Site Plan Review Application submitted by Nate Fuss, Bohler of behalf of Double Reverse, LLC., for PIN # 70037 02018 (150 Highway 30) for a General Development Site Plan to allow a RV / Boat Storage (Bespoke Port Wentworth) in a P-C-3 (Planned General Business) Zoning District

Issue/Item: Site Plan Review Application submitted by Nate Fuss, Bohler of behalf of Double Reverse, LLC., for PIN # 70037 02018 (150 Highway 30) for a General Development Site Plan to allow a RV / Boat Storage (Bespoke Port Wentworth) in a P-C-3 (Planned General Business) Zoning District

Background: Currently the site is an undeveloped wooded parcel with existing wetlands permit in place and utility easements that run a portion of the property.

Facts and Findings: The Developer has proposed developing a class A Enclosed, Covered and Open Boat/RV storage facility and office. The site will be gated, fenced and have 24 hour monitoring/surveillance. Amenities will include a wash station, dump station, propane, ice, water, and compressed air for all customers to use/purchase. Access to the site will be an existing curb cut on Highway 30. The site will connect to City of Port Wentworth Water and sanitary sewer utilities. According to the 2021 City of Port Wentworth Comprehensive Plan this property is under the Highway Commercial Interchange Area Character Area.

Funding: N/A

Recommendation: The Planning Commission will hear this application on Monday, November 14, 2022 at 3:30 PM. **/ UPDATE: THE PLANNING COMMISSION VOTED UNANIMOUSLY TO RECOMMEND TO APPROVE THE APPLICATION.**

ATTACHMENTS:

- Bespoke RV-Boat STG 7-0037-02-018 G-Site Plan 2022-Full Application (PDF)
- Bespoke RV-Boat STG 7-0037-02-018 G-Site Plan 2022-Timeline (DOCX)

DocuSign Envelope ID: AC096082-46C0-41BE-9B84-DD0D340CFE03

220501

City of Port Wentworth
▪7224 Highway 21 ▪ Port Wentworth ▪ Georgia ▪ 31407 ▪ 912-999-2084

RECEIVED
OCT 03 2022
BY:

Site Plan Review Application

Site Plan Application is required for all new construction in a "P" or "MPO" zone as defined in the Zoning Ordinance of the City of Port Wentworth.

Site Plan Type (*Check One*): ☒ General / Concept ☐ Specific Development

Site Plan Address: 150 GA Hwy 30, Port Wentworth, GA

PIN #(s): 70037-02018

Zoning: P-C-3 General Business Estimated Cost of Construction: $ TBD

Type of Construction: P-C-3 General Business

Project Name: Bespoke Port Wentworth

Applicant's Name: Nate Fuss - Bohler

Mailing Address: 211 Perimeter Center Pkwy NE, Suite 425, Atlanta , GA 30346

Phone #: 678-695-6800 Email: nfuss@bohlereng.com

Owner's Name (If Different form Applicant): Double Reverse, LLC

Mailing Address: 250 N. Orange Avenue, Suite 1500 Orlando, FL 32801

Phone #: 407-426-7702 Email: mike@bbdre.com

I hereby acknowledge that the above information is true and correct.

Applicant's Signature — Date: 9/30/2022

DocuSigned by:
F76B9C1B16C94EF...
Owner's Signature (If Different form Applicant) — Date: 9/30/2022

Please see page 2 for required submittal checklist

City of Port Wentworth
▪7224 Highway 21 ▪ Port Wentworth ▪ Georgia ▪ 31407 ▪ 912-999-2084

Site Plan Review Application Submittal Checklist

Documentation below is required for a complete submittal.

- [X] Signed and Completed Application
- [X] 3 Full size sets of site plan civil drawings or concept plan (depending on type of site plan)

Full size is 11x17 of the concept plan

- [X] 15 half size (11" X 17") sets of site plan civil drawings or concept plan (depending on type of site plan)
- N/A ☐ 2 copies of hydrology reports (if applicable)
- [X] Names, mailing address, and PIN number of all property owners within 250 feet of all property lines
- [X] 1 8 ½" X 11" of site plan civil drawings or concept plan (depending on type of site plan)
- [X] PDF of entire submittal on a flash drive or download link ONLY (NO CD'S)
- [X] Other Engineering details or reports may be required once submittal has been received

Architectural elevations, Project Narrative, Survey, and the existing wetlands permit

- [X] Site plan review fee check
  - ○ No Land Disturbance- $206.00 Site Plan Fee + $50.00 Admin Fee = Total $256.00
  - X With Land Disturbance - $836.00 Site Plan Fee + $50.00 Admin Fee = Total $886.00

Additional Fee Statement: If engineer review cost to the City exceeds the site plan review fee that is paid at the time of initial application submittal, you may be required to pay additional review cost.

I have read and agree to the above additional fee statement

Nathan Fox
Applicant's Signature

09/30/2022
Date

CITY OF PORT WENTWORTH
(912) 964-4379

REC#: 00371636 10/06/2022 9:55 AM
OPER: KS TERM: 055
REF#: 10127

TRAN: 112.0000 BLDG PERMIT
220501 886.00CR
DOUBLE REVERSE
7-0037-02-018
DEV-SPR 886.00CR

TENDERED: 886.00 CHECK
APPLIED: 886.00-

CHANGE: 0.00

WWW.CITYOFPORTWENTWORTH.COM

Our intent is to bring a state of the art Class A Boat and RV facility to the gateway corridor. Providing a currently unmet need for the Port Wentworth, Pooler and Savannah MSA's.

Currently the site is an undeveloped wooded parcel with existing wetlands permit in place and utility easements that run a portion of the property. In our opinion, due to site constraints we are proposing what is the highest and best use for the site.

While meeting an unmet need to multiple communities, our use has a relatively low traffic impact to the surrounding community. Based on past traffic studies, our use for this size facility will generate approximately 50.7 trips a day of which approximately 6 trips will be generated during peak hours.

Current Site

- Access on Georgia Hwy 30
- Existing curb cut onto Hwy 30
- Site has 2 utility easements (gas and electric) and wetlands
- Most of the usable acreage is wooded
- The two neighboring touching parcels are both being developed as Hotels

Proposed Project

- We are planning on developing a class A Enclosed, Covered and Open Boat/RV storage facility
- The site will be gated, fenced and have 24 hour monitoring/surveillance
- Amenities will include a wash station, dump station, propane, ice, water, and compressed air for all customers to use/purchase.
- Other common supplies such as locks will be sold in the office
- No repairs or sales will be done on site
- Office being proposed is approx. 457 sf
- Rentals will be done either in person, online or through our call center
- Once construction begins we expect to be completed within 10-12 months of breaking ground

Unit Mix below

Units		Ct	Avg Size	Total RSF
12x20	**Open**	68	240	16,320
12x40	**Open**	40	480	19,200
14x30	**Covered**	39	420	16,380
14x35	**Covered**	39	490	19,110
14x30	**Enclosed**	36	420	15,120
14x40	**Enclosed**	116	560	64,960
14x50	**Enclosed**	65	700	45,500
Total		**403**	**473**	**196,590**

Name	Mailing Address	PIN
FRANK AND REITA'S LLC	1716 E HIGHWAY 80 BLOOMINGDALE GA 31302	70976 02030
FRANK & REITAS II LLC	1716 E HIGHWAY 80 BLOOMINGDALE GA 31302	70976 02031
FLOYD CHARLES LYNN	4092 GA HIGHWAY 119 S GUYTON GA 31312	70976 02032
FLOYD JUDY SIGLER	119 N CENTER ST WINDER GA 30680	70976 02033
BRADY-HOHNERLEIN COLLEEN LYNETTE	83 FALKLAND AVE PORT WENTWORTH GA 31407	70976 02034
WPB ESTATE MANAGEMENT LLC	4107 COLUMBIA ROAD AUGUSTA GA 30907	70037 02016
SHAYANAM, LLC	ATTN: HEMLATA PATEL, MANAGER 3758 US 17 RICHMOND HILL GA 31324	70037 02017
PADEREWSKI JULES B ET AL*	PO BOX 9087 SAVANNAH GA 31412	70976 02026
NEWPORT SQUARE HOMEOWNERS ASSOCIATION, L	120 COMMERCE COURT POOLER GA 31322	70976G01015
SIERRA INVESTMENT PROPERTIES,LLC	120 COMMERCE COURT POOLER GA 31322	70976G01007
JONES EDWINA	7 CORDAGE CIRCLE PORT WENTWORTH GA 31407	70978A01004
HARDY CORLETTA	9 CORDAGE CIR PORT WENTWORTH GA 31407	70978A01005
RODRIGUEZ MIGUEL A	1318 195TH ST E SPANAWAY WA 98387-3407	70978A01006
RYC PROPERTIES LLC	7640B ABERCORN STREET SAVANNAH GA 31406	70978A01007
COE, JR. ROBERT C	15 CORDAGE CIRCLE PORT WENTWORTH GA 31407	70978A01008
VINNY'S PROPERTIES, INC.	101 BREAKLANDS COURT PORT WENTWORTH GA 31407	70978A01009
SHOREY GILBERT II	19 CORDAGE CIRCLE PORT WENTWORTH GA 31407	70978A01010
DAVIS NORMAN E & EVELYN L	139 COBBLETON DR RINCON GA 31326	70978A01011
BOYLE DENNIS M.	23 CORDAGE CIRCLE PORT WENTWORTH GA 31407	70978A01012
LANE ROLONIA	100 S EFFINGHAM PLANTATION DR GUYTON GA 31312	70978A01013
BARRETT SCOTT J	418 LIONS DEN DR POOLER GA 31322-3810	70978A01014
DAVIS NORMAN E JR & EVELYN*	139 COBBLETON DR RINCON GA 31326	70978A01015
DAVIS NORMAN E JR & EVELYN*	139 COBBLETON DR RINCON GA 31326	70978A01016
SAMS MONICA G.	33 CORDAGE CIRCLE PORT WENTWORTH GA 31407	70978A01017
MCCOY TERRY & RUBY JANIE*	35 CORDAGE CIRCLE PORT WENTWORTH GA 31407	70978A01018
BIGHAM & OWENS KENNETH & SHANTELL	37 CORDAGE CIR PT WENTWORTH GA 31407	70978A01019
KNIGHT MONICA	826 COUNTY ROAD 1610 MARLOW OK 73055	70978A01020
SILVA CARLOS N.	41 CORDAGE CIRCLE PORT WENTWORTH GA 31407	70978A01021
HARVEY AIKEN DISHON G	43 CORDAGE CIRCLE PORT WENTWORTH GA 31407	70978A01022
BROWN JAMILA Y	12 CORDAGE CIRCLE PORT WENTWORTH GA 31407	70978A06006
GORDON KAREN	10 CORDAGE CIR PORT WENTWORTH GA 31407	70978A06005
WELLS DEBRA A	3 BINNACLE LN PT WENTWORTH GA 31407	70978A06011
ANCRUM RONNIE L & BETTY A	1 BINNACLE LANE PT WENTWORTH GA 31407	70978A06012
RODAS DELFIA	2 BINNACLE LN PORT WENTWORTH GA 31407	70978A08007
CONNOR MARGARET J	40 MITCHELL AVE NEW BRUNSWICK NJ 08901	70978A08006
CAPERS SHANTEEN	3 HALYARD DR PT WENTWORTH GA 31407	70978A08013
PRIESTER DAVID	1 HALYARD DR PORT WENTWORTH GA 31407	70978A08014
SANCHEZ MARGARITA	PO BOX 4314 SAVANNAH GA 31407-4314	70978A10008
DERRINGER HOLLY C	4 HALYARD DR PORT WENTWORTH GA 31407	70978A10007
PICKETT CHRISTOPHER A & ANGEL L*	46 CORDAGE CIRCLE PT WENTWORTH GA 31407	70978A10015
BHATT KETAN H	44 CORDAGE CIRCLE PORT WENTWORTH GA 31407	70978A10016

Project Timeline

Project Number: 220501

Project Name: Bespoke RV-Boat STG 7-0037-02-018 G-Site Plan 2022

Applicant / Engineer: Nate Fuss - Bohler

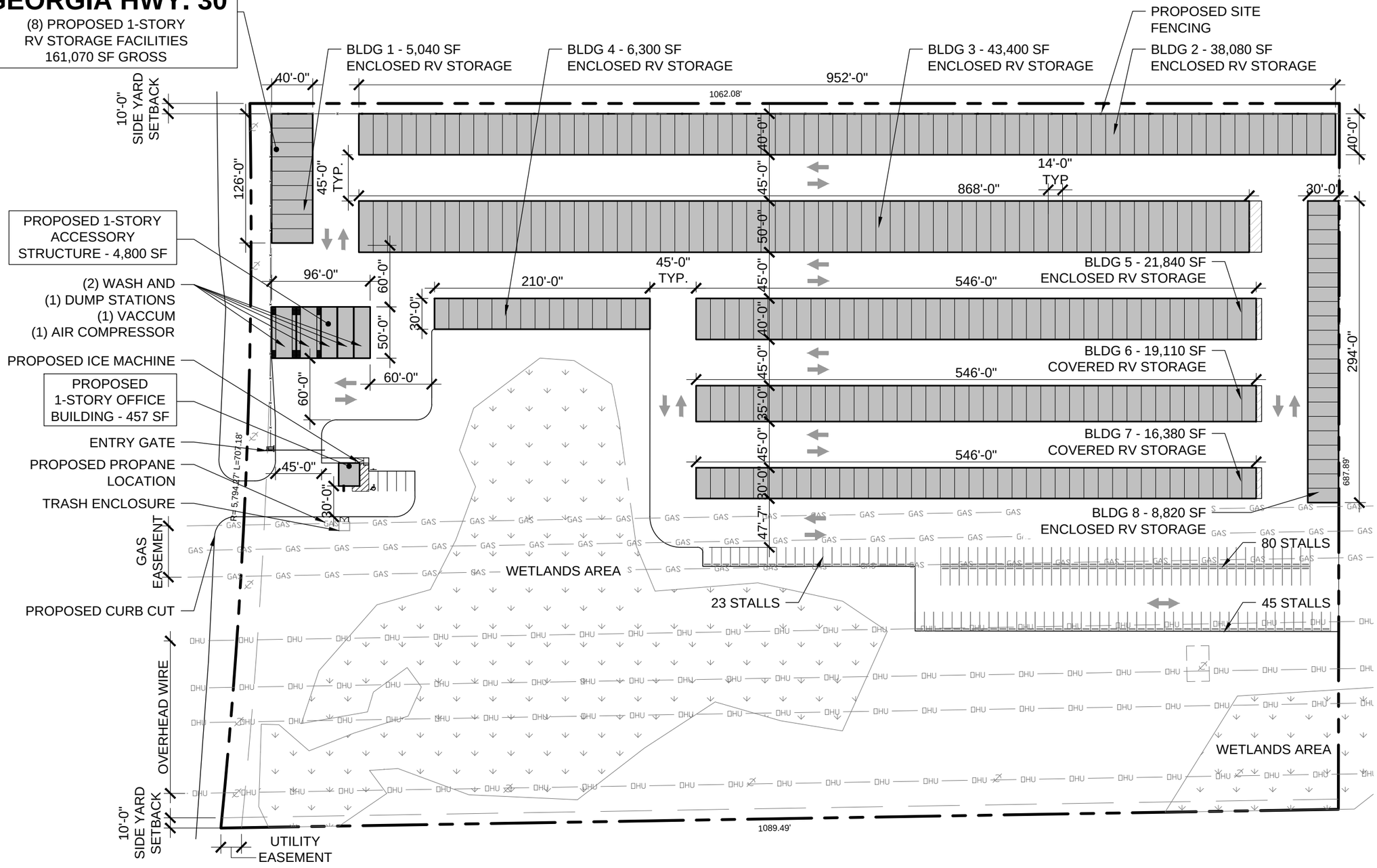
Owner: Double Reverse, LLC

City Review Engineer:

- 10/03/2022 – Application received: Incomplete.
- 10/6/2022 – Application complete
- 10/12/2022 – scheduled for the November 2022 meetings.
- 10/21/2022 – public hearing notice letters mailed.
- 10/24/2022 – public hearing notice posted in Savannah Morning News
- 11/14/2022 – the Planning Commission voted unanimously to recommend approving the application.

RV STORAGE
GEORGIA HWY. 30

(8) PROPOSED 1-STORY
RV STORAGE FACILITIES
161,070 SF GROSS



ARCHITECTURE & DESIGN

GEORGIA HWY. 30

SAVANNAH, GA

1" = 100'

0 20' 50' 100' 200'

N

SITE PLAN

AUGUST 23, 2022 P.X

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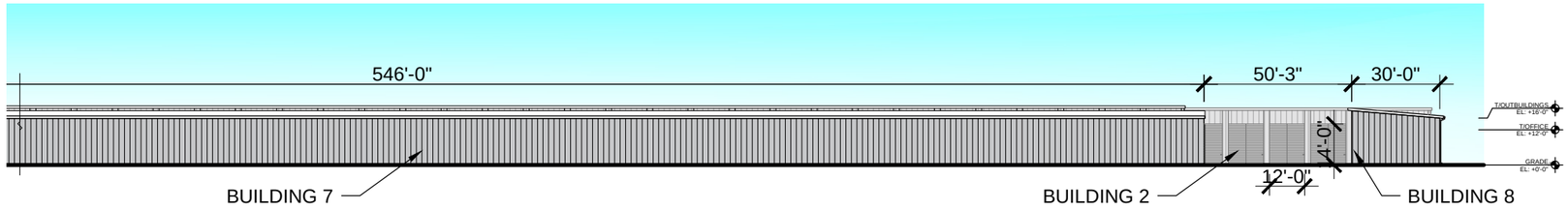
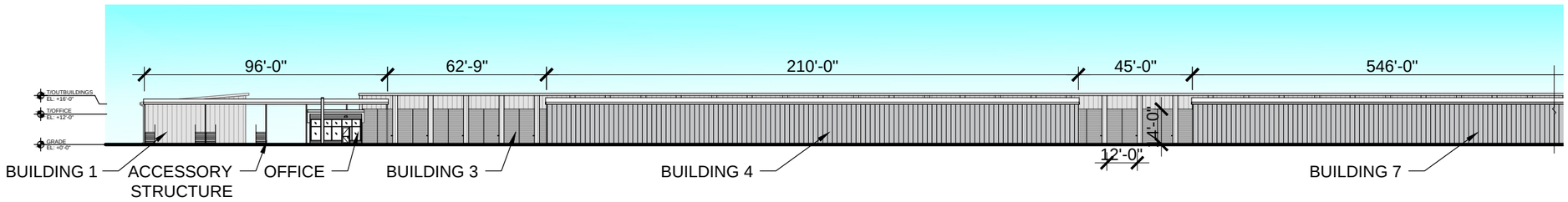
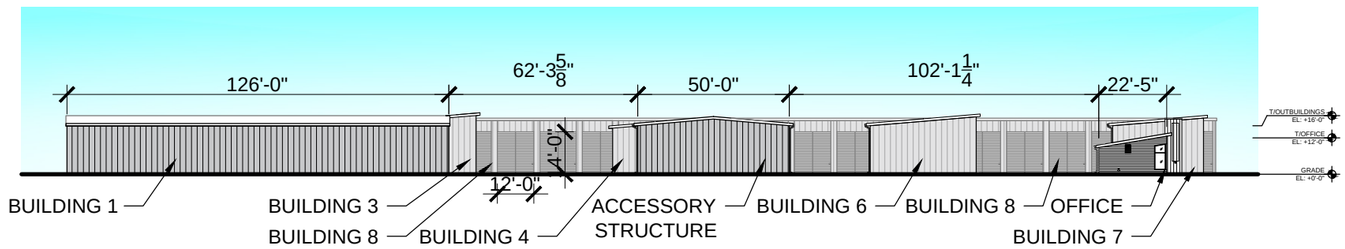


3. PARTIAL SOUTH SITE ELEVATION



2. PARTIAL SOUTH SITE ELEVATION



1. WEST SITE ELEVATION

ARCHITECTURE & DESIGN

GEORGIA HWY. 30

SAVANNAH, GA

1" = 50'

0 10' 30' 50' 100'

ELEVATIONS

SEPTEMBER 29, 2022 P.3

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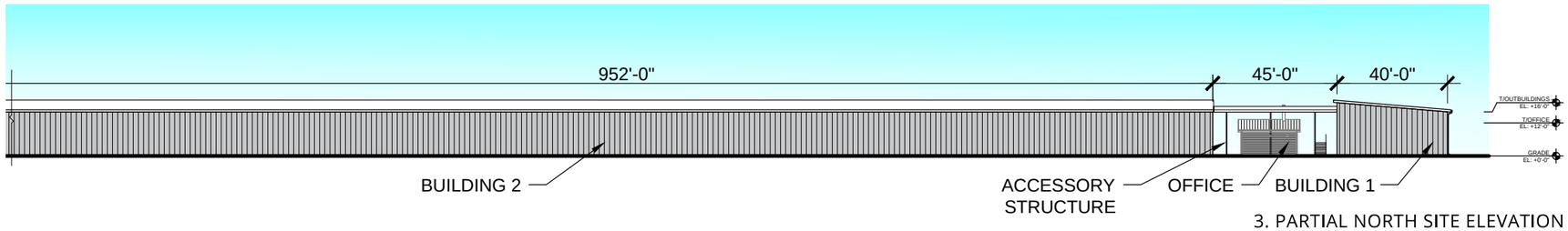
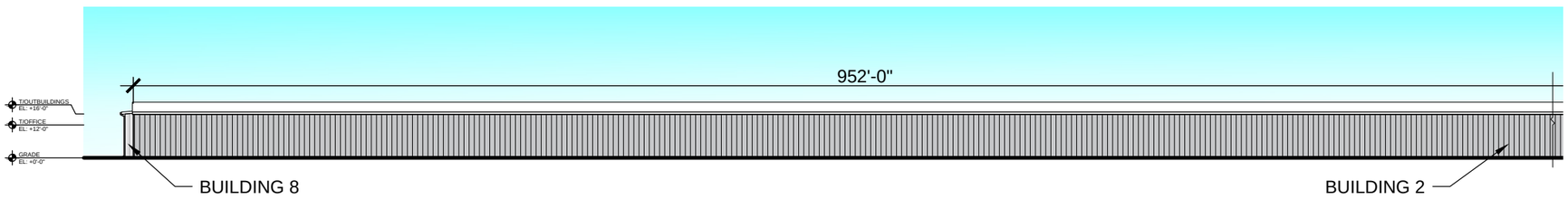
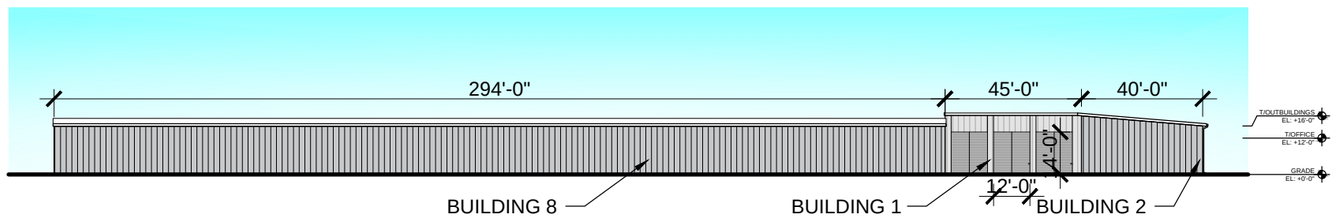


3. PARTIAL NORTH SITE ELEVATION



2. PARTIAL NORTH SITE ELEVATION



1. EAST SITE ELEVATION

ARCHITECTURE & DESIGN

GEORGIA HWY. 30

SAVANNAH, GA

1" = 50'

0 10' 30' 50' 100'

ELEVATIONS

SEPTEMBER 29, 2022 P.4

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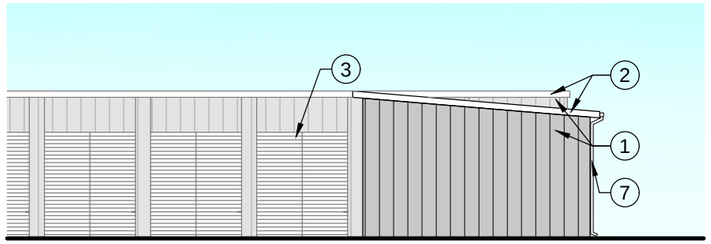
MATERIAL LEGEND:

NOTE: KEYED NOTES BELOW APPLY TO MULTIPLE SHEETS AND MAY NOT BE APPLICABLE TO THIS SHEET

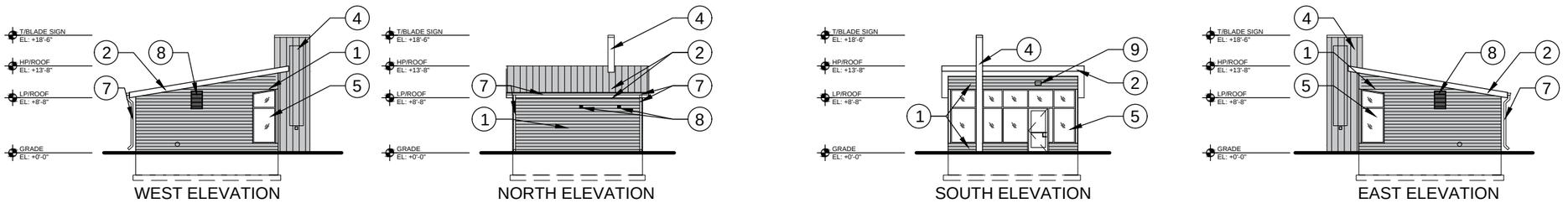
1. METAL WALL PANEL - MBCI 7.2
   COLOR - MEDIUM BRONZE
2. METAL ROOF PANEL/ FASCIA - MBCI 7.2
   COLOR - BROWNSTONE
3. ROLL UP DOORS -
   PAINT TO MATCH MBCI BROWNSTONE
4. METAL BLADE SIGN (BY OTHERS)
5. BLACK ANODIZED STOREFRONT SYSTEM
   BLACK ANODIZED
6. STEEL STRUCTURE
   PAINT TO MATCH MBCI MEDIUM BRONZE
7. GUTTER & DOWNSPOUT -
   PAINT TO MATCH MBCI BROWNSTONE
8. LOUVER OR WEATHERHEAD-SEE MECHANICAL

MEDIUM BRONZE

BROWNSTONE



2. PARTIAL OUTBUILDING ELEVATION



1. OFFICE BUILDING ELEVATIONS

GEORGIA HWY. 30

SAVANNAH, GA

1" = 20'

0 5' 10' 20' 40'

ELEVATIONS

SEPTEMBER 29, 2022 P.5

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THIS SPACE RESERVED FOR THE CLERK OF SUPERIOR COURT

GRID NORTH, NAD83 (2011) GEORGIA SPC, EAST ZONE

PLAT REFERENCES

1. PHASE I SAVANNAH GATEWAY WEST, BEING A SUBDIVISION OF A PORTION OF LANDS OF THE SAVANNAH WEST, LLC, BY HUSSEY, GAY, BELL, & DEYOUNG, DATED JULY 31, 2008, RECORDED IN PLAT BOOK 41-S, PAGE 11, CHATHAM COUNTY RECORDS.
2. REVISED MINOR SUBDIVISION SURVEY FORMER BOARDMAN TRACT, BEING A DIVISION OF PARCEL 2, A 77.32 ACRE PORTION OF THE FORMER BOARDMAN TRACT, BY SUNDIAL LAND SURVEYING, PC, DATED JANUARY 28, 2020, REVISED FEBRUARY 26, 2020, RECORDED IN PLAT BOOK 52, PAGE 360, AND FURTHER REVISED MAY 12, 2020, RECORDED IN PLAT BOOK 52, PAGE 428 IN CHATHAM COUNTY RECORDS.
3. A MINOR SUBDIVISION PLAT OF PARCEL 2A, SAVANNAH GATEWAY WEST, A PORTION OF TAX PARCEL NO. 7-0037-02-004, BY ATLAS SURVEYING, INC, DATED FEBRUARY 27, 2020, RECORDED IN PLAT BOOK 52, PAGE 363, CHATHAM COUNTY RECORDS.
4. RECOMBINATION SURVEY LOT 7 & LOT 8, PHASE I SAVANNAH GATEWAY WEST, BY THOMAS & HUTTON, DATED JULY 23, 2012, RECORDED IN PLAT BOOK 47-P, PAGE 32, CHATHAM COUNTY RECORDS.
5. PLAT OF A 20' UTILITY EASEMENT THROUGH LANDS OF McKAY INVESTMENTS, LLC, BY HUSSEY, GAY, BELL & DeYOUNG, DATED NOVEMBER 23, 2004, REVISED JANUARY 17, 2005, RECORDED IN PLAT BOOK 30-P, PAGE 25, CHATHAM COUNTY RECORDS.

PLAT REFERENCES

6. EASEMENT SURVEY SCG PIPELINE PROJECT, CROSSING PROPERTY OF CLAYTON P. BOARDMAN, III - CH-30A, BY GLENN ASSOCIATES SURVEYING, INC, DATED MAY 17, 2002.
7. PLAT OF PROPOSED WELL SITE BEING LANDS OF BOARDMAN AND CLAUSEN, BY HUSSEY, GAY, BELL & DeYOUNG, DATED JUNE 14, 1988, RECORDED IN PLAT BOOK 9-P, PAGE 195, CHATHAM COUNTY RECORDS.
8. MINOR SUBDIVISION SURVEY FORMER BOARDMAN TRACT BEING A DIVISION OF PARCEL 2, A 77.27 ACRE PORTION OF THE FORMER BOARDMAN TRACT, BY SUNDIAL LAND SURVEYING, PC, DATED JANUARY 28, 2020, RECORDED IN PLAT BOOK 52, PAGE 353, CHATHAM COUNTY RECORDS.
9. WETLANDS SURVEY LAND OF PNC BANK, N.A. AND A PORTION OF SAVANNAH GATEWAY WEST PHASE I, BY THOMAS & HUTTON, DATED MAY 1, 2018.
10. PRELIMINARY MINOR SUBDIVISION OF THE BOARDMAN TRACT BEING A SUBDIVISION OF PARCEL 2, PREPARED BY SUNDIAL LAND SURVEYING, PC., DATED JANUARY 28, 2020

LEGEND

- CONC. MONUMENT FOUND
- CURB INLET MANHOLE
- ELECTRIC BOX
- FIRE HYDRANT
- GAS VALVE
- GUY WIRE
- IRON PIPE FOUND
- IRON PIPE SET
- IRON REBAR FOUND
- UNDERGROUND UTILITY LINE MARKER
- LIGHT POLE
- COMPUTED POINT (NO MONUMENT)
- POWER POLE
- STORM DRAINAGE MANHOLE
- SANITARY MANHOLE
- TELEPHONE BOX
- WATER METER
- WATER MANHOLE
- WATER VALVE

LINE TABLE		
LINE	BEARING	LENGTH
L1	S 51°24'40" E	34.27'
L2	N 65°46'56" W	18.09'
L3	N 20°21'58" E	53.25'
L4	S 18°34'06" E	39.93'
L5	N 18°17'10" W	91.32'
L6	S 00°51'46" W	60.85'
L7	N 55°06'12" W	66.06'
L8	S 34°44'12" W	66.07'

LINE TABLE		
LINE	BEARING	LENGTH
L9	S 55°16'32" E	66.18'
L10	S 32°57'09" W	183.02'
L11	N 72°00'25" E	31.61'
L12	S 18°17'10" E	14.65'
L13	N 71°25'54" E	62.31'
L14	N 65°46'56" W	13.88'
L15	N 67°42'57" E	99.05'

CURVE TABLE					
CURVE	RADIUS	LENGTH	CH BEARING	CH LENGTH	DELTA
C1	230.00'	27.98'	N 62°17'53" W	27.96'	6°58'10"
C2	230.00'	162.69'	N 38°33'00" W	159.32'	40°31'41"
C3	70.00'	26.38'	N 29°13'56" W	26.22'	21°35'20"
C4	1976.16'	379.13'	S 29°23'17" W	378.55'	10°59'33"
C5	130.00'	26.16'	S 24°09'48" E	26.12'	11°31'53"
C6	5794.27'	707.18'	N 74°03'46" E	706.75'	6°59'34"
C7	170.00'	134.97'	N 43°02'19" W	131.45'	45°29'18"

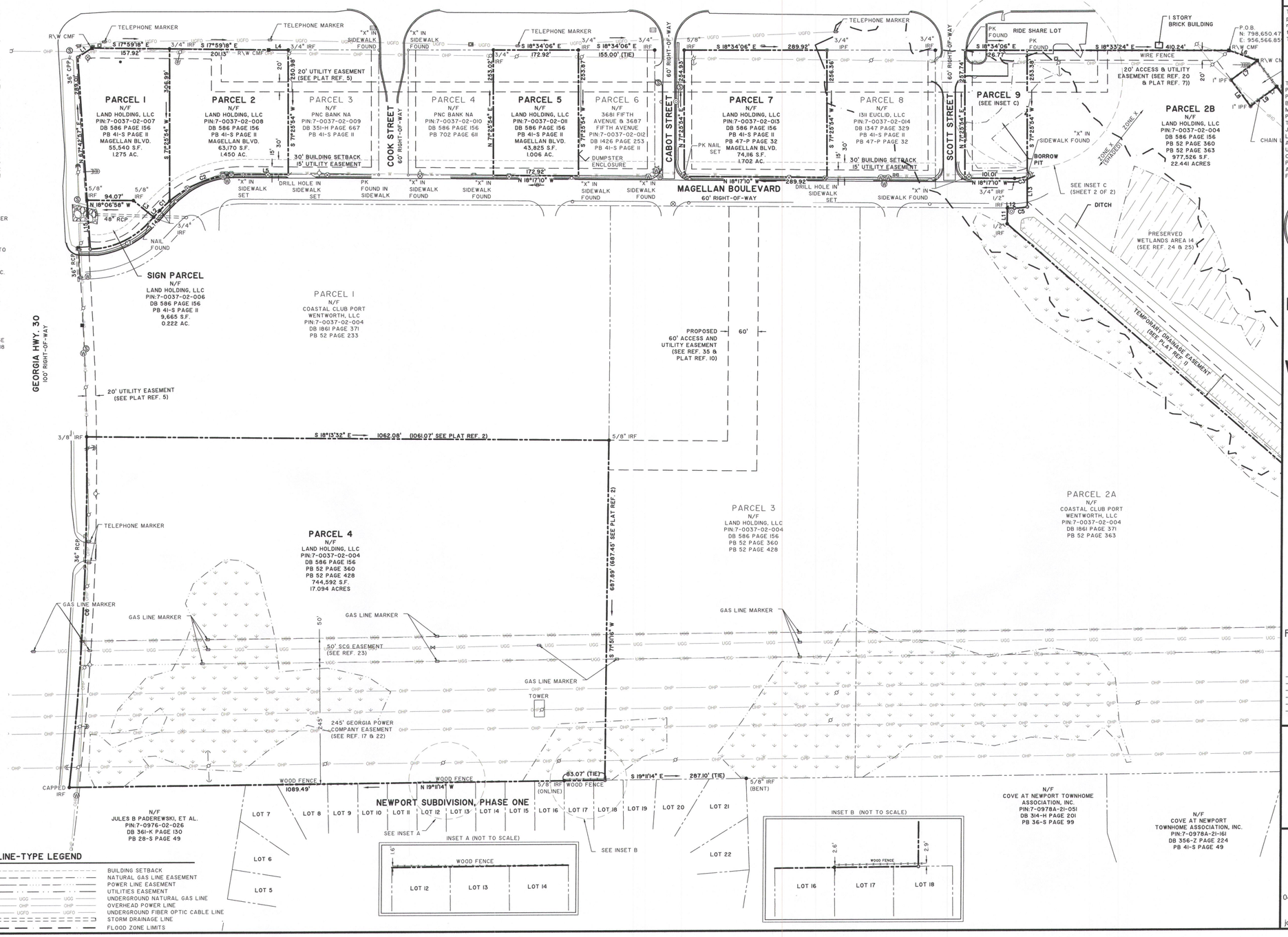
GEORGIA HWY. 21 (AUGUSTA ROAD) 300' RIGHT-OF-WAY

NOTES

1. FIELD EQUIPMENT USED FOR THIS SURVEY: GEOMAX ZOOM90 R2.
2. THE FIELD DATA UPON WHICH THIS MAP OR PLAT IS BASED HAS A CLOSURE RATIO OF 1 FOOT IN 41,263 FEET, AN ANGULAR ERROR OF 0.44" PER ANGLE POINT, AND WAS ADJUSTED USING THE COMPASS RULE METHOD.
3. ALL CORNERS MARKED WITH 3/4" IRON PIPE, 24" LONG WITH CAP STAMPED "THH" UNLESS OTHERWISE NOTED.
4. THIS PLAT HAS A PRECISION OF ONE FOOT IN 93,688.
5. COORDINATES AND DIRECTIONS ARE BASED ON GEORGIA STATE PLANE COORDINATE SYSTEM (NAD83), EAST ZONE.
6. ACCORDING TO F.I.R.M. MAP NO. 13051C, PANEL 0030G, REVISED AUGUST 16, 2018, THE PROPERTY SHOWN ON THIS PLAT LIES IN ZONE X, X SHADED & AE (12 FEET).
7. WETLANDS THAT MAY EXIST ON THE PROPERTY ARE UNDER THE JURISDICTION OF THE CORPS OF ENGINEERS AND/OR THE DEPARTMENT OF NATURAL RESOURCES. LOT OWNERS AND THE DEVELOPER ARE SUBJECT TO PENALTY BY LAW FOR DISTURBANCE TO THESE PROTECTED AREAS WITHOUT PROPER PERMIT AND APPROVAL.
8. THE POSITION OF UNDERGROUND UTILITIES SHOWN ON THIS DRAWING IS BASED UPON THE LOCATION OF SURFACE APPURTENANCES AND/OR SURFACE MARKINGS AND SHOULD BE CONSIDERED APPROXIMATE. THE EXACT LOCATION, SIZE, TYPE AND DEPTH OF UNDERGROUND UTILITIES SHOWN HEREON OR ANY OTHER UTILITIES THAT MAY EXIST, CAN ONLY BE DETERMINED VIA AN EXCAVATION OF THE UTILITY.
9. REFERENCES LISTED WERE PROVIDED BY THE ORT LAW FIRM.

REFERENCES

17. EASEMENT FOR RIGHT OF WAY TO SAVANNAH ELECTRIC AND POWER COMPANY FILED ON JANUARY 16, 1973, RECORDED IN RECORD BOOK 101-Q, FOLIO 721-722, AFORESAID RECORDS.
18. EASEMENT DESCRIBED IN WARRANTY DEED FROM CLAYTON P. BOARDMAN, JR., BARNEY D. BOARDMAN, AND WARD S. CLAUSSEN TO CITY OF PORT WENTWORTH FILED AUGUST 1, 1988, RECORDED IN RECORD BOOK 139-D, FOLIO 731-732, AFORESAID RECORDS.
22. EASEMENT FROM LAND HOLDING, LLC TO SOUTHERN TELECOM, INC. FILED JUNE 25, 2019, RECORDED IN RECORD BOOK 1653, FOLIO 606-610, AFORESAID RECORDS.
23. NATURAL GAS TRANSMISSION EASEMENT TO SCG PIPELINE, INC. FILED MARCH 5, 2003, RECORDED IN RECORD BOOK 247-V, FOLIO 266-272, AFORESAID RECORDS.
24. RESTRICTIVE COVENANTS FILED JANUARY 21, 1997, RECORDED IN RECORD BOOK 183-G, FOLIO 627-643, AFORESAID RECORDS.
25. FIRST AMENDMENT AND EXTENSION OF RESTRICTIVE COVENANTS FILED OCTOBER 21, 2002, RECORDED IN RECORD BOOK 241-T, PAGE 647, AFORESAID RECORDS,AS AFFECTED BY THAT AUGUST 8, 2018 LETTER FROM SKYE H. STOCKEL, REGULATORY SPECIALIST, COASTAL SECTION, U.S. ARMY CORPS OF ENGINEERS TO JOHN R. GASSIE, V.P., LAND HOLDING, LLC, ASSOCIATED WITH PROJECT NUMBER SAS-2005-02104, A COPY OF WHICH IS ON FILE IN THE OFFICE OF ROBINSON & BLAZER, LLP, 150 PONCE DE LEON AVE., STE. 475, DECATUR, GEORGIA 30030.
35. PROPOSED 60' ACCESS AND UTILITIES EASEMENT ANTICIPATED TO BE RESERVED IN FAVOR OF TRACT 2PURSUANT OT DEED OR EASEMENT INSTRUMENT TO BE RECORDED IN THE AFORESAID RECORDS.


PARCEL 1
N/F
LAND HOLDING, LLC
PIN:7-0037-02-007
DB 586 PAGE 156
PB 41-S PAGE II
MAGELLAN BLVD.
55,540 S.F.
1.275 AC.
PARCEL 2
N/F
LAND HOLDING, LLC
PIN:7-0037-02-008
DB 586 PAGE 156
PB 41-S PAGE II
MAGELLAN BLVD.
63,170 S.F.
1.450 AC.
PARCEL 3
N/F
PNC BANK NA
PIN:7-0037-02-009
DB 351-H PAGE 667
PB 41-S PAGE II
PARCEL 4
N/F
PNC BANK NA
PIN:7-0037-02-010
DB 586 PAGE 156
PB 702 PAGE 68
PARCEL 5
N/F
LAND HOLDING, LLC
PIN:7-0037-02-011
DB 586 PAGE 156
PB 41-S PAGE II
MAGELLAN BLVD.
43,825 S.F.
1.006 AC.
PARCEL 6
N/F
3681 FIFTH AVENUE & 3687 FIFTH AVENUE
PIN:7-0037-02-012
DB 1426 PAGE 253
PB 41-S PAGE II
DUMPSTER ENCLOSURE
PARCEL 7
N/F
LAND HOLDING, LLC
PIN:7-0037-02-013
DB 586 PAGE 156
PB 41-S PAGE II
PB 47-P PAGE 32
MAGELLAN BLVD.
74,116 S.F.
1.702 AC.
PK NAIL SET
PARCEL 8
N/F
1311 EUCLID, LLC
PIN:7-0037-02-014
DB 1347 PAGE 329
PB 41-S PAGE II
PB 47-P PAGE 32
PARCEL 9
(SEE INSET C)
PARCEL 2B
N/F
LAND HOLDING, LLC
PIN:7-0037-02-004
DB 586 PAGE 156
PB 52 PAGE 360
PB 52 PAGE 363
977,526 S.F.
22.441 ACRES
SIGN PARCEL
N/F
LAND HOLDING, LLC
PIN:7-0037-02-006
DB 586 PAGE 156
PB 41-S PAGE II
9,665 S.F.
0.222 AC.
PARCEL 1
N/F
COASTAL CLUB PORT WENTWORTH, LLC
PIN:7-0037-02-004
DB 1861 PAGE 371
PB 52 PAGE 233
PARCEL 2A
N/F
COASTAL CLUB PORT WENTWORTH, LLC
PIN:7-0037-02-004
DB 1861 PAGE 371
PB 52 PAGE 363
PARCEL 3
N/F
LAND HOLDING, LLC
PIN:7-0037-02-004
DB 586 PAGE 156
PB 52 PAGE 360
PB 52 PAGE 428
PARCEL 4
N/F
LAND HOLDING, LLC
PIN:7-0037-02-004
DB 586 PAGE 156
PB 52 PAGE 360
PB 52 PAGE 428
744,592 S.F.
17.094 ACRES
N/F
JULES B PADEREWSKI, ET AL.
PIN:7-0976-02-026
DB 361-K PAGE 130
PB 28-S PAGE 49
N/F
COVE AT NEWPORT TOWNHOME ASSOCIATION, INC.
PIN:7-0978A-21-051
DB 314-H PAGE 201
PB 36-S PAGE 99
N/F
COVE AT NEWPORT TOWNHOME ASSOCIATION, INC.
PIN:7-0978A-21-161
DB 356-Z PAGE 224
PB 41-S PAGE 49
GEORGIA HWY. 30
100' RIGHT-OF-WAY
COOK STREET
60' RIGHT-OF-WAY
CABOT STREET
60' RIGHT-OF-WAY
SCOTT STREET
60' RIGHT-OF-WAY
MAGELLAN BOULEVARD
60' RIGHT-OF-WAY
PROPOSED 60' ACCESS AND UTILITY EASEMENT (SEE REF. 35 & PLAT REF. 10)
20' UTILITY EASEMENT (SEE PLAT REF. 5)
50' SCG EASEMENT (SEE REF. 23)
245' GEORGIA POWER COMPANY EASEMENT (SEE REF. 17 & 22)
20' ACCESS & UTILITY EASEMENT (SEE REF. 20 & PLAT REF. 7))
30' BUILDING SETBACK
15' UTILITY EASEMENT
TEMPORARY DRAINAGE EASEMENT (SEE PLAT REF. 1)
PRESERVED WETLANDS AREA 14 (SEE REF. 24 & 25)
BORROW PIT
DITCH
SEE INSET C (SHEET 2 OF 2)
NEWPORT SUBDIVISION, PHASE ONE
LOT 5
LOT 6
LOT 7
LOT 8
LOT 9
LOT 10
LOT 11
LOT 12
LOT 13
LOT 14
LOT 15
LOT 16
LOT 17
LOT 18
LOT 19
LOT 20
LOT 21
LOT 22
SEE INSET A
SEE INSET B
INSET A (NOT TO SCALE)
INSET B (NOT TO SCALE)
WOOD FENCE
GAS LINE MARKER
TOWER
TELEPHONE MARKER
I STORY BRICK BUILDING
RIDE SHARE LOT
WIRE FENCE
SIDEWALK FOUND
"X" IN SIDEWALK FOUND
"X" IN SIDEWALK SET
DRILL HOLE IN SIDEWALK SET
PK FOUND IN SIDEWALK
ZONE X
ZONE X SHADED
P.O.B. N: 798,650.47 E: 956,566.85
S 18°34'06" E 289.92'
S 18°34'06" E 172.92'
S 18°34'06" E 155.00' (TIE)
S 18°33'24" E 410.24'
S 18°13'32" E 1062.08' (1061.07' SEE PLAT REF. 2)
N 19°11'14" W 1089.49'
S 19°11'14" E 287.10' (TIE)
63.07' (TIE)
N 18°17'10" W 289.92'
N 18°17'10" W 101.01'
N 18°06'58" W 94.07'
N 77°25'54" E 687.89' (687.45' SEE PLAT REF. 2)
S 77°25'54" W 687.74'
N 77°25'54" E 687.74'

THIS SPACE RESERVED FOR THE
CLERK OF SUPERIOR COURT

GRID NORTH, NAD83 (2011)
GEORGIA SPC, EAST ZONE

LINE TABLE		
LINE	BEARING	LENGTH
L1	S 8°24'40" E	34.27'
L2	N 65°46'56" W	18.09'
L3	N 20°21'58" E	53.25'
L4	S 18°34'06" E	39.93'
L5	N 18°17'10" W	91.32'
L6	S 00°51'46" W	60.85'
L7	N 55°06'12" W	66.06'
L8	S 34°44'12" W	66.07'
L9	S 55°16'32" E	66.18'
L10	S 32°57'09" W	183.02'
L11	N 72°00'25" E	31.61'
L12	S 18°17'10" E	14.65'
L13	N 71°25'54" E	62.31'
L14	N 65°46'56" W	13.88'
L15	N 67°42'57" E	99.05'

CURVE TABLE					
CURVE	RADIUS	LENGTH	CH BEARING	CH LENGTH	DELTA
C1	230.00'	27.98'	N 62°17'53" W	27.96'	6°58'10"
C2	230.00'	162.69'	N 38°33'00" W	159.32'	40°31'41"
C3	70.00'	26.38'	N 29°13'56" W	26.22'	21°35'20"
C4	1976.16'	379.13'	S 29°23'17" W	378.55'	10°59'33"
C5	130.00'	26.16'	S 24°09'48" E	26.12'	11°31'53"
C6	5794.27'	707.18'	N 74°03'46" E	706.75'	6°59'34"
C7	170.00'	134.97'	N 43°02'19" W	131.45'	45°29'18"

LEGEND

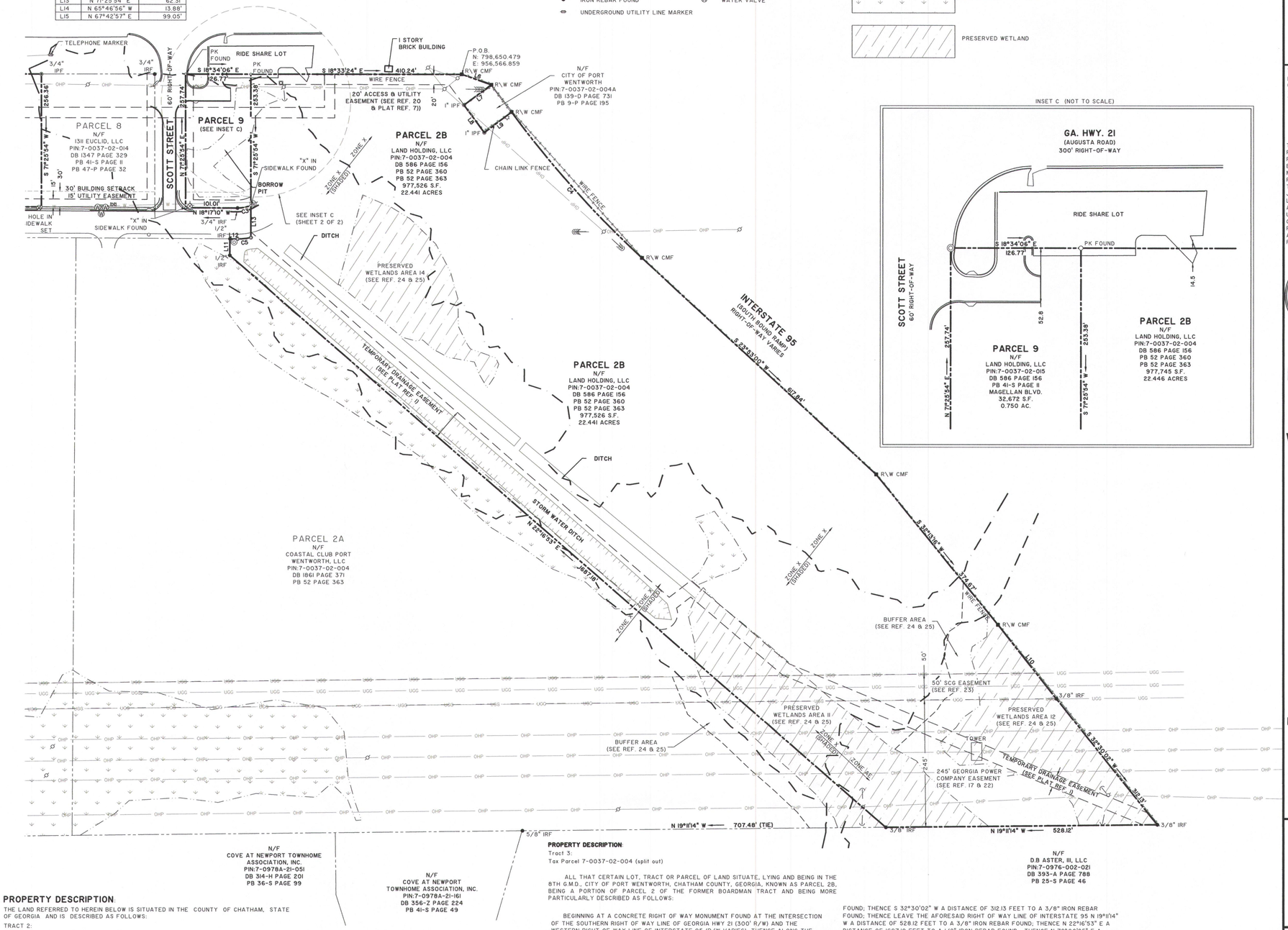
- CONC. MONUMENT FOUND
- CURB INLET MANHOLE
- ELECTRIC BOX
- FIRE HYDRANT
- GAS VALVE
- GUY WIRE
- IRON PIPE FOUND
- IRON PIPE SET
- IRON REBAR FOUND
- UNDERGROUND UTILITY LINE MARKER
- LIGHT POLE
- COMPUTED POINT (NO MONUMENT)
- POWER POLE
- STORM DRAINAGE MANHOLE
- SANITARY MANHOLE
- TELEPHONE BOX
- WATER METER
- WATER MANHOLE
- WATER VALVE

HATCH LEGEND

- RIP-RAP
- SIDEWALK
- JURISDICTIONAL WETLAND
- PRESERVED WETLAND

LINE-TYPE LEGEND

- BUILDING SETBACK
- NATURAL GAS LINE EASEMENT
- POWER LINE EASEMENT
- UTILITIES EASEMENT
- UGG — UNDERGROUND NATURAL GAS LINE
- OHP — OVERHEAD POWER LINE
- UGFO — UNDERGROUND FIBER OPTIC CABLE LINE
- STORM DRAINAGE LINE
- FLOOD ZONE LIMITS



INSET C (NOT TO SCALE)

NOTES

1. FIELD EQUIPMENT USED FOR THIS SURVEY: GEOMAX ZOOM90 R2.
2. THE FIELD DATA UPON WHICH THIS MAP OR PLAT IS BASED HAS A CLOSURE RATIO OF 1 FOOT IN 41,263 FEET, AN ANGULAR ERROR OF 0.44" PER ANGLE POINT, AND WAS ADJUSTED USING THE COMPASS RULE METHOD.
3. ALL CORNERS MARKED WITH 3/4" IRON PIPE, 24" LONG WITH CAP STAMPED "TH#" UNLESS OTHERWISE NOTED.
4. THIS PLAT HAS A PRECISION OF ONE FOOT IN 93,688.
5. COORDINATES AND DIRECTIONS ARE BASED ON GEORGIA STATE PLANE COORDINATE SYSTEM (NAD83), EAST ZONE.
6. ACCORDING TO F.I.R.M. MAP NO. 13051C, PANEL 0030G, REVISED AUGUST 16, 2018, THE PROPERTY SHOWN ON THIS PLAT LIES IN ZONE X, X SHADED & AE (12 FEET).
7. WETLANDS THAT MAY EXIST ON THE PROPERTY ARE UNDER THE JURISDICTION OF THE CORPS OF ENGINEERS AND/OR THE DEPARTMENT OF NATURAL RESOURCES. LOT OWNERS AND THE DEVELOPER ARE SUBJECT TO PENALTY BY LAW FOR DISTURBANCE TO THESE PROTECTED AREAS WITHOUT PROPER PERMIT AND APPROVAL.
8. THE POSITION OF UNDERGROUND UTILITIES SHOWN ON THIS DRAWING IS BASED UPON THE LOCATION OF SURFACE APPURTENANCES AND/OR SURFACE MARKINGS AND SHOULD BE CONSIDERED APPROXIMATE. THE EXACT LOCATION, SIZE, TYPE AND DEPTH OF UNDERGROUND UTILITIES SHOWN HEREON OR ANY OTHER UTILITIES THAT MAY EXIST, CAN ONLY BE DETERMINED VIA AN EXCAVATION OF THE UTILITY.
9. REFERENCES LISTED WERE PROVIDED BY THE ORT LAW FIRM.

REFERENCES

17. EASEMENT FOR RIGHT OF WAY TO SAVANNAH ELECTRIC AND POWER COMPANY FILED ON JANUARY 16, 1973, RECORDED IN RECORD BOOK 101-Q, FOLIO 721-722, AFORESAID RECORDS.
18. EASEMENT DESCRIBED IN WARRANTY DEED FROM CLAYTON P. BOARDMAN, JR., BARNEY D. BOARDMAN, AND WARD S. CLAUSSEN TO CITY OF PORT WENTWORTH FILED AUGUST 1, 1988, RECORDED IN RECORD BOOK 139-D, FOLIO 731-732, AFORESAID RECORDS.
22. EASEMENT FROM LAND HOLDING, LLC TO SOUTHERN TELECOM, INC. FILED JUNE 25, 2019, RECORDED IN RECORD BOOK 1653, FOLIO 606-610, AFORESAID RECORDS.
23. NATURAL GAS TRANSMISSION EASEMENT TO SCG PIPELINE, INC. FILED MARCH 5, 2003, RECORDED IN RECORD BOOK 247-V, FOLIO 266-272, AFORESAID RECORDS.
24. RESTRICTIVE COVENANTS FILED JANUARY 21, 1997, RECORDED IN RECORD BOOK 183-G, FOLIO 627-643, AFORESAID RECORDS.
25. FIRST AMENDMENT AND EXTENSION OF RESTRICTIVE COVENANTS FILED OCTOBER 21, 2002, RECORDED IN RECORD BOOK 241-T, PAGE 647, AFORESAID RECORDS,AS AFFECTED BY THAT AUGUST 8, 2018 LETTER FROM SKYE H. STOCKEL, REGULATORY SPECIALIST, COASTAL SECTION, U.S. ARMY CORPS OF ENGINEERS TO JOHN R. GASSIE, V.P., LAND HOLDING, LLC, ASSOCIATED WITH PROJECT NUMBER SAS-2005-02104, A COPY OF WHICH IS ON FILE IN THE OFFICE OF ROBINSON & BLAZER, LLP, 150 PONCE DE LEON AVE., STE. 475, DECATUR, GEORGIA 30030.
35. PROPOSED 60' ACCESS AND UTILITIES EASEMENT ANTICIPATED TO BE RESERVED IN FAVOR OF TRACT 2PURSUANT OT DEED OR EASEMENT INSTRUMENT TO BE RECORDED IN THE AFORESAID RECORDS.

PLAT REFERENCES

1. PHASE I SAVANNAH GATEWAY WEST, BEING A SUBDIVISION OF A PORTION OF LANDS OF THE SAVANNAH WEST, LLC, BY HUSSEY, GAY, BELL, & DEYOUNG, DATED JULY 31, 2008, RECORDED IN PLAT BOOK 41-S, PAGE 11, CHATHAM COUNTY RECORDS.
2. REVISED MINOR SUBDIVISION SURVEY FORMER BOARDMAN TRACT, BEING A DIVISION OF PARCEL 2, A 77.32 ACRE PORTION OF THE FORMER BOARDMAN TRACT, BY SUNDIAL LAND SURVEYING, PC, DATED JANUARY 28, 2020, REVISED FEBRUARY 26, 2020, RECORDED IN PLAT BOOK 52, PAGE 360, CHATHAM COUNTY RECORDS, AND FURTHER REVISED MAY 12, 2020, RECORDED IN PLAT BOOK 52, PAGE 428 IN CHATHAM COUNTY RECORDS.
3. A MINOR SUBDIVISION PLAT OF PARCEL 2A, SAVANNAH GATEWAY WEST, A PORTION OF OF TAX PARCEL NO. 7-0037-02-004, BY ATLAS SURVEYING, INC, DATED FEBRUARY 27, 2020, RECORDED IN PLAT BOOK 52, PAGE 363, CHATHAM COUNTY RECORDS.
4. RECOMBINATION SURVEY LOT 7 & LOT 8, PHASE I SAVANNAH GATEWAY WEST, BY THOMAS & HUTTON, DATED JULY 23, 2012, RECORDED IN PLAT BOOK 47-P, PAGE 32, CHATHAM COUNTY RECORDS.
5. PLAT OF A 20' UTILITY EASEMENT THROUGH LANDS OF McKAY INVESTMENTS, LLC, BY HUSSEY, GAY, BELL & DeYOUNG, DATED NOVEMBER 23, 2004, REVISED JANUARY 17, 2005, RECORDED IN PLAT BOOK 30-P, PAGE 25, CHATHAM COUNTY RECORDS.
6. EASEMENT SURVEY SCG PIPELINE PROJECT, CROSSING PROPERTY OF CLAYTON P. BOARDMAN, III - CH-30A, BY GLENN ASSOCIATES SURVEYING, INC, DATED MAY 17, 2002.
7. PLAT OF PROPOSED WELL SITE BEING LANDS OF BOARDMAN AND CLAUSEN, BY HUSSEY, GAY, BELL & DeYOUNG, DATED JUNE 14, 1988, RECORDED IN PLAT BOOK 9-P, PAGE 195, CHATHAM COUNTY RECORDS.
8. MINOR SUBDIVISION SURVEY FORMER BOARDMAN TRACT BEING A DIVISION OF PARCEL 2, A 77.27 ACRE PORTION OF THE FORMER BOARDMAN TRACT, BY SUNDIAL LAND SURVEYING, PC, DATED JANUARY 28, 2020, RECORDED IN PLAT BOOK 52, PAGE 353, CHATHAM COUNTY RECORDS.
9. WETLANDS SURVEY LAND OF PNC BANK, N.A. AND A PORTION OF SAVANNAH GATEWAY WEST PHASE I, BY THOMAS & HUTTON, DATED MAY 1, 2018.

PROPERTY DESCRIPTIONS:

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF CHATHAM, STATE OF GEORGIA AND IS DESCRIBED AS FOLLOWS:

TRACT 1:

TAX PARCELS 7-0037-02-007, 7-0037-02-008, 7-0037-02-011, 7-0037-02-013, 7-0037-02-015

ALL THAT CERTAIN LOT, TRACT, OR PARCEL OF LAND SITUATE, LYING, AND BEING IN THE EIGHTH G.M. DISTRICT, CITY OF PORT WENTWORTH, CHATHAM COUNTY, GEORGIA BEING LOTS 1,2,5,7, AND 9 OF SAVANNAH GATEWAY WEST PER PLAT RECORDED JANUARY 28, 2008 IN PLAT BOOK 41-S, PAGE 11, CHATHAM COUNTY RECORDS, LAST CONVEYED BY DEED DATED JUNE 2, 2015, RECORDED IN DEED BOOK 586, PAGE 156, AFORESAID RECORDS.

TAX PARCEL 7-0037-02-006

ALL THAT CERTAIN LOT, TRACT, OR PARCEL OF LAND SITUATE, LYING, AND BEING IN THE EIGHTH G.M. DISTRICT, CITY OF PORT WENTWORTH, CHATHAM COUNTY, GEORGIA BEING THE "SIGN PARCEL" LOT OF SAVANNAH GATEWAY WEST PER PLAT RECORDED JANUARY 28, 2008 IN PLAT BOOK 41S, PAGE 11, CHATHAM COUNTY RECORDS, LAST CONVEYED BY DEED DATED JUNE 2, 2015, RECORDED IN DEED BOOK 586, PAGE 156, AFORESAID RECORDS.

PROPERTY DESCRIPTION:

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF CHATHAM, STATE OF GEORGIA AND IS DESCRIBED AS FOLLOWS:

TRACT 2:

TAX PARCEL 7-0037-02-004 (SPLIT OUT)

ALL THAT CERTAIN LOT, TRACT, OR PARCEL OF LAND SITUATE, LYING, AND BEING IN THE EIGHTH G.M. DISTRICT, CITY OF PORT WENTWORTH, CHATHAM COUNTY, GEORGIA, BEING PARCEL 4 OF SAVANNAH GATEWAY WEST PER PLAT RECORDED FEBRUARY 27, 2020 IN PLAT BOOK 52, PAGE 360, FURTHER REVISED MAY 12, 2020, RECORDED IN PLAT BOOK 52, PAGE 428, CHATHAM COUNTY RECORDS, LAST CONVEYED BY DEED DATED JUNE 2, 2015, RECORDED IN DEED BOOK 586, PAGE 156, AFORESAID RECORDS.

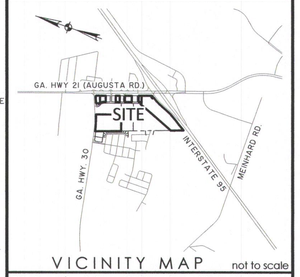
PROPERTY DESCRIPTION:

Tract 3:

Tax Parcel 7-0037-02-004 (split out)

ALL THAT CERTAIN LOT, TRACT OR PARCEL OF LAND SITUATE, LYING AND BEING IN THE 8TH G.M.D., CITY OF PORT WENTWORTH, CHATHAM COUNTY, GEORGIA, KNOWN AS PARCEL 2B, BEING A PORTION OF PARCEL 2 OF THE FORMER BOARDMAN TRACT AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A CONCRETE RIGHT OF WAY MONUMENT FOUND AT THE INTERSECTION OF THE SOUTHERN RIGHT OF WAY LINE OF GEORGIA HWY 21 (300' R/W) AND THE WESTERN RIGHT OF WAY LINE OF INTERSTATE 95 (R/W VARIES); THENCE ALONG THE AFORESAID RIGHT OF WAY LINE OF INTERSTATE 95 S 00°51'46" W A DISTANCE OF 60.85 FEET TO A CONCRETE RIGHT OF WAY MONUMENT FOUND; THENCE LEAVE THE AFORESAID RIGHT OF LINE OF INTERSTATE 95 N 55°06'12" W A DISTANCE OF 66.06 FEET TO A 1" IRON PIPE FOUND; THENCE S 34°44'12" W A DISTANCE OF 66.07 FEET TO A 1" IRON PIPE FOUND; THENCE S 55°16'32" E A DISTANCE OF 66.18 FEET TO A CONCRETE RIGHT OF WAY MONUMENT FOUND ON THE AFORESAID RIGHT OF WAY LINE OF INTERSTATE 95; THENCE ALONG THE AFORESAID RIGHT OF WAY LINE OF INTERSTATE 95 379.13 FEET ALONG THE ARC OF A CURVE TURNING TO THE LEFT, HAVING A RADIUS OF 1976.16 FEET, A CHORD LENGTH OF 378.55 FEET, AND A CHORD BEARING S 29°23'17" W TO A CONCRETE RIGHT OF WAY MONUMENT FOUND; THENCE S 23°53'00" W A DISTANCE OF 617.84 FEET TO A CONCRETE RIGHT OF WAY MONUMENT FOUND; THENCE S 32°13'16" W A DISTANCE OF 374.67 FEET TO A CONCRETE RIGHT OF WAY MONUMENT FOUND; THENCE S 32°57'09" W A DISTANCE OF 183.02 FEET TO A 3/8" IRON REBAR FOUND; THENCE LEAVE THE AFORESAID RIGHT OF WAY LINE OF INTERSTATE 95 N 19°11'14" W A DISTANCE OF 528.12 FEET TO A 3/8" IRON REBAR FOUND; THENCE N 22°16'53" E A DISTANCE OF 1687.18 FEET TO A 1/2" IRON REBAR FOUND ; THENCE N 72°00'25" E A DISTANCE OF 31.61 FEET TO A 1/2" IRON REBAR FOUND ON THE SOUTHERN RIGHT OF WAY LINE OF MAGELLAN BOULEVARD (60' R/W); THENCE ALONG THE AFORESAID RIGHT OF WAY LINE OF MAGELLAN BOULEVARD S 18°17'10" E A DISTANCE OF 14.65 FEET TO A 3/4" IRON PIPE SET; THENCE 26.16 FEET ALONG THE ARC OF A CURVE TURNING TO THE LEFT, HAVING A RADIUS OF 130.00 FEET, A CHORD LENGTH OF 26.12 FEET, AND A CHORD BEARING S 24°09'48" E TO A 3/4" IRON PIPE SET; THENCE LEAVE THE AFORESAID RIGHT OF WAY LINE OF MAGELLAN BOULEVARD N 71°25'54" E A DISTANCE OF 62.31 FEET TO A 3/4" IRON PIPE SET ON THE NORTHERN RIGHT OF WAY LINE OF MAGELLAN BOULEVARD; THENCE LEAVE THE AFORESAID RIGHT OF WAY LINE OF MAGELLAN BOULEVARD N 71°25'54" E A DISTANCE OF 253.38 FEET TO A PK NAIL FOUND ON THE SOUTHERN RIGHT OF WAY LINE OF GEORGIA HWY 21; THENCE ALONG THE AFORESAID RIGHT OF WAY LINE OF GEORGIA HWY 21 S 18°33'24" E A DISTANCE OF 410.24 FEET TO THE POINT OF BEGINNING HAVING AN AREA OF 977,526 SQUARE FEET OR 22.441 ACRES OF LAND.



VICINITY MAP not to scale

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SURVEYOR'S CERTIFICATION

THIS PLAT IS A RETRACEMENT OF AN EXISTING PARCEL OR PARCELS OF LAND AND DOES NOT SUBDIVIDE OR CREATE A NEW PARCEL OR MAKE ANY CHANGES TO ANY REAL PROPERTY BOUNDARIES. THE RECORDING INFORMATION OF THE DOCUMENTS, MAPS, PLATS, OR OTHER INSTRUMENTS WHICH CREATED THE PARCEL OR PARCELS ARE STATED HEREON. RECORDATION OF THIS PLAT DOES NOT IMPLY APPROVAL OF ANY LOCAL JURISDICTION, AVAILABILITY OF PERMITS, COMPLIANCE WITH LOCAL REGULATIONS OR REQUIREMENTS, OR SUITABILITY FOR ANY USE OR PURPOSE OF THE LAND. FURTHERMORE, THE UNDERSIGNED LAND SURVEYOR CERTIFIES THAT THIS PLAT COMPLIES WITH THE MINIMUM TECHNICAL STANDARDS FOR PROPERTY SURVEYS IN GEORGIA AS SET FORTH IN THE RULES AND REGULATIONS OF THE GEORGIA BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS AND AS SET FORTH IN O.C.G.A. SECTION 15-6-67.

GEORGIA REGISTERED No. 2612 LAND SURVEYOR WRIGHT C. POWERS, JR.

5-18-2020

WRIGHT C. POWERS, JR.
GEORGIA REGISTERED LAND SURVEYOR
RLS #2612 / LSF #145
powers.w@thomasandhutton.com

BOUNDARY SURVEY

LOTS 1, 2, 5, 7, 9 & SIGN PARCEL PHASE 1, SAVANNAH GATEWAY WEST, & PARCELS 2B & 4 FORMER BOARDMAN TRACT BEING A DIVISION OF PARCEL 2, A 77.32 ACRE PORTION OF THE FORMER BOARDMAN TRACT

8TH G.M. DISTRICT, CITY OF PORT WENTWORTH
CHATHAM COUNTY, GEORGIA

prepared for
BISHOP BEALE DUNCAN;
DOUBLE REVERSE, LLC;
FIRST AMERICAN TITLE INSURANCE CO.;
ROBINSON LAW, P.C.; &
THE ORT LAW FIRM

No.	Revision	By	Date

THOMAS & HUTTON
50 Park of Commerce Way
Savannah, GA 31405 • 912.234.5300
www.thomasandhutton.com

100 0 100 200
1 INCH = 100 FEET

plat	drawn	reviewed	field	crew
04/24/2020	BA	WCP	04/21/2020	MB

job 28427.0000

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS
SAVANNAH DISTRICT
100 W OGLETHORPE AVENUE
SAVANNAH, GEORGIA 31401-3604

August 8, 2018

Regulatory Branch
SAS-2005-02104

Mr. John R. Gassie, V.P.
Land Holding, LLC
201 East Pine Street, Suite 100
Orlando, Florida 32801

Dear Mr. Gassie:

I refer to a letter dated May 24, 2018, submitted on your behalf by Mr. Joel Price of Sligh Environmental Consultants, Inc., requesting a delineation of aquatic resources for your 94.68 acre site located west of and adjacent to Georgia Highway 21, south of and adjacent to Georgia State Route 30, and north of and adjacent to Interstate 95, in the City of Port Wentworth, Chatham County, Georgia (Latitude 32.1934, Longitude -81.1987). This project has been assigned number SAS-2005-02104 and it is important that you refer to this number in all communication concerning this matter.

The enclosed survey entitled "Wetland Survey Lands of PNC Bank, N.A. and a Portion of Savannah Gateway West Phase 1", with revision date July 23, 2018, and signed by Registered Land Surveyor Wright C. Powers, identifies the delineation limits of all aquatic resources within the review area. The wetlands were delineated in accordance with criteria contained in the 1987 "Corps of Engineers Wetland Delineation Manual," as amended by the most recent regional supplements to the manual. This delineation will remain valid for a period of 5-years unless new information warrants revision prior to that date.

If you intend to sell property that is part of a project that requires Department of the Army Authorization, it may be subject to the Interstate Land Sales Full Disclosure Act. The Property Report required by Housing and Urban Development Regulation must state whether, or not a permit for the development has been applied for, issued or denied by the U.S. Army Corps of Engineers (Part 320.3(h) of Title 33 of the Code of Federal Regulations).

This communication does not convey any property rights, either in real estate or material, or any exclusive privileges. It does not authorize any injury to property, invasion of rights, or any infringement of federal, state or local laws, or regulations. It does not obviate your requirement to obtain state or local assent required by law for the

development of this property. If the information you have submitted, and on which the U.S. Army Corps of Engineers has based its determination is later found to be in error, this decision may be revoked.

A copy of this letter is being provided to the following party: Mr. Joel Price, Sligh Environmental Consultants, Inc., 31 Park of Commerce Way, Suite 200B, Savannah, Georgia 31405.

Thank you in advance for completing our on-line Customer Survey Form located at http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey. We value your comments and appreciate your taking the time to complete a survey each time you have interaction with our office.

If you have any questions, please call me at (912) 652-5690.

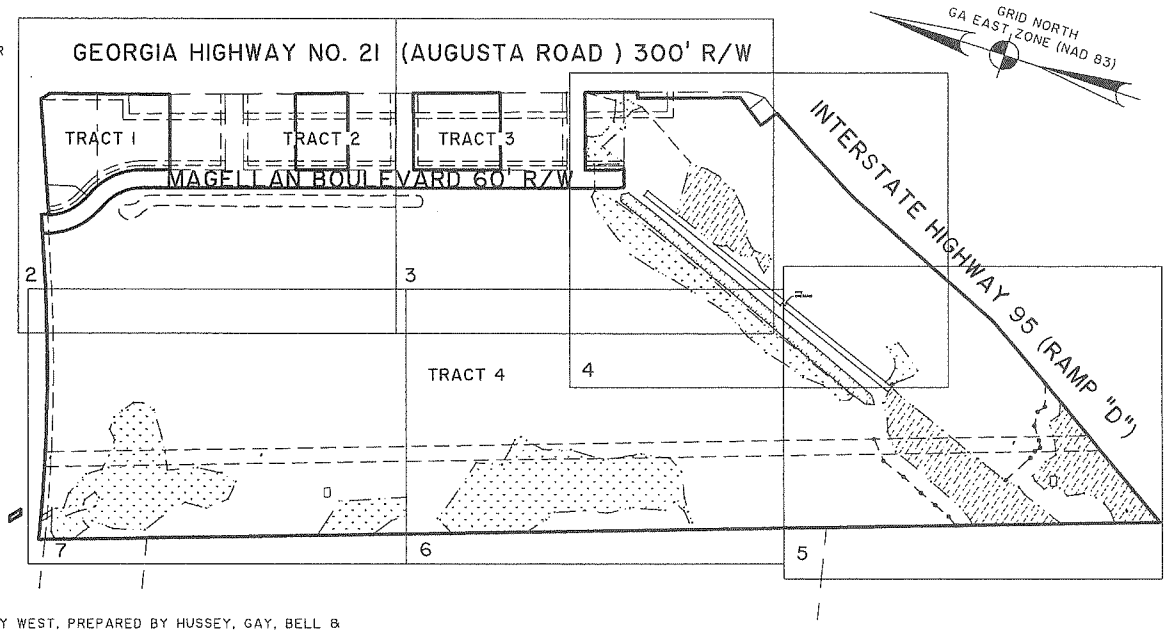
Sincerely,

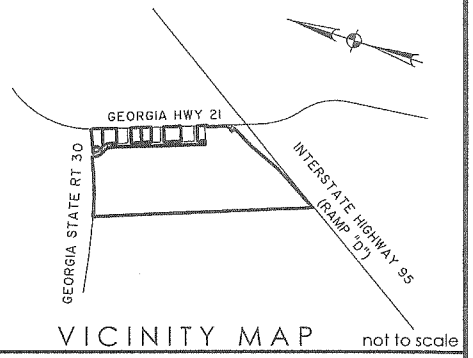
Skye H. Stockel
Regulatory Specialist, Coastal Section

Enclosures

LEGEND

- ELECTRIC BOX
- UNDERGROUND UTILITY LINE MARKER
- POWER POLE
- WLM WATER LINE MARKER
- MEANDER POINT (NO MONUMENT)
- CONCRETE MONUMENT (FOUND)
- CONCRETE MONUMENT (SET)
- IRON PIPE (FOUND)
- IRON PIPE (SET)
- IRON REBAR (FOUND)
- IRON REBAR (SET)
- JURISDICTIONAL WETLAND
- PRESERVED WETLAND





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WETLAND SURVEY

LANDS OF PNC BANK, N.A. AND A PORTION OF SAVANNAH GATEWAY WEST PHASE 1

8TH G.M.D., CITY OF PORT WENTWORTH,
CHATHAM COUNTY, GEORGIA

prepared for
PNC BANK, N.A.

REFERENCES

1. PLAT OF PHASE I SAVANNAH GATEWAY WEST, PREPARED BY HUSSEY, GAY, BELL & DeYOUNG, INC. , DATED 7-31-08, RECORDED IN SMB 41S PAGE 11, CHATHAM COUNTY RECORDS.
2. PLAT OF A 20' UTILITY EASEMENT THROUGH LANDS OF McKAMEY INVESTMENTS, LLC., PREPARED BY HUSSEY, GAY, BELL & DeYOUNG, INC. LAST REVISED 1-17-05, RECORDED IN PRB 30P PAGE 25, CHATHAM COUNTY RECORDS.
3. DEED UNDER POWER OF SALE SAVANNAH GATEWAY WEST, LLC TO SAVANNAH INTERESTS, LLC, DATED SEPTEMBER 6, 2011, RECORDED IN DEED BOOK 372E PAGE 709, CHATHAM COUNTY, RECORDS.
4. A WETLAND PLAT OF 353.30 ACRE TRACT BEING A PORTION OF THE HERBERT KELLER TRACT, PREPARED BY KERN & COLEMAN & CO., DATED 2-28-02, RECORDED IN PRB 22P PAGE 59A.

NOTES

1. THIS MAP OR PLAT HAS BEEN CALCULATED FOR CLOSURE AND IS FOUND TO BE ACCURATE WITHIN ONE FOOT IN 142,113 FEET OR BETTER.
2. COORDINATES AND DIRECTIONS SHOWN ON THIS SURVEY ARE BASED ON GEORGIA STATE PLANE COORDINATE SYSTEM (NAD83), EAST ZONE.
3. ACCORDING TO F.I.R.M. MAP NO. 13051C0030F, REVISED SEPTEMBER 26, 2008, THE PROPERTY SHOWN ON THIS PLAT LIES IN FLOOD HAZARD ZONE AE (EL.12.0) & ZONE X.
4. THE TAX PARCEL IDENTIFICATION NUMBERS (PIN) FOR THE PROPERTY PLATTED HEREON ARE: 7-0037-02-004, 7-0037-02-006, 7-0037-02-007, 7-0037-02-008, 7-0037-02-010, 7-0037-02-011, 7-0037-02-013 & 7-0037-02-015.
5. WETLANDS ARE UNDER THE JURISDICTION OF THE CORPS OF ENGINEERS AND/OR THE DEPARTMENT OF NATURAL RESOURCES. LOT OWNERS AND THE DEVELOPER ARE SUBJECT TO PENALTY BY LAW FOR DISTURBANCE TO THESE PROTECTED AREAS WITHOUT PROPER PERMIT AND APPROVAL.
6. THE POSITION OF UNDERGROUND UTILITIES SHOWN ON THIS DRAWING IS BASED UPON THE LOCATION OF SURFACE APPURTENANCES AND/OR SURFACE MARKINGS AND SHOULD BE CONSIDERED APPROXIMATE.
7. WETLANDS DESIGNATED AS 11, 12 & 14 ARE PRESERVED WETLAND PER RESTRICTIVE COVENANTS RECORDED IN DEED BOOK 183G, FOLIO 627 AND DEED BOOK 24IT, FOLIO 647.
8. WETLAND AREAS A, B, C, D, E, & F WERE DELINEATED BY SLIGH ENVIRONMENTAL CONSULTANTS, INC IN APRIL 2018 AND LOCATED BY THOMAS & HUTTON IN APRIL 2018. WETLAND DITCHES LOCATED BY THOMAS & HUTTON IN DECEMBER 2012. THE LOCATION OF PRESERVED WETLAND 11, 12 & 14 ARE BASED ON A PREVIOUS WETLAND EXHIBIT PREPARED BY HUSSEY, GAY BELL & DeYOUNG, INC DATED 12-2-2005 AND VERIFIED BY SLIGH ENVIRONMENTAL CONSULTANTS, INC. AND NOT FIELD LOCATED BY THOMAS & HUTTON.
9. SEE SHEET 8 OF 8 FOR LINE, CURVE, AND AREA TABLES.

GEORGIA REGISTERED No. 2612 LAND SURVEYOR WRIGHT C. POWERS JR.

WETLAND LINES SHOWN ON THIS SURVEY WERE LOCATED USING A TRIMBLE GEO7X RECEIVER AND DATA WAS DIFFERENTIALLY CORRECTED USING NGS STATION GASA. THE PURPOSE OF THIS SURVEY IS FOR THE LOCATION OF WETLAND AREAS ONLY AND IT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PROPERTY AND IS NOT SUITABLE FOR CONVEYANCE OF PROPERTY.

