



**TOWN OF ASHLAND CITY**  
**Planning Commission Meeting**  
**June 03, 2024 5:30 PM**  
**Agenda**

**Chairwoman:** Nicole Binkley

**Committee Members:** Vivian Foston, Gerald Greer, JT Smith, Steven Stratton, Mike Stuart, Jerome Terrell

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**CALL TO ORDER**

**ROLL CALL**

**APPROVAL OF AGENDA**

**APPROVAL OF MINUTES**

1. 05-06-2024 PC Meeting Minutes

**PUBLIC FORUM**

2. ***Procedure for Speaking Before the Board***

- \* Speakers must complete the information form and submit it to the transcriber prior to the public forum. Be prepared to speak when your name is called.
- \* Each speaker will be allowed 4 minutes.
- \* Speakers may comment on issues scheduled for consideration at the meeting or other appropriate concerns pertinent to the operation of the town.
- \* Each speaker should state the following:
  - his/her name
  - whether they are an Ashland City resident and/or property owner
- \* No person shall be allowed to make obscene, derogatory, or slanderous remarks while addressing the Council/Board. Persons doing so will be asked to stop speaking and will forfeit the remainder of their time.
- \* All remarks shall be directed to the Council/Board as a body only.
- \* No person shall be allowed to disrupt or interfere with the procedures.
- \* Remarks shall end when the speaker's allotted time has expired. No time shall be shared with other speakers.
- \* Questions from the council/board members may be asked for clarification as well as council/board members may have brief comments; however, no person shall be permitted to enter any discussion or debate either directly with or through any member of the Council/Board or anyone present at the meeting.
- \* No one shall make open comments during the meeting.

**OLD BUSINESS**

3. AO Smith/ Ashland City Plat Approval

**NEW BUSINESS**

4. Site Plan Approval Request ACE Retail
5. Rezone Request Parcel 055C S 007.02
6. Rezone Request Parcels 062.041.00 and 062 041.01

**OTHER**

7. Zoning Ordinance Redline with Site Plan Checklist
8. Matrix

**ADJOURNMENT**

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*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**  
**May 06, 2024 5:30 PM**  
**Minutes**

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**CALL TO ORDER**

Chairwoman Binkley called the meeting to order at 5:48 p.m.

**ROLL CALL**

PRESENT

Chairwoman Nicole Binkley  
Committee Member Gerald Greer  
Committee Member Vivian Foston  
Committee Member JT Smith  
Committee Member Mike Stuart  
Committee Member Jerome Terrell

ABSENT

Committee Member Steven Stratton

**APPROVAL OF AGENDA**

A motion was made by Committee Member Greer, Seconded by Committee Member Stuart, to approve the agenda. All approved by voice vote.

**APPROVAL OF MINUTES**

1. 04/01/2024 PC Meeting Minutes

A motion was made by Committee Member Stuart, Seconded by Committee Member Greer, to approve the minutes. All approved by voice vote.

**PUBLIC FORUM**

2. None.

**OLD BUSINESS**

3. AO Smith/ Ashland City Plat Approval

A motion was made by Committee Member Stuart, Seconded by Committee Member Greer, to defer. All approved by voice vote.

**OTHER**

4. Article VII

Mr. Gregory and the Committee discussed Article VII of the Zoning Ordinance.

Committee Member Smith discussed an email received regarding Ordinance 147.

**ADJOURNMENT**

A motion was made by Committee Member Stuart, Seconded by Committee Member Greer, to adjourn the meeting. All approved by voice vote and the meeting adjourned at 6:26 p.m.

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CHAIRWOMAN NICOLE BINKLEY

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SECRETARY ALICIA MARTIN



# Town of Ashland City Building & Codes Department

233 Tennessee Waltz Parkway Suite 103  
Ashland City TN 37015  
(615) 792-6455

## APPLICATION FOR SITE PLAN APPROVAL

Site Plan Review Fee: \$100.00

Date Received: \_\_\_\_\_

Property Address: 1209 Highway 12 S.  
Ashland City, TN 37015

Map # 055 Parcel # 036.00 Acreage: 5.19

Property Owner(s): Mark Parbrough

Phone: 615-417-7659

Description of project being reviewed: Commercial Building  
consisting of shell retail spaces for  
tenant buildouts

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. I 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.

Ma  
Applicant Signature

4/30/2024  
Date



# Town of Ashland City

## Building & Codes Department

233 Tennessee Waltz Parkway Suite 103  
Ashland City TN 37015  
(615) 792-6455

### PLANNING COMMISSION SITE PLAN CHECKLIST

NAME OF SITE Ace Retail Center

LOCATION 1209 TN Hwy-12 South ZONING DISTRICT C-2

OWNER Mark & Tonya Yarbrough

ENGINEER Klober Engineering Services - Josh Lyon, P.E.

1. Three (3) copies of the site plan. Please indicate at time of application if you would like any of the remaining copies after your case is heard and voted on.
2. Three (3) copies and an electronic PDF of revised site plans made available to the Fire, Building and Life Safety Department – according to planner/engineer comments. Also written response to all comments to match what was changed on revised site plans.
3. Location map of the site at a scale of not less than 1"=2000' (USGS map is acceptable). Map must show the following:
  - a. Approximate site boundary
  - b. Public streets in the vicinity
  - c. Types of development of surrounding parcels
  - d. Public water and sewer lines serving the site
  - e. Map # and Parcel # of site location
4. Site boundary, stamped and signed by a registered surveyor.
5. The shape, size and location of all existing buildings on the lot.
6. The existing and intended use of the lot and of structures on it. If residential, give the number of dwelling units per building.
7. Topographic survey of the site with contour intervals at no greater than 5' intervals, stamped and signed by a registered surveyor.
8. Location of all driveways and entrances with dimensions from the centerline of the drive to the nearest property corner and to the nearest intersection (if the intersection is closer than 200 feet).
9. Dimensioned layout and location of all parking spaces including handicapped spaces.
10. Dimensioned layout and location of off-street loading bays and docks.





# Town of Ashland City

## Building & Codes Department

233 Tennessee Waltz Parkway Suite 103  
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11. Location and area of open space.
12. A table showing the ground coverage, total floor area and building heights.
13. Location, dimension and heights of all fences and walls with materials specified.
14. Location, type and amount of landscaping.
15. Proposed means of surface drainage, including locations and sizes of all culverts, ditches and detention structures, storm-water system to be designed as per the requirements of the Ashland City Planning Commission.
16. Dimensioned location of all easements and right-of-ways.
17. Location of all portions of the site that are within the floodway and the 100-year floodplain. A note will be included which gives the FEMA map number from which this information was developed. In addition, if portions of the site are in the 100-year floodplain and/or the floodway, the 100-year flood elevation(s) at the site will be listed on the plan.
18. Location, size and distance to all public utilities serving the site including all fire hydrants.
19. Location, by type and size of all proposed signs, (Please note that signs larger than 40 sq. ft. are not permitted per the sign ordinance for the Town of Ashland City.
20. Vegetation, show at minimum the following:
  - a. Existing tree masses and hedgerows
  - b. General description of the tree types and sizes within the tree masses
  - c. Location and identification of trees 15" in caliper (measured 4' above the ground) or larger
  - d. Description of landscaping requirements for the site based upon surrounding land uses (see Zoning Ordinance Section 3, 140)
21. Identification of slopes greater than 15% and identification of those soils (SCS soil mapping is acceptable) on those slopes.
22. Site plan application fee \$100
23. Additional engineering review etc., site inspection charges are subject to Section 14-301 of the Ashland City Municipal Code per Ordinance #165.
24. Three (3) sets of the construction plans for the site.



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25. Submittal must be made at least 20 working days prior to the Planning Commission meeting to be heard.
  
26. If application is requesting a variance, application is to be submitted to the Building Official in accordance with Section 7.080 of the Ashland City Zoning Ordinance.

# SITE PLAN FOR

# ACE RETAIL CENTER

1209 TN HIGHWAY-12 SOUTH  
ASHLAND CITY, TN 37015

### SHEET INDEX:

- C1.00 ————— EXISTING CONDITIONS
- C1.01 ————— INITIAL EPSC PLAN
- C1.02 ————— SITE PLAN
- C1.03 ————— GRADING AND DRAINAGE PLAN
- C1.04 ————— FINAL STABILIZATION PLAN
- C2.01 ————— CONSTRUCTION DETAILS
- C2.02 ————— CONSTRUCTION DETAILS
- C2.03 ————— WATERLINE DETAILS
- C2.04 ————— SEWER LINE DETAILS

**NOT FOR CONSTRUCTION**



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



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



**Vicinity Map**  
Not to Scale

**DATE: 05/15/2024    ACE RETAIL CENTER**

REPRODUCTION OF THESE DRAWINGS OR ANY PART THEREOF IS PROHIBITED WITHOUT WRITTEN APPROVAL OF KLOBER ENGINEERING SERVICES. THESE DRAWINGS ARE PROTECTED BY U.S. COPYRIGHT LAWS AND VIOLATORS ARE SUBJECT TO LEGAL RECOURSE.



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

**DEED REFERENCE:**  
MAP 55, PARCEL 36  
LEE EATSON 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: GENERAL RETAIL,  
PROFESSIONAL SERVICES-NON MEDICAL

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

**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 TRANSMITTERS 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 POLICES 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.

**LOT COVERAGE:**  
EXISTING BUILDING AREA = 49,755 S.F.  
NEW BUILDING AREA = 20,552 S.F.  
BUILDING COVERAGE = 31.1%  
PROPOSED BUILDING HEIGHT: 33'-1"  
MAX BUILDING HEIGHT: 40'-0"  
EXISTING CONCRETE SURFACE: ±350 S.F.  
EXISTING ASPHALT SURFACE: ±59,926 S.F.  
EXISTING IMPERVIOUS AREA: ±110,511 S.F. = 48.65%  
PROPOSED ASPHALT SURFACE: ±23,008 S.F.  
PROPOSED IMPERVIOUS AREA: ±1,528 S.F.  
PROPOSED IMPERVIOUS AREA: ±45,088 S.F. = 20.00%

**PARKING INFORMATION:**  
REQUIRED PARKING:  
GENERAL RETAIL: 11,000/250 = 44 SPACES  
PROFESSIONAL SERVICES: 9,552/400 = 24 SPACES  
TOTAL PARKING: 68 SPACES, INCLUDING 4 HANDICAP SPACES

**UTILITY NOTE:**  
COORDINATE ALL UTILITY INSTALLATIONS WITH GOVERNING ENTITIES.

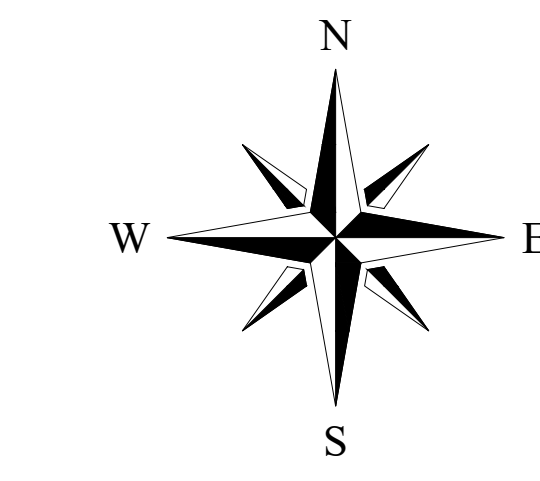
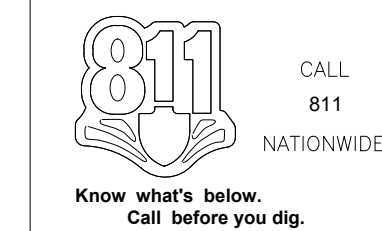
- GENERAL NOTES:**
- PRIOR TO BEGINNING CONSTRUCTION ON THIS SITE THE LOCATION OF UTILITIES MUST BE IDENTIFIED BY CALLING THE TOLL-FREE TENNESSEE ONE CALL REFERENCE NUMBER 1-800-351-1111.
  - ALL CONSTRUCTION ON THIS SITE SHALL COMPLY WITH APPLICABLE REGULATIONS AS SPECIFIED BY THE CITY OF MILLERSVILLE AND THE STATE OF TENNESSEE.
  - TOPSOIL SHALL BE PLACED ON EXCAVATED AREAS WHICH REQUIRE NEW VEGETATION. GROUND COVER SHALL BE REESTABLISHED WITH KENTUCKY 31 FESCUE SEED AT A MINIMUM OF 250 LBS. PER ACRE. SLOPES 3:1 OR GREATER SHALL BE LINED WITH NORTH AMERICAN GREEN S150 GRASS MATING OR EQUAL.
  - 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.
  - 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.
  - THE TOPOGRAPHIC SURVEY SHOWN HEREON WAS TAKEN FROM A SURVEY BY CHANDLER SURVEYING OF PLEASANT VIEW, TN.
  - CONSTRUCTION WILL BEGIN FOLLOWING PLAN APPROVAL BY THE CITY OF ASHLAND CITY. ANY DUMPSTER SHALL BE FULLY ENCLOSED, WATCHING THE FACE 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.
  - ALL ADDITIONS IN THE FUTURE MUST BE BUILT TO THESE STANDARDS.
  - ACCORDING TO MAP 42021C0170E, DATED 02/28/2021, PORTIONS OF THE SITE ARE LOCATED WITHIN FLOOD HAZARD AREAS 'AE' AND 'X'.

**NPDES PERMIT NOTE:**  
THE MAXIMUM DISTURBED AREA FOR THIS PROJECT IS OVER 1 ACRE. THIS SITE IS CURRENTLY COVERED UNDER PERMIT NUMBER TNR245326.

*Joshua M. Lyon*  
JOSHUA M. LYON, P.E.  
PROJECT MANAGER

- EP&SC NOTES:**
- 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.
  - ALL EP&SC DEVICES ARE TO REMAIN IN PLACE UNTIL THE SITE HAS BEEN STABILIZED AND A GOOD STAND OF GRASS HAS BEEN ESTABLISHED.
  - 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).
  - 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.
  - EXCAVATED TOPSOIL TO BE REUSED MUST BE STOCKPILED AND ENCLOSED WITH SILT FENCING.
  - 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.
  - APPROVED INLET PROTECTIONS FOR NEARBY STORM SEWER CURB AND DROP INLETS MUST BE INSTALLED WITHIN 24 HOURS OF GRADING COMMENCEMENT.
  - VEGETATIVE BUFFERS OR OTHER PROTECTION MUST BE PROVIDED ALONG STREAMS, RIVERS, AND PONDS TO AVOID EROSION OF BANKS.
  - 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.
  - 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.
  - SEDIMENT MUST BE REMOVED FROM SEDIMENT BARRIERS, PONDS, AND OTHER SEDIMENT CONTROLS WHEN DESIGN CAPACITY HAS BEEN REACHED BY 50%.
  - SEDIMENT THAT HAS ESCAPED THE CONSTRUCTION SITE AND HAS COLLECTED IN THE STREET OR DRAINAGE STRUCTURES MUST IMMEDIATELY BE PHYSICALLY REMOVED.
  - 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.
  - 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



SCALE IN FEET  
0 30 60

**LEGEND:**

	PROPERTY LINE		MANHOLE
	EXISTING WATER LINE		CLEAN OUT
	EXISTING SEWER LINE		POWER POLE
	OVERHEAD ELECTRIC LINE		WATER METER
	NEW CURBS		FIRE HYDRANT
	NEW CONCRETE		IRON ROD OLD
	NEW 12" WATER LINE		IRON ROD NEW
	NEW 8" SEWER LINE		INVERTED PIPE
	NEW 6" SEWER LINE		SPOT ELEVATION
	NEW 4" SEWER LINE		SLOPE DIRECTION



**KLOBER ENGINEERING SERVICES**  
SERVING CLIENTS WITH CIVIL ENGINEERING & LAND DEVELOPMENT SERVICES  
3556 TONYA WAY #31772  
ASHLAND CITY, TN 37105  
PHONE: (615) 382-2000 FAX: (615) 379-4488  
www.klobereng.com

NO.	DATE	DESCRIPTION



**ACE RETAIL CENTER**  
1209 TN HWY 12 SOUTH  
ASHLAND CITY, TN 37105  
CHEATHAM COUNTY

DRAWN BY: CIN  
CHECKED BY: JML  
DATE: 5/7/24  
PROJECT NO.: C02624

EXISTING CONDITIONS  
SHEET NUMBER  
**C1.00**

NOT FOR CONSTRUCTION

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TRANSMITTERS SERVING THE GATED FACILITY OR COMMUNITY WHICH ALLOW EMERGENCY  
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- ALL ADDITIONS IN THE FUTURE MUST BE BUILT TO THESE STANDARDS.
- ACCORDING TO MAP 47021C0170E, DATED 02/28/2021, PORTIONS OF THE SITE ARE LOCATED WITHIN FLOOD HAZARD AREAS 'AE' AND 'X'.

**NPDES PERMIT NOTE:**  
THE MAXIMUM DISTURBED AREA FOR THIS PROJECT IS OVER 1 ACRE. THIS SITE IS CURRENTLY COVERED UNDER PERMIT NUMBER TNR245326.

