



MEMORANDUM

To: Mayor and Members of the City Council

From: Reginald Goodson, City Manager
Kellen Long, Development Services Director

Date: May 23, 2025

Subj: Consideration – Call for a Public Hearing – SUB 01-25 – Tooley Harbor Phase 3 Submitted by Timmons Group for 55 Single Family Lots on a 35-Acre Tract

BACKGROUND:

What began as a development originally named Rivers Glen, and later became Mariners' Landing is now known as Tooley Harbor. The site was annexed into the City on September 27, 2005, and zoned R-15. The Sketch Plan for what was at that time River Glen Phase 1 (now Tooley Harbor Phase 1), was approved in December 2004. In August 2006, the Sketch Plan for River Glen Phase 2 was approved. That Sketch Plan would eventually become Tooley Harbor Phase 2. Nearly two decades later in November 2024, the Sketch Plan for Tooley Harbor Phase 3 was approved. The preliminary plat was reviewed and conditionally approved at the same meeting in November 2024.

In 2005, a Traffic Impact Analysis (TIA) was prepared for the proposed developments along River Road. This project is included in that analysis. The recommended road improvements consisted of constructing a northbound right-turn lane with at least 50' of storage with additional taper at Grandview Drive at River Road and constructing a westbound left-turn lane with at least 50' of storage at the entrance to Sailor's Way from River Road. These road improvements have since been completed.

ANALYSIS:

For Phase 3, the owners are seeking Preliminary Plat approval for 55 single-family lots through the major subdivision process. The total acreage of this phase of the development is approximately 35 acres. This development will have a gross density of 1.6 units per acre.

The property is zoned R-15 with lot sizes ranging from 15,300 square feet to approximately 24,000 square feet with a typical lot size of approximately 16,500 square feet. The UDO requires that approximately 0.6 acres of open space be dedicated for Parks and Recreation. The applicant is proposing to dedicate

approximately 1.3 acres of open space located adjacent to the detention ponds. Since the open space was not considered usable for recreation purposes due to the detention ponds, the Parks and Recreation Department has requested fees in lieu of dedication.

The subdivision has two street connections to Sailor's Way. At the northern portion by Tooley Harbor Phase 1 there is a street connection that leads to River Road. At the southwestern portion of the site by Tooley Harbor Phase 2 there is a street connection that connects to Pleasant View Drive, which leads out to River Road.

This project was heard at the November 2024 Technical Review Committee meeting. Departmental comments have been included in the staff analysis attached to this memo.

The Planning Commission considered the application during their regularly scheduled meeting on May 6, 2025. The only public comments were from one adjacent property owner who had direct questions about the site plan, which the project engineer was able to explain. There were no objections from the adjacent property owner or anyone else in the audience. The Planning Commission unanimously recommended approval with conditions presented by staff.

Prior to final plat approval:

1. The state permit authorizing the construction of the water improvements shall be secured;
2. Fire hydrants are required to be within 400 feet of each lot;
3. Street name signs shall be similar to those used by the City, with an extruded metal blade type with green background and reflective white lettering;
4. Supplemental HOA declarations shall be submitted for review and shall provide perpetual maintenance of the proposed stormwater facilities, detention ponds and outfall drainage pipes.

STAFF RECOMMENDATION:

By motion, call for a Public Hearing to be held on Monday, June 9, 2025 at the 7:00 p.m. City Council Regular Session in Council Chambers, located on the second floor of the Gardner Municipal Building at 306 East Colonial Avenue to gather citizen input regarding preliminary plat approval for Tooley Harbor Phase 3.



CITY OF ELIZABETH CITY
DEVELOPMENT SERVICES DEPARTMENT

STAFF ANALYSIS

MEETING DATE:

May 27, 2025

ITEM:

Tooley Harbor Phase 3, Preliminary Plat for 55 Residential Lots - SUB 01-25

LOCATION/DESCRIPTION:

The 35-acre site is located on the north side of the River Road and directly west of the termini of Pleasant Drive and Grand View Drive.

TAX ID:

Tax Map: P123

Parcels: 42A and 42B

ZONING DISTRICT:

R-15, Residential

OWNERS/DEVELOPER:

3 N 1, Inc.
301 South Road Street
Elizabeth City, NC 27907
(252) 335-4520

APPLICANT/AGENT:

Timmons Group
1805 West City Drive Suite E
Elizabeth City, NC 27909
(252) 621-5030

LAND USE/ZONING OF SURROUNDING PROPERTY:

NORTH: Single Family Lots (Riverview Estate) - Zoned R-15
SOUTH: Single Family (Tooley Harbor) – Zoned R-15
EAST: Cropland – Zoned R-15
WEST: River Road Middle School & Single Family (Tooley Harbor) – Zoned O&I and R-15

NARRATIVE OF REQUEST:

The owners are seeking Preliminary Plat approval for 55 single family lots, Phase 3, through the major subdivision process. The total acreage of this phase of the development is approximately 35 acres. This development will have a gross density of 1.6 units per acre.

This property is zoned R-15 with lot sizes ranging from 15,300 square feet to approximately 24,000 square feet with a typical lot size of approximately 16,500 square feet. The UDO requires that approximately 0.6 acres of open space be dedicated for parks and recreation. The applicant is proposing to dedicate approximately 1.3 acres of

open space located adjacent to the detention ponds. Since the open space was not considered usable for recreation purposes due to the detention ponds, the Parks & Recreation Department requests fees in lieu of dedication.

The subdivision has two street connections to Sailor's Way. At the northern portion by Tooley Harbor Phase 1, there is a street connection that leads to River Road. At the southwestern portion of the site by Tooley Harbor Phase 2 there is a street connection that connects to Pleasant View Drive which leads out to River Road.



BACKGROUND:

Tooley Harbor was originally named River Glen which became Mariners Landing then finally Tooley Harbor. The site was annexed to the City on September 27, 2005 and was zoned R-15. The Sketch Plan for River Glen Phase 1, now Tooley Harbor Phase 1, was approved in December 2004. In August 2006 the Sketch Plan for River Glen Phase 2 was approved. This sketch plan eventually became Tooley Harbor Phase 2. The Sketch Plan for Tooley Harbor Phase 3 was approved in November 2024, at the same meeting the preliminary plat for Phase 3 was reviewed and conditionally approved in November 2024.

The current plans have been revised in response to the conditions required for the TRC approval. Copies of the Technical Review Committee minutes during the Preliminary Plat deliberations are attached for your information.

Back in 2005 a Traffic Impact analysis (TIA) was prepared for the proposed developments along River Road. This project is included in that analysis. The recommended road improvements consisted of constructing a northbound right-turn lane with at least 50' of storage with additional taper at Grandview Drive at River Road

and constructing a westbound left-turn lane with at least 50' of storage at the entrance to Sailor's Way from River Road. These road improvements have since been completed.

TECHNICAL CONSIDERATIONS:

This project was heard at the November 2024 Technical Review Committee meeting.

TRANSPORTATION:

Access to the site is via River Road which runs along the western border of the site. The Pasquotank County-Elizabeth City Comprehensive Transportation Plan (CTP) designates River Road as a minor thoroughfare designed to collect traffic from local access streets and carry it to major thoroughfares

STREETS:

All streets will be built to NCDOT Design and Construction Standards. The developer plans to dedicate the street within this development to the City of Elizabeth City. Interconnectivity from both ends of the site have been provided to River Road via Sailor's Way, Grand View Drive, and Pleasant Drive.

DRAINAGE:

The NC Dept. of Environment and Natural Resources approved an Erosion and Sedimentation Control Plan for the project which was issued in April 2025. During the construction phase of the project, the adjacent property owners; City of Elizabeth City, 3 N 1, Inc., and Jon Crouse, have granted permission to perform land disturbing activities on their property as is necessary to install drainage improvements. The permission will terminate once the construction has been completed (see attached letters).

The initial stormwater permit was issued in February 2007 and was renewed in March 2021 and is effective until March 2029. The majority of the site's existing farm ditches will be filled and drainage will be accommodated via swales, stormwater piping, and two detention ponds located within the development. The stormwater overflow is handled via two 66" x 43" storm drains that follow the northward portion of Asbury Lane crossing through the Crouse estates and discharges into a swale which drains into the Pasquotank River. The detention ponds were designed for a 25-year storm instead of the UDO required 10-year storm.

