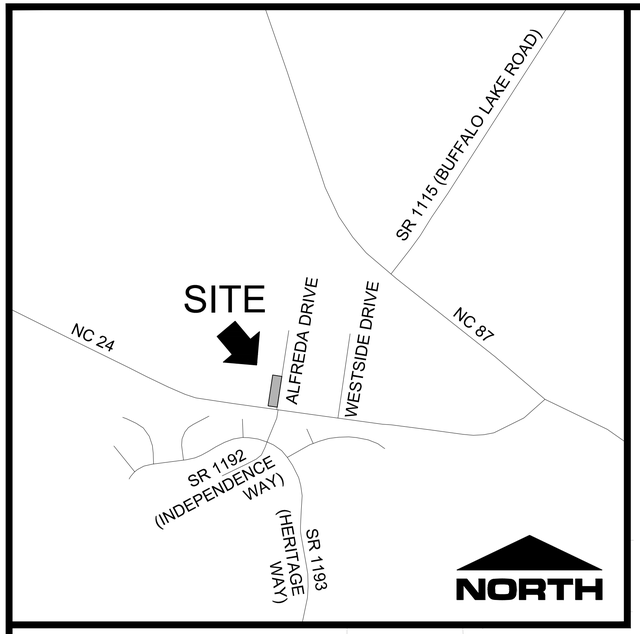
EASY STORAGE
SITE DEVELOPMENT PLANS

JOHNSONVILLE TOWNSHIP
CITY OF CAMERON, NORTH CAROLINA
HARNETT COUNTY



VICINITY MAP
NOT TO SCALE

EXISTING UTILITY OWNER

WATER

HARNETT REGIONAL WATER
700 McKinney Parkway
Lilington, North Carolina 27546
910-893-7575
Contact: Jay Meyers, PE

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

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CIVIL ENGINEER

4D SITE SOLUTIONS, INC.
409 Chicago Drive - Suite 112
Fayetteville, North Carolina 28306
910-426-6777
Contact: Scott Brown, PE
email: sbrown@4dsitesolutions.com

OWNER

ANDERSON CREEK RENTALS AND PROPERTIES, LLC
37 JDE Street
Spring Lake, NC 28390
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Contact: Rodney Haire
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GENERAL CONTRACTOR

MIKE EVANS DESIGN/BUILD
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Fayetteville, NC 28312
910-486-5120
Contact: Alex Parham
email: alex.parham@medbcinc.com

SURVEYOR

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3679 Nicholson Road
Cameron, North Carolina 28326
910-499-6174
Contact: Melvin Graham, PLS
email: graham59@windstream.net

THE CONTRACTOR MUST CONTACT NORTH CAROLINA ONE CALL CENTER AT 1-800-632-4949 A MINIMUM OF 72 HOURS PRIOR TO DIGGING IN ORDER TO HAVE THE EXISTING UTILITIES LOCATED

4Dsite solutions
civil engineering | land surveying
409 Chicago Drive, Suite 112, Fayetteville, NC 28306
office | 910-426-6777 fax | 910-426-5777 licenses number | C-2354
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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 027462 SCOTT BROWN
05.06.24

REVISIONS
ISSUED FOR CONSTRUCTION

PROJECT NAME
EASY STORAGE

PIN: 9575-73-5360.000
NC HIGHWAY 24
JOHNSONVILLE TOWNSHIP
CITY OF CAMERON
HARNETT COUNTY
NORTH CAROLINA

CLIENT
MIKE EVANS DESIGN/BUILD

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Fayetteville, North Carolina 28312
Phone: (910) 486-5120

PROJECT INFORMATION

DESIGNED BY:	BRETT
DRAWN BY:	BRETT
CHECKED BY:	SCOTT
PROJECT NUMBER:	1980

DRAWING SCALE
SEE SHEETS

DATE RELEASED
MAY 6, 2024

I:\Mike Evans\1980-Easy Storage\CIVIL 3D\DWG\1980-SDESIGN.dwg • AR-C5 • 5/6/2024 12:02:25 PM

2022 HRW REQUIRED UTILITY NOTES

(REVISION 10– APRIL 19, 2022)

THE FOLLOWING UTILITY NOTES SHOULD BE ADDED TO THE COVERSHEET OF UTILITY PLANS FOR PROJECTS LOCATED IN HARNETT COUNTY:

WATER

A. THE FIRE MARSHAL'S OFFICE SHALL APPROVE ALL HYDRANT TYPES AND LOCATIONS IN NEW SUBDIVISIONS. HOWEVER, HARNETT REGIONAL WATER (HRW) PREFERS THE CONTRACTORS TO INSTALL ONE OF THE FOLLOWING FIRE HYDRANTS:

1. MUELLER – SUPER CENTURION 250 A–423 MODEL WITH A 5¼" MAIN VALVE OPENING THREE WAY (TWO HOSE NOZZLES AND ONE PUMPER NOZZLE);
2. AMERICAN DARLING – MARK B–84–B MODEL WITH A 5¼" MAIN VALVE OPENING THREE WAY (TWO HOSE NOZZLES AND ONE PUMPER NOZZLE);
3. WATEROUS – PACER B–67–250 MODEL WITH A 5¼" MAIN VALVE OPENING THREE WAY (TWO HOSE NOZZLES AND ONE PUMPER NOZZLE) OR APPROVED EQUAL FOR STANDARDIZATION.

*ALL FIRE HYDRANTS LISTED ABOVE MUST HAVE "AMERICAN NATIONAL FIRE HOSE CONNECTION SCREW THREADS" NST/NH HOSE THREADS.

B. FIRE HYDRANTS ARE INSTALLED AT CERTAIN ELEVATIONS. ANY GRADE CHANGE NEAR ANY FIRE HYDRANT, WHICH IMPEDES ITS OPERATION, SHALL BECOME THE RESPONSIBILITY OF THE UTILITY CONTRACTOR FOR CORRECTION. CORRECTIONS WILL BE MONITORED BY THE HRW UTILITY CONSTRUCTION INSPECTOR AND THE HARNETT COUNTY FIRE MARSHAL.

C. THE PROFESSIONAL ENGINEER (PE) SHALL OBTAIN AND PROVIDE THE NCDEQ "AUTHORIZATION TO CONSTRUCT" PERMIT TO THE UTILITY CONTRACTOR BEFORE THE CONSTRUCTION OF THE WATER LINE SHALL BEGIN. THE UTILITY CONTRACTOR MUST POST A COPY OF THE NCDEQ "AUTHORIZATION TO CONSTRUCT" PERMIT ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NCDEQ) ON SITE PRIOR TO THE START OF CONSTRUCTION. THE PERMIT MUST BE MAINTAINED ON SITE THROUGHOUT THE ENTIRE CONSTRUCTION PROCESS OF THE PROPOSED WATER LINES THAT WILL SERVE THIS PROJECT.

D. THE UTILITY CONTRACTOR SHALL NOTIFY HARNETT REGIONAL WATER (HRW) AND THE PROFESSIONAL ENGINEER (PE) AT LEAST TWO DAYS PRIOR TO CONSTRUCTION COMMENCING. THE UTILITY CONTRACTOR MUST SCHEDULE A PRE–CONSTRUCTION CONFERENCE WITH MR. CHAD EVERETTE, HRW UTILITY CONSTRUCTION INSPECTOR AT LEAST TWO (2) DAYS BEFORE CONSTRUCTION WILL BEGIN AND THE UTILITY CONTRACTOR MUST COORDINATE WITH HRW FOR REGULAR INSPECTION VISITATIONS AND ACCEPTANCE OF THE WATER SYSTEM(S). CONSTRUCTION WORK SHALL BE PERFORMED ONLY DURING THE NORMAL WORKING HOURS OF HRW WHICH IS 8:00 AM – 5:00 PM MONDAY THROUGH FRIDAY. HOLIDAY AND WEEKEND WORK IS NOT PERMITTED BY HRW.

E. THE PROFESSIONAL ENGINEER (PE) SHALL PROVIDE HRW AND THE UTILITY CONTRACTOR WITH A SET OF NCDEQ APPROVED PLANS MARKED "RELEASED FOR CONSTRUCTION" AT LEAST TWO DAYS PRIOR TO CONSTRUCTION COMMENCING. THE REGISTERED LAND SURVEYOR (RLS) SHOULD STAKE OUT ALL LOT CORNERS AND THE GRADE STAKES FOR THE PROPOSED FINISH GRADE FOR EACH STREET BEFORE THE UTILITY CONTRACTOR BEGINS CONSTRUCTION OF THE WATER LINE(S). THE GRADE STAKES SHOULD BE SET WITH A CONSISTENT OFFSET FROM THE STREET CENTERLINE SO AS NOT TO INTERFERE WITH THE STREET GRADING AND UTILITY CONSTRUCTION.

F. THE UTILITY CONTRACTOR SHALL PROVIDE THE HRW UTILITY CONSTRUCTION INSPECTOR WITH MATERIAL SUBMITTALS AND SHOP DRAWINGS FOR ALL PROJECT MATERIALS PRIOR TO THE CONSTRUCTION OF ANY WATER LINE EXTENSION(S), AND ASSOCIATED WATER SERVICES IN HARNETT COUNTY. THE MATERIALS TO BE USED ON THE PROJECT MUST MEET THE ESTABLISHED SPECIFICATIONS OF HRW AND BE APPROVED BY THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION. ALL SUBSTANDARD MATERIALS OR MATERIALS NOT APPROVED FOR USE IN HARNETT COUNTY FOUND ON THE PROJECT SITE MUST BE REMOVED IMMEDIATELY WHEN NOTIFIED BY THE HRW UTILITY CONSTRUCTION INSPECTOR.

G. THE WATER MAIN(S), FIRE HYDRANTS, SERVICE LINES, METER SETTERS AND ALL ASSOCIATED APPURTENANCES SHALL BE CONSTRUCTED IN STRICT IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE HARNETT REGIONAL WATER (HRW). THE UTILITY CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE THE NEWLY INSTALLED WATER MAIN(S), WATER SERVICE LINES AND ALL ASSOCIATED METER SETTERS AND METER BOXES FOR OTHER UTILITY COMPANIES AND THEIR CONTRACTORS UNTIL THE NEW WATER MAIN(S) HAVE BEEN APPROVED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY, DIVISION OF ENVIRONMENTAL HEALTH, PUBLIC WATER SUPPLY SECTION (NCDEQ, DEH, PWS) AND ACCEPTED BY HRW.

H. PRIOR TO ACCEPTANCE, ALL SERVICES WILL BE INSPECTED TO ENSURE THAT THEY ARE INSTALLED AT THE PROPER DEPTH. ALL METER BOXES MUST BE FLUSH WITH THE GROUND LEVEL AT FINISH GRADE AND THE METER SETTERS MUST BE A MINIMUM OF 8" BELOW THE METER BOX LID. METER SETTERS SHALL BE CENTERED IN THE METER BOX AND SUPPORTED BY BRICK, BLOCK OR STONE.

I. THE UTILITY CONTRACTOR SHALL PROVIDE THE PROFESSIONAL ENGINEER (PE) AND HRW UTILITY CONSTRUCTION INSPECTOR WITH A SET OF RED LINE DRAWINGS IDENTIFYING THE COMPLETE WATER SYSTEM INSTALLED FOR EACH PROJECT. THE RED LINE DRAWINGS SHOULD IDENTIFY THE MATERIALS, PIPE SIZES AND APPROXIMATE DEPTHS OF THE WATER LINES AS WELL AS THE GATE VALVES, FIRE HYDRANTS, METER SETTERS, BLOW OFF ASSEMBLIES AND ALL ASSOCIATED APPURTENANCES FOR ALL WATER LINE(S) CONSTRUCTED IN HARNETT COUNTY. THE RED LINE DRAWINGS SHOULD CLEARLY IDENTIFY ANY DEVIATIONS FROM THE NCDEQ APPROVED PLANS. ALL CHANGE ORDERS MUST BE APPROVED BY HRW AND THE PROFESSIONAL ENGINEER (PE) IN WRITING AND PROPERLY DOCUMENTED IN THE RED LINE FIELD DRAWINGS.