**EP&SC NOTES:**

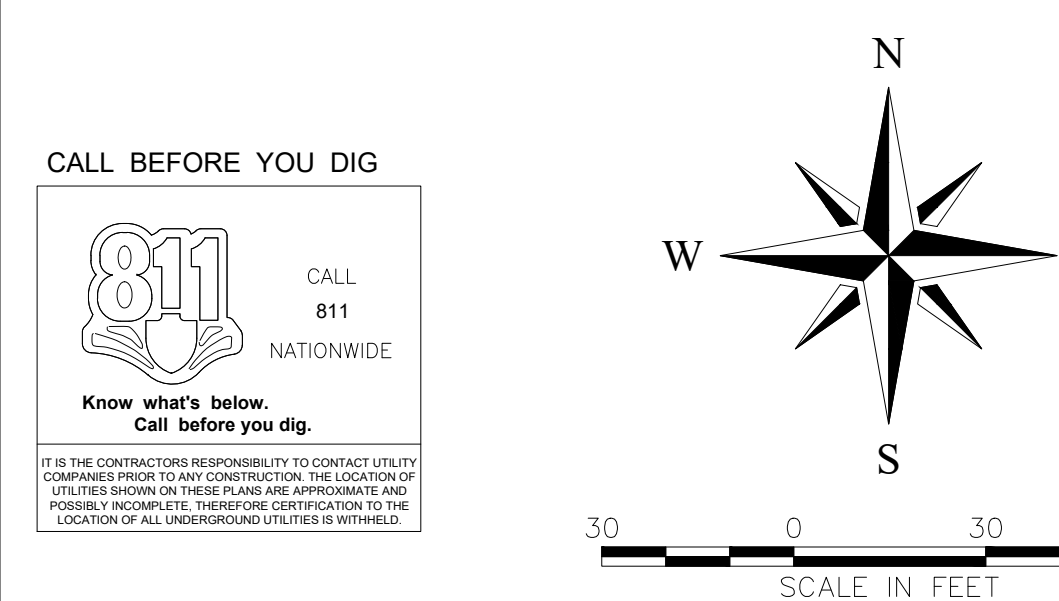
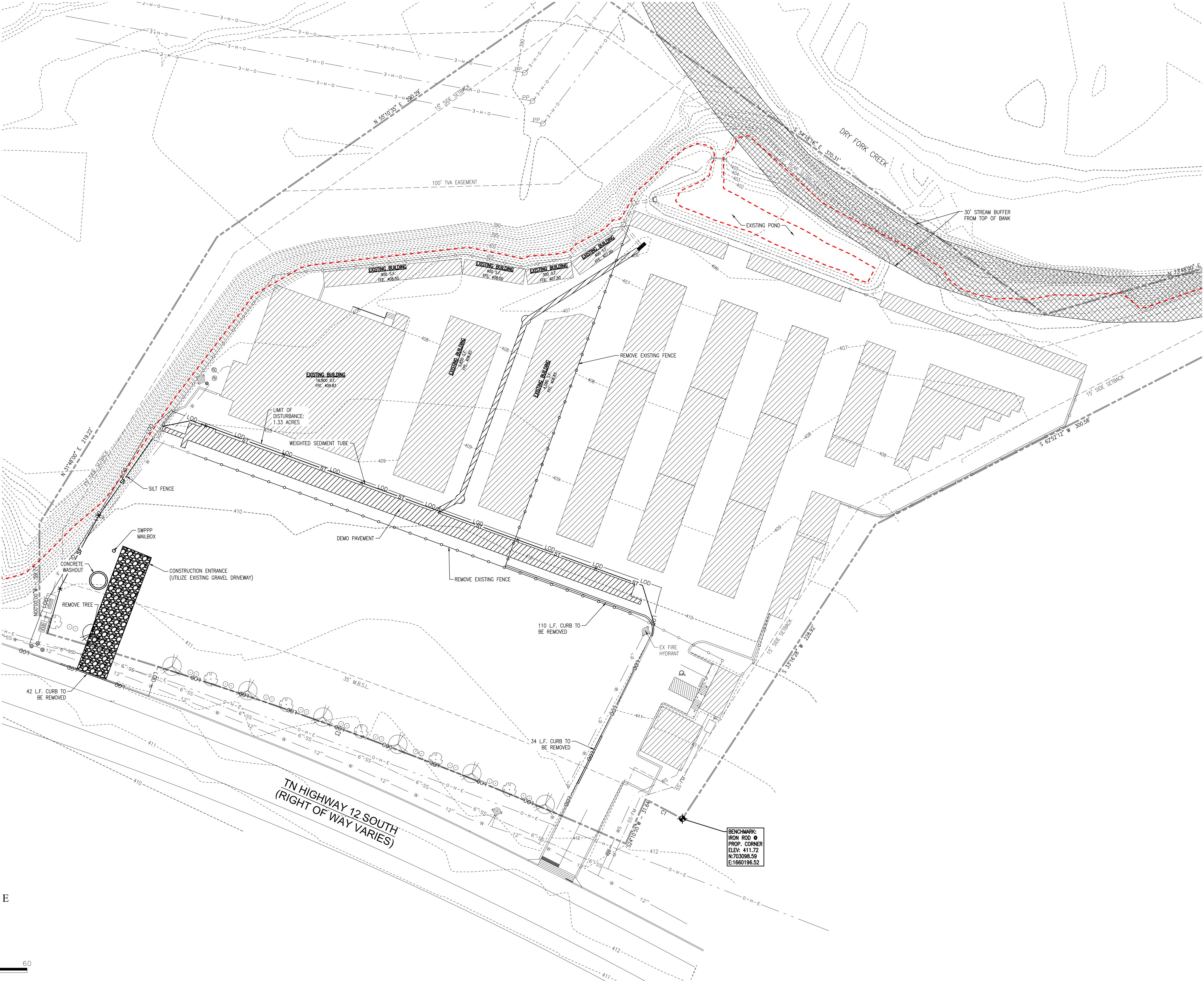
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- SILT FENCE, OR OTHER SEDIMENT BARRIERS ARE TO BE INSTALLED PROPERLY ALONG TOPOGRAPHICAL CONTOURS DOWN SLOPE OF THE AREA TO BE DISTURBED PRIOR TO ANY GRADING, CLEARING AND/OR ANY OTHER CONSTRUCTION ACTIVITY.
- EXCAVATED TOPSOIL TO BE REUSED MUST BE STOCKPILED AND ENCLOSED WITH SILT FENCING.
- 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.
- APPROVED INLET PROTECTIONS FOR NEARBY STORM SEWER CURB AND DROP INLETS MUST BE INSTALLED WITHIN 24 HOURS OF GRADING COMMENCEMENT.
- VEGETATIVE BUFFERS OR OTHER PROTECTION MUST BE PROVIDED ALONG STREAMS, RIVERS, AND PONDS TO AVOID EROSION OF BANKS.
- 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.
- 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.
- SEDIMENT MUST BE REMOVED FROM SEDIMENT BARRIERS, PONDS, AND OTHER SEDIMENT CONTROLS WHEN DESIGN CAPACITY HAS BEEN REACHED BY 50%.
- SEDIMENT THAT HAS ESCAPED THE CONSTRUCTION SITE AND HAS COLLECTED IN THE STREET OR DRAINAGE STRUCTURES MUST IMMEDIATELY BE PHYSICALLY REMOVED.
- 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.
- 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.

IF THE CONTRACTOR'S RESPONSIBILITY TO CONTACT UTILITY LOCATIONS IS NOT SHOWN ON THESE PLANS ARE APPROXIMATE AND POSSIBLY INCOMPLETE. THEREFORE, CONSTRUCTION TO THE LOCATION OF ALL UNDERGROUND UTILITIES IS WITHELD.



**LEGEND:**

- PROPERTY LINE
- EXISTING WATER LINE
- EXISTING SEWER LINE
- OVERHEAD ELECTRIC LINE
- NEW CURB
- SILT FENCE
- EXISTING 5' CONTOUR
- EXISTING 1' CONTOUR
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- DEM. LINE
- MANHOLE
- CLEAN OUT
- POWER POLE
- WATER METER
- FIRE HYDRANT
- IRON ROD OLD
- IRON ROD NEW
- IN-25.42 PIPE INVERT
- 28.14 SPOT ELEVATION
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**KLOBER ENGINEERING SERVICES**

SERVING CLIENTS WITH CIVIL ENGINEERING & LAND DEVELOPMENT SERVICES  
3556 TOLSON TOWER, ASHLAND CITY, TN 37172  
PHONE: (615) 382-2000 FAX: (615) 371-4448  
www.klobereing.com

NO.	DATE	DESCRIPTION

**OSHA 10 HOUR**

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

**ACE RETAIL CENTER**

1209 TN HWY-12 SOUTH  
ASHLAND CITY, TN 37105  
CHEATHAM COUNTY

DRAWN BY: CIN  
CHECKED BY: JML  
DATE: 5/7/24  
PROJECT NO.: C02624

**INITIAL EP&SC PLAN**

SHEET NUMBER  
**C1.01**

ITEM # 4

NOT FOR CONSTRUCTION



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

**DEED REFERENCE:**  
MAP 55, PARCEL 36  
LEE EATSON COMMERCIAL LOTS - LOT 1

**PROPERTY INFORMATION:**  
AREA: 226,164 S.F. = 5.19 ACRES  
PROPOSED ASPHALT SURFACE: 115,228 S.F. = 20.00%  
PROPOSED IMPERVIOUS AREA: 145,088 S.F. = 20.00%

**ZONING:**  
COMMERCIAL C-2

**LOT COVERAGE:**  
EXISTING BUILDING AREA = 49,755 S.F.  
NEW BUILDING AREA = 20,552 S.F.  
BUILDING COVERAGE = 31.1%  
PROPOSED BUILDING HEIGHT: 33'-1"  
MAX BUILDING HEIGHT: 40'-0"  
EXISTING CONCRETE SURFACE: ±350 S.F.  
EXISTING ASPHALT SURFACE: 159,926 S.F.  
EXISTING IMPERVIOUS AREA: ±110,511 S.F. = 48.65%  
PROPOSED ASPHALT SURFACE: 123,008 S.F.  
PROPOSED IMPERVIOUS AREA: ±45,088 S.F. = 20.00%

**PARKING INFORMATION:**  
REQUIRED PARKING:  
GENERAL RETAIL: 11,000/250 = 44 SPACES  
PROFESSIONAL SERVICES: 9,552/400 = 24 SPACES  
TOTAL PARKING: 68 SPACES,  
INCLUDING 4 HANDICAP SPACES

**SITE USE:**  
EXISTING USE: MINI STORAGE  
PROPOSED USE: GENERAL RETAIL,  
PROFESSIONAL SERVICES-NON MEDICAL

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

**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 TRANSMITTERS 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.

**UTILITY NOTE:**  
COORDINATE ALL UTILITY INSTALLATIONS WITH GOVERNING ENTITIES.

**GENERAL NOTES:**

- 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.
- ALL CONSTRUCTION ON THIS SITE SHALL COMPLY WITH APPLICABLE REGULATIONS AS SPECIFIED BY THE CITY OF MILLERSVILLE AND THE STATE OF TENNESSEE.
- TOPSOIL SHALL BE PLACED ON EXCAVATED AREAS WHICH REQUIRE NEW VEGETATION. GROUND COVER SHALL BE REESTABLISHED WITH KENTUCKY 31 FESCUE SEED 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.
- SILT FENCE SHALL BE INSTALLED IN ALL EROSION AREAS WHICH COULD ALLOW UNRETAINED 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.
- 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.
- THE TOPOGRAPHIC SURVEY SHOWN HEREON WAS TAKEN FROM A SURVEY BY CHANDLER SURVEYING OF PLEASANT VIEW, TN.
- CONSTRUCTION WILL BEGIN FOLLOWING PLAN APPROVAL BY THE CITY OF ASHLAND CITY. 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.
- ALL ADDITIONS IN THE FUTURE MUST BE BUILT TO THESE STANDARDS.
- ACCORDING TO MAP 47021C0170E, DATED 02/26/2021, PORTIONS OF THE SITE ARE LOCATED WITHIN FLOOD HAZARD AREAS 'AE' AND 'X'.

**NPDES PERMIT NOTE:**  
THE MAXIMUM DISTURBED AREA FOR THIS PROJECT IS OVER 1 ACRE. THIS SITE IS CURRENTLY COVERED UNDER PERMIT NUMBER TMR245326.

**EP&SC NOTES:**

- 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.
- ALL EP&SC DEVICES ARE TO REMAIN IN PLACE UNTIL THE SITE HAS BEEN STABILIZED AND A GOOD STAND OF GRASS HAS BEEN ESTABLISHED.
- 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).
- 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.
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- 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.
- SEDIMENT MUST BE REMOVED FROM SEDIMENT BARRIERS, PONDS, AND OTHER SEDIMENT CONTROLS WHEN DESIGN CAPACITY HAS BEEN REACHED BY 50%.
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Know what's below. Call before you dig.

IF IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT UTILITY LOCATIONS, THESE PLANS ARE APPROXIMATE AND POSSIBLY INCOMPLETE. THEREFORE, CONFIRMATION TO THE LOCATION OF ALL UNDERGROUND UTILITIES IS Warranted.

**LEGEND:**

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

MANHOLE  
CLEAN OUT  
POWER POLE  
WATER METER  
FIRE HYDRANT  
IRON ROD OLD  
IRON ROD NEW

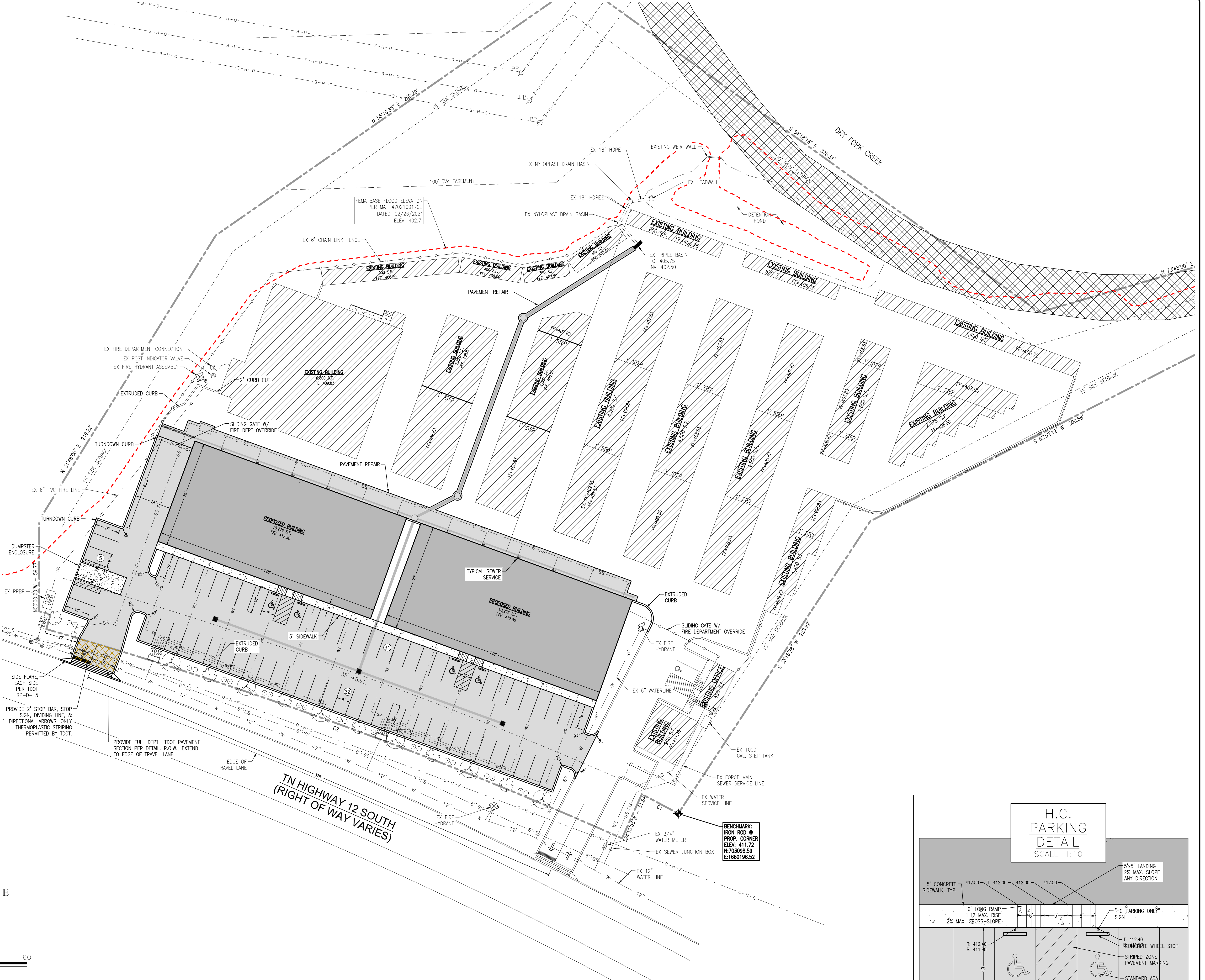
INV.-25.42 PIPE INVERT  
28.14 SPOT ELEVATION  
SLOPE DIRECTION

**TDOT DRAINAGE NOTE:**  
THERE WILL BE NO INCREASE IN THE  $Q_{50}$  RUNOFF FROM THE DEVELOPMENT ONTO THE STATE R.O.W.

050 POST: 27.00 CFS  
050 POST: 23.68 CFS  
0100 PRE: 30.24 CFS  
0100 POST: 26.20 CFS

**SIGHT DISTANCE NOTE:**  
THIS SITE COMPLES WITH THE ASHTO GREENBOOK INTERSECTION SITE DISTANCE.

**NOT FOR CONSTRUCTION**



**KLOBER ENGINEERING SERVICES**

SERVING CLIENTS WITH CIVIL ENGINEERING & LAND DEVELOPMENT SERVICES  
3556 TOWN CENTER BLVD. SUITE 200  
ASHLAND CITY, TN 37105  
PHONE: (615) 382-2000 FAX: (615) 371-4488  
www.klobereing.com

NO.	DATE	DESCRIPTION

**JOSUUA M. LYON, P.E.**  
PROJECT MANAGER

**JOSUUA M. LYON, P.E. TN#112331**

**ACE RETAIL CENTER**

1209 TN HWY-12 SOUTH  
ASHLAND CITY, TN 37015  
CHEATHAM COUNTY

**H.C. PARKING DETAIL**  
SCALE 1:10

5' CONCRETE SIDEWALK, TYP.  
6' LONG RAMP 1:12 MAX. RISE 2% MAX. CROSS-SLOPE  
5'x5' LANDING 2% MAX. SLOPE ANY DIRECTION  
TYP. PARKING ONLY SIGN  
CONCRETE WHEEL STOP  
STRIPED ZONE PAVEMENT MARKING  
STANDARD ADA PAVEMENT MARKING

T: 412.50  
T: 412.00  
T: 412.00  
T: 412.50  
T: 412.40  
B: 411.90  
T: 412.40  
T: 411.74  
T: 411.88  
T: 412.62

**DRAWN BY:** CIN  
**CHECKED BY:** JML  
**DATE:** 5/7/24  
**PROJECT NO.:** C02624

**SITE PLAN**

SHEET NUMBER  
**C1.02**

ITEM # 4

REPRODUCTION OF THESE DRAWINGS OR ANY PART THEREOF IS PROHIBITED WITHOUT WRITTEN APPROVAL OF KLOBER ENGINEERING SERVICES. THESE DRAWINGS ARE PROTECTED BY U.S. COPYRIGHT LAWS AND VIOLATORS ARE SUBJECT TO LEGAL RECOURSE.