Both ponds will have direct access from Yawl Street for maintenance. ***To ensure that both ponds have adequate access for maintenance a 20' drainage and access easement will be dedicated along the perimeter of the pond and will encroach into the rear building setback of all lots with frontage on the ponds. Lot 201, 202, 254, and 246 will have the 20' drainage and access easement located along the side property line abutting the pond area.*** The HOA will be responsible for the maintenance of all drainage facilities including the ponds and outfall.

UTILITIES:

Public water, sewer and electric services will be provided by the City of Elizabeth City. The Fire Department has approved the road width and fire hydrant locations. A pump station has been constructed that serves the complete Tooley Harbor subdivision. The sewer permit for the subdivision was issued in 2007. The pump station has already been accepted by the City. The water permit is still outstanding. ***The applicant is to secure state permit to construct the waterline improvements prior to final plat approval.***

OPEN SPACE:

The UDO requires that 0.6 acres of open space be dedicated. The Parks & Recreation Department is requesting that a fee be paid to the City in lieu of dedicating the required open space. The dedicated open space is located around the detention ponds and includes the outfall ditch. These areas are not considered viable areas for recreational uses. It is at the discretion of City Council (UDO, Section 10-7.16 D) as to whether the fee in lieu is acceptable, or if open space will be required.

Rec fees: \$343.900 assessed value/19.65 assessed acres = \$17,501/ac x 0.6 acres = \$10,500 or \$190.92/lot

FLOOD ZONES:

Site is located outside of the 100-year flood zone

SCHOOLS:

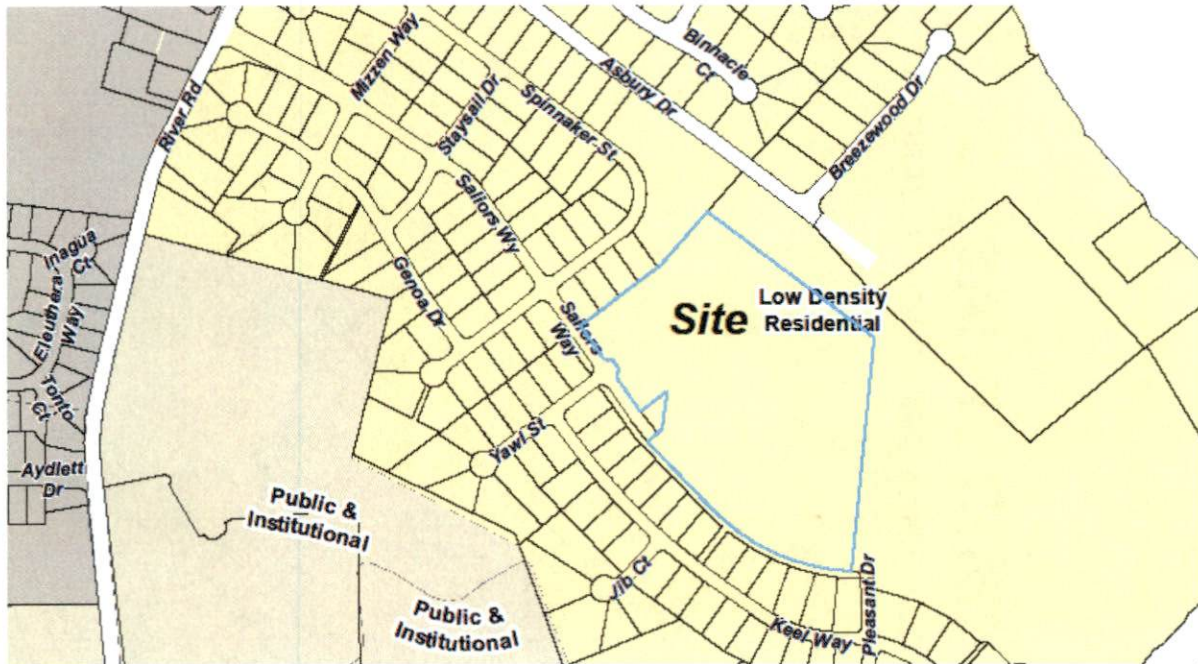
Amanda Hill with the School Transportation Division was able to provide some information about the impact of the proposed developments on the school services. Weeksville Elementary School would service this development. The school is nearing its capacity of 338 students with a current enrollment of 300 students. Pasquotank Elementary School has closed and the students were shifted around to four different schools that were only half full. With the addition of the additional students, each of the schools are now very close to capacity.

Using a student count of 0.3 students per household, the proposed 55 units shown on the Sketch Plan and Preliminary Plat will generate approximately 17 students. This will bring the total enrollment up to 317 students. The middle and high schools have the capacity to handle the students generated by the 55 homes. Currently the School system is understaffed for school bus drivers for all of the school routes. At this time there is no available transportation room to transport the students from this proposed development.

Dr. Keith Parker the School Superintendent said that while Weeksville Elementary is near capacity, ECPSS is supportive of any growth and expansion in the City that could lead to an increase in student enrollment at their schools. The school system will work with the City to accommodate any growth that might result from new development.

LAND USE PLAN:

The Joint Elizabeth City and Pasquotank County Draft Land Use Plan designates the subject property as Low Density Residential (LDR). The LDR classification is intended to delineate lands where the predominant land use is low density detached residences. The City's goals and policies support the continued use of land in LDR areas for low density dwellings. The proposed density for the 55-lot subdivision is approximately 1.6 units per gross acre and therefore the development is consistent with the Land Use Plan.



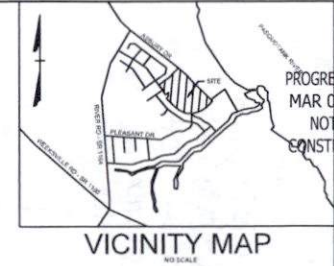
RECOMMENDATION:

Staff recommends **approval** with the following conditions:

1. Prior to final plat approval, the state permit authorizing the construction of the water improvements shall be secured;
2. Fire hydrants are required to be within 400 feet of each lot;
3. Street name signs shall be similar to City used signs with an extruded metal blade type with green background and reflective white lettering;
4. Prior to final plat approval, supplemental HOA declarations shall be submitted for review and shall provide perpetual maintenance of the proposed stormwater facilities, detention ponds and outfall drainage pipes.

