



**AGENDA
TECHNICAL REVIEW COMMITTEE
REGULAR MEETING
JUNE 10, 2021
9:00 AM
CITY HALL COMMISSION CHAMBERS
204 ASH STREET
FERNANDINA BEACH, FL 32034**

- 1. CALL TO ORDER**
- 2. ROLL CALL**
- 3. PLEDGE OF ALLEGIANCE**
- 4. APPROVAL OF MINUTES**
 - 4.1 Approval of Minutes for the May 13, 2021 Regular Meeting
 - 4.2 Approval of Minutes for the May 27, 2021 Regular Meeting
- 5. DISCUSSION ITEMS**
 - 5.1 Pre-Application Discussion: Tony Jarzyna, Jarzyna & Associates Architects to discuss a multi-family residential project at 306 Ash Street.
- 6. OLD BUSINESS**
 - 6.1 SPR 2020-0013: Nick Gillette with Gillette & Associates - 233 S. 14th St.- Construction of a Group Residential structure. *Second Distribution.*
- 7. DEVELOPMENT INQUIRIES FROM APPLICANTS NOT ON THE AGENDA - DISCUSSION ONLY, NO ACTION TO BE TAKEN.**
- 8. COMMITTEE BUSINESS**
- 9. ADJOURNMENT**

NEXT REGULAR TRC MEETING IS SCHEDULED FOR JUNE 24, 2021

Persons with disabilities requiring accommodations in order to participate in this program or activity should contact 310-3115, TTY 711, or through the Florida Relay Services at 1-800-955-8771 (TTY number for all City offices) at least 24 hours in advance to request such accommodations.



**MINUTES
TECHNICAL REVIEW COMMITTEE
REGULAR MEETING
MAY 13, 2021**

1. CALL TO ORDER 9:00

2. ROLL CALL

MEMBERS PRESENT:

Jacob Platt, Planning

Michelle Forstrom, Code Enforcement

Andre Desilet, Stormwater/Utilities

Jason Higginbotham, Fire

Rex Lester, Streets/ADA

OTHERS PRESENT:

Taylor Hartmann, Recording Secretary

3. PLEDGE OF ALLEGIANCE

4. APPROVAL OF MINUTES

4.1 Approval of Minutes for the Regular Meeting of April 8, 2021.

ACTION TAKEN: A motion was made by Member Forstrom seconded by Member Desilet to approve the minutes as presented.

Vote upon passage of the motion was taken by voice vote, and being all ayes, carried.

5. DISCUSSION ITEMS

5.1 Change of Use: 960194 Gateway Blvd., Ste 203 - Michelle Strickland to discuss opening a Laser Center in a former resort development location. The property is zoned C-2.

Mr. Platt introduced the case and invited the applicant to speak.

Michelle Strickland, applicant, stated that the proposed location was previously used as a professional office.

Mr. Desilet stated he would look into any potential changes in water and wastewater usage.

Members agreed that the applicant can move forward with obtaining a Local Business Tax Receipt.

6. NEW BUSINESS

None presented.

7. OLD BUSINESS

None presented.

8. DEVELOPMENT INQUIRIES FROM APPLICANTS NOT ON THE AGENDA - DISCUSSION ONLY, NO ACTION TO BE TAKEN.

Asa Gillette, Asa Gillette Inc., spoke about a future project on N. 2nd Street, north of Alachua Street. Mr. Gillette explained that the proposed project is to create a paid parking lot. He added that the parking surface will likely be pervious pavers or of similar material.

Mr. Lester indicated that a sidewalk should be added to the north end of the lot, as well as appropriate lighting, and signage.

Ms. Forstrom inquired about placing a dumpster at this location in order to alleviate street congestion created by the use of rollout trash bins.

Members agreed that the proposed plan should come back to TRC for a second more detailed discussion.

9. COMMITTEE BUSINESS

- 9.1 SPR 2021-0005: Chris Nardone, Passero Associates, LLC., 700 Airport Rd. - Proposed expansion to existing T-hangar buildings 6 and 7; includes a unisex restroom, asphalt taxi lanes, and retention ponds. Sign-off

Members will electronically sign off on this case.

10. ADJOURNMENT 9:25

Jacob Platt



**MINUTES
TECHNICAL REVIEW COMMITTEE
REGULAR MEETING
MAY 27, 2021**

1. CALL TO ORDER 9:00

2. ROLL CALL

MEMBERS PRESENT:

Jacob Platt, Planning

Rex Lester, Streets/ADA (9:01)

Jason Higginbotham, Fire

Sal Cumella, Historic Preservation

Andre Desilet, Stormwater/Utilities

OTHERS PRESENT:

Taylor Hartmann, Recording Secretary

3. PLEDGE OF ALLEGIANCE

4. APPROVAL OF MINUTES

5. DISCUSSION ITEMS

- 5.1 Pre-Application Discussion - Robert Ziegenfuss, Z Development Services, Parcel: 00-00-30-0800-0029-0040 on S. 8th Street - To discuss the construction of a Popeyes fast food restaurant. This property is zoned C-2.

Mr. Platt introduced the case and invited the applicant to speak.

Robert Ziegenfuss, Z Development Services, applicant, stated that he is in the process of performing due diligence for his client. He also recognized that there would potentially be a cross-access easement with Advanced Auto immediately to the south.

Mr. Desilet indicated that a waterline runs through much of the proposed entrance to Popeyes and would need to be considered during both the design and construction stages.

Mr. Platt confirmed that the City does not allow filling in of wetlands and additionally requires a wetland buffer so this could potentially affect the building footprint. Seeking a variance with regards to wetland encroachment is not permissible.

Mr. Ziegenfuss inquired about loading zone requirements.

Mr. Lester stated the handicapped parking space requirements are 12 FT wide measured from the inside of each blue line.

- 5.2 Pre-Application Discussion - Asa Gillette, Gillette & Associates, Inc., N. 2nd Street, To discuss the construction of 5 townhomes and courtyard.

Mr. Platt introduced the case and invited the applicant to speak.

Asa Gillette, applicant, indicated that the proposed plan is to have 5 townhomes with a shared front

courtyard located at 21 N. 2nd Street.

Mr. Desilet will confirm current locations of watermain in order to provide utility service to the townhomes.

Mr. Higginbotham confirmed that the townhomes would require sprinkler systems.

Mr. Lester stated that he would like to see the entrance on Alachua Street resurfaced with stamped brick.

Mr. Cumella confirmed that there are no Historic District and CRA Design Guidelines that would affect the building footprint.

Mr. Gillette believes that the proposed plan will not result in any lost public parking spaces.

Members agreed that this case will need to come back to TRC for a full Site Plan Review.

- 5.3 Pre-Application Discussion - Kathleen McClurg, 312 S. 8th Street - To discuss opening a Montessori school in a former transportation logistics location. This property is zoned MU-8.

Mr. Platt introduced the case and invited the applicant to speak.

Kathleen McClurg, applicant, provided an overview of the proposed project which would include installation of an outdoor recreation area for children, a 4 FT fence around the exterior of the property, and a temporary shade structure.

Mr. Desilet will calculate any changes in utility impact fees.

Mr. Lester indicated that the handicapped parking space needs to be located as close as possible to the first accessible entrance.

Members agreed that the applicant can move forward with obtaining an LBTR and any required permits.

6. NEW BUSINESS

- 6.1 SPR 2021-0007: Chris Nardone, Passero Associates, LLC., 700 Airport Rd. - Site Plan Review of proposed fire station at airport.

Mr. Platt introduced the case and invited the applicant to speak.

Chris Nardone, Passero Associates, LLC., applicant, reviewed comprehensive plans including site and utility. He stated that he is currently engaged in a conversation with FPU regarding relocating a utility pole.

Mr. Platt reviewed buffer requirements for the zoning district.

Members agreed that this project can move forward.

7. DEVELOPMENT INQUIRIES FROM APPLICANTS NOT ON THE AGENDA - DISCUSSION ONLY, NO ACTION TO BE TAKEN.

Julie Delphs, 10 S. 4th Street, requesting a change of use in order to open an art gallery and studio.

Mr. Platt stated this is a permissible use in the C-3 zoning district.

Mr. Lester inquired about signage placement and confirmed that sidewalk signs are required to be at least 6 FT away from the building.

DRAFT

Members agreed that this project can move forward with permitting and obtaining an LBTR.

Chris Nardone, Passero Associates, LLC., presented proposed plans for the City's waterfront.

Chris Nardone, Passero Associates, LLC., reviewed comprehensive plans for parking lots C & D specifically with details including a boardwalk, tidal plantings, and an oyster shell reef.

Mr. Higginbotham pointed out an FDC connection that should be considered during construction.

Mr. Lester pointed out the consideration needs to be made for parking and maneuverability of tour busses.

8. COMMITTEE BUSINESS

9. ADJOURNMENT 10:59

Jacob Platt

ENGINEERING PLANS

FOR

SETTLERS COVE

FOR

SIMMONS 9, LLC

SETTLERS COVE

FOR

SIMMONS 9, LLC

RELEASED FOR CONSTRUCTION BY

GILLETTE & ASSOCIATES, INC.

CIVIL & ENVIRONMENTAL ENGINEERING
MECHANICAL & STRUCTURAL ENGINEERING
PERMITTING & CONSTRUCTION MANAGEMENT

20 SOUTH 4TH STREET AMELIA ISLAND, FLORIDA 32034
PHONE: 904/261-8819



PERMITTING AGENCIES

CITY OF FERNANDINA BEACH: 904-310-3421
SJRWMD: 904-730-6270

UTILITY PROVIDERS

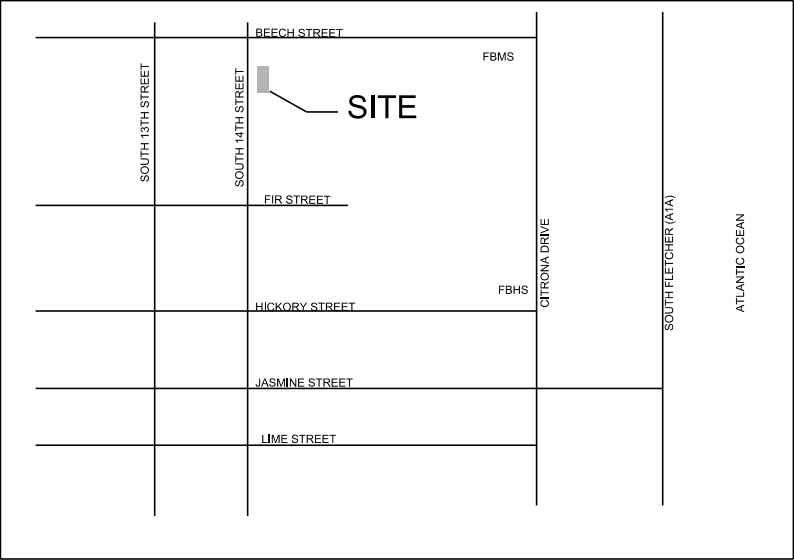
WATER/SEWER: CITY OF FERNANDINA BEACH
ELECTRIC: FLORIDA PUBLIC UTILITIES
CABLE: COMCAST
TELEPHONE: AT&T

G&A Project
No.:19-10.18

Issue Date: December 3, 2020



SITE LOCATION MAP



1. ALL WORK SHALL BE PERFORMED IN A SAFE MANNER. ALL SAFETY RULES AND GUIDELINES OF OSHA SHALL BE FOLLOWED. THE CONTRACTOR SHALL BE WHOLLY RESPONSIBLE FOR ANY INJURIES OF HIS EMPLOYEES, AND ANY DAMAGE TO PRIVATE PROPERTY OR PERSONS DURING THE COURSE OF THIS PROJECT. ALL COSTS ASSOCIATED WITH COMPLYING WITH OSHA REGULATIONS AND THE FLORIDA TRENCH SAFETY ACT MUST BE INCLUDED IN THE CONTRACTOR'S PRICE FOR PERFORMING THE WORK.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE JOB SITE PRIOR TO PREPARING THE BID FOR THE PURPOSE OF FAMILIARIZING HIMSELF WITH THE NATURE AND THE EXTENT OF THE WORK AND LOCAL CONDITIONS, EITHER SURFACE OR SUBSURFACE, WHICH MAY AFFECT THE WORK TO BE PERFORMED, AND THE EQUIPMENT, LABOR AND MATERIALS REQUIRED. FAILURE TO DO SO WILL NOT RELIEVE THE CONTRACTOR OF COMPLETE PERFORMANCE UNDER THIS CONTRACT. THE CONTRACTOR IS URGED TO TAKE COLOR PHOTOGRAPHS ALONG THE ROUTE OF THIS PROJECT TO RECORD EXISTING CONDITIONS PRIOR TO CONSTRUCTION, AND TO AID IN RESOLVING POSSIBLE FUTURE COMPLAINTS THAT MAY OCCUR DUE TO CONSTRUCTION OF THE PROJECT. ALL COSTS ASSOCIATED WITH PRELIMINARY INVESTIGATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

3. ALL IMPROVEMENTS SHOWN ARE TO BE WARRANTED BY THE CONTRACTOR TO THE DEVELOPER.

4. ELEVATIONS ARE BASED ON NAVD 1988.

5. TOPOGRAPHIC AND BOUNDARY INFORMATION WAS PROVIDED BY: MANZIE & DRAKE LAND SURVEYORS (904-491-5700)

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY BUILDING, RIGHT-OF-WAY PERMITS NOT PROVIDED AND INSURANCE REQUIRED FOR THE PROJECT.

7. THE CONTRACTOR SHALL COORDINATE THE WORK WITHIN COUNTY OR STATE RIGHT-OF-WAY WITH THE PROPER AGENCIES FOR MAINTENANCE OF TRAFFIC AND METHOD OF CONSTRUCTION & REPAIR.

8. THE CONTRACTOR SHALL ADVISE THE OWNER'S AUTHORIZED REPRESENTATIVE OF PLANNED WORK SCHEDULE. THE CONTRACTOR SHALL COORDINATE THEIR CONSTRUCTION WITH ALL OTHER CONTRACTORS. IN THE EVENT OF ANY CONFLICT WHATSOEVER, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD, AND THE OWNER PRIOR TO PROCEEDING WITH CONSTRUCTION.

9. "AS-BUILT" DRAWINGS - AS-BUILTS ARE REQUIRED TO BE SIGNED AND SEALED BY A FLORIDA REGISTERED LAND SURVEYOR. THEREFORE, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTRACT WITH A LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA FOR THE PREPARATION, FIELD LOCATIONS, CERTIFICATION, AND SUBMITTAL OF AS-BUILT DRAWINGS.

10. "AS-BUILT" RECORD DATA AND INFORMATION SHALL BE MAINTAINED BY THE CONTRACTOR. RECORD DRAWINGS SHALL BE SUPPLIED TO THE ENGINEER.

11. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL SURVEY AND PROPERTY MONUMENTS. IF A MONUMENT IS DISTURBED, THE CONTRACTOR SHALL CONTRACT WITH THE SURVEYOR OF RECORD FOR REINSTALLATION OF THE MONUMENT.

12. ALL DEBRIS RESULTING FROM ALL ACTIVITIES SHALL BE DISPOSED OF OFF-SITE BY CONTRACTOR ON A DAILY BASIS.

13. ALL EXCESS SUITABLE AND UNSUITABLE MATERIALS SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR UNLESS DIRECTED OTHERWISE BY THE ENGINEER.

14. ALL EXISTING TREES LISTED TO REMAIN SHALL BE PRESERVED AND PROTECTED.

15. THE LOCATION OF ALL EXISTING UTILITIES, STRUCTURES, AND IMPROVEMENTS ON THE DRAWINGS ARE BASED ON LIMITED INFORMATION AND MAY NOT HAVE BEEN FIELD VERIFIED. THE LOCATIONS ARE APPROXIMATE. THE CONTRACTOR SHALL NOTIFY RESPECTIVE UTILITY OWNERS AND FIELD VERIFY LOCATIONS OF EXISTING UTILITIES AND OTHER IMPROVEMENTS PRIOR TO COMMENCING ANY CONSTRUCTION. IF THE LOCATIONS SHOWN ARE CONTRARY TO ACTUAL FIELD LOCATIONS, THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER OF THE DISCREPANCY. THE DISCREPANCY SHOULD BE RESOLVED PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN WORKING IN AREAS NEAR EXISTING UTILITY IMPROVEMENTS AND SHALL BE RESPONSIBLE FOR REPAIRS OR PAYMENTS FOR ALL DAMAGE MADE TO EXISTING UTILITIES OR OTHER IMPROVEMENTS. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL GRADES, INVERTS, AND TYPE OF MATERIAL OF EXISTING UTILITIES TO WHICH THEY SHALL CONNECT.

16. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER ON ALL MATERIALS, FOR REVIEW AND APPROVAL, PRIOR TO PURCHASE OR CONSTRUCTION OF ANY UTILITY OR STRUCTURE.

17. UNSUITABLE MATERIALS UNDER WATER, SEWER, OR STORM PIPE AND/OR STRUCTURES SHALL BE REMOVED AND REPLACED WITH SELECTED BACKFILL COMPACTED TO 98% OF ITS MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST (ASTM D1557).

18. ALL WATER & SEWER CONSTRUCTION SHALL BE ACCOMPLISHED BY AN UNDERGROUND UTILITY CONTRACTOR LICENSED UNDER THE PROVISIONS OF CHAPTER 489 FLORIDA STATUTES.

19. WHEN DEWATERING CAPACITY REQUIRES A PERMIT (ICUP), IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE PERMIT THROUGH THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT.

20. WATER MAINS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED SANITARY HAZARD. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. WHERE PARALLEL WATER AND SEWER MAINS HAVE LESS THAN 10 FOOT HORIZONTAL SEPARATION, 20 FOOT LENGTHS OF C900 (DR18) WATER QUALITY PIPE SHALL BE USED WITH THE JOINTS STAGGERED AT 10 FOOT INTERVALS. THE PIPES SHALL BE PLACED IN SEPARATE TRENCHES WITH THE WATER MAIN AT LEAST 18 INCHES ABOVE THE SEWER.

21. WATER MAINS CROSSING SANITARY HAZARDS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SEWER MAIN. WHERE WATER AND SEWER MAINS CROSS WITH BETWEEN 18 INCHES AND 6 INCHES OF VERTICAL CLEARANCE, A 20 FOOT SECTION OF C900 (DR18) WATER QUALITY PIPE SHALL BE CENTERED ON THE POINT OF THE CROSSING. THE CONTRACTOR SHALL FIELD VERIFY THE VERTICAL SEPARATION. THE MINIMUM SEPARATION BETWEEN WATER AND SEWER PIPES IS TO BE 6 INCHES OUTSIDE DIAMETER TO OUTSIDE DIAMETER.

22. NO WATER MAIN PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF A SEWER MANHOLE.

23. BLANK

24. TRACER WIRE SHALL BE PROVIDED ON ALL WATER MAINS AND FORCE MAINS. TRACER WIRE SHALL BE A MINIMUM OF 14 GAUGE, SOLID COPPER WIRE, COATED, AND SUITABLE FOR BURIAL. WIRE SHALL BE ATTACHED DIRECTLY TO TOP OF PIPE AND BROUGHT INTO EACH VALVE BOX AND COILED TO ALLOW FOR EASY ACCESS AND EXTENSION ABOVE FINISHED GRADE FOR ATTACHMENT OF LOCATING EQUIPMENT.

25. ALL PIPE LENGTHS ARE APPROXIMATE DIMENSIONS. ALL DRAINAGE STRUCTURES SHALL BE CONSTRUCTED TO CONFORM WITH TYPICAL SECTIONS AND DETAILS AS SHOWN ON THE MISCELLANEOUS DETAILS SHEET AND IN ACCORDANCE WITH THE SPECIFICATIONS.

26. ALL UNDERGROUND UTILITIES MUST BE INSTALLED PRIOR TO PREPARATION OF SUBGRADE FOR PAVEMENT.

27. GRADES SHOWN ON PLANS ARE EDGE OF PAVEMENT FINISHED GRADES UNLESS OTHERWISE NOTED.

28. SHOULD THE SURFACE OR SUBSURFACE CONDITIONS VARY FROM WHAT IS SHOWN ON THE PLANS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.

29. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE SEEDED AND MULCHED UNLESS OTHERWISE SPECIFICALLY STATED.

30. THE CONTRACTOR IS RESPONSIBLE FOR THE CONTROL OF SEDIMENT-LOADED RUNOFF RESULTING FROM STORM EVENTS DURING THE CONSTRUCTION PHASE. EROSION CONTROL FACILITIES SHOULD BE INSTALLED EARLY DURING THE CONSTRUCTION PERIOD SO AS TO PREVENT THE TRANSPORT OF SEDIMENT INTO SURFACE WATERS, REVEGETATION AND STABILIZATION OF DISTURBED AREAS SHOULD BE ACCOMPLISHED IMMEDIATELY TO REDUCE THE POTENTIAL FOR FURTHER SOIL EROSION.

31. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND THE CITY OF FERNANDINA BEACH BEFORE COMMENCING WORK.

32. MINIMUM COVER OVER PIPES SHALL BE 36" UNLESS OTHERWISE INDICATED.

33. ALL UNDERGROUND UTILITY COMPANIES SHALL BE CONTACTED AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.

34. IN ADDITION TO THE SPECIFICATIONS AND DETAILS PROVIDED FOR THIS CONTRACT, THE CITY OF FERNANDINA BEACH STANDARD DETAILS AND SPECIFICATIONS (LATEST REVISION) SHALL ALSO BE USED FOR ANY ITEMS NOT COVERED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN A SET OF STANDARD DETAILS AND SPECIFICATIONS FROM THE CITY OF FERNANDINA BEACH.

35. BACKFILL MATERIAL SHALL BE COMPACTED TO 100% (1.22) PER CITY OF FERNANDINA BEACH REQUIREMENTS UNDER EXISTING AND PROPOSED ROADWAYS.

36. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN TO BE MADE WITHOUT PRIOR APPROVAL OF THE ENGINEER.

37. STATIONING REFERS TO THE CENTERLINE OF THE ROADWAY EXCEPT AS NOTED ON PLANS. WHERE PAVEMENT SPLITS, THE STATIONING FOLLOWS THE INSIDE EDGE OF PAVEMENT UNTIL ROADWAY TRANSITIONS BACK TO THE TYPICAL ROADWAY SECTION

38. ALL CONSTRUCTION, MATERIAL, AND WORKMANSHIP ARE TO BE IN ACCORDANCE WITH THE CITY OF FERNANDINA BEACH AND CITY OF FERNANDINA BEACH STANDARDS.

1. WATER MAINS SHALL HAVE A MINIMUM OF 36" COVER UNDER PAVEMENT OR 30" COVER FROM FINISHED GRADE UNLESS OTHERWISE SHOWN. ALL WATER MAINS SHALL BE FLUSHED IN ACCORDANCE WITH, AND UNDER THE DIRECTION OF THE UTILITY COMPANY.

2. THRUST RESTRAINTS ARE REQUIRED IN ACCORDANCE WITH THE UTILITY COMPANY STANDARDS WHERE WATER MAINS ARE TERMINATED AND AT ALL BENDS AND TEES.

3. TIE RODS SHALL BE INSTALLED ON ALL VALVES LOCATED AT FITTINGS. ALL 10" AND LARGER VALVES AND LARGER SHALL REQUIRE (4) TIE RODS. MEGA LUG JOINT RESTRAINTS MAY BE USED IN LIEU OF THRUST BLOCKS OR TIE RODS.

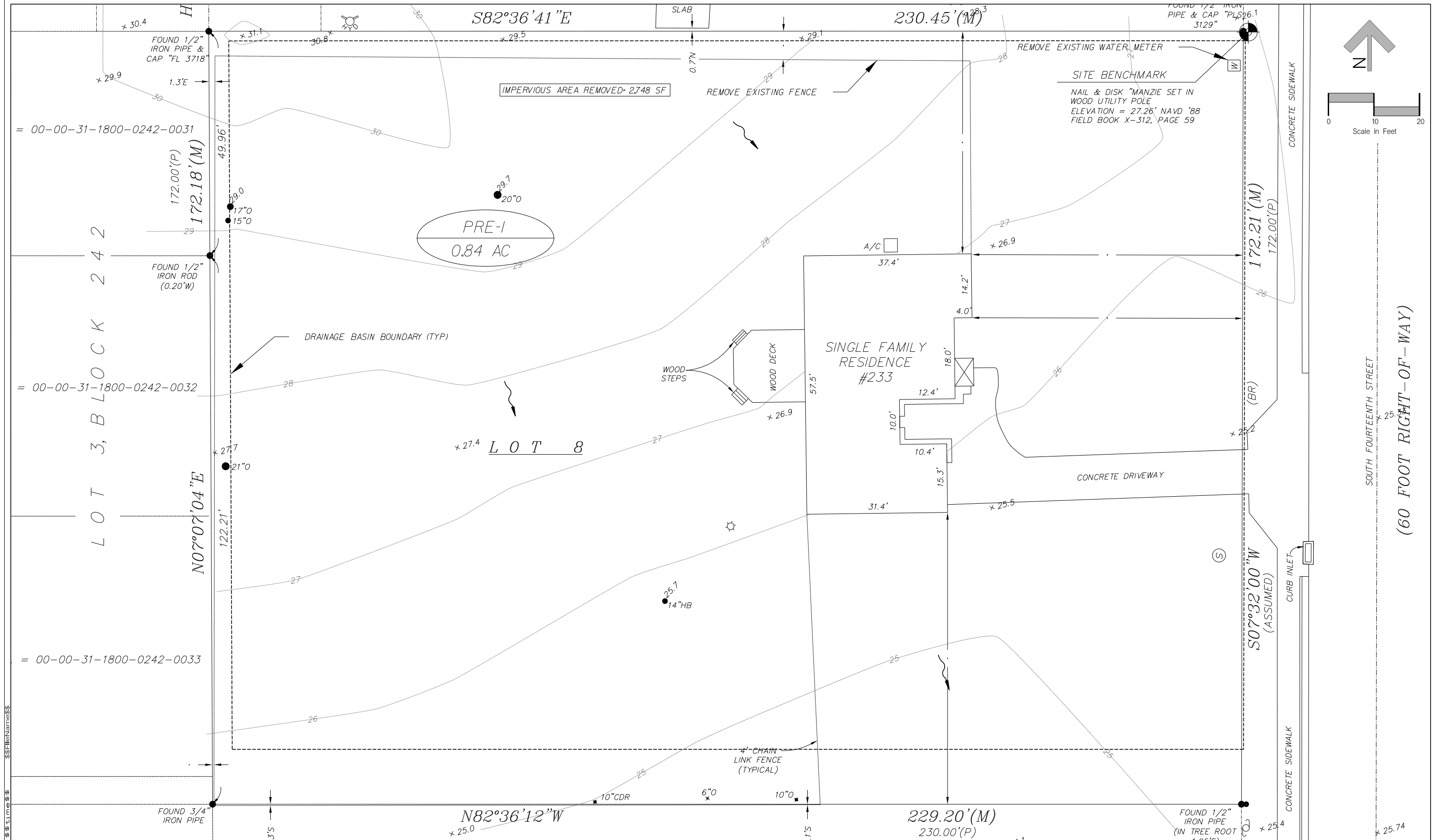
4. UNLESS OTHERWISE NOTED, WATER MAINS ARE TO BE PVC DR18, DR-25, C-900 (BLUE), CLASS 150.

5. ALL WATER MAINS SHALL BE BACTERIOLOGICAL AND PRESSURE TESTED IN ACCORDANCE WITH ANWA C-600. NO CONNECTION TO EXISTING POTABLE WATER SYSTEM SHALL BE ALLOWED UNTIL ALL PROPOSED WATER MAINS HAVE BEEN PRESSURE TESTED, DISINFECTED, AND CLEARED FOR SERVICE. THE UTILITY COMPANY'S AUTHORIZED REPRESENTATIVE MUST BE NOTIFIED 48 HOURS PRIOR TO PERFORMING THE PRESSURE TEST AND MUST BE PRESENT.

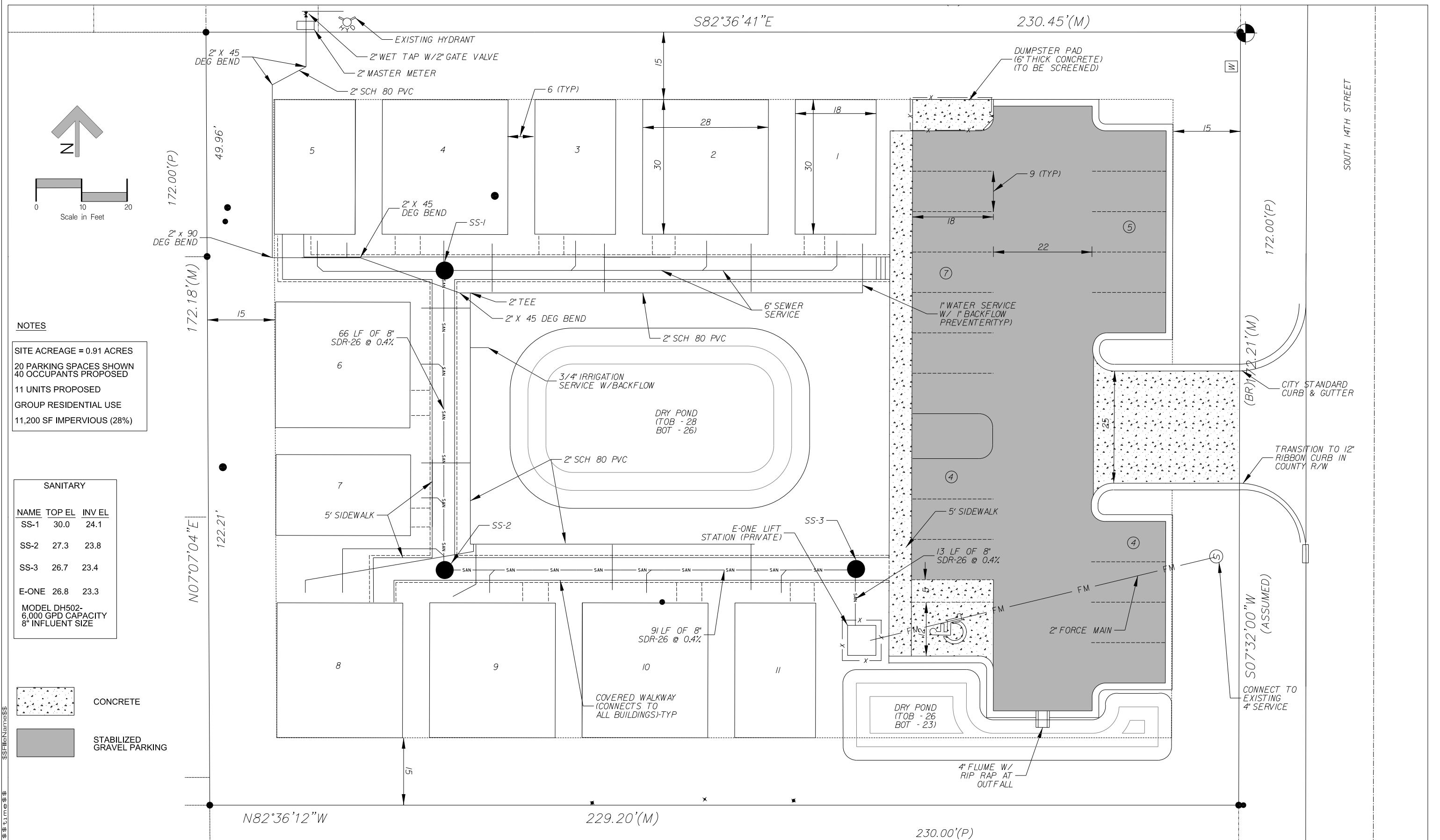
6. THE CONTRACTOR SHALL AVOID SERVICE INTERRUPTIONS AND MAINTAIN ANY EXISTING WATER SERVICE TO MEET THE SYSTEM DEMANDS AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFICATION OF AFFECTED CUSTOMERS OF THE UTILITY A MINIMUM OF 48 HOURS IN ADVANCE OF ANY INTERRUPTION OF SERVICE. BOIL WATER NOTICES SHALL BE DELIVERED IN ACCORDANCE WITH THE UTILITY COMPANY BOIL WATER NOTICE REQUIREMENTS.

7. ALL MAIN FLUSHING POINTS SHALL BE SAME SIZE AS MAIN UP TO 8 INCH WATER MAINS. FLUSHING POINTS FOR MAINS LARGER THAN 8 INCH SHALL BE REDUCED TO 8 INCH.

8. ALL WATER MAINS SHALL BE DISINFECTED USING LIQUID CHLORINE OR HYPOCHLORITES IN ACCORDANCE TO ANWA C651-86. WATER IN MAIN SHALL MAINTAIN A CHLORINE RESIDUAL OF 50 MG/L FOR A MINIMUM OF 24 HOURS. WATER MAIN SHALL NOT BE PLACED IN SERVICE UNTIL CLEARANCE HAS BEEN PROVIDED BY THE APPROPRIATE

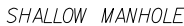
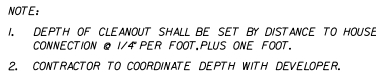


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No				Project Mgr:				Gillette & Associates, Inc.																3 of 9			
By				Designed by:				20 South 4th Street																Issue Date			
Date				Drawn by:				Fernandina Beach, FL 32034																NOVEMBER 2019			
Revision				QA/QC:				Certificate of Authorization No. 9332																Project No.			
								DO NOT SCALE THIS DRAWING - DIMENSIONS AND NOTES TAKE PREFERENCE. DRAWING IS REDUCED IF LESS THAN 22" x 34"																17-10.35			
								PHONE: (904) 261-8819																Registered Professional			



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	K				Project Mgr: NG	Gillette & Associates, Inc. 20 South 4th Street Fernandina Beach, FL 32034						
	J				Designed by: NG							
	I				Drawn by: BM	Certificate of Authorization No. 9332						
	H				QA/QC: AG	DO NOT SCALE THIS DRAWING - DIMENSIONS AND NOTES TAKE PREFERENCE. DRAWING IS REDUCED IF LESS THAN 22" x 34"						
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SHEET NO. DT-1	
<u>7</u> of <u>9</u>	
Issue Date NOVEMBER 2019	
Project No. 17-10.35	



CLASS "B"

ALL MANHOLES SHALL BE PRECAST CONCRETE AND CONFORM TO ASTM C-478 STANDARDS. MANHOLE CONES AND RISERS SHALL BE CONSTRUCTED OF 400 PSI/TYPE II CEMENT WITH RIVER ROCK OR GRANITE AGGREGATE.

2. ALL PIPES SHALL BE CONNECTED TO THE MANHOLE USING A 10 CK JOINT FLEXIBLE MANHOLE SLEEVE (ASTM C-923) OR APPROVED EQUAL.

3. THE EXTERIOR AND INTERIOR OF THE MANHOLE SHALL BE COATED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS WITH FABRITITE AS MANUFACTURED BY BRIGGS BRIDGES COMPOSITION COMPANY.

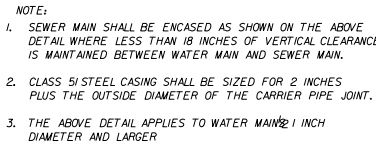
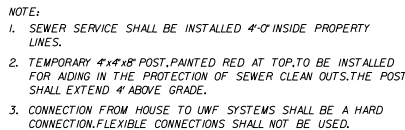
4. AN INVERT PVC DROP MANHOLE (TYPE "B") SHALL BE REQUIRED FOR MANHOLES LOCATED IN AREAS WHERE THERE IS A VERTICAL SEPARATION BETWEEN INFLUENT PIPE, INVERT AND EFFLUENT PIPE. INVERT, ALL OTHER DROPS SHALL HAVE A SLODE CONSTRUCTED TO DIRECT THE FLOW INTO THE INVERT CHANNEL.

5. SEWER SERVICES SHALL BE CAST IRON IF 24" OF GROUND COVER CAN NOT BE MAINTAINED OVER THE SERVICE LINE.

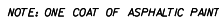
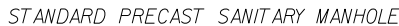
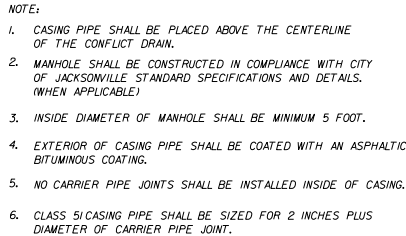
6. ALL DUCTILE IRON SEWER PIPE, WHERE SPECIFIED, SHALL BE CLASS 51 AND COMPLY WITH ANSI/AWWA C105/A250 AND ANSI/AWWA C124/A251. DUCTILE IRON PIPE SHALL BE COATED WITH AN EPDM QUALITY ACTUARY APPLIED INTERIOR POLYETHYLENE LINING IN ACCORDANCE WITH ANSI/AWWA C1248.

7. THE MAXIMUM NUMBER OF DIPS IS ONE-INCH DIP PER 135 LF OF PIPE, NO MORE THAN 7 DIP PER 135 LF OF PIPE. A DIP IS DEFINED AS A CHANGE IN ELEVATION OF 0.5" OR GREATER.

CLEANOUT



TYPICAL SEWER SERVICE



DRAIN CONFLICT

TYPE "B" MANHOLE

TYPE "A" MANHOLE

MANHOLE COVER

L			
K			
J			
I			
H			
G			
F			
E			
D			
C			
B			
No.	By	Date	Revision

Scale:

Project Mgr:

Designed by:

Drawn by:

QA/QC:

Gillette & Associates, Inc.
20 South 4th Street
Fernandina Beach, FL 32034

Certificate of Authorization No. 9332

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G & A[‡]
GILLETTE & ASSOCIATES, INC.

GILLETTE & ASSOCIATES, INC.

20 SOUTH 4TH STREET
FERNANDINA BEACH, FL 32034

PHONE: (904) 261-8819

SETTLER'S COVE

SIMMONS 9, LLC

SEWER DETAILS

SHEET NO.

DT-2

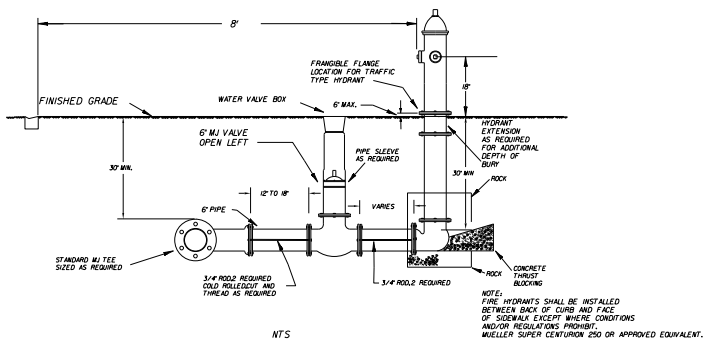
3 of 9

Issue Date

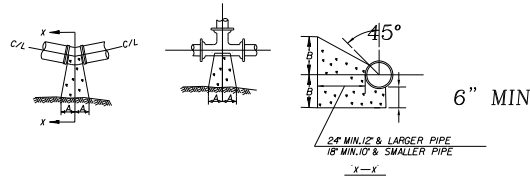
NOVEMBE

Project

Registered Professional



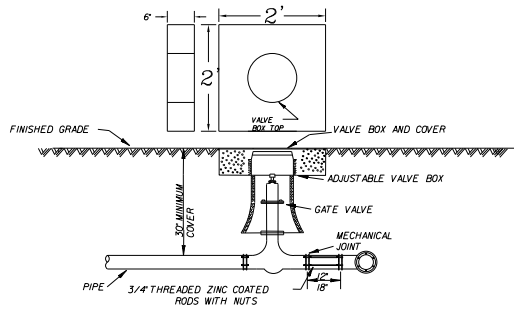
HYDRANT INSTALLATION WITH TIE RODS



SIZE	1/4 BENDS	CU FT CONC.	1/2 BENDS	CU FT CONC.	3/4 BENDS	CU FT CONC.	TEE	CU FT CONC.
A	B		A	B		A	B	
6"	16"	10"	3"	9"	10"	3"	10"	12"
8"	24"	16"	4"	12"	16"	4"	16"	20"
10"	36"	24"	6"	18"	24"	6"	24"	30"
12"	48"	32"	8"	24"	32"	8"	32"	40"
14"	60"	40"	10"	30"	40"	10"	40"	50"
16"	72"	48"	12"	36"	48"	12"	48"	60"
18"	84"	56"	14"	42"	56"	14"	56"	70"
20"	96"	64"	16"	48"	64"	16"	64"	80"
22"	108"	72"	18"	54"	72"	18"	72"	90"
24"	120"	80"	20"	60"	80"	20"	80"	100"

NOTES:
1. ALL BEARING SURFACES TO BE CARRIED TO UNDISTURBED SOIL.
2. THESE TABLES SHOW MINIMUM SIZE THRUST BLOCKS FOR GOOD SOIL (A1 THROUGH A-3, CLEAN SAND AND GRAVELS).
3. POOR SOIL (A-4 THROUGH A-8, SILTY SOILS, CLAYS, MUCK AND PEAT) WILL REQUIRE LARGER THRUST BLOCKS.