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400 0 400 800
1 INCH = 400 FEET

plat	drawn	reviewed	field	crew
05-01-18	JMK	WCP	04-17-18	JH

Rev. 05-18-18 Tract 2 area Rev. 07-23-18 Tract 4 areas
job 27224 SHEET 1 OF 8

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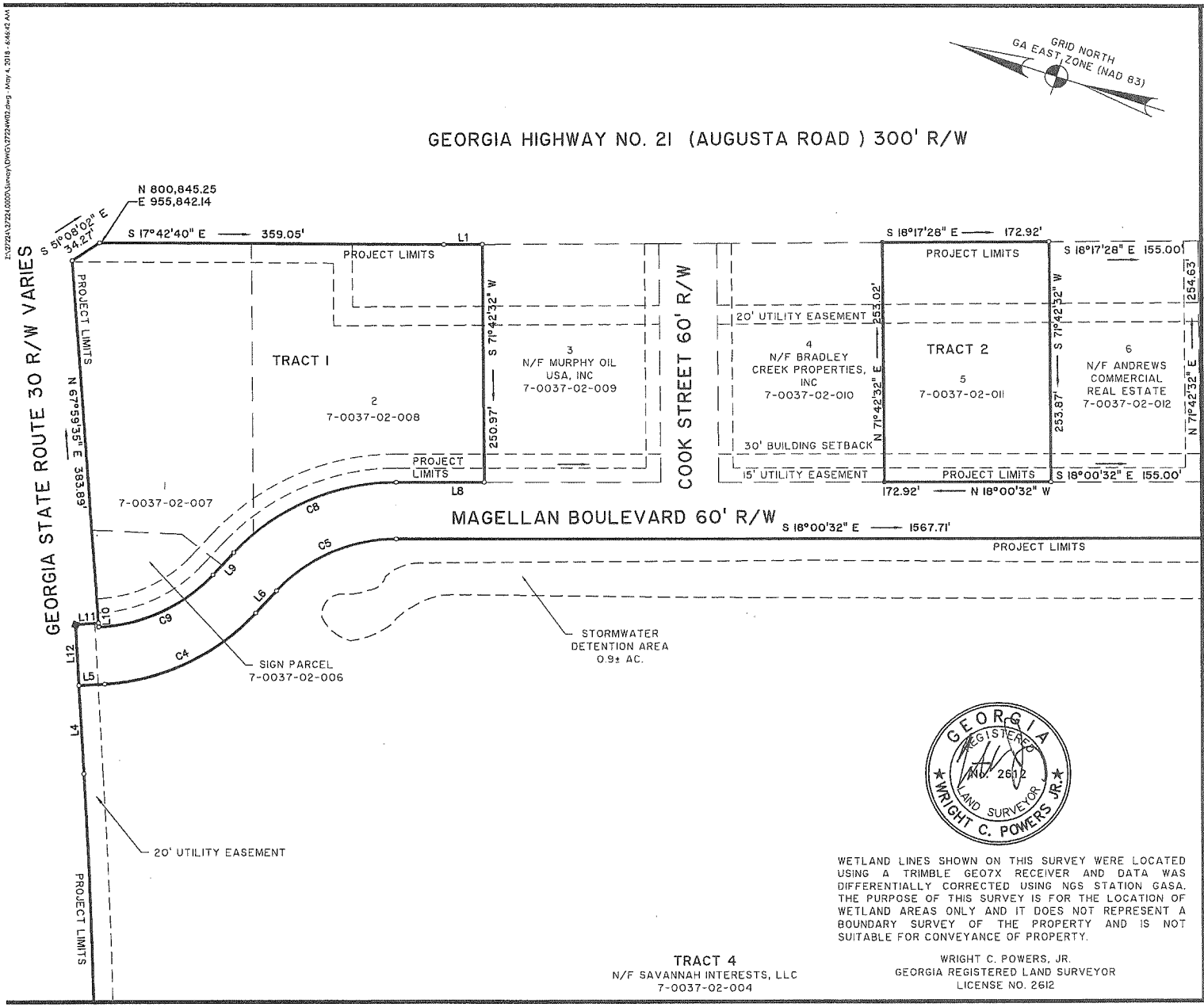

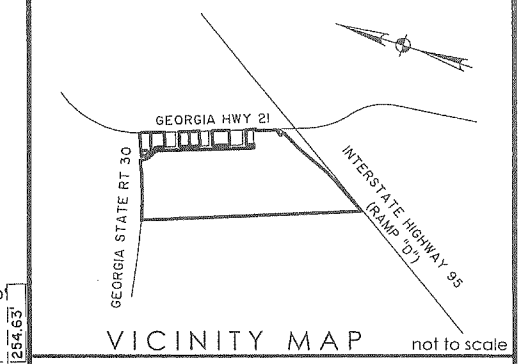

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1 INCH = 100 FEET

plat	drawn	reviewed	field	crew
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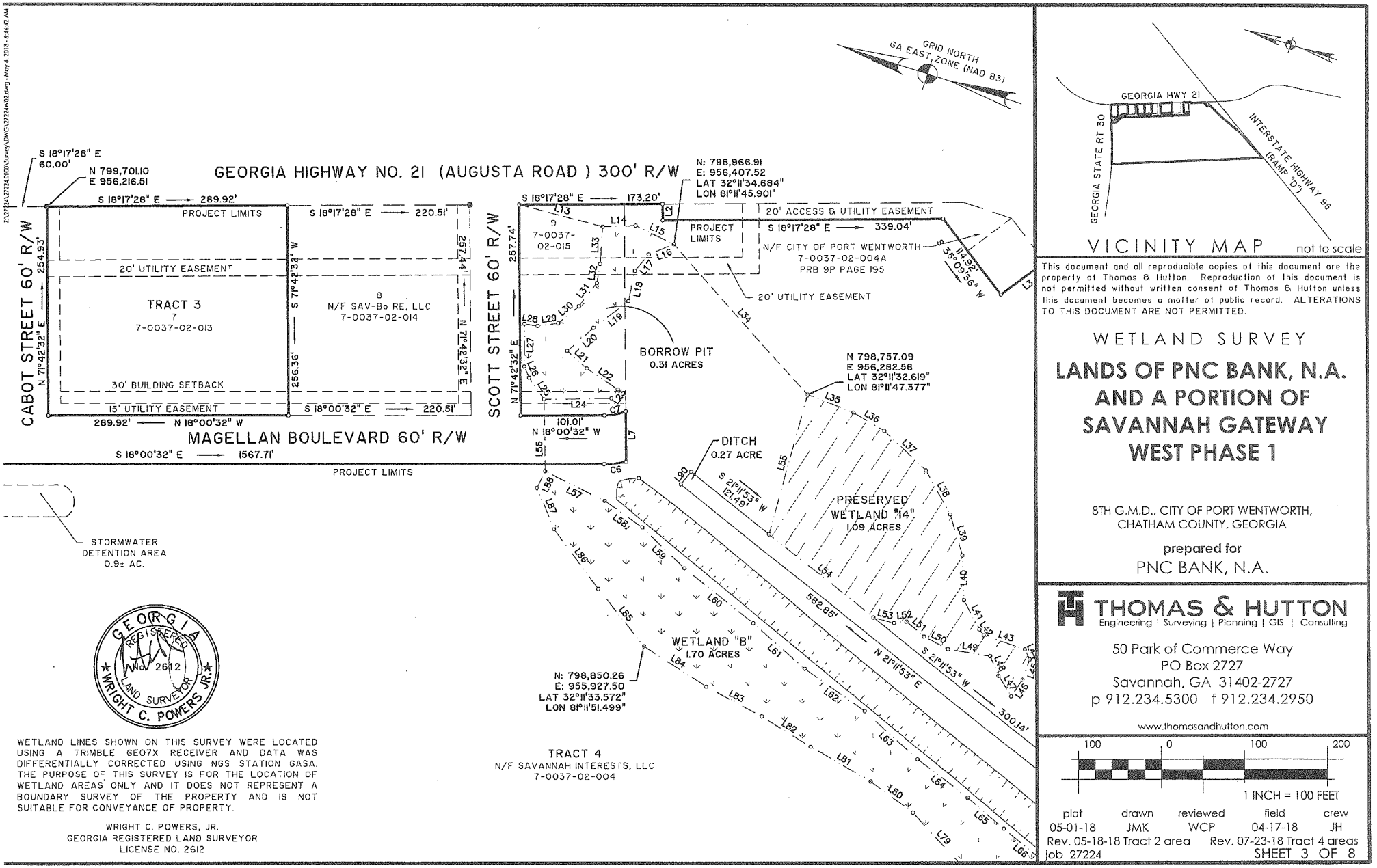
Rev. 05-18-18 Tract 2 area Rev. 07-23-18 Tract 4 areas
job 27224 SHEET 2 OF 8



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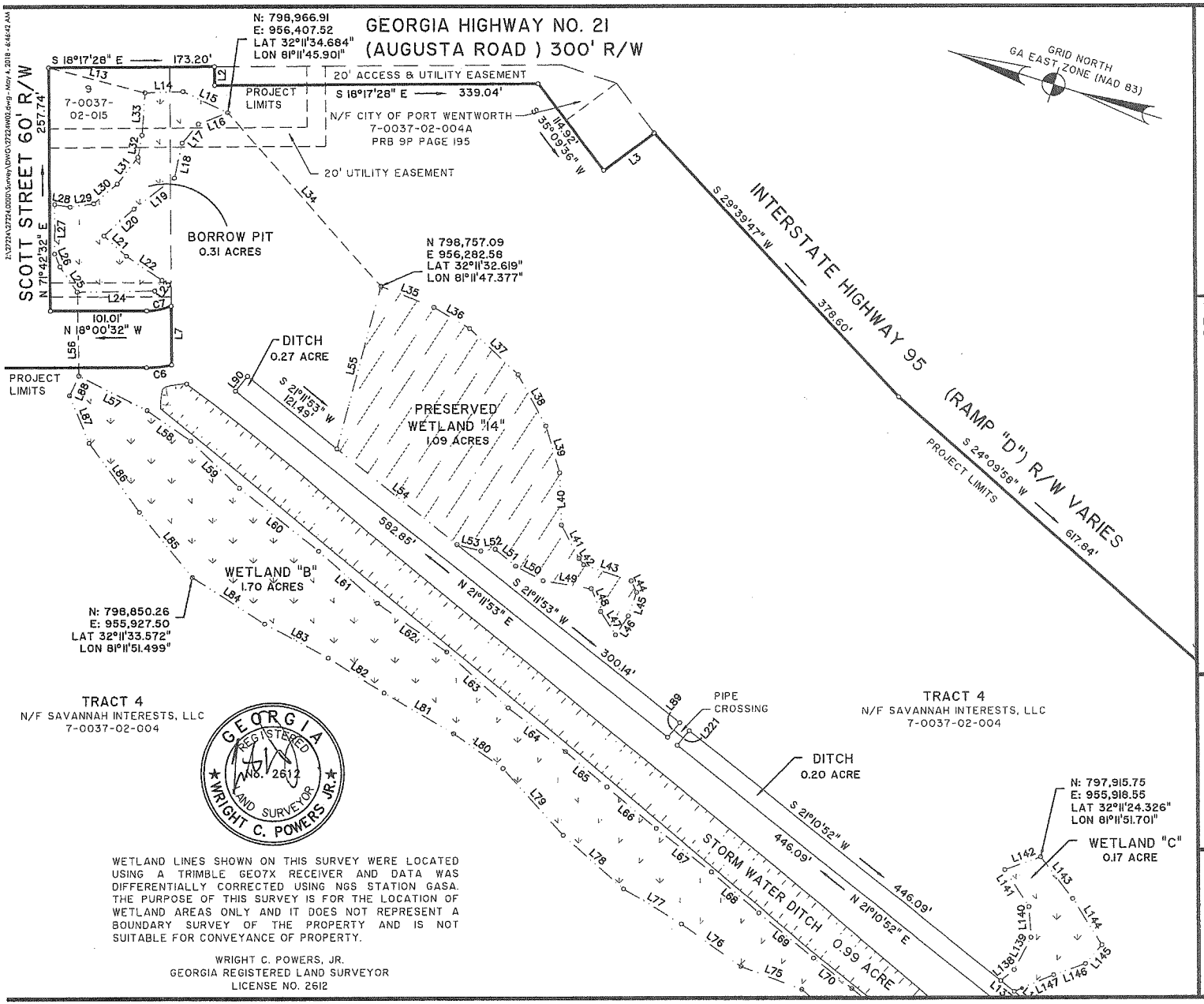

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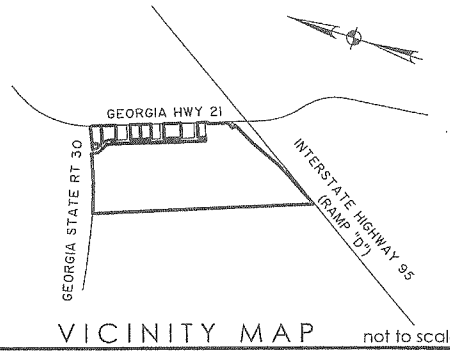

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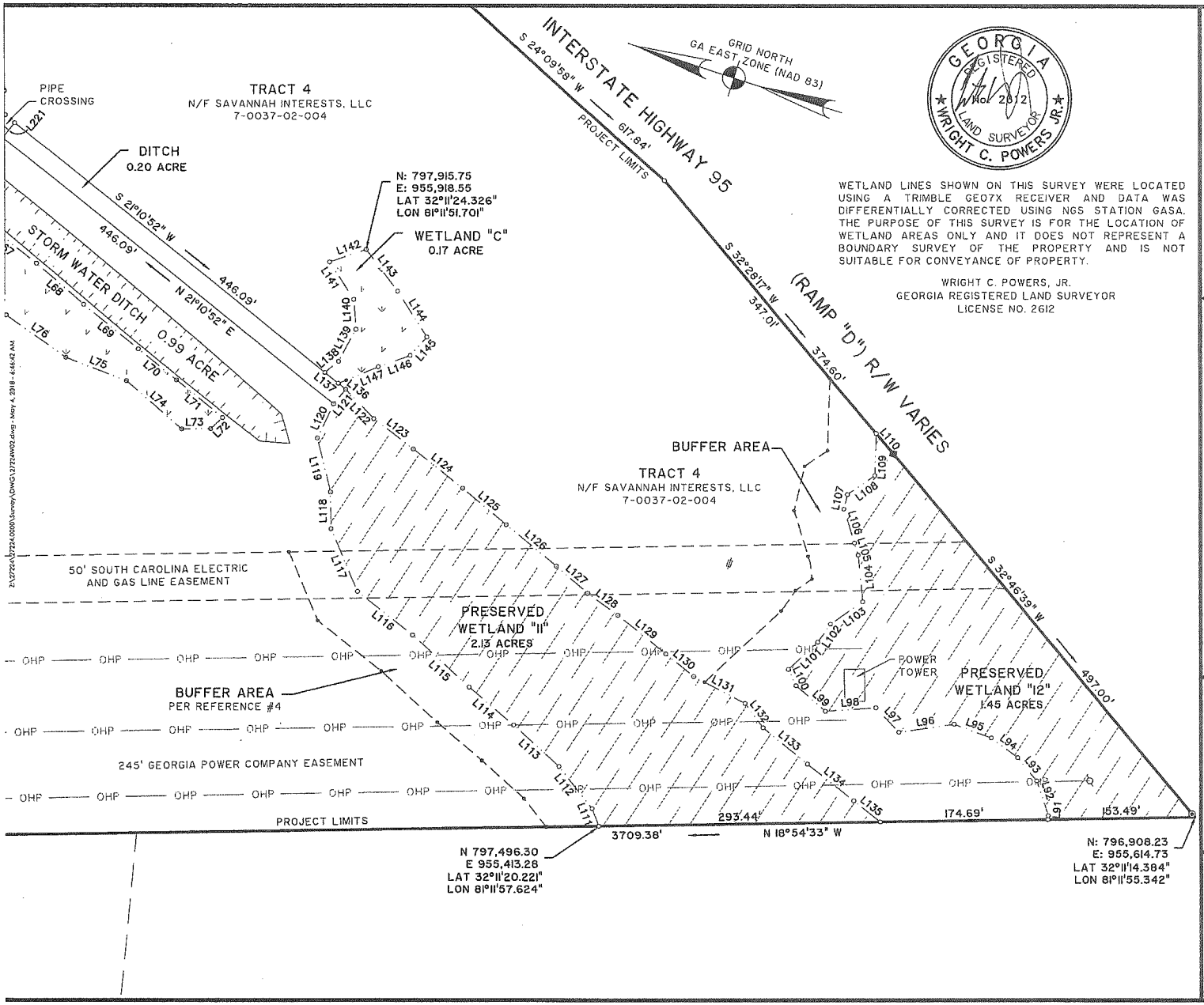
job 27224 SHEET 4 OF 8



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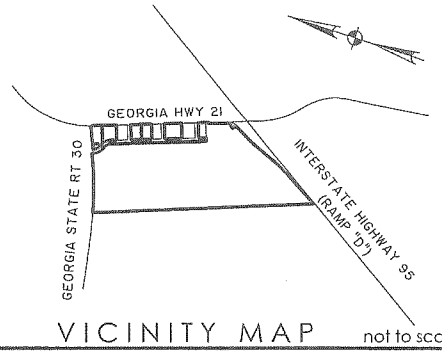

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job 27224 SHEET 5 OF 8

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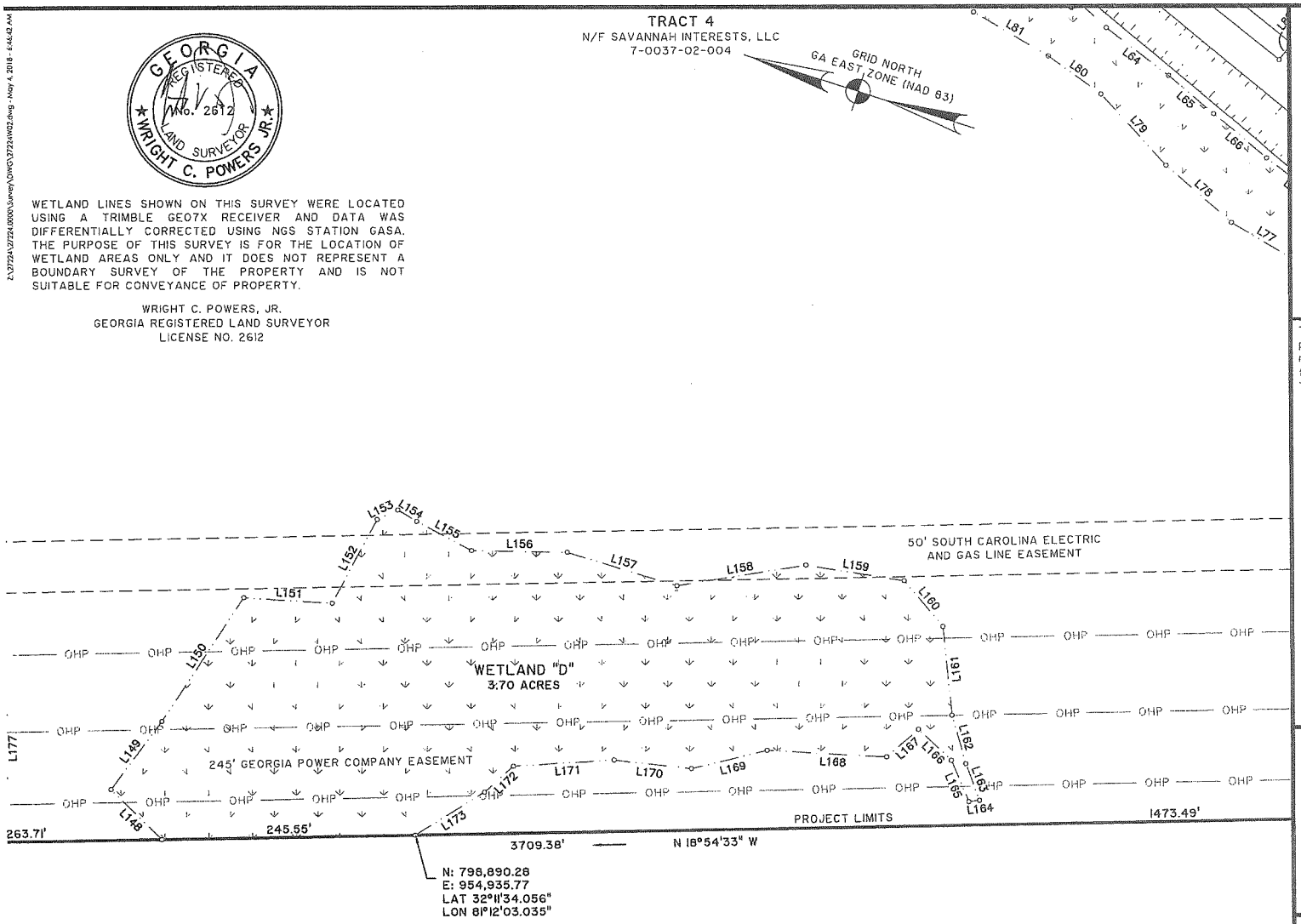
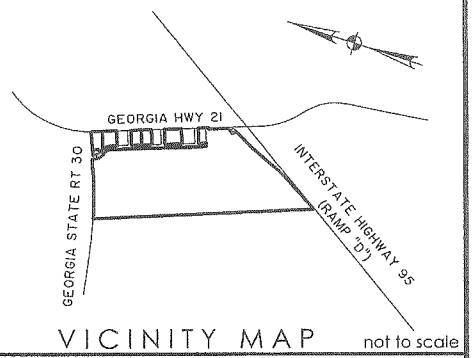
GEORGIA REGISTERED LAND SURVEYOR
LICENSE NO. 2612

TRACT 4
N/F SAVANNAH INTERESTS, LLC
7-0037-02-004

GRID NORTH
GA EAST ZONE (NAD 83)





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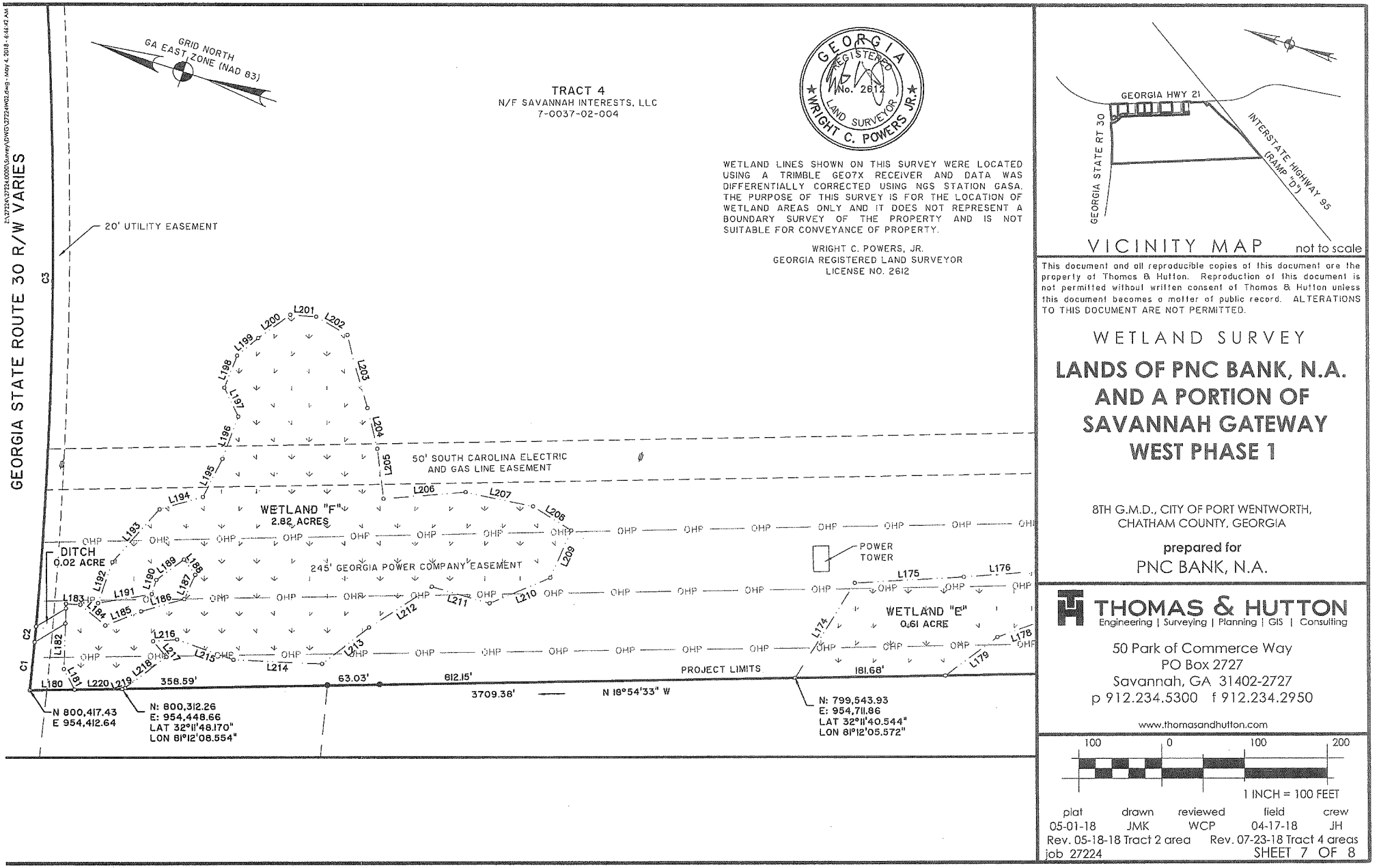

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Rev. 05-18-18 Tract 2 area Rev. 07-23-18 Tract 4 areas
job 27224 SHEET 7 OF 8

LINE TABLE		
LINE	BEARING	LENGTH
L1	S 18°17'28" E	39.93'
L2	S 71°42'32" W	20.00'
L3	S 54°50'24" E	66.15'
L4	N 66°53'36" E	93.05'
L5	S 21°06'24" E	27.02'
L6	S 65°30'18" E	31.97'
L7	N 71°42'32" E	62.23'
L8	N 18°00'32" W	91.59'
L9	N 65°30'18" W	31.97'
L10	N 67°59'36" E	4.16'
L11	N 22°10'24" W	24.00'
L12	S 68°53'36" W	63.76'
L13	S 03°06'00" E	104.26'
L14	S 19°49'01" E	39.80'
L15	S 07°58'24" W	51.52'
L16	N 39°57'17" W	32.83'
L17	N 67°36'31" W	25.88'
L18	S 84°10'21" W	37.86'
L19	N 55°37'04" W	53.49'
L20	N 59°52'51" W	42.33'
L21	S 24°33'07" W	31.87'
L22	S 16°41'58" W	45.36'
L23	N 73°30'47" W	13.58'
L24	N 18°53'27" W	81.37'
L25	N 38°26'14" E	32.36'
L26	N 49°22'17" E	14.89'
L27	N 72°18'12" E	52.36'
L28	S 08°02'31" E	16.25'
L29	S 25°50'52" E	25.13'
L30	S 57°58'39" E	32.41'
L31	S 70°26'09" E	35.49'
L32	N 82°18'47" E	23.82'
L33	N 75°47'17" E	45.03'
L34	S 30°46'18" W	244.20'
L35	S 04°20'24" W	59.52'
L36	S 12°58'08" W	43.44'
L37	S 26°05'16" W	70.29'
L38	S 43°50'39" W	61.27'
L39	S 55°56'31" W	52.28'
L40	S 70°13'21" W	55.18'
L41	S 44°35'21" W	39.92'
L42	S 36°14'17" W	8.69'
L43	S 01°04'38" W	52.44'
L44	S 47°12'43" W	13.30'
L45	N 88°54'24" W	26.39'
L46	N 73°56'28" W	24.41'
L47	N 40°40'52" E	29.30'
L48	N 49°47'19" E	25.97'
L49	N 08°33'52" W	51.36'
L50	N 10°22'48" E	32.61'
L51	N 22°24'51" E	28.11'
L52	N 24°57'19" W	15.05'
L53	N 02°46'06" W	25.88'
L54	N 21°11'53" E	161.22'
L55	N 87°07'15" E	178.24'
L56	S 71°08'34" W	88.72'
L57	S 08°48'59" W	80.39'
L58	S 17°45'08" W	55.83'
L59	S 26°46'01" W	71.36'
L60	S 20°45'53" W	106.83'
L61	S 24°01'45" W	82.88'
L62	S 17°50'25" W	88.54'
L63	S 24°53'22" W	87.23'
L64	S 19°50'15" W	76.14'
L65	S 22°57'17" W	57.30'
L66	S 22°21'35" W	67.29'
L67	S 20°42'48" W	73.73'
L68	S 23°17'54" W	65.67'
L69	S 21°14'30" W	74.09'
L70	S 21°19'59" W	51.23'
L71	S 21°45'04" W	62.23'
L72	N 62°03'33" W	17.04'

LINE TABLE		
L73	N 18°39'54" W	30.19'
L74	N 23°37'36" E	76.92'
L75	N 03°01'06" E	68.29'
L76	N 17°45'48" E	76.50'
L77	N 13°15'54" E	70.65'
L78	N 24°03'43" E	84.71'
L79	N 30°07'11" E	94.43'
L80	N 17°57'19" E	63.27'
L81	N 12°55'55" E	84.06'
L82	N 14°37'09" E	69.16'
L83	N 10°28'26" E	76.36'
L84	N 15°09'17" E	89.84'
L85	N 33°45'00" E	88.83'
L86	N 36°10'54" E	90.41'
L87	N 49°50'26" E	54.54'
L88	S 82°25'59" E	22.79'
L89	N 68°48'07" W	20.00'
L90	S 68°48'07" E	20.00'
L91	N 76°48'23" E	3.99'
L92	N 54°06'15" E	38.95'
L93	N 32°44'19" E	31.63'
L94	N 19°20'01" E	34.47'
L95	N 02°20'22" E	41.43'
L96	N 26°20'43" W	58.12'
L97	N 29°34'40" E	35.22'
L98	N 21°59'03" W	52.56'
L99	N 23°28'41" E	40.57'
L100	N 47°10'03" E	18.86'
L101	S 61°00'02" E	41.96'
L102	S 73°27'59" E	23.08'
L103	S 53°21'58" E	40.99'
L104	N 66°26'44" E	49.74'
L105	N 56°03'48" E	13.26'
L106	N 55°08'25" E	37.55'
L107	N 85°13'14" E	16.00'
L108	S 53°04'11" E	34.67'
L109	N 73°57'26" E	45.00'
L110	S 32°28'17" W	27.59'
L111	N 51°21'44" E	20.06'
L112	N 34°14'01" E	56.46'
L113	N 24°34'56" E	64.49'
L114	N 22°53'46" E	61.33'
L115	N 24°55'27" E	80.24'
L116	N 20°50'07" E	73.66'
L117	N 49°34'05" E	71.82'
L118	N 71°06'59" E	39.00'
L119	N 58°33'07" E	58.88'
L120	S 82°57'43" E	39.95'
L121	S 68°49'08" E	20.00'
L122	S 28°47'10" W	42.51'
L123	S 20°00'42" W	52.08'
L124	S 21°04'30" W	66.29'
L125	S 22°16'22" W	59.48'
L126	S 21°57'42" W	68.55'
L127	S 23°00'13" W	43.64'
L128	S 18°37'34" W	39.27'
L129	S 21°11'24" W	64.33'
L130	S 21°06'14" W	37.59'
L131	S 09°57'48" W	60.53'
L132	S 35°51'07" W	31.90'
L133	S 21°34'04" W	60.21'
L134	S 21°05'08" W	61.72'
L135	S 21°18'17" W	35.64'
L136	N 21°10'52" E	10.05'
L137	N 21°10'52" E	18.05'
L138	S 57°33'49" E	18.41'
L139	S 79°53'17" E	38.39'
L140	N 66°09'33" E	31.57'
L141	N 39°21'44" E	46.79'
L142	S 37°41'21" E	40.20'
L143	S 35°22'06" W	55.14'
L144	S 39°43'32" W	56.94'
L145	N 66°36'09" W	26.05'

LINE TABLE		
L146	N 37°50'02" W	35.38'
L147	N 40°48'18" W	45.11'
L148	N 27°13'50" E	69.64'
L149	S 71°35'51" E	83.19'
L150	S 74°39'46" E	144.94'
L151	S 14°07'20" E	86.02'
L152	S 79°53'09" E	93.19'
L153	S 43°30'37" E	22.08'
L154	S 14°30'26" W	21.61'
L155	S 10°35'18" W	60.42'
L156	S 16°51'29" E	93.07'
L157	S 00°51'41" E	111.21'
L158	S 26°57'33" E	126.88'
L159	S 08°46'02" E	96.23'
L160	S 32°21'53" W	58.56'
L161	S 66°31'46" W	87.14'
L162	S 56°43'10" W	49.53'
L163	S 51°54'15" W	38.50'
L164	N 24°42'35" W	10.47'
L165	N 49°37'21" E	44.02'
L166	N 26°14'20" E	44.01'
L167	N 59°18'57" W	40.99'
L168	N 14°42'11" W	116.13'
L169	N 31°28'24" W	75.68'
L170	N 11°25'37" W	75.23'

LINE TABLE		
L171	N 21°29'17" W	98.28'
L172	N 60°21'08" W	37.88'
L173	N 50°07'30" W	79.29'
L174	S 75°53'29" E	137.49'
L175	S 21°07'21" E	131.21'
L176	S 22°06'57" E	89.02'
L177	S 71°38'04" W	62.24'
L178	N 37°47'03" W	52.03'
L179	N 55°01'24" W	78.50'
L180	S 18°54'33" E	53.90'
L181	N 45°02'15" E	28.56'
L182	N 73°54'44" E	80.26'
L183	S 14°12'48" E	17.45'
L184	S 22°27'18" W	39.33'
L185	S 40°06'06" E	46.57'
L186	S 33°52'00" E	54.08'
L187	S 84°01'57" E	32.42'
L188	N 35°49'36" E	22.81'
L189	N 54°24'24" W	41.45'
L190	S 89°25'24" W	18.13'
L191	N 27°39'44" W	65.78'
L192	S 88°55'49" E	52.71'
L193	S 66°23'38" E	86.06'
L194	S 33°53'42" E	54.15'
L195	S 81°08'43" E	52.62'

LINE TABLE		
L196	S 87°43'21" E	55.27'
L197	N 46°45'14" E	39.50'
L198	S 86°28'41" E	42.58'
L199	S 57°47'07" E	33.48'
L200	S 54°13'48" E	48.24'
L201	S 13°33'26" E	31.23'
L202	S 12°56'38" W	43.63'
L203	S 57°13'14" W	92.94'
L204	S 58°37'54" W	51.49'
L205	S 65°07'29" W	61.92'
L206	S 22°35'59" E	100.34'
L207	S 05°42'04" E	62.90'
L208	S 14°35'57" W	54.69'
L209	N 84°04'24" W	62.57'
L210	N 41°03'20" W	79.27'
L211	N 01°55'51" W	72.98'
L212	N 5°04'43" W	91.10'
L213	N 56°20'57" W	72.09'
L214	N 15°13'39" W	106.84'
L215	N 02°11'10" E	72.73'
L216	N 22°01'44" W	29.92'
L217	S 32°23'29" W	25.21'
L218	N 55°28'05" W	62.80'
L219	N 37°58'46" W	3.81'
L220	N 18°54'33" W	57.26'
L221	S 68°49'08" E	20.00'

CURVE TABLE					
CURVE	RADIUS	LENGTH	CH BEARING	CH LENGTH	DELTA
C1	5794.27'	59.74'	N 77°23'46" E	59.74'	0°35'26"
C2	5794.27'	19.30'	N 77°00'19" E	19.30'	0°11'27"
C3	5794.27'	853.87'	N 72°41'18" E	853.10'	8°26'36"
C4	230.00'	178.23'	S 43°18'21" E	173.80'	44°23'54"
C5	170.00'	140.92'	S 41°45'25" E	136.92'	47°29'46"
C6	130.00'	26.67'	S 23°50'08" E	26.62'	11°45'16"
C7	70.00'	26.36'	N 28°47'42" W	26.20'	21°34'21"
C8	230.03'	190.68'	N 41°45'25" W	185.27'	47°29'46"
C9	169.98'	134.67'	N 42°48'26" W	131.18'	45°23'44"

TRACT 1

UPLANDS	2.95 AC.
WETLANDS	0.00 AC.
TOTAL	2.95 AC.

TRACT 2

UPLANDS	1.01 AC.
WETLANDS	0.00 AC.
TOTAL	1.01 AC.

TRACT 3

UPLANDS	1.70 AC.
WETLANDS	0.00 AC.
TOTAL	1.70 AC.

TRACT4

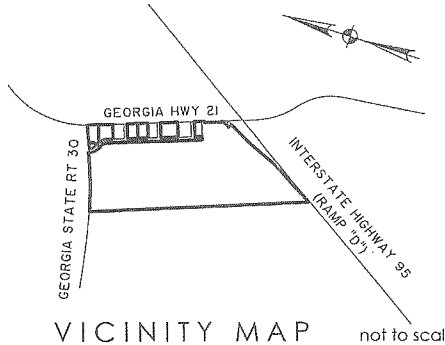
UPLANDS	72.66 AC.
WETLANDS	9.00 AC.
BORROW PIT	0.31 AC.
PRESERVED WETLANDS	4.67 AC.
DITCHES	0.49 AC.
STORM DETENTION AREA	±0.9 AC.
STORM WATER DITCH	0.99 AC.
TOTAL	89.02 AC.

TOTAL ACREAGE	94.68 AC.

GEORGIA REGISTERED No. 2612 LAND SURVEYOR WRIGHT C. POWERS JR.

WETLAND LINES SHOWN ON THIS SURVEY WERE LOCATED USING A TRIMBLE GEO7X RECEIVER AND DATA WAS DIFFERENTIALLY CORRECTED USING NGS STATION GASA. THE PURPOSE OF THIS SURVEY IS FOR THE LOCATION OF WETLAND AREAS ONLY AND IT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PROPERTY AND IS NOT SUITABLE FOR CONVEYANCE OF PROPERTY.

WRIGHT C. POWERS, JR.
GEORGIA REGISTERED LAND SURVEYOR
LICENSE NO. 2612



VICINITY MAP not to scale

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WETLAND SURVEY

LANDS OF PNC BANK, N.A. AND A PORTION OF SAVANNAH GATEWAY WEST PHASE 1

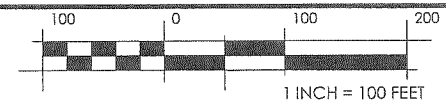
8TH G.M.D., CITY OF PORT WENTWORTH,
CHATHAM COUNTY, GEORGIA

prepared for
PNC BANK, N.A.

THOMAS & HUTTON
Engineering | Surveying | Planning | GIS | Consulting

50 Park of Commerce Way
PO Box 2727
Savannah, GA 31402-2727
p 912.234.5300 f 912.234.2950

www.thomasandhutton.com



plat	drawn	reviewed	field	crew
05-01-18	JMK	WCP	04-17-18	JH

Rev. 05-18-18 Tract 2 area Rev. 07-23-18 Tract 4 areas
job 27224 SHEET 8 OF 8

Z:\27224\27224.00000\Survey\DWG\27224WGE.dwg - May 4, 2018 - 8:48:42 AM

Site Plan Review Application submitted by Scott Monson, Thomas & Hutton on behalf of Port Wentworth SFR, LLC., for PIN # 7-0906-04-024 (Magnolia Blvd, Parcel 4 - A portion of Tract A1-1 of the Chisholm Tract) for a Specific Development Site Plan to allow a Single Family Rental Community in a M-P-O (Master Plan Overlay) Zoning District

Issue/Item: Site Plan Review Application submitted by Scott Monson, Thomas & Hutton on behalf of Port Wentworth SFR, LLC., for PIN # 7-0906-04-024 (Magnolia Blvd, Parcel 4 - A portion of Tract A1-1 of the Chisholm Tract) for a Specific Development Site Plan to allow a Single Family Rental Community in a M-P-O (Master Plan Overlay) Zoning District

Background: The subject property is currently vacant woodland. There are no buildings or structures on the subject property. The general development plan for this project was approved during a regular City Council meeting on April 28, 2022.

Facts and Findings: The subject parcel is located on the east side of Highway 21 and at the south end of Magnolia Blvd. The site plan consist of 106 total rental units to be developed with the appearance of a detached single family subdivision, pool/clubhouse amenity area, and associated storm water detention and parking. The access will be off of Highway 21 using the same access as the Novare apartment development. This project complies with the current City of Port Wentworth 2021-2041 Comprehensive Plan. The site plan has received concurrence from City engineers, T.R. Long Engineering. According to the 2021 City of Port Wentworth Comprehensive Plan this property is under the Open Space Character Area.

Funding: N/A

Recommendation: The Planning Commission will hear this application on Monday, November 14, 2022 at 3:30 P.M. **/ UPDATE: THE PLANNING VOTED UNANIMOUSLY TO RECOMMEND TO APPROVE THE APPLICATION.**

ATTACHMENTS:

- Novare Single Family Rental 7-0906-04-024 S-Site Plan 2022 - Application 7.8.22 (PDF)
- Novare Single Family Rental 7-0906-04-024 S-Site Plan 2022 - Timeline (DOCX)
- Novare Single Family Rental 7-0906-04-024 S-Site Plan 2022 - Concurrence Long 10.9.22 (PDF)

City of Port Wentworth
▪7224 Highway 21 ▪ Port Wentworth ▪ Georgia ▪ 31407 ▪ 912-999-2084

Site Plan Review Application

Site Plan Application is required for all new construction in a "P" or "MPO" zone as defined in the Zoning Ordinance of the City of Port Wentworth.

Site Plan Type (*Check One*): ☐ General / Concept ☒ Specific Development

Site Plan Address: Magnolia Blvd., Port Wentworth, GA 31407 (adjacent to Novare Multifamily & Village at Rice Hope)

PIN #(s): 7-0906-04-024 (Parcel 4 - A portion of Tract A1-1 of the Chisholm Tract)

Zoning: P-RIP Estimated Cost of Construction: $ 18 Million

Type of Construction: Single Family Rental Community

Applicant's Name: Scott K. Monson - Thomas & Hutton

Mailing Address: 50 Park of Commerce Way Savannah, GA 31405

Phone #: 912-721-4132 Email: monson.s@tandh.com

Owner's Name (If Different form Applicant): Port Wentworth SFR, LLC

Mailing Address: 1545 Peachtree Street Suite 260, Atlanta, GA 30309

Phone #: 404-815-1234 Email: tandersen@novaregroup.com

I hereby acknowledge that the above information is true and correct.

Scott K. Monson — 7/8/2022

Applicant's Signature — Date

7/6/22

Owner's Signature (If Different form Applicant) — Date

Please see page 2 for required submittal checklist

City of Port Wentworth
▪7224 Highway 21 ▪ Port Wentworth ▪ Georgia ▪ 31407 ▪ 912-999-2084

Site Plan Review Application Submittal Checklist

Documentation below is required for a complete submittal.

- ☒ Signed and Completed Application
- ☒ 3 Full size sets of site plan civil drawings or concept plan (depending on type of site plan)
- ☒ 15 half size (11" X 17") sets of site plan civil drawings or concept plan (depending on type of site plan)
- ☒ 2 copies of hydrology reports (if applicable)
- ☒ Names, mailing address, and PIN number of all property owners within 250 feet of all property lines
- ☒ 1 8 ½" X 11" of site plan civil drawings or concept plan (depending on type of site plan)
- ☒ PDF of entire submittal (either flash drive or CD)
- ☒ Other Engineering details or reports may be required once submittal has been received
- ☒ Site plan review fee check
  - No Land Disturbance- $206.00 Site Plan Fee + $50.00 Admin Fee = Total $256.00
  - With Land Disturbance - $836.00 Site Plan Fee + $50.00 Admin Fee = Total $886.00

Additional Fee Statement: If engineer review cost to the City exceeds the site plan review fee that is paid at the time of initial application submittal, you may be required to pay additional review cost.

I have read and agree to the above additional fee statement

Scott K. Monroe — 7/8/2022

Applicant's Signature — Date

CITY OF PORT WENTWORTH
(912) 964-4379

REC#: 00361359 7/11/2022 1:33 PM
OPER: KS TERM: 055
REF#: 115371

TRAN: 112.0000 BLDG PERMIT
220376 886.00CR
PORT WENTWORTH SFR, LLC
PIN# 7-0906-04-024
DEV-SPR 886.00CR

TENDERED: 886.00 CHECK
APPLIED: 886.00-

CHANGE: 0.00

WWW.CITYOFPORTWENTWORTH.COM

TMS	Owner Name	Property Address	Owner Address (If different from Property Address)
7-0906-04-037	Rice Hope CJ LLC	100 Magnolia Blvd, Port Wentworth GA 31407	PO Box 450233, Atlanta, GA 31145-0233
7-0975-02-006	Birch Circle LLC	7514 Hwy 21, Port Wentworth GA 31407	514 S Main St, Hinesville, GA 31313-4355
7-0975-02-007	James Wood Industries LLC	7512 Hwy 21, Port Wentworth GA 31407	136 Post House Trl, Port Wentworth, GA 31322-9624
7-0975-02-008	Christian, Brenda Sue	Hwy 21, Port Wentworth GA 31407	6 Hasleiters Retreat, Savannah, GA 31411-3107
7-0975-02-009	Smith, Eric C.	7508 Hwy 21, Port Wentworth GA 31407	PO Box 2264, Rincon, GA 31326-2264
7-0975-02-010	Cheathem, Lula Ghyll Roberts	Hwy 21, Port Wentworth GA 31407	1595 Berkely Ave, North Baldwin, NY 11510-1635
7-0975-02-011	Wilson, David Johnson Edward	7500 Hwy 21, Port Wentworth GA 31407	2119 Biscayne Dr, Savannah, GA 31406-2801
7-0975-02-012	Johnson, Edward	Hwy 21, Port Wentworth GA 31407	2127 Mason Dr, Savannah, GA 31404-5652
7-0975-02-013	Fieldstone Group LLC	Hwy 21, Port Wentworth GA 31407	204 Wiley Bottom Rd, Savannah, GA 31411-1537
7-0975-02-014	Fieldstone Group LLC	Hwy 21, Port Wentworth GA 31407	204 Wiley Bottom Rd, Savannah, GA 31411-1537
7-0975-02-015	Fieldstone Group LLC	Hwy 21, Port Wentworth GA 31407	204 Wiley Bottom Rd, Savannah, GA 31411-1537
7-0906-04-075	BEP Rice Hope LLC	Hwy 21, Port Wentworth GA 31407	100 Lakeside Blvd, Port Wentworth, GA 31407-3391
7-0907-01-003	Exley, Thomas L	Hwy 21, Port Wentworth GA 31407	PO Box 1338, Rincon, GA 31326-1338
7-0907A-02-011	Jones, Carol D	22 Treadway St, Port Wentworth GA 31407	22 Treadway St, Port Wentworth GA 31407
7-0907A-02-010	Otto, James Paul	20 Treadway St, Port Wentworth GA 31407	20 Treadway St, Port Wentworth GA 31407
7-0907A-03-001	Mack, Evon	216 Black Creek Dr, Port Wentworth GA 31407	216 Black Creek Dr, Port Wentworth GA 31407
7-0907A-03-002	Edge, Melissa G	214 Black Creek Dr, Port Wentworth GA 31407	214 Black Creek Dr, Port Wentworth GA 31407
7-0907A-03-003	Robinson, Charles Jerome	112 Black Creek Dr, Port Wentworth GA 31407	112 Black Creek Dr, Port Wentworth GA 31407
7-0907A-03-004	Pelton, Joshua	110 Black Creek Dr, Port Wentworth GA 31407	110 Black Creek Dr, Port Wentworth GA 31407
7-0907A-07-012	Vogel, Brian R.	21 Treadway St, Port Wentworth GA 31407	21 Treadway St, Port Wentworth GA 31407
7-0907A-07-013	Chisholm, Pamela R.	19 Treadway St, Port Wentworth GA 31407	19 Treadway St, Port Wentworth GA 31407

Project Timeline

Project Number: 220376

Project Name: Novare Single Family Rental

Applicant / Engineer: Thomas & Hutton – Scott K. Monson

Owner: Port Wentworth SFR, LLC

City Review Engineer: TR Long

- 07/08/2022 – Application received: Complete
- 7/13/2022 – sent files to TR Long for review.
- 7/27/2022 – sent email to Scott Monson letting him know that this application would not be on the August 2022 meetings due to not having review comments for the project yet.
- 8/1/2022 – sent email to TR Long for review update.
- 8/11/2022 – received 1st review from TR Long. Forwarded to T&H.
- 9/6/22 – 1st resubmittal received from T&H. TR Long copied on email
- 10/3/22 – sent email for review update from TR Long.
- 10/4/22 – received 2nd comment letter from TR Long. Forwarded to T&H.
- 10/5/22 – received 2nd resubmittal from T&H. TR Long copied.
- 10/9/22 - received concurrence letter from TR Long.
- 10/11/22 – forwarded concurrence letter to T&H and informed them they would be scheduled for the November 2022 meetings.
- 10/21/2022 – public hearing notice letters mailed.
- 10/24/2022 – public hearing notice posted in Savannah Morning News
- 11/14/2022 – the Planning Commission voted unanimously to recommend approving the application.

114 North Commerce Street
Hinesville, Georgia 31313
(912) 368-5664 Office
(912) 368-7206 Fax

T R LONG ENGINEERING, P.C.

1000 Towne Center Blvd.
Suite 304
Pooler, Georgia 31322
(912) 355-1046

October 9, 2022

Mr. Brian Harvey
City of Port Wentworth
7224 Georgia Highway 21
Port Wentworth, Georgia 31407

Re: Site Development Plans
Novare Single Family
Port Wentworth. Georgia

Dear Mr. Harvey:

T. R. Long Engineering, P.C. has reviewed the revisions to the construction plans for the above referenced project. These plans were prepared by Thomas & Hutton revised October 5, 2022. The proposed plans generally meet the intent of the ordinances and guidelines governing construction in Port Wentworth.

Concurrence with the site plan by T. R. Long Engineering, P.C. and Port Wentworth does not relieve the owner/developer, designer, engineer, and contractor nor their representatives from their individual or collective responsibilities to comply with provisions of Local, State, and Federal regulations and/or ordinances. T. R. Long Engineering, P.C. and Port Wentworth's review of the submitted documents for completeness and general compliance with codes, ordinances and/or standards. No design liability can be assumed or assigned to T. R. Long Engineering, P.C. or Port Wentworth. All design liability remains with the professional engineer who signed and sealed those documents. Additionally, concurrence with the submitted documents and their intent is not to be construed as a check of every item submitted and does not prevent Port Wentworth from requiring corrections and/or addressing of omissions in the submitted documents and/or construction.

Should you have any questions, comments or need additional information please contact us.

Sincerely,

Trent R. Long, P.E.

Z:\28595\28595.0004\LD\ENGR\DRAWINGS\CONSTRUCTION PLANS\28595.0004 - CO.DWG - Oct 5, 2022 - 9:01 AM

SITE DEVELOPMENT PLANS

FOR

SINGLE FAMILY RENTAL - PARCEL 4

106 UNITS

PORT WENTWORTH, GEORGIA

PREPARED FOR:

NOVARE GROUP - PORT WENTWORTH SFR, LLC

1545 PEACHTREE STREET

ATLANTA, GA 30309

TM# 7-0906-04-024

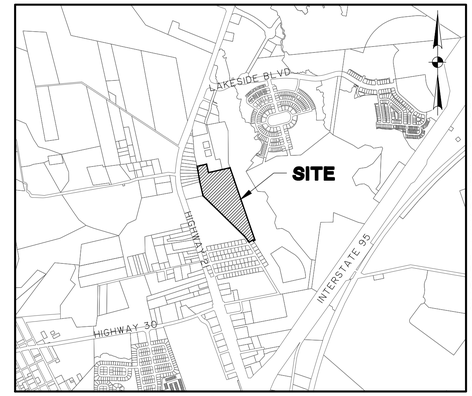
JULY 5, 2022

PERMIT SET - FOR REVIEW PURPOSES ONLY

J-28595.0004

PREPARED BY:

THOMAS & HUTTON



VICINITY MAP
SCALE: 1" = 2000'

J-28595.0004
7/5/2022

SINGLE FAMILY RENTAL - PARCEL 4
106 UNITS

SHEET LIST TABLE	
Sheet Number	Sheet Title
CO	COVER SHEET
GO.1	SHEET INDEX
GO.2	GENERAL NOTES AND LEGEND
EXI.1	EXISITNG CONDITIONS & DEMO PLAN
EXI.2	EXISITNG CONDITIONS & DEMO PLAN
EXI.3	EXISTING CONDITIONS & DEMO PLAN
CI.1	SITE LAYOUT & SIGNAGE PLAN
CI.2	SITE LAYOUT & SIGNAGE PLAN
CI.3	ADA ACCESSIBILITY PLAN
C2.1	WATER & SEWER PLAN
C2.2	WATER & SEWER PLAN
C2.3	SEWER PROFILES
C2.4	SEWER PROFILES
C2.5	WATER & SEWER DETAILS
C2.6	WATER & SEWER DETAILS
C2.7	WATER & SEWER DETAILS
C2.8	WATER & SEWER DETAILS
C3.1	PAVING & GRADING PLAN
C3.2	PAVING & GRADING PLAN
C3.3	PAVING & GRADING PLAN
C3.4	DRAINAGE PLAN
C3.5	DRAINAGE PLAN
C3.6	DRAINAGE PLAN
C3.7	DRAINAGE PROFILES
C3.8	DRAINAGE PROFILES
C3.9	PAVING, GRADING & DRAINAGE DETAILS
C3.10	PAVING, GRADING & DRAINAGE DETAILS
C3.11	PAVING, GRADING & DRAINAGE DETAILS
C3.12	PAVING, GRADING & DRAINAGE DETAILS
ECO.1	ESPC NOTES
ECO.2	ESPC NOTES
ECO.3	ESPC NOTES
EC1.1	ESPC PLAN - INITIAL
EC2.1	ESPC PLAN - INTERMEDIATE
EC3.1	ESPC PLAN - FINAL
EC4.1	ESPC DETAILS
EC4.2	ESPC DETAILS

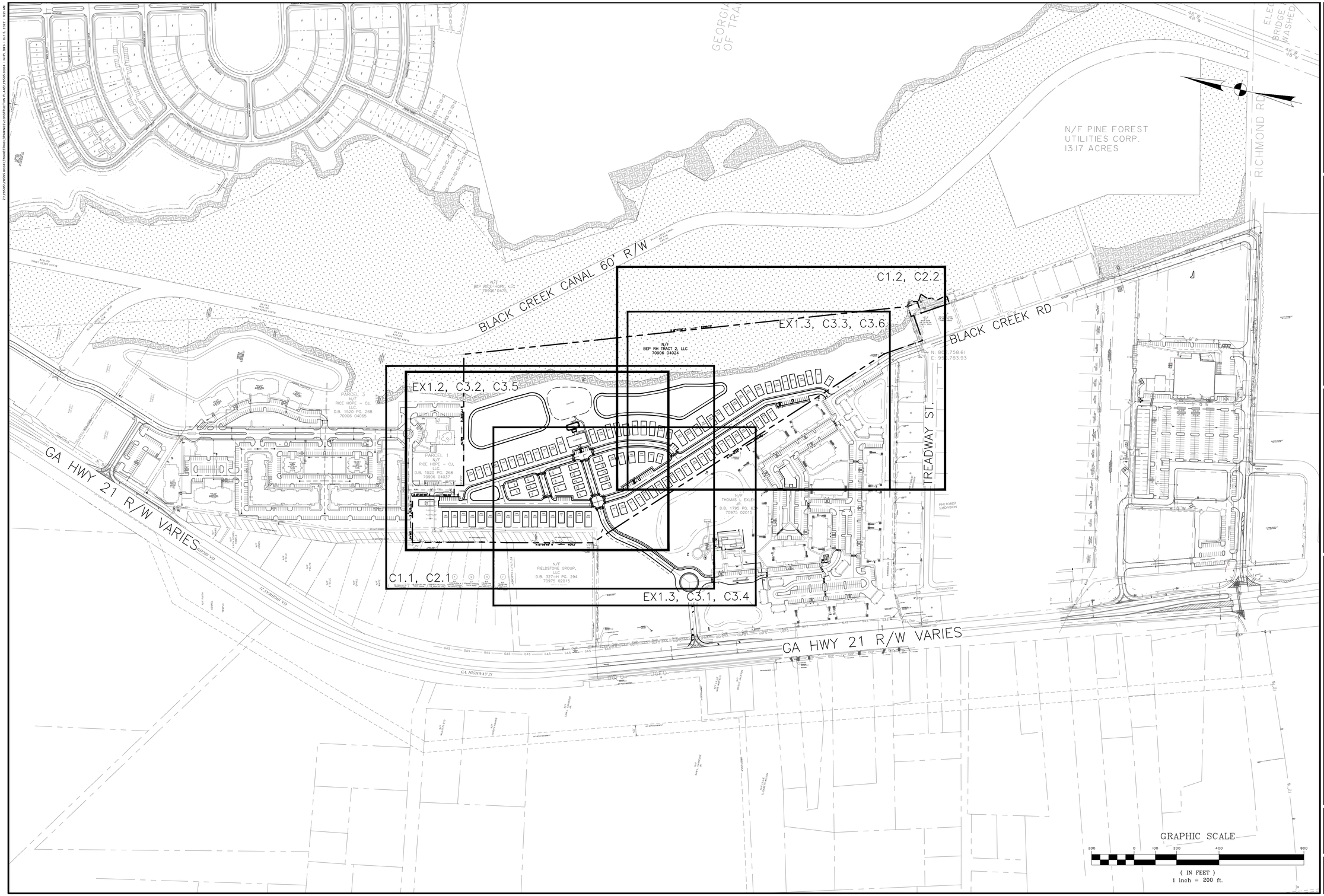
GEORGIA REGISTERED PROFESSIONAL ENGINEER SCOTT K. MONSON

REVISION HISTORY			
3	PER T.R. LONG REVIEW COMMENTS DATED 10/04/22	SGJ	10/05/22
2	PER T.R. LONG REVIEW COMMENTS DATED 8/11/22	SGJ	9/02/22
1	REVISED PER EPD COMMENTS	SGJ	8/22/22
REV. NO.	REVISION	BY	DATE

SUBMITTAL HISTORY	
SUBMITTED TO	DATE

811 Know what's below. Call before you dig.

THOMAS & HUTTON
50 Park of Commerce Way
Savannah, GA 31405
p.912.234.5300
www.thomasandhutton.com



PERMIT SET - FOR REVIEW PURPOSES ONLY

GEORGIA REGISTERED PROFESSIONAL SCOTT K. MONTGOMERY

NO.	REVISIONS	BY	DATE

THOMAS & HUTTON
50 Park of Commerce Way
Savannah, GA 31405 • 912.234.5300
www.thomasandhutton.com

NOVARE GROUP - PORT WENTWORTH SFR, LLC
PORT WENTWORTH, GEORGIA

SINGLE FAMILY RENTAL - PARCEL 4

SHEET INDEX

JOB NO:	J-28595.0004
DATE:	7/5/2022
DRAWN:	JBJ
DESIGNED:	SKM
REVIEWED:	SKM
APPROVED:	SKM
SCALE:	1" = 200'

G0.1

Z:\28595.1859\GO4\ENGINEERING\DRAWINGS\CONSTRUCTION PLANS\28595GO4 - 09-07.DWG - Oct 11, 2022 - 9:22 AM

WATER LEGEND

DESCRIPTION	EXISTING	PROPOSED
WATER MAIN	10"W	10"W
SINGLE SERVICE LATERAL		
DOUBLE SERVICE LATERAL		
VALVE AND BOX		
FIRE HYDRANT W/VALVE & BOX		
POST HYDRANT		
REDUCER		
BACKFLOW PREVENTOR		
CROSS		
TEE		
90° BEND - HORIZONTAL		
45° BEND - HORIZONTAL		
22-½° BEND - HORIZONTAL		
11-¼° BEND - HORIZONTAL		
BEND - VERTICAL		
CAP		

SEWER LEGEND

DESCRIPTION	EXISTING	PROPOSED
GRAVITY PIPE	SS	
SINGLE SERVICE LATERAL		
DOUBLE SERVICE LATERAL		
MANHOLE		
CLEANOUT		
FORCEMAIN	10"FM	10"FM
VALVE AND BOX		
FLUSH HYDRANT		
REDUCER		
BACKFLOW PREVENTOR		
CROSS		
TEE		
90° BEND - HORIZONTAL		
45° BEND - HORIZONTAL		
22-½° BEND - HORIZONTAL		
11-¼° BEND - HORIZONTAL		
BEND - VERTICAL		
PLUG \ CAP		

OTHER UTILITIES LEGEND

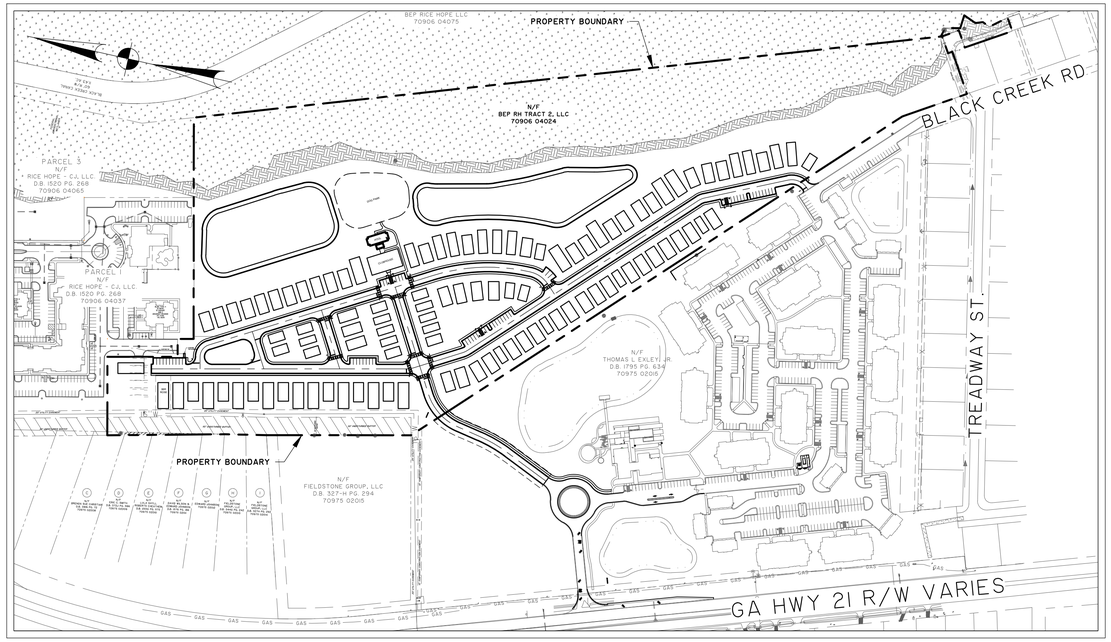
DESCRIPTION	EXISTING
NATURAL GAS	UGG
TELEPHONE	OHT
UNDERGROUND TELEPHONE	UTL
ELECTRICITY	OHP
UNDERGROUND ELECTRICITY	UGP

DRAINAGE LEGEND

DESCRIPTION	EXISTING	PROPOSED
PIPE		
DITCH		
CURB INLET		
GRATE INLET		
JUNCTION BOX		
OUTLET STRUCTURE		

ABBREVIATIONS

HDPE	HIGH DENSITY POLYETHYLENE		JB	JUNCTION BOX		SDMH	STORM DRAINAGE MANHOLE
BOT	BOTTOM		LF	LINEAR FEET		SF	SQUARE FEET
CI	CURB INLET		MAX	MAXIMUM		SS	SANITARY SEWER
CPP	CORRUGATED PLASTIC PIPE		MIN	MINIMUM		TC	TOP OF CURB
DIP	DUCTILE IRON PIPE		MH	MANHOLE		TG	TOP OF GUTTER
EL	ELEVATION		OC	ON CENTER		TP	TOP OF PAVEMENT
FG	FINISH GRADE		PC	POINT OF CURVE		TW	TOP OF WALK
FH	FIRE HYDRANT		PH	POST HYDRANT		TYP	TYPICAL
FM	FORCE MAIN (SANITARY SEWER)		PT	POINT OF TANGENT		W	WATER
FP	FINISH PAD		PVC	POLYVINYL CHLORIDE		W/	WITH
FR	FRAME		RCP	REINFORCED CONCRETE PIPE		WV	WATER VALVE
GI	GRATE INLET		RJP	RESTRAINED JOINT PIPE		YI	YARD INLET
GV	GATE VALVE		R/W	RIGHT-OF-WAY			
INV	INVERT ELEVATION		SD	STORM DRAINAGE			



INDEX

SCALE: 1" = 200'

1. ALL TOPOGRAPHIC INFORMATION IS BASED ON SURVEY FIELD DATA PROVIDED BY THOMAS AND HUTTON. ELEVATIONS ARE BASED UPON NAVD 88 VERTICAL DATUM. ELEVATIONS WERE ESTABLISHED USING 5" TOTAL STATION. THE HORIZONTAL DATUM USED IS GEORGIA STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD 83. SEE EXISTING CONDITIONS PLAN FOR ADDITIONAL INFORMATION. CONTACT ENGINEER IMMEDIATELY IF FIELD ELEVATIONS VARY FROM EXISTING GROUND ELEVATIONS DISPLAYED. VERIFY CHANGES IN ELEVATIONS RESULTING FROM CONTRACTOR CLEARING AND STRIPPING.
2. HORIZONTAL AND VERTICAL CONTROL SHOWN IN THESE PLANS ARE TO BE USED FOR ALL LAYOUT AND RECORD DATA FOR THIS PROJECT. IF DISCREPANCIES ARE FOUND CONTACT THOMAS AND HUTTON BEFORE PROCEEDING. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ESTABLISH SUPPLEMENTAL CONTROL WITHIN THE PROJECT AS NEEDED.
3. CONTRACTOR SHALL VERIFY THE SIZE AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION. CONTACT ENGINEER IMMEDIATELY WITH ANY DISCREPANCIES.
4. THE EXISTING UNDERGROUND UTILITIES SHOWN HEREON ARE BASED UPON AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL UTILITIES, IF UTILITIES OTHER THAN THOSE SHOWN ARE ENCOUNTERED DURING CONSTRUCTION , THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY AND TAKE STEPS TO PROTECT THE LINE(S) AND ENSURE CONTINUED SERVICE. DAMAGE CAUSED TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR. ADDITIONALLY, THE CONTRACTOR SHALL CONFIRM THE CONNECTION POINTS OF NEW UTILITIES TO EXISTING UTILITIES PRIOR TO BEGINNING NEW CONSTRUCTION.
5. PIPE, FITTINGS, VALVES AND OTHER ACCESSORIES SHALL, UNLESS OTHERWISE DIRECTED, BE UNLOADED AT THE POINT OF DELIVERY, AND STORED WHERE THEY WILL BE PROTECTED AND WILL NOT BE HAZARDOUS TO TRAFFIC. THEY SHALL AT ALL TIMES BE HANDLED WITH CARE TO AVOID DAMAGE. THE INTERIOR OF ALL PIPE, FITTINGS AND OTHER ACCESSORIES SHALL BE KEPT FREE FROM DIRT AND FOREIGN MATTER AT ALL TIMES.
6. ANY DEFECTIVE, DAMAGED OR UNSOUND PIPE SHALL BE REJECTED. ALL FOREIGN MATTER OR DIRT SHALL BE REMOVED FROM THE INSIDE OF THE PIPE BEFORE IT IS LOWERED INTO ITS POSITION IN THE TRENCH AND SHALL BE KEPT CLEAN BY ACCEPTABLE MEANS DURING AND AFTER LAYING. CARE SHALL BE TAKEN TO PREVENT DIRT FROM ENTERING THE JOINT SPACE. AT TIMES WHEN PIPE LAYING IS NOT IN PROGRESS, THE OPEN ENDS OF THE PIPE SHALL BE CLOSED BY ACCEPTABLE MEANS AND NO TRENCH WATER SHALL BE PERMITTED TO ENTER THE PIPE.
7. CONTRACTOR SHALL MAINTAIN MIN. COVER OVER THE WATER PIPE BARREL OF 3'-0" UNLESS OTHERWISE INDICATED.
8. CLEAN THE INTERIORS OF ALL PIPE BY BRUSHING, SWABBING OR WASHING OUT OF ALL DIRT BEFORE LAYING.
9. ALL UTILITY POLES ADJACENT TO PROPOSED CONSTRUCTION MUST BE SECURED PRIOR TO ANY ADJACENT DISTURBANCE AND THE CONSTRUCTION PROCEDURE MUST BE ACCEPTABLE TO THE UTILITY COMPANY.
10. CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES BEFORE WORK COMMENCES, EVEN IF UTILITY IS NOT SHOWN ON THE PLANS. CONTRACTOR SHALL VERIFY UTILITY WITHIN THE PROJECT LIMITS AND NOTIFY THE ENGINEER OF CONFLICTS OR VARIANCES TO THE PLANS PRIOR TO BEGINNING WORK OR PURCHASE OF MATERIALS.
11. ALL WATER AND SEWER MATERIAL, PROCEDURE AND INSTALLATION SHALL BE IN CONFORMANCE WITH THE CITY OF PORT WENTWORTH DEVELOPMENT POLICY AND PROCEDURE MANUAL,TECHNICAL SPECIFICATION AND DETAILS, LATEST VERSIONS, CITY OF PORT WENTWORTH DOCUMENTS SHALL TAKE PRECEDENCE OVER THOMAS AND HUTTON DOCUMENTS FOR ANY DISCREPANCIES FOUND.
12. CONTRACTOR TO COORDINATE WITH UTILITY COMPANIES FOR THE RELOCATION OF EXISTING UTILITIES. UTILITIES NEEDING TO BE REMOVED OR RELOCATED SHALL BE COORDINATED WITH THE AFFECTED UTILITY COMPANY. ADEQUATE TIME SHALL BE PROVIDED FOR RELOCATION, AND CLOSE COORDINATION WITH THE UTILITY COMPANY IS NECESSARY TO PROVIDE A SMOOTH TRANSITION IN UTILITY SERVICE. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY CONCERNING PORTIONS OF THE WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANY'S FORCES AND ANY FEES WHICH ARE TO THE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR PAYING ALL FEES AND CHARGES.
13. ALL STORM DRAIN PIPE JOINTS SHALL BE WRAPPED WITH FILTER FABRIC.
14. SHOULD PIPE, FITTINGS, AND OTHER MATERIALS BE NEEDED IN ADDITION TO THAT SHOWN ON THE DRAWINGS BECAUSE PIPELINE WAS NOT INSTALLED TO THE ALIGNMENT AND PROFILE SHOWN, THEN THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THOSE NECESSARY MATERIALS AND PROVIDING THE EQUIPMENT AND LABOR TO INSTALL THEM TO MEET THE DESIGN INTENT AT NO ADDITIONAL COST TO THE OWNER.
15. THE DATA, TOGETHER WITH ALL OTHER INFORMATION SHOWN ON THESE PLANS OR IN ANY WAY INDICATED THEREBY, WHETHER BY DRAWINGS OR NOTES, OR IN ANY OTHER MANNER, ARE BASED UPON FIELD INVESTIGATIONS AND ARE BELIEVED TO BE INDICATIVE OF ACTUAL CONDITIONS. HOWEVER, THE SAME ARE SHOWN AS INFORMATION ONLY, ARE NOT GUARANTEED, AND DO NOT BIND THOMAS & HUTTON.
16. THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE ENGINEER 48 HOURS IN ADVANCE OF ALL REQUIRED TESTS AND INSPECTIONS.
17. CONTRACTOR IS TO VERIFY ACCURACY OF ANY TEMPORARY BENCHMARKS SHOWN PRIOR TO UTILIZING THEM FOR CONSTRUCTION.
18. IF WORK IS SUSPENDED OR DELAYED FOR 14 DAYS, THE CONTRACTOR SHALL TEMPORARILY STABILIZE THE DISTURBED AREA AT NO ADDITIONAL COST TO THE OWNER.
19. CONTRACTOR SHALL COMMUNICATE WITH OWNER PRIOR TO DISPOSAL OF DEMOLITION MATERIALS AND STORE ITEMS IN LOCATION SPECIFIED BY THE OWNER OR REMOVE ITEMS FROM SITE REQUESTED BY OWNER.
20. CONTRACTOR SHALL COORDINATE WITH THE CITY OF PORT WENTWORTH PRIOR WATER AND SEWER MAIN CONNECTIONS.
21. ALL CONSTRUCTION MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE CONSTRUCTION PLANS AND TECHNICAL SPECIFICATIONS.
22. THE CONTRACTOR SHALL INSTALL ANY BARRICADES PRIOR TO BEGINNING CONSTRUCTION.
23. ANY DAMAGE TO EXISTING PAVEMENT MUST BE REPAIRED AT CONTRACTORS EXPENSE AND TO THE SATISFACTION OF CITY OF PORT WENTHWORTH AND THE PROJECT ENGINEER.
24. A COMPLETE SET OF PERMITTED DRAWINGS AND SPECIFICATIONS MUST BE MAINTAINED ON SITE AT ALL TIMES THAT THE CONTRACTOR IS PERFORMING WORK. THESE DRAWINGS SHALL BE MADE AVAILABLE UPON REQUEST.
25. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL CONSTRUCTION PERMITS NECESSARY FROM OTHER RESPONSIBLE AGENCIES PRIOR TO COMMENCEMENT OF CONSTRUCTION.
26. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF UNSUITABLE MATERIAL IS DISCOVERED PRIOR TO BEGINNING ANY REMOVAL OPERATION. CONTRACTOR SHALL REFER TO THE REPORT OF GEOTECHNICAL EXPLORATION AND EVALUATION, DATED XXXXXXXXX, PREPARED BY TERRACON CONSULTANTS, INC. FOR GUIDANCE THROUGHOUT CONSTRUCTION. CONTACT ENGINEER TO OBTAIN A COPY OF THIS EVALUATION PRIOR TO PROVIDING A BID OR BEGINNING WORK.
22. IT IS THE OBLIGATION OF THE CONTRACTOR TO MAKE THEIR OWN INTERPRETATION OF ALL SURFACE AND SUBSURFACE DATA AVAILABLE AS TO THE NATURE AND EXTENT OF THE MATERIALS TO BE EXCAVATED, WASTED, GRADED AND COMPACTED. THE INFORMATION SHOWN ON THESE PLANS IN NO WAY GUARANTEES THE AMOUNT OR NATURE OF THE MATERIAL TO BE ENCOUNTERED.
23. CONTRACTOR WILL BE REQUIRED TO ADJUST ALL MANHOLE FRAMES AND UTILITY APPURTENANCES TO MATCH FINAL GRADE AT NO ADDITIONAL COST.
24. ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE CONSTRUCTED SIMULTANEOUSLY WITH THE DISTURBANCE OF THE LAND AND SHALL REMAIN FUNCTIONAL UNTIL THE CONTRIBUTING DISTURBED AREAS ARE STABILIZED. SILT BARRIERS WILL BE INSTALLED AS NECESSARY TO PREVENT EXCESSIVE SEDIMENTATION OF DOWNSTREAM AREAS.
25. CONTRACTOR SHALL GRADE AREAS TO DRAIN FOR POSITIVE FLOW PRIOR TO FINAL ACCEPTANCE.
26. CONTROL OF THE WATER FLOWING THROUGH THE EXISTING DRAINAGE PATTERNS DURING THE CONSTRUCTION PERIOD SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE EXISTING DRAINAGE CONVEYANCE SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. ALL PENALTIES, CLAIMS AND FEES IMPOSED ON OWNER AS A RESULT OF DAMAGES CAUSED BY ACTIONS OF THE CONTRACTOR, IT'S EMPLOYEES OR SUBCONTRACTORS SHALL BE BORNE IN FULL BY THE CONTRACTOR.
27. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PHASING OF CONSTRUCTION AND THE COORDINATION,SEQUENCING AND SUPERVISION OF CONSTRUCTION ACTIVITIES. ANY AND ALL COST ASSOCIATED WITH PROJECT PHASING WILL BE BORNE IN FULL BY THE CONTRACTOR.
28. ALL TRAFFIC CONTROL SIGNS AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE MANUAL ON "UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" CURRENT EDITION.
29. ACCESS TO THE PROJECT IS LIMITED TO THOSE LOCATIONS WHERE STABILIZED CONSTRUCTION ENTRANCES HAVE BEEN INDICATED IN THE PLANS.
30. ALL DRAINAGE WILL BE MADE FUNCTIONAL DAILY AS WORK PROGRESSES.
31. EXISTING ROADWAYS WILL BE CLEANED UP AND RESTORED DAILY. COMPLETE ROAD CLOSURE IS NOT PERMITTED AT ANY TIME DURING THE CONSTRUCTION PERIOD. TRAFFIC SHALL BE REROUTED TO MAINTAIN FLOW DURING CONSTRUCTION OPERATIONS. COORDINATE WITH THE OWNER, ENGINEER AND GDOT IF ROADWAY ACCESS CANNOT BE MAINTAINED PRIOR TO PROCEEDING WITH BLOCKAGE.
32. NEW PAVEMENT TO BE FLUSH WITH EDGE OF EXISTING PAVEMENT.
33. ALL STORM DRAIN PIPE INVERTS IN AND OUT ARE THE SAME AS THE BOX INVERT UNLESS OTHERWISE NOTED ON THE PLAN SHEETS AND/OR PROFILES.
34. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UNDERGROUND UTILITIES AND SHALL COORDINATE ALL WORK WITH THE OWNER AND UTILITY COMPANIES.
35. CONTRACTOR SHALL CLEAN CLEAN STORM SEWER SYSTEM OF ALL DEBRIS AND REMOVE ALL EROSION CONTROL DEVICES UPON COMPLETION OF CONSTRUCTION AND PRIOR TO FINAL PAYMENT.
36. ANY BARRICADES, LIGHTS, SIGNS AND OTHER TRAFFIC CONTROL DEVICES REQUIRED BY THE CITY OF PORT WENTWORTH FOR THE THE PROTECTION AND SAFETY OF THE PUBLIC SHALL BE PROVIDED AND MAINTAINED THROUGHOUT CONSTRUCTION.
37. CONTRACTOR WILL BE REQUIRED TO DEWATER POND AS NECESSARY TO INSTALL DRAINAGE UTILITIES.

GENERAL INFORMATION

COUNTY	CHATHAM
TOWN	PORT WENTWORTH
ZONING	P-RIP

CLIENT:
NGI ACQUISITIONS, LLC
1545 PEACHTREE STREET
SUITE 260
ATLANTA, GA 30309
(912) 658-1625

GEOTECHNICAL CONSULTANT:
TERRACON CONSULTANTS, INC.
2201 ROWLAND AVE.
SAVANNAH, GA 31404
(912) 629-4001

ELECTRIC:
GEORGIA POWER
3100 KILOWATT DRIVE
SAVANNAH, GA 31402
(912) 944-3572

TELEPHONE & CABLE:
COMCAST OF GEORGIA/SOUTH CAROLINA, INC.
145 PARK OF COMMERCE DR.
SAVANNAH, GA 31405
(912) 253-7117

ENGINEER:
THOMAS & HUTTON
50 PARK OF COMMERCE WAY
SAVANNAH, GA 31405
(912) 234-5300

SURVEYOR:
THOMAS & HUTTON
50 PARK OF COMMERCE WAY
SAVANNAH, GA 31405
(912) 234-5300

WATER/SEWER:
CITY OF PORT WENTWORTH
CONTACT: BRIAN HARVEY
305 SOUTH COASTAL HIGHWAY
PORT WENTWORTH, GA. 31407
(912) 210-2643

GAS COMPANY:
ATLANTA GAS LIGHT COMPANY
CONTACT: JOSEPH WHITE
1668 CHATHAM PARKWAY
SAVANNAH, GA. 31405
(912) 239-6508

GEORGIA REGISTERED PROFESSIONAL ENGINEER SCOTT K. MONDS 29205

PERMIT SET - FOR REVIEW PURPOSES ONLY

NO.	REVISIONS	BY	DATE

THOMAS & HUTTON
611 Burroughs & Chapin Blvd. • Suite 202
Myrtle Beach, SC 29577 • 843.839.3545
www.thomasandhutton.com

NOVARE GROUP - PORT WENTWORTH SFR, LLC
PORT WENTWORTH, GEORGIA

SINGLE FAMILY RENTAL - PARCEL 4

GENERAL NOTES AND LEGEND

JOB NO:	J-28595.0004
DATE:	7/5/2022
DRAWN:	JBJ
DESIGNED:	SKM
REVIEWED:	SKM
APPROVED:	SKM
SCALE:	########

G0.2

Z:\28595\28595-0004\ENGINEERING\28595-0004 - EX1.DWG - Oct 5, 2022 - 9:22 AM JBJ

LEGEND

- BENCHMARK
- CONC. MONUMENT FOUND
- CURB INLET MANHOLE (CIMH)
- FIRE HYDRANT
- GRATE INLET (GI)
- IRON PIPE FOUND
- IRON REBAR FOUND
- POWER POLE
- SANITARY MANHOLE (SSMH)
- WATER MANHOLE
- WATER VALVE
- CHECK VALVE
- WATER METER
- TELEPHONE BOX
- SL SEWER LATERAL
- WL WATER LATERAL

TREE LEGEND

- GUM SWEET GUM
- OAK MISC. OAK
- PIN PINE
- RO RED OAK

LINE-TYPE LEGEND (UTILITIES)

- OHP — OHP — OVERHEAD POWER LINE
- SS — SS — SANITARY SEWER LINE
- STORM DRAINAGE LINE
- W — W — WATER DISTRIBUTION LINE

NOTES

1. FIELD EQUIPMENT USED FOR THIS SURVEY: GEOMAX ZOOM90 R2
2. THE FIELD DATA UPON WHICH THIS MAP OR PLAT IS BASED HAS A CLOSURE PRECISION OF ONE FOOT IN 59,900 FEET, AN ANGULAR ERROR OF 0.4" PER ANGLE POINT, AND WAS ADJUSTED USING THE LEAST SQUARES METHOD.
3. ELEVATIONS ARE BASE ON NAVD88, UNLESS OTHERWISE NOTED. CONTOUR INTERVAL IS ONE FOOT.
4. COORDINATES AND DIRECTIONS ARE BASED ON GEORGIA STATE PLANE COORDINATE SYSTEM (NAD83), EAST ZONE.
5. ACCORDING TO F.I.R.M. MAP NO. 13051C, PANEL, 0036G, REVISED AUGUST 16, 2018, THE PROPERTY SHOWN ON THIS PLAT LIES IN ZONE X, X SHADED AND AE (BFE 12.8 & 13).
6. WETLANDS THAT MAY EXIST ON THE PROPERTY ARE UNDER THE JURISDICTION OF THE CORPS OF ENGINEERS AND/OR THE DEPARTMENT OF NATURAL RESOURCES. IT IS THE OWNER'S RESPONSIBILITY TO COMPLY WITH ALL STATE LAW FOR DISTURBANCE TO THESE PROTECTED AREAS WITHOUT PROPER PERMIT AND APPROVAL.
7. THE POSITION OF UNDERGROUND UTILITIES SHOWN ON THIS DRAWING IS BASED UPON THE LOCATION OF SURFACE APPURTENANCES, SURFACE MARKINGS AND RECORD DRAWINGS AND SHOULD BE CONSIDERED APPROXIMATE. THE EXACT LOCATION, SIZE, TYPE AND DEPTH OF UNDERGROUND UTILITIES SHOWN HEREON AND THOSE THAT MAY EXIST, CAN ONLY BE DETERMINED VIA AN EXCAVATION OF THE UTILITY.
8. TAX MAP NUMBER: 7095G 04024
   PROPERTY OWNER: BEP-PH TRACT 3, LLC (PER TAX RECORDS)
   TITLE REFERENCE: DEED BOOK 794, PAGE 549

LINE-TYPE LEGEND (BOUNDARIES)

- ADJOINER PROPERTY LINE
- SUBJECT PROPERTY LINE
- FLOOD ZONE LIMITS

HATCH PATTERN LEGEND

- WETLAND BUFFER
- FRESHWATER WETLAND
- CONCRETE PAVEMENT
- GRAVEL/EARTH DRIVE

MATCH LINE - SEE SHEET NO. EX1.2

MATCH LINE - SEE SHEET NO. EX1.3

DEMO EARTH ROAD

EARTH ROAD

50' UNDISTURBED BUFFER

PROPERTY BOUNDARY

N 12°38'48" W 404.11'

L42 "
IRF

BENCHMARK #6
BTS IN 17" WILLOW
ELEV: 20.30

N 45°41'05" W

BENCHMARK #4
BTS IN 17" POST OAK
ELEV: 16.44

20' UTILITY EASEMENT

10' TEMPORARY CONSTRUCTION EASEMENT

30' UTILITY EASEMENT

20' UTILITY EASEMENT
DB 295-R, PG. 325

N/F
FIELDSTONE GROUP, LLC
D.B. 327-H PG. 294
70975 02015

N/F
FIELDSTONE
GROUP, LLC
D.B. 327H PG. 292
70975 02014

N/F
WILLIAM CHISHOLM

Pn

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

PERMIT SET - FOR REVIEW PURPOSES ONLY

GEORGIA REGISTERED LANDSCAPE ARCHITECT SCOTT K. MOORE NO. 1302 PROFESSIONAL

NO.	REVISIONS	BY	DATE

THOMAS & HUTTON
50 Park of Commerce Way
Savannah, GA 31405 • 912.234.5300
www.thomasandhutton.com

NOVARE GROUP - PORT WENTWORTH SFR, LLC
PORT WENTWORTH, GEORGIA

SINGLE FAMILY RENTAL - PARCEL 4

EXISITNG CONDITIONS & DEMO PLAN

JOB NO:	J-28595.0004
DATE:	7/5/2022
DRAWN:	JBJ
DESIGNED:	SKM
REVIEWED:	SKM
APPROVED:	SKM
SCALE:	1" = 40'

EX1.1

Z:\28595\28595-0004\ENGINEERING\DRAWINGS\CONSTRUCTION PLANS\28595-0004 - EX1.DWG - Oct 5, 2022 - 9:22 AM

LEGEND

- BENCHMARK
- CONC. MONUMENT FOUND
- CURB INLET MANHOLE (CIMH)
- FIRE HYDRANT
- GRATE INLET (GI)
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- SL SEWER LATERAL
- WL WATER LATERAL

TREE LEGEND

GUM	SWEET GUM
OAK	MISC. OAK
PIN	PINE
RO	RED OAK

LINE-TYPE LEGEND (UTILITIES)

- OHP — OVERHEAD POWER LINE
- SS — SANITARY SEWER LINE
- SD — STORM DRAINAGE LINE
- W — WATER DISTRIBUTION LINE

NOTES

1. FIELD EQUIPMENT USED FOR THIS SURVEY: GEOMAX ZOOM90 R2
2. THE FIELD DATA UPON WHICH THIS MAP OR PLAT IS BASED HAS A CLOSURE PRECISION OF ONE FOOT IN 59,900 FEET, AN ANGULAR ERROR OF 0.8" PER ANGLE POINT, AND WAS ADJUSTED USING THE COMPASS METHOD.
3. ELEVATIONS ARE BASED ON NAVD88, UNLESS OTHERWISE NOTED. CONTOUR INTERVAL IS ONE FOOT.
4. COORDINATES AND DIRECTIONS ARE BASED ON GEORGIA STATE PLANE COORDINATE SYSTEM (NAD83), EAST ZONE.
5. ACCORDING TO F.I.R.M. MAP NO. 13051C, PANEL, 0036G, REVISED AUGUST 16, 2018, THE PROPERTY SHOWN ON THIS PLAT LIES IN ZONE X, X SHADED AND AE (EFE 12.8 & 13).
6. WETLANDS THAT MAY EXIST ON THE PROPERTY ARE UNDER THE JURISDICTION OF THE CORPS OF ENGINEERS AND/OR THE DEPARTMENT OF NATURAL RESOURCES. THE OWNER AND/OR DEVELOPER IS RESPONSIBLE FOR OBTAINING ALL LAW FOR DISTURBANCE TO THESE PROTECTED AREAS WITHOUT PROPER PERMIT AND APPROVAL.
7. THE POSITION OF UNDERGROUND UTILITIES SHOWN ON THIS DRAWING IS BASED UPON THE LOCATION OF SURFACE APPURTENANCES, SURFACE MARKINGS AND RECORD DRAWINGS AND SHOULD BE CONSIDERED APPROXIMATE. THE EXACT LOCATION, SIZE, TYPE AND DEPTH OF UNDERGROUND UTILITIES SHOWN HEREON SHOULD BE VERIFIED. ANY THAT MAY EXIST, CAN ONLY BE DETERMINED VIA AN EXCAVATION OF THE UTILITY.
8. TAX MAP NUMBER: 7D906 04024
   PROPERTY OWNER: BEP PH TRACT 2, LLC (PER TAX RECORDS)
   TITLE REFERENCE: DEED BOOK 784, PAGE 549

LINE-TYPE LEGEND (BOUNDARIES)

- ADJOINER PROPERTY LINE
- SUBJECT PROPERTY LINE
- FLOOD ZONE LIMITS

HATCH PATTERN LEGEND

- WETLAND BUFFER
- FRESHWATER WETLAND
- CONCRETE PAVEMENT
- GRAVEL/EARTH DRIVE

N 77°21'12" E 618.76'

PROPERTY BOUNDARY

BLDG TYPE 4
8 UNITS
(2 GARAGE AND 2 DRIVEWAY SPACE
FF: 17.00
FG: 16.50

EXISTING SSMH #2
RIM: 1643
IE: 10.76 (W)
IE: 6.28 (S)
IE: 6.27 (N)

DEMO EXISTING 10" WATERMAIN TO PROPERTY BOUNDARY AND CAP

EXISTING WATER MAIN STUB UP

DEMO TURN-OUT, INSTALL CURB AND GUTTER ACROSS DRIVE

DEMO ALL SEWER TO PROPERTY BOUNDARY AND CAP

S 12°38'48" E 196.35'

EXISTING FM PLUGGED

EXISTING 10" WATER LINE. TO BE REPLACED

DEMO EXISTING FORCEMAIN TO PROPERTY BOUNDARY AND PLUG

DEMO ALL EXISTING WATER LATERAL SERVICE

N 77°21'12" E 219.45'

DEMO ALL EXISTING SEWER LATERAL SERVICE

EXISTING SSMH #1
RIM:18.11
IE:11.69 (E)

DEMO EXISTING BUILDING PAD OVERGROWN

Ok

DEMO EARTH ROAD

EARTH ROAD

20' UTILITY EASEMENT

EXISTING 16" WATER MAIN

50' UNDISTURBED BUFFER

POSSIBLE OVERLAP AREA WITHIN PARCEL 4
0.03 ACRES

N 12°38'48" W 404.11'

DEMO EARTH ROAD

MATCH LINE - SEE SHEET NO. EX1.1

Pn

Oj

MATCH LINE - SEE SHEET NO. EX1.1

PROPERTY BOUNDARY

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

PERMIT SET - FOR REVIEW PURPOSES ONLY

GEORGIA REGISTERED PROFESSIONAL ENGINEER SCOTT K. MONROE

NO.	REVISIONS	BY	DATE
2	PER T.R. LONG REVIEW COMMENTS DATED 8/11/22	SGJ	9/02/22

THOMAS & HUTTON
50 Park of Commerce Way
Savannah, GA 31405 • 912.234.5300
www.thomasandhutton.com

NOVARE GROUP - PORT WENTWORTH SFR, LLC
PORT WENTWORTH, GEORGIA

SINGLE FAMILY RENTAL - PARCEL 4

EXISITNG CONDITIONS & DEMO PLAN

JOB NO:	J-28595.0004
DATE:	7/5/2022
DRAWN:	JBJ
DESIGNED:	SKM
REVIEWED:	SKM
APPROVED:	SKM
SCALE:	1" = 40'

EX1.2

LEGEND

- BENCHMARK
- CONC. MONUMENT FOUND
- CURB INLET MANHOLE (CIMH)
- FIRE HYDRANT
- GRATE INLET (GI)
- IRON PIPE FOUND
- IRON REBAR FOUND
- POWER POLE
- SANITARY MANHOLE (SSMH)
- WATER MANHOLE
- WATER VALVE
- CHECK VALVE
- WATER METER
- TELEPHONE BOX
- SL SEWER LATERAL
- WL WATER LATERAL

TREE LEGEND

- GUM SWEET GUM
- OAK MISC. OAK
- PI PINE
- RO RED OAK

LINE-TYPE LEGEND (UTILITIES)

- OHP OVERHEAD POWER LINE
- SS SANITARY SEWER LINE
- SD STORM DRAINAGE LINE
- W WATER DISTRIBUTION LINE

NOTES

1. FIELD EQUIPMENT USED FOR THIS SURVEY: GEOMAX ZOOM90 R2
2. THE FIELD DATA UPON WHICH THIS MAP OR PLAT IS BASED HAS A CLOSURE PRECISION OF ONE FOOT IN 59,900 FEET, AN ANGULAR ERROR OF 0.8" PER ANGLE POINT, AND WAS ADJUSTED USING THE LEAST SQUARES METHOD.
3. ELEVATIONS ARE BASED ON NAVD88, UNLESS OTHERWISE NOTED. CONTOUR INTERVAL IS ONE FOOT.
4. COORDINATES AND DIRECTIONS ARE BASED ON GEORGIA STATE PLANE COORDINATE SYSTEM (NAD83), EAST ZONE.
5. ACCORDING TO F.I.R.M. MAP NO. 13051C, PANEL, 0036G, REVISED AUGUST 16, 2018, THE PROPERTY SHOWN ON THIS PLAT LIES IN ZONE X, X SHADED AND AE (BFE 12.8 & 13).
6. WETLANDS THAT MAY EXIST ON THE PROPERTY ARE UNDER THE JURISDICTION OF THE CORPS OF ENGINEERS AND/OR THE DEPARTMENT OF NATURAL RESOURCES. THE OWNER AND/OR DEVELOPER IS RESPONSIBLE FOR COMPLYING WITH LAW FOR DISTURBANCE TO THESE PROTECTED AREAS WITHOUT PROPER PERMIT AND APPROVAL.
7. THE POSITION OF UNDERGROUND UTILITIES SHOWN ON THIS DRAWING IS BASED UPON THE LOCATION OF SURFACE APPURTENANCES, SURFACE MARKINGS AND RECORD DRAWINGS AND SHOULD BE CONSIDERED APPROXIMATE. THE EXACT LOCATION, SIZE, TYPE AND DEPTH OF UNDERGROUND UTILITIES SHOWN HEREON SHALL BE VERIFIED. ANY UTILITIES THAT MAY EXIST, CAN ONLY BE DETERMINED VIA AN EXCAVATION OF THE UTILITY.
8. TAX MAP NUMBER: 7090G 04024
   PROPERTY OWNER: BEP PH TRACT 3, LLC (PER TAX RECORDS)
   TITLE REFERENCE: DEED BOOK 794, PAGE 549

LINE-TYPE LEGEND (BOUNDARIES)

- ADJOINER PROPERTY LINE
- SUBJECT PROPERTY LINE
- FLOOD ZONE LIMITS

HATCH PATTERN LEGEND

- WETLAND BUFFER
- FRESHWATER WETLAND
- CONCRETE PAVEMENT
- GRAVEL/EARTH DRIVE

PROPERTY BOUNDARY

Cc

Oj

ZONE AE (EL 13)

ZONE X (SHADED)

ZONE X

DEMO CURB

PROPERTY BOUNDARY

BENCHMARK #5
BTS IN 15" HICKORY
ELEV: 14.50

BENCHMARK #4
BTS IN 17" POST OAK
ELEV: 16.44

163.18'

N 45°41'05" W

MATCH LINE - SEE SHEET NO. EX1.2

MATCH LINE - SEE SHEET NO. EX1.1

GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

PERMIT SET - FOR REVIEW PURPOSES ONLY

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SINGLE FAMILY RENTAL - PARCEL 4

EXISTING CONDITIONS & DEMO PLAN

JOB NO:	J-28595.0004
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DRAWN:	JBJ
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REVIEWED:	SKM
APPROVED:	SKM
SCALE:	1" = 40'

EX1.3

Z:\28595\28595.0004\ENGINEERING\DRAWINGS\CONSTRUCTION PLANS\28595.0004 - EX PLOT.DWG - Oct 5, 2022 - 9:23 AM

LINE TABLE		
LINE	BEARING	DISTANCE
L1	N 77°21'12" E	219.45'
L2	S 12°38'48" E	196.35'
L3	N 77°21'12" E	50.00'
L4	S 12°38'48" E	44.63'
L5	N 77°21'12" E	618.76'
L6	S 18°53'41" E	2099.75'
L7	S 74°14'44" E	27.26'
L8	S 11°56'09" E	41.45'
L9	S 85°17'09" E	37.44'
L10	S 21°43'30" W	37.83'
L11	S 19°23'13" E	21.22'
L12	S 24°03'51" W	22.17'
L13	S 39°32'35" E	57.31'
L14	S 58°12'23" W	39.82'
L15	N 31°46'38" W	140.38'

LINE TABLE		
LINE	BEARING	DISTANCE
L16	N 58°12'29" E	50.71'
L17	N 32°24'37" W	49.99'
L18	S 57°35'21" W	49.97'
L19	S 32°24'37" E	12.85'
L20	S 58°16'38" W	124.95'
L21	N 32°02'42" W	36.05'
L22	N 31°52'12" W	154.96'
L23	N 45°41'05" W	1637.18'
L24	N 12°38'48" W	404.11'
L25	N 11°22'15" W	57.65'
L26	N 11°32'55" W	59.88'
L27	N 13°12'32" W	327.22'
L28	S 60°03'14" W	230.64'
L29	S 60°03'14" W	81.29'
L31	S 10°56'58" W	65.47'

LINE TABLE		
LINE	BEARING	DISTANCE
L33	S 23°52'45" W	134.29'
L34	S 12°41'57" E	715.59'
L36	S 29°56'46" E	146.68'
L38	S 45°41'05" E	769.57'
L40	S 24°49'46" E	238.92'
L42	S 44°18'55" W	6.98'
L43	S 60°03'14" W	109.25'
L44	S 60°03'14" W	172.06'
L45	N 44°18'55" E	32.79'
L48	N 29°56'46" W	324.08'
L49	N 29°56'46" W	330.01'
L51	S 77°18'03" W	34.01'
L52	N 79°06'44" E	69.81'
L54	S 30°21'59" E	160.33'
L56	S 27°32'33" E	63.97'

LINE TABLE		
LINE	BEARING	DISTANCE
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L66	N 12°14'36" W	70.76'
L68	N 26°53'06" W	97.44'
L70	N 22°29'35" W	72.08'
L72	N 12°56'05" W	138.62'
L75	S 72°21'16" W	19.94'

CURVE TABLE					
CURVE	RADIUS	LENGTH	CHORD	CHD BEARING	DELTA
C1	150.00'	128.56'	124.66'	S 35°30'06" W	49°06'16"
C2	400.00'	90.27'	90.08'	S 17°24'52" W	12°55'47"
C3	50.00'	15.05'	14.99'	S 21°19'21" E	17°14'49"
C4	50.00'	13.73'	13.69'	S 37°48'56" E	15°44'20"
C5	50.00'	18.20'	18.10'	S 35°15'25" E	20°51'20"
C6	50.00'	60.34'	56.74'	S 09°44'35" W	69°08'40"
C7	80.00'	61.66'	60.15'	N 22°14'05" E	44°09'39"
C8	528.43'	277.61'	274.43'	N 14°53'45" W	30°06'02"
C9	34.00'	43.17'	40.33'	N 66°19'21" W	72°45'11"
C10	64.00'	78.77'	73.89'	S 65°37'37" E	70°31'17"

CURVE TABLE					
CURVE	RADIUS	LENGTH	CHORD	CHD BEARING	DELTA
C11	472.00'	23.26'	23.26'	S 28°57'16" E	2°49'26"
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C13	61.00'	95.95'	86.36'	N 75°00'21" W	90°07'10"
C14	61.00'	116.11'	99.36'	N 24°34'58" E	109°03'28"
C15	28.00'	75.08'	54.52'	N 58°12'35" E	153°38'07"
C16	328.00'	36.43'	36.42'	N 15°25'32" W	6°21'52"
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C18	328.00'	25.14'	25.13'	N 24°41'20" W	4°23'30"
C19	128.00'	21.35'	21.33'	N 17°42'50" W	9°33'30"
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C24	751.49'	260.96'	259.65'	S 09°05'24" E	19°53'47"
C25	60.00'	47.99'	46.72'	S 22°03'26" E	45°49'50"

DRY DETENTION POND 1:
TOB: 10.00
BOT: 6.00
25 YR: 8.6I
50 YR: 8.96

DRY DETENTION POND 2:
TOB: 10.00
BOT: 6.00
25 YR: 8.5I
50 YR: 8.86

MATCH LINE - SEE SHEET NO. C1.2

DOG PARK

POOL

CLUBHOUSE

EXISTING 10" WATERMAIN

6" FM

6' FLUME

18" SOLID WHITE STOP BAR

CROSSWALK (TYP.)