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

**DEED REFERENCE:**  
MAP 55, PARCEL 36  
LEE BAXSON 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: GENERAL RETAIL,  
PROFESSIONAL SERVICES-NON MEDICAL

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MOST CURRENT EDITION OF THE  
ASHLAND CITY ZONING ORDINANCE.  
SEPARATE PERMIT REQUIRED.

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SECURITY GATES OR BARRIERS SHALL BE EQUIPPED WITH A RADIO  
OPERATED RECEIVER/CONTROLLER CAPABLE OF RECEIVING SIGNALS FROM A POLICE  
DEPARTMENT, SHERIFF'S DEPARTMENT OF THE GATED FACILITY OR COMMUNITY IS IN  
THE COUNTY), FIRE DEPARTMENT, UTILITY AND EMERGENCY MEDICAL SERVICES' RADIO  
TRANSMITTERS SERVING THE GATED FACILITY OR COMMUNITY WHICH ALLOW EMERGENCY  
RESPONDERS AND OTHER NECESSARY ON-DUTY EMPLOYEES TO OPEN THE SECURITY  
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MUST MEET POLICIES DEEMED NECESSARY BY THE AUTHORITY HAVING JURISDICTION  
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**NPDES PERMIT NOTE:**  
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*Joshua M. Lyon, P.E.*  
JOSHUA M. LYON, P.E.  
PROJECT MANAGER

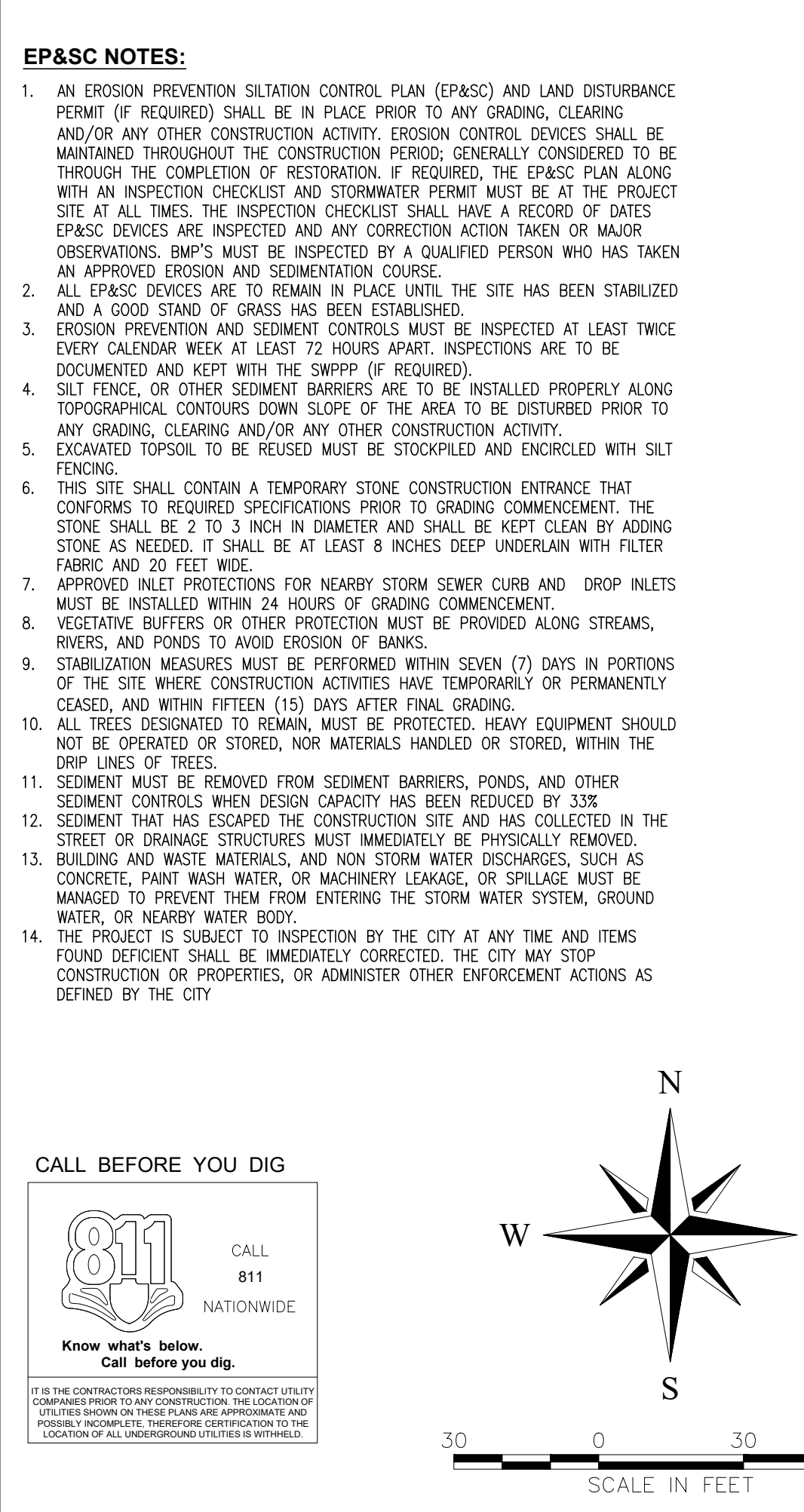
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**CALL BEFORE YOU DIG**

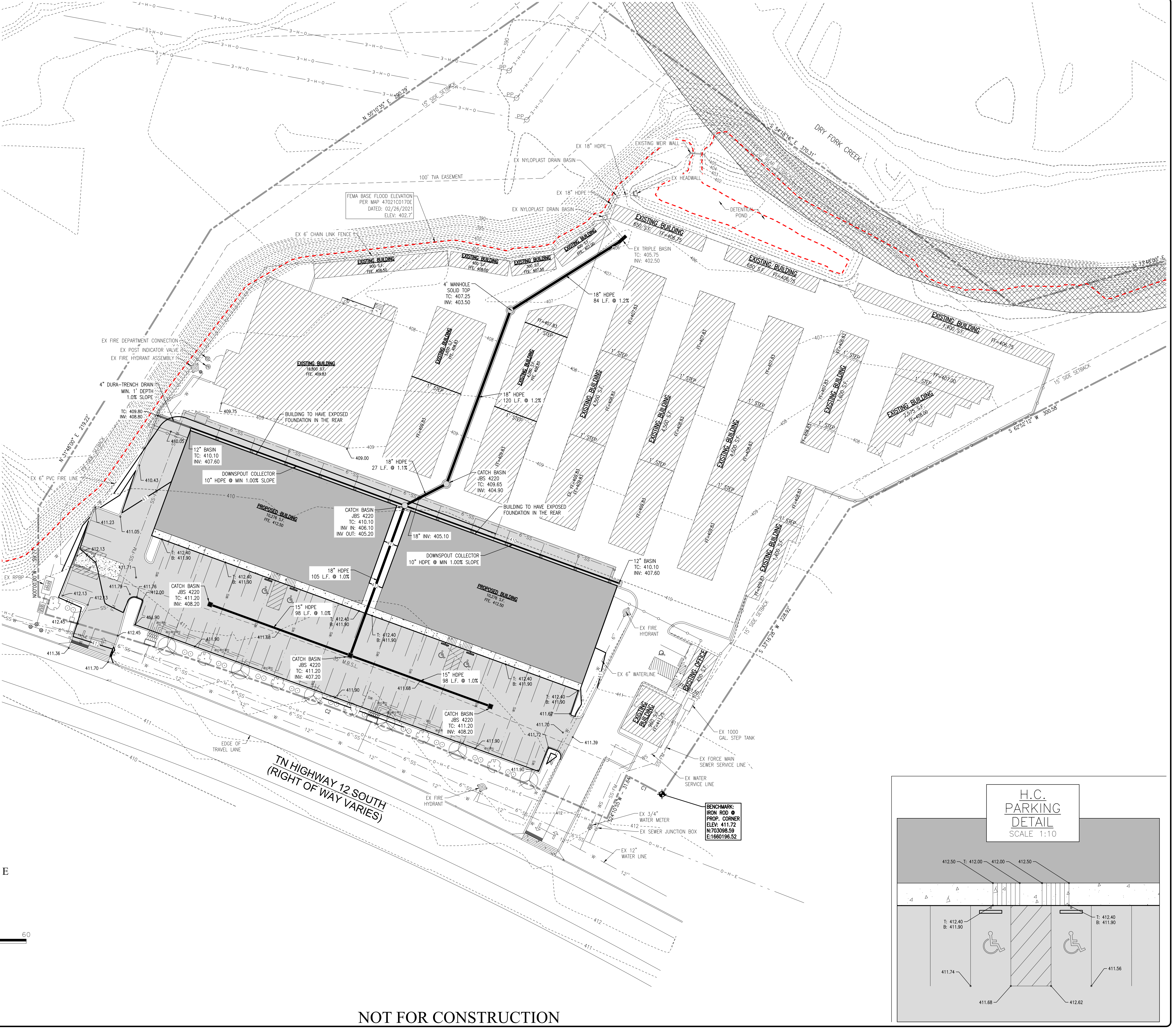
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**LEGEND:**

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- SLOPE DIRECTION



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3556 TOWN CENTER DR. #100  
ASHLAND CITY, TN 37105  
PHONE: (615) 382-2000 FAX: (615) 371-4448  
www.klobere.com