J. POTABLE WATER MAINS CROSSING OTHER UTILITIES AND NON–POTABLE WATER LINES (SANITARY SEWER, STORM SEWER, RCP, ETC.) SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF TWENTY–FOUR (24") INCHES BETWEEN THE POTABLE WATER MAIN AND ALL OTHER UTILITIES. NCDOT REQUIRES THE NEW WATER MAINS TO BE INSTALLED UNDER THE STORM WATER LINES. THE POTABLE WATER MAIN SHALL BE INSTALLED WITH TWENTY–FOUR (24") INCHES OF VERTICAL SEPARATION AND WITH DUCTILE IRON PIPE WHEN DESIGNED TO BE PLACED UNDER A NON– POTABLE WATER LINE SUCH AS SANITARY SEWER OR STORM SEWER LINES. IF THESE SEPARATIONS CANNOT BE MAINTAINED THEN THE WATER MAIN SHALL BE INSTALLED WITH DUCTILE IRON PIPE. BOTH THE POTABLE WATER MAIN AND THE NON–POTABLE WATER LINE MUST BE CAST IRON OR DUCTILE IRON PIPE (DIP) IF THE STATE MINIMUM SEPARATIONS CANNOT BE MAINTAINED. THE DUCTILE IRON PIPE MUST BE LAID SO THE MECHANICAL JOINTS ARE AT LEAST (10') FEET FROM THE POINT WHERE THE POTABLE WATER MAIN CROSSES THE NON–POTABLE WATER LINE.

K. POTABLE WATER MAINS INSTALLED PARALLEL TO NON–POTABLE WATER LINES (SANITARY SEWER, STORM SEWER, RCP, ETC.) SHALL BE LAID TO PROVIDE A MINIMUM HORIZONTAL DISTANCE OF TEN (10') FEET BETWEEN THE POTABLE WATER MAIN AND SANITARY SEWER MAINS, SEWER LATERALS AND SERVICES. THE HORIZONTAL SEPARATION BETWEEN THE POTABLE WATER MAIN AND ANY OTHER UTILITY OR STORM SEWER SHALL NOT BE LESS THAN FIVE (5') FEET. THE POTABLE WATER MAIN MUST BE DUCTILE IRON PIPE IF THIS HORIZONTAL SEPARATION OF TEN (10') FEET CANNOT BE MAINTAINED. THE DUCTILE IRON PIPE SHALL EXTEND AT LEAST TEN (10') FEET BEYOND THE POINT WHERE THE MINIMUM REQUIRED HORIZONTAL SEPARATION OF TEN (10') FEET CAN BE RE–ESTABLISHED.

L. METER SETTERS SHALL BE INSTALLED IN PAIRS ON EVERY OTHER LOT LINE WHERE POSSIBLE TO LEAVE ADEQUATE SPACE FOR OTHER UTILITIES TO BE INSTALLED AT A LATER TIME. THE METER SETTERS SHALL BE INSTALLED AT LEAST ONE (1') FOOT INSIDE THE RIGHT–OF–WAY AND AT LEAST THREE (3') TO FIVE (5') FEET FROM THE PROPERTY LINE BETWEEN THE LOTS.

M. HRW REQUIRES THAT METER BOXES FOR ¾" SERVICES SHALL BE 12" WIDE X 17" LONG ABS PLASTIC BOXES AT LEAST 18" IN HEIGHT WITH CAST IRON LIDS/COVERS. METER BOXES FOR 1" SERVICES SHALL BE 17" WIDE X 21" LONG ABS PLASTIC BOXES AT LEAST 18" IN HEIGHT WITH PLASTIC LIDS AND CAST IRON FLIP COVERS IN THE CENTER OF THE LIDS. METER BOXES FOR 2" SERVICES SHALL BE 20" WIDE X 32" LONG ABS PLASTIC BOXES AT LEAST 20" IN HEIGHT WITH PLASTIC LIDS AND CAST IRON FLIP COVERS IN THE CENTER OF THE LIDS.

N. MASTER METERS MUST BE INSTALLED IN CONCRETE VAULTS SIZED FOR THE METER ASSEMBLY AND ASSOCIATED APPURTENANCES SO AS TO PROVIDE AT LEAST EIGHTEEN (18") INCHES OF CLEARANCE BETWEEN THE BOTTOM OF THE CONCRETE VAULT AND THE BOTTOM OF THE METER SETTER. THE MASTER METER MUST BE PROVIDED TEST PORTS IF THE METER IS NOT EQUIPPED WITH TEST PORTS FROM THE MANUFACTURER IN ACCORDANCE WITH THE HRW ESTABLISHED STANDARD SPECIFICATIONS AND DETAILS. DUCTILE IRON PIPE MUST BE USED FOR THE MASTER METER VAULT PIPING AND VALVE VAULT PIPING. THE UTILITY CONTRACTOR MUST PROVIDE SHOP DRAWINGS FOR THE METER VAULTS TO HRW PRIOR TO ORDERING THE CONCRETE VAULTS.

O. THE UTILITY CONTRACTOR WILL INSTALL POLYETHYLENE SDR–9 WATER SERVICE LINES THAT CROSS UNDER THE PAVEMENT INSIDE A SCHEDULE 40 PVC CONDUIT TO ALLOW FOR REMOVAL AND REPLACEMENT IN THE FUTURE. TWO (2) INDEPENDENT ¾" WATER SERVICE LINES MAY BE INSTALLED INSIDE ONE (1) – TWO (2") INCH SCHEDULE 40 PVC CONDUIT OR TWO (2) INDEPENDENT 1" WATER SERVICE LINES MAY BE INSTALLED INSIDE ONE

(1) – THREE (3") INCH SCHEDULE 40 PVC CONDUIT, BUT EACH WATER SERVICE SHALL BE TAPPED DIRECTLY TO THE WATER MAIN. SPLIT SERVICES ARE NOT ALLOWED BY HRW. IF SIDEWALKS ARE PROPOSED, THE CONDUIT MUST EXTEND PAST THE SIDEWALK.

P. THE WATER MAIN(S), FIRE HYDRANTS, GATE VALVES, SERVICE LINES, METER SETTERS AND ASSOCIATED APPURTENANCES MUST BE RATED FOR 200 PSI AND HYDROSTATICALLY PRESSURE TESTED TO 200 PSI. THE HYDROSTATIC PRESSURE TEST(S) MUST BE WITNESSED BY THE HRW UTILITY CONSTRUCTION INSPECTOR. THE UTILITY CONTRACTOR MUST NOTIFY HRW WHEN THEY ARE READY TO BEGIN FILLING IN LINES AND COORDINATE WITH HARNETT REGIONAL WATER TO WITNESS ALL PRESSURE TESTING.

Q. THE UTILITY CONTRACTOR SHALL CONDUCT A PNEUMATIC PRESSURE TEST USING COMPRESSED AIR OR OTHER INERT GAS ON THE STAINLESS STEEL TAPPING SLEEVE(S) PRIOR TO MAKING THE TAP ON THE EXISTING WATER MAIN. THIS PNEUMATIC PRESSURE TEST MUST BE WITNESSED BY THE HRW UTILITY CONSTRUCTION INSPECTOR. THE UTILITY CONTRACTOR SHALL USE ROMAC BRAND STAINLESS STEEL TAPPING SLEEVE(S) OR APPROVED EQUAL FOR ALL TAPS MADE IN HARNETT COUNTY. ALL NEW WATER LINE EXTENSIONS MUST BEGIN WITH A RESILIENT WEDGE TYPE GATE VALVE SIZED EQUAL TO THE DIAMETER OF THE NEW WATER LINE EXTENSION IN ORDER TO PROVIDE A MEANS OF ISOLATION BETWEEN HARNETT REGIONAL WATER'S EXISTING WATER MAINS AND THE NEW WATER LINE EXTENSIONS UNDER CONSTRUCTION.

R. ALL WATER MAINS WILL BE CONSTRUCTED WITH SDR–21 PVC PIPE OR CLASS 50 DUCTILE IRON PIPE RATED FOR AT LEAST 200 PSI OR GREATER. ALL PIPES MUST BE PROTECTED DURING LOADING, TRANSPORT, UNLOADING, STAGING, AND INSTALLATION. PVC PIPE MUST BE PROTECTED FROM EXTENDED EXPOSURE TO SUNLIGHT PRIOR TO INSTALLATION.

S. ALL WATER MAINS WILL BE FLUSHED AND DISINFECTED IN STRICT ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE HARNETT REGIONAL WATER. ALL WATER SAMPLES COLLECTED FOR BACTERIA TESTING WILL BE COLLECTED BY THE HRW UTILITY CONSTRUCTION INSPECTOR AND TESTED IN THE HRW LABORATORY.

T. ALL FITTINGS LARGER THAN TWO (2") INCHES DIAMETER SHALL BE DUCTILE IRON. HRW REQUIRES THAT MECHANICAL JOINTS BE ASSEMBLED WITH GRIP RINGS AS "MEGALUG" FITTINGS ARE NOT APPROVED BY HARNETT REGIONAL WATER FOR PIPE SIZES SMALLER THAN TWELVE INCHES (12") DIAMETER. PVC PIPE USED FOR WATER MAINS SHALL BE CONNECTED BY SLIP JOINT OR MECHANICAL JOINT WITH GRIP RINGS. GLUED PIPE JOINTS ARE NOT ALLOWED ON PVC PIPE USED FOR WATER MAINS IN HARNETT COUNTY.

U. HRW REQUIRES THAT THE UTILITY CONTRACTOR INSTALL TRACER WIRE IN THE TRENCH WITH ALL WATER LINES. THE TRACER WIRE SHALL BE 12 GA. INSULATED, SOLID COPPER CONDUCTOR AND IT SHALL BE TERMINATED AT THE TOP OF THE VALVE BOXES OR MANHOLES. NO SPLICED WIRE CONNECTIONS SHALL BE MADE UNDERGROUND ON TRACER WIRE INSTALLED IN HARNETT COUNTY. THE TRACER WIRE MAY BE SECURED WITH DUCT TAPE TO THE TOP OF THE PIPE BEFORE BACKFILLING.

V. THE UTILITY CONTRACTOR WILL PROVIDE PROFESSIONAL ENGINEER (PE) AND THE HRW UTILITY CONSTRUCTION INSPECTOR WITH A SET OF RED LINE FIELD DRAWINGS TO IDENTIFY THE INSTALLED LOCATIONS OF THE WATER LINE(S) AND ALL ASSOCIATED SERVICES. ALL CHANGE ORDERS MUST BE PRE–APPROVED BY HRW AND THE PROFESSIONAL ENGINEER (PE) IN WRITING AND PROPERLY DOCUMENTED IN THE RED LINE FIELD DRAWINGS.

W. THE UTILITY CONTRACTOR SHALL SPOT DIG TO EXPOSE EACH UTILITY PIPE OR LINE WHICH MAY CONFLICT WITH CONSTRUCTION OF PROPOSED WATER LINE EXTENSIONS WELL IN ADVANCE TO VERIFY LOCATIONS OF THE EXISTING UTILITIES. THE UTILITY CONTRACTOR SHALL PROVIDE BOTH HORIZONTAL AND VERTICAL CLEARANCES TO THE PROFESSIONAL ENGINEER (PE) TO ALLOW THE PE TO ADJUST THE WATER LINE DESIGN IN ORDER TO AVOID CONFLICTS WITH EXISTING UNDERGROUND UTILITIES. THE UTILITY CONTRACTOR SHALL COORDINATE WITH THE UTILITY OWNER AND BE RESPONSIBLE FOR TEMPORARY RELOCATION AND/OR SECURING EXISTING UTILITY POLES, PIPES, WIRES, CABLES, SIGNS AND/OR UTILITIES INCLUDING SERVICES IN ACCORDANCE WITH THE UTILITY OWNER REQUIREMENTS DURING WATER LINE INSTALLATION, GRADING AND STREET CONSTRUCTION.

X. PRIOR TO THE COMMENCEMENT OF ANY WORK WITHIN ESTABLISHED UTILITY EASEMENTS OR NCDOT RIGHT–OF–WAYS THE UTILITY CONTRACTOR IS REQUIRED TO HAVE A SIGNED NCDOT ENCROACHMENT AGREEMENT POSTED ON SITE AND NOTIFY ALL CONCERNED UTILITY COMPANIES IN ACCORDANCE WITH G.S. 87–102. THE UTILITY CONTRACTOR MUST CALL THE NC ONE CALL CENTER AT 811 OR (800) 632–4949 TO VERIFY THE LOCATION OF EXISTING UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION. EXISTING UTILITIES SHOWN IN THESE PLANS ARE TAKEN FROM MAPS FURNISHED BY VARIOUS UTILITY COMPANIES AND HAVE NOT BEEN PHYSICALLY LOCATED OR VERIFIED BY THE P.E. (I.E. TELEPHONE, CABLE, WATER, SEWER, ELECTRICAL POWER, FIBER OPTIC,

NATURAL GAS, ETC.). THE UTILITY CONTRACTOR WILL BE RESPONSIBLE TO REPAIR ANY AND ALL DAMAGES TO THE SATISFACTION OF THE RELATED UTILITY COMPANY.