5' SIDEWALK (TYP.)

20' UTILITY EASEMENT

50' UNDISTURBED BUFFER

50' ACCESS EASEMENT

10' TEMPORARY CONSTRUCTION EASEMENT

BENCHMARK #6
BTS IN 17" WILLOW
ELEV: 23.30

N/F
FIELDSTONE GROUP, LLC
D.B. 327-H PG. 294
70975 02015

BRENDA SUE CHRISTIAN
D.B. 38IN PG. 72
70975 02008

ERIC C. SMITH
D.B. 372J PG. 586
70975 02009

ROBERTS CHEATHEM
D.B. 255G PG. 575
70975 02010

DAVID WILSON &
EDWARD JOHNSON
D.B. 1576 PG. 186
70975 02011

EDWARD JOHNSON
70975 02012

FIELDSTONE GROUP, LLC
D.B. 344G PG. 242
70975 02014

FIELDSTONE GROUP, LLC
D.B. 327H PG. 293

GRAPHIC SCALE
(IN FEET)
1 inch = 50 ft.

PERMIT SET - FOR REVIEW PURPOSES ONLY

GEORGIA REGISTERED PROFESSIONAL ENGINEER SCOTT K. MOORE

NO.	REVISIONS	BY	DATE
3	PER T.R. LONG REVIEW COMMENTS DATED 10/04/22	SGJ	10/05/22
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NOVARE GROUP - PORT WENTWORTH SFR, LLC
PORT WENTWORTH, GEORGIA

SINGLE FAMILY RENTAL - PARCEL 4

SITE LAYOUT & SIGNAGE PLAN

JOB NO:	J-28595.0004
DATE:	7/5/2022
DRAWN:	JBJ
DESIGNED:	SKM
REVIEWED:	SKM
APPROVED:	SKM
SCALE:	1" = 50'

C1.1

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C25	60.00'	47.99'	46.72'	S 22°03'26" E	45°49'50"

PROPERTY LINE (TYP.)

MATCH LINE - SEE SHEET NO. C1.1

DRY DETENTION POND 2:
TOB: 10.00
BOT: 6.00
25 YR: 8.51
50 YR: 8.86

LOT 12
N/F
MACK EVON
D.B. 719 PG. 96
70907A 0300I

MELISS
D.B. 383
7090

BENCHMARK #3
BTS IN 15" HICKORY
ELEV: 14.50

BENCHMARK #4
BTS IN 17" POST OAK
ELEV: 16.44

N: 802,758.61
E: 956,783.93

5' SIDEWALK (TYP.)

CROSSWALK (TYP.)

STOP
R1-1
(30)30

R7-8P (18)9
R7-8 (12)18

BLACK CREEK DRIVE 60' R/W

50' UNDISTURBED NATURAL BUFFER

4' CHAIN LINK FENCE

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

NO.	REVISIONS	BY	DATE
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GEORGIA REGISTERED PROFESSIONAL ENGINEER SCOTT K. MOORE 035220 NOVEMBER 2022

PERMIT SET - FOR REVIEW PURPOSES ONLY

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NOVARE GROUP - PORT WENTWORTH SFR, LLC
PORT WENTWORTH, GEORGIA

SINGLE FAMILY RENTAL - PARCEL 4

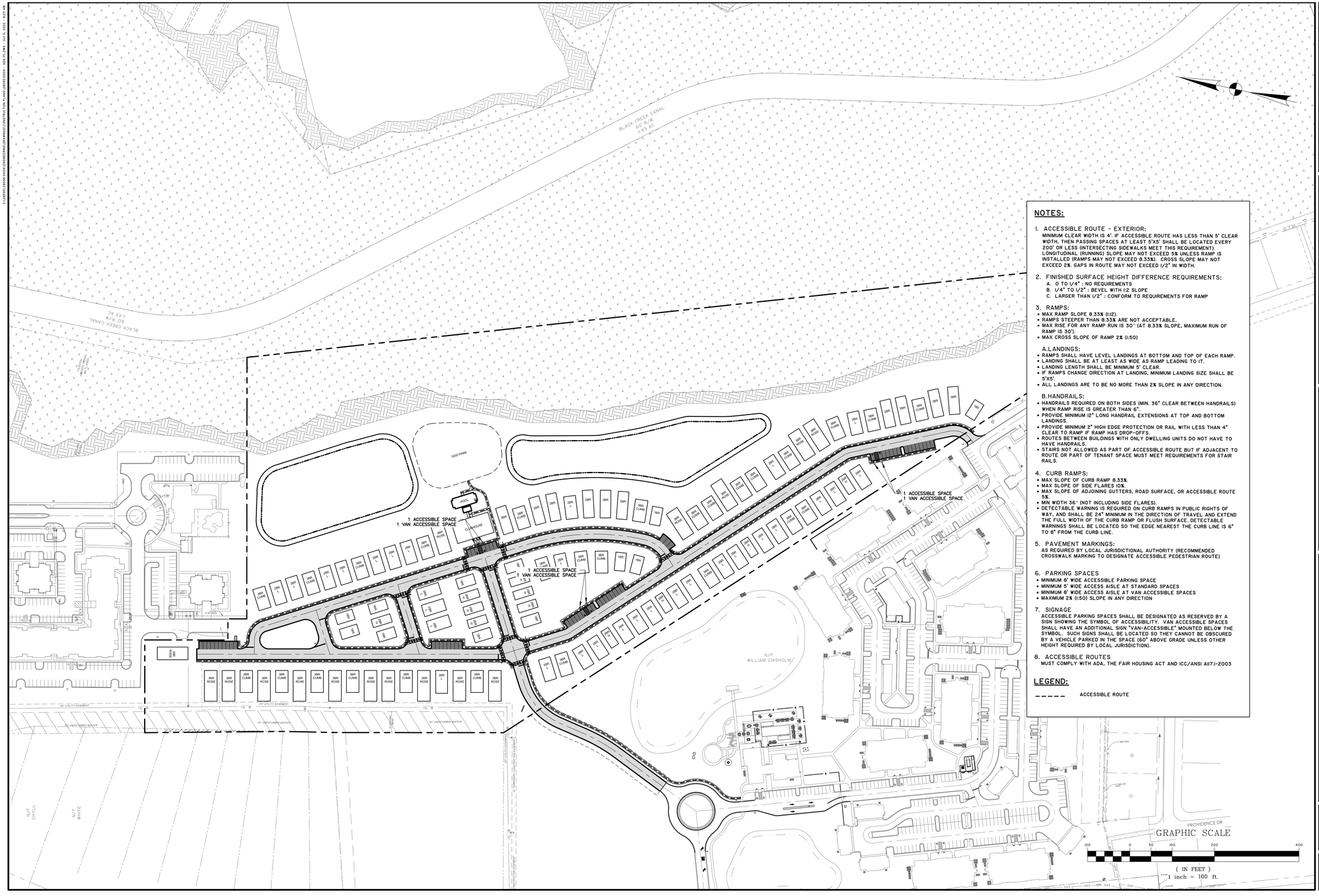
SITE LAYOUT & SIGNAGE PLAN

JOB NO:	J-26595.0004
DATE:	7/5/2022
DRAWN:	JBJ
DESIGNED:	SKM
REVIEWED:	SKM
APPROVED:	SKM
SCALE:	1" = 50'

C1.2

Z:\26595\26595.0004\ENGINEER\DRAWINGS\CONSTRUCTION PLANS\26595.0004 - SITE.DWG - OCT 5, 2022 - 9:03 AM

Z:\28595\28595.0004\ENGINEERING\DRAWINGS\CONSTRUCTION PLANS\28595.0004 - ADA PL.DWG - OCT 5, 2022 - 9:53 AM



NOTES:

1. ACCESSIBLE ROUTE - EXTERIOR:
   MINIMUM CLEAR WIDTH IS 4'. IF ACCESSIBLE ROUTE HAS LESS THAN 5' CLEAR WIDTH, THEN PASSING SPACES AT LEAST 5'X5' SHALL BE LOCATED EVERY 200' OR LESS (INTERSECTING SIDEWALKS MEET THIS REQUIREMENT). LONGITUDINAL (RUNNING) SLOPE MAY NOT EXCEED 5% UNLESS RAMP IS INSTALLED (RAMPS MAY NOT EXCEED 8.33%). CROSS SLOPE MAY NOT EXCEED 2%. GAPS IN ROUTE MAY NOT EXCEED 1/2" IN WIDTH.

2. FINISHED SURFACE HEIGHT DIFFERENCE REQUIREMENTS:
   A. 0 TO 1/4" : NO REQUIREMENTS
   B. 1/4" TO 1/2" : BEVEL WITH 1:2 SLOPE
   C. LARGER THAN 1/2" : CONFORM TO REQUIREMENTS FOR RAMP

3. RAMPS:
   - MAX RAMP SLOPE 8.33% (1:12).
   - RAMPS STEEPER THAN 8.33% ARE NOT ACCEPTABLE.
   - MAX RISE FOR ANY RAMP RUN IS 30" (AT 8.33% SLOPE, MAXIMUM RUN OF RAMP IS 30').
   - MAX CROSS SLOPE OF RAMP 2% (1:50)

   A.LANDINGS:
   - RAMPS SHALL HAVE LEVEL LANDINGS AT BOTTOM AND TOP OF EACH RAMP.
   - LANDING SHALL BE AT LEAST AS WIDE AS RAMP LEADING TO IT.
   - LANDING LENGTH SHALL BE MINIMUM 5' CLEAR.
   - IF RAMPS CHANGE DIRECTION AT LANDING, MINIMUM LANDING SIZE SHALL BE 5'X5'.
   - ALL LANDINGS ARE TO BE NO MORE THAN 2% SLOPE IN ANY DIRECTION.

   B.HANDRAILS:
   - HANDRAILS REQUIRED ON BOTH SIDES (MIN. 36" CLEAR BETWEEN HANDRAILS) WHEN RAMP RISE IS GREATER THAN 6".
   - PROVIDE MINIMUM 12" LONG HANDRAIL EXTENSIONS AT TOP AND BOTTOM LANDINGS.
   - PROVIDE MINIMUM 2" HIGH EDGE PROTECTION OR RAIL WITH LESS THAN 4" CLEAR TO RAMP IF RAMP HAS DROP-OFFS.
   - ROUTES BETWEEN BUILDINGS WITH ONLY DWELLING UNITS DO NOT HAVE TO HAVE HANDRAILS.
   - STAIRS NOT ALLOWED AS PART OF ACCESSIBLE ROUTE BUT IF ADJACENT TO ROUTE OR PART OF TENANT SPACE MUST MEET REQUIREMENTS FOR STAIR RAILS.

4. CURB RAMPS:
   - MAX SLOPE OF CURB RAMP 8.33%.
   - MAX SLOPE OF SIDE FLARES 10%.
   - MAX SLOPE OF ADJOINING GUTTERS, ROAD SURFACE, OR ACCESSIBLE ROUTE 5%.
   - MIN WIDTH 36" (NOT INCLUDING SIDE FLARES).
   - DETECTABLE WARNING IS REQUIRED ON CURB RAMPS IN PUBLIC RIGHTS OF WAY, AND SHALL BE 24" MINIMUM IN THE DIRECTION OF TRAVEL AND EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE. DETECTABLE WARNINGS SHALL BE LOCATED SO THE EDGE NEAREST THE CURB LINE IS 6" TO 8" FROM THE CURB LINE.

5. PAVEMENT MARKINGS:
   AS REQUIRED BY LOCAL JURISDICTIONAL AUTHORITY (RECOMMENDED CROSSWALK MARKING TO DESIGNATE ACCESSIBLE PEDESTRIAN ROUTE)

6. PARKING SPACES
   - MINIMUM 8' WIDE ACCESSIBLE PARKING SPACE
   - MINIMUM 5' WIDE ACCESS AISLE AT STANDARD SPACES
   - MINIMUM 8' WIDE ACCESS AISLE AT VAN ACCESSIBLE SPACES
   - MAXIMUM 2% (1:50) SLOPE IN ANY DIRECTION

7. SIGNAGE
   ACCESSIBLE PARKING SPACES SHALL BE DESIGNATED AS RESERVED BY A SIGN SHOWING THE SYMBOL OF ACCESSIBILITY. VAN ACCESSIBLE SPACES SHALL HAVE AN ADDITIONAL SIGN "VAN-ACCESSIBLE" MOUNTED BELOW THE SYMBOL. SUCH SIGNS SHALL BE LOCATED SO THEY CANNOT BE OBSCURED BY A VEHICLE PARKED IN THE SPACE (60" ABOVE GRADE UNLESS OTHER HEIGHT REQUIRED BY LOCAL JURISDICTION).

8. ACCESSIBLE ROUTES
   MUST COMPLY WITH ADA, THE FAIR HOUSING ACT AND ICC/ANSI A117.1-2003

LEGEND:

_____ ACCESSIBLE ROUTE

GEORGIA REGISTERED PROFESSIONAL ENGINEER SCOTT K. MONTGOMERY 10/07/2022

NO.	REVISIONS	BY	DATE

THOMAS & HUTTON
50 Park of Commerce Way
Savannah, GA 31405 • 912.234.5300
www.thomasandhutton.com

NOVARE GROUP - PORT WENTWORTH SFR, LLC
PORT WENTWORTH, GEORGIA

SINGLE FAMILY RENTAL - PARCEL 4

ADA ACCESSIBILITY PLAN

JOB NO:	J-28595.0004
DATE:	7/5/2022
DRAWN:	JBJ
DESIGNED:	SKM
REVIEWED:	SKM
APPROVED:	SKM
SCALE:	1" = 100'

C1.3

PERMIT SET - FOR REVIEW PURPOSES ONLY

PERMIT SET - FOR REVIEW PURPOSES ONLY

MATCH LINE - SEE SHEET NO. C2.2

N 77°21'12" E 619.75'

NOTE: RESTRAINED JOINTS REQUIRED AT ALL FITTINGS

DOG PARK

POOL

CLUBHOUSE

BLDG. TYPE 4
8 UNITS
12 GARAGE
AND 2
DRIVEWAY SPACES)
FF. 17.00
FG. 16.50

X" IN CURB

EXISTING 10" WATERMAIN

MH #11
FR: 15.60
INV. IN: 7.75 (N)
INV. OUT: 7.65 (SW)

256 LF 8" PVC - SDR 26 @ 0.40%

MH #12
FR: 14.62
INV. IN: 8.46 (NW)
INV. OUT: 8.36 (S)

151 LF 8" PVC - SDR 26 @ 0.40%

MH #13
FR: 16.08
INV. IN: 9.40 (NW)
INV. OUT: 9.05 (SE)

150 LF 8" PVC - SDR 26 @ 0.40%

MH #14
FR: 15.88
INV. IN: 10.61 (NW)
INV. OUT: 10.51 (SE)

277 LF 8" PVC - SDR 26 @ 0.40%

201 LF 8" PVC - SDR 26 @ 0.40%

MH #15
FR: 16.57
INV. IN: 11.52 (NW)
INV. OUT: 11.42 (SE)

122 LF 8" PVC - SDR 26 @ 0.40%

MH #16
FR: 18.24
INV. OUT: 12.00 (SE)

MH #17
FR: 18.25
INV. OUT: 10.26 (SW)

MH #18
FR: 17.47
INV. OUT: 10.95 (SW)

93 LF 8" PVC - SDR 26 @ 0.40%

147 LF 8" PVC - SDR 26 @ 0.40%

103 LF 8" PVC - SDR 26 @ 0.40%

280 LF 8" PVC - SDR 26 @ 0.47%

MH #5
FR: 16.19
INV. IN: 7.44 (NW)
INV. IN: 7.24 (NE)
INV. OUT: 7.14 (SE)

MH #6
FR: 17.90
INV. IN: 8.86 (NW)
INV. OUT: 8.76 (SE)

153 LF 8" PVC - SDR 26 @ 0.40%

MH #7
FR: 20.14
INV. IN: 9.57 (N)
INV. IN: 9.67 (NE)
INV. OUT: 9.47 (SE)

MH #8
FR: 18.80
INV. IN: 10.58 (N)
INV. IN: 10.58 (NE)
INV. OUT: 10.48 (S)

228 LF 8" PVC - SDR 26 @ 0.40%

228 LF 8" PVC - SDR 26 @ 0.40%

MH #9
FR: 19.24
INV. IN: 11.59 (N)
INV. OUT: 11.49 (S)

300 LF 8" PVC - SDR 26 @ 0.40%

MH #10
FR: 18.15
INV. IN: 12.89 (W)
INV. OUT: 12.79 (S)

MH #19
FR: 14.33
INV. IN: 13.62 (W)
INV. OUT: 13.62 (E)

5 LF 8" PVC - SDR 26 @ 0.40%

S 12°38'48" E PH-196.35'

N 77°21'12" E 219.45'

N 12°38'48" W 404.11'

PROPERTY LINE (TYP.)

8" X 6" TEE
6" GV
FH

8" X 4" TEE
(I) 8" GV
(I) 4" GV

8" X 2" REDUCER
2" GV

8" 45° BEND

8" 22.5° BEND

10" 45° BEND

10" 22.5° BEND

10" X 6" TEE
6" GV

10" X 6" CROSS
(I) 10" GV
(I) 10" X 8" REDUCER
(3) 8" GV

16" X 10" TAPPING SLEEVE

10" WATER METER
SEE DETAIL ON
SHEET C2.6

10.00' RPZ
SEE DETAIL ON
SHEET C3.7

1" SINGLE WATER SERVICE LATERAL (TYP.)

4" SINGLE SEWER SERVICE LATERAL (TYP.)

6" DUAL SEWER SERVICE LATERAL (TYP.)

20' UTILITY EASEMENT

30' UTILITY EASEMENT

50' UNDISTURBED BUFFER

10' TEMPORARY CONSTRUCTION EASEMENT

POND

8" CAP

POSSIBLE OVERLAP AREA WITHIN PARCEL 4 0.03 ACRES

3/4" IPF POB

3/4" IPF

C
N/F
BRENDA SUE CHRISTIAN
D.B. 38IN PG. 72
70975 02008

D
N/F
ERIC C. SMITH
D.B. 372J PG. 586
70975 02009

E
N/F
LULA GHYLL
ROBERTS CHEATHEM
D.B. 255G PG. 575
70975 02010

F
N/F
DAVID WILSON &
EDWARD JOHNSON
D.B. 1576 PG. 186
70975 02011

G
N/F
EDWARD JOHNSON
70975 02012

H
N/F
FIELDSTONE
GROUP, LLC
D.B. 344G PG. 242
70975 02014

I
N/F
FIELDSTONE
GROUP, LLC
D.B. 327H PG. 293

N/F
FIELDSTONE GROUP, LLC
D.B. 327-H PG. 294
70975 02015

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

GEORGIA REGISTERED PROFESSIONAL ENGINEER SCOTT K. MOORE 25722 NOSHEET

NO.	REVISIONS	BY	DATE
2	PER T.R. LONG REVIEW COMMENTS DATED 8/11/22	SGJ	9/02/22

THOMAS & HUTTON
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Savannah, GA 31405 • 912.234.5300
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NOVARE GROUP - PORT WENTWORTH SFR, LLC
PORT WENTWORTH, GEORGIA

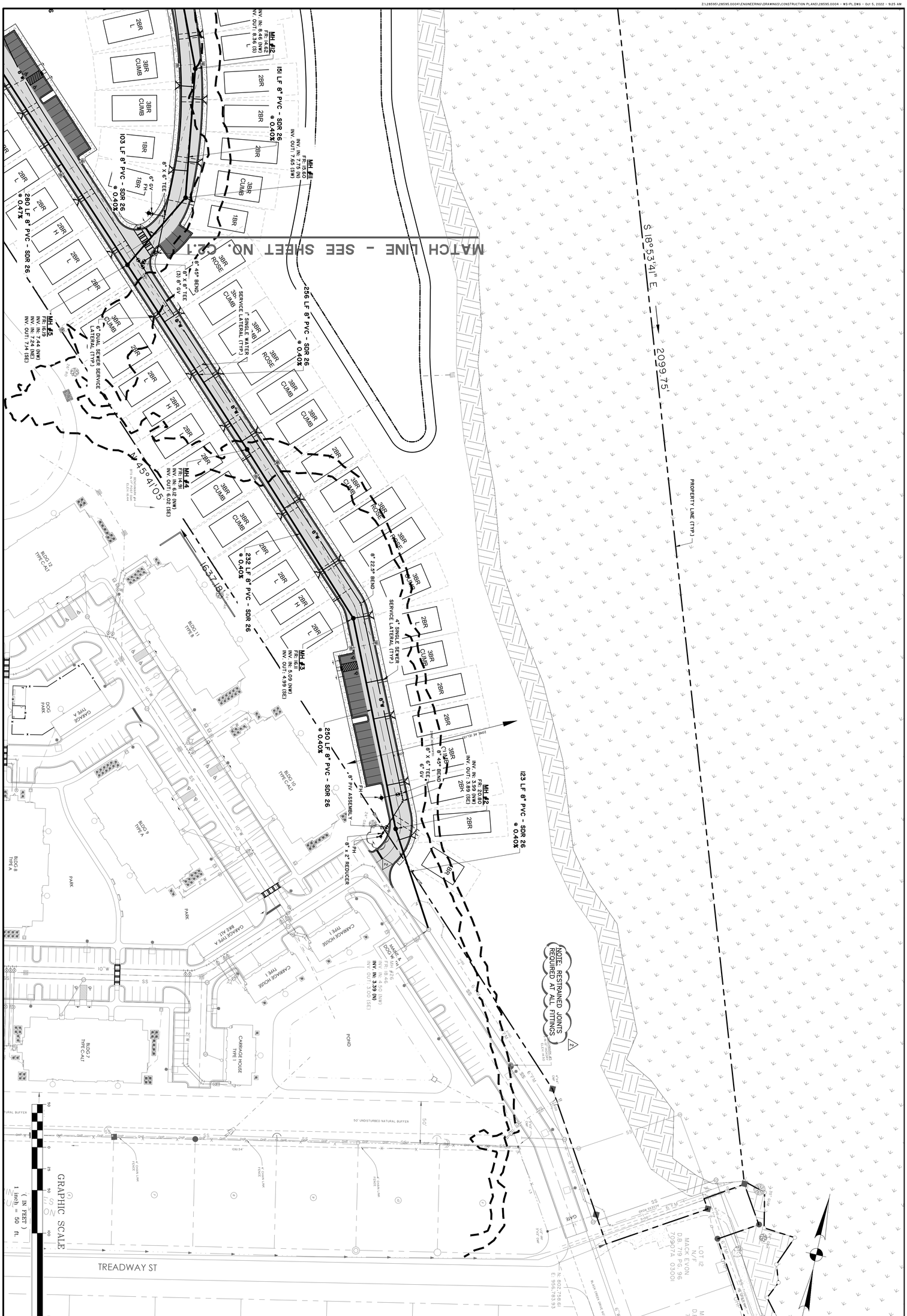
SINGLE FAMILY RENTAL - PARCEL 4

WATER & SEWER PLAN

JOB NO:	J-28595.0004
DATE:	7/5/2022
DRAWN:	JBJ
DESIGNED:	SKM
REVIEWED:	SKM
APPROVED:	SKM
SCALE:	1" = 50'

C2.1

J:\28595\28595.0004\ENGINEERING\DRAWINGS\CONSTRUCTION PLANS\28595004 WSP1.DWG - Oct 5, 2022 - 9:54 AM



C2.2

NOVARE GROUP - PORT WENTWORTH SFR, LLC
PORT WENTWORTH, GEORGIA

SINGLE FAMILY RENTAL - PARCEL 4

WATER & SEWER PLAN

PROJECT NO: 28595.0004
DATE: 7/5/2022
DRAWN: JBJ
DESIGNED: SKM
REVIEWED: SKM
APPROVED: SKM
SCALE: 1" = 50'

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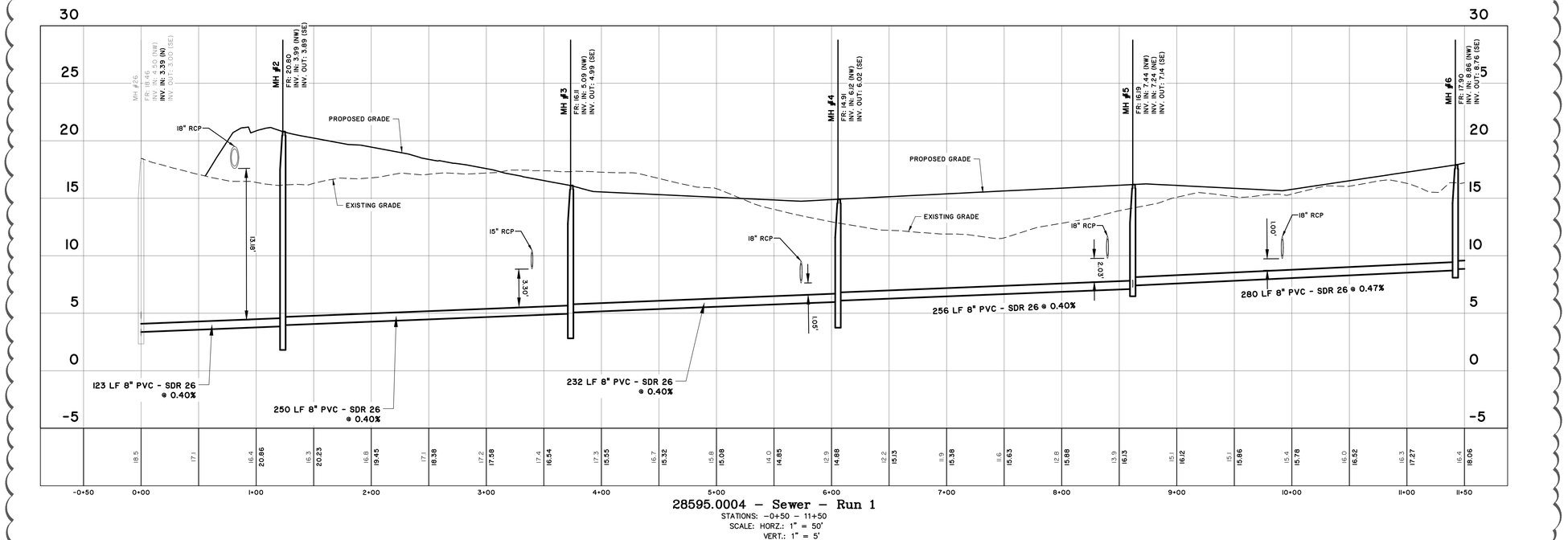
NO.	REVISIONS	BY	DATE
2	PER T.R. LONG REVIEW COMMENTS DATED 8/11/22	SGJ	9/02/22

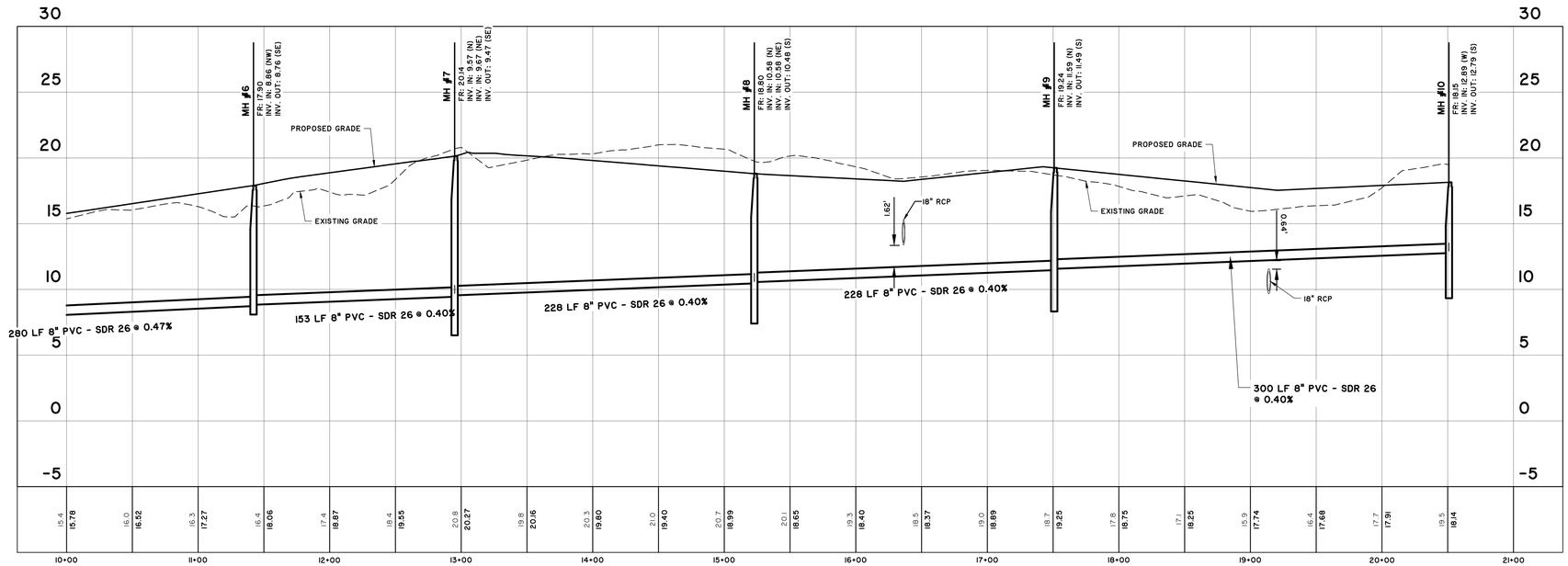
GEORGIA REGISTERED PROFESSIONAL LICENSED ENGINEER SCOTT K. MONSON

PERMIT SET - FOR REVIEW PURPOSES ONLY



28595.0004 – Sewer – Run 1

STATIONS: -0+50 – 11+50
SCALE: HORZ.: 1" = 50'
VERT.: 1" = 5'



28595.0004 – Sewer – Run 1

STATIONS: 10+00 – 21+00
SCALE: HORZ.: 1" = 50'
VERT.: 1" = 5'

PERMIT SET - FOR REVIEW PURPOSES ONLY

GEORGIA REGISTERED PROFESSIONAL ENGINEER SCOTT K. MOORE

NO.	BY	DATE
2	SGJ	9/02/22

REVISIONS
PER T.R.-LONG REVIEW COMMENTS DATED 8/11/22

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NOVARE GROUP - PORT WENTWORTH SFR, LLC
PORT WENTWORTH, GEORGIA

SINGLE FAMILY RENTAL - PARCEL 4

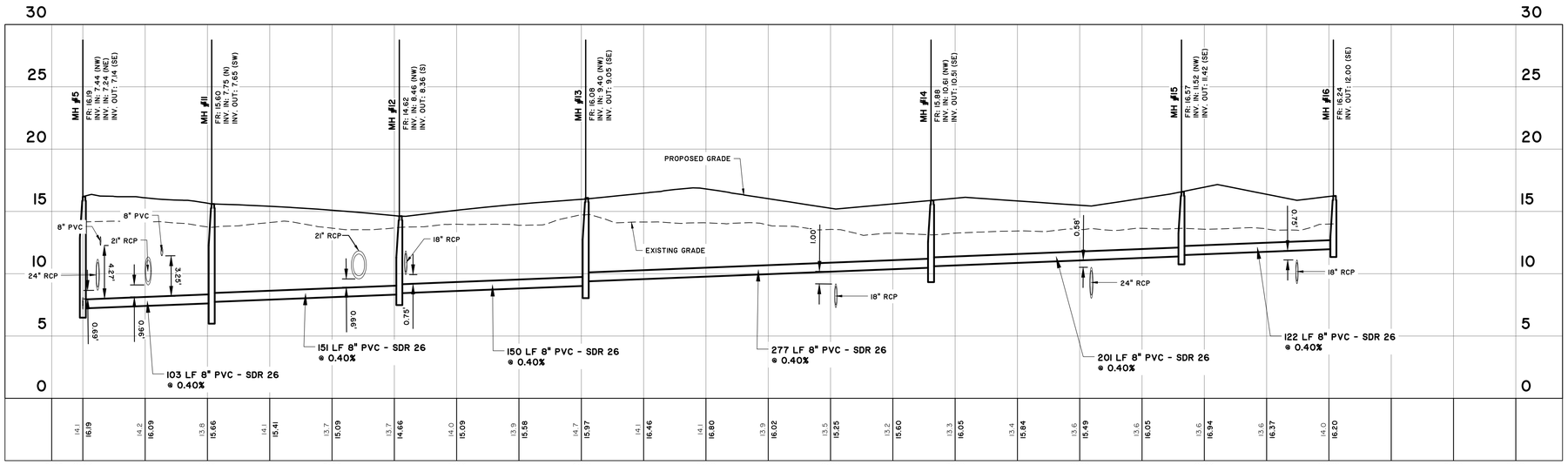
SEWER PROFILES

JOB NO:	J-28595.0004
DATE:	7/5/2022
DRAWN:	JBJ
DESIGNED:	SKM
REVIEWED:	SKM
APPROVED:	SKM
SCALE:	AS NOTED

C2.3

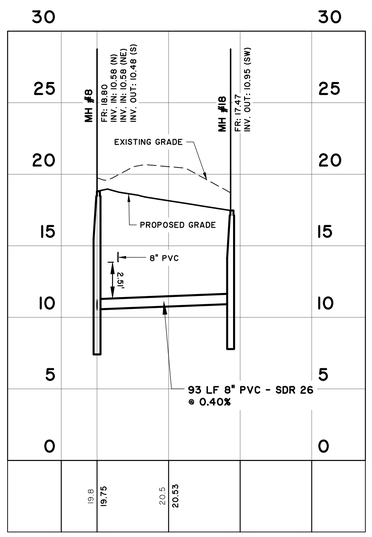
Z:\28595.0004\CIVIL\ENGINEERING\DRAWINGS\CONSTRUCTION PLANS\28595.0004 - SEWER.DWG - Oct 5, 2022 - 9:23 AM

Z:\28595\28595.0004\ENGINEERING\DRAWINGS\CONSTRUCTION PLANS\28595.0004 - SS-PROFILES - OCT 5, 2022 - 9:43 AM



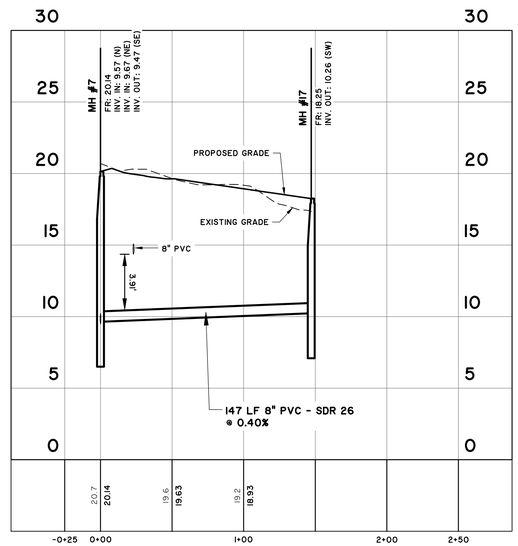
28595.0004 – Sewer – Run 2

STATIONS: –0+25 – 11+50
SCALE: HORZ.: 1" = 50'
VERT.: 1" = 5'



28595.0004 – Sewer – Run 3

STATIONS: –0+25 – 1+50
SCALE: HORZ.: 1" = 50'
VERT.: 1" = 5'



28595.0004 – Sewer – Run 4

STATIONS: –0+25 – 2+50
SCALE: HORZ.: 1" = 50'
VERT.: 1" = 5'

GEORGIA REGISTERED PROFESSIONAL SCOTT K. MONTGOMERY

NO.	REVISIONS	BY	DATE
2	PER T.R. LONG REVIEW COMMENTS DATED 8/11/22	SGJ	9/02/22

PERMIT SET - FOR REVIEW PURPOSES ONLY

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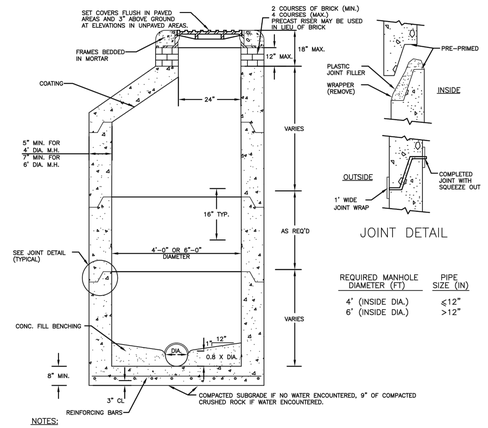
NOVARE GROUP - PORT WENTWORTH SFR, LLC
PORT WENTWORTH, GEORGIA

SINGLE FAMILY RENTAL - PARCEL 4

SEWER PROFILES

JOB NO:	J-28595.0004
DATE:	7/5/2022
DRAWN:	JBJ
DESIGNED:	SKM
REVIEWED:	SKM
APPROVED:	SKM
SCALE:	1" = 50'

C2.4



REQUIRED MANHOLE DIAMETER (FT)	PIPE SIZE (IN)
4' (INSIDE DIA.)	≤12"
6' (INSIDE DIA.)	>12"

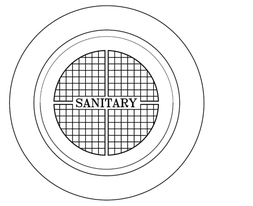
NOTES:

1. PRECAST REINFORCED CONCRETE TOPS, RISERS, BASES AND REBARS SHALL CONFORM TO LATEST ASTM C-478 STD. SPECIFICATIONS.
2. INTERIOR OF MANHOLE SHALL BE COATED IN ACCORDANCE WITH CITY OF PORT WENTWORTH STD. SPECIFICATIONS. THE EXTERIOR OF MANHOLE SHALL BE COATED WITH CONSEAL CS-55 DAMP-PROOF COATING OR EQUAL.
3. MANUFACTURER CERTIFICATION THAT MANHOLE MEETS ASTM SPECIFICATION SHALL BE SUBMITTED TO CITY OF PORT WENTWORTH.
4. SEE DETAIL SHEET FOR MANHOLE COVER & FRAME.
6. BUOYANCY MAY NEED TO BE CHECKED IF NECESSARY
7. ALL PIPE PENETRATIONS SHALL HAVE A BOOT CONNECTION. SEE DETAIL S-6.

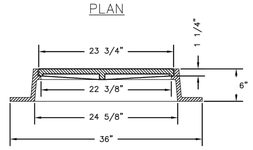
PRECAST CONCRETE MANHOLE

City of Port Wentworth
TECHNICAL DETAILS
S-1

PREPARED BY SAUSSY ENGINEERING, LLC.
SCALE: N.T.S.
DATED: FEBRUARY 2007



PLAN



SECTION

NOTE:

MANHOLE RING & COVER SHALL BE HEAVY DUTY RATED EQUAL TO U. S. FOUNDRY CO. USF 195-ORS. TOTAL WEIGHT 325# TYPE "C" LID TO HAVE MACHINED BEARING SURFACES. LID TO BE LETTERED 2 1/2" -3" LETTER HEIGHT "SANITARY" (NON VENTED). MANHOLE RING SHALL INCLUDE A WATERTIGHT GASKET. STACKING CLEATS ON THE BOTTOM OF THE COVER SHALL NOT BE ALLOWED.

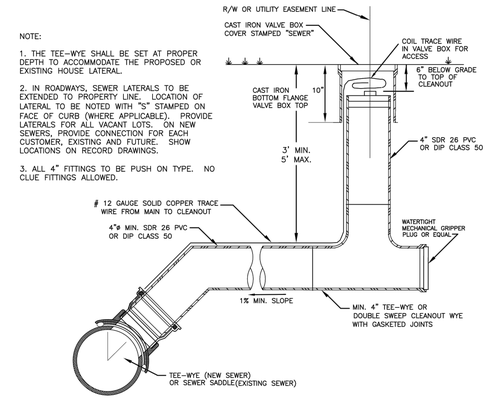
MANHOLE RING & COVER

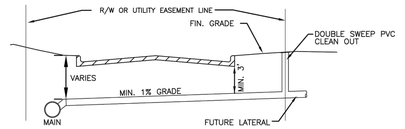
City of Port Wentworth
TECHNICAL DETAILS
S-2

PREPARED BY SAUSSY ENGINEERING, LLC.
SCALE: N.T.S.
DATED: FEBRUARY 2007

NOTE:

1. THE TEE-WYE SHALL BE SET AT PROPER DEPTH TO ACCOMMODATE THE PROPOSED OR EXISTING HOUSE LATERAL.
2. IN ROADWAYS, SEWER LATERALS TO BE EXTENDED TO PROPERTY LINE. LOCATION OF LATERAL TO BE NOTED WITH "S" STAMPED ON FACE OF CURB (WHERE APPLICABLE). PROVIDE LATERALS FOR ALL VACANT LOTS. ON NEW SEWERS, PROVIDE CONNECTION FOR EACH CUSTOMER, EXISTING AND FUTURE. SHOW LOCATIONS ON RECORD DRAWINGS.
3. ALL 4" FITTINGS TO BE PUSH ON TYPE. NO CLUE FITTINGS ALLOWED.

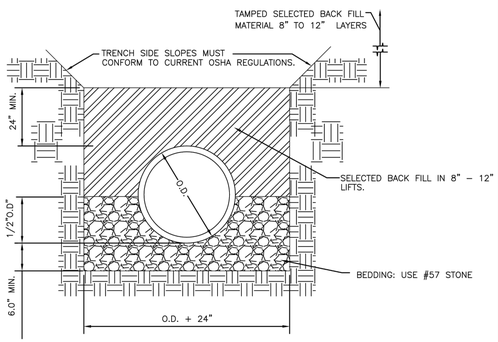




SANITARY SEWER SERVICE CONNECTION

City of Port Wentworth
TECHNICAL DETAILS
S-4

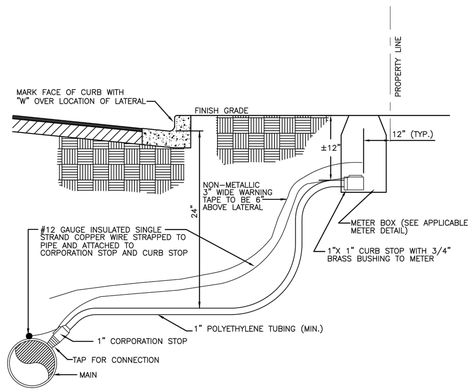
PREPARED BY SAUSSY ENGINEERING, LLC.
SCALE: N.T.S.
DATED: FEBRUARY 2007



PIPE BEDDING

City of Port Wentworth
TECHNICAL DETAILS
S-8

PREPARED BY SAUSSY ENGINEERING, LLC.
SCALE: N.T.S.
DATED: FEBRUARY 2007

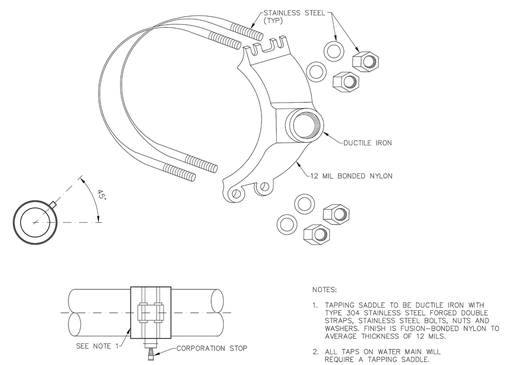


NOTE:
ALL FITTINGS IN LATERAL SHALL BE COMPRESSION TYPE.

WATER SERVICE LATERAL

City of Port Wentworth
TECHNICAL DETAILS
W-1

PREPARED BY SAUSSY ENGINEERING, LLC.
SCALE: N.T.S.
DATED: FEBRUARY 2007



NOTES:

1. TAPPING SADDLE TO BE DUCTILE IRON WITH TYPE 304 STAINLESS STEEL FORGED DOUBLE STRAPS, STAINLESS STEEL BOLTS, NUTS AND WASHERS. FINISH IS FUSION-BONDED NYLON TO AVERAGE THICKNESS OF 12 MILS.
2. ALL TAPS ON WATER MAIN WILL REQUIRE A TAPPING SADDLE.

1" AND 2" TAPPING SADDLE

City of Port Wentworth
TECHNICAL DETAILS
W-2

PREPARED BY SAUSSY ENGINEERING, LLC.
SCALE: N.T.S.
DATED: FEBRUARY 2007

PERMIT SET - FOR REVIEW PURPOSES ONLY

GEORGIA REGISTERED PROFESSIONAL ENGINEER SCOTT K. NOWOTNY

NO.	REVISIONS	BY	DATE

THOMAS & HUTTON
50 Park of Commerce Way
Savannah, GA 31405 • 912.234.5300
www.thomasandhutton.com

NOVARE GROUP - PORT WENTWORTH SFR, LLC
PORT WENTWORTH, GEORGIA

SINGLE FAMILY RENTAL - PARCEL 4

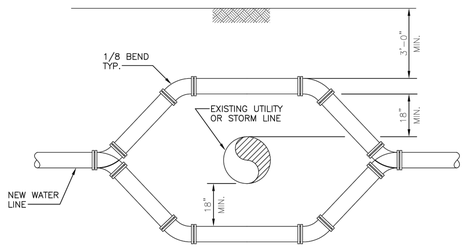
WATER & SEWER DETAILS

JOB NO:	J-28595.0004
DATE:	7/5/2022
DRAWN:	JBJ
DESIGNED:	SKM
REVIEWED:	SKM
APPROVED:	SKM
SCALE:	1" = 1'

C2.5

21\28595\28595.0004\ENGINEERING\DRAWINGS\CONSTRUCTION PLANS\28595.0004 - W'S DETAILS - OCT 5, 2022 - 9:43 AM

21-28595-28595-0004-CRAWFORD\DRAWINGS\DRAWINGS CONSTRUCTION PLANS\28595-0004 - WS DETAILS - OCT 5, 2022 - 9:43 AM



NOTES:

1. WATER LINE SHALL BE INSTALLED ABOVE SANITARY OR STORM LINE IF POSSIBLE.
2. STRAIGHT RUN OF WATER LINE DIRECTLY ABOVE OR BELOW EXISTING UTILITY LINE MUST BE 10' MINIMUM WITH NO JOINT.
3. IF WATER LINE IS INSTALLED BELOW SANITARY LINE WATER LINE SHALL BE DUCTILE IRON PIPE.
4. JOINTS SHALL BE RESTRAINED IN ACCORDANCE WITH CITY OF PORT WENTWORTH STANDARD DETAILS.

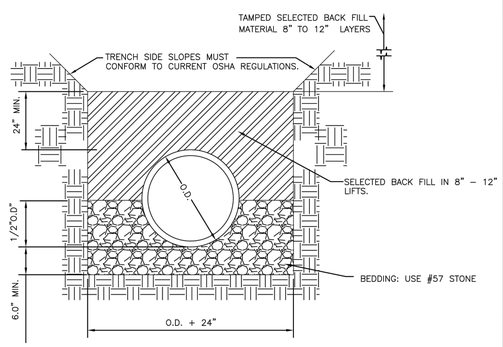
STANDARD UTILITY CROSSING

City of Port Wentworth
TECHNICAL DETAILS

W-6

PREPARED BY SAUSSY ENGINEERING, LLC.

SCALE: N.T.S.
DATED: FEBRUARY 2007



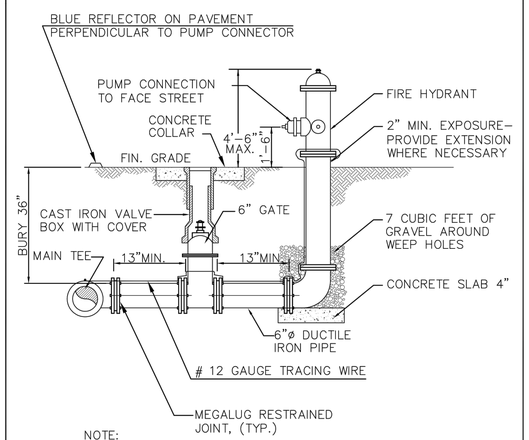
PIPE BEDDING

City of Port Wentworth
TECHNICAL DETAILS

W-8

PREPARED BY SAUSSY ENGINEERING, LLC.

SCALE: N.T.S.
DATED: FEBRUARY 2007



NOTE:

1. ALL JOINTS FROM MAIN TO HYDRANT SHALL BE RESTRAINED.
2. PROTECT BOLTS AND THREADS FROM CONCRETE.

STANDARD FIRE HYDRANT

City of Port Wentworth
TECHNICAL DETAILS

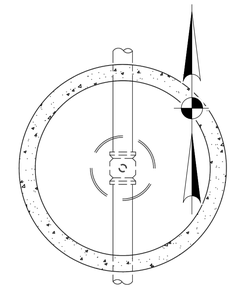
W-9

PREPARED BY SAUSSY ENGINEERING, LLC.

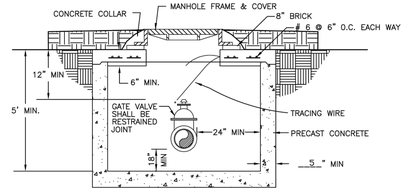
SCALE: N.T.S.
DATED: FEBRUARY 2007

NOTES:

1. MANHOLE FRAME AND COVER SHALL BE NEENAH FOUNDRY CO, CATALOG NO. R-1668, TYPE C, LABELED "WATER".
2. THE BOTTOM OF THE MANHOLE FRAME SHALL NOT BE MORE THAN 12" ABOVE THE TOP OF THE MANHOLE STRUCTURE.
3. PRECAST CONCENTRIC CONE RISERS MAY BE USED WHERE REQUIRED FOR DEPTH.
4. THE MANHOLE FRAME AND COVER MUST BE CENTERED OVER THE VALVE.



PLAN



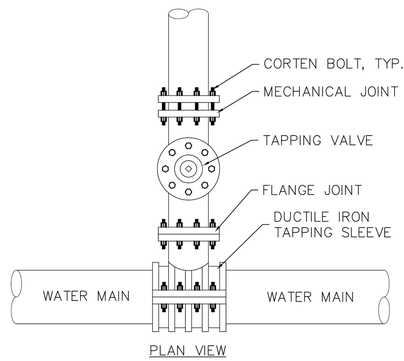
VALVE MANHOLE FOR 8" & GREATER GATE VALVE

City of Port Wentworth
TECHNICAL DETAILS

W-14

PREPARED BY SAUSSY ENGINEERING, LLC.

SCALE: N.T.S.
DATED: FEBRUARY 2007



PLAN VIEW

NOTE:
1. THE TAPPING SLEEVE AND VALVE MUST BE INSTALLED IN A MANHOLE. SEE DETAIL W-14 FOR THE MANHOLE DETAIL.

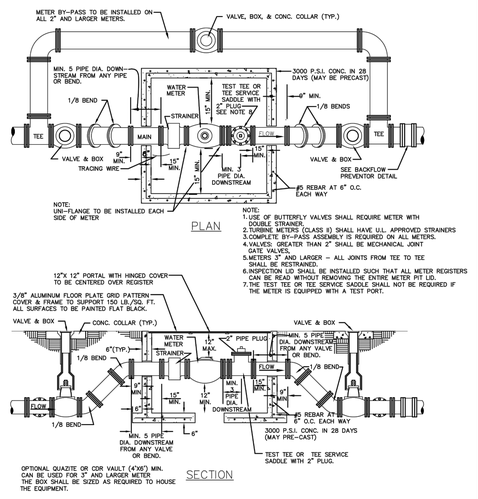
STANDARD TAPPING SLEEVE

City of Port Wentworth
TECHNICAL DETAILS

W-5

PREPARED BY SAUSSY ENGINEERING, LLC.

SCALE: N.T.S.
DATED: FEBRUARY 2007



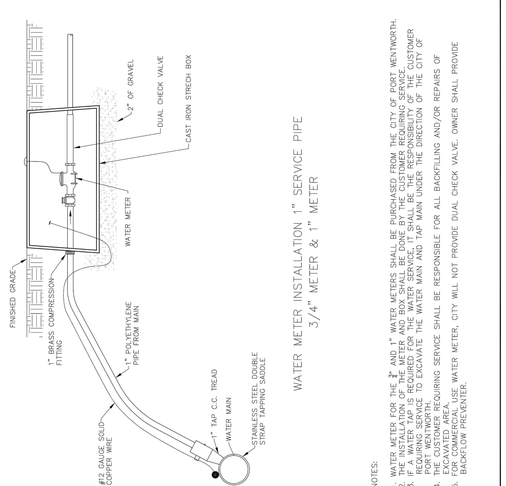
WATER METER INST. 3" AND LARGER

City of Port Wentworth
TECHNICAL DETAILS

W-15

PREPARED BY SAUSSY ENGINEERING, LLC.

SCALE: N.T.S.
DATED: FEBRUARY 2007



NOTES:

1. WATER METER FOR THE 3" AND 1" WATER METERS SHALL BE PURCHASED FROM THE CITY OF PORT WENTWORTH.
2. THE INSTALLATION OF THE METER AND BOX SHALL BE DONE BY THE CUSTOMER REQUIRING SERVICE.
3. IF A WATER LINE IS REQUIRED TO BE EXTENDED TO SERVICE THE PROPERTY, THE CUSTOMER REQUIRING SERVICE TO EXCAVATE, THE WATER MAIN AND TAP MAIN UNDER THE DIRECTION OF THE CITY OF PORT WENTWORTH.
4. THE CUSTOMER REQUIRING SERVICE SHALL BE RESPONSIBLE FOR ALL BACKFILLING AND/OR REPAIRS OF EXCAVATED AREA.
5. FOR COMMERCIAL USE WATER METER, CITY WILL NOT PROVIDE DUAL CHECK VALVE. OWNER SHALL PROVIDE BACKFLOW PROTECTION.

WATER METER

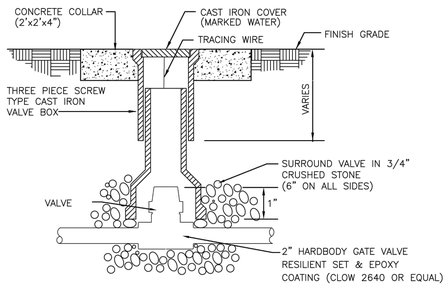
City of Port Wentworth
TECHNICAL DETAILS

W-17

ADDENDUM 01

PREPARED BY SAUSSY ENGINEERING, LLC.

SCALE: N.T.S.
DATED: FEBRUARY 2007



NOTE:

1. THIS DETAIL APPLIES TO VALVES.
2. IN UNPAVED AREAS, SET TOP OF CONC. COLLAR 1" ABOVE FINISHED GRADE. IN PAVED AREAS SET TOP OF BOX FLUSH W/ PAVEMENT. NO CONC. COLLAR REQUIRED.
3. VALVE BOX SHALL NOT REST ON THE VALVE

2" WATER VALVE

City of Port Wentworth
TECHNICAL DETAILS

W-18

PREPARED BY SAUSSY ENGINEERING, LLC.

SCALE: N.T.S.
DATED: FEBRUARY 2007

GEORGIA REGISTERED PROFESSIONAL ENGINEER SCOTT K. NOSNOW 27202 — 7/5/2022

NO.	REVISIONS	BY	DATE

PERMIT SET - FOR REVIEW PURPOSES ONLY

THOMAS & HUTTON
50 Park of Commerce Way
Savannah, GA 31405 • 912.234.5300
www.thomasandhutton.com

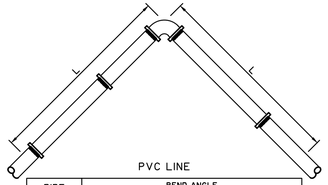
NOVARE GROUP - PORT WENTWORTH SFR, LLC
PORT WENTWORTH, GEORGIA

SINGLE FAMILY RENTAL - PARCEL 4

WATER & SEWER DETAILS

JOB NO:	J-28595 0004
DATE:	7/5/2022
DRAWN:	JBJ
DESIGNED:	SKM
REVIEWED:	SKM
APPROVED:	SKM
SCALE:	1" = 1'

C2.6



PVC LINE

PIPE DIA.	BEND ANGLE			
	11 1/4°	22 1/2°	45°	90°
4	3	6	12	29
6	4	8	17	41
8	5	11	22	53
10	6	13	26	64
12	7	15	31	75

DUCTILE IRON LINE

PIPE DIA.	BEND ANGLE			
	11 1/4°	22 1/2°	45°	90°
4	2	4	8	20
6	3	6	12	28
8	4	7	15	36
10	4	9	18	43
12	5	10	21	51
16	6	13	27	65
20	8	16	33	79
24	9	18	38	92

MINIMUM RESTRAINED LENGTH (L)

NOTES:

1. LENGTH OF RESTRAINT SHOWN IS IN FEET.
2. WHERE LINES CONSIST OF BOTH DUCTILE IRON AND PVC WITHIN THE LIMITS OF REQUIRED RESTRAINT, LIMITS FOR PVC SHALL APPLY.

STANDARD HORIZONTAL BEND RESTRAINT

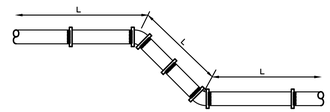
City of Port Wentworth

TECHNICAL DETAILS

W-27

PREPARED BY STEVENSON & PALMER ENGINEERING, INC.

SCALE: N.T.S.
DATED: FEBRUARY 2007



PVC LINE

PIPE DIA.	BEND ANGLE			
	11 1/4°	22 1/2°	45°	90°
4	5	10	22	52
6	7	15	30	74
8	9	19	40	96
10	11	23	48	115
12	13	27	56	136

DUCTILE IRON LINE

PIPE DIA.	BEND ANGLE			
	11 1/4°	22 1/2°	45°	90°
4	3	6	12	28
6	4	8	17	40
8	4	10	22	52
10	5	12	26	62
12	6	15	30	73
16	7	19	39	94
20	11	23	47	114
24	13	26	55	132

MINIMUM RESTRAINED LENGTH (L)

NOTES:

1. LENGTH OF RESTRAINT SHOWN IS IN FEET.
2. WHERE LINES CONSIST OF BOTH DUCTILE IRON AND PVC WITHIN THE LIMITS OF REQUIRED RESTRAINT, LIMITS FOR PVC SHALL APPLY.

STANDARD VERTICAL BEND RESTRAINT

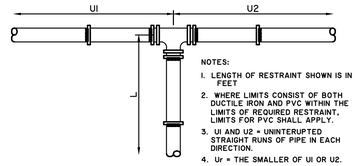
City of Port Wentworth

TECHNICAL DETAILS

W-28

PREPARED BY STEVENSON & PALMER ENGINEERING, INC.

SCALE: N.T.S.
DATED: FEBRUARY 2007



NOTES:

1. LENGTH OF RESTRAINT SHOWN IS IN FEET
2. WHERE LIMITS CONSIST OF BOTH DUCTILE IRON AND PVC WITHIN THE LIMITS OF REQUIRED RESTRAINT, LIMITS FOR PVC SHALL APPLY.
3. U1 AND U2 = UNINTERRUPTED STRAIGHT RUNS OF PIPE IN EACH DIRECTION.
4. Ur = THE SMALLER OF U1 OR U2.
5. L = MINIMUM RESTRAINED LENGTH ALONG THE BRANCH
6. WHERE Ur IS LESS THAN 5', RESTRAIN TEE AS A 90° HORIZONTAL BEND.

TEE / Ur	5'-10"	11"-20"	21'-35"	> 35'
4x4	43	28	4	*
6x4	38	17	*	*
6x6	64	49	25	*
8x4	34	6	*	*
8x6	61	42	10	*
8x8	87	72	48	12
10x4	29	*	*	*
10x6	58	34	*	*
10x8	84	65	35	*
10x10	106	91	67	31
12x4	24	*	*	*
12x6	54	26	*	*
12x8	82	60	23	*
12x10	104	86	57	13
12x12	126	112	87	51

MINIMUM RESTRAINED LENGTH (L)

* RESTRAIN AT TEE ONLY

STANDARD TEE RESTRAINT (PVC LINE)

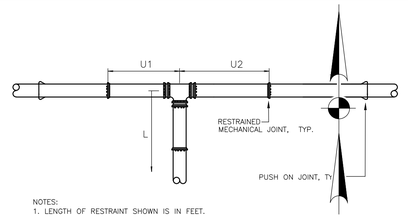
City of Port Wentworth

TECHNICAL DETAILS

W-29

PREPARED BY STEVENSON & PALMER ENGINEERING, INC.

SCALE: N.T.S.
DATED: FEBRUARY 2007



NOTES:

1. LENGTH OF RESTRAINT SHOWN IS IN FEET.
2. WHERE LINES CONSIST OF BOTH DUCTILE IRON AND PVC WITHIN THE LIMITS OF REQUIRED RESTRAINT, LIMITS FOR PVC SHALL APPLY.
3. U1 AND U2 = UNINTERRUPTED STRAIGHT RUNS OF RESTRAINED JOINT PIPE IN EACH DIRECTION.
4. Ur = THE SMALLER OF U1 OR U2 (E.G., U1, IN THE ABOVE DIAGRAM)
5. L = MINIMUM RESTRAINED LENGTH ALONG THE BRANCH.
6. WHERE Ur IS LESS THAN 5', RESTRAIN TEE AS A 90° HORIZONTAL BEND.

DUCTILE IRON LINE

TEE / Ur	5'-10"	11'-20"	21'-35"	36'-50"	50'-75"	75'-100"
4X4	23	15	2	*	*	*
6X4	21	9	*	*	*	*
6X6	35	27	14	*	*	*
8X4	18	3	*	*	*	*
8X6	33	23	5	*	*	*
8X8	47	39	26	6	*	*
10X4	16	*	*	*	*	*
10X6	31	18	*	*	*	*
10X8	46	36	19	*	*	*
10X10	57	49	36	17	*	*
12X4	13	*	*	*	*	*
12X6	30	14	*	*	*	*
12X8	44	32	13	*	*	*
12X10	56	47	31	7	*	*
12X12	68	60	47	28	*	*
16X6	26	6	*	*	*	*
16X8	41	25	*	*	*	*

DUCTILE IRON LINE

TEE / Ur	5'-10"	11'-20"	21'-35"	36'-50"	50'-75"	75'-100"
16X10	54	41	20	*	*	*
16X12	66	56	38	*	*	*
16X16	89	81	38	*	*	*
20X6	22	*	*	*	*	*
20X8	38	18	*	*	*	*
20X10	51	35	8	*	*	*
20X12	64	51	28	*	*	*
20X16	87	77	60	35	10	*
20X20	108	100	87	67	48	*
24X6	18	*	*	*	*	*
24X8	35	10	*	*	*	*
24X10	49	29	*	*	*	*
24X12	62	45	17	*	*	*
24X16	86	73	53	22	*	*
24X20	107	97	81	57	33	*
24X24	127	119	106	86	66	33

MINIMUM RESTRAINED LENGTH (L)

*RESTRAIN AT TEE ONLY.

STANDARD TEE RESTRAINT (DUCTILE IRON PIPE)

City of Port Wentworth

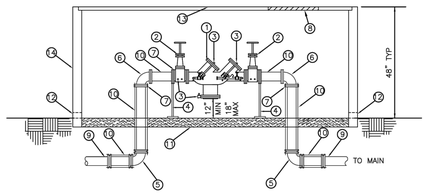
TECHNICAL DETAILS

W-30

PREPARED BY STEVENSON & PALMER ENGINEERING, INC.

SCALE: N.T.S.
DATED: FEBRUARY 2007

2



ITEM	QUAN.	MATERIALS DESCRIPTION
1	1	REDUCED PRESSURE ZONE DEVICE
2	2	O.S. & Y RESILIENT GATE VALVES
3	4	TEST COCKS
4	2	2" SCH 40 GALV. PIPE STAND & BASE BOLTED TO FLANGE
5	2	MJ 45° OR 90° BENDS
6	2	FLANGED 45° OR 90° BENDS
7	2	FLANGE ADAPTERS
8		2" X 2" MIN. HATCH
9		DI OR PVC PIPE
10		DUCTILE IRON PIPE, CUT TO FIT
11		4" PEA GRAVEL IN BOTTOM OF PIT OR CONCRETE SLAB
12	2	DRAIN PORTS SIZE ACCORDING TO PIPE SIZE
13		3/8 ALUMINUM TREAD PLATE / HATCH COVER W/ SUPPORTS AS NECESSARY
14		BOX-CONCRETE BLOCK, POURED CONCRETE OR PREFABRICATED BOX

NOTES:

1. FOR FINAL APPROVAL, ASSEMBLY MUST BE CENTERED IN ENCLOSURE. UNDER NO CONDITION WILL ANY CONNECTION BE ALLOWED BETWEEN THE SERVICE METER AND A BACKFLOW PREVENTER. BACKFLOW PREVENTER SHALL ALWAYS BE INSTALLED IMMEDIATELY DOWNSTREAM OF METER.
2. IF A PRESSURE MONITOR IS TO BE INSTALLED, ADD A TEE, VALVE, FITTINGS, AND MOUNT ON SUPPLY SIDE PRIOR TO BACKFLOW PREVENTER. UNDER NO CIRCUMSTANCE SHALL TEST PORTS BE MODIFIED OR UTILIZED FOR ANY USE, OTHER THAN BACKFLOW DEVICE TESTING.
3. ALL MECHANICAL JOINTS MUST BE RESTRAINED.
4. PROVIDE A MINIMUM CLEARANCE OF 12 INCHES BETWEEN THE INSIDE FACE OF THE ENCLOSURE AND THE PIPING AND VALVES.

TYPICAL OUTSIDE INSTALLATION
(3", 4", 6", 8", & 10" SIZES)

RPZ DEVICE FOR DOMESTIC SYSTEM

City of Port Wentworth

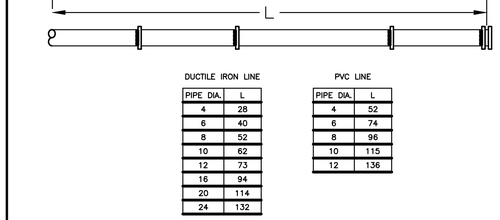
TECHNICAL DETAILS

W-23

ADDENDUM 01

PREPARED BY SAUSSY ENGINEERING, LLC.

SCALE: N.T.S.
DATED: FEBRUARY 2007



DUCTILE IRON LINE

PIPE DIA.	L
4	28
6	40
8	52
10	62
12	73
16	94
20	114
24	132

PVC LINE

PIPE DIA.	L
4	52
6	74
8	96
10	115
12	136

NOTES:

1. LENGTH OF RESTRAINT SHOWN IS IN FEET.
2. WHERE LIMITS CONSIST OF BOTH DUCTILE IRON AND PVC WITHIN THE LIMITS OF REQUIRED RESTRAINT, LIMITS FOR PVC SHALL APPLY.
3. FOR LINE STUBS (SEE DETAIL W39), THE LENGTH OF RESTRAINT (L) SHALL BE FROM THE VALVE AND NOT THE CAP.

STANDARD DEAD END RESTRAINT

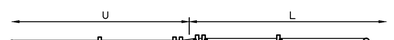
City of Port Wentworth

TECHNICAL DETAILS

W-31

PREPARED BY STEVENSON & PALMER ENGINEERING, INC.

SCALE: N.T.S.
DATED: FEBRUARY 2007



DUCTILE IRON LINE

REDUCER	U	L
6x4	30	21
8x4	72	38
8x6	29	22
10x4	123	51
10x6	63	38
10x8	26	21
12x4	186	64
12x6	106	53
12x8	59	39
12X10	26	21
16x6	214	79
16x8	141	68
16x10	91	56
16x12	54	40
20x10	174	84
20x12	123	71
20x16	51	40
24x12	207	97
24x16	113	72
24x20	48	39

PVC LINE

REDUCER	U	L
6x4	56	38
8x4	134	69
8x6	53	40
10x4	227	94
10x6	117	71
10x8	49	39
12x4	343	118
12x6	196	99
12x8	109	72
12x10	48	40

U = MINIMUM UNINTERRUPTED STRAIGHT RUN OF PIPE ON SMALL SIDE OF REDUCER.

L = MINIMUM RESTRAINED LENGTH.

* WHERE MINIMUM "U" IS NOT MET, PIPE ON LARGE SIDE OF REDUCER SHALL BE RESTAINED FOR A MINIMUM OF "L" FEET.

NOTES:

1. LENGTH OF RESTRAINT SHOWN IS IN FEET.
2. WHERE LIMITS CONSIST OF BOTH DUCTILE IRON AND PVC WITHIN THE LIMITS OF REQUIRED RESTRAINT, LIMITS FOR PVC SHALL APPLY.

STANDARD REDUCER RESTRAINT

City of Port Wentworth

TECHNICAL DETAILS

W-32

PREPARED BY STEVENSON & PALMER ENGINEERING, INC.

SCALE: N.T.S.
DATED: FEBRUARY 2007

GEORGIA REGISTERED PROFESSIONAL ENGINEER SCOTT K. MOORE

NO.	BY	DATE
2	SGJ	9/02/22

REVISIONS

2 PER T.R. LONG REVIEW COMMENTS DATED 8/11/22

PERMIT SET - FOR REVIEW PURPOSES ONLY

THOMAS & HUTTON
50 Park of Commerce Way
Savannah, GA 31405 • 912.234.5300
www.thomasandhutton.com

NOVARE GROUP - PORT WENTWORTH SFR, LLC
PORT WENTWORTH, GEORGIA

SINGLE FAMILY RENTAL - PARCEL 4

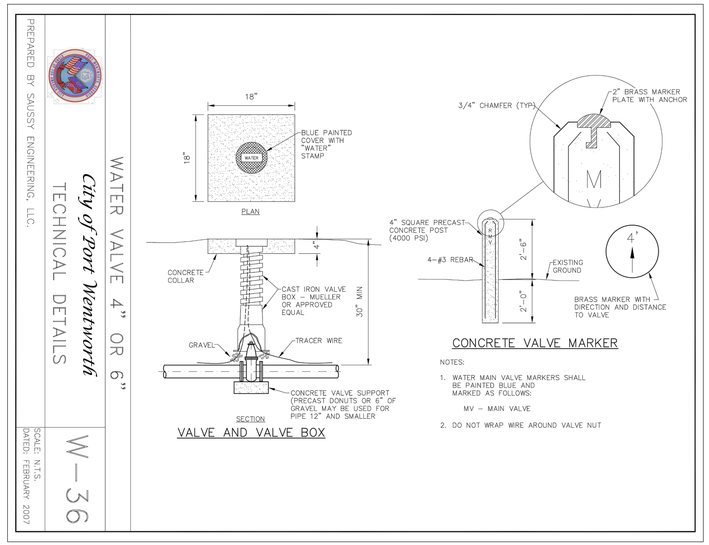
WATER & SEWER DETAILS

JOB NO:	J-28595.0004
DATE:	7/5/2022
DRAWN:	JBJ
DESIGNED:	SKM
REVIEWED:	SKM
APPROVED:	SKM
SCALE:	1" = 1'

C2.7

Z:\28595\28595.0004\ENGINEERING\DRAWINGS\CONSTRUCTION PLANS\28595.0004 - W'S DETAILS - OCT 5, 2022 - 9:43 AM

PERMIT SET - FOR REVIEW PURPOSES ONLY



WATER VALVE 4" OR 6"

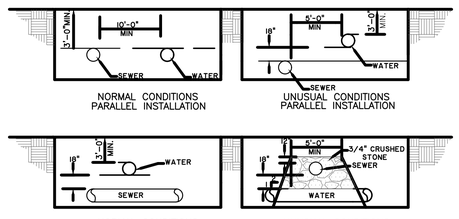
City of Port Wentworth

TECHNICAL DETAILS

W–36

PREPARED BY SAUSSY ENGINEERING, LLC.

SCALE: N.T.S.
DATED: FEBRUARY 2007



NOTES:

THE SEPARATION OF WATER MAINS AND SEWERS SHALL COMPLY WITH THE GEORGIA ENVIROMENTAL PROTECTION DIVISION MINIMUM STANDARDS FOR PUBLIC WATER SYSTEMS, WHICH ARE GENERALLY AS FOLLOWS:

A. PARALLEL INSTALLATION:

1. NORMAL CONDITIONS: THE INSIDE EDGE OF A WATER LINE SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM THE INSIDE EDGE OF ANY SANITARY SEWER, STORM SEWER OR SEWER MANHOLE.

2. UNUSUAL CONDITIONS: WHEN LOCAL CONDITIONS PREVENT A HORIZONTAL SEPARATION OF 10 FEET, AND WHEN APPROVED BY THE ENGINEER, THE INSIDE EDGE OF A WATER MAIN MAY BE LAID A MINIMUM OF 5 FEET FROM THE INSIDE EDGE OF A SEWER PROVIDED THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES HIGHER THAN THE TOP OF THE SEWER (SEE DETAIL), AND THE WATER MAIN IS LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF.

B. CROSSINGS:

1. NORMAL CONDITIONS: WHENEVER POSSIBLE, THE BOTTOM OF THE WATER MAIN SHALL BE AT LEAST 18 INCHES HIGHER THAN THE TOP OF THE SEWER.

2. UNUSUAL CONDITIONS: IF A WATER MAIN MUST CROSS UNDER A SEWER, THE TOP OF THE WATER MAIN SHALL BE AT LEAST 18 INCHES LOWER THAN THE BOTTOM OF THE SEWER, THE WATER MAIN PIPE SHALL BE CENTERED AT THE CROSSING SO THAT THE JOINTS ARE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE SEWER, AND ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO PREVENT EXCESSIVE DEFLECTION OF THE SEWER AT THE CROSSING. ADEQUATE STRUCTURAL SUPPORT SHALL INCLUDE BACKFILLING THE ENTIRE UTILITY CROSSING AREA WITH 3/4" CRUSHED STONE AS SHOWN IN THE DETAIL.

MINIMUM WATER & SEWER PIPE SEPARATION

City of Port Wentworth

TECHNICAL DETAILS

U–3

PREPARED BY STEVENSON & PALMER ENGINEERING, INC.

SCALE: N.T.S.
DATED: FEBRUARY 2007

TYP. WATER & SEWER PLANNING

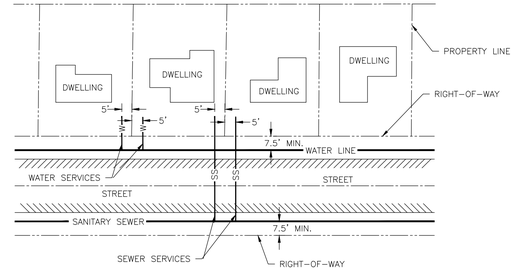
City of Port Wentworth

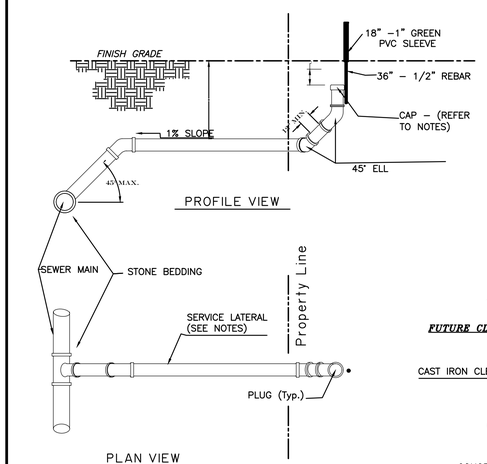
TECHNICAL DETAILS

U–2

PREPARED BY STEVENSON & PALMER ENGINEERING, INC.

