TOWN OF ASHLAND CITY
Planning Commission Meeting
May 03, 2021 5:30 PM
Agenda

Chairwoman: Melody Sleeper
Committee Members: Steve Allen, Vivian Foston, Gerald Greer, Alberto Santacruz, Steven Stratton

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CALL TO ORDER

ROLL CALL

APPROVAL OF AGENDA

APPROVAL OF MINUTES

1. April 5, 2021 Planning Commission Meeting Minutes

PUBLIC FORUM

OLD BUSINESS

2. Preliminary Plat Approval: Skyview Drive Phase 3

NEW BUSINESS

3. Rezone Request: 1807 Highway 12 South
4. Site Plan Approval: Ace Mini Storage Phase 2
5. Site Plan Approval: Highway 12 Distillery

OTHER

ADJOURNMENT

Those with disabilities who require certain accommodations in order to allow them to observe and/or participate in this meeting, or who have questions regarding the accessibility of the meeting, should contact the ADA Coordinator at 615-792-6455, M-F 8:00 AM – 4:00 PM. The town will make reasonable accommodations for those persons.

TOWN OF ASHLAND CITY
Planning Commission Meeting
April 05, 2021 5:30 PM
Minutes

CALL TO ORDER
Chairwoman Melody Sleeper called the meeting to order at 5:30 p.m.

ROLL CALL
PRESENT
Chairwoman Melody Sleeper
Mayor Steve Allen
Councilman Gerald Greer
Committee Member Alberto Santacruz
Committee Member Steven Stratton

APPROVAL OF AGENDA
A motion was made by Mayor Allen, seconded by Committee Member Stratton, to approve the agenda. All approved by voice vote.

APPROVAL OF MINUTES
1. March 1, 2021 Planning Commission Meeting Minutes
   A motion was made by Committee Member Stratton, seconded by Committee Member Santacruz, to approve the March 1, 2021 Planning Commission Meeting Minutes. All approved by voice vote.

PUBLIC FORUM
None.

NEW BUSINESS
2. Preliminary Plat Approval-Skyview Phase 3
   Mr. Michael Black stated he is the Civil Engineer of record for the Skyview Project. He stated this is the final twenty-three lots on Skyview Drive and this submittal is comprised of the remaining lots on Skyview. Further, the public utilities are in place and they are just submitting this final plat for approval to finish the project out. Mr. Rick Gregory stated this is considered a sketch plat and there are a lot of details that are not on the plat which will be required for the final plat. He discussed the right-of-way changes that need to be on the plans. Mr. Black stated that was a clerical error on their part and on April 1 they submitted a revised plan showing the change. He stated he submitted it to Calvin Bell who is the developer for this project. Mr. Gregory stated it is fine for approval for a sketch plat, but will need to come back for final approval. Mr. Jason McClain stated all he has is what was submitted on the 15th and no other information was not provided to them. Mr. Gregory stated to consider this for a sketch plat is fine for approval, but we cannot approve a final plat. A motion was made by Councilman Greer, seconded by Mayor Allen, to approve the sketch plat. Voting Yea: Chairwoman Sleeper, Mayor Allen, Councilman Greer, Committee Member Santacruz, Committee Member Stratton.

OLD BUSINESS
3. Jarrett Concrete Plant Site Plan Approval- Hwy 12 South Map 65 Parcel 046
   Mr. Jarrett stated he believes everything has been turned in and he is waiting to hear back on everything that has been submitted. City Planner Mr. Rick Gregory requested the site plan be considered as the staff report reflected some issues which have been addressed in a different document. He further stated he does however have some questions and things that he would

like to bring to committee's attention. They are showing a six (6) inch main on the plan which needs to be verified by the city as available. Typically, the water line and sprinkler line are separate and this is not separated. The other concern is the gravel storage lot as we ask for a dust free surface, but gravel is not dust free. Mr. Gregory stated the site plan is in good shape otherwise and if the Planning Commission is ok with these things then it can be approved. Mr. Jason McClain stated the way the dust free ordinance reads it is a little vague, but with the nature of what he is doing Mr. Jarrett is asking for a little leeway there for that particular part of the site plan. Mr. Jarrett stated the pipes weigh up to forty thousand (40,000) pounds and that would destroy the site and could damage the product as well. He stated the part of the lot up to the building it is paved, but the ground would need a little give in it to not cause damage. Mayor Allen questioned if the storage area will be gravel or dirt. Mr. Jarrett responded it will be gravel. He further stated it will be way off the road. Councilman Greer asked if this site can be seen from the main road. Mr. Jarrett responded no. After some discussion a motion was made by Councilman Greer, seconded by Committee Member Stratton, to approve the Jarrett Concrete Site Plan and allow a variance for the storage yard to not dust free surfacing. Voting Yea: Chairwoman Sleeper, Mayor Allen, Committee Member Greer, Committee Member Santacruz, Committee Member Stratton.

4. Landscape Ordinance
   Mr. Gregory stated the document you have is complete, but at the top of page 6, page 24 in the Planning packet the title should be the Planning Commission and Board of Zoning and Appeals. Further, the committee discussed deleting section 3.150 and renumber accordingly, but everything else is in order. A motion was made by Committee Member Stratton, seconded by Mayor Allen, to approve the landscape ordinance. Voting Yea: Chairwoman Sleeper, Mayor Allen, Councilman Greer, Committee Member Santacruz, Committee Member Stratton.

OTHER
None.

ADJOURNMENT
A motion was made by Committee Member Greer, seconded by Committee Member Stratton, to adjourn. All approved by voice vote and the meeting adjourned at 5:52 p.m.

_____ _____
CHAIRWOMAN MELODY SLEEPER CITY RECORDER KELLIE REED, CMFO, CMC

Ashland City Fire, Building & Life Safety Department
101 Court Street
Ashland City TN 37015
Fire & Life Safety: (615) 792-4531 – Building Codes (615) 792-6455

SUBDIVISON APPLICATION

APPLICANT NAME: Calvin Bell DBA Bell, Inc & Maple Hills Partners

ADDRESS: 1030 Bamman Mountain Rd,
Ashland City, TN 37015

TELEPHONE: 615-390-0757

PROJECT NAME: Skyview Extension Phase III

NUMBER OF LOTS: 23

PLANNING COMMISSION FEES: $250

Minor Subdivision (Four lots or less): $150.00
Plat Amendment: $150.00
Major Subdivision: $250.00

Note: Mylar shall be presented at the time of Final Subdivision Plat Approval and must be signed by all parties except for Secretary of the Planning Commission.

Having submitted plans for review by the Ashland City Planning Commission, I understand that I am responsible for all review fees incurred by the Town of Ashland City. In understand that the fee paid at the time of submittal is not applicable for the fees incurred through review. With my signature, I verify that I fully understand that I am responsible for said fees, and that I have received a copy of Ordinance #165.

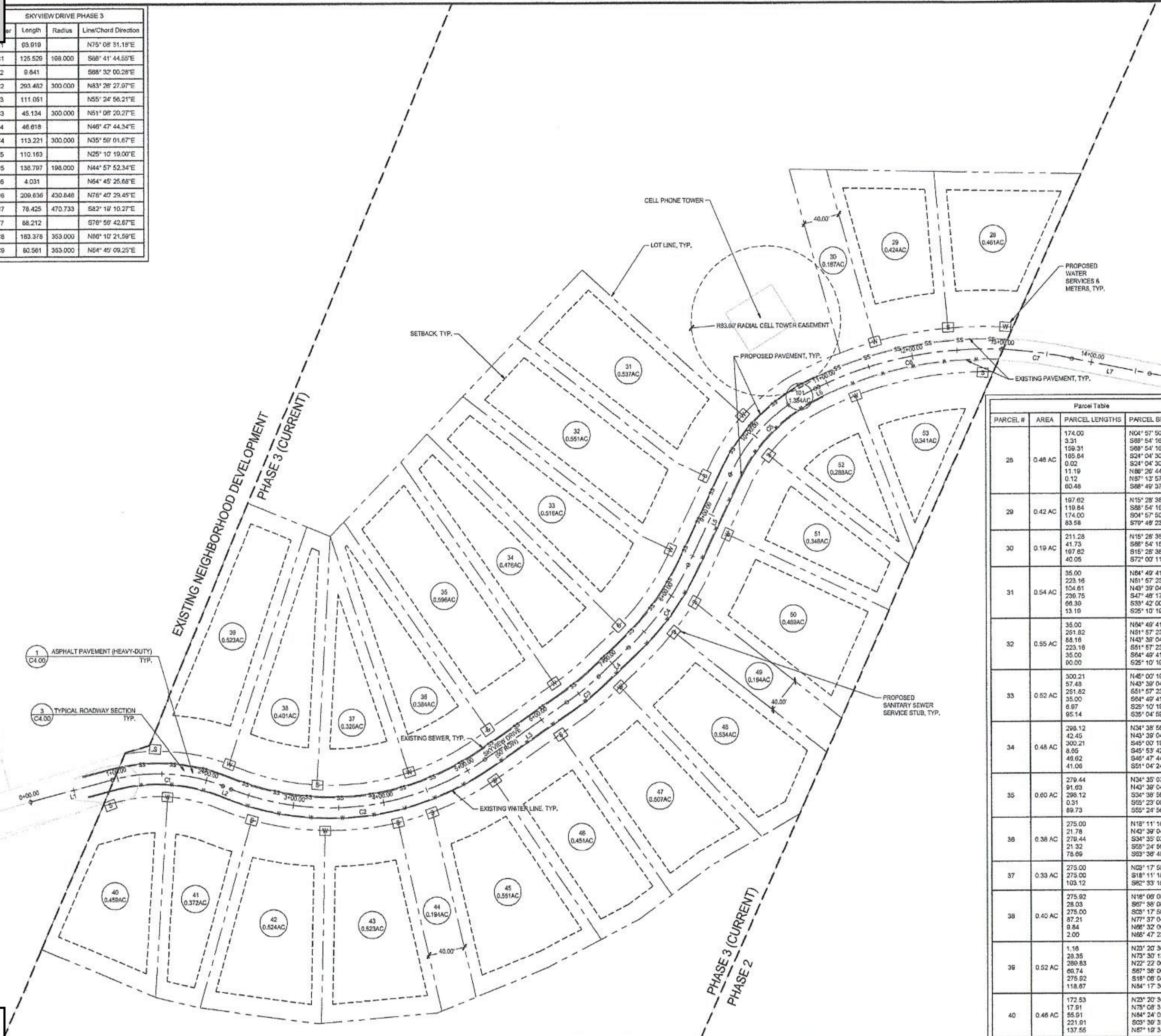
C Bell

Applicant's Signature

3-15-21

Date

[illegible]	Length	Radius	Line/Chord Direction
SKYVIEW DRIVE PHASE 3			
L1	93.919		N75° 08' 31.18"E
C1	125.529	198.000	S86° 41' 44.55"E
L2	9.841		S68° 32' 00.28"E
C2	293.462	300.000	N83° 26' 27.97"E
L3	111.051		N55° 24' 56.21"E
C3	45.134	300.000	N51° 08' 20.27"E
L4	46.618		N46° 47' 44.34"E
C4	113.221	300.000	N35° 59' 01.67"E
L5	110.163		N25° 10' 19.00"E
C5	136.797	198.000	N44° 57' 52.34"E
L6	4.031		N64° 45' 25.68"E
C6	209.636	430.846	N76° 40' 29.45"E
C7	78.425	470.733	S82° 19' 10.27"E
L7	88.212		S76° 56' 42.67"E
C8	183.378	353.000	N86° 10' 21.59"E
C9	80.561	353.000	N64° 45' 09.25"E



LAYOUT NOTES:

1. SEE SHEET C0.01 FOR GENERAL NOTES.
2. SEE ARCHITECTURAL SHEETS FOR BUILDING.
3. INSTALL JOINTS WHERE SHOWN TO ALIGN TO WALLS, BUILDINGS, RADII, ETC. EVENLY SPACE BETWEEN ELEMENTS AS SHOWN. PROVIDE EXPANSION JOINTS BETWEEN CONCRETE PAVEMENT AND VERTICAL ELEMENTS (WALL, CURBS, ETC.). ALL JOINTS TO BE STRAIGHT AND TRUE.
4. LAYOUT ALL CURVES SMOOTHLY WITH NO ABRUPT CHANGES AT TANGENT POINTS.
5. ALL CURBS ARE DIMENSIONED TO THE FACE OF CURB.
6. CONTRACTOR TO TAKE ALL PRECAUTIONS TO FIND AND AVOID SITE UTILITIES. ALL UTILITIES ARE NOT SHOWN ON DRAWING. VERIFY LOCATIONS AND CONSIDER SUCH WHEN ESTIMATING.
7. ALL PAVEMENT MARKING AND TRAFFIC CONTROL DEVICES SHALL BE INSTALLED PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION.
8. ALL PAVEMENT MARKINGS TO BE THERMOPLASTIC, UNLESS OTHERWISE NOTED.
9. ALL CONSTRUCTION AND MATERIALS SHALL COMPLY WITH TDOT'S STANDARDS FOR ROADWAY AND BRIDGE CONSTRUCTION, LATEST EDITION.
10. ALL ANGLES ARE 90° UNLESS OTHERWISE NOTED.

SETBACKS:

FRONT:	40'
REAR:	20'
SIDE: (1 OR 2 STORIES)	12'

SCALE: 1" = 50'

Parcel Table

PARCEL #	AREA	PARCEL LENGTHS	PARCEL BEARINGS
28	0.46 AC	174.00 3.31 159.31 165.84 0.02 11.19 0.12 60.48	N04° 57' 50.97"W S88° 54' 16.43"E S88° 54' 16.43"E S24° 04' 30.51"W S24° 04' 30.51"W N86° 26' 44.16"W N87° 13' 57.12"W S88° 49' 37.74"W
29	0.42 AC	197.62 119.84 174.00 83.58	N15° 28' 38.77"W S88° 54' 16.43"E S04° 57' 50.97"E S79° 48' 23.80"W
30	0.19 AC	211.28 41.73 197.62 40.05	N15° 28' 38.77"W S88° 54' 16.43"E S15° 28' 38.77"E S72° 00' 11.69"W
31	0.54 AC	35.00 223.16 104.61 239.75 66.39 13.19	N64° 49' 41.00"W N51° 57' 23.40"W N43° 39' 04.27"E S47° 46' 17.17"E S33° 42' 00.92"W S25° 10' 19.00"W
32	0.55 AC	35.00 251.82 88.16 223.16 35.00 90.00	N64° 49' 41.00"W N51° 57' 23.40"W N43° 39' 04.27"E S51° 57' 23.40"E S64° 49' 41.00"E S25° 10' 19.00"W
33	0.52 AC	300.21 57.48 251.82 35.00 6.97 95.14	N45° 00' 19.98"W N43° 39' 04.27"E S51° 57' 23.40"E S64° 49' 41.00"E S25° 10' 19.00"W S35° 04' 59.51"W
34	0.48 AC	298.12 42.45 300.21 8.65 46.62 41.06	N34° 38' 56.03"W N43° 39' 04.27"E S45° 00' 19.98"E S45° 53' 42.18"W S46° 47' 44.34"W S51° 04' 24.15"W
35	0.60 AC	279.44 91.63 298.12 0.31 89.73	N34° 35' 03.79"W N43° 39' 04.27"E S34° 38' 56.03"E S55° 23' 00.09"W S55° 24' 56.21"W
36	0.38 AC	275.00 21.78 279.44 21.32 78.69	N18° 11' 18.39"W N43° 39' 04.27"E S34° 35' 03.79"E S55° 24' 56.21"W S63° 38' 48.91"W
37	0.33 AC	275.00 275.00 103.12	N03° 17' 50.88"E S18° 11' 18.39"E S82° 33' 18.25"W
38	0.40 AC	275.92 28.03 275.00 87.21 9.84 2.00	N18° 06' 08.09"E S67° 38' 00.00"E S03° 17' 50.88"W N77° 37' 04.70"W N68° 32' 00.28"W N68° 47' 23.31"W
39	0.52 AC	1.16 28.35 289.83 69.74 275.92 118.87	N23° 20' 36.69"E N73° 30' 13.00"E N22° 22' 00.00"E S67° 38' 00.00"E S18° 06' 08.09"W N84° 17' 30.15"W
40	0.46 AC	172.53 17.91 55.91 221.91 137.56	N23° 20' 36.69"E N75° 08' 31.18"E N84° 24' 02.07"E S03° 39' 32.96"W N87° 19' 34.21"W

Parcel Table

PARCEL #	AREA	PARCEL LENGTHS	PARCEL BEARINGS
41	0.37 AC	49.66 0.93 221.91 53.77 9.84 33.65 215.41 0.64	N76° 32' 35.96"W N87° 19' 34.21"W N03° 39' 32.96"E S77° 28' 13.66"E S68° 32' 00.28"E S71° 29' 57.08"E S15° 32' 06.13"W N82° 11' 38.43"W
42	0.52 AC	131.15 215.41 81.21 213.31 3.37	N82° 11' 38.43"W N15° 32' 06.13"E S81° 37' 25.57"E S01° 13' 02.74"W S85° 03' 09.76"W
43	0.52 AC	128.87 213.31 81.25 213.97 5.69	S85° 03' 09.76"W N01° 13' 02.74"E N84° 03' 19.64"E S13° 06' 23.45"E S67° 49' 57.99"W
44	0.19 AC	210.06 40.51 213.97 40.10	S13° 06' 23.45"E S67° 49' 57.99"W N13° 06' 23.45"W N73° 21' 31.06"E
45	0.55 AC	86.43 210.06 77.33 212.11 66.62	S67° 49' 57.99"W N13° 06' 23.45"W N63° 00' 25.10"E S33° 48' 35.38"E S62° 30' 10.50"W
46	0.45 AC	47.01 212.11 4.39 85.13 216.31 45.77	S62° 30' 10.50"W N33° 48' 35.38"W N55° 48' 10.42"E N55° 24' 56.21"E S34° 35' 03.79"E S53° 29' 10.71"W
47	0.51 AC	53.09 216.31 25.92 46.90 9.92 227.37 65.66	S53° 29' 10.71"W N34° 35' 03.79"W N55° 24' 56.21"E N51° 08' 20.27"E N46° 47' 44.34"E S43° 12' 15.66"E S59° 53' 05.81"W
48	0.53 AC	48.49 227.37 36.70 48.12 215.20 75.02	S59° 53' 05.81"W N43° 12' 15.66"W N46° 47' 44.34"E N42° 33' 13.94"E S51° 41' 16.46"E S24° 00' 14.94"W
49	0.19 AC	207.47 41.28 215.20 40.10	S51° 41' 16.46"E S24° 00' 14.94"W N51° 41' 16.46"W N34° 45' 38.06"E
50	0.49 AC	197.55 130.63 207.47 34.43 49.07	S64° 49' 41.00"E S24° 00' 14.94"W N51° 41' 16.46"W N28° 12' 25.79"E N25° 10' 19.00"E
51	0.35 AC	196.98 55.93 197.55 61.09 37.60	S52° 22' 30.13"E S24° 00' 14.94"W N64° 49' 41.00"W N25° 10' 19.00"E N31° 23' 54.44"E
52	0.29 AC	14.67 196.98 81.92 4.03 32.78 184.05	S24° 00' 14.94"W N52° 22' 30.13"W N51° 11' 27.78"E N64° 45' 25.68"E N67° 02' 06.20"E S20° 39' 10.59"E
53	0.34 AC	184.05 156.60 0.02 217.03	N20° 39' 10.59"W N80° 24' 07.53"E S24° 04' 30.52"W S24° 04' 26.89"W

LOSE DESIGN
SPACES FOR LIFE.

SKYVIEW EXTENSION
PHASE 3

MAPLE HILLS, LLC.

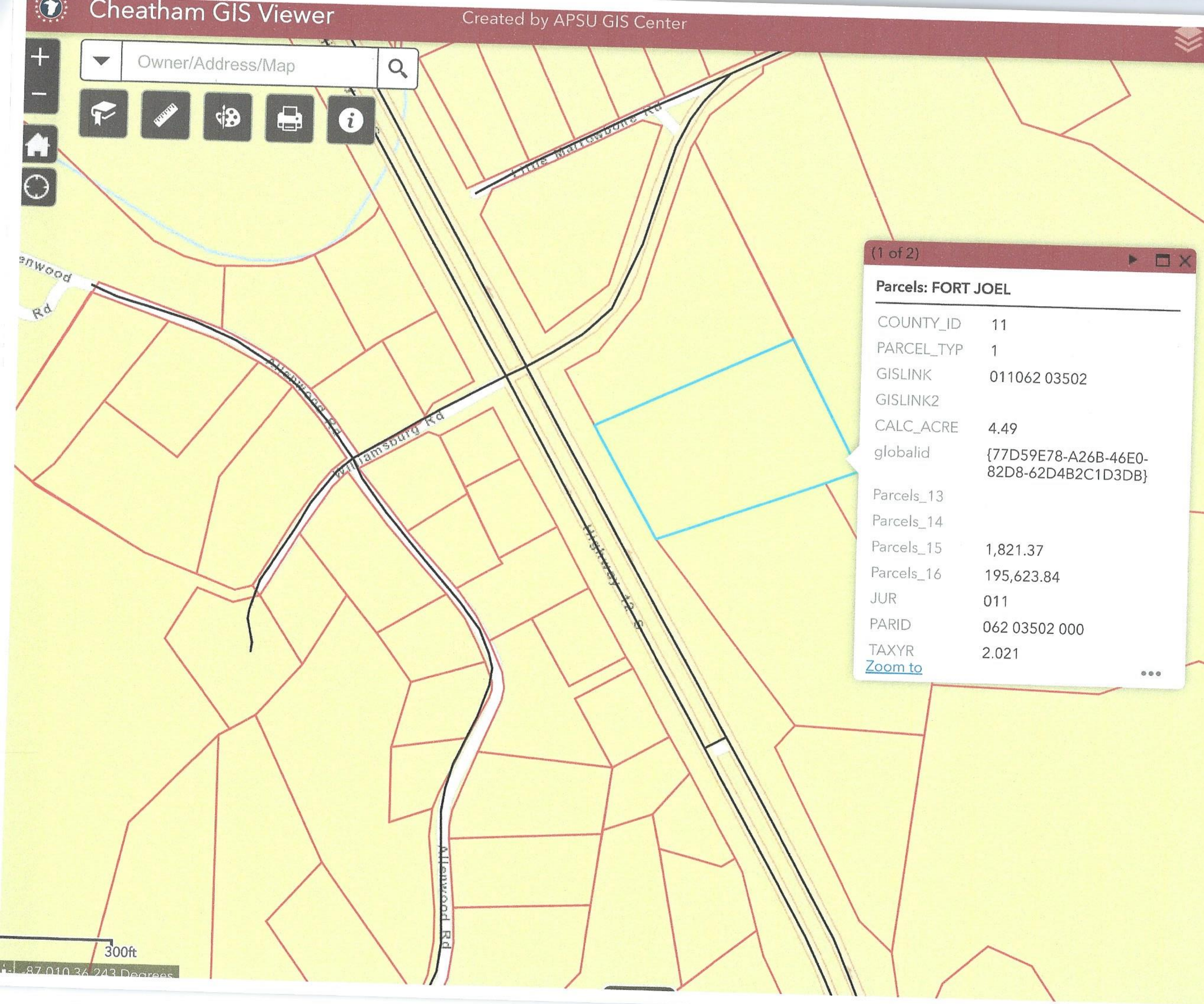
ASHLAND CITY TENNESSEE

SUBMITTALS / REVISIONS

NO.	DATE	DESCRIPTION
.	.	.

SHEET TITLE: SITE LAYOUT

PROJECT NO. 18043	DATE 04/08/2021
DRAWN BY OM	SCALE 1" = 50'
CHECKED BY MB	
SHEET NO.	C1.00


Cheatham GIS Viewer
Created by APSU GIS Center
Owner/Address/Map
Little Marrowbone Rd
Allenwood Rd
Williamsburg Rd
Highway 12 S
(1 of 2)
Parcels: FORT JOEL
COUNTY_ID 11
PARCEL_TYP 1
GISLINK 011062 03502
GISLINK2
CALC_ACRE 4.49
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Parcels_14
Parcels_15 1,821.37
Parcels_16 195,623.84
JUR 011
PARID 062 03502 000
TAXYR 2.021
Zoom to
300ft

CALL BEFORE YOU DIG

811 CALL 811 NATIONWIDE

Know what's below. Call before you dig.

IT IS THE CONTRACTORS RESPONSIBILITY TO CONTACT UTILITY COMPANIES PRIOR TO ANY CONSTRUCTION. THE LOCATION OF UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE AND POSSIBLY INCOMPLETE, THEREFORE CERTIFICATION TO THE LOCATION OF ALL UNDERGROUND UTILITIES IS WITHHELD.

N / S / E / W

30 0 30 60
SCALE IN FEET

LEGEND:

PROPERTY LINE
EXISTING WATER LINE
EXISTING SEWER LINE
OVERHEAD ELECTRIC LINE
FENCE
NEW CURB
SILT FENCE
EXISTING 5' CONTOUR
EXISTING 1' CONTOUR
NEW 1' CONTOUR
DEMO LINE
MANHOLE
CLEAN OUT
POWER POLE
WATER METER
FIRE HYDRANT
IRON ROD OLD
IRON ROD NEW
PIPE INVERT
SPOT ELEVATION
SLOPE DIRECTION

LOT COVERAGE

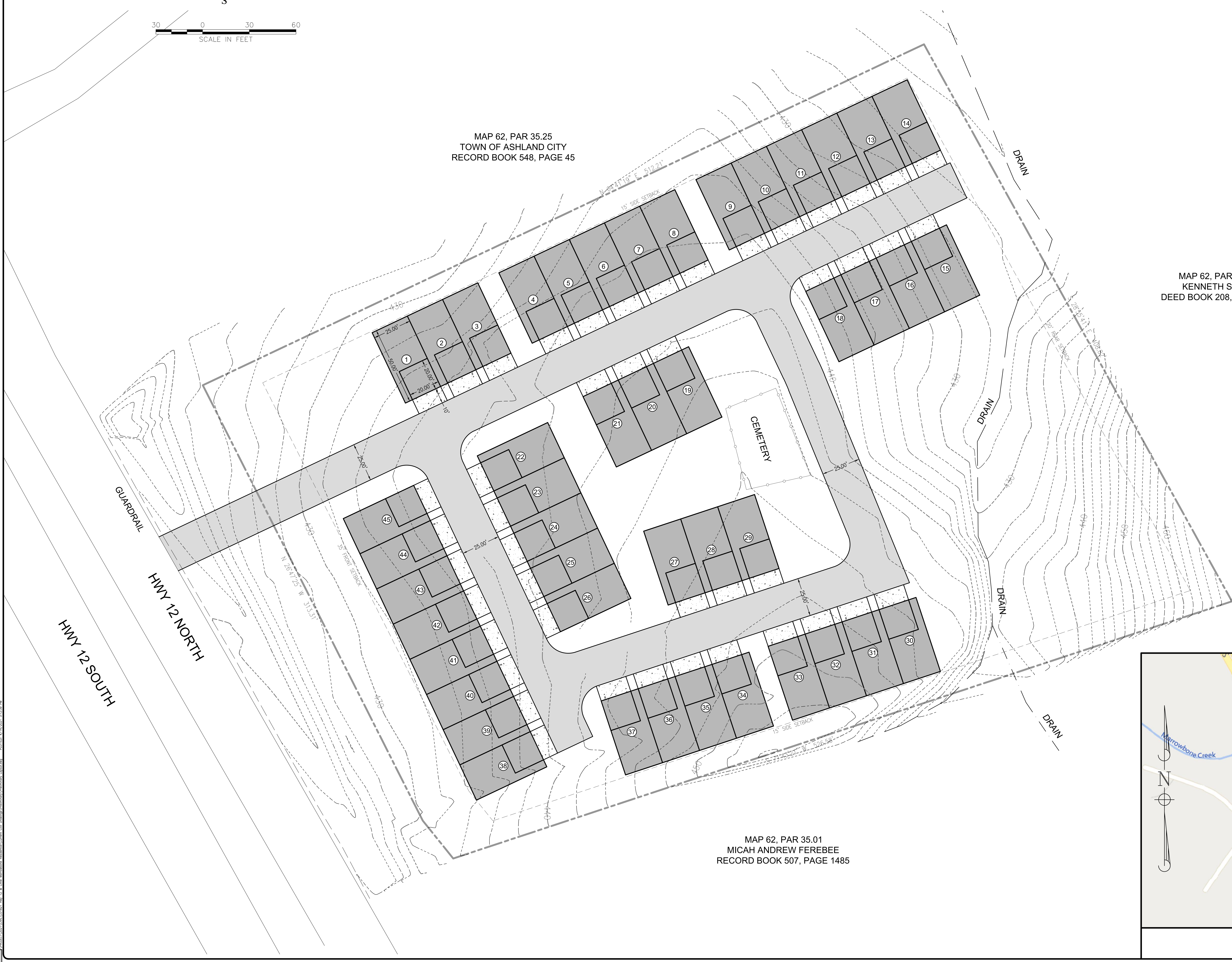
SITE AREA = 194,780 S.F., 4.47 ACRES
EXISTING BUILDING AREA = 4,462 S.F.
NEW BUILDING AREA = 168,750 S.F.
UNIT RATIO = 1 UNITS PER 4,328 S.F.
PROPOSED UNITS: 45 UNITS

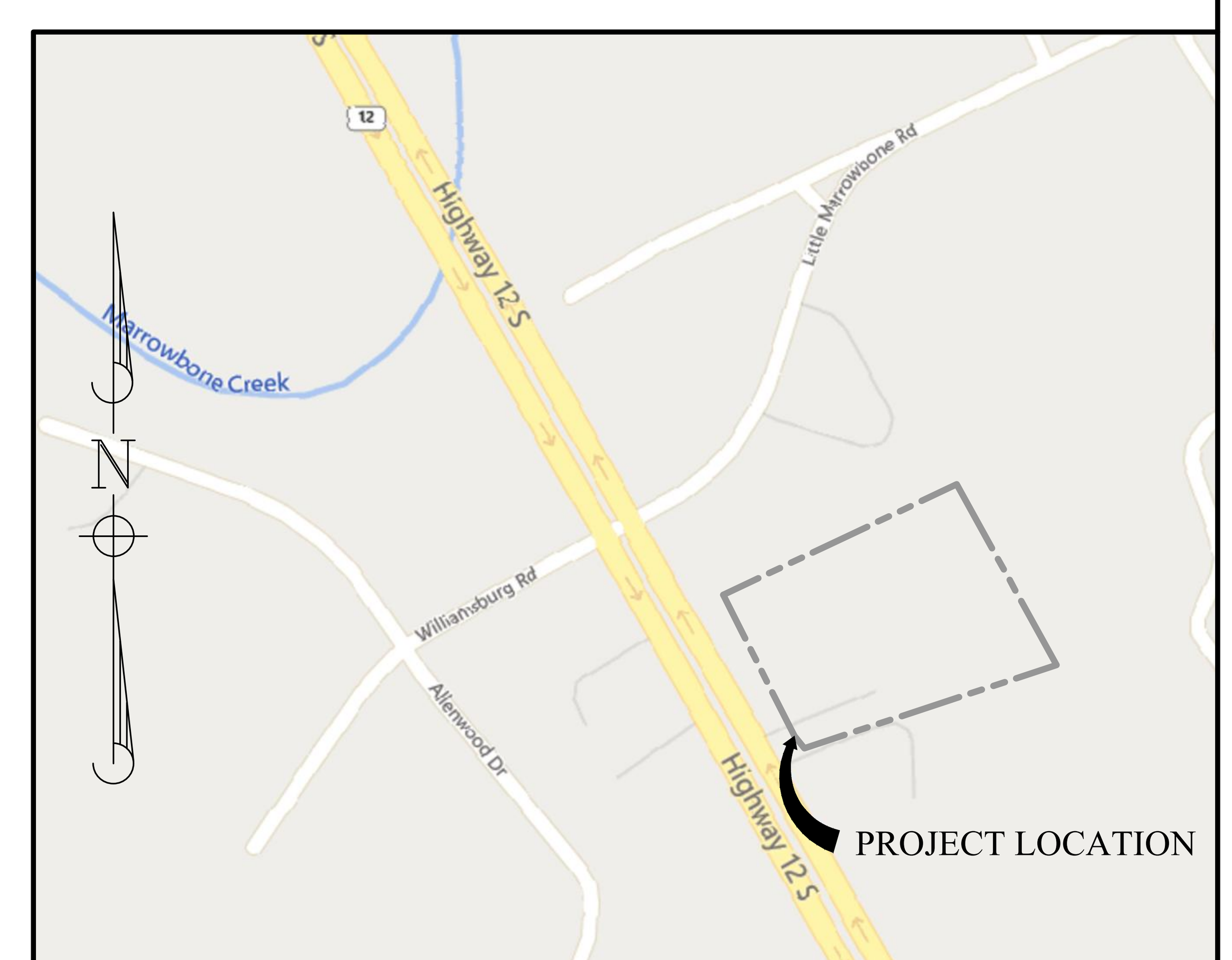
PARKING NOTES

2 PARKING STALLS PER UNIT

ZONING

EXISTING ZONING – R1
PROPOSED ZONING – R4





Vicinity Map
Not to Scale

KLOBER ENGINEERING SERVICES

SERVING CLIENTS WITH CIVIL ENGINEERING & LAND DEVELOPMENT SERVICES
3556 TOM AUSTIN HWY, SUITE 1, SPRINGFIELD, TN 37172
PHONE: (615) 382-2000 FAX: (888) 373-4485
www.klobereng.com

REVISIONS

NO.	BY	DATE	DESCRIPTION

JOSHUA M. LYON, P.E. TN#112331

NOT FOR CONSTRUCTION

HIGHWAY 12 RESIDENTIAL DEVELOPMENT

HWY 12
ASHLAND CITY, TENNESSEE
CHEATHAM COUNTY

DRAWN BY:	CJN
CHECKED BY:	JML
PROJECT NO.:	C01821

SITE LAYOUT

SHEET NUMBER
C1.02

Ashland City Fire, Building & Life Safety Department

101 Court Street
Ashland City TN 37015
Fire & Life Safety: (615) 792-4531 – Building Codes (615) 792-6455

Application for Reclassification of Property Under the Zoning Ordinance

Application Fee: $100.00

Application is hereby made to the Mayor and City Council, which first must be reviewed by the City Planning Commission, to reclassify the property described below now in a R-1 district.