Y. THE UTILITY CONTRACTOR SHALL PROVIDE HRW WITH AT LEAST ONE (1) FIRE HYDRANT WRENCH AND ONE (1) BREAK–AWAY FLANGE KIT FOR EVERY SUBDIVISION WITH FIRE HYDRANTS DEVELOPED IN HARNETT COUNTY. THESE ITEMS MUST BE PROVIDED TO HRW BEFORE THE FINAL INSPECTION WILL BE SCHEDULED BY THE HRW UTILITY CONSTRUCTION INSPECTOR. IN ADDITION, THE UTILITY CONTRACTOR SHALL INSTALL A 4" X 4" CONCRETE VALVE MARKER AT THE EDGE OF THE RIGHT–OF–WAY TO IDENTIFY THE LOCATION OF EACH GATE VALVE INSTALLED IN THE NEW WATER SYSTEM WITH THE EXCEPTION OF THE FIRE HYDRANT ISOLATION VALVES. THE CONTRACTOR SHALL MEASURE THE DISTANCE FROM THE CENTER OF THE CONCRETE MARKER TO THE CENTER OF THE VALVE BOX. THIS DISTANCE (IN LINEAR FEET) SHALL BE STAMPED ON THE BRASS PLATE LOCATED ON THE TOP OF THE CONCRETE VALVE MARKER. IN LIEU OF INSTALLING THE CONCRETE VALVE MARKERS, THE UTILITY CONTRACTOR MAY PROVIDE AT LEAST TWO MEASUREMENTS FROM TWO INDEPENDENT PERMANENT ABOVE GROUND STRUCTURES TO THE PROFESSIONAL ENGINEER (PE) IN THE RED LINE DRAWINGS TO IDENTIFY THE VALVE LOCATIONS. THE PROFESSIONAL ENGINEER (PE) MUST INCLUDE THESE MEASUREMENTS IN THE AS–BUILT RECORD DRAWINGS SUBMITTED TO HRW.

Z. THE UTILITY CONTRACTOR WILL BE RESPONSIBLE FOR ANY AND ALL REPAIRS DUE TO LEAKAGE DAMAGE FROM POOR WORKMANSHIP DURING THE ONE

(1) YEAR WARRANTY PERIOD ONCE THE WATER SYSTEM IMPROVEMENTS HAVE BEEN ACCEPTED BY HARNETT REGIONAL WATER. HARNETT REGIONAL WATER WILL PROVIDE MAINTENANCE AND REPAIRS WHEN REQUESTED AND BILL THE DEVELOPER AND/OR UTILITY CONTRACTOR IF NECESSARY DUE TO LACK OF RESPONSE WITHIN 48 HOURS OF NOTIFICATION OF WARRANTY WORK. THE UTILITY CONTRACTOR WILL BE RESPONSIBLE FOR ANY AND ALL REPAIRS DUE TO DAMAGES RESULTING FROM FAILURE TO LOCATE THE NEW WATER LINES AND ASSOCIATED APPURTENANCES FOR OTHER UTILITIES AND THEIR CONTRACTORS UNTIL THE WATER LINES HAVE BEEN APPROVED BY NCDEQ AND ACCEPTED BY HRW. THE FINAL INSPECTION OF WATER SYSTEM IMPROVEMENTS CANNOT BE SCHEDULED WITH HRW UNTIL THE STREETS HAVE BEEN PAVED; THE RIGHTS–OF–WAY AND UTILITY EASEMENTS HAVE BEEN SEEDED AND STABILIZED WITH AN ADEQUATE STAND OF GRASS IN PLACE TO PREVENT EROSION ISSUES ON SITE.

AA THE ENGINEER OF RECORD IS RESPONSIBLE TO ENSURE THAT CONSTRUCTION IS, AT ALL TIMES, IN COMPLIANCE WITH ACCEPTED SANITARY ENGINEERING PRACTICES AND APPROVED PLANS AND SPECIFICATIONS. NO FIELD CHANGES TO THE APPROVED PLANS ARE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL BY HRW. A COPY OF EACH ENGINEER'S FIELD REPORT IS TO BE SUBMITTED TO HRW AS EACH SUCH INSPECTION IS MADE ON SYSTEM IMPROVEMENTS OR TESTING IS PERFORMED BY THE CONTRACTOR. WATER AND SEWER INFRASTRUCTURE MUST PASS ALL TESTS REQUIRED BY HRW SPECIFICATIONS

AND THOSE OF ALL APPLICABLE REGULATORY AGENCIES. THESE TESTS INCLUDE, BUT ARE NOT LIMITED TO: AIR TEST, VACUUM TEST, MANDREL TEST, VISUAL TEST, PRESSURE TEST, BACTERIOLOGICAL TEST, ETC. A HRW INSPECTOR MUST BE PRESENT DURING TESTING AND ALL TEST RESULTS SHALL BE SUBMITTED TO HRW. ALL TESTS MUST BE SATISFIED BEFORE THE FINAL INSPECTION WILL BE SCHEDULED WITH THE HRW INSPECTOR. THE ENGINEER OF RECORD MUST REQUEST IN WRITING TO SCHEDULE THE FINAL INSPECTION ONCE ALL CONSTRUCTION IS COMPLETE. THE DEVELOPER'S ENGINEER OF RECORD AND THE HRW UTILITY CONSTRUCTION INSPECTOR SHALL PREPARE A WRITTEN PUNCH LIST OF ANY DEFECTS OR DEFICIENCIES NOTED DURING THE FINAL INSPECTION, SHOULD ANY EXIST. UPON COMPLETION OF THE PUNCH LIST, THE DEVELOPER'S ENGINEER OF RECORD WILL SCHEDULE ANOTHER INSPECTION. IN THE EVENT THE NUMBER OF INSPECTIONS PERFORMED BY THE HRW EXCEEDS TWO, ADDITIONAL FEES MAY BE ASSESSED TO THE DEVELOPER.

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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 027482 CRAIG NEES SCOTT BROWN
05.06.24

REVISIONS

ISSUED FOR CONSTRUCTION

PROJECT NAME

EASY STORAGE

PROJECT NOTES

CLIENT

MIKE EVANS DESIGN/BUILD

912 Cedar Creek Road
Fayetteville, North Carolina 28312
Phone: (910) 486-5120

PROJECT INFORMATION

DESIGNED BY:	BRETT
DRAWN BY:	BRETT
CHECKED BY:	SCOTT
PROJECT NUMBER:	1980

DRAWING SCALE

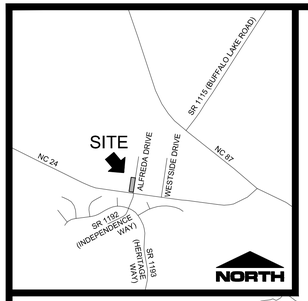
SEE SHEETS

DATE RELEASED

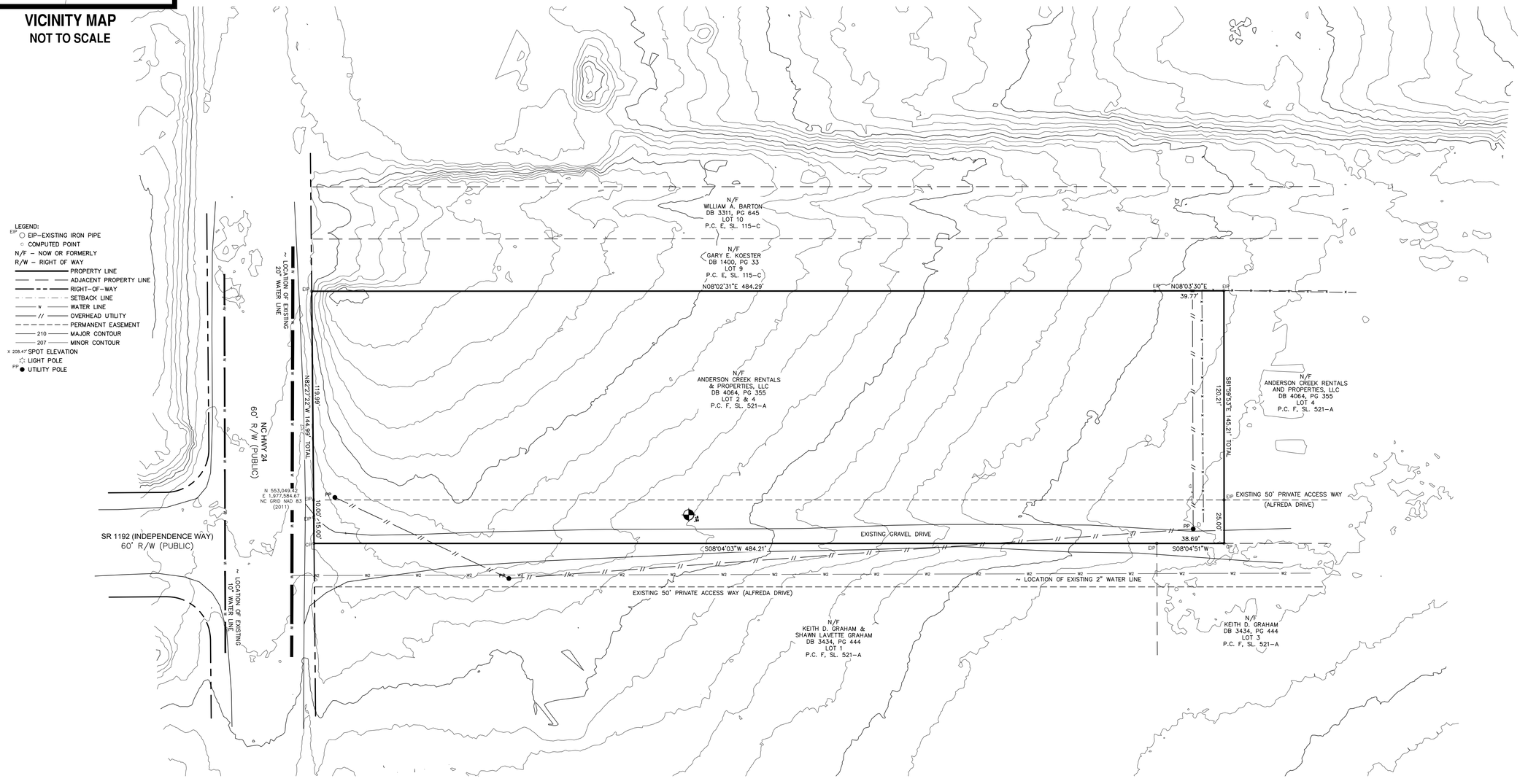
MAY 6, 2024

SHEET NUMBER

G-1.0



VICINITY MAP
NOT TO SCALE



BOUNDARY SURVEY DATA OBTAINED FROM A SURVEY FOR ANDERSON CREEK RENTALS AND PROPERTIES, LLC PREPARED BY MELVIN A. GRAHAM, PLS DATED SEPTEMBER 29, 2022 BY A CAD DRAWING NAMED 5622–SP PROVIDED BY THE AFOREMENTIONED.

THE CONTOURS SHOWN ARE FROM THE NORTH CAROLINA SPATIAL DATA DOWNLOAD WEBSITE, VIA THE NC FLOODPLAIN MAPPING PROGRAM. THE CONTOURS WERE ACHIEVED VIA LIDAR MAPPING SYSTEMS AND ARE PART OF THE PHASE 3, 2015 QL2–NC DATA SET. THESE CONTOURS ARE 1' CONTOURS AND ARE IN NC GRID NAD 83/2011 AND NAVD 88 DATUMS.