SCALE: N.T.S.
DATED: FEBRUARY 2007

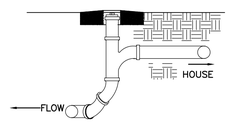




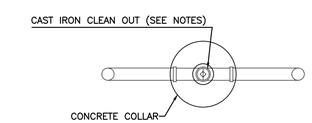
SINGLE SERVICE SEWER LATERAL

NOT TO SCALE

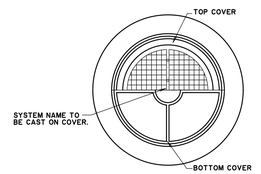
NOTES:
1. SERVICE CLEAN OUT SHALL BE INSTALLED 12" BELOW FINISHED GRADE AND CAPPED IN A MANNER SUITABLE FOR SYSTEM PRESSURE TESTING. PLUMBER SHALL REMOVE RISER AS REQUIRED TO INSTALL SERVICE WYE AND FINAL CLEAN OUT ASSY PER DETAILS.
2. SERVICE LATERALS SHALL BE 6" FOR COMMERCIAL AND 4" FOR RESIDENTIAL SERVICES.
3. CLEAN OUT SHALL BE INSTALLED BY PLUMBER AT EACH SERVICE CONNECTION AND SHALL CONSIST OF A CAST IRON PLUG SURROUNDED BY A CONCRETE COLLAR. COLLAR SHALL BE FLUSH WITH FINISHED GRADE. CLEAN OUT PLUG SHALL NOT PROTRUDE ABOVE COLLAR.
4. CLEAN OUTS IN PAVED AREAS SHALL CONSIST OF A CAST IRON HANDHOLD FRAME AND COVER SET TO FINAL GRADE WITH PVC PLUG INSIDE.
5. SERVICE PIPING SHALL BE GASKETED SDR 26 CLASS OR GLUED SCHEDULE 40 PVC PIPE. IF GLUED PIPE IS USED, CLEANER SHALL BE PURPLE AND GLUE GRAY.



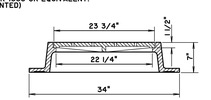
FUTURE CLEAN OUT INSTALLATION – PROFILE VIEW



FUTURE CLEAN OUT – PLAN VIEW



NEENAH R-1668 OR EQUIVALENT. (NON-VENTED)



NOTE:
CASTINGS SHALL BE OF UNIFORM QUALITY, FREE FROM BLOWHOLES, PORODITY, HARD SPOTS, SHRINKAGE, DISTORTION OR OTHER DEFECTS THEY SHALL BE SMOOTH AND WELL CLEANED BY SHOTBLASTING OR BY SOME OTHER APPROVED METHOD.

MATERIALS USED IN THE MANUFACTURE OF CASTINGS SHOULD CONFORM TO ASTM, AASHTO, ASA. MIL, AMS OR SPECIFICATIONS FOR GRAY IRON OR DUCTILE IRON AS FOLLOWS: GRAY IRON-ASTM A48, CLASS 35B, DUCTILE IRON-ASTM A536, CLASS 80-55-06.

ALL CASTINGS SHALL BE MANUFACTURED TRUE TO PATTERN; COMPONENT PARTS SHALL FIT TOGETHER IN A SATISFACTORY MANNER, ROUND FRAMES AND COVERS SHALL BE OF NON-ROCKING DESIGN, OR SHALL HAVE MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING UNDER TRAFFIC.

DEVIATIONS SHALL NOT EXCEED TOLERANCES PERMITTED BY ASTM STANDARDS

MANHOLE FRAME AND COVER DETAIL

NOT TO SCALE

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NO.	REVISIONS	BY	DATE

NOVARE GROUP – PORT WENTWORTH SFR, LLC

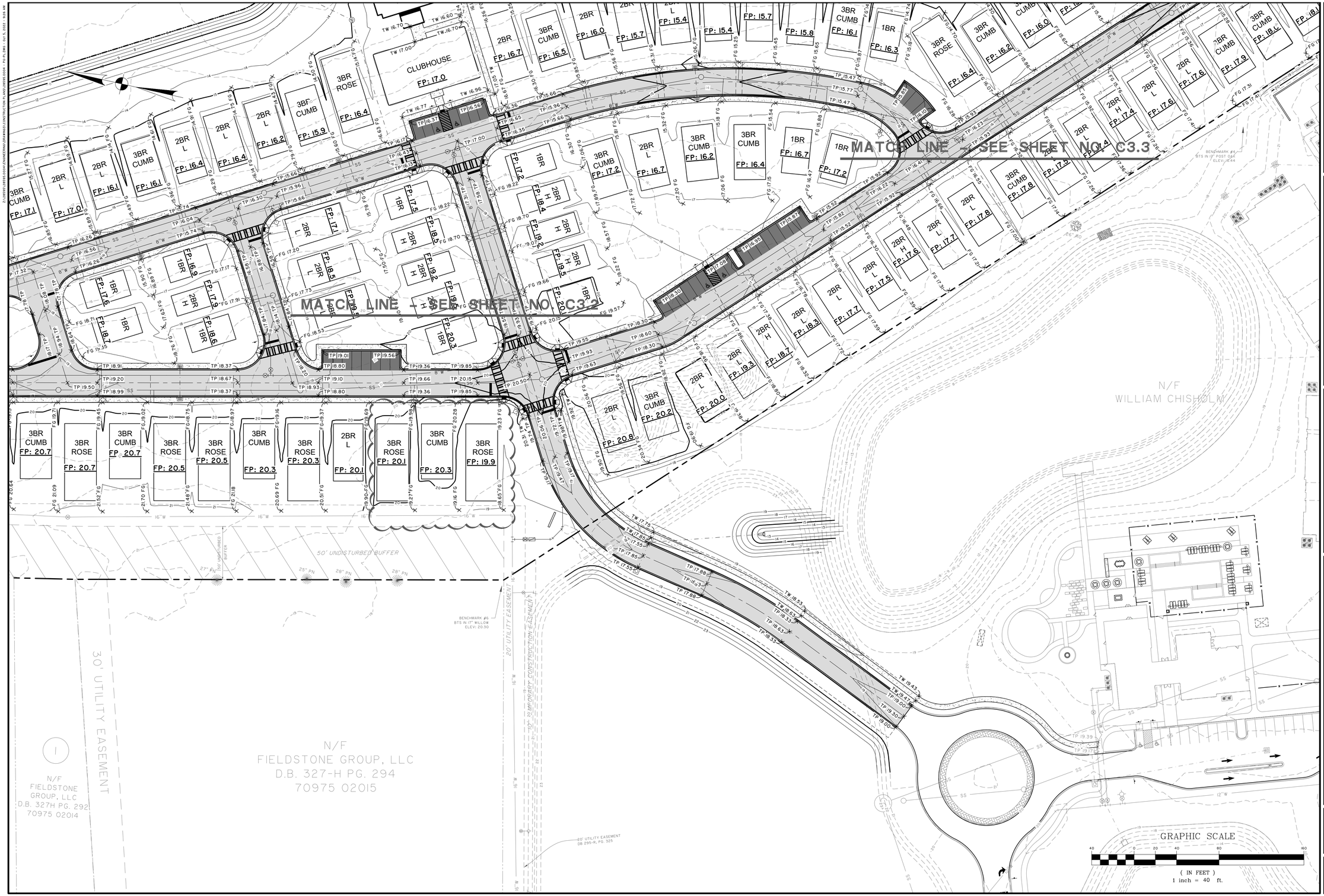
PORT WENTWORTH, GEORGIA

SINGLE FAMILY RENTAL – PARCEL 4

WATER & SEWER DETAILS

JOB NO:	J-28595.0004
DATE:	7/5/2022
DRAWN:	JBJ
DESIGNED:	SKM
REVIEWED:	SKM
APPROVED:	SKM
SCALE:	1" = 1'

C2.8



GEORGIA REGISTERED PROFESSIONAL ENGINEER SCOTT K. MONTGOMERY 027202 PROFESSIONAL ENGINEER

PERMIT SET - FOR REVIEW PURPOSES ONLY

NO.	REVISIONS	BY	DATE

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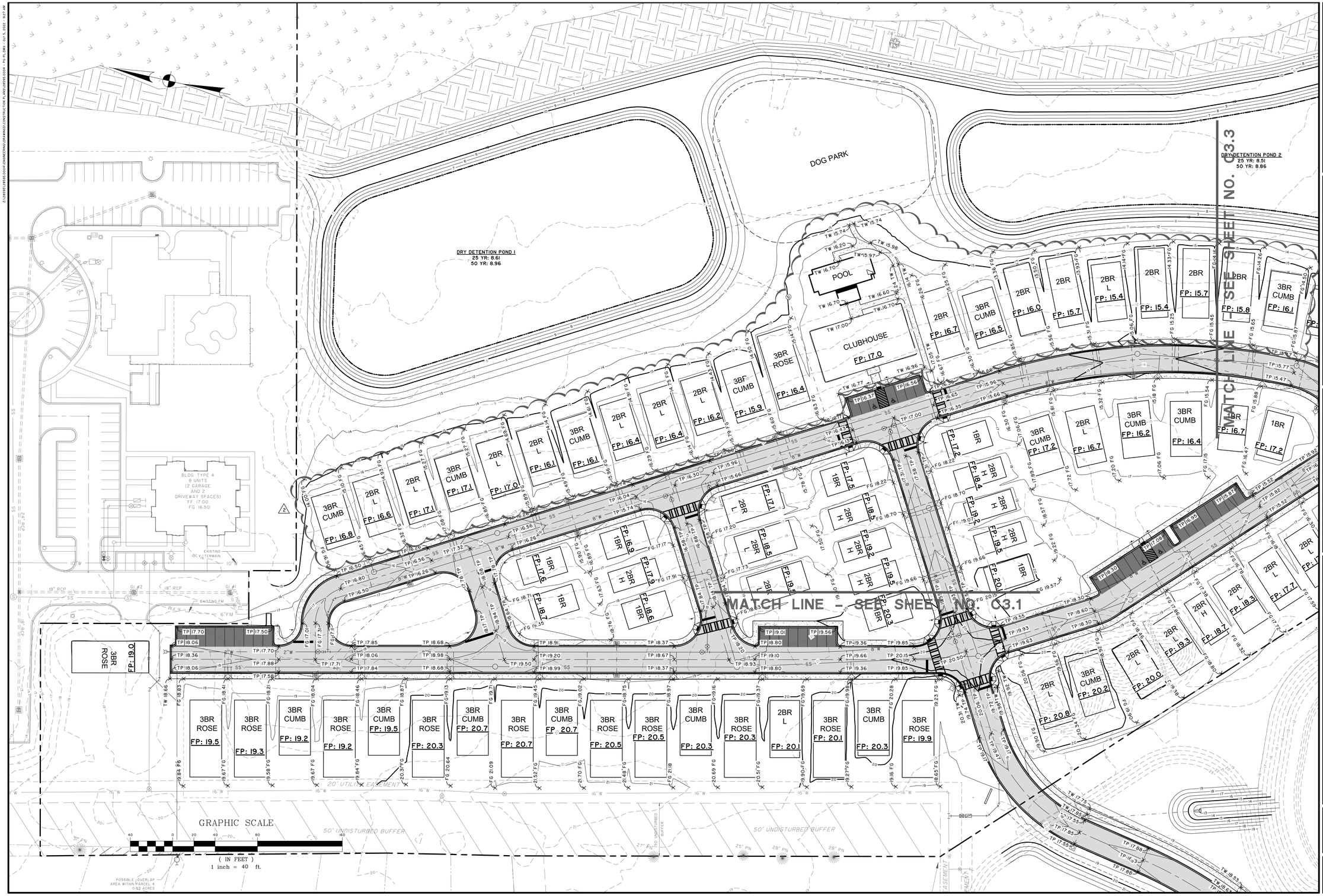
NOVARE GROUP - PORT WENTWORTH SFR, LLC
PORT WENTWORTH, GEORGIA

SINGLE FAMILY RENTAL - PARCEL 4

PAVING & GRADING PLAN

JOB NO:	J-28595.0004
DATE:	7/5/2022
DRAWN:	JBJ
DESIGNED:	SKM
REVIEWED:	SKM
APPROVED:	SKM
SCALE:	1" = 40'

C3.1



PERMIT SET - FOR REVIEW PURPOSES ONLY

GEORGIA REGISTERED PROFESSIONAL ENGINEER SCOTT K. MOORE 035220 NOVEMBER 30, 2022

NO.	REVISIONS	BY	DATE
2	PER T.R. LONG REVIEW COMMENTS DATED 8/11/22	SGJ	9/02/22

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NOVARE GROUP - PORT WENTWORTH SFR, LLC
PORT WENTWORTH, GEORGIA

SINGLE FAMILY RENTAL - PARCEL 4

PAVING & GRADING PLAN

JOB NO:	J-28595.0004
DATE:	7/5/2022
DRAWN:	JBJ
DESIGNED:	SKM
REVIEWED:	SKM
APPROVED:	SKM
SCALE:	1" = 40'

C3.2

Z:\28595.1\0004\ENGINEERING\DRAWINGS\CONSTRUCTION PLANS\28595.0004 - PH-FC.DWG - Oct 5, 2022 - 9:27 AM

DRY DETENTION POND 2
25 YR: 8.5i
50 YR: 8.86

MATCH LINE - SEE SHEET NO. C3.2

MATCH LINE - SEE SHEET NO. C3.1

BENCHMARK #5
815 IRON PIPE
ELEV: 14.50

BENCHMARK #4
STS IN 17" POST OAK
ELEV: 14.44

GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

PERMIT SET - FOR REVIEW PURPOSES ONLY

GEORGIA
REGISTERED
PROFESSIONAL
ENGINEER
SCOTT K. MONK
NO. 35504

NO.	REVISIONS	BY	DATE
2	PER T.R. LONG REVIEW COMMENTS DATED 8/11/22	SGJ	9/02/22

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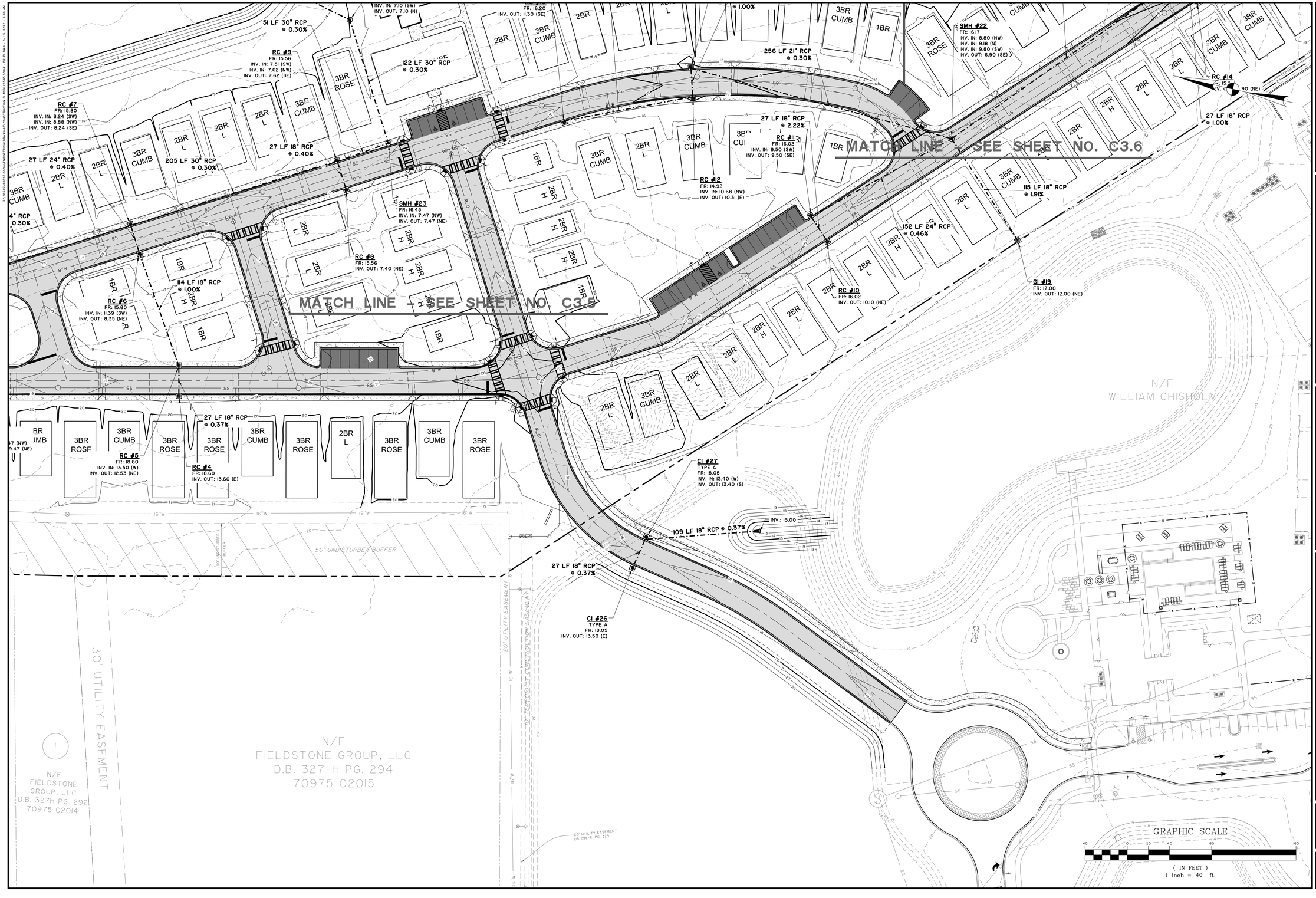
NOVARE GROUP - PORT WENTWORTH SFR, LLC
PORT WENTWORTH, GEORGIA

SINGLE FAMILY RENTAL - PARCEL 4

PAVING & GRADING PLAN

JOB NO:	J-28595.0004
DATE:	7/5/2022
DRAWN:	JBJ
DESIGNED:	SKM
REVIEWED:	SKM
APPROVED:	SKM
SCALE:	1" = 40'

C3.3



PERMIT SET - FOR REVIEW PURPOSES ONLY

GEORGIA REGISTERED PROFESSIONAL ENGINEER SCOTT K. MONTGOMERY 035222

NO.	REVISIONS	BY	DATE

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NOVARE GROUP - PORT WENTWORTH SFR, LLC
PORT WENTWORTH, GEORGIA

SINGLE FAMILY RENTAL - PARCEL 4

DRAINAGE PLAN

JOB NO:	J-28595.0004
DATE:	7/5/2022
DRAWN:	JBJ
DESIGNED:	SKM
REVIEWED:	SKM
APPROVED:	SKM
SCALE:	1" = 40'

C3.4

PERMIT SET - FOR REVIEW PURPOSES ONLY

Z:\28595\28595.0004\ENGINEERING\DRAWINGS\CONSTRUCTION PLANS\28595.0004 - DRYDEN6 - OCT 5, 2022 - 9:58 AM

WETLANDS (TYP.)

WETLAND BUFFER (TYP.)

DOG PARK

DRY DETENTION POND 1
25 YR: 8.61
50 YR: 8.96

DRY DETENTION POND 2
25 YR: 8.51
50 YR: 8.86

INV.: 7.00

232 LF 24" RCP @ 0.00%

60 LF 30" RCP @ 0.13%

51 LF 30" RCP @ 0.30%

122 LF 30" RCP @ 0.30%

124 LF 18" RCP @ 0.50%

28 LF 18" RCP @ 1.00%

256 LF 21" RCP @ 0.30%

27 LF 18" RCP @ 2.22%

27 LF 24" RCP @ 0.40%

205 LF 30" RCP @ 0.30%

165 LF 24" RCP @ 0.30%

27 LF 18" RCP @ 0.35%

27 LF 18" RCP @ 0.40%

114 LF 18" RCP @ 1.00%

27 LF 18" RCP @ 0.37%

124 LF 18" RCP @ 0.35%

109 LF 18" RCP @ 0.37%

27 LF 18" RCP @ 0.37%

RC #1
FR: 17.92
INV. OUT: 9.90 (SE)

RC #2
FR: 16.24
INV. IN: 9.47 (NW)
INV. OUT: 9.47 (NE)

RC #3
FR: 16.24
INV. IN: 9.38 (SW)
INV. OUT: 9.38 (SE)

RC #4
FR: 18.60
INV. OUT: 13.60 (E)

RC #5
FR: 18.60
INV. IN: 13.50 (W)
INV. OUT: 12.53 (NE)

RC #6
FR: 15.80
INV. IN: 11.39 (SW)
INV. OUT: 8.35 (NE)

RC #7
FR: 15.50
INV. IN: 8.24 (SW)
INV. IN: 8.88 (NW)
INV. OUT: 8.24 (SE)

RC #8
FR: 15.56
INV. OUT: 7.40 (NE)

RC #9
FR: 15.56
INV. IN: 7.51 (SW)
INV. IN: 7.62 (NW)
INV. OUT: 7.62 (SE)

RC #10
FR: 16.02
INV. OUT: 10.10

RC #11
FR: 15.82
INV. IN: 9.40 (SW)
INV. OUT: 9.90 (SE)

RC #12
FR: 14.92
INV. IN: 10.68 (NW)
INV. OUT: 10.31 (E)

RC #15
FR: 14.92
INV. IN: 10.03 (W)
INV. OUT: 9.95 (S)

RC #18
FR: 16.20
INV. OUT: 11.30 (SE)

SMH #23
FR: 16.45
INV. IN: 7.47 (NW)
INV. OUT: 7.47 (NE)

SMH #24
FR: 15.06
INV. IN: 7.10 (SW)
INV. OUT: 7.10 (N)

CI #27
TYPE A
FR: 18.05
INV. IN: 13.40 (W)
INV. OUT: 13.40 (S)

INV.: 13.00

MATCH LINE - SEE SHEET NO. C3.6

MATCH LINE - SEE SHEET NO. C3.4

20' UTILITY EASEMENT

50' UNDISTURBED BUFFER

50' UNDISTURBED BUFFER

50' UNDISTURBED BUFFER

EXISTING FM

EXISTING MH

EXISTING CONCRETE TERMAIN

GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

GEORGIA REGISTERED PROFESSIONAL ENGINEER SCOTT K. MOORE 035220 NOSHOW

NO.	REVISIONS	BY	DATE

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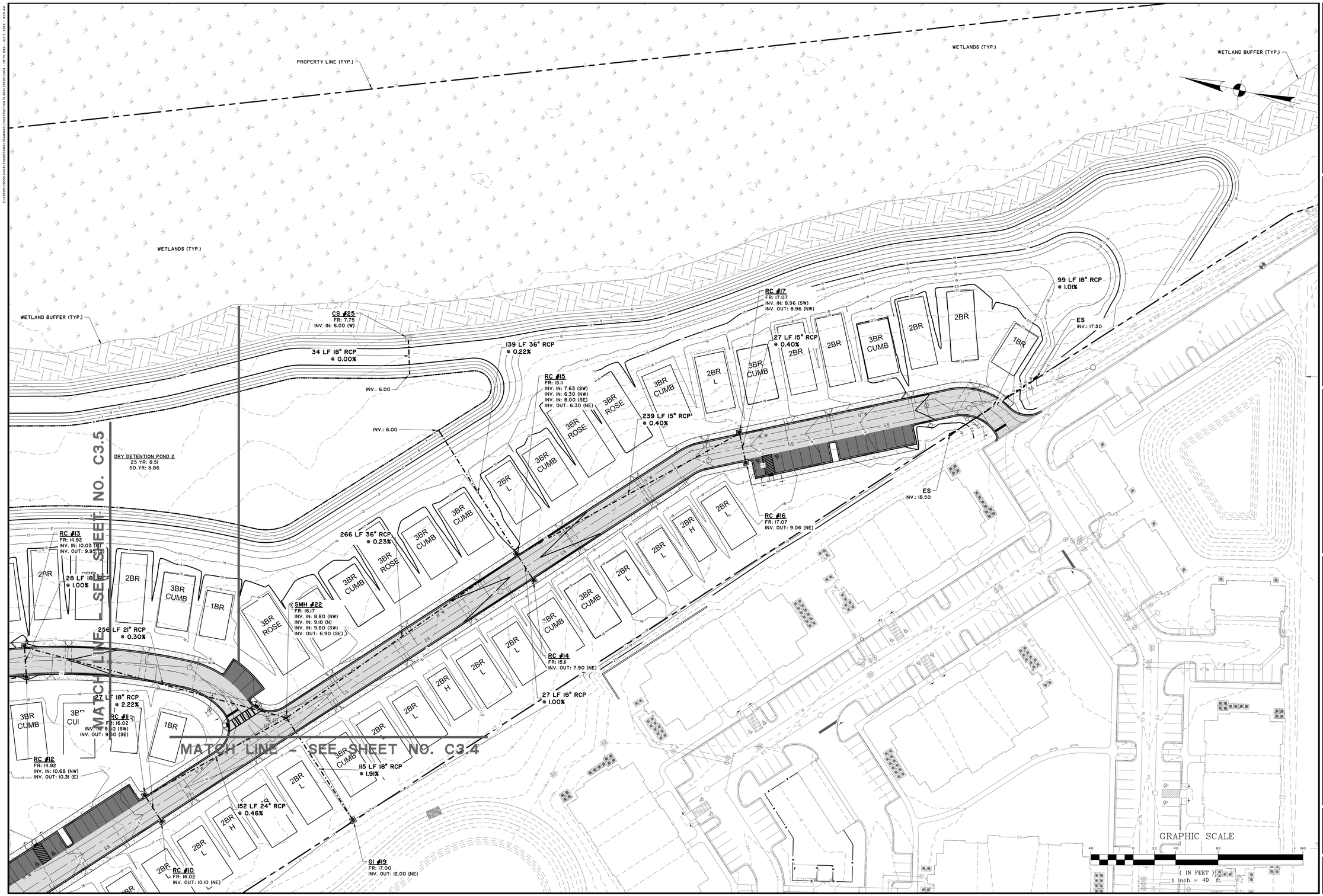
NOVARE GROUP - PORT WENTWORTH SFR, LLC
PORT WENTWORTH, GEORGIA

SINGLE FAMILY RENTAL - PARCEL 4

DRAINAGE PLAN

JOB NO:	J-28595.0004
DATE:	7/5/2022
DRAWN:	JBJ
DESIGNED:	SKM
REVIEWED:	SKM
APPROVED:	SKM
SCALE:	1" = 40'

C3.5



PERMIT SET - FOR REVIEW PURPOSES ONLY

GEORGIA REGISTERED PROFESSIONAL ENGINEER SCOTT K. MONTGOMERY

NO.	REVISIONS	BY	DATE

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NOVARE GROUP - PORT WENTWORTH SFR, LLC
PORT WENTWORTH, GEORGIA

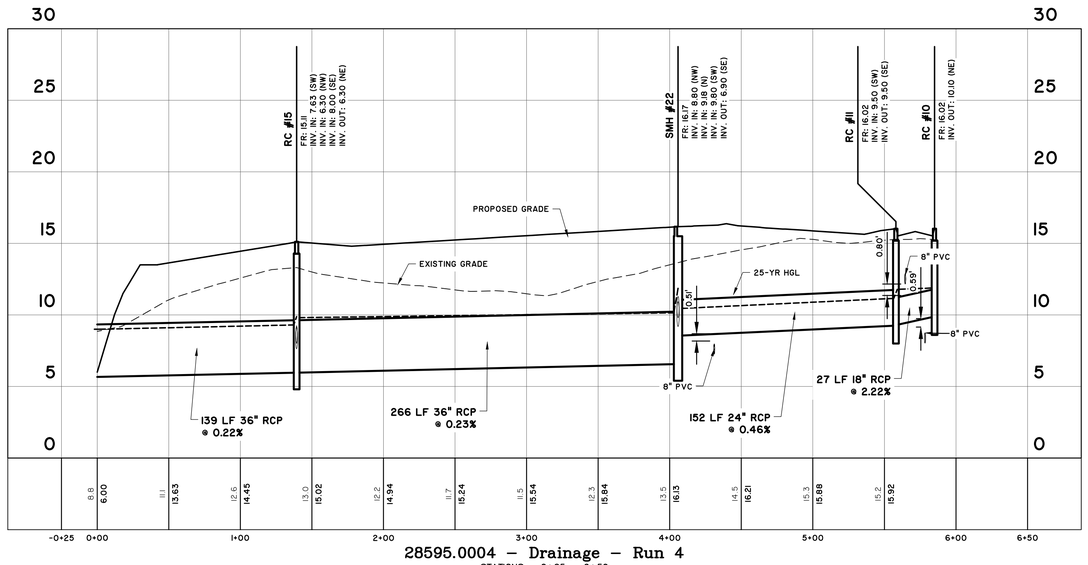
SINGLE FAMILY RENTAL - PARCEL 4

DRAINAGE PLAN

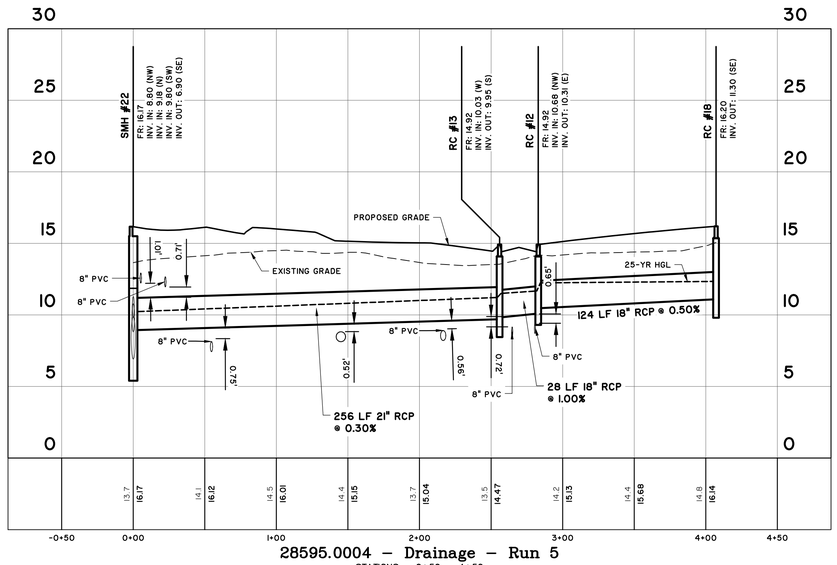
JOB NO:	J-28595.0004
DATE:	7/5/2022
DRAWN:	JBJ
DESIGNED:	SKM
REVIEWED:	SKM
APPROVED:	SKM
SCALE:	1" = 40'

C3.6

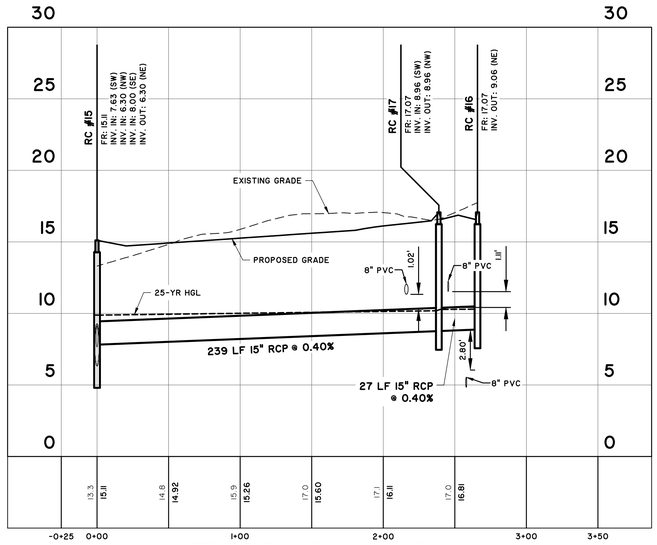
Z:\28595\28595.0004\ENGINEER\DRAWINGS\CONSTRUCTION PLANS\28595.0004 - DR PRIME - Oct 5, 2022 - 9:29 AM



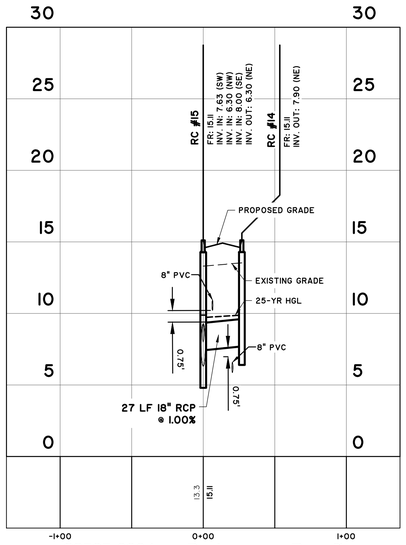
28595.0004 – Drainage – Run 4
STATIONS: −0+25 – 6+50
SCALE: HORZ.: 1" = 50'
VERT.: 1" = 5'



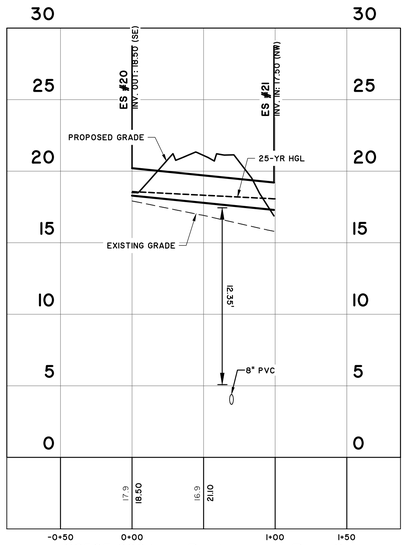
28595.0004 – Drainage – Run 5
STATIONS: −0+50 – 4+50
SCALE: HORZ.: 1" = 50'
VERT.: 1" = 5'



28595.0004 – Drainage – Run 6
STATIONS: −0+25 – 3+50
SCALE: HORZ.: 1" = 50'
VERT.: 1" = 5'



28595.0004 – Drainage – Run 7
STATIONS: −1+00 – 1+00
SCALE: HORZ.: 1" = 50'
VERT.: 1" = 5'



28595.0004 – Drainage – Run 8
STATIONS: −0+50 – 1+50
SCALE: HORZ.: 1" = 50'
VERT.: 1" = 5'

PERMIT SET - FOR REVIEW PURPOSES ONLY

GEORGIA REGISTERED PROFESSIONAL ENGINEER SCOTT K. MONTGOMERY

NO.	REVISIONS	BY	DATE

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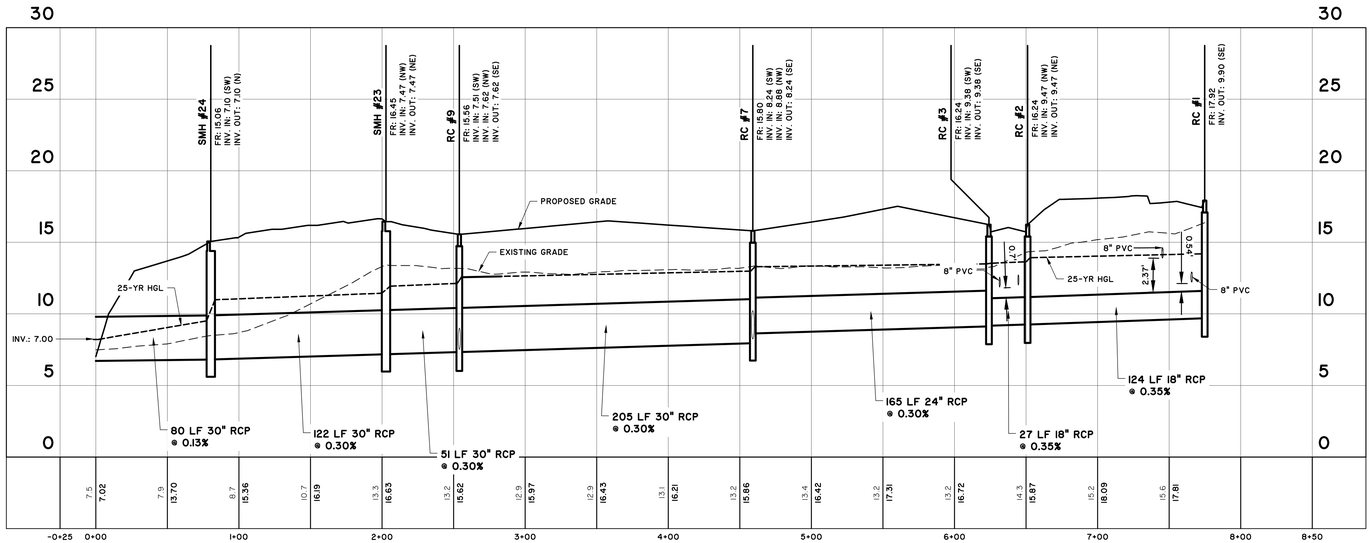
NOVARE GROUP - PORT WENTWORTH SFR, LLC
PORT WENTWORTH, GEORGIA

SINGLE FAMILY RENTAL - PARCEL 4

DRAINAGE PROFILES

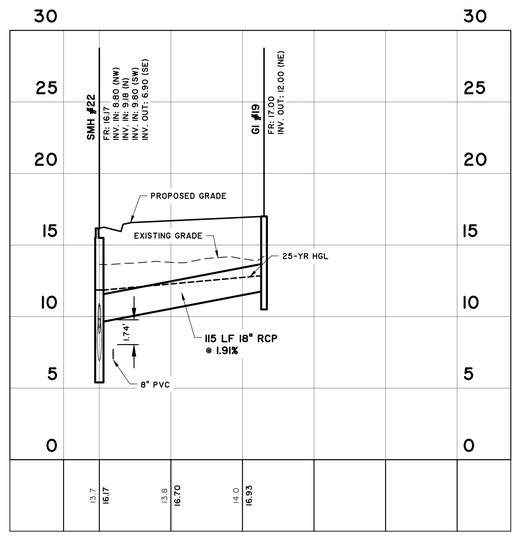
JOB NO:	J-28595.0004
DATE:	7/5/2022
DRAWN:	JBJ
DESIGNED:	SKM
REVIEWED:	SKM
APPROVED:	SKM
SCALE:	AS NOTED

C3.7



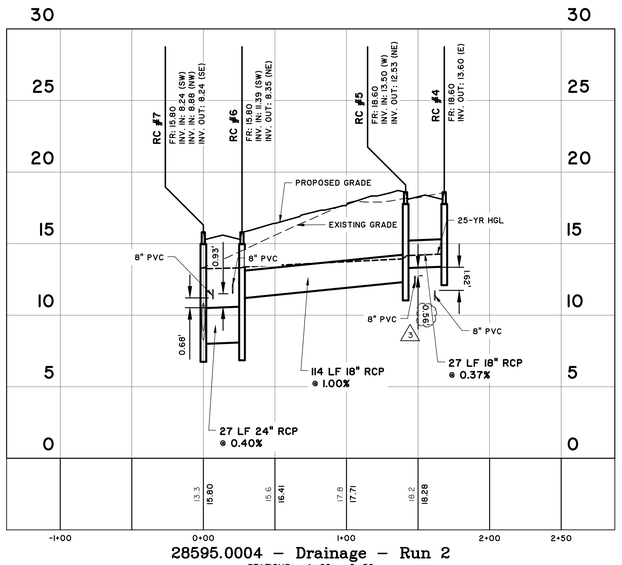
28595.0004 – Drainage – Run 1

STATIONS: −0+25 – 8+50
SCALE: HORZ.: 1" = 50'
VERT.: 1" = 5'



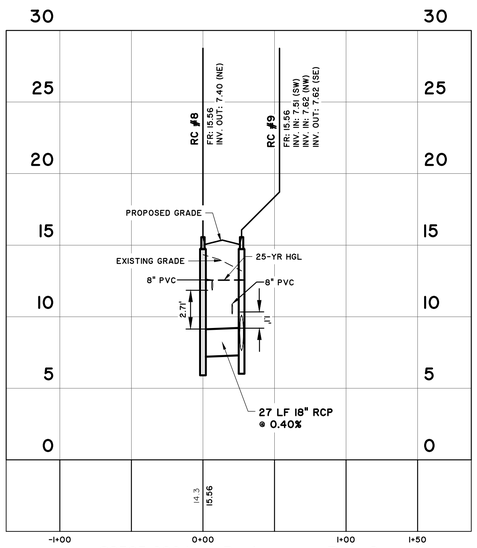
28595.0004 – Drainage – Run 10

STATIONS: −0+25 – 2+50
SCALE: HORZ.: 1" = 50'
VERT.: 1" = 5'



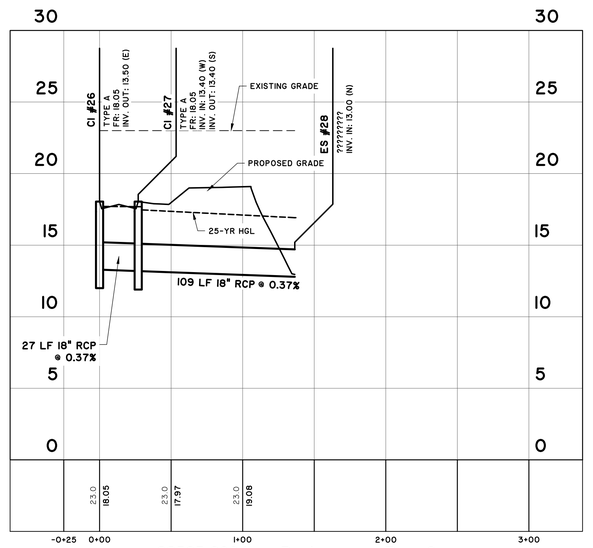
28595.0004 – Drainage – Run 2

STATIONS: −1+00 – 2+50
SCALE: HORZ.: 1" = 50'
VERT.: 1" = 5'



28595.0004 – Drainage – Run 3

STATIONS: −1+00 – 1+50
SCALE: HORZ.: 1" = 50'
VERT.: 1" = 5'



28595.0004 – Drainage – Run 9

STATIONS: −0+25 – 3+00
SCALE: HORZ.: 1" = 50'
VERT.: 1" = 5'

PERMIT SET - FOR REVIEW PURPOSES ONLY

NO.	REVISIONS	BY	DATE
3	PER T.R.LONG REVIEW COMMENTS DATED 10/04/22	SGJ	10/05/22

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NOVARE GROUP – PORT WENTWORTH SFR, LLC
PORT WENTWORTH, GEORGIA

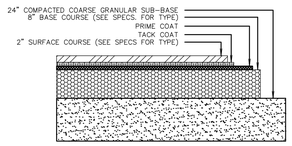
SINGLE FAMILY RENTAL – PARCEL 4

DRAINAGE PROFILES

JOB NO:	J-28595.0004
DATE:	7/5/2022
DRAWN:	JBJ
DESIGNED:	SKM
REVIEWED:	SKM
APPROVED:	SKM
SCALE:	AS NOTED

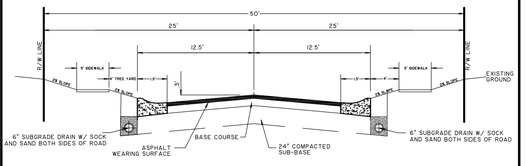
C3.8

Z:\28595.0004\ENGINEER\DRAWINGS\CONSTRUCTION PLANS\28595.0004 - DR PLANS - Oct 5, 2022 - 9:29 AM



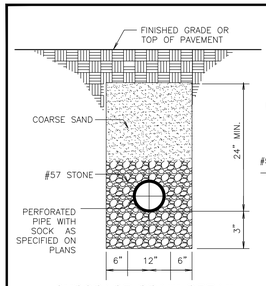
PAVEMENT SECTION
TYPICAL FOR NEIGHBORHOOD STREETS

NOT TO SCALE



TYPICAL SECTION
ROLL-OVER CURB
(TYPICAL FOR NEIGHBORHOOD STREETS)

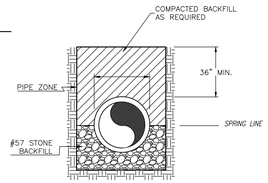
NOT TO SCALE



SUBGRADE DRAIN DETAIL

NOT TO SCALE

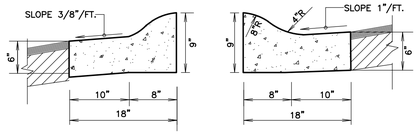
NOTES:
1. 6" PIPE SHALL BE ADS 6" DIA. PERFORATED TUBING OR APPROVED EQUIVALENT.
2. COARSE SAND BACKFILL SHALL BE USED.
3. MINIMUM GRADIENT FOR ALL SUBGRADE DRAIN SHALL BE 0.15%.



TYPICAL BEDDING DETAIL

NOT TO SCALE

NOTES:
1. PAVEMENT CUT TO EXTEND 12" BEYOND EDGES OF TRENCH AS SHOWN.
2. MATCH EXISTING PAVEMENT TYPE AND THICKNESS.
3. ALL INSTALLATIONS IN PUBLIC ROADWAYS SHALL COMPLY WITH CONDITIONS OUTLINED ON APPLICABLE ENCROACHMENT PERMIT.



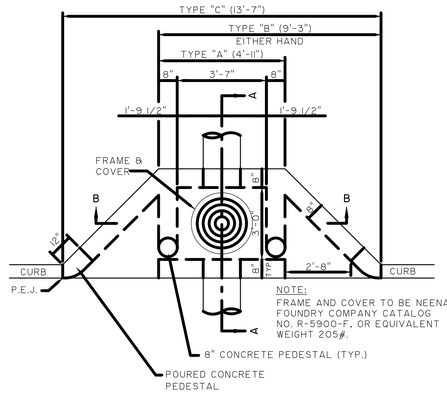
PITCH CURB

NORMAL CURB

NOTES:
1. ALL CONCRETE SHALL BE 3,000 PSI.
2. PROVIDE CONTROL JOINTS EVERY TEN FEET (10').
3. PROVIDE EXPANSION JOINTS EVERY FIFTY FEET (50).
4. PROVIDE EXPANSION JOINT WHERE CURB ABUTS SIDEWALKS, OR OTHER STRUCTURES.
5. PROVIDE LIGHT BROOM FINISH.
6. REFER TO CITY OF PORT WENTWORTH DETAIL: SD-10

18" ROLL-OVER CURB & GUTTER

NOT TO SCALE



NOTE:
FRAME AND COVER TO BE NEENAH FOUNDRY COMPANY CATALOG NO. R-5900-F, OR EQUIVALENT WEIGHT 205#.

PLAN OF CURB INLET

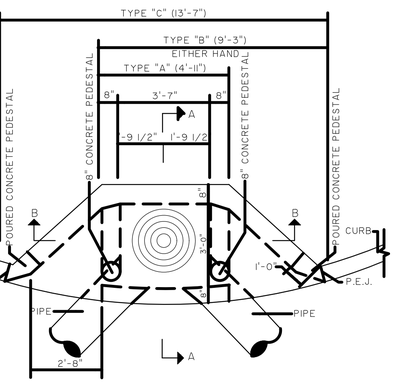
City of Port Wentworth

TECHNICAL DETAILS

SD-1

PREPARED BY STEVENSON & PALMER ENGINEERING, INC.

SCALE: N.T.S.
DATED: FEBRUARY 2007



NOTE:
FRAME AND COVER TO BE NEENAH FOUNDRY COMPANY CATALOG NO. R-5900-F OR EQUIVALENT WEIGHT 205#

PLAN OF CRUB INLET ON RADIUS

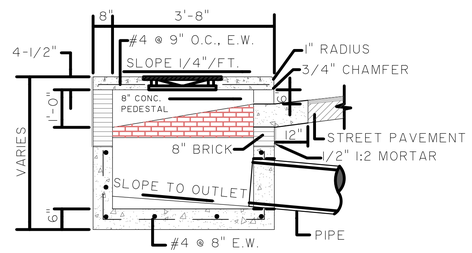
City of Port Wentworth

TECHNICAL DETAILS

SD-2

PREPARED BY STEVENSON & PALMER ENGINEERING, INC.

SCALE: N.T.S.
DATED: FEBRUARY 2007



NOTES:
1. CHAMFER ALL EXPOSED CONCRETE EDGES 3/4"
2. PIPE TIEING TO CURB INLET MUST BE SEALED INSIDE AND OUTSIDE OF STRUCTURE WITH BRICK AND MORTAR

CURB INLET SECTION A - A

City of Port Wentworth

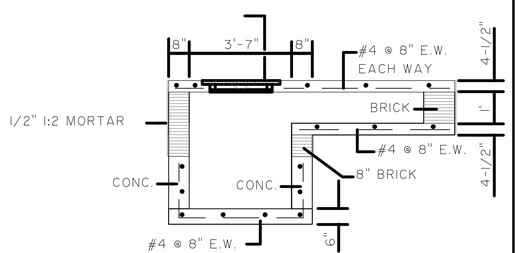
TECHNICAL DETAILS

SD-3

PREPARED BY STEVENSON & PALMER ENGINEERING, INC.

SCALE: N.T.S.
DATED: FEBRUARY 2007

NOTE:
C.I. MANHOLE FRAME AND COVER EQUIVALENT TO NEENAH R-5900-F. FRAME AND COVER TO BE MACHINE FITTED PRIOR TO LEAVING SHOP. WEIGHT - 205 LBS.



NOTES:
1. MATCH TOP OF PIPE ELEVATIONS WHEN DIFFERENT SIZE PIPES ARE CONSTRUCTED IN CURB INLET.
2. TYPE "B" INLET SHOWN

CURB INLET SECTION B - B

City of Port Wentworth

TECHNICAL DETAILS

SD-4

PREPARED BY STEVENSON & PALMER ENGINEERING, INC.

SCALE: N.T.S.
DATED: FEBRUARY 2007

GEORGIA REGISTERED PROFESSIONAL ENGINEER SCOTT K. MONROE 29660

NO.	REVISIONS	BY	DATE

NOVARE GROUP - PORT WENTWORTH SFR, LLC
PORT WENTWORTH, GEORGIA

SINGLE FAMILY RENTAL - PARCEL 4

PAVING, GRADING & DRAINAGE DETAILS

THOMAS & HUTTON
50 Park of Commerce Way
Savannah, GA 31405 • 912.234.5300
www.thomasandhutton.com

JOB NO:	J-28595.0004
DATE:	7/5/2022
DRAWN:	JBJ
DESIGNED:	SKM
REVIEWED:	SKM
APPROVED:	SKM
SCALE:	1" = 1'

C3.9

PERMIT SET - FOR REVIEW PURPOSES ONLY

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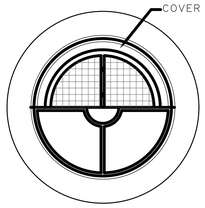


NOTES:

1. FRAME AND COVER TO BE NEENAH FOUNDRY COMPANY CATALOG NO. R-5900-F OR EQUIVALENT WEIGHT 205#.
2. COVER MUST HAVE FOUNDRY STAMP SHOWING THE UTILITY (DRAINAGE).

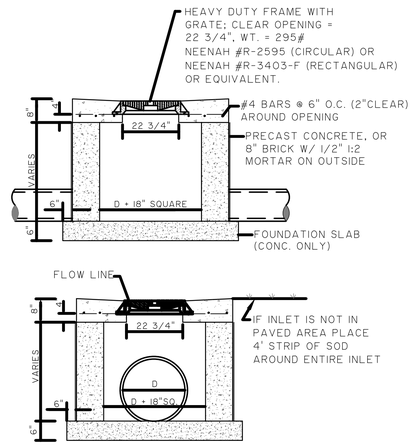
INLET FRAME & COVER

City of Port Wentworth
TECHNICAL DETAILS

SD-5

PREPARED BY STEVENSON & PALMER ENGINEERING, INC.

SCALE: N.T.S.
DATED: FEBRUARY 2007



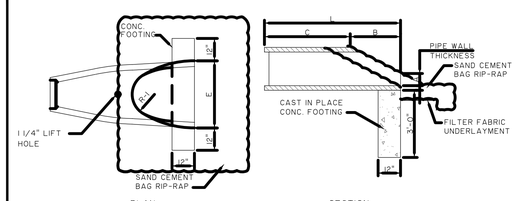
GRATE INLET

City of Port Wentworth
TECHNICAL DETAILS

SD-8

PREPARED BY STEVENSON & PALMER ENGINEERING, INC.

SCALE: N.T.S.
DATED: FEBRUARY 2007



FLARE DIMENSIONS						
PIPE DIA.	A	B	C	L	E	R-1
15"	6"	2'-3"	3'-10"	6'-1"	2'-6"	1'-0"
18"	9"	2'-3"	3'-10"	6'-1"	3'-0"	1'-4"
24"	10"	3'-8"	2'-6"	6'-2"	4'-0"	1'-5"
30"	12"	4'-6"	1'-8"	6'-2"	5'-0"	1'-6"
36"	16"	5'-3"	2'-11"	8'-2"	6'-0"	2'-0"
42"	21"	5'-3"	2'-11"	8'-2"	6'-6"	2'-4"
REINFORCEMENT CONFORMS TO ASTM A-82						

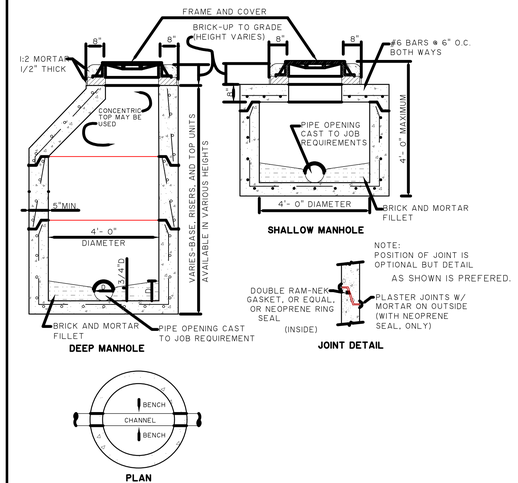
FLARED END SECTION

City of Port Wentworth
TECHNICAL DETAILS

SD-11

PREPARED BY STEVENSON & PALMER ENGINEERING, INC.

SCALE: N.T.S.
DATED: FEBRUARY 2007



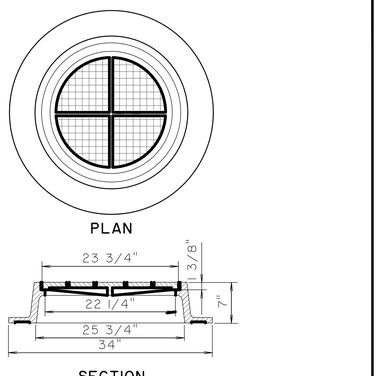
PRECAST STORM MANHOLE

City of Port Wentworth
TECHNICAL DETAILS

SD-12

PREPARED BY STEVENSON & PALMER ENGINEERING, INC.

SCALE: N.T.S.
DATED: FEBRUARY 2007



NOTE:

MANHOLE RIM & COVER SIMILAR TO NEENAH FOUNDRY CO. R-1412-A4. TOTAL WEIGHT 310#. TYPE "C" LID TO HAVE MACHINED BEARING SURFACES. LID TO BE LETTERED "STORM".

STORM MANHOLE RING & COVER

City of Port Wentworth
TECHNICAL DETAILS

SD-14

PREPARED BY STEVENSON & PALMER ENGINEERING, INC.

SCALE: N.T.S.
DATED: FEBRUARY 2007

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PERMIT SET - FOR REVIEW PURPOSES ONLY

GEORGIA REGISTERED PROFESSIONAL ENGINEER SCOTT K. MOORE

NO.	REVISIONS	BY	DATE

THOMAS & HUTTON
50 Park of Commerce Way
Savannah, GA 31405 • 912.234.5300
www.thomasandhutton.com

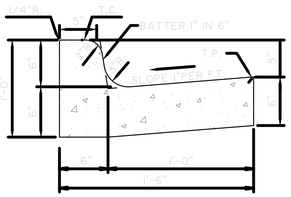
NOVARE GROUP - PORT WENTWORTH SFR, LLC
PORT WENTWORTH, GEORGIA

SINGLE FAMILY RENTAL - PARCEL 4

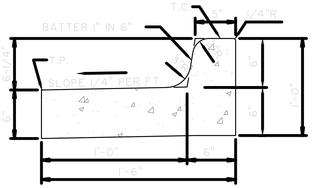
PAVING, GRADING & DRAINAGE DETAILS

JOB NO:	J-28595.0004
DATE:	7/5/2022
DRAWN:	JBJ
DESIGNED:	SKM
REVIEWED:	SKM
APPROVED:	SKM
SCALE:	1" = 1'

C3.10



NORMAL GUTTER



PITCHED GUTTER

NOTE: COMPACT SUBGRADE TO 98% (ASTM D698-00ael)

18" CURB & GUTTER

City of Port Wentworth
TECHNICAL DETAILS
P-3

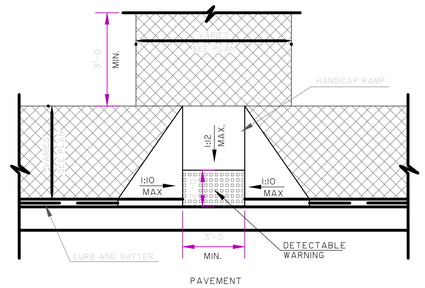
PREPARED BY STEVENSON & PALMER ENGINEERING, INC.
SCALE: N.T.S.
DATED: FEBRUARY 2007

DETECTABLE WARNINGS ON WALKING SURFACE OF HANDICAP RAMP

DETECTABLE WARNINGS SHALL CONSIST OF RAISED TRUNCATED DOMES WITH A DIAMETER OF NOMINAL 0.9 IN (23mm). A HEIGHT OF NOMINAL 0.2 IN (5mm) AND A CENTER-TO-CENTER SPACING OF NOMINAL 2.35 IN (60mm) AND SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES, EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT.

THE MATERIAL USED TO PROVIDE CONTRAST SHALL BE INTEGRAL PART OF THE WALKING SURFACE. DETECTABLE WARNINGS USED ON SURFACES SHALL DIFFER FROM ADJOINING WALKING SURFACES IN RESILIENCY OR SOUND-ON-CANE

SURFACES SHALL MEET THE ADA ACCESSIBILITY GUIDELINES SECTION 4.29.2.



HANDICAP RAMP TYPE "A"

City of Port Wentworth
TECHNICAL DETAILS
P-4

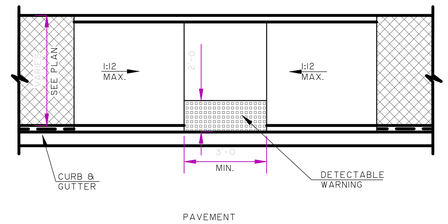
PREPARED BY STEVENSON & PALMER ENGINEERING, INC.
SCALE: N.T.S.
DATED: FEBRUARY 2007

DETECTABLE WARNINGS ON WALKING SURFACE OF HANDICAP RAMP

DETECTABLE WARNINGS SHALL CONSIST OF RAISED TRUNCATED DOMES WITH A DIAMETER OF NOMINAL 0.9 IN (23mm). A HEIGHT OF NOMINAL 0.2 IN (5mm) AND A CENTER-TO-CENTER SPACING OF NOMINAL 2.35 IN (60mm) AND SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES, EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT.

THE MATERIAL USED TO PROVIDE CONTRAST SHALL BE INTEGRAL PART OF THE WALKING SURFACE. DETECTABLE WARNINGS USED ON SURFACES SHALL DIFFER FROM ADJOINING WALKING SURFACES IN RESILIENCY OR SOUND-ON-CANE CONTACT.

SURFACES SHALL MEET THE ADA ACCESSIBILITY GUIDELINES SECTION 4.29.2.

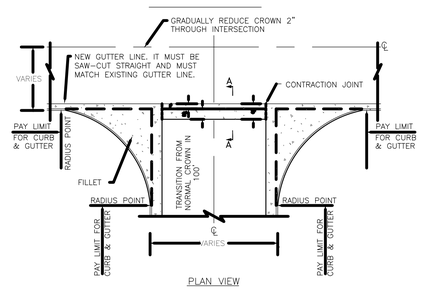


PAVEMENT

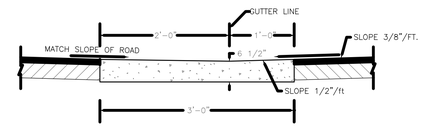
HANDICAP RAMP TYPE "B"

City of Port Wentworth
TECHNICAL DETAILS
P-5

PREPARED BY STEVENSON & PALMER ENGINEERING, INC.
SCALE: N.T.S.
DATED: FEBRUARY 2007



PLAN VIEW



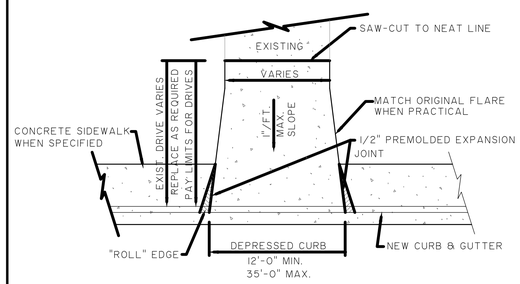
SECTION A – A

NOTES:
1– COMPACTED SUBBASE TO 100% STANDARD (ASTM D-698)
2– ALL PAVEMENT AND CONCRETE CUTS MUST BE STRAIGHT SAW CUT LINES.

CONCRETE SWALE WITH FILLETS

City of Port Wentworth
TECHNICAL DETAILS
P-7

PREPARED BY STEVENSON & PALMER ENGINEERING, INC.
SCALE: N.T.S.
DATED: FEBRUARY 2007



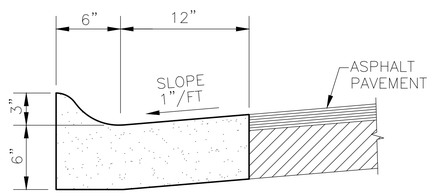
PLAN VIEW

NOTE:
1. % OF THE SLOPE FROM DRIVE TO STREET
2. DRIVEWAY THICKNESS SHALL BE 6" FIBER REINFORCED CONCRETE.

DRIVEWAY

City of Port Wentworth
TECHNICAL DETAILS
P-8

PREPARED BY STEVENSON & PALMER ENGINEERING, INC.
SCALE: N.T.S.
DATED: FEBRUARY 2007



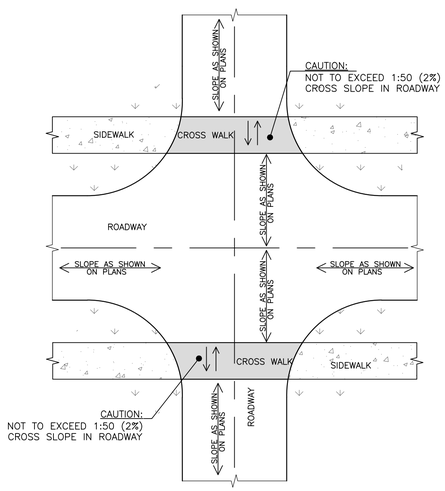
NOTE: FOR RESIDENTIAL USE ONLY

ROLL-OVER CURB

City of Port Wentworth
TECHNICAL DETAILS
P-11

PREPARED BY STEVENSON & PALMER ENGINEERING, INC.
SCALE: N.T.S.
DATED: FEBRUARY 2007

NOTE:
ALL SIDEWALKS TO MEET ADA STANDARDS



ROAD GRADING AT PEDESTRIAN CROSSING ON ACCESSIBLE ROUTE

NOT TO SCALE

GEORGIA REGISTERED PROFESSIONAL ENGINEER SCOTT K. NOVOTNY 029220

PERMIT SET - FOR REVIEW PURPOSES ONLY

NO.	REVISIONS	BY	DATE

THOMAS & HUTTON
50 Park of Commerce Way
Savannah, GA 31405 • 912.234.5300
www.thomasandhutton.com

NOVARE GROUP - PORT WENTWORTH SFR, LLC
PORT WENTWORTH, GEORGIA

SINGLE FAMILY RENTAL - PARCEL 4

PAVING, GRADING & DRAINAGE DETAILS

JOB NO:	J-28595.0004
DATE:	7/5/2022
DRAWN:	JBJ
DESIGNED:	SKM
REVIEWED:	SKM
APPROVED:	SKM
SCALE:	1" = 1'

C3.11

Z:\28595\28595.0004\ENGINEERING\DRAWINGS\CONSTRUCTION PLANS\28595.0004 - PSD-DT.DWG - Oct 5, 2022 - 9:43 AM

NOTE:

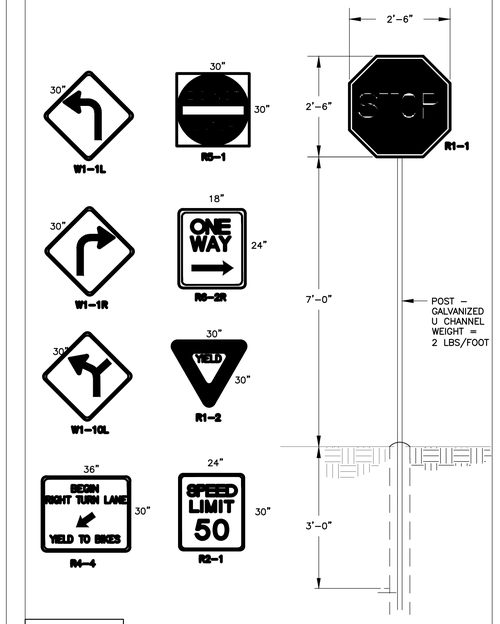
1. DETECTABLE WARNING SHALL CONSIST OF RAISED TRUNCATED DOMES WITH A DIAMETER OF NOMINAL 0.9 INCHES, A HEIGHT OF NOMINAL 0.2 INCHES AND A CENTER TO CENTER SPACING OF NOMINAL 2.35 INCHES AND SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES. IF THE SIDEWALK AND RAMP ARE CONSTRUCTED OF CONCRETE, THE WARNING AREA SHALL BE RED BRICK IN COLOR. IF THE SIDEWALK AND RAMP ARE CONSTRUCTED OF RED BRICK, THE WARNING AREA SHALL BE GRAY IN COLOR. THE COLOR USED TO PROVIDE CONTRAST SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE.

2. BRICK PAVERS SHALL BE SET IN A WET MORTAR BED ON A 4" MIN. THICK CONCRETE FOUNDATION.

DETECTABLE WARNING DETAIL

NOT TO SCALE

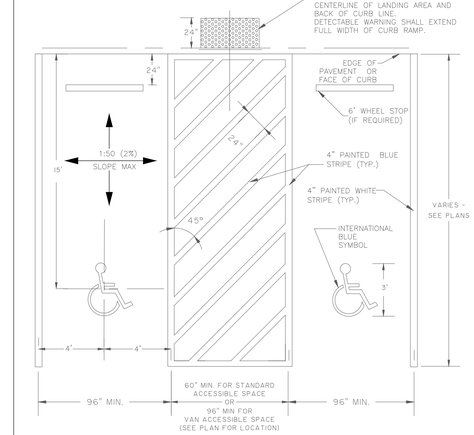
A2.1
FEB. 2009
THOMAS & HUTTON ENGINEERING CO.



ROAD SIGN DETAILS

NOT TO SCALE

T4
OCT. 2008
THOMAS & HUTTON ENGINEERING CO.



NOTES:

1. STRIPING AND CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES AND SPECIFICATIONS.

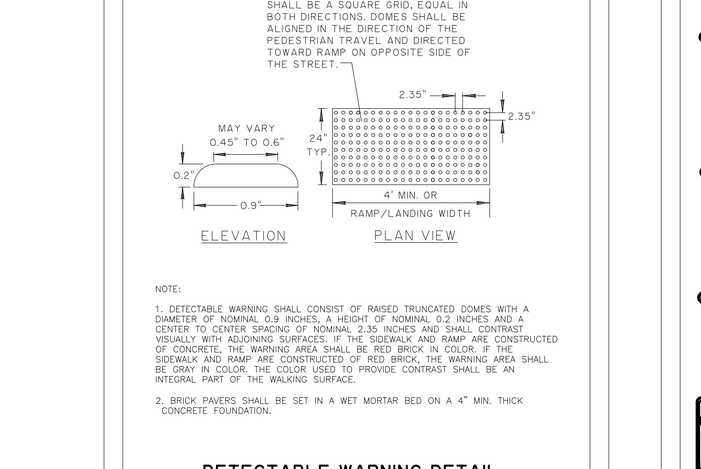
2. 2% MAXIMUM SLOPE IN ALL DIRECTIONS WITHIN ACCESSIBLE PARKING SPACE AND ACCESS AISLE.

3. ONE IN EVERY 8 ACCESSIBLE SPACES SHALL BE SERVED BY AN 8' WIDE ACCESS AISLE AND SHALL BE DESIGNATED "VAN ACCESSIBLE".

ACCESSIBLE PARKING SPACE STRIPING DETAIL

NOT TO SCALE

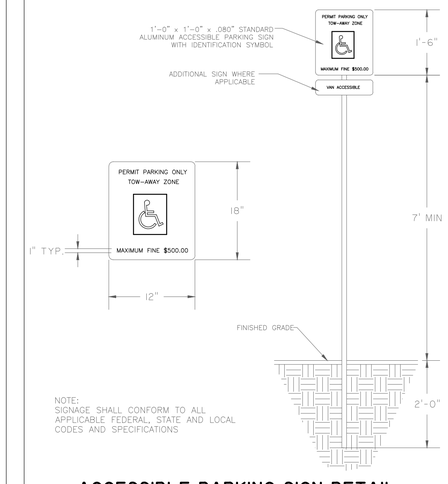
A3.1
FEB. 2009
THOMAS & HUTTON ENGINEERING CO.



CROSSWALK STRIPING DETAIL

NOT TO SCALE

T9
OCT. 2008
THOMAS & HUTTON ENGINEERING CO.



NOTE:
SIGNAGE SHALL CONFORM TO ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES AND SPECIFICATIONS

ACCESSIBLE PARKING SIGN DETAIL

NOT TO SCALE

A4.1
FEB. 2009
THOMAS & HUTTON ENGINEERING CO.

PERMIT SET - FOR REVIEW PURPOSES ONLY

GEORGIA REGISTERED PROFESSIONAL ENGINEER SCOTT K. MONROE 035722

NO.	REVISIONS	BY	DATE

THOMAS & HUTTON
50 Park of Commerce Way
Savannah, GA 31405 • 912.234.5300
www.thomasandhutton.com

NOVARE GROUP - PORT WENTWORTH SFR, LLC
PORT WENTWORTH, GEORGIA

SINGLE FAMILY RENTAL - PARCEL 4

PAVING, GRADING & DRAINAGE DETAILS

JOB NO:	J-28595.0004
DATE:	7/5/2022
DRAWN:	JBJ
DESIGNED:	SKM
REVIEWED:	SKM
APPROVED:	SKM
SCALE:	1" = 1'

C3.12

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PERMIT SET - FOR REVIEW PURPOSES ONLY

EROSION,SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST
STAND ALONE CONSTRUCTION PROJECTS

SWCD: COASTAL
PROJECT NAME: NOVARE SINGLE FAMILY RENTAL DEVELOPMENT
CITY/COUNTY: PORT WENTWORTH/CHATHAM

ADDRESS: PIN: 7-0906-04-024 PORT WENTWORTH, GEORGIA 31407
DATE ON PLANS: 7/5/2022 REVISED DATE: _
NAME & EMAIL OF PERSON FILLING OUT CHECKLIST: BARRY JENKINS / jenkins.b@tandh.com

ATTACHED | YES — 1. THE APPLICABLE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN CHECKLIST ESTABLISHED BY THE COMMISSION AS OF JANUARY 1 OF THE YEAR IN THE LAND-DISTURBING ACTIVITY WAS PERMITTED. (THE COMPLETED CHECKLIST MUST BE SUBMITTED WITH THE ESⅈPC PLAN OR THE PLAN WILL NOT BE REVIEWED).

PLEASE FIND THE CURRENT STAND ALONE EROSION, SEDIMENTATION AND POLLUTION CONTROL CHECKLIST ATTACHED WITH THIS PLAN

ALL | YES — 2. LEVEL II CERTIFICATION NUMBER ISSUED BY THE COMMISSION, SIGNATURE AND SEAL OF THE CERTIFIED DESIGN PROFESSIONAL. (SIGNATURE, SEAL AND LEVEL II NUMBER MUST BE ON EACH SHEET PERTAINING TO ESⅈPC PLAN OR THE PLAN WILL NOT BE REVIEWED)

PLEASE FIND ON EACH SHEET OF THE ESⅈPC PLANS, THE GSWCC LEVEL II CERTIFICATION NUMBER, SIGNATURE AND SEAL FOR SCOTT K. MONSON, PE.

EC0.1 | YES — 3. LIMITS OF DISTURBANCE SHALL BE NO GREATER THAN 50 ACRES AT ANY ONE TIME WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE GAEPD DISTRICT OFFICE. IF GAEPD APPROVES THE REQUEST TO DISTURB 50 ACRES OR MORE AT ANY ONE TIME, THE PLAN MUST INCLUDE AT LEAST 4 OF THE BMPs LISTED IN APPENDIX 1 OF THIS CHECK LIST AND THE GAEPD APPROVAL LETTER. * (A COPY OF THE THE WRITTEN APPROVAL BY GAEPD MUST BE ATTACHED TO THE PLAN FOR THE PLAN TO BE REVIEWED.

TOTAL AREA OF DISTURBANCE WILL NOT EXCEED 50 ACRES AT ANY TIME.

EC0.1 | YES — 4. THE NAME AND PHONE NUMBER OF THE 24-HOUR CONTACT RESPONSIBLE FOR EROSION, SEDIMENTATION AND POLLUTION CONTROLS.

THOMAS AND HUTTON ENGINEERING COMPANY
50 PARK OF COMMERCE WAY
SAVANNAH, GEORGIA 31405
CONTACT: SCOTT K. MONSON, P.E.
OFFICE PHONE (912) 721-4132
MOBILE PHONE (912) 665-2935

EC0.1 | YES — 5. PROVIDE THE NAME, ADDRESS, EMAIL ADDRESS, AND PHONE NUMBER OF PRIMARY PERMITTEE.

ATT: TODD ANDERSEN, SENIOR VP DEVELOPMENT <Tandersen@novoregroup.com>
PORT WENTWORTH SFR, LLC
1545 PEACHTREE ST. SUITE 260
ATLANTA, GEORGIA 30309
(404) 961-9888

EC0.1 | YES — 6. NOTE TOTAL AND DISTURBED ACREAGES OF THE PROJECT OR PHASE UNDER CONSTRUCTION.

TOTAL PARCEL ACREAGE IS 33.3 ACRES.
TOTAL DISTURBED ACREAGE FOR THE PROJECT IS 23.6 ACRES.

EC0.1 | YES — 7. PROVIDE THE GPS LOCATION OF THE CONSTRUCTION EXIT FOR THE SITE. GIVE THE LATITUDE AND LONGITUDE IN DECIMAL DEGREES.

CONSTRUCTION EXIT IS LOCATED AT:
LAT: 32.2059
LONG: -81.1990

ALL | YES — 8. INITIAL DATE OF THE PLAN AND THE DATES OF ANY REVISIONS MADE TO THE PLAN INCLUDING THE ENTITY WHO REQUESTED THE REVISIONS.

PLEASE FIND THE INITIAL DATE OF THE PLAN AND ALL REVISIONS ON THE COVER SHEET AS WELL AS EACH INDIVIDUAL SHEET OF THE PLAN.

EC0.1 | YES — 9. DESCRIPTION OF THE NATURE OF CONSTRUCTION ACTIVITY AND EXISTING SITE CONDITIONS.

THE SUBJECT PROPERTY IS 33.3 ACRES OF UNDEVELOPED LAND. THE MAJORITY OF WHICH IS WOODED WITH NATIVE SPECIES. ELEVATIONS RANGE FROM 16 TO 21 NAVD. THE CONSTRUCTION ACTIVITY (23.6 AC.) AT THE SITE WILL ONLY INVOLVE MASS CLEARING, GRADING, AND STABILIZATION FOR A FUTURE SINGLE FAMILY DEVELOPMENT.

COVER | YES — 10. PROVIDE VICINITY MAP SHOWING SITE'S RELATION TO SURROUNDING AREAS. INCLUDE DESIGNATION OF SPECIFIC PHASE, IF NECESSARY.

PLEASE FIND THE VICINITY MAP LOCATED ON THE COVER SHEET OF THE PLANS

EC0.1;1.3 | YES — 11. IDENTIFY THE PROJECT RECEIVING WATERS AND DESCRIBE ALL SENSITIVE ADJACENT AREAS INCLUDING STREAMS, LAKES, RESIDENTIAL AREAS, WETLANDS, MARSHLANDS, ETC. WHICH MAY BE AFFECTED.

THE RECEIVING WATERS FOR THE PROJECT IS BLACK CREEK BY THE WAY OF DIRECT DISCHARGE.

EC0.1 | YES — 12. DESIGN PROFESSIONAL'S CERTIFICATION STATEMENT AND SIGNATURE THAT THE SITE WAS VISITED PRIOR TO DEVELOPMENT OF THE ESⅈPC PLAN AS STATED ON PART IV PAGE 19 OF THE PERMIT.

I CERTIFY UNDER PENALTY OF LAW THAT THIS PLAN WAS PREPARED AFTER A SITE VISIT TO THE LOCATIONS DESCRIBED HEREIN BY MYSELF OR AUTHORIZED AGENT UNDER MY SUPERVISION.

SCOTT K. MONSON, PE
GSWCC LEVEL II DESIGN PROFESSIONAL
CERTIFICATION #0000012466
EXPIRATION DATE: 6/22/2024

EC0.1 | YES — 13. DESIGN PROFESSIONAL'S CERTIFICATION STATEMENT AND SIGNATURE THAT THE PERMITTEE'S ESⅈPC PLAN PROVIDES FOR AN APPROPRIATE AND COMPREHENSIVE SYSTEM OF BMP'S AND SAMPLING TO MEET PERMIT REQUIREMENTS AS STATED ON PART IV PAGE 19 OF THE PERMIT.

I CERTIFY THAT THE PERMITEE'S EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN PROVIDES FOR AN APPROPRIATE AND COMPREHENSIVE SYSTEM OF BEST MANAGEMENT PRACTICES REQUIRED BY THE GEORGIA WATER QUALITY CONTROL ACT AND THE DOCUMENT "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" (MANUAL) PUBLISHED BY THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION AS OF JANUARY 1 OF THE YEAR IN WHICH THE LAND-DISTURBING ACTIVITY WAS PERMITTED, PROVIDES FOR THE SAMPLING OF THE RECEIVING WATER(S) OR THE SAMPLING OF THE STORM WATER OUTFALLS AND THAT THE DESIGNED SYSTEM OF BEST MANAGEMENT PRACTICES AND SAMPLING METHODS IS EXPECTED TO MEET THE REQUIREMENTS CONTAINED IN THE GENERAL NPDES PERMIT NO. GAR 100001.

SCOTT K. MONSON, PE
GSWCC LEVEL II DESIGN PROFESSIONAL
CERTIFICATION #0000012466
EXPIRATION DATE: 6/22/2024

EC0.1 | YES — 14. CLEARLY NOTE THE STATEMENT THAT "THE DESIGN PROFESSIONAL WHO PREPARED THE ESⅈPC PLAN IS TO INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMP'S WITHIN 7 DAYS AFTER INSTALLATION, IN ACCORDANCE WITH PART IV.A.5 PAGE 25 OF THE PERMIT.*

THE DESIGN PROFESSIONAL WHO PREPARED THE ESⅈPC PLAN IS TO INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMP'S WITHIN 7 DAYS AFTER INSTALLATION.

DESIGN PROFESSIONAL 7-DAY VISIT CERTIFICATION

DESIGN PROFESSIONAL WHO PREPARED THE ESⅈPC PLAN IS TO INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPs WITHIN 7 DAYS AFTER INSTALLATION.

DATE OF INSPECTION: _____

I CERTIFY THE SITE WAS _____ WITH THE ESⅈPC PLAN ON THE DATE OF INSPECTION.

_____ _____
GSWCC LEVEL II DESIGN PROFESSIONAL CERTIFICATION #

INSPECTION REVEALED THE FOLLOWING DISCREPANCIES FROM THE ESⅈPC PLAN

_____
_____
_____
_____

THESE DEFICIENCIES MUST BE ADDRESSED IMMEDIATELY AND A RE-INSPECTION SCHEDULED. WORK SHALL NOT PROCEED ON THE SITE UNTIL DESIGN PROFESSIONAL CERTIFICATION IS OBTAINED.

EC0.1 | YES — 15. CLEARLY NOTE THE STATEMENT THAT "NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION OR WITHIN 25-FEET OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS."

NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50 FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION OR WITHIN 25-FEET OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.

EC0.1 | YES — 16. PROVIDE A DESCRIPTION OF ANY BUFFER ENCROACHMENTS AND INDICATE WHETHER A BUFFER VARIANCE IS REQUIRED.

THERE WILL BE NO BUFFER ENCROACHMENTS AS PART OF THE PROJECT.

EC0.1 | YES — 17. CLEARLY NOTE THE STATEMENT THAT "AMENDMENTS/REVISIONS TO THE ESⅈPC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMP'S WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL."*

AMENDMENTS/REVISIONS TO THE ESⅈPC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMP'S WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.

EC0.1 | YES — 18. CLEARLY NOTE THE STATEMENT THAT "WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.*

WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.

EC0.1 | YES — 19. CLEARLY NOTE THE STATEMENT THAT "THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND DISTURBING ACTIVITIES."

THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND DISTURBING ACTIVITIES.

EC0.1 | YES — 20. CLEARLY NOTE THE STATEMENT THAT "EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE."

EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.

EC0.1 | YES — 21. CLEARLY NOTE THE STATEMENT "ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING."

ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.

N/A — 22. ANY CONSTRUCTION ACTIVITY WHICH DISCHARGES STORM WATER INTO AN IMPAIRED STREAM SEGMENT, OR WITHIN 1 LINEAR MILE UPSTREAM OF AND WITHIN THE SAME WATERSHED AS, ANY PORTION OF AN 305B IMPAIRED STREAM SEGMENT MUST COMPLY WITH PART III.C. OF THE PERMIT. INCLUDE THE COMPLETED APPENDIX 1 LISTING ALL THE BMP'S THAT WILL BE USED FOR THOSE AREAS OF THE SITE WHICH DISCHARGE TO THE IMPAIRED STREAM SEGMENT.*

THERE ARE NO DISCHARGES INTO AN IMPAIRED STREAM SEGMENT OR WITHIN 1 LINEAR MILE UPSTREAM OF AND WITHIN THE SAME WATERSHED AS ANY PORTION OF A 305B IMPAIRED STREAM SEGMENT.

N/A — 23. IF A TMDL IMPLEMENTATION PLAN FOR SEDIMENT HAS BEEN FINALIZED FOR THE IMPAIRED STREAM SEGMENT (IDENTIFIED IN ITEM 22 ABOVE) AT LEAST SIX MONTHS PRIOR TO SUBMITTAL OF NOI, THE ESⅈPC PLAN MUST ADDRESS ANY SITE-SPECIFIC CONDITIONS OR REQUIREMENTS INCLUDED IN THE TMDL IMPLEMENTATION PLAN.*

A TMDL IMPLEMENTATION PLAN HAS BEEN FINALIZED FOR THE IMPAIRED STREAM SEGMENT IDENTIFIED IN ITEM 22 ABOVE. DEVELOPMENT OF THE SITE DOES NOT INCLUDE ACTIVITY CONTRIBUTING TO STREAM IMPAIRMENT. SITE DEVELOPMENT IS CONSISTENT WITH TMDL SITE IMPLEMENTATION PLAN.

N/A — 24. BMP'S FOR CONCRETE WASHDOWN OF TOOLS, CONCRETE MIXER CHUTES, HOPPERS AND THE REAR OF THE VEHICLES. WASHOUT OF THE DRUM AT THE CONSTRUCTION SITE IS PROHIBITED.*

CONCRETE WASHOUT NOT NEEDED FOR THIS PHASE OF PROJECT.

EC0.1 | YES — 25. PROVIDE BMP'S FOR THE REMEDIATION OF ALL PETROLEUM SPILLS AND LEAKS.

PETROLEUM BASED PRODUCTS- CONTAINERS FOR PRODUCTS SUCH AS FUELS, LUBRICANTS AND TARS WILL BE INSPECTED DAILY FOR LEAKS AND SPILLS. THIS INCLUDES ON-SITE VEHICLE AND MACHINERY INSPECTIONS AND REGULAR PREVENTATIVE MAINTENANCE FOR SUCH EQUIPMENT. EQUIPMENT MAINTENANCE AREAS WILL BE LOCATED AWAY FROM STATE WATER, NATURAL DRAINS AND STORM WATER DRAINAGE INLETS. IN ADDITION, TEMPORARY FUELING TANKS SHALL HAVE A SECONDARY CONTAINMENT LINER TO PREVENT/MINIMIZE SITE CONTAMINATION. DISCHARGE OF OILS, FUELS AND LUBRICANTS IS PROHIBITED. PROPER DISPOSAL METHODS WILL INCLUDE COLLECTION IN A SUITABLE CONTAINER AND DISPOSAL AS REQUIRED BY LOCAL AND STATE REGULATIONS. HAVE EQUIPMENT TO CONTAIN AND CLEAN UP PETROLEUM SPILLS IN FUEL STORAGE AREAS OR ON MAINTENANCE AND FUELING VEHICLES. STORE IN COVERED AREAS PROTECTED WITH DIKES. REGULARLY INSPECT FOR CRACKS OR LEAKAGE IN CONTAINERS/TANKS.