DESCRIPTION OF PROPERTY (Attach Map): Map 62 Parcel 35.02

REASON FOR RECLASSIFICATION REQUEST R-4

Address: 1807 Hwy 12S Ashland City, TN 37015

NOTE:

1. All applications for rezoning must be turned into City Hall no later than thirty (30) days prior to the upcoming planning commission meeting, if they are to be entertained at said meeting.
2. An accurate graphic plat prepared and stamped by a registered design professional and a legal description of property to be rezoned must be submitted to the Building Official prior to consideration by the City Commissioners. In certain circumstances (i.e. large annexation requests having irregular boundaries) these legal descriptions must be submitted prior to planning commission consideration.
3. The applicant will submit the names and addresses of all owners of adjacent property within 1,000 feet. The applicant must also submit a map showing the property within 200 feet of said property.

Michael L Stuart 4-15-21

Applicant Signature Date

NAME	ADDRESS	
SMITH KENNETH ETUX WILDA B	LITTLE MARROWBONE RD 1070	ASHLAND CITY, TN 37015
BEASLEY MARY B ETVIR THOMAS W RUTLEDGE	LITTLE MARROWBONE RD 1080	ASHLAND CITY, TN 37015
JOHNSON RONALD KEITH	LITTLE MARROWBONE RD 1090	ASHLAND CITY, TN 37015
FEREBEE MICAH ANDREW	HWY 12S 1811	ASHLAND CITY, TN 37015
LAYTON REGINA	HWY 12S 1829	ASHLAND CITY, TN 37015
TOWN OF ASHLAND CITY	Court Square	ASHLAND CITY, TN 37015
HOLT MICHAEL D	1050 SIDNEY FAMBROUGH RD	ASHLAND CITY, TN 37015
CANTRELL JOSEPH L	LITTLE MARROWBONE RD 1009	ASHLAND CITY, TN 37015
TAYLOR ANTHONY R ETUX DONNA S	LITTLE MARROWBONE RD 1015	ASHLAND CITY, TN 37015
CANNON STACY RENEE & JESSICA CANNON	LITTLE MARROWBONE RD 1019	ASHLAND CITY, TN 37015
WILLIAMS ROBERT C JR	LITTLE MARROWBONE RD 1025	ASHLAND CITY, TN 37015
SLEEPER EDWARD ETUX MELODY	LITTLE MARROWBONE RD 1029	ASHLAND CITY, TN 37015
POTTS CHRISTOPHER ETUX TRACY & POTTS CHRISTOPHER ETUX TRACY	LITTLE MARROWBONE RD 1035	ASHLAND CITY, TN 37015
LARSEN KEVIN	LITTLE MARROWBONE RD 1039	ASHLAND CITY, TN 37015
MUELLER DAVID ETUX TABITHA AUSTIN	LITTLE MARROWBONE RD 1045	ASHLAND CITY, TN 37015
REIGLE DANIEL H ETUX TINA A	290 ED HARRIS RD	ASHLAND CITY, TN 37015
ROSE GASSER FAMILY TRUST	HWY 12S 1692	ASHLAND CITY, TN 37015
GASSER ROSE B SUBSTITUTE TRUSTEE OF THE ROSE GASSER FAMILY TRUST	HWY 12 S 1692	ASHLAND CITY, TN 37015
RAMSEY JIMMY G ETUX TONYA L	WILLIAMSBURG RD 1001	ASHLAND CITY, TN 37015
YATES JAMES M ETAL WITH A RESERVED LE FOR MARY F YATES ETAL	HWY 12S 1806	ASHLAND CITY, TN 37015
RAYMER SHERRI	**HWY 12S 1808**	ASHLAND CITY, TN 37015
WATTS JARRETT S CECELIA	HWY 12S 1812	ASHLAND CITY, TN 37015
KERN JACKIE L JR ETUX JAMIE L	HWY 12S 1816	ASHLAND CITY, TN 37015
RICHARDSON VICTOR	HWY 12S 1820	ASHLAND CITY, TN 37015
STINNETT JAMES W JR ETUX YVONNE	HWY 12S 1830	ASHLAND CITY, TN 37015
HOOTEN ANTHONY D	2305 SIEFRIED ST	NASHVILLE, TN 37208
DEVILLE BELTON M ETUX LOUISE	ALLENWOOD DR 1123	ASHLAND CITY, TN 37015
BRADEN SANDRA CHARLES	ALLENWOOD DR 1119	ASHLAND CITY, TN 37015
YOUNG-SEIGLER ARTENZIA C	ALLENWOOD DR 1115	ASHLAND CITY, TN 37015
MEADOWS DIANA GAYLE ETVIR MELVIN AVERY	1022 MEADOW BROOK RD	ASHLAND CITY, TN 37015
WEST BRYAN ETUX CHRISTINA K	ALLENWOOD DR 1105	ASHLAND CITY, TN 37015
RAINES JAMES REX ETUX GEORGE ANNE	P O BOX 224	ASHLAND CITY, TN 37015
MYATT PHILLIP W ETUX VICKEY L	WILLIAMSBURG RD 1004	ASHLAND CITY, TN 37015
ROSE GASSER FAMILY TRUST % ROSE B GASSER	ALLENWOOD DR 1009	ASHLAND CITY, TN 37015
KRANTZ BILL FRANK	ALLENWOOD DR 1000	ASHLAND CITY, TN 37015
POSS JOHN	ALLENWOOD DR 1004	ASHLAND CITY, TN 37015
SHARPE LEE & SHER SHAPRE	ALLENWOOD DR 1010	ASHLAND CITY, TN 37015
HOUNIHAN KEVIN	ALLENWOOD DR 1108	ASHLAND CITY, TN 37015
KEPHART BRYAN W	ALLENWOOD DR 1112	ASHLAND CITY, TN 37015
ADAMBERGER DEREK ETUX ALYCIA	ALLENWOOD DR 1114	ASHLAND CITY, TN 37015
WILLIAMS ROBERT W	6060 N CENTRAL EXPY #560	DALLAS, TX 75206
BIGGS HERBERT D SR ETUX KAYE D	WILLIAMSBURG RD 1105	ASHLAND CITY, TN 37015
JONES JAMES W JR	WILLIAMSBURG RD 1110	ASHLAND CITY, TN 37015
MIKLICH HENRY A ETUX JANE O	RIVERVIEW LN 1055	ASHLAND CITY, TN 37015

Fire, Building & Life Safety Department

Ashland City Fire, Building & Life Safety Department

101 Court Street
Ashland City TN 37015
Fire & Life Safety: (615) 792-4531 – Building Codes (615) 792-6455

APPLICATION FOR SITE PLAN APPROVAL

Date Received: 4/15/21

Property Address: 2150 STATE HIGHWAY 12

ASHLAND CITY, TN 37015

Map # 65 **Parcel # 48.03** **Acreage: LOT 4 – 3.22 AC**

Property Owner(s): DAREK BELL

Phone: 615-351-9442

Description of project being reviewed: PROPOSED DISTILLERY LOCATED OFF OF TRINITY LANE AND STATE HIGHWAY 12. PROPOSED DISTILLERY TO INCLUDE TWO RICK HOUSES AND ONE STILL HOUSE.

Having submitted plans for review by the Ashland City Planning Commission, I understand that I am responsible for all review fees incurred by the Town of Ashland City. In understand that the fee paid at the time of submittal is not applicable for the fees incurred through review. With my signature, I verify that I fully understand that I am responsible for said fees, and that I have received a copy of Ordinance #165.

ASHLAND CITY PLANNING COMMISSION SITE PLAN REVIEW FEE: $100.00

NEXT SCHEDULED MEETING: MAY 3, 2021

D. Bell

Applicant's Signature

4/13/2021

Date

Ashland City Fire, Building & Life Safety Department

101 Court Street
Ashland City TN 37015
Fire & Life Safety: (615) 792-4531 – Building Codes (615) 792-6455

APPLICATION FOR SITE PLAN APPROVAL

Date Received: 4/16/2021

Property Address: 1209 TN-12 Ashland City Tennessee 37015

Map # 55 **Parcel #** 36 **Acreage:** 5.19

Property Owner(s): Mark & Tonya Yarbrough

Phone: 615-417-7659

Description of project being reviewed:

Expansion of existing Mini Storage

Having submitted plans for review by the Ashland City Planning Commission, I understand that I am responsible for all review fees incurred by the Town of Ashland City. In understand that the fee paid at the time of submittal is not applicable for the fees incurred through review. With my signature, I verify that I fully understand that I am responsible for said fees, and that I have received a copy of Ordinance #165.

ASHLAND CITY PLANNING COMMISSION SITE PLAN REVIEW FEE: $100.00

NEXT SCHEDULED MEETING: 5/3/2021

Applicant's Signature

04/16/21
Date

SITE PLAN FOR

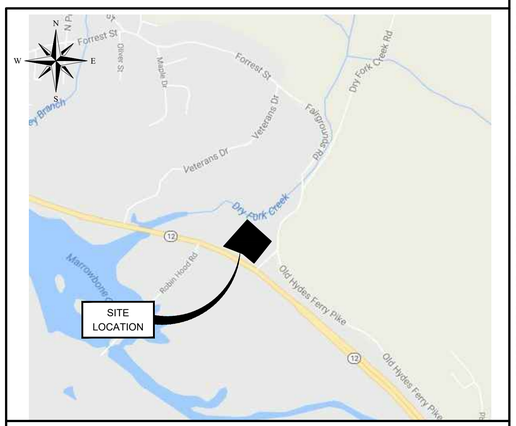
ACE STORAGE

HIGHWAY 12
ASHLAND CITY, TN

DATE: 4/15/21

ACE STORAGE

SHEET INDEX:



Vicinity Map
Not to Scale

KLOBER
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PHONE: (615) 382-2000 FAX: (888) 373-4485
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JOSHUA M. LYON, P.E. TN#112331

PRESENT OWNER:

MARK & TONYA YARBROUGH
400 WARIOTO WAY #708
ASHLAND CITY, TN 37105

DEED REFERENCE:

MAP 55, PARCEL 36
LEE BATSON COMMERCIAL LOTS – LOT 1

PROPERTY INFORMATION:

AREA: 226,164 S.F. = 5.19 ACRES

ZONING:

COMMERCIAL C–2

SITE USE:

EXISTING USE: MINI STORAGE
PROPOSED USE: MINI STORAGE

SIGN NOTE:

ALL SIGNS SHALL COMPLY WITH THE MOST CURRENT EDITION OF THE ASHLAND CITY ZONING ORDINANCE. SEPARATE PERMIT REQUIRED.

LOT COVERAGE:

EXISTING BUILDING AREA = 22,225 S.F.
NEW BUILDING AREA = 13,550 S.F.
BUILDING COVERAGE = 15.5%
MAX BUILDING HEIGHT: 30'–0"
EXISTING CONCRETE SURFACE: ±350 S.F.
EXISTING ASPHALT SURFACE: ±41,782 S.F.
EXISTING IMPERVIOUS AREA: ±64,357 S.F. = 2
PROPOSED ASPHALT SURFACE: ±22,656 S.F.
PROPOSED IMPERVIOUS AREA: ±100,563 S.F. =

PARKING INFORMATION:

REQUIRED PARKING:
EXISTING: 3 SPACES, INCLUDING 1 HANDICAP SPACES

PROVIDED: 2 SPACES

TOTAL PARKING: 5 SPACES, INCLUDING 1 HANDICAP SPACES

UTILITY NOTE:

COORDINATE ALL UTILITY INSTALLATIONS WITH GOVERNING ENTITIES.

SECURITY GATE:

SECURITY GATES OR BARRIERS SHALL BE EQUIPPED WITH A RADIO OPERATED RECEIVER/CONTROLLER CAPABLE OF RECEIVING SIGNALS FROM A POLICE DEPARTMENT, SHERIFF'S DEPARTMENT (IF THE GATED FACILITY OR COMMUNITY IS IN THE COUNTY), FIRE DEPARTMENT, UTILITY AND EMERGENCY MEDICAL SERVICES' RADIO TRANSCEIVERS SERVING THE GATED FACILITY OR COMMUNITY WHICH ALLOW EMERGENCY RESPONDERS AND OTHER NECESSARY ON–DUTY EMPLOYEES TO OPEN THE SECURITY GATE OR BARRIER BY USE OF SUCH EQUIPMENT. ALL SECURITY GATES OR BARRIERS MUST MEET POLICIES DEEMED NECESSARY BY THE AUTHORITY HAVING JURISDICTION OVER THE GATED FACILITY OR COMMUNITY FOR RAPID, RELIABLE, AND MUTUAL AID ACCESS. SUCH EQUIPMENT SHALL BE FURNISHED, INSTALLED AND MAINTAINED BY THE GATED FACILITY OR COMMUNITY THAT IS SERVED BY SUCH EQUIPMENT.

GENERAL NOTES:

1. PRIOR TO BEGINNING CONSTRUCTION ON THIS SITE THE LOCATION OF UTILITIES MUST BE IDENTIFIED BY CALLING THE TOLL–FREE TENNESSEE ONE CALL REFERENCE NUMBER 1–800–351–1111.
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3. TOPSOIL SHALL BE PLACED ON EXCAVATED AREAS WHICH REQUIRE NEW VEGETATION. GROUND COVER SHALL BE REESTABLISHED WITH KENTUCKY 31 FESCUE SEEDED AT A MINIMUM OF 250 LBS. PER ACRE. SLOPES 3:1 OR GREATER SHALL BE LINED WITH NORTH AMERICAN GREEN S150 GRASS MATTING OR EQUAL.
4. SILT FENCE SHALL BE INSTALLED IN ALL EROSION AREAS WHICH COULD ALLOW UNTREATED STORMWATER RUNOFF TO BE DISCHARGED FROM THE PROPERTY. ALL EROSION CONTROL MEASURES SHALL BE CONSISTENT WITH THE PROVISIONS DESCRIBED IN THE MOST CURRENT EDITION OF THE TENNESSEE EROSION & SEDIMENT CONTROL HANDBOOK.
5. THE STORMWATER RUNOFF CALCULATIONS ON THIS SITE HAVE BEEN PERFORMED USING THE U.S. SOIL CONSERVATION SERVICE TR–55 METHOD. STORMWATER POND HAS BEEN SIZED TO HANDLE A 25 AND 100 YEAR STORM EVENT.
6. THE TOPOGRAPHIC SURVEY SHOWN HEREON WAS TAKEN FROM A SURVEY BY STEVEN E ARTZ SURVEYING OF SPRINGFIELD, TN.
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9. ANY DUMPSTER SHALL BE FULLY ENCLOSED, MATCHING THE FACADE OF THE BUILDING, AND A WOODEN PRIVACY FENCE GATE THAT IS 8 FEET HIGH ON ALL SIDES AND ALL SERVICE BOXES AND MECHANICALS TO BE IN THE REAR OF THE BUILDING.
10. ALL ADDITIONS IN THE FUTURE MUST BE BUILT TO THESE STANDARDS.
11. THIS PROPERTY IN LOCATED IN ZONE "A" AND ZONE "X" (AREAS OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN AS SHOWN ON NFIP FIRM MAP ACCORDING TO THE FEMA MAP PANEL NUMBER 47021C0170D, DATED 9/10/2010,

NPDES PERMIT NOTE:

THE MAXIMUM DISTURBED AREA FOR THIS PROJECT IS OVER 1 ACRE. THEREFORE, THIS SITE IS CURRENTLY COVERED UNDER PERMIT NUMBER TNR241736.

JOSHUA M. LYON, P.E.
PROJECT MANAGER

EP&SC NOTES:

1. AN EROSION PREVENTION SILTATION CONTROL PLAN (EP&SC) AND LAND DISTURBANCE PERMIT (IF REQUIRED) SHALL BE IN PLACE PRIOR TO ANY GRADING, CLEARING AND/OR ANY OTHER CONSTRUCTION ACTIVITY. EROSION CONTROL DEVICES SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD; GENERALLY CONSIDERED TO BE THROUGH THE COMPLETION OF RESTORATION. IF REQUIRED, THE EP&SC PLAN ALONG WITH AN INSPECTION CHECKLIST AND STORMWATER PERMIT MUST BE AT THE PROJECT SITE AT ALL TIMES. THE INSPECTION CHECKLIST SHALL HAVE A RECORD OF DATES EP&SC DEVICES ARE INSPECTED AND ANY CORRECTION ACTION TAKEN OR MAJOR OBSERVATIONS. BMP'S MUST BE INSPECTED BY A QUALIFIED PERSON WHO HAS TAKEN AN APPROVED EROSION AND SEDIMENTATION COURSE.
2. ALL EP&SC DEVICES ARE TO REMAIN IN PLACE UNTIL THE SITE HAS BEEN STABILIZED AND A GOOD STAND OF GRASS HAS BEEN ESTABLISHED.
3. EROSION PREVENTION AND SEDIMENT CONTROLS MUST BE INSPECTED AT LEAST TWICE EVERY CALENDAR WEEK AT LEAST 72 HOURS APART. INSPECTIONS ARE TO BE DOCUMENTED AND KEPT WITH THE SWPPP (IF REQUIRED).
4. SILT FENCE, OR OTHER SEDIMENT BARRIERS ARE TO BE INSTALLED PROPERLY ALONG TOPOGRAPHICAL CONTOURS DOWN SLOPE OF THE AREA TO BE DISTURBED PRIOR TO ANY GRADING, CLEARING AND/OR ANY OTHER CONSTRUCTION ACTIVITY.
5. EXCAVATED TOPSOIL TO BE REUSED MUST BE STOCKPILED AND ENCIRCLED WITH SILT FENCING.
6. THIS SITE SHALL CONTAIN A TEMPORARY STONE CONSTRUCTION ENTRANCE THAT CONFORMS TO REQUIRED SPECIFICATIONS PRIOR TO GRADING COMMENCEMENT. THE STONE SHALL BE 2 TO 3 INCH IN DIAMETER AND SHALL BE KEPT CLEAN BY ADDING STONE AS NEEDED. IT SHALL BE AT LEAST 8 INCHES DEEP UNDERLAIN WITH FILTER FABRIC AND 20 FEET WIDE.
7. APPROVED INLET PROTECTIONS FOR NEARBY STORM SEWER CURB AND DROP INLETS MUST BE INSTALLED WITHIN 24 HOURS OF GRADING COMMENCEMENT.
8. VEGETATIVE BUFFERS OR OTHER PROTECTION MUST BE PROVIDED ALONG STREAMS, RIVERS, AND PONDS TO AVOID EROSION OF BANKS.
9. STABILIZATION MEASURES MUST BE PERFORMED WITHIN SEVEN (7) DAYS IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, AND WITHIN FIFTEEN (15) DAYS AFTER FINAL GRADING.
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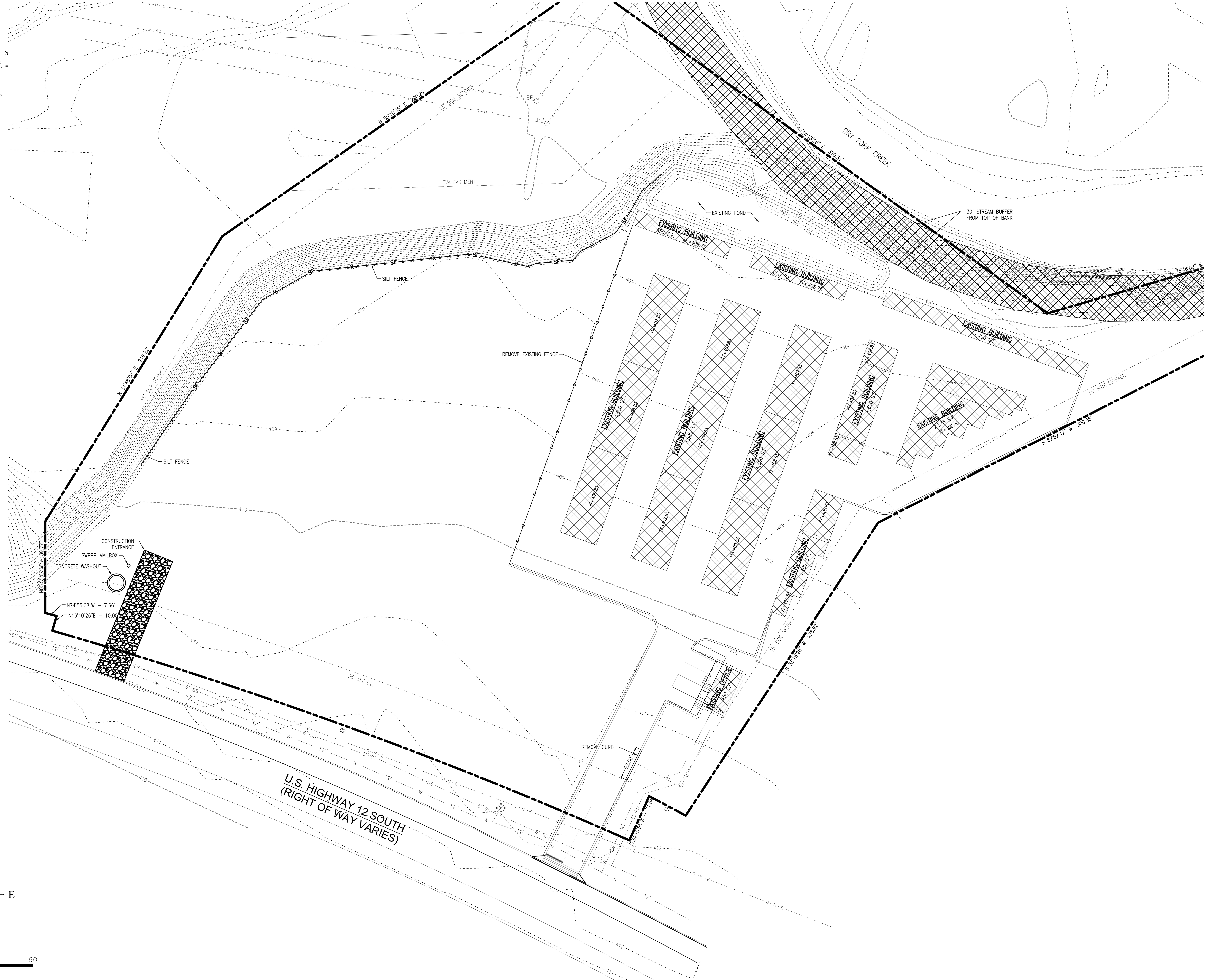
12. SEDIMENT THAT HAS ESCAPED THE CONSTRUCTION SITE AND HAS COLLECTED IN THE STREET OR DRAINAGE STRUCTURES MUST IMMEDIATELY BE PHYSICALLY REMOVED.
13. BUILDING AND WASTE MATERIALS, AND NON STORM WATER DISCHARGES, SUCH AS CONCRETE, PAINT WASH WATER, OR MACHINERY LEAKAGE, OR SPILLAGE MUST BE MANAGED TO PREVENT THEM FROM ENTERING THE STORM WATER SYSTEM, GROUND WATER, OR NEARBY WATER BODY.
14. THE PROJECT IS SUBJECT TO INSPECTION BY THE CITY AT ANY TIME AND ITEMS FOUND DEFICIENT SHALL BE IMMEDIATELY CORRECTED. THE CITY MAY STOP CONSTRUCTION OR PROPERTIES, OR ADMINISTER OTHER ENFORCEMENT ACTIONS AS DEFINED BY THE CITY

CALL BEFORE YOU DIG

811 CALL 811 NATIONWIDE

Know what's below. Call before you dig.

IT IS THE CONTRACTORS RESPONSIBILITY TO CONTACT UTILITY COMPANIES PRIOR TO ANY CONSTRUCTION. THE LOCATION OF UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE AND POSSIBLY INCOMPLETE, THEREFORE CERTIFICATION TO THE LOCATION OF ALL UNDERGROUND UTILITIES IS WITHHELD.



LEGEND:

PROPERTY LINE
EXISTING WATER LINE
EXISTING SEWER LINE
OVERHEAD ELECTRIC LINE
FENCE
NEW CURB
SILT FENCE
EXISTING 5' CONTOUR
EXISTING 1' CONTOUR
NEW 1' CONTOUR
DEMO LINE

MANHOLE
CO CLEAN OUT
PP POWER POLE
WM WATER METER
FIRE HYDRANT
IR(O) IRON ROD OLD
IR(N) IRON ROD NEW

INV.–25.42 PIPE INVERT
28.14 SPOT ELEVATION
SLOPE DIRECTION

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REVISIONS			
NO.	BY	DATE	DESCRIPTION

JOSHUA M. LYON, P.E. TN#112331

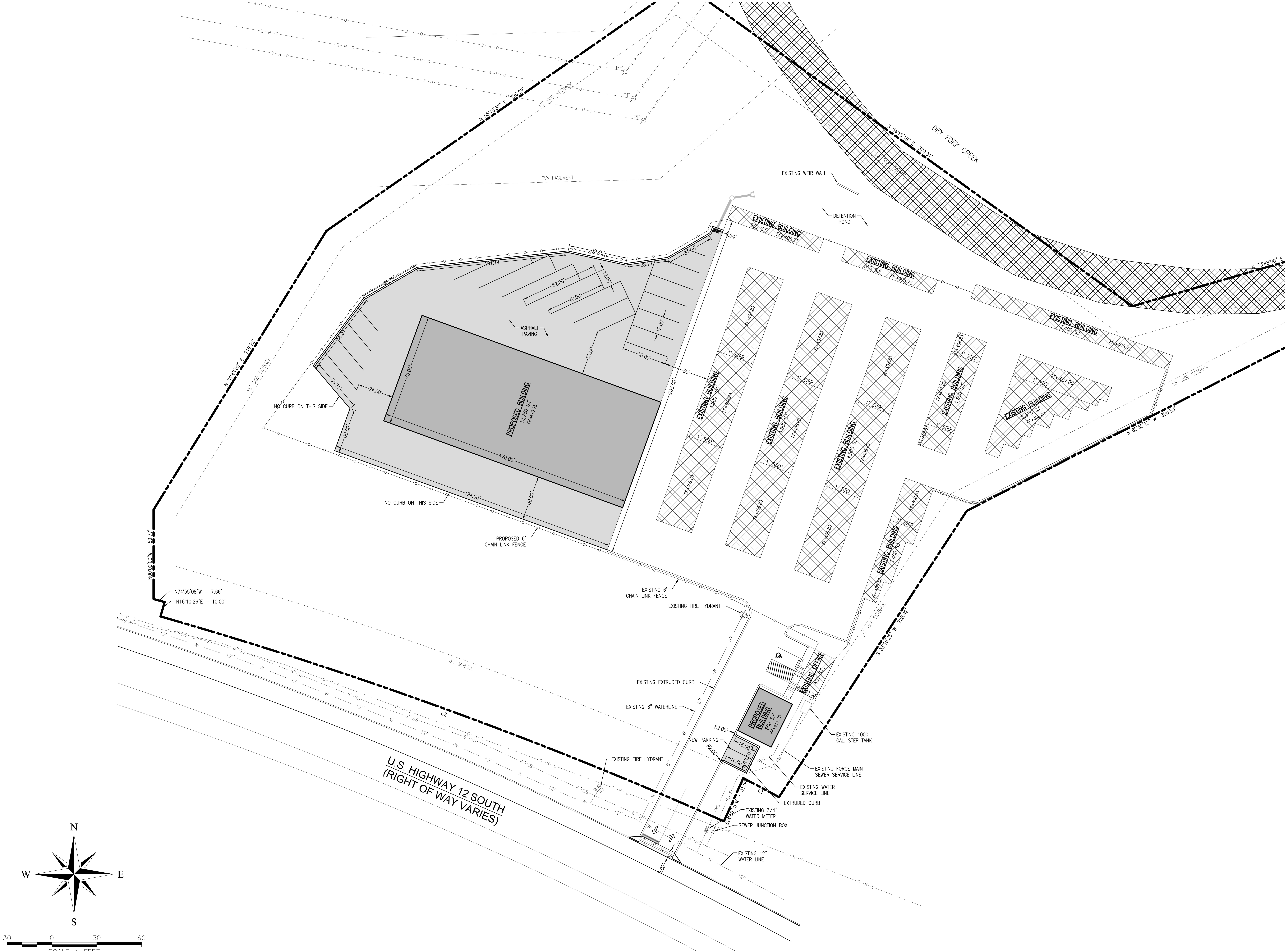
ACE MINI STORAGE

ASHLAND CITY, TN
CHEATHAM COUNTY

DRAWN BY:	CJN
CHECKED BY:	JML
DATE:	7/13/17
PROJECT NO.:	C03317

INITIAL EP&SC

SHEET NUMBER
C1.01



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ACE MINI STORAGE

ASHLAND CITY, TN
CHEATHAM COUNTY

DRAWN BY:	CJN
CHECKED BY:	JML
DATE:	7/13/17
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SITE LAYOUT

SHEET NUMBER
C1.02

ITEM # 4.