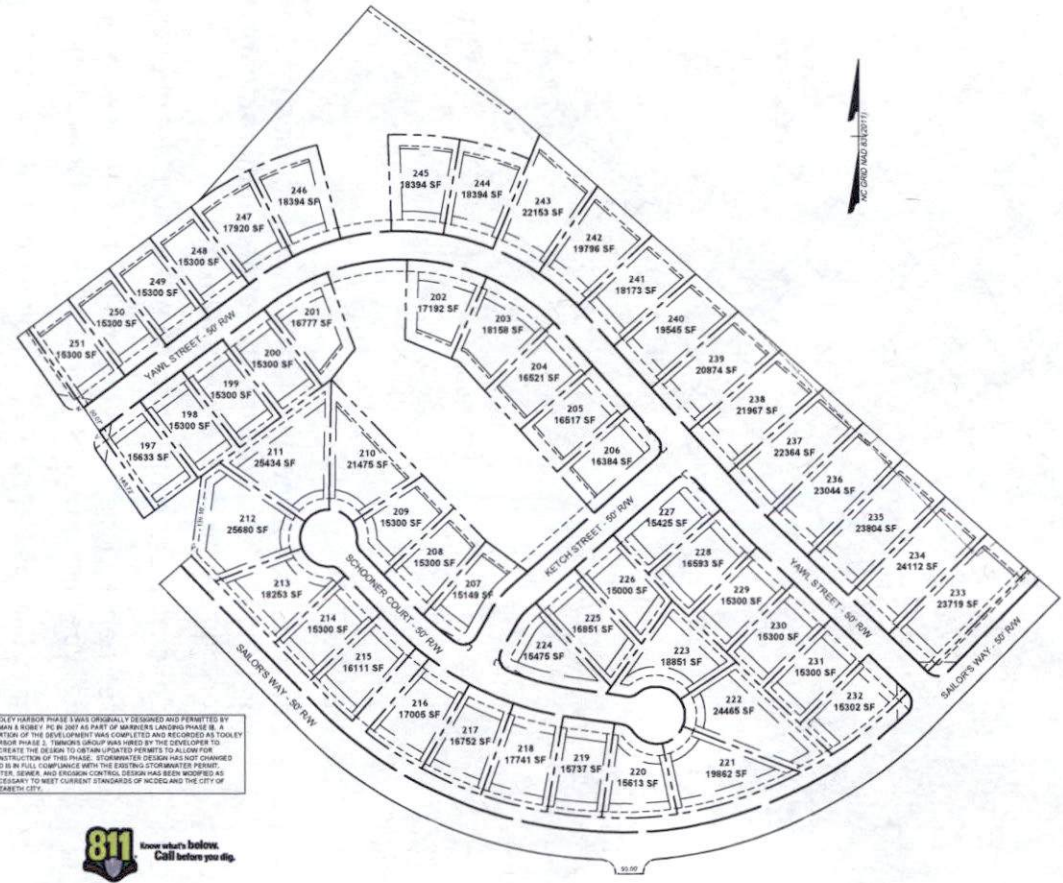
COVER SHEET OF PRELIMINARY PLAT FOR

TOOLEY HARBOR - PHASE 3 CITY OF ELIZABETH CITY, PASQUOTANK COUNTY, NORTH CAROLINA



1. OWNER/DEVELOPER
281 INC.
PO BOX 3221
ELIZABETH CITY NC 27808
PHILIP WARRINGTON PRESIDENT
755-546420
2. SITE INFORMATION
PW RECORD# 18 & A PORTION OF RECORD# 19
TR 172-242A & A PORTION OF TR 172-242B
S. 8, 74 PLS. 13 (RECENTLY RECORDED)
CITY OF ELIZABETH
TOTAL TRACT 24.23 AC
AREA IN LOTS 22.79 AC
TOTAL NUMBER OF LOTS 56 LOTS
MINIMUM LOT SIZE 15,000 SF
3. IMPROVEMENTS AREA
LOTS 487 500 SF IN 100 SF PER LOT
ROADWAY 189 264 SF
SIDEWALK 43 242 SF
TOTAL 679 806 SF (45,476)
4. TOTAL AREA DEDICATED TO RIGHT-OF-WAY 5.82 AC
5. LINEAR FRONTAGE OF PROPOSED STREETS TO BE PUBLICLY DEDICATED
SALOORS WAY 1058.78 LF
YAWL STREET 1006.51 LF
KETCH STREET 541.71 LF
SCHOONER COURT 876.81 LF
6. TYPICAL BUILDING SETBACKS
FRONT YARD 30'
REAR YARD 20'
SIDE YARD 10'
SIDE YARD (CORNER) 30'
7. A 20' ELIZABETH CITY UTILITY EASEMENT FOR THE INSTALLATION OF ELECTRIC, TELEPHONE, CABLE AND GAS IS LOCATED ALONG ALL STREET FRONTAGES AND ALL STRENGTHENED AREAS ON THE PLAT
8. DRAINAGE EASEMENTS ARE AS FOLLOWS
IF ALONG ALL INTERNAL PROPERTY LINES
IF ALONG ALL RIGHT-OF-WAY'S EXTERNAL PROPERTY LINES
IF ALONG ALL SETBACK FRONTS
IF ALONG PROPERTY LINES ALONG MAJOR DRAINAGE ROUTES
AS SHOWN
9. SITE IS LOCATED IN FLOOD ZONE "X" AS SHOWN ON THE FEMA PANEL 370820300K, DATED DECEMBER 21, 2018.
10. TOTAL OPEN SPACE REQUIRED
10.4 & A REDUCED TO 12.8 IN 100 = 23.986 SF (0.55 AC)
OPEN SPACE PROVIDED POND AREA = 4.22 AC
OPEN SPACE = 1.25 AC
11. TAX VALUE (AREA REQUIRED) / TOTAL AREA OF DEVELOPMENT = FEES TO BE PAID
\$1.97 700.00 & 0.55 AC / 24.23 AC = \$19.28/AC
TAX VALUE WAS DERIVED USING THE TAX OFFICE VALUE OF \$35,000.00 PER ACRE FOR UNDEVELOPED LAND. THIS WAS DONE BECAUSE WE ARE NOT INCLUDING THE ENTIRE TRACT FOR PANEL REVISIONS.
12. DRAINAGE AND UTILITY EASEMENTS SHALL REMAIN FREE OF OBSTRUCTION. THE OWNER SHALL MAINTAIN ALL UTILITIES AND SHALL BE RESPONSIBLE FOR THE EASEMENTS FOLLOWING ACCESS TO THE FACILITY BY THE UTILITY COMPANY SHALL BE AT THE EXPENSE OF THE PROPERTY OWNER.
13. OPEN SPACE AREAS SHALL BE UNDER THE OWNERSHIP AND CONTROL OF THE HOMEOWNER ASSOCIATION.
14. DISTURBED AREA SHALL NOT EXCEED 37.0 AC.

CURVE	RADIUS	LENGTH	TANGENT	DELTA	CURVE BEARING	CHORD
C1	500.00	232.16	116.08	22.2642	S64°39'16"W	231.65
C2	565.00	252.47	126.24	24.7492	N89°52'15"W	250.59
C3	429.00	432.83	391.30	85.1499	S84°10'56"E	575.74
C11	475.00	35.68	16.85	4.9345	S43°15'51"E	33.67
C12	25.00	19.27	25.00	90.9090	N89°24'18"E	35.36
C13	375.00	596.10	345.27	85.1430	S84°10'56"E	1088.00
C14	25.00	19.27	25.00	90.9090	S3°29'24"W	35.36
C15	150.00	15.00	20.27	18.2922	S38°41'14"W	35.81
C16	25.00	42.00	27.95	96.2247	S77°15'54"W	37.27
C17	475.00	40.48	45.38	10.3489	N89°07'43"W	50.34
C18	25.00	21.83	11.18	48.1123	N16°34'12"W	20.41
C19	50.00	241.19	44.73	276.2243	S49°26'56"W	69.67
C20	25.00	21.83	11.18	48.1123	S47°45'51"E	20.41
C21	525.00	193.36	193.36	90.2447	S82°52'14"E	345.41
C22	25.00	21.83	11.18	48.1123	S50°09'14"E	20.41
C23	50.00	241.19	44.73	276.2243	N7°55'23"E	69.67
C24	25.00	21.83	11.18	48.1123	S75°48'44"W	20.41
C25	475.00	122.16	61.08	14.4421	N74°42'24"W	121.88
C26	25.00	42.00	27.95	96.2244	N10°05'24"W	37.27
C27	190.00	33.88	17.12	19.2822	N87°45'18"E	33.78
C28	25.00	19.27	25.00	90.9090	S89°31'54"E	35.36
C29	525.00	17.22	18.42	4.9344	S43°15'51"E	33.67
C30	25.00	19.27	25.00	91.9222	S87°04'18"W	35.36
C31	225.00	174.89	76.19	90.5239	N89°18'58"W	333.18
C32	375.00	21.72	10.86	1.7422	N42°51'43"W	21.72
C33	750.00	21.83	10.91	1.7422	S42°51'43"E	21.83
C34	190.00	67.37	33.71	5.1652	S46°29'25"E	61.35
C35	700.00	107.88	54.07	84.9701	N89°57'21"E	143.34