NC GRID NAD 83 (2011)

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 027462 SCOTT BROWN
05.06.24

REVISIONS
ISSUED FOR CONSTRUCTION

PROJECT NAME
EASY STORAGE

EXISTING CONDITIONS

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Phone: (910) 486-5120

PROJECT INFORMATION

SURVEYED BY:	M.A.G
DRAWN BY:	M.A.G
CHECKED BY:	M.A.G
PROJECT NUMBER:	1980

DRAWING SCALE
HORIZONTAL: 1"=30'

DATE SURVEYED
FEBRUARY 14, 2023

SHEET NUMBER
C-1.0

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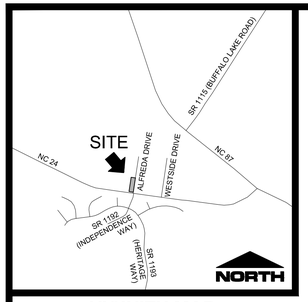


VICINITY MAP
NOT TO SCALE

	QTY.	TYPE	PLANTING SIZE	MIN. HEIGHT	SCIENTIFIC NAME
		UNDERSTORY TREES			
	34	FLOWERING DOGWOOD	1.5" CALIPER	8'	CORNUS FLORIDA
		SHRUBS			
	99	JAPANESE HOLLY	3 GAL.	18"	ILEX CRENATA

LANDSCAPING NOTES:

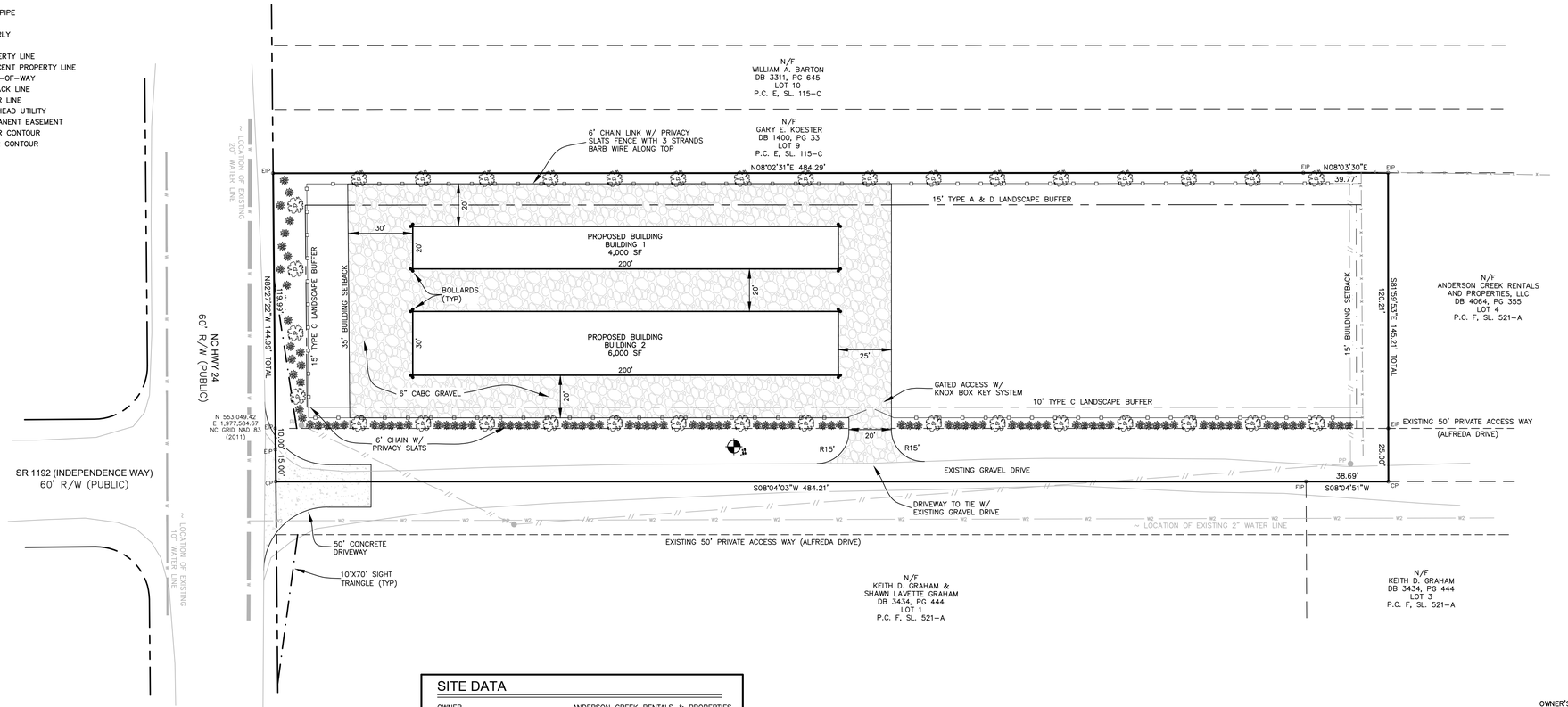
1. HEIGHT AND SPREAD OF TREE SPECIMEN SHALL MEET REQUIREMENTS OF THE AMERICAN ASSOCIATION OF NURSERYMEN, AMERICAN STANDARD FOR NURSERY STOCK.
2. SITE LIGHTING PLANS REQUIRE LIGHTS TO BE A MIN. OF 15 FEET FROM TREES. ANY ADJUSTMENTS IN THE FIELD NEED TO COMPLY WITH THIS STANDARD AND BE APPROVED BY COUNTY STAFF.
3. EACH TREE MUST BE PLANTED SUCH THAT THE ROOT FLARE IS VISIBLE AT THE TOP OF THE ROOT BALL. TREES WHERE THE ROOT FLARE IS NOT VISIBLE SHALL BE REJECTED. DO NOT COVER THE ROOT FLARE WITH MULCH.
4. DO NOT PLACE MULCH IN CONTACT WITH THE TREE TRUNK. KEEP MULCH A MIN. OF 4" AWAY FROM THE TRUNK BASE.
5. ANY CHANGES TO THE PROPOSED PLANT SCHEDULE MUST BE APPROVED BY THE DESIGNER OF RECORD AND THE COUNTY. IN CASES WHERE THE PLANT SCHEDULE ONLY INCLUDES THE PLANT TYPE AND DOES NOT INCLUDE THE PLANT SPECIES, THE CONTRACTOR SHALL BE REQUIRED TO SUBMIT TO THE COUNTY FOR APPROVAL, A DETAILED PLANT SCHEDULE AND ASSOCIATED PLANTING PLAN PREPARED BY A PROFESSIONAL KNOWLEDGEABLE ABOUT PLANT MATERIAL AND DESIGN, PRIOR TO PROCEEDING WITH INSTALLATION.

*THIS LANDSCAPING PLAN IS THE MINIMUM REQUIRED TO MEET WITH HARNET COUNTY ZONING ORDINANCE. THE OWNER OR DEVELOPER IS ENCOURAGED TO CONSULT WITH A LANDSCAPE ARCHITECT IN ORDER TO DEVELOP A PLAN THAT IS MORE IN DEPTH THAN THE MINIMUM REQUIREMENTS. THIS PLAN IS FOR PERMITTING PURPOSES ONLY.

SITE NOTES

1. EXISTING UNDERGROUND UTILITIES ARE SHOWN ONLY WHERE EVIDENCE COULD BE FOUND TO VERIFY LOCATION. PRIOR TO CONSTRUCTION OR EXCAVATION OF THE SITE, THE GENERAL CONTRACTOR SHALL VERIFY ALL UTILITY COMPANIES TO VERIFY THE LOCATION OF THEIR RESPECTIVE UTILITIES. ALL DAMAGE INCURRED TO EXISTING UTILITIES DURING CONSTRUCTION SHALL BE REPAIRED AT THE GENERAL CONTRACTOR'S EXPENSE.
2. ASPHALT AND BASE TYPE SHALL BE PER THE DETAILS.
3. ALL DIMENSIONS ARE TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
4. ALL WASTE MATERIAL SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH STATE AND LOCAL LAWS AND REGULATIONS.
5. ALL SITE IMPROVEMENTS SHALL BE INSTALLED PER HARNETT COUNTY AND STATE REGULATIONS.
6. ALL EXISTING FENCES, STRUCTURES, AND POWER UTILITIES WITHIN PROPERTY LINES TO BE REMOVED OR RELOCATED.

LEGEND:
- EIP — EIP-EXISTING IRON PIPE
- ○ COMPUTED POINT
- N/F — NOW OR FORMERLY
- R/W — RIGHT OF WAY
- PROPERTY LINE
- ADJACENT PROPERTY LINE
- RIGHT-OF-WAY
- SETBACK LINE
- W — WATER LINE
- // — OVERHEAD UTILITY
- PERMANENT EASEMENT
- 210 — MAJOR CONTOUR
- 207 — MINOR CONTOUR
- x 208.47 SPOT ELEVATION
- ☆ LIGHT POLE
- ● UTILITY POLE



SITE DATA

OWNER	ANDERSON CREEK RENTALS & PROPERTIES
MAILING ADRESS	37 JDE STREET
CITY, STATE	SPRING LAKE, NORTH CAROLINA 28390
PIN NUMBER	9575-73-5360.000
TOTAL SITE AREA	75,957 SF (1.74 AC)
AREA TO BE DEVELOPED	42,786 SF (0.98 AC)
CURRENT ZONING	COMM
EXISTING USE	UNDEVELOPED
PROPOSED USE	COMMERCIAL STORAGE
PROPOSED BUILDINGS	2
DISTURBED/DENUDED AREA	0.99 ACRES
IMPERVIOUS AREA	30,622 SF (0.70 AC)
SETBACKS REQUIRED:	COMM
FRONT	35 FT
SIDE	0 FT, 20 FT RESIDENTIAL
REAR	25 FT

OWNER'S CONSENT

AS THE OWNER OF RECORD, I HEREBY FORMALLY CONSENT TO THE PROPOSED DEVELOPMENT SHOWN ON THE SITE PLAN AND ALL REGULATIONS AND REQUIREMENTS OF THE HARNETT COUNTY ORDINANCES.

_____ DATE

_____ OWNER'S SIGNATURE

NC GRID NAD 83 (2011)

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

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office | 910-426-6777 fax | 910-426-5777 licenses number | C-2354
www.4Dsitesolutions.com

NORTH CAROLINA PROFESSIONAL SEAL 027462 ENGINEER SCOTT BROWN
05.06.24

REVISIONS

ISSUED FOR CONSTRUCTION

PROJECT NAME

EASY STORAGE

SITE PLAN

CLIENT

MIKE EVANS DESIGN/BUILD

912 Cedar Creek Road
Fayetteville, North Carolina 28312
Phone: (910) 486-5120

PROJECT INFORMATION

DESIGNED BY:	BRETT
DRAWN BY:	BRETT
CHECKED BY:	SCOTT
PROJECT NUMBER:	1980

DRAWING SCALE

HORIZONTAL: 1"=30'

DATE RELEASED

MAY 6, 2024

SHEET NUMBER

C-2.0

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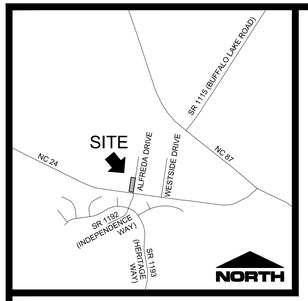