PRESENT OWNER:
MARK & TONYA YARBROUGH
400 WARIOTO WAY #708
ASHLAND CITY, TN 37105

DEED REFERENCE:
MAP 55, PARCEL 36
LEE BATSON COMMERCIAL LOTS – LOT 1

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PLOTTED: 4/14/2021 2:39:36 PM

\PROJECT\2021\CIVIL\C03221 Ace Storage – Ashland City\Current Civil Drawings\Ace Storage – Ashland City Hwy12.dwg

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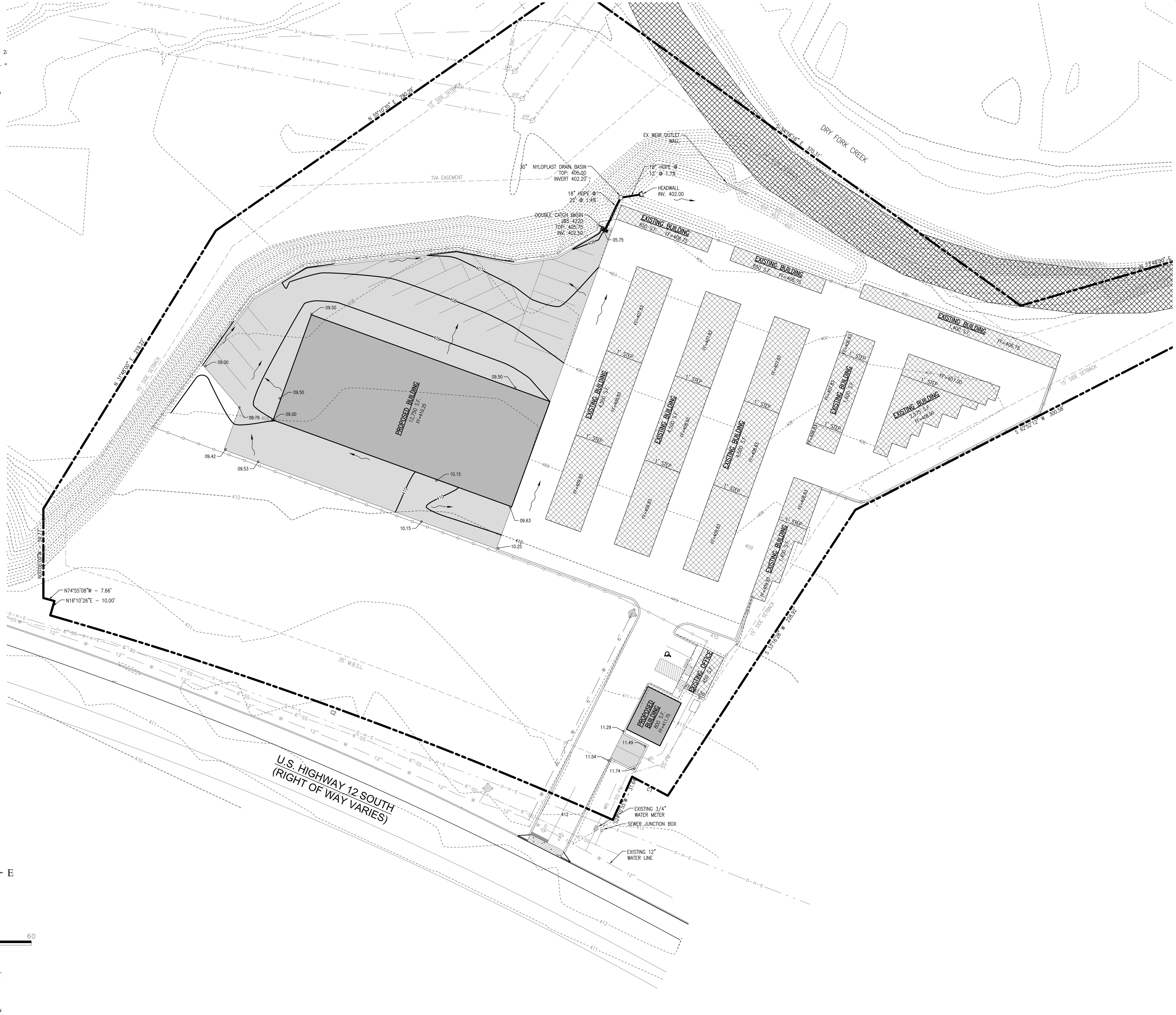
N S E W

30 0 30 60
SCALE IN FEET



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NO.	BY	DATE	DESCRIPTION
REVISIONS			

JOSHUA M. LYON, REGISTERED ENGINEER, AGRICULTURE, COMMERCE, NO. 112331, STATE OF TENNESSEE
4/15/21
JOSHUA M. LYON, P.E. TN#112331

ACE MINI STORAGE
ASHLAND CITY, TN
CHEATHAM COUNTY

DRAWN BY:	CJN
CHECKED BY:	JML
DATE:	7/13/17
PROJECT NO.:	C03317

GRADING & DRAINAGE PLAN

SHEET NUMBER
C1.03

PRESENT OWNER:
MARK & TONYA YARBROUGH
400 WARIOTO WAY #708
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11. THIS PROPERTY IN LOCATED IN ZONE "A" AND ZONE "X" (AREAS OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN AS SHOWN ON NFIP FIRM MAP ACCORDING TO THE FEMA MAP PANEL NUMBER 47021C0170D, DATED 9/10/2010,

NPDES PERMIT NOTE:
THE MAXIMUM DISTURBED AREA FOR THIS PROJECT IS OVER 1 ACRE. THEREFORE, THIS SITE IS CURRENTLY COVERED UNDER PERMIT NUMBER TNR241736.

JOSHUA M. LYON, P.E.
PROJECT MANAGER

EP&SC NOTES:
1. AN EROSION PREVENTION SILTATION CONTROL PLAN (EP&SC) AND LAND DISTURBANCE PERMIT (IF REQUIRED) SHALL BE IN PLACE PRIOR TO ANY GRADING, CLEARING AND/OR ANY OTHER CONSTRUCTION ACTIVITY. EROSION CONTROL DEVICES SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD; GENERALLY CONSIDERED TO BE THROUGH THE COMPLETION OF RESTORATION. IF REQUIRED, THE EP&SC PLAN ALONG WITH AN INSPECTION CHECKLIST AND STORMWATER PERMIT MUST BE AT THE PROJECT SITE AT ALL TIMES. THE INSPECTION CHECKLIST SHALL HAVE A RECORD OF DATES EP&SC DEVICES ARE INSPECTED AND ANY CORRECTION ACTION TAKEN OR MAJOR OBSERVATIONS. BMP'S MUST BE INSPECTED BY A QUALIFIED PERSON WHO HAS TAKEN AN APPROVED EROSION AND SEDIMENTATION COURSE.
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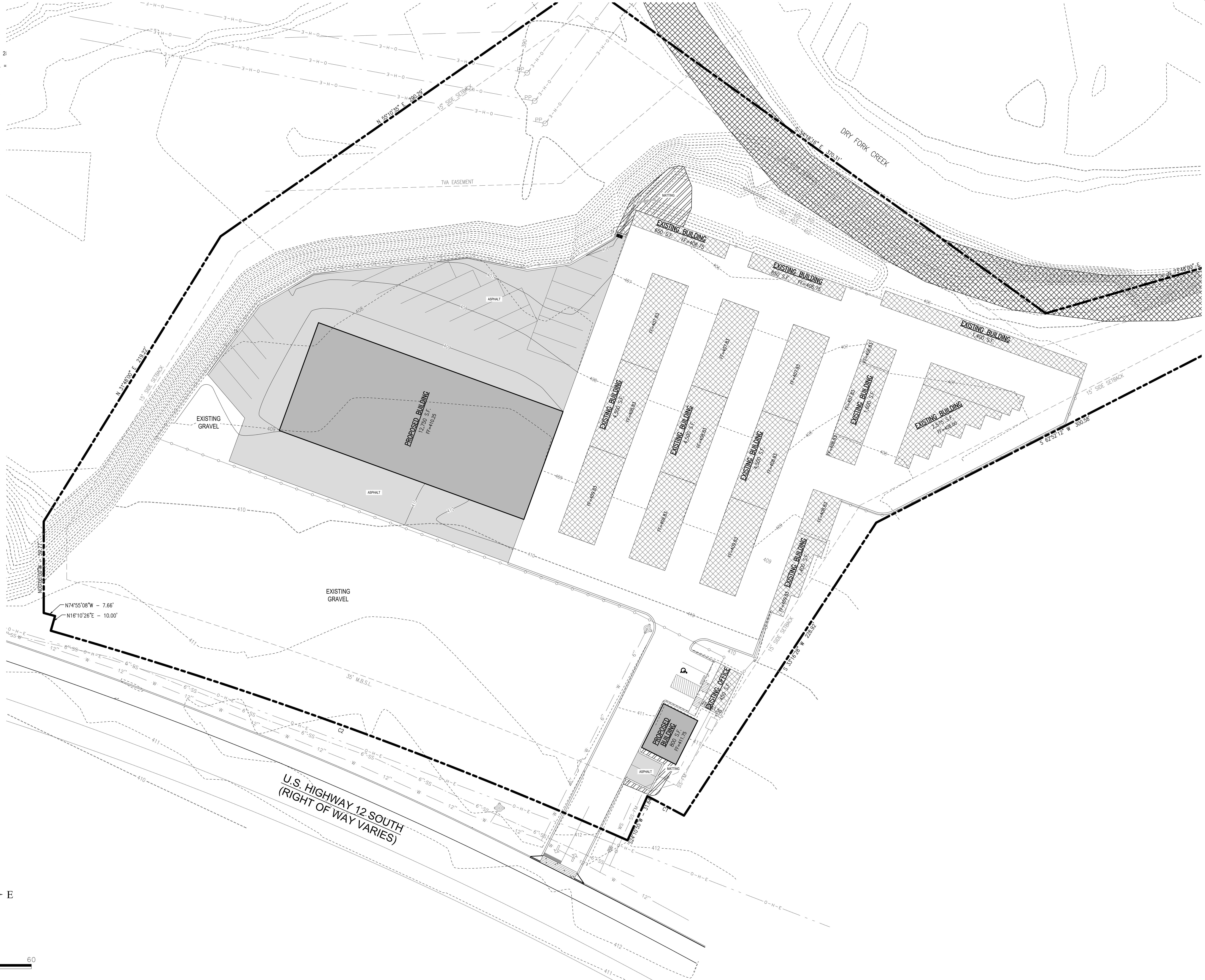
12. SEDIMENT THAT HAS ESCAPED THE CONSTRUCTION SITE AND HAS COLLECTED IN THE STREET OR DRAINAGE STRUCTURES MUST IMMEDIATELY BE PHYSICALLY REMOVED.
13. BUILDING AND WASTE MATERIALS, AND NON STORM WATER DISCHARGES, SUCH AS CONCRETE, PAINT WASH WATER, OR MACHINERY LEAKAGE, OR SPILLAGE MUST BE MANAGED TO PREVENT THEM FROM ENTERING THE STORM WATER SYSTEM, GROUND WATER, OR NEARBY WATER BODY.
14. THE PROJECT IS SUBJECT TO INSPECTION BY THE CITY AT ANY TIME AND ITEMS FOUND DEFICIENT SHALL BE IMMEDIATELY CORRECTED. THE CITY MAY STOP CONSTRUCTION OR PROPERTIES, OR ADMINISTER OTHER ENFORCEMENT ACTIONS AS DEFINED BY THE CITY

PLOTTED: 4/14/2021 2:39:37 PM

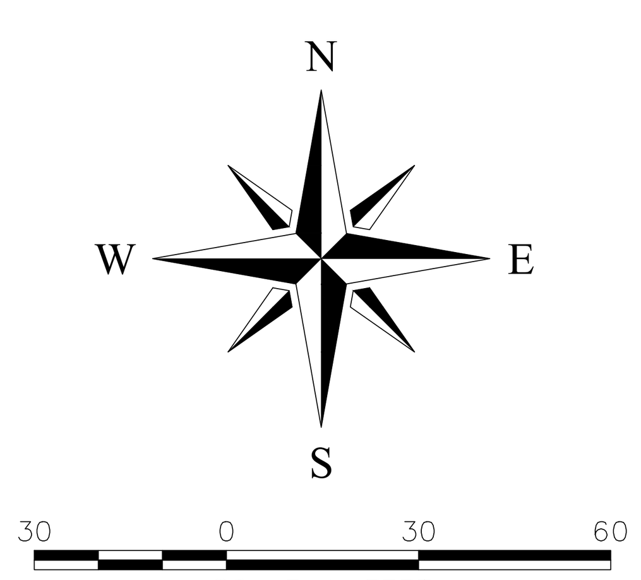


CALL BEFORE YOU DIG

811 CALL 811 NATIONWIDE

Know what's below.
Call before you dig.

IT IS THE CONTRACTORS RESPONSIBILITY TO CONTACT UTILITY COMPANIES PRIOR TO ANY CONSTRUCTION. THE LOCATION OF UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE AND POSSIBLY INCOMPLETE, THEREFORE CERTIFICATION TO THE LOCATION OF ALL UNDERGROUND UTILITIES IS WITHHELD.



LEGEND:
PROPERTY LINE	MANHOLE
EXISTING WATER LINE	CO CLEAN OUT
EXISTING SEWER LINE	PP POWER POLE
OVERHEAD ELECTRIC LINE	WM WATER METER
FENCE	FIRE HYDRANT
NEW CURB	IR(O) IRON ROD OLD
SILT FENCE	IR(N) IRON ROD NEW
EXISTING 5' CONTOUR	INV.–25.42 PIPE INVERT
EXISTING 1' CONTOUR	28.14 SPOT ELEVATION
NEW 1' CONTOUR	SLOPE DIRECTION
DEMO LINE	

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REVISIONS

NO.	BY	DATE	DESCRIPTION

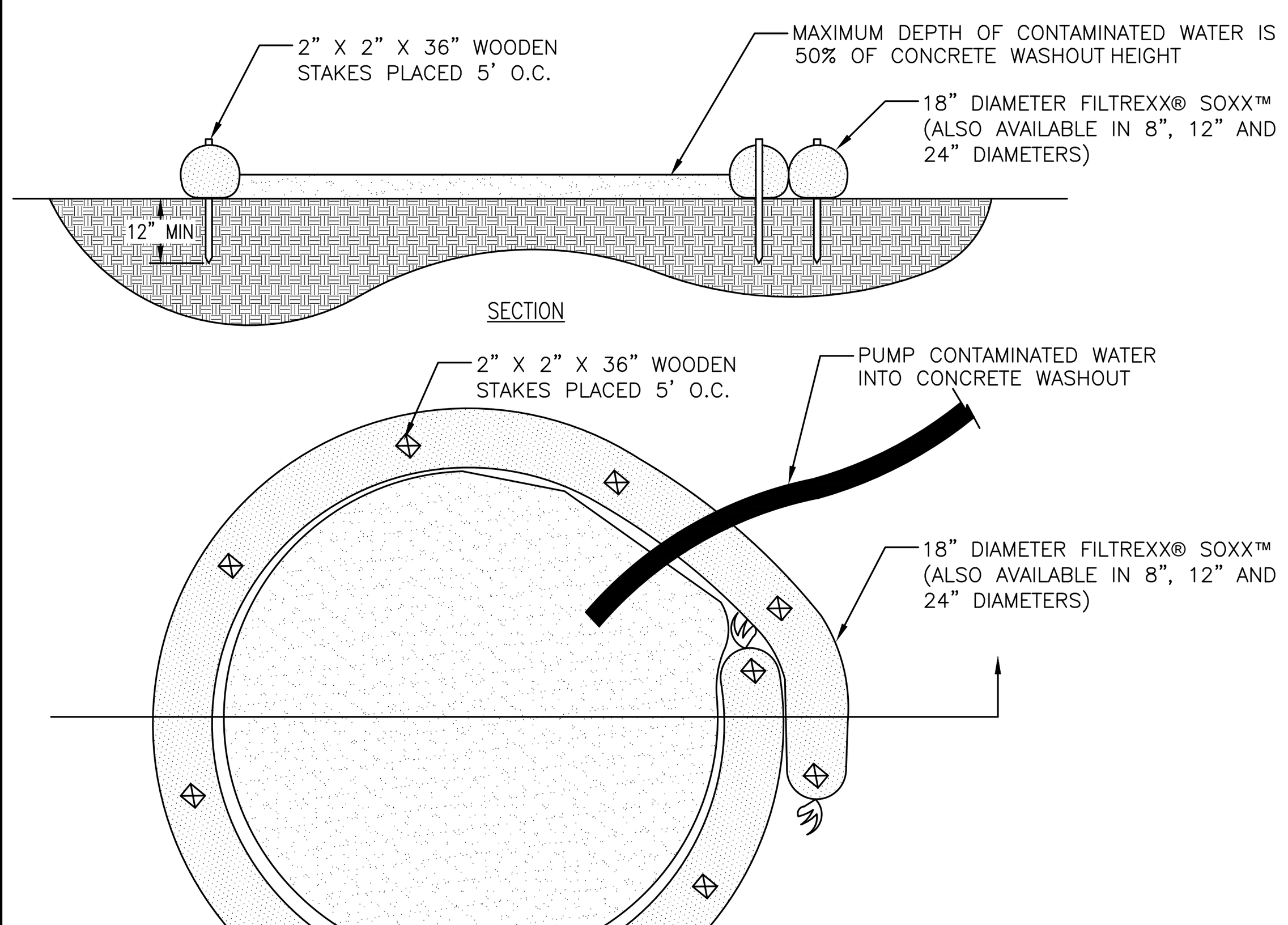
JOSHUA M. LYON, P.E. TN#112331

ACE MINI STORAGE
ASHLAND CITY, TN
CHEATHAM COUNTY

DRAWN BY:	CJN
CHECKED BY:	JML
DATE:	7/13/17
PROJECT NO.:	C03317

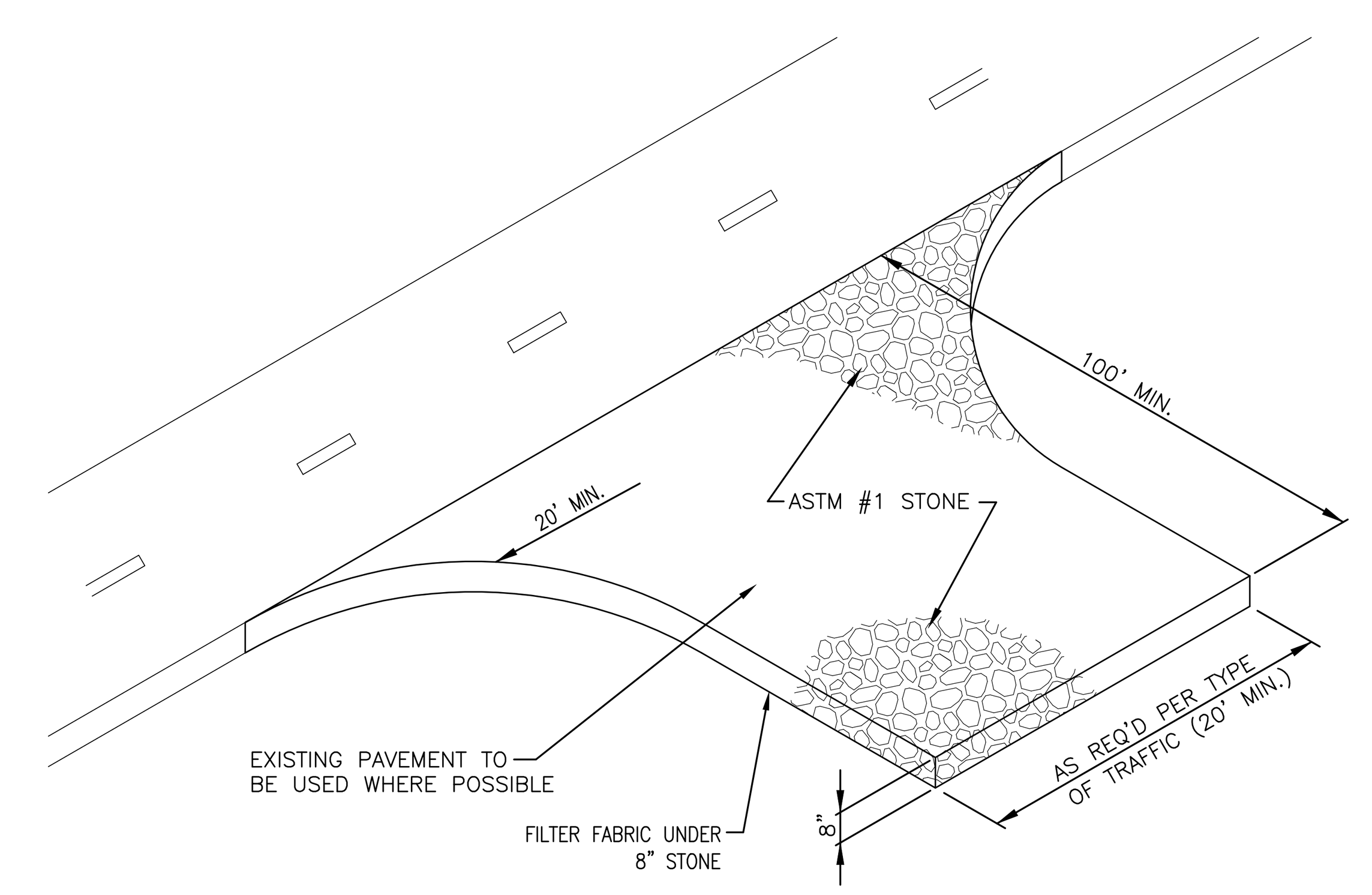
FINAL STABILIZATION

SHEET NUMBER
C1.04



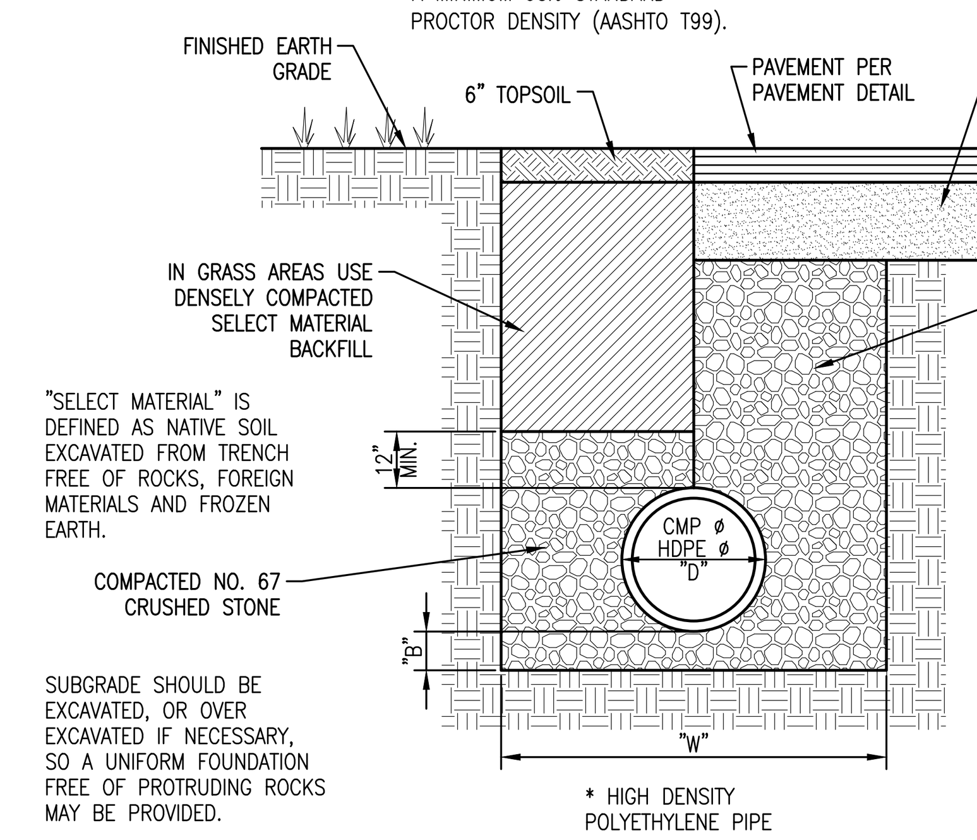
NOTES:
1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE
2. CONCRETE WASHOUT MAY BE STACKED IN A PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT AND STABILITY
3. CONCRETE WASHOUT MAY BE DIRECT SEEDED AT THE TIME OF INSTALLATION

FILTREXX® CONCRETE WASHOUT
NOT TO SCALE



TEMPORARY CONSTRUCTION ENTRANCE DETAIL
NOT TO SCALE METRO STORMWATER MANAGEMENT MANUAL TCP-03

NOTE:
ALL BACKFILL AND BEDDING SHALL BE PLACED IN 6-INCH LAYERS AND THOROUGHLY COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY (AASHTO T99).



"SELECT MATERIAL" IS DEFINED AS NATIVE SOIL EXCAVATED FROM TRENCH FREE OF ROCKS, FOREIGN MATERIALS AND FROZEN EARTH.

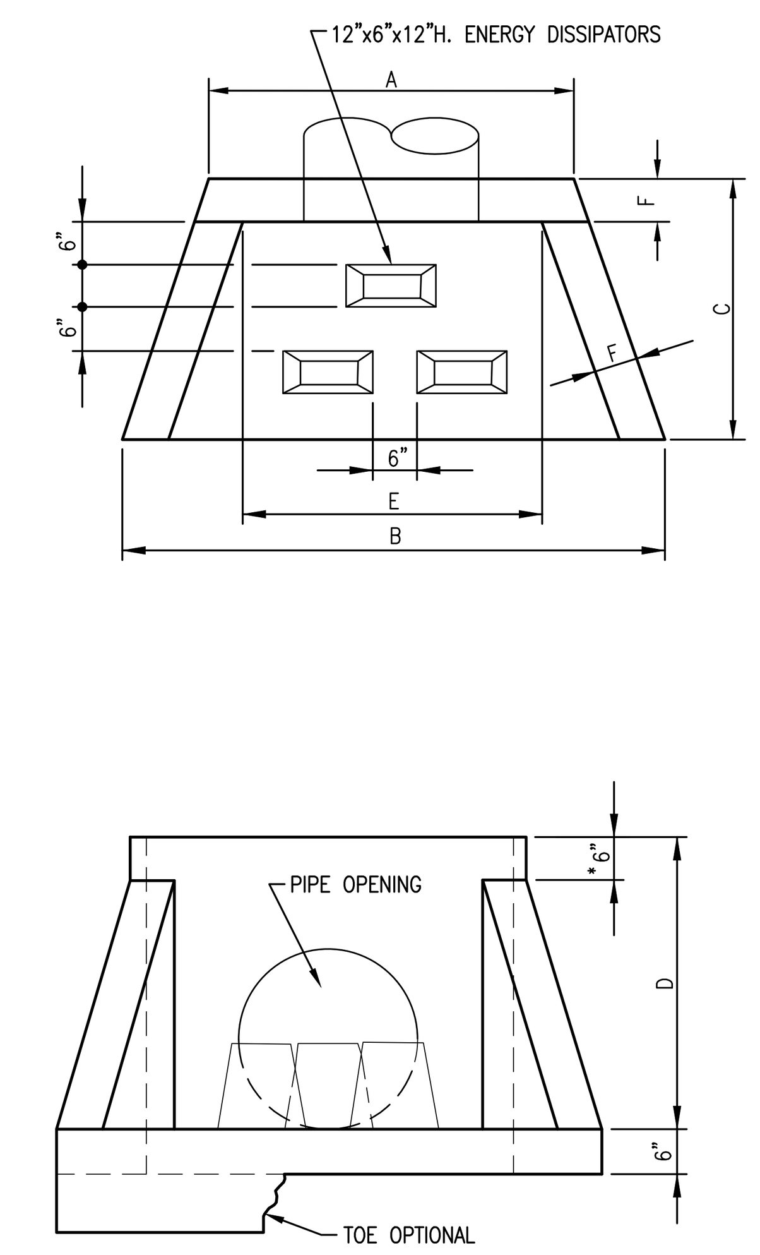
SUBGRADE SHOULD BE EXCAVATED, OR OVER EXCAVATED IF NECESSARY, SO A UNIFORM FOUNDATION FREE OF PROTRUDING ROCKS MAY BE PROVIDED.