SPILL CLEANUP AND CONTROL PRACTICES

- LOCAL, STATE AND MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND PROCEDURES WILL BE MADE AVAILABLE TO SITE PERSONNEL.
- MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREAS. TYPICAL MATERIALS AND EQUIPMENT INCLUDES, BUT IS NOT LIMITED TO, BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, CAT LITTER, SAND, SAWDUST, AND PROPERLY LABELED PLASTIC AND MEAL WASTE CONTAINERS.
- SPILL PREVENTION PRACTICES AND PROCEDURES WILL BE REVIEWED AFTER A SPILL AND ADJUSTED AS NECESSARY TO PREVENT FUTURE SPILLS.
- FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEEN ON SURFACE WATER), THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-424-8802.
- FOR SPILLS OF AN UNKNOWN AMOUNT, THE NATIONAL CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS
- FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE GEORGIA EPD WILL BE CONTACTED WITHIN 24 HOURS.
- FOR SPILLS LESS THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE SPILL WILL BE CLEANED UP AND LOCAL AGENCIES WILL BE CONTACTED AS REQUIRED.

THE CONTRACTOR SHALL NOTIFY THE LICENSED PROFESSIONAL WHO PREPARED THIS PLAN IF MORE THAN 1320 GALLONS OF PETROLEUM IS STORED ONSITE (THIS INCLUDES CAPACITIES OF EQUIPMENT) OR IF ANY ONE PIECE OF EQUIPMENT HAS A CAPACITY GREATER THAN 660 GALLONS. THE CONTRACTOR WILL NEED A SPILL PREVENTION CONTAINMENT AND COUNTERMEASURES PLAN PREPARED BY THAT LICENSED PROFESSIONAL.

EC0.1 | YES — 26. DESCRIPTION OF THE MEASURES THAT WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS TO CONTROL POLLUTANTS IN STORM WATER THAT WILL OCCUR AFTER CONSTRUCTION OPERATIONS HAVE BEEN COMPLETED.*

THE MAIN PERMANENT EROSION CONTROL PRACTICE AT THE POND DISCHARGES IS RIP-RAP. THE PONDS INCLUDE WIDE DISCHARGE POINTS OR WEIRS (25' WIDE)TO HELP SPREAD THE FLOW OVER A LARGE AREA AND TO DECREASE VELOCITIES. THE LARGEST VELOCITY DISCHARGING FROM THE PONDS IS JUST OVER 5 FT/S. IN ADDITION, THE SITES CLOSE PROXIMITY TO LITTLE HEARST BRANCH PREVENTS ADDITIONAL SEDIMENT FROM BEING CARRIED OFFSITE. RIP-RAP IS INSTALLED ON ALL OUTFALL LOCATIONS. PERMANENT GRASSING AND LANDSCAPING WILL BE INSTALLED TO PROTECT EARTHEN AREAS FROM EROSION ONCE CONSTRUCTION IS COMPLETE.

EC0.1 | YES — 27. DESCRIPTION OF PRACTICES TO PROVIDE COVER FOR BUILDING MATERIALS AND BUILDING PRODUCTS ON SITE.*

THE PLAN MUST CONTAIN A DESCRIPTION OF MEASURES, SUCH AS PLASTIC SHEETING OR TEMPORARY ROOFS, TO COVER BUILDING MATERIALS, BUILDING PRODUCTS, CONSTRUCTION WASTES, TRASH, LANDSCAPE MATERIALS, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS IN ORDER TO MINIMIZE EXPOSURE TO PRECIPITATION AND TO STORMWATER.

EC0.1 | YES — 28. DESCRIPTION OF THE PRACTICES THAT WILL BE USED TO REDUCE THE POLLUTANTS IN STORM WATER DISCHARGES.*

POLLUTANT PREVENTION

THE FOLLOWING MATERIALS ARE EXPECTED ONSITE DURING CONSTRUCTION: PETROLEUM BASED FUELS AND LUBRICANTS FOR EQUIPMENT, ADDITIVES FOR SOIL STABILIZATION, PESTICIDES, FERTILIZERS, HERBICIDES, CRUSHED STONE, CONCRETE PRODUCTS, ASPHALT, TAR, LUMBER, , PAINTS/STAINS/FINISHING TREATMENTS, PAINT SOLVENTS, CLEANING SOLVENTS, PLASTICS AND METAL PIPES.

PRACTICES SUCH AS GOOD HOUSEKEEPING, PROPER HANDLING OF HAZARDOUS PRODUCTS AND PROPER SPILL CONTROL PRACTICES WILL BE FOLLOWED TO REDUCE THE RISK OF SPILLS FROM DISCHARGING INTO STORM WATER RUNOFF.

GOOD HOUSEKEEPING

- QUANTITIES ONSITE WILL BE LIMITED TO THE AMOUNT NEEDED FOR THE JOB.
- PRODUCTS AND MATERIALS WILL BE STORED IN A NEAT, ORDERLY MANNER IN APPROPRIATE CONTAINERS PROTECTED FROM RAINFALL, WHERE POSSIBLE.
- PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH MANUFACTURER'S LABELS LEGIBLE AND VISIBLE.
- PRODUCT MIXING, DISPOSAL, AND DISPOSAL OF PRODUCT CONTAINERS WILL BE ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
- THE CONTRACTOR WILL INSPECT SUCH MATERIALS TO ENSURE PROPER USE, STORAGE AND DISPOSAL.

PRODUCT SPECIFIC PRACTICES

FERTILIZER/HERBICIDES/PESTICIDES/DETERGENTS- THESE WILL BE APPLIED AT RATES THAT DO NOT EXCEED THE MANUFACTURER'S SPECIFICATIONS OR ABOVE THE GUIDELINES SET FORTH IN THE CROP ESTABLISHMENT OR IN THE GSWCC MANUAL FOR EROSION AND SEDIMENTATION CONTROL IN GEORGIA. ANY STORAGE OF THESE MATERIALS WILL BE UNDER ROOF IN SEALED CONTAINERS. DO NOT DISCHARGE WASH WATER INTO STORM WATER SYSTEM. INSTALL CURBS OR DIKES AROUND STORAGE AREA TO PROTECT AGAINST SPILLS. LIMIT USE OF DETERGENTS ON-SITE.

PAINTS/FINISHES/SOLVENTS- ALL PRODUCTS WILL BE STORED IN TIGHTLY SEALED ORIGINAL CONTAINERS WHEN NOT IN USE. EXCESS PRODUCT WILL NOT BE DISCHARGED TO THE STORM WATER COLLECTION SYSTEM. EXCESS PRODUCT, MATERIALS USED WITH THESE PRODUCTS AND PRODUCT CONTAINERS WILL BE DISPOSED OF ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.

CONCRETE TRUCK WASHING- CONCRETE WASHOUT SHALL OCCUR ONLY IN THE WASH PAD VICINITY DELINEATED IN THE PLANS.

BUILDING MATERIALS- NO BUILDING OR CONSTRUCTION MATERIALS WILL BE BURIED OR DISPOSED OF ONSITE. ALL SUCH MATERIAL WILL BE DISPOSED OF IN PROPER WASTE DISPOSAL PROCEDURES.

EC0.2 | YES — 29. DESCRIPTION AND CHART OR TIMELINE OF THE INTENDED SEQUENCE OF MAJOR ACTIVITIES WHICH DISTURB SOILS FOR THE MAJOR PORTIONS OF THE SITE (I.E., INITIAL PERIMETER AND SEDIMENT STORAGE BMP'S, CLEARING AND GRUBBING ACTIVITIES, EXCAVATION ACTIVITIES, UTILITY ACTIVITIES, TEMPORARY AND FINAL STABILIZATION).

A SPECIFIED WORK SCHEDULE IS NEEDED TO COORDINATE THE TIMING OF LAND DISTURBING ACTIVITIES WITH THE INSTALLATION OF EROSION AND SEDIMENTATION CONTROL MEASURES.

THE PURPOSE OF THE SCHEDULE IS TO REDUCE ON-SITE EROSION AND OFF-SITE SEDIMENTATION BY PERFORMING LAND DISTURBING ACTIVITIES AND INSTALLING EROSION AND SEDIMENTATION CONTROL PRACTICES IN ACCORDANCE WITH A PLANNED SCHEDULE.

IN PLANNING CONSTRUCTION WORK, IT MAY BE HELPFUL TO OUTLINE ALL LAND DISTURBING ACTIVITIES NECESSARY TO COMPLETE THE PROPOSED PROJECT. THEN LIST ALL PRACTICES NEEDED TO CONTROL EROSION AND SEDIMENTATION ON THE SITE. THESE TWO LISTS CAN THEN BE COMBINED IN LOGICAL ORDER TO PROVIDE A PRACTICAL AND EFFECTIVE CONSTRUCTION SEQUENCE SCHEDULE THAT BECOMES PART OF THE EROSION AND SEDIMENTATION CONTROL PLAN.

GEORGIA REGISTERED SCOTT K. MONSON 0000012466 PROFESSIONAL ENGINEER
GSWCC LEVEL L2
DESIGN PROFESSIONAL
CERTIFICATION #
0000012466
EXPIRES: 6/22/2024

NO.	REVISIONS	BY	DATE

THOMAS & HUTTON
50 Park of Commerce Way
Savannah, GA 31405 • 912.234.5300
www.thomasandhutton.com

NOVARE GROUP - PORT WENTWORTH SFR, LLC
PORT WENTWORTH, GEORGIA

SINGLE FAMILY RENTAL - PARCEL 4

ESPC NOTES

JOB NO:	J-28595.0004
DATE:	7/5/2022
DRAWN:	JBJ
DESIGNED:	SKM
REVIEWED:	SKM
APPROVED:	SKM
SCALE:	1" = 1'

EC0.1

J:\28595\28595.0004\CAD\DETAILS\DRAWINGS\CONSTRUCTION PLANS\28595.0004 EC-0.1.DWG - Oct 5, 2022 - 9:53 AM

CONSTRUCTION ACTIVITY	SCHEDULE CONSIDERATION
1. OBTAIN ALL PLAN APPROVALS AND OTHER APPLICABLE PERMITS.	
2. FLAG THE WORK LIMITS AND MARK THE TREES AND BUFFER AREAS FOR PROTECTION.	
3. HOLD PRE CONSTRUCTION CONFERENCE AT LEAST ONE WEEK PRIOR TO STARTING CONSTRUCTION.	
4. CONSTRUCTION ACCESS - CONSTRUCTION ENTRANCE, CONSTRUCTION ROUTES, EQUIPMENT PARKING AREAS.	FIRST LAND DISTURBING ACTIVITY - STABILIZE BARE AREAS IMMEDIATELY WITH GRAVEL AND TEMPORARY VEGETATION AS CONSTRUCTION TAKES PLACE.
5. SEDIMENT TRAPS AND BARRIERS - BASIN TRAPS, SEDIMENT FENCES, AND OUTLET PROTECTION.	INSTALL PRINCIPAL BASINS AFTER CONSTRUCTION SITE IS ACCESSED. INSTALL ADDITIONAL TRAPS AND BARRIERS AS NEEDED DURING GRADING.
6. RUNOFF CONTROL - DIVERSIONS, PERIMETER DIKES, WATER BARS, AND OUTLET PROTECTION.	INSTALL KEY PRACTICES AFTER PRINCIPAL SEDIMENT TRAPS AND BEFORE LAND GRADING. INSTALL ADDITIONAL RUNOFF-CONTROL MEASURES DURING GRADING.
7. RUNOFF CONVEYANCE SYSTEM- STABILIZE STREAM BANKS, STORM DRAINS, CHANNELS, INLET AND OUTLET PROTECTION, SLOPE DRAINS.	WHERE NECESSARY, STABILIZE STREAM BANKS AS EARLY AS POSSIBLE. INSTALL PRINCIPAL RUNOFF CONVEYANCE SYSTEM WITH RUNOFF-CONTROL MEASURES. INSTALL REMAINDER OF SYSTEM AFTER GRADING.
8. LAND CLEARING AND GRADING - SITE PREPARATION CUTTING, FILLING AND GRADING, SEDIMENTATION TRAPS, BARRIERS, DIVERSIONS, DRAINS,SURFACE ROUGHENING.	BEGIN MAJOR CLEARING AND GRADING AFTER PRINCIPAL SEDIMENT AND KEY RUNOFF - CONTROL MEASURES ARE INSTALLED. INSTALL ADDITIONAL CONTROL MEASURES AS GRADING PROGRESSES. MARK TREES AND BUFFER AREAS FOR PRESERVATION.
9. SURFACE STABILIZATION - TEMPORARY AND PERMANENT SEEDING, MULCHING, SODDING, RIPRAP.	APPLY TEMPORARY OR PERMANENT STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS WHERE WORK IS DELAYED OR COMPLETE.
10. BUILDING CONSTRUCTION- BUILDINGS UTILITIES, PAVING.	INSTALL NECESSARY EROSION AND SEDIMENTATION CONTROL PRACTICES AS WORK TAKES PLACE.
11. LANDSCAPING AND FINAL STABILIZATION - TOPSOILING, TREES AND SHRUBS, PERMANENT SEEDING, MULCHING, SODDING RIPRAP.	LAST CONSTRUCTION PHASE--STABILIZE ALL OPEN AREAS, INCLUDING BORROW AND SPOIL AREAS. REMOVE AND STABILIZE ALL TEMPORARY CONTROL MEASURES.

CONSTRUCTION SCHEDULE

ACTIVITY	MONTH 1	2	3
PERIMETER BMPS			
SITE CLEARING			
TEMPORARY GRASSING			
SITE GRADING			
PERMANENT GRASSING			
FINAL STABILIZATION/ BMP REMOVAL			
BMP MAINTENANCE			

ECO.2 | YES 30. PROVIDE COMPLETE REQUIREMENTS OF INSPECTIONS AND RECORD KEEPING BY THE PRIMARY PERMITEE.*

INSPECTIONS AND RECORD KEEPING

A. PRIMARY PERMITTEE:

I. EACH DAY WHEN ANY TYPE OF CONSTRUCTION ACTIVITY HAS TAKEN PLACE AT A PRIMARY PERMITTEE'S SITE, CERTIFIED PERSONNEL PROVIDED BY THE PRIMARY PERMITTEE SHALL INSPECT: (a) ALL AREAS OF THE PRIMARY PERMITTEE'S SITE WHERE PETROLEUM PRODUCTS ARE STORED, USED, OR HANDLED FOR SPILLS AND LEAKS FROM VEHICLES AND EQUIPMENT. (b) ALL LOCATIONS AT THE PRIMARY PERMITTEE'S SITE WHERE VEHICLES ENTER OR EXIT THE SITE FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING. THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.

2. MEASURE AND RECORD RAINFALL WITHIN DISTURBED AREAS OF THE SITE THAT HAVE MET FINAL STABILIZATION ONCE EVERY 24 HOURS EXCEPT ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY AND NON-WORKING FEDERAL HOLIDAY. THE DATA COLLECTED FOR THE PURPOSE OF COMPLIANCE WITH THIS PERMIT SHALL BE REPRESENTATIVE OF THE MONITORED ACTIVITY. MEASUREMENT OF RAINFALL MAY BE SUSPENDED IF ALL AREAS OF THE SITE HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION.

3. CERTIFIED PERSONAL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT THE FOLLOWING AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES OR GREATER (UNLESS SUCH STORM ENDS AFTER 5:00PM ON ANY FRIDAY OR ON ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY OR ANY FEDERAL HOLIDAY IN WHICH CASE THE INSPECTION SHALL BE COMPLETED BY THE END OF THE NEXT BUSINESS DAY AND/OR WORKING DAY, WHICHEVER OCCURS FIRST): (a) DISTURBED AREAS OF THE PRIMARY PERMITTEE'S CONSTRUCTION SITE. (b) AREAS USED BY THE PRIMARY PERMITTEE FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION. AND (c) STRUCTURAL CONTROL MEASURES. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN APPLICABLE TO THE PRIMARY PERMITTEE'S SITE SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S). FOR AREAS OF A SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION, THE PERMITTEE MUST COMPLY WITH PART IV.D.4.a.(4). THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.

4. CERTIFIED PERSONNEL (PROVIDED BY PRIMARY PERMITTEE) SHALL INSPECT AT LEAST ONCE PER MONTH DURING THE TERM OF THIS PERMIT (I.e. UNTIL A NOTICE OF TERMINATION HAS BEEN SUBMITTED) THE AREAS OF THE SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION. THESE AREAS SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM AND THE RECEIVING WATER(S). EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S).

5. BASED ON THE RESULTS OF EACH INSPECTION, THE SITE DESCRIPTION AND THE POLLUTION PREVENTION AND CONTROL MEASURES IDENTIFIED IN THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, THE PLAN SHALL BE REVISED AS APPROPRIATE NOT LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION. IMPLEMENTATION OF SUCH CHANGES SHALL BE MADE AS SOON AS PRACTICAL BUT IN NO CASE LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION.

6. A REPORT OF EACH INSPECTION THAT INCLUDES THE NAME(S) OF CERTIFIED PERSONNEL MAKING EACH INSPECTION, THE DATE(S) OF EACH INSPECTION, CONSTRUCTION PHASE (I.E., INITIAL, INTERMEDIATE OR FINAL), MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, AND ACTIONS TAKEN IN ACCORDANCE WITH PART IV.D.4.a.(5). OF THE PERMIT SHALL BE MADE AND RETAINED AT THE SITE OR BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION UNTIL THE ENTIRE SITE OR THAT PORTION OF A CONSTRUCTION PROJECT THAT HAS BEEN PHASED HAS UNDERGONE FINAL STABILIZATION AND A NOTICE OF TERMINATION IS SUBMITTED TO EPD. SUCH REPORTS SHALL BE READILY AVAILABLE BY END OF THE SECOND BUSINESS DAY AND/OR WORKING DAY AND SHALL IDENTIFY ALL INCIDENTS OF BEST MANAGEMENT PRACTICES THAT HAVE NOT BEEN PROPERLY INSTALLED AND/OR MAINTAINED AS DESCRIBED IN THE PLAN. WHERE THE REPORT DOES NOT IDENTIFY ANY INCIDENTS, THE INSPECTION REPORT SHALL CONTAIN A CERTIFICATION THAT THE BEST MANAGEMENT PRACTICES ARE IN COMPLIANCE WITH THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN. THE REPORT SHALL BE SIGNED IN ACCORDANCE WITH PART V.G.2 OF THIS PERMIT.

AN "EROSION & SEDIMENTATION INSPECTION AND MAINTENANCE REPORT" SHEET IS ATTACHED. SHOULD THE INSPECTION REVEAL ANY DEFICIENCIES, A COPY SHALL BE SENT TO:

SCOTT K. MONSON, PE
THOMAS & HUTTON
50 PARK OF COMMERCE WAY
SAVANNAH, GA 31405
(912) 234-5300

ECO.2 | YES 31. PROVIDE COMPLETE REQUIREMENTS OF SAMPLING FREQUENCY AND REPORTING OF SAMPLING RESULTS.*

SAMPLING REQUIREMENTS. THIS PERMIT REQUIRES THE MONITORING OF NEPHELOMETRIC TURBIDITY IN RECEIVING WATER(S) OR OUTFALLS IN ACCORDANCE WITH THIS PERMIT. THIS PARAGRAPH SHALL NOT APPLY TO ANY LAND DISTURBANCE ASSOCIATED WITH THE CONSTRUCTION OF SINGLE-FAMILY HOMES WHICH ARE NOT PART OF A SUBDIVISION OR PLANNED COMMON DEVELOPMENT UNLESS FIVE (5) ACRES OR MORE WILL BE DISTURBED. THE FOLLOWING PROCEDURES CONSTITUTE EPD'S GUIDELINES FOR SAMPLING TURBIDITY.

a. SAMPLING REQUIREMENTS SHALL INCLUDE THE FOLLOWING:

(1) A USGS TOPOGRAPHIC MAP, A TOPOGRAPHIC MAP OR A DRAWING (REFERRED TO AS A TOPOGRAPHIC MAP) THAT IS A SCALE EQUAL TO OR MORE DETAILED THAN A 1:24000 MAP SHOWING THE LOCATION OF THE SITE OR THE STAND ALONE CONSTRUCTION; (a) THE LOCATION OF ALL PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES LOCATED DURING MANDATORY FIELD VERIFICATION, INTO WHICH THE STORM WATER IS DISCHARGED AND, (b) THE RECEIVING WATER AND/OR OUTFALL SAMPLING LOCATIONS. WHEN THE PERMITTEE HAS CHOSEN TO USE A USGS TOPOGRAPHIC MAP AND THE RECEIVING WATER(S) IS NOT SHOWN ON THE USGS TOPOGRAPHIC MAP, THE LOCATION FOR THE RECEIVING WATER(S) MUST BE HAND-DRAWN ON THE USGS TOPOGRAPHIC MAP FROM WHERE THE STORM WATER(S) ENTERS THE RECEIVING WATER(S) TO THE POINT WHERE THE RECEIVING WATER(S) COMBINES WITH THE FIRST BLUE LINE STREAM SHOWN ON THE USGS TOPOGRAPHIC MAP;

(2) A WRITTEN NARRATIVE OF SITE SPECIFIC ANALYTICAL METHODS USED TO COLLECT, HANDLE AND ANALYZE THE SAMPLES INCLUDING QUALITY CONTROL/QUALITY ASSURANCE PROCEDURES. THIS NARRATIVE MUST INCLUDE PRECISE SAMPLING METHODOLOGY FOR EACH SAMPLING LOCATION;

(3) WHEN THE PERMITTEE HAS DETERMINED THAT SOME OR ALL OUTFALLS WILL BE SAMPLED, A RATIONALE MUST BE INCLUDED ON THE PLAN FOR THE NTU LIMIT(S) SELECTED FROM APPENDIX b. THIS RATIONALE MUST INCLUDE THE SIZE OF THE CONSTRUCTION SITE, THE CALCULATION OF THE SIZE OF THE SURFACE WATER DRAINAGE AREA, AND THE TYPE OF RECEIVING WATER(S) (I.E., TROUT STREAM OR SUPPORTING WARM WATER FISHERIES); AND

(4) ANY ADDITIONAL INFORMATION EPD DETERMINES NECESSARY TO BE PART OF THE PLAN. EPD WILL PROVIDE WRITTEN NOTICE TO THE PERMITTEE OF THE INFORMATION NECESSARY AND THE TIME LINE FOR SUBMITTAL.

b. SAMPLE TYPE. ALL SAMPLING SHALL BE COLLECTED BY "GRAB SAMPLES" AND THE ANALYSIS OF THESE SAMPLES MUST BE CONDUCTED IN ACCORDANCE WITH METHODOLOGY AND TEST PROCEDURES ESTABLISHED BY 40 CFR PART 136 (UNLESS OTHER TEST PROCEDURES HAVE BEEN APPROVED); THE GUIDANCE DOCUMENT TITLED "NPDES STORM WATER SAMPLING GUIDANCE DOCUMENT, EPA 833-B-92-001" AND GUIDANCE DOCUMENTS THAT MAY BE PREPARED BY THE EPD.

1. SAMPLE CONTAINERS SHOULD BE LABELED PRIOR TO COLLECTING THE SAMPLES.
2. SAMPLES SHOULD BE WELL MIXED BEFORE TRANSFERRING TO A SECONDARY CONTAINER.
3. LARGE MOUTH, WELL CLEANED AND RINSED GLASS OR PLASTIC JARS SHOULD BE USED FOR COLLECTING SAMPLES. THE JARS SHOULD BE CLEANED THOROUGHLY TO AVOID CONTAMINATION.
4. MANUAL, AUTOMATIC OR RISING STAGE SAMPLING MAY BE UTILIZED. SAMPLES REQUIRED BY THIS PERMIT SHOULD BE ANALYZED IMMEDIATELY, BUT IN NO CASE LATER THAN 48 HOURS AFTER COLLECTION. HOWEVER, SAMPLES FROM AUTOMATIC SAMPLERS MUST BE COLLECTED NO LATER THAN THE NEXT BUSINESS DAY AFTER THEIR ACCUMULATION, UNLESS FLOW THROUGH AUTOMATED ANALYSIS IS UTILIZED. IF AUTOMATIC SAMPLING IS UTILIZED AND THE AUTOMATIC SAMPLER IS NOT ACTIVATED DURING THE QUALIFYING EVENT, THE PERMITTEE MUST UTILIZE MANUAL SAMPLING OR RISING STAGE SAMPLING DURING THE NEXT QUALIFYING EVENT. DILUTION OF SAMPLES IS NOT REQUIRED. SAMPLES MAY BE ANALYZED DIRECTLY WITH A PROPERLY CALIBRATED TURBIDIMETER. SAMPLES ARE NOT REQUIRED TO BE COOLED.
5. SAMPLING AND ANALYSIS OF THE RECEIVING WATER(S) OR OUTFALLS BEYOND THE MINIMUM FREQUENCY STATED IN THE PERMIT MUST BE REPORTED TO EPD AS SPECIFIED IN PART IV.E. OF THE PERMIT.

c. SAMPLING POINTS: THERE WILL BE 3 STORM WATER SAMPLING LOCATIONS. THE SAMPLING LOCATION WILL BE THE DOWNSTREAM POINTS, PER NPDES PERMIT GAR 100001, FOR CONSTRUCTION ACTIVITIES, THE PRIMARY PERMITTEE MUST COMPLETE ALL SAMPLING.

I. FOR CONSTRUCTION ACTIVITIES THE PRIMARY PERMITTEE MUST SAMPLE ALL RECEIVING WATER(S) OR ALL OUTFALL(S), OR A COMBINATION OF RECEIVING WATER(S) AND OUTFALL(S). SAMPLES TAKEN FOR THE PURPOSE OF COMPLIANCE WITH THIS PERMIT SHALL BE REPRESENTATIVE OF THE MONITORED ACTIVITY AND REPRESENTATIVE OF THE WATER QUALITY OF THE RECEIVING WATER(S) AND/OR THE STORM WATER OUTFALL(S) USING THE FOLLOWING MINIMUM GUIDELINES:

A. THE UPSTREAM SAMPLE FOR EACH RECEIVING WATER(S) MUST BE TAKEN IMMEDIATELY UPSTREAM OF THE CONFLUENCE OF THE FIRST STORM WATER DISCHARGE FROM THE PERMITTED ACTIVITY (I.E., THE DISCHARGE FARTHEST UPSTREAM AT THE SITE) BUT DOWNSTREAM OF ANY OTHER STORM WATER DISCHARGES NOT ASSOCIATED WITH THE PERMITTED ACTIVITY, WHERE APPROPRIATE, SEVERAL UPSTREAM SAMPLES FROM ACROSS THE RECEIVING WATER(S) MAY NEED TO BE TAKEN AND THE ARITHMETIC AVERAGE OF THE TURBIDITY OF THESE SAMPLES USED FOR THE UPSTREAM TURBIDITY VALUE.

B. THE DOWNSTREAM SAMPLE FOR EACH RECEIVING WATER(S) MUST BE TAKEN DOWNSTREAM OF THE CONFLUENCE OF THE LAST STORM WATER DISCHARGE FROM THE PERMITTED ACTIVITY (I.E., THE DISCHARGE FARTHEST DOWNSTREAM AT THE SITE) BUT UPSTREAM OF ANY OTHER STORM WATER DISCHARGE NOT ASSOCIATED WITH THE PERMITTED ACTIVITY. WHERE APPROPRIATE, SEVERAL DOWNSTREAM SAMPLES FROM ACROSS THE RECEIVING WATER(S) MAY NEED TO BE TAKEN AND THE ARITHMETIC AVERAGE OF THE TURBIDITY OF THESE SAMPLES USED FOR THE DOWNSTREAM TURBIDITY VALUE.

C. IDEALLY THE SAMPLES SHOULD BE TAKEN FROM THE HORIZONTAL AND VERTICAL CENTER OF THE RECEIVING WATER(S) OR THE STORM WATER OUTFALL CHANNELS(S).

D. CARE SHOULD BE TAKEN TO AVOID STIRRING THE BOTTOM SEDIMENTS IN THE RECEIVING WATER(S) OR IN THE OUTFALL STORM WATER CHANNEL.

E. THE SAMPLING CONTAINER SHOULD BE HELD SO THAT THE OPENING FACES UPSTREAM.

F. THE SAMPLES SHOULD BE KEPT FREE FROM FLOATING DEBRIS.

G. PERMITTEES DO NOT HAVE TO SAMPLE SHEETFLOW THAT FLOWS ONTO UNDISTURBED NATURAL AREAS OR AREAS STABILIZED BY THE PROJECT. FOR PURPOSES OF THIS SECTION, STABILIZED SHALL MEAN, FOR UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES AND AREAS LOCATED OUTSIDE THE WASTE DISPOSAL LIMITS OF A LANDFILL CELL THAT HAS BEEN CERTIFIED BY EPD FOR WASTE DISPOSAL, 100% OF THE SOIL SURFACE IS UNIFORMLY COVERED IN PERMANENT VEGETATION WITH A DENSITY OF 70% OR GREATER, OR LANDSCAPED ACCORDING TO THE PLAN (UNIFORMLY COVERED WITH LANDSCAPING MATERIALS IN PLANNED LANDSCAPED AREAS), OR EQUIVALENT PERMANENT STABILIZATION MEASURES AS DEFINED IN THE MANUAL (EXCLUDING A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET CROP PERENNIALS APPROPRIATE FOR THE REGION).

A. ALL SAMPLING PURSUANT TO THIS PERMIT MUST BE DONE IN SUCH A WAY (INCLUDING GENERALLY ACCEPTED SAMPLING METHODS, LOCATIONS, TIMING AND FREQUENCY) AS TO ACCURATELY REFLECT WHETHER STORM WATER RUNOFF FROM THE CONSTRUCTION SITE IS IN COMPLIANCE WITH THE STANDARD SET FORTH IN PARTS III.D.3. OR III.D.4., WHICHEVER IS APPLICABLE.

d. SAMPLING FREQUENCY

I. THE PRIMARY PERMITTEE MUST SAMPLE IN ACCORDANCE WITH THE PLAN AT LEAST ONCE FOR EACH RAINFALL EVENT DESCRIBED BELOW. FOR A QUALIFYING EVENT, THE PERMITTEE SHALL SAMPLE AT THE BEGINNING OF ANY STORM WATER DISCHARGE TO A MONITORED RECEIVING WATER AND/OR FROM A MONITORED OUTFALL LOCATION WITHIN FORTY-FIVE (45) MINUTES OR AS SOON AS POSSIBLE.

2. HOWEVER, WHERE MANUAL AND AUTOMATIC SAMPLING ARE IMPOSSIBLE (AS DEFINED IN THIS PERMIT), OR ARE BEYOND THE PERMITTEE'S CONTROL, THE PERMITTEE SHALL TAKE SAMPLES AS SOON AS POSSIBLE, BUT IN NO CASE MORE THAN TWELVE (12) HOURS AFTER THE BEGINNING OF THE STORM WATER DISCHARGE.

3. SAMPLING BY THE PERMITTEE SHALL OCCUR FOR THE FOLLOWING QUALIFYING EVENTS:

A. FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH WITH A STORM WATER DISCHARGE THAT OCCURS DURING NORMAL BUSINESS HOURS AS DEFINED IN THIS PERMIT AFTER ALL CLEARING AND GRUBBING OPERATIONS HAVE BEEN COMPLETED, BUT PRIOR TO COMPLETION OF MASS GRADING OPERATIONS, IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE SAMPLING LOCATION;

B. IN ADDITION TO (A.) ABOVE, FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH WITH A STORM WATER DISCHARGE THAT OCCURS DURING NORMAL BUSINESS HOURS AS DEFINED IN THE PERMIT EITHER 90 DAYS AFTER THE FIRST SAMPLING EVENT OR AFTER ALL MASS GRADING OPERATIONS HAVE BEEN COMPLETED, BUT PRIOR TO SUBMITTAL OF A NOT, IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE SAMPLING LOCATIONS, WHICHEVER COMES FIRST;

C. AT THE TIME OF SAMPLING PERFORMED PURSUANT TO (A) AND (B) ABOVE, IF BMPS IN ANY AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL ARE NOT PROPERLY DESIGNED, INSTALLED AND MAINTAINED, CORRECTIVE ACTION SHALL BE DEFINED AND IMPLEMENTED WITHIN TWO (2) BUSINESS DAYS, AND TURBIDITY SAMPLES SHALL BE TAKEN FROM DISCHARGES FROM THAT AREA OF THE SITE FOR EACH SUBSEQUENT RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH DURING NORMAL BUSINESS HOURS* UNTIL THE SELECTED TURBIDITY STANDARD IS ATTAINED, OR UNTIL POST-STORM EVENT INSPECTIONS DETERMINE THAT BMPS ARE PROPERLY DESIGNED, INSTALLED AND MAINTAINED;

D. WHERE SAMPLING PURSUANT TO (A), (B) OR (C) ABOVE IS REQUIRED BUT NOT POSSIBLE (OR NOT REQUIRED BECAUSE THERE WAS NO DISCHARGE), THE PERMITTEE, IN ACCORDANCE WITH PART IV.D.4.a.(6), MUST INCLUDE A WRITTEN JUSTIFICATION IN THE INSPECTION REPORT OF WHY SAMPLING WAS NOT PERFORMED. PROVIDING THIS JUSTIFICATION DOES NOT RELIEVE THE PERMITTEE OF ANY SUBSEQUENT SAMPLING OBLIGATIONS UNDER (A), (B) OR (C) ABOVE; AND

E. EXISTING CONSTRUCTION ACTIVITIES, I.E., THOSE THAT ARE OCCURRING ON OR BEFORE THE EFFECTIVE DATE OF THIS PERMIT, THAT HAVE MET THE SAMPLING REQUIRED BY (A) ABOVE SHALL SAMPLE IN ACCORDANCE WITH (B). THOSE EXISTING CONSTRUCTION ACTIVITIES THAT HAVE MET THE SAMPLING REQUIRED BY (B) ABOVE SHALL NOT BE REQUIRED TO CONDUCT ADDITIONAL SAMPLING OTHER THAN AS REQUIRED BY (C) ABOVE.

*NOTE THAT THE PERMITTEE MAY CHOOSE TO MEET THE REQUIREMENTS OF (A) AND (B) ABOVE BY COLLECTING TURBIDITY SAMPLES FROM ANY RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR SAMPLING AT ANY TIME OF THE DAY OR WEEK.

REPORTING

I. THE APPLICABLE PERMITTEES ARE REQUIRED TO SUBMIT THE SAMPLING RESULTS TO THE EPD AT THE ADDRESS SHOWN IN PART II.C BY THE FIFTEENTH DAY OF THE MONTH FOLLOWING THE REPORTING PERIOD. REPORTING PERIODS ARE MONTHS DURING WHICH SAMPLES ARE TAKEN IN ACCORDANCE WITH THIS PERMIT. SAMPLING RESULTS SHALL BE IN A CLEARLY LEGIBLE FORMAT. UPON WRITTEN NOTIFICATION, EPD MAY REQUIRE THE APPLICABLE PERMITTEE TO SUBMIT THE SAMPLING RESULTS ON A MORE FREQUENT BASIS. SAMPLING AND ANALYSIS OF ANY STORM WATER DISCHARGE(S) OR THE RECEIVING WATER(S) BEYOND THE MINIMUM FREQUENCY STATED IN THIS PERMIT MUST BE REPORTED IN A SIMILAR MANNER TO THE EPD. THE SAMPLING REPORTS MUST BE SIGNED IN ACCORDANCE WITH PART V.G.2. SAMPLING REPORTS MUST BE SUBMITTED TO EPD USING THE ELECTRONIC SUBMITTAL SERVICE PROVIDED BY EPD. SAMPLING REPORTS MUST BE SUBMITTED TO EPD UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI.

2. ALL SAMPLING REPORT SHALL INCLUDE THE FOLLOWING INFORMATION:
   a. THE RAINFALL AMOUNT, DATE, EXACT PLACE AND TIME OF SAMPLING OR MEASUREMENTS;
   b. THE NAME(S) OF THE CERTIFIED PERSONNEL WHO PERFORMED THE SAMPLING AND MEASUREMENTS;
   c. THE DATE(S) ANALYSES WERE PERFORMED;
   d. THE TIME(S) ANALYSES WERE INITIATED;
   e. THE NAMES(S) OF THE CERTIFIED PERSONNEL WHO PERFORMED THE ANALYSES;
   f. REFERENCES AND WRITTEN PROCEDURES , WHEN AVAILABLE, FOR THE ANALYTICAL TECHNIQUES OR METHODS USED;
   g. THE RESULTS OF SUCH ANALYSES, INCLUDING THE BENCH SHEETS, INSTRUMENT READOUTS, COMPUTER DISKS OR TAPES, ETC., USED TO DETERMINE THESE RESULTS;
   h. RESULTS WHICH EXCEED 1000 NTU SHALL BE REPORTED AS "EXCEEDS 1000 NTU;" AND
   i. CERTIFICATION STATEMENT THAT SAMPLING WAS CONDUCTED AS PER THE PLAN.
3. ALL WRITTEN CORRESPONDENCE REQUIRED BY THIS PERMIT SHALL BE SUBMITTED BY RETURN RECEIPT CERTIFIED MAIL (OR SIMILAR SERVICE) TO THE APPROPRIATE DISTRICT OFFICE OF THE EPD ACCORDING TO THE SCHEDULE IN APPENDIX A OF THIS PERMIT. THE PERMITTEE SHALL RETAIN A COPY OF THE PROOF OF SUBMITTAL AT THE CONSTRUCTION SITE OR THE PROOF OF SUBMITTAL SHALL BE READILY AVAILABLE AT A DESIGNATED LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI.

EPD OFFICE:
COASTAL DISTRICT - BRUNSWICK
GEORGIA ENVIRONMENTAL PROTECTION DIVISION
400 COMMERCE CENTER DR.
BRUNSWICK, GA 31523
(912)264-7284

ECO.2 | YES 32. PROVIDE COMPLETE DETAILS FOR RETENTION OF RECORDS AS PER PART IV.F. OF THE PERMIT.*

RETENTION OF RECORDS

I. THE PRIMARY PERMITTEE SHALL RETAIN THE FOLLOWING RECORDS AT THE CONSTRUCTION SITE OR THE RECORDS SHALL BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOTICE OF TERMINATION IS SUBMITTED IN ACCORDANCE WITH PART VI.

- COPY OF ALL NOTICES OF INTENT SUBMITTED TO EPD.
- A COPY OF THE ESNPC PLAN REQUIRED IN PERMIT No. GAR 100001.
- THE DESIGN PROFESSIONALS REPORT OF THE THE RESULTS OF THE INSPECTION CONDUCTED IN ACCORDANCE WITH PART IV.A.5 IN PERMIT No. GAR 100001.
- A COPY OF ALL SAMPLING INFORMATION , RESULTS, AND REPORTS REQUIRED BY IN PERMIT No. GAR 100001.
- A COPY OF ALL INSPECTION REPORTS GENERATED IN ACCORDANCE WITH PART IV.D.4.a OF PERMIT No. GAR 100001.
- A COPY OF ALL VIOLATION SUMMARIES AND VIOLATION SUMMARY REPORTS GENERATED IN ACCORDANCE WITH PART III.D.2 IN PERMIT No. GAR 100001.
- DAILY RAINFALL INFORMATION COLLECTED IN ACCORDANCE WITH PART IV.D.4.a.(2). IN PERMIT No. GAR 100001.

2. COPIES OF ALL NOTICES OF INTENT, NOTICES OF TERMINATION, INSPECTION REPORTS, SAMPLING REPORTS (INCLUDING ALL CALIBRATION AND MAINTENANCE RECORDS AND ALL ORIGINAL STRIP CHART RECORDINGS FOR CONTINUOUS MONITORING INSTRUMENTATION) OR OTHER REPORTS REQUESTED BY THE EPD, EROSION, SEDIMENTATION AND POLLUTION CONTROL PLANS, RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT TO BE COVERED BY THIS PERMIT AND ALL OTHER RECORDS REQUIRED BY THIS PERMIT SHALL BE RETAINED BY THE PERMITTEE WHO EITHER PRODUCED OR USED IT FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE THAT THE NOTICE OF TERMINATION IS SUBMITTED IN ACCORDANCE WITH PART VI OF THE GAR100001. THESE RECORDS MUST BE MAINTAINED AT THE PERMITTEE'S PRIMARY PLACE OF BUSINESS OR AT A DESIGNATED ALTERNATIVE LOCATION ONCE THE CONSTRUCTION ACTIVITY HAS CEASED AT THE PERMITTED SITE. THIS PERIOD MAY BE EXTENDED BY REQUEST OF THE EPD AT ANY TIME UPON WRITTEN NOTIFICATION TO THE PERMITTEE.

GEORGIA REGISTERED PROFESSIONAL ENGINEER SCOTT K. MONSON 035222
GSWCC LEVEL 2 DESIGN PROFESSIONAL CERTIFICATION # 0000035222
EXPIRES: 6/22/2024

PERMIT SET - FOR REVIEW PURPOSES ONLY

NO.	REVISIONS	BY	DATE

THOMAS & HUTTON
50 Park of Commerce Way
Savannah, GA 31405 • 912.234.5300
www.thomasandhutton.com

NOVARE GROUP - PORT WENTWORTH SFR, LLC
PORT WENTWORTH, GEORGIA

SINGLE FAMILY RENTAL - PARCEL 4

ESPC NOTES

JOB NO:	J-28595.0004
DATE:	7/5/2022
DRAWN:	JBJ
DESIGNED:	SKM
REVIEWED:	SKM
APPROVED:	SKM
SCALE:	1" = 1'

ECO.2

Z:\28595\28595.0004\CAD\ESNPC\SHEETS\ESNPC NOTES.DWG - Oct 5, 2022 - 9:53 AM

21\28595\28595-0004\DRAWINGS\CONSTRUCTION PLANS\28595-0004 - EC-GT.DWG - Oct 5, 2022 - 9:53 AM

ECO.3 | YES

33. DESCRIPTION OF ANALYTICAL METHODS TO BE USED TO COLLECT AND ANALYZE THE SAMPLES FROM EACH LOCATION.*

STORM WATER SAMPLES ARE TO BE ANALYZED IN ACCORDANCE WITH METHODOLOGY AND TEST PROCEDURES ESTABLISHED BY 40 CFR PART 136 AND THE GUIDANCE DOCUMENT TITLED "NPDES STORM WATER SAMPLING GUIDANCE DOCUMENT EPA 833-B-92-001.

ECO.3 | YES

34. APPENDIX B RATIONALE FOR NTU VALUES AT ALL OUTFALL SAMPLING POINTS WHERE APPLICABLE.*

STORM WATER IS TO BE SAMPLED FOR NEPHELOMETRIC TURBIDITY UNITS (NTU) AT THE OUTFALL LOCATIONS. A DISCHARGE OF STORM WATER RUNOFF FROM DISTURBED AREAS WHERE BEST MANAGEMENT PRACTICES HAVE NOT BEEN PROPERLY DESIGNED, INSTALLED, AND MAINTAINED SHALL CONSTITUTE A SEPARATE VIOLATION FOR EACH DAY ON WHICH SUCH CONDITION RESULTS IN THE TURBIDITY OF THE DISCHARGE EXCEEDING 50, THE VALUE THAT WAS SELECTED FROM APPENDIX B IN PERMIT NO. GAR 100001. THE NTU IS BASED UPON THE DISTURBED ACREAGE OF 25.8 ACRES FOR THE PROJECT SITE, THE SURFACE WATER DRAINAGE AREA OF LESS THAN 4.99 SQUARE MILES AND RECEIVING WATER WHICH SUPPORTS WARM WATER FISHERIES. APPENDIX B WAS USED TO DETERMINE THE NTU ALLOWABLE AND DOWNSTREAM SAMPLING WILL BE PERFORMED FOR THIS PROJECT.

Appendix B
Nephelometric Turbidty Unit (NTU) Table
Warm Water (Supporting Warm Water Fisheries)

Surface Water Drainage Area, square miles

	0-4.99	5-9.99	10-24.99	25-49.99	50-99.99	100-249.99	250-499.99	500+
1.00-10	75	150	200	400	750	750	750	750
10.01-25	50	100	100	200	300	500	750	750
25.01-50	25	50	100	100	200	300	750	750
50.01-100	50	50	50	100	100	150	300	600
100.01+	50	50	50	50	50	100	200	100

EC1.1-1.3 | YES

35. DELINEATE ALL SAMPLING LOCATIONS, PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES INTO WHICH STORM WATER IS DISCHARGED.*

PLEASE SEE PLAN SHEETS FOR DELINEATION OF SAMPLING LOCATIONS, PERENNIAL, INTERMITTENT STREAMS AND OTHER WATER BODIES INTO WHICH STORM WATER IS DISCHARGED.

ECO.3 | YES

36. A DESCRIPTION OF APPROPRIATE CONTROLS AND MEASURES THAT WILL BE IMPLEMENTED AT THE CONSTRUCTION SITE INCLUDING (1) INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMP'S, (2) INTERMEDIATE GRADING AND DRAINAGE BMP'S, AND (3) FINAL BMP'S. **FOR CONSTRUCTION SITES WHERE THERE WILL BE NO MASS GRADING AND THE INITIAL PERIMETER CONTROL BMP'S, INTERMEDIATE GRADING AND DRAINAGE BMP'S, AND FINAL BMP'S ARE THE SAME, THE PLAN MAY COMBINE ALL OF THE BMP'S INTO A SINGLE PHASE.***

INITIAL PHASE - THE INITIAL PHASE OF THE ESⅭPC PLAN WILL INCLUDE THE INSTALLATION OF THE CONSTRUCTION EXIT, SILT FENCE AND TEMPORARY SEDIMENT TRAP. TYPE NS & S SILT FENCE WILL BE USED. DITCHES TO BE MAINTAINED DURING SITE CLEARING. DUST CONTROL AND MULCHING WILL BE IMPLEMENTED AS NECESSARY.

INTERMEDIATE PHASE - THE INTERMEDIATE PHASE WILL INCLUDE GRADING AND DRAINAGE. BMP'S WILL INCLUDE THE MAINTENANCE OF ALL SILT FENCE AND TEMPORARY SEDIMENT TRAP. DUST CONTROL, MULCHING, AND TEMPORARY SEEDING WILL BE IMPLEMENTED AS NECESSARY.

FINAL PHASE - THE FINAL GRADING AND REMOVAL OF TEMPORARY SEDIMENT TRAP. DRAINAGE BMP'S WILL INCLUDE THE MAINTENANCE OF ALL SILT FENCE. PERMANENT SEEDING WILL BE IMPLEMENTED FOR SITE STABILIZATION. ONCE THE SITE IS STABILIZED, ALL TEMPORARY BMP'S ARE TO BE REMOVED.

ALL | YES

37. GRAPHIC SCALE AND NORTH ARROW.
GRAPHIC SCALE AND NORTH ARROW ARE LOCATED ON EACH PLAN SHEET.

EC2.1-2.3 | YES

38. EXISTING AND PROPOSED CONTOUR LINES WITH CONTOUR LINES DRAWN AT AN INTERVAL IN ACCORDANCE WITH THE FOLLOWING:

MAP SCALE	GROUND SLOPE	CONTOUR INTERVALS, FT.
1 INCH = 100 FT OR LARGER SCALE	FLAT 0-2%	0.5 OR 1
	ROLLING 2-8%	1 OR 2
	STEEP 8%+	2, 5 OR 10

EXISTING AND PROPOSED CONTOUR LINES DRAWN AT AN INTERVAL OF 1' ARE SHOWN ON EACH PLAN SHEET. ONSITE ELEVATIONS ARE BASED ON NAVD 88 DATUM.

N/A

39. USE OF ALTERNATIVE BMP'S WHOSE PERFORMANCE HAS BEEN DOCUMENTED TO BE EQUIVALENT TO OR SUPERIOR TO CONVENTIONAL BMP'S AS CERTIFIED BY A DESIGN PROFESSIONAL (UNLESS DISAPPROVED BY EPD OR THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION). PLEASE REFER TO THE ALTERNATIVE BMP GUIDANCE DOCUMENT FOUND AT www.gaswcc.org. (PERMIT IV.D.3.a(4) PG 29)
NOT APPLICABLE FOR THIS PROJECT.

N/A

40. USE OF ALTERNATIVE BMP FOR APPLICATION TO THE EQUIVALENT BMP LIST. PLEASE REFER TO APPENDIX A-2 OF THE MANUAL FOR EROSION & SEDIMENT CONTROL IN GEORGIA 2016 EDITION.
NOT APPLICABLE FOR THIS PROJECT.

EC0.1-0.3 | YES

41. DELINEATION OF THE APPLICABLE 25-FOOT OR 50-FOOT UNDISTURBED BUFFERS ADJACENT TO STATE WATERS AND ANY ADDITIONAL BUFFERS REQUIRED BY THE LOCAL ISSUING AUTHORITY. CLEARLY NOTE AND DELINEATE ALL AREAS OF IMPACT. (PERMIT IV.D.2.e PG 27)
WETLAND BUFFER DELINEATED.

N/A | YES

42. DELINEATION OF ON-SITE WETLANDS AND ALL STATE WATERS LOCATED ON AND WITHIN 200 FEET OF THE PROJECT SITE.
WETLANDS DELINEATED.

ALL | YES

43. DELINEATION AND ACREAGE OF CONTRIBUTING DRAINAGE BASINS ON THE PROJECT SITE.

THEY ARE INCLUDED IN AN EXHIBIT AS PART OF THE ATTACHED STORM WATER REPORT.

ATTACHED | YES

44. PROVIDE HYDROLOGY STUDY AND MAPS OF DRAINAGE BASINS FOR BOTH THE PRE- AND POST-DEVELOPMENT CONDITIONS.*
PLEASE FIND ATTACHED WITH THIS PLAN A HYDROLOGY STUDY AND MAPS OF DRAINAGE BASINS FOR BOTH PRE- AND POST-DEVELOPED CONDITIONS ENTITLED STORMWATER REPORT.

ECO.3 | YES

45. AN ESTIMATE OF THE RUNOFF COEFFICIENT OR PEAK DISCHARGE FLOW OF THE SITE PRIOR TO AND AFTER CONSTRUCTION ACTIVITIES ARE COMPLETED.
RUNOFF COEFFICIENT: PRE-CONSTRUCTION CN = 65
POST-CONSTRUCTION CN = 79

EC2.1-3.1 | YES

46. STORM-DRAIN PIPE AND WEIR VELOCITIES WITH APPROPRIATE OUTLET PROTECTION TO ACCOMMODATE DISCHARGES WITHOUT EROSION. IDENTIFY/DELINEATE ALL STORM WATER DISCHARGE POINTS.

THE STORMWATER DISCHARGE POINTS ARE INDICATED ON THE PLANS.

ECO.3 | YES

47. SOIL SERIES FOR THE PROJECT SITE AND THEIR DELINEATION.

SOILS LISTED HERE ARE DELINEATED ON THE EROSION CONTROL SHEETS.
Cc-Cape Fear, Oj-Ocilla, Ok-Ogeechee, and Pn-Pooler.

EC1.1-1.3 | YES

48. THE LIMITS OF DISTURBANCE FOR EACH PHASE OF CONSTRUCTION.

PLEASE SEE THE PLAN FOR THE DELINEATION OF THE LIMITS OF DISTURBANCE. THEY ARE THE SAME FOR ALL PHASES OF CONSTRUCTION.

ECO.3 | YES

49. PROVIDE A MINIMUM OF 67 CUBIC YARDS OF SEDIMENT STORAGE PER ACRE DRAINED USING A TEMPORARY SEDIMENT BASIN, RETROFITTED DETENTION POND, AND/OR EXCAVATED INLET SEDIMENT TRAPS FOR EACH COMMON DRAINAGE LOCATION. SEDIMENT STORAGE VOLUME MUST BE IN PLACE PRIOR TO AND DURING ALL LAND DISTURBANCE ACTIVITIES UNTIL FINAL STABILIZATION OF THE SITE HAS BEEN ACHIEVED. A WRITTEN JUSTIFICATION EXPLAINING THE DECISION TO USE EQUIVALENT CONTROLS WHEN A SEDIMENT BASIN IS NOT ATTAINABLE MUST BE INCLUDED IN THE PLAN FOR EACH COMMON DRAINAGE LOCATION IN WHICH A SEDIMENT BASIN IS NOT PROVIDED. A WRITTEN JUSTIFICATION AS TO WHY 67 CUBIC YARDS OF STORAGE IS NOT ATTAINABLE MUST ALSO BE GIVEN. WORKSHEETS FROM THE MANUAL MUST BE INCLUDED FOR STRUCTURAL BMPs AND ALL CALCULATIONS USED BY THE STORAGE DESIGN PROFESSIONAL TO OBTAIN THE REQUIRED SEDIMENT WHEN USING EQUIVALENT CONTROLS. WHEN DISCHARGING FROM SEDIMENT BASINS AND IMPOUNDMENTS, PERMITEES ARE REQUIRED TO UTILIZE OUTLET STRUCTURES THAT WITHDRAW WATER FROM THE SURFACE, UNLESS INFEASIBLE. IF OUTLET STRUCTURES THAT WITHDRAW WATER FROM THE SURFACE ARE NOT FEASIBLE, A WRITTEN JUSTIFICATION EXPLAINING THIS DECISION MUST BE INCLUDED IN THE PLAN.

SEDIMENT STORAGE - THE PERMIT REQUIRES A MINIMUM OF 67 CUBIC YARDS OF SEDIMENT STORAGE PER ACRE DRAINED.

1

THE SEDIMENT STORAGE REQUIREMENT WILL BE ACHIEVED BY UTILIZING SILT FENCE AND PERMANENT DETENTION PONDS AS TEMPORARY SEDIMENT TRAPS.

REQUIRED ON SITE SEDIMENT STORAGE = 22.6 AC x 67 CY/AC = 1,515 CY

POND NO.1 (MAX 5 ACRE DA)
1.22 AC X 0.5' DEPTH = 984 CY

POND NO.2 (MAX 5 ACRE DA)
1.32 X 0.5' DEPTH = 1,065 CY

SILT FENCE 1 (260 LF @ 7.5 CF OF STORAGE/LF)
1,945 CF X 0.037 CY/CF = 72 CY

SILT FENCE 2 (750 LF @ 7.5 CF OF STORAGE/LF)
5,625 CF X 0.037 CY/CF = 208 CY

SILT FENCE 3 (600 LF @ 7.5 CF OF STORAGE/LF)
4,500 CF X 0.037 CY/CF = 167 CY

SILT FENCE 4 (540 LF @ 7.5 CF OF STORAGE/LF)
4,050 CF X 0.037 CY/CF = 150 CY

984 CY + 1,065 CY + 72 CY + 208 CY + 167 CY + 150 CY= 2,646 CY
2,646 CY EXCEEDS THE REQUIRED STORAGE OF 1,515 CY

EC1.1-1.3 | YES

50. LOCATION OF BEST MANAGEMENT PRACTICES THAT ARE CONSISTENT WITH AND NO LESS STRINGENT THAN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA. USE UNIFORM CODING SYMBOLS FROM THE MANUAL, CHAPTER 6, WITH LEGEND.

PLEASE SEE THE PLAN SHEETS FOR THE LOCATION OF BEST MANAGEMENT PRACTICES THAT ARE CONSISTENT WITH AND NO LESS STRINGENT THAN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA USING THE UNIFORM CODING SYMBOLS FROM THE MANUAL, CHAPTER 6 WITH ACCOMPANYING LEGEND.

EC5.1-5.2 | YES

51. PROVIDE DETAILED DRAWINGS FOR ALL STRUCTURAL PRACTICES. SPECIFICATIONS MUST, AT A MINIMUM, MEET THE GUIDELINES SET FORTH IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.

PLEASE SEE THE DETAIL SHEET FOR DETAILED DRAWINGS FOR ALL STRUCTURAL PRACTICES WITH SPECIFICATIONS MEETING THE GUIDELINES SET FORTH IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.

EC1.1-1.3 | YES

52. PROVIDE VEGETATIVE PLAN. NOTING ALL TEMPORARY AND PERMANENT VEGETATIVE PRACTICES, INCLUDE SPECIES, PLANTING DATES AND SEEDING, FERTILIZER, LIME AND MULCHING RATES. VEGETATIVE PLAN SHALL BE SITE SPECIFIC FOR APPROPRIATE TIME OF YEAR THAT SEEDING WILL TAKE PLACE AND FOR APPROPRIATE GEOGRAPHIC REGION OF GEORGIA.

PLEASE SEE THE PLAN AND DETAIL SHEETS FOR THE VEGETATIVE PLAN NOTING ALL TEMPORARY AND PERMANENT VEGETATIVE PRACTICES INCLUDING SPECIES, PLANTING DATES AND SEEDING, FERTILIZER, LIME AND MULCHING RATES. THIS PLAN IS SPECIFIC TO THE SITE AND APPROPRIATE FOR TIME OF YEAR THAT SEEDING WILL TAKE PLACE AND FOR THE APPROPRIATE GEOGRAPHIC REGION OF GEORGIA.

EFFECTIVE JANUARY 1, 2022

LAND DISTURBING ACTIVITIES PLAN

GENERAL DESIGN PRINCIPLES
FOR AN EROSION, SEDIMENTATION AND POLLUTION CONTROL PROGRAM TO BE EFFECTIVE, IT IS IMPERATIVE THAT PROVISIONS FOR SEDIMENT CONTROL MEASURES BE MADE IN THE PLANNING STAGE. THESE PLANNED MEASURES WHEN CONSCIENTIOUSLY AND EXPEDITIOUSLY APPLIED DURING CONSTRUCTION, WILL RESULT IN ORDERLY DEVELOPMENT WITHOUT ADVERSE ENVIRONMENTAL DEGRADATION. THE FOLLOWING KEY PRINCIPALS SHALL BE UTILIZED, TO THE MAXIMUM EXTENT POSSIBLE, IN ALL PLANNING.

I. FIT THE ACTIVITY TO THE TOPOGRAPHY AND SOILS.

DETAILED PLANNING SHOULD BE EMPLOYED TO ASSURE THE ROADWAYS, BUILDINGS AND OTHER PERMANENT FEATURES OF THE ACTIVITY CONFORM TO THE NATURAL CHARACTERISTICS OF THE SITE. LARGE GRADED AREAS SHOULD BE LOCATED ON THE MOST LEVEL PORTION OF THE SITE. AREAS SUBJECT TO FLOODING SHOULD BE AVOIDED. AREAS OF STEEP SLOPES, ERODIBLE SOILS, AND SOILS WITH SEVERE LIMITATIONS FOR THE INTENDED USES SHOULD NOT BE UTILIZED WITHOUT OVERCOMING THE LIMITATIONS THROUGH SOUND ENGINEERING PRACTICES. EROSION CONTROL, DEVELOPMENT AND MAINTENANCE COSTS CAN BE MINIMIZED IF A SITE IS SELECTED FOR A SPECIFIC ACTIVITY.

2. DISTURBED AREA AND DURATION OF EXPOSURE TO EROSION ELEMENTS SHOULD BE MINIMIZED.

CLEARING OF NATURAL VEGETATION SHOULD BE LIMITED TO ONLY THOSE AREAS OF THE SITE TO BE DEVELOPED AT A GIVEN TIME. NATURAL VEGETATION SHOULD BE RETAINED, PROTECTED AND SUPPLEMENTED WITH CONSTRUCTION SCHEDULING EMPLOYED TO LIMIT THE DURATION OF SOIL EXPOSURE.

3. STABILIZE DISTURBED AREAS IMMEDIATELY.

PERMANENT STRUCTURES, TEMPORARY OR PERMANENT VEGETATION, AND MULCH, OR A COMBINATION OF THESE MEASURES, SHOULD BE EMPLOYED AS QUICKLY AS POSSIBLE AFTER THE LAND IS DISTURBED. TEMPORARY VEGETATION AND MULCHES CAN BE MOST EFFECTIVE ON AREAS WHERE IT IS NOT PRACTICAL TO ESTABLISH PERMANENT VEGETATION. THESE TEMPORARY MEASURES SHOULD BE EMPLOYED IMMEDIATELY AFTER ROUGH GRADING IS COMPLETED IF A DELAY IS ANTICIPATED ON OBTAINING FINISHED GRADE.

THE FINISHED SLOPE OF A CUT OR FILL SHOULD BE STABLE AND EASE OF MAINTENANCE CONSIDERED IN THE DESIGN. STABILIZE ALL ROADWAYS, PARKING AREAS, AND PAVED AREAS WITH THE GRAVEL SUB-BASE, TEMPORARY VEGETATION OR MULCH.

4. RETAIN OR ACCOMMODATE RUNOFF.

RUNOFF FROM THE DEVELOPMENT SHOULD BE SAFELY CONVEYED TO A STABLE OUTLET USING STORM DRAINS, DIVERSIONS, STABLE WATERWAYS OR SIMILAR CONSERVATION MEASURES. CONSIDERATION SHOULD ALSO BE GIVEN TO THE INSTALLATION OF STORM WATER RETENTION STRUCTURES TO PREVENT FLOODING AND DAMAGE TO DOWNSTREAM FACILITIES RESULTING FROM INCREASED RUNOFF FROM THE SITE. TEMPORARY OR PERMANENT FACILITIES FOR CONVEYANCE OF STORM WATER SHOULD BE DESIGNED TO WITHSTAND THE VELOCITIES OF PROJECTED PEAK DISCHARGES. THESE FACILITIES SHOULD BE IN OPERATION AS SOON AS POSSIBLE AFTER THE START OF CONSTRUCTION.

5. RETAIN SEDIMENT.

SEDIMENT BASINS, SEDIMENT BARRIERS AND RELATED STRUCTURES SHOULD BE INSTALLED TO FILTER OR TRAP SEDIMENT ON THE SITE TO BE DISTURBED. THE MOST EFFECTIVE METHOD OF CONTROLLING SEDIMENT, HOWEVER, IS TO CONTROL EROSION AT ITS SOURCE. SEDIMENT RETENTION STRUCTURES SHOULD BE PLANNED TO RETAIN SEDIMENT WHEN EROSION CONTROL METHODS ARE NOT PRACTICAL, ARE INSUFFICIENT, OR IN THE PROCESS OF BEING INSTALLED, OR HAVE FAILED DUE TO SOME UNFORESEEN FACTOR.

6. DO NOT ENCROACH UPON WATERCOURSES.

PERMANENT BUILDINGS SHOULD NOT BE SUBJECTED TO FLOODING, SEDIMENT DAMAGE OR EROSION HAZARDS. EARTH FILLS SHOULD NOT BE CONSTRUCTED IN FLOOD-PRONE AREAS SO AS TO ADVERSELY OBSTRUCT WATER FLOWS. WHEN IT IS NECESSARY TO SPAN A FLOOD PRONE AREA OR WATERCOURSE, BRIDGE OR CULVERT OPENINGS SHOULD BE SIZED TO PERMIT PASSAGE OF PEAK DISCHARGES WITHOUT CAUSING UNDUE RESTRICTIONS IN WATER FLOWS OR WITHOUT CREATING EXCESSIVE DOWNSTREAM VELOCITIES. USES OF FLOOD PRONE AREAS SHOULD BE LIMITED TO ACTIVITIES WHICH WOULD NOT SUFFER EXCESSIVE DAMAGES FROM FLOODING, SCOUR, AND SEDIMENT DAMAGES. TEMPORARY BRIDGES OR CULVERTS SHOULD BE EMPLOYED WHEN CONSTRUCTION EQUIPMENT IS REQUIRED TO CROSS NATURAL OR CONSTRUCTED CHANNELS.

STANDARDS AND SPECIFICATIONS

ALL DESIGNS WILL CONFORM TO AND WORK WILL BE PERFORMED IN ACCORDANCE WITH THE PUBLICATION ENTITLED "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA", ISSUED 2000 AND THE ATTACHED DETAILS.

MAINTENANCE PROGRAM

EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE. ALL DRAINAGE SWALES, POCKETS, DEPRESSIONS, FLOW LINES AND OUTLET DITCHES SHALL DRAIN EFFECTIVELY AT ALL TIMES. SETTLEMENT OR WASHING THAT MAY OCCUR SHALL BE REPAIRED BY THE CONTRACTOR. SEDIMENT SHALL BE REMOVED ONCE IT HAS ACCUMULATED TO ONE-HALF THE ORIGINAL HEIGHT OF THE BARRIER. THE SEDIMENT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN AN EFFECTIVE BARRIER. MAINTAIN THE CONSTRUCTION EXIT IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE SITE. THIS MAY REQUIRE PERIODIC TOP-DRESSING WITH 2-INCH STONE. IMMEDIATELY REMOVE ALL OBJECTIONABLE MATERIALS SPILLED, WASHED OR TRACKED ONTO PUBLIC ROADWAYS. RE-SEED AND MULCH AREAS WHERE SEEDLING EMERGENCE IS POOR OR WHERE EROSION OCCURS. PROTECT FROM TRAFFIC AS MUCH AS POSSIBLE. INSPECT ALL MULCHES PERIODICALLY AND AFTER RAINSTORMS TO CHECK FOR RILL EROSION, DISLOCATION OR FAILURE. IF WASHOUT OCCURS REPAIR THE SLOPE GRADE, RE-SEED AND RE-INSTALL MULCH. INSPECT RIP-RAP OUTLET STRUCTURES AFTER HEAVY RAINS TO DETERMINE IF ANY EROSION IN AND AROUND THE RIP-RAP HAS TAKEN PLACE OR IF STONES HAVE BEEN DISLODGED. FOLLOW THE CONSTRUCTION SEQUENCE THROUGHOUT THE PROJECT DEVELOPMENT. WHEN CHANGES IN CONSTRUCTION ACTIVITIES ARE NEEDED AMEND THE SEQUENCE SCHEDULE IN ADVANCE TO MAINTAIN MANAGEMENT CONTROL. ORDERLY MODIFICATION ASSURES COORDINATION OF CONSTRUCTION AND EROSION CONTROL PRACTICES TO MINIMIZE EROSION AND SEDIMENTATION PROBLEMS. IF MAJOR CHANGES ARE NECESSARY, SEND A COPY OF THE MODIFIED SCHEDULE TO THE LOCAL SEDIMENT CONTROL AGENCY. SEDIMENT AND EROSION CONTROL MEASURES WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE DISTURBED AREAS ARE STABILIZED.

EROSION, SEDIMENTATION AND POLLUTION CONTROL STRUCTURAL PRACTICES

CONSTRUCTION EXIT

A STABILIZED STONE PAD LOCATED AT ANY POINT WHERE TRAFFIC WILL BE LEAVING A CONSTRUCTION SITE TO A PUBLIC RIGHT-OF-WAY, STREET, ALLEY, SIDEWALK OR PARKING AREA. THE PURPOSE OF THIS MEASURE IS TO REDUCE OR ELIMINATE THE TRANSPORT OF MUD FROM THE CONSTRUCTION AREAS BY MOTOR VEHICLES OR BY RUNOFF.

SEDIMENT BARRIER

TEMPORARY STRUCTURES TYPICALLY CONSTRUCTED OF SILT FENCE SUPPORTED BY STEEL OR WOOD POSTS. OTHER TYPES OF BARRIERS MAY INCLUDE SANDBAGS, STRAW BALES, BRUSH PILES AND OTHER FILTERING MATERIAL. THE PURPOSE OF THIS MEASURE IS TO PREVENT SEDIMENT CARRIED BY SHEET FLOW FROM LEAVING THE SITE AND ENTERING NATURAL DRAINAGE WAYS OR STORM DRAINAGE SYSTEMS BY SLOWING STORM WATER RUNOFF AND CAUSING THE DEPOSITION AT THE STRUCTURE.

VEGETATIVE MEASURES - TREE PROTECTION

TREE PROTECTION ZONES SHALL BE ESTABLISHED AND MAINTAINED FOR EACH TREE PRESERVED ON THE SITE. THE MINIMUM TREE PROTECTION ZONE, EXCEPT FOR PALM-TYPE TREES, SHALL BE AN AREA CENTERED ON EACH TREE WITH A RADIUS IN FEET EQUAL TO THE TREE DIAMETER IN INCHES MEASURED AT BREAST HEIGHT. PALM-TYPE TREES SHALL HAVE A MINIMUM TREE PROTECTION ZONE DIAMETER EQUAL TO THE DIAMETER OF THE LEAF CROWN. THE MINIMUM TREE PROTECTION DEVICE SHALL BE A FENCE CONSTRUCTED AT AND AROUND THE PERIMETER OF THE TREE PROTECTION ZONE AND CONSTRUCTED OF 2"X4"X6'-0" POSTS WITH ONE 2"X4"X12'-0" RAIL NAILED TO THE TOP OF EACH ADJACENT POST. THE MINIMUM RAIL HEIGHT SHALL BE FOUR (4) FEET. PREFABRICATED, REUSABLE FENCING MATERIALS MAY BE USED UPON APPROVAL BY THE CITY OF SAVANNAH.
TREE PROTECTION SHALL BEGIN AT THE START OF CONSTRUCTION AND AS ENCOUNTERED DURING THE CLEARING PROCESS AND SHALL REMAIN UNTIL FINAL INSPECTION OF THE CLEARING HAS BEEN SUCCESSFULLY COMPLETED. BROKEN OR DISLODGE TREE PROTECTION DEVICES SHALL BE IMMEDIATELY REPAIRED. NO VEHICLES SHALL BE PARKED, CONSTRUCTION MATERIALS STORED OR SUBSTANCES SPILLED, DISPOSED OF OR PLACED WITHIN THE TREE PROTECTION ZONES AT ANY TIME.

SMALLER TREES SHALL BE REMOVED FIRST TO ALLOW LARGER TREES TO BE FELLED WITH GREATER CARE. TREES ARE TO BE FELLED IN A DIRECTION AWAY FROM TREES THAT ARE TO REMAIN. CONSTRUCTION OPERATIONS SHALL BE CONDUCTED SO AS TO PREVENT DAMAGE BY FALLING TREES TO OTHER TREES, FOLIAGE AND PLANT MATERIAL LEFT STANDING; TO EXISTING STRUCTURES AND INSTALLATIONS AND THOSE UNDER CONSTRUCTION; TO PROPERTY EXISTING OUTSIDE THE AREAS TO BE CLEARED AND SO AS TO PROVIDE FOR THE SAFETY OF EMPLOYEES AND OTHERS. ALL STUMP HOLES MUST BE FILLED USING CLEAN FILL DIRT PLACED IN ONE-FOOT LIFTS AND ADEQUATELY COMPACTED.

TREES DESIGNATED TO REMAIN STANDING WITHIN THE CLEARED AREAS SHALL BE TRIMMED OF DEAD BRANCHES 1-1/2" IN DIAMETER OR GREATER. LIMBS AND BRANCHES TO BE TRIMMED SHALL BE NEATLY CUT CLOSE TO THE TRUNK OF THE TREE OR MAIN BRANCH. CUTS OF MORE THAN 1-1/2" IN DIAMETER MADE THUSLY SHALL BE PAINTED WITH AN APPROVED TREE WOUND PAINT MANUFACTURED FOR THIS SPECIFIC PURPOSE. IN THE CASE OF IMPORTANT, LARGE TREES WHERE A SMALL AMOUNT OF CAVITY WORK WOULD PROLONG THE LIFE OF THE TREE, SUCH WORK SHALL BE DONE. THE SERVICES OF A QUALIFIED TREE SURGEON ARE RECOMMENDED FOR THIS PROCEDURE.

ALL CLEARED MATERIAL SHALL BE REMOVED FROM THE SITE OR BURNED. DISPOSAL BY BURNING MAY ONLY BE DONE WITH THE APPROVAL OF CHATHAM COUNTY. MATERIAL DISPOSED OF BY BURNING SHALL BE BURNED IN A MANNER THAT WILL AVOID ALL HAZARDS SUCH AS DAMAGE TO EXISTING STRUCTURES, CONSTRUCTION IN PROGRESS, TREES TO BE PRESERVED AND EXISTING VEGETATION.

DISTURBED AREA STABILIZATION WITH TEMPORARY SEEDINGS

ESTABLISHING TEMPORARY VEGETATIVE COVER WITH FAST-GROWING SEEDINGS FOR SEASONAL PROTECTION ON DISTURBED OR DENUDED AREAS. THE PURPOSE OF THIS MEASURE IS:
- REDUCTION OF EROSION, SEDIMENT AND RUNOFF DAMAGES TO DOWNSTREAM RESOURCES
- IMPROVEMENT OF WILDLIFE HABITATS
- IMPROVED AESTHETICS
- PROTECTION OF SOIL SURFACES FROM EROSION
- IMPROVED TILTH AND ADDITIONAL ORGANIC MATTER FOR PERMANENT PLANTINGS

DISTURBED AREA STABILIZATION WITH PERMANENT VEGETATION

PLANTING PERENNIAL VEGETATION SUCH AS TREES, SHRUBS, VINES, GRASSES OR LEGUMES ON EXPOSED AREAS FOR FINAL PERMANENT STABILIZATION. THE PURPOSE OF THIS MEASURE IS SOIL STABILIZATION, DAMAGE REDUCTION FROM SEDIMENT AND RUNOFF TO DOWNSTREAM AREAS AND IMPROVEMENT OF WILDLIFE HABITAT AND VISUAL RESOURCES.

TEMPORARY AND PERMANENT VEGETATIVE PRACTICE SHALL BE AS FOLLOWS:

SEED SPECIES	APPLICATION/ACRE	PLANTING DATE
BERMUDA (HULLED) (PERMANENT)	10 LBS./ACRE	MARCH 1 - SEPT. 1
BERMUDA (UNHULLED)	10 LBS./ACRE	SEPT. 1 - MARCH 1
ABRUZZI RYE (TEMPORARY)	50 LBS./ACRE	

FERTILIZER SHALL BE APPLIED AT A RATE OF 1,500 LBS. PER ACRE.
LIME SHALL BE APPLIED AT A RATE OF 1,500 LBS. PER ACRE.
MULCHING SHALL BE SPREAD AT A RATE OF 2.0 TONS PER ACRE.

WEEKLY INSPECTION OF THE GRASS COVER SHALL BE PERFORMED TO IDENTIFY AREAS REQUIRING RE-ESTABLISHMENT OF GRASS.

DUST CONTROL ON DISTURBED AREAS

CONTROLLING SURFACE AND AIR MOVEMENT OF DUST ON CONSTRUCTION SITE AND HAUL ROUTES. THE PURPOSE OF THIS MEASURE IS REDUCTION OF AIRBORNE SUBSTANCES WHICH MAY BE HARMFUL OR INJURIOUS TO HUMAN HEALTH, WELFARE OR SAFETY OR MAY BE HARMFUL TO ANIMAL OR PLANT LIFE.

GENERAL NOTES

1. THIS PLAN WAS PREPARED AS REQUIRED BY NPDES GENERAL PERMIT No. 100001. THESE PLAN SHEETS AND ALL REQUIREMENTS OF THE GENERAL PERMIT AS WELL AS LOCAL, STATE AND FEDERAL REGULATIONS OR LAWS APPLY REGARDLESS OF SPECIFIC INCLUSIONS IN THIS PLAN.
2. THE CONTRACTOR SHALL VERIFY THE SIZE AND LOCATION OF ALL EXISTING UTILITIES. EXISTING UTILITIES ARE ALL UTILITIES ON THE PROJECT IN AN ORIGINAL, RELOCATED OR NEWLY INSTALLED POSITION. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THE COST OF REPAIRS TO DAMAGED UNDERGROUND OR OVERHEAD FACILITIES EVEN IF THE UTILITY IS NOT SHOWN ON THE SITE DEVELOPMENT PLANS. THE CONTRACTOR SHALL CONTACT THE UTILITIES PROTECTION CENTER AT 1-800-282-7411 TO COORDINATE MARKING OF EXISTING UTILITY LINES A MAXIMUM OF 72 HOURS PRIOR TO COMMENCEMENT OF ANY WORK.
3. CONTRACTOR SHALL FLUSH ALL INLETS AND PIPES AT THE COMPLETION OF CONSTRUCTION TO REMOVE SILT AND DEBRIS. CLEANING AND FLUSHING OF EXISTING AND PROPOSED INLETS AND PIPES SHALL BE CONSIDERED PART OF THE PIPE COST FOR THE PROJECT. SCHEDULE CONSTRUCTION ACTIVITIES TO MINIMIZE EXPOSED AREAS AND DURATION OF EXPOSURE. WHEN SCHEDULING, TAKE INTO ACCOUNT THE SEASON AND THE WEATHER FORECASTS.
4. EROSION CONTROL MEASURES ARE THE MINIMUM REQUIRED. THE CONTRACTOR SHALL PROVIDE ADDITIONAL CONTROL MEASURES AS DICTATED BY ACTUAL FIELD CONDITIONS AT THE TIME OF CONSTRUCTION IN ORDER TO PREVENT EROSION AND CONTROL SEDIMENT. THE CONTRACTOR SHALL BE FAMILIAR WITH THE "NARRATIVE DESCRIPTION OF DISTURBING ACTIVITIES" REPORT THAT ACCOMPANIES THIS PROJECT AND HAVE A CLEAR UNDERSTANDING OF THE CONCEPTS, APPLICATIONS, STANDARDS AND SPECIFICATIONS OF THE BEST MANAGEMENT PRACTICES LISTED IN SAID DOCUMENT. EROSION AND SEDIMENT CONTROL MEASURES WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE ENTIRE PROJECT IS TERMINATED OR SUSPENDED FOR AN INDEFINITE LENGTH OF TIME. ALL DISTURBED AREAS SHALL BE PLANTED WITH PERMANENT VEGETATION.
5. THE DATA AND ALL OTHER INFORMATION SHOWN ON THESE PLANS OR IN ANY WAY INDICATED BY DRAWINGS, NOTES OR IN ANY OTHER FASHION IS BASED UPON FIELD INVESTIGATIONS AND IS BELIEVED TO BE INDICATIVE OF ACTUAL CONDITIONS. HOWEVER, THE SAME IS SHOWN AS INFORMATION ONLY, IS NOT GUARANTEED AND DOES NOT BIND THOMAS AND HUTTON OR THE OWNER IN ANY WAY.
6. CONTRACTOR SHALL MAINTAIN SITE ON A DAILY BASIS TO PROVIDE FOR POSITIVE DRAINAGE. CONTRACTO

EROSION CONTROL LEGEND

DESCRIPTION	PLAN SYMBOL
DISTURBED AREA STABILIZATION (MULCHING ONLY)	Ds1
DUST CONTROL	Du
CONSTRUCTION EXIT	Co
SILT FENCE - TYPE NS	Sd1-NS
SILT FENCE - TYPE S	Sd1-S
LIMIT OF DISTURBANCE	LOD

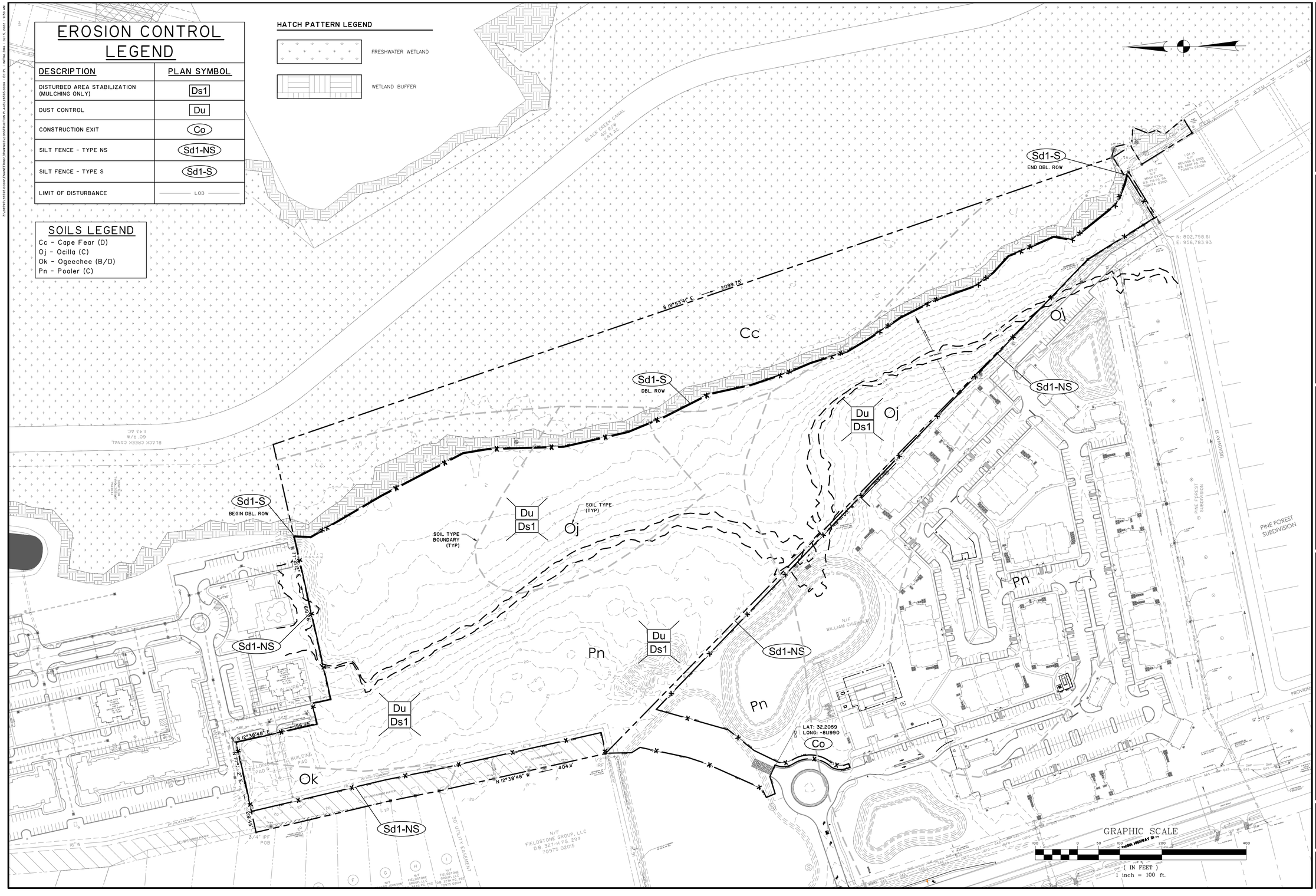
SOILS LEGEND

Cc - Cape Fear (D)
Oj - Ocilla (C)
Ok - Ogeechee (B/D)
Pn - Pooler (C)

HATCH PATTERN LEGEND

FRESHWATER WETLAND

WETLAND BUFFER



GEORGIA REGISTERED PROFESSIONAL LANDSCAPE ARCHITECT SCOTT K. MOORE

GSWCC LEVEL L2
DESIGN PROFESSIONAL
CERTIFICATION #
COORDINATOR
EXPIRES: 6/22/2024

PERMIT SET - FOR REVIEW PURPOSES ONLY

NO.	REVISIONS	BY	DATE

THOMAS & HUTTON
50 Park of Commerce Way
Savannah, GA 31405 • 912.234.5300
www.thomasandhutton.com

NOVARE GROUP - PORT WENTWORTH SFR, LLC
PORT WENTWORTH, GEORGIA

SINGLE FAMILY RENTAL - PARCEL 4

ESPC PLAN - INITIAL

JOB NO:	J-28595.0004
DATE:	7/5/2022
DRAWN:	JBJ
DESIGNED:	SKM
REVIEWED:	SKM
APPROVED:	SKM
SCALE:	1" = 100'

EC1.1

PERMIT SET - FOR REVIEW PURPOSES ONLY

HATCH PATTERN LEGEND

FRESHWATER WETLAND

WETLAND BUFFER

EROSION CONTROL LEGEND

DESCRIPTION	PLAN SYMBOL
DISTURBED AREA STABILIZATION (TEMPORARY SEEDING)	Ds2
DUST CONTROL	Du
CONSTRUCTION EXIT	Co
SILT FENCE - TYPE NS	Sd1-NS
SILT FENCE - TYPE S	Sd1-S
TEMPORARY SEDIMENT TRAP	Sd4
LIMIT OF DISTURBANCE	LOD

SOILS LEGEND

Cc – Cape Fear (D)
Oj – Ocilla (C)
Ok – Ogeechee (B/D)
Pn – Pooler (C)

BLACK CREEK CANAL
60' R/W
11.43 AC

NPDES STORMWATER MONITORING STATION NO.1

NPDES STORMWATER MONITORING STATION NO.2

DRY DETENTION POND NO.1

DRY DETENTION POND NO.2

SOIL TYPE BOUNDARY (TYP)

SOIL TYPE (TYP)

S 18°53'41" E — 2099.75'

S 12°38'48" E — 196.35'

N 72°12'12" E — 889.35'

N 72°12'12" E — 229.45'

N 12°38'48" W — 404.11'

3/4" IPF POB

1/2" IRF

LAT: 32.2059
LONG: -81.1990

N: 802,758.61
E: 956,783.93

N/F FIELDSTONE GROUP, LLC D.B. 327-H PG. 294 70975 0201

N/F WILLIAM CHISHOLM

PINE FOREST SUBDIVISION

30' UTILITY EASEMENT

GRAPHIC SCALE
0 50 100 200 400
(IN FEET)
1 inch = 100 ft.