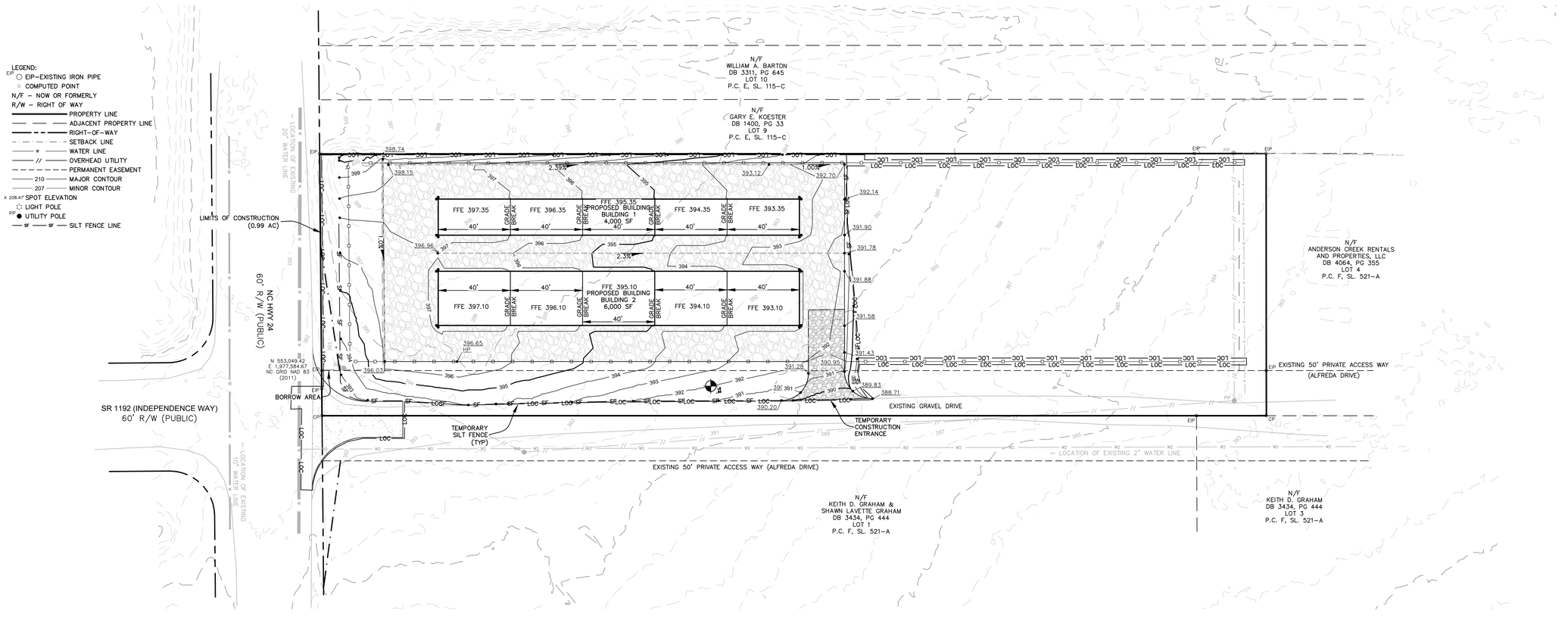
VICINITY MAP
NOT TO SCALE

EROSION CONTROL NOTES

1. TEMPORARY EROSION CONTROL FACILITIES AND/OR PERMANENT FACILITIES INTENDED TO CONTROL EROSION OF AND EARTH DISTURBANCE OPERATION SHALL BE INSTALLED BEFORE ANY EARTH DISTURBANCE OPERATIONS TAKE PLACE OR AT THE EARLIEST POSSIBLE POINT DURING CONSTRUCTION.
2. TEMPORARY & PERMANENT EROSION CONTROL MEASURES SHALL BE CONSTRUCTED PER THE DETAILS HEREIN, OR SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.
3. REMOVE ALL SOILS AND SEDIMENTS TRACKED OR OTHERWISE DEPOSITED ONTO PUBLIC AND PRIVATE PAVEMENT AREAS. REMOVAL SHALL BE ON A DAILY BASIS WHEN TRACKING OCCURS.
4. LOCATE SOIL STOCKPILES NO LESS THAN FIFTY (50) FEET FROM ANY PUBLIC OR PRIVATE ROADWAY OR DRAINAGE CHANNEL. IF REMAINING FOR MORE THAN SEVEN DAYS, STABILIZE THE STOCKPILES BY VEGETATIVE COVER, TARPS, OR OTHER MEANS. CONTROL EROSION FROM ALL STOCKPILES BY PLACING SILT BARRIERS AROUND THE PILES. TEMPORARY STOCKPILES LOCATED ON PAVED SURFACES MUST BE NO LESS THAN FIVE FEET FROM THE DRAINAGE/GUTTER LINE AND SHALL BE COVERED IF LEFT MORE THAN 24 HOURS.
5. MAINTAIN ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES IN PLACE UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED. INSPECT TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES ON A DAILY BASIS AND REPLACE DETERIORATED, DAMAGED, OR ROTTED EROSION CONTROL DEVICES IMMEDIATELY.
6. TEMPORARILY OR PERMANENTLY STABILIZE ALL DENUDED AREAS WHICH HAVE BEEN FINISH GRADED, AND ALL DENUDED AREAS IN WHICH GRADING OR SITE BUILDING CONSTRUCTION OPERATIONS ARE NOT ACTIVELY UNDERWAY AGAINST EROSION DUE TO RAIN, WIND AND RUNNING WATER WITHIN 14 DAYS. USE SEEDING AND MULCHING, EROSION CONTROL MATTING, AND/OR SODDING AND STAKING IN GREEN SPACE AREAS AND OTHERWISE APPROPRIATE MEASURES. USE EARLY APPLICATION OF GRAVEL BASE ON AREAS TO BE PAVED.
7. DO NOT REMOVE ANY EROSION AND SEDIMENT CONTROL DEVICES AFTER THE PROTECTED AREA HAS UNDERGONE FINAL STABILIZATION AND PERMANENT VEGETATION HAS BEEN ESTABLISHED, IT IS RECOMMENDED THAT NCDEQ APPROVE THE ACTION PRIOR TO REMOVAL.
8. THE CONSTRUCTION ENTRANCE SHALL BE INSTALLED CONCURRENTLY WITH THE INITIATION OF CONSTRUCTION ACTIVITY.
9. THE INSTALLATION OF EROSION CONTROL MEASURES SHALL TAKE PRECEDENCE OVER ALL OTHER CONSTRUCTION ACTIVITIES.
10. THE PERMITTEE SHALL BE HELD RESPONSIBLE FOR THE ACTIONS AND PERFORMANCE OF ANY OTHER PARTIES PERFORMING WORK ON THIS PROJECT.
11. ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF-PRODUCING RAINFALL BUT IN NO CASE LESS THAN ONCE EVERY WEEK. ANY NEEDED REPAIRS WILL BE MADE IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGNED.
12. PURSUANT TO G.S. 113A-57(2), THE ANGLE FOR GRADED SLOPES AND FILLS SHALL BE NO GREATER THAN THE ANGLE THAT CAN BE RETAINED BY VEGETATIVE COVER OR OTHER ADEQUATE EROSION CONTROL DEVICES OR STRUCTURES. IN ANY EVENT, SLOPES LEFT EXPOSED WILL, WITHIN 7 OR 14 CALENDAR DAYS OF COMPLETION OF ANY PHASE OF GRADING, BE PLANTED OR OTHERWISE PROVIDED WITH TEMPORARY OR PERMANENT GROUND COVER, DEVICES OR STRUCTURES SUFFICIENT TO RESTRAIN EROSION. PURSUANT TO G.S. 113A-57(3), PROVISIONS FOR PERMANENT GROUND COVER SUFFICIENT TO RETAIN EROSION MUST BE ACCOMPLISHED FOR ALL DISTURBED AREAS WITHIN 90 CALENDAR DAYS FOLLOWING COMPLETION OF CONSTRUCTION OR DEVELOPMENT.
13. CONTRACTOR IS RESPONSIBLE FOR INSTALLING ALL EROSION CONTROL MEASURES SHOWN AND ANY ADDITIONAL MEASURES REQUIRED TO CONTROL THE SEDIMENT DURING THE COURSE OF CONSTRUCTION.
14. ALL SEEDED AREAS WILL BE FERTILIZED, RESEEDED AS NECESSARY, AND MULCHED ACCORDING TO THE DETAILS HEREIN.
15. THE CONTACT PERSON FOR EROSION CONTROL ISSUES THAT ARISE ON SITE IS MIKE EVANS. CONTACT 910-486-5120.
16. EXCESS TOPSOIL FROM THE SITE SHOULD BE HAULED OFF AND PROPERLY DISPOSED OF.

GRADING NOTES

1. ALL ELEVATIONS SHOWN ARE IN REFERENCE TO THE LIDAR DATA AND MUST BE VERIFIED BY THE GENERAL CONTRACTOR.
2. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR ALL LAND DISTURBING ACTIVITIES AND ENSURE COMPLIANCE WITH THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN. THE CONTRACTOR SHALL INSPECT AND MAINTAIN ALL EROSION CONTROL DEVICES AND CLEAR ANY DEBRIS LEAVING THE SITE ON NEIGHBORING ROADS.
3. EXISTING GROUND UPON WHICH FILL OR BASE IS TO BE PLACED SHALL BE CLEARED OF WEEDS, DEBRIS, TOPSOIL, AND ALL OTHER DELETERIOUS MATERIALS; NO FILL SHALL BE PLACED UNTIL PREPARATION OF THE EXISTING GROUND HAS BEEN COMPLETED
4. PROTECTIVE MEASURES SHALL BE TAKEN BY THE CONTRACTOR AND THE OWNER TO PROTECT ADJACENT PROPERTY, THE PUBLIC AND UTILITIES DURING GRADING OPERATIONS. THE CONTRACTOR ASSUMES ALL LIABILITY FOR THE UNDERGROUND UTILITY PIPES, CONDUITS, OR STRUCTURES, WHETHER SHOWN OR NOT ON THE PLAN
5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES OR STRUCTURES ABOVE AND BELOW GROUND, SHOWN OR NOT SHOWN ON THESE PLANS. THEY WILL BE HELD RESPONSIBLE FOR ALL DAMAGE TO ANY UTILITIES OR STRUCTURES CAUSED BY HIS OPERATION.
6. ALL CUT AND FILL SLOPES SHOULD BE INVESTIGATED BOTH DURING AND AFTER GRADING BY THE CONTRACTOR TO DETERMINE IF ANY SLOPE STABILITY PROBLEMS EXIST. IF IT IS DETERMINED THAT THERE IS A SLOPE STABILITY PROBLEM THE ENGINEER OF RECORD SHOULD BE NOTIFIED.
7. STOCKPILE AREAS THAT WILL EXCEED 10' IN HEIGHT SHOULD BE GRADED WITH 3:1 SLOPES AND SURROUNDED BY SILT FENCE.
8. APPROVED COPIES OF THE GRADING AND EROSION CONTROL PLANS SHALL BE ON THE PERMITTED SITE WHILE WORK IS IN PROGRESS.
9. ALL EXISTING DRAINAGE COURSES THROUGH THIS SITE SHALL REMAIN IN A CONDITION SUCH THAT THEY CAN TRANSPORT THE NATURAL DRAINAGE UNTIL FACILITIES TO HANDLE THE STORM WATER ARE CONSTRUCTED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DUE TO OBSTRUCTING NATURAL DRAINAGE PATTERNS.
10. ANY DEVIATION FROM THE APPROVED GRADING PLAN SHOULD BE REPORTED TO THE ENGINEER OF RECORD PRIOR TO IMPLEMENTATION OF THE CHANGE.
11. ALL SLOPES 3:1 OR STEEPER THAT EXTEND TEN FEET OR MORE SHALL BE LINED WITH NORTH AMERICAN GREEN S75 TEMPORARY EROSION CONTROL BLANKET OR EQUAL SUBSTITUTE.



CONSTRUCTION SEQUENCE

1. OBTAIN ALL NECESSARY PERMITS AND APPROVALS AND HOLD PRE-CONSTRUCTION CONFERENCE.
2. INSTALL STONE CONSTRUCTION ENTRANCE
3. CLEAR AND GRUB THE SITE AS NEEDED.
4. ROUGH GRADE THE SITE AND APPLY TEMPORARY SEEDING TO AREAS REMAIN GRASSED.
5. INSTALL UTILITIES.
6. PERFORM FINE GRADING.
7. INSTALL GRAVEL DRIVE AISLES.
8. FERTILIZE, SEED AND MULCH ALL REMAINING DISTURBED AREAS.
9. UPON SITE STABILIZATION, SEEK NCDEQ APPROVAL TO REMOVE ALL TEMPORARY MEASURES.
10. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED AS OUTLINED IN THE DETAILS WITHIN THE PLANS AND ACCORDING TO THE NCDEQ EROSION CONTROL MANUAL. OBTAIN ALL NECESSARY PERMITS AND APPROVALS AND HOLD PRE CONSTRUCTION CONFERENCE.

GROUND STABILIZATION CHART

SITE AREA DESCRIPTION	STABILIZATION TIME FRAME	STABILIZATION TIME FRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITHCES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED
SLOPES 3:1 OR FLATTER	14 DAYS	7-DAYS FOR SLOPES GREATER THAN 50 FEET IN LENGTH
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE (EXCEPT FOR PERIMETERS AND HQW ZONES)

Know what's below. Call before you dig.