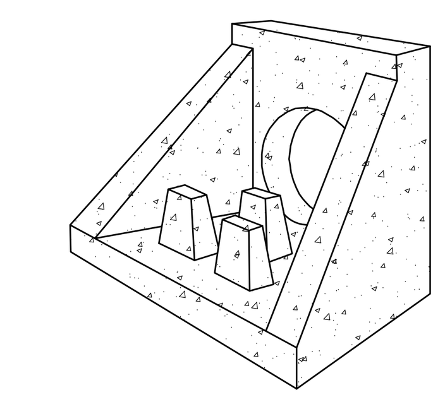
* HIGH DENSITY POLYETHYLENE PIPE

MINIMUM DIMENSIONS
TRENCH OR OPEN DITCH INSTALLATIONS

NOMINAL DIAMETER	MINIMUM THICKNESS	MINIMUM COVER	MIN. TRENCH WIDTH
"D"	"B"		"W"
3"	4"	12"	20"
4"	4"	12"	21"
6"	4"	12"	23"
8"	4"	12"	25"
10"	4"	12"	28"
12"	5"	12"	31"
15"	5"	12"	34"
18"	6"	12"	39"
24"	6"	12"	48"
36"	6"	18"	60"

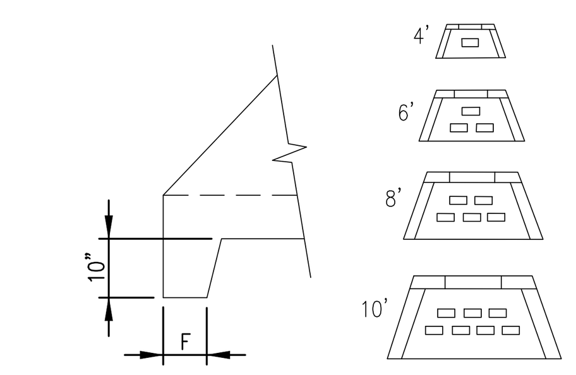
CMP OR HDPE* BEDDING (NON-PERFORATED)
NOT TO SCALE



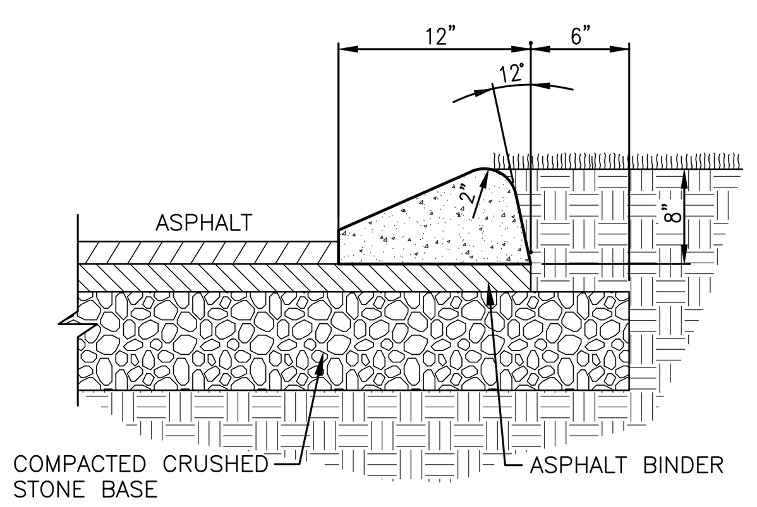


SIZE	4'	6'	8'	10'
A	32"	48"	72"	96"
B	48"	72"	96"	120"
C	30"	44"	50"	56"
D	25"	36"	52"	66"
E	24"	36"	59"	83"
F	NA	8"	8"	8"
MAX. OPG.	18"	26"	40"	60"
WT./#	1090	3130	5625	8575

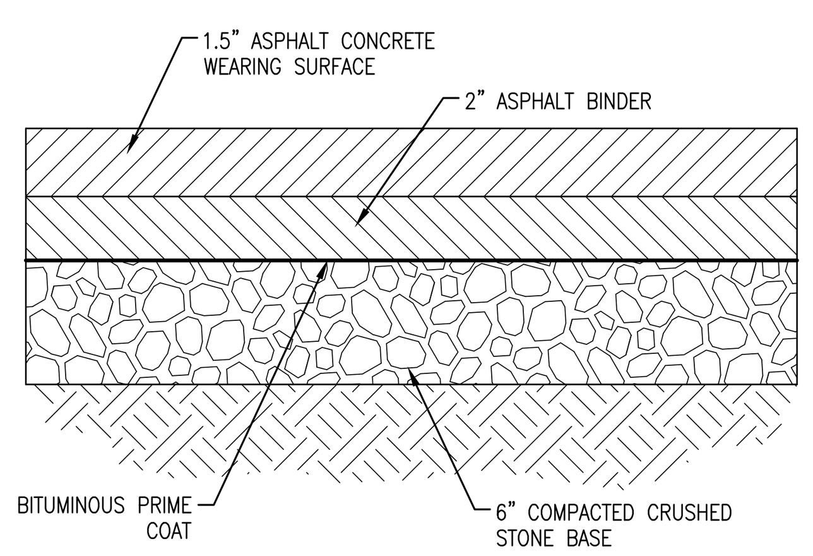
* 0" ON 4" WINGED HEADWALL



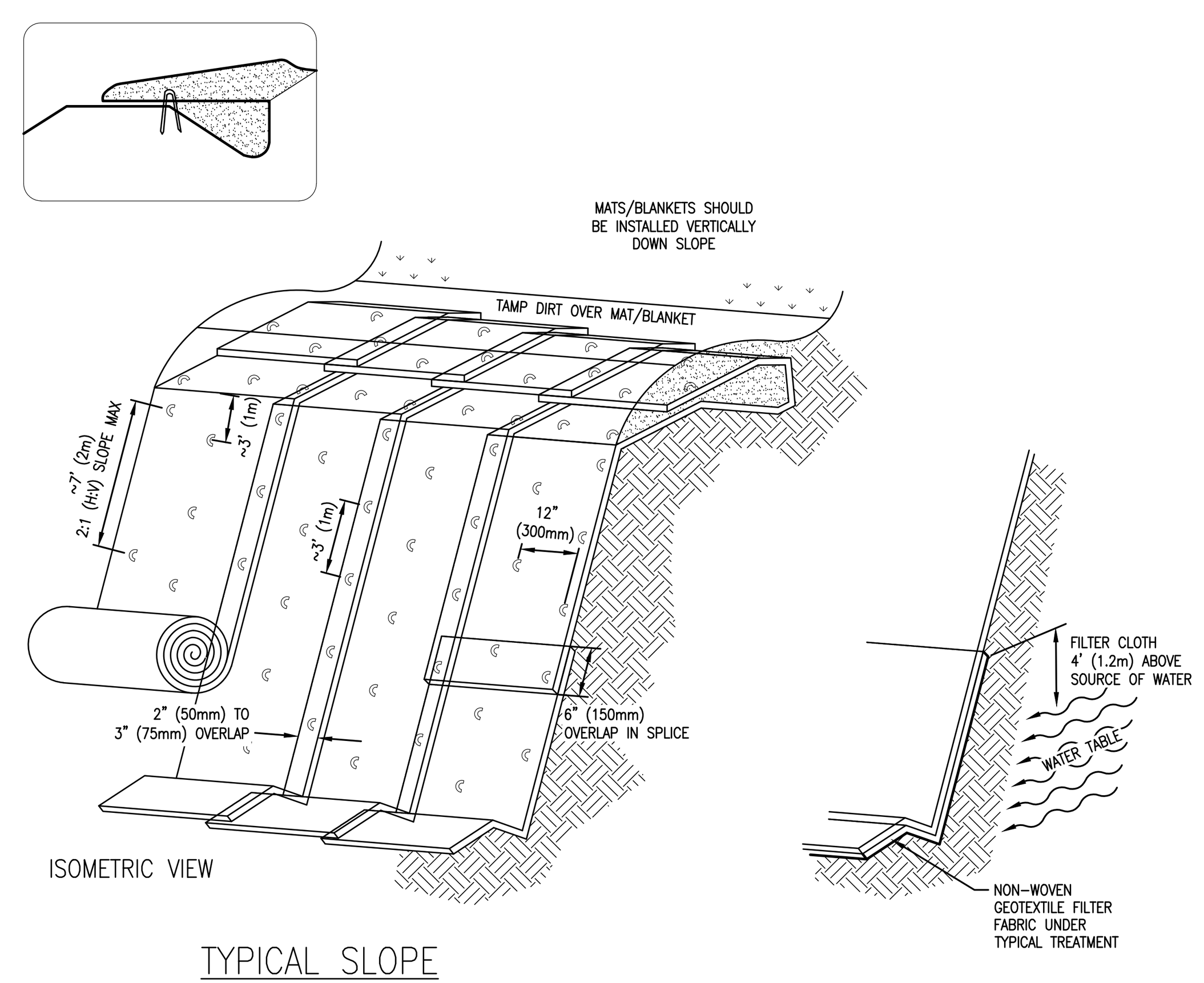
WINGED HEADWALL W/ENERGY DISSIPATORS
NOT TO SCALE CLOUD SW-301 OR EQUAL



EXTRUDED CURB DETAIL
NOT TO SCALE



ASPHALT PAVING DETAIL
NOT TO SCALE



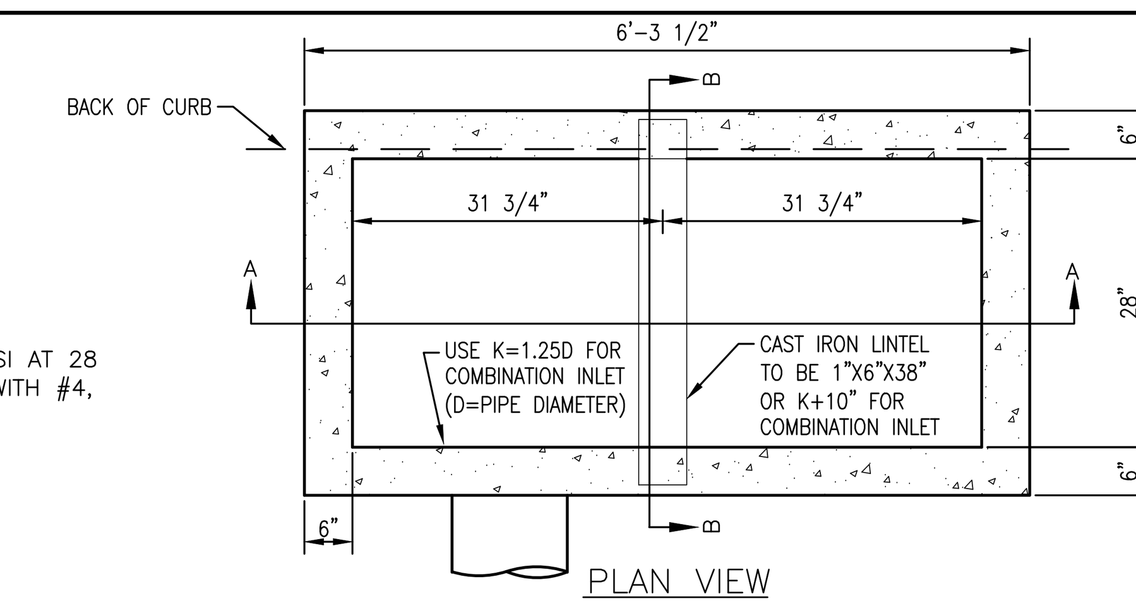
TYPICAL SLOPE SOIL STABLIZATION
N.T.S.

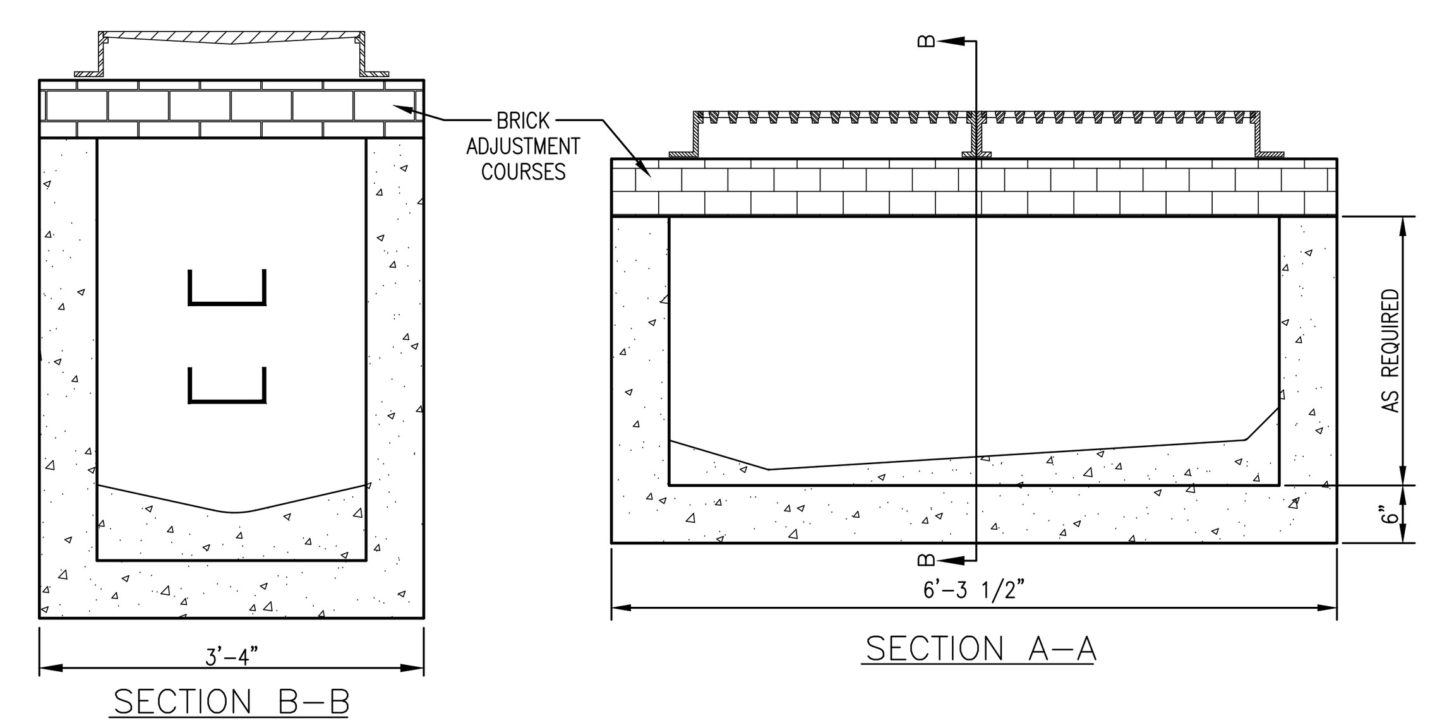
WET SLOPE LINING
N.T.S.

NOTES:
1. SLOPE SURFACE SHALL BE FREE OF ROCKS, SOIL CLODS, STICKS AND GRASS. MATS/BLANKETS SHALL HAVE GOOD SOIL CONTACT
2. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.

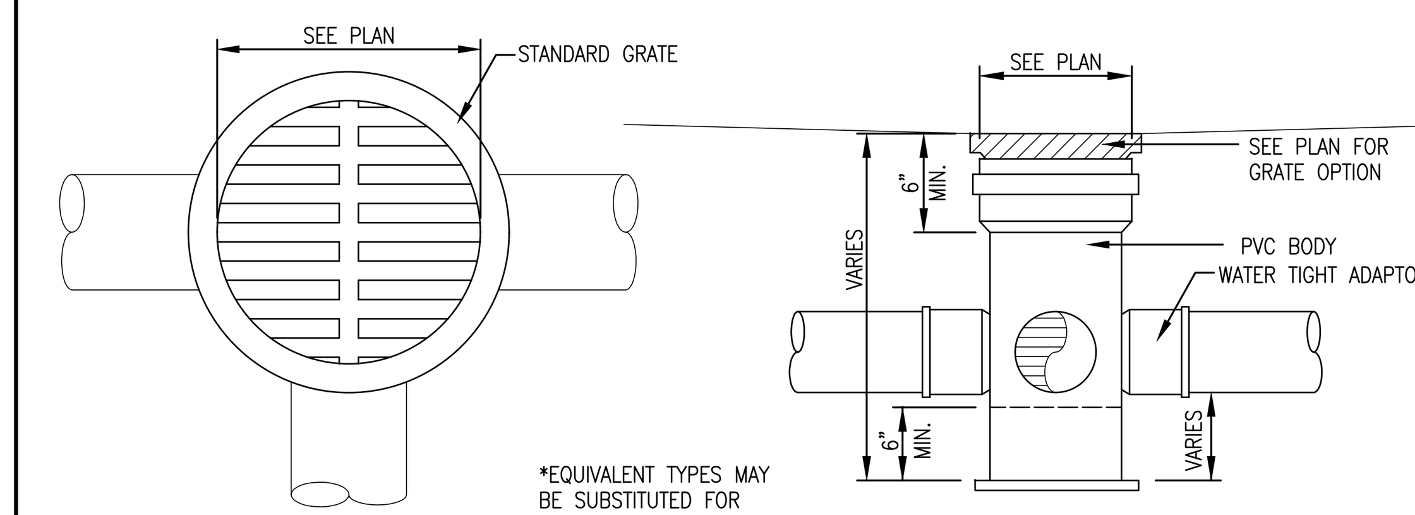
GRASS MATTING PLACEMENT
METRO STORMWATER MANAGEMENT MANUAL PESC-02

CONCRETE: 4000 PSI AT 28 DAYS REINFORCED WITH #4, GRADE 60 BARS.
CASTING: JBS 4220





TYPICAL PRECAST DOUBLE INLET
NOT TO SCALE



*EQUIVALENT TYPES MAY BE SUBSTITUTED FOR NYLOPLAST BASINS AND GRATES

NYLOPLAST DRAIN BASIN
NOT TO SCALE

KLOBER
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NO.	BY	DATE	DESCRIPTION

REVISIONS

JOSHUA M. LYON, P.E. TN#112331

ACE
MINI STORAGE
ASHLAND CITY, TN
CHEATHAM COUNTY

DRAWN BY:	CJN
CHECKED BY:	JML
DATE:	7/13/17
PROJECT NO.:	C03317

CONSTRUCTION DETAILS

SHEET NUMBER
C2.01

ITEM # 4.

STORMWATER DESIGN CALCULATIONS

FOR

Ace Mini Storage

Hwy 12
Ashland City, TN

April 14, 2021

Prepared By

KLOBER ENGINEERING SERVICES
3556 Tom Austin Hwy, Suite 1
Springfield, Tennessee 37172
(615) 382-2000

KLOBER
ENGINEERING SERVICES

Serving clients with Civil and Environmental Engineering Services

3556 Tom Austin Hwy, Suite 1
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STORM WATER CALCULATIONS

NOTE: Storm water runoff is calculated using the TR-55 Method. All flow calculations are based on methods established in the Nashville / Davidson County Stormwater Management Manual.

The following pages contain calculations for the storm water drainage system.

The following table illustrates storm water runoff data for pre and post developed conditions for the above referenced property.

Storm Event	Total Pre-Developed Runoff (1R)	Post-Developed to Pond (3S)	Total Post Developed Discharge (2R)	Pond Elevation: TOB: 405.25
2 yr.	13.55	15.23	13.03	402.95
5 yr.	17.14	18.96	16.26	403.25
10 yr.	19.98	21.92	18.78	403.49
25 yr.	23.98	26.12	22.25	403.82
50 yr.	27.19	29.52	24.95	404.09
100yr.	30.43	33.00	27.61	404.35

Water Quantity:

The existing detention pond on this site has been sized to handle the additional stormwater runoff generated by the site development and to reduce the peak discharge at or below predeveloped conditions. The pond and outlet structure had been designed for the complete build out of the site for all phases. Storm events are controlled by a weir structure built into the pond wall.

PRE-DEVELOPED

PRESENT OWNER:
MARK & TONYA YARBROUGH
400 WARIOTO WAY #708
ASHLAND CITY, TN 37105

DEED REFERENCE:
MAP 55, PARCEL 36
LEE BATSON COMMERCIAL LOTS – LOT 1

PROPERTY INFORMATION:
AREA: 226,164 S.F. = 5.19 ACRES

ZONING:
COMMERCIAL C–2

SITE USE:
EXISTING USE: VACANT
PROPOSED USE: MINI STORAGE

SIGN NOTE:
ALL SIGNS SHALL COMPLY WITH THE MOST CURRENT EDITION OF THE ASHLAND CITY ZONING ORDINANCE. SEPARATE PERMIT REQUIRED.

LOT COVERAGE:
EXISTING BUILDING AREA = 0 S.F.
NEW BUILDING AREA = 22,225 S.F.
BUILDING COVERAGE = 9.8%
MAX BUILDING HEIGHT: 30'–0"
PROPOSED CONCRETE SURFACE: ±350 S.F.
PROPOSED ASPHALT SURFACE: ±41,782 S.F.
IMPERVIOUS AREA: ±64,357 S.F. = 28.46%

PARKING INFORMATION:
REQUIRED PARKING:
GENERAL OFFICE
1 PER 400 S.F. = 450/400 = 1 SPACES

HANDICAP: 1 SPACE (PART OF REQD TOTAL)

TOTAL REQUIRED: 1 SPACES

TOTAL PROVIDED: 3 SPACES, INCLUDING 1 HANDICAP SPACES

UTILITY NOTE:
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JOSHUA M. LYON, P.E.
PROJECT MANAGER

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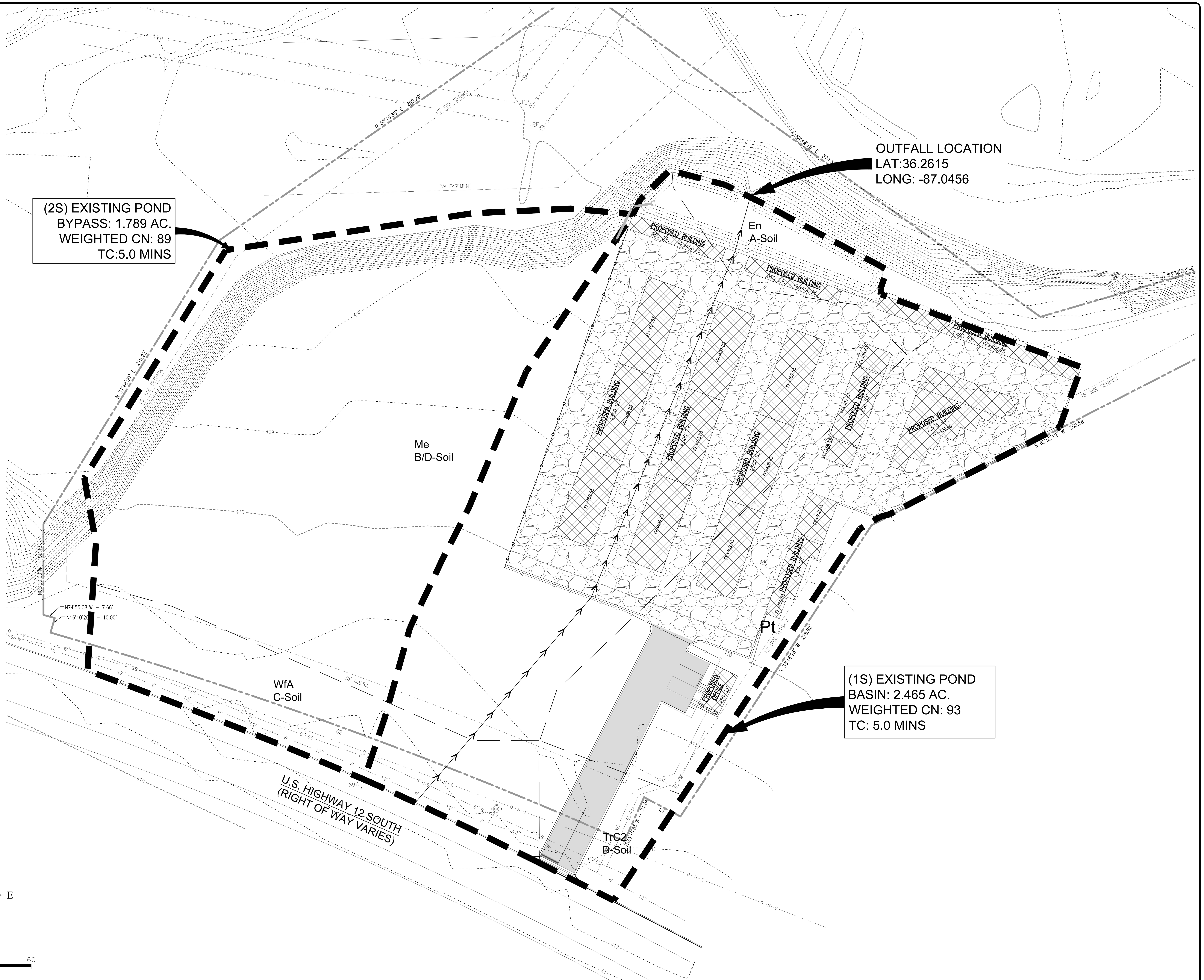
11. SEDIMENT MUST BE REMOVED FROM SEDIMENT BARRIERS, PONDS, AND OTHER SEDIMENT CONTROLS WHEN DESIGN CAPACITY HAS BEEN REDUCED BY 33%
12. SEDIMENT THAT HAS ESCAPED THE CONSTRUCTION SITE AND HAS COLLECTED IN THE STREET OR DRAINAGE STRUCTURES MUST IMMEDIATELY BE PHYSICALLY REMOVED.
13. BUILDING AND WASTE MATERIALS, AND NON STORM WATER DISCHARGES, SUCH AS CONCRETE, PAINT WASH WATER, OR MACHINERY LEAKAGE, OR SPILLAGE MUST BE MANAGED TO PREVENT THEM FROM ENTERING THE STORM WATER SYSTEM, GROUND WATER, OR NEARBY WATER BODY.
14. THE PROJECT IS SUBJECT TO INSPECTION BY THE CITY AT ANY TIME AND ITEMS FOUND DEFICIENT SHALL BE IMMEDIATELY CORRECTED. THE CITY MAY STOP CONSTRUCTION OR PROPERTIES, OR ADMINISTER OTHER ENFORCEMENT ACTIONS AS DEFINED BY THE CITY



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IT IS THE CONTRACTORS RESPONSIBILITY TO CONTACT UTILITY COMPANIES PRIOR TO ANY CONSTRUCTION. THE LOCATION OF UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE AND POSSIBLY INCOMPLETE, THEREFORE CERTIFICATION TO THE LOCATION OF ALL UNDERGROUND UTILITIES IS WITHHELD.