NO.	DATE	DESCRIPTION

**OSHA 10 HOUR**

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

**ACE RETAIL CENTER**

1209 TN HWY-12 SOUTH  
ASHLAND CITY, TN 37015  
CHEATHAM COUNTY

DRAWN BY: CIN  
CHECKED BY: JML  
DATE: 5/7/24  
PROJECT NO.: C02624

**GRADING & DRAINAGE PLAN**

SHEET NUMBER  
**C1.03**

ITEM # 4

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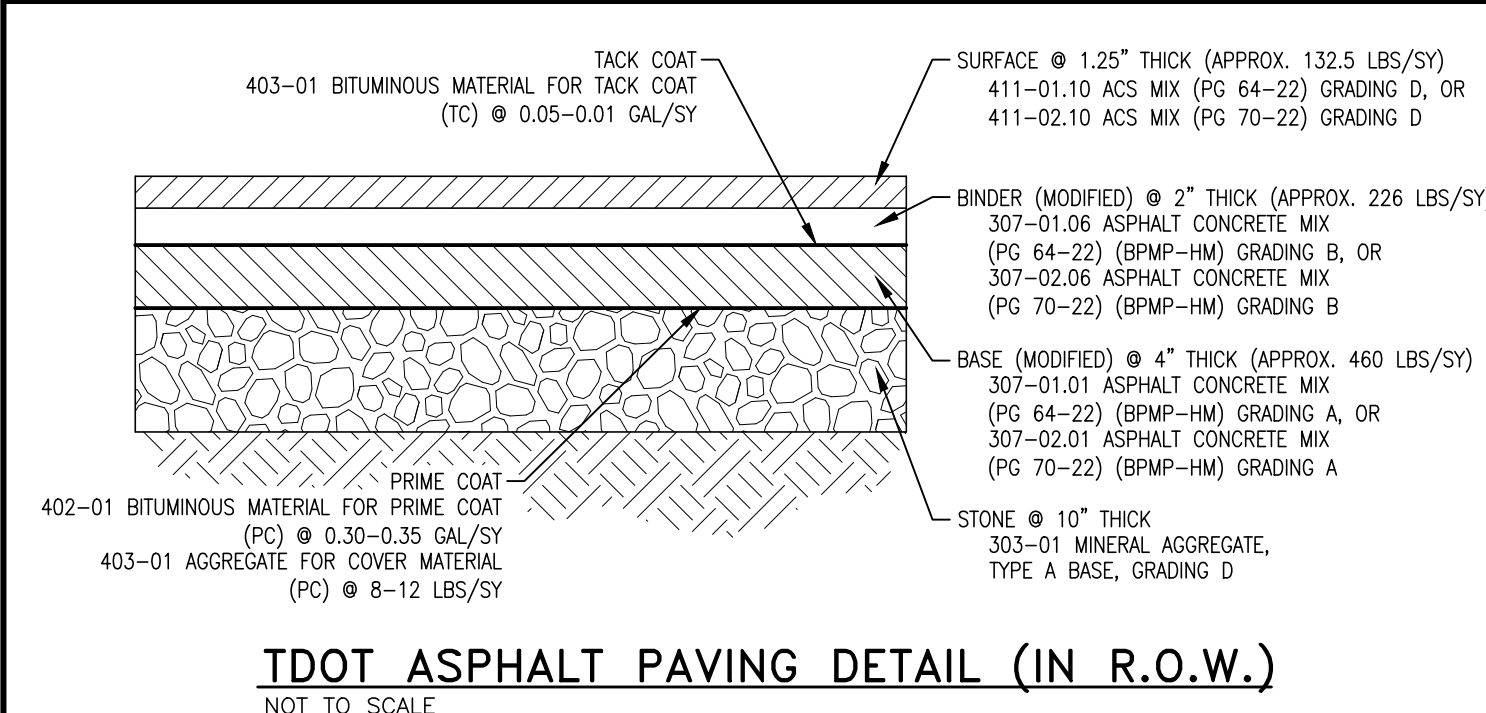
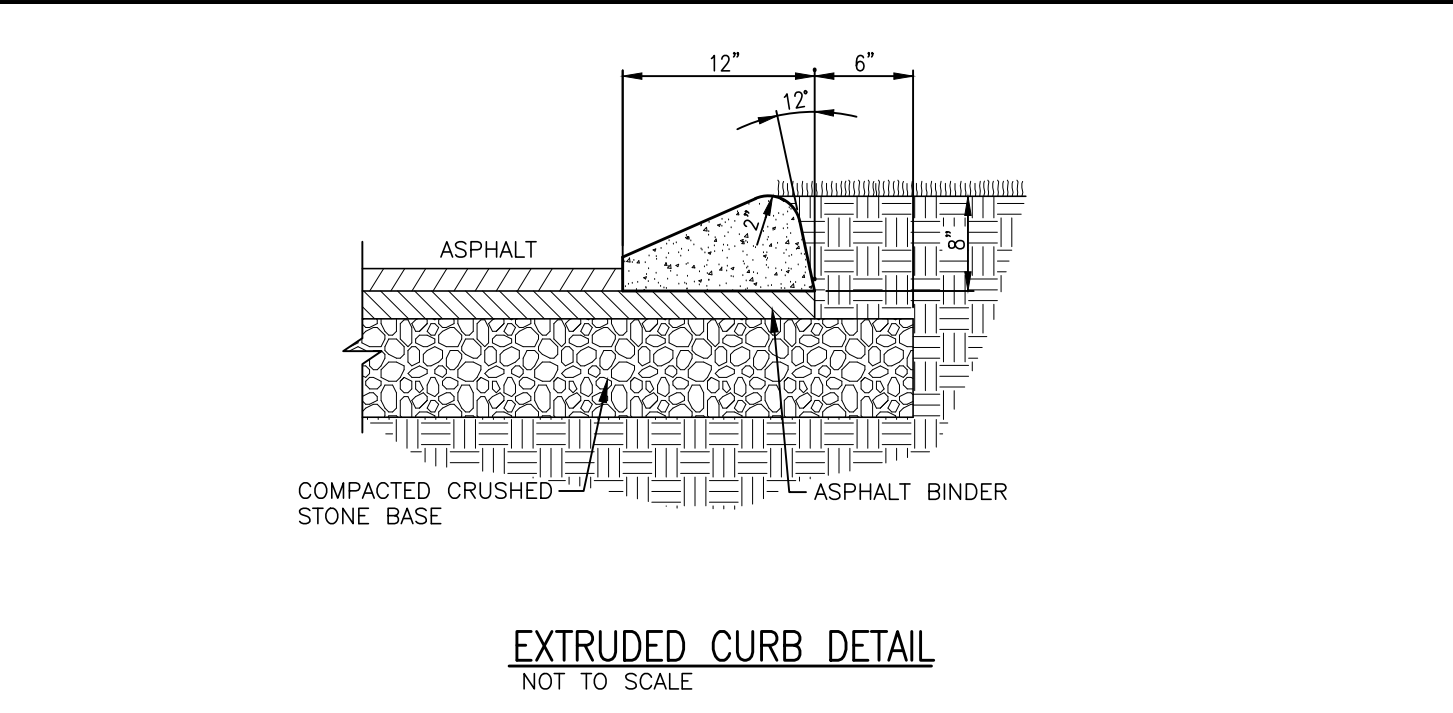