NC GRID NAD 83 (2011)

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

THE CONTRACTOR MUST CONTACT NORTH CAROLINA ONE CALL CENTER AT 1-800-632-4949 A MINIMUM OF 72 HOURS PRIOR TO DIGGING IN ORDER TO HAVE THE EXISTING UTILITIES LOCATED

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office | 910-426-6777 fax | 910-426-5777 licenses number | C-2354
www.4Dsitesolutions.com

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 027462 CRAIG NEELY SCOTT BROWN
05.06.24

REVISIONS
ISSUED FOR CONSTRUCTION

PROJECT NAME
EASY STORAGE

GRADING AND EROSION CONTROL PLAN

CLIENT
MIKE EVANS DESIGN/BUILD

912 Cedar Creek Road
Fayetteville, North Carolina 28312
Phone: (910) 486-5120

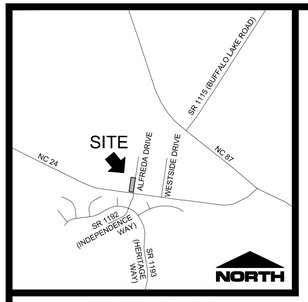
PROJECT INFORMATION

DESIGNED BY:	BRETT
DRAWN BY:	BRETT
CHECKED BY:	SCOTT
PROJECT NUMBER:	1980

DRAWING SCALE
HORIZONTAL: 1"=30'

DATE RELEASED
MAY 6, 2024

SHEET NUMBER
C-3.0



VICINITY MAP
NOT TO SCALE

LEGEND:
- EIP – EIP–EXISTING IRON PIPE
- CP – COMPUTED POINT
- N/F – NOW OR FORMERLY
- R/W – RIGHT OF WAY
- PROPERTY LINE
- ADJACENT PROPERTY LINE
- RIGHT–OF–WAY
- SETBACK LINE
- W – WATER LINE
- OH – OVERHEAD UTILITY
- PERMANENT EASEMENT
- 210 – MAJOR CONTOUR
- 207 – MINOR CONTOUR
- 208.47 SPOT ELEVATION
- LIGHT POLE
- UTILITY POLE
- PROPOSED FIRE HYDRANT
- PROPOSED TAP SLEEVE AND VALVE
- PROPOSED TEE
- PROPOSED PLUG

N/F
WILLIAM A. BARTON
DB 3311, PG 645
LOT 10
P.C. E, SL. 115–C

N/F
GARY E. KOESTER
DB 1400, PG 33
LOT 9
P.C. E, SL. 115–C

FFE 397.35 | FFE 396.35 | FFE 395.35 PROPOSED BUILDING BUILDING 1 4,000 SF | FFE 394.35 | FFE 393.35
40' | 40' | 40' | 40' | 40'

FFE 397.10 | FFE 396.10 | FFE 395.10 PROPOSED BUILDING BUILDING 2 6,000 SF | FFE 394.10 | FFE 393.10
40' | 40' | 40' | 40' | 40'

~ LOCATION OF EXISTING 20" WATER LINE

60' R/W NC HWY 24 (PUBLIC)

N 553,049.42
E 1,977,584.67
NC GRID NAD 83 (2011)

9+75 | 10+00 | 11+00 | 12+00 | 12+54.63

FH 12+29.6

6" PRIVATE FIRE LINE

6" RPZ BFP 10+47.5

TIE TO EXISTING WATER MAIN W/ 20"X6" TS&V

20"X6" TS&V 10+05.0

SR 1192 (INDEPENDENCE WAY)
60' R/W (PUBLIC)

*HRW MAINTENANCE ENDS AT THE ROW

EXISTING GRAVEL DRIVE

EXISTING 50' PRIVATE ACCESS WAY (ALFREDA DRIVE)

~ LOCATION OF EXISTING 2" WATER LINE

N/F
ANDERSON CREEK RENTALS AND PROPERTIES, LLC
DB 4064, PG 355
LOT 4
P.C. F, SL. 521–A

N/F
KEITH D. GRAHAM & SHAWN LAVETTE GRAHAM
DB 3434, PG 444
LOT 1
P.C. F, SL. 521–A

N/F
KEITH D. GRAHAM
DB 3434, PG 444
LOT 3
P.C. F, SL. 521–A

NC GRID NAD 83 (2011)

4D SITE SOLUTIONS

*SEE SHEET G–1.0 FOR ADDITIONAL UTILITY NOTES

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

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

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I:\Mike Evans\1980 Easy Storage\CIVIL 3D\DWG\1980_DESIGN.dwg • C4.0 UTILITY PLAN • 5.6.2024 12:30:53 PM

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office | 910-426-6777 fax | 910-426-5777 licenses number | C-2354
www.4dsitesolutions.com

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 027462 ENGINEER SCOTT BROWN
05.06.24

REVISIONS
ISSUED FOR CONSTRUCTION

PROJECT NAME
EASY STORAGE

UTILITY PLAN

PIN: 9575-73-5360.000

CLIENT
MIKE EVANS DESIGN/BUILD

912 Cedar Creek Road
Fayetteville, North Carolina 28312
Phone: (910) 486-5120

PROJECT INFORMATION

DESIGNED BY:	BRETT
DRAWN BY:	BRETT
CHECKED BY:	SCOTT
PROJECT NUMBER:	1980

DRAWING SCALE
HORIZONTAL: 1"=30'

DATE RELEASED
MAY 6, 2024

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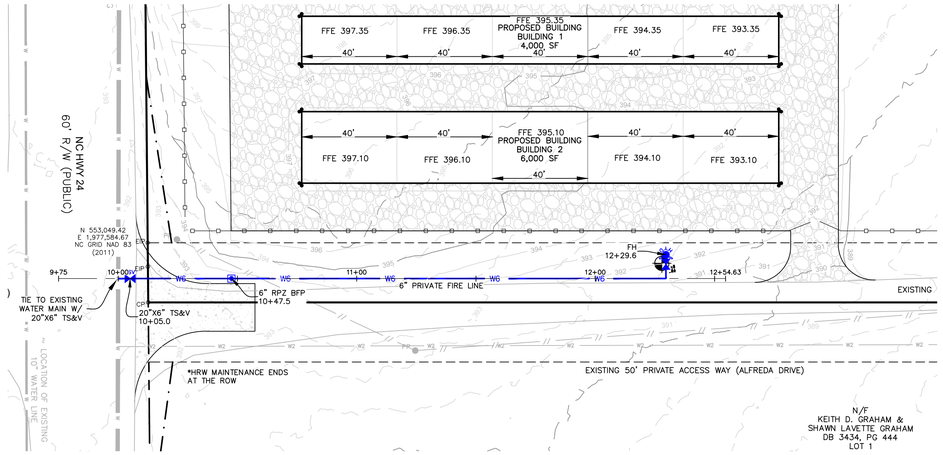
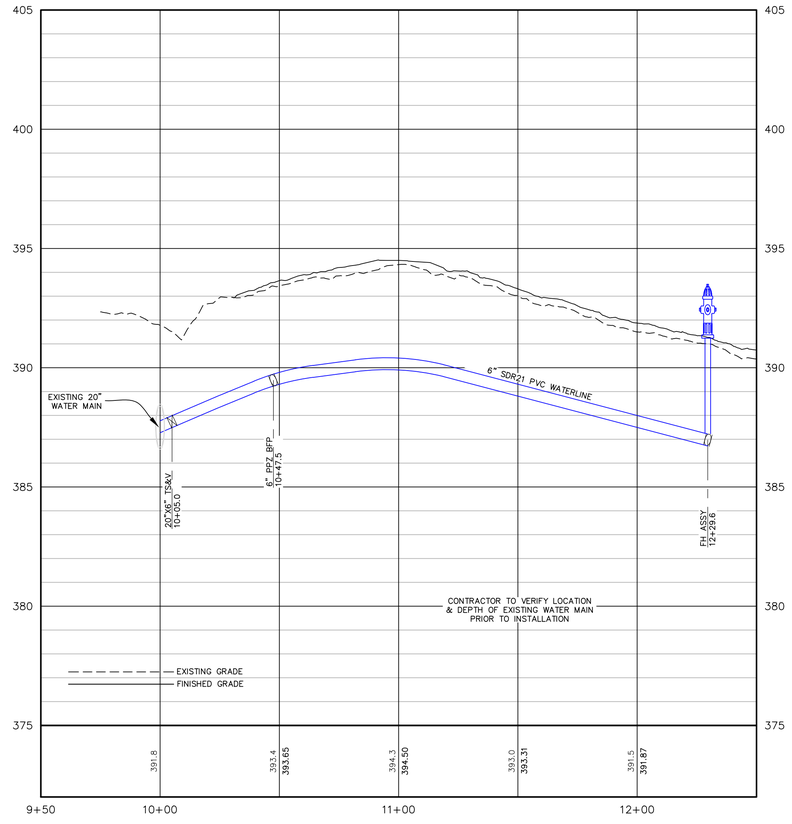
C-4.0



FIRELINE

WATER MAIN 9+50 TO 12+50



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NORTH CAROLINA PROFESSIONAL SEAL 027462 ENGINEER SCOTT BROWN

05.06.24

REVISIONS

ISSUED FOR CONSTRUCTION

PROJECT NAME

EASY STORAGE

FIRELINE PROFILE

CLIENT

MIKE EVANS DESIGN/BUILD

912 Cedar Creek Road
Fayetteville, North Carolina 28312
Phone: (910) 486-5120

PROJECT INFORMATION

DESIGNED BY:	BRETT
DRAWN BY:	BRETT
CHECKED BY:	SCOTT
PROJECT NUMBER:	1980

DRAWING SCALE

HORIZONTAL: 1"=30'
VERTICAL: 1"=3'

DATE RELEASED

MAY 6, 2024

SHEET NUMBER

C-5.0

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TEMPORARY SEEDING/MULCHING SPECIFICATIONS (FOR LATE WINTER AND EARLY SPRING)
SEEDING MIXTURE:

SPECIES	RATE (LB./ACRE)
RYE (GRAIN)	120
ANNUAL KOBE LESPEDEZA	50

OMIT ANNUAL LESPEDEZA WHEN DURATION OF TEMPORARY COVER IS NOT EXTEND BEYOND JUNE.

SEEDING DATES:
JANUARY 1 - MAY 1

SOIL AMENDMENTS:
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB./ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB./ACRE 10-10-10 FERTILIZER.

MULCH:
APPLY 4,000 LB./ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE:
REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

TEMPORARY SEEDING/MULCHING SPECIFICATIONS (FOR SUMMER)
SEEDING MIXTURE:

SPECIES	RATE (LB./ACRE)
GERMAN MILLET	40

A SMALL-STEMMED SUDANGRASS MAY BE SUBSTITUTED AT A RATE OF 50 LB./ACRE.

SEEDING DATES:
MAY 1 - AUGUST 15

SOIL AMENDMENTS:
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB./ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB./ACRE 10-10-10 FERTILIZER.

MULCH:
APPLY 4,000 LB./ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE:
REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

TEMPORARY SEEDING/MULCHING SPECIFICATIONS (FOR FALL)
SEEDING MIXTURE:

SPECIES	RATE (LB./ACRE)
RYE (GRAIN)	120

SEEDING DATES:
AUGUST 15 - DECEMBER 30

SOIL AMENDMENTS:
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB./ACRE GROUND AGRICULTURAL LIMESTONE AND 1,000 LB./ACRE 10-10-10 FERTILIZER.

MULCH:
APPLY 4,000 LB./ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE:
REPAIR AND REFERTILIZE DAMAGED AREAS IMMEDIATELY. TOP DRESS WITH 50 LB./ACRE OF NITROGEN IN MARCH. IF IT IS NECESSARY TO EXTEND TEMPORARY COVER BEYOND JUNE 15, OVERSEED WITH 50 LB./ACRE KOBE LESPEDEZA IN LATE OR EARLY MARCH.

1 TEMPORARY SEEDING SPECIFICATIONS

SEEDING SPECIFICATIONS

SEEDING MIXTURES:

SPECIES	RATE (LBS./ACRE)
TALL FESCUE	80
PENSACOLA BAHIAGRASS	50
SERICEA LESPEDEZA	30
KOBE LESPEDEZA	10

SEEDING NOTES:
1. FROM SEPT. 1 TO MAR. 1 USE UNSCARIFIED SERICEA SEED.
2. ON POORLY DRAINED SITES OMIT SERICEA AND INCREASE KOBE TO 30 LB./ACRE.
3. WHERE A NEAT APPEARANCE IS DESIRED, OMIT SERICEA AND INCREASE KOBE TO 40 LB./ACRE.

NURSE PLANTS:
BETWEEN APRIL 15 AND AUG. 15, ADD 10 LB./ACRE OF GERMAN MILLET OR 15 LB./ACRE SUDANGRASS. PRIOR TO MAY 1 OR AFTER AUG. 15, ADD 25 LB./ACRE RYE (GRAIN).

SEEDING DATES:

	BEST	POSSIBLE
EARLY SPRING:	FEB. 15 - MAR. 20	FEB. 15 - APR. 30
FALL:	SEPT. 1 - SEPT. 30	SEPT. 1 - OCT. 31

SOIL AMENDMENTS:
APPLY LIME AND FERTILIZER ACCORDING TO SOIL TEST, OR APPLY 3,000 - 5,000 LB./ACRE GROUND AGRICULTURAL LIMESTONE (USE THE LOWER RATE ON SANDY SOILS) AND 1,000 LB./ACRE 10-10-10 FERTILIZER.

MULCH:
APPLY 4,000 LB./ACRE GRAIN STRAW OR EQUIVALENT COVER OF ANOTHER SUITABLE MULCH. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR ROVING OR BY CRIMPING WITH A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE:
IF GROWTH IS LESS THAN FULLY ADEQUATE, REFERTILIZE IN THE SECOND YEAR, ACCORDING TO THE SOIL TESTS OR TOP DRESS WITH 500 LB./ACRE 10-10-10 FERTILIZER. MOW AS NEEDED WHEN SERICEA IS OMITTED FROM THE MIXTURE. RESEED, FERTILIZE, AND MULCH DAMAGED AREAS IMMEDIATELY.