N
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30 0 30 60
SCALE IN FEET

LEGEND:

PROPERTY LINE	MANHOLE
EXISTING WATER LINE	CLEAN OUT
EXISTING SEWER LINE	POWER POLE
OVERHEAD ELECTRIC LINE	WATER METER
FENCE	FIRE HYDRANT
NEW CURB	IR(O) IRON ROD OLD
SILT FENCE	IR(N) IRON ROD NEW
EXISTING 5' CONTOUR	INV.–25.42 PIPE INVERT
EXISTING 1' CONTOUR	28.14 SPOT ELEVATION
NEW 1' CONTOUR	SLOPE DIRECTION
DEMO LINE	

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NO.	BY	DATE	DESCRIPTION

REVISIONS

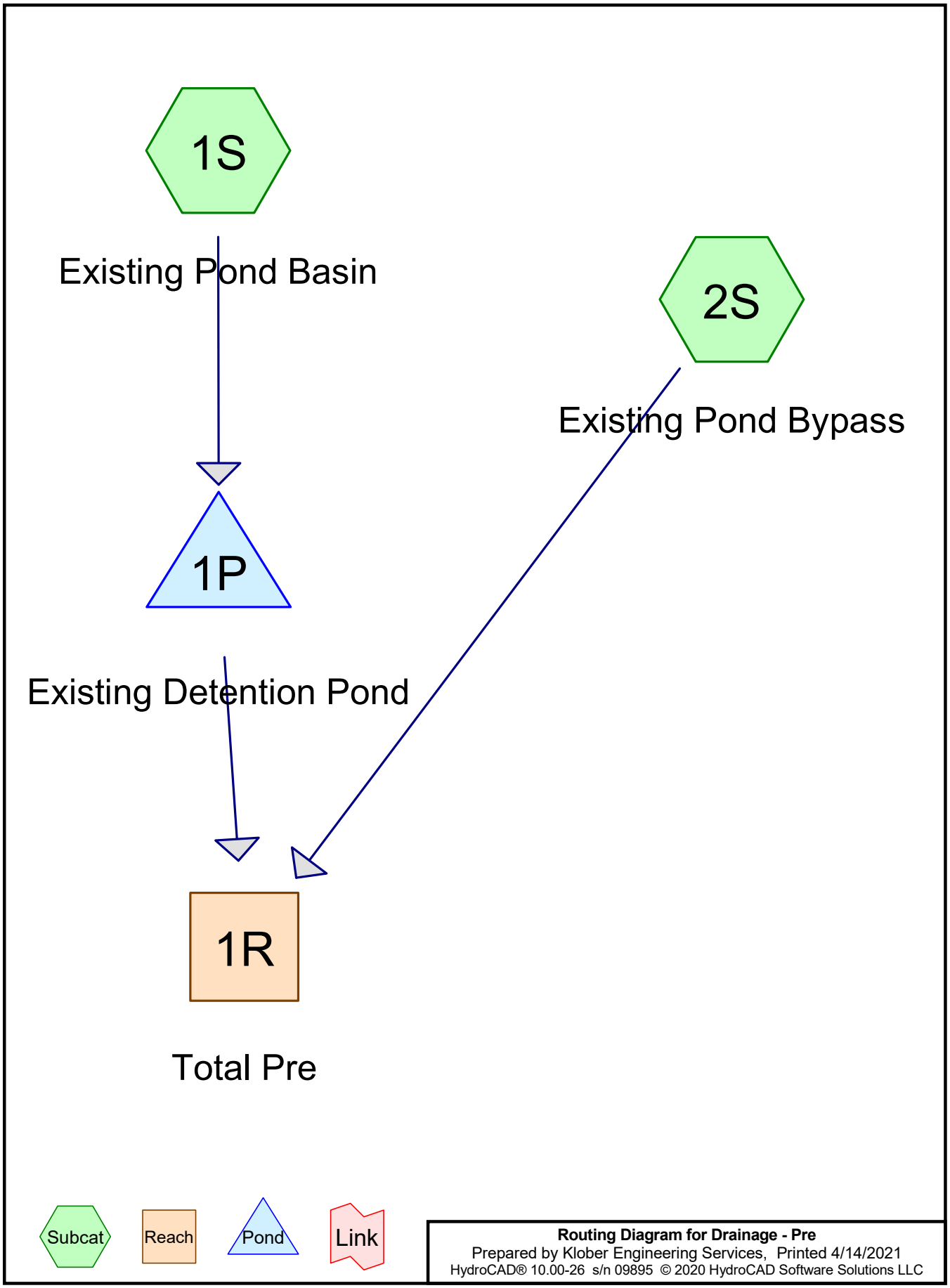
JOSHUA M. LYON, P.E. TN#112331

ACE
MINI STORAGE
ASHLAND CITY, TN
CHEATHAM COUNTY

DRAWN BY:	CJN
CHECKED BY:	JML
DATE:	7/13/17
PROJECT NO.:	C03317

PRE
DEVELOPED
DRAINAGE

SHEET NUMBER
DM-1



Routing Diagram for Drainage - Pre
Prepared by Klober Engineering Services, Printed 4/14/2021
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Summary for Subcatchment 1S: Existing Pond Basin

Runoff = 9.75 cfs @ 12.11 hrs, Volume= 0.552 af, Depth> 2.69"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NOAA 24-hr B 2-Year Rainfall=3.60"

	Area (ac)	CN	Description
	0.219	79	50-75% Grass cover, Fair, HSG C
	0.124	49	50-75% Grass cover, Fair, HSG A
	0.113	98	Paved parking, HSG C
	1.491	96	Gravel surface, HSG C
*	0.510	98	Roofs, HSG C
	0.008	98	Unconnected pavement, HSG C
	2.465	93	Weighted Average
	1.834		74.40% Pervious Area
	0.631		25.60% Impervious Area
	0.008		1.27% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment 2S: Existing Pond Bypass

Runoff = 6.34 cfs @ 12.11 hrs, Volume= 0.345 af, Depth> 2.31"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NOAA 24-hr B 2-Year Rainfall=3.60"

Area (ac)	CN	Description
0.215	79	50-75% Grass cover, Fair, HSG C
0.303	69	50-75% Grass cover, Fair, HSG B
1.271	96	Gravel surface, HSG C
1.789	89	Weighted Average
1.789		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Reach 1R: Total Pre

Inflow Area = 4.254 ac, 14.83% Impervious, Inflow Depth > 2.53" for 2-Year event
Inflow = 13.55 cfs @ 12.14 hrs, Volume= 0.897 af
Outflow = 13.55 cfs @ 12.14 hrs, Volume= 0.897 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Pond 1P: Existing Detention Pond

Inflow Area = 2.465 ac, 25.60% Impervious, Inflow Depth > 2.69" for 2-Year event
Inflow = 9.75 cfs @ 12.11 hrs, Volume= 0.552 af
Outflow = 7.72 cfs @ 12.17 hrs, Volume= 0.552 af, Atten= 21%, Lag= 3.2 min
Primary = 7.72 cfs @ 12.17 hrs, Volume= 0.552 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 402.47' @ 12.17 hrs Surf.Area= 2,808 sf Storage= 1,922 cf

Plug-Flow detention time= 1.9 min calculated for 0.552 af (100% of inflow)
Center-of-Mass det. time= 1.8 min (758.0 - 756.1)

Volume	Invert	Avail.Storage	Storage Description
#1	401.25'	11,230 cf	**DETENTION POND (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
401.25	16	16.0	0	0	16
402.00	2,505	355.0	680	680	10,025
403.00	3,174	346.0	2,833	3,513	10,638
404.00	3,860	357.0	3,511	7,025	11,346
405.00	4,561	368.0	4,206	11,230	12,077

Device	Routing	Invert	Outlet Devices
#1	Primary	401.25'	**2.0' long x 3.75' rise Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Primary OutFlow Max=7.55 cfs @ 12.17 hrs HW=402.45' (Free Discharge)
↑—**1=Sharp-Crested Rectangular Weir** (Weir Controls 7.55 cfs @ 3.58 fps)

Summary for Subcatchment 1S: Existing Pond Basin

Runoff = 12.21 cfs @ 12.11 hrs, Volume= 0.702 af, Depth> 3.42"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NOAA 24-hr B 5-Year Rainfall=4.39"

	Area (ac)	CN	Description
	0.219	79	50-75% Grass cover, Fair, HSG C
	0.124	49	50-75% Grass cover, Fair, HSG A
	0.113	98	Paved parking, HSG C
	1.491	96	Gravel surface, HSG C
*	0.510	98	Roofs, HSG C
	0.008	98	Unconnected pavement, HSG C
	2.465	93	Weighted Average
	1.834		74.40% Pervious Area
	0.631		25.60% Impervious Area
	0.008		1.27% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment 2S: Existing Pond Bypass

Runoff = 8.15 cfs @ 12.11 hrs, Volume= 0.451 af, Depth> 3.02"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NOAA 24-hr B 5-Year Rainfall=4.39"

Area (ac)	CN	Description
0.215	79	50-75% Grass cover, Fair, HSG C
0.303	69	50-75% Grass cover, Fair, HSG B
1.271	96	Gravel surface, HSG C
1.789	89	Weighted Average
1.789		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Reach 1R: Total Pre

Inflow Area = 4.254 ac, 14.83% Impervious, Inflow Depth > 3.25" for 5-Year event
Inflow = 17.14 cfs @ 12.14 hrs, Volume= 1.153 af
Outflow = 17.14 cfs @ 12.14 hrs, Volume= 1.153 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Pond 1P: Existing Detention Pond

Inflow Area = 2.465 ac, 25.60% Impervious, Inflow Depth > 3.42" for 5-Year event
Inflow = 12.21 cfs @ 12.11 hrs, Volume= 0.702 af
Outflow = 9.65 cfs @ 12.17 hrs, Volume= 0.702 af, Atten= 21%, Lag= 3.2 min
Primary = 9.65 cfs @ 12.17 hrs, Volume= 0.702 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 402.69' @ 12.17 hrs Surf.Area= 2,957 sf Storage= 2,556 cf

Plug-Flow detention time= 2.1 min calculated for 0.700 af (100% of inflow)
Center-of-Mass det. time= 2.1 min (753.8 - 751.7)

Volume	Invert	Avail.Storage	Storage Description
#1	401.25'	11,230 cf	**DETENTION POND (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
401.25	16	16.0	0	0	16
402.00	2,505	355.0	680	680	10,025
403.00	3,174	346.0	2,833	3,513	10,638
404.00	3,860	357.0	3,511	7,025	11,346
405.00	4,561	368.0	4,206	11,230	12,077

Device	Routing	Invert	Outlet Devices
#1	Primary	401.25'	**2.0' long x 3.75' rise Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Primary OutFlow Max=9.45 cfs @ 12.17 hrs HW=402.66' (Free Discharge)
↑—**1=Sharp-Crested Rectangular Weir** (Weir Controls 9.45 cfs @ 3.89 fps)

Summary for Subcatchment 1S: Existing Pond Basin

Runoff = 14.15 cfs @ 12.11 hrs, Volume= 0.823 af, Depth> 4.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NOAA 24-hr B 10-Year Rainfall=5.02"

	Area (ac)	CN	Description
	0.219	79	50-75% Grass cover, Fair, HSG C
	0.124	49	50-75% Grass cover, Fair, HSG A
	0.113	98	Paved parking, HSG C
	1.491	96	Gravel surface, HSG C
*	0.510	98	Roofs, HSG C
	0.008	98	Unconnected pavement, HSG C
	2.465	93	Weighted Average
	1.834		74.40% Pervious Area
	0.631		25.60% Impervious Area
	0.008		1.27% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment 2S: Existing Pond Bypass

Runoff = 9.59 cfs @ 12.11 hrs, Volume= 0.536 af, Depth> 3.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NOAA 24-hr B 10-Year Rainfall=5.02"

Area (ac)	CN	Description
0.215	79	50-75% Grass cover, Fair, HSG C
0.303	69	50-75% Grass cover, Fair, HSG B
1.271	96	Gravel surface, HSG C
1.789	89	Weighted Average
1.789		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Reach 1R: Total Pre

Inflow Area = 4.254 ac, 14.83% Impervious, Inflow Depth > 3.83" for 10-Year event
Inflow = 19.98 cfs @ 12.13 hrs, Volume= 1.359 af
Outflow = 19.98 cfs @ 12.13 hrs, Volume= 1.359 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Pond 1P: Existing Detention Pond

Inflow Area = 2.465 ac, 25.60% Impervious, Inflow Depth > 4.00" for 10-Year event
Inflow = 14.15 cfs @ 12.11 hrs, Volume= 0.823 af
Outflow = 11.17 cfs @ 12.17 hrs, Volume= 0.822 af, Atten= 21%, Lag= 3.3 min
Primary = 11.17 cfs @ 12.17 hrs, Volume= 0.822 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 402.86' @ 12.17 hrs Surf.Area= 3,073 sf Storage= 3,064 cf

Plug-Flow detention time= 2.3 min calculated for 0.820 af (100% of inflow)
Center-of-Mass det. time= 2.2 min (751.3 - 749.1)

Volume	Invert	Avail.Storage	Storage Description
#1	401.25'	11,230 cf	**DETENTION POND (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
401.25	16	16.0	0	0	16
402.00	2,505	355.0	680	680	10,025
403.00	3,174	346.0	2,833	3,513	10,638
404.00	3,860	357.0	3,511	7,025	11,346
405.00	4,561	368.0	4,206	11,230	12,077

Device	Routing	Invert	Outlet Devices
#1	Primary	401.25'	**2.0' long x 3.75' rise Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Primary OutFlow Max=10.94 cfs @ 12.17 hrs HW=402.83' (Free Discharge)
↑—**1=Sharp-Crested Rectangular Weir** (Weir Controls 10.94 cfs @ 4.11 fps)

Summary for Subcatchment 1S: Existing Pond Basin

Runoff = 16.92 cfs @ 12.11 hrs, Volume= 0.994 af, Depth> 4.84"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NOAA 24-hr B 25-Year Rainfall=5.92"

	Area (ac)	CN	Description
	0.219	79	50-75% Grass cover, Fair, HSG C
	0.124	49	50-75% Grass cover, Fair, HSG A
	0.113	98	Paved parking, HSG C
	1.491	96	Gravel surface, HSG C
*	0.510	98	Roofs, HSG C
	0.008	98	Unconnected pavement, HSG C
	2.465	93	Weighted Average
	1.834		74.40% Pervious Area
	0.631		25.60% Impervious Area
	0.008		1.27% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment 2S: Existing Pond Bypass

Runoff = 11.64 cfs @ 12.11 hrs, Volume= 0.659 af, Depth> 4.42"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NOAA 24-hr B 25-Year Rainfall=5.92"

Area (ac)	CN	Description
0.215	79	50-75% Grass cover, Fair, HSG C
0.303	69	50-75% Grass cover, Fair, HSG B
1.271	96	Gravel surface, HSG C
1.789	89	Weighted Average
1.789		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Reach 1R: Total Pre

Inflow Area = 4.254 ac, 14.83% Impervious, Inflow Depth > 4.66" for 25-Year event
Inflow = 23.98 cfs @ 12.13 hrs, Volume= 1.654 af
Outflow = 23.98 cfs @ 12.13 hrs, Volume= 1.654 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Pond 1P: Existing Detention Pond

Inflow Area = 2.465 ac, 25.60% Impervious, Inflow Depth > 4.84" for 25-Year event
Inflow = 16.92 cfs @ 12.11 hrs, Volume= 0.994 af
Outflow = 13.30 cfs @ 12.17 hrs, Volume= 0.994 af, Atten= 21%, Lag= 3.3 min
Primary = 13.30 cfs @ 12.17 hrs, Volume= 0.994 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 403.09' @ 12.17 hrs Surf.Area= 3,232 sf Storage= 3,797 cf

Plug-Flow detention time= 2.4 min calculated for 0.991 af (100% of inflow)
Center-of-Mass det. time= 2.4 min (748.5 - 746.1)

Volume	Invert	Avail.Storage	Storage Description
#1	401.25'	11,230 cf	**DETENTION POND (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
401.25	16	16.0	0	0	16
402.00	2,505	355.0	680	680	10,025
403.00	3,174	346.0	2,833	3,513	10,638
404.00	3,860	357.0	3,511	7,025	11,346
405.00	4,561	368.0	4,206	11,230	12,077

Device	Routing	Invert	Outlet Devices
#1	Primary	401.25'	**2.0' long x 3.75' rise Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Primary OutFlow Max=13.04 cfs @ 12.17 hrs HW=403.06' (Free Discharge)
↑—**1=Sharp-Crested Rectangular Weir** (Weir Controls 13.04 cfs @ 4.40 fps)

Summary for Subcatchment 1S: Existing Pond Basin

Runoff = 19.16 cfs @ 12.11 hrs, Volume= 1.134 af, Depth> 5.52"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NOAA 24-hr B 50-Year Rainfall=6.65"

	Area (ac)	CN	Description
	0.219	79	50-75% Grass cover, Fair, HSG C
	0.124	49	50-75% Grass cover, Fair, HSG A
	0.113	98	Paved parking, HSG C
	1.491	96	Gravel surface, HSG C
*	0.510	98	Roofs, HSG C
	0.008	98	Unconnected pavement, HSG C
	2.465	93	Weighted Average
	1.834		74.40% Pervious Area
	0.631		25.60% Impervious Area
	0.008		1.27% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment 2S: Existing Pond Bypass

Runoff = 13.29 cfs @ 12.11 hrs, Volume= 0.760 af, Depth> 5.10"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NOAA 24-hr B 50-Year Rainfall=6.65"

Area (ac)	CN	Description
0.215	79	50-75% Grass cover, Fair, HSG C
0.303	69	50-75% Grass cover, Fair, HSG B
1.271	96	Gravel surface, HSG C
1.789	89	Weighted Average
1.789		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Reach 1R: Total Pre

Inflow Area = 4.254 ac, 14.83% Impervious, Inflow Depth > 5.34" for 50-Year event
Inflow = 27.19 cfs @ 12.13 hrs, Volume= 1.894 af
Outflow = 27.19 cfs @ 12.13 hrs, Volume= 1.894 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Pond 1P: Existing Detention Pond

Inflow Area = 2.465 ac, 25.60% Impervious, Inflow Depth > 5.52" for 50-Year event
Inflow = 19.16 cfs @ 12.11 hrs, Volume= 1.134 af
Outflow = 15.00 cfs @ 12.17 hrs, Volume= 1.134 af, Atten= 22%, Lag= 3.3 min
Primary = 15.00 cfs @ 12.17 hrs, Volume= 1.134 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 403.27' @ 12.17 hrs Surf.Area= 3,354 sf Storage= 4,399 cf

Plug-Flow detention time= 2.6 min calculated for 1.130 af (100% of inflow)
Center-of-Mass det. time= 2.5 min (746.7 - 744.2)

Volume	Invert	Avail.Storage	Storage Description
#1	401.25'	11,230 cf	**DETENTION POND (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
401.25	16	16.0	0	0	16
402.00	2,505	355.0	680	680	10,025
403.00	3,174	346.0	2,833	3,513	10,638
404.00	3,860	357.0	3,511	7,025	11,346
405.00	4,561	368.0	4,206	11,230	12,077

Device	Routing	Invert	Outlet Devices
#1	Primary	401.25'	**2.0' long x 3.75' rise Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Primary OutFlow Max=14.70 cfs @ 12.17 hrs HW=403.24' (Free Discharge)
↑—1=Sharp-Crested Rectangular Weir (Weir Controls 14.70 cfs @ 4.61 fps)

Summary for Subcatchment 1S: Existing Pond Basin

Runoff = 21.45 cfs @ 12.11 hrs, Volume= 1.277 af, Depth> 6.22"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NOAA 24-hr B 100-Year Rainfall=7.40"

	Area (ac)	CN	Description
	0.219	79	50-75% Grass cover, Fair, HSG C
	0.124	49	50-75% Grass cover, Fair, HSG A
	0.113	98	Paved parking, HSG C
	1.491	96	Gravel surface, HSG C
*	0.510	98	Roofs, HSG C
	0.008	98	Unconnected pavement, HSG C
	2.465	93	Weighted Average
	1.834		74.40% Pervious Area
	0.631		25.60% Impervious Area
	0.008		1.27% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment 2S: Existing Pond Bypass

Runoff = 14.98 cfs @ 12.11 hrs, Volume= 0.864 af, Depth> 5.79"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NOAA 24-hr B 100-Year Rainfall=7.40"

Area (ac)	CN	Description
0.215	79	50-75% Grass cover, Fair, HSG C
0.303	69	50-75% Grass cover, Fair, HSG B
1.271	96	Gravel surface, HSG C
1.789	89	Weighted Average
1.789		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Reach 1R: Total Pre

Inflow Area = 4.254 ac, 14.83% Impervious, Inflow Depth > 6.04" for 100-Year event
Inflow = 30.43 cfs @ 12.13 hrs, Volume= 2.140 af
Outflow = 30.43 cfs @ 12.13 hrs, Volume= 2.140 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Pond 1P: Existing Detention Pond

Inflow Area = 2.465 ac, 25.60% Impervious, Inflow Depth > 6.22" for 100-Year event
Inflow = 21.45 cfs @ 12.11 hrs, Volume= 1.277 af
Outflow = 16.70 cfs @ 12.17 hrs, Volume= 1.277 af, Atten= 22%, Lag= 3.4 min
Primary = 16.70 cfs @ 12.17 hrs, Volume= 1.277 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 403.46' @ 12.17 hrs Surf.Area= 3,478 sf Storage= 5,028 cf

Plug-Flow detention time= 2.7 min calculated for 1.273 af (100% of inflow)
Center-of-Mass det. time= 2.6 min (745.3 - 742.7)

Volume	Invert	Avail.Storage	Storage Description
#1	401.25'	11,230 cf	**DETENTION POND (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
401.25	16	16.0	0	0	16
402.00	2,505	355.0	680	680	10,025
403.00	3,174	346.0	2,833	3,513	10,638
404.00	3,860	357.0	3,511	7,025	11,346
405.00	4,561	368.0	4,206	11,230	12,077

Device	Routing	Invert	Outlet Devices
#1	Primary	401.25'	**2.0' long x 3.75' rise Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Primary OutFlow Max=16.37 cfs @ 12.17 hrs HW=403.42' (Free Discharge)
↑—1=Sharp-Crested Rectangular Weir (Weir Controls 16.37 cfs @ 4.82 fps)

POST-DEVELOPED

PRESENT OWNER:
MARK & TONYA YARBROUGH
400 WARIOTO WAY #708
ASHLAND CITY, TN 37105

DEED REFERENCE:
MAP 55, PARCEL 36
LEE BATSON COMMERCIAL LOTS – LOT 1

PROPERTY INFORMATION:
AREA: 226,164 S.F. = 5.19 ACRES

ZONING:
COMMERCIAL C–2

SITE USE:
EXISTING USE: VACANT
PROPOSED USE: MINI STORAGE

SIGN NOTE:
ALL SIGNS SHALL COMPLY WITH THE MOST CURRENT EDITION OF THE ASHLAND CITY ZONING ORDINANCE. SEPARATE PERMIT REQUIRED.

LOT COVERAGE:
EXISTING BUILDING AREA = 0 S.F.
NEW BUILDING AREA = 22,225 S.F.
BUILDING COVERAGE = 9.8%
MAX BUILDING HEIGHT: 30'–0"
PROPOSED CONCRETE SURFACE: ±350 S.F.
PROPOSED ASPHALT SURFACE: ±41,782 S.F.
IMPERVIOUS AREA: ±64,357 S.F. = 28.46%

PARKING INFORMATION:
REQUIRED PARKING:
GENERAL OFFICE
1 PER 400 S.F. = 450/400 = 1 SPACES

HANDICAP: 1 SPACE (PART OF REQD TOTAL)

TOTAL REQUIRED: 1 SPACES

TOTAL PROVIDED: 3 SPACES, INCLUDING 1 HANDICAP SPACES

UTILITY NOTE:
COORDINATE ALL UTILITY INSTALLATIONS WITH GOVERNING ENTITIES.

SECURITY GATE:
SECURITY GATES OR BARRIERS SHALL BE EQUIPPED WITH A RADIO OPERATED RECEIVER/CONTROLLER CAPABLE OF RECEIVING SIGNALS FROM A POLICE DEPARTMENT, SHERIFF'S DEPARTMENT (IF THE GATED FACILITY OR COMMUNITY IS IN THE COUNTY), FIRE DEPARTMENT, UTILITY AND EMERGENCY MEDICAL SERVICES' RADIO TRANSCEIVERS SERVING THE GATED FACILITY OR COMMUNITY WHICH ALLOW EMERGENCY RESPONDERS AND OTHER NECESSARY ON–DUTY EMPLOYEES TO OPEN THE SECURITY GATE OR BARRIER BY USE OF SUCH EQUIPMENT. ALL SECURITY GATES OR BARRIERS MUST MEET POLICIES DEEMED NECESSARY BY THE AUTHORITY HAVING JURISDICTION OVER THE GATED FACILITY OR COMMUNITY FOR RAPID, RELIABLE, AND MUTUAL AID ACCESS. SUCH EQUIPMENT SHALL BE FURNISHED, INSTALLED AND MAINTAINED BY THE GATED FACILITY OR COMMUNITY THAT IS SERVED BY SUCH EQUIPMENT.

GENERAL NOTES:

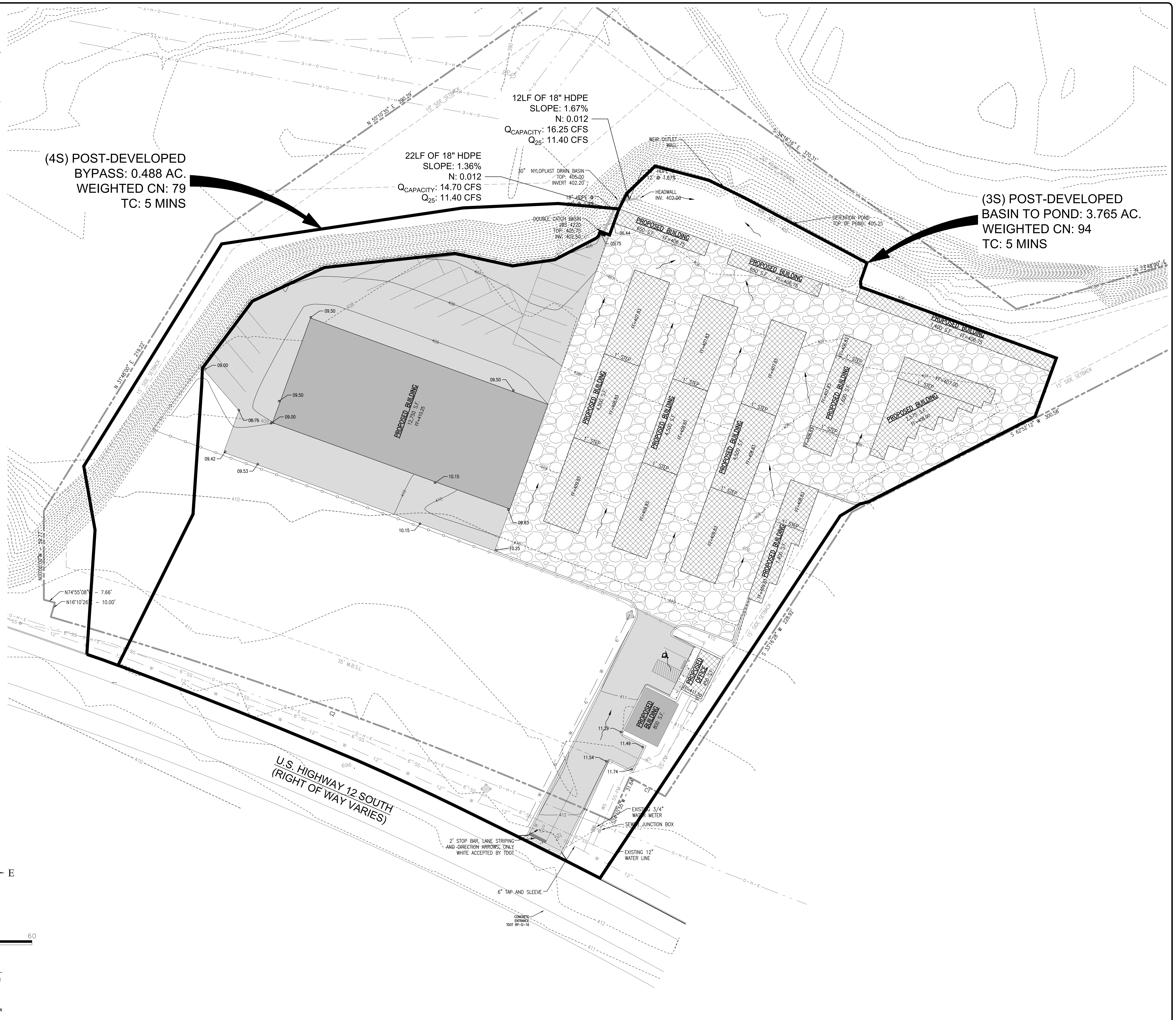
1. PRIOR TO BEGINNING CONSTRUCTION ON THIS SITE THE LOCATION OF UTILITIES MUST BE IDENTIFIED BY CALLING THE TOLL–FREE TENNESSEE ONE CALL REFERENCE NUMBER 1–800–351–1111.
2. ALL CONSTRUCTION ON THIS SITE SHALL COMPLY WITH APPLICABLE REGULATIONS AS SPECIFIED BY THE CITY OF MILLERSVILLE AND THE STATE OF TENNESSEE.
3. TOPSOIL SHALL BE PLACED ON EXCAVATED AREAS WHICH REQUIRE NEW VEGETATION. GROUND COVER SHALL BE REESTABLISHED WITH KENTUCKY 31 FESCUE SEEDED AT A MINIMUM OF 250 LBS. PER ACRE. SLOPES 3:1 OR GREATER SHALL BE LINED WITH NORTH AMERICAN GREEN S150 GRASS MATTING OR EQUAL.
4. SILT FENCE SHALL BE INSTALLED IN ALL EROSION AREAS WHICH COULD ALLOW UNTREATED STORMWATER RUNOFF TO BE DISCHARGED FROM THE PROPERTY. ALL EROSION CONTROL MEASURES SHALL BE CONSISTENT WITH THE PROVISIONS DESCRIBED IN THE MOST CURRENT EDITION OF THE TENNESSEE EROSION & SEDIMENT CONTROL HANDBOOK.
5. THE STORMWATER RUNOFF CALCULATIONS ON THIS SITE HAVE BEEN PERFORMED USING THE U.S. SOIL CONSERVATION SERVICE TR–55 METHOD. STORMWATER POND HAS BEEN SIZED TO HANDLE A 25 AND 100 YEAR STORM EVENT.
6. THE TOPOGRAPHIC SURVEY SHOWN HEREON WAS TAKEN FROM A SURVEY BY STEVEN E ARTZ SURVEYING OF SPRINGFIELD, TN.
7. CONSTRUCTION WILL BEGIN FOLLOWING PLAN APPROVAL BY THE CITY OF ASHLAND CITY.
8. THE BUILDING SHOULD FRONT TED DORRIS ROAD, AND BE SERVICED BY UNDERGROUND UTILITY LINES.
9. ANY DUMPSTER SHALL BE FULLY ENCLOSED, MATCHING THE FACADE OF THE BUILDING, AND A WOODEN PRIVACY FENCE GATE THAT IS 8 FEET HIGH ON ALL SIDES AND ALL SERVICE BOXES AND MECHANICALS TO BE IN THE REAR OF THE BUILDING.
10. ALL ADDITIONS IN THE FUTURE MUST BE BUILT TO THESE STANDARDS.
11. THIS PROPERTY IN LOCATED IN ZONE "A" AND ZONE "X" (AREAS OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN AS SHOWN ON NFIP FIRM MAP ACCORDING TO THE FEMA MAP PANEL NUMBER 47021C0170D, DATED 9/10/2010,

NPDES PERMIT NOTE:
THE MAXIMUM DISTURBED AREA FOR THIS PROJECT IS OVER 1 ACRE. THEREFORE, A NPDES GENERAL CONSTRUCTION PERMIT IS REQUIRED.