GSWCC LEVEL 2 DESIGN PROFESSIONAL CERTIFICATION # COMMERCIAL EXPIRES: 6/22/2024

NO.	REVISIONS	BY	DATE
1	REVISED PER EPD COMMENTS	SGJ	8/22/22

THOMAS & HUTTON
50 Park of Commerce Way
Savannah, GA 31405 • 912.234.5300
www.thomasandhutton.com

NOVARE GROUP - PORT WENTWORTH SFR, LLC
PORT WENTWORTH, GEORGIA

SINGLE FAMILY RENTAL - PARCEL 4

ESPC PLAN - INTERMEDIATE

JOB NO:	J-28595.0004
DATE:	7/5/2022
DRAWN:	JBJ
DESIGNED:	SKM
REVIEWED:	SKM
APPROVED:	SKM
SCALE:	1" = 100'

EC2.1

Z:\28595\28595.0004\ENGINEERING\28459SECONSTRUCTION PLANS\28595-0004 - ECPL - FINAL.DWG - OCT 5, 2022 - 9:52 AM

HATCH PATTERN LEGEND

FRESHWATER WETLAND

WETLAND BUFFER

EROSION CONTROL LEGEND

DESCRIPTION	PLAN SYMBOL
DISTURBED AREA STABILIZATION (PERMANENT VEGETATION)	Ds3
DUST CONTROL	Du
CONSTRUCTION EXIT	Co
SILT FENCE - TYPE NS	Sd1-NS
SILT FENCE - TYPE S	Sd1-S
TEMPORARY SEDIMENT TRAP	Sd4
LIMIT OF DISTURBANCE	

SOILS LEGEND

Cc – Cape Fear (D)
Oj – Ocilla (C)
Ok – Ogeechee (B/D)
Pn – Pooler (C)

BLACK CREEK CANAL
60' R/W
11.43 AC

S 18°53'41" E 2099.75'

NPDES STORMWATER MONITORING STATION NO.1

NPDES STORMWATER MONITORING STATION NO.2

DRY DETENTION POND NO.1

DRY DETENTION POND NO.2

SOIL TYPE BOUNDARY (TYP)

Sd1-S END DBL. ROW

Sd1-S DBL. ROW

Sd1-S BEGIN DBL. ROW

Sd1-NS

Sd2-P

Sd2-F

Sd4

St

Du

Ds3

Co

N: 802,758.61
E: 956,783.93

LAT: 32.2059
LONG: -81.1990

N 12°38'48" W 404.11'

S 12°38'48" E 269.35'

N 77°21'12" E 269.35'

N 77°21'12" W 269.35'

3/4" IPF
POB

1/2" IRF

30' UTILITY EASEMENT

N/F FIELDSTONE GROUP, LLC D.B. 327-H PG. 294 70975 0205

N/F WILLIAM GUSHOUR

PINE FOREST SUBDIVISION

BREADWAY ST

GRAPHIC SCALE
(IN FEET)
1 inch = 100 ft.

GEORGIA REGISTERED PROFESSIONAL ENGINEER SCOTT K. MONROE

GSWCC LEVEL L2
DESIGN PROFESSIONAL
CERTIFICATION #
COORDINATED BY
EXPIRES: 6/22/2024

NO.	REVISIONS	BY	DATE

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50 Park of Commerce Way
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NOVARE GROUP - PORT WENTWORTH SFR, LLC
PORT WENTWORTH, GEORGIA

SINGLE FAMILY RENTAL - PARCEL 4

ESPC PLAN - FINAL

JOB NO:	J-28595.0004
DATE:	7/5/2022
DRAWN:	JBJ
DESIGNED:	SKM
REVIEWED:	SKM
APPROVED:	SKM
SCALE:	1" = 100'

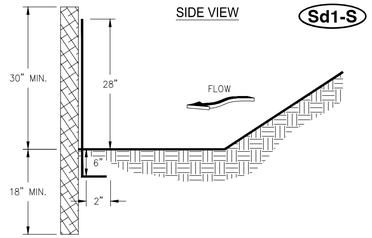
EC3.1

Z:\28595\28595-0004\ENGINEER\DRAWINGS\CONSTRUCTION PLANS\28595-0004 - EC-DETAILS - Oct 5, 2022 - 9:52 AM

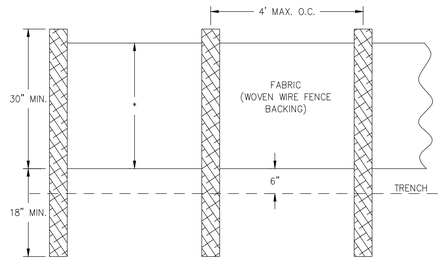
SILT FENCE - TYPE SENSITIVE

Sd1-S

SIDE VIEW



FRONT VIEW

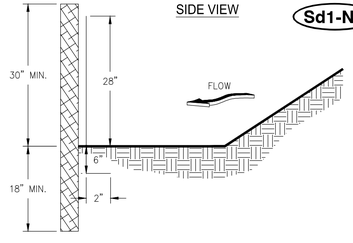


NOTES:
1. USE STEEL OR WOOD POSTS OR AS SPECIFIED BY THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
2. HEIGHT (*) IS TO BE SHOWN ON THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

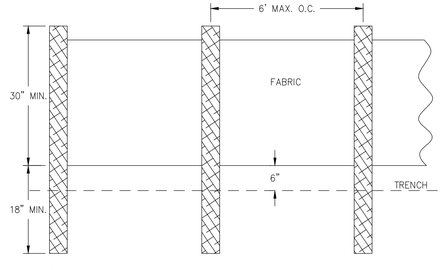
SILT FENCE - TYPE NON-SENSITIVE

Sd1-NS

SIDE VIEW



FRONT VIEW



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Du

DUST CONTROL ON DISTURBED AREAS

DEFINITION

Controlling surface and air movement of dust on land-disturbing activities.

PURPOSE

- Prevent the movement of dust from exposed soil surfaces.
- Prevent the movement of airborne substances that may be harmful to health.

INSTALLATION

- Apply according to approved plan, if shown.
- Mulch disturbed areas and tackify with resins such as asphalt, Curasol or Terratack according to manufacturer's recommendations.
- Stabilize disturbed areas with temporary or permanent vegetation.
- Irrigate disturbed areas until surface is wet.
- Cover surfaces with crushed stone or gravel.

32

Du

- Apply calcium chloride at a rate to keep surfaces moist.
- Apply spray-on adhesives to mineral soils (not muck soils) as described in Table 1.

Table 1. Spray-On Adhesive Application Requirements

Adhesive	Water Dilution	Nozzle Type	Application (Gal./Acre)
Anionic asphalt emulsion	7:1*	Coarse spray	1,200
Latex emulsion	12.5:1 *	Fine spray	235
Resin-in-water emulsion	4:1*	Fine spray	300

*Use manufacturer's recommendations when available.

Du

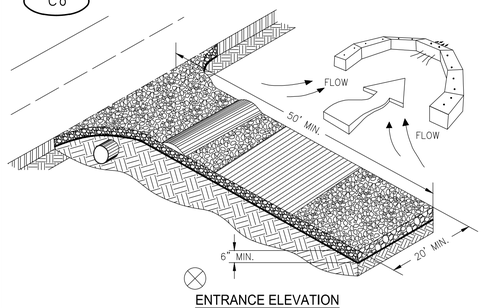
DUST CONTROL

NOT TO SCALE

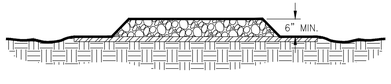
CRUSHED STONE CONSTRUCTION EXIT

Co

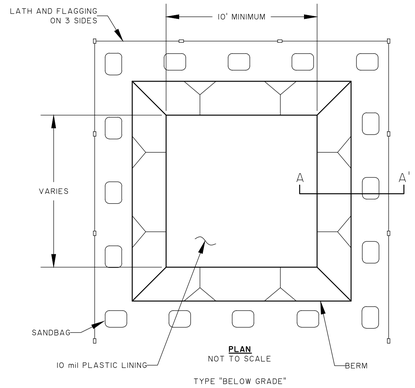
EXIT DIAGRAM



ENTRANCE ELEVATION

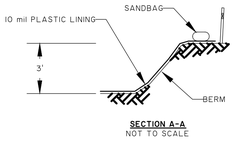


NOTES:
1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS.
2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
3. AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"-3.5" STONE).
4. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 6".
5. PAD WIDTH SHALL BE EQUAL FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS, BUT NO LESS THAN 20'.
6. A DIVERSION RIDGE SHOULD BE CONSTRUCTED WHEN GRADE TOWARD PAVED AREA IS GREATER THAN 2%..
7. INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES.
8. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN (DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE).
9. WASHRACKS AND/OR TIRE WASHERS MAY BE REQUIRED DEPENDING ON SCALE AND CIRCUMSTANCE. IF NECESSARY, WASHRACK DESIGN MAY CONSIST OF ANY MATERIAL SUITABLE FOR TRUCK TRAFFIC THAT REMOVE MUD AND DIRT.
10. MAINTAIN AREA IN A WAY THAT PREVENTS TRACKING AND/OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.



PLAN
NOT TO SCALE

TYPE "BELOW GRADE"



SECTION A-A
NOT TO SCALE

NOTES:
1. ACTUAL LAYOUT DETERMINED IN THE FIELD.
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY

CONCRETE WASHOUT

SEEDING RATES FOR TEMPORARY & PERMANENT COVER

MONTH	TEMPORARY COVER	RATE PER ACRE: SEEDED ALONE	RATE PER ACRE: ADDED TO MIX	PERMANENT COVER	RATE PER ACRE: SEEDED ALONE	RATE PER ACRE: ADDED TO MIX
JANUARY	* LESPEDEZA, ANNUAL * RYE * RYEGRASS, ANNUAL * WHEAT	40 lbs. 3 bu. 40 lbs. 3 bu.	10 lbs. .5 bu. - .5 bu.	* BAHIA, PENSACOLA BERMUDA, UNHULLED CENTIPEDE, SOD LESPEDEZA, SERICEA 1	60 lbs. 10 lbs. - 75 lbs.	30 lbs. 6 lbs. - -
FEBUARY	LESPEDEZA, ANNUAL, * LOVEGRASS, WEEPING * RYE * RYEGRASS, ANNUAL	40 lbs. 4 lbs. 3 bu. 40 lbs.	10 lbs. 2 lbs. .5 bu. -	* BAHIA, PENSACOLA CENTIPEDE, SOD LESPEDEZA, SEDICEA 1, 2 * LESPEDEZA, SEDICEA * LOVEGRASS, WEEPING	60 lbs. 75 lbs. 75 lbs. 4 lbs.	30 lbs. - - 2 lbs.
MARCH	* LESPEDEZA, ANNUAL, LOVEGRASS, WEEPING * RYEGRASS, ANNUAL * SUDANGRASS	40 lbs. 4 lbs. 40 lbs. 60 lbs.	10 lbs. 2 lbs. - -	BAHIA, PENSACOLA BERMUDA, UNHULLED CENTIPEDE, SOD * LESPEDEZA, SEDICEA 1 LESPEDEZA, SEDICEA 2 LOVEGRASS, WEEPING	60 lbs. 10 lbs. - 75 lbs. 75 lbs. 4 lbs.	30 lbs. 6 lbs. - - - 2 lbs.
APRIL	LOVEGRASS, WEEPING MILLET, BROWNTOP * MILLET, PEARL SUDANGRASS	4 lbs. 40 lbs. 50 lbs. 60 lbs.	2 lbs. 10 lbs. - -	BAHIA, PENSACOLA BERMUDA, HULLED CENTIPEDE, SOD * LESPEDEZA, SEDICEA 1 LESPEDEZA, SEDICEA 2 LOVEGRASS, WEEPING	60 lbs. 10 lbs. - 75 lbs. 75 lbs. 4 lbs.	30 lbs. 6 lbs. - - - 2 lbs.
MAY	LOVEGRASS, WEEPING MILLET, BROWNTOP MILLET, PEARL SUDANGRASS	4 lbs. 40 lbs. 50 lbs. 60 lbs.	2 lbs. 10 lbs. - -	BAHIA, PENSACOLA BERMUDA, HULLED CENTIPEDE, SOD * LESPEDEZA, SEDICEA 1 LESPEDEZA, SEDICEA 2 LOVEGRASS, WEEPING	60 lbs. 10 lbs. - 75 lbs. 75 lbs. 4 lbs.	30 lbs. 6 lbs. - - - 2 lbs.
JUNE	* LOVEGRASS, WEEPING MILLET, BROWNTOP MILLET, PEARL SUDANGRASS	4 lbs. 40 lbs. 50 lbs. 60 lbs.	2 lbs. 10 lbs. - -	BAHIA, PENSACOLA * BERMUDA, UNHULLED * LESPEDEZA, SEDICEA 1 * LESPEDEZA, SEDICEA 2 * LOVEGRASS, WEEPING	60 lbs. 10 lbs. 75 lbs. 75 lbs. 4 lbs.	30 lbs. 6 lbs. - - 2 lbs.
JULY	* MILLET, BROWNTOP MILLET, PEARL SUDANGRASS	40 lbs. 50 lbs. 60 lbs.	10 lbs. - -	* BAHIA, PENSACOLA * LESPEDEZA, SEDICEA 1	60 lbs. 75 lbs.	30 lbs. -
AUGUST	* MILLET, PEARL * RYEGRASS, ANNUAL	50 lbs. 40 lbs.	- -	* BAHIA, PENSACOLA * LESPEDEZA, SEDICEA 1	60 lbs. 75 lbs.	30 lbs. -
SEPTEMBER	* BARLEY * OATS * RYE RYEGRASS, ANNUAL * WHEAT	3 bu. 4 bu. 3 bu. 40 lbs. 3 bu.	.5 bu. 1 bu. .5 bu. - .5 bu.	* BAHIA, PENSACOLA LESPEDEZA, SEDICEA 1	60 lbs. 75 lbs.	30 lbs. -
OCTOBER	BARLEY OATS RYE RYEGRASS, ANNUAL WHEAT	3 bu. 4 bu. 3 bu. 40 lbs. 3 bu.	.5 bu. 1 bu. .5 bu. - .5 bu.	* BAHIA, PENSACOLA LESPEDEZA, SEDICEA 1	60 lbs. 75 lbs.	30 lbs. -
NOVEMBER	BARLEY OATS RYE RYEGRASS, ANNUAL WHEAT	3 bu. 4 bu. 3 bu. 40 lbs. 3 bu.	.5 bu. 1 bu. .5 bu. - .5 bu.	* BAHIA, PENSACOLA BERMUDA, UNHULLED CENTIPEDE, SOD LESPEDEZA, SEDICEA 1	60 lbs. 10 lbs. - 75 lbs.	30 lbs. 6 lbs. - -
DECEMBER	BARLEY OATS RYE RYEGRASS, ANNUAL WHEAT	3 bu. 4 bu. 3 bu. 40 lbs. 3 bu.	.5 bu. 1 bu. .5 bu. - .5 bu.	* BAHIA, PENSACOLA BERMUDA, UNHULLED CENTIPEDE, SOD LESPEDEZA, SEDICEA 1	60 lbs. 10 lbs. - 75 lbs.	30 lbs. 6 lbs. - -

NOTES

ALL PERMANENT GRASS PLANTINGS SHALL BE MULCHED
PERMANENT GRASSING SHOWN ON THIS TABLE IS FOR DISTURBED AREAS NOT SHOWN ON LANDSCAPE PLAN.
** INDICATES MARGINAL (BUT PERMISSIBLE) PLANTING DATE*
1. UNSCARIFIED
2. SCARIFIED
3. CENTIPEDE SOD CAN BE USED AS PERMANENT COVER ANYTIME EXCEPT JUNE THRU OCTOBER

GEORGIA — REGISTERED — SCOTT K. MONROE — PROFESSIONAL ENGINEER

GSWCC LEVEL 2
DESIGN PROFESSIONAL
CERTIFICATION #
CONTROL NO.
EXPIRES: 6/22/2024

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NOVARE GROUP - PORT WENTWORTH SFR, LLC
PORT WENTWORTH, GEORGIA

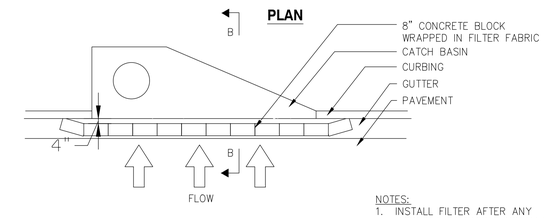
SINGLE FAMILY RENTAL - PARCEL 4

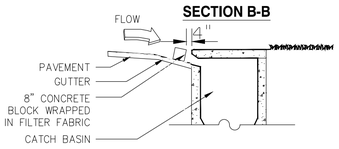
ESPC DETAILS

JOB NO:	J-28595.0004
DATE:	7/5/2022
DRAWN:	JBJ
DESIGNED:	SKM
REVIEWED:	SKM
APPROVED:	SKM
SCALE:	1" = 1'

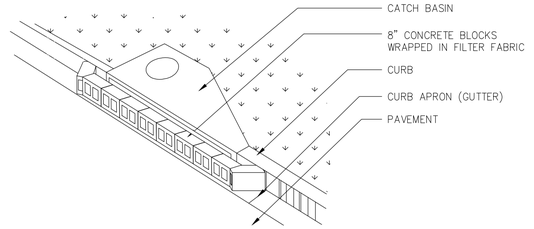
EC4.1

Z:\28595\28595-0004\ENGINEERING\DRAWINGS\CONSTRUCTION PLANS\28595-0004 - EC-DETAILS - OCT 5, 2022 - 9:52 AM





NOTES:
1. INSTALL FILTER AFTER ANY ASPHALT PAVEMENT INSTALLATION.
2. WRAP 8" CONCRETE BLOCKS IN FILTER FABRIC AND SPAN ACROSS CATCH BASIN INLET.
3. FACE OPENINGS IN BLOCKS OUTWARD.
4. LEAVE A GAP OF APPROXIMATELY 4 INCHES BETWEEN THE CURB AND THE FILTERS TO ALLOW FOR OVERFLOW TO PREVENT HAZARDOUS PONDING.
5. INSTALL OUTLET PROTECTION BELOW STORM DRAIN OUTLETS.



CURB INLET FILTER "PIGS IN BLANKET"
CURB INLET PROTECTION

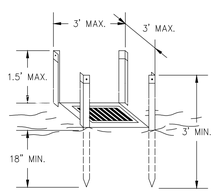
Sd2-P

NOT TO SCALE

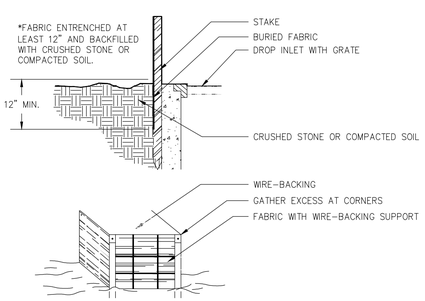
FABRIC AND SUPPORTING FRAME FOR INLET PROTECTION

Sd2-F

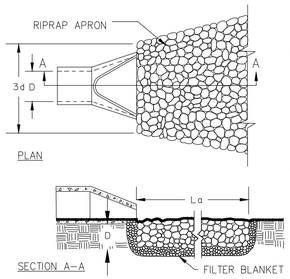
STEEL FRAME AND SILT FENCE INSTALLATION



NOTES:
1. DESIGN IS FOR SLOPES NO GREATER THAN 5% (NOT DESIGNED FOR CONCENTRATED FLOWS).
2. THE STEEL POSTS SUPPORTING THE SILT FENCE MATERIAL SHOULD BE SPACED EVENLY AROUND THE PERIMETER OF THE INLET (MAXIMUM OF 3' APART).
3. THE STEEL POSTS SHOULD BE SECURELY DRIVEN AT LEAST 18" DEEP.
4. THE FABRIC SHOULD BE ENTRENCHED AT LEAST 12" AND THEN BACKFILLED WITH CRUSHED STONE OR COMPACTED SOIL.

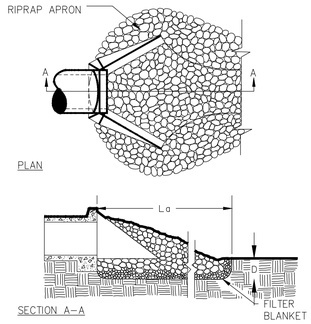


PIPE OUTLET TO FLAT AREA -- NO WELL DEFINED CHANNEL



NOTES:
1. La IS THE LENGTH OF THE RIPRAP APRON.
2. D = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6".
3. IN A WELL-DEFINED CHANNEL, EXTEND THE APRON UP THE CHANNEL BANKS TO AN ELEVATION OF 6" ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK (WHICHEVER IS LESS).
4. A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIPRAP AND THE SOIL FOUNDATION.
5. La = 10'
   W1 = 4'
   W2 = 12'
   d50 = 3.6"
   dMAX = 5.4"
   D = 8.1"

PIPE OUTLET TO WELL DEFINED CHANNEL



RIPRAP OUTLET PROTECTION

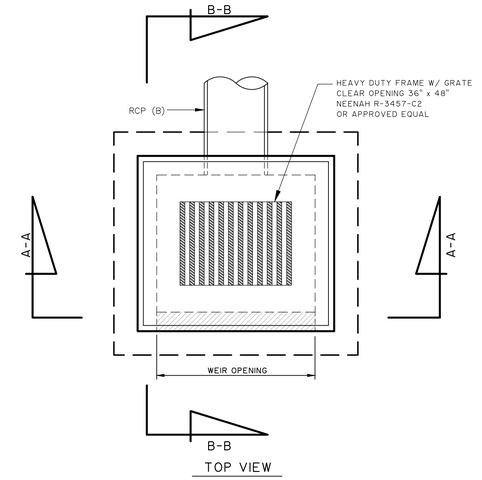
St

NOT TO SCALE

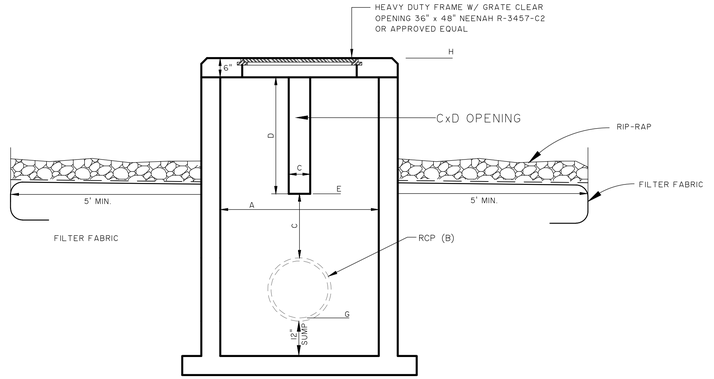
CONTROL STRUCTURE DIMENSIONS							
CS	A (MIN.)	B	C	D	E (EL)	G (EL)	H
CS	48"	18"ø	6"	24"	8.0	6.0	10.5

BUBBLER STRUCTURE DETAIL (TYP. – SEE TABLE)

NOT TO SCALE

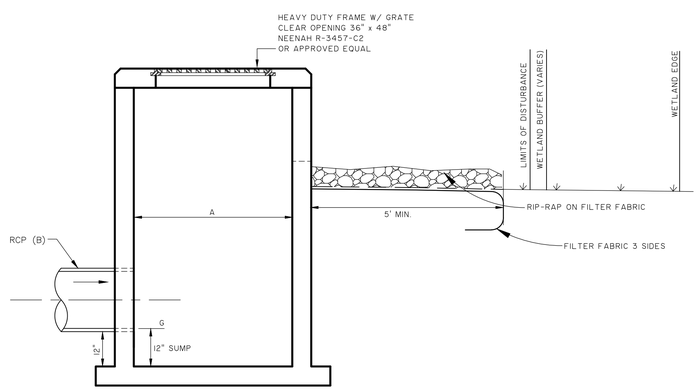


TOP VIEW



SECTION A-A

NOT TO SCALE



SECTION B-B

NOT TO SCALE

GEORGIA REGISTERED PROFESSIONAL ENGINEER SCOTT K. MOORE
GSWCC LEVEL 2 DESIGN PROFESSIONAL CERTIFICATION # 0000046166
EXPIRES: 6/22/2024

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NOVARE GROUP - PORT WENTWORTH SFR, LLC
PORT WENTWORTH, GEORGIA

SINGLE FAMILY RENTAL - PARCEL 4

ESPC DETAILS

JOB NO:	J-28595.0004
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DESIGNED:	SKM
REVIEWED:	SKM
APPROVED:	SKM
SCALE:	1" = 1'

EC4.2

PROJECT NARRATIVE

Novare singlefamily is a 22.6 -acre residential development consisting of 106 single family rental units that will contribute to the Pine Forest PS. This projects are located on Highway 21 N in Port Wentworth, Georgia. Wastewater from the projects will be collected by new 8 inch gravity sewer lines and transported to the existing Novare Multifamily gravity sewer system. From there, wasterwater will be tranported to the Pine Forest Pump Station. Sewage collected at the Pine Forest pump station will be pumped through a 4" force main to a City maintained gravity sewer system.

DESIGN FLOW

Description	Units		UCL			Average Day Flow	
One Bedroom Units =	172	each @	150	gpd/each	=	25,800	gpd
Two Bedroom Units =	144	each @	200	gpd/each	=	28,800	gpd
Three Bedroom Units =	12	seats @	300	gpd/each	=	3,600	gpd
Clubhouse Amenity =	100	members @	20	gpd/each	=	2,000	gpd
Pine Forest Lots	85	each @	300	gpd/each	=	25,500	gpd
SFR 1BR	22	each @	150	gpd/each	=	3,300	gpd
SFR 2BR	45	each @	200	gpd/each	=	9,000	gpd
SFR 3BR	39	each @	300	gpd/each	=	11,700	gpd
Food Lion Center	1	each @	19662	gpd/each	=	19,662	gpd
** UCL is Unit Contributory Loading*				**TOTAL**	=	**129,362**	**gpd**

AVERAGE DAY FLOW

24 hours per day of flow = 1440 min/day

129,362 gpd / 1440 min/day = **90 gpm**

PEAK FACTOR

A peaking factor of 2.5 will be used for the Pump Station Design

Peak = 2.5

Average daily flows will vary continuously throughout each day with peak flows occurring at some point. The peak factor, which is applied to the average day flow to obtain the peak day flow, is derived from *10-State Standards.*

Use Peak Factor of **2.5**

PEAK DAY FLOW

90 gpm x **2.5** = **225 gpm**

CHECK CAPACITY OF NEW GRAVITY SEWER LINE ON-SITE

Use Mannings Equation to Calculate Maximum Allowable Flow

Qm=(1.49/n)x A x R^.67 x S^.5

where: Qm = Maximum Flowrate (cfs)
n = Mannings Roughness Coefficient
A = Cross Sectional Area (sf)
R = Hydraulic Radius (ft)
S = Slope (ft/ft)

Calculate Cross Sectional Area of Pipe

Dia (in) = **8**

A (sf) = PI x d^2 / 4

A (sf) = (**0.35**

Calculate Hydraulic Radius

R(ft) = Area / Wetted Perimeter (Pw)

where Pw = inside circumference of pipe (assuming full flow condition)

Pw = 2.0944

R(ft) = **0.17**

Select Variables

n= **0.014** Roughness Coefficient

S (ft/ft) = **0.004** Slope

Q_m (cfs) = 0.71 Maximum number of units on **8** inch gravity = **600 REUs**

Q_m (gpm) = 317 **Gravity line is adequate in size**

Qr (gpm) = 225 (Qr is peak flow)

Note: 600 REU's is derived from 300 gpd per REU with a peak factor of 2.5 and flow occuring over a 24-hour period. 600 REU's equal 450,000 gpd peak flow.

WATER MODELING REPORT
FOR:

NOVARE PORT WENTWORTH
PORT WENTWORTH, GEORGIA

PREPARED FOR:
NGI ACQUISITIONS, LLC

MAY 26, 2022

J – 28595.0004

Prepared by:

THOMAS & HUTTON

Savannah, GA | Brunswick, GA | Charleston, SC | Myrtle Beach, SC
Columbia, SC | Greenville, SC | Charlotte, NC

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4.1 Design Criteria
4.2 Software Modeling

Section 5.0 Conclusions 2

Appendix A – Hydrant Flow Tests

Appendix B – Water Model Results
- Peak Day Demand Results
- Maximum Instantaneous Demand Results
- Fire Flow Report

Appendix C - Exhibit
- Junction Node Exhibit (EX-1)

1.0 INTRODUCTION

NGI Acquisitions, LLC proposes to develop a single-family residential complex called Novare – Port Wentworth. The site consists of 22.6 acres which will be developed to include 106 single family units.

The site is located on the east side of Georgia Highway 21 just north of the Pine Forest subdivision and Novare multifamily apartments and about 1 mile west of Interstate 95 in Port Wentworth, Georgia.

2.0 SUPPLY

Potable water will be supplied to the proposed development via new 8" & 10" water mains that will connect to an existing Cit of Port Wentworth 16" water main located at the north end of the site and the 10" water main in the Novare multifamily apartment complex on located at the northwestern portion of the site.

The existing potable water distribution system is owned and operated by the City of Port Wentworth. The proposed water system will be privately owned. A recent hydrant flow test was conducted by Thomas and Hutton. The measured hydrant is located on the west side of Highway 21 across from the site, and the flowed hydrant is located within a utility easement running along the north boundary of the property. The results of the hydrant flow test are provided in Appendix A. The locations of the referenced hydrants are shown with the flow test results in Appendix A.

3.0 FIRE FLOW

A minimum of 20 psi residual pressure will be targeted during a fire flow scenario. A minimum fire flow of 1500 gpm will be used to evaluate the water distribution system referenced above. This minimum fire flow has been calculated based upon Table B105.1 of the 2018 IFC with reduction for fully sprinklered buildings.

Computer simulations were completed for various fire flows at various nodes located within the project limits. Refer to Section 5.0 for conclusions drawn from these simulations.

4.0 HYDRAULIC SYSTEM MODELING / PIPE SIZING

4.1 Design Criteria

- Hydraulic Analysis - The Hazen-Williams equation is the basis of all analyzed hydraulic situations.

  Hazen-Williams formula –

$$f = 0.2083\left(\frac{100}{C}\right)^{1.85} x \frac{q^{1.85}}{d^{4.8655}}$$

  Where:
  f = Friction head in feet per 100 feet of pipe
  d = Inside diameter of pipe in inches
  q = Flow in gallons per minute
  C = Constant accounting for surface roughness

- Coefficient of Roughness – The "C" factor used for frictional loss calculations is 130 for PVC.

4.2 Software Modeling

WaterCad Analysis
A computer model of the water system was developed using WaterCad version 8.0 by Bentley Systems, Inc. The following scenarios were run to evaluate the capacity of the proposed water distribution system.

- Peak Day Demand Scenario
- Maximum Instantaneous Demand Scenario
- Fire Flow Scenario

These scenarios are described below:

Peak Day Demand Scenario
This scenario evaluates the resulting residual pressures in the water distribution system under a peak day demand condition. The peak day demand is calculated based on a peaking factor of 2.5 which is applied to the average day demand. The average day demand is calculated assuming that the water demand is equal to 1.5 times the sewer unit contributory loadings.

Maximum Instantaneous Demand Scenario
This scenario evaluates the resulting residual pressures in the water distribution system under a maximum instantaneous demand condition. The maximum instantaneous demand for each of the proposed building was calculated using the method developed by Joseph S. Ameen (Community Water System Source book). Based on this methodology, the calculated maximum instantaneous demand for the apartment buildings is 16 GPM.

Fire Flow Scenario
This scenario evaluates fire flow availability and the resulting residual pressures in the water distribution system assuming 1/5 of the maximum instantaneous demands associated with the proposed development occur as a base demand. A range of fire flows was evaluated at each node, in addition to the base demand, so as to identify available fire flow capacity at the node while maintaining a minimum of 20 psi residual pressure at other nodes throughout the project limits. Refer to Appendix B for results of the modeled fire flow scenario.

5.0 Conclusions

Based upon the modeled scenarios described above for the proposed water distribution system, the following conclusions have been made:

- For the proposed conditions, based upon the peak day demand and maximum instantaneous demand modeled results, resulting pressures (at ground level) range from 57 psi and 60 psi, respectively, for nodes throughout the proposed and existing development. These pressures are acceptable, as a minimum pressure of 40 psi (at ground level) is required under this scenario.

- For the proposed conditions, based upon the fire flow modeled results, a minimum of 20 psi (at ground level) is maintained at all junctions associated with the water system within the project limits while providing a minimum of 1500 gpm fire flow capacity.

APPENDIX A

RECENT HYDRANT FLOW TEST

WATER FLOW TEST SUMMARY SHEET

Hydrant No.	Outlet I.D. inches	Pitot Press. psi	Flow gpm	Residual psi
1	2.5	28.5	894	55
~~2~~ 1	2.5	29.0	900	55
3				
Total Flow			1,794	55

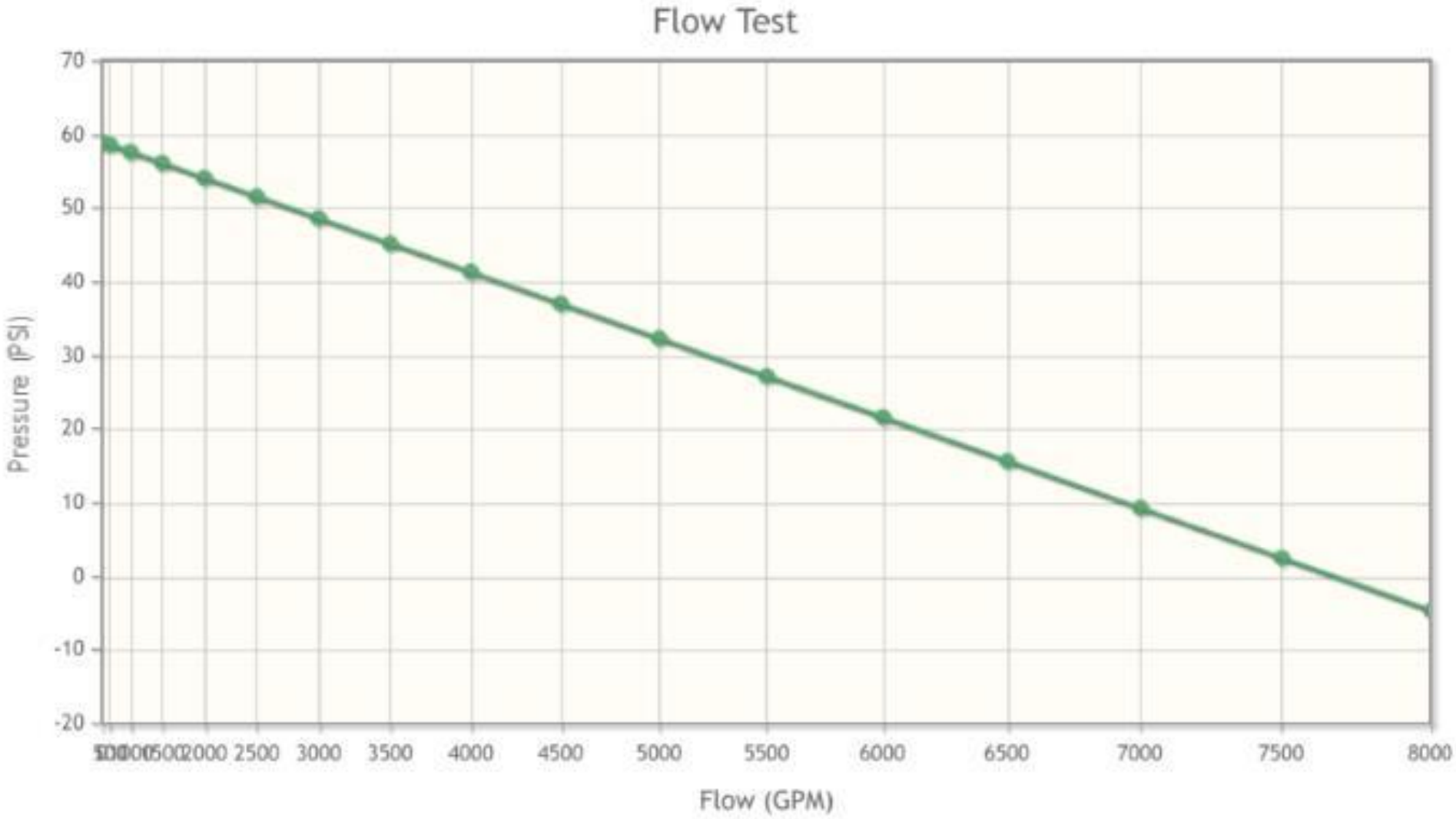
Date: 8-5-21 Time: 2:50 PM Project No. J-28595.0002

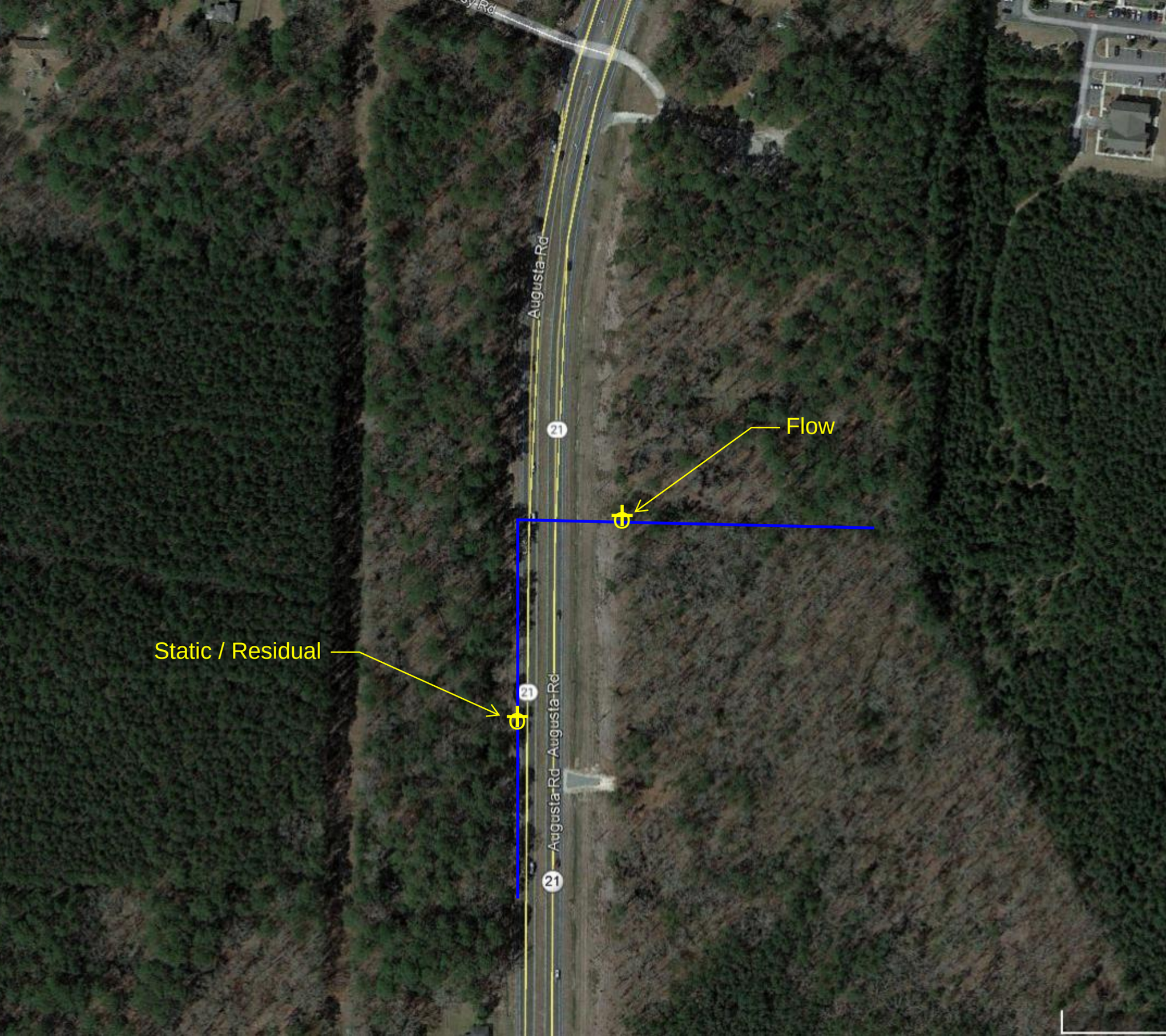
Location: Novare - Pt.Wentwoth

Notes: See attached drawing for hydrant location

Estimated water usage: 3,150 gals Flow @ 0 psi 7,673 gpm

Static Press: 59 psi Flow @ 20 psi 6,136 gpm




Augusta Rd
21
Flow
Static / Residual
21
Augusta Rd
Augusta Rd
21

APPENDIX B

MODEL RESULTS
FOR
PEAK DAY DEMAND SCENARIO
MAXIMUM INSTANTANEOUS
DEMAND SCENARIO
AND
FIRE FLOW SCENARIO

Scenario: Peak Hour + FF
Current Time Step: 0.000 h
Fire Flow Node FlexTable: Fire Flow Report

Label	Zone	Fire Flow Iterations	Satisfies Fire Flow Constraints?	Fire Flow (Needed) (gpm)	Fire Flow (Available) (gpm)	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Pressure (Zone Lower Limit) (psi)	Pressure (Calculated Zone Lower Limit) (psi)	Junction w/ Minimum Pressure (Zone)	Pressure (System Lower Limit) (psi)	Pressure (Calculated System Lower Limit) (psi)	Junction w/ Minimum Pressure (System)	Is Fire Flow Run Balanced?
BUILDING 1	<None>	2	True	1,500	2,500	1,516	2,516	20	27	20	31	J-9	20	31	J-9	True
BUILDING 2	<None>	4	True	1,500	2,207	1,516	2,223	20	20	20	33	BUILDING 3	20	33	BUILDING 3	True
BUILDING 3	<None>	4	True	1,500	2,201	1,516	2,217	20	20	20	33	BUILDING 2	20	33	BUILDING 2	True
BUILDING 4	<None>	3	True	1,500	2,500	1,516	2,516	20	22	20	30	BUILDING 8	20	30	BUILDING 8	True
BUILDING 5	<None>	4	True	1,500	2,191	1,516	2,207	20	20	20	33	J-4	20	33	J-4	True
BUILDING 6	<None>	4	True	1,500	2,225	1,516	2,241	20	20	20	33	BUILDING 7	20	33	BUILDING 7	True
BUILDING 7	<None>	4	True	1,500	2,224	1,516	2,240	20	20	20	33	BUILDING 6	20	33	BUILDING 6	True
BUILDING 8	<None>	4	True	1,500	2,195	1,516	2,211	20	20	20	34	BUILDING 4	20	34	BUILDING 4	True
BUILDING 9	<None>	4	True	1,500	2,098	1,516	2,114	20	20	20	35	BUILDING 11	20	35	BUILDING 11	True
BUILDING 10	<None>	4	True	1,500	2,279	1,516	2,295	20	20	20	32	BUILDING 11	20	32	BUILDING 11	True
BUILDING 11	<None>	4	True	1,500	2,302	1,516	2,318	20	20	20	32	BUILDING 9	20	32	BUILDING 9	True
BUILDING 12	<None>	4	True	1,500	2,247	1,516	2,263	20	20	20	33	BUILDING 9	20	33	BUILDING 9	True
BUILDING 13	<None>	4	True	1,500	2,220	1,516	2,236	20	20	20	34	BUILDING 8	20	34	BUILDING 8	True
J-1	<None>	2	True	1,500	2,500	1,500	2,500	20	38	20	36	BUILDING 5	20	36	BUILDING 5	True
J-2	<None>	2	True	1,500	2,500	1,500	2,500	20	38	20	35	BUILDING 5	20	35	BUILDING 5	True
J-4	<None>	2	True	1,500	2,500	1,500	2,500	20	29	20	29	BUILDING 5	20	29	BUILDING 5	True
J-5	<None>	3	True	1,500	2,500	1,500	2,500	20	26	20	29	J-4	20	29	J-4	True
J-6	<None>	2	True	1,500	2,500	1,500	2,500	20	31	20	30	BUILDING 8	20	30	BUILDING 8	True
J-7	<None>	2	True	1,500	2,500	1,500	2,500	20	30	20	30	BUILDING 5	20	30	BUILDING 5	True
J-8	<None>	2	True	1,500	2,500	1,500	2,500	20	31	20	30	BUILDING 10	20	30	BUILDING 10	True
J-9	<None>	2	True	1,500	2,500	1,500	2,500	20	31	20	31	BUILDING 5	20	31	BUILDING 5	True
J-11	<None>	2	True	1,500	2,500	1,500	2,500	20	30	20	29	BUILDING 3	20	29	BUILDING 3	True
J-13	<None>	2	True	1,500	2,500	1,500	2,500	20	29	20	29	BUILDING 3	20	29	BUILDING 3	True
J-15	<None>	2	True	1,500	2,500	1,500	2,500	20	30	20	30	BUILDING 4	20	30	BUILDING 4	True
J-17	<None>	2	True	1,500	2,500	1,500	2,500	20	30	20	29	BUILDING 5	20	29	BUILDING 5	True
J-19	<None>	2	True	1,500	2,500	1,500	2,500	20	30	20	30	BUILDING 6	20	30	BUILDING 6	True
J-21	<None>	2	True	1,500	2,500	1,500	2,500	20	30	20	30	BUILDING 7	20	30	BUILDING 7	True
J-23	<None>	2	True	1,500	2,500	1,500	2,500	20	31	20	30	BUILDING 8	20	30	BUILDING 8	True
J-25	<None>	2	True	1,500	2,500	1,500	2,500	20	30	20	29	BUILDING 9	20	29	BUILDING 9	True
J-27	<None>	2	True	1,500	2,500	1,500	2,500	20	30	20	29	BUILDING 10	20	29	BUILDING 10	True
J-29	<None>	2	True	1,500	2,500	1,500	2,500	20	30	20	29	BUILDING 11	20	29	BUILDING 11	True
J-31	<None>	2	True	1,500	2,500	1,500	2,500	20	31	20	30	BUILDING 9	20	30	BUILDING 9	True
J-33	<None>	2	True	1,500	2,500	1,500	2,500	20	31	20	30	BUILDING 8	20	30	BUILDING 8	True
J-35	<None>	2	True	1,500	2,500	1,500	2,500	20	32	20	31	BUILDING 5	20	31	BUILDING 5	True
J-36	<None>	2	True	1,500	2,500	1,505	2,505	20	29	20	31	BUILDING 10	20	31	BUILDING 10	True
J-37	<None>	2	True	1,500	2,500	1,505	2,505	20	31	20	32	J-38	20	32	J-38	True
J-38	<None>	2	True	1,500	2,500	3,003	4,003	20	32	20	32	J-39	20	32	J-39	True
J-39	<None>	2	True	1,500	2,500	1,502	2,502	20	28	20	29	J-40	20	29	J-40	True
J-40	<None>	3	True	1,500	2,500	1,502	2,502	20	26	20	27	J-42	20	27	J-42	True
J-41	<None>	3	True	1,500	2,500	1,501	2,501	20	25	20	25	J-42	20	25	J-42	True
J-42	<None>	4	True	1,500	1,912	1,501	1,912	20	20	20	35	J-41	20	35	J-41	True
J-43	<None>	3	True	1,500	2,500	1,502	2,502	20	26	20	27	J-42	20	27	J-42	True
J-44	<None>	2	True	1,500	2,500	1,502	2,502	20	28	20	29	J-43	20	29	J-43	True
J-45	<None>	2	True	1,500	2,500	1,505	2,505	20	31	20	31	J-44	20	31	J-44	True
J-46	<None>	2	True	1,500	2,500	1,500	2,500	20	37	20	35	BUILDING 5	20	35	BUILDING 5	True

Scenario: Peak Hour + FF
Current Time Step: 0.000 h
FlexTable: Junction Table

ID	Label	Elevation (ft)	Zone	Demand Collection	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
54	BUILDING 1	23.02	<None>	<Collection: 1 item>	16	145.82	53
59	BUILDING 2	23.91	<None>	<Collection: 1 item>	16	145.76	53
64	BUILDING 3	24.21	<None>	<Collection: 1 item>	16	145.76	53
69	BUILDING 4	23.22	<None>	<Collection: 1 item>	16	145.67	53
74	BUILDING 5	24.41	<None>	<Collection: 1 item>	16	145.71	52
79	BUILDING 6	23.00	<None>	<Collection: 1 item>	16	145.65	53
84	BUILDING 7	23.00	<None>	<Collection: 1 item>	16	145.65	53
89	BUILDING 8	23.25	<None>	<Collection: 1 item>	16	145.67	53
94	BUILDING 9	23.25	<None>	<Collection: 1 item>	16	145.62	53
99	BUILDING 10	23.00	<None>	<Collection: 1 item>	16	145.61	53
104	BUILDING 11	23.00	<None>	<Collection: 1 item>	16	145.61	53
109	BUILDING 12	22.02	<None>	<Collection: 1 item>	16	145.67	53
114	BUILDING 13	22.00	<None>	<Collection: 1 item>	16	145.67	54
33	J-1	19.00	<None>	<Collection: 0 items>	0	146.52	55
35	J-2	19.00	<None>	<Collection: 0 items>	0	146.46	55
39	J-4	23.90	<None>	<Collection: 0 items>	0	145.74	53
41	J-5	21.11	<None>	<Collection: 0 items>	0	145.74	54
43	J-6	20.68	<None>	<Collection: 0 items>	0	145.68	54
45	J-7	22.28	<None>	<Collection: 0 items>	0	145.67	53
48	J-8	20.32	<None>	<Collection: 0 items>	0	145.59	54
51	J-9	23.14	<None>	<Collection: 0 items>	0	145.82	53
56	J-11	23.18	<None>	<Collection: 0 items>	0	145.77	53
61	J-13	23.27	<None>	<Collection: 0 items>	0	145.76	53
66	J-15	22.02	<None>	<Collection: 0 items>	0	145.67	53
71	J-17	22.77	<None>	<Collection: 0 items>	0	145.72	53
76	J-19	21.76	<None>	<Collection: 0 items>	0	145.65	54
81	J-21	21.76	<None>	<Collection: 0 items>	0	145.65	54
86	J-23	19.67	<None>	<Collection: 0 items>	0	145.68	55
91	J-25	22.05	<None>	<Collection: 0 items>	0	145.62	53
96	J-27	21.62	<None>	<Collection: 0 items>	0	145.61	54
101	J-29	21.62	<None>	<Collection: 0 items>	0	145.61	54
106	J-31	20.58	<None>	<Collection: 0 items>	0	145.68	54
111	J-33	20.65	<None>	<Collection: 0 items>	0	145.68	54
116	J-35	21.00	<None>	<Collection: 0 items>	0	145.87	54
125	J-36	20.80	<None>	<Collection: 0 items>	5	145.38	54
126	J-37	18.00	<None>	<Collection: 0 items>	5	144.28	55
127	J-38	20.30	<None>	<Collection: 1 item>	1,503	144.09	54
128	J-39	19.00	<None>	<Collection: 0 items>	2	144.10	54
129	J-40	18.00	<None>	<Collection: 0 items>	2	144.10	55
130	J-41	17.00	<None>	<Collection: 0 items>	1	144.11	55
131	J-42	18.00	<None>	<Collection: 0 items>	1	144.11	55
132	J-43	16.00	<None>	<Collection: 0 items>	2	144.11	55
133	J-44	16.80	<None>	<Collection: 0 items>	2	144.12	55
134	J-45	16.00	<None>	<Collection: 0 items>	5	144.12	55
135	J-46	18.00	<None>	<Collection: 0 items>	0	146.05	55

Scenario: Peak Hour + FF
Current Time Step: 0.000 h
FlexTable: Pipe Table

ID	Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Has Check Valve?	Minor Loss Coefficient (Local)	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)	Has User Defined Length?	Length (User Defined) (ft)
55	P-1	21	J-9	BUILDING 1	6.0	Ductile Iron	130.0	False	0.000	16	0.18	0.000	False	0
60	P-2	93	J-11	BUILDING 2	6.0	Ductile Iron	130.0	False	0.000	16	0.18	0.000	False	0
65	P-3	93	J-13	BUILDING 3	6.0	Ductile Iron	130.0	False	0.000	16	0.18	0.000	False	0
70	P-4	46	J-15	BUILDING 4	6.0	Ductile Iron	130.0	False	0.000	16	0.18	0.000	False	0
75	P-5	93	J-17	BUILDING 5	6.0	Ductile Iron	130.0	False	0.000	16	0.18	0.000	False	0
80	P-6	93	J-19	BUILDING 6	6.0	Ductile Iron	130.0	False	0.000	16	0.18	0.000	False	0
85	P-7	93	J-21	BUILDING 7	6.0	Ductile Iron	130.0	False	0.000	16	0.18	0.000	False	0
90	P-8	98	J-23	BUILDING 8	6.0	Ductile Iron	130.0	False	0.000	16	0.18	0.000	False	0
95	P-9	112	J-25	BUILDING 9	6.0	Ductile Iron	130.0	False	0.000	16	0.18	0.000	False	0
100	P-10	81	J-27	BUILDING 10	6.0	Ductile Iron	130.0	False	0.000	16	0.18	0.000	False	0
105	P-11	78	J-29	BUILDING 11	6.0	Ductile Iron	130.0	False	0.000	16	0.18	0.000	False	0
110	P-12	94	J-31	BUILDING 12	6.0	Ductile Iron	130.0	False	0.000	16	0.18	0.000	False	0
115	P-13	99	J-33	BUILDING 13	6.0	Ductile Iron	130.0	False	0.000	16	0.18	0.000	False	0
36	P-14	13	J-1	J-2	8.0	Ductile Iron	130.0	False	0.000	465	2.97	0.004	False	0
53	P-16	277	J-9	J-6	10.0	Ductile Iron	130.0	False	0.000	257	1.05	0.000	False	0
68	P-17	165	J-15	J-7	10.0	Ductile Iron	130.0	False	0.000	37	0.15	0.000	False	0
72	P-18	273	J-7	J-17	10.0	Ductile Iron	130.0	False	0.000	-144	0.59	0.000	False	0
73	P-19	125	J-17	J-4	10.0	Ductile Iron	130.0	False	0.000	-160	0.65	0.000	False	0
78	P-20	77	J-19	J-7	10.0	Ductile Iron	130.0	False	0.000	-181	0.74	0.000	False	0
82	P-21	343	J-8	J-21	10.0	Ductile Iron	130.0	False	0.000	-149	0.61	0.000	False	0
83	P-22	9	J-21	J-19	10.0	Ductile Iron	130.0	False	0.000	-165	0.67	0.000	False	0
87	P-23	104	J-6	J-23	10.0	Ductile Iron	130.0	False	0.000	69	0.28	0.000	False	0
88	P-24	71	J-23	J-15	10.0	Ductile Iron	130.0	False	0.000	53	0.22	0.000	False	0
98	P-25	217	J-27	J-8	10.0	Ductile Iron	130.0	False	0.000	108	0.44	0.000	False	0
117	P-25	966	J-2	J-35	12.0	Ductile Iron	130.0	False	0.000	465	1.32	0.001	False	0
102	P-26	48	J-25	J-29	10.0	Ductile Iron	130.0	False	0.000	140	0.57	0.000	False	0
118	P-26	93	J-35	J-9	10.0	Ductile Iron	130.0	False	0.000	273	1.12	0.001	False	0
103	P-27	25	J-29	J-27	10.0	Ductile Iron	130.0	False	0.000	124	0.51	0.000	False	0
119	P-27	358	J-35	J-11	10.0	Ductile Iron	130.0	False	0.000	192	0.78	0.000	False	0
108	P-28	278	J-31	J-25	10.0	Ductile Iron	130.0	False	0.000	156	0.64	0.000	False	0
136	P-28	486	J-1	J-46	16.0	Ductile Iron	130.0	False	0.000	1,270	2.03	0.001	False	0
112	P-29	10	J-6	J-33	10.0	Ductile Iron	130.0	False	0.000	188	0.77	0.000	False	0
137	P-29	204	J-46	J-38	10.0	Ductile Iron	130.0	False	0.000	1,270	5.19	0.010	False	0
113	P-30	10	J-33	J-31	10.0	Ductile Iron	130.0	False	0.000	172	0.70	0.000	False	0
138	P-30	225	J-38	J-39	8.0	PVC	130.0	False	0.000	-30	0.19	0.000	False	0
139	P-31	212	J-39	J-40	8.0	PVC	130.0	False	0.000	-22	0.14	0.000	False	0
42	P-32	316	J-4	J-5	10.0	Ductile Iron	130.0	False	0.000	0	0.00	0.000	False	0
140	P-32	178	J-40	J-41	8.0	Ductile Iron	130.0	False	0.000	-24	0.15	0.000	False	0
141	P-33	135	J-41	J-42	6.0	PVC	130.0	False	0.000	1	0.01	0.000	False	0
62	P-34	10	J-11	J-13	10.0	Ductile Iron	130.0	False	0.000	176	0.72	0.000	False	0
142	P-34	204	J-41	J-43	8.0	PVC	130.0	False	0.000	-26	0.16	0.000	False	0
63	P-35	98	J-13	J-4	10.0	Ductile Iron	130.0	False	0.000	160	0.65	0.000	False	0
143	P-35	202	J-43	J-44	8.0	PVC	130.0	False	0.000	-27	0.17	0.000	False	0
34	P-36	585	PMP-1	J-1	16.0	Ductile Iron	130.0	False	0.000	1,735	2.77	0.002	False	0
144	P-36	216	J-44	J-45	8.0	PVC	130.0	False	0.000	-38	0.24	0.000	False	0
32	P-37	145	R-1	PMP-1	100.0	Ductile Iron	130.0	False	0.000	1,735	0.07	0.000	True	1
145	P-37	480	J-45	J-37	8.0	PVC	130.0	False	0.000	-114	0.73	0.000	False	0
146	P-38	430	J-38	J-37	8.0	PVC	130.0	False	0.000	-133	0.85	0.000	False	0
147	P-39	774	J-37	J-36	8.0	PVC	130.0	False	0.000	-252	1.61	0.001	False	0
148	P-40	231	J-38	J-45	8.0	PVC	130.0	False	0.000	-70	0.45	0.000	False	0
149	P-41	172	J-39	J-44	4.0	PVC	130.0	False	0.000	-9	0.23	0.000	False	0
155	P-42	142	J-36	J-8	8.0	PVC	130.0	False	0.000	-257	1.64	0.001	False	0

Scenario: Peak Hour + FF
Current Time Step: 0.000 h
FlexTable: Pump Table

ID	Label	Elevation (ft)	Pump Definition	Pump Status	Hydraulic Grade (Suction) (ft)	Hydraulic Grade (Discharge) (ft)	Flow (Total) (gpm)	Pump Head (ft)
31	PMP-1	20.00	2021-08-05 FH Flow Test	On	20.00	147.53	1,735	127.53

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Scenario: Peak Hour + FF
Current Time Step: 0.000 h
FlexTable: Reservoir Table

ID	Label	Elevation (ft)	Zone	Flow (Out net) (gpm)	Hydraulic Grade (ft)
30	R-1	20.00	<None>	1,735	20.00

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Scenario: Peak Hour
Current Time Step: 0.000 h
FlexTable: Junction Table

ID	Label	Elevation (ft)	Zone	Demand Collection	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
54	BUILDING 1	23.02	<None>	<Collection: 1 item>	16	155.71	57
59	BUILDING 2	23.91	<None>	<Collection: 1 item>	16	155.70	57
64	BUILDING 3	24.21	<None>	<Collection: 1 item>	16	155.70	57
69	BUILDING 4	23.22	<None>	<Collection: 1 item>	16	155.70	57
74	BUILDING 5	24.41	<None>	<Collection: 1 item>	16	155.70	57
79	BUILDING 6	23.00	<None>	<Collection: 1 item>	16	155.70	57
84	BUILDING 7	23.00	<None>	<Collection: 1 item>	16	155.70	57
89	BUILDING 8	23.25	<None>	<Collection: 1 item>	16	155.70	57
94	BUILDING 9	23.25	<None>	<Collection: 1 item>	16	155.70	57
99	BUILDING 10	23.00	<None>	<Collection: 1 item>	16	155.70	57
104	BUILDING 11	23.00	<None>	<Collection: 1 item>	16	155.70	57
109	BUILDING 12	22.02	<None>	<Collection: 1 item>	16	155.70	58
114	BUILDING 13	22.00	<None>	<Collection: 1 item>	16	155.70	58
33	J-1	19.00	<None>	<Collection: 0 items>	0	155.80	59
35	J-2	19.00	<None>	<Collection: 0 items>	0	155.80	59
39	J-4	23.90	<None>	<Collection: 0 items>	0	155.70	57
41	J-5	21.11	<None>	<Collection: 0 items>	0	155.70	58
43	J-6	20.68	<None>	<Collection: 0 items>	0	155.70	58
45	J-7	22.28	<None>	<Collection: 0 items>	0	155.70	58
48	J-8	20.32	<None>	<Collection: 0 items>	0	155.70	59
51	J-9	23.14	<None>	<Collection: 0 items>	0	155.71	57
56	J-11	23.18	<None>	<Collection: 0 items>	0	155.71	57
61	J-13	23.27	<None>	<Collection: 0 items>	0	155.71	57
66	J-15	22.02	<None>	<Collection: 0 items>	0	155.70	58
71	J-17	22.77	<None>	<Collection: 0 items>	0	155.70	58
76	J-19	21.76	<None>	<Collection: 0 items>	0	155.70	58
81	J-21	21.76	<None>	<Collection: 0 items>	0	155.70	58
86	J-23	19.67	<None>	<Collection: 0 items>	0	155.70	59
91	J-25	22.05	<None>	<Collection: 0 items>	0	155.70	58
96	J-27	21.62	<None>	<Collection: 0 items>	0	155.70	58
101	J-29	21.62	<None>	<Collection: 0 items>	0	155.70	58
106	J-31	20.58	<None>	<Collection: 0 items>	0	155.70	58
111	J-33	20.65	<None>	<Collection: 0 items>	0	155.70	58
116	J-35	21.00	<None>	<Collection: 0 items>	0	155.72	58
125	J-36	20.80	<None>	<Collection: 0 items>	0	155.72	58
126	J-37	18.00	<None>	<Collection: 0 items>	0	155.78	60
127	J-38	20.30	<None>	<Collection: 0 items>	0	155.80	59
128	J-39	19.00	<None>	<Collection: 0 items>	0	155.79	59
129	J-40	18.00	<None>	<Collection: 0 items>	0	155.79	60
130	J-41	17.00	<None>	<Collection: 0 items>	0	155.79	60
131	J-42	18.00	<None>	<Collection: 0 items>	0	155.79	60
132	J-43	16.00	<None>	<Collection: 0 items>	0	155.79	60
133	J-44	16.80	<None>	<Collection: 0 items>	0	155.79	60
134	J-45	16.00	<None>	<Collection: 0 items>	0	155.79	60
135	J-46	18.00	<None>	<Collection: 0 items>	0	155.80	60

Scenario: Peak Hour
Current Time Step: 0.000 h
FlexTable: Pipe Table

ID	Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Has Check Valve?	Minor Loss Coefficient (Local)	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)	Has User Defined Length?	Length (User Defined) (ft)
55	P-1	21	J-9	BUILDING 1	6.0	Ductile Iron	130.0	False	0.000	16	0.18	0.000	False	0
60	P-2	93	J-11	BUILDING 2	6.0	Ductile Iron	130.0	False	0.000	16	0.18	0.000	False	0
65	P-3	93	J-13	BUILDING 3	6.0	Ductile Iron	130.0	False	0.000	16	0.18	0.000	False	0
70	P-4	46	J-15	BUILDING 4	6.0	Ductile Iron	130.0	False	0.000	16	0.18	0.000	False	0
75	P-5	93	J-17	BUILDING 5	6.0	Ductile Iron	130.0	False	0.000	16	0.18	0.000	False	0
80	P-6	93	J-19	BUILDING 6	6.0	Ductile Iron	130.0	False	0.000	16	0.18	0.000	False	0
85	P-7	93	J-21	BUILDING 7	6.0	Ductile Iron	130.0	False	0.000	16	0.18	0.000	False	0
90	P-8	98	J-23	BUILDING 8	6.0	Ductile Iron	130.0	False	0.000	16	0.18	0.000	False	0
95	P-9	112	J-25	BUILDING 9	6.0	Ductile Iron	130.0	False	0.000	16	0.18	0.000	False	0
100	P-10	81	J-27	BUILDING 10	6.0	Ductile Iron	130.0	False	0.000	16	0.18	0.000	False	0
105	P-11	78	J-29	BUILDING 11	6.0	Ductile Iron	130.0	False	0.000	16	0.18	0.000	False	0
110	P-12	94	J-31	BUILDING 12	6.0	Ductile Iron	130.0	False	0.000	16	0.18	0.000	False	0
115	P-13	99	J-33	BUILDING 13	6.0	Ductile Iron	130.0	False	0.000	16	0.18	0.000	False	0
36	P-14	13	J-1	J-2	8.0	Ductile Iron	130.0	False	0.000	152	0.97	0.001	False	0
53	P-16	277	J-9	J-6	10.0	Ductile Iron	130.0	False	0.000	70	0.28	0.000	False	0
68	P-17	165	J-15	J-7	10.0	Ductile Iron	130.0	False	0.000	-10	0.04	0.000	False	0
72	P-18	273	J-7	J-17	10.0	Ductile Iron	130.0	False	0.000	-19	0.08	0.000	False	0
73	P-19	125	J-17	J-4	10.0	Ductile Iron	130.0	False	0.000	-35	0.14	0.000	False	0
78	P-20	77	J-19	J-7	10.0	Ductile Iron	130.0	False	0.000	-9	0.04	0.000	False	0
82	P-21	343	J-8	J-21	10.0	Ductile Iron	130.0	False	0.000	23	0.09	0.000	False	0
83	P-22	9	J-21	J-19	10.0	Ductile Iron	130.0	False	0.000	7	0.03	0.000	False	0
87	P-23	104	J-6	J-23	10.0	Ductile Iron	130.0	False	0.000	22	0.09	0.000	False	0
88	P-24	71	J-23	J-15	10.0	Ductile Iron	130.0	False	0.000	6	0.03	0.000	False	0
98	P-25	217	J-27	J-8	10.0	Ductile Iron	130.0	False	0.000	-33	0.13	0.000	False	0
117	P-25	966	J-2	J-35	12.0	Ductile Iron	130.0	False	0.000	152	0.43	0.000	False	0
102	P-26	48	J-25	J-29	10.0	Ductile Iron	130.0	False	0.000	-1	0.00	0.000	False	0
118	P-26	93	J-35	J-9	10.0	Ductile Iron	130.0	False	0.000	86	0.35	0.000	False	0
103	P-27	25	J-29	J-27	10.0	Ductile Iron	130.0	False	0.000	-17	0.07	0.000	False	0
119	P-27	358	J-35	J-11	10.0	Ductile Iron	130.0	False	0.000	67	0.27	0.000	False	0
108	P-28	278	J-31	J-25	10.0	Ductile Iron	130.0	False	0.000	15	0.06	0.000	False	0
136	P-28	486	J-1	J-46	16.0	Ductile Iron	130.0	False	0.000	56	0.09	0.000	False	0
112	P-29	10	J-6	J-33	10.0	Ductile Iron	130.0	False	0.000	47	0.19	0.000	False	0
137	P-29	204	J-46	J-38	10.0	Ductile Iron	130.0	False	0.000	56	0.23	0.000	False	0
113	P-30	10	J-33	J-31	10.0	Ductile Iron	130.0	False	0.000	31	0.13	0.000	False	0
138	P-30	225	J-38	J-39	8.0	PVC	130.0	False	0.000	8	0.05	0.000	False	0
139	P-31	212	J-39	J-40	8.0	PVC	130.0	False	0.000	6	0.04	0.000	False	0
42	P-32	316	J-4	J-5	10.0	Ductile Iron	130.0	False	0.000	0	0.00	0.000	False	0
140	P-32	178	J-40	J-41	8.0	Ductile Iron	130.0	False	0.000	6	0.04	0.000	False	0
141	P-33	135	J-41	J-42	6.0	PVC	130.0	False	0.000	0	0.00	0.000	False	0
62	P-34	10	J-11	J-13	10.0	Ductile Iron	130.0	False	0.000	51	0.21	0.000	False	0
142	P-34	204	J-41	J-43	8.0	PVC	130.0	False	0.000	6	0.04	0.000	False	0
63	P-35	98	J-13	J-4	10.0	Ductile Iron	130.0	False	0.000	35	0.14	0.000	False	0
143	P-35	202	J-43	J-44	8.0	PVC	130.0	False	0.000	6	0.04	0.000	False	0
34	P-36	585	PMP-1	J-1	16.0	Ductile Iron	130.0	False	0.000	208	0.33	0.000	False	0
144	P-36	216	J-44	J-45	8.0	PVC	130.0	False	0.000	8	0.05	0.000	False	0
32	P-37	145	R-1	PMP-1	100.0	Ductile Iron	130.0	False	0.000	208	0.01	0.000	True	1
145	P-37	480	J-45	J-37	8.0	PVC	130.0	False	0.000	25	0.16	0.000	False	0
146	P-38	430	J-38	J-37	8.0	PVC	130.0	False	0.000	30	0.19	0.000	False	0
147	P-39	774	J-37	J-36	8.0	PVC	130.0	False	0.000	56	0.36	0.000	False	0
148	P-40	231	J-38	J-45	8.0	PVC	130.0	False	0.000	17	0.11	0.000	False	0
149	P-41	172	J-39	J-44	4.0	PVC	130.0	False	0.000	2	0.06	0.000	False	0
155	P-42	142	J-36	J-8	8.0	PVC	130.0	False	0.000	56	0.36	0.000	False	0

Scenario: Peak Hour
Current Time Step: 0.000 h
FlexTable: Pump Table

ID	Label	Elevation (ft)	Pump Definition	Pump Status	Hydraulic Grade (Suction) (ft)	Hydraulic Grade (Discharge) (ft)	Flow (Total) (gpm)	Pump Head (ft)
31	PMP-1	20.00	2021-08-05 FH Flow Test	On	20.00	155.82	208	135.82

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Scenario: Peak Hour
Current Time Step: 0.000 h
FlexTable: Reservoir Table

ID	Label	Elevation (ft)	Zone	Flow (Out net) (gpm)	Hydraulic Grade (ft)
30	R-1	20.00	<None>	208	20.00

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APPENDIX C

EXHIBITS

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Color Coding Legend
Pipe: Diameter (in)

<=	4.0
<=	6.0
<=	8.0
<=	10.0
<=	12.0
<=	16.0
	Other

GEORGIA HIGHWAY 21 R/W VARIES

GEORGIA HIGHWAY 21 R/W VARIES

WATERCAD WATER MODEL

NOVARE SFR

PORT WENTWORTH, GEORGIA

PREPARED FOR:

NGI ACQUISITIONS, LLC

PREPARED BY:

THOMAS & HUTTON
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Savannah, GA 31405 • 912.234.5300
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JOB NO:	J-28595.0004
DRAWN:	SGJ
REVIEWED:	SKM
DATE:	05/27/2022
SCALE:	1" = 60'
SHEET:	EXHIBIT

THOMAS & HUTTON

STORMWATER MANAGEMENT REPORT FOR:

NOVARE SINGLE-FAMILY PORT WENTWORTH, GEORGIA

PREPARED FOR:
NGI ACQUISITIONS, LLC

J–28595.0004

MAY, 2022

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Soil Map EX4

SECTION 1 - SUMMARY OF RESULTS

TABLE 1 Summary of Results – Peak Runoff										
Peak Runoff (cfs)										
Outfall	*2-yr*		*5-yr*		*10-yr*		*25-yr*		*50-yr*	
	Pre-	*Post-*	*Pre-*	*Post-*	*Pre-*	*Post-*	*Pre-*	*Post-*	*Pre-*	*Post-*
Outfall 1	33.21	13.26	45.93	18.54	57.68	23.37	68.44	27.52	79.15	31.33

See the Pre- and Post- Development Drainage Exhibits at the end of this report for the location of the outfall from the project site.

TABLE 2 Summary of Results – Ponds									
Lagoon	**Pond Bottom**		**Top of Bank**		**Peak Pond Stage (ft)**				
	Elevation (ft)	**Area (Ac.)**	**Elevation (ft)**	**Area (Ac.)**	***2-yr***	***5-yr***	***10-yr***	***25-yr***	***50-yr***
01	6.0	1.32	10.0	1.60	7.61	7.93	8.28	8.61	8.96
02	6.0	1.22	10.0	1.60	7.40	7.76	8.15	8.51	8.86

* All elevations are in reference to the North Americian Vertical Datum of 1988 (NAVD88).

The proposed development, as shown in site development plans, does not increase flow rates for the design storm events or raise the stages within the system above acceptable limits.

SECTION 2 - PROJECT NARRATIVE

The Novare single-family residential development is a proposed 22.6-acre, single-family site located east of Georgia Highway 21 and North of I-95 in Port Wentworth, Georgia. The subject site is located on parcel 7-0906-04-024 within the PRIP zoning district. NGI Acquisitions proposes the development of 106 single-family units, a Clubhouse and storm water detention ponds.

The development will include the construction of a stormwater management system to detain stormwater for the design storm events. A total of two dry ponds are proposed for this project. A system of grate and curb inlets will convey stormwater from developed areas to proposed detention ponds before they will be discharged via a storm water control structure into the wetland system located to the west of the project.

Existing conditions on this site consist of mostly wooded vegetation and non-jurisdictional wetlands. The existing elevations on the subject property range from elevation 6 to 24 NAVD88. The soils onsite are mostly Pooler soils (Pn) and Ocilla Compex (Oj), consisting of hydrologic soil groups C/D & B/D respectively. Approximately half of the site lies primarily in FEMA Special Flood Hazard Area (SFHA) zone X (unshaded) and The other half of the site lies in zone AE, as shown on Chatham County, Georgia Flood Insurance Rate Map (FIRM) 4505C0475D, effective October 18, 2019.

SECTION 3 - PURPOSE

The purposes of this report are:

- To define the existing basins and sub basins for the project.
- To determine the pre-development runoff rates.

- To document major drainage infrastructure such as road crossings, drainage connectors, ponds and outfalls are adequate for proposed development within the drainage basin.
- To document compliance with regulatory requirements of the State of Georgia and City of Port Wentworth summarized as follows:

Georgia EPD

- Sediment shall be prevented from leaving the site during construction.

City of Port Wentworth

- Post-development peak runoff rates shall be detained to pre-development peak runoff rates for the 2, 5, 10, 25 and 50-year, 24-hour storm events.
- Aquatic Protection – 24-hour extended detention of the 1-year, 24-hour storm event.
- Water Quality shall be maintained by providing Best Management Practices (BMP) on the site.
- Sediment shall be prevented from leaving the site during construction.

SECTION 4 - PRE-DEVELOPMENT DRAINAGE SYSTEM

Elevations within the project area range from elevation 24 adjacent to Highway 21 and elevation 9 in the southeast corner of the property (NAVD 1988 Datum). A majority of the site drains to the east-southeast into adjacent wetlands before ultimately discharging to Black Creek and the Savannah River. The pre-development drainage basins were delineated utilizing 2010 Chatham County LiDAR data and a topographic survey by Thomas & Hutton dated August 19, 2021. A hydrologic model was created to obtain pre-development flows. The results can be found in Appendix A.

SECTION 5 - POST-DEVELOPMENT DRAINAGE SYSTEM

The stormwater collection system consists of inlets and pipes routed to proposed stormwater ponds for treatment prior to release from the site. A total of two ponds will be constructed to attenuate stormwater runoff from the proposed development and to provide water quality treatment as required by GA EPD. On-site BMPs will be used throughout construction to prevent sediment transport from the site.

The post-development sub-basins were delineated utilizing 2010 Chatham County LiDAR data, survey data by Thomas & Hutton dated August 19, 2021 and the site development plans in conjunction with the proposed pipe networks and site grading for the project. The post-development model results can be found in Appendix B.

Stormwater runoff from developed areas will be conveyed to proposed detention ponds through a closed conduit drainage system consisting of grate and curb inlets . Outfall control structures are proposed in each stormwater detention pond to maintain normal water levels and attinuate peak runoff rates to their pre-development levels at each outfall for the design storm events.

SECTION 6 - TAILWATER CONDITION

Based on observations of the topography in the adjeacent wetland system that will be the ultimate outfall for this project, maximum elevations were approximately 6.18. 6.18 was chosen as the starting point of the wetland system for our model.

SECTION 7 - STORMWATER QUANTITY METHODOLOGY

The existing and proposed conditions were analyzed using the Storm and Sanitary Analysis (SSA) program developed by Autodesk. The program is used to model rainfall and stormwater runoff and to perform hydraulic routing through the storm drainage system (including existing and proposed storage/detention features such as wetlands, ponds, and lakes).

SSA is an advanced and comprehensive modeling program used to analyze and design drainage systems, stormwater sewers, and sanitary sewers. The software can simultaneously model complex hydrology, hydraulics, and water quality based on Storm Water Management Model (SWMM) methodologies. For the Novare single-family assessment, the hydrology was simulated using the NRCS (SCS) TR-55 methodology. The hydraulics were simulated utilizing hydrodynamic routing, which accounts for backwater effects, flow reversal, surcharging, and interconnected ponds.

The SSA graphical user interface (GUI) allows for the input of hydrologic data for each drainage sub-basin. See Appendices A and B for the input variables including runoff curve number, rainfall distribution pattern, hydrograph peaking factor, and area of each drainage sub-basin. SSA calculates flow at each time step based on a unit hydrograph. Peak flows at each time step are then added together through an aggregation process to form a composite runoff hydrograph for each outfall/discharge point. The individual hydrographs are generated based on a dimensionless unit hydrograph and user- specified sub-basin properties.

The model's hydraulic input data consists of a system of nodes and links. Nodes represent locations where flows enter or exit the system, pipe or channel characteristics change, or where stage/storage/time relationships are provided. Links represent traditional types of hydraulic conveyance such as pipes, channels, control structures, weirs, etc. The sizes, inverts, lengths, and Manning "n" values for all pipes connecting the ponds are input into the model. In addition to pipe information, all pond stage-area relationships and the respective control structure parameters are input into the model.

Runoff hydrographs for each drainage area are combined with the hydraulic parameters to dynamically model the hydraulic interactions of the entire drainage system. The models are used to establish peak discharge rates to the outfall and to establish pond stages to assess compliance with regulations and design guidelines.

SECTION 8 - HYDROLOGY

- SCS Unit Hydrograph Method is used.

- Amount of rainfall for each storm frequency is determined based on NOAA Atlas 14. The following design storms are used in the model simulations:

TABLE 3
Rainfall Amounts

Storm Event	Duration	Rainfall (inches)
1-year	24-hour Design Storm	3.7
2–year	24–hour Design Storm	4.3
5–year	24–hour Design Storm	5.4
10–year	24–hour Design Storm	6.4
25–year	24–hour Design Storm	7.4
50–year	24–hour Design Storm	9.2
100-year	24-hour Design Storm	10.6

- SCS Type III Statistical Rainfall Distribution is used. This distribution pattern is determined by the Soil Conservation Service comparing regional rain–gage data.

- A 323 Hydrograph Peaking Factor is used. The 323 Factor is based on statistical analysis of actual rainfall and runoff data from the Southeastern United States, and is typical for coastal areas.

- The time of concentration for each pre- and post- development basin was calculated according to the procedures set forth in the Urban Hydrology for Small Watersheds (TR-55) (USDA-NRCS, 1986).

SECTION 9 - RUNOFF CALCULATIONS

Peak flow rates for each design storm are calculated by SSA based on drainage area, hydrologic and hydraulic parameters, and the following runoff parameters:

9.1 Curve Numbers

Curve numbers are generated according to procedures set forth in SCS Technical Release 55 (TR–55). The composite curve numbers for each drainage basin are calculated using soils information from the USGS Websoil Survey of Chatham County. Curve numbers were weighted based on the type and amount of soil within the basin. Curve number calculatons were performed in Win TR-55 for pre- and post-development basins.

9.2 Time of Concentration

Time of concentration was calculated according to procedures set forth in SCS Hydrology Technical Note No. N4, as referenced in TR–55. The travel times (T_t) for overland flow, shallow concentrated flow, and channel flow are added together for the drainage basin to get the total time of concentration T_c.

- Overland Flow
  The equation for overland flow travel time is as follows:

  $$T_t = \frac{0.007\,(nL)^{0.8}}{P_2^{0.5} S^{0.4}}$$

  Where: n = Manning's friction factor
  L = slope length (ft)
  S = Slope (ft/ft)
  P_2 = 24–hour precipitation (inches)

  The travel time as calculated in the above equation in hours.

- Shallow Concentrated Flow
  The equation for shallow concentrated flow travel time is as follows:

  $$T_t = \frac{L}{60v} \text{ (min)}$$

  Where: L = length (ft)
  v = velocity (ft/sec)

- Channel and Pipe Flow
  The equation for channel flow travel time is as follows:

$T_t = \frac{L}{60v}$ (min) Where: L = length of channel (ft)
v = velocity (ft/sec)

The velocity is determined using Manning's equation:

$v = (1.49/n)r^{2/3}S^{1/2}$ Where: r = hydraulic radius (ft) = A_x/P
A_x = cross–sectional area (sf)
P = wetted perimeter (ft)
S = slope (ft/ft)

For channel and pipe flow travel times, a velocity of 2 ft/sec was used in both the pre- and post-development calculations.

Travel times for each sub–basin were then added together to determine the time of concentration for each drainage area. Win TR-55 was used to calculate the time of concentration for the pre- and post-development drainage basins, and can be found in Appendix E.

SECTION 10 - COASTAL STORMWATER SUPPLEMENT

The stormwater runoff volume generated by the first 1.2" of rainfall is called the runoff reduction storm event (RRv), in Section 4.4.1 of the latest edition of the CSS to the GSMM. The RRv shall be captured on-site to the maximum extent practical. A stormwater management system is presumed to comply with these criteria if, according to the following criteria:

1. It includes green infrastructure practices that provide for the interception, evapotranspiration, infiltration or capture and reuse of stormwater runoff, that have been selected, designed, constructed and maintained in accordance with the information presented in the latest edition of the CSS to the GSMM and the LDM; and,

2. It is designed to provide the amount of stormwater runoff reduction specified in the latest edition of the CSS to the GSMM, to the maximum extent practical.

For the Novare Multifamily development, downspot disconnections, undistrubed pervious areas, and grass channels are proposed to provide the required runoff reduction volume to the maximum extent practical. Additionally, proposed extended detention storm water ponds are proposed to provide water quality treatment.

SECTION 11 - CONCLUSIONS

The proposed project was evaluated by Thomas & Hutton using the methods identified in this report. Based on the results of this evaluation:

- The post–developed runoff is released at less than pre–developed rates for the 2, 5, 10, 25 and 50 Year, 24–hour design storms.
- Proposed stormwater ponds do not stage above acceptable limits for the design storm events.
- The required runoff reduction volume has been achieved to the maximum extent practical.
- The required water quality treatment volume has been provided.