SHEET LIST

SHEET NUMBER	SHEET TITLE
C0.0	COVER
C1.0	EXISTING CONDITIONS
C1.1	EXISTING CONDITIONS
C2.0	PRELIMINARY PLAT
C2.1	PRELIMINARY PLAT
C3.0	GRADING & DRAINAGE OVERVIEW
C3.1	GRADING & DRAINAGE PLAN
C3.2	GRADING & DRAINAGE PLAN
C3.3	GRADING & DRAINAGE PLAN
C3.4	GRADING & DRAINAGE PLAN
C3.5	GRADING & DRAINAGE PLAN
C3.6	GRADING & DRAINAGE PLAN
C3.7	GRADING & DRAINAGE PLAN
C3.8	GRADING & DRAINAGE PLAN
C3.9	EROSION & SEDIMENT CONTROL PLAN - PHASE 1
C3.10	EROSION & SEDIMENT CONTROL PLAN - PHASE 1
C3.11	EROSION & SEDIMENT CONTROL PLAN - PHASE 1
C3.12	EROSION & SEDIMENT CONTROL PLAN - PHASE 2
C3.13	EROSION & SEDIMENT CONTROL PLAN - PHASE 2
C3.14	EROSION & SEDIMENT CONTROL PLAN - PHASE 2
C4.0	UTILITY PLAN
C4.1	UTILITY PLAN
C4.2	UTILITY PLAN & PROFILE - YAWL STREET
C4.3	UTILITY PLAN & PROFILE - YAWL STREET
C4.4	UTILITY PLAN & PROFILE - YAWL STREET
C4.5	UTILITY PLAN & PROFILE - KETCH STREET
C4.6	UTILITY PLAN & PROFILE - SCHOONER COURT
C4.7	UTILITY PLAN & PROFILE - SALOORS WAY
C4.8	UTILITY PLAN & PROFILE - SALOORS WAY
C4.9	UTILITY PLAN & PROFILE - SALOORS WAY
C5.0	CONSTRUCTION DETAILS
C5.1	EROSION & SEDIMENT CONTROL DETAILS
C5.2	EROSION & SEDIMENT CONTROL DETAILS
C5.3	STORMWATER DETAILS
C5.4	STORMWATER DETAILS
C5.5	STORMWATER DETAILS
C5.6	WATERLINE DETAILS
C5.7	WATERLINE DETAILS
C5.8	SEWER DETAILS

TOOLEY HARBOR PHASE 3 WAS ORIGINALLY DESIGNED AND PERMITTED BY HYMAN & ROBBY, P.C. IN 2017 AS PART OF WARRIERS LANDING PHASE B. A PORTION OF THE DEVELOPMENT WAS COMPLETED AND RECORDED AS TOOLEY HARBOR PHASE 3. TIMMONS GROUP HAS HIRED BY THE DEVELOPER TO REVISIT THE DESIGN TO OBTAIN IMPROVED PERMITS TO ALLOW FOR CONSTRUCTION OF THIS PHASE. STORMWATER DESIGN HAS NOT CHANGED AND IS IN FULL COMPLIANCE WITH THE EXISTING STORMWATER PERMITS. WATER, SEWER, AND EROSION CONTROL DESIGN HAS BEEN MODIFIED AS NECESSARY TO MEET CURRENT STANDARDS OF WCCDC AND THE CITY OF ELIZABETH CITY.

The Director of the Elizabeth City Public Works Department has reviewed this plan. The plan was found to be in conformance with the established minimum design required for the extension of the City roads, utilities, and stormwater infrastructure.

Director Dawn Bell _____ Date _____



TIMMONS GROUP

NORTH CAROLINA LICENSE NO. C-1652
TOOLEY HARBOR PHASE 3
PASQUOTANK COUNTY - NORTH CAROLINA
COVER

JOB NO.
62977
SHEET NO.
C.O.0

DATE
8/30/2024

DRAWN BY
SCJ

DESIGNED BY
KEH

CHECKED BY
KEH

SCALE
1" = 100'

YOUR VISION ACHIEVED THROUGH OURS

REVISION DESCRIPTION

THIS DRAWING PREPARED AT THE
ELIZABETH CITY OFFICE
1000 West Elizabeth Street, Elizabeth, NC 27808
TEL: 757.242.1030 FAX: 757.242.6174 www.timmonsgrp.com

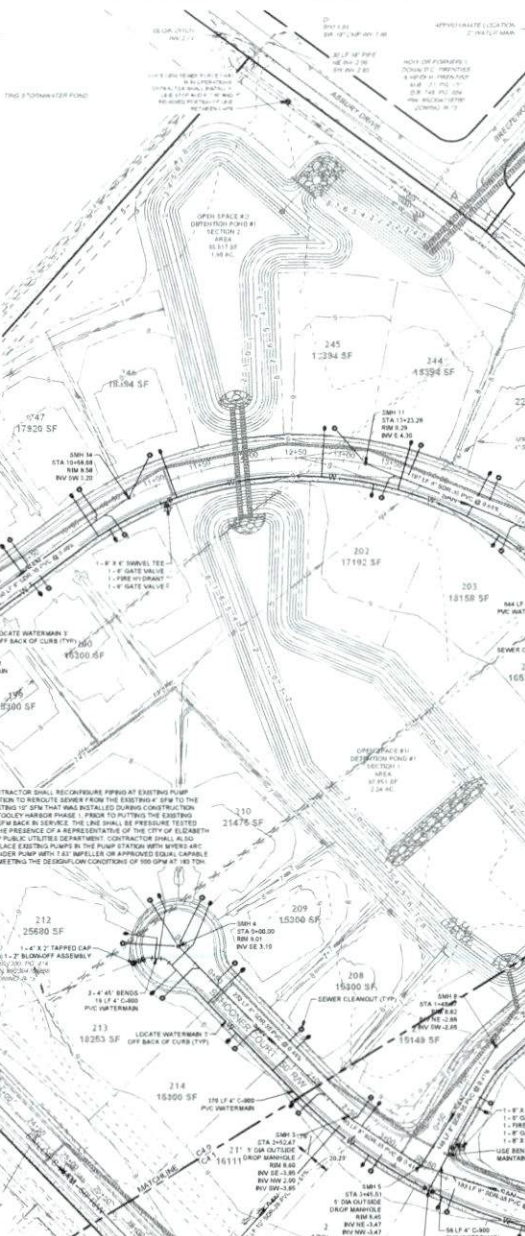
SITE DATA

- 1. OWNER/DEVELOPER: 175 N.W. PO BOX 2222 ELIZABETH CITY, NC 27808...
2. SITE INFORMATION: PERMIT TO CONSTRUCT FOR THE PORTLAND CEMENT PLANT...
3. SURVEY DATA: 1. SURVEYED AREA: 175,000 SF...
4. TOTAL AREA DEDICATED TO RIGHT-OF-WAY: 1.62 AC...
5. TYPICAL BUILDING SETBACKS: REAR YARD: 20 FT...
6. DRAINAGE EASEMENTS ARE AS FOLLOWS: IF ADJACENT INTERNAL PROPERTY LINES...
7. SITE IS LOCATED IN FLOOD ZONE "X" AS SHOWN ON THE FIRM PLAN...
8. OPEN SPACE PROVIDED: 15,414.4 SQ FT...
9. TAX VALUE (AREA REQUIRED): TOTAL AREA DEVELOPMENT + FEES TO BE PAID: \$1,187,700.00...
10. TAX VALUE PAID DURING THE TAX OFFICE VALUE OF \$10,000 PER ACRE FOR UNDEVELOPED LAND...
11. ALL PROPERTY FROM ADJACENT AREAS MUST BE DIRECTED TO THE RIGHT...
12. DRAINAGE AND UTILITY EASEMENTS SHALL REMAIN FREE OF SUBSTANTIAL STRUCTURES...
13. OPEN SPACE AREA SHALL BE UNDER THE OWNERSHIP AND CONTROL OF THE HOMEOWNER ASSOCIATION...
14. DISTURBED AREA SHALL NOT EXCEED 15.41 AC.