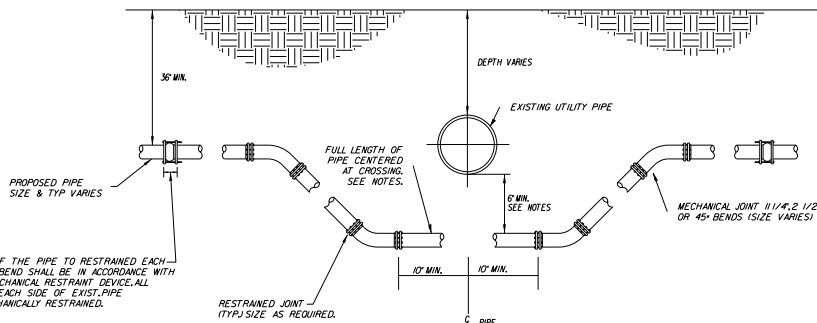
THRUST BLOCKS FOR BENDS & TEE'S



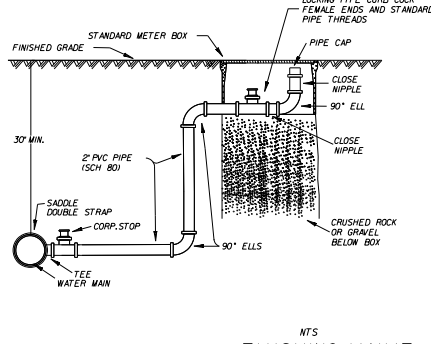
GATE VALVE & BOX DETAIL

TIE RODS

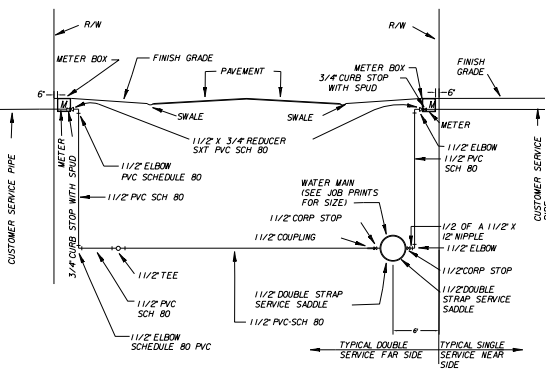
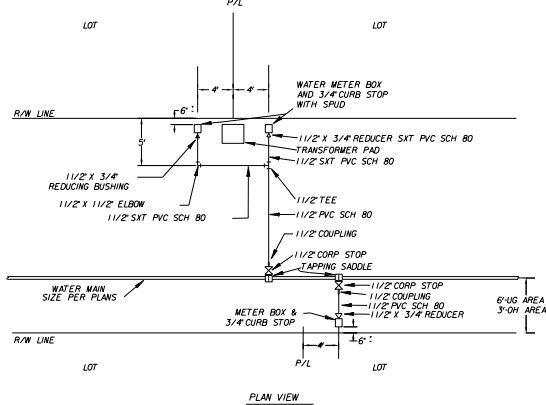
TWO RODS ON ALL SIX INCH (6") PIPE
THREE RODS ON ALL EIGHT INCH (8") PIPE
FOUR RODS ON ALL TEN AND TWELVE INCH (10" & 12") PIPE



UTILITY CONFLICT DETAIL "B"

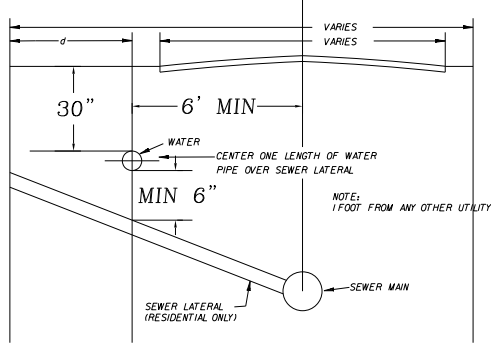


FLUSHING VALVE

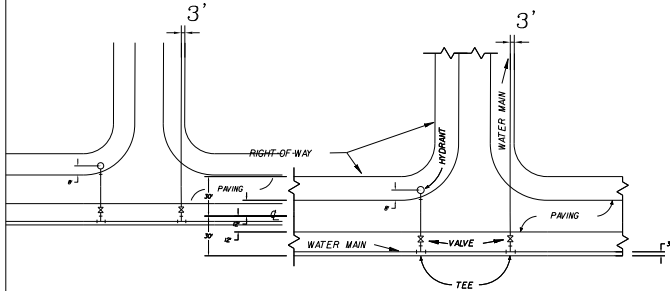


STATE ROAD-11/2" CARRIER PIPE-4" BLACK IRON CASING FOR JACK AND BORE INSTALLATION.
COUNTY AND CITY-11/2" CARRIER PIPE-3" PVC CASING FOR JACK AND BORE INSTALLATION.

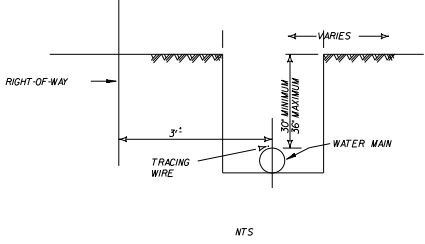
TYPICAL WATER SERVICE LOCATIONS



HORIZONTAL AND VERTICAL CLEARANCES BETWEEN WATER AND SEWER MAINS



TYPICAL SECTION DETAIL

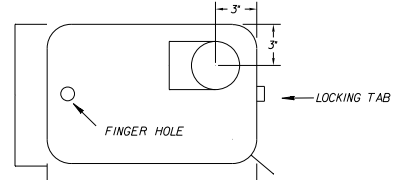


TRENCH DETAILS

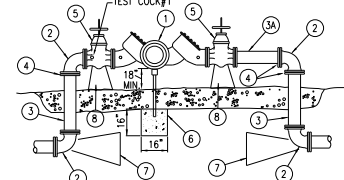
WHITE PVC DR 25 C900 PIPE FOR ALL 4", 6", 8", 10" AND 12" MAINS
*10 IF SOID TRACING WIRE TO BE INSTALLED ON TOP OF MAIN TAPED EVERY TEN FEET
PIPE LETTERING TO BE AT TOP OF PIPE WITH EDGE OF JOINT LINE VISIBLE AT BELL

PIPE SIZE	11 1/4	22 1/2	45	90	TEE	VALVE	CAP	REDUCER
4	2	4	7	18	20	39	39	N/A
6	2	5	10	25	20	55	55	28
8	3	6	13	32	20	72	72	30
10	4	8	16	38	20	86	86	29
12	4	9	19	45	20	102	102	50
16	6	11	23	57	20	131	131	30

BELL RESTRAINT REQUIREMENTS



TOUCH READ COVER FOR PLASTIC METER BOX



ITEM	QUANT.	DESCRIPTION
1	1	2.5"-10" VALVE, DOUBLE CHECK OR REDUCED PRESSURE
2	4	2.5"-10" BEND - 90° F-F
3	2	2.5"-10" D.I.P. (48" LONG) F-PE
3A	1	2.5"-10" D.I.P. (24" LONG) F-PE (OPT.)
4	3	2.5"-10" FLANGE, D.I.P.
5	2	2.5"-10" VALVE, GATE, D.I., F-F, OS+Y (RESILIENT SEAT)
6	1	2" IRON PIPE/CONCRETE FOUNDATION
7	2	THRUST BLOCK
8	2	SUPPORT BLOCKING UNDER VALVES (6" AND LARGER SIZES)

LARGE WATER SERVICE
DOUBLE CHECK AND REDUCED PRESSURE
BACKFLOW PREVENTION
SINGLE SERVICE: 2 1/2" - 10"

BACKFLOW PREVENTER

CONTRACTORS ARE REQUIRED TO PAINT NEW HYDRANTS SAFETY YELLOW AND MARK HYDRANTS. THE TOPS AND NOZZLE CAPS SHALL BE PAINTED WITH THE FOLLOWING CAPACITY INDICATOR COLOR SCHEME:
BLUE (SW4079) 1500GPM AND HIGHER
GREEN (SW4085) 1000-1499 GPM
ORANGE (SW4083) 500-999 GPM
RED (SW4081) LESS THAN 500 GPM

IT IS REQUIRED THAT ALL NEW AND RELOCATED WATER MAINS BE PRESSURE TESTED AND LEAKAGE TESTED IN ACCORDANCE WITH ANWA STANDARD C600.

IT IS REQUIRED THAT ALL NEW AND RELOCATED WATER MAINS BE DISINFECTED IN ACCORDANCE WITH ANWA STANDARD C651 AND RULE 62-555.345, F.A.C.

ALL WATER MAINS WILL BE CONSTRUCTED WITH BLUE C900-DR25 PIPE
ALL WATER SERVICES WILL CONSTRUCTED WITH WHITE PVC SCHEDULE 80 PIPE. BLUE SPRAY PAINT WILL BE APPLIED TO THE TOP SURFACE.
JOINT RESTRAINERS MAY BE USED IN PLACE OF THRUST BLOCKS ON C900-DR25 PIPE, WITH APPROVAL OF THE CITY UTILITIES DEPARTMENT.



WATER SPECIFICATIONS

SCALE: NTS	CITY OF FERNANDINA BEACH
DATE: 2/5/98	FLORIDA 32034
DRAWN BY: VLT	
REVISED BY: MM	
DATE: 6/20/06	

L			
K			
J			
I			
H			
G			
F			
E			
D			
C			
B			
No.	By	Date	Revision

Scale:	
Project Mgr:	NG
Designed by:	NG
Drawn by:	BM
QA/QC:	AG

Gillette & Associates, Inc. 20 South 4th Street Fernandina Beach, FL 32034
Certificate of Authorization No. 9332
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GILLETTE & ASSOCIATES, INC
20 SOUTH 4TH STREET
FERNANDINA BEACH, FL 32034
PHONE: (904) 261-8819

SETTLER'S COVE

SIMMONS 9, LLC

WATER DETAILS

SHEET NO.
DT-3
9 of 9
Issue Date
NOVEMBER 2019
Project No.
17-10.35



Civil & Environmental Engineering • Mechanical & Structural Engineering • Construction Management

SITE DRAINAGE EVALUATION

**SETTLER'S COVE
233 SOUTH 14TH STREET
FERNANDINA BEACH, FLORIDA**

BY

**Gillette & Associates, Inc.
20 South 4th Street
Fernandina Beach, FL**

December 3, 2020

PROJECT DESCRIPTION

The proposed project consists of an 11 unit group residential development that is served by a gravel parking area and two dry pond facilities. The site may be developed in multiple phases.

No wetlands are present on the subject site.

EXISTING CONDITIONS

The project site is mostly cleared with a single family residential unit present. Discharge goes to South 14th Street in the predeveloped condition.

Drainage Analysis

No outfall was observed for the mean annual storm event in accordance with SJRWMD criteria for a dry pond. Recovery for the mean annual event occurs within 25 hours for the southern pond and 15 hours for the central pond. The maximum stage for the mean annual event is elevation 25.4 for the southern pond which is the outfall for the site. Top of Bank for the pond is set at elevation 26.0.

SUPPORTING INFORMATION

Group Residential Post Developed - Southern Pond

Basin Calculations

Basin 1

Composite Cn

Total Drainage Area = 12762 ft²
 Impervious Area = 4775 ft² 0.293
 Pond Area = 2512 ft² 37% Impervious

Impervious Cn = 98.0
 Pond Cn = 100.0
 Pervious Cn = 49.0

Composite Cn = 77.4

Time of Concentration, Tc

Minimum Time of Concentration = 10 min.
 Length of Overland Flow @ 1ft/sec. = 136 ft.
 Length of Pipe Flow @ 2.5 ft/sec. = 0 ft.

Tc = 13 min.

Pond Information

El. (ft.)		Area ft ²	Volume ft ³
28.00	TOB	2512	3657
27.25	weir	1980	1972
27.00		1803	1499
26.00	Bottom	1195	0

Treatment Volume Required, TVR

(on-line retention)

TVR = 1" * (1'/12")*Total Drainage Area = 1064 ft³
 or

TVR = 1.25" * (1'/12")*Total Impervious Drainage Area + 0.5" * (1'/12")*Total Drainage Area = 1029 ft³

TVR = 1064 ft³

Treatment Volume Provided, TVP

TVP = Vol @ Weir = 1972 ft³ OK

908 surplus

Group Residential Post Developed - Central Pond

Basin Calculations

Basin 1

Composite Cn

Total Drainage Area = 17822 ft² 0.409
 Impervious Area = 4352 ft² 24% Impervious
 Pond Area = 1080 ft²

 Impervious Cn = 98.0
 Pond Cn = 100.0
 Pervious Cn = 49.0

 Composite Cn = 64.1

Time of Concentration, Tc

Minimum Time of Concentration = 10 min.
 Length of Overland Flow @ 1ft/sec. = 136 ft.
 Length of Pipe Flow @ 2.5 ft/sec. = 0 ft.

 Tc = 13 min.

Pond Information

El. (ft.)		Area ft ²	Volume ft ³
26.00	TOB	1080	1166
25.50	weir	811	693
25.00		542	355
24.00	Bottom	167	0

Treatment Volume Required, TVR

(on-line retention)

TVR = 1" * (1'/12")*Total Drainage Area = 1485 ft³
 or

TVR = 1.25" * (1'/12")*Total Impervious Drainage Area + 0.5" * (1'/12")*Total Drainage Area = 1196 ft³

TVR = 1485 ft³

Treatment Volume Provided, TVP

TVP = Vol @ Weir = 693 ft³ Error

792 deficiency

MODRET ANALYSIS

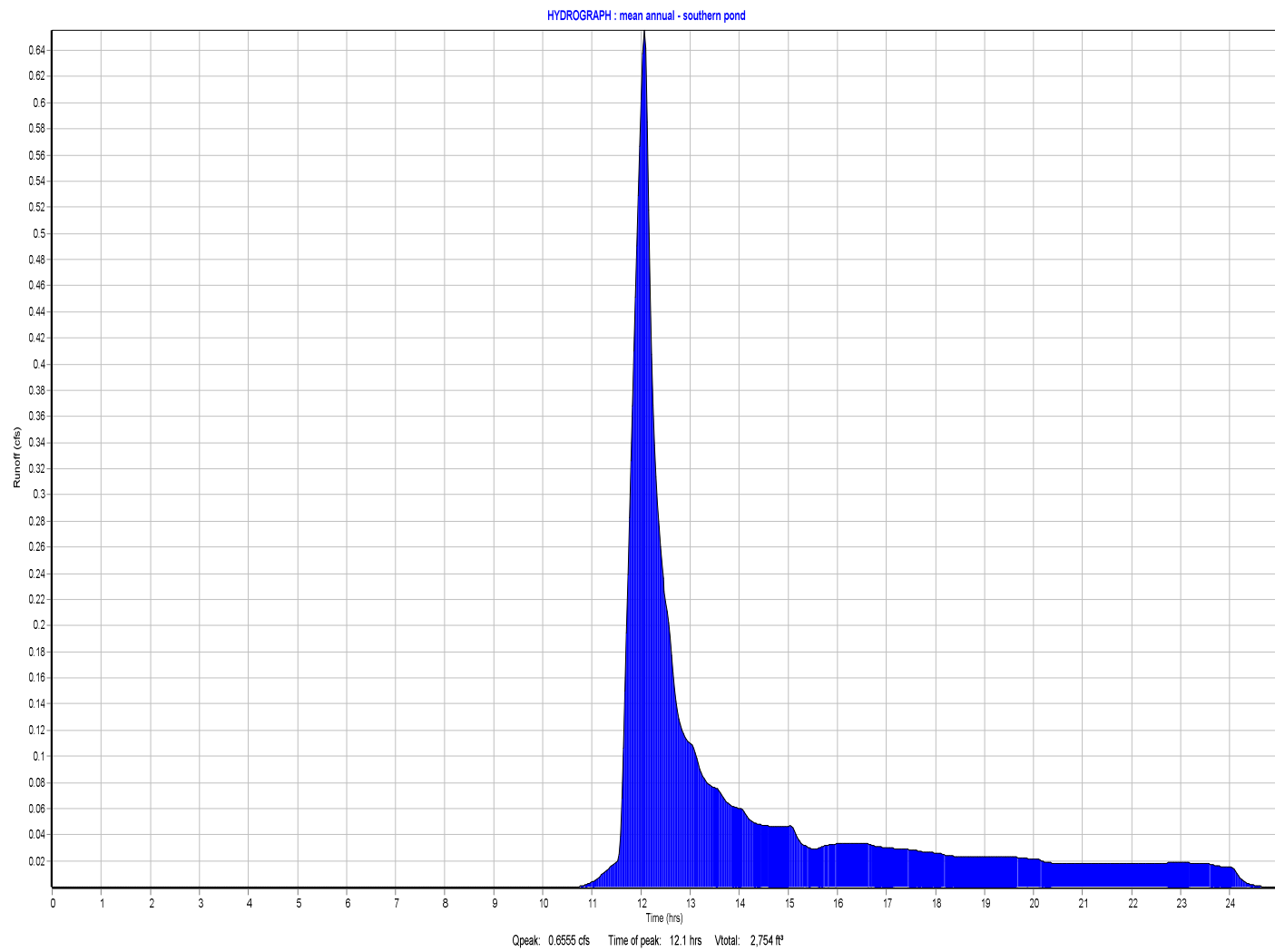
SOUTHERN POND

MODRET

HYDROGRAPH DATA INPUT - SCS UNIT METHOD

Project Name : mean annual - southern pond
Rainfall Distribution : SCS Type II (24 hrs)

Contributing Basin Area	0.41 ac.
SCS Curve Number	64.00
Time of Concentration	10.00 min.
Rainfall Depth	5.40 in.
Shape Factor	323
Percent DCIA	0.00 %



MODRET

SUMMARY OF UNSATURATED & SATURATED INPUT PARAMETERS

PROJECT NAME : 14th street - southern pond
HYDROGRAPH RUNOFF DATA USED
UNSATURATED ANALYSIS INCLUDED

Pond Bottom Area	167.00 ft ²
Pond Volume between Bottom & DHWL	1,166.00 ft ³
Pond Length to Width Ratio (L/W)	1.60
Elevation of Effective Aquifer Base	12.00 ft
Elevation of Seasonal High Groundwater Table	19.00 ft
Elevation of Starting Water Level	24.00 ft
Elevation of Pond Bottom	24.00 ft
Design High Water Level Elevation	26.00 ft
Avg. Effective Storage Coefficient of Soil for Unsaturated Analysis	0.23
Unsaturated Vertical Hydraulic Conductivity	26.60 ft/d
Factor of Safety	2.00
Saturated Horizontal Hydraulic Conductivity	10.15 ft/d
Avg. Effective Storage Coefficient of Soil for Saturated Analysis	0.29
Avg. Effective Storage Coefficient of Pond/Exfiltration Trench	1.00
Time Increment During Storm Event	2.00 hrs
Time Increment After Storm Event	12.00 hrs
Total Number of Increments After Storm Event	6.00

Runoff Hydrograph File Name: scs1.SCS

Time of Peak Runoff: 12.06 hrs

Rate of Peak Runoff: 0.66 cfs

Hydraulic Control Features:

Groundwater Control Features - Y/N

Distance to Edge of Pond

Elevation of Water Level

Impervious Barrier - Y/N

Elevation of Barrier Bottom

Top	Bottom	Left	Right
N	N	N	N
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00

N	N	N	N
0.00	0.00	0.00	0.00

MODRET

SUMMARY OF RESULTS

PROJECT NAME : 14th street - southern pond

CUMULATIVE TIME (hrs)	WATER ELEVATION (feet)	INSTANTANEOUS INFILTRATION RATE (cfs)	AVERAGE INFILTRATION RATE (cfs)	CUMULATIVE OVERFLOW (ft ³)
00.00 - 10.62	19.000	0.000 *		
			0.00000	
10.62	19.000	0.09020		
			0.08275	
13.83	25.379	0.07530		0.00
			0.07063	
15.84	25.047	0.06183		0.00
			0.05303	
17.85	24.772	0.04792		0.00
			0.04281	
19.86	24.534	0.03951		0.00
			0.03621	
21.87	24.313	0.03410		0.00
			0.03199	
23.88	24.137	0.02971		0.00
			0.01611	
25.26	24.000	0.01304		0.00
			0.00997	
47.88	22.205	0.00841		0.00
			0.00685	
59.88	21.697	0.00593		0.00
			0.00502	
71.88	21.326	0.00443		0.00
			0.00384	
83.88	21.041	0.00344		0.00
			0.00303	
95.88	20.816			0.00