JOSHUA M. LYON, P.E.
PROJECT MANAGER

EP&SC NOTES:

1. AN EROSION PREVENTION SILTATION CONTROL PLAN (EP&SC) AND LAND DISTURBANCE PERMIT (IF REQUIRED) SHALL BE IN PLACE PRIOR TO ANY GRADING, CLEARING AND/OR ANY OTHER CONSTRUCTION ACTIVITY. EROSION CONTROL DEVICES SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD; GENERALLY CONSIDERED TO BE THROUGH THE COMPLETION OF RESTORATION. IF REQUIRED, THE EP&SC PLAN ALONG WITH AN INSPECTION CHECKLIST AND STORMWATER PERMIT MUST BE AT THE PROJECT SITE AT ALL TIMES. THE INSPECTION CHECKLIST SHALL HAVE A RECORD OF DATES EP&SC DEVICES ARE INSPECTED AND ANY CORRECTION ACTION TAKEN OR MAJOR OBSERVATIONS. BMP'S MUST BE INSPECTED BY A QUALIFIED PERSON WHO HAS TAKEN AN APPROVED EROSION AND SEDIMENTATION COURSE.
2. ALL EP&SC DEVICES ARE TO REMAIN IN PLACE UNTIL THE SITE HAS BEEN STABILIZED AND A GOOD STAND OF GRASS HAS BEEN ESTABLISHED.
3. EROSION PREVENTION AND SEDIMENT CONTROLS MUST BE INSPECTED AT LEAST TWICE EVERY CALENDAR WEEK AT LEAST 72 HOURS APART. INSPECTIONS ARE TO BE DOCUMENTED AND KEPT WITH THE SWPPP (IF REQUIRED).
4. SILT FENCE, OR OTHER SEDIMENT BARRIERS ARE TO BE INSTALLED PROPERLY ALONG TOPOGRAPHICAL CONTOURS DOWN SLOPE OF THE AREA TO BE DISTURBED PRIOR TO ANY GRADING, CLEARING AND/OR ANY OTHER CONSTRUCTION ACTIVITY.
5. EXCAVATED TOPSOIL TO BE REUSED MUST BE STOCKPILED AND ENCIRCLED WITH SILT FENCING.
6. THIS SITE SHALL CONTAIN A TEMPORARY STONE CONSTRUCTION ENTRANCE THAT CONFORMS TO REQUIRED SPECIFICATIONS PRIOR TO GRADING COMMENCEMENT. THE STONE SHALL BE 2 TO 3 INCH IN DIAMETER AND SHALL BE KEPT CLEAN BY ADDING STONE AS NEEDED. IT SHALL BE AT LEAST 8 INCHES DEEP UNDERLAIN WITH FILTER FABRIC AND 20 FEET WIDE.
7. APPROVED INLET PROTECTIONS FOR NEARBY STORM SEWER CURB AND DROP INLETS MUST BE INSTALLED WITHIN 24 HOURS OF GRADING COMMENCEMENT.
8. VEGETATIVE BUFFERS OR OTHER PROTECTION MUST BE PROVIDED ALONG STREAMS, RIVERS, AND PONDS TO AVOID EROSION OF BANKS.
9. STABILIZATION MEASURES MUST BE PERFORMED WITHIN SEVEN (7) DAYS IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, AND WITHIN FIFTEEN (15) DAYS AFTER FINAL GRADING.
10. ALL TREES DESIGNATED TO REMAIN, MUST BE PROTECTED. HEAVY EQUIPMENT SHOULD NOT BE OPERATED OR STORED, NOR MATERIALS HANDLED OR STORED, WITHIN THE DRIP LINES OF TREES.
11. SEDIMENT MUST BE REMOVED FROM SEDIMENT BARRIERS, PONDS, AND OTHER SEDIMENT CONTROLS WHEN DESIGN CAPACITY HAS BEEN REDUCED BY 33%
12. SEDIMENT THAT HAS ESCAPED THE CONSTRUCTION SITE AND HAS COLLECTED IN THE STREET OR DRAINAGE STRUCTURES MUST IMMEDIATELY BE PHYSICALLY REMOVED.
13. BUILDING AND WASTE MATERIALS, AND NON STORM WATER DISCHARGES, SUCH AS CONCRETE, PAINT WASH WATER, OR MACHINERY LEAKAGE, OR SPILLAGE MUST BE MANAGED TO PREVENT THEM FROM ENTERING THE STORM WATER SYSTEM, GROUND WATER, OR NEARBY WATER BODY.
14. THE PROJECT IS SUBJECT TO INSPECTION BY THE CITY AT ANY TIME AND ITEMS FOUND DEFICIENT SHALL BE IMMEDIATELY CORRECTED. THE CITY MAY STOP CONSTRUCTION OR PROPERTIES, OR ADMINISTER OTHER ENFORCEMENT ACTIONS AS DEFINED BY THE CITY

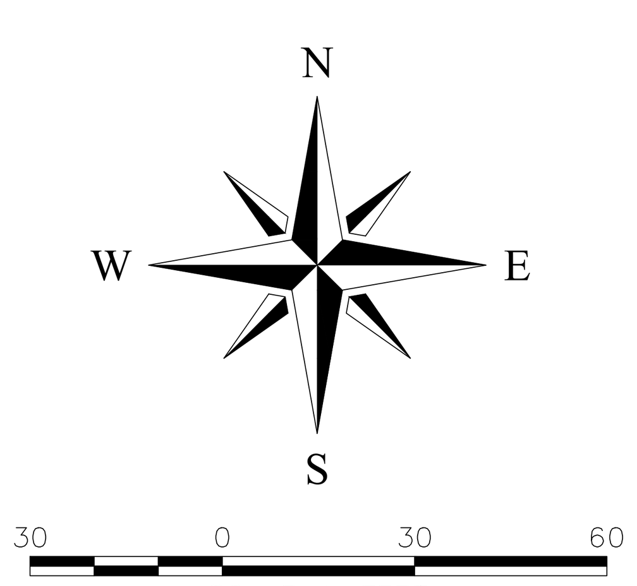


CALL BEFORE YOU DIG

CALL 811 NATIONWIDE

Know what's below. Call before you dig.

IT IS THE CONTRACTORS RESPONSIBILITY TO CONTACT UTILITY COMPANIES PRIOR TO ANY CONSTRUCTION. THE LOCATION OF UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE AND POSSIBLY INCOMPLETE, THEREFORE CERTIFICATION TO THE LOCATION OF ALL UNDERGROUND UTILITIES IS WITHHELD.



LEGEND:
PROPERTY LINE
EXISTING WATER LINE
EXISTING SEWER LINE
OVERHEAD ELECTRIC LINE
FENCE
NEW CURB
SILT FENCE
EXISTING 5' CONTOUR
EXISTING 1' CONTOUR
NEW 1' CONTOUR
DEMO LINE
MANHOLE
CLEAN OUT
POWER POLE
WATER METER
FIRE HYDRANT
IRON ROD OLD
IRON ROD NEW
INV.–25.42 PIPE INVERT
28.14 SPOT ELEVATION
SLOPE DIRECTION

KLOBER ENGINEERING SERVICES
SERVING CLIENTS WITH CIVIL ENGINEERING & LAND DEVELOPMENT SERVICES

REVISIONS

NO.	BY	DATE	DESCRIPTION

JOSHUA M. LYON, P.E. TN#112331

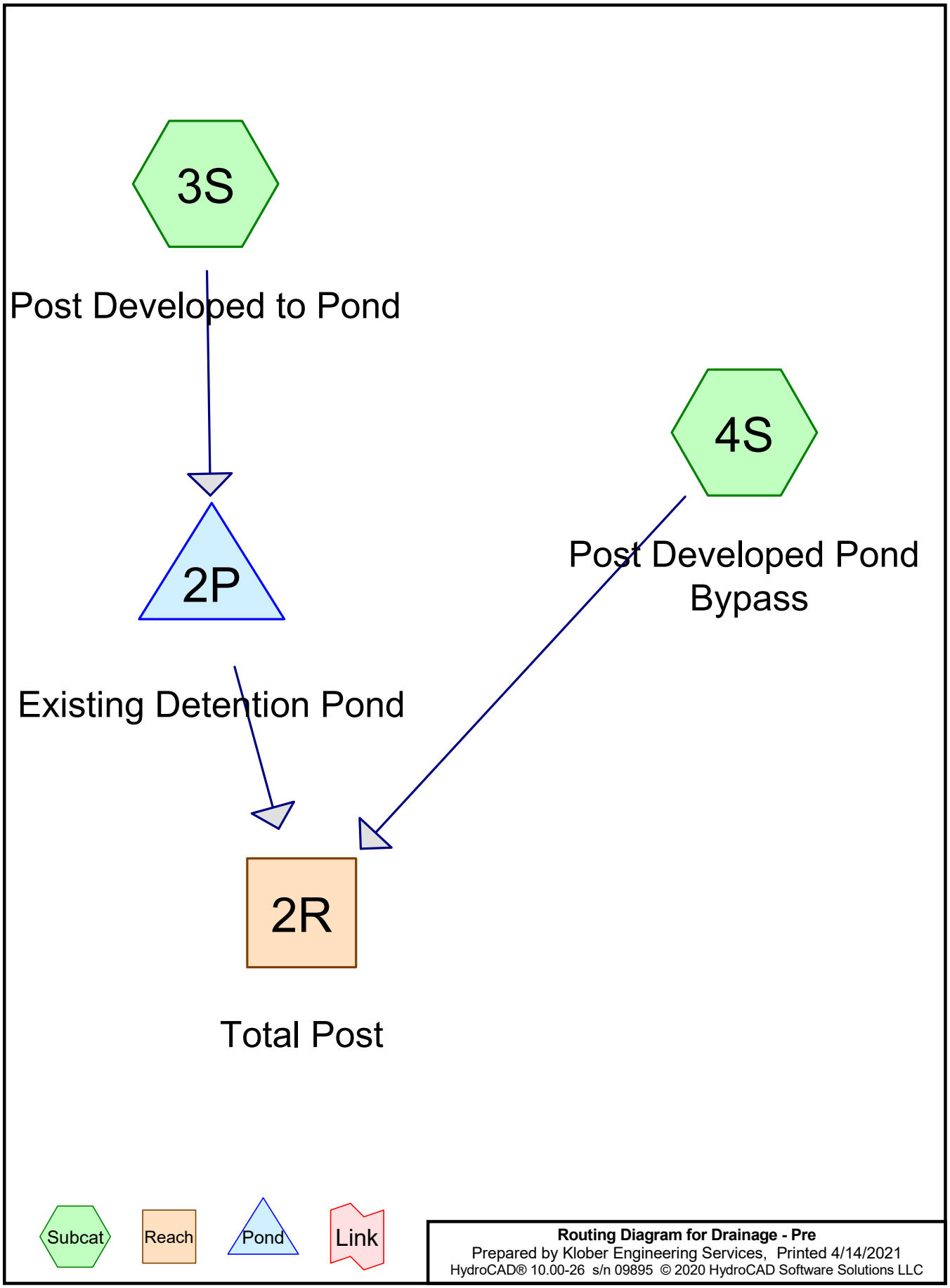
ACE
MINI STORAGE
ASHLAND CITY, TN
CHEATHAM COUNTY

DRAWN BY:	CJN
CHECKED BY:	JML
DATE:	7/13/17
PROJECT NO.:	C03317

POST DEVELOPED DRAINAGE

SHEET NUMBER
DM-2

ITEM # 4.



Routing Diagram for Drainage - Pre
Prepared by Klober Engineering Services, Printed 4/14/2021
HydroCAD® 10.00-26 s/n 09895 © 2020 HydroCAD Software Solutions LLC

Summary for Subcatchment 3S: Post Developed to Pond

Runoff = 15.23 cfs @ 12.11 hrs, Volume= 0.874 af, Depth> 2.79"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NOAA 24-hr B 2-Year Rainfall=3.60"

	Area (ac)	CN	Description
	0.369	79	50-75% Grass cover, Fair, HSG C
	0.124	49	50-75% Grass cover, Fair, HSG A
	0.639	98	Paved parking, HSG C
	1.804	96	Gravel surface, HSG C
*	0.821	98	Roofs, HSG C
	0.008	98	Unconnected pavement, HSG C
	3.765	94	Weighted Average
	2.297		61.01% Pervious Area
	1.468		38.99% Impervious Area
	0.008		0.54% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment 4S: Post Developed Pond Bypass

Runoff = 1.19 cfs @ 12.12 hrs, Volume= 0.062 af, Depth> 1.53"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NOAA 24-hr B 2-Year Rainfall=3.60"

Area (ac)	CN	Description
0.315	69	50-75% Grass cover, Fair, HSG B
0.173	96	Gravel surface, HSG C
0.488	79	Weighted Average
0.488		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Reach 2R: Total Post

Inflow Area = 4.253 ac, 34.52% Impervious, Inflow Depth > 2.64" for 2-Year event
Inflow = 13.03 cfs @ 12.16 hrs, Volume= 0.936 af
Outflow = 13.03 cfs @ 12.16 hrs, Volume= 0.936 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Pond 2P: Existing Detention Pond

Inflow Area = 3.765 ac, 38.99% Impervious, Inflow Depth > 2.79" for 2-Year event
Inflow = 15.23 cfs @ 12.11 hrs, Volume= 0.874 af
Outflow = 11.99 cfs @ 12.17 hrs, Volume= 0.874 af, Atten= 21%, Lag= 3.3 min
Primary = 11.99 cfs @ 12.17 hrs, Volume= 0.874 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 402.95' @ 12.17 hrs Surf.Area= 3,135 sf Storage= 3,340 cf

Plug-Flow detention time= 2.4 min calculated for 0.871 af (100% of inflow)
Center-of-Mass det. time= 2.3 min (754.7 - 752.4)

Volume	Invert	Avail.Storage	Storage Description
#1	401.25'	11,230 cf	**DETENTION POND (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
401.25	16	16.0	0	0	16
402.00	2,505	355.0	680	680	10,025
403.00	3,174	346.0	2,833	3,513	10,638
404.00	3,860	357.0	3,511	7,025	11,346
405.00	4,561	368.0	4,206	11,230	12,077

Device	Routing	Invert	Outlet Devices
#1	Primary	401.25'	**2.0' long x 3.75' rise Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#2	Primary	405.00'	**10.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=11.74 cfs @ 12.17 hrs HW=402.92' (Free Discharge)
└**1=Sharp-Crested Rectangular Weir** (Weir Controls 11.74 cfs @ 4.22 fps)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Subcatchment 3S: Post Developed to Pond

Runoff = 18.96 cfs @ 12.11 hrs, Volume= 1.104 af, Depth> 3.52"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NOAA 24-hr B 5-Year Rainfall=4.39"

	Area (ac)	CN	Description
	0.369	79	50-75% Grass cover, Fair, HSG C
	0.124	49	50-75% Grass cover, Fair, HSG A
	0.639	98	Paved parking, HSG C
	1.804	96	Gravel surface, HSG C
*	0.821	98	Roofs, HSG C
	0.008	98	Unconnected pavement, HSG C
	3.765	94	Weighted Average
	2.297		61.01% Pervious Area
	1.468		38.99% Impervious Area
	0.008		0.54% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment 4S: Post Developed Pond Bypass

Runoff = 1.66 cfs @ 12.12 hrs, Volume= 0.087 af, Depth> 2.14"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NOAA 24-hr B 5-Year Rainfall=4.39"

Area (ac)	CN	Description
0.315	69	50-75% Grass cover, Fair, HSG B
0.173	96	Gravel surface, HSG C
0.488	79	Weighted Average
0.488		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Reach 2R: Total Post

Inflow Area = 4.253 ac, 34.52% Impervious, Inflow Depth > 3.36" for 5-Year event
Inflow = 16.26 cfs @ 12.16 hrs, Volume= 1.191 af
Outflow = 16.26 cfs @ 12.16 hrs, Volume= 1.191 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Pond 2P: Existing Detention Pond

Inflow Area = 3.765 ac, 38.99% Impervious, Inflow Depth > 3.52" for 5-Year event
Inflow = 18.96 cfs @ 12.11 hrs, Volume= 1.104 af
Outflow = 14.83 cfs @ 12.17 hrs, Volume= 1.104 af, Atten= 22%, Lag= 3.3 min
Primary = 14.83 cfs @ 12.17 hrs, Volume= 1.104 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 403.25' @ 12.17 hrs Surf.Area= 3,342 sf Storage= 4,339 cf

Plug-Flow detention time= 2.6 min calculated for 1.104 af (100% of inflow)
Center-of-Mass det. time= 2.5 min (751.0 - 748.5)

Volume	Invert	Avail.Storage	Storage Description
#1	401.25'	11,230 cf	**DETENTION POND (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
401.25	16	16.0	0	0	16
402.00	2,505	355.0	680	680	10,025
403.00	3,174	346.0	2,833	3,513	10,638
404.00	3,860	357.0	3,511	7,025	11,346
405.00	4,561	368.0	4,206	11,230	12,077

Device	Routing	Invert	Outlet Devices
#1	Primary	401.25'	**2.0' long x 3.75' rise Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#2	Primary	405.00'	**10.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=14.53 cfs @ 12.17 hrs HW=403.22' (Free Discharge)
1=Sharp-Crested Rectangular Weir (Weir Controls 14.53 cfs @ 4.59 fps)
2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Summary for Subcatchment 3S: Post Developed to Pond

Runoff = 21.92 cfs @ 12.11 hrs, Volume= 1.288 af, Depth> 4.10"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NOAA 24-hr B 10-Year Rainfall=5.02"

	Area (ac)	CN	Description
	0.369	79	50-75% Grass cover, Fair, HSG C
	0.124	49	50-75% Grass cover, Fair, HSG A
	0.639	98	Paved parking, HSG C
	1.804	96	Gravel surface, HSG C
*	0.821	98	Roofs, HSG C
	0.008	98	Unconnected pavement, HSG C
	3.765	94	Weighted Average
	2.297		61.01% Pervious Area
	1.468		38.99% Impervious Area
	0.008		0.54% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment 4S: Post Developed Pond Bypass

Runoff = 2.04 cfs @ 12.12 hrs, Volume= 0.108 af, Depth> 2.64"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NOAA 24-hr B 10-Year Rainfall=5.02"

Area (ac)	CN	Description
0.315	69	50-75% Grass cover, Fair, HSG B
0.173	96	Gravel surface, HSG C
0.488	79	Weighted Average
0.488		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Reach 2R: Total Post

Inflow Area = 4.253 ac, 34.52% Impervious, Inflow Depth > 3.94" for 10-Year event
Inflow = 18.78 cfs @ 12.16 hrs, Volume= 1.395 af
Outflow = 18.78 cfs @ 12.16 hrs, Volume= 1.395 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Pond 2P: Existing Detention Pond

Inflow Area = 3.765 ac, 38.99% Impervious, Inflow Depth > 4.10" for 10-Year event
Inflow = 21.92 cfs @ 12.11 hrs, Volume= 1.288 af
Outflow = 17.03 cfs @ 12.17 hrs, Volume= 1.288 af, Atten= 22%, Lag= 3.4 min
Primary = 17.03 cfs @ 12.17 hrs, Volume= 1.288 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 403.49' @ 12.17 hrs Surf.Area= 3,503 sf Storage= 5,153 cf

Plug-Flow detention time= 2.7 min calculated for 1.283 af (100% of inflow)
Center-of-Mass det. time= 2.6 min (748.8 - 746.1)

Volume	Invert	Avail.Storage	Storage Description
#1	401.25'	11,230 cf	**DETENTION POND (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
401.25	16	16.0	0	0	16
402.00	2,505	355.0	680	680	10,025
403.00	3,174	346.0	2,833	3,513	10,638
404.00	3,860	357.0	3,511	7,025	11,346
405.00	4,561	368.0	4,206	11,230	12,077

Device	Routing	Invert	Outlet Devices
#1	Primary	401.25'	**2.0' long x 3.75' rise Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#2	Primary	405.00'	**10.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=16.69 cfs @ 12.17 hrs HW=403.45' (Free Discharge)
1=Sharp-Crested Rectangular Weir (Weir Controls 16.69 cfs @ 4.86 fps)
2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Summary for Subcatchment 3S: Post Developed to Pond

Runoff = 26.12 cfs @ 12.11 hrs, Volume= 1.550 af, Depth> 4.94"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NOAA 24-hr B 25-Year Rainfall=5.92"

	Area (ac)	CN	Description
	0.369	79	50-75% Grass cover, Fair, HSG C
	0.124	49	50-75% Grass cover, Fair, HSG A
	0.639	98	Paved parking, HSG C
	1.804	96	Gravel surface, HSG C
*	0.821	98	Roofs, HSG C
	0.008	98	Unconnected pavement, HSG C
	3.765	94	Weighted Average
	2.297		61.01% Pervious Area
	1.468		38.99% Impervious Area
	0.008		0.54% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment 4S: Post Developed Pond Bypass

Runoff = 2.59 cfs @ 12.12 hrs, Volume= 0.138 af, Depth> 3.39"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NOAA 24-hr B 25-Year Rainfall=5.92"

Area (ac)	CN	Description
0.315	69	50-75% Grass cover, Fair, HSG B
0.173	96	Gravel surface, HSG C
0.488	79	Weighted Average
0.488		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Reach 2R: Total Post

Inflow Area = 4.253 ac, 34.52% Impervious, Inflow Depth > 4.76" for 25-Year event
Inflow = 22.25 cfs @ 12.16 hrs, Volume= 1.688 af
Outflow = 22.25 cfs @ 12.16 hrs, Volume= 1.688 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Pond 2P: Existing Detention Pond

Inflow Area = 3.765 ac, 38.99% Impervious, Inflow Depth > 4.94" for 25-Year event
Inflow = 26.12 cfs @ 12.11 hrs, Volume= 1.550 af
Outflow = 20.05 cfs @ 12.17 hrs, Volume= 1.550 af, Atten= 23%, Lag= 3.5 min
Primary = 20.05 cfs @ 12.17 hrs, Volume= 1.550 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 403.82' @ 12.17 hrs Surf.Area= 3,733 sf Storage= 6,351 cf

Plug-Flow detention time= 2.9 min calculated for 1.545 af (100% of inflow)
Center-of-Mass det. time= 2.8 min (746.3 - 743.5)

Volume	Invert	Avail.Storage	Storage Description
#1	401.25'	11,230 cf	**DETENTION POND (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
401.25	16	16.0	0	0	16
402.00	2,505	355.0	680	680	10,025
403.00	3,174	346.0	2,833	3,513	10,638
404.00	3,860	357.0	3,511	7,025	11,346
405.00	4,561	368.0	4,206	11,230	12,077

Device	Routing	Invert	Outlet Devices
#1	Primary	401.25'	**2.0' long x 3.75' rise Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#2	Primary	405.00'	**10.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=19.66 cfs @ 12.17 hrs HW=403.78' (Free Discharge)
1=Sharp-Crested Rectangular Weir (Weir Controls 19.66 cfs @ 5.20 fps)
2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Summary for Subcatchment 3S: Post Developed to Pond

Runoff = 29.52 cfs @ 12.11 hrs, Volume= 1.763 af, Depth> 5.62"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NOAA 24-hr B 50-Year Rainfall=6.65"

	Area (ac)	CN	Description
	0.369	79	50-75% Grass cover, Fair, HSG C
	0.124	49	50-75% Grass cover, Fair, HSG A
	0.639	98	Paved parking, HSG C
	1.804	96	Gravel surface, HSG C
*	0.821	98	Roofs, HSG C
	0.008	98	Unconnected pavement, HSG C
	3.765	94	Weighted Average
	2.297		61.01% Pervious Area
	1.468		38.99% Impervious Area
	0.008		0.54% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment 4S: Post Developed Pond Bypass

Runoff = 3.04 cfs @ 12.12 hrs, Volume= 0.163 af, Depth> 4.02"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NOAA 24-hr B 50-Year Rainfall=6.65"

Area (ac)	CN	Description
0.315	69	50-75% Grass cover, Fair, HSG B
0.173	96	Gravel surface, HSG C
0.488	79	Weighted Average
0.488		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Reach 2R: Total Post

Inflow Area = 4.253 ac, 34.52% Impervious, Inflow Depth > 5.44" for 50-Year event
Inflow = 24.95 cfs @ 12.16 hrs, Volume= 1.927 af
Outflow = 24.95 cfs @ 12.16 hrs, Volume= 1.927 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Pond 2P: Existing Detention Pond

Inflow Area = 3.765 ac, 38.99% Impervious, Inflow Depth > 5.62" for 50-Year event
Inflow = 29.52 cfs @ 12.11 hrs, Volume= 1.763 af
Outflow = 22.39 cfs @ 12.17 hrs, Volume= 1.763 af, Atten= 24%, Lag= 3.6 min
Primary = 22.39 cfs @ 12.17 hrs, Volume= 1.763 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 404.09' @ 12.17 hrs Surf.Area= 3,918 sf Storage= 7,360 cf

Plug-Flow detention time= 3.0 min calculated for 1.757 af (100% of inflow)
Center-of-Mass det. time= 3.0 min (744.8 - 741.9)

Volume	Invert	Avail.Storage	Storage Description
#1	401.25'	11,230 cf	**DETENTION POND (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
401.25	16	16.0	0	0	16
402.00	2,505	355.0	680	680	10,025
403.00	3,174	346.0	2,833	3,513	10,638
404.00	3,860	357.0	3,511	7,025	11,346
405.00	4,561	368.0	4,206	11,230	12,077

Device	Routing	Invert	Outlet Devices
#1	Primary	401.25'	**2.0' long x 3.75' rise Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#2	Primary	405.00'	**10.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=21.97 cfs @ 12.17 hrs HW=404.04' (Free Discharge)
1=Sharp-Crested Rectangular Weir (Weir Controls 21.97 cfs @ 5.46 fps)
2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Summary for Subcatchment 3S: Post Developed to Pond

Runoff = 33.00 cfs @ 12.11 hrs, Volume= 1.982 af, Depth> 6.32"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NOAA 24-hr B 100-Year Rainfall=7.40"

	Area (ac)	CN	Description
	0.369	79	50-75% Grass cover, Fair, HSG C
	0.124	49	50-75% Grass cover, Fair, HSG A
	0.639	98	Paved parking, HSG C
	1.804	96	Gravel surface, HSG C
*	0.821	98	Roofs, HSG C
	0.008	98	Unconnected pavement, HSG C
	3.765	94	Weighted Average
	2.297		61.01% Pervious Area
	1.468		38.99% Impervious Area
	0.008		0.54% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment 4S: Post Developed Pond Bypass

Runoff = 3.51 cfs @ 12.11 hrs, Volume= 0.190 af, Depth> 4.68"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NOAA 24-hr B 100-Year Rainfall=7.40"

Area (ac)	CN	Description
0.315	69	50-75% Grass cover, Fair, HSG B
0.173	96	Gravel surface, HSG C
0.488	79	Weighted Average
0.488		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Reach 2R: Total Post

Inflow Area = 4.253 ac, 34.52% Impervious, Inflow Depth > 6.13" for 100-Year event
Inflow = 27.61 cfs @ 12.16 hrs, Volume= 2.172 af
Outflow = 27.61 cfs @ 12.16 hrs, Volume= 2.172 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Pond 2P: Existing Detention Pond

Inflow Area = 3.765 ac, 38.99% Impervious, Inflow Depth > 6.32" for 100-Year event
Inflow = 33.00 cfs @ 12.11 hrs, Volume= 1.982 af
Outflow = 24.68 cfs @ 12.17 hrs, Volume= 1.981 af, Atten= 25%, Lag= 3.6 min
Primary = 24.68 cfs @ 12.17 hrs, Volume= 1.981 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 404.35' @ 12.17 hrs Surf.Area= 4,102 sf Storage= 8,436 cf

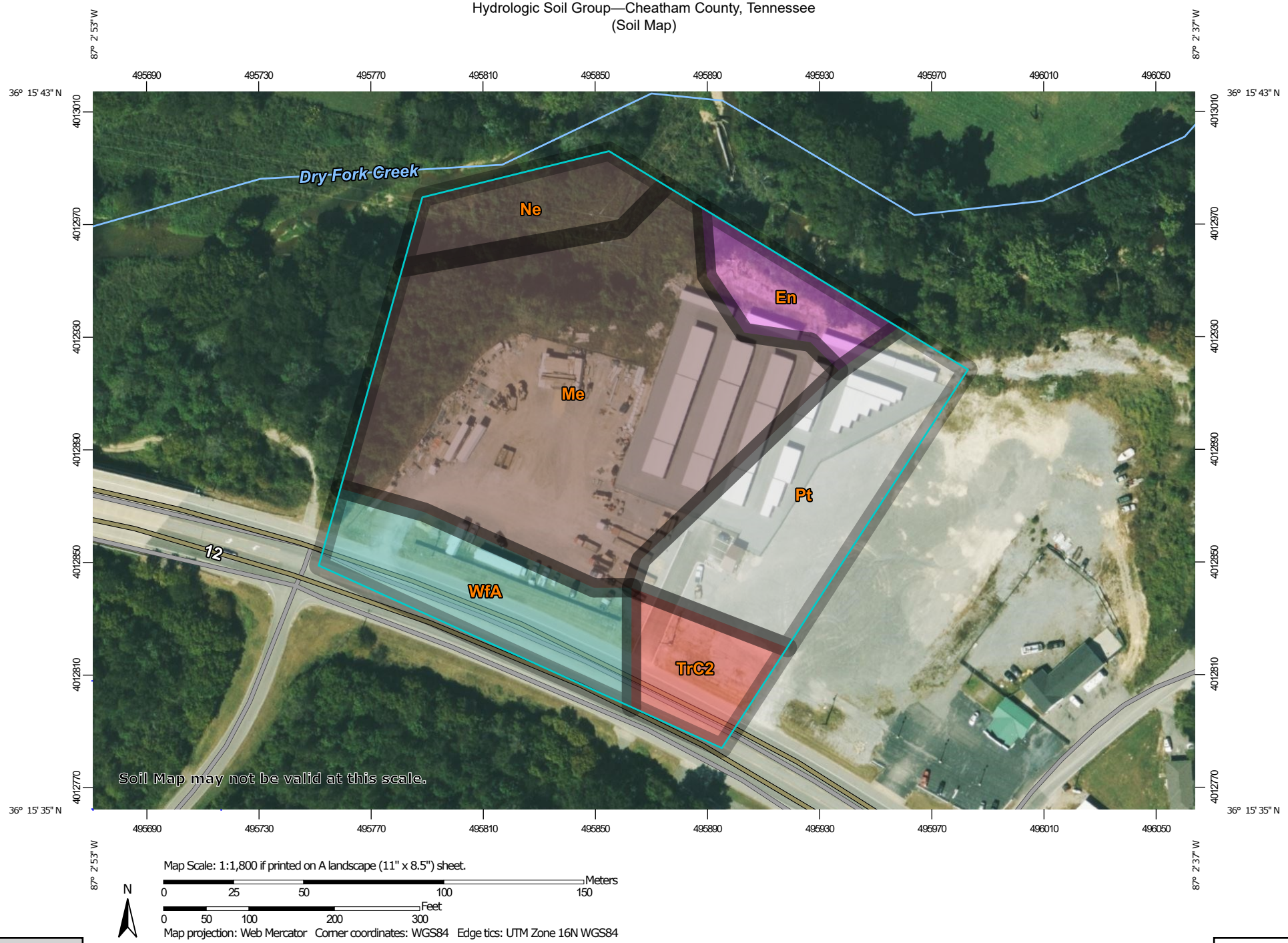
Plug-Flow detention time= 3.2 min calculated for 1.981 af (100% of inflow)
Center-of-Mass det. time= 3.1 min (743.6 - 740.5)

Volume	Invert	Avail.Storage	Storage Description
#1	401.25'	11,230 cf	**DETENTION POND (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
401.25	16	16.0	0	0	16
402.00	2,505	355.0	680	680	10,025
403.00	3,174	346.0	2,833	3,513	10,638
404.00	3,860	357.0	3,511	7,025	11,346
405.00	4,561	368.0	4,206	11,230	12,077

Device	Routing	Invert	Outlet Devices
#1	Primary	401.25'	**2.0' long x 3.75' rise Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#2	Primary	405.00'	**10.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=24.24 cfs @ 12.17 hrs HW=404.30' (Free Discharge)
1=Sharp-Crested Rectangular Weir (Weir Controls 24.24 cfs @ 5.71 fps)
2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)


87° 2' 53" W
87° 2' 37" W
36° 15' 43" N
36° 15' 35" N
495690
495730
495770
495810
495850
495890
495930
495970
496010
496050
4013010
4012970
4012930
4012890
4012850
4012810
4012770
Dry Fork Creek
Ne
En
Me
Pt
12
WfA
TrC2
Soil Map may not be valid at this scale.
Map Scale: 1:1,800 if printed on A landscape (11" x 8.5") sheet.
N
Meters
0 25 50 100 150
Feet
0 50 100 200 300
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Cheatham County, Tennessee
Survey Area Data: Version 14, May 29, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 21, 2019—Apr 10, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
En	Ennis gravelly silt loam, occasionally flooded	A	0.4	5.6%
Me	Melvin silt loam, frequently flooded	B/D	3.6	48.9%
Ne	Newark silt loam, frequently flooded	B/D	0.5	7.1%
Pt	Pits, quarry		1.4	19.3%
TrC2	Tarklin gravelly silt loam, 5 to 12 percent slopes, eroded	D	0.5	6.4%
WfA	Wolftever silty clay loam, 0 to 2 percent slopes, occasionally flooded	C	1.0	12.8%
Totals for Area of Interest			**7.4**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

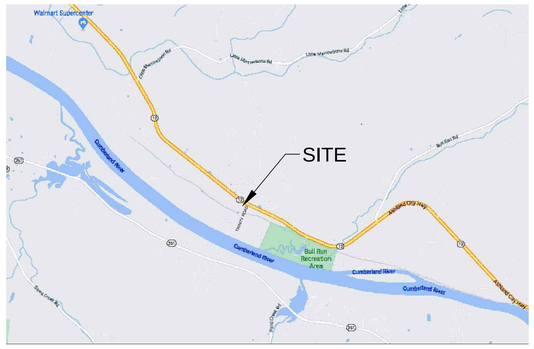
Component Percent Cutoff: None Specified

Tie-break Rule: Higher

HIGHWAY 12 DISTILLERY

2150 STATE HIGHWAY 12

NASHVILLE, TN 37015



VICINITY MAP
N.T.S.