- GENERAL NOTES: 1. EXISTING UNDERGROUND UTILITIES ARE SHOWN BASED ON INFORMATION AVAILABLE TO THE ENGINEER...
2. ALL UTILITIES SHALL BE IDENTIFIED WITH THE CITY OF ELIZABETH CITY PUBLIC UTILITIES DEPARTMENT...
3. ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM WITH CURRENT STANDARDS AND SPECIFICATIONS OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION...
4. A SEGMENT & EROSION CONTROL PLAN HAS BEEN APPROVED FOR THIS PROJECT...
5. MINIMUM CLEARANCES FOR WATER, SEWER AND STORM DRAINAGE SHALL MEET THE FOLLOWING CRITERIA: HORIZONTAL: VERTICAL: WATER AND SEWER: 10 FT ABOVE SEWER OR 15 FT ABOVE WATER AND SEWER...
6. WATER AND STORM DRAINAGE SHALL BE CENTERED ON THE CROSSING...
7. WATER AND STORM DRAINAGE SHALL BE CENTERED ON THE CROSSING...
8. SEWER AND STORM DRAINAGE SEPARATION BETWEEN SEWER AND STORM DRAIN CAN BE REDUCED BY UTILIZING DUCTILE IRON SEWER PIPES.

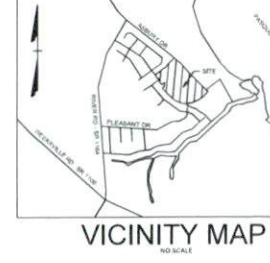
WATERMAIN NOTES

- 1. THE CITY OF ELIZABETH CITY WILL PROVIDE WATER SERVICE FOR THIS PROJECT...
2. ALL WATERMAIN SHALL BE EITHER PVC 1500 LB DUCTILE IRON OR DUCTILE IRON PIPE...
3. WATERMANS MAY BE INSTALLED UNDER STORM DRAINS WITHOUT FITTINGS...
4. WATERMANS INSTALLED UNDER STORM DRAINS SHALL HAVE A MINIMUM SEPARATION OF 12" BETWEEN INTERSECTIONS AND STORM DRAINS...
5. THREAT BLOOMING SHALL BE INSTALLED ON ALL BRANCHES OF 12" OR GREATER...
6. CONTRACTOR SHALL COORDINATE CONNECTION TO WATERMAIN WITH THE ELIZABETH CITY PUBLIC UTILITIES DEPARTMENT...
7. THE CONTRACTOR SHALL FIELD VERIFY THE SIZE AND MATERIAL OF EXISTING MAINS PRIOR TO ORDERING MATERIALS...
8. LENGTHS OF WATERLINE ARE APPROXIMATE AND HAVE BEEN LISTED FOR THE CONVENIENCE OF THE CONTRACTOR...
9. DURING CONSTRUCTION, NO PIPE SHALL BE COVERED UNLESS INSPECTED BY THE ENGINEER...
10. THE CONTRACTOR SHALL SAFELY ABANDON REQUIREMENTS OF THE DEPARTMENT OF TRANSPORTATION...
11. ALL WATERMANS SHALL HAVE A MINIMUM OF 10' COVER...
12. ALL PIPES AND SERVICES TO HAVE BURNING ALLOWS AND WITH THE PIPE A CONTINUOUS LENGTH OF #11 SOLID COPPER WIRE AND #14 WIRE TRACER WIRE...
13. WATER LINES SHALL BE PRESURE TESTED AND CHLORINATED AS REQUIRED BY CODE...
14. ALL WATER SERVICES SHALL BE W/ 1/2" x 1/2" TAPPED CAP.



SEWER NOTES

- 1. EXISTING SEWER FORCEMAIN TO BE TAPPED AND ABANDONED IS KNOWN TO BE CONSTRUCTED OF ASBESTOS CEMENT PIPE...
2. DISTANCES FOR THE SANITARY SEWER ARE FROM CENTER TO CENTER OF MANHOLE...
3. ALL GRAVITY SEWER SHALL BE EITHER SDR35 PVC OR DUCTILE IRON AS SHOWN ON THE PLANS...
4. ALL MANHOLES SHALL HAVE AN 18" THICK CONCRETE BASE THAT EXTENDS AT LEAST 6" FROM THE OUTSIDE OF THE RISER SECTION...
5. ALL JOINTS OF THE MANHOLES SHALL BE DEFLECTED WITH A BUTYL MASTIC JOINT SEALANT...
6. GRAVITY SEWER PIPE SHALL BE TESTED FOR IMPERFECTION WITH A MINIMUM OF 30 DAYS AFTER TRENCH BACKFILL HAS BEEN COMPLETED...
7. ALL GRAVITY SEWER SHALL BE LEAK TESTED BY MEANS OF A LOW PRESSURE AIR TEST...
8. ALL TESTING SHALL BE WITNESSED BY A REPRESENTATIVE OF THE ELIZABETH CITY PUBLIC UTILITIES DEPARTMENT AND/OR THE ENGINEER.



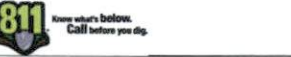
PROGRESS PRINT MAR 03, 2024 NOT FOR CONSTRUCTION

THIS DRAWING PREPARED AT THE ELIZABETH CITY OFFICE... NORTH CAROLINA PROFESSIONAL ENGINEER LICENSE NO. 10000

REVISION DESCRIPTION table with columns for DATE, DESCRIPTION, and REVISIONS.

DESIGNED BY, CHECKED BY, DATE, SCALE table.

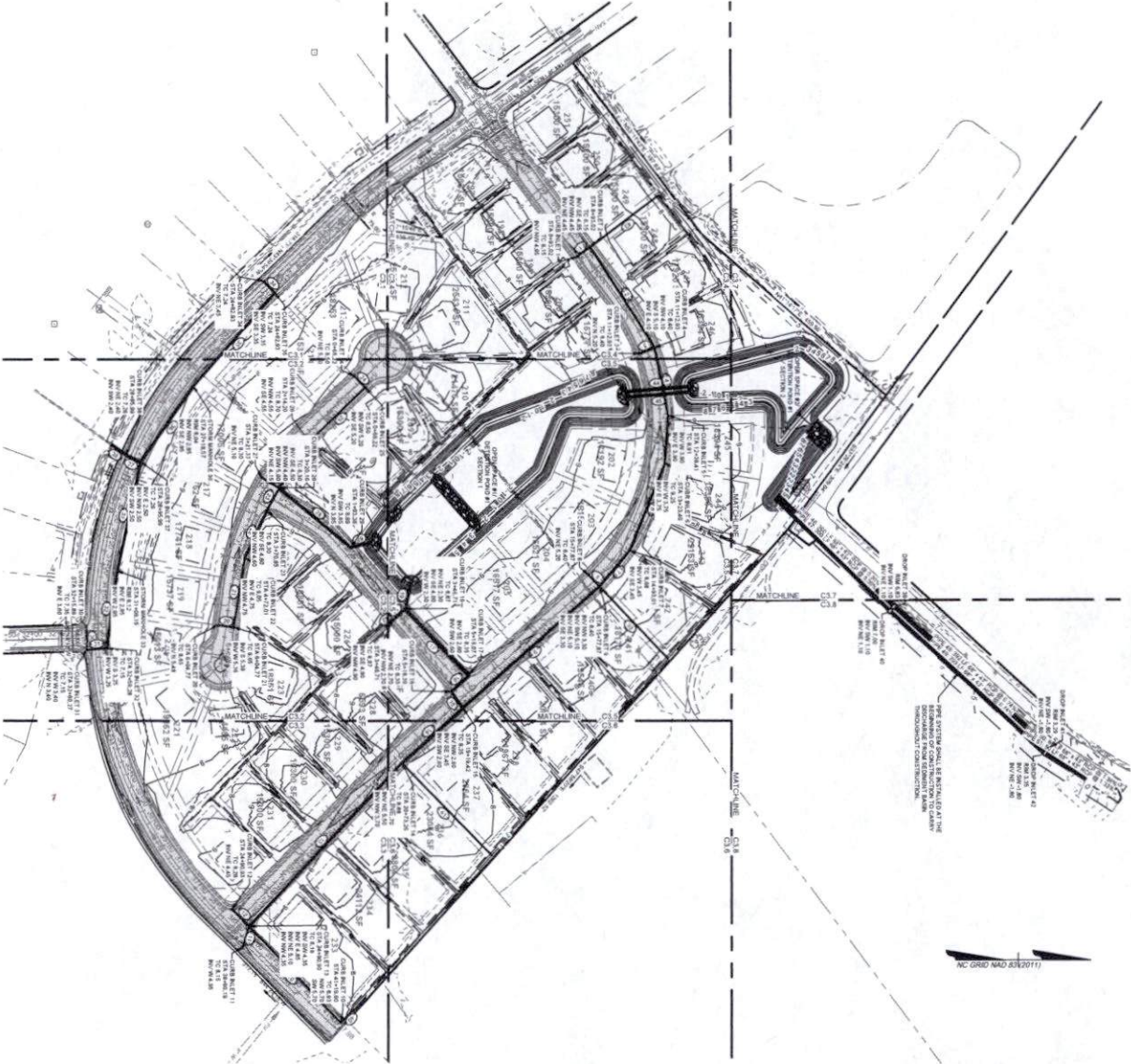
TIMMONS GROUP logo and project title: TOOLEY HARBOR PHASE 3 UTILITY PLAN. Includes license information and contact details.