Maximum Water Elevation: 25.379 feet @ 13.83 hours

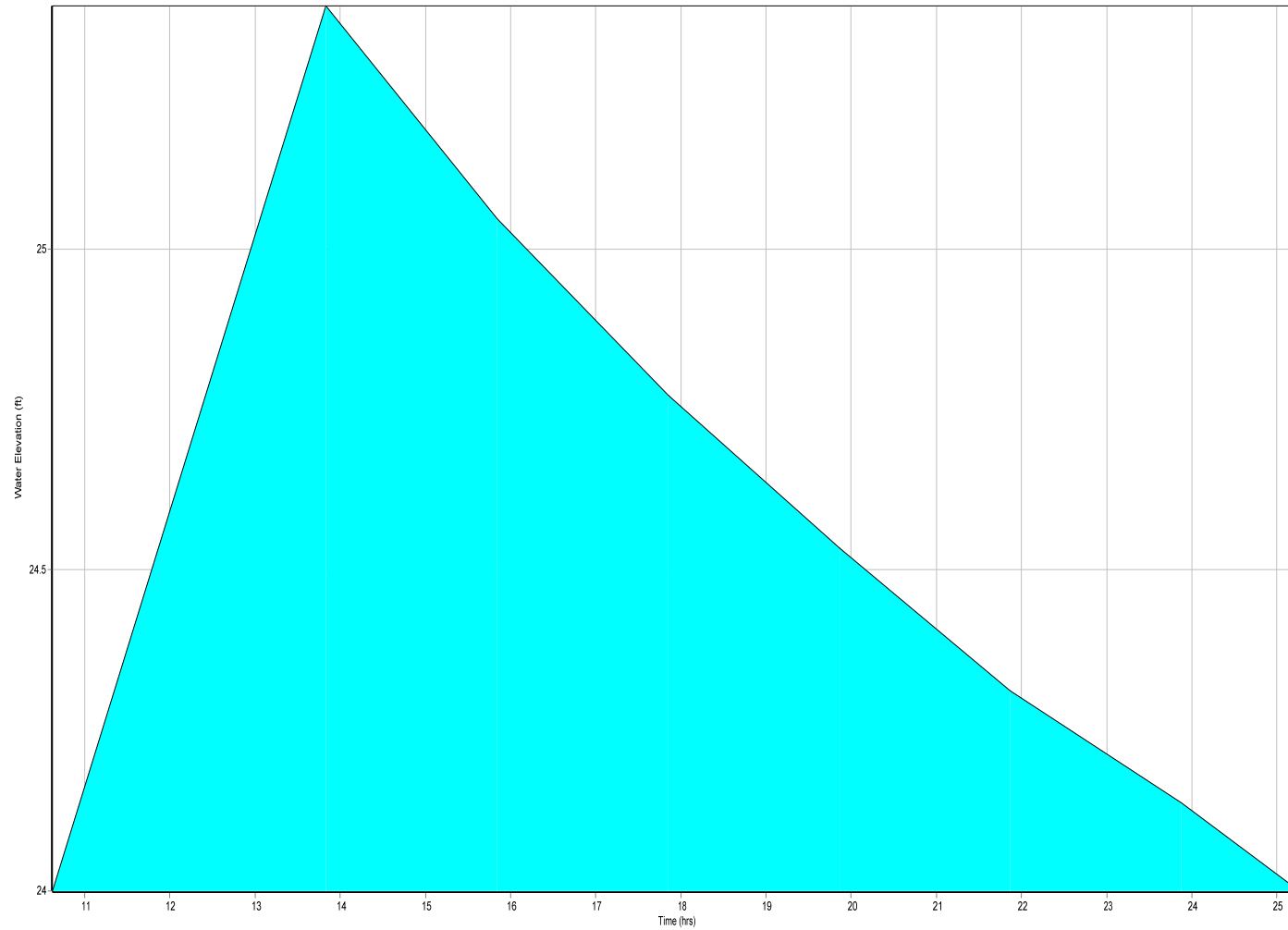
Recovery @ 25.261 hours

* Time increment when there is no runoff

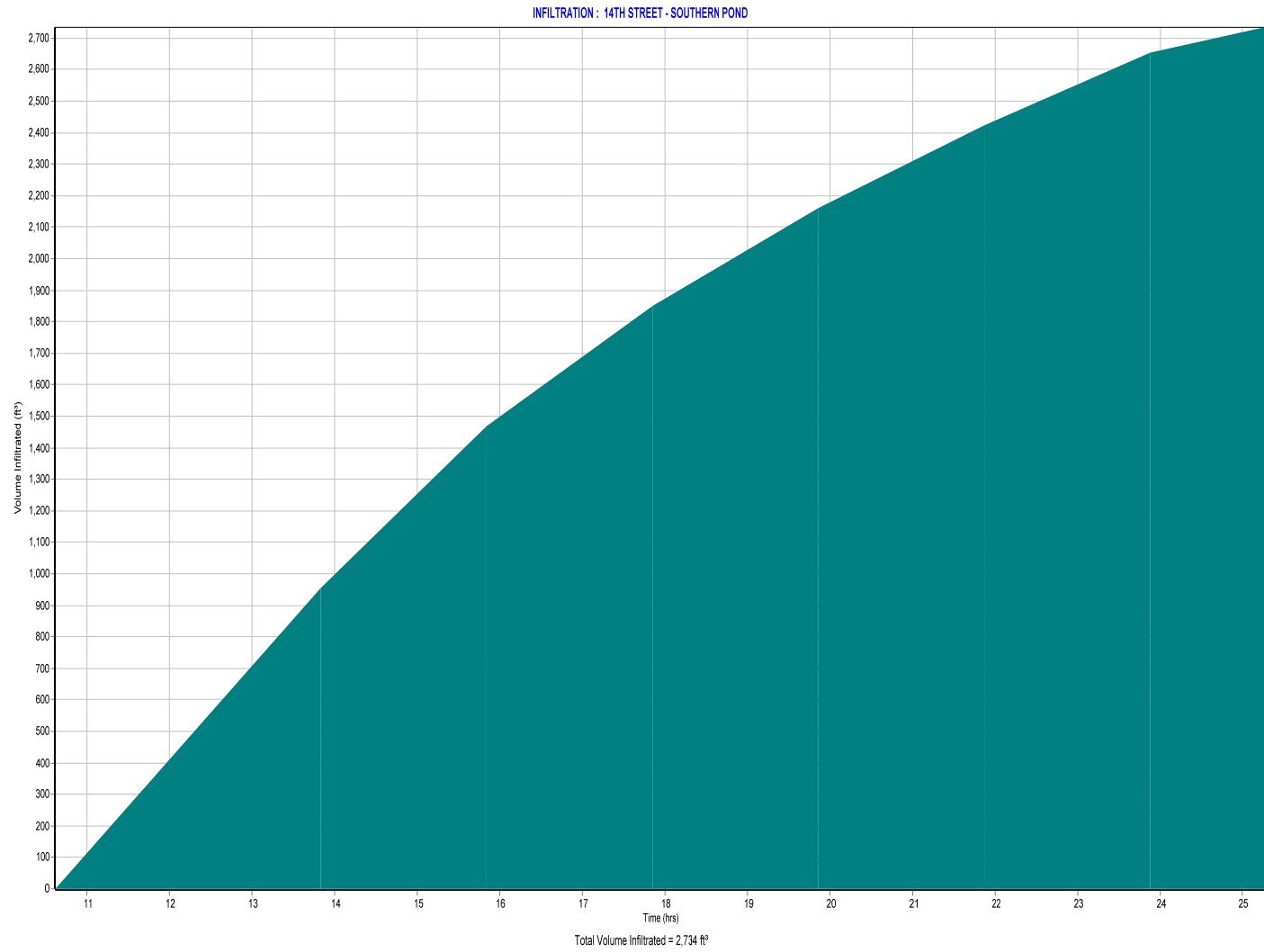
Maximum Infiltration Rate: 12.263 ft/day

Analysis Date: 11/16/2020

INFILTRATION : 14TH STREET - SOUTHERN POND



Max Water Elevation = 25.38 ft



CENTRAL POND

MODRET

HYDROGRAPH DATA INPUT - SCS UNIT METHOD

Project Name : mean annual - central pond
Rainfall Distribution : SCS Type II (24 hrs)

Contributing Basin Area

0.29 ac.

SCS Curve Number

77.00

Time of Concentration

10.00 min.

Rainfall Depth

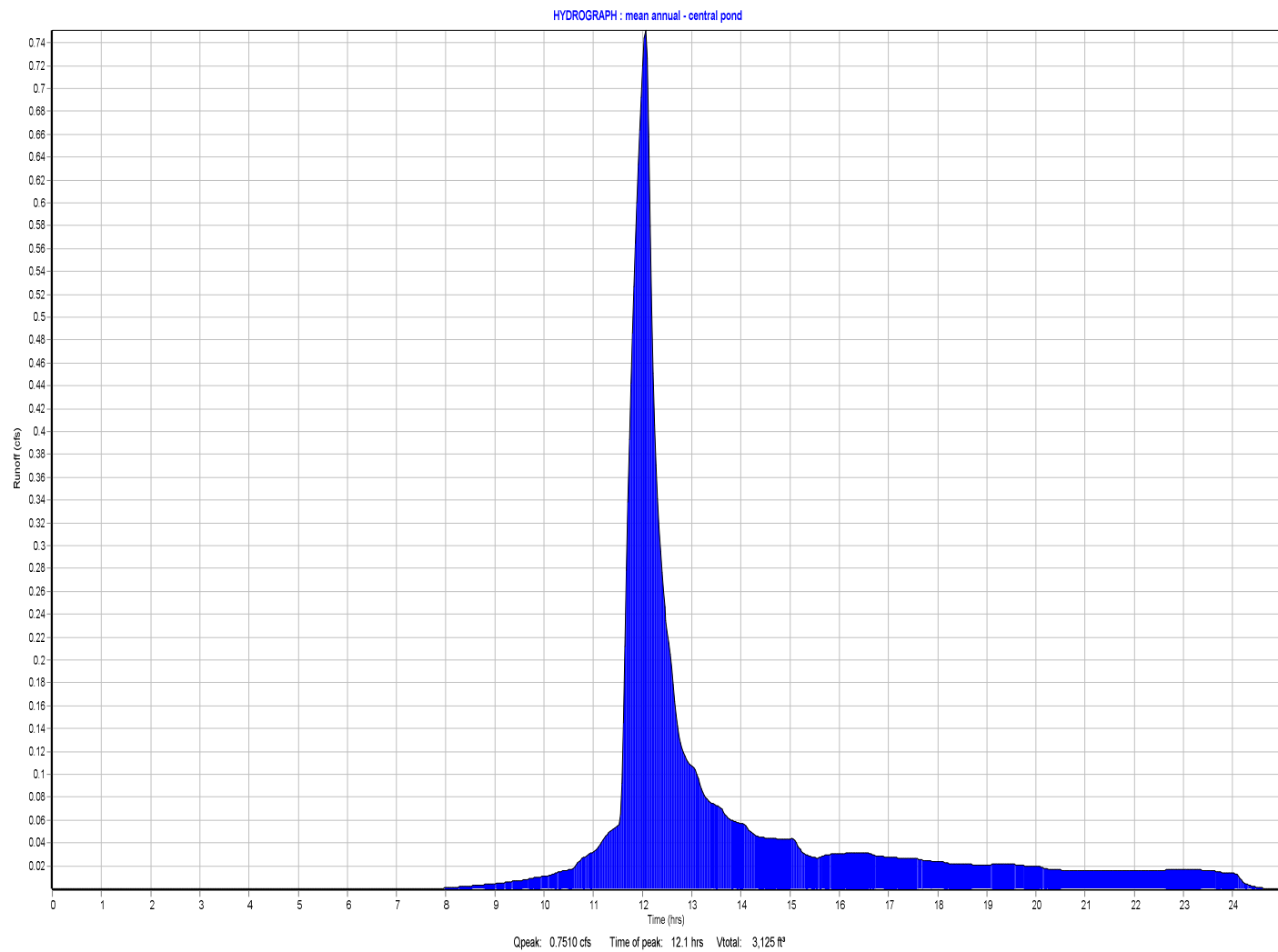
5.40 in.

Shape Factor

323

Percent DCIA

0.00 %



MODRET

SUMMARY OF UNSATURATED & SATURATED INPUT PARAMETERS

PROJECT NAME : 14th street - central pond
HYDROGRAPH RUNOFF DATA USED
UNSATURATED ANALYSIS INCLUDED

Pond Bottom Area	1,195.00 ft ²
Pond Volume between Bottom & DHWL	3,657.00 ft ³
Pond Length to Width Ratio (L/W)	1.60
Elevation of Effective Aquifer Base	12.00 ft
Elevation of Seasonal High Groundwater Table	19.00 ft
Elevation of Starting Water Level	26.00 ft
Elevation of Pond Bottom	26.00 ft
Design High Water Level Elevation	28.00 ft
Avg. Effective Storage Coefficient of Soil for Unsaturated Analysis	0.23
Unsaturated Vertical Hydraulic Conductivity	26.60 ft/d
Factor of Safety	2.00
Saturated Horizontal Hydraulic Conductivity	10.15 ft/d
Avg. Effective Storage Coefficient of Soil for Saturated Analysis	0.29
Avg. Effective Storage Coefficient of Pond/Exfiltration Trench	1.00
Time Increment During Storm Event	2.00 hrs
Time Increment After Storm Event	12.00 hrs
Total Number of Increments After Storm Event	6.00

Runoff Hydrograph File Name: scs2.SCS

Time of Peak Runoff: 12.06 hrs

Rate of Peak Runoff: 1.06 cfs

Hydraulic Control Features:

Groundwater Control Features - Y/N

Distance to Edge of Pond

Elevation of Water Level

Impervious Barrier - Y/N

Elevation of Barrier Bottom

Top	Bottom	Left	Right
N	N	N	N
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00

N	N	N	N
0.00	0.00	0.00	0.00

MODRET

SUMMARY OF RESULTS

PROJECT NAME : 14th street - central pond

CUMULATIVE TIME (hrs)	WATER ELEVATION (feet)	INSTANTANEOUS INFILTRATION RATE (cfs)	AVERAGE INFILTRATION RATE (cfs)	CUMULATIVE OVERFLOW (ft ³)
00.00 - 7.59	19.000	0.000 *		
			0.00000	
7.59	19.000	0.12938		
			0.12566	
14.22	26.130	0.12194		0.00
			0.12081	
15.17	26.000	0.10967		0.00
			0.09853	
18.24	25.617	0.09028		0.00
			0.08202	
20.25	25.408	0.07603		0.00
			0.07003	
22.26	25.220	0.06578		0.00
			0.06153	
24.27	25.061	0.05804		0.00
			0.03719	
36.27	24.182	0.03151		0.00
			0.02584	
48.27	23.572	0.02265		0.00
			0.01946	
60.27	23.112	0.01743		0.00
			0.01541	
72.27	22.748	0.01401		0.00
			0.01262	
84.27	22.450	0.01161		0.00
			0.01059	
96.27	22.199			0.00

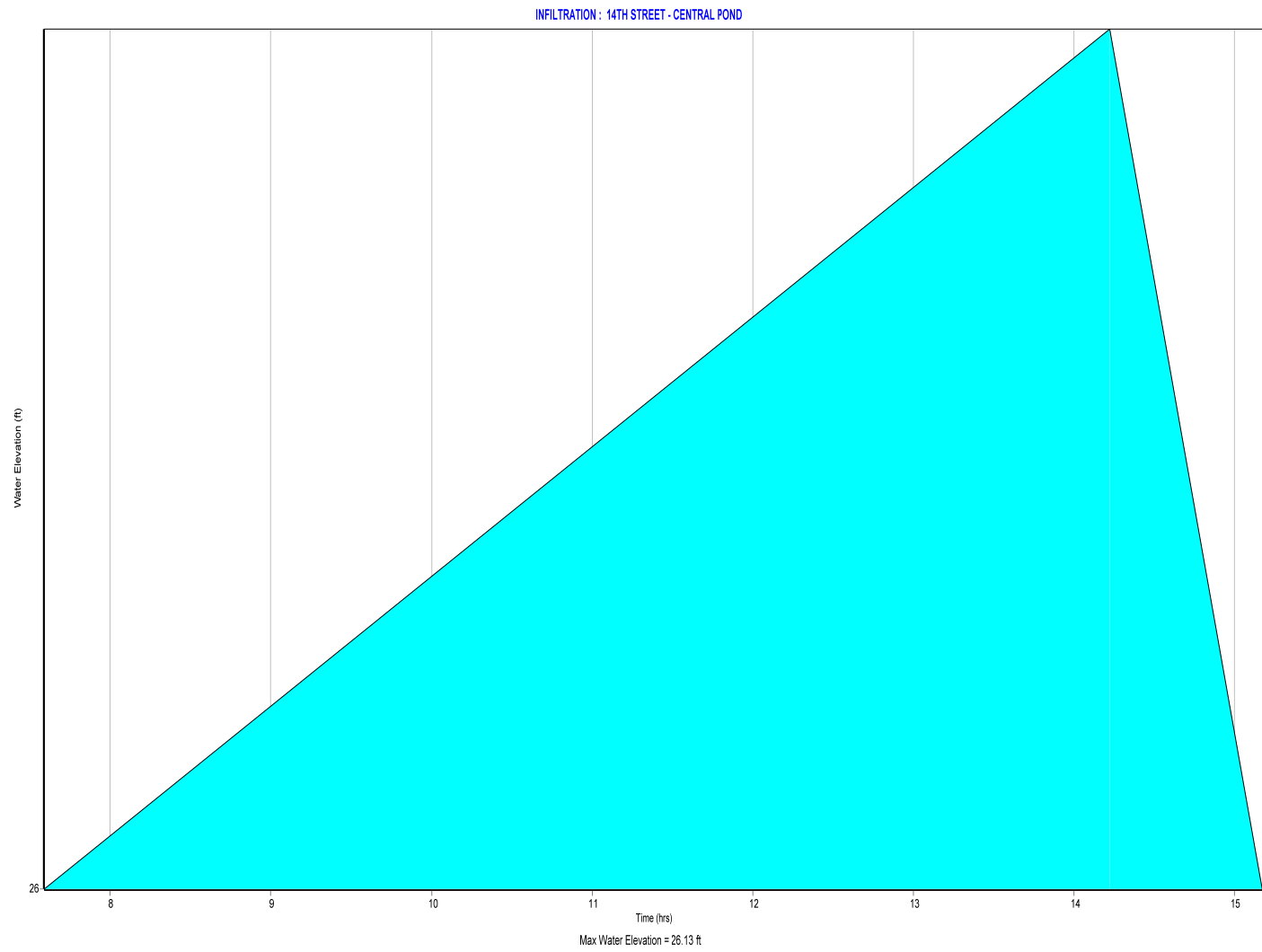
Maximum Water Elevation: 26.130 feet @ 14.22 hours

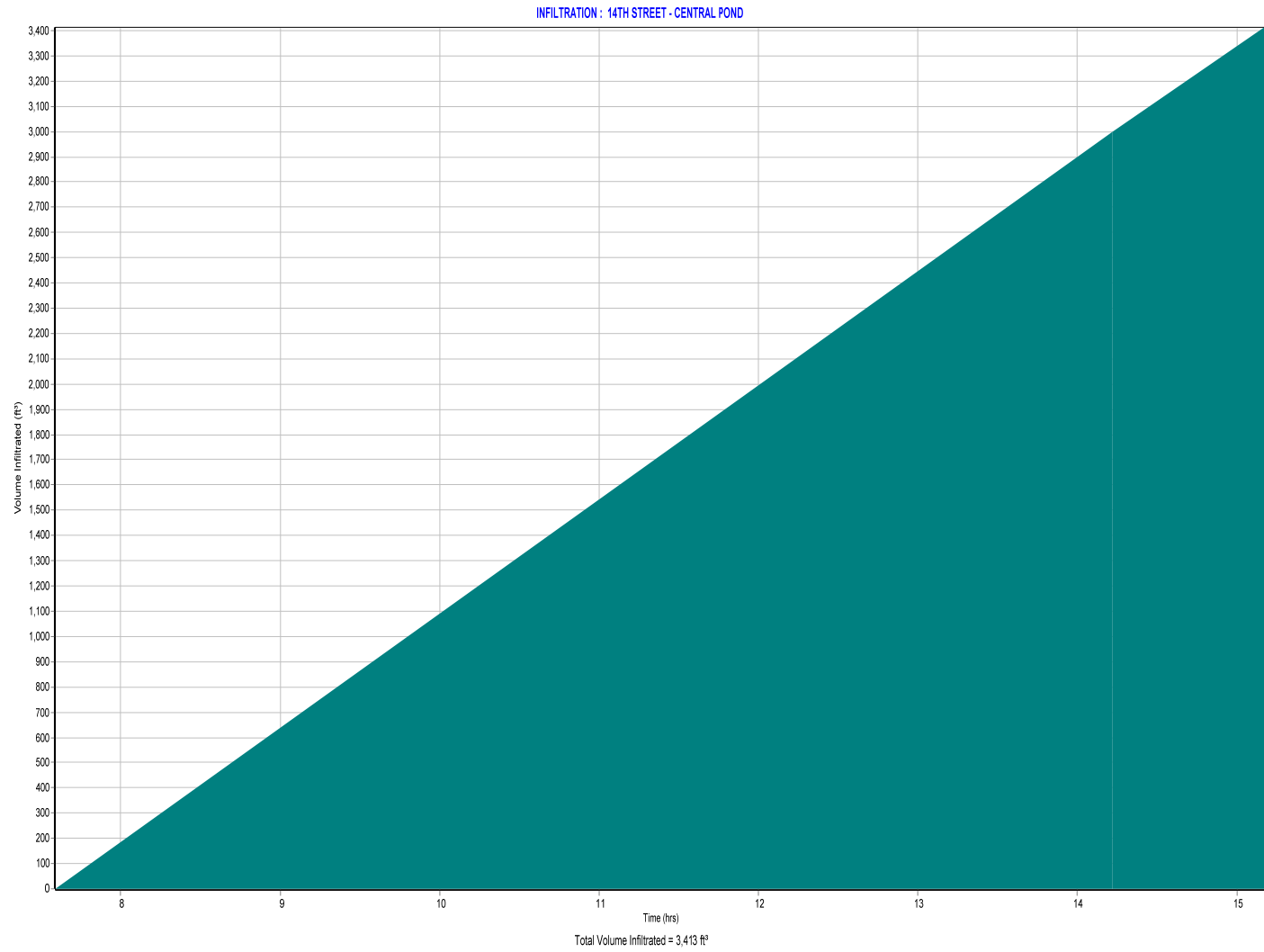
Recovery @ 15.171 hours

* Time increment when there is no runoff

Maximum Infiltration Rate: 5.938 ft/day

Analysis Date: 11/16/2020





GEOTECHNICAL REPORT



OF JAX, INC.