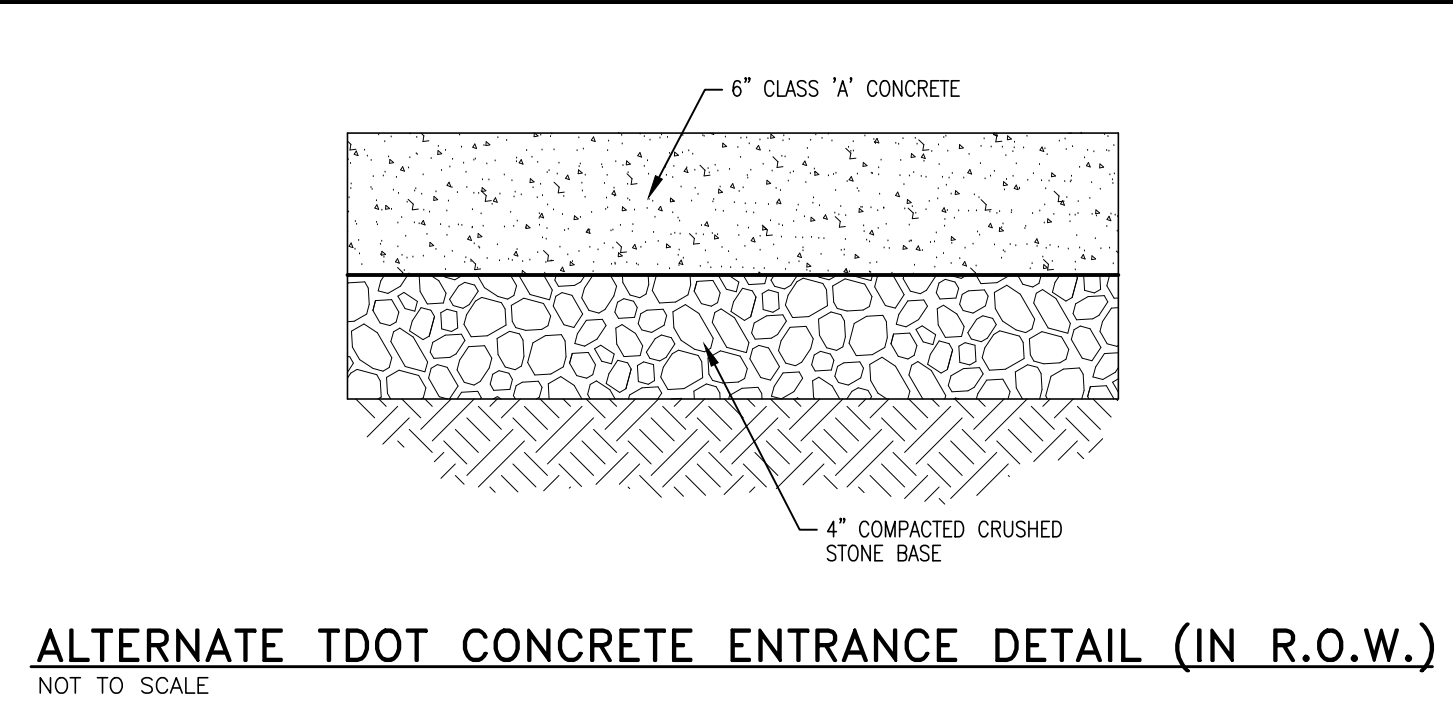
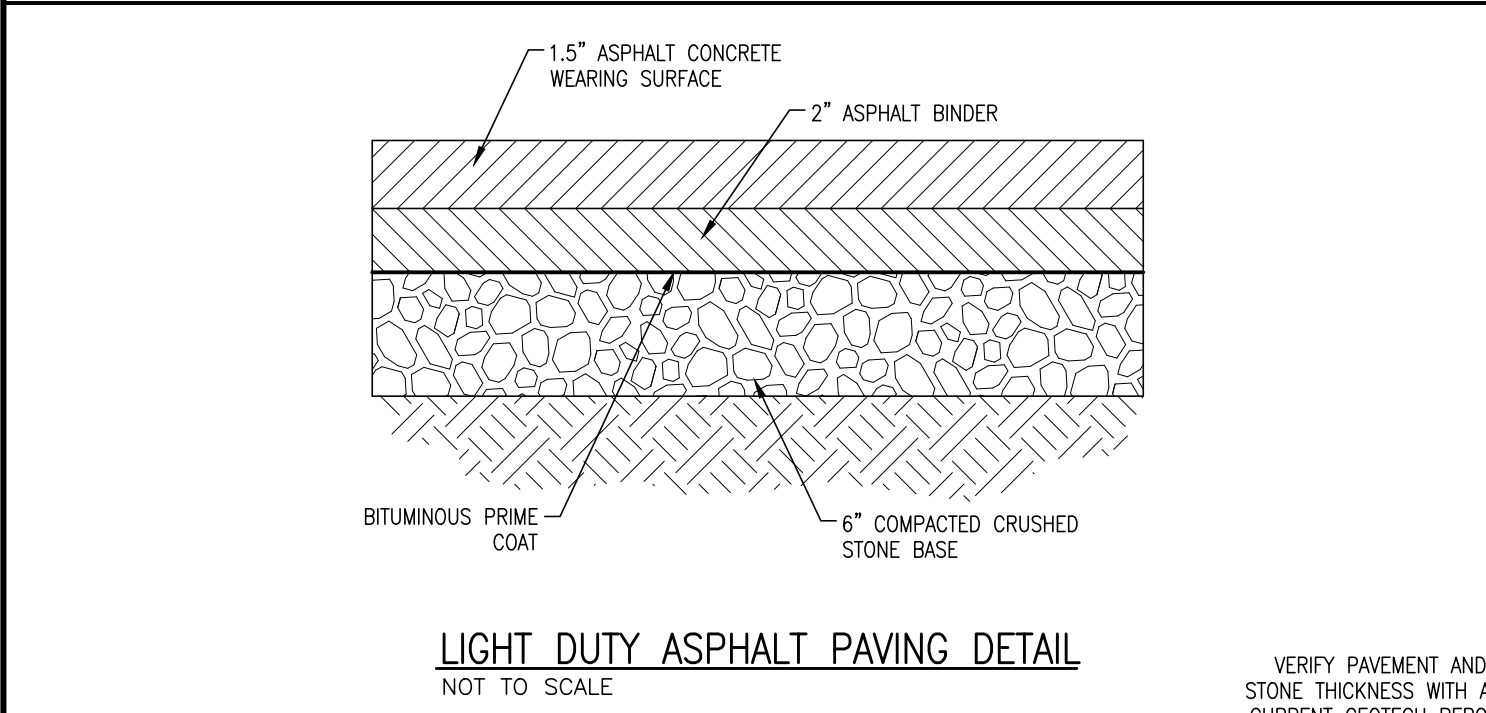
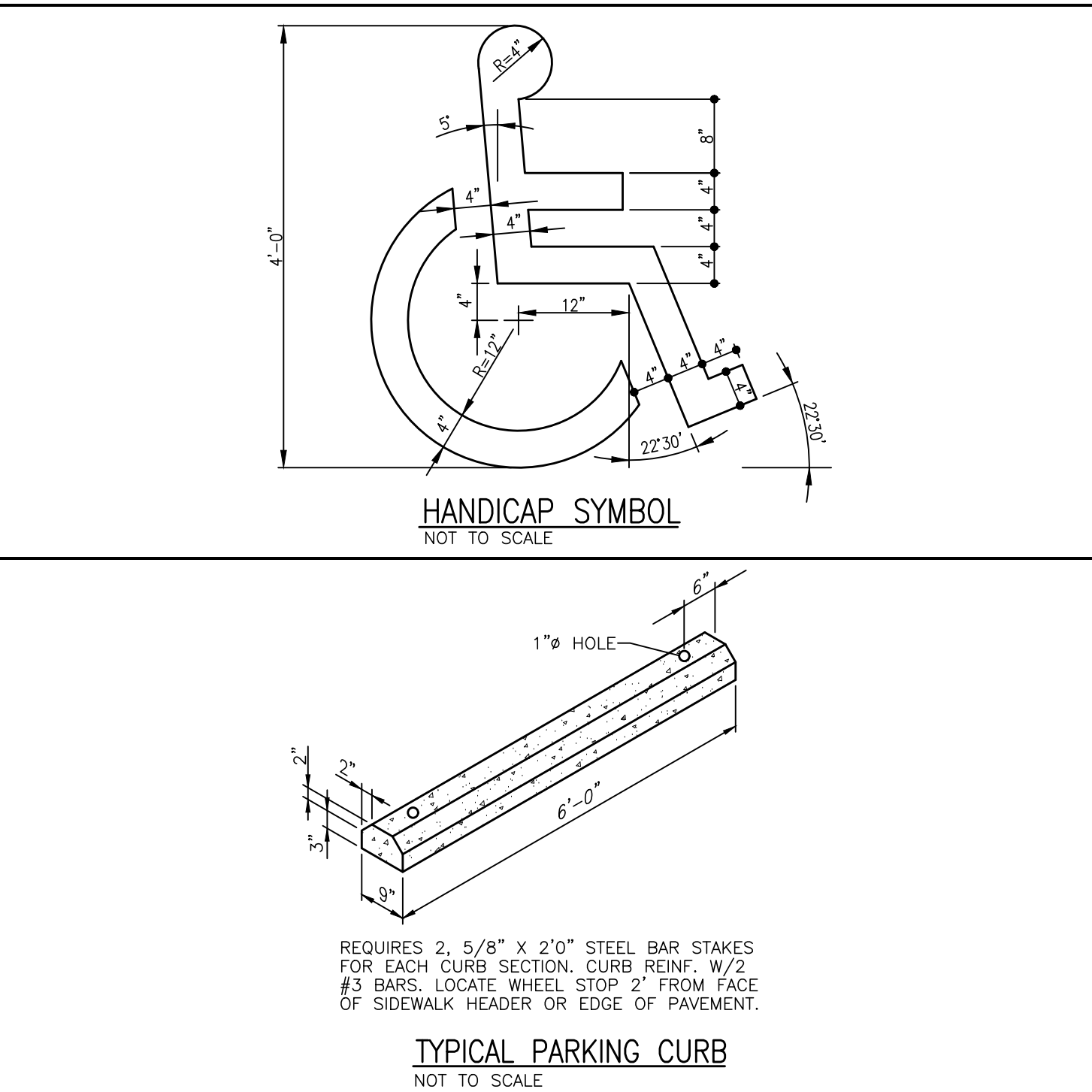
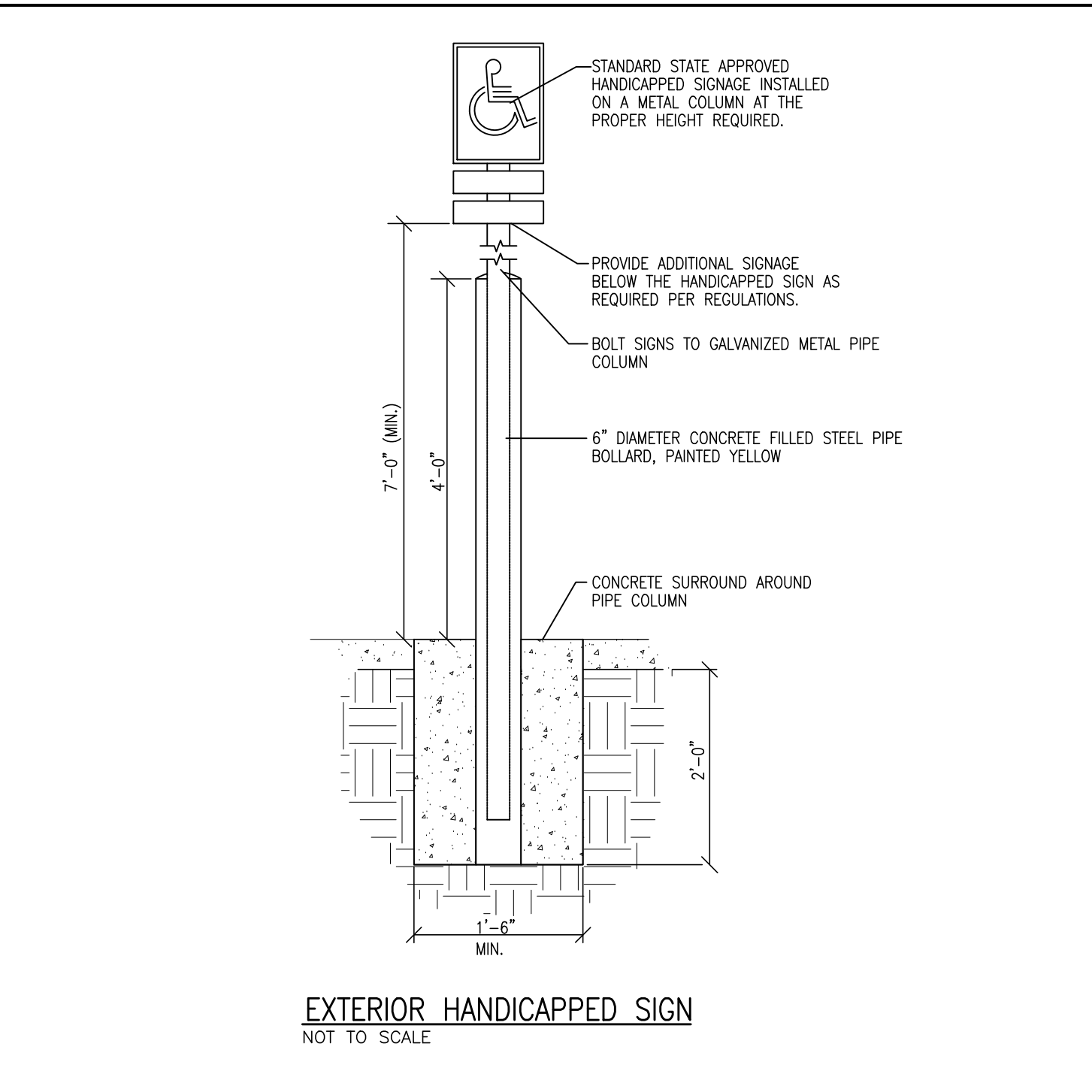
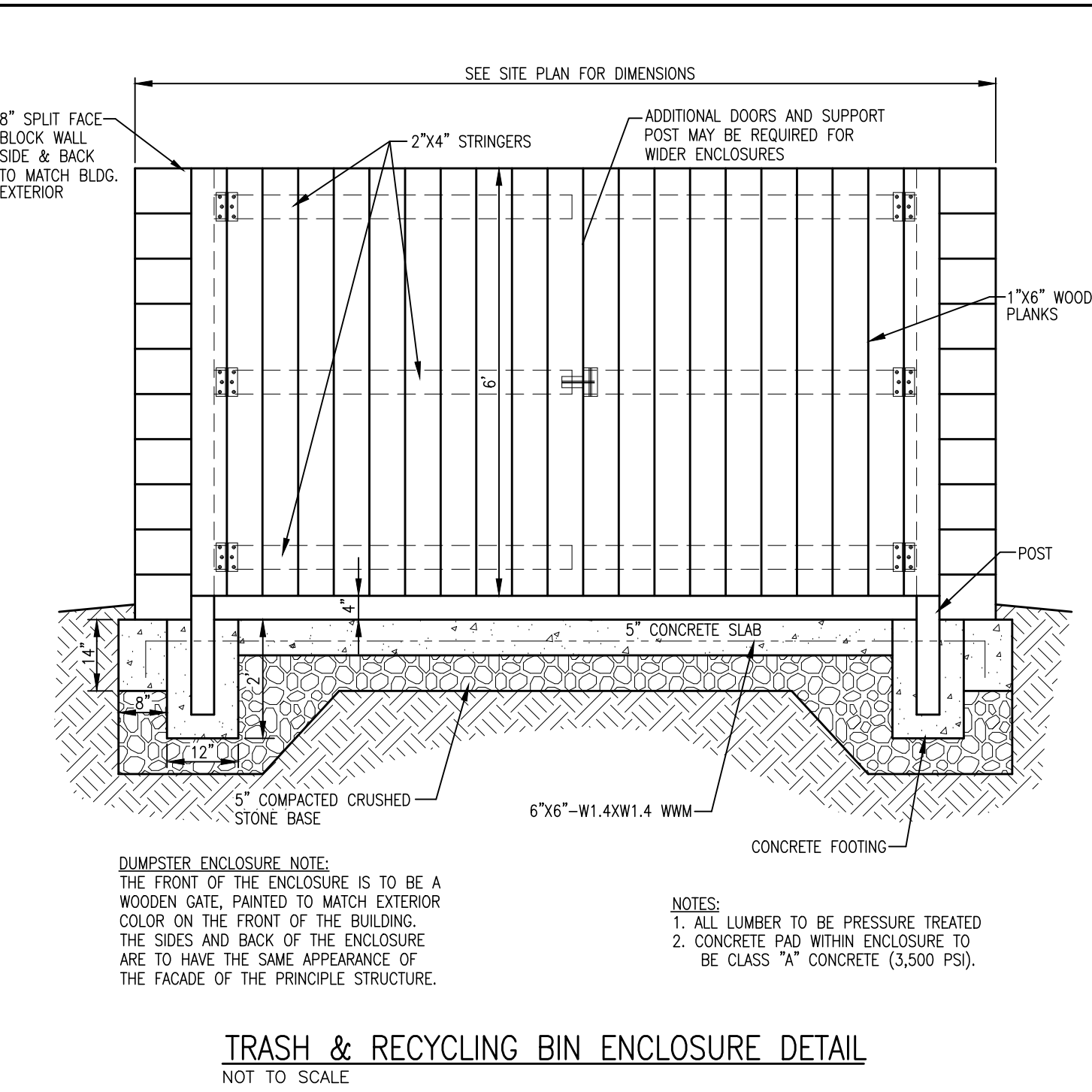
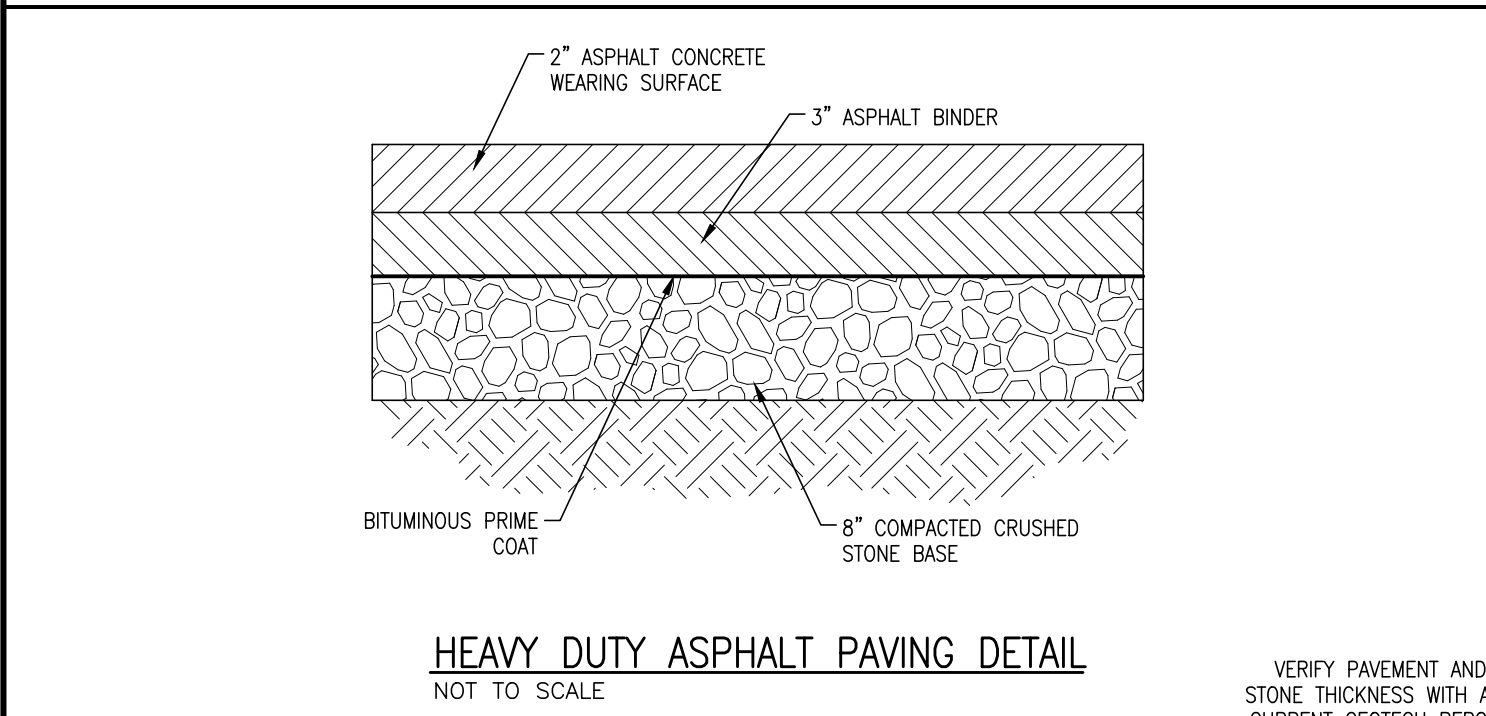
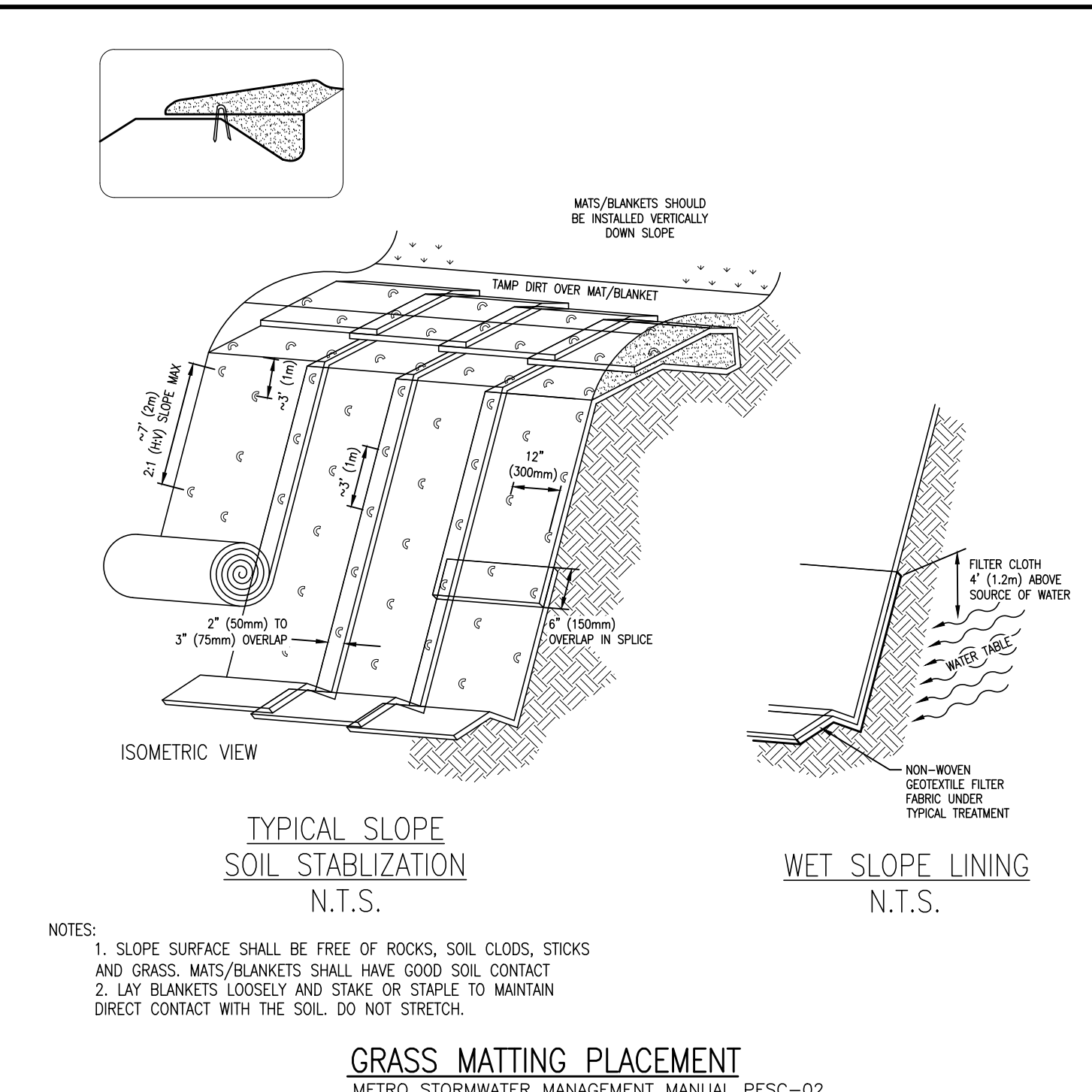
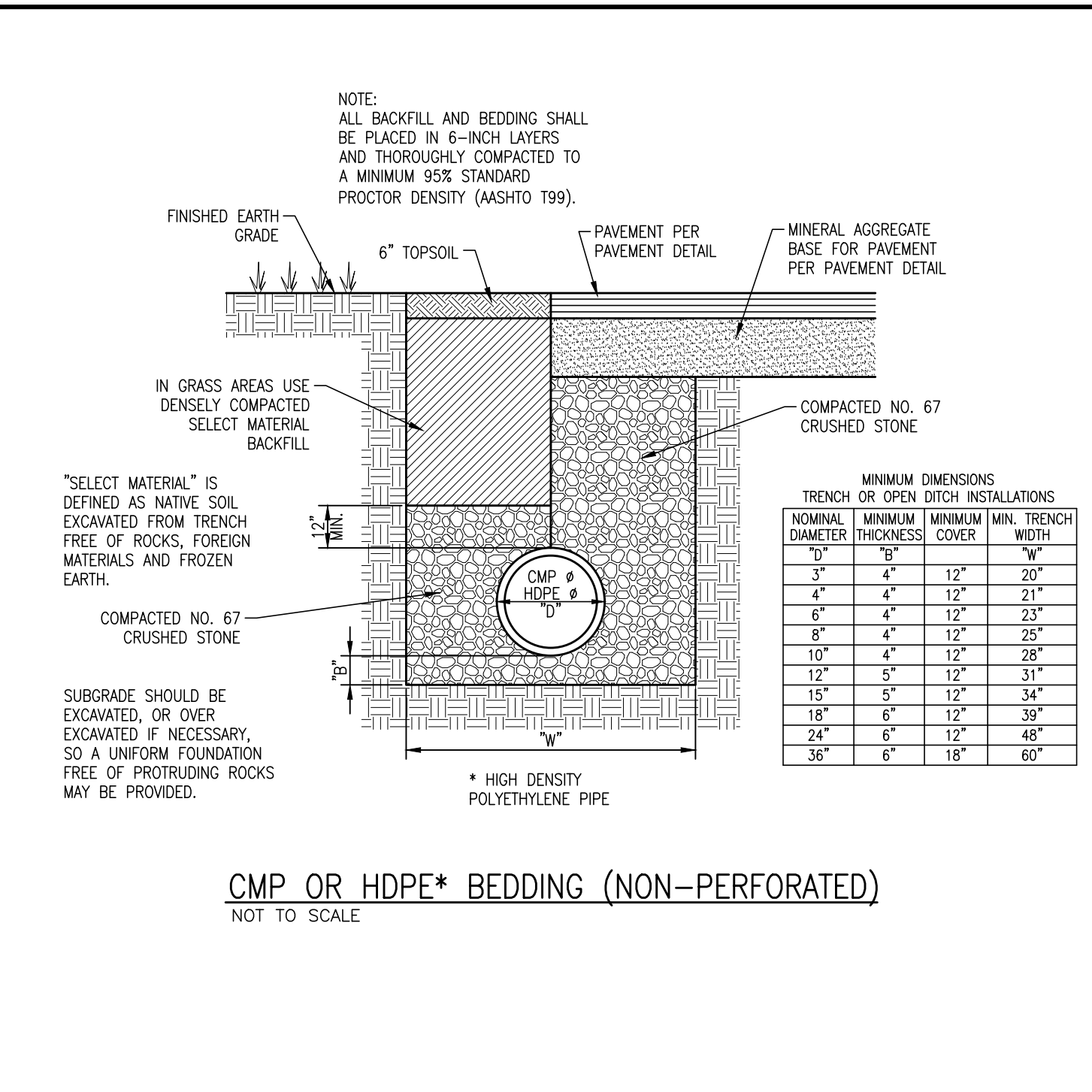
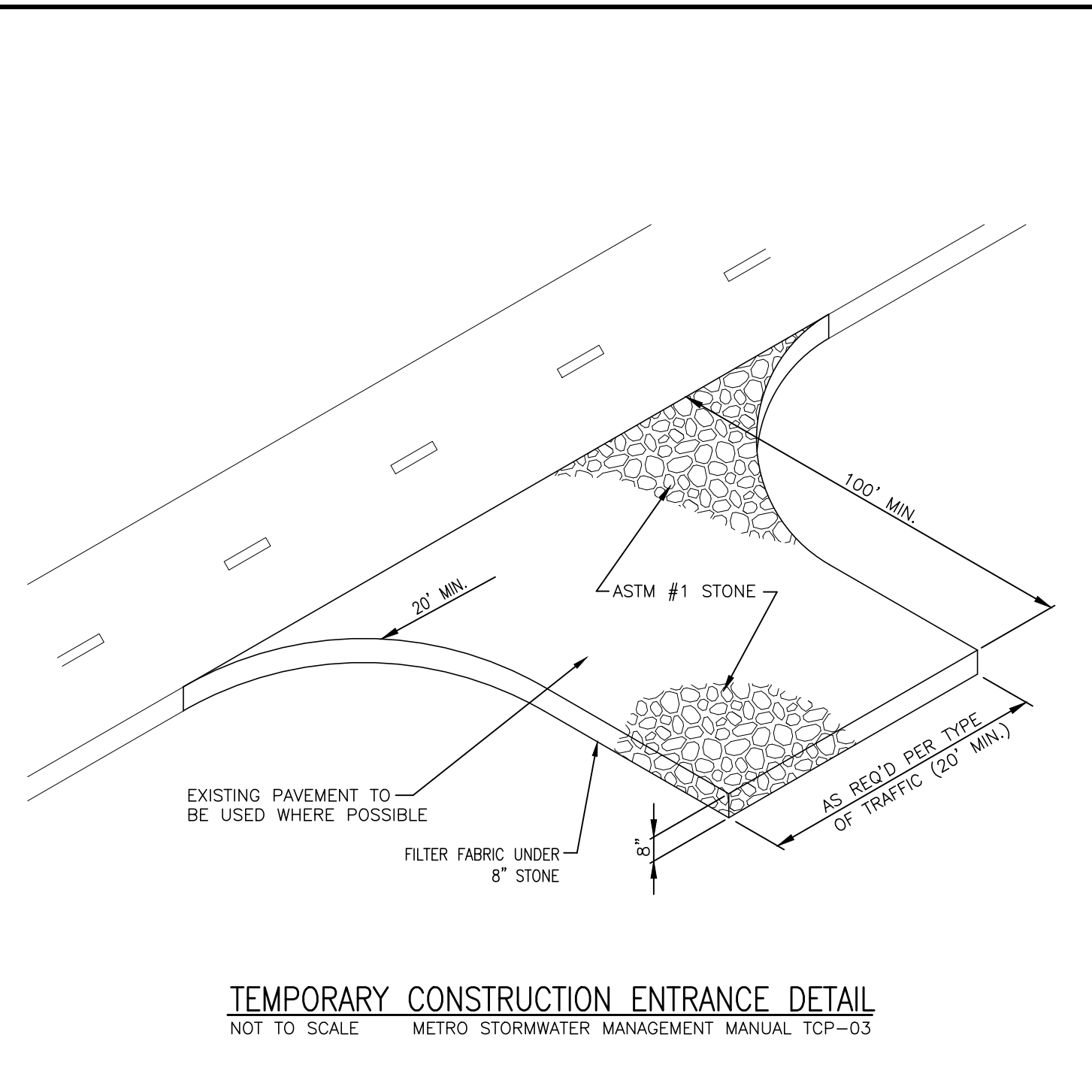
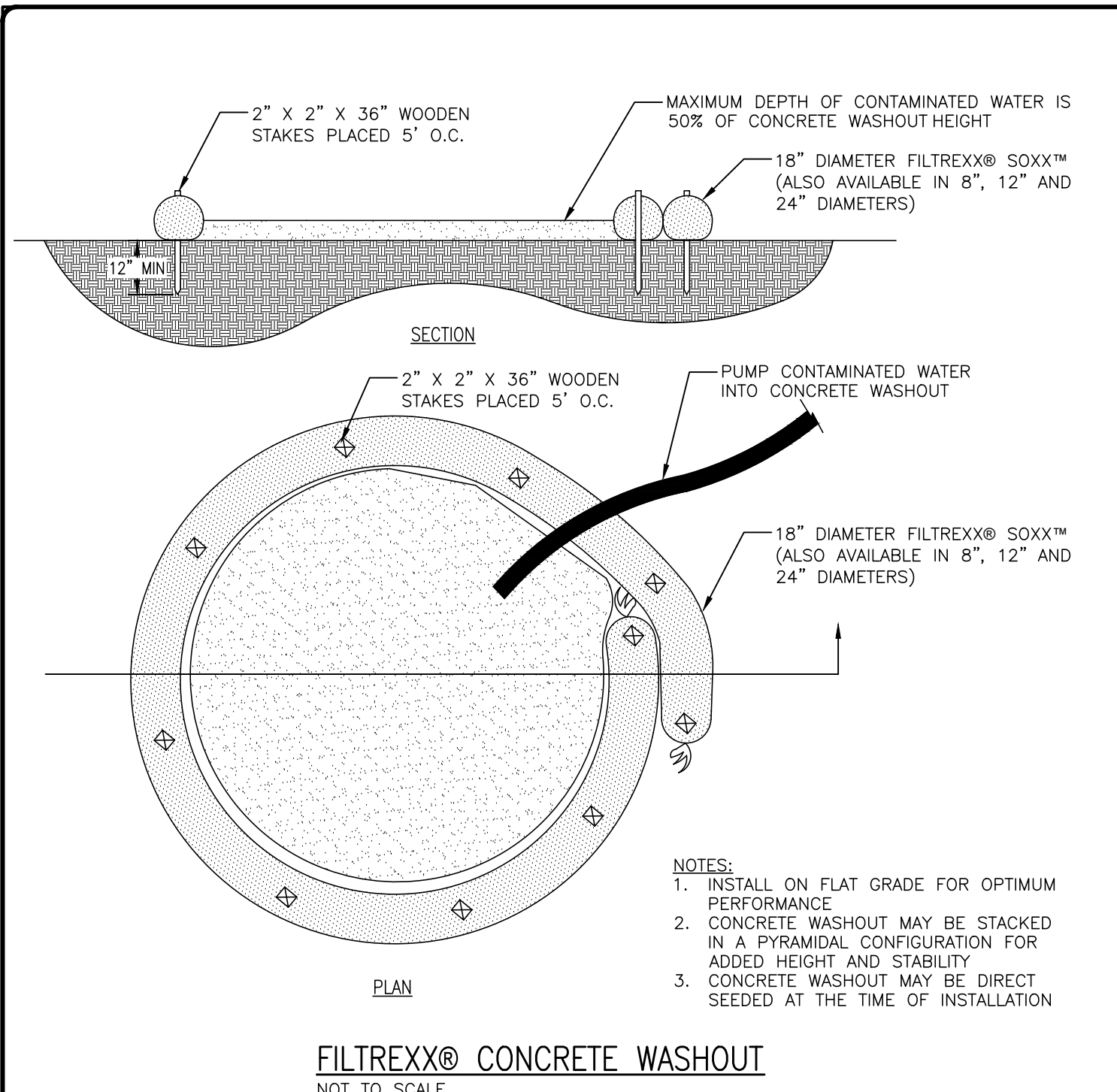