Vertical text on the right edge: NORTH CAROLINA PROFESSIONAL ENGINEER LICENSE NO. 10000

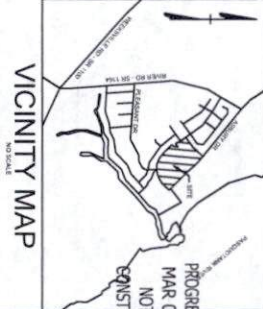


1. OVERALL ELEVATION
2. ELEVATION OF FINISHED GRADE
3. ELEVATION OF EXISTING GRADE
4. ELEVATION OF PROPOSED GRADE
5. ELEVATION OF PROPOSED FINISHED GRADE
6. ELEVATION OF PROPOSED FINISHED GRADE AT THE END OF THE PIPE
7. ELEVATION OF PROPOSED FINISHED GRADE AT THE END OF THE PIPE AT THE POINT OF ENTRY INTO THE EXISTING DRAINAGE SYSTEM
8. ELEVATION OF PROPOSED FINISHED GRADE AT THE END OF THE PIPE AT THE POINT OF ENTRY INTO THE EXISTING DRAINAGE SYSTEM
9. ELEVATION OF PROPOSED FINISHED GRADE AT THE END OF THE PIPE AT THE POINT OF ENTRY INTO THE EXISTING DRAINAGE SYSTEM
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12. ELEVATION OF PROPOSED FINISHED GRADE AT THE END OF THE PIPE AT THE POINT OF ENTRY INTO THE EXISTING DRAINAGE SYSTEM
13. ELEVATION OF PROPOSED FINISHED GRADE AT THE END OF THE PIPE AT THE POINT OF ENTRY INTO THE EXISTING DRAINAGE SYSTEM
14. ELEVATION OF PROPOSED FINISHED GRADE AT THE END OF THE PIPE AT THE POINT OF ENTRY INTO THE EXISTING DRAINAGE SYSTEM



NO GRID (NO 500711)

PIPE #	LENGTH	DESCRIPTION	UPSTREAM INVERT	DOWNSTREAM INVERT
1	20.12	18" HDPE	4.68	4.00
2	222.12	24" HDPE	5.00	5.00
3	128.12	36" HDPE	4.10	3.90
4	128.12	36" HDPE	3.70	3.70
5	87.12	36" HDPE	3.70	3.40
6	174.12	36" HDPE	3.40	3.30
7	87.12	36" HDPE	3.30	3.30
8	294.12	18" HDPE	3.30	2.80
9	341.12	48" x 32" RCP	3.30	2.80
10	248.12	18" HDPE	3.10	3.10
11	41.12	18" HDPE	4.60	4.60
12	44.12	36" HDPE	4.60	4.60
13	412.12	36" x 24" RCP	4.20	3.70
14	172.12	48" x 32" RCP	3.70	3.60
15	37.12	48" x 32" RCP	2.80	2.70
16	43.12	48" x 32" RCP	2.70	2.80
17	172.12	48" x 32" RCP	2.70	2.30
18	29.12	36" x 24" RCP	4.50	4.60
19	48.12	48" RCP	2.30	2.10
20	28.12	18" HDPE	5.80	5.30
21	130.12	24" HDPE	5.30	4.70
22	98.12	24" HDPE	4.70	4.60
23	41.12	24" HDPE	4.60	4.60
24	24.12	18" HDPE	3.50	3.50
25	144.12	36" HDPE	3.50	4.00
26	102.12	24" HDPE	4.00	4.60
27	28.12	18" HDPE	5.10	5.00
28	172.12	48" x 27" RCP	4.10	3.60
29	28.12	48" x 32" RCP	3.60	3.70
30	43.12	18" HDPE	3.80	3.40
31	26.12	18" HDPE	3.40	3.20
32	148.12	36" x 24" RCP	3.20	2.90
33	208.12	36" x 24" RCP	2.90	2.50
34	29.12	24" HDPE	3.40	3.30
35	232.12	36" x 24" RCP	3.30	2.60
36	172.12	48" x 27" RCP	2.60	2.50
37	29.12	48" x 32" RCP	2.50	2.60
38	34.12	48" x 32" RCP	2.60	2.30
39	104.12	18" HDPE	3.00	3.10
40	34.12	18" HDPE	6.00	5.70
41	238.12	18" HDPE	5.00	5.00
42	19.12	36" x 18" RCP	5.00	4.80
43	108.12	18" HDPE	5.00	4.60
44	118.12	50" x 36" RCP	5.10	0.00
45	118.12	50" x 36" RCP	5.10	0.00
46	300.12	48" x 48" RCP	2.50	1.10
47	300.12	48" x 48" RCP	2.50	1.10
48	302.12	48" x 48" RCP	1.10	-1.80
49	48.12	48" x 48" RCP	1.10	-1.00
50	48.12	48" x 48" RCP	-1.00	-1.00
51	90.12	48" x 48" RCP	-1.00	-2.00



TIMMONS GROUP

NORTH CAROLINA LICENSE NO. C-1652

TOOLEY HARBOR PHASE 3

NIXONTON TNSP - PASQUOTANK COUNTY - NORTH CAROLINA

GRADING AND DRAINAGE PLAN OVERLAY

YOUR VISION ACHIEVED THROUGH OURS.

THIS DRAWING PREPARED AT THE ELIZABETH CITY OFFICE
1805 West City Drive, Unit E | Elizabeth City, NC 27808
TEL: 252.411.5030 FAX: 252.245.4974 www.timmons.com

DATE: 03/02/2014

REVISION DESCRIPTION

PROGRESS PAINT NOT FOR CONSTRUCTION

MAR 03 2018

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SITE DATA

1. OWNER/DEVELOPER
111 S. CANTON
ELIZABETH CITY, NC 27828
PHILIP HARRINGTON, PROJECT
503-354-6328

2. SITE INFORMATION
TRN 20200701 IS A PORTION OF RESUBDIVISION
TM P13-248-6 A PORTION OF TM P13-248
PHILIP HARRINGTON, PROJECT
P. 14, PG. 13 (REVISED 1/1/2020)
CONV. 1/1/2020
TOTAL TRACT 19.22 AC
AREA IN LOTS 19.22 AC
TOTAL NUMBER OF LOTS 18 LOTS
MINIMUM LOT SIZE 1.000 SF

3. INTERFERING AREA
LOT 1 487,500 SF (8.800 SF PER LOT)
ROADWAY 186,300 SF
SIDEWALK 41,442 SF
TOTAL 675,242 SF (12.620 AC)

LOTS ARE PERMITTED FOR A MAXIMUM BUILD UPON AREA OF 8,500 SF
ACCORDING TO STATE STORMWATER MANAGEMENT PLAN
NO SWOTESTS FOR WARRIERS LIONS PHASE 2

4. TOTAL AREA DEDICATED TO RIGHT-OF-WAY 1.82 AC

5. LINEAR FRONTAGE OF PROPOSED
STREETS TO BE PUBLICLY DESIGNATED
SABORS WAY 166.04 LF
VALE STREET 154.84 LF
KETCH STREET 541.72 LF
SCHOENES COURT 81.46 LF

6. TYPICAL BUILDING SETBACKS
FRONT YARD 30
REAR YARD 10
SIDE YARD 10
USE YARD (CORNER) 10

7. A 20' ELIZABETH CITY UTILITY EASEMENT FOR THE INSTALLATION OF ELECTRIC,
TELEPHONE, CABLE AND GAS IS LOCATED ALONG ALL STREET FRONTAGES AND
IS CONVEYED SHOWN ON THE PLAN.