INDEX OF DRAWINGS	
SHEET NO.	DESCRIPTION
C000	COVER SHEET
C001	EXISTING CONDITIONS
C100	SITE PLAN
C200	GRADING PLAN
C300	EPSC
C400	UTILITY PLAN

JOHN GORE, PE
PROJECT MANAGER

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DESIGNER

JOHN R GORE
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 108856
STATE OF TENNESSEE
04/15/21

BCA PROJECT NO. 2970-01

ENGINEERING BY - BARGE CAUTHEN & ASSOCIATES

OWNER / DEVELOPER:
DAREK BELL
601 MERRIT AVENUE
NASHVILLE, TN 37203

C000

VICINITY MAP
NTS
Highway 12S
Site
Cumberland River
River Road
HIGHWAY 12 SOUTH
(R.O.W. VARIES)
CSX TRANSPORTATION RAILROAD
(R.O.W. VARIES)
TENNESSEE GAS
PIPELINE EASEMENT
D.B. 392, PG. 341
FLOOD ZONE "X"
FLOOD ZONE "AE"
(48.04)
DONALD L. KEMP, JR., ET UX
D.B. 428, PG. 286
R.O.C.C., TN
FLOOD ZONE 'X' LINE
0.2% ANNUAL CHANCE FLOOD HAZARD, AREAS
OF 1% ANNUAL CHANCE FLOOD WITH AVG.
DEPTH LESS THAN ONE FOOT OR WITH
DRAINAGE AREAS LESS THAN ONE SQUARE MILE.
SCALED FROM FEMA MAP 47027C0235E DATE
FEBRUARY 26, 2021.
Lot 1
CURRENT/PROPOSED
ZONING "C-2"
Lot 2
CURRENT/PROPOSED
ZONING "I-2"
Lot 3
CURRENT/PROPOSED
ZONING "I-2"
Lot 4
CURRENT/PROPOSED
ZONING "I-2"
ONE STORY
METAL & BLOCK
Building Foot Print
60,678 Sq. Ft.
BENCHMARK - ELEV.=422.38
MAG. NAIL SET FLUSH IN ASPHALT
50' PUBLIC UTILITY, DRAINAGE AND
ACCESS EASEMENT, P.B. 14, PG. 423 (#13) (#19)
50' INGRESS/EGRESS EASEMENT
D.B. 173, PG. 498 (#15)
P.B. 14, PG. 423 (#13) (#19)
LOT 3
GREENHOUSE SUBDIVISION
P.B. 13, PG. 112
R.O.C.C., TN
(36.03)
STACY R. REIGLE
D.B. 118, PG. 370
R.O.C.C., TN
(36.04)
CEMETERY
LOT 4
GREENHOUSE SUBDIVISION
P.B. 13, PG. 112
R.O.C.C., TN
TRINITY ROAD
(PRIVATE DRIVE)
100 YEAR FLOOD ZONE LINE
SCALED FROM FEMA MAP 47027C0235E
DATED: FEBRUARY 26, 2021.
GRID
STATE PLANE COORDINATE
SYSTEM NAD-83 (1990)
0 25 50 100 150
GRAPHIC SCALE
811
Know what's below
Call before you dig.
811
www.call811.com

P F E F F E R T O R O D E

JOHN R. GORE
REGISTERED ENGINEER
No. 108856
STATE OF TENNESSEE
04/15/21

DOCUMENT PHASE

2150 TN-12

2150 STATE HIGHWAY 12
ASHLAND CITY, TN 37015

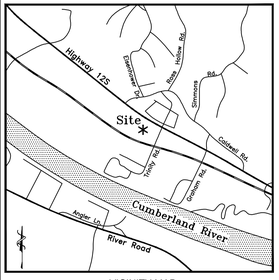
REVISION INFORMATION

#	REVISION	MM.DD.YYYY

19000 03.24.2021

EXISTING CONDITIONS

C001



VICINITY MAP
NTS

GENERAL CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL CHECK ALL FINISHED GRADES AND DIMENSIONS IN THE FIELD AND REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE PRIOR TO BEGINNING WORK.
2. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES. TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN. REPAIR CONTRACTOR CAUSED DAMAGE ACCORDING TO LOCAL STANDARDS AND AT THE CONTRACTOR'S EXPENSE. COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY(S).
3. THE CONTRACTOR SHALL CONFORM TO ALL LOCAL CODES AND OBTAIN ALL PERMITS PRIOR TO BEGINNING WORK.
4. PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING PAVEMENT AND NEW PAVEMENT. FIELD ADJUSTMENT OF FINAL GRADES MAY BE NECESSARY. OBTAIN APPROVAL FROM ENGINEER PRIOR TO ANY DEVIATIONS FROM INTENDED GRADES ON PLANS. INSTALL ALL UTILITIES PRIOR TO INSTALLATION OF PAVEMENT.
5. CONCRETE WALKS AND PADS SHALL HAVE A BROOM FINISH, UNLESS OTHERWISE NOTED. ALL CONCRETE SHALL BE CLASS "A" (4,000 P.S.I.), UNLESS OTHERWISE NOTED.
6. ALL DAMAGE TO EXISTING ASPHALT PAVEMENT, CURB AND GUTTER, AND CONCRETE SIDEWALKS TO REMAIN WHICH RESULTS FROM NEW CONSTRUCTION, SHALL BE REPLACED WITH LIKE MATERIALS AT CONTRACTOR'S EXPENSE.
7. DIMENSIONS ARE TO THE FACE OF CURBS, EDGE OF CONCRETE, OR TO FACE OF BUILDING, UNLESS OTHERWISE NOTED.
8. CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN THE USE OF EQUIPMENT IN AND AROUND OVERHEAD ELECTRICAL WIRES AND SERVICES. IF AT ANY TIME IN THE PURSUIT OF THIS WORK, THE CONTRACTOR MUST WORK IN CLOSE PROXIMITY OF THE ABOVE NOTED WIRES, THE ELECTRICAL COMPANY SHALL BE CONTACTED PRIOR TO SUCH WORK AND THE PROPER SAFETY MEASURES TAKEN.
9. SEE ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS.
10. IN EASEMENTS AND RIGHTS-OF-WAY, CONTRACTOR SHALL PROTECT AND RESTORE SAID PROPERTY TO A CONDITION SIMILAR OR EQUAL TO THAT EXISTING AT THE COMMENCEMENT OF CONSTRUCTION EXCEPT AS NOTED.
11. THE CONTRACTOR SHALL COMPLY WITH ALL PERTINENT PROVISIONS OF THE "MANUAL OF ACCIDENT PREVENTION IN CONSTRUCTION" ISSUED BY AGC OF AMERICA, INC. AND THE "SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION" ISSUED BY THE U.S. DEPARTMENT OF LABOR.
12. CONTRACTOR SHALL SAW CUT ANY SIDEWALKS, CURBS, GUTTERS, DRIVEWAYS, OR PAVED STREETS FOR UTILITY CROSSINGS, AND REPLACE WITH SAME SECTION AND MATERIALS AS EXISTING.
13. NO TREES OR VEGETATION SHALL BE DISTURBED WITHOUT OWNER'S APPROVAL.
14. CONTRACTOR SHALL HIGH-PRESSURE WASH PARKING LOT, CONCRETE PAVEMENT, AND SIDEWALKS UPON COMPLETION OF CONSTRUCTION AS NEEDED.
15. CONTRACTOR SHALL NOTE THAT ALL WORK TO BE DONE SUCH AS EXCAVATIONS, TRENCHES, CAISSONS, WALKS, ETC. AS INDICATED ON DRAWINGS, IS SHOWN WITHOUT KNOWLEDGE OF UNDERGROUND UTILITIES ON THIS PARTICULAR SITE. THE ARCHITECT / ENGINEER AND OWNER ASSUME NO RESPONSIBILITY FOR DETERMINING THEIR LOCATION, SIZE, DEPTH, OR HAZARD.
16. NO CONSTRUCTION OR STORAGE OF SUPPLIES AND EQUIPMENT SHALL BE PERMITTED OUTSIDE SILT FENCE.
17. ALL CONSTRUCTION ACTIVITIES SHALL BE IN COMPLIANCE WITH THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA) IN EFFECT AT THE TIME IN WHICH THE CONSTRUCTION ACTIVITIES ARE PERFORMED.
18. ALL PAVEMENT MARKINGS AND SIGNAGE SHALL BE IN CONFORMANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) PUBLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION.
19. NO SITE LIGHTING IS CURRENTLY PLANNED FOR THIS PHASE 1 OF DEVELOPMENT. ONLY SECURITY LIGHTING ON BUILDINGS.

SITE DATA

PARCEL ID:	TAX MAP 65, PARCEL 48.03
SITE ADDRESS:	2150 STATE HIGHWAY 12, ASHLAND CITY, TN 37015
SITE ACREAGE:	LOT 4 - 3.22 AC. (140,228 SF)
EXISTING ZONING:	IR
PROPOSED USE:	DISTILLERY
PROPOSED MAX. BUILDING HEIGHT:	STILL HOUSE = 65' / RICK HOUSE = 45'

IMPERVIOUS SURFACE AREA

BUILDINGS:	0.74 AC. (32,424 SF)
DRIVES/SIDEWALKS:	0.00 AC. (0 SF)
TOTAL PROPOSED IMPERVIOUS AREA:	0.74 AC. (32,424 SF)
PROPOSED ISR:	0.23
ALLOWED ISR:	0.85 (MIN 15% PERVIOUS ON-SITE)

PARKING SUMMARY

PARKING REQUIRED:	RATIO OF LANDSCAPED AREA PER SF PAVED = 8%
(PARKING REQUIREMENTS)	NO LIMIT ON ROWS OF CONTINUOUS PARKING OR ISLANDS
PARKING PROVIDED:	5 SPACES / 2 ADA

OWNER:	DAREK BELL
ADDRESS:	601 MERRIT AVENUE NASHVILLE, TN 37203
PHONE NO.:	615-351-9442
E-MAIL ADDRESS:	WHISKEYDAREK@GMAIL.COM
PROJECT REPRESENTATIVE:	DAVID BRAWNER - STUDIO HEAD
ADDRESS:	921B WOODLAND ST NASHVILLE, TN 37206
PHONE NO.:	615-667-0808
CONTACT NAME:	JUSTIN EADE, EI
CONTACT E-MAIL ADDRESS:	JEADE@BARGECAUTHEN.COM

RECORDED DOCUMENTS: DEED BOOK 514 PAGE 2273

FEMA PANEL:
THE SUBJECT PROPERTY DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD ZONE ACCORDING TO COMMUNITY PANEL NO. 235 OF 316, FEB 26, 2021, COMMUNITY NAME: ASHLAND CITY, TOWN OF CHEATHAM COUNTY.

STATE PLANE COORDINATE SYSTEM NAD-83 (1990)

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GRAPHIC SCALE

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JOHN R GORE
REGISTERED ENGINEER
AGRICULTURAL
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0.108855
STATE OF TENNESSEE
04/15/21

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ASHLAND CITY, TN 37015

REVISION INFORMATION

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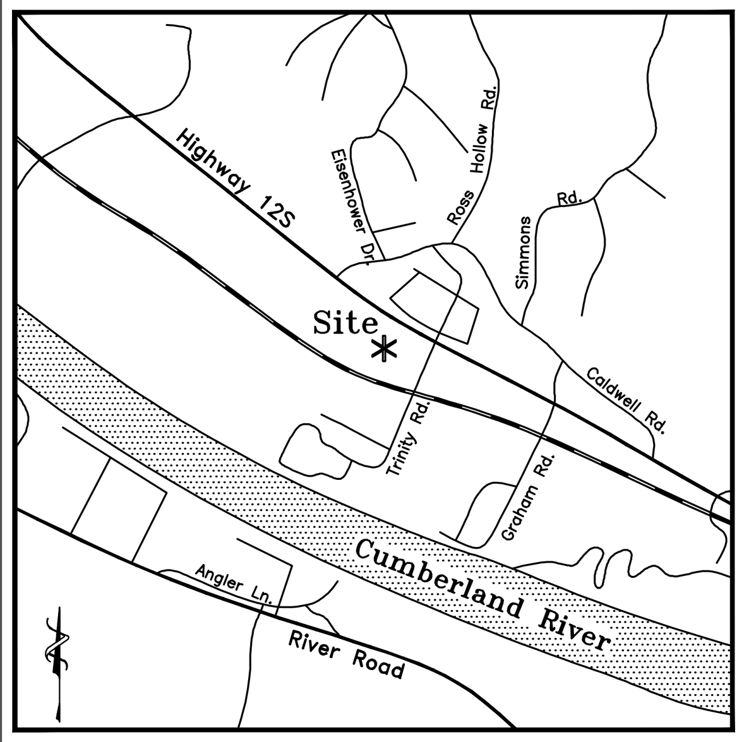
SITE PLAN

C100

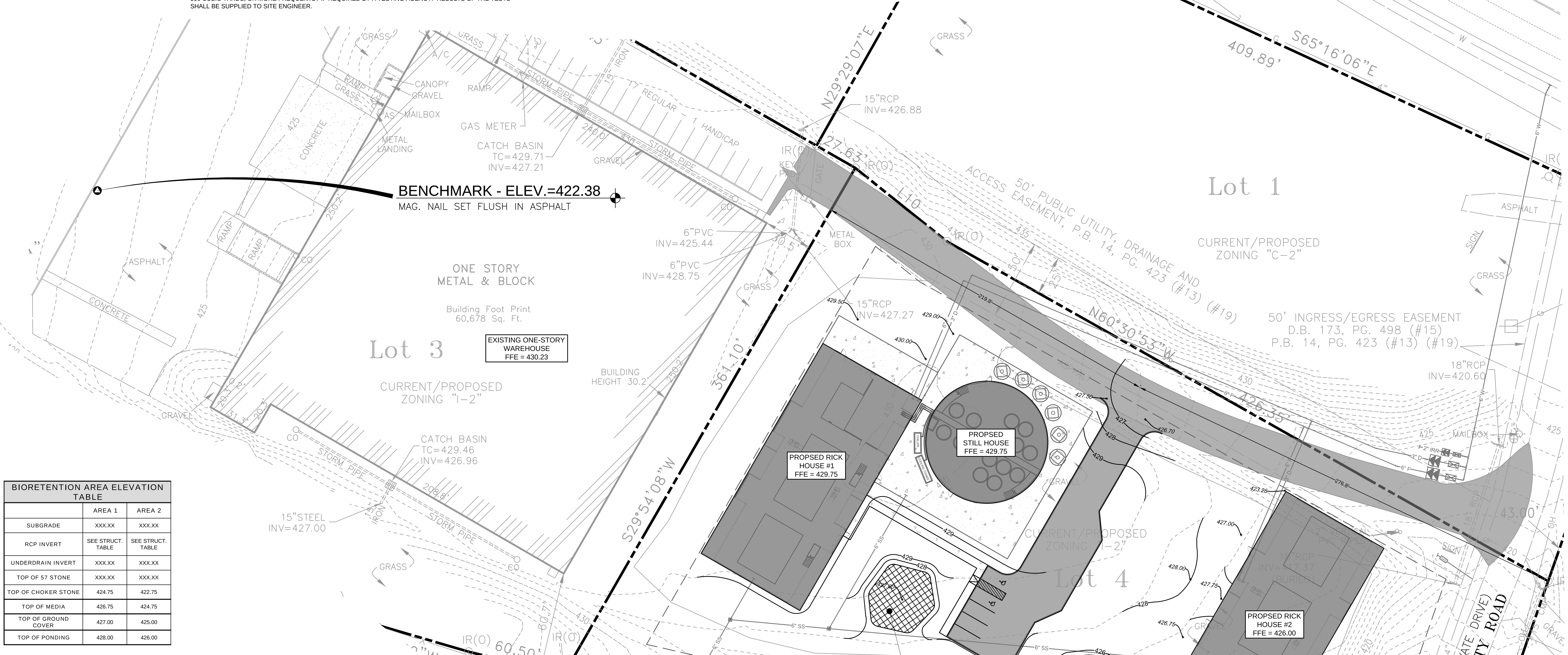
ITEM # 5.



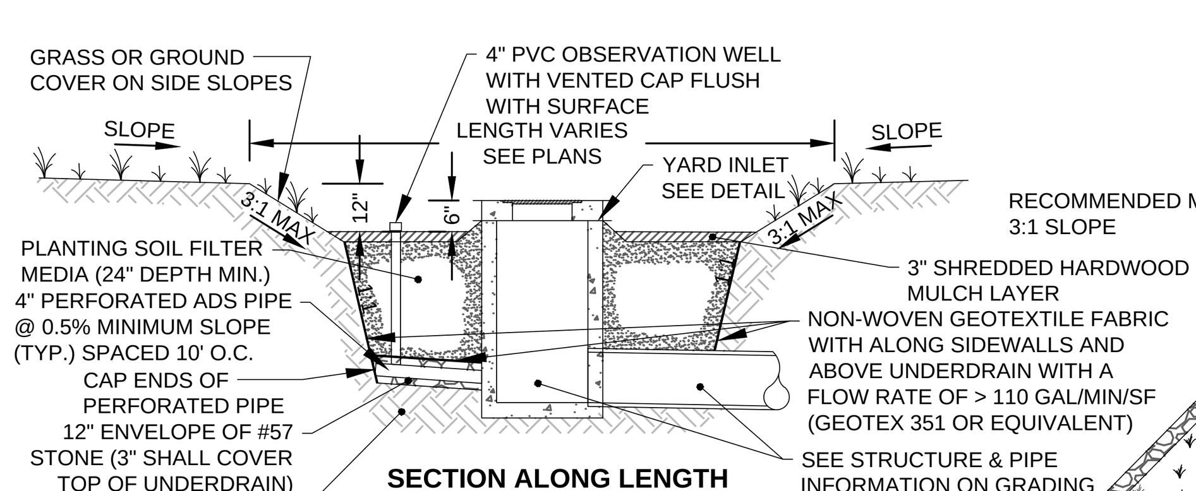
VICINITY MAP
NTS

GRADING AND DRAINAGE NOTES:

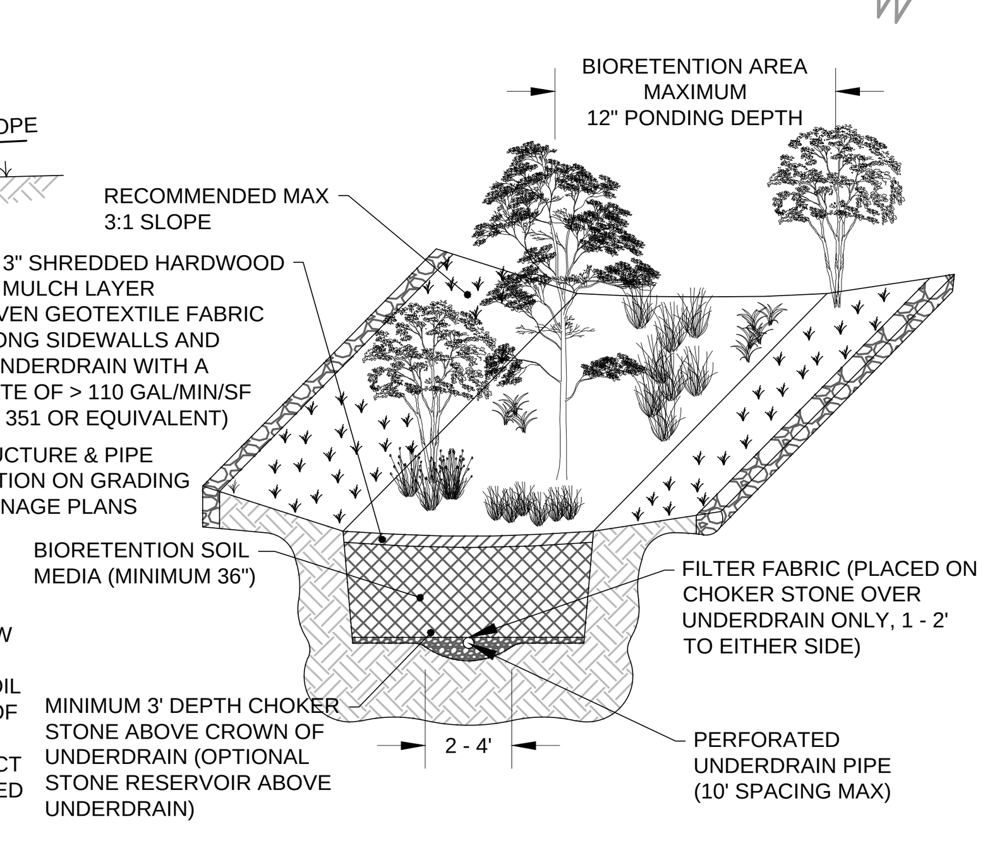
1. NO TREES ARE TO BE REMOVED AND/OR VEGETATION DISTURBED EXCEPT AS NECESSARY FOR GRADING PURPOSES AND ONLY AS APPROVED BY OWNER'S REPRESENTATIVE.
2. REGARDLESS OF DEPTH, TOPSOIL IS TO BE STRIPPED FROM ALL DISTURBED AREAS, STOCKPILED ONSITE, AND PROPERLY STABILIZED AND PROTECTED. TOPSOIL SHALL BE STABILIZED WITH SEEDING AND MULCH.
3. ALL GRADED AREAS, INCLUDING SLOPES, ARE TO BE MULCHED AND SEEDED WITHIN 14 DAYS AFTER GRADING IS COMPLETED.
4. CONSTRUCT EROSION CONTROL AS SHOWN ON DRAWINGS PRIOR TO BEGINNING GRADING OPERATIONS.
5. ALL NEW AND EXISTING STRUCTURES SHALL HAVE SEDIMENT REMOVED PRIOR TO FINAL ACCEPTANCE.
6. THE CONTRACTOR SHALL PROVIDE THE NECESSARY PROTECTION, IN ACCORDANCE WITH THE SPECIFICATIONS, FOR TREES TO REMAIN. DO NOT OPERATE OR STORE HEAVY EQUIPMENT, NOR HANDLE OR STORE MATERIALS, WITHIN THE DRIP LINES OF TREES TO REMAIN.
7. CONTRACTOR SHALL VERIFY EXISTING ELEVATIONS PRIOR TO BEGINNING WORK.
8. IN THE EVENT OF DISCREPANCIES THE RECOMMENDATIONS OF THE ENGINEER SHALL GOVERN.
9. ALL GRADING OPERATIONS, EXCAVATION, FILL, COMPACTION TESTING AND BACKFILL SHALL BE OBSERVED AND TESTED BY A QUALIFIED TESTING AGENCY.
10. NO FILL SHALL BE PLACED PRIOR TO APPROVAL OF THE SUBGRADE BY THE TESTING AGENCY.
11. COMPACTION SHALL BE DONE IN ACCORDANCE WITH THE RECOMMENDATIONS OF A TESTING AGENCY.
12. COMPACTION TESTS SHALL BE DONE FOR EACH TWO FEET OF FILL, BUT NOT LESS THAN ONE TEST FOR EVERY 500 CUBIC YARDS, OR MORE FREQUENTLY IF REQUIRED BY A TESTING AGENCY. RESULTS OF THE TESTS SHALL BE SUPPLIED TO SITE ENGINEER.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL COSTS INCURRED FOR INSPECTION AND TESTING OF SOILS DUE TO FAILURE TO COMPLY WITH THE MINIMUM REQUIREMENTS OF THE TESTING AGENCY.
14. ALL GRADING OPERATIONS SHALL BE STAKED BY A REGISTERED CIVIL ENGINEER OR LICENSED LAND SURVEYOR APPROVED BY THE OWNER.
15. UPON COMPLETION OF GRADING, THE TESTING AGENCY SHALL PROVIDE OWNER WITH A LETTER INDICATING THAT THE SITE AND BUILDING PAD WERE PREPARED IN DIRECT CONFORMANCE WITH HIS RECOMMENDATIONS.
16. ALL SLOPES 3:1 OR STEEPER SHALL BE STABILIZED WITH EROSION CONTROL BLANKET OR APPROVED EQUAL WITHIN SEVEN (7) DAY AFTER GRADING IS COMPLETE.
17. CONTRACTOR TO PROVIDE ENGINEER WITH A COMPLETE AS-BUILT SURVEY OF THE SITE BY A LICENSED LAND SURVEYOR. THE AS-BUILT SURVEY SHOULD INCLUDE (AT A MINIMUM) THE FOLLOWING:
    - 17.1. CONTOURS ON 1' INTERVALS
    - 17.2. SPOT ELEVATIONS AT TOPS AND TOES OF SLOPES IN DETENTION PONDS, PONDS SPILLWAYS, BIORETENTION AREAS AND PRETREATMENT CELLS.
    - 17.3. SPOT ELEVATIONS AT EDGES OF PERVIOUS PAVEMENT
    - 17.4. DELINEATION OF PERVIOUS PAVEMENT AREAS
    - 17.5. PIPE SIZE, MATERIAL, CASTING AND INVERT ELEVATIONS OF STORM AND SANITARY SEWER
    - 17.6. LOCATIONS OF WATER AND GAS LINES AND APPURTENANCES
18. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL, STATE, AND LOCAL ENVIRONMENTAL LAWS.
19. CONTRACTOR SHALL BE RESPONSIBLE FOR ADHERING TO ALL LOCAL GRADING AND INSPECTION CODES.
20. CONTRACTOR SHALL PROVIDE AN AREA FOR CONCRETE WASH DOWN AND EQUIPMENT FUELING. CONTROL OF OTHER SITE WASTES SUCH AS DISCARDED BUILDING MATERIALS, CHEMICAL, LITTER AND SANITARY WASTE THAT MAY CAUSE ADVERSE IMPACTS TO WATER QUALITY IS ALSO REQUIRED BY THE GRADING PERMIT.



BIORETENTION AREA ELEVATION TABLE		
	AREA 1	AREA 2
SUBGRADE	XXX.XX	XXX.XX
RCP INVERT	SEE STRUCT. TABLE	SEE STRUCT. TABLE
UNDERDRAIN INVERT	XXX.XX	XXX.XX
TOP OF 57 STONE	XXX.XX	XXX.XX
TOP OF CHOKER STONE	424.75	422.75
TOP OF MEDIA	426.75	424.75
TOP OF GROUND COVER	427.00	425.00
TOP OF PONDING	428.00	426.00



SECTION ALONG LENGTH



LEVEL 1 BIORETENTION AREA (GIP-01)
N.T.S.

NOTES:
1. MULCH FOR SURFACE SHALL BE COMMERCIALLY AVAILABLE FINE SHREDDED HARDWOOD MULCH.
2. FILTER MEDIA COMPOSITION SHALL HAVE THE FOLLOWING CHARACTERISTICS:
    - 2.1. 70-85% SAND
    - 2.2. 10-20% SILT + CLAY, WITH CLAY ≤ 10%
    - 2.3. 5-10% ORGANIC MATTER
3. SEE LANDSCAPE PLANS FOR PLANT ...D PLANTING DETAILS.
4. CONTRACTOR, ENGINEER, OR OWNER'S REPRESENTATIVE SHALL NOTIFY MWS DEVELOPMENT REVIEW AT LEAST 24 HOURS PRIOR TO THE INSTALLATION OF THE PLANTING SOIL FILTER BED. AT THE COMPLETION OF INSTALLATION, THE ABOVE REFERENCED PERSON WILL COLLECT ONE SAMPLE PER BIORETENTION BED FOR ANALYSIS AND CONFIRMATION OF THE SOIL CHARACTERISTICS AS DEFINED BY GIP-01, FILTER MEDIA AND SURFACE COVER, SECTION 6.6, PAGE 20.