TABLE 4 Summary of Results – Peak Runoff										
Peak Runoff (cfs)										
Outfall	*2-yr*		*5-yr*		*10-yr*		*25-yr*		*50-yr*	
	Pre-	*Post-*	*Pre-*	*Post-*	*Pre-*	*Post-*	*Pre-*	*Post-*	*Pre-*	*Post-*
Outfall 1	33.21	13.26	45.93	18.54	57.68	23.37	68.44	27.52	79.15	31.33

TABLE 5 Summary of Results – Ponds									
Lagoon	**Pond Bottom**		**Top of Bank**		**Peak Pond Stage (ft)**				
	Elevation (ft)	**Area (Ac.)**	**Elevation (ft)**	**Area (Ac.)**	***2-yr***	***5-yr***	***10-yr***	***25-yr***	***50-yr***
01	6.0	1.32	10.0	1.60	7.61	7.93	8.28	8.61	8.96
02	6.0	1.22	10.0	1.60	7.40	7.76	8.15	8.51	8.86

THOMAS & HUTTON

STORMWATER MANAGEMENT REPORT

NOVARE MULTIFAMILY
PORT WENTWORTH, GEORGIA

Appendix A

SSA PRE DEVELOPMENT MODEL INPUT AND OUTPUT RESULTS

Pre-Development
002-Year

Project Description

File Name	28595.0004 - Pre Development.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	SCS TR-55
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	NO

Analysis Options

Start Analysis On	May 18, 2022	00:00:00
End Analysis On	May 21, 2022	00:00:00
Start Reporting On	May 18, 2022	00:00:00
Antecedent Dry Days	0	days
Runoff (Dry Weather) Time Step	0 01:00:00	days hh:mm:ss
Runoff (Wet Weather) Time Step	0 00:05:00	days hh:mm:ss
Reporting Time Step	0 00:05:00	days hh:mm:ss
Routing Time Step	1	seconds

Number of Elements

	Qty
Rain Gages	0
Subbasins	1
Nodes	2
Junctions	1
Outfalls	1
Flow Diversions	0
Inlets	0
Storage Nodes	0
Links	1
Channels	1
Pipes	0
Pumps	0
Orifices	0
Weirs	0
Outlets	0
Pollutants	0
Land Uses	0

Subbasin Summary

SN	Subbasin ID	Area (ac)	Peak Rate Factor	Weighted Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1	Pre-Basin	23.02	323.00	82.00	4.70	2.81	64.73	33.38	0 00:35:00

Node Summary

SN	Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Initial Water Elevation (ft)	Surcharge Elevation (ft)	Ponded Area (ft^2)	Peak Inflow (cfs)	Max HGL Elevation Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
2	Out-01	Outfall	6.18	17.18	7.18	7.18	0.00	33.21	7.05					

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length	Inlet Invert Elevation	Outlet Invert Elevation	Average Slope	Diameter or Height	Manning's Roughness	Peak Flow	Design Flow Capacity	Peak Flow/ Design Flow Ratio	Peak Flow Velocity	Peak Flow Depth	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged	Reported Condition
					(ft)	(ft)	(ft)	(%)	(in)		(cfs)	(cfs)		(ft/sec)	(ft)		(min)	
1	DummyChannel	Channel	DummyJunction	Out-01	100.00	7.18	6.18	1.0000										

Pre-Development
005-Year

Project Description

File Name	28595.0004 - Pre Development.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	SCS TR-55
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	NO

Analysis Options

Start Analysis On	May 18, 2022	00:00:00
End Analysis On	May 21, 2022	00:00:00
Start Reporting On	May 18, 2022	00:00:00
Antecedent Dry Days	0	days
Runoff (Dry Weather) Time Step	0 01:00:00	days hh:mm:ss
Runoff (Wet Weather) Time Step	0 00:05:00	days hh:mm:ss
Reporting Time Step	0 00:05:00	days hh:mm:ss
Routing Time Step	1	seconds

Number of Elements

	Qty
Rain Gages	0
Subbasins	1
Nodes	2
Junctions	1
Outfalls	1
Flow Diversions	0
Inlets	0
Storage Nodes	0
Links	1
Channels	1
Pipes	0
Pumps	0
Orifices	0
Weirs	0
Outlets	0
Pollutants	0
Land Uses	0

Subbasin Summary

SN	Subbasin ID	Area (ac)	Peak Rate Factor	Weighted Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1	Pre-Basin	23.02	323.00	82.00	5.90	3.90	89.66	46.09	0 00:35:00

Node Summary

SN	Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Initial Water Elevation (ft)	Surcharge Elevation (ft)	Ponded Area (ft²)	Peak Inflow (cfs)	Max HGL Elevation Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	DummyJunction	Junction	7.18	17.18	7.18	7.18	0.00	45.94	8.37	0.00	8.81	0 00:00	0.00	0.00
2	Out-01	Outfall	6.18					45.93	7.25					

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Diameter or Height (in)	Manning's Roughness	Peak Flow (cfs)	Design Flow Capacity (cfs)	Peak Flow/ Design Flow Ratio	Peak Flow Velocity (ft/sec)	Peak Flow Depth (ft)	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged (min)	Reported Condition
1	DummyChannel	Channel	DummyJunction	Out-01	100.00	7.18	6.18	1.0000	120.000	0.0320	45.93	1036.23	0.04	4.07	1.13	0.11	0.00	

Pre-Development
010-Year

Project Description

File Name	28595.0004 - Pre Development.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	SCS TR-55
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	NO

Analysis Options

Start Analysis On	May 18, 2022	00:00:00
End Analysis On	May 21, 2022	00:00:00
Start Reporting On	May 18, 2022	00:00:00
Antecedent Dry Days	0	days
Runoff (Dry Weather) Time Step	0 01:00:00	days hh:mm:ss
Runoff (Wet Weather) Time Step	0 00:05:00	days hh:mm:ss
Reporting Time Step	0 00:05:00	days hh:mm:ss
Routing Time Step	1	seconds

Number of Elements

	Qty
Rain Gages	0
Subbasins	1
Nodes	2
Junctions	1
Outfalls	1
Flow Diversions	0
Inlets	0
Storage Nodes	0
Links	1
Channels	1
Pipes	0
Pumps	0
Orifices	0
Weirs	0
Outlets	0
Pollutants	0
Land Uses	0

Subbasin Summary

SN	Subbasin ID	Area (ac)	Peak Rate Factor	Weighted Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1	Pre-Basin	23.02	323.00	82.00	7.00	4.92	113.17	57.85	0 00:35:00

Node Summary

SN	Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Initial Water Elevation (ft)	Surcharge Elevation (ft)	Ponded Area (ft²)	Peak Inflow (cfs)	Max HGL Elevation Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	DummyJunction	Junction	7.18	17.18	7.18	7.18	0.00	57.69	8.57	0.00	8.61	0 00:00	0.00	0.00
2	Out-01	Outfall	6.18					57.68	7.42					

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Diameter or Height (in)	Manning's Roughness	Peak Flow (cfs)	Design Flow Capacity (cfs)	Peak Flow/ Design Flow Ratio	Peak Flow Velocity (ft/sec)	Peak Flow Depth (ft)	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged (min)	Reported Condition
1	DummyChannel	Channel	DummyJunction	Out-01	100.00	7.18	6.18	1.0000	120.000	0.0320	57.68	1036.23	0.06	4.38	1.32	0.13	0.00	

Pre-Development
025-Year

Project Description

File Name	28595.0004 - Pre Development.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	SCS TR-55
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	NO

Analysis Options

Start Analysis On	May 18, 2022	00:00:00
End Analysis On	May 21, 2022	00:00:00
Start Reporting On	May 18, 2022	00:00:00
Antecedent Dry Days	0	days
Runoff (Dry Weather) Time Step	0 01:00:00	days hh:mm:ss
Runoff (Wet Weather) Time Step	0 00:05:00	days hh:mm:ss
Reporting Time Step	0 00:05:00	days hh:mm:ss
Routing Time Step	1	seconds

Number of Elements

	Qty
Rain Gages	0
Subbasins	1
Nodes	2
Junctions	1
Outfalls	1
Flow Diversions	0
Inlets	0
Storage Nodes	0
Links	1
Channels	1
Pipes	0
Pumps	0
Orifices	0
Weirs	0
Outlets	0
Pollutants	0
Land Uses	0

Subbasin Summary

SN	Subbasin ID	Area (ac)	Peak Rate Factor	Weighted Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1	Pre-Basin	23.02	323.00	82.00	8.00	5.86	134.90	68.55	0 00:35:00

Node Summary

SN	Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Initial Water Elevation (ft)	Surcharge Elevation (ft)	Ponded Area (ft²)	Peak Inflow (cfs)	Max HGL Elevation Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	DummyJunction	Junction	7.18	17.18	7.18	7.18	0.00	68.45	8.75	0.00	8.43	0 00:00	0.00	0.00
2	Out-01	Outfall	6.18					68.44	7.57					

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Diameter or Height (in)	Manning's Roughness	Peak Flow (cfs)	Design Flow Capacity (cfs)	Peak Flow/ Design Flow Ratio	Peak Flow Velocity (ft/sec)	Peak Flow Depth (ft)	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged (min)	Reported Condition
1	DummyChannel	Channel	DummyJunction	Out-01	100.00	7.18	6.18	1.0000	120.000	0.0320	68.44	1036.23	0.07	4.62	1.48	0.15	0.00	

Pre-Development
050-Year

Project Description

File Name	28595.0004 - Pre Development.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	SCS TR-55
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	NO

Analysis Options

Start Analysis On	May 18, 2022	00:00:00
End Analysis On	May 21, 2022	00:00:00
Start Reporting On	May 18, 2022	00:00:00
Antecedent Dry Days	0	days
Runoff (Dry Weather) Time Step	0 01:00:00	days hh:mm:ss
Runoff (Wet Weather) Time Step	0 00:05:00	days hh:mm:ss
Reporting Time Step	0 00:05:00	days hh:mm:ss
Routing Time Step	1	seconds

Number of Elements

	Qty
Rain Gages	0
Subbasins	1
Nodes	2
Junctions	1
Outfalls	1
Flow Diversions	0
Inlets	0
Storage Nodes	0
Links	1
Channels	1
Pipes	0
Pumps	0
Orifices	0
Weirs	0
Outlets	0
Pollutants	0
Land Uses	0

Subbasin Summary

SN	Subbasin ID	Area (ac)	Peak Rate Factor	Weighted Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1	Pre-Basin	23.02	323.00	82.00	9.00	6.81	156.86	79.30	0 00:35:00

Node Summary

SN	Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Initial Water Elevation (ft)	Surcharge Elevation (ft)	Ponded Area (ft²)	Peak Inflow (cfs)	Max HGL Elevation Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	DummyJunction	Junction	7.18	17.18	7.18	7.18	0.00	79.17	8.92	0.00	8.26	0 00:00	0.00	0.00
2	Out-01	Outfall	6.18					79.15	7.71					

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Diameter or Height (in)	Manning's Roughness	Peak Flow (cfs)	Design Flow Capacity (cfs)	Peak Flow/ Design Flow Ratio	Peak Flow Velocity (ft/sec)	Peak Flow Depth (ft)	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged (min)	Reported Condition
1	DummyChannel	Channel	DummyJunction	Out-01	100.00	7.18	6.18	1.0000	120.000	0.0320	79.15	1036.23	0.08	4.84	1.63	0.16	0.00	

THOMAS & HUTTON

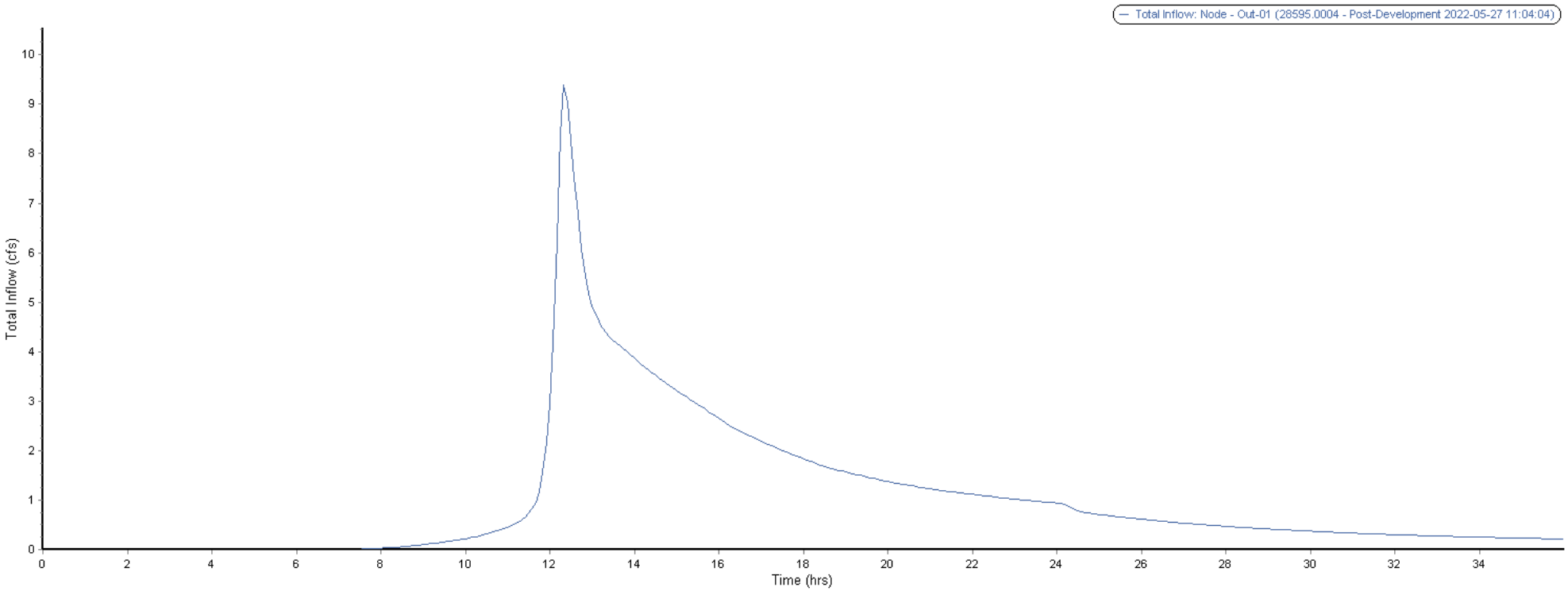
STORMWATER MANAGEMENT REPORT

PORT WENTWORTH, GEORGIA

APPENDIX B

SSA POST DEVELOPMENT MODEL INPUT AND OUTPUT RESULTS

Post-Development
Aquatic Resource Protection 001-Year Drawdown


Total Inflow: Node - Out-01 (28595.0004 - Post-Development 2022-05-27 11:04:04)
Total Inflow (cfs)
0
1
2
3
4
5
6
7
8
9
10
Time (hrs)
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34

Post-Development
002-Year

Project Description

File Name	28595.0004 - Post-Development.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	SCS TR-55
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	NO

Analysis Options

Start Analysis On	May 18, 2022	00:00:00
End Analysis On	May 21, 2022	00:00:00
Start Reporting On	May 18, 2022	00:00:00
Antecedent Dry Days	0	days
Runoff (Dry Weather) Time Step	0 01:00:00	days hh:mm:ss
Runoff (Wet Weather) Time Step	0 00:05:00	days hh:mm:ss
Reporting Time Step	0 00:05:00	days hh:mm:ss
Routing Time Step	1	seconds

Number of Elements

	Qty
Rain Gages	0
Subbasins	3
Nodes	5
Junctions	2
Outfalls	1
Flow Diversions	0
Inlets	0
Storage Nodes	2
Links	5
Channels	1
Pipes	3
Pumps	0
Orifices	0
Weirs	1
Outlets	0
Pollutants	0
Land Uses	0

Subbasin Summary

SN	Subbasin ID	Area (ac)	Peak Rate Factor	Weighted Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1	DA-Wetland	4.46	0.00	86.00	4.70	3.19	14.22	11.16	0 00:20:00
2	Post-Basin1	9.32	323.00	89.00	4.70	3.49	32.48	27.88	0 00:10:00
3	Post-Basin2	10.16	323.00	91.00	4.70	3.69	37.50	28.35	0 00:14:00

Node Summary

SN	Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Initial Water Elevation (ft)	Surcharge Elevation (ft)	Ponded Area (ft²)	Peak Inflow (cfs)	Max HGL Elevation Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	CS-01	Junction	6.00	10.50	6.00	10.50	1.00	4.31	7.21	0.00	3.29	0 00:00	0.00	0.00
2	Jun-02	Junction	6.18	10.50	6.18	10.50	1.00	4.31	6.49	0.00	4.01	0 00:00	0.00	0.00
3	Out-01	Outfall	6.18					13.26	6.27					
4	Stor-01	Storage Node	6.00	10.00	6.00		1.00	27.38	7.61				0.00	0.00
5	Stor-02	Storage Node	6.00	10.00	6.00		1.00	28.29	7.40				0.00	0.00

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length	Inlet Invert Elevation	Outlet Invert Elevation	Average Slope	Diameter or Height	Manning's Roughness	Peak Flow	Design Flow Capacity	Peak Flow/ Design Flow Ratio	Peak Flow Velocity	Peak Flow Depth	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged	Reported Condition
					(ft)	(ft)	(ft)	(%)	(in)		(cfs)	(cfs)		(ft/sec)	(ft)		(min)	
1	Link-01	Pipe	Stor-01	Stor-02	232.00	7.00	7.00	0.0000	24.000	0.0130	0.77	0.47	1.65	1.44	0.46	0.23	0.00	> CAPACITY
2	Link-02	Pipe	CS-01	Jun-02	1.00	6.00	6.00	0.0000	18.000	0.0130	4.31	44.57	0.10	4.80	0.76	0.51	0.00	Calculated
3	Link-03	Pipe	Stor-02	CS-01	35.00	6.00	6.00	0.0000	18.000	0.0130	4.31	0.56	7.67	2.65	1.30	0.87	0.00	> CAPACITY
4	Link-04	Channel	Jun-02	Out-01	100.00	6.18	6.18	0.0000	6.000	0.0320	4.31	1.48	2.91	0.68	0.20	0.40	0.00	
5	Weir-01	Weir	CS-01	Jun-02		6.00	6.18				0.00							

Post-Development
005-Year

Project Description

File Name	28595.0004 - Post-Development.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	SCS TR-55
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	NO

Analysis Options

Start Analysis On	May 18, 2022	00:00:00
End Analysis On	May 21, 2022	00:00:00
Start Reporting On	May 18, 2022	00:00:00
Antecedent Dry Days	0	days
Runoff (Dry Weather) Time Step	0 01:00:00	days hh:mm:ss
Runoff (Wet Weather) Time Step	0 00:05:00	days hh:mm:ss
Reporting Time Step	0 00:05:00	days hh:mm:ss
Routing Time Step	1	seconds

Number of Elements

	Qty
Rain Gages	0
Subbasins	3
Nodes	5
Junctions	2
Outfalls	1
Flow Diversions	0
Inlets	0
Storage Nodes	2
Links	5
Channels	1
Pipes	3
Pumps	0
Orifices	0
Weirs	1
Outlets	0
Pollutants	0
Land Uses	0

Subbasin Summary

SN	Subbasin ID	Area (ac)	Peak Rate Factor	Weighted Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1	DA-Wetland	4.46	0.00	86.00	5.90	4.31	19.24	14.92	0 00:20:00
2	Post-Basin1	9.32	323.00	89.00	5.90	4.64	43.24	36.60	0 00:10:00
3	Post-Basin2	10.16	323.00	91.00	5.90	4.86	49.37	36.79	0 00:14:00

Node Summary

SN	Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Initial Water Elevation (ft)	Surcharge Elevation (ft)	Ponded Area (ft^2)	Peak Inflow (cfs)	Max HGL Elevation Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	CS-01	Junction	6.00	10.50	6.00	10.50	1.00	6.09	7.46	0.00	3.04	0 00:00	0.00	0.00
2	Jun-02	Junction	6.18	10.50	6.18	10.50	1.00	6.09	6.55	0.00	3.95	0 00:00	0.00	0.00
3	Out-01	Outfall	6.18					18.54	6.29					
4	Stor-01	Storage Node	6.00	10.00	6.00		1.00	35.89	7.93				0.00	0.00
5	Stor-02	Storage Node	6.00	10.00	6.00		1.00	36.74	7.76				0.00	0.00

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length	Inlet Invert Elevation	Outlet Invert Elevation	Average Slope	Diameter or Height	Manning's Roughness	Peak Flow	Design Flow Capacity	Peak Flow/ Design Flow Ratio	Peak Flow Velocity	Peak Flow Depth	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged	Reported Condition
					(ft)	(ft)	(ft)	(%)	(in)		(cfs)	(cfs)		(ft/sec)	(ft)		(min)	
1	Link-01	Pipe	Stor-01	Stor-02	232.00	7.00	7.00	0.0000	24.000	0.0130	2.09	0.47	4.44	1.93	0.82	0.41	0.00	> CAPACITY
2	Link-02	Pipe	CS-01	Jun-02	1.00	6.00	6.00	0.0000	18.000	0.0130	6.09	44.57	0.14	5.40	0.91	0.61	0.00	Calculated
3	Link-03	Pipe	Stor-02	CS-01	35.00	6.00	6.00	0.0000	18.000	0.0130	6.09	0.56	10.85	3.46	1.48	0.99	0.00	> CAPACITY
4	Link-04	Channel	Jun-02	Out-01	100.00	6.18	6.18	0.0000	6.000	0.0320	6.09	1.48	4.12	0.80	0.24	0.47	0.00	
5	Weir-01	Weir	CS-01	Jun-02		6.00	6.18				0.00							

Post-Development
010-Year

Project Description

File Name	28595.0004 - Post-Development.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	SCS TR-55
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	NO

Analysis Options

Start Analysis On	May 18, 2022	00:00:00
End Analysis On	May 21, 2022	00:00:00
Start Reporting On	May 18, 2022	00:00:00
Antecedent Dry Days	0	days
Runoff (Dry Weather) Time Step	0 01:00:00	days hh:mm:ss
Runoff (Wet Weather) Time Step	0 00:05:00	days hh:mm:ss
Reporting Time Step	0 00:05:00	days hh:mm:ss
Routing Time Step	1	seconds

Number of Elements

	Qty
Rain Gages	0
Subbasins	3
Nodes	5
Junctions	2
Outfalls	1
Flow Diversions	0
Inlets	0
Storage Nodes	2
Links	5
Channels	1
Pipes	3
Pumps	0
Orifices	0
Weirs	1
Outlets	0
Pollutants	0
Land Uses	0

Subbasin Summary

SN	Subbasin ID	Area (ac)	Peak Rate Factor	Weighted Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1	DA-Wetland	4.46	0.00	86.00	7.00	5.37	23.93	18.41	0 00:20:00
2	Post-Basin1	9.32	323.00	89.00	7.00	5.71	53.20	44.55	0 00:10:00
3	Post-Basin2	10.16	323.00	91.00	7.00	5.94	60.34	44.49	0 00:14:00

Node Summary

SN	Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Initial Water Elevation (ft)	Surcharge Elevation (ft)	Ponded Area (ft²)	Peak Inflow (cfs)	Max HGL Elevation Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	CS-01	Junction	6.00	10.50	6.00	10.50	1.00	7.27	7.72	0.00	2.78	0 00:00	0.00	0.00
2	Jun-02	Junction	6.18	10.50	6.18	10.50	1.00	7.27	6.58	0.00	3.92	0 00:00	0.00	0.00
3	Out-01	Outfall	6.18					23.37	6.30					
4	Stor-01	Storage Node	6.00	10.00	6.00		1.00	43.85	8.28				0.00	0.00
5	Stor-02	Storage Node	6.00	10.00	6.00		1.00	44.43	8.15				0.00	0.00

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length	Inlet Invert Elevation	Outlet Invert Elevation	Average Slope	Diameter or Height	Manning's Roughness	Peak Flow	Design Flow Capacity	Peak Flow/ Design Flow Ratio	Peak Flow Velocity	Peak Flow Depth	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged	Reported Condition
					(ft)	(ft)	(ft)	(%)	(in)		(cfs)	(cfs)		(ft/sec)	(ft)		(min)	
1	Link-01	Pipe	Stor-01	Stor-02	232.00	7.00	7.00	0.0000	24.000	0.0130	3.21	0.47	6.83	1.94	1.21	0.60	0.00	> CAPACITY
2	Link-02	Pipe	CS-01	Jun-02	1.00	6.00	6.00	0.0000	18.000	0.0130	7.27	44.57	0.16	6.18	0.95	0.63	0.00	Calculated
3	Link-03	Pipe	Stor-02	CS-01	35.00	6.00	6.00	0.0000	18.000	0.0130	7.27	0.56	12.95	4.11	1.50	1.00	309.00	SURCHARGED
4	Link-04	Channel	Jun-02	Out-01	100.00	6.18	6.18	0.0000	6.000	0.0320	7.27	1.48	4.91	0.86	0.26	0.52	0.00	
5	Weir-01	Weir	CS-01	Jun-02		6.00	6.18				0.00							

Post-Development
025-Year

Project Description

File Name	28595.0004 - Post-Development.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	SCS TR-55
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	NO

Analysis Options

Start Analysis On	May 18, 2022	00:00:00
End Analysis On	May 21, 2022	00:00:00
Start Reporting On	May 18, 2022	00:00:00
Antecedent Dry Days	0	days
Runoff (Dry Weather) Time Step	0 01:00:00	days hh:mm:ss
Runoff (Wet Weather) Time Step	0 00:05:00	days hh:mm:ss
Reporting Time Step	0 00:05:00	days hh:mm:ss
Routing Time Step	1	seconds

Number of Elements

	Qty
Rain Gages	0
Subbasins	3
Nodes	5
Junctions	2
Outfalls	1
Flow Diversions	0
Inlets	0
Storage Nodes	2
Links	5
Channels	1
Pipes	3
Pumps	0
Orifices	0
Weirs	1
Outlets	0
Pollutants	0
Land Uses	0

Subbasin Summary

SN	Subbasin ID	Area (ac)	Peak Rate Factor	Weighted Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1	DA-Wetland	4.46	0.00	86.00	8.00	6.33	28.24	21.55	0 00:20:00
2	Post-Basin1	9.32	323.00	89.00	8.00	6.69	62.32	51.73	0 00:10:00
3	Post-Basin2	10.16	323.00	91.00	8.00	6.92	70.35	51.43	0 00:14:00

Node Summary

SN	Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Initial Water Elevation (ft)	Surcharge Elevation (ft)	Ponded Area (ft²)	Peak Inflow (cfs)	Max HGL Elevation Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	CS-01	Junction	6.00	10.50	6.00	10.50	1.00	8.26	7.96	0.00	2.54	0 00:00	0.00	0.00
2	Jun-02	Junction	6.18	10.50	6.18	10.50	1.00	8.26	6.60	0.00	3.90	0 00:00	0.00	0.00
3	Out-01	Outfall	6.18					27.52	6.31					
4	Stor-01	Storage Node	6.00	10.00	6.00		1.00	50.81	8.61				0.00	0.00
5	Stor-02	Storage Node	6.00	10.00	6.00		1.00	51.42	8.51				0.00	0.00

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length	Inlet Invert Elevation	Outlet Invert Elevation	Average Slope	Diameter or Height	Manning's Roughness	Peak Flow	Design Flow Capacity	Peak Flow/ Design Flow Ratio	Peak Flow Velocity	Peak Flow Depth	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged	Reported Condition
					(ft)	(ft)	(ft)	(%)	(in)		(cfs)	(cfs)		(ft/sec)	(ft)		(min)	
1	Link-01	Pipe	Stor-01	Stor-02	232.00	7.00	7.00	0.0000	24.000	0.0130	3.83	0.47	8.16	1.93	1.56	0.78	0.00	> CAPACITY
2	Link-02	Pipe	CS-01	Jun-02	1.00	6.00	6.00	0.0000	18.000	0.0130	8.26	44.57	0.19	6.91	0.96	0.64	0.00	Calculated
3	Link-03	Pipe	Stor-02	CS-01	35.00	6.00	6.00	0.0000	18.000	0.0130	8.26	0.56	14.71	4.67	1.50	1.00	466.00	SURCHARGED
4	Link-04	Channel	Jun-02	Out-01	100.00	6.18	6.18	0.0000	6.000	0.0320	8.26	1.48	5.58	0.91	0.28	0.55	0.00	
5	Weir-01	Weir	CS-01	Jun-02		6.00	6.18				0.00							

Post-Development
050-Year

Project Description

File Name	28595.0004 - Post-Development.SPF

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	SCS TR-55
Time of Concentration (TOC) Method	SCS TR-55
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	NO

Analysis Options

Start Analysis On	May 18, 2022	00:00:00
End Analysis On	May 21, 2022	00:00:00
Start Reporting On	May 18, 2022	00:00:00
Antecedent Dry Days	0	days
Runoff (Dry Weather) Time Step	0 01:00:00	days hh:mm:ss
Runoff (Wet Weather) Time Step	0 00:05:00	days hh:mm:ss
Reporting Time Step	0 00:05:00	days hh:mm:ss
Routing Time Step	1	seconds

Number of Elements

	Qty
Rain Gages	0
Subbasins	3
Nodes	5
Junctions	2
Outfalls	1
Flow Diversions	0
Inlets	0
Storage Nodes	2
Links	5
Channels	1
Pipes	3
Pumps	0
Orifices	0
Weirs	1
Outlets	0
Pollutants	0
Land Uses	0

Subbasin Summary

SN	Subbasin ID	Area (ac)	Peak Rate Factor	Weighted Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1	DA-Wetland	4.46	0.00	86.00	9.00	7.30	32.58	24.66	0 00:20:00
2	Post-Basin1	9.32	323.00	89.00	9.00	7.67	71.48	58.92	0 00:10:00
3	Post-Basin2	10.16	323.00	91.00	9.00	7.91	80.40	58.39	0 00:14:00

Node Summary

SN	Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Initial Water Elevation (ft)	Surcharge Elevation (ft)	Ponded Area (ft²)	Peak Inflow (cfs)	Max HGL Elevation Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	CS-01	Junction	6.00	10.50	6.00	10.50	1.00	9.30	8.15	0.00	2.35	0 00:00	0.00	0.00
2	Jun-02	Junction	6.18	10.50	6.18	10.50	1.00	9.30	6.62	0.00	3.88	0 00:00	0.00	0.00
3	Out-01	Outfall	6.18					31.33	6.32					
4	Stor-01	Storage Node	6.00	10.00	6.00		1.00	57.51	8.96				0.00	0.00
5	Stor-02	Storage Node	6.00	10.00	6.00		1.00	59.30	8.86				0.00	0.00

Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length	Inlet Invert Elevation	Outlet Invert Elevation	Average Slope	Diameter or Height	Manning's Roughness	Peak Flow	Design Flow Capacity	Peak Flow/ Design Flow Ratio	Peak Flow Velocity	Peak Flow Depth	Peak Flow Depth/ Total Depth Ratio	Total Time Surcharged	Reported Condition
					(ft)	(ft)	(ft)	(%)	(in)		(cfs)	(cfs)		(ft/sec)	(ft)		(min)	
1	Link-01	Pipe	Stor-01	Stor-02	232.00	7.00	7.00	0.0000	24.000	0.0130	4.38	0.47	9.32	1.92	1.91	0.95	0.00	> CAPACITY
2	Link-02	Pipe	CS-01	Jun-02	1.00	6.00	6.00	0.0000	18.000	0.0130	9.11	44.57	0.20	7.52	0.97	0.65	0.00	Calculated
3	Link-03	Pipe	Stor-02	CS-01	35.00	6.00	6.00	0.0000	18.000	0.0130	9.30	0.56	16.56	5.26	1.50	1.00	596.00	SURCHARGED
4	Link-04	Channel	Jun-02	Out-01	100.00	6.18	6.18	0.0000	6.000	0.0320	9.30	1.48	6.28	0.97	0.29	0.59	0.00	
5	Weir-01	Weir	CS-01	Jun-02		6.00	6.18				0.19							

THOMAS & HUTTON

STORMWATER MANAGEMENT REPORT

NOVARE MULTIFAMILY
PORT WENTWORTH, GEORGIA

APPENDIX C

STORMWATER PIPING AND INLET DESIGN CONSIDERATIONS

HEC-22

Energy Grade Line Computations

Struct. ID	*Q* (cfs)	*EGLo* (ft)	*HGLo* (ft)	Total Pipe Loss (ft)	*EGLi* (ft)	*HGLi* (ft)	*Ea* (ft)	*EGLa* (ft)	Surface Elev. (ft)
98		8.48	8.48						9.95
24	24.871	9.93	8.22	0	11.23	9.52	2.93	11.23	14.42
23	25.053	11.39	10.99	0.46	11.85	11.44	3.38	12.18	16.68
9	25.131	12.35	11.94	0.19	12.54	12.13	3.7	12.7	15.56
7	18.756	12.79	12.56	0.43	13.22	12.99	3.02	13.35	15.8
6	10.696	13.42	13.24	0.06	13.48	13.3	2.9	13.54	15.8
5	7.332	13.64	13.37	0.56	14.2	13.93	2.41	14.3	18.6
4	6.828	14.39	14.16	0.11	14.51	14.28	2.68	14.68	18.6
3	7.86	13.39	13.29	0.2	13.59	13.49	2.27	13.67	16.24
2	6.636	13.75	13.53	0.11	13.86	13.64	2.49	14	16.24
1	4.911	14.05	13.93	0.27	14.32	14.2	2.4	14.4	17.92
99		8.28	8.28						10.02
15	34.101	9.35	8.83	0.4	9.75	9.23	3.3	10.2	14.51
14	8.067	10.33	10.01	0.16	10.49	10.17	2.73	10.73	14.51
22	23.68	10.35	9.99	0.89	11.24	10.88	3.64	11.44	16.1
11	8.419	11.48	11.37	0.21	11.69	11.58	2.28	11.78	16.02
10	6.365	11.86	11.66	0.1	11.96	11.76	2.51	12.11	16.02
13	9.827	11.5	11.35	0.48	11.98	11.83	3.51	12.11	14.92
12	8.44	12.25	11.9	0.17	12.43	12.07	3.8	12.65	14.92
18	2.994	12.69	12.59	0.27	12.95	12.86	2.02	13.02	16.2
19	6.097	12.39	11.86	0	13.39	12.86	1.77	13.77	17
17	2.315	10.23	10.17	0.31	10.53	10.48	1.63	10.59	16.19
16	1.716	10.6	10.57	0.02	10.62	10.59	1.59	10.65	16.19
21		8.28	8.28						19.21
20	2.296	18.29	18.07	0	18.79	18.57	0.79	18.79	19.71

HEC-22
Storm Drain Computations

Structure ID		Length (ft)	Drainage Area (ac)	Runoff Coeff "C"	Tc (min)	Rain "I" (in/hr)	Runoff "Q" (cfs)	Known Q (cfs)	Total Q (cfs)	Pipe Dia. (in)	Velocity Design (ft/s)	Invert Elevation		Slope
From	To											U/S	D/S	
24	98	80.37	0	0	8.256	7.717	24.871	0	24.871	30	10.501	8.3	7	1.62%
23	24	122.45	0	0	7.92	7.773	25.053	0	25.053	30	6.079	8.8	8.3	0.41%
9	23	51.26	0.082544	0.95	7.777	7.798	25.131	0	25.131	30	5.95	9	8.8	0.39%
7	9	205.07	0.062707	0.95	7.183	7.898	18.756	0	18.756	30	5.757	10.33	9.51	0.40%
6	7	27	0.569293	0.74	6.384	8.032	10.696	0	10.696	24	4.995	10.64	10.53	0.40%
5	6	114.34	0.084039	0.75	6.071	8.085	7.332	0	7.332	18	6.1	11.89	10.89	0.88%
4	5	27	1.11516	0.75	6	8.097	6.828	0	6.828	18	6.328	12	11.73	1.00%
3	7	165	0.161854	0.95	6.606	7.995	7.86	0	7.86	24	4.766	11.4	10.7	0.42%
2	3	27	0.309624	0.71	6.501	8.012	6.636	0	6.636	18	4.286	11.51	11.4	0.40%
1	2	123.69	0.801997	0.75	6	8.097	4.911	0	4.911	18	4.114	12	11.51	0.40%
15	99	137.8	0.164852	0.75	8.4	7.693	34.101	0	34.101	36	5.785	6.9	6.5	0.29%
14	15	27	1.317522	0.75	6	8.097	8.067	0	8.067	18	6.554	8	7.73	1.00%
22	15	266.5	0	0	7.598	7.828	23.68	0	23.68	30	5.536	7.8	6.9	0.34%
11	22	152.21	0.317342	0.8	6.109	8.078	8.419	0	8.419	24	4.997	9.5	8.8	0.46%
10	11	27	1.039532	0.75	6	8.097	6.365	0	6.365	18	4.124	9.6	9.5	0.37%
13	22	255.95	0.182905	0.95	6.639	7.989	9.827	0	9.827	24	4.449	8.6	7.8	0.31%
12	13	27	0.905907	0.75	6.568	8.001	8.44	0	8.44	18	6.377	8.85	8.6	0.92%
18	12	124.28	0.488895	0.75	6	8.097	2.994	0	2.994	15	3.645	11	10.5	0.40%
19	22	115.08	0.933472	0.8	6	8.097	6.097	0	6.097	18	5.842	12	11	0.87%
17	15	238.87	0.078097	0.95	6.141	8.073	2.315	0	2.315	15	3.433	8.96	8	0.40%
16	17	27	0.300223	0.7	6	8.097	1.716	0	1.716	15	3.184	9.06	8.96	0.40%
20	21	99.09	0.374905	0.75	6	8.097	2.296	0	2.296	18	3.717	18	17.5	0.51%

HEC-22

Inlet Capacity Results

Structure	Q=CIA/Kc (cfs)	Known Q (cfs)	Longitudinal Slope SL (ft/ft)	Cross Slope *Sx* (ft/ft)	Cross Slope *Sw* (ft/ft)	Prev. Bypass Flow (cfs)	Total Gutter Flow (cfs)	Depth *d* (ft)	Gutter Width (ft)	Spread *T* (ft)	Inlet Type	Grate Length (in)	Grate Width (in)	Curb Opening Length (in)	Curb Opening Height (in)	Intercept Flow Q*i* (cfs)	Bypass Flow Q*b* (cfs)	Bypass Structure	Remark
1	4.911	0	-1	0.021	0.083	0	4.911	0.5	1	20.83	Grate inlet	26.04	23.52			4.911	0		
2	1.795	0	-1	0.021	0.083	0	1.795	0.29	1	11.04	Grate inlet	26.04	23.52			1.795	0		
3	1.255	0	-1	0.021	0.083	0	1.255	0.22	1	7.37	Grate inlet	26.04	23.52			1.255	0		
4	6.828	0	-1	0.021	0.083	0	6.828	0.6	1	25.76	Grate inlet	26.04	23.52			6.828	0		
5	0.515	0	-1	0.021	0.083	0	0.515	0.07	1	0.91	Grate inlet	26.04	23.52			0.515	0		
6	3.439	0	-1	0.021	0.083	0	3.439	0.41	1	16.6	Grate inlet	26.04	23.52			3.439	0		
7	0.486	0	-1	0.021	0.083	0	0.486	0.06	1	0.88	Grate inlet	26.04	23.52			0.486	0		
8	6.226	0	-1	0.021	0.083	0	6.226	0.57	1	24.27	Grate inlet	26.04	23.52			6.226	0		
9	0.64	0	-1	0.021	0.083	0	0.64	0.09	1	1.53	Grate inlet	26.04	23.52			0.64	0		
10	6.365	0	-1	0.021	0.083	0	6.365	0.57	1	24.62	Grate inlet	26.04	23.52			6.365	0		
11	2.073	0	-1	0.021	0.083	0	2.073	0.31	1	12.07	Grate inlet	26.04	23.52			2.073	0		
12	5.547	0	-1	0.021	0.083	1.808	7.355	0.62	1	27.03	Grate inlet	26.04	23.52			7.355	0		
13	1.419	0	-1	0.021	0.083	0	1.419	0.24	1	8.74	Grate inlet	26.04	23.52			1.419	0		
14	8.067	0	-1	0.021	0.083	0.879	8.946	0.7	1	30.69	Grate inlet	26.04	23.52			8.946	0		
15	1.009	0	-1	0.021	0.083	0.181	1.19	0.2	1	6.81	Grate inlet	26.04	23.52			1.19	0		
16	1.716	0	0.02	0.021	0.083	0	1.716	0.2	1	6.61	Grate inlet	26.04	23.52			0.837	0.879	14	
17	0.606	0	0.02	0.021	0.083	0	0.606	0.15	1	4.14	Grate inlet	26.04	23.52			0.425	0.181	15	
18	2.994	0	0.02	0.021	0.083	0	2.994	0.24	1	8.31	Grate inlet	26.04	23.52			1.186	1.808	12	
19	6.097	0	-1	0.021	0.083	0	6.097	0.57	1	24.42	Grate inlet	23.76	23.76			6.097	0		

THOMAS & HUTTON

STORMWATER MANAGEMENT REPORT

NOVARE MULTIFAMILY
PORT WENTWORTH, GEORGIA

APPENDIX D

COASTAL STORMWATER SUPPLEMENT

Coastal Stormwater Supplement Site Planning & Design Worksheet

Revised July 2014

Site Data

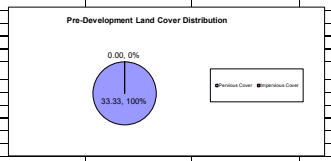
Site Name:

	data input cells
	calculation cells
	constant values

Step 1: Enter Site Information

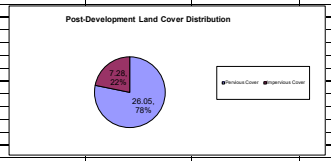
Pre-Development Land Cover (acres)

Land Cover Type	HSG A Soils	HSG B Soils	HSG C Soils	HSG D Soils	Totals
Pervious Cover	0.00	0.00	0.00	33.33	33.33
Impervious Cover	0.00	0.00	0.00	0.00	0.00
				Total	33.33

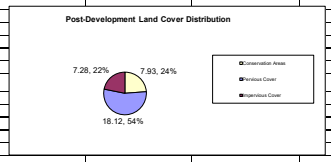


Post-Development Land Cover (acres)

Land Cover Type	HSG A Soils	HSG B Soils	HSG C Soils	HSG D Soils	Totals
Pervious Cover	0.00	0.00	0.00	26.05	26.05
Impervious Cover	0.00	0.00	7.28		7.28
				Total	33.33



Runoff Reduction Rainfall Event (inches)	1.2
Post-Development Site Imperviousness (%)	22%
Post-Development Site Runoff Coefficient, Rv	0.25
Target Runoff Reduction Volume, RRv (acre-feet)	0.82
Target Runoff Reduction Volume, RRv (cubic feet)	35,800

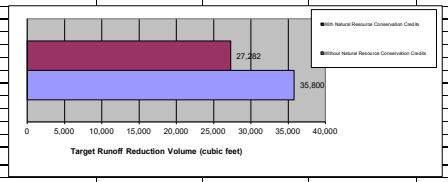


Step 2: Apply Better Site Planning Techniques

Natural Resource Conservation Credits	HSG A Soils	HSG B Soils	HSG C Soils	HSG D Soils	Total
Primary Conservation Areas (acres)	0.0	0.0	0.0	7.9	7.9
Secondary Conservation Areas (acres)	0.0	0.0	0.0	0.0	0.0
Total (acres)					7.93

Target Runoff Reduction Volume with Natural Resource Conservation Credits, RRv

Target Runoff Reduction Volume, RRv (acre-feet)	0.63
Target Runoff Reduction Volume, RRv (cubic feet)	27,282



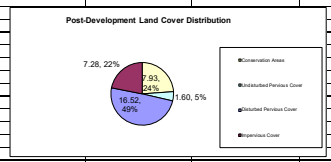
Step 3: Apply Better Site Design Techniques

Reduced Clearing and Grading Credits

	HSG A soils	HSG B Soils	HSG C Soils	HSG D Soils	Total
Undisturbed Pervious Cover (Acres)	0.0	0.0	0.0	1.6	1.60

Revised Post-Development Land Cover (acres)

Land Cover Type	HSG A soils	HSG B Soils	HSG C Soils	HSG D Soils	Totals
Conservation Areas	0.00	0.00	0.00	7.93	7.93
Undisturbed Pervious Cover	0.00	0.00	0.00	1.60	1.60
Disturbed Pervious Cover	0.00	0.00	0.00	16.52	16.52
Impervious Cover	0.00	0.00	7.28	0.00	7.28
				Total	33.33

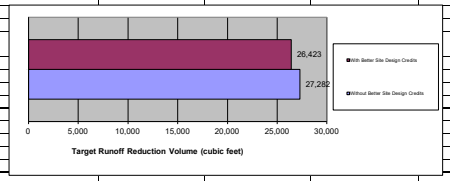


Restoration of Disturbed Pervious Surfaces

Soil Restoration (Acres)	0.0
Site Reforestation/Vegetation (Acres)	0.0
Soil Restoration w/ Site Reforestation/Revegetation (Acres)	0.0

Target Runoff Reduction Volume After Application of Better Site Design Credits, RRv

Target Runoff Reduction Volume, RRv (acre-feet)	0.61
Target Runoff Reduction Volume, RRv (cubic feet)	26,423



Note: Remainder of Better Site Design Techniques are considered to be "self-crediting."

Coastal Stormwater Supplement Site Planning & Design Worksheet

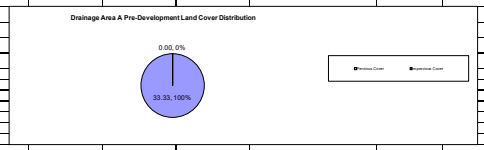
Revised July 2014

Drainage Area A

Drainage Area Information

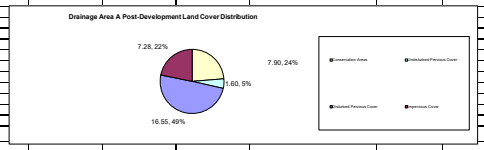
Drainage Area A Pre-Development Land Cover (acres)

Land Cover Type	HSG A soils	HSG B Soils	HSG C Soils	HSG D Soils	Totals
Pervious Cover	0.00	0.00	0.00	33.33	33.33
Impervious Cover	0.00	0.00	0.00	0.00	0.00
				Total	33.33



Drainage Area A Post-Development Land Cover (acres)

Land Cover Type	HSG A soils	HSG B Soils	HSG C Soils	HSG D Soils	Totals
Conservation Areas	0.00	0.00	0.00	7.90	7.90
Undisturbed Pervious Cover	0.00	0.00	0.00	1.60	1.60
Disturbed Pervious Cover	0.00	0.00	0.00	16.55	16.55
Impervious Cover	0.00	0.00	0.00	7.28	7.28
				Total	33.33



Low Impact Development Practices

Alternatives to Impervious Surfaces

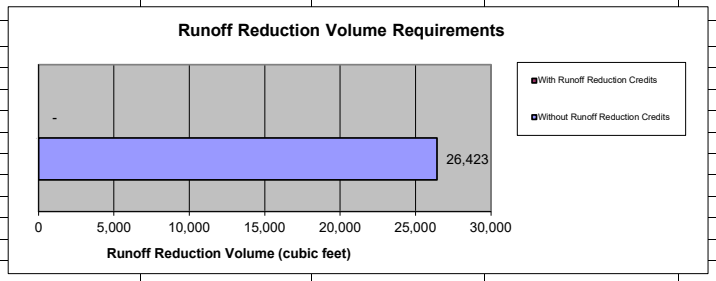
Low Impact Development Practice	Size of Contributing Drainage Area (acres)	Impervious Cover in Contributing Drainage Area (acres)	Direct Runoff Reduction Volume Received by Practice (cubic feet)	Description of Runoff Reduction Credit	Runoff Reduction Volume Received from Upstream Practices	Total Runoff Reduction Volume Received by Practice (cubic feet)	Treatment Volume Received from Upstream Practices (cubic feet)	Total Treatment Volume Received by Practice (cubic feet)	Method for Calculating Storage	Storage Volume Provided by Practice (cubic feet)	Adjustment to Runoff Reduction Volume (cubic feet)	Remaining Runoff Reduction Volume (cubic feet)	Adjustment to Treatment Volume (cubic feet)	Remaining Treatment Volume (cubic feet)	Downstream Practice to be Employed
None	0.00	0.00	0.0	N/A	0.0	0.0	0.0	0.0	N/A	N/A	0.0	0.0	0.0	0.0	
None	0.00	0.00	0.0	N/A	0.0	0.0	0.0	0.0	N/A	N/A	0.0	0.0	0.0	0.0	
None	0.00	0.00	0.0	N/A	0.0	0.0	0.0	0.0	N/A	N/A	0.0	0.0	0.0	0.0	
None	0.00	0.00	0.0	N/A	0.0	0.0	0.0	0.0	N/A	N/A	0.0	0.0	0.0	0.0	
None	0.00	0.00	0.0	N/A	0.0	0.0	0.0	0.0	N/A	N/A	0.0	0.0	0.0	0.0	
"Receiving" Low Impact Development Practices															
Grass Channel, C/D Soils 1	17.15	7.28	32275.8	12.5% of volume received by the practice	0.0	32275.8	0.0	32275.8	N/A	N/A	4034.5	28241.3	4034.5	28241.3	Bioretention Area, Non-Underdrained 1
Bioretention Area, Non-Underdrained 1	3.19	0.00	694.8	100% of storage volume	28241.3	28936.1	28241.3	28936.1	Surface Area x (Ponding Depth + Depth of Planting Bed x Void	500015.0	28936.1	0.0	28936.1	0.0	Stormwater Pond, Wetland, or Wet Swale 1
Vegetated Filter Strip, C/D Soils 1	3.43	0.00	747.1	30% of volume received by the practice	0.0	747.1	0.0	747.1	N/A	N/A	224.1	522.9	224.1	522.9	Stormwater Pond, Wetland, or Wet Swale 1
None	0.00	0.00	0.0	N/A	0.0	0.0	0.0	0.0	N/A	N/A	0.0	0.0	0.0	0.0	No Downstream Practice
None	0.00	0.00	0.0	N/A	0.0	0.0	0.0	0.0	N/A	N/A	0.0	0.0	0.0	0.0	No Downstream Practice
None	0.00	0.00	0.0	N/A	0.0	0.0	0.0	0.0	N/A	N/A	0.0	0.0	0.0	0.0	No Downstream Practice
None	0.00	0.00	0.0	N/A	0.0	0.0	0.0	0.0	N/A	N/A	0.0	0.0	0.0	0.0	No Downstream Practice
None	0.00	0.00	0.0	N/A	0.0	0.0	0.0	0.0	N/A	N/A	0.0	0.0	0.0	0.0	No Downstream Practice
None	0.00	0.00	0.0	N/A	0.0	0.0	0.0	0.0	N/A	N/A	0.0	0.0	0.0	0.0	
None	0.00	0.00	0.0	N/A	0.0	0.0	0.0	0.0	N/A	N/A	0.0	0.0	0.0	0.0	
None	0.00	0.00	0.0	N/A	0.0	0.0	0.0	0.0	N/A	N/A	0.0	0.0	0.0	0.0	
None	0.00	0.00	0.0	N/A	0.0	0.0	0.0	0.0	N/A	N/A	0.0	0.0	0.0	0.0	
None	0.00	0.00	0.0	N/A	0.0	0.0	0.0	0.0	N/A	N/A	0.0	0.0	0.0	0.0	
None	0.00	0.00	0.0	N/A	0.0	0.0	0.0	0.0	N/A	N/A	0.0	0.0	0.0	0.0	
None	0.00	0.00	0.0	N/A	0.0	0.0	0.0	0.0	N/A	N/A	0.0	0.0	0.0	0.0	
Treatment Only Practices															
Stormwater Pond, Wetland, or Wet Swale 1	9.56	0.00	2082.2	None	522.9	2605.1	522.9	2605.1	Volume in Wet Pool and Extended Detention	0.0	0.0	2605.1	0.0	2605.1	
None	0.00	0.00	0.0	N/A	0.0	0.0	0.0	0.0	N/A	0.0	0.0	0.0	0.0	0.0	No Downstream Practice
None	0.00	0.00	0.0	N/A	0.0	0.0	0.0	0.0	N/A	0.0	0.0	0.0	0.0	0.0	No Downstream Practice
None	0.00	0.00	0.0	N/A	0.0	0.0	0.0	0.0	N/A	N/A	0.0	0.0	0.0	0.0	
None	0.00	0.00	0.0	N/A	0.0	0.0	0.0	0.0	N/A	N/A	0.0	0.0	0.0	0.0	
Totals	**33.33**	**7.28**									**33194.7**		**33194.7**		

Coastal Stormwater Supplement Site Planning & Design Worksheet

Revised July 2014

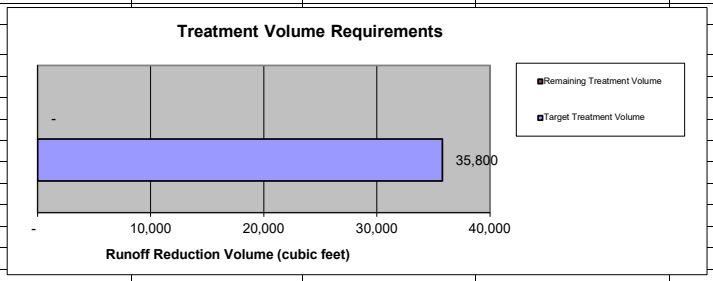
Stormwater Runoff Reduction Summary

Target Runoff Reduction and Treatment Volume, RRv (cubic feet)	35,800
Total Adjustment to Runoff Reduction Volume, RRv (cubic feet)	42,572
Percentage of Target Runoff Reduction Volume Achieved	119%
Runoff Reduction Volume Achieved (in)	1.43
Runoff Reduction Volume Remaining (cubic feet)	-



Note: If any of the target runoff reduction volume cannot be reduced on the development site, due to site characteristics or constraints, it should be intercepted and treated in one or more stormwater management practices that: (1) provide for at least an 80 percent reduction in TSS loads; and (2) reduce nitrogen and bacteria loads to the maximum extent practical.

Treatment Volume Achieved (cubic feet)	42,572
Treatment Volume Remaining (cubic feet)	-



THOMAS & HUTTON

STORMWATER MANAGEMENT REPORT

NOVARE MULTIFAMILY
PORT WENTWORTH, GEORGIA

APPENDIX E

WIN-TR55 CALCULATIONS

Pre-Development

WinTR-55 Current Data Description

--- Identification Data ---

User: SGJ
Project: 28595.0004 - Novare SF
SubTitle: Pre-Development
State: Georgia
County: Chatham
Filename: Z:\28595\28595.0004\Engineering\Calculations and Reports\Storm Water\TR55\PRE\28595.w55

Date: 5/18/2022
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
DA-Pre		Outlet	23.02	82	.587

Total area: 23.02 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
4.2	5.4	6.4	7.8	9.0	10.2	3.5

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type III
Dimensionless Unit Hydrograph: <standard>

28595.0004 - Novare SF
Pre-Development
Chatham County, Georgia

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
DA-Pre	23.02	0.587	82	Outlet	

Total Area: 23.02 (ac)

28595.0004 - Novare SF
Pre-Development
Chatham County, Georgia

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
DA-Pre							
SHEET	100	0.0900	0.800				0.298
SHALLOW	560	0.0256	0.050				0.060
SHALLOW	1398	0.0110	0.050				0.229
						Time of Concentration	.587

28595.0004 - Novare SF
Pre-Development
Chatham County, Georgia

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
DA-Pre	Paved parking lots, roofs, driveways	D	.3	98
	Woods - grass combination (fair)	D	22.72	82
	Total Area / Weighted Curve Number		23.02	82

Post-Development

WinTR-55 Current Data Description

--- Identification Data ---

User: SGJ
Project: 28595.0004 - Novare SF
SubTitle: Post Development
State: Georgia
County: Chatham
Filename: Z:\28595\28595.0004\Engineering\Calculations and Reports\Storm Water\TR55\28595.w55

Date: 5/18/2022
Units: English
Areal Units: Acres

--- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
DA- Post1		Outlet	9.32	89	.204
DA- Wet		Outlet	4.45	86	.328
DA-Post2		Outlet	10.16	90	0.240

Total area: 23.93 (ac)

--- Storm Data --

Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
4.2	5.4	6.4	7.8	9.0	10.2	3.5

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type III
Dimensionless Unit Hydrograph: <standard>

SGJ

28595.0004 - Novare SF
Post Development
Chatham County, Georgia

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
DA- Post1	9.32	0.204	89	Outlet	
DA- Wet	4.45	0.328	86	Outlet	
DA-Post2	10.16	0.240	90	Outlet	

Total Area: 23.93 (ac)

28595.0004 - Novare SF
Post Development
Chatham County, Georgia

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
DA- Post1							
SHEET	50	0.0050	0.150				0.143
SHALLOW	140	0.0050	0.025				0.027
CHANNEL	775	0.0030	0.013	3.14	3.14	6.332	0.034
					Time of Concentration		.204
DA- Wet							
SHEET	100	0.0200	0.400				0.312
SHALLOW	500	0.3000	0.050				0.016
					Time of Concentration		.328
DA-Post2							
SHEET	100	0.0100	0.150				0.188
SHALLOW	225	0.0150	0.025				0.025
CHANNEL	600	0.0030	0.013	3.14	3.14	6.173	0.027
					Time of Concentration		0.240

28595.0004 - Novare SF
Post Development
Chatham County, Georgia

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
DA- Post1	Open space; grass cover < 50% (poor)	D	1.353	89
	Open space; grass cover 50% to 75% (fair)	D	4.937	84
	Paved parking lots, roofs, driveways	D	3.025	98
	Total Area / Weighted Curve Number		9.32	89
DA- Wet	Open space; grass cover 50% to 75% (fair)	D	3.96	84
	Paved parking lots, roofs, driveways	D	.49	98
	Total Area / Weighted Curve Number		4.45	86
DA-Post2	Open space; grass cover 50% to 75% (fair)	D	5.55	84
	Paved parking lots, roofs, driveways	D	4.61	98
	Total Area / Weighted Curve Number		10.16	90

THOMAS & HUTTON

STORMWATER MANAGEMENT REPORT

NOVARE MULTIFAMILY
PORT WENTWORTH, GEORGIA

APPENDIX F

EXHIBITS

Z:\28595\0004\ENGINEERING\CALCULATIONS AND REPORTS\STORM WATER\DWG\28595-0004 - PRE DEVELOPMENT.DWG - May 26, 2022 - 2:52 PM

BLACK CREEK CANAL (60' R/W)

BLACK CREEK CANAL
60' R/W
1.43 AC

OUTFALL

N: 802,758.61
E: 956,783.93

DA- POST BASIN 2
AC: 23.02
CN:82
TC: 35

MAGNOLIA BOULEVARD

16' W 20' UTILITY EASEMENT

50' UNDISTURBED BUFFER

EXISTING 20' UTILITY EASEMENT

C N/F BRENDA SUE CHRISTIAN D.B. 3816 PG. 72 70975 02008

D N/F ERIC C. SMITH D.B. 3722 PG. 566 70975 02009

E N/F LULA GHYLL ROBERTS CHEATHEM D.B. 2550 PG. 575 70975 02010

F N/F DAVID WILSON & EDWARD JOHNSON D.B. 1576 PG. 186 70975 02011

G N/F EDWARD JOHNSON 70975 02012

H N/F FELDSTONE GROUP, LLC D.B. 3446 PG. 242 70975 02013

I N/F FELDSTONE GROUP, LLC D.B. 3376 PG. 270 70975 02014

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.

GEORGIA HIGHWAY 21 R/W VARIES VARIES

PREDEVELOPMENT DRAINAGE EXHIBIT

NOVARE SINGLEFAMILY

PORT WENTWORTH, GEORGIA

PREPARED FOR:

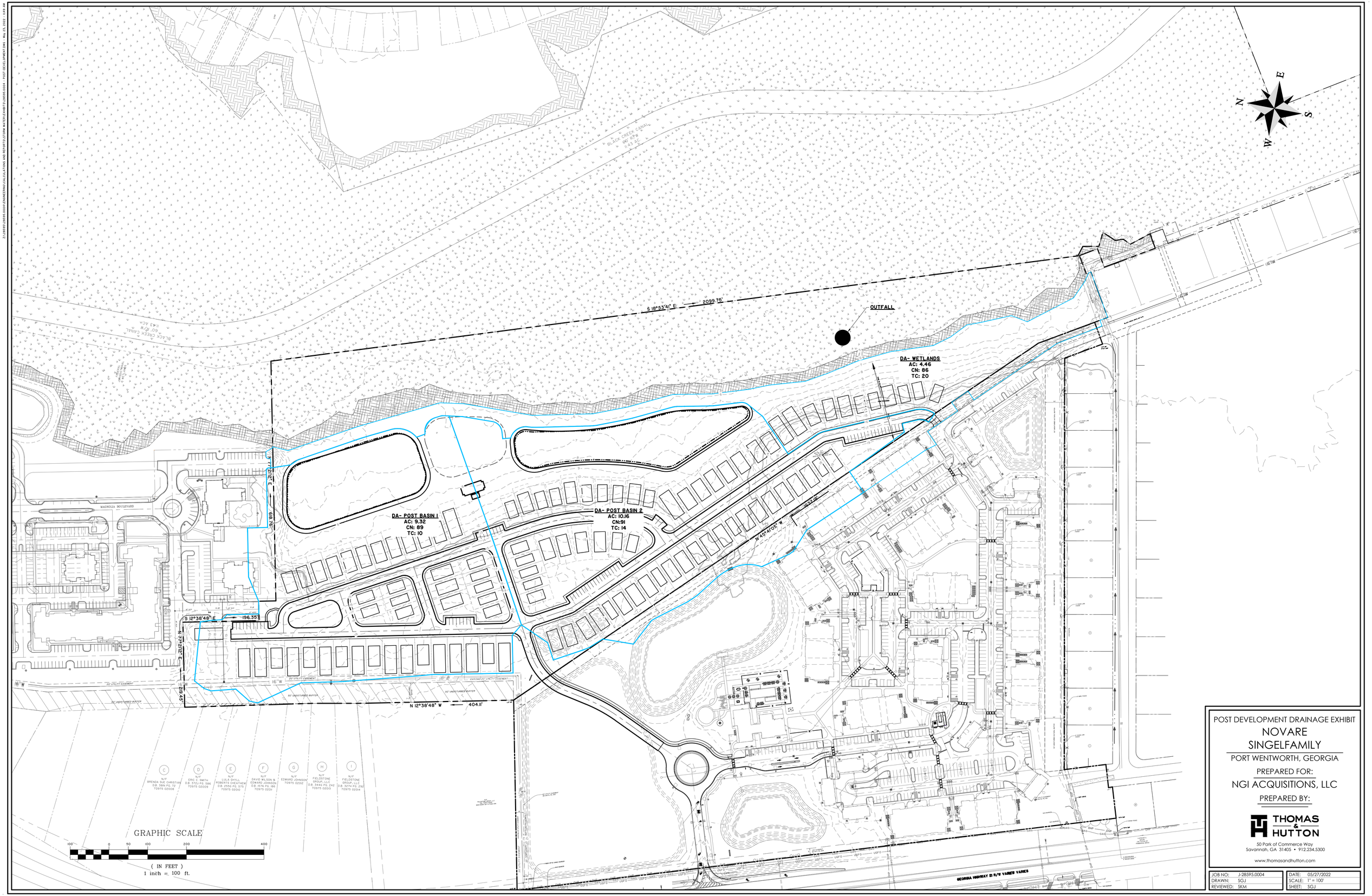
NGI AQUISITIONS, LLC

PREPARED BY:

THOMAS & HUTTON
50 Park of Commerce Way
Savannah, GA 31405 • 912.234.5300
www.thomasandhutton.com

JOB NO:	J-28595.0004
DRAWN:	SGJ
REVIEWED:	SKM

DATE:	05/27/2022
SCALE:	1" = 100'
SHEET:	1 OF 1



POST DEVELOPMENT DRAINAGE EXHIBIT

NOVARE SINGELFAMILY

PORT WENTWORTH, GEORGIA

PREPARED FOR:

NGI ACQUISITIONS, LLC

PREPARED BY:

THOMAS & HUTTON

50 Park of Commerce Way
Savannah, GA 31405 • 912.234.5300

www.thomasandhutton.com

JOB NO: J-28595.0004	DATE: 05/27/2022
DRAWN: SGJ	SCALE: 1" = 100'
REVIEWED: SKM	SHEET: SGJ

Z:\28595\28595.0004\ENGINEERING\CALCULATIONS AND REPORTS\SITE\28595.0004 - SECONDARY DRAINAGE EXHIBIT.DWG - May 31, 2022 - 1:39 PM

BLACK CREEK CANAL
60' R/W
11.43 AC.

BLACK CREEK CANAL
60' R/W
11.43 AC

POOL PARK

POOL

CLUBHOUSE

WS-01
AC: 0.80
RC: 0.75
TC: 6 MIN

WS-02
AC: 0.31
RC: 0.71
TC: 6 MIN

WS-03
AC: 0.16
RC: 0.95
TC: 6 MIN

WS-04
AC: 1.11
RC: 0.75
TC: 6 MIN

WS-05
AC: 0.08
RC: 0.95
TC: 6 MIN

WS-06
AC: 0.57
RC: 0.74
TC: 6 MIN

WS-07
AC: 0.06
RC: 0.95
TC: 6 MIN

WS-08
AC: 1.01
RC: 0.75
TC: 6 MIN

WS-09
AC: 0.08
RC: 0.95
TC: 6 MIN

WS-10
AC: 1.04
RC: 0.75
TC: 6 MIN

WS-11
AC: 0.32
RC: 0.80
TC: 6 MIN

WS-12
AC: 0.91
RC: 0.75
TC: 6 MIN

WS-13
AC: 0.18
CN: 0.95
TC: 6 MIN

WS-14
AC: 1.32
RC: 0.75
TC: 6 MIN

WS-15
AC: 0.16
RC: 0.95
TC: 6 MIN

WS-16
AC: 0.30
RC: 0.70
TC: 6 MIN

WS-17
AC: 0.08
RC: 0.95
TC: 6 MIN

WS-18
AC: 0.49
RC: 0.75
TC: 6 MIN

WS-19
AC: 0.93
RC: 0.80
TC: 6 MIN

WS-20
AC: 0.37
RC: 0.75
TC: 6 MIN

WS-21
AC: 0.28
RC: 0.95
TC: 6 MIN

WS-22
AC: 0.39
RC: 0.90
TC: 6 MIN

38R HOSE

20' UTILITY EASEMENT

50' UNDISTURBED BUFFER

GEORGIA HIGHWAY 21 R/W VARIES

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)

1 inch = 100 ft.

SECONDARY DRAINAGE

NOVARE SINGLEFAMILY

PORT WENTWORTH, GOERGIA

PREPARED FOR:

NGI AQUISITIONS, LLC

PREPARED BY:

THOMAS & HUTTON

50 Park of Commerce Way
Savannah, GA 31405 • 912.234.5300

www.thomasandhutton.com

JOB NO:	J-28595.0004
DRAWN:	SGJ
REVIEWED:	SKM

DATE:	05/31/2022
SCALE:	1" = 100'
SHEET:	1

Custom Soil Resource Report
Soil Map

Map Scale: 1:3,830 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Bryan and Chatham Counties, Georgia
Survey Area Data: Version 16, Aug 31, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 4, 2021—Jan 18, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Cc	Cape Fear soils	1.1	4.3%
Oj	Ocilla complex	10.0	39.3%
Ok	Ogeechee loamy fine sand	0.5	1.8%
Pn	Pooler fine sandy loam	13.9	54.6%
Totals for Area of Interest		**25.4**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The

delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Subdivision Application submitted by Cody Rogers, P.E., EMC Engineering Services, Inc., on behalf of Forrest and William Floyd for PIN #'s: 70976 02003, 70976 02029, and 70976B01001B (Northwest Quadrant of the Intersection of Highway 21 and Highway 30) located in a R-A (Residential Agriculture) Zoning District for a Final Plat of a Major Subdivision (Floyd Property - 9.525 Acres) for the purpose of retail and other business development

Issue/Item: Subdivision Application submitted by Cody Rogers, P.E., EMC Engineering Services, Inc., on behalf of Forrest and William Floyd for PIN #'s: 70976 02003, 70976 02029, and 70976B01001B (Northwest Quadrant of the Intersection of Highway 21 and Highway 30) located in a R-A (Residential Agriculture) Zoning District for a Final Plat of a Major Subdivision (Floyd Property - 9.525 Acres) for the purpose of retail and other business development

Background: There are currently three (3) existing parcels at this location which will be subdivided and recombined into five (5) proposed parcels. The five proposed parcels are described as follows:

1.) Parcel A: 3.847 acres created through a combination of a portion of PINs 70976 02029 and 70976 02003.
2.) Parcel B: (remaining lands of Floyd) 1.231 acres created as the "leftover" portion of 70976B01001B.
3.) Parcel C: (remaining lands of Floyd) 0.451 acres created as the "leftover" portion of 70976 02003.
4.) Outparcel 1: 2.840 acres created through a combination of a portion of PINs 70976 02003 and 70976B01001B
5.) Outparcel 2: 1.156 acres created through a combination of a portion of PINs 70976 02029 and 70976 02003.

Facts and Findings: The application and submitted plat appears to meet the City requirements. When developed the developer intends on connecting to City of Port Wentworth water and sanitary sewer utilities.

Funding: N/A

Recommendation: The Planning Commission will hear this application on Monday, November 14, 2022 at 3:30PM. **/ UPDATE: THE PLANNING VOTED UNANIMOUSLY TO RECOMMEND TO APPROVE THE APPLICATION.**

ATTACHMENTS:

- Parkers Hwy 21 & 30 RA F-PLAT Nov 2022-Application (PDF)
- Parkers Hwy 21 & 30 RA F-Plat Nov 2022-Letter of Intent (PDF)
- Parkers Hwy 21 & 30 RA F-Plat Nov 2022-Subdivision Narrative 11.7.22 (PDF)
- Parkers Hwy 21 & 30 R-A F-Plat Nov 2022-Timeline (DOCX)
- Parkers Hwy 21 & 30 RA F-Plat Nov 2022-Sub Plat-REV1 (signed) 11.3.22 (PDF)

Project # 220494

RECEIVED SEP 23 2022 BY:

SUBDIVISION APPLICATION FORM FOR THE CITY OF PORT WENTWORTH

Application Form Required

This application form is to accompany **all** subdivisions submitted for Port Wentworth Planning Commission review and is to be filled out in its **entirety.** Plats/subdivisions not accompanied by this application will not be accepted for processing. All subdivisions with their completed applications must be received by the City of Port Wentworth at least 45 business days prior to the Planning Commission meeting at which they are to be considered. Revisions to a subdivision under review by the Port Wentworth Planning Commission must be received 10 business days prior to the Port Wentworth Planning Commission at which each subdivision is scheduled to be heard.

Subdivision Name: Parkers - Highway 21 & 30	
Location: Northwest Quadrant of Intersection of Highway 21 & 30	
Number of Lots: ~~N~~ 5 CR DBH	Number of Acres: 7.83
PIN #('s): 70976-02029 ; 70976-02003 ; 70976B01001B	Current Zoning: R-A (proposed C-3)

Type of Subdivision: (Check applicable blanks from each column)

A.
- ____ Sketch Plan
- ____ Master Plan
- ~~N~~ ____ Preliminary Plat
- DBH CR X Final Plat
- ____ Revision to a Recorded Plat

B.
- X Major Subdivision (4 or more lots or a new road)
- CR DBH ~~N~~ Minor Subdivision (3 or less lots & no new road)

Access Road is not to be dedicated to the City

Purpose of Subdivision:

- ____ Single Family
- ____ Multi-Family
- X Retail
- X Other Business
- ____ Industrial
- ____ Institutional
- ____ Other
- ____ Sign

Variances: (List all variances being requested)

_____

_____

_____

_____

_____

Georgia DOT Review

In all applications in which property being subdivided lies along a State Highway or access is needed from a State Highway, all applicants are required to submit a plat to the Georgia Department of Transportation for review. The subdivision application will not be considered by the Port Wentworth Planning Commission until the Georgia Department of Transportation has commented on the subdivision. The comments must accompany the application.

Plat has been submitted, comments will be forwarded upon receipt

Previous Submittal

Has this tract of land being proposed for subdividing been submitted to the Port Wentworth Planning Commission under a different subdivision name?

Yes _____ No X

If yes, what name? _____

Date Submitted: _____ PWPC File No: _____

Number of Required Prints

All submittals, regardless of type, shall include **three (3) full size prints and fifteen (15) half size (11" x 17") prints**. Stamp must be in contrasting ink. Also, a **PDF** of the entire submittal is required on a flash drive or digital download link (**NO CD's**).

Statements as to Covenants / Deed Restrictions: (Check One)

__ __ A copy of all existing deed restrictions or subdivision covenants applicable to this property are attached.

__ X __ There are no added restrictions or subdivision covenants on this property.

Contact Person (s): (Type or Print Legibly)

Engineer/Surveyor:	EMC Engineering Services, Inc. C/O Cody Rogers, PE		
Address:	1211 Merchant Way, Suite 201	City, State Zip:	Statesboro, GA 30458
Phone #:	912-644-3219	Email:	cody_rogers@emc-eng.com
Owner:	Forrest Floyd & William Floyd		
Address:	120 State Road 30	City, State Zip:	Savannah, GA 31407
Phone #	912.657.9691	Email:	w.floyd@comcast.net
Date:	09/21/2022		

Please list all property owners that are within 250 feet of the parcel to be subdivided including those across the public right-of-way. Please include name, mailing address and PIN #.

1.) Frank & Reita's LLC; 70976 02030; 134 Highway 30; 1716 E Highway 80, Bloomingdale, GA 31302
2.) Green Eddie Lee; 70976B01018 & 70976B01019; Highway 21; 7317 Highway 21, Port Wentworth, GA 31407
3.) Hunter Charles & Rosella; 70976B01001A; 7229 Highway 21, Port Wentworth, GA 31407
4.) Jones Rosella ET AL; 70976B01002; Augusta Road; 116 Village Lake Drive, Pooler, GA 31322
5.) Hunter Charles E ET AL; 70976B01011; Augusta Road; 7229 Highway 21, Port Wentworth, GA 31407
6.) Port City Car Wash, LLC.; 70037 02007; 38 Magellan Blvd.; 118 Pipemakers Circle, Suite 100, Pooler, GA 31322
7.) Double Reverse, LLC.; 70037 02006; 0 Magellan Blvd.; 250 N. Orange Avenue, Suite 1500, Orlando, FL 32801
8.) WPB Estate Management LLC.; 70037 02016; 0 Highway 21; 4107 Columbia Road, Augusta, GA 30907

Certifications:

1. I hereby certify that this proposed subdivision/plan does not violate any covenants or deed restrictions currently in effect for the property being subdivided.
2. I hereby certify that all taxes applicable to this property have been paid and that there are no delinquent taxes outstanding.
3. I hereby certify that I am the owner of the property being proposed for subdivision.
4. I hereby certify that all the information pertained in this application is true and correct.

ESTATE OF FRANK NEVILLE FLOYD

William T. Floyd

Signature of Owner

AS CO-EXECUTOR OF THE ESTATE

ESTATE OF FRANK NEVILLE FLOYD

Signature of Owner

AS CO-EXECUTOR OF THE ESTATE

Comments: Place any pertinent comments you wish to make in the following space:

Submit this form with the proposed subdivision and any accompanying information to:

CITY OF PORT WENTWORTH

7306 HIGHWAY 21, SUITE 301

PORT WENTWORTH, GEORGIA 31407

CM CARELLAS MURPHY LAW, LLP
440 Silverwood Centre Drive
P.O. Box 2599 Rincon, GA, 31326
T: (912) 826-7100
F: (912) 826-9740

SCANNED 9-29-22

September 27, 2022

Parker's Kitchen
Attn: Daniel Ben-Yisrael
17 W. McDonough St.
Savannah, GA 31401

Re: Subdivision application and rezoning authorization form

Dear Daniel:

Enclosed are the original documents which were signed by Forrest Floyd and William Floyd.

Sincerely,

CARELLAS MURPHY LAW, LLP
By Theodore T. Carellas, P.C.

Janelle W. Drawdy
Legal Assistant

/jwd
Enclosures

AUTHORIZATION OF PROPERTY OWNER

Application for Rezoning or Variance

I swear that I am the owner of the property which is the subject matter of the attached application, as is shown in the records of Port Wentworth, Georgia.

I authorize the person named below to act as applicant in the pursuit of a variance or for the rezoning of this property.

Name of Applicant: Drayton-Parker Companies, LLC C/O Daniel Ben-Yisrael

Address: 17 W. McDonough Street, Savannah, GA 31401

Telephone Number: 912-677-0593

ESTATE OF FRANK NEVILLE FLOYD

Signature of Owner WILLIAM NEVILLE FLOYD
AS CO-EXECUTOR OF THE ESTATE

ESTATE OF FRANK NEVILLE FLOYD

Signature of Owner FRANK FORREST FLOYD
AS CO-EXECUTOR OF THE ESTATE

Personally appeared before me

William Neville Floyd and Frank Forrest Floyd

who swears that the information contained in this authorization is true and correct to the best of his or her knowledge and belief.

Notary Public

JANELLE W DRAWDY NOTARY PUBLIC Comm. Exp. 02/25/26 EFFINGHAM COUNTY, GA

9/22/22

Date

CITY OF PORT WENTWORTH
(912) 964-4379

REC#: 00371557 10/04/2022 10:55 AM
OPER: KS TERM: 055
REF#: 1111

TRAN: 112.0000 BLDG PERMIT
220494 621.00CR
FLOYD, WILLIAM
7097602029
I-SUBDIV 621.00CR

TENDERED:	621.00	CHECK
APPLIED:	621.00-	
CHANGE:	0.00	

WWW.CITYOFPORTWENTWORTH.COM

22-2059 Parkers – Highway 21 & 30, Port Wentworth

The following narrative describes in detail the proposed subdivision at the northwest corner of the intersection of Highway 21 & Highway 30.

There are currently three (3) existing parcels at this location which will be subdivided and recombined into five (5) proposed parcels following the subdivision approval.

The three existing parcels are:

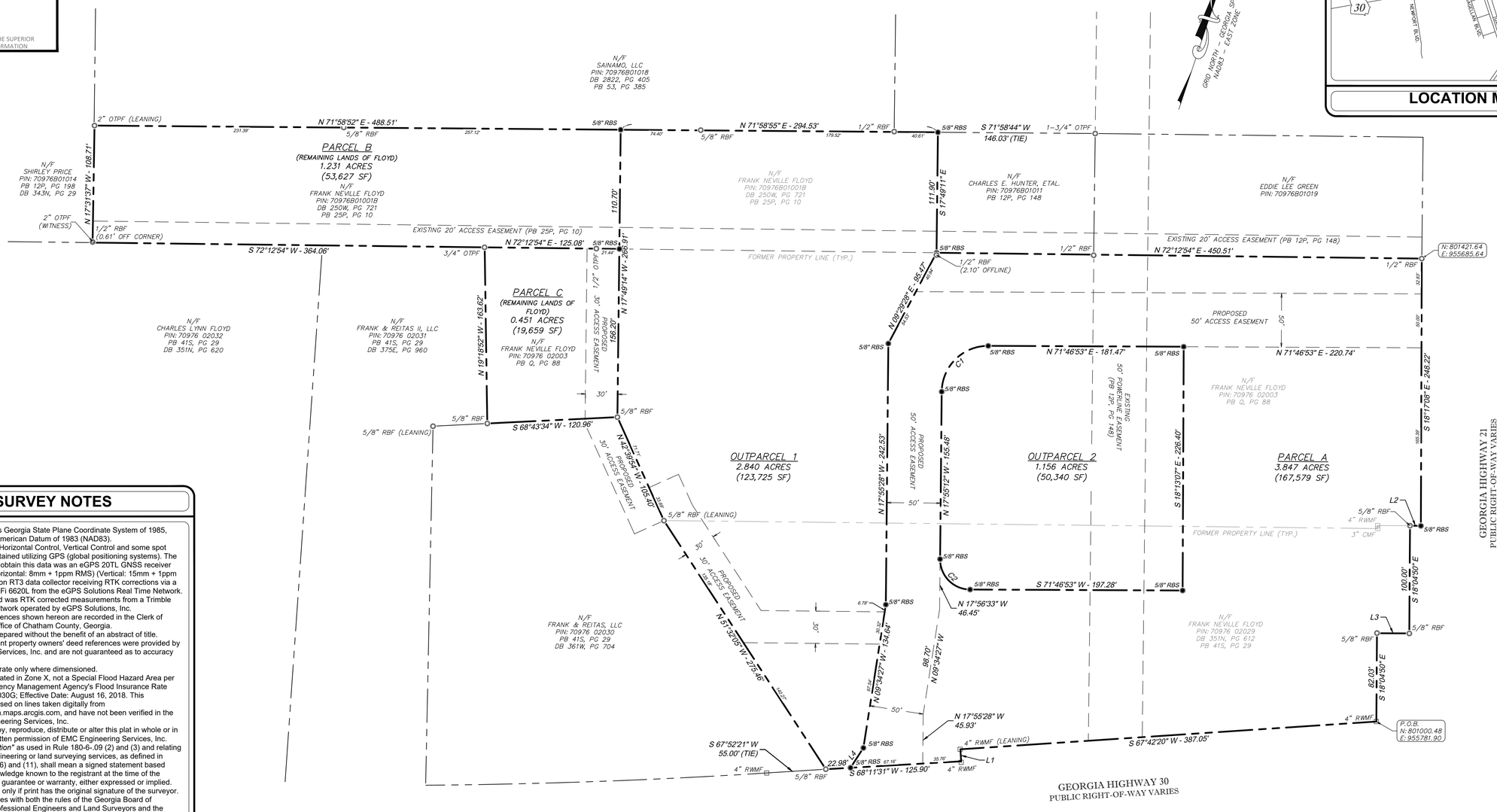
1.) PIN: 70976 02029 N/F Frank Neville Floyd (PB 41S, PG 29) (DB 351N, PG 612)
2.) PIN: 70976 02003 N/F Frank Neville Floyd (PB Q, PG 88)
3.) PIN: 70976B01001B N/F Frank Neville Floyd (PB 25P, PG 10) (DB 250W, PG 721)

The five proposed parcels are described as follows:

1.) Parcel A: 3.847 acres created through a combination of a portion of PINs 70976 02029 and 70976 02003.
2.) Parcel B: (remaining lands of Floyd) 1.231 acres created as the "leftover" portion of 70976B01001B.
3.) Parcel C: (remaining lands of Floyd) 0.451 acres created as the "leftover" portion of 70976 02003.
4.) Outparcel 1: 2.840 acres created through a combination of a portion of PINs 70976 02003 and 70976B01001B
5.) Outparcel 2: 1.156 acres created through a combination of a portion of PINs 70976 02029 and 70976 02003.

The above labeled parcels can be seen graphically on the subdivision plat prepared by EMC Engineering Services, Inc. on 11/03/2022.

THIS BOX IS RESERVED FOR THE SUPERIOR COURT CLERKS FILING INFORMATION



NO.	REVISION DESCRIPTION	DATE
1	REVISE SUBDIVISION & EASEMENT LINE	9/28/22
2	CORRECT ACREGE/SIGNATURE LINES	10/12/22
3	REVISE LOT LINES (PARCEL A, OP 1 & OP 2)	11/03/22

SURVEY NOTES

1. Horizontal Datum is Georgia State Plane Coordinate System of 1985, East Zone, North American Datum of 1983 (NAD83).
2. Basis of Bearings, Horizontal Control, Vertical Control and some spot elevations were obtained utilizing GPS (global positioning systems). The equipment used to obtain this data was an eGPS 20TL GNSS receiver [RTK Accuracy (Horizontal: 8mm + 1ppm RMS) (Vertical: 15mm + 1ppm RMS)] with a Carlson RT3 data collector receiving RTK corrections via a Verizon Jetpack MiFi 6620L from the eGPS Solutions Real Time Network. The technique used was RTK corrected measurements from a Trimble VRS Real Time Network operated by eGPS Solutions, Inc.
3. All deed book references shown hereon are recorded in the Clerk of Superior Court's Office of Chatham County, Georgia.
4. This survey was prepared without the benefit of an abstract of title. Subject and adjacent property owners' deed references were provided by EMC Engineering Services, Inc. and are not guaranteed as to accuracy or completeness.
5. Locations are accurate only where dimensioned.
6. This property is located in Zone X, not a Special Flood Hazard Area per the Federal Emergency Management Agency's Flood Insurance Rate Map No. 13051C0030G; Effective Date: August 16, 2018. This determination is based on lines taken digitally from http://hazards-fema.maps.arcgis.com, and have not been verified in the field by EMC Engineering Services, Inc.
7. No person may copy, reproduce, distribute or alter this plat in whole or in part without the written permission of EMC Engineering Services, Inc.
8. The term *"Certification"* as used in Rule 180-6-.09 (2) and (3) and relating to professional engineering or land surveying services, as defined in O.C.G.A. 43-15-2 (6) and (11), shall mean a signed statement based upon facts and knowledge known to the registrant at the time of the survey and is not a guarantee or warranty, either expressed or implied.
9. This survey is valid only if print has the original signature of the surveyor.
10. This Survey complies with both the rules of the Georgia Board of Registration for Professional Engineers and Land Surveyors and the Official Code of Georgia Annotated (OCGA) 15-6-67, in that where a conflict exists between those two sets of specifications, the requirements of law prevail.
11. All wetlands are under the jurisdiction of the U.S. Army Corps. of Engineers and/or the State of Georgia Department of Natural Resources. Lot owners are subject to penalty by law for disturbance to these protected areas without proper permit application and approval.

SURVEY DATA

Parcel A:	3.847 Acres (167,579 Square Feet)
Outparcel 1:	2.840 Acres (123,725 Square Feet)
Outparcel 2:	1.156 Acres (50,340 Square Feet)
Parcel B:	1.231 Acres (53,627 Square Feet)
Parcel C:	0.451 Acres (19,659 Square Feet)
Total Area:	9.525 Acres (414,930 Square Feet)
Plat Closure:	1 in 1,273,168

Field Precision: This entire survey was completed using GPS Base and Rover, Real Time Kinematic, surveying methods using multi-frequency receivers. The field data for this boundary survey has a Relative Positional Accuracy of 0.06 feet or less, horizontally at the 95% confidence level.

Equipment used:	Carlson CR2+ Robotic Total Station Carlson BRx6 GNSS GPS/eGPS Network
Field Work Completed on:	September 23, 2022

REFERENCES

PB 75, PG 34	PB 12P, PG 148B	PB 25, PG 10
PB 41S, PG 29	PB Q, PG 88	DB 1250W, PG 721

SURVEYORS CERTIFICATION

GEORGIA REGISTERED No. 3343 PROFESSIONAL LAND SURVEYOR WESLEY P. WETTMAN

As required by subsection (d) of O.C.G.A. Section 15-6-67, this plat has been prepared by a land surveyor and approved by all applicable local jurisdictions for recording as evidenced by approval certificates, signatures, stamps, or statements hereon. Such approvals or affirmations should be confirmed with the appropriate governmental bodies by any purchaser or user of this plat as to intended use of any parcel. Furthermore, the undersigned land surveyor certifies that this plat complies with the minimum technical standards for property surveys in Georgia as set forth in the rules and regulations of the Georgia Board of Registration for Professional Engineers and Land Surveyors and as set forth in O.C.G.A. Section 15-6-67.

Wesley P. Wettman — 11/3/2022

GA REG. L. S. NO. 3343 — DATE

LINE TABLE		
LINE #	DIRECTION	LENGTH
L1	S22° 13' 35"E	11.19
L2	S72° 08' 50"W	10.09
L3	S71° 51' 49"W	30.00
L4	N14° 27' 29"E	22.00

CURVE TABLE				
CURVE #	BEARING	CHORD	RADIUS	ARC
C1	N26° 55' 51"E	60.65	43.00	67.32
C2	N63° 04' 09"W	39.70	28.00	44.13

LEGEND

PROPERTY BOUNDARY		POINT OF BEGINNING	P.O.B.
ADJACENT PROPERTY LINE		PROPERTY ID NUMBER	PIN
FORMER PROPERTY LINE		NOW OR FORMERLY	N/F
METES AND BOUNDS	N 47°45'54" E - 497.06'	RIGHT-OF-WAY	R/W
TAG LABEL	L# or C#	PLAT BOOK	PB
5/8" IRON REBAR FOUND	5/8" RBF	DEED BOOK	DB
RIGHT-OF-WAY MONUMENT FOUND	RWMF	PAGE	PG
5/8" IRON REBAR SET W/CAP	RBS	NOT TO SCALE	N.T.S.
MEANDER POINT			

CERTIFICATE OF DEDICATION

ALL STREETS, RIGHTS-OF-WAY, EASEMENTS AND ANY SITES FOR PUBLIC USE AS NOTED ON THIS PLAT ARE HEREBY DEDICATED FOR THE USE INTENDED.