SEEDING SPECIFICATIONS

SEEDING MIXTURE:

SPECIES	RATE (LB./ACRE)
COMMON BERMUDAGRASS	40-80(1-2 LB./1,000 FT²)

SEEDING DATES:
COASTAL PLAIN: APR. - JULY

SOIL AMENDMENTS:
APPLY LIME AND FERTILIZER ACCORDING TO SOIL TEST, OR APPLY 3,000 LB./ACRE GROUND AGRICULTURAL LIMESTONE AND 500 LB./ACRE 10-10-10 FERTILIZER.

MULCH:
USE JUTE, EXCELSIOR MATTING, OR OTHER EFFECTIVE CHANNEL LINING MATERIAL TO COVER THE BOTTOM OF CHANNELS AND DITCHES. THE LINING SHOULD EXTEND ABOVE THE HIGHEST CALCULATED DEPTH OF FLOW. ON CHANNEL SIDE SLOPES ABOVE THIS HEIGHT, AND IN DRAINAGES NOT REQUIRING TEMPORARY LININGS, APPLY 4,000 LB./ACRE GRAIN STRAW AND ANCHOR STRAW BY STAPLING NETTING OVER THE TOP.

MULCH AND ANCHORING MATERIALS MUST NOT BE ALLOWED TO WASH DOWN SLOPES WHERE THEY CAN CLOG DRAINAGE DEVICES.

MAINTENANCE:
A MINIMUM OF 3 WEEKS IS REQUIRED FOR ESTABLISHMENT. INSPECTION AND REPAIR MULCH FREQUENTLY. REFERTILIZE THE FOLLOWING APR. WITH 50 LB./ACRE NITROGEN.

2 PERMANENT SEEDING SPECIFICATIONS

1. UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL HANDBOOK.

2. THE CONTRACTOR SHALL NOTIFY PLAN APPROVING AUTHORITY ONE WEEK PRIOR TO THE PRECONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO FINAL INSPECTION.

3. IF POSSIBLE ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO CLEARING AND/OR LAND DISTURBANCE.

4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN AND PERMIT SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.

5. PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO OFF-SITE BORROW OR WASTE AREAS, STAGING OR STORAGE AREAS), THE CONTRACTOR SHALL PREPARE AND SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND TO NCDENR REGIONAL OFFICE FOR APPROVAL. CONTRACTOR SHALL PAY ALL FEES REQUIRED AND SHALL INSTALL NECESSARY MEASURES AT NO SEPARATE PAYMENT. THE CONTRACTOR SHALL PROVIDE THE OWNER AND THE ENGINEER A COPY OF THE AMENDED PERMIT.

6. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY EITHER NCDENR OR THE ENGINEER.

7. ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.

8. ALL AREAS DISTURBED BY CONSTRUCTION UNLESS OTHERWISE IMPROVED SHALL BE SODDED OR SEEDED AS INDICATED AND STABILIZED.

9. DURING DEWATERING OPERATIONS, WATER SHALL BE PUMPED INTO AN APPROVED FILTERING DEVICE PRIOR TO DISCHARGE TO RECEIVING OUTLET.

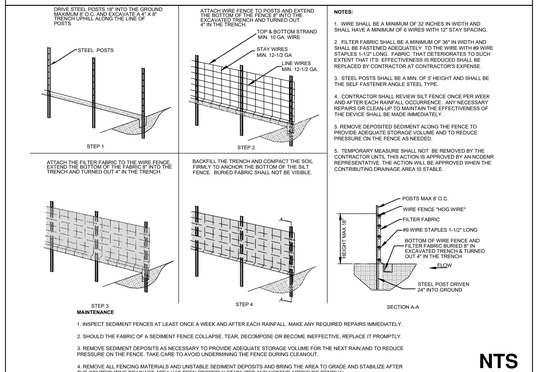
10. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES WEEKLY AND AFTER EACH RUNOFF-PRODUCING EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.

11. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED BY CONTRACTOR ONCE STABILIZATION OR A SUFFICIENT GROUND COVER HAS BEEN ESTABLISHED OR AS DIRECTED BY THE ENGINEER. NCDENR'S FINAL APPROVAL IS REQUIRED.

12. TEMPORARY GRAVEL CONSTRUCTION ENTRANCE SHALL BE REQUIRED AT ALL CONSTRUCTION STAGING AREA ENTRANCES AND ALL CONSTRUCTION ACCESS LOCATIONS INTO NON-PAVED AREA.

13. WHEN CROSSING CREEK OR DRAINAGE-WAY, THE CONTRACTOR SHALL RIP-RAP WITH FABRIC DISTURBED BANKS AND CHANNEL AND RESTORE SLOPES TO ORIGINAL CONTOURS, BUT NOT STEEPER THAN 2:1 MAXIMUM. DISTURBED CREEK AREA SHALL BE STABILIZED IMMEDIATELY.

3 GENERAL EROSION AND SEDIMENT CONTROL NOTES



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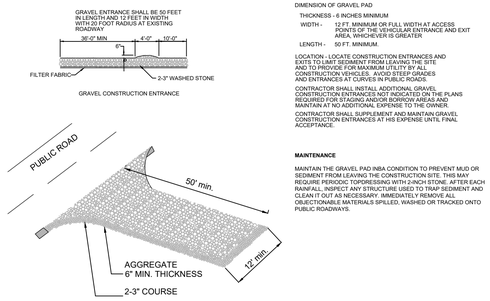
4 TEMPORARY GRAVEL CONSTRUCTION ENTRANCE

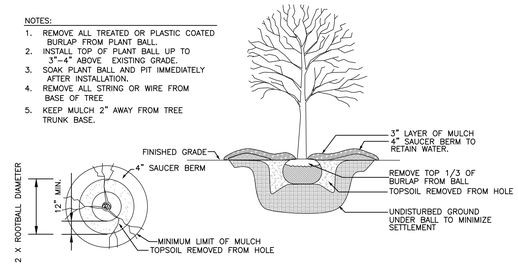


DESIGN CRITERIA
AGGREGATE SIZE - USE 2-3 INCH WASHED STONE
DIMENSION OF GRAVEL PAD
THICKNESS - 6 INCHES MINIMUM
WIDTH - 12 FT. MINIMUM OR FULL WIDTH AT ACCESS POINTS OF THE VEHICULAR ENTRANCE AND EXIT AREA, WHICHEVER IS GREATER
LENGTH - 50 FT. MINIMUM
LOCATION - LOCATE CONSTRUCTION ENTRANCES AND EXITS TO LIMIT SEDIMENT FROM LEAVING THE SITE AND TO PROVIDE FOR MAXIMUM UTILITY BY ALL CONSTRUCTION VEHICLES. AVOID STEEP GRADES AND ENTRANCES AT CURVES IN PUBLIC ROADS.
CONTRACTOR SHALL INSTALL ADDITIONAL GRAVEL CONSTRUCTION ENTRANCES NOT INDICATED ON THE PLANS REQUIRED FOR STAGING AND/OR BORROW AREAS AND MAINTAIN AT NO ADDITIONAL EXPENSE TO THE OWNER.
CONTRACTOR SHALL SUPPLEMENT AND MAINTAIN GRAVEL CONSTRUCTION ENTRANCES AT HIS EXPENSE UNTIL FINAL ACCEPTANCE.

MAINTENANCE
MAINTAIN THE GRAVEL PAD INBA CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH 2-INCH STONE. AFTER EACH RAINFALL, INSPECT ANY STRUCTURE USED TO TRAP SEDIMENT AND CLEAN IT OUT AS NECESSARY. IMMEDIATELY REMOVE ALL OBJECTIONABLE MATERIALS SPILLED, WASHED OR TRACKED ONTO PUBLIC ROADWAYS.

NTS

5 SILT FENCE



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6 GROUND STABILIZATION CHART

GROUND STABILIZATION CHART

SITE AREA DESCRIPTION	STABILIZATION TIME FRAME	STABILIZATION TIME FRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED
SLOPES 3:1 OR FLATTER	14 DAYS	7-DAYS FOR SLOPES GREATER THAN 50 FEET IN LENGTH
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE (EXCEPT FOR PERIMETERS AND HQW ZONES)

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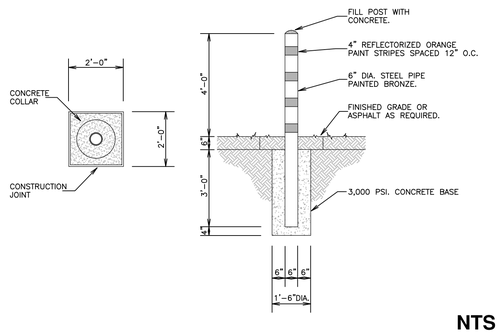
7 6" BOLLARD



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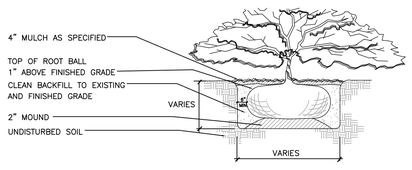
8 SHRUB PLANTING



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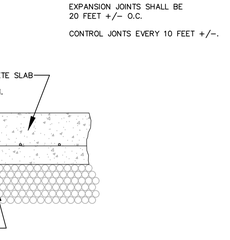
9 TREE PLANTING



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10 CONCRETE DRIVE PAVEMENT SECTION

4Dsite solutions
civil engineering | land surveying
409 Chicago Drive, Suite 112, Fayetteville, NC 28306
office | 910-426-6777 fax | 910-426-5777 licenses number | C-2354
www.4Dsitesolutions.com

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 027262 SCOTT BRANDON CRAIG NEELY
05.06.24

REVISIONS
ISSUED FOR CONSTRUCTION

PROJECT NAME
EASY STORAGE

SITE & EROSION CONTROL DETAILS

CLIENT
MIKE EVANS DESIGN/BUILD

912 Cedar Creek Road
Fayetteville, North Carolina 28312
Phone: (910) 486-5120

PROJECT INFORMATION

DESIGNED BY:	BRETT
DRAWN BY:	BRETT
CHECKED BY:	SCOTT
PROJECT NUMBER:	1980

DRAWING SCALE
NOT TO SCALE

DATE RELEASED
MAY 6, 2024

SHEET NUMBER
C-6.0

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GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT

Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

SECTION E: GROUND STABILIZATION

Required Ground Stabilization Timeframes		
Site Area Description	**Stabilize within this many calendar days after ceasing land disturbance**	**Timeframe variations**
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b) High Quality Water (HQW) Zones	7	None
(c) Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed
(d) Slopes 3:1 to 4:1	14	-7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed
(e) Areas with slopes flatter than 4:1	14	-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless there is zero slope

Note: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

GROUND STABILIZATION SPECIFICATION

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below:

Temporary Stabilization	Permanent Stabilization
• Temporary grass seed covered with straw or other mulches and tackifiers • Hydroseeding • Rolled erosion control products with or without temporary grass seed • Appropriately applied straw or other mulch • Plastic sheeting	• Permanent grass seed covered with straw or other mulches and tackifiers • Geotextile fabrics such as permanent soil reinforcement matting • Hydroseeding • Shrubs or other permanent plantings covered with mulch • Uniform and evenly distributed ground cover sufficient to restrain erosion • Structural methods such as concrete, asphalt or retaining walls • Rolled erosion control products with grass seed

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

1. Select flocculants that are appropriate for the soils being exposed during construction, selecting from the *NC DWR List of Approved PAMS/Flocculants*.
2. Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
3. Apply flocculants at the concentrations specified in the *NC DWR List of Approved PAMS/Flocculants* and in accordance with the manufacturer's instructions.
4. Provide ponding area for containment of treated Stormwater before discharging offsite.
5. Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

EQUIPMENT AND VEHICLE MAINTENANCE

1. Maintain vehicles and equipment to prevent discharge of fluids.
2. Provide drip pans under any stored equipment.
3. Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
4. Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
5. Remove leaking vehicles and construction equipment from service until the problem has been corrected.
6. Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

1. Never bury or burn waste. Place litter and debris in approved waste containers.
2. Provide a sufficient number and size of waste containers (e.g dumpster, trash receptacle) on site to contain construction and domestic wastes.
3. Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
4. Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
5. Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
6. Anchor all lightweight items in waste containers during times of high winds.
7. Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
8. Dispose waste off-site at an approved disposal facility.
9. On business days, clean up and dispose of waste in designated waste containers.