March 6, 2019

GILLETTE & ASSOCIATES

20 South 4th Street
Amelia Island, Florida 32034

Attn: Mr. Nick Gillette

Re: Report of Subsurface Exploration, Double Ring & Hydraulic Conductivity Testing
Proposed 14th Street Townhomes
Fernandina Beach, Florida
AGES Job No. J18574, Report No. 001

Ladies & Gentlemen:

AGES OF JAX (AGES), INC. has completed the requested subsurface testing at the subject site. This report includes a summary of the background information provided, a description of the testing that was performed, and a summary of the results that were obtained.

PROJECT BACKGROUND INFORMATION

General information has been provided by Gillette & Associates representative, Mr. Nick Gillette during recent email and telephone conversations. We have been provided with a Preliminary Site Plan which illustrates the property boundaries, roadway and lot layout, and the planned stormwater pond locations. No other plans or documents have been provided at this time. The proposed development will include seven town homes, asphalt paved roads and a dry stormwater management facility.

SUBSURFACE EXPLORATION

The requested geotechnical testing was conducted during the period of February 27 to March 5, 2019. The scope of testing included six(6) 6-foot deep auger borings (A1 - A6) which we drilled in the lot and roadway locations and one 13-foot deep auger boring (LA1) which was drilled in the planned dry pond location. A 14-foot deep temporary 2" diameter monitoring well (TMW1) which was equipped with a 10 foot slotted screen was installed at the center of the dry pond. Rising and Falling Head "slug" tests were performed in accordance with the procedures outlined in ASTM D4044/D4044M - 15, to determine the saturated horizontal hydraulic conductivity (Khsat) of the surface aquifer. The test results were analyzed using Hvorslev Time Lag Analytical procedures. One double ring infiltration test (DRI1) was conducted adjacent to the well location using the procedures outlined in ASTM D3385-18 to determine the vertical unsaturated hydraulic conductivity i.e infiltration rate (Kvunsat) in the vadose zone. The test locations are shown on the attached Field Exploration Plan. Auger boring results, the rising and falling Head "Slug Test" data, and Infiltration Test Data are presented in the attachments.

SURFACE AQUIFER CHARACTERIZATION TEST RESULTS

The borings/tests performed in the proposed roadway, lots and stormwater treatment pond area encountered fine to slightly silty to silty fine sands (SP to SP-SM) in the upper 14 feet of profile. The

AGES of JAX, Inc.

P O Box 24008, Jacksonville FL 32241-4008
9556 Historic Kings Road South, Suite 201 ● Jacksonville, Florida 32257-2010
(904) 886-0766 ● (904) 880-5190 (FAX)

groundwater level was encountered 7 feet below the ground surface. The seasonal high groundwater level is estimated to be 6 foot below the existing ground surface. The fillable porosity of the sand deposit is estimated to be 0.22. The effective aquifer thickness is estimated to be 15 feet. The saturated horizontal hydraulic conductivity (Khsat, the average of the falling and rising head hydraulic conductivity tests) of the unconfined surface aquifer was calculated to 7.6 ft/day. The average unsaturated vertical hydraulic conductivity (Kvunsat, infiltration rate) was measured to be 12.9 inches/hour.

CLOSURE

We appreciate the opportunity to be of service as the geotechnical consultant during this phase of your project. Should you have any questions concerning this report or if we may be of any further service to you, please feel free to contact us.

Very truly yours,

AGES of JAX, INC.

Bill C. McMahan, Jr., P.E.
Principal Engineer/ Vice-President
Registered, Florida No. 42677

DATA ATTACHMENTS

Site Location Map

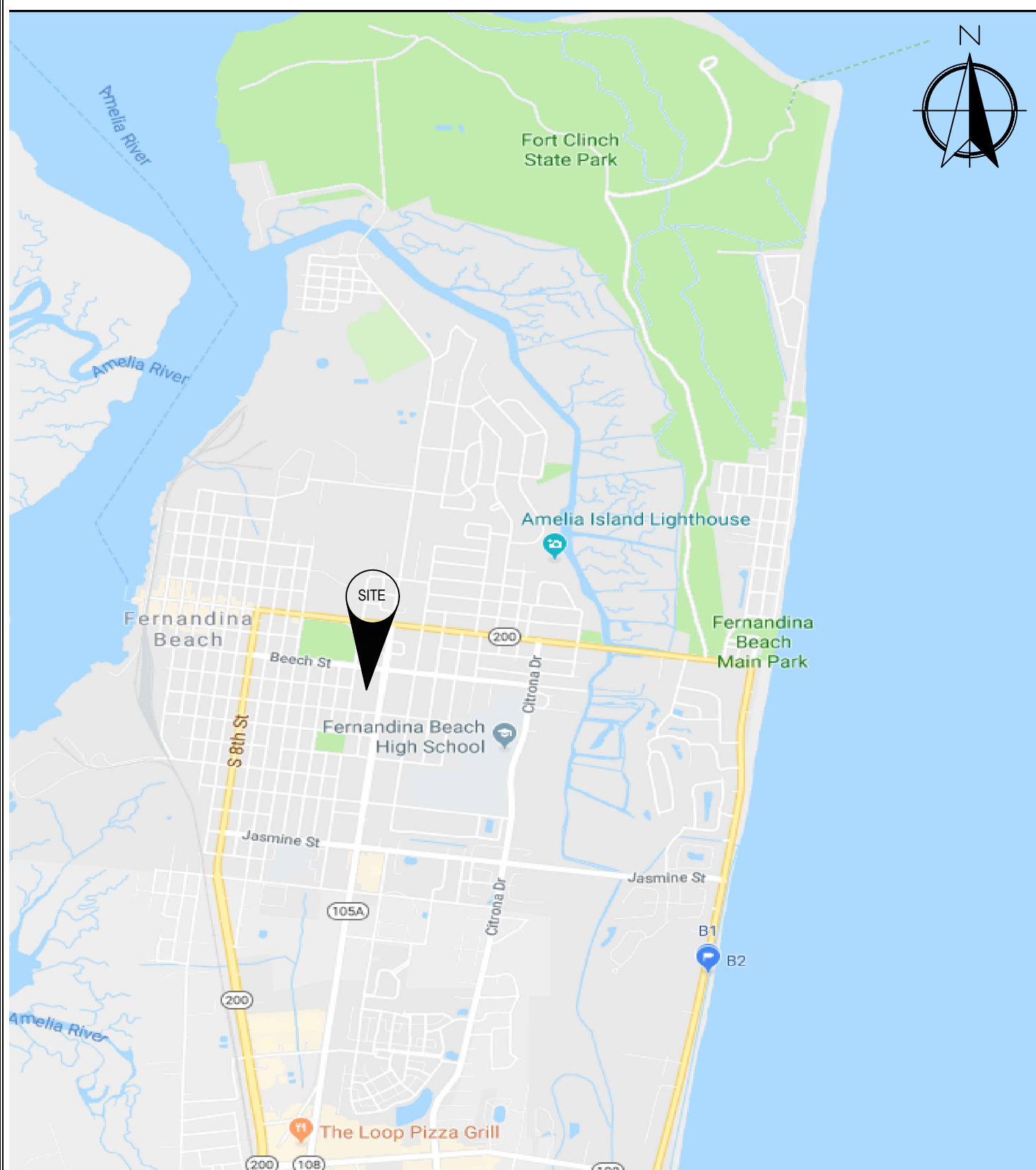
Field Exploration Plan

Key to Soil Classification

Auger Boring Records

Double Ring Infiltration Test Results Sheet

Rising and Falling Head Hydraulic Conductivity Test Results Sheets



REFERENCE:

Google.com



AGES of JAX Inc.
9556 Historic Kings Rd.
Jacksonville, Florida 32257

SITE LOCATION MAP
14th Street Townhomes
Fernandina Beach, Florida

DRAWN: JLW

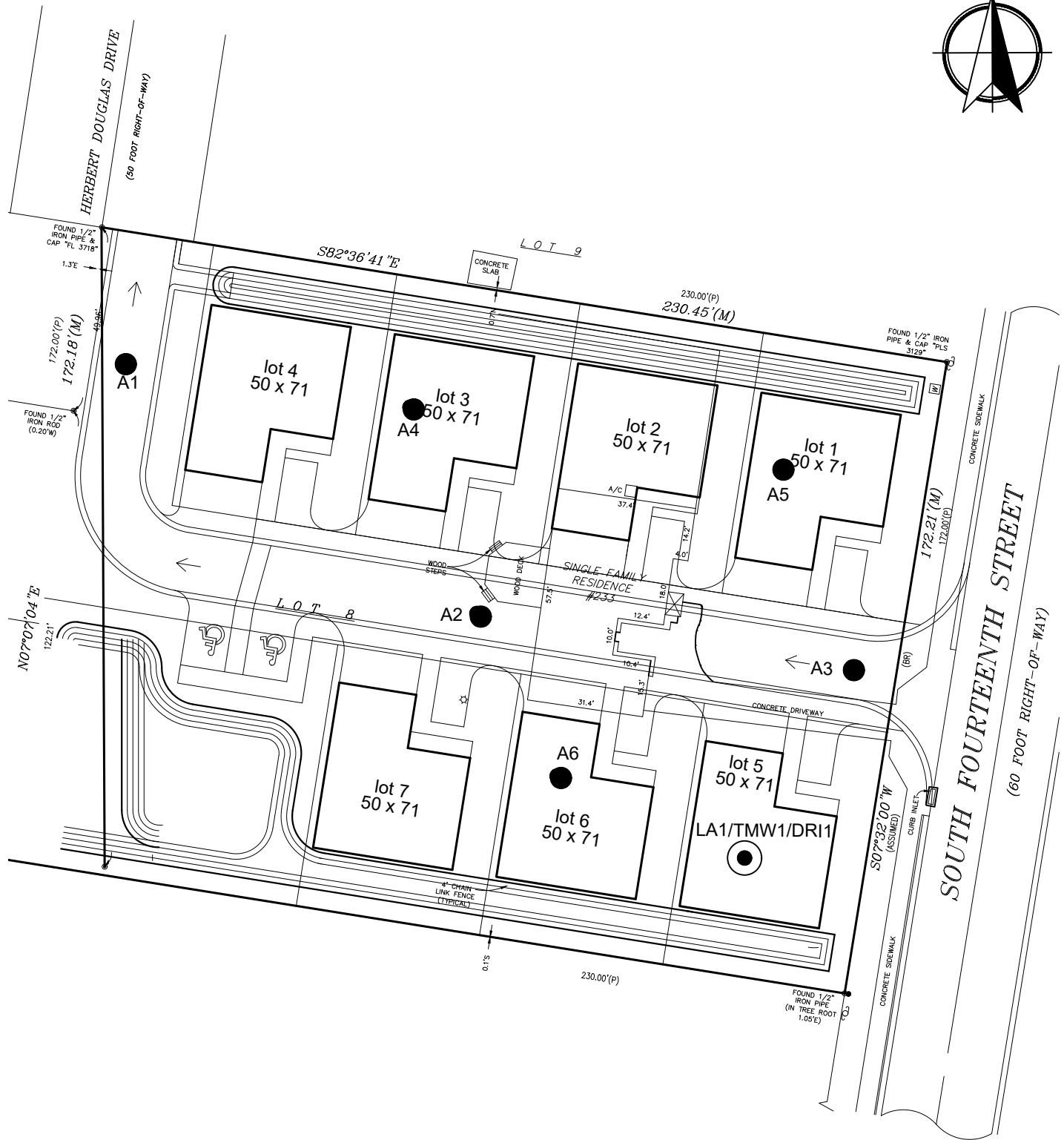
DATE: 03/04/19

SCALE:

CHECKED: BCM

JOB NO: J18574

NTS



LEGEND:

- Auger Boring Location (approximate)
- ⊙ Double Ring Infiltration Test Location (approximate)

REFERENCE:

Site Plan, dated 08/14/2018, provided by Mazie & Drake Land Surveying.

NOTES:

The boring locations were established by AGES personnel using handheld GPS Locator Units. Boring locations as shown on this plan are approximate.



AGES of JAX Inc.
9556 Historic Kings Rd.
Jacksonville, Florida 32257

FIELD EXPLORATION PLAN

14th Street Townhomes
Fernandina Beach, Florida

DRAWN: JLW

DATE: 03/04/19

SCALE:

CHECKED: BCM

JOB NO: J18574

1"=40'

KEY TO SOIL CLASSIFICATION

CORRELATION OF N-VALUE WITH RELATIVE DENSITY & CONSISTENCY

SANDS AND GRAVEL	
NO. OF BLOWS, N'	RELATIVE DENSITY
0 - 4	VERY LOOSE
5 - 10	LOOSE
11 - 20	FIRM
21 - 30	VERY FIRM
31 - 50	DENSE
OVER 50	VERY DENSE

SILTS AND CLAYS	
NO. OF BLOWS, N*	CONSISTENCY
0 - 2	VERY SOFT
3 - 4	SOFT
5 - 8	FIRM
9 - 15	STIFF
16 - 30	VERY STIFF
31 - 50	HARD
OVER 50	VERY HARD

PARTICLE SIZE IDENTIFICATION (UNIFIED SOIL CLASSIFICATION SYSTEM)

CATEGORY	DIMENSIONS
Boulders	Diameter exceeds 12 inches
Cobbles	3 to 12 inches
Gravel	Coarse - 0.75 to 3 inches in diameter
Sand	Coarse - 2.0 mm to 4.76 mm diameter Medium - 0.42 mm to 2.0 mm diameter
Silt and Clay	Less than 0.074 mm (Invisible to the naked eye)

MODIFIERS

These modifiers provide our estimate of the amount of minor constituents (sand silt or clay size particles) in the soil sample.

PERCENTAGE OF MINOR CONSTITUENT	MODIFIERS
5% to 12%	Slightly Silty, Slightly Clayey, Slightly Sandy Silty, Clayey, Sandy Very Silty, Very Clayey, Very Sandy
12% to 30%	
30% to 50%	

These modifiers provide our estimate of the amount of other components in the soil sample.

APPROXIMATE CONTENT OF OTHER COMPONENTS (SHELL, GRAVEL, ETC.)	MODIFIERS	APPROXIMATE CONTENT OF ORGANIC COMPONENTS
0% to 5%	TRACE FEW SOME MANY	1% to 2%
5% to 12%		2% to 4%
12% to 30%		4% to 8%
30% to 50%		>8%



AUGER BORING RECORDS
14th Street Townhomes
Fernandina Beach, Florida
AGES Job No. J18574; Report No. 001

Date Performed: 2/27/19

Performed By: N.W & A.W

Auger ID Lat/Long	Depth (Feet) ^a	SOIL DESCRIPTION (USCS / AASHTO CLASSIFICATION)
----------------------	---------------------------	---

Roadways

A1 N 30.66632° W 81.45274°	0.0 - 1.0	Dark Grey Brown Fine SAND w/ Many Roots (PT)
	1.0 - 3.0	Light Grey Fine SAND (SP)
	3.0 - 6.0	Red Brown Fine SAND (SP)
	A.B.T. ^b	GWL ^c = Not Encountered
A2 N 30.66614° W 81.45243°	0.0 - 1.0	Dark Grey Brown Fine SAND w/ Many Roots (PT)
	1.0 - 2.0	Light Grey Fine SAND (SP)
	2.0 - 6.0	Red Brown Fine SAND (SP)
	A.B.T. ^b	GWL ^c = Not Encountered
A3 N 30.66611° W 81.45211°	0.0 - 1.0	Dark Grey Fine SAND w/ Some Small Roots (SP)
	1.0 - 3.0	Grey Fine SAND w/ Trace Pine Roots(SP)
	3.0 - 6.0	Brown Fine SAND (SP)
	A.B.T. ^b	GWL ^c = Not Encountered
A4 N 30.66629° W 81.45249°	0.0 - 1.0	Grey Brown Fine SAND w/ Many Roots (PT)
	1.0 - 3.0	Light Grey Fine SAND (SP)
	3.0 - 6.0	Red Brown Fine SAND (SP)
	A.B.T. ^b	GWL ^c = Not Encountered
A5 N 30.66625° W 81.45211°	0.0 - 1.0	Dark Grey Brown Fine SAND w/ Many Small Roots (PT)
	1.0 - 2.0	Light Grey Fine SAND (SP)
	2.0 - 6.0	Red Brown Fine SAND (SP)
	A.B.T. ^b	GWL ^c = Not Encountered
A6 N 30.66601° W 81.45236°	0.0 - 1.0	Dark Grey Fine SAND w/ Some Roots (SP)
	1.0 - 2.0	Grey Fine SAND (SP)
	2.0 - 5.0*	Brown Fine SAND (SP)
	A.B.T. ^b	GWL ^c = Not Encountered

Stormwater Management Ponds

LA1 N 30.66598° W 81.45219°	0.0 - 0.5	Dark Brown Silty Fine SAND w/ Many Roots (PT/A-8)
	0.5 - 2.0	Dark Grey Slightly Silty Fine SAND w/ Some Roots(SP-SM/A-3)
	2.0 - 6.0	Grey Slightly Silty Fine SAND (SP-SM/A-3)
	6.0 - 13.0	Light Brown Slightly Silty Fine SAND (SP-SM/A-3)
	A.B.T. ^b	GWL ^c = 7.0'
		Estimated Seasonal High GWL = 6.0

* - Boring Terminated Early Due to Large Roots.

a - Depth measured below ground surface existing at boring location at time of drilling

b - Auger Boring Terminated (A.B.T.)

c - Groundwater Level (GWL) depth below existing ground surface, recorded at time of drilling, unless otherwise noted
J18574aug.wpd JW



DOUBLE RING INFILTRATION TEST RESULTS

PROJECT: 14th Street Townhomes
 LOCATION: Fernandina Beach, Florida
 JOB NUMBER: J18574
 TEST NUMBER: DRI1
 LAT/LONG: N30.66598°, W81.45219°

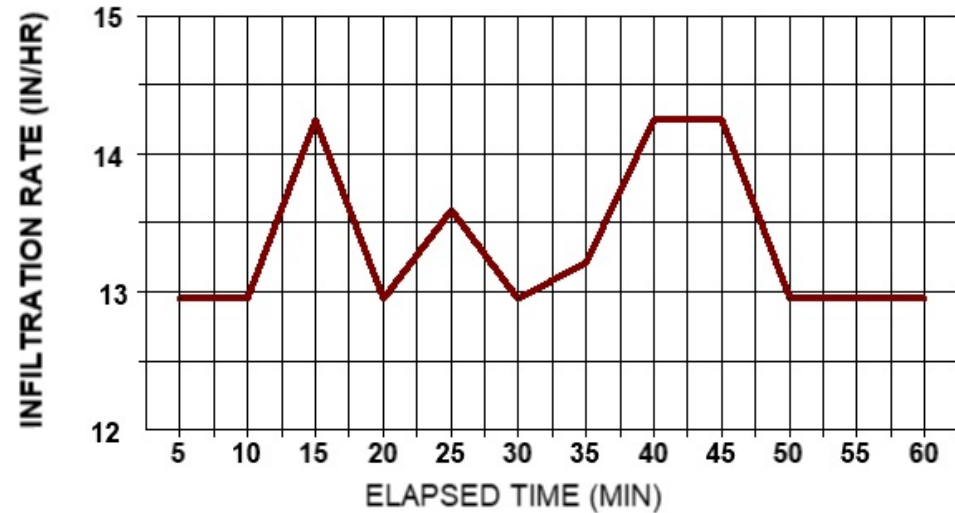
REPORT DATE: 03/04/19
 TEST DATE: 02/27/19
 FIELD PERSONNEL: N.W. & A.W.
 METHOD: ASTM D3385
 WATER HEAD: 6"
 TEST DEPTH: Surface