8. DRAINAGE EASEMENTS ARE AS FOLLOWS
10' ALONG ALL INTERNAL PROPERTY LINES
20' ALONG ALL RIGHT-OF-WAY & EXTERNAL PROPERTY LINES
30' ALONG PROPERTY LINES ALONG MAJOR DRAINAGE LINES
AS SHOWN

9. SITE IS LOCATED IN FLOOD ZONE "X" AS SHOWN ON THE FEMA PANEL
733982303N, DATED DECEMBER 31, 2018.

10. TOTAL OPEN SPACE REQUIRED
10.5 (4.8 ACRES) = 120.4 (3.33 AC) OF 0.5 AC
OPEN SPACE PROVIDED POND AREA = 4.22 AC
OPEN SPACE = 1.28 AC
TOTAL OPEN SPACE = 5.50 AC
OPEN SPACE PROVIDED IS NOT SUFFICIENT FOR ACTIVE RECREATION
OPEN SPACE FEES TO BE PAID IN FULL AT DEEDING.

TAX VALUE (AREA REQUIRED) TOTAL AREA OF DEVELOPMENT - FEES TO BE
PAID
\$1,187,936.8 X (0.8 AC) = \$422,401 = \$18,395.80

TAX VALUE (POND DENIED) USING THE TAX OFFICE VALUE OF \$30,000.00 PER ACRE
FOR UNDEVELOPED LAND, THIS VALUE IS NOT INCLUSIVE OF THE
COSTS OF THE TRACT FOR PUBLIC UTILITY CONSTRUCTION.

11. ALL RUNOFF FROM INTERFERING AREAS MUST BE DIRECTED TO THE ROAD,
DITCHES AND DRAINAGE DITCHES AS SHOWN.

12. DRAINAGE AND UTILITY EASEMENTS SHALL REMAIN FREE OF SUBSTANTIAL
STRUCTURES. THE REPAIR TO ANY STRUCTURE OR LANDSCAPE LOCATED IN
THE EASEMENTS FOLLOWING ACCESS TO THE FACILITIES BY THE CITY OR
UTILITY COMPANY SHALL BE AT THE EXPENSE OF THE PROPERTY OWNER.

13. OPEN SPACE AREAS SHALL BE UNDER THE OWNERSHIP AND CONTROL OF THE
HOMEOWNERS ASSOCIATION.

14. DISTURBED AREA SHALL NOT EXCEED 57.4% AC.

GENERAL NOTES

1. EXISTING UNDERGROUND UTILITIES ARE SHOWN BASED ON INFORMATION AVAILABLE TO THE ENGINEER AND SHOULD NOT BE CONSIDERED COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES (PUBLIC OR PRIVATE) THAT MAY EXIST IN THE AREA OF CONSTRUCTION PRIOR TO COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING AT HIS EXPENSE ANY UTILITIES DAMAGED DURING CONSTRUCTION. CONTRACTOR SHALL CONTACT 811 FOR UTILITY LOCATION.

2. ALL RESPECTORS SHALL BE COORDINATED WITH THE CITY OF ELIZABETH CITY PUBLIC UTILITIES DEPARTMENT AND THE ENGINEER A MINIMUM OF 48 HOURS IN ADVANCE.

3. ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM WITH CURRENT STANDARDS AND SPECIFICATIONS OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION, HIGHWAYS AND THE CITY OF ELIZABETH CITY.

4. A SEDIMENT & EROSION CONTROL PLAN HAS BEEN APPROVED FOR THIS PROJECT. THE UTILITY CONTRACTOR SHALL NOT OBTAIN THE EROSION CONTROL DEVICE AS INSTALLED FOR THIS PROJECT. ANY RELOCATION OF EROSION CONTROL DEVICES SHALL BE DONE IN ACCORDANCE WITH THE NOTIFICATION TO THE REGULATORY CONTRACTOR AND THE ENGINEER. THE UTILITY CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO LIMIT EROSION & SEDIMENT TRANSPORT TO PUBLIC ROADS.

5. MINIMUM CLEARANCES FOR WATER SEWER AND STORM DRAINAGE SHALL MEET THE FOLLOWING CRITERIA: HORIZONTAL VERTICAL
WATER AND SEWER 4'-0" 18" (WATER ABOVE SEWER)
SEWER WATER AND SEWER CHANGES AND WATER IS NOT ABOVE SEWER OR DOES NOT HAVE 6" CLEARANCE. BOTH WATER AND SEWER PIPES SHALL BE DUCTILE IRON PIPE 10 FEET ON EACH SIDE OF THE CROSSING AND FULL JOINTS OF PIPE SHALL BE CENTERED ON THE CROSSING. SEWER WATER AND STORM DRAINAGE CROSSINGS AND WATER NOT ABOVE STORM DRAINAGE WATER PIPES SHALL BE DUCTILE IRON PIPE 10 FEET ON EACH SIDE OF THE CROSSING WITH A FULL JOINT CENTERED AT THE CROSSING.
WATER AND STORM DRAINAGE 10' 18"
SEPARATION BETWEEN SEWER AND STORM DRAIN CAN BE REDUCED BY UTILIZING DUCTILE IRON SEWER PIPES.

SEWER NOTES

1. ALL GRAVITY SEWER SHALL BE EITHER DUCTILE IRON OR DUCTILE BROWN AS SHOWN ON PLANS. ALL PIPE SHALL MEET THE REQUIREMENTS OF ANSIS STANDARDS AND THE NATIONAL SANITATION FOUNDATION. ALL PIPE MUST BEAR THE LOADS FOR RETAINING WATER.

2. ALL MANHOLES SHALL HAVE AN 8" MIN. THICK CONCRETE BASE AT LEAST 1' FROM THE OUTSIDE OF THE RISE SECTION.

3. ALL JOINTS OF THE MANHOLES SHALL BE DAMAGED WITH A BUTYL MASTIC JOINT SEALING MIPAP.

4. GRAVITY SEWER PIPE SHALL BE TESTED FOR DEFLECTION A MINIMUM OF 30 DAYS AFTER TRENCH BACKFILL HAS BEEN COMPLETED IN 100' OF WATER TO 30 DAYS TESTING (AFTER RECEIVING CERTIFICATION THAT TRENCH CONTRACTOR MEETS A MINIMUM OF 95% DENSITY).

5. ALL GRAVITY SEWER SHALL BE TESTED BY MEANS OF A LOW PRESSURE AIR TEST.

6. ALL GRAVITY SEWER SHALL BE CAMERA INSPECTED UPON COMPLETION. VIDEO SHALL BE PROVIDED TO THE ELIZABETH CITY PUBLIC UTILITIES DEPARTMENT.

7. ALL MANHOLES SHALL BE LEAK TESTED BY EITHER VACUUM TESTING OR EXHAUSTION TESTING.

8. ALL TESTING SHALL BE WITNESSED BY A REPRESENTATIVE OF THE ELIZABETH CITY PUBLIC UTILITIES DEPARTMENT AND THE ENGINEER.

WATERMAIN NOTES

1. THE CITY OF ELIZABETH CITY WILL PROVIDE WATER SERVICE FOR THIS PROJECT.

2. ALL WATERMANS SHALL BE EITHER PVC-C OR DUCTILE BROWN AS SHOWN ON PLANS. ALL PIPE SHALL COMPLY WITH THE REQUIREMENTS OF ANSIS STANDARDS AND THE NATIONAL SANITATION FOUNDATION. ALL PIPE MUST BEAR THE LOADS FOR RETAINING WATER.

3. WATERMANS SHALL BE INSTALLED UNDER STORM DRAINS WITHOUT FITTINGS WHERE THE CHANGE IN VERTICAL ELEVATION IS TWO FEET OR LESS.