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www.klobereng.com

NO.	BY	DATE	DESCRIPTION

**CONVOY FOR TENNESSEE**

JOS (L) M. LYON, P.E. TN#112331

**ACE RETAIL CENTER**

1209 TN HWY-12 SOUTH  
ASHLAND CITY, TN 37015  
CHEATHAM COUNTY

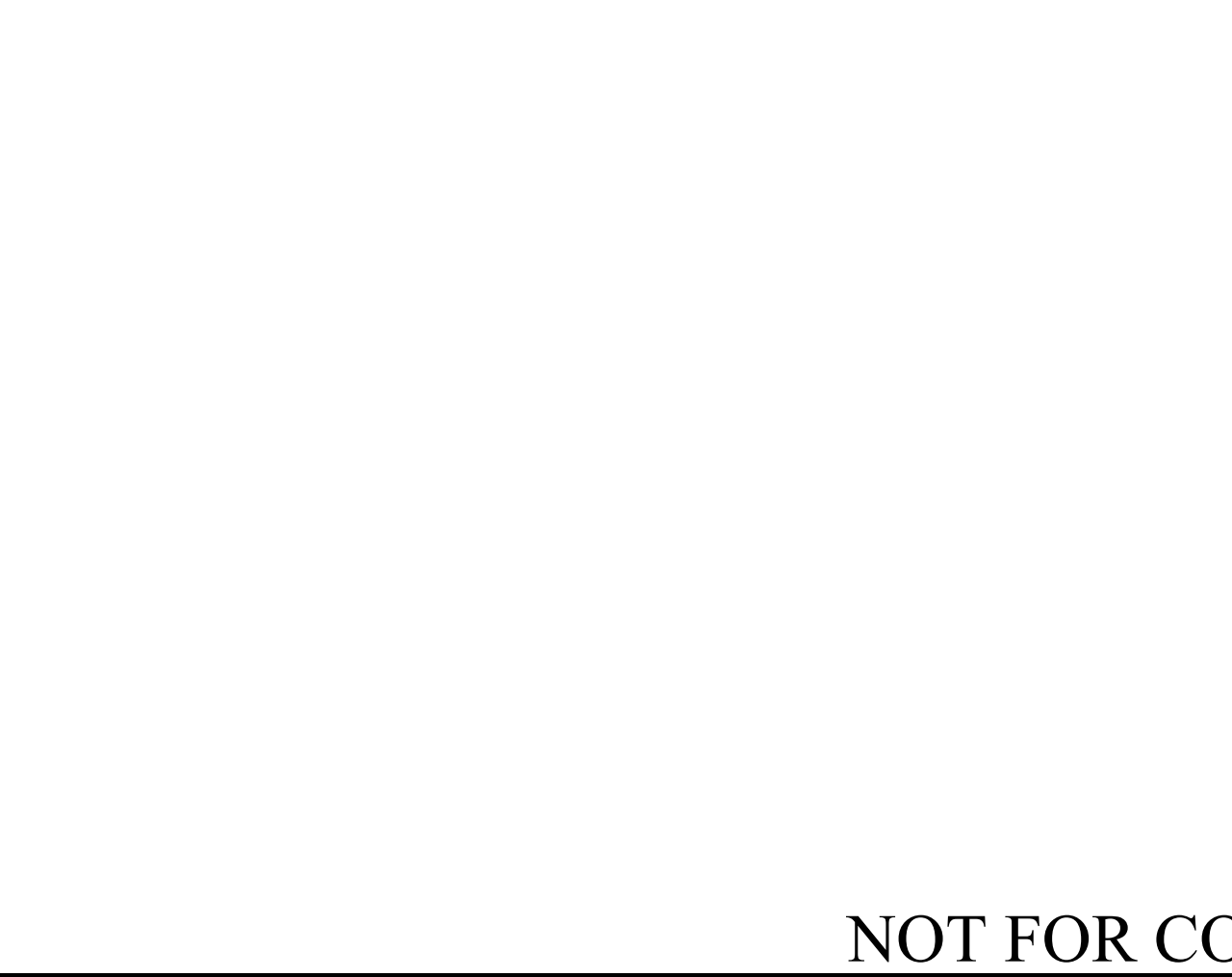
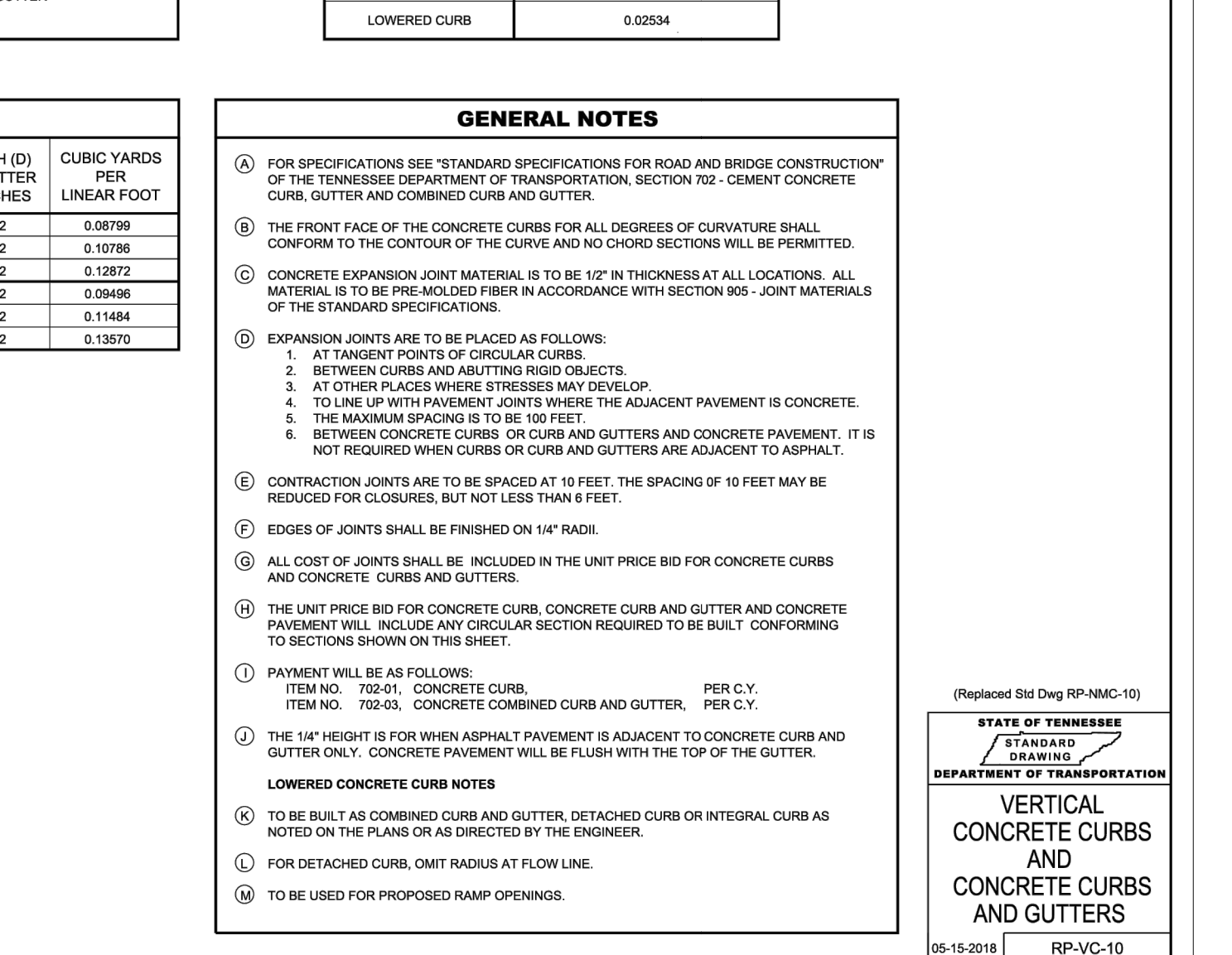
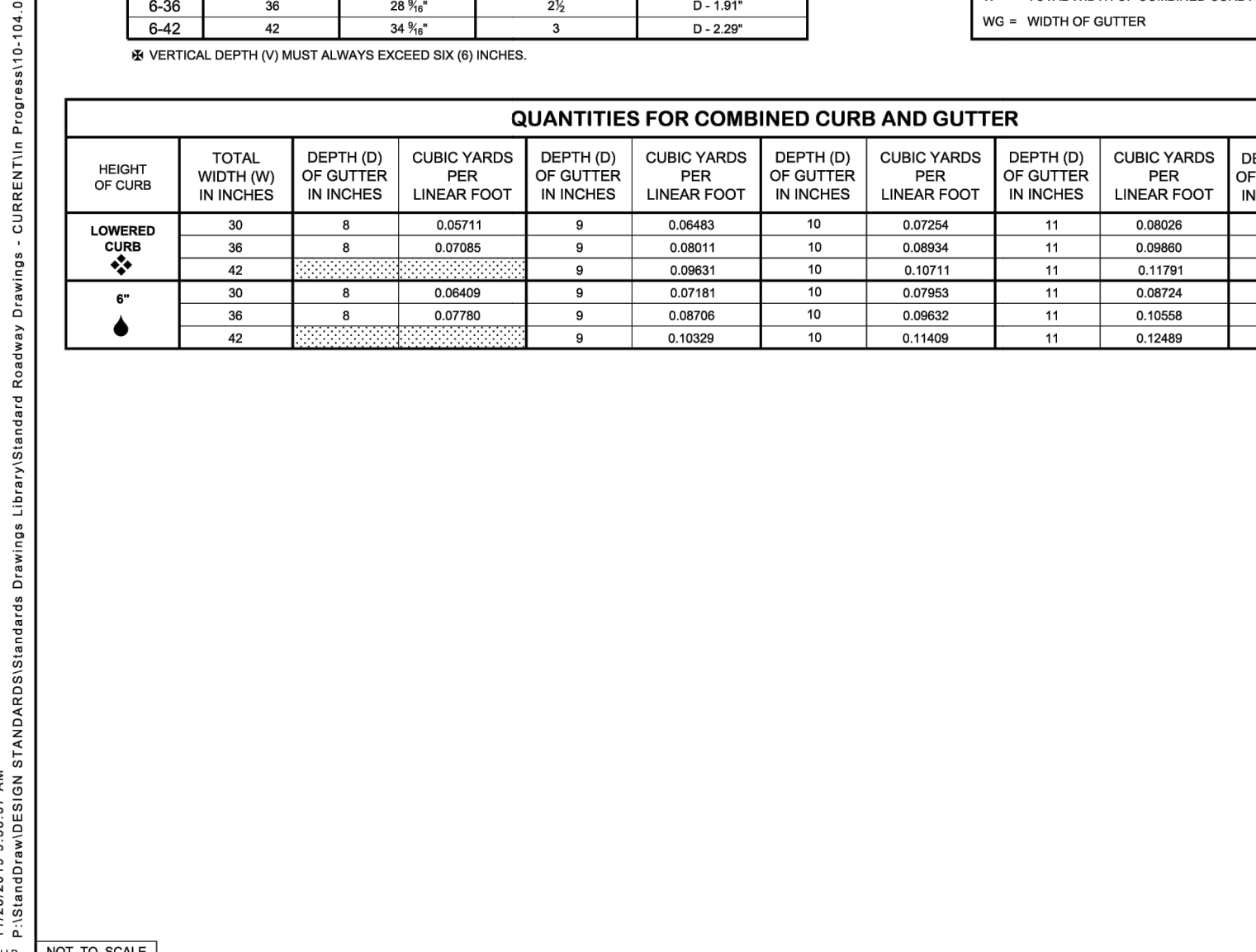
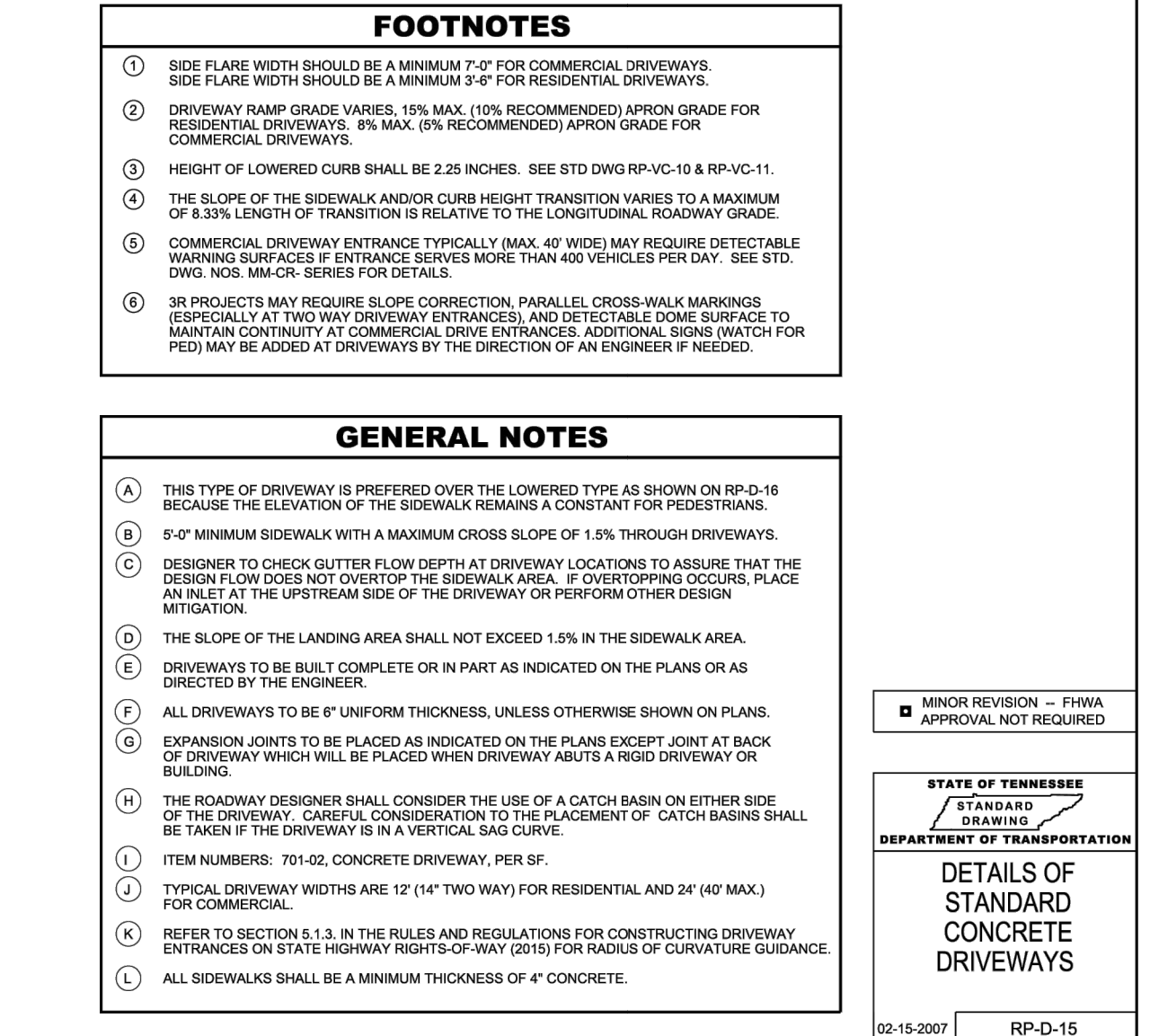
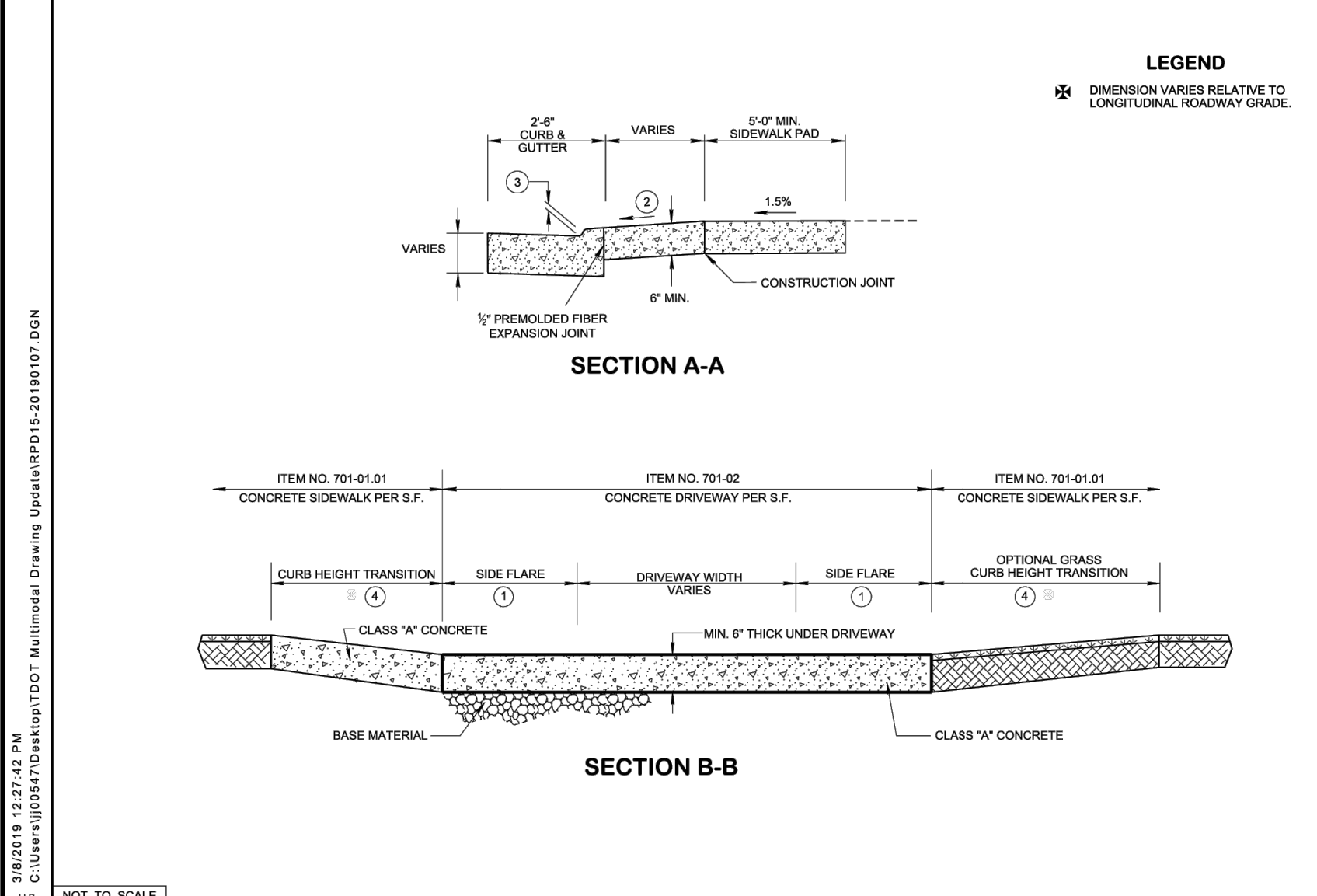
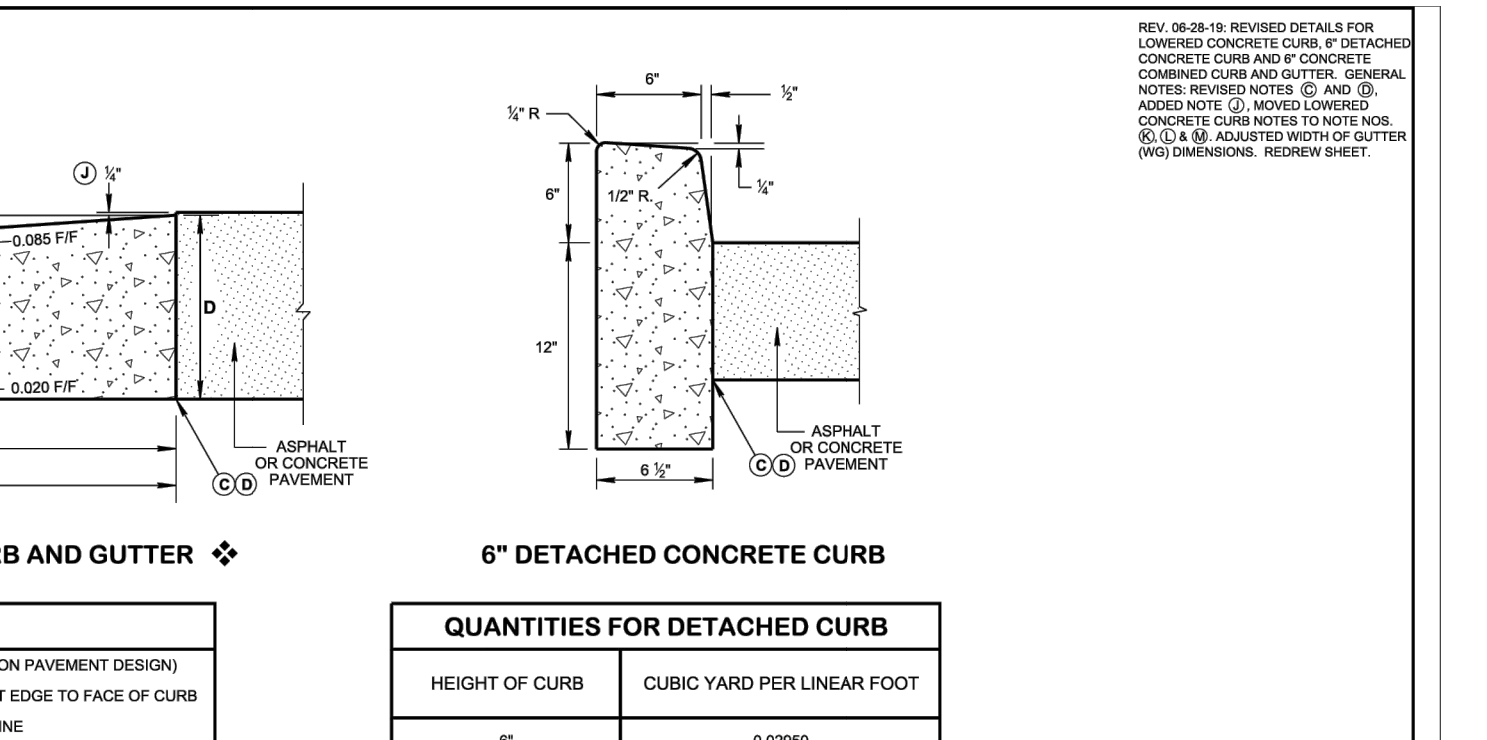
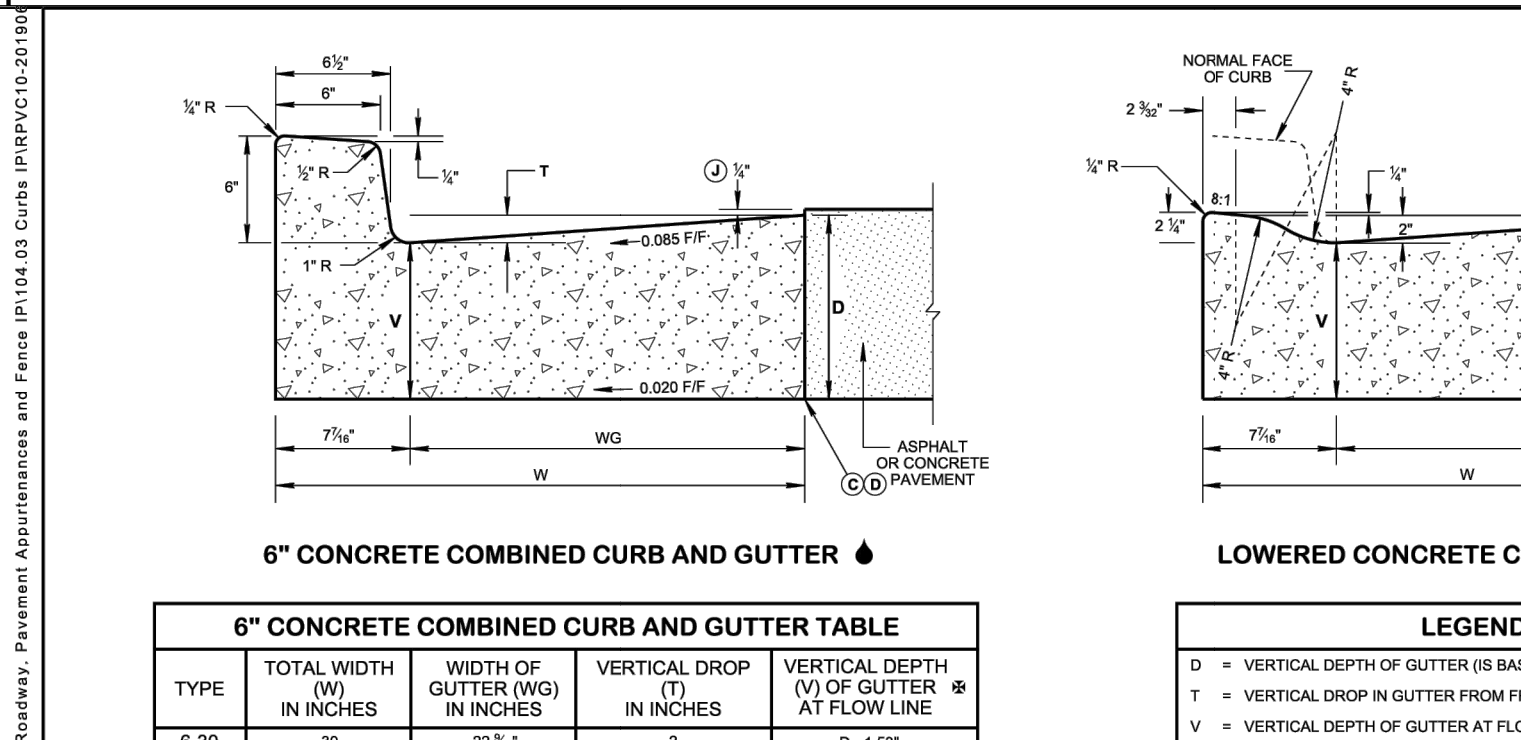
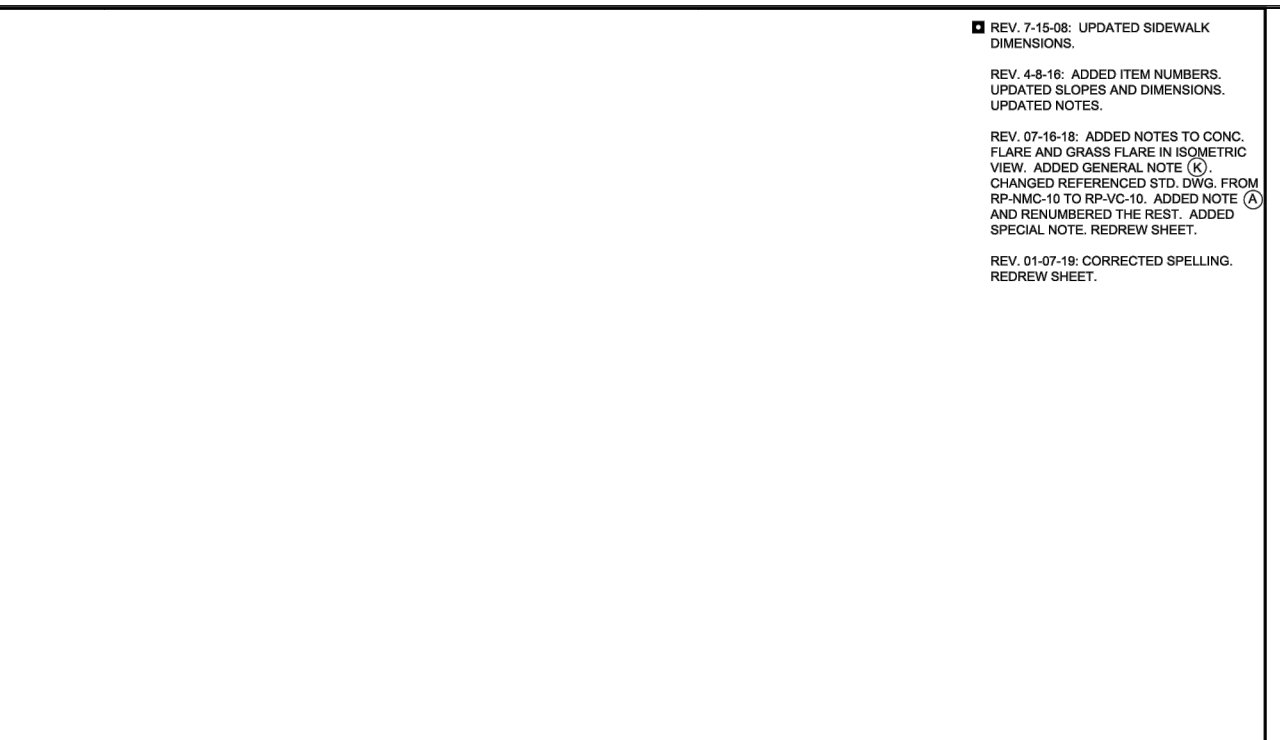
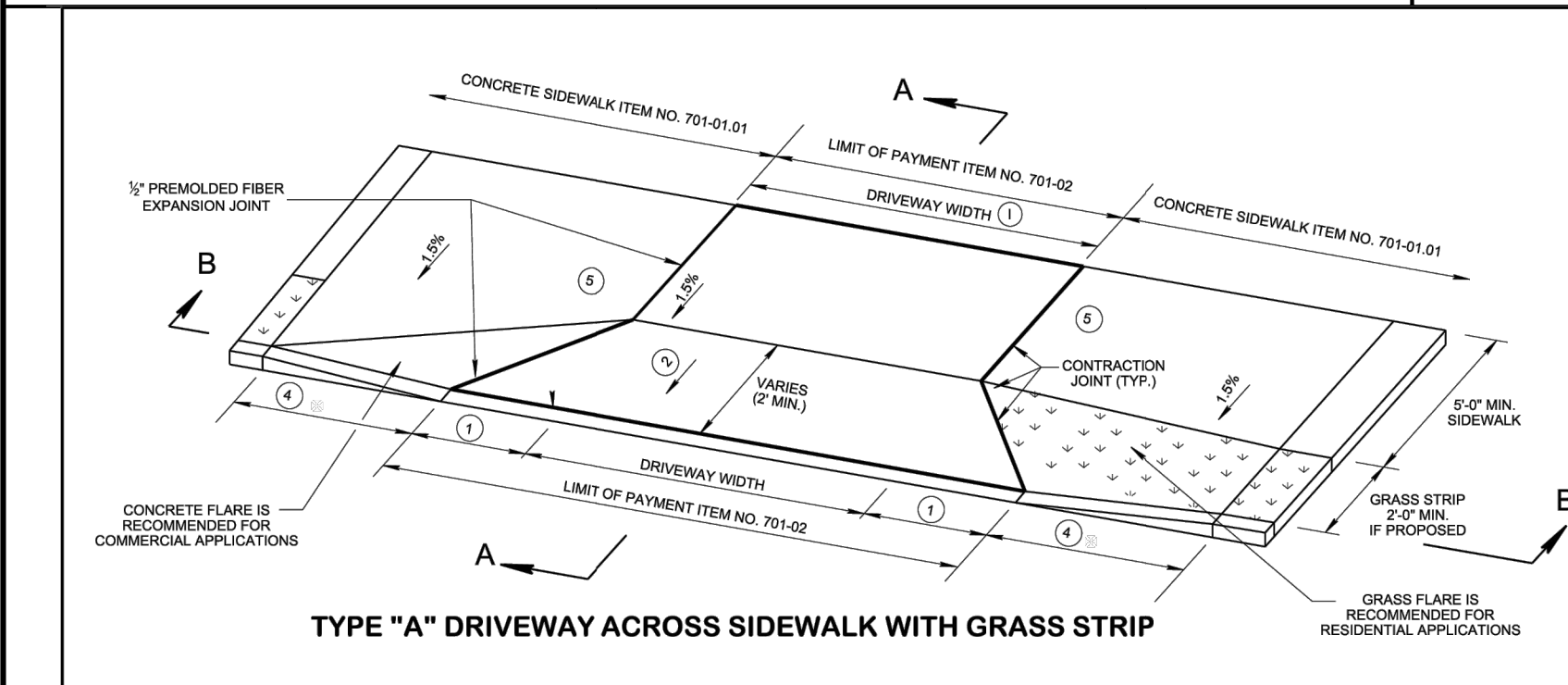
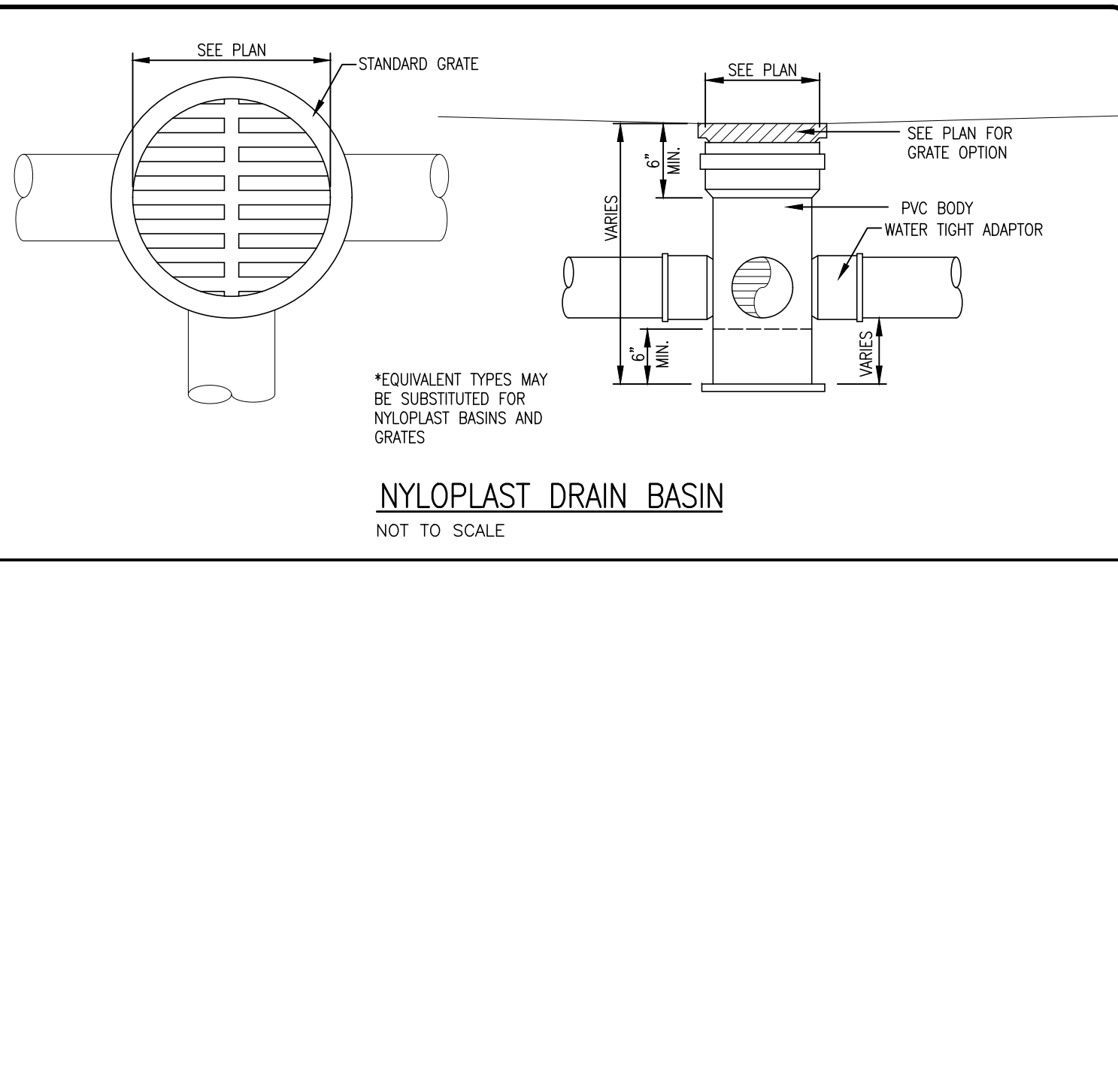
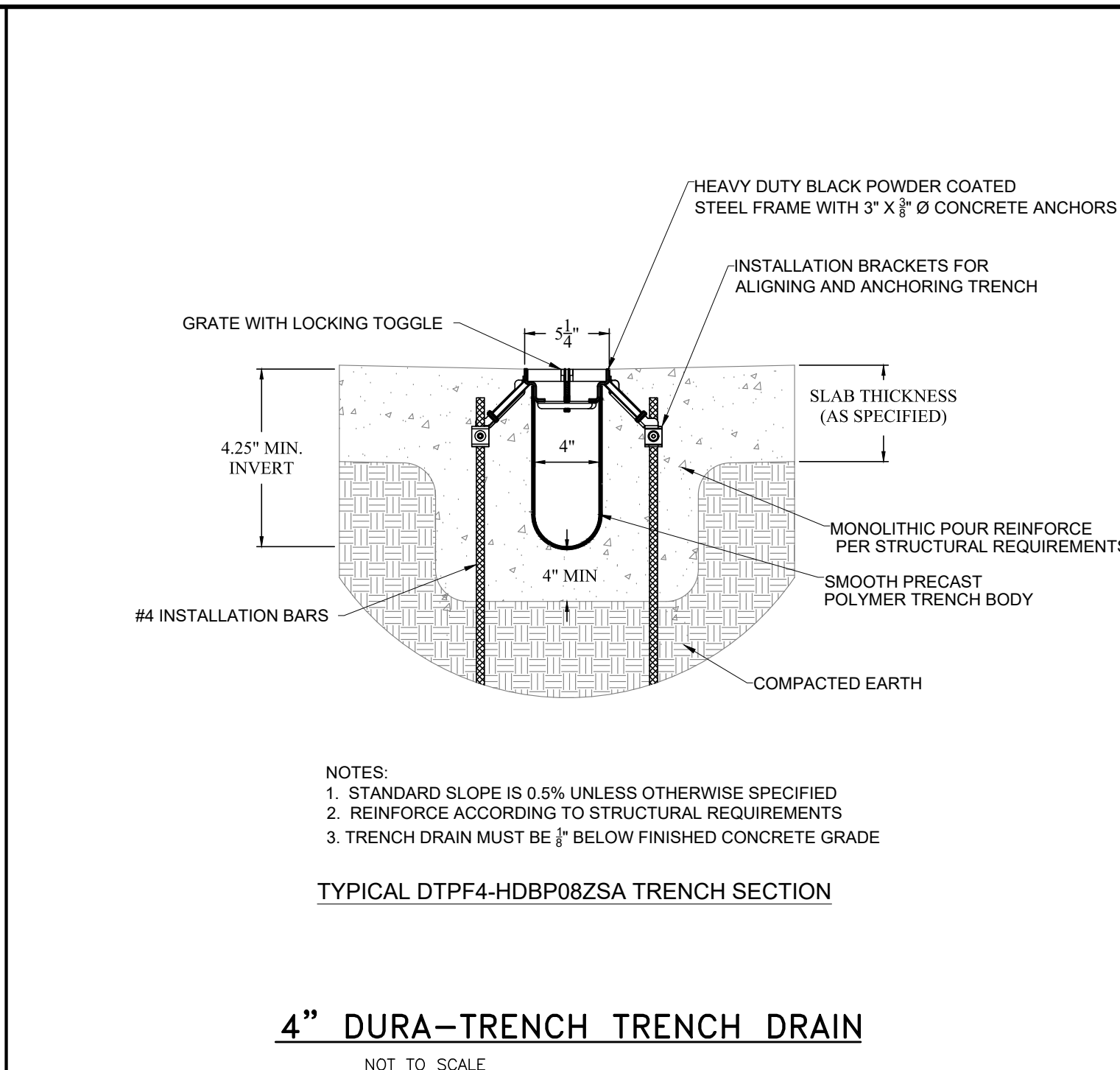
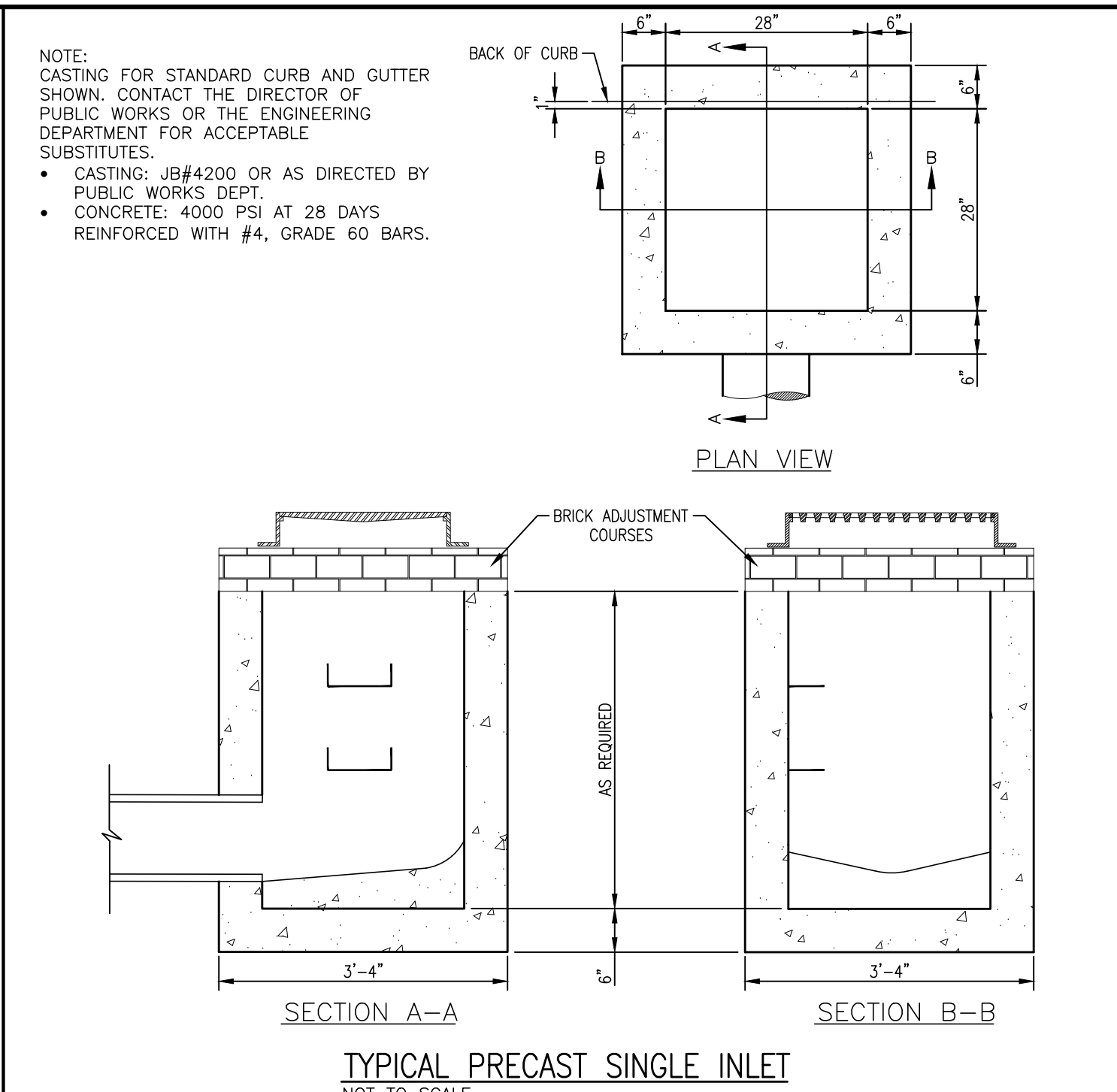
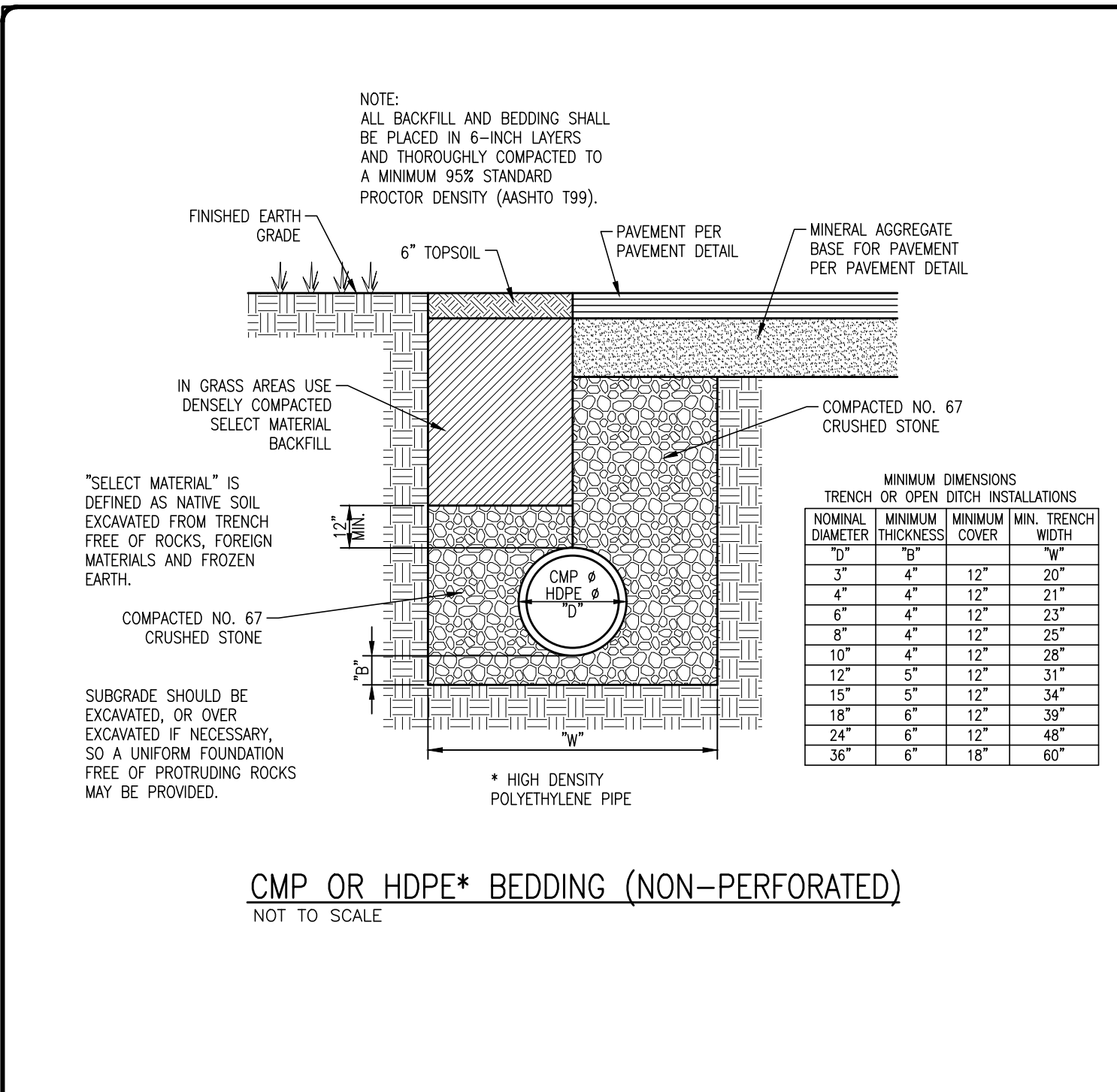
DRAWN BY:	CJN
CHECKED BY:	JML
DATE:	5/7/24
PROJECT NO.:	C02624

**CONSTRUCTION DETAILS**

SHEET NUMBER  
**C2.01**

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SERVING CLIENTS WITH CIVIL ENGINEERING & LAND DEVELOPMENT SERVICES

REVISIONS

NO.	BY	DATE	DESCRIPTION

**OSHA**

OSHA 309

OSHA 309

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

**ACE RETAIL CENTER**

1209 TN HWY-12 SOUTH  
ASHLAND CITY, TN 37015  
CHEATHAM COUNTY

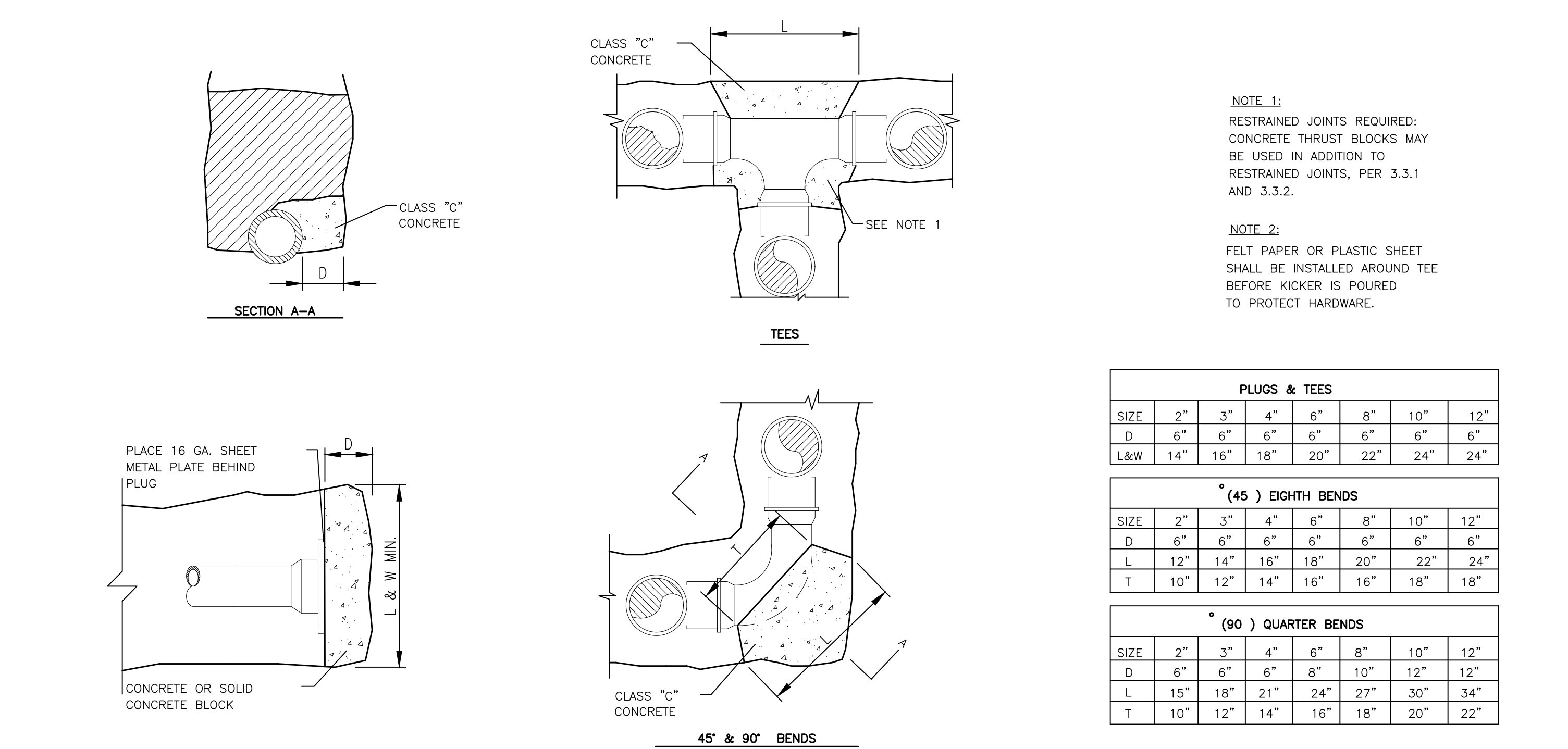