ELAPSED TIME (MINUTES)	WATER QUANTITY (ML)	INFILTRATION RATE (IN/HOUR)
5	2000	12.9
10	2000	12.9
15	2200	14.2
20	2000	12.9
25	2100	13.6
30	2000	12.9
35	2040	13.2
40	2200	14.2
45	2200	14.2
50	2000	12.9
55	2000	12.9
60	2000	12.9

SUMMARY OF TEST DATA & RESULTS

INNER RING SIZE (INCHES): 12
 OUTER RING SIZE (INCHES): 24
 AVERAGE INFILTRATION RATE (IN/HR): 13.3
 STEADY STATE INFILTRATION RATE (IN/HR): 12.9

INFILTRATION RATE VS TIME



SOIL PROFILE

Depth(Ft)	Soil Description (USCS/AASHTO Classification)
0.0 - 0.5	Dark Brown Silty Fine SAND w/ Many Roots (PT/A-8)
0.5 - 2.0	Dark Grey Sl. Si. Fine SAND w/ Some Rts. (SP-SM/A-3)
2.0 - 6.0	Dark Brown Fine SAND (SP/A-3)
6.0 - 13.0	Light Brown Slightly Silty Fine SAND (SP-SM/A-3)
A.B.T.	GWL = 7.0'

Estimated Seasonal High GWL = 6.0' Below Gound Surface



INSITU FALLING HEAD HYDRAULIC CONDUCTIVITY TEST

14th Street Townhomes
Fernandina Beach, Florida
AGES Job No. J18574

Governing Equation (NAVFAC)

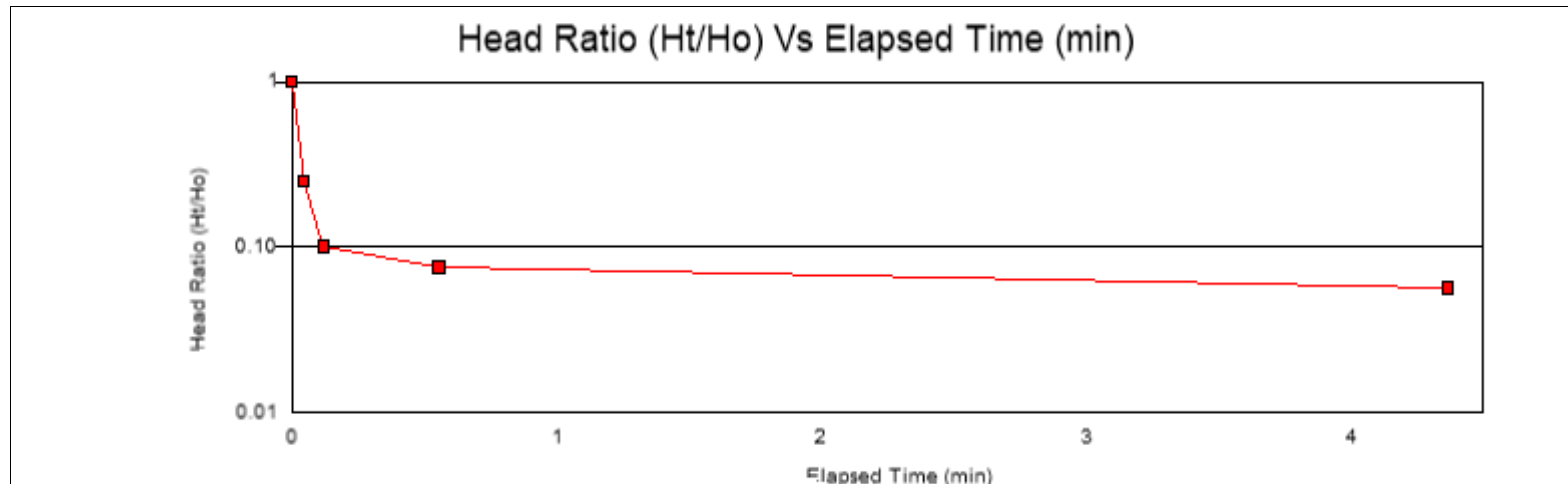
$$K = \frac{r^2}{2L} \ln(L/R) \left[\ln(H_1/H_2) / (t_2 - t_1) \right]$$

Date Performed 03/05/19

Performed by D Anderson

Well Data	
Test ID	TMW1
Well Radius - R (ft)	0.08
Well Stickup (ft)	1
Well Depth below TOC (ft)	15.33
Saturated Screen Length - L (ft)	10
Depth to Static GW below TOC	7.292
Initial Water Depth below TOC Slug In	6.790

Field Data			Water Level TOC (ft)	Head (Ht)	Head Ratio Ht/Ho
Elapsed Time t					
min	sec	min			
0	0.1	0.0	6.790	0.5018	1.0
0	2.7	0.0	7.167	0.13	0.2
0	7.1	0.1	7.241	0.05	0.1
0	33.4	0.6	7.254	0.04	0.1
4	22	4.4	7.263	0.03	0.1
Results: Insitu Horizontal Hydraulic Conductivity (k)					
0.003836 ft/min		5.52	ft/day	1.9E-03	cm/sec





INSITU RISING HEAD HYDRAULIC CONDUCTIVITY TEST

14th Street Townhomes
Fernandina Beach, Florida

AGES Job No. J18574

Governing Equation (NAVFAC)

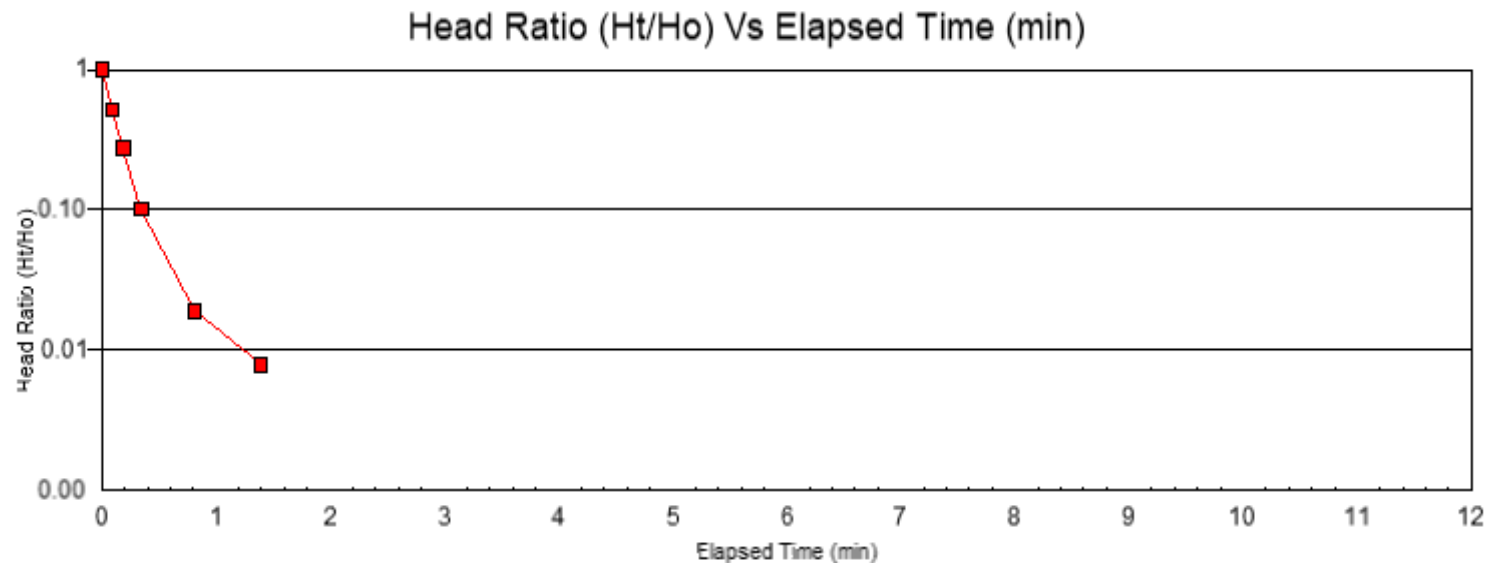
$$Khsat = \frac{r^2}{2L} \ln(L/R) [\ln(H1/H2)/(t2-t1)]$$

Date Performed 03/05/19

Performed by D. Anderson

Well Data	
Well ID	TMW1
Well Radius - R (ft)	0.083
Saturated Screen Length - L(ft)	8.05
Well Stickup (ft)	1.00
Well Depth below TOC	15.33
Depth to Static GW below TOC	7.281
Initial Drawdown Depth below TOC	8.225

Field Data			Depth Below TOC (ft)	Head (Ht)	Head Ratio Ht/Ho
Elapsed Time (t)					
min	sec	min			
0	0.1	0.0	8.225	0.9436	1.00
0	5.6	0.1	7.770	0.48906	0.52
0	11.3	0.2	7.543	0.261	0.28
0	20.6	0.3	7.377	0.095773	0.10
0	48.7	0.8	7.299	0.017952	0.02
1	23.5	1.4	7.289	0.00743	0.01
Results: Insitu Horizontal Hydraulic Conductivity (k)					
0.007049 ft/min		10.15 ft/day		3.6E-03 cm/sec	



Technical Review Committee: Application - Submission #6424

Date Submitted: 12/7/2020

Technical Review Committee: Application

USE THIS FORM TO To apply for review of site plans, preliminary subdivision plats, final subdivision plats, minor subdivisions, and amendments to previously issued local development orders, change of use, and nonresidential building expansions.

Fees

☒Initial submittal + two submittals of full site plans. \$400 or 2% of the project construction cost (whichever is greater) for up to a maximum of \$5,500.

☐3rd and subsequent resubmittals. \$400

☐Change of Use Determination Letter \$50

☐Engineering Review (Consultant Hourly Rate) \$125



IMPORTANT NOTES

This application will be routed to the various departments for review of the applicable codes and design standards.

Please see the Land Development Code (LDC) for detailed information:



Requirements for All Site Plans “ see LDC section 11.01.04



Requirements for Subdivision Plats “ see LDC section 11.01.05



Determination for Completeness & sufficiency “ see LDC section 11.03.01



Review and Compliance Report by the Technical Review Committee “ see LDC Section 11.03.02



Construction and Improvements “ see LDC section 11.05.00



Amendments to Local Development Orders “ see LDC section 11.06.00

The LDC is available for review at

www.fbfl.us/LDC

Application Requirements



See Development Plan Submittal Checklist



All applications are subject to a determination of completeness as required by Land Development Code section 11.03.01.



A determination of completeness is a determination that all required documents and plans have been submitted, and whether all fees have been paid.



A determination of completeness is not a determination of compliance with substantive standards and criteria.

Key Contacts

TRC will guide your application from start to finish, engaging other City departments as needed.



PROPERTY INFORMATION

[Property information can be found at the Nassau County Property Appraiser's Website's Map Search](#)

Site Address*

233 South 14th Street

City*

Fernandina Beach

State*

FL

Zip*

32034

Parcel ID #(s)

00-00-31-1800-0242-0080

Lot

8

Block

242

Subdivision

N/A

Zoning District

MU-1

Future Land Use Designation*

Medium Density Residential

Overlay District*

None

Size of Property (acres)*

0.91

Present Property Use*

Cleared single family

Wetlands*

No

Flood Zone*

X, area of minimal flood

Coastal Construction Control Line (CCCL)*

No

OWNER OF RECORD

As recorded with the Nassau County Property Appraiser

First Name*

Simmons 9, LLC

Last Name*

Simmons 9, LLC

Company (if applicable)

Simmons 9, LLC

Mailing Address*

20 South 4th Street

City*

Fernandina Beach

State*

FL

Zip*

32034

Telephone Number*

9042618819

Email Address*

nick@gilletteassociates.com

OWNER'S AGENT

If other than owner. If an agent will be representing the owner, an Owner’s Authorization For Agent Representation form must be included

First Name

Last Name

Company (if applicable)

-- Year --

Mailing Address

1005 OCEANWALK CT

City

FERNANDINA BEACH

State

FL

Zip

32034-2286

Telephone Number

9047538775

Email Address

nick@gilletteassociates.com

PROJECT INFORMATION

Project Type*

Site Plan Review

Project Name

Settler's Cove - Group Residential

Proposed Access Road*

South 14th Street

Rd Maintenance Jurisdiction*

County Maintained

Project Estimated Cost*

115000

Description of Request*

Construct pervious parking lot and dry pond system to serve an 11-unit group residential project.

Site Plan Review Checklist

☒

The names, address, telephone number, fax number, and email address of the person preparing the plan.

☒

The date of preparation and date(s) of any modifications, a north arrow, and a written and graphic scale.

☒

The legal description of the property, consistent with the required survey.



A vicinity map showing the location of the property.



The location of streams, bodies of water, natural features, roads, rights-of-way, street intersections, and paved areas within the boundaries of the property.



The location of streams, bodies of water, dunes and dune systems, and other natural features within 250 feet of the boundaries of the property.



The location of the mean high-water line, if such line is within the boundaries of the property.



A topographic survey, soils report, grading plan, and an erosion control plan.



A general floodplain map indicating areas subject to inundation and high groundwater levels up to a 100-year flood classification.



A statement indicating the distances to schools and public safety facilities intended to serve the proposed development.



The name, plat book, and page number of any recorded subdivision comprising all or part of the site.



The location and use of any existing and proposed principal or accessory buildings and structures, showing proposed setbacks, building heights, and other dimensional requirements of the zoning district.



Elevations of all proposed structures.



The access points, driveway design, on-site parking, including required parking lot landscaping, internal circulation, sidewalks, and bicycle facilities.



The location of existing and proposed utilities, utility services, and easements.



A tree survey showing protected trees, proposed replacement trees, if required, and landscaping and buffering. (See Section 4.05.00.)



A soil erosion and sediment control plan compliant with Section 3.01.04.



For a PUD site plan, a detailed, written list and explanation of how the proposed PUD differs from any provision of this LDC applicable to the underlying zoning district.



For site plans and PUD site plans where development is proposed in phases, the plans shall include phase lines and the following supporting information:



o Timeline for the development; and



o Benchmarks for monitoring the progress of construction of each phase regarding land clearing, soil stabilization and erosion control, installation of infrastructure, and installation of landscaping.



A summary block containing:



o Land use category from the Future Land Use Map in the comprehensive plan;



o Zoning district;



o Total acreage;



o Total square footage for non-residential uses;



o Total density and number of units, proposed and permissible for residential uses;



o Impervious surface ratio calculation, proposed and permissible;



o Floor area ratio calculation, proposed and permissible;



o Total number of parking spaces, required and provided; and



o Number of trees required to be protected, number of trees remaining on the site, and number of trees to be planted.



Additional plans, documents, or reports that are necessary to support the application shall be submitted. Such plans, documents, or reports may include, but are not limited to:



o Subdivision Plats (subdivision plats shall contain the information set forth in Section 11.01.05.)



o Concurrency analysis (concurrency analysis reports shall contain the information set forth in Section 7.04.00.)



o Traffic analysis reports (requirements for traffic analysis reports are set forth in Section 11.01.06.)



o Parking studies (requirements for parking studies are set forth in Section 7.01.04.)



o Stormwater management plans (requirements for stormwater management plans are set forth in Section 7.03.00.)



o Environmental Impact Study (requirements for environmental impact studies are set forth by regional, State, and federal agencies with jurisdiction and in Chapter 3 of the LDC.)



o Tree Protection Plan (Section 4.05.09.)



o Landscape Plan (Section 4.05.00.)



o Lighting Plan (Section 3.05.00.), Section 7.01.04.B)



o Signage Plan (Section 5.03.00.)



o Proof of Ownership “provide a legal description, Property Identification Number (PIN) and a copy of the warranty deed.



Concurrency analysis reports shall contain the information set forth in Section 7.04.00. Requirements for traffic analysis reports are set forth in Section 11.01.06. Requirements for parking studies



“Any development application for development proposed within the Airport Overlay Zone established for the Fernandina Beach Municipal Airport shall provide confirmation of notification to the FAA as r

School Concurrency

New residential development is required to demonstrate compliance with school concurrency as regulated in the City of Fernandina Beach through the City of Fernandina Beach’s Comprehensive Plan Intergovernmental Coordination Element and the Interlocal Agreement Amendment for Public School Facility Planning adopted by the City on May 21, 2019. No new residential rezoning, preliminary plat, site plan or functional equivalent may be approved by the City unless the residential development is exempt from requirements outlined in Section 9.13 of the Amended Interlocal Agreement OR a School Concurrency Reservation Letter has been issued by the School Board indicating that adequate school facilities exist.

Certification*

☒

By signing below, I certify that the information contained in this application is true and correct to the best of my knowledge at the time of the application.

☒

I acknowledge that I understand and have complied with all of the submittal requirements and procedures.

Applicant First Name*

Nick

Applicant Last Name*

Gillette

Today's Date*

12/7/2020

Upload Supporting Documentation*

SETTLERS COVE CIVIL 12-3-20.pdf

Upload 2

SETTLERS COVE DRAINAGE REPORT 12-3-20.pdf

Upload 3

Choose File

No file selected

Upload 4

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No file selected

Upload 5

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Upload 6

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Upload 7

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No file selected





Civil & Environmental Engineering • Mechanical & Structural Engineering • Construction Management

June 2, 2021

Mr. Jacob Platt, Senior Planner
City of Fernandina Beach
204 Ash Street
Fernandina Beach, FL 32034

Re: Settler's Cove
SP 2020-0013

Dear Mr. Platt:

We are pleased to submit the following responses to the comments generated by the review of the TRC members, received on April 4, 2021:

Planning

• Please include tree protection detail.

A tree protection detail has been added to Sheet 6 (Tree-1). Tree Protection was also added around existing trees that are to remain.

• 26 shade trees required onsite: 1 per 1,500 square feet.

We have elected to plant 29 shade trees just to be sure we meet all possible elements of the code. This is reflected on Sheet 6 (Tree-1).

• Eastern redbud doesn't meet the definition of shade tree in the LDC.

Florida Elm trees have been added as a substitute,

• Please provide parking lot landscaping calculations.

These have been added to Sheet 6 (Tree-1) under parking lot landscaping calc.

Stormwater

• Please provide drainage analysis for the 10 yr-24 hr storm event (LDC 7.03.03 F (1)a)

A revised drainage report is attached showing this 10-year storm event. A revised description of the changes are reflected in the project summary within this report.

• Please confirm that proposed spot elevations and drainage design will work with the cross slope requirements for the sidewalk along N 14th st.

The inlet near the entrance has been slightly relocated to the west to allow for transitional grading in order to reduce the driveway slope.

Fire

- Spoke with Nick Gillette about the need for a private fire hydrant, location of a stand-alone FDC, and potential for additional fire protection features to compensate for the limited accessibility for fire suppression operations and he is working on the revisions needed for those concerns. 4/19/21 JSH

These elements have been added to Sheet 4 (GE-1) based on conversations with Jason Higginbotham.

Streets

- No Comment

Building

- 05/07/2021 No noted problems. DPK

Utilities – Wastewater

- No comments

Utilities – Water

Please confirm if the proposed master meter will be used for irrigation or if a separate irrigation meter will be requested.

An irrigation meter has been added and is shown on Sheet 6 (Tree-1). The irrigation line will be connected to the 6 inch fire line so an additional backflow preventer is not necessary.

Thank you for your time and consideration on this application, and please contact me at your earliest convenience with any questions that you may have.

Sincerely,



Nick Gillette, P.E.
Gillette & Associates, Inc

ENGINEERING PLANS

FOR

SETTLERS COVE- SINGLE BUILDING DESIGN

FOR

SIMMONS 9, LLC

SETTLERS COVE
SINGLE BUILDING DESIGN

FOR

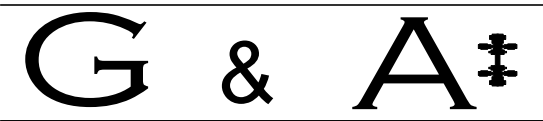
SIMMONS 9, LLC

RELEASED FOR CONSTRUCTION BY

GILLETTE & ASSOCIATES, INC.