4. WATERMANS INSTALLED UNDER STORM DRAINS SHALL HAVE A MINIMUM SEPARATION OF 18" BETWEEN WATERMAIN AND STORM DRAIN AND WATERMAIN SHALL BE DUCTILE BROWN. WHERE PRACTICAL, INSTALL A FULL JOINT OF 20' OF DUCTILE BROWN PIPE CENTERED UNDER THE STORM DRAIN. WHERE THE WATER MAIN BENDS INTO A VERTICAL, LEAD WITH 18" HORIZONTAL FEET OF THE STORM DRAIN. THE VERTICAL LEAD SHALL BE DUCTILE BROWN.

5. THROUST BLOCKINGS SHALL BE INSTALLED ON ALL BENDS OF 1/2" OR GREATER. (SEE THE CONTRACTOR'S SPECIFICATIONS FOR THROUST BLOCKINGS).

6. CONTRACTOR SHALL COVER/SEAL CONNECTION TO WATERMAIN WITH THE ELIZABETH CITY PUBLIC UTILITIES DEPARTMENT.

7. THE CONTRACTOR SHALL FIELD VERIFY THE SIZE AND MATERIAL OF EXISTING MAINS PRIOR TO ADDRESSING MATERIALS.

8. LENGTHS OF WATERLINES ARE APPROXIMATE AND HAVE BEEN PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR SHALL VERIFY LENGTHS TO HIS SATISFACTION.

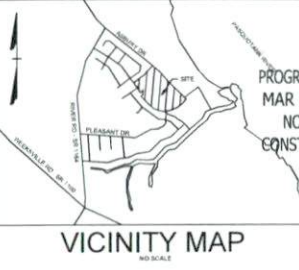
9. DURING CONSTRUCTION, NO PIPE SHALL BE COVERED UNTIL INSPECTED BY THE ENGINEER OR A REPRESENTATIVE OF THE ELIZABETH CITY PUBLIC UTILITIES DEPARTMENT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND PUBLIC UTILITIES DEPARTMENT 48 HOURS PRIOR TO COMMENCEMENT OF WORK TO COORDINATE INSPECTION OF WATERLINE.

10. THE CONTRACTOR SHALL SATISFY ALL BONDING REQUIREMENTS OF THE DEPARTMENT OF TRANSPORTATION PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

11. ALL WATERMANS SHALL HAVE A MINIMUM OF 36" COVER.

12. ALL PIPES AND SERVICES TO HAVE RUNNING ALONG AND WITH THE PIPE A CONTINUOUS LENGTH OF #12 GALD COPPER WIRE AND A WIRE TIE TAP AT ONE (1) FOOT BELOW THE FINISHED GRADE OF THE EXCAVATION FOR THE PIPE.

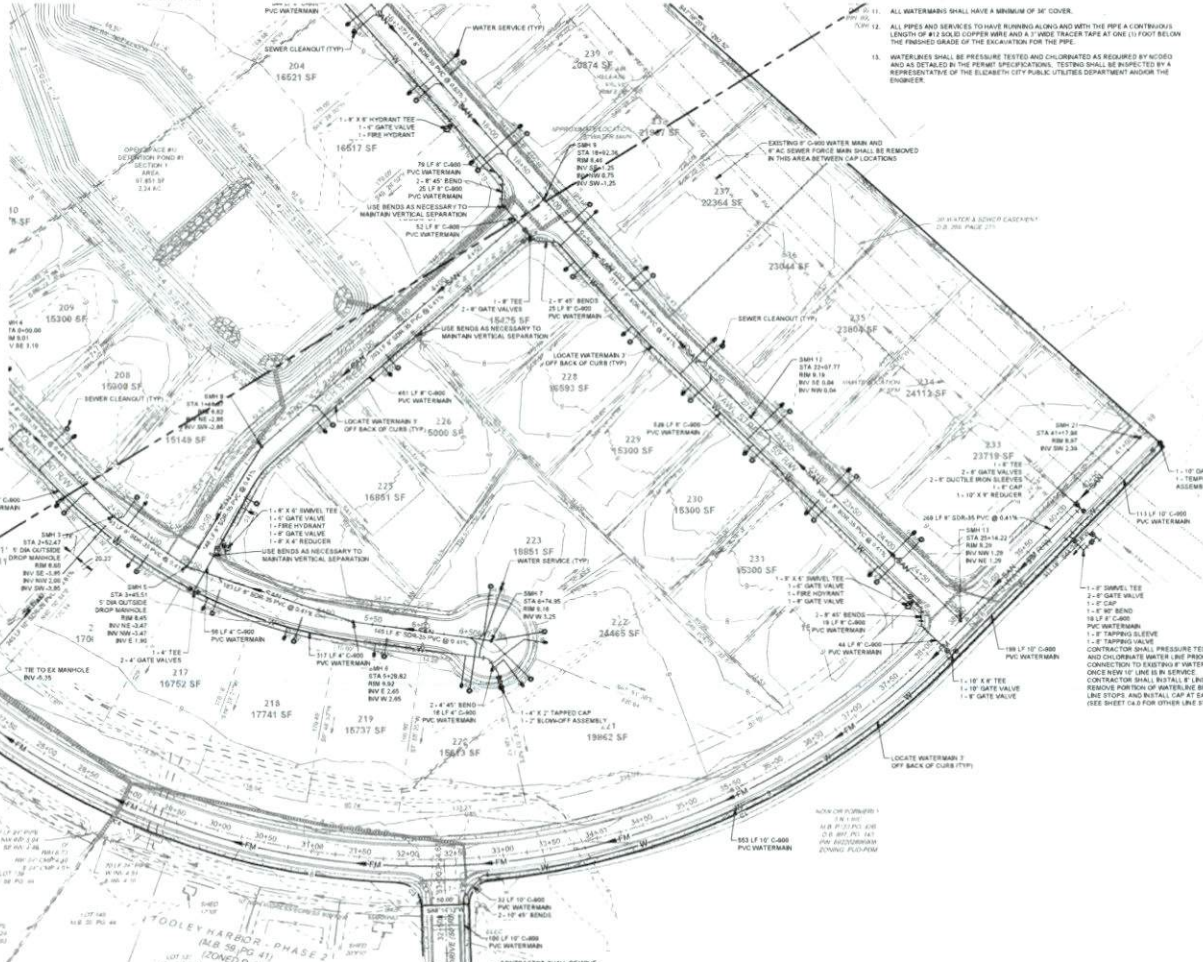
13. WATER LINES SHALL BE PRESSURE TESTED AND CHLORINATED AS REQUIRED BY NC802 AND AS DETAILED IN THE PERMITS SPECIFICATIONS. TESTING SHALL BE WITNESSED BY A REPRESENTATIVE OF THE ELIZABETH CITY PUBLIC UTILITIES DEPARTMENT AND/OR THE ENGINEER.



PROGRESS PRINT
MAR 03, 2024
NOT FOR CONSTRUCTION

THE SEALING OF THIS PLAN BY THE NORTH CAROLINA SEALING BOARD IS LIMITED TO THE TECHNICAL ASPECTS OF THE PLAN AND DOES NOT CONSTITUTE AN ENDORSEMENT OR GUARANTEE OF THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED HEREON. THE SEALING BOARD IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS IN THIS PLAN OR FOR ANY CONSEQUENCES ARISING FROM THE USE OF THIS PLAN.

1805 West City Drive, Suite E1, Raleigh, NC 27601
TEL: 919.286.5559 FAX: 919.286.9174 www.nceal.org



YOUR VISION ACHIEVED THROUGH OURS.

DATE	DATE
03/03/2024	

DRAWN BY: BCD
CHECKED BY: JKH
SCALE: 1" = 60'

TIMMONS GROUP
NORTH CAROLINA LICENSE NO. C-1652
TOOLEY HARBOR PHASE 3
NORLINGTON TNSP - PASQUOTANK COUNTY, NORTH CAROLINA
UTILITY PLAN

JOB NO: 62977
SHEET NO: C4.1