OWNER — DATE

CERTIFICATE OF APPROVAL

APPROVED BY THE MAYOR AND COUNCIL, CITY OF PORT WENTWORTH

MAYOR — DATE

COUNCIL MEMBER — DATE

COUNCIL MEMBER — DATE

COUNCIL MEMBER — DATE

COUNCIL MEMBER — DATE

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COUNCIL MEMBER — DATE

COUNCIL MEMBER — DATE

EMC ENGINEERING SERVICES, INC.
PO Box 2088
121 Merchant's Way, Suite 201
Statesboro, GA 30458
Ph: (912) 764-7022
Fax: (912) 233-4580
statesboro@emc-eng.com
www.emc-eng.com
CIVIL MARINE ENVIRONMENTAL
ALBANY • ATLANTA • AUGUSTA • BRUNSWICK • COLUMBUS
GREENVILLE • SAVANNAH • STATESBORO • THOMASTON • VALDOSTA

RECOMBINATION AND SUBDIVISION PLAT

FLOYD PROPERTY - 9.525 ACRES

8th G.M. DISTRICT

CITY OF PORT WENTWORTH, CHATHAM COUNTY, GEORGIA

Prepared for:
DRAYTON PARKER COMPANIES

PROJECT NO.:	22-2059
DRAWN BY:	WPW/WEC
DESIGNED BY:	
SURVEYED BY:	NCH
SURVEY DATE:	9/23/2022
CHECKED BY:	WPW
SCALE:	1" = 50'
DATE:	9/23/2022

SHEET 1 OF 1

O:\2022\22-2059 PARKERS - HWY 21 & HWY 30\DWG\22-2059VL_SDI HWY 21 @ 30 SUBDIVISION PLAT.DWG 11/3/2022 3:51 PM

Project Timeline

Project Number: 220494

Project Name: Parkers Hwy 21 & 30 RA F-Plat

Applicant / Engineer: EMC Engineering Services

Owner: William & Forrest Floyd

City Review Engineer: N/A – Staff Review

- 09/23/2022 – Subdivision Application received
- 10/12/2022 – sent 1st review of plat to Cody Rogers (EMC)
- 10/21/2022 – public hearing notice letters mailed.
- 10/24/2022 – public hearing notice posted in Savannah Morning News
- 11/4/2022 – received revised plat.
- 11/14/2022 – the Planning Commission voted unanimously to recommend approving the application.

Russell R. McMurry, P.E., Commissioner
One Georgia Center
600 West Peachtree NW
Atlanta, GA 30308
(404) 631-1990 Main Office

September 28, 2022

The Parker Companies
Daniel Ben-Yisrael
Real Estate Development Manager 17 W.
McDonough St.
Savannah, GA 31401

Re: Commercial Driveway Letter of Intent; SR21 and SR30; Chatham County; Mile Post 15.50 (SR21) and Mile Post 3.41 (SR30)

The Department has reviewed the proposed conceptual drawing submitted to this office requested by The Parker Companies, regarding the request for a Commercial Driveway Permit. The Department agrees to allow one right in / right out only commercial drive located on SR 21 at approximately M.P. 15.50 and an access point located on SR 30 at approximately M.P. 3.41, as depicted on the attachment, that conforms to the current Georgia Department of Transportation Requirements. In addition, the Department will determine if any additional improvements are required once an official set of plans and all required documents are submitted for review and approval

Please be advised the agreement detailed in this letter will expire 1 year from the above date. Submittal and review of your final plans will be required before a permit can be issued for the proposed work. For further assistance, please contact Bryan Hillyard at 912-530-4465, or mail at Georgia Department of Transportation, Attention Bryan Hillyard, 204 N. Hwy. 301 Jesup, GA 31546.

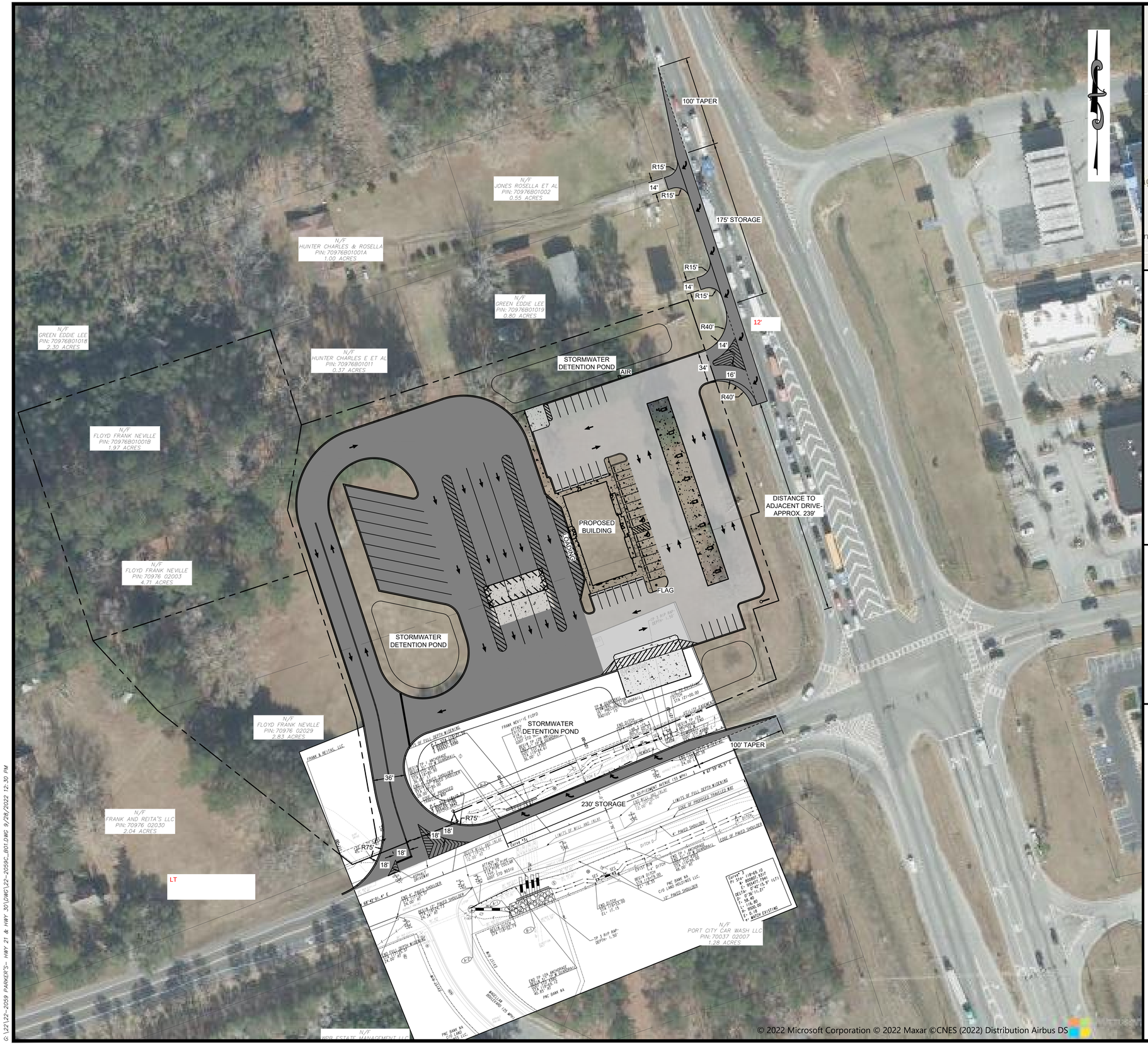
Sincerely,

FOR: Troy Pittman, P.E.
District Engineer

BY: Joseph Capello, P.E.
District Traffic Engineer

Attachments
JRC:DBB:BTH

cc: Randy Rhodes, Area Engineer, Chatham
John Kent, Area Permit Inspector



VICINITY MAP

NOT TO SCALE

GDOT COMMERCIAL DRIVEWAY NOTES:

OWNER / APPLICANT:
THE PARKER'S COMPANIES- DANIEL BEN-YISRAEL
17 W. MCDONOUGH ST., SAVANNAH, GA 31401
(912) 677-0593 (dbenyisrael@parkersav.com)

ENGINEER / PLAN PREPARER:
EMC ENGINEERING SERVICES, INC.; CODY P. ROGERS, PE
1211 MERCHANT WAY, SUITE 201, STATESBORO, GEORGIA 30458
(912) 644-3219 (cody_rogers@emc-eng.com)

SITE INFORMATION:
LOCATION: GA STATE ROUTE 21 & GA STATE ROUTE 30
PROPERTY AREA: 8.00 ACRES
ROAD NAME (STATE ROUTE) : TOM TRIMPLETT PKWY (GA STATE ROUTE 21)
PIEDMONT AVE (GA STATE ROUTE 30)
POSTED SPEED LIMIT: HWY 21- 45 MPH
HWY 30- 55 MPH
FUNCTIONAL CLASS: HWY 21- PRINCIPAL ARTERIAL
HWY 30- MINOR ARTIERIAL
ANNUAL AVERAGE DAILY TRAFFIC:
HWY 21- 29,100 (2021 DATA FROM GDOT STATION ID 051-0112)
HWY 30- 13,000 (2021 DATA FROM GDOT STATION ID 051-0307)
PERCENT TRUCKS: HWY 21- 14% (2021 DATA FROM GDOT STATION ID 051-0112)
HWY 30- 6% (2021 DATA FROM GDOT STATION ID 051-0307)

TRIP GENERATION:
A TRAFFIC IMPACT ANALYSIS WILL BE PERFORMED UNDER THE SCOPE OF THIS PROJECT. ROADWAY IMPROVEMENTS WILL BE IMPLEMENTED AS RECOMMENDED IN THE TIA.

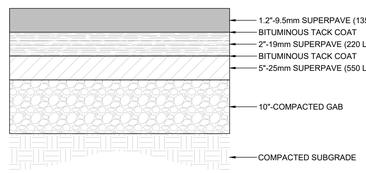
STORMWATER:
SITE DOES NOT INCREASE RUNOFF BY MORE THAN 1-CFS INTO STATE R/W. SITE WILL NOT HAVE ANY ADVERSE EFFECT UPSTREAM, DOWNSTREAM, OR ON THE STATE R/W.

GDOT MARKING NOTES:

1. ALL PAVEMENT MARKINGS INSTALLED ON ASPHALT WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE THERMOPLASTIC MATERIAL; HIGH CONTRAST TAPE SHALL BE INSTALLED ON CONCRETE.
2. LANE LINES ARE GENERALLY 5" (WHITE).
3. STOP LINES SHOULD BE 24" (WHITE).
4. CENTER LINES SHOULD BE 5" DOUBLE YELLOW.
5. DECELERATION LANES SHOULD HAVE TURN ARROWS (TP-2) SPACED EVERY 50 FEET.
6. NEW CONSTRUCTION SHOULD INSTALL 5" WHITE EDGE LINES, INCLUDING AT NEW CURB & GUTTER.
7. RAISED PAVEMENT MARKERS - TYPE 3 (RPMs) SHALL BE INSTALLED FOR ALL NEW CONSTRUCTION ON ROADWAYS WITH EXISTING RPMs.

SPECIAL NOTES:

1. DURING CONSTRUCTION, WORK WILL BE PERFORMED IN SUCH A MANNER AS TO PERMIT TRAFFIC TO OPERATE WITH THE LEAST AMOUNT OF INCONVENIENCE POSSIBLE. ADDITIONAL CHANNELIZATION & SIGNAGE SHALL BE INSTALLED, AS DIRECTED BY THE ENGINEER, TO ALLOW TRAFFIC TO FLOW AS FREELY AS POSSIBLE.
2. ALL SIGNAGE AND MARKING SHALL BE PER GDOT STANDARDS AND THE M.U.T.C.D.



NOTES:
- TOP 12" OF SUBGRADE TO BE MIXED IN PLACE AND COMPACTED TO 98% MAXIMUM DRY DENSITY.
- BASE MATERIAL TO MEET THE FOLLOWING SPECIFICATIONS & RELATED REFERENCES TO GDOT SPECIFICATIONS, LATEST EDITION. TO BE COMPACTED TO 98% MAXIMUM DRY DENSITY.
  - SECTION 814 FOR SOIL BASE MATERIALS
  - SECTION 815 FOR GRADED AGGREGATE BASE
  - SECTION 816 FOR SOIL AGGREGATE BASES
- THE CONTRACTOR SHALL PROVIDE COMPACTION TEST AND SOIL ANALYSIS TEST RESULTS FROM AN APPROVED TESTING LABORATORY.

GEORGIA DOT
ASPHALT PAVEMENT SECTION
NO SCALE

NO.	REVISION DESCRIPTION	DATE
.	.	.

GEORGIA REGISTERED No. PE024036 PROFESSIONAL ENGINEER CODY PRESTON ROGERS
PRELIMINARY
09/28/2022

50' 25' 0' 50'
GRAPHIC SCALE: 1" = 50'

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SAVANNAH • STATESBORO • THOMASTON • VALDOSTA • WARNER ROBINS

GDOT CONCEPTUAL PLAN

PARKER'S KITCHEN

HWY. 21 & HWY. 30
PORT WENTWORTH, CHATHAM COUNTY, GEORGIA
Prepared for:
THE PARKER COMPANIES

PROJECT NO.:	22-2059
DRAWN BY:	KES
DESIGNED BY:	KES
SURVEYED BY:	-
SURVEY DATE:	-
CHECKED BY:	CPR
SCALE:	1" = 50'
DATE:	09/28/2022

SHEET
1
OF 1

CONCEPT

G:\22\22-2059 PARKER'S - HWY. 21 & HWY. 30\DWG\22-2059C_B01.DWG 9/28/2022 12:30 PM

Zoning Map Amendment Application submitted by Daniel Ben-Yisrael, Drayton Parker Companies, on behalf of Frank Neville Floyd, for PIN #'s 70976 02003, a portion of 70976 02029 and a portion of 70976B01001B (Northwest intersection of Highway 21 and Highway 30) to Rezone from RA (Residential Agriculture) to P-C-3 (Planned General Business) Zoning District for the purpose of a Convenience Store / Fuel Service Station (Parker's Kitchen) 1st Reading

Issue/Item: Zoning Map Amendment Application submitted by Daniel Ben-Yisrael, Drayton Parker Companies, on behalf of Frank Neville Floyd, for PIN #'s 70976 02003, a portion of 70976 02029 and a portion of 70976B01001B (Northwest intersection of Highway 21 and Highway 30) to Rezone from RA (Residential Agriculture) to P-C-3 (Planned General Business) Zoning District for the purpose of a Convenience Store / Fuel Service Station (Parker's Kitchen) 1st Reading

Background: The subject property is currently woodland and open area.

Facts and Findings: The total amount of property to be rezoned is 7.83 acres. The applicant is requesting to rezone for a commercial development that will include a fuel station / Convenience Store and two outparcels. The project will also include associated parking, and drainage. The proposed access will be on Highway 30 and the Highway 21. The Developer intends to connect to City of Port Wentworth water and sanitary sewer utilities. According to the 2021 City of Port Wentworth Comprehensive Plan this property is under the Rural Neighborhood Character Area.

Funding: N/A

Recommendation: The Planning Commission will hear this application on Monday, November 14, 2022 at 3:30 PM. **/ UPDATE: THE PLANNING VOTED 5-1 TO RECOMMEND TO DENY THE APPLICATION.**

ATTACHMENTS:

- ZMA Parkers Kitchen Gas Station RA to PC3 2022-Full Application (PDF)
- ZMA Parkers Kitchen Gas Station RA to PC3 2022-Timeline (DOCX)

APPLICATION TO AMEND THE ZONING MAP OF PORT WENTWORTH, GEORGIA

Applicant: Drayton Parker Companies C/O Daniel Ben-Yisrael Phone # 912-677-0593

Mailing Address: 17 W. McDonough Street, Savannah, GA 31401

Property Owner: Floyd Frank Neville Phone # _____

Use back if more than one owner

Owner Address: 120 State Road 30, Port Wentworth, GA 31407

PIN #('s): 70976-02029; 70976-02003; 70976B01001B # of Acres ~~8.00~~ 7.83

Zoning Classification: Present R-A Requested C-3

Use of Property: Present Undeveloped Field Requested Gas Station

X If the requested changed is to extend an existing adjacent zoning district to include this property, explain below why the proposed change should be made.

_____ If the requested changed is not to extend an adjacent zoning district, explain below why this property should be placed in a different zoning district than all adjoining properties. (How does it differ from adjoining properties and why should it be subject to different restrictions than those applying to adjoining properties?)

These properties combine to create the northwest quadrant of the intersection of Highway 21 & 30
The uses to the east, west and south are all commercial and include 1.) The City of Port Wentworth
2.) CVS Pharmacy 3.) Car Wash 4.) Coastal Nursery & Landscape Supply
The proposed rezoning would not be in conflict with adjacent zonings or uses in these areas.

Attach the following documents:

1. Written legal description of the property (e.g. copy of deed) – full metes and bounds description rather than plat reference.
2. Name, PIN #, property address and mailing address of property owners withing 250 feet of this property.
3. Plat showing property lines with lengths and bearings, adjoining streets, locations of existing buildings, north arrow and scale. Submit fifteen (15) copies of in 11" x 17", one 1 copy in 8.5" x 11", and a PDF on a flash drive.
4. Site Plan of proposed use of property. Submit fifteen (15) copies in 11" x 17", one 1 copy in 8.5" x 11", and a PDF on a flash drive.
5. Disclosure of Campaign Contributions and Gifts form. N/A
6. Disclosure of Financial Interests form N/A
7. If property owner and applicant are not the same, Authorization by Property Owner form or Authorizations of Attorney form.
8. Filing fee of $356.00 + $50.00 per acre + $50.00 Administrative Fee, payable to the City of Port Wentworth.

APPLICATION MUST BE FILED 45 BUSINESS DAYS PRIOR TO THE PLANNING COMMISSION MEETING AT WHICH THEY ARE TO BE CONSIDERED.

I hereby authorize the staff of the City of Port Wentworth to inspect the premises of the above described property and to post this property with the duly required notices. I hereby depose and say that all statements herein and attached statements submitted are true and correct to the best of my knowledge and belief.

BRANDON DEWEESE NOTARY PUBLIC STATE OF SOUTH CAROLINA My Commission Expires June 11, 2026

Sworn to and subscribed before me this
26 day of Sep, 2022.

Signature of Applicant

Notary Public

DISCLOSURE OF CAMPAIGN CONTRIBUTIONS

(Required by Title 36, Chapter 67A, Official Code of Georgia Annotated)

Reference: Application filed on 9/26/22, 2022, to rezone real property described as follows:

N/A

Withing the two years preceding the above filing date, the applicant has made campaign contributions aggregating $250.00 or more to each member of the City Council of the City of Port Wentworth who will consider the application and is listed below. List (1) the name and official position of the local government official and (2) the dollar amount, description and date of each campaign contribution.

N/A

I hereby depose and say that all statements herein are true, correct and complete to the best of my knowledge and belief.

Sworn to and subscribed before me this
26 day of Sep, 2022.

Signature of Applicant

Notary Public

BRANDON A. DEWEESE
My Commission Expires
NOTARY PUBLIC
June 11, 2031
STATE OF SOUTH CAROLINA

BRANDON A. DEWEESE
My Commission Expires
NOTARY PUBLIC
June 11, 2031
STATE OF SOUTH CAROLINA

AUTHORIZATION OF PROPERTY OWNER

Application for Rezoning or Variance

I swear that I am the owner of the property which is the subject matter of the attached application, as is shown in the records of Port Wentworth, Georgia.

I authorize the person named below to act as applicant in the pursuit of a variance or for the rezoning of this property.

Name of Applicant: Drayton-Parker Companies, LLC C/O Daniel Ben-Yisrael

Address: 17 W. McDonough Street, Savannah, GA 31401

Telephone Number: 912-677-0593

ESTATE OF FRANK NEVILLE FLOYD

Signature of Owner WILLIAM NEVILLE FLOYD
AS CO-EXECUTOR OF THE ESTATE

ESTATE OF FRANK NEVILLE FLOYD

Signature of Owner FRANK FORREST FLOYD
AS CO-EXECUTOR OF THE ESTATE

Personally appeared before me

William Neville Floyd and Frank Forrest Floyd

who swears that the information contained in this authorization is true and correct to the best of his or her knowledge and belief.

Notary Public

JANELLE W DRAWDY NOTARY PUBLIC Comm. Exp. 02/25/26 EFFINGHAM COUNTY, GA

9/22/22

Date

22-2059 Parkers – Highway 21 & 30, Port Wentworth

Adjacent property owners within 250' of property boundaries:

1.) Frank & Reita's LLC; 70976 02030; 134 Highway 30; 1716 E Highway 80, Bloomingdale, GA 31302
2.) Green Eddie Lee; 70976B01018 & 70976B01019; Highway 21; 7317 Highway 21, Port Wentworth, GA 31407
3.) Hunter Charles & Rosella; 70976B01001A; 7229 Highway 21, Port Wentworth, GA 31407
4.) Jones Rosella ET AL; 70976B01002; Augusta Road; 116 Village Lake Drive, Pooler, GA 31322
5.) Hunter Charles E ET AL; 70976B01011; Augusta Road; 7229 Highway 21, Port Wentworth, GA 31407
6.) Port City Car Wash, LLC.; 70037 02007; 38 Magellan Blvd.; 118 Pipemakers Circle, Suite 100, Pooler, GA 31322
7.) Double Reverse, LLC.; 70037 02006; 0 Magellan Blvd.; 250 N. Orange Avenue, Suite 1500, Orlando, FL 32801
8.) WPB Estate Management LLC.; 70037 02016; 0 Highway 21; 4107 Columbia Road, Augusta, GA 30907

22-2059 Parkers – Highway 21 & 30, Port Wentworth

The following narrative describes in detail the proposed subdivision at the northwest corner of the intersection of Highway 21 & Highway 30.

There are currently three (3) existing parcels at this location which will be subdivided and recombined into five (5) proposed parcels following the subdivision approval.

The three existing parcels are:

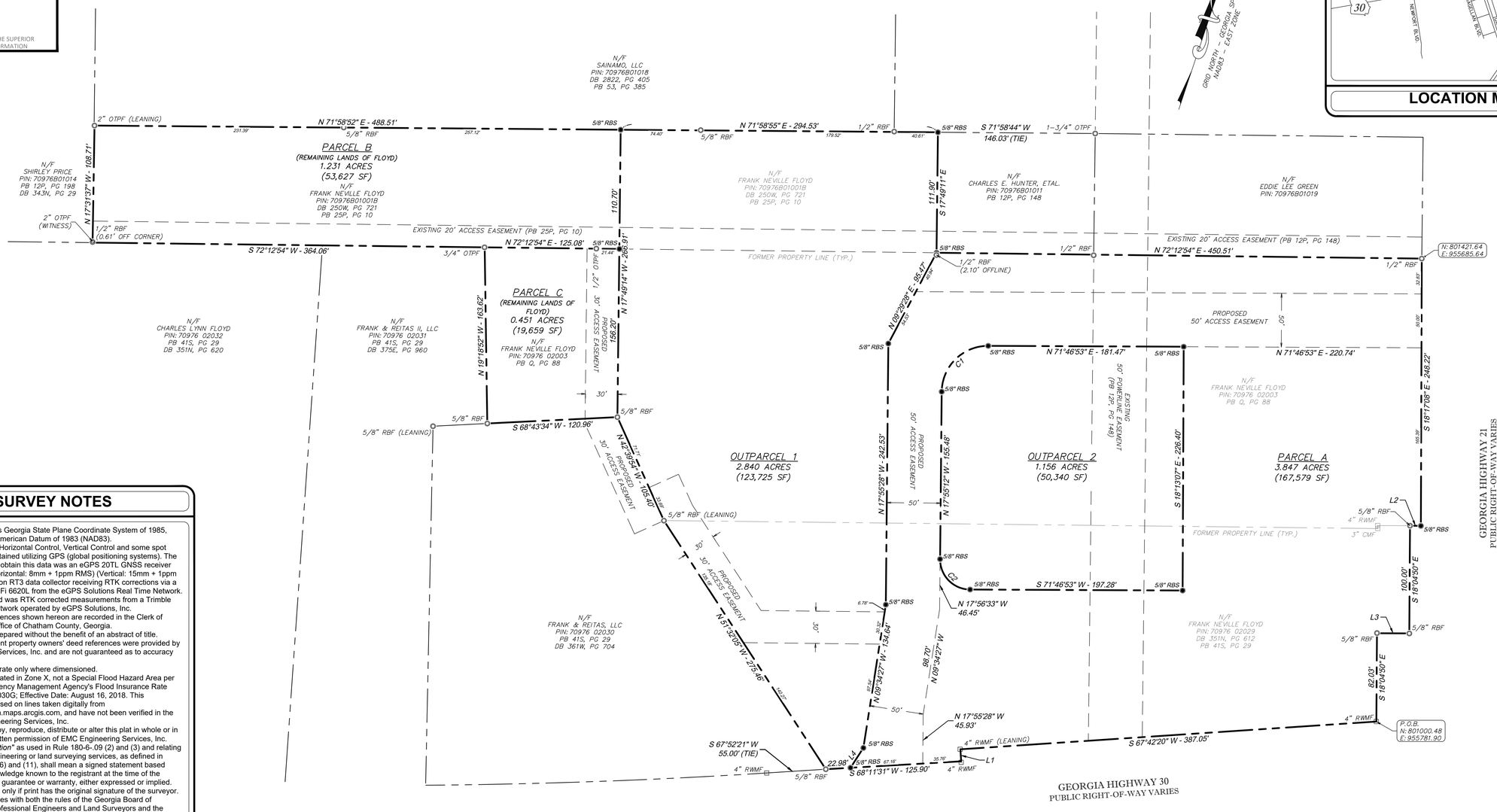
1.) PIN: 70976 02029 N/F Frank Neville Floyd (PB 41S, PG 29) (DB 351N, PG 612)
2.) PIN: 70976 02003 N/F Frank Neville Floyd (PB Q, PG 88)
3.) PIN: 70976B01001B N/F Frank Neville Floyd (PB 25P, PG 10) (DB 250W, PG 721)

The five proposed parcels are described as follows:

1.) Parcel A: 3.847 acres created through a combination of a portion of PINs 70976 02029 and 70976 02003.
2.) Parcel B: (remaining lands of Floyd) 1.231 acres created as the "leftover" portion of 70976B01001B.
3.) Parcel C: (remaining lands of Floyd) 0.451 acres created as the "leftover" portion of 70976 02003.
4.) Outparcel 1: 2.840 acres created through a combination of a portion of PINs 70976 02003 and 70976B01001B
5.) Outparcel 2: 1.156 acres created through a combination of a portion of PINs 70976 02029 and 70976 02003.

The above labeled parcels can be seen graphically on the subdivision plat prepared by EMC Engineering Services, Inc. on 11/03/2022.

THIS BOX IS RESERVED FOR THE SUPERIOR COURT CLERKS FILING INFORMATION



NO.	REVISION DESCRIPTION	DATE
1	REVISE SUBDIVISION & EASEMENT LINE	9/28/22
2	CORRECT ACREGE/SIGNATURE LINES	10/12/22
3	REVISE LOT LINES (PARCEL A, OP 1 & OP 2)	11/03/22

SURVEY NOTES

1. Horizontal Datum is Georgia State Plane Coordinate System of 1985, East Zone, North American Datum of 1983 (NAD83).
2. Basis of Bearings, Horizontal Control, Vertical Control and some spot elevations were obtained utilizing GPS (global positioning systems). The equipment used to obtain this data was an eGPS 20TL GNSS receiver [RTK Accuracy (Horizontal: 8mm + 1ppm RMS) (Vertical: 15mm + 1ppm RMS)] with a Carlson RT3 data collector receiving RTK corrections via a Verizon Jetpack MiFi 6620L from the eGPS Solutions Real Time Network. The technique used was RTK corrected measurements from a Trimble VRS Real Time Network operated by eGPS Solutions, Inc.
3. All deed book references shown hereon are recorded in the Clerk of Superior Court's Office of Chatham County, Georgia.
4. This survey was prepared without the benefit of an abstract of title. Subject and adjacent property owners' deed references were provided by EMC Engineering Services, Inc. and are not guaranteed as to accuracy or completeness.
5. Locations are accurate only where dimensioned.
6. This property is located in Zone X, not a Special Flood Hazard Area per the Federal Emergency Management Agency's Flood Insurance Rate Map No. 13051C0030G; Effective Date: August 16, 2018. This determination is based on lines taken digitally from http://hazards-fema.maps.arcgis.com, and have not been verified in the field by EMC Engineering Services, Inc.
7. No person may copy, reproduce, distribute or alter this plat in whole or in part without the written permission of EMC Engineering Services, Inc.
8. The term *"Certification"* as used in Rule 180-6-.09 (2) and (3) and relating to professional engineering or land surveying services, as defined in O.C.G.A. 43-15-2 (6) and (11), shall mean a signed statement based upon facts and knowledge known to the registrant at the time of the survey and is not a guarantee or warranty, either expressed or implied.
9. This survey is valid only if print has the original signature of the surveyor.
10. This Survey complies with both the rules of the Georgia Board of Registration for Professional Engineers and Land Surveyors and the Official Code of Georgia Annotated (OCGA) 15-6-67, in that where a conflict exists between those two sets of specifications, the requirements of law prevail.
11. All wetlands are under the jurisdiction of the U.S. Army Corps. of Engineers and/or the State of Georgia Department of Natural Resources. Lot owners are subject to penalty by law for disturbance to these protected areas without proper permit application and approval.

SURVEY DATA

Parcel A:	3.847 Acres (167,579 Square Feet)
Outparcel 1:	2.840 Acres (123,725 Square Feet)
Outparcel 2:	1.156 Acres (50,340 Square Feet)
Parcel B:	1.231 Acres (53,627 Square Feet)
Parcel C:	0.451 Acres (19,659 Square Feet)
Total Area:	9.525 Acres (414,930 Square Feet)
Plat Closure:	1 in 1,273,168

Field Precision: This entire survey was completed using GPS Base and Rover, Real Time Kinematic, surveying methods using multi-frequency receivers. The field data for this boundary survey has a Relative Positional Accuracy of 0.06 feet or less, horizontally at the 95% confidence level.

Equipment used:	Carlson CR2+ Robotic Total Station Carlson BRx6 GNSS GPS/eGPS Network
Field Work Completed on:	September 23, 2022

REFERENCES

PB 75, PG 34	PB 12P, PG 148B	PB 25, PG 10
PB 41S, PG 29	PB Q, PG 88	DB 1250W, PG 721

SURVEYORS CERTIFICATION

GEORGIA REGISTERED No. 3343 PROFESSIONAL LAND SURVEYOR WESLEY P. WETTMAN

As required by subsection (d) of O.C.G.A. Section 15-6-67, this plat has been prepared by a land surveyor and approved by all applicable local jurisdictions for recording as evidenced by approval certificates, signatures, stamps, or statements hereon. Such approvals or affirmations should be confirmed with the appropriate governmental bodies by any purchaser or user of this plat as to intended use of any parcel. Furthermore, the undersigned land surveyor certifies that this plat complies with the minimum technical standards for property surveys in Georgia as set forth in the rules and regulations of the Georgia Board of Registration for Professional Engineers and Land Surveyors and as set forth in O.C.G.A. Section 15-6-67.

Wesley P. Wettman — 11/3/2022

GA REG. L. S. NO. 3343 — DATE

LINE TABLE		
LINE #	DIRECTION	LENGTH
L1	S22° 13' 35"E	11.19
L2	S72° 08' 50"W	10.09
L3	S71° 51' 49"W	30.00
L4	N14° 27' 29"E	22.00

CURVE TABLE				
CURVE #	BEARING	CHORD	RADIUS	ARC
C1	N26° 55' 51"E	60.65	43.00	67.32
C2	N63° 04' 09"W	39.70	28.00	44.13

LEGEND

PROPERTY BOUNDARY		POINT OF BEGINNING	P.O.B.
ADJACENT PROPERTY LINE		PROPERTY ID NUMBER	PIN
FORMER PROPERTY LINE		NOW OR FORMERLY	N/F
METES AND BOUNDS	N 47°45'54" E - 497.06'	RIGHT-OF-WAY	R/W
TAG LABEL	L# or C#	PLAT BOOK	PB
5/8" IRON REBAR FOUND	5/8" RBF	DEED BOOK	DB
RIGHT-OF-WAY MONUMENT FOUND	RWMF	PAGE	PG
5/8" IRON REBAR SET W/CAP	RBS	NOT TO SCALE	N.T.S.
MEANDER POINT			

CERTIFICATE OF DEDICATION

ALL STREETS, RIGHTS-OF-WAY, EASEMENTS AND ANY SITES FOR PUBLIC USE AS NOTED ON THIS PLAT ARE HEREBY DEDICATED FOR THE USE INTENDED.

OWNER — DATE

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APPROVED BY THE MAYOR AND COUNCIL, CITY OF PORT WENTWORTH

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RECOMBINATION AND SUBDIVISION PLAT

FLOYD PROPERTY - 9.525 ACRES

8th G.M. DISTRICT

CITY OF PORT WENTWORTH, CHATHAM COUNTY, GEORGIA

Prepared for:
DRAYTON PARKER COMPANIES

PROJECT NO.:	22-2059
DRAWN BY:	WPW/WEC
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SHEET 1 OF 1

O:\2022\22-2059 PARKERS - HWY 21 & HWY 30\DWG\22-2059VL_SDI HWY 21 @ 30 SUBDIVISION PLAT.DWG 11/3/2022 3:51 PM

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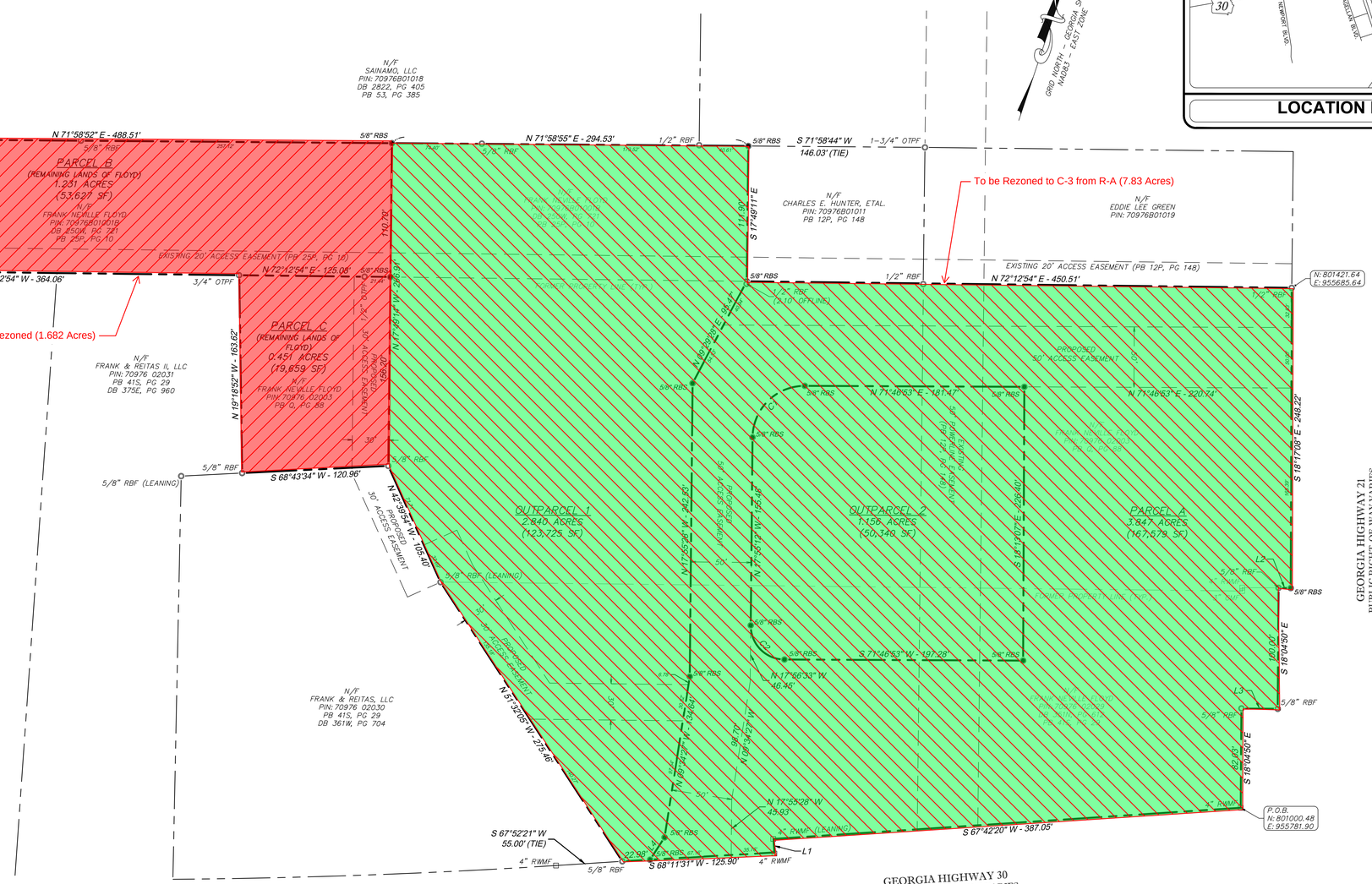
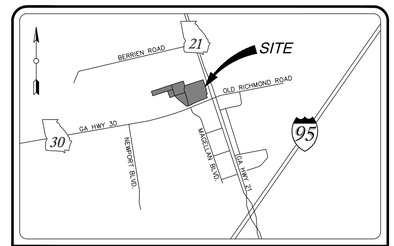




LOCATION MAP N.T.S.

NO.	REVISION DESCRIPTION	DATE
1	REVISE SUBDIVISION & EASEMENT LINE	9/28/22
2	CORRECT ACREGE/SIGNATURE LINES	10/12/22
3	REVISE LOT LINES (PARCEL A, OP 1 & OP 2)	11/03/22

50' 25' 0' 50'
GRAPHIC SCALE: 1" = 50'

SURVEY NOTES

1. Horizontal Datum is Georgia State Plane Coordinate System of 1985, East Zone, North American Datum of 1983 (NAD83).
2. Basis of Bearings, Horizontal Control, Vertical Control and some spot elevations were obtained utilizing GPS (global positioning systems). The equipment used to obtain this data was an eGPS 20TL GNSS receiver [RTK Accuracy (Horizontal: 8mm + 1ppm RMS) (Vertical: 15mm + 1ppm RMS)] with a Carlson RT3 data collector receiving RTK corrections via a Verizon Jetpack MiFi 6620L from the eGPS Solutions Real Time Network. The technique used was RTK corrected measurements from a Trimble VRS Real Time Network operated by eGPS Solutions, Inc.
3. All deed book references shown hereon are recorded in the Clerk of Superior Court's Office of Chatham County, Georgia.
4. This survey was prepared without the benefit of an abstract of title. Subject and adjacent property owners' deed references were provided by EMC Engineering Services, Inc. and are not guaranteed as to accuracy or completeness.
5. Locations are accurate only where dimensioned.
6. This property is located in Zone X, not a Special Flood Hazard Area per the Federal Emergency Management Agency's Flood Insurance Rate Map No. 13051C0030G; Effective Date: August 16, 2018. This determination is based on lines taken digitally from http://hazards-fema.maps.arcgis.com, and have not been verified in the field by EMC Engineering Services, Inc.
7. No person may copy, reproduce, distribute or alter this plat in whole or in part without the written permission of EMC Engineering Services, Inc.
8. The term *"Certification"* as used in Rule 180-6-.09 (2) and (3) and relating to professional engineering or land surveying services, as defined in O.C.G.A. 43-15-2 (6) and (11), shall mean a signed statement based upon facts and knowledge known to the registrant at the time of the survey and is not a guarantee or warranty, either expressed or implied.
9. This survey is valid only if print has the original signature of the surveyor.
10. This Survey complies with both the rules of the Georgia Board of Registration for Professional Engineers and Land Surveyors and the Official Code of Georgia Annotated (OCGA) 15-6-67, in that where a conflict exists between those two sets of specifications, the requirements of law prevail.
11. All wetlands are under the jurisdiction of the U.S. Army Corps. of Engineers and/or the State of Georgia Department of Natural Resources. Lot owners are subject to penalty by law for disturbance to these protected areas without proper permit application and approval.

SURVEY DATA

Parcel A:	3.847 Acres (167,579 Square Feet)
Outparcel 1:	2.840 Acres (123,725 Square Feet)
Outparcel 2:	1.156 Acres (50,340 Square Feet)
Parcel B:	1.231 Acres (53,627 Square Feet)
Parcel C:	0.451 Acres (19,659 Square Feet)
Total Area:	9.525 Acres (414,930 Square Feet)
Plat Closure:	1 in 1,273,168

Field Precision: This entire survey was completed using GPS Base and Rover, Real Time Kinematic, surveying methods using multi-frequency receivers. The field data for this boundary survey has a Relative Positional Accuracy of 0.06 feet or less, horizontally at the 95% confidence level.

Equipment used:	Carlson CR2+ Robotic Total Station Carlson BRx6 GNSS GPS/eGPS Network
Field Work Completed on:	September 23, 2022

REFERENCES

PB 75, PG 34	PB 12P, PG 148B	PB 25, PG 10
PB 41S, PG 29	PB Q, PG 88	DB 1250W, PG 721

SURVEYORS CERTIFICATION

GEORGIA REGISTERED No. 3343 PROFESSIONAL LAND SURVEYOR WESLEY P. WITTMAN

As required by subsection (d) of O.C.G.A. Section 15-6-67, this plat has been prepared by a land surveyor and approved by all applicable local jurisdictions for recording as evidenced by approval certificates, signatures, stamps, or statements hereon. Such approvals or affirmations should be confirmed with the appropriate governmental bodies by any purchaser or user of this plat as to intended use of any parcel. Furthermore, the undersigned land surveyor certifies that this plat complies with the minimum technical standards for property surveys in Georgia as set forth in the rules and regulations of the Georgia Board of Registration for Professional Engineers and Land Surveyors and as set forth in O.C.G.A. Section 15-6-67.

Wesley P. Wittman — 11/3/2022

GA REG. L. S. NO. 3343 — DATE

LINE TABLE		
LINE #	DIRECTION	LENGTH
L1	S22° 13' 35"E	11.19
L2	S72° 08' 50"W	10.09
L3	S71° 51' 49"W	30.00
L4	N14° 27' 29"E	22.00

CURVE TABLE				
CURVE #	BEARING	CHORD	RADIUS	ARC
C1	N26° 55' 51"E	60.65	43.00	67.32
C2	N63° 04' 09"W	39.70	28.00	44.13

LEGEND

PROPERTY BOUNDARY		POINT OF BEGINNING	P.O.B.
ADJACENT PROPERTY LINE / FORMER PROPERTY LINE		PROPERTY ID NUMBER	PIN
METES AND BOUNDS	N 47°45'54" E - 497.06'	NOW OR FORMERLY	N/F
TAG LABEL	L# or C#	RIGHT-OF-WAY	R/W
5/8" IRON REBAR FOUND	○ 5/8" RBF	PLAT BOOK	PB
RIGHT-OF-WAY MONUMENT FOUND	⊡ RWMF	DEED BOOK	DB
5/8" IRON REBAR SET W/CAP	● RBS	PAGE	PG
MEANDER POINT	○	NOT TO SCALE	N.T.S.

CERTIFICATE OF DEDICATION

ALL STREETS, RIGHTS-OF-WAY, EASEMENTS AND ANY SITES FOR PUBLIC USE AS NOTED ON THIS PLAT ARE HEREBY DEDICATED FOR THE USE INTENDED.

OWNER — DATE

CERTIFICATE OF APPROVAL

APPROVED BY THE MAYOR AND COUNCIL, CITY OF PORT WENTWORTH

MAYOR — DATE

COUNCIL MEMBER — DATE

COUNCIL MEMBER — DATE

COUNCIL MEMBER — DATE

COUNCIL MEMBER — DATE

COUNCIL MEMBER — DATE

COUNCIL MEMBER — DATE

EMC ENGINEERING SERVICES, INC.
PO Box 2086
721 Merchant Way, Suite 201
Statesboro, GA 30458
Ph: (912) 764-7022
Fax: (912) 233-4580
statesboro@emc-eng.com
www.emc-eng.com
CIVIL MARINE ENVIRONMENTAL
ALBANY • ATLANTA • AUGUSTA • BRUNSWICK • COLUMBUS
GREENVILLE • SAVANNAH • STATESBORO • THOMASTON • VALDOSTA

RECOMBINATION AND SUBDIVISION PLAT

FLOYD PROPERTY - 9.525 ACRES

8th G.M. DISTRICT

CITY OF PORT WENTWORTH, CHATHAM COUNTY, GEORGIA

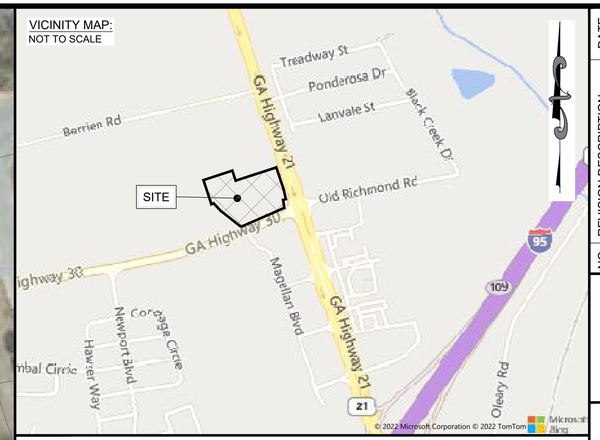
Prepared for:
DRAYTON PARKER COMPANIES

PROJECT NO.:	22-2059
DRAWN BY:	WPW/WEC
DESIGNED BY:	
SURVEYED BY:	NCH
SURVEY DATE:	9/23/2022
CHECKED BY:	WPW
SCALE:	1" = 50'
DATE:	9/23/2022

SHEET 1 OF 1

O:\2022\22-2059 PARKERS - HWY 21 & HWY 30\DWG\22-2059V_SD1 HWY 21 @ 30 SUBDIVISION PLAT.DWG 11/3/2022 3:51 PM

VICINITY MAP:
NOT TO SCALE



SITE NOTES:

PROJECT DESCRIPTION	THE SUBJECT SITE CONSISTS OF UNDEVELOPED/OPEN SPACE, LYING ON 3 PARCEL(S) OF LAND. IT IS THE INTENTION OF THE DEVELOPER TO CONSTRUCT A CONVENIENCE STORE / GAS STATION AT THE CORNER OF HWY. 21 AND HWY. 30. THE DEVELOPER ALSO PLANS TO INSTALL AN ACCESS ROAD OFF OF HWY. 30 TO SERVE THE CONVENIENCE STORE DIESEL FUELING STATION AS WELL AS OUT-PARCELS TO BE LOCATED WEST OF THE ACCESS ROAD.	
PROPERTY DESCRIPTION	NORTHWEST INTERSECTION OF HWY. 21 & HWY. 30 PIN #: 70976-02029, 70976-02003 & 70976B01001B	
AREA	TOTAL PROPERTY AREA	7.83 ACRES
	SUBJECT PROPERTY AREA	3.84 ACRES
	OUT-PARCEL AREA	OUT-PARCEL #1- 2.83 ACRES OUT-PARCEL #2- 1.16 ACRES
	DISTURBED AREA	TBD
ZONING	EXISTING	R-A
	PROPOSED	C-3 (GENERAL-BUSINESS) (REZONING REQUIRED)
SETBACKS	FRONT SETBACK:	40-FT
	SIDE SETBACK:	10-FT
	REAR SETBACK:	10-FT
UTILITIES	WATER SANITARY SEWER	THE DEVELOPER INTENDS TO CONNECT TO THE CITY OF PORT WENTWORTH'S UTILITY MAINS FOR WATER AND SANITARY SEWER SERVICE.

OFF STREET PARKING NOTES:

REQUIRED PARKING	1 SPACE PER 200 SQ. FT. + 1 SPACE PER FUEL PUMP
REQUIRED PARKING DESIGN CONSTRAINT	5,175 SQ. FT. 7 PUMPS
REQUIRED PARKING CALCULATION	(1 SPACE PER 200 SQ. FT. * 5,175 SQ. FT.) + (1 SPACE PER FUEL PUMP * 7 PUMPS) = 33 SPACES REQUIRED
PARKING PROVIDED	31 9-FT WIDE REGULAR AUTO SPACES 2 9-FT WIDE ADA AUTO SPACES 33 TOTAL SPACES

HATCH LEGEND:

- PROPOSED ASPHALT
- PROPOSED HEAVY-DUTY ASPHALT
- PROPOSED CONCRETE SIDEWALK
- DUMPSTER PAD

CONCEPTUAL PLAN SPECIAL NOTES	
1	PYLON SIGN - TO BE DESIGNED AND PERMITTED BY OTHERS
2	24' X 186' AUTO CANOPY
3	DUMPSTER ENCLOSURE
4	CONCRETE PAD W/ (3) UNDERGROUND FUEL STORAGE TANKS

GEORGIA811
www.Georgia811.com
Know what's **below.**
Call before you dig.

THIS CONCEPTUAL SITE PLAN IS INTENDED TO ILLUSTRATE DEVELOPMENT POTENTIAL. THIS PLAN DOES NOT BIND OR LIMIT THE OWNER / DEVELOPER, NOR SHALL THE ENGINEER BE BOUND OR LIMITED BY THE PLAN. ALL ILLUSTRATIONS / DRAWINGS ARE SUBJECT TO CHANGE

NO.	REVISION DESCRIPTION	DATE
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.	.	.
.	.	.

GEORGIA REGISTERED PROFESSIONAL ENGINEER
No. PE035596
11/03/2022
CORY PRESTON ROGERS
PRELIMINARY

50' 25' 0' 50'
GRAPHIC SCALE: 1" = 50'

EMC ENGINEERING SERVICES, INC.
PO Box 2086
121 Merchant's Way, Suite 201
Statesboro, GA 30458
Ph: (912) 764-7022
Fax: (912) 233-4580
statesboro@emc-eng.com
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CIVIL MARINE ENVIRONMENTAL
ALBANY • ATLANTA • AUGUSTA • BRUNSWICK • COLUMBUS
SAVANNAH • STATESBORO • THOMASTON • VALDOSTA • WARNER ROBINS

CONCEPTUAL PLAN

PARKER'S KITCHEN

HWY. 21 & HWY. 30
PORT WENTWORTH, CHATHAM COUNTY, GEORGIA
Prepared for:
THE PARKER COMPANIES

PROJECT NO.:	22-2059
DRAWN BY:	KES
DESIGNED BY:	KES
SURVEYED BY:	-
SURVEY DATE:	-
CHECKED BY:	CPR
SCALE:	1" = 50'
DATE:	11/03/2022

SHEET
1
OF 1

G:\22\22-2059 PARKER'S- HWY 21 & HWY 30\DWG\22-2059C_B01.DWG 11/3/2022 11:49 AM

Clock#: 389528
FILED FOR RECORD

5/07/2003 02:24pm

PAID: 12.00

Susan D. Prouse, Clerk
Superior Court of Chatham County
Chatham County, Georgia

Real Estate Transfer Tax

PAID $424.00

For Clerk of Superior Court

BOOK 250 PAGE 721

Return Recorded Document to:
Theodore T. Carellas, P.C.
Post Office Box 2599
Rincon, GA 31326

WARRANTY DEED

STATE OF GEORGIA

COUNTY OF EFFINGHAM File #: **0267-03**

This Indenture made this **23rd** day of **April, 2003** between **Alex Jenkins** , of the County of Dade, State of Florida, as party or parties of the first part, hereinafter called Grantor, and **Frank Neville Floyd** , as party or parties of the second part, hereinafter called Grantee (the words "Grantor" and "Grantee" to include their respective heirs, successors and assigns where the context requires or permits).

W I T N E S S E T H that: Grantor, for and in consideration of the sum of **TEN AND 00/100'S ($10.00) Dollars** and other good and valuable considerations in hand paid at and before the sealing and delivery of these presents, the receipt whereof is hereby acknowledged, has granted, bargained, sold, aliened, conveyed and confirmed, and by these presents does grant, bargain, sell, alien, convey and confirm unto the said Grantee, the following described property:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

TO HAVE AND TO HOLD the said tract or parcel of land, with all and singular the rights, members and appurtenances thereof, to the same being, belonging, or in anywise appertaining, to the only proper use, benefit and behoof of the said Grantee forever in **FEE SIMPLE.**

AND THE SAID Grantor will warrant and forever defend the right and title to the above described property unto the said Grantee against the claims of all persons whomsoever.

IN WITNESS WHEREOF, Grantor has hereunto set grantor's hand and seal this day and year first above written.

Signed, sealed and delivered in the presence of:

Witness

Notary Public

NOTARY SEAL
JOHN HENRY BAKER
NOTARY PUBLIC STATE OF FLORIDA
COMMISSION NO. CC
MY COMMISSION EXP. OCT. 29, 20

Alex Jenkins (Seal)

(Seal)

https://search.gsccca.org/Imaging/HTML5Viewer.aspx?id=16909545&key1=250W&key2=721&county=25&countyname=CHATHAM&userid=34458&ap... 1/2

EXHIBIT "A"

All that certain lot, tract or parcel of land situate, lying and being in the 8th G.M. District, Chatham County, Georgia, containing 1.98 acres and being a portion of TheThompkins Property, as shown and more particularly described on that certain map or plat made by Vincent Helmly, R.L.S. #1882, dated April 10, 2003, recorded in Plat Book 25P, Folio 10, in the records of the Clerk of Superior Court of Chatham County, Georgia. For a more particular description reference is hereby made to the aforesaid plat, which is specifically incorporated herein and made a part hereof.

This being the same property conveyed by Warranty Deed from Charlie Thompkins to Alex Jenkins, dated April 28, 1978, recorded in Deed Book 110-U, page 587, aforesaid records.

SUBJECT TO AND INCLUDED HEREWITH is a 20 foot access easement for ingress and egress purposes across the Southern side of the above-described property as shown on the aforedescribed plat.

BOOK 250 PAGE 722

A.J

Clock#: 1160343
FILED FOR RECORD
5/22/2009 10:04am
PAID: 12.00
Daniel W. Massey, Clerk
Superior Court of Chatham County
Chatham County, Georgia

RECORD AND RETURN TO:
CARELLAS & NEWBERRY, P.C.
POST OFFICE BOX 2599
RINCON, GA 31326

STATE OF GEORGIA)
)
COUNTY OF CHATHAM)

EXECUTOR'S DEED

THIS INDENTURE, Made this the 15 day of MAY, 2009, between FRANK NEVILLE FLOYD and CHARLES LYNN FLOYD, Executors of the Estate of ALMA REITA FLOYD, late of the State of Georgia, and County of Chatham, deceased, as Parties of the First Part (hereinafter called "grantors") and FRANK NEVILLE FLOYD, as Party of the Second Part (hereinafter called "grantee"), the words "grantor(s)" and "grantee(s)" to include their respective heirs, successors and assigns where the context requires or permits:

BOOK 351N PAGE 612

WITNESSETH: That the said grantors (acting under and by virtue of the power and authority contained in the Last Will and Testament of Alma Reita Floyd, the same having been duly probated and recorded in the Court of Probate of Chatham County, Georgia) and all debts of said estate of Alma Reita Floyd having been paid, for and in consideration of the sum of Ten and 00/100 ($10.00) DOLLARS In hand paid, at and before the sealing and delivery of these presents (the receipt of which is hereby acknowledged), have granted, bargained, sold and conveyed, and by these presents does grant, bargain, sell and convey unto the said grantee, the following described property, to wit:

See "Exhibit A" attached hereto and made a part hereof.

TO HAVE AND TO HOLD the said tract or parcel of land, with all and singular the rights, members and appurtenances thereof, to the same being, belonging, or in anywise appertaining, to the only proper use, benefit and behoof of the said grantee forever, IN FEE SIMPLE: in as full and ample a manner as the same was held, possessed and enjoyed, or might have been held, possessed and enjoyed, by the said deceased.

And the said Parties of the First Part, their heirs, executors, successors and assigns will warrant and forever defend the right and title to the above described property unto the said Party of the Second Part, his executors, administrators, heirs and assigns against the claims of all persons whomsoever.

IN WITNESS WHEREOF, the grantors herein have hereunto set their hand and seal, the day and year first above written.

Signed, sealed and delivered
in the presence of:

WITNESS

NOTARY PUBLIC

THEODORE T. CARELLAS NOTARY PUBLIC Comm. Exp. 5/26/09 CHATHAM COUNTY, GA.

Frank Neville Floyd (SEAL)
FRANK NEVILLE FLOYD, Executor of the Estate
of Alma Reita Floyd

Signed, sealed and delivered
in the presence of:

WITNESS

NOTARY PUBLIC

THEODORE T. CARELLAS NOTARY PUBLIC Comm. Exp. 5/26/09 CHATHAM COUNTY, GA.

Charles L. Floyd (SEAL)
CHARLES LYNN FLOYD, Executor of the Estate
of Alma Reita Floyd

https://search.gsccca.org/Imaging/HTML5Viewer.aspx?id=56187175&key1=351N&key2=612&county=25&countyname=CHATHAM&userid=34458&ap... 1/4

EXHIBIT "A"

All that certain lot, tract or parcel of land situate, lying and being in the City of Port Wentworth, 8th G.M.D., County of Chatham, State of Georgia, and known as Lot One (1), containing 2.83 acres, more or less, as shown upon a map or plat of record in the Office of the Clerk of the Superior Court of Chatham County, Georgia, in Plat Book 41S, page 29, known as A Resubdivision of Parcels 1, 2 & 3, Floyd Subdivision, 8th. G. M. District, by Vincent Helmly, Surveyor, RLS #1882, said plat dated July 23, 2008, for the Estate of Alma Reita Floyd.

Subject to conditions, restrictions and easements of record and as shown n the aforedescribed plat of survey.

BOOK 351 N PAGE 613

Clock#: 1160344
FILED FOR RECORD
5/22/2009 10:04am
PAID: 12.00
Daniel W. Massey, Clerk
Superior Court of Chatham County
Chatham County, Georgia

BOOK 351 N PAGE 614

RECORD AND RETURN TO:
CARELLAS & NEWBERRY, P.C.
POST OFFICE BOX 2599
RINCON, GA 31326

STATE OF GEORGIA)
)
COUNTY OF CHATHAM)

EXECUTOR'S DEED

THIS INDENTURE, Made this the 15 day of MAY, 2009, between FRANK NEVILLE FLOYD and CHARLES LYNN FLOYD, Executors of the Estate of ALMA REITA FLOYD, late of the State of Georgia, and County of Chatham, deceased, as Parties of the First Part (hereinafter called "grantors") and FRANK FORREST FLOYD, as Party of the Second Part (hereinafter called "grantee"), the words "grantor(s)" and "grantee(s)" to include their respective heirs, successors and assigns where the context requires or permits:

WITNESSETH: That the said grantor (acting under and by virtue of the power and authority contained in the Last Will and Testament of Alma Reita Floyd, the same having been duly probated and recorded in the Court of Probate of Chatham County, Georgia, for and in consideration of the sum of Ten and 00/100 ($10.00) DOLLARS In hand paid, at and before the sealing and delivery of these presents (the receipt of which is hereby acknowledged), have granted, bargained, sold and conveyed, and by these presents does grant, bargain, sell and convey unto the said grantee, the following described property, to wit:

See "Exhibit A" attached hereto and made a part hereof.

TO HAVE AND TO HOLD the said tract or parcel of land, with all and singular the rights, members and appurtenances thereof, to the same being, belonging, or in anywise appertaining, to the only proper use, benefit and behoof of the said grantee forever, IN FEE SIMPLE: in as full and ample a manner as the same was held, possessed and enjoyed, or might have been held, possessed and enjoyed, by the said deceased.

IN WITNESS WHEREOF, the grantors herein have hereunto set their hand and seal, the day and year first above written.

Signed, sealed and delivered
in the presence of:

WITNESS

NOTARY PUBLIC

THEODORE T. CARELLAS NOTARY PUBLIC Comm. Exp. 5/26/09 CHATHAM COUNTY, GA.

Signed, sealed and delivered
in the presence of:

WITNESS

NOTARY PUBLIC

THEODORE T. CARELLAS NOTARY PUBLIC Comm. Exp. 5/26/09 CHATHAM COUNTY, GA.

Frank Neville Floyd (SEAL)
FRANK NEVILLE FLOYD, Executor of the Estate
of Alma Reita Floyd

Charles L. Floyd (SEAL)
CHARLES LYNN FLOYD, Executor of the Estate
of Alma Reita Floyd

EXHIBIT "A"

All that certain lot, tract or parcel of land situate, lying and being in the City of Port Wentworth, 8th G.M.D., County of Chatham, State of Georgia, and known as Lot Two (2), containing 2.04 acres, more or less, as shown upon a map or plat of record in the Office of the Clerk of the Superior Court of Chatham County, Georgia, in Plat Book 41S, page 29, known as A Resubdivision of Parcels 1, 2 & 3, Floyd Subdivision, 8th. G. M. District, by Vincent Helmly, Surveyor, RLS #1882, said plat dated July 23, 2008, for the Estate of Alma Rita Floyd.

Subject to conditions, restrictions and easements of record and as shown on the aforementioned plat of survey.

BOOK 351 N PAGE 615

Prepared by and, after recording, return to:

WILLIAMS
TRANSACTIONS & ESTATES, LLC

6205 Abercorn Street, Suite 201
Savannah, Georgia 31405
(912) 356-5550

File #: WT-22-6897

Type: WD
Kind: WARRANTY DEED
Recorded: 6/3/2022 1:04:00 PM
Fee Amt: $200.00 Page 1 of 2
Transfer Tax: $175.00
Chatham, Ga. Clerk Superior Court
Tammie Mosley Clerk Superior Court

Participant ID: 3602506218

BK 2822 PG 405 - 406

STATE OF GEORGIA

COUNTY OF CHATHAM

WARRANTY DEED

THIS INDENTURE, made and entered into this 3rd day of JUNE, 2022, by and between **EDDIE GREENE AKA EDDIE LEE GREEN**, as Party of the First Part, and **SAINAMO, LLC,** as Party of the Second Part:

WITNESSETH

PARTY OF THE FIRST PART, for and in consideration of the sum of TEN DOLLARS ($10.00) and other valuable consideration, receipt whereof is hereby acknowledged, does hereby grant, bargain, sell and convey unto Party of the Second Part, its heirs, successors and assigns, the following-described property, to-wit:

ALL OF THAT CERTAIN LOT, TRACT OR PARCEL OF LAND SITUATE, LYING AND BEING IN THE 8TH G.M. DISTRICT OF CHATHAM COUNTY, GEORGIA, AND BEING KNOWN AND DESIGNATED AS "AREA = 2.319 ACRES" ON A SURVEY PREPARED BY GLISSON LAND SURVEYING, WILLIAM MARK GLISSON - REGISTERED LAND SURVEYOR GEORGIA PLS #3316, WITH A FIELD SURVEY DATE OF MAY 20, 2022, DATED MAY 23, 2022, RECORDED MAY 24, 2022, IN PLAT BOOK 53, AT PAGE 375; AS REVISED ON JUNE 1, 2022 AND RE-RECORDED ON JUNE 1, 2022, IN PLAT BOOK 53, AT PAGE 385, CHATHAM COUNTY, GEORGIA RECORDS, ENTITLED "SURVEY OF 2.319 ACRES OF LAND LOCATED IN THE 8TH G.M. DISTRICT OF CHATHAM COUNTY, GEORGIA". SAID PLATS ARE INCORPORATED HEREIN BY SPECIFIC REFERENCE AND MADE A PART HEREOF.

THIS BEING THE SAME PROPERTY AS CONVEYED BY ASSENT TO DEVISE FROM NATHANIEL GREEN, AS EXECUTOR OF THE LAST WILL & TESTAMENT OF MARY LOU THOMPKINS TO EDDIE LEE GREEN, DATED JUNE 22, 1998, RECORDED JUNE 23, 1998, IN DEED BOOK 1941, AT PAGE 628, IN THE OFFICE OF THE CLERK OF THE SUPERIOR COURT OF CHATHAM COUNTY, GEORGIA, WHICH DEED IS INCORPORATED HEREIN BY SPECIFIC REFERENCE AND MADE A PART HEREOF.

COMMONLY KNOWN AS 0 HIGHWAY 21, PORT WENTWORTH, GEORGIA 31407; P.I.N. 7-0976B-01-018.

SUBJECT, HOWEVER, TO ALL VALID EASEMENTS, RESTRICTIVE COVENANTS, AND RIGHTS-OF-WAY OF RECORD.

TO HAVE AND TO HOLD the said bargained premises, together with all and singular the rights, members, appurtenances and hereditaments to the same being, belonging or in anywise appertaining, to the only proper use, benefit and behoof of the Party of the Second Part, its heirs and assigns forever, in **FEE SIMPLE**. The Party of the First Part expressly covenants that it is seized of said property in good fee simple title and that it has the full right, power and authority to convey the same; that the said property and the grantor thereof is free and clear of any liens, claims or encumbrances whatever whereby the title to said property may in anywise be charged, changed, impaired or defeated, and that the Party of the First Part will forever warrant and defend the said premises against the lawful claim of all persons whomsoever.

IN WITNESS WHEREOF, the said Party of the First Part has hereunto set its hand under seal, this day as aforesaid.

Signed, sealed and delivered in the presence of:

Witness:

Sign:
Print: Wallace Williams

Seller(s):

EDDIE GREENE AKA EDDIE LEE GREEN

Notary Public
Commission Expiration Date:
[NOTARIAL SEAL]

LAURA C MILKO
NOTARY PUBLIC
BRYAN COUNTY, GEORGIA
MY COMMISSION EXPIRES JANUARY 11, 2025

PT-61 (Rev. 2/18) To be filed in **CHATHAM COUNTY** **PT-61 025-2022-006582**

SECTION A – SELLER'S INFORMATION (Do not use agent's information)			SECTION C – TAX COMPUTATION	
SELLER'S LAST NAME GREEN	FIRST NAME EDDIE	MIDDLE LEE	Exempt Code If no exempt code enter NONE	NONE
MAILING ADDRESS (STREET & NUMBER) 7317 GA HWY 21			1. Actual Value of consideration received by seller Complete Line 1A if actual value unknown	$175,000.00
CITY, STATE / PROVINCE / REGION, ZIP CODE, COUNTRY PORT WENTWORTH, GA 31407 USA	DATE OF SALE 6/3/2022		1A. Estimated fair market value of Real and Personal property	$0.00
SECTION B – BUYER'S INFORMATION (Do not use agent's information)			2. Fair market value of Personal Property only	$0.00
BUYER'S'S BUSINESS / ORGANIZATION / OTHER NAME SAINAMO, LLC			3. Amount of liens and encumbrances not removed by transfer	$0.00
MAILING ADDRESS (Must use buyer's address for tax billing & notice purposes) 112 PARKSIDE BOULEVARD			4. Net Taxable Value (Line 1 or 1A less Lines 2 and 3)	$175,000.00
CITY, STATE / PROVINCE / REGION, ZIP CODE, COUNTRY PORT WENTWORTH, GA 31407 USA	Check Buyers Intended Use ( ) Residential ( ) Commercial ( ) Agricultural ( ) Industrial		5. TAX DUE at .10 per $100 or fraction thereof (Minimum $1.00)	$175.00

SECTION D – PROPERTY INFORMATION (Location of Property (Street, Route, Hwy, etc))					
HOUSE NUMBER & EXTENSION (ex 265A) 0	PRE-DIRECTION, STREET NAME AND TYPE, POST DIRECTION HIGHWAY 21				SUITE NUMBER
COUNTY CHATHAM	CITY (IF APPLICABLE)		MAP & PARCEL NUMBER 70976B01018		ACCOUNT NUMBER
TAX DISTRICT	GMD	LAND DISTRICT	ACRES	LAND LOT	SUB LOT & BLOCK

SECTION E – RECORDING INFORMATION (Official Use Only)				
DATE	DEED BOOK	DEED PAGE	PLAT BOOK	PLAT PAGE

ADDITIONAL BUYERS
None

Clock#: 1389836
FILED FOR RECORD
2/01/2012 08:47am
PAID: 12.00
Daniel W. Massey, Clerk
Superior Court of Chatham County
Chatham County, Georgia

BOOK 375E PAGE 960

RECORD AND RETURN TO:
CARELLAS & NEWBERRY, P.C.
P.O. BOX 2599
RINCON, GA 31326

STATE OF GEORGIA)
)
COUNTY OF EFFINGAM)

QUITCLAIM DEED

THIS INDENTURE, made this 30th day of November, 2011, between F. FORREST FLOYD, as Party of the First Part, and FRANK AND REITA'S II, LLC, as Party of the Second Part,

WITNESSETH:

That the said Party of the First Part for and in consideration of the sum of One Dollar ($1.00) cash in hand paid, the receipt and adequacy of which is hereby acknowledged, has bargained, sold, and does by these presents remise, release and forever QUITCLAIM to the said Party of the Second Part, its successors, and assigns, all right, title, and interest in and to the following described property, to wit:

All that certain lot, tract or parcel of land situate, lying and being in the City of Port Wentworth, 8th G.M.D., County of Chatham, State of Georgia, and known as Lot Three (3), containing 1.54 acres, more or less, as shown upon a map or plat of record in the Office of the Clerk of the Superior Court of Chatham County, Georgia, in Plat Book 41S, page 29, known as A Resubdivision of Parcels 1, 2 & 3, Floyd Subdivision, 8th. G. M. District, by Vincent Helmly, Surveyor, RLS #1882, said plat dated July 23, 2008, for the Estate of Alma Reita Floyd.

Subject to conditions, restrictions and easements of record and as shown on the aforedescribed plat of survey.

This being the same property conveyed by Quitclaim Deed from William Neville Floyd to F. Forrest Floyd, dated August 25 2010, recorded in Deed Book 363-P, Page 541, aforesaid records.

BOOK 375E PAGE 961

TO HAVE AND TO HOLD the said property and premises to the said Party of the Second Part so that neither the said Party of the First Part nor his heirs, executors, administrators and assigns, nor any person or persons claiming under the Party of the First Part, shall at any time by any ways or means, have, claim or demand any right or title to the aforesaid property and premises or its appurtenances or any right thereof.

IN WITNESS WHEREOF, said Party of the First Part has hereunto caused his official hand and seal to be set on the day and year first above written.

F. Forrest Floyd (Seal)

Signed, sealed and delivered in the presence of:

Witness

Notary Public

JANELLE W. DRAWDY NOTARY PUBLIC Comm. Exp. 2/25/14 EFFINGHAM COUNTY, GA

TITLE NOT EXAMINED BY PREPARER OF DEED

Clock#: 1255696
FILED FOR RECORD
6/24/2010 09:11am
PAID: 10.00
Daniel W. Massey, Clerk
Superior Court of Chatham County
Chatham County, Georgia

BOOK 361 PAGE 704

RECORD AND RETURN TO:
CARELLAS & NEWBERRY, P.C.
P.O. BOX 2599
RINCON, GA 31326

STATE OF GEORGIA)
)
COUNTY OF EFFINGAM)

QUITCLAIM DEED

THIS INDENTURE, made this 17th day of June, 2010, between FRANK FORREST FLOYD, as Party of the First Part, and FRANK AND REITA'S, LLC, as Party of the Second Part,

WITNESSETH:

That the said Party of the First Part for and in consideration of the sum of One Dollar ($1.00) cash in hand paid, the receipt and adequacy of which is hereby acknowledged, has bargained, sold, and does by these presents remise, release and forever QUITCLAIM to the said Party of the Second Part, its successors, and assigns, all right, title, and interest in and to the following described property, to wit:

All that certain lot, tract or parcel of land situate, lying and being in the City of Port Wentworth, 8th G.M.D., County of Chatham, State of Georgia, and known as Lot Two (2), containing 2.04 acres, more or less, as shown upon a map or plat of record in the Office of the Clerk of the Superior Court of Chatham County, Georgia, in Plat Book 41S, page 29, known as A Resubdivision of Parcels 1, 2 & 3, Floyd Subdivision, 8th. G. M. District, by Vincent Helmly, Surveyor, RLS #1882, said plat dated July 23, 2008, for the Estate of Alma Rita Floyd.

Subject to conditions, restrictions and easements of record and as shown on the aforementioned plat of survey.

This being the same property conveyed by Executor's Deed dated May 15, 2009, from Frank Neville Floyd and Charles Lynn Floyd, Executors of the Estate of Alma Reita Floyd to Frank Forrest Floyd, recorded in Deed Record Book 351-N, Page 614, aforesaid records.

TO HAVE AND TO HOLD the said property and premises to the said Party of the Second Part so that neither the said Party of the First Part nor his heirs, executors, administrators and assigns, nor any person or persons claiming under the Party of the First Part, shall at any time by any ways or means, have, claim or demand any right or title to the aforesaid property and premises or its appurtenances or any right thereof.

IN WITNESS WHEREOF, said Party of the First Part has hereunto caused his official hand and seal to be set on the day and year first above written.

Frank Forrest Floyd (Seal)

Signed, sealed and delivered in the presence of:

Witness

Notary Public

THEODORE P. CARELLAS NOTARY PUBLIC My Comm. Exp. May 19, 2013 CHATHAM COUNTY, GA

TITLE NOT EXAMINED BY PREPARER OF DEED

CITY OF PORT WENTWORTH
(912) 964-4379

REC#: 00371638 10/06/2022 9:59 AM
OPER: KS TERM: 055
REF#: 94359

TRAN: 112.0000 BLDG PERMIT
220498 797.50CR
FLOYD, F. NEVILLE
7-0976-02-029
DEV-ZMA 797.50CR

TENDERED: 797.50 CHECK
APPLIED: 797.50-

CHANGE: 0.00

WWW.CITYOFPORTWENTWORTH.COM

Russell R. McMurry, P.E., Commissioner
One Georgia Center
600 West Peachtree NW
Atlanta, GA 30308
(404) 631-1990 Main Office

September 28, 2022

The Parker Companies
Daniel Ben-Yisrael
Real Estate Development Manager 17 W.
McDonough St.
Savannah, GA 31401

Re: Commercial Driveway Letter of Intent; SR21 and SR30; Chatham County; Mile Post 15.50 (SR21) and Mile Post 3.41 (SR30)

The Department has reviewed the proposed conceptual drawing submitted to this office requested by The Parker Companies, regarding the request for a Commercial Driveway Permit. The Department agrees to allow one right in / right out only commercial drive located on SR 21 at approximately M.P. 15.50 and an access point located on SR 30 at approximately M.P. 3.41, as depicted on the attachment, that conforms to the current Georgia Department of Transportation Requirements. In addition, the Department will determine if any additional improvements are required once an official set of plans and all required documents are submitted for review and approval

Please be advised the agreement detailed in this letter will expire 1 year from the above date. Submittal and review of your final plans will be required before a permit can be issued for the proposed work. For further assistance, please contact Bryan Hillyard at 912-530-4465, or mail at Georgia Department of Transportation, Attention Bryan Hillyard, 204 N. Hwy. 301 Jesup, GA 31546.

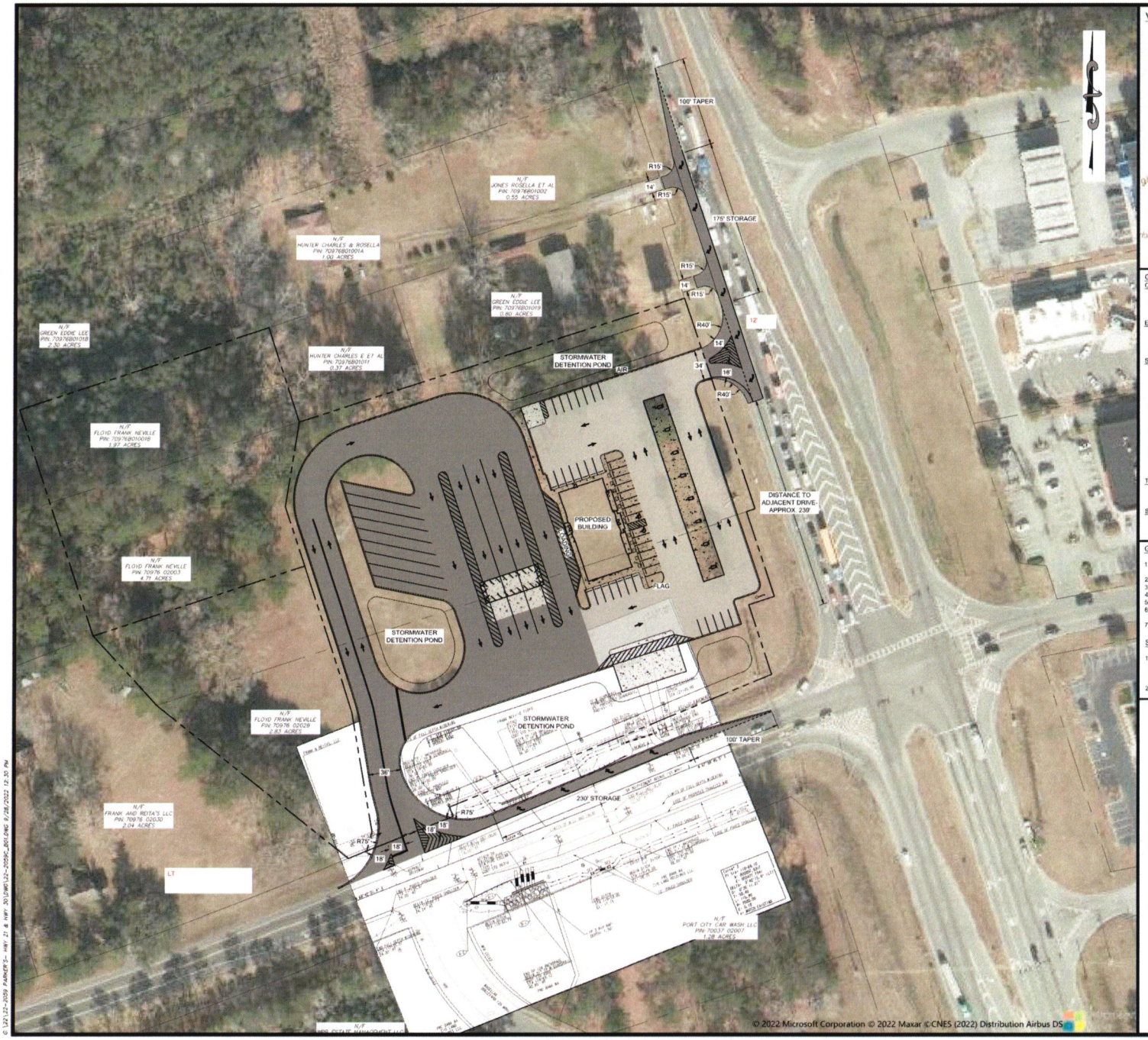
Sincerely,

FOR: Troy Pittman, P.E.
District Engineer

BY: Joseph Capello, P.E.
District Traffic Engineer

Attachments
JRC:DBB:BTH

cc: Randy Rhodes, Area Engineer, Chatham
John Kent, Area Permit Inspector



VICINITY MAP
NOT TO SCALE

GDOT COMMERCIAL DRIVEWAY NOTES:

OWNER / APPLICANT:
THE PARKER'S COMPANIES- DANIEL BEN-YISRAEL
17 W. MCDONOUGH ST., SAVANNAH, GA 31401
(912) 677-0593 (dbenyisrael@parkersav.com)

ENGINEER / PLAN PREPARER:
EMC ENGINEERING SERVICES, INC., CODY P. ROGERS, PE
1211 MERCHANT WAY, SUITE 201, STATESBORO, GEORGIA 30458
(912) 644-3219 (cody_rogers@emc-eng.com)

SITE INFORMATION:
LOCATION: GA STATE ROUTE 21 & GA STATE ROUTE 30
PROPERTY AREA: 8.00 ACRES
ROAD NAME (STATE ROUTE): TOM TRIMPLETT PKWY (GA STATE ROUTE 21)
PIEDMONT AVE (GA STATE ROUTE 30)
POSTED SPEED LIMIT: HWY 21- 45 MPH
HWY 30- 55 MPH
FUNCTIONAL CLASS: HWY 21- PRINCIPAL ARTERIAL
HWY 30- MINOR ARTERIAL
ANNUAL AVERAGE DAILY TRAFFIC:
HWY 21- 29,100 (2021 DATA FROM GDOT STATION ID 051-0112)
HWY 30- 13,000 (2021 DATA FROM GDOT STATION ID 051-0307)
PERCENT TRUCKS: HWY 21- 14% (2021 DATA FROM GDOT STATION ID 051-0112)
HWY 30- 6% (2021 DATA FROM GDOT STATION ID 051-0307)

TRIP GENERATION:
A TRAFFIC IMPACT ANALYSIS WILL BE PERFORMED UNDER THE SCOPE OF THIS PROJECT. ROADWAY IMPROVEMENTS WILL BE IMPLEMENTED AS RECOMMENDED IN THE TIA.

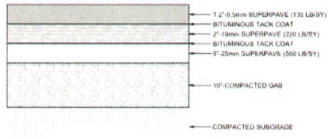
STORMWATER:
SITE DOES NOT INCREASE RUNOFF BY MORE THAN 1-CFS INTO STATE R/W. SITE WILL NOT HAVE ANY ADVERSE EFFECT UPSTREAM, DOWNSTREAM, OR ON THE STATE R/W.

GDOT MARKING NOTES:

1. ALL PAVEMENT MARKINGS INSTALLED ON ASPHALT WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE THERMOPLASTIC MATERIAL; HIGH CONTRAST TAPE SHALL BE INSTALLED ON CONCRETE.
2. LANE LINES ARE GENERALLY 5" (WHITE).
3. STOP LINES SHOULD BE 24" (WHITE).
4. CENTER LINES SHOULD BE 5" DOUBLE YELLOW.
5. DECELERATION LANES SHOULD HAVE TURN ARROWS (TP-2) SPACED EVERY 50 FEET.
6. NEW CONSTRUCTION SHOULD INSTALL 5" WHITE EDGE LINES, INCLUDING AT NEW CURB & GUTTER.
7. RAISED PAVEMENT MARKERS - TYPE 3 (RPMs) SHALL BE INSTALLED FOR ALL NEW CONSTRUCTION ON ROADWAYS WITH EXISTING RPMs.

SPECIAL NOTES:

1. DURING CONSTRUCTION, WORK WILL BE PERFORMED IN SUCH A MANNER AS TO PERMIT TRAFFIC TO OPERATE WITH THE LEAST AMOUNT OF INCONVENIENCE POSSIBLE. ADDITIONAL CHANNELIZATION & SIGNAGE SHALL BE INSTALLED, AS DIRECTED BY THE ENGINEER, TO ALLOW TRAFFIC TO FLOW AS FREELY AS POSSIBLE.
2. ALL SIGNAGE AND MARKING SHALL BE PER GDOT STANDARDS AND THE M.U.T.C.D.



NOTES:
- TOP 12" OF SUBGRADE TO BE MIXED IN PLACE AND COMPACTED TO 98% MAXIMUM DRY DENSITY.
- BASE MATERIAL TO MEET THE FOLLOWING SPECIFICATIONS & RELATED REFERENCES TO GDOT SPECIFICATIONS, LATEST EDITION, TO BE COMPACTED TO 98% MAXIMUM DRY DENSITY.
  - SECTION 814 FOR SOIL BASE MATERIALS
  - SECTION 815 FOR GRADED AGGREGATE BASE
  - SECTION 816 FOR SOIL AGGREGATE BASES
- THE CONTRACTOR SHALL PROVIDE COMPACTION TEST AND SOIL ANALYSIS TEST RESULTS FROM AN APPROVED TESTING LABORATORY.

GEORGIA DOT
ASPHALT PAVEMENT SECTION
NO SCALE

RECEIVED
OCT 03 2022
BY: SC

NO.	REVISION DESCRIPTION	DATE

GEORGIA REGISTERED PROFESSIONAL ENGINEER No. 34888 CODY PRESTON ROGERS
PRELIMINARY NOT FOR CONSTRUCTION

50' 25' 0 50'
GRAPHIC SCALE 1" = 50'

EMC ENGINEERING SERVICES, INC.
PO Box 2588
1211 Merchant Way, Suite 201
Statesboro, GA 30458
Ph. (912) 644-3219
Fax (912) 233-4656
statesboro@emc-eng.com
www.emc-eng.com
CIVIL MARINE ENVIRONMENTAL
ALBANY • ATLANTA • AUGUSTA • BRUNSWICK • COLUMBUS
SAVANNAH • STATESBORO • THOMASTON • VALDOSTA • WAYCROSS • ROGERS

GDOT CONCEPTUAL PLAN

PARKER'S KITCHEN

HWY. 21 & HWY. 30
PORT WENTWORTH, CHATHAM COUNTY, GEORGIA
Prepared for:
THE PARKER COMPANIES

PROJECT NO.	22-2059
DRAWN BY:	KES
DESIGNED BY:	KES
SURVEYED BY:	--
SURVEY DATE:	--
CHECKED BY:	CPR
SCALE:	1" = 50'
DATE:	09/28/2022

SHEET 1 OF 1

CONCEPT

© V:\22-2059 PARKER'S- HWY. 21 & HWY. 30\CIVIL\22-2059C_BOUNDS 9-28-2022 12:55 PM

Project Timeline

Project Number: 220498

Project Name: ZMA Parkers Kitchen Gas Station RA to C3 2022

Applicant / Engineer: EMC Engineering Services

Owner: Frank Neville Floyd

City Review Engineer: N/A

- 10/03/2022 – Zoning Map Amendment Application received: Incomplete
- 10/05/2022 – Received missing documentation.
- 10/11/2022 – zoning signs ordered
- 10/21/2022 – public hearing notice letters mailed.
- 10/24/2022 – public hearing notice posted in Savannah Morning News
- 10/26/2022 – public hearing notice signs posted.
- 11/4/2022 – received revised concept plan and plat.
- 11/14/2022 – The Planning Commission voted 5-1 to recommend denying the application.