CIVIL & ENVIRONMENTAL ENGINEERING
MECHANICAL & STRUCTURAL ENGINEERING
PERMITTING & CONSTRUCTION MANAGEMENT

20 SOUTH 4TH STREET AMELIA ISLAND, FLORIDA 32034
PHONE: 904/261-8819



PERMITTING AGENCIES

CITY OF FERNANDINA BEACH: 904-310-3421
SJRWMD: 904-730-6270

UTILITY PROVIDERS

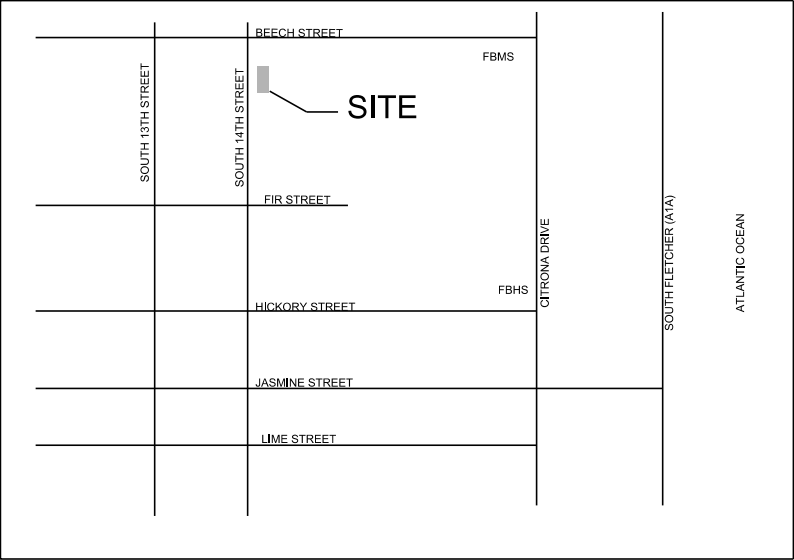
WATER/SEWER: CITY OF FERNANDINA BEACH
ELECTRIC: FLORIDA PUBLIC UTILITIES
CABLE: COMCAST
TELEPHONE: AT&T

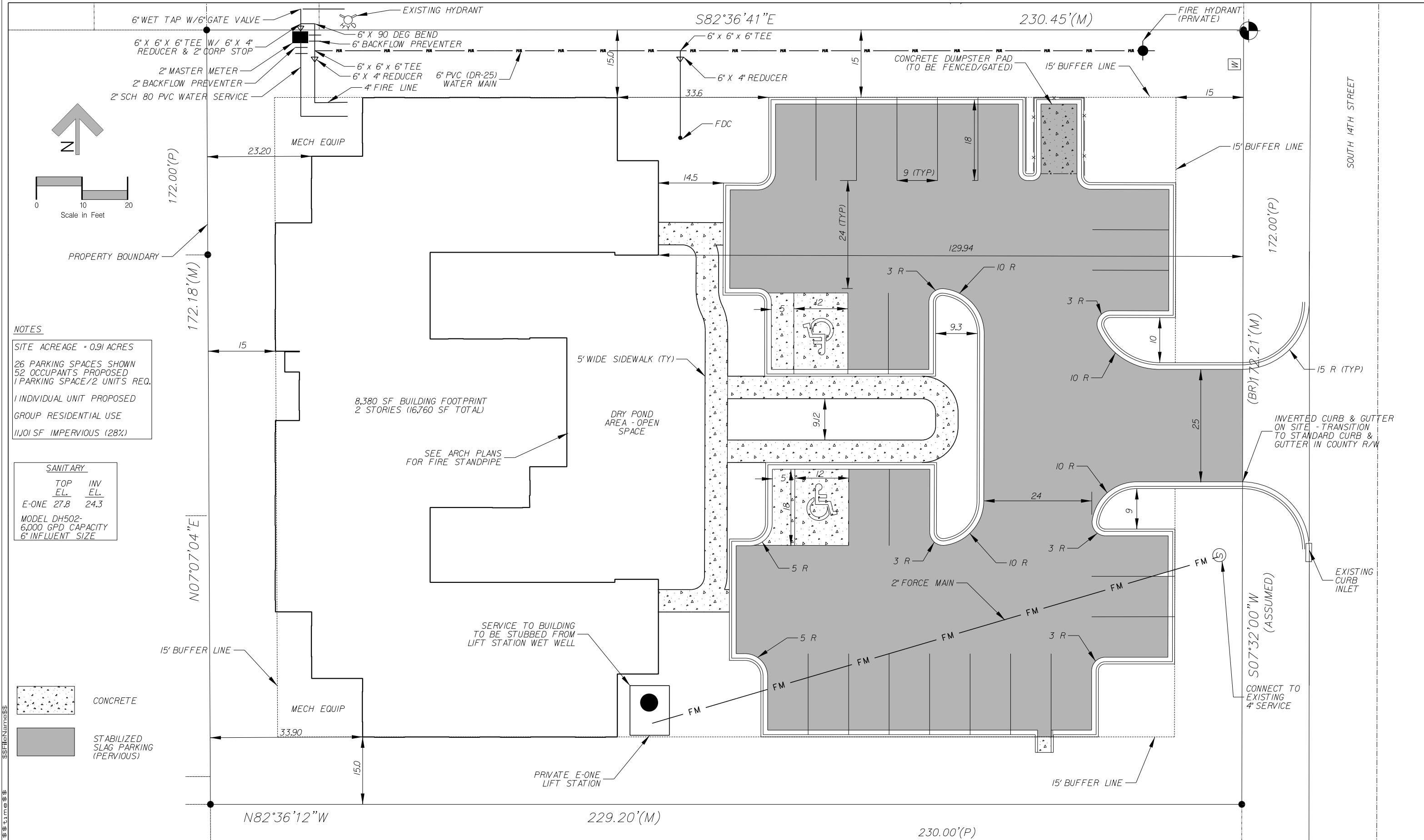
G&A Project
No.:19-10.18

Issue Date: April 5, 2021
Revision Date: June 2, 2021



SITE LOCATION MAP





NOTES

SITE ACREAGE = 0.91 ACRES

26 PARKING SPACES SHOWN

52 OCCUPANTS PROPOSED

1 PARKING SPACE/2 UNITS REQ.

1 INDIVIDUAL UNIT PROPOSED

GROUP RESIDENTIAL USE

11,101 SF IMPERVIOUS (28%)

SANITARY	
TOP EL.	INV EL.
E-ONE 27.8	24.3
MODEL DH502- 6,000 GPD CAPACITY 6" INFLUENT SIZE	

CONCRETE

STABILIZED SLAG PARKING (PERVIOUS)

No.	By	Date	Revision
1	NG	6-2-21	drainage modstree plan updates/fire updates
2	NG	4-5-21	Revised to single building design

Scale:	
Project Mgr:	NG
Designed by:	NG
Drawn by:	BM
QAQC:	AG

Gillette & Associates, Inc. 20 South 4th Street Fernandina Beach, FL 32034
Certificate of Authorization No. 9332
DO NOT SCALE THIS DRAWING - DIMENSIONS AND NOTES TAKE PREFERENCE. DRAWING IS REDUCED IF LESS THAN 22" x 34"

G & A
GILLETTE & ASSOCIATES, INC.
20 SOUTH 4TH STREET
FERNANDINA BEACH, FL 32034
PHONE: (904) 261-8819

SETTLER'S COVE
SINGLE BUILDING DESIGN

SIMMONS 9, LLC

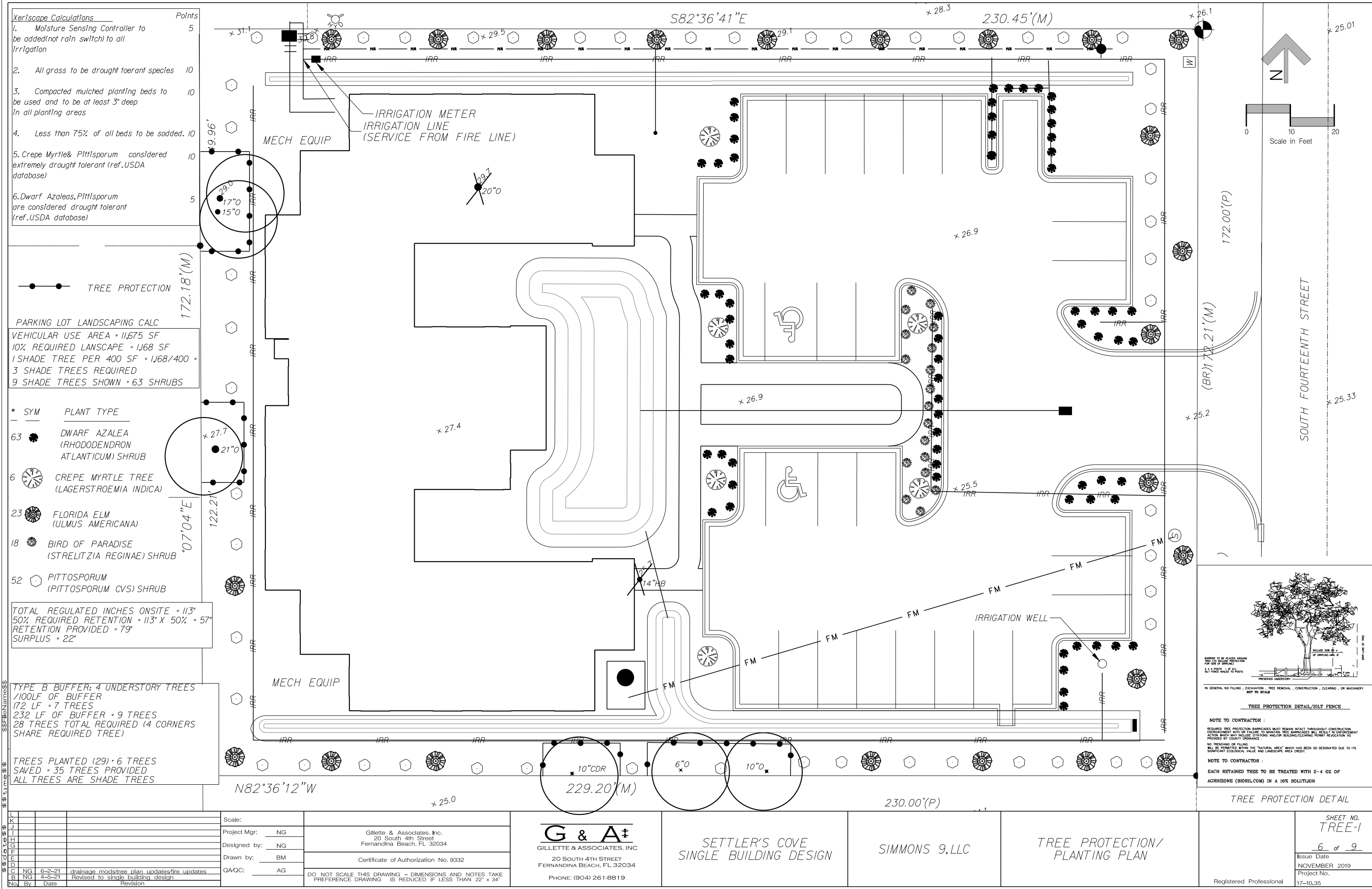
GEOMETRY PLAN

SHEET NO.
GE-1
4 of 9

Issue Date
NOVEMBER 2019

Project No.
17-10.35

Registered Professional



- Xeriscape Calculations**
- | | Points |
|--|--------|
| 1. Moisture Sensing Controller to be added(not rain switch) to all Irrigation | 5 |
| 2. All grass to be drought toerant species | 10 |
| 3. Compacted mulched planting beds to be used and to be at least 3" deep in all planting areas | 10 |
| 4. Less than 75% of all beds to be sodded. | 10 |
| 5. Crepe Myrtle& Pittisporum considered extremely drought tolerant (ref.USDA database) | 10 |
| 6.Dwarf Azaleas,Pittisporum are considered drought tolerant (ref.USDA database) | 5 |

PARKING LOT LANDSCAPING CALC
VEHICULAR USE AREA = 11,675 SF
10% REQUIRED LANDSCAPE = 1,168 SF
1 SHADE TREE PER 400 SF = 1,168/400 = 3 SHADE TREES REQUIRED
9 SHADE TREES SHOWN + 63 SHRUBS

#	SYM	PLANT TYPE
63		DWARF AZALEA (RHODODENDRON ATLANTICUM) SHRUB
6		CREPE MYRTLE TREE (LAGERSTROEMIA INDICA)
23		FLORIDA ELM (ULMUS AMERICANA)
18		BIRD OF PARADISE (STRELITZIA REGINAE) SHRUB
52		PITTOSPORUM (PITTOSPORUM CVS) SHRUB

TOTAL REGULATED INCHES ONSITE = 113"
50% REQUIRED RETENTION = 113" X 50% = 57"
RETENTION PROVIDED = 79"
SURPLUS = 22"

TYPE B BUFFER: 4 UNDERSTORY TREES /100LF OF BUFFER
172 LF = 7 TREES
232 LF OF BUFFER = 9 TREES
28 TREES TOTAL REQUIRED (4 CORNERS SHARE REQUIRED TREE)

TREES PLANTED (29) + 6 TREES SAVED = 35 TREES PROVIDED
ALL TREES ARE SHADE TREES

L			
K			
J			
I			
H			
G			
F			
E			
D			
C	NG	6-2-21	drainage modstree plan updates/fire updates
B	NG	4-5-21	Revised to single building design
No.	By	Date	Revision

Scale:	
Project Mgr:	NG
Designed by:	NG
Drawn by:	BM
QAQC:	AG

Gillette & Associates, Inc. 20 South 4th Street Fernandina Beach, FL 32034
Certificate of Authorization No. 9332
DO NOT SCALE THIS DRAWING - DIMENSIONS AND NOTES TAKE PREFERENCE. DRAWING IS REDUCED IF LESS THAN 22" x 34"

GILLETTE & ASSOCIATES, INC.
20 SOUTH 4TH STREET
FERNANDINA BEACH, FL 32034
PHONE: (904) 261-8819

SETTLER'S COVE
SINGLE BUILDING DESIGN

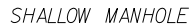
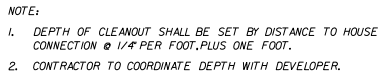
SIMMONS 9, LLC

TREE PROTECTION/
PLANTING PLAN

SHEET NO.
TREE-1
6 of 9
Issue Date
NOVEMBER 2019
Project No.
17-10.35

Registered Professional

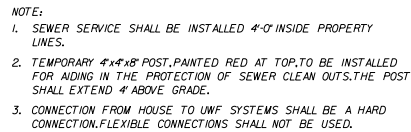
SHEET NO. DT-1 <u>7</u> of <u>9</u>	
Issue Date NOVEMBER 2019	
Project No. 17-10.35	



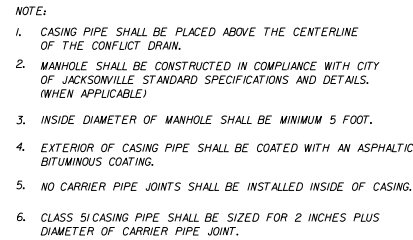
CLASS "B"

1. ALL MANHOLES SHALL BE PRECAST CONCRETE AND CONFORM TO ASTM C-478 STANDARDS. MANHOLE COVERS AND RISERS SHALL BE CONSTRUCTED OF 400 PSI, TYPE II CEMENT WITH RIVER ROCK OR GRANITE AGGREGATE.
2. ALL PIPES SHALL BE CONNECTED TO THE MANHOLE USING A 10 CK JOINT FLEXIBLE MANHOLE SLEEVE (ASTM C-923) OR APPROVED EQUAL.
3. THE EXTERIOR AND INTERIOR OF THE MANHOLE SHALL BE COATED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS WITH FABRICITE AS MANUFACTURED BY BRIGGS BITUMINOUS COMPOSITION COMPANY.
4. AN INSIDE PVC DROP MANHOLE (TYPE "B") SHALL BE REQUIRED FOR MANHOLES WHICH HAVE A DISTANCE OF 18 INCHES OR GREATER BETWEEN INFLUENT PIPE INVERT AND EFFLUENT PIPE INVERT. ALL OTHER DROPS SHALL HAVE A SLIDE CONSTRUCTED TO DIRECT THE FLOW INTO THE INVERT CHANNEL.
5. SEWER SERVICES SHALL BE CAST IRON IF 2 1/2 FEET OF GROUND COVER CAN NOT BE MAINTAINED OVER THE SERVICE LINE.
6. ALL DUCTILE IRON SEWER PIPE, WHERE SPECIFIED, SHALL BE CLASS 51 AND COMPLY WITH ANSI/AWWA C150/A242 AND ANSI/AWWA C151/A251. DUCTILE IRON PIPE SHALL BE PROVIDED WITH A FACTORY APPLIED POLYETHYLENE LINING IN ACCORDANCE WITH ANSI/A2130 A2148.
7. THE MAXIMUM NUMBER OF DIPS IS ONE. HUNCH DIP PER 135 LF OF PIPE, NO MORE THAN ONE DIP PER 135 LF OF PIPE. A DIP IS DEFINED AS A CHANGE IN ELEVATION OF 0.5' OR GREATER.

CLEANOUT



TYPICAL SEWER SERVICE



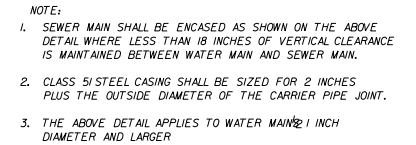
TYPE "C" MANHOLE



BEDDING DETAILS



GRAVITY SEWER STANDARD SPECIFICATIONS



ENCASEMENT AT WATER LINE



DRAIN CONFLICT

L			
K			
J			
I			
H			
G			
F			
E			
D			
C			
B	NG	6-2-21	drainage modstree plan updates/fire updates
A	NG	4-8-21	Revised to single building design
No.	Bv	Date	Revision

Scale:	
Project Mgr:	NG
Designed by:	NG
Drawn by:	BM
QA/QC:	AG

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G & A[†]
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PHONE: (904) 261-8819

SETTLER'S COVE
SINGLE BUILDING DESIGN

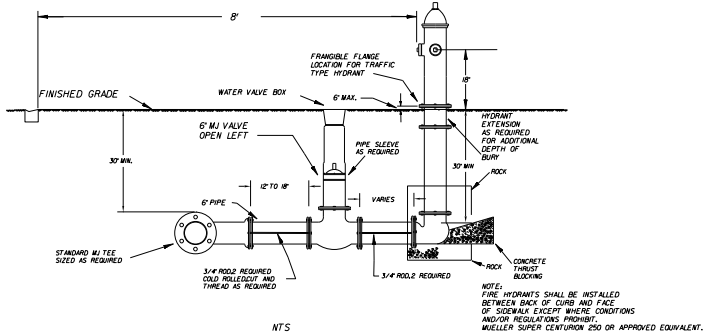
SIMMONS 9, LLC

SEWER DETAILS

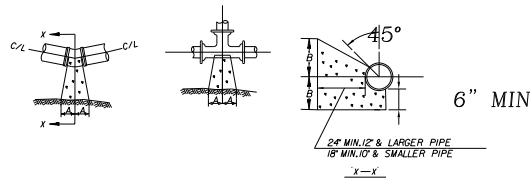
MANHOLE COVER

Registered Professional

.35



HYDRANT INSTALLATION WITH TIE RODS



SIZE	1/4 BENDS	CU FT CONC.	1/2 BENDS	CU FT CONC.	3/4 BENDS	CU FT CONC.	TEE	CU FT CONC.
A	B		A	B		A	B	
6"	16"	10"	3"	9"	10"	3"	6"	10"
8"	24"	14"	4"	12"	14"	4"	8"	14"
10"	36"	21"	6"	18"	21"	6"	10"	21"
12"	48"	28"	8"	24"	28"	8"	12"	28"
14"	60"	35"	10"	30"	35"	10"	14"	35"
16"	72"	42"	12"	36"	42"	12"	16"	42"
18"	84"	49"	14"	42"	49"	14"	18"	49"
20"	96"	56"	16"	48"	56"	16"	20"	56"
22"	108"	63"	18"	54"	63"	18"	22"	63"
24"	120"	70"	20"	60"	70"	20"	24"	70"
26"	132"	77"	22"	66"	77"	22"	26"	77"
28"	144"	84"	24"	72"	84"	24"	28"	84"
30"	156"	91"	26"	78"	91"	26"	30"	91"
32"	168"	98"	28"	84"	98"	28"	32"	98"
34"	180"	105"	30"	90"	105"	30"	34"	105"
36"	192"	112"	32"	96"	112"	32"	36"	112"
38"	204"	119"	34"	102"	119"	34"	38"	119"
40"	216"	126"	36"	108"	126"	36"	40"	126"
42"	228"	133"	38"	114"	133"	38"	42"	133"
44"	240"	140"	40"	120"	140"	40"	44"	140"
46"	252"	147"	42"	126"	147"	42"	46"	147"
48"	264"	154"	44"	132"	154"	44"	48"	154"
50"	276"	161"	46"	138"	161"	46"	50"	161"
52"	288"	168"	48"	144"	168"	48"	52"	168"
54"	300"	175"	50"	150"	175"	50"	54"	175"
56"	312"	182"	52"	156"	182"	52"	56"	182"
58"	324"	189"	54"	162"	189"	54"	58"	189"
60"	336"	196"	56"	168"	196"	56"	60"	196"
62"	348"	203"	58"	174"	203"	58"	62"	203"
64"	360"	210"	60"	180"	210"	60"	64"	210"
66"	372"	217"	62"	186"	217"	62"	66"	217"
68"	384"	224"	64"	192"	224"	64"	68"	224"
70"	396"	231"	66"	198"	231"	66"	70"	231"
72"	408"	238"	68"	204"	238"	68"	72"	238"
74"	420"	245"	70"	210"	245"	70"	74"	245"
76"	432"	252"	72"	216"	252"	72"	76"	252"
78"	444"	259"	74"	222"	259"	74"	78"	259"
80"	456"	266"	76"	228"	266"	76"	80"	266"
82"	468"	273"	78"	234"	273"	78"	82"	273"
84"	480"	280"	80"	240"	280"	80"	84"	280



Civil & Environmental Engineering • Mechanical & Structural Engineering • Construction Management

SITE DRAINAGE EVALUATION

Revision #1

**SETTLER'S COVE
233 SOUTH 14TH STREET
FERNANDINA BEACH, FLORIDA**

BY

**Gillette & Associates, Inc.
20 South 4th Street
Fernandina Beach, FL**

December 3, 2020
Revised: June 2, 2021

REVISION DESCRIPTION

The 10- year storm was analyzed per a request by the City of Fernandina Beach. As a result, a 6-inch pipe was added to outfall the primary system to an outfall swale on the southern portion of the site. A second 12-inch pipe is also proposed as an emergency outfall from this centralized retention facility. A final 3rd outfall will be through an inlet near South 14th Street.