PAINT AND OTHER LIQUID WASTE

1. Do not dump paint and other liquid waste into storm drains, streams or wetlands.
2. Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
3. Contain liquid wastes in a controlled area.
4. Containment must be labeled, sized and placed appropriately for the needs of site.
5. Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

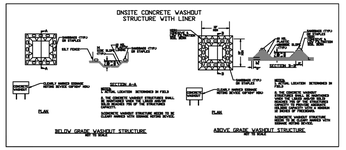
PORTABLE TOILETS

1. Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
2. Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
3. Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

EARTHEN STOCKPILE MANAGEMENT

1. Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available.
2. Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
3. Provide stable stone access point when feasible.
4. Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.

NORTH CAROLINA *Environmental Quality*



CONCRETE WASHOUTS

1. Do not discharge concrete or cement slurry from the site.
2. Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
3. Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
4. Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
5. Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project.
6. Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow.
7. Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.
8. Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout itself to identify this location.
9. Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.
10. At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

HERBICIDES, PESTICIDES AND RODENTICIDES

1. Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
2. Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
3. Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.
4. Do not stockpile these materials onsite.

HAZARDOUS AND TOXIC WASTE

1. Create designated hazardous waste collection areas on-site.
2. Place hazardous waste containers under cover or in secondary containment.
3. Do not store hazardous chemicals, drums or bagged materials directly on the ground.

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

EFFECTIVE: 04/01/19

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION A: SELF-INSPECTION

Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of equal to or greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the Inspection Record.

Inspect	Frequency (during normal business hours)	Inspection records must include:
(1) Rain gauge maintained in good working order	Daily	Daily rainfall amounts. If no daily rain gauge observations are made during weekend or holiday periods, and no individual day rainfall information is available, record the cumulative rain measurement for those unattended days (and this will determine if a site inspection is needed). Days on which no rainfall occurred shall be recorded as "zero." The permittee may use another rain-monitoring device approved by the Division.
(2) E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the measures inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Indication of whether the measures were operating properly, 5. Description of maintenance needs for the measure, 6. Description, evidence, and date of corrective actions taken.
(3) Stormwater discharge outfalls (SDOs)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the discharge outfalls inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration, 5. Indication of visible sediment leaving the site, 6. Description, evidence, and date of corrective actions taken.
(4) Perimeter of site	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If visible sedimentation is found outside site limits, then a record of the following shall be made: 1. Actions taken to clean up or stabilize the sediment that has left the site limits, 2. Description, evidence, and date of corrective actions taken, and 3. An explanation as to the actions taken to control future releases.
(5) Streams or wetlands onsite or offsite (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction activity, then a record of the following shall be made: 1. Description, evidence and date of corrective actions taken, and 2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item (2)(a) of this permit of this permit.
(6) Ground stabilization measures	After each phase of grading	1. The phase of grading (installation of perimeter E&SC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover). 2. Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible.

NOTE: The rain inspection resets the required 7 calendar day inspection requirement.

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

1. E&SC Plan Documentation

The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be documented in the manner described:

Item to Document	Documentation Requirements
(a) Each E&SC Measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC Plan.	Initial and date each E&SC Measure on a copy of the approved E&SC Plan or complete, date and sign an inspection report that lists each E&SC Measure shown on the approved E&SC Plan. This documentation is required upon the initial installation of the E&SC Measures or if the E&SC Measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&SC Plan or complete, date and sign an inspection report to indicate completion of the construction phase.
(c) Ground cover is located and installed in accordance with the approved E&SC Plan.	Initial and date a copy of the approved E&SC Plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications.
(d) The maintenance and repair requirements for all E&SC Measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&SC Measures.	Initial and date a copy of the approved E&SC Plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

2. Additional Documentation

In addition to the E&SC Plan documents above, the following items shall be kept on the site and available for agency inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:

(a) This general permit as well as the certificate of coverage, after it is received.

(b) Records of inspections made during the previous 30 days. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.

(c) All data used to complete the Notice of Intent and older inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION C: REPORTING

1. Occurrences that must be reported

Permittees shall report the following occurrences:

(a) Visible sediment deposition in a stream or wetland.

(b) Oil spills if:
- They are 25 gallons or more,
- They are less than 25 gallons but cannot be cleaned up within 24 hours,
- They cause sheen on surface waters (regardless of volume), or
- They are within 100 feet of surface waters (regardless of volume).

(a) Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85.

(b) Anticipated bypasses and unanticipated bypasses.

(c) Noncompliance with the conditions of this permit that may endanger health or the environment.

2. Reporting Timeframes and Other Requirements

After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Division's Emergency Response personnel at (800) 662-7956, (800) 858-0368 or (919) 733-3300.

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment deposition in a stream or wetland	• ***Within 24 hours***, an oral or electronic notification. • ***Within 7 calendar days***, a report that contains a description of the sediment and actions taken to address the cause of the deposition. Division staff may waive the requirement for a written report on a case-by-case basis. • If the stream is named on the NC 303(d) list as impaired for sediment-related causes, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine that additional requirements are needed to assure compliance with the federal or state impaired-waters conditions.
(b) Oil spills and release of hazardous substances per Item 1(b)-(c) above	• ***Within 24 hours***, an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release.
(c) Anticipated bypasses [40 CFR 122.41(m)(3)]	• ***A report at least ten days before the date of the bypass, if possible***. The report shall include an evaluation of the anticipated quality and effect of the bypass.
(d) Unanticipated bypasses [40 CFR 122.41(m)(3)]	• ***Within 24 hours***, an oral or electronic notification. • ***Within 7 calendar days***, a report that includes an evaluation of the quality and effect of the bypass.
(e) Noncompliance with the conditions of this permit that may endanger health or the environment[40 CFR 122.41(l)(7)]	• ***Within 24 hours***, an oral or electronic notification. • ***Within 7 calendar days***, a report that contains a description of the noncompliance, and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. [40 CFR 122.41(l)(6). • Division staff may waive the requirement for a written report on a case-by-case basis.

NORTH CAROLINA *Environmental Quality*

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

EFFECTIVE: 04/01/19

4Dsite solutions
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NORTH CAROLINA PROFESSIONAL SEAL 027482 ENGINEER SCOTT BRANDON BROWN
05/06/24

REVISIONS

ISSUED FOR CONSTRUCTION

PROJECT NAME

EASY STORAGE

EROSION CONTROL DETAILS

CLIENT

MIKE EVANS DESIGN/BUILD

912 Cedar Creek Road
Fayetteville, North Carolina 28312
Phone: (910) 486-5120

PROJECT INFORMATION

DESIGNED BY:	BRETT
DRAWN BY:	BRETT
CHECKED BY:	SCOTT
PROJECT NUMBER:	1980

DRAWING SCALE

NOT TO SCALE

DATE RELEASED

MAY 6, 2024

SHEET NUMBER

C-6.1

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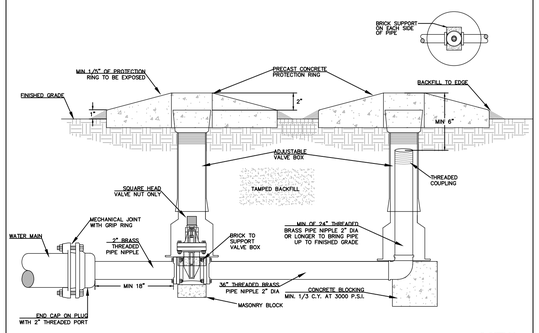
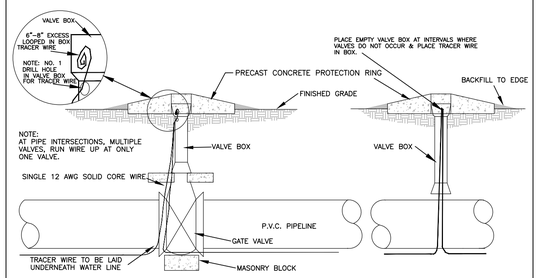


NOTE: SEE TYPICAL VALVE BOX DETAIL FOR BRICK INSTALLATION

NTS

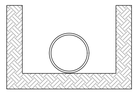
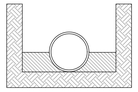
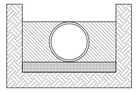
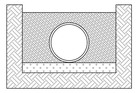
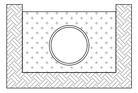
1 PERMANENT BLOW-OFF ASSEMBLY



NOTES:
1. DRILL HOLE IN VALVE BOX TO INSERT TRACER WIRE,BRING UP TO INSIDE AND ROLL UP AT LEAST 6"-8" EXCESS
2. PLACE TRACER WIRE IN VALVE BOX AT 1,000' INTERVALS OR AS NOTED ON THE PLANS, TYPICAL.
3. DO NOT SPLICE WIRE WHEN BEGINNING A NEW SPOOL. INSTEAD INSTALL A VALVE BOX AND ATTACH EACH WIRE WITH A BRASS SCREW TO THE VALVE BOX.

NTS

2 TYPICAL TRACER WIRE INSTALLATION

LAYING CONDITIONS	DESCRIPTION	PROJECT USE
 TYPE 1	FLAT BOTTOM UNDISTURBED EARTH TRENCH, LOOSE BACKFILL	NOT USED.
 TYPE 2	FLAT BOTTOMED UNDISTURBED EARTH TRENCH. BACKFILL LIGHTLY CONSOLIDATED TO CENTERLINE OF PIPE.	NOT USED.
 TYPE 3	PIPE BEDDED IN 4" MINIMUM JOB EXCAVATED MATERIAL. BACKFILL LIGHTLY CONSOLIDATED TO TOP OF PIPE.	ALL DUCTILE IRON GRAVITY SEWER LINE.
 TYPE 4	PIPE BEDDED IN SAND, GRANULAR MATERIAL OR GRADED GRAVEL TO THE DEPTH OF 1/8 PIPE DIAMETER, 4" MIN. JOB EXCAVATED MATERIAL COMPACTED TO 4" ABOVE TOP OF PIPE. (APPROX. 95% STANDARD PROCTOR, AASHTO T-99)	ALL PVC WATER LINE AND PVC FORCE MAIN.
 TYPE 5	PIPE BEDDED TO ITS CENTERLINE IN COMPACTED GRANULAR MATERIAL 4" MIN. UNDER PIPE. COMPACTED GRANULAR OR SAND MATERIAL TO 4"ABOVE TOP OF PIPE. (APPROX. 95% STANDARD PROCTOR, AASHTO T-99)	ALL PVC GRAVITY SEWER LINE.

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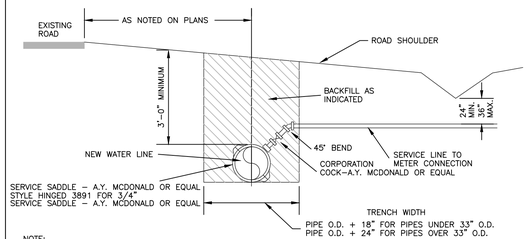
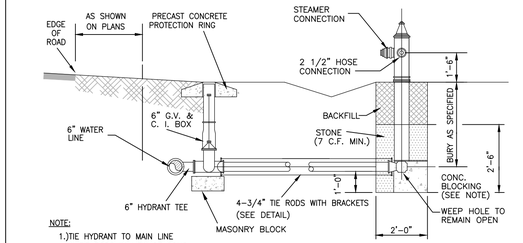
3 TYPICAL LAYING CONDITIONS



NOTE:
1. "SERVICE CONNECTION" IN PROPOSAL TO INCLUDE SERVICE SADDLE, 45° BEND, CORPORATION COCK AND ALL LABOR INVOLVED IN MAKING A COMPLETE SERVICE CONNECTION.
2. SERVICE PIPING TO BE 3/4" SDR-9 PE TUBING
3. ALL BRASS FITTINGS SHALL BE COMPRESSION TYPE

NTS

4 TYPICAL WATER SERVICE CONNECTION



NOTE:
1.)TIE HYDRANT TO MAIN LINE W/TIE RODS IN LIEW OF CONC. BLOCKING IN SANDY SOIL.
2.)MECHANICAL JOINTS USED WITH GRIP RINGS

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5 FIRE HYDRANT ASSEMBLY INSTALLATION

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6 TYP. TAPPING SLEEVE & VALVE ASSEMBLY

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www.4Dsitesolutions.com

NORTH CAROLINA PROFESSIONAL SEAL 027462 ENGINEER SCOTT BROWN
05.06.24

REVISIONS

ISSUED FOR CONSTRUCTION

PROJECT NAME

EASY STORAGE

WATER DETAILS

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DATE RELEASED

MAY 6, 2024

SHEET NUMBER

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