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JOHN R. GORE REGISTERED ENGINEER AGRICULTURE COMMERCE No. 108856 STATE OF TENNESSEE 04/15/21

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GRADING PLAN

C200

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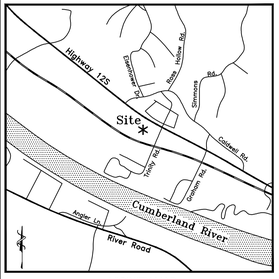
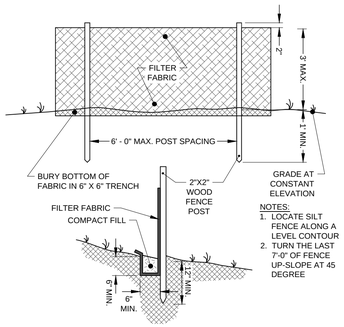
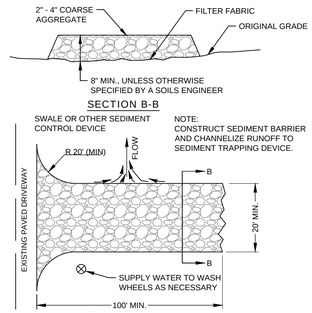


VICINITY MAP
NTS



NOTES:
1. LOCATE SILT FENCE ALONG A LEVEL CONTOUR
2. TURN THE LAST 7'-0" OF FENCE UP-SLOPE AT 45 DEGREE

SILT FENCE
N.T.S.



NOTE:
CONSTRUCT SEDIMENT BARRIER AND CHANNELIZE RUNOFF TO SEDIMENT TRAPPING DEVICE.

STABILIZED CONSTRUCTION ENTRANCE
N.T.S.

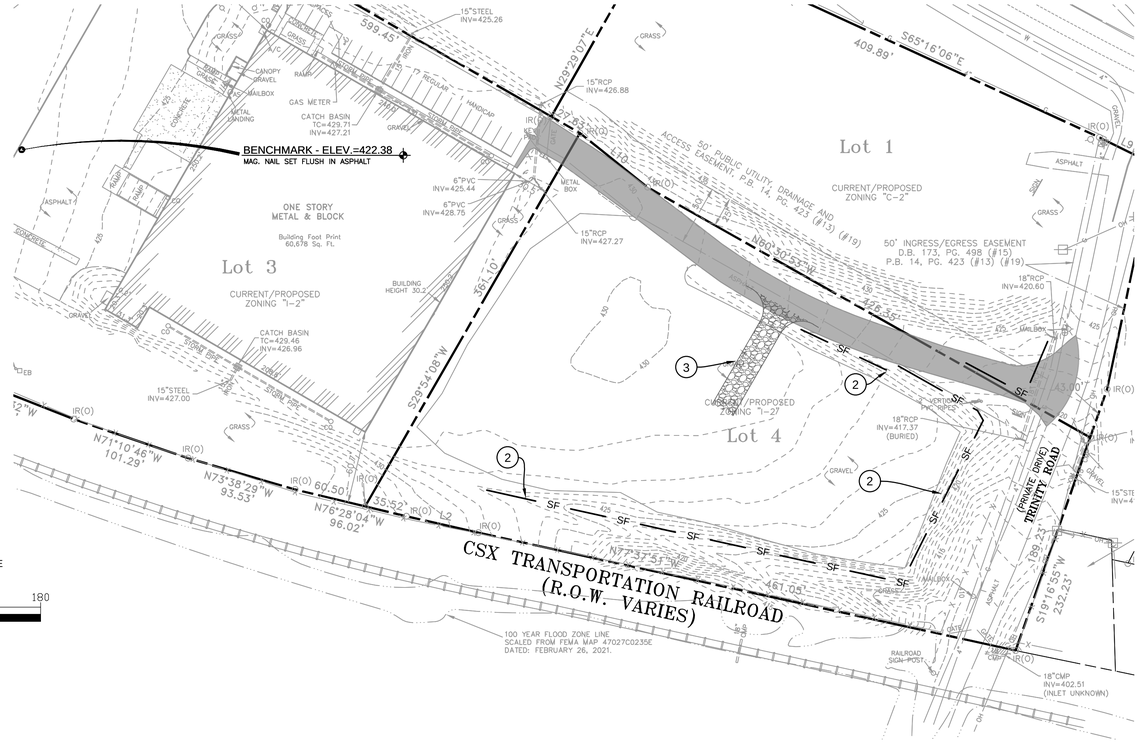
EROSION CONTROL (EPSC) NOTES:

1. ALL EROSION CONTROL PLANS SHALL BE KEPT CURRENT, AND WILL BE AVAILABLE TO ALL OPERATORS AND SITE PERSONNEL INVOLVED WITH EROSION PREVENTION AND SEDIMENT CONTROL. FOR PROJECTS REQUIRING COVERAGE UNDER THE TENNESSEE CONSTRUCTION GENERAL PERMIT, A COPY OF THE SWPPP, AND NOI WILL ALSO BE AVAILABLE TO THE SAME PERSONNEL, AND A COPY OF THE NOC WITH THE NPDES TRACKING NUMBER WILL BE POSTED AT THE SITE ENTRANCE.
2. WHERE CONSTRUCTION ACTIVITIES ON A PORTION OF THE SITE ARE TEMPORARILY CEASED FOR A PERIOD OF 14 DAYS OR LONGER, TEMPORARY STABILIZATION OF ALL DISTURBED AREAS, INCLUDING SLOPES AND STOCK PILES SHALL BE COMPLETED. SLOPES WITH A GRADE OF 3:1 OR STEEPER SHALL BE STABILIZED NO LATER THAN 7 DAYS AFTER COMPLETION, WITH EROSION CONTROL BLANKET, OR APPROVED EQUAL.
3. ALL EPSC MEASURES SHALL BE INSTALLED PRIOR TO COMMENCING WITH EARTH DISTURBING ACTIVITIES. THESE MEASURES SHALL BE SUBJECT TO A SITE ASSESSMENT WITHIN IN ONE MONTH OF COMMENCEMENT. THIS ASSESSMENT WILL BE COMPLETED PER THE CRITERIA SET FORTH IN SECTION 3.1.2 OF THE TENNESSEE CONSTRUCTION GENERAL PERMIT.
4. DISCHARGES FROM DEWATERING ACTIVITIES, INCLUDING DISCHARGES FROM DEWATERING OF TRENCH EXCAVATIONS, ARE PROHIBITED UNLESS MANAGED BY APPROPRIATE CONTROLS. APPROPRIATE CONTROLS INCLUDE, BUT ARE NOT LIMITED TO: WEIR TANK, DEWATERING TANK, GRAVITY BAG FILTER, SAND MEDIA, PARTICULATE FILTER, PRESSURIZED BAG FILTER, CARTRIDGE FILTER, OR OTHER APPROVED CONTROL UNITS PROVIDING THE LEVEL OF TREATMENT NECESSARY.
5. ALL NEW AND EXISTING DRAINAGE STRUCTURES SHALL HAVE SEDIMENT REMOVED PRIOR TO FINAL ACCEPTANCE.
6. SILT BARRIERS SHALL BE CLEANED OF ACCUMULATED SEDIMENT WHEN APPROXIMATELY 50% FILLED WITH SUCH SEDIMENT.
7. ALL DIMENSIONS AND LOCATIONS OF TEMPORARY EROSION AND WATER POLLUTION CONTROL DEVICES SHALL BE SUBJECT TO ADJUSTMENT AS DESIGNATED BY THE EPSC PROFESSIONAL.
8. WHEN THE TEMPORARY SOIL EROSION AND WATER POLLUTION DEVICES ARE NO LONGER REQUIRED FOR THE INTENDED PURPOSE IN THE OPINION OF THE EPSC PROFESSIONAL, THEY SHALL BE REMOVED.
9. REPLACE SILT BARRIERS AS DIRECTED BY THE EPSC PROFESSIONAL.
10. PROHIBITED DISCHARGES FROM THIS SITE INCLUDE: CONCRETE WASHOUT WATER, WATER USED FOR CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS, EQUIPMENT FUELS AND OILS, SOAPS AND SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING. THE CONTRACTOR SHALL BE REQUIRED TO IMPLEMENT THE APPROPRIATE BMPs NECESSARY TO PREVENT THESE MATERIALS FOR CONTAMINATING ANY SITE DISCHARGE WATER. THE LOCATIONS OF THESE BMPs SHALL BE COORDINATED WITH THE NPDES DEPARTMENT DURING THE PRE-CONSTRUCITON MEETING.
11. CONTRACTOR TO PROVIDE AN AREA FOR CONCRETE WASHDOWN AND EQUIPMENT FUELING IN ACCORDANCE WITH METRO CP-10 AND CP-13, RESPECTIVELY. CONTRACTOR TO COORDINATE EXACT LOCATION WITH NPDES DEPARTMENT DURING PRE-CONSTRUCTION MEETING.
12. CONTROL OF OTHER SITE WASTES SUCH AS DISCARDED BUILDING MATERIALS, CHEMICALS, LITTER, AND SANITARY WASTES THAT MAY CAUSE ADVERSE IMPACTS TO WATER QUALITY IS ALSO REQUIRED BY THE GRADING PERMITTEE. LOCATION OF AND/OR NOTES REFERRING TO THESE BMP'S SHALL BE SHOWN ON THE EPSC PLAN.
13. CONTRACTOR SHALL PROVIDE ALL INSPECTIONS AND REPORTING REQUIRED FOR THE STATE ISSUED NOC.
14. CONTRACTOR IS RESPONSIBLE FOR PROVIDING DUST CONTROL DURING CONSTRUCTION. COST TO PROVIDE DUST CONTROL TO BE INCLUDED IN BID.
15. CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL SILT/ MUD/ DEBRIS FROM PUBLIC AND PRIVATE DRIVES. THIS MAY INCLUDE A STREET SWEEPER/ WASHER. COST OF REMOVAL TO BE INCLUDED IN BID.
16. CONTRACTOR SHALL FILE A NOTICE OF TERMINATION (NOT) WITH T.D.E.C. UPON FINAL STABILIZATION OF SITE.

STATE PLANE COORDINATE SYSTEM NAD-83 (1990)

0 30 60 120 180
GRAPHIC SCALE

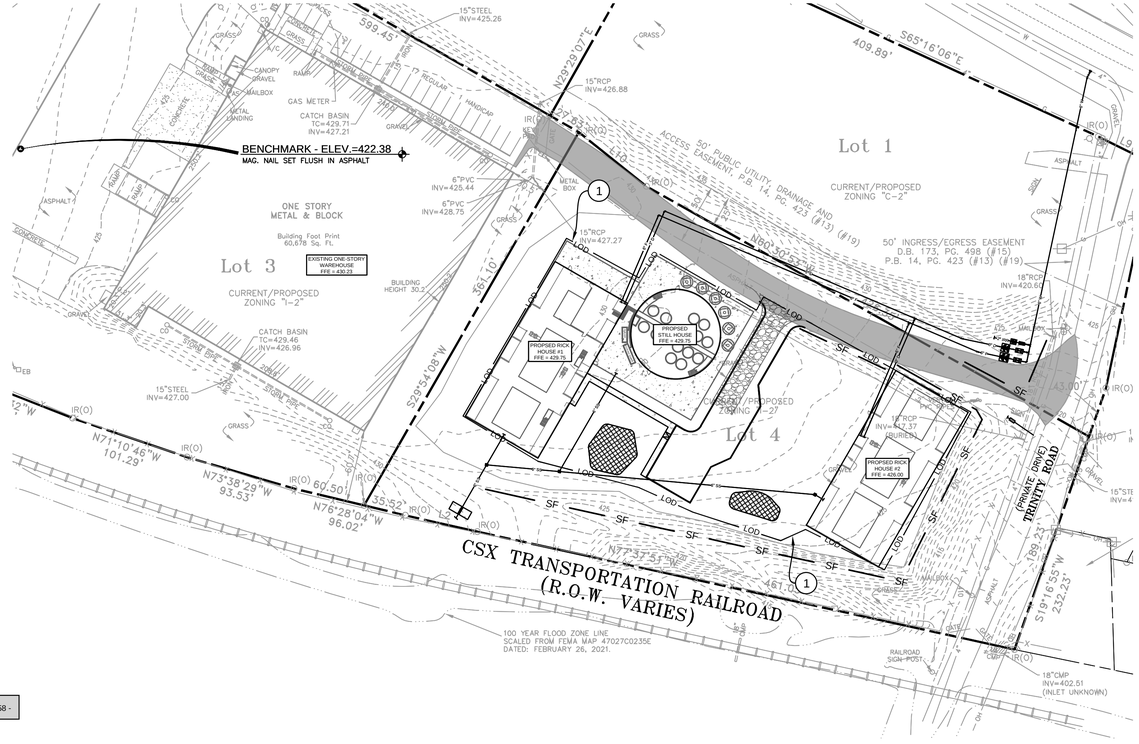
INITIAL EPSC PLAN



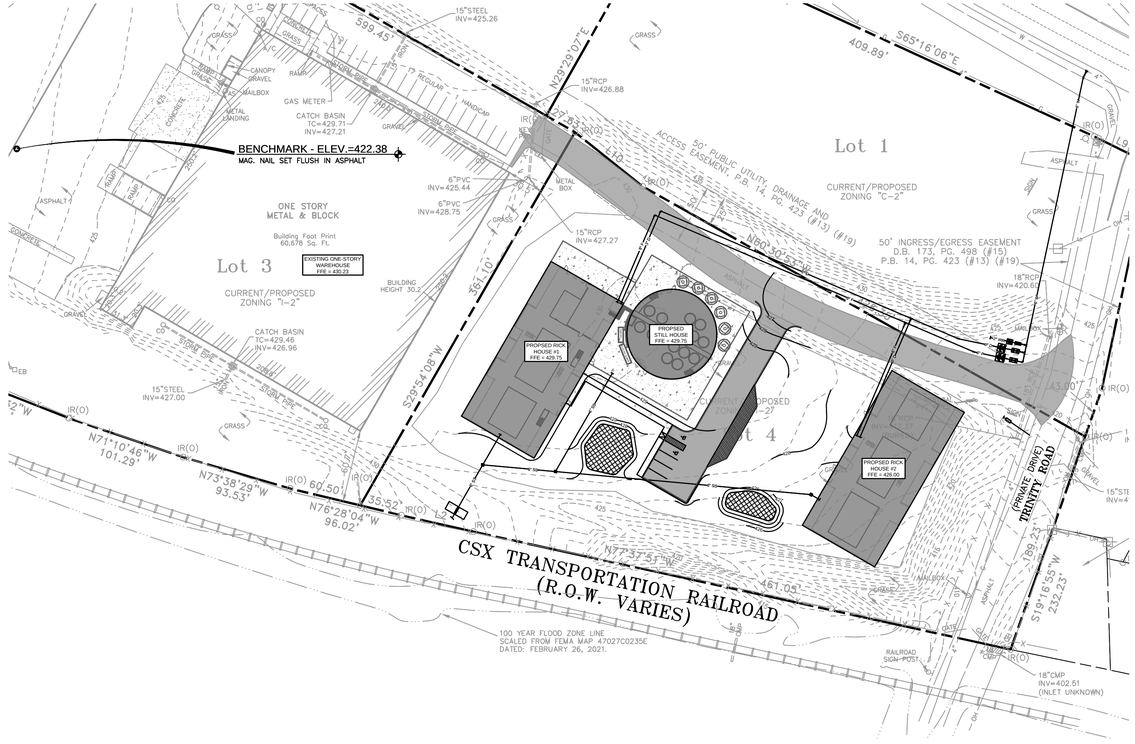
EPSC PLAN KEYNOTE TABLE:

1. LIMIT OF DISTURBANCE= 1.48 ACRES
2. SILT FENCE. SEE DETAIL SHEET C5.0
3. STABILIZED CONSTRUCTION ENTRANCE. SEE DETAIL SHEET C5.0

INTERMEDIATE EPSC PLAN



FINAL EPSC PLAN



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JOHN R. GORE
REGISTERED ENGINEER
AGRICULTURE
STATE OF TENNESSEE
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EPSC PLAN

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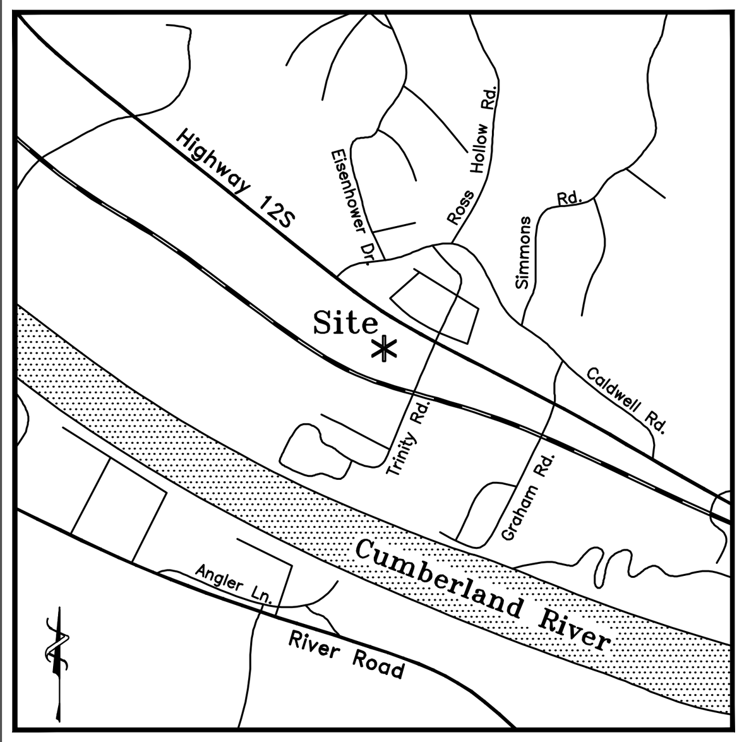

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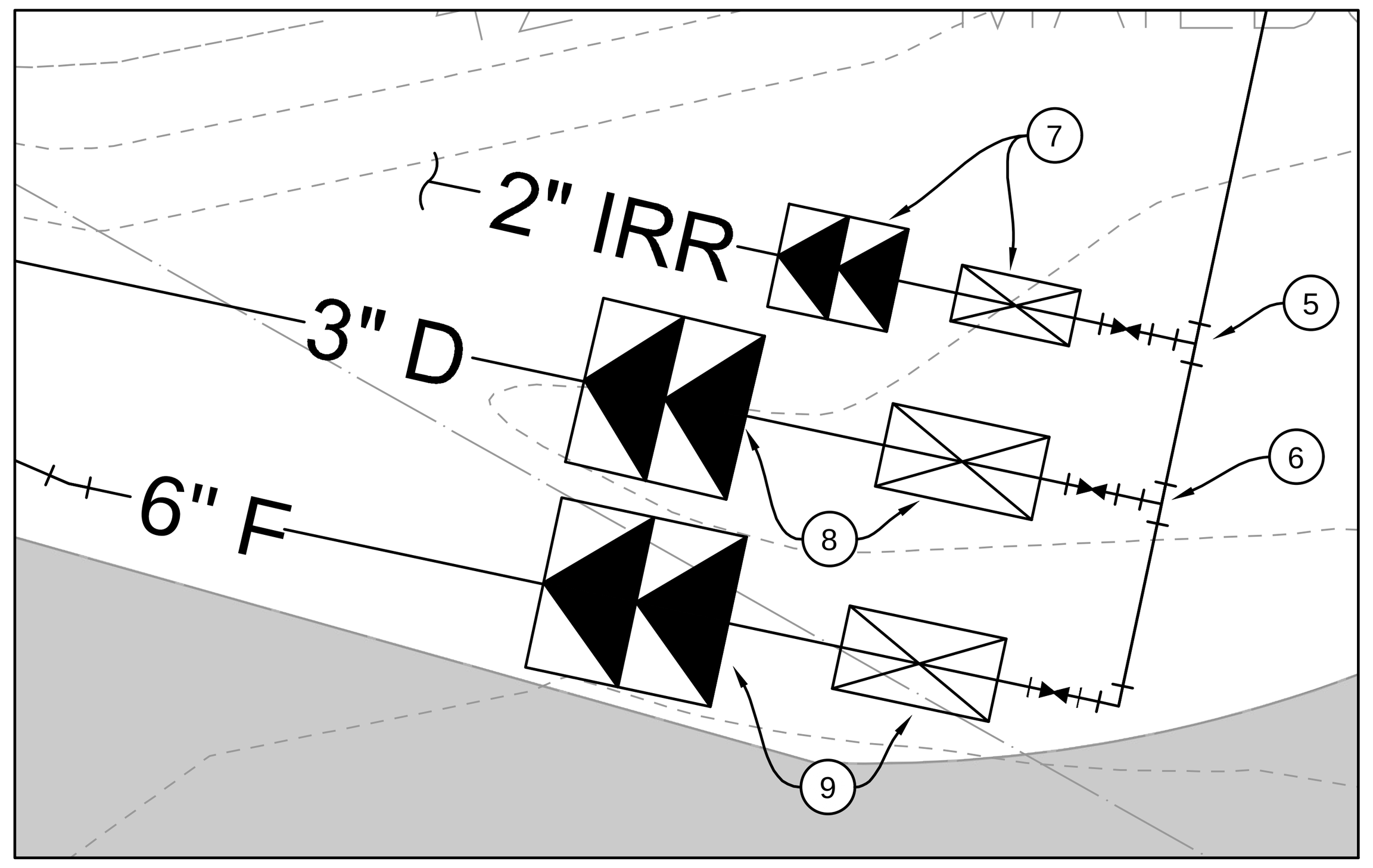
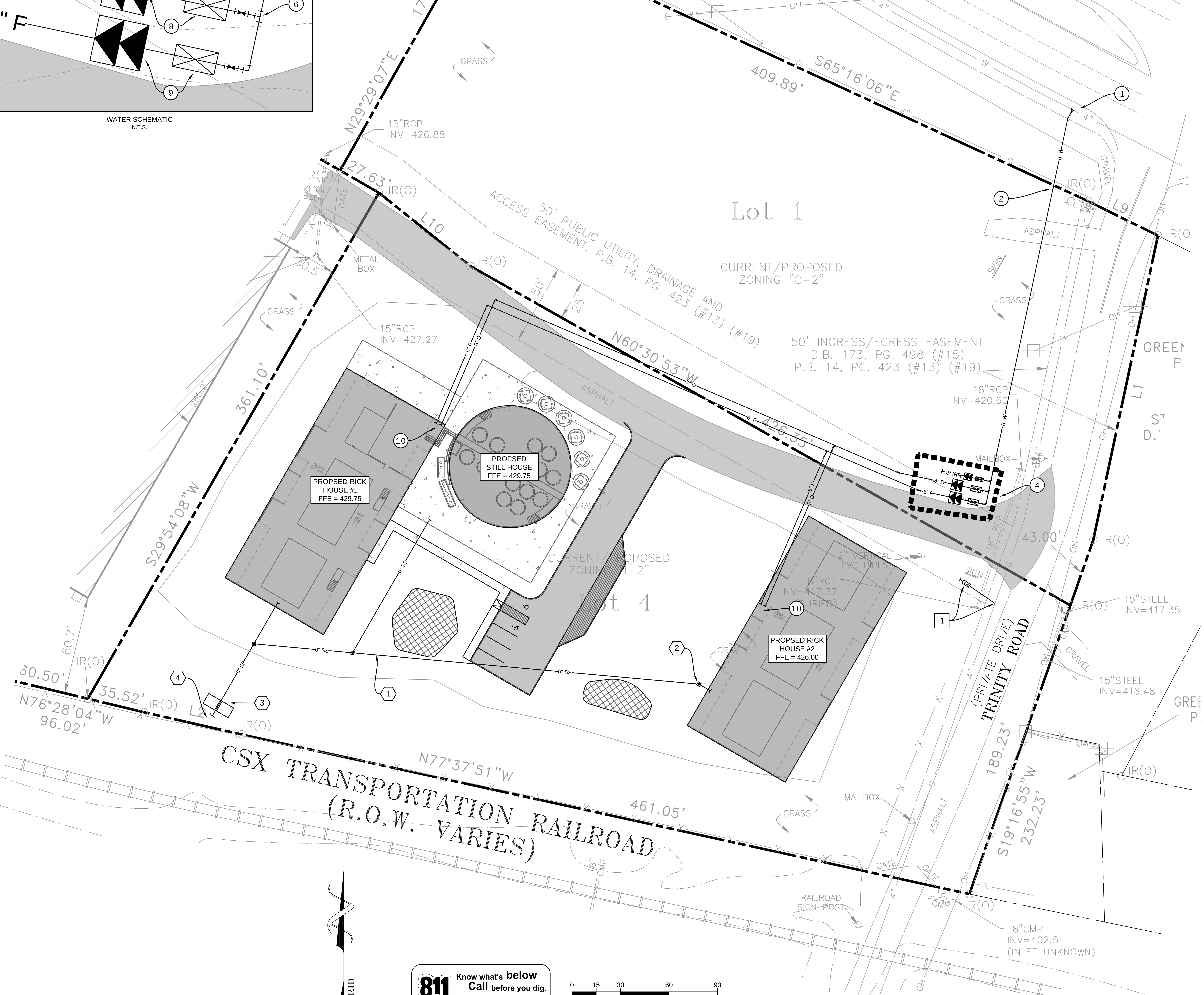


WATER SCHEMATIC
N.T.S.

UTILITY NOTES:

1. WHERE UTILITY LINES PASS OVER OR WITHIN 2.5 FEET OF WATER MAINS, THE SEWER SHALL BE ENCASED IN CONCRETE.
2. ALL PAVED AREAS SHALL BE CONSTRUCTED TO SUBGRADE AND ALL PROPOSED FILLS SHALL BE MADE AND COMPACTED PRIOR TO CONSTRUCTION OF SANITARY SEWER.
3. CONTRACTOR IS RESPONSIBLE FOR ALL HORIZONTAL AND VERTICAL BENDS, JOINTS AND FITTINGS TO CONSTRUCT UTILITIES.
4. CONTRACTOR IS RESPONSIBLE FOR ANY FEES ASSOCIATED WITH CONSTRUCTION SHOWN ON DRAWINGS.
5. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL EXISTING UTILITIES, INCLUDING SEWERS, PRIOR TO CONSTRUCTION.
6. ALL CONNECTIONS TO EXISTING MANHOLE(S) SHALL BE CORING AND RESILIENT CONNECTOR METHOD.
7. A MINIMUM OF 4' GROUND COVER SHALL BE MAINTAINED OVER ALL PROPOSED SANITARY SEWER LINES AND WATER LINES.
8. SEE MECHANICAL DRAWINGS FOR EXACT LOCATIONS OF SEWER CONNECTIONS, WATER CONNECTIONS AND GAS CONNECTIONS. UTILITY CONTRACTOR TO INSTALL PROPOSED UTILITIES TO WITHIN 5 FT. OF BUILDING LINE.
9. ALL SEWER INSTALLATION SHALL BE IN ACCORDANCE WITH SPECIFICATIONS OF ASHLAND CITY INDUSTRIAL PARK SEWER BOARD.
10. THE CONTRACTOR IS RESPONSIBLE FOR REIMBURSING THE TOWN OF ASHLAND CITY THE COST OF INSPECTION.
11. AFTER COMPLETION OF THE SANITARY SEWER(S), ASHLAND CITY INDUSTRIAL PARK SEWER BOARD WILL DIRECT THE TELEVISING OF THE LINES PRIOR TO FINAL ACCEPTANCE.
12. THE CONTRACTOR SHALL MAINTAIN UNINTERRUPTED DOMESTIC AND FIRE WATER SERVICE UNTIL THE NEW SYSTEM HAS BEEN COMPLETED, TESTED AND APPROVED.
13. INSPECTION CLEANOUTS TO BE INSTALLED ACCORDING TO THE TOWN OF ASHLAND CITY SPECIFICATIONS.
14. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL SEWER CUT SHEETS AS REQUIRED BY ASHLAND CITY INDUSTRIAL PARK SEWER BOARD.
15. THE CONTRACTOR IS TO PROVIDE AND MAINTAIN THE CONSTRUCTION IDENTIFICATION SIGN FOR PRIVATE DEVELOPMENT APPROVED.
16. MAIN LINE SEWER TAPS WILL BE MADE BY ASHLAND CITY INDUSTRIAL PARK SEWER BOARD.
17. COORDINATE MAINLINE WATER TAPS WITH THE TOWN OF ASHLAND CITY PRIOR TO CONSTRUCTION.
18. ALL WATER AND SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE TOWN OF ASHLAND CITY DESIGN SPECIFICATIONS, THE TOWN OF ASHLAND CITY REQUIREMENTS TO SUPERSEDE ANY SPECIFICATIONS PROVIDED. CONTRACTOR SHALL BE KNOWLEDGEABLE OF THE TOWN OF ASHLAND CITY REQUIREMENTS PRIOR TO BIDDING.
19. CONTRACTOR TO PROVIDE CONCRETE ANCHORS ON WATER AND SEWER MAINS IN ACCORDANCE WITH THE TOWN OF ASHLAND CITY FOR WATER AND THE INDUSTRIAL PARK SEWER BOARD FOR SANITARY.



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GRAPHIC SCALE

UTILITY KEYNOTES:

1. TIE PROPOSED 6" WATER LINE TO EXISTING MAIN AT THIS LOCATION. SEE TAPPING SLEEVE AND VALVE DETAIL SHEET C5.0
2. 6" PROPERTY LINE GATE VALVE
3. 6" WATER LINE
4. WATER SCHEMATIC - SEE DETAIL THIS SHEET
5. 6" X 6" X 2" TEE
6. 6" X 6" X 3" TEE
7. 2" IRRIGATION METER AND 2" REDUCE PRESSURE BACKFLOW PREVENTER
8. 3" DOMESTIC METER AND 3" REDUCE PRESSURE BACKFLOW PREVENTER
9. 6" FIRE METER AND 6" REDUCE PRESSURE BACKFLOW PREVENTER
10. SEE PLUMBING PLANS FOR CONTINUATION

[1] PROPOSED GAS LOCATION AND METER

⟨1⟩ 6" SANITARY SEWER LINE
⟨2⟩ SANITARY SEWER CLEANOUT (TYP.), SEE DETAIL SHEET C5.0
⟨3⟩ PROPOSED SANITARY STEP SYSTEM, SEPTIC TANK WITH EFFLUENT PUMP
⟨4⟩ PROPOSED SEWER CONNECTION LOCATION

PFEFFER TORODE

JOHN R. GORE
REGISTERED ENGINEER
AGRICULTURE / COMMERCE
No. 108856
STATE OF TENNESSEE
04/15/21

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UTILITY PLAN

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