The updated MODRET analysis is attached as part of this addendum.

The 10 year predevelopment discharge is 0.266 cfs.

The 10 year post development discharge is 457.34 ft³ of volume of 30 minutes which equates to 0.254 cfs.

SUPPORTING INFORMATION

**PREDEVELOPMENT
MODRET ANALYSIS**

**POST DEVELOPMENT
MODRET ANALYSIS**

MODRET

HYDROGRAPH DATA INPUT - SCS UNIT METHOD

Project Name : 10 year - single building PREDEVELOPMENT
Rainfall Distribution : SCS Type II (24 hrs)

Contributing Basin Area

0.46 ac.

SCS Curve Number

39.00

Time of Concentration

10.00 min.

Rainfall Depth

7.40 in.

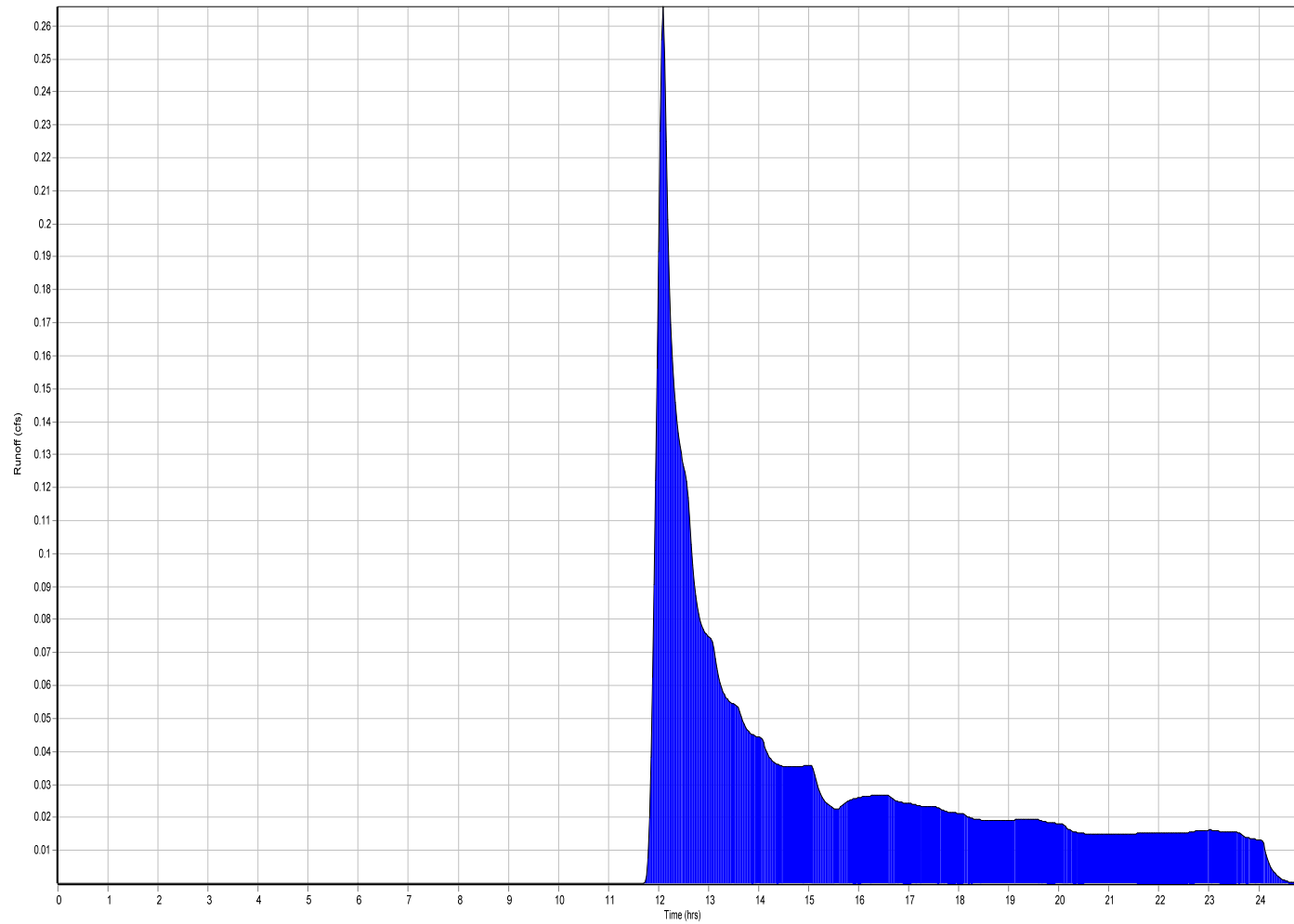
Shape Factor

323

Percent DCIA

0.00 %

HYDROGRAPH : 10 year - single building PREDEVELOPMENT



Qpeak: 0.2658 cfs Time of peak: 12.1 hrs Vtotal: 1,534 ft³

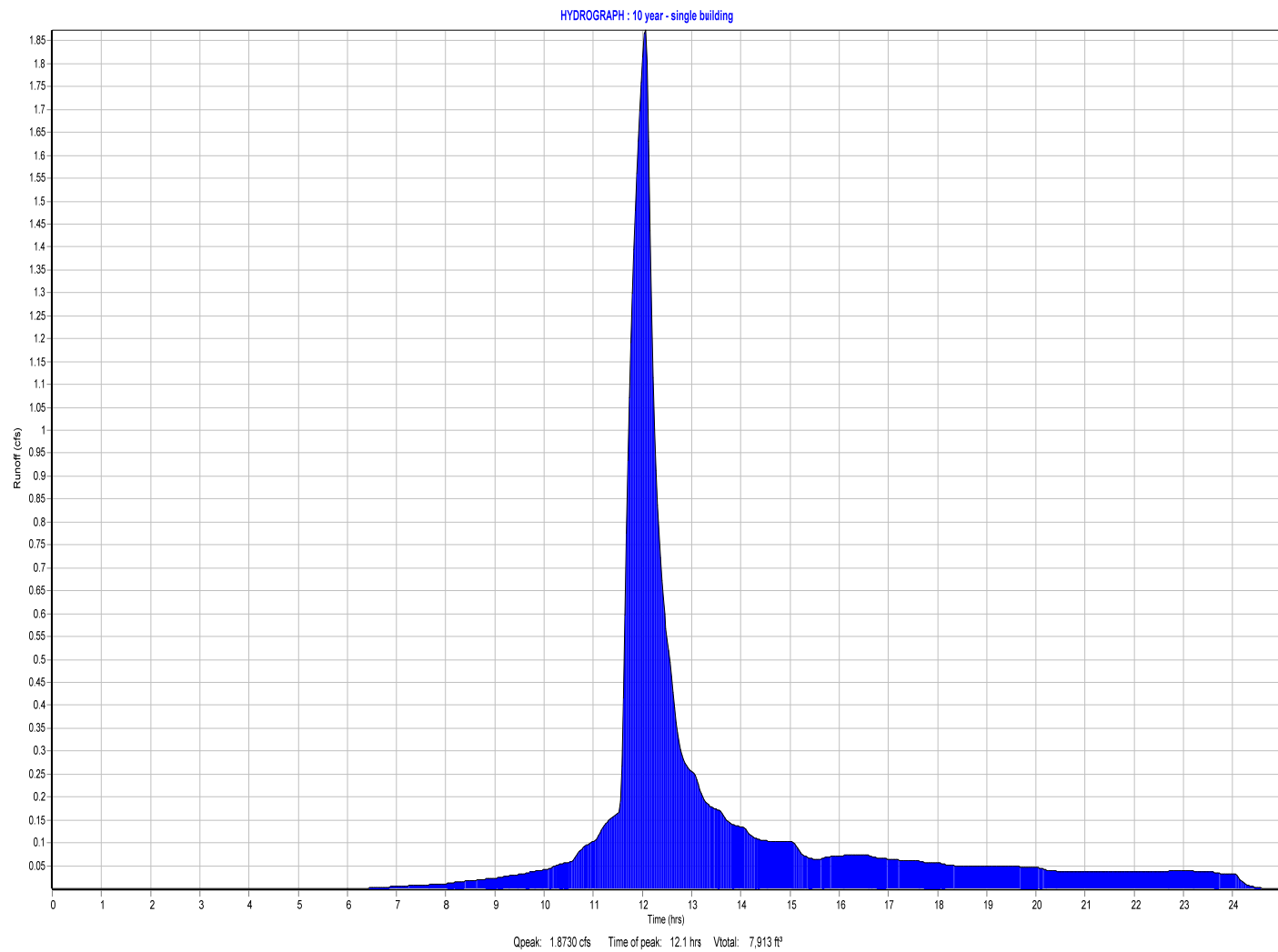
**POST DEVELOPMENT
MODRET ANALYSIS**

MODRET

HYDROGRAPH DATA INPUT - SCS UNIT METHOD

Project Name : 10 year - single building
Rainfall Distribution : SCS Type II (24 hrs)

Contributing Basin Area	0.46 ac.
SCS Curve Number	77.00
Time of Concentration	10.00 min.
Rainfall Depth	7.40 in.
Shape Factor	323
Percent DCIA	0.00 %



MODRET

SUMMARY OF UNSATURATED & SATURATED INPUT PARAMETERS

PROJECT NAME : 14th street - southern pond
HYDROGRAPH RUNOFF DATA USED
UNSATURATED ANALYSIS INCLUDED

Pond Bottom Area	415.00 ft ²
Pond Volume between Bottom & DHWL	3,397.00 ft ³
Pond Length to Width Ratio (L/W)	2.70
Elevation of Effective Aquifer Base	12.00 ft
Elevation of Seasonal High Groundwater Table	19.00 ft
Elevation of Starting Water Level	24.00 ft
Elevation of Pond Bottom	24.00 ft
Is there overflow ?	Y
Avg. Effective Storage Coefficient of Soil for Unsaturated Analysis	0.23
Unsaturated Vertical Hydraulic Conductivity	26.60 ft/d
Factor of Safety	2.00
Saturated Horizontal Hydraulic Conductivity	10.15 ft/d
Avg. Effective Storage Coefficient of Soil for Saturated Analysis	0.29
Avg. Effective Storage Coefficient of Pond/Exfiltration Trench	1.00
Time Increment During Storm Event	0.50 hrs
Time Increment After Storm Event	12.00 hrs
Total Number of Increments After Storm Event	6.00

Runoff Hydrograph File Name: scs1.SCS

Time of Peak Runoff: 12.06 hrs

Rate of Peak Runoff: 1.87 cfs

Hydraulic Control Features:

Groundwater Control Features - Y/N

Distance to Edge of Pond

Elevation of Water Level

Impervious Barrier - Y/N

Elevation of Barrier Bottom

Top	Bottom	Left	Right
N	N	N	N
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00

N	N	N	N
0.00	0.00	0.00	0.00

MODRET

ELEVATION VS OVERFLOW RELATIONSHIP

PROJECT NAME : 14th street - southern pond
ORIFICE STRUCTURE TYPE

Centerline Elevation of Orifice	26.60 ft
Area of Orifice	28.26 in
Coefficient of Discharge	4.80
Orifice Flow Exponent	0.50
Number of Identical Orifices	1.00
Design High Water Level Elevation	27.00 ft

MODRET

SUMMARY OF RESULTS

PROJECT NAME : 14th street - southern pond

CUMULATIVE TIME (hrs)	WATER ELEVATION (feet)	INSTANTANEOUS INFILTRATION RATE (cfs)	AVERAGE INFILTRATION RATE (cfs)	CUMULATIVE OVERFLOW (ft³)
00.00 - 6.06	19.000	0.000 *		
			0.00000	
6.06	19.000	-0.08989		
			0.03640	
11.61	24.050	0.16270		0.00
			0.17431	
12.12	26.035	0.17431		0.00
			0.17431	
12.63	26.642	0.17431		457.34
			0.17431	
13.14	26.546	0.16273		779.01
			0.15116	
13.65	26.448	0.14138		948.76
			0.13160	
14.16	26.393	0.12655		1,023.40
			0.12149	
14.67	26.358	0.11758		1,037.50
			0.11367	
15.18	26.336	0.10972		1,037.50
			0.10577	
15.69	26.275	0.10274		1,037.50
			0.09971	
16.20	26.228	0.09725		1,037.50
			0.09480	
16.71	26.192	0.09255		1,037.50
			0.09030	
17.22	26.151	0.08830		1,037.50
			0.08629	
17.73	26.109	0.08443		1,037.50

MODRET

SUMMARY OF RESULTS

PROJECT NAME : 14th street - southern pond

CUMULATIVE TIME (hrs)	WATER ELEVATION (feet)	INSTANTANEOUS INFILTRATION RATE (cfs)	AVERAGE INFILTRATION RATE (cfs)	CUMULATIVE OVERFLOW (ft³)
			0.08257	
18.24	26.064	0.08082		1,037.50
			0.07907	
18.75	26.017	0.07756		1,037.50
			0.07606	
19.26	25.973	0.07473		1,037.50
			0.07340	
19.77	25.932	0.07211		1,037.50
			0.07082	
20.28	25.889	0.06951		1,037.50
			0.06819	
20.79	25.839	0.06703		1,037.50
			0.06587	
21.30	25.792	0.06485		1,037.50
			0.06383	
21.81	25.749	0.06292		1,037.50
			0.06200	
22.32	25.708	0.06120		1,037.50
			0.06041	
22.83	25.671	0.05970		1,037.50
			0.05899	
23.34	25.638	0.05826		1,037.50
			0.05754	
23.85	25.602	0.05650		1,037.50
			0.05546	
24.36	25.548	0.05392		1,037.50
			0.05239	
24.87	25.466	0.05149		1,037.50

SUMMARY OF RESULTS

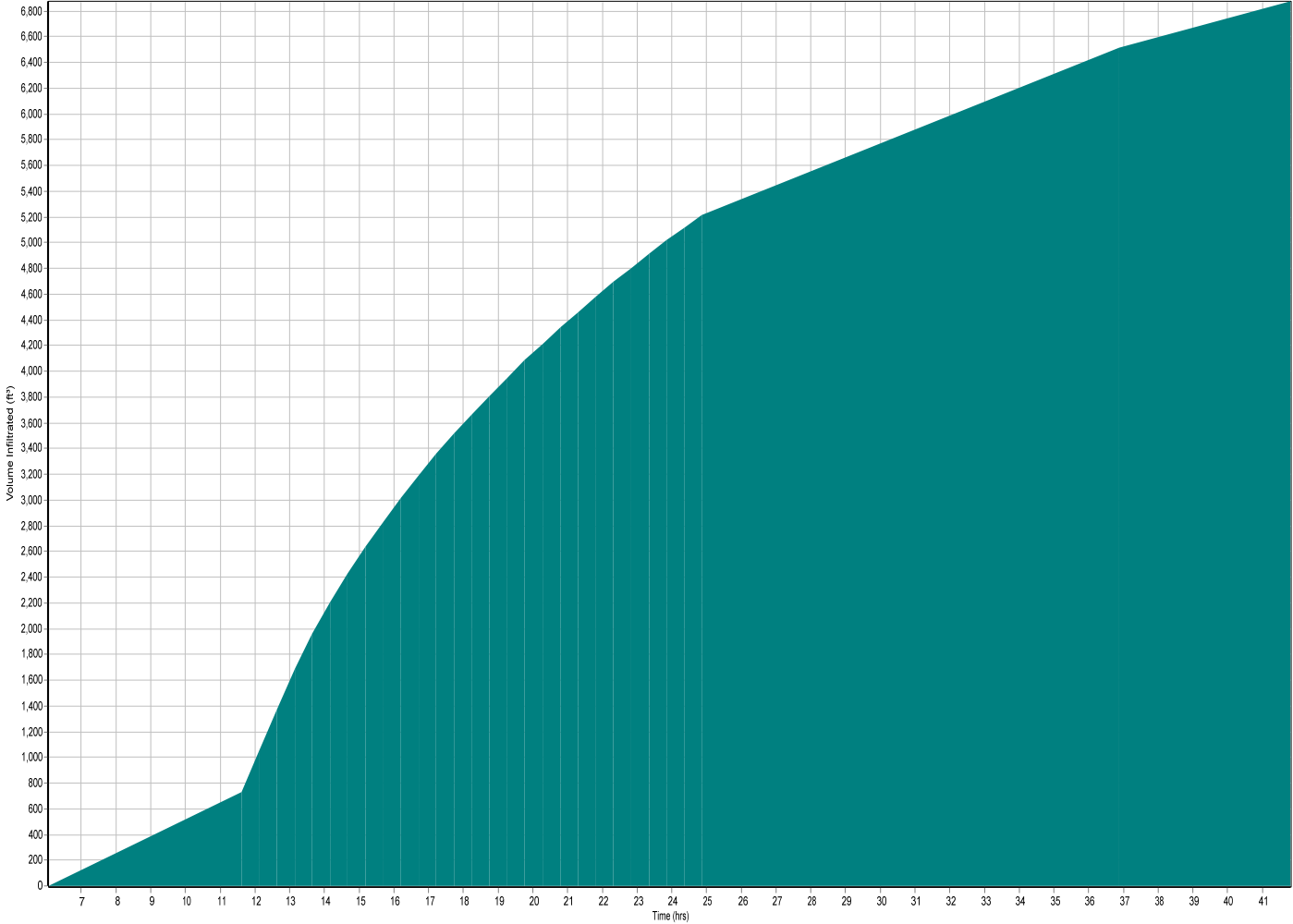
CUMULATIVE TIME (hrs)	WATER ELEVATION (feet)	INSTANTANEOUS INFILTRATION RATE (cfs)	AVERAGE INFILTRATION RATE (cfs)	CUMULATIVE OVERFLOW (ft³)
			0.03013	
36.87	24.317	0.02515		1,037.50
			0.02017	
41.81	24.000	0.01742		1,037.50
			0.01467	
60.87	22.987	0.01297		1,037.50
			0.01126	
72.87	22.558	0.01011		1,037.50
			0.00896	
84.87	22.216	0.00815		1,037.50
			0.00733	
96.87	21.936			1,037.50

Recovery @ 41.806 hours

Maximum Infiltration Rate: 13.300 ft/day

Analysis Date: 6/2/2021

INFILTRATION : 14TH STREET - SOUTHERN POND



Total Volume Infiltrated = 6,675 ft³



Group Residential Post Developed - center pond

Basin Calculations

Basin 1

Composite Cn

Total Drainage Area = 20144 ft² 0.462
 Impervious Area = 11001 ft² 55% Impervious
 Pond Area = 1875 ft²

 Impervious Cn = 98.0
 Pond Cn = 100.0
 Pervious Cn = 39.0

 Composite Cn = 76.9

Time of Concentration, Tc

Minimum Time of Concentration = 10 min.
 Length of Overland Flow @ 1ft/sec. = 136 ft.
 Length of Pipe Flow @ 2.5 ft/sec. = 0 ft.

 Tc = 13 min.

Pond Information

El. (ft.)		Area ft ²	Volume ft ³
27.00	TOB	1875	3397
26.25	weir	1550	2112
25.00		832	624
24.00	Bottom	415	0

Treatment Volume Required, TVR

(on-line retention)

TVR = 1" * (1'/12")*Total Drainage Area = 1679 ft³
 or

TVR = 1.25" * (1'/12")*Total Impervious Drainage Area + 0.5" * (1'/12")*Total Drainage Area = 1985 ft³

TVR = 1985 ft³

Treatment Volume Provided, TVP

TVP = Vol @ Weir = 2112 ft³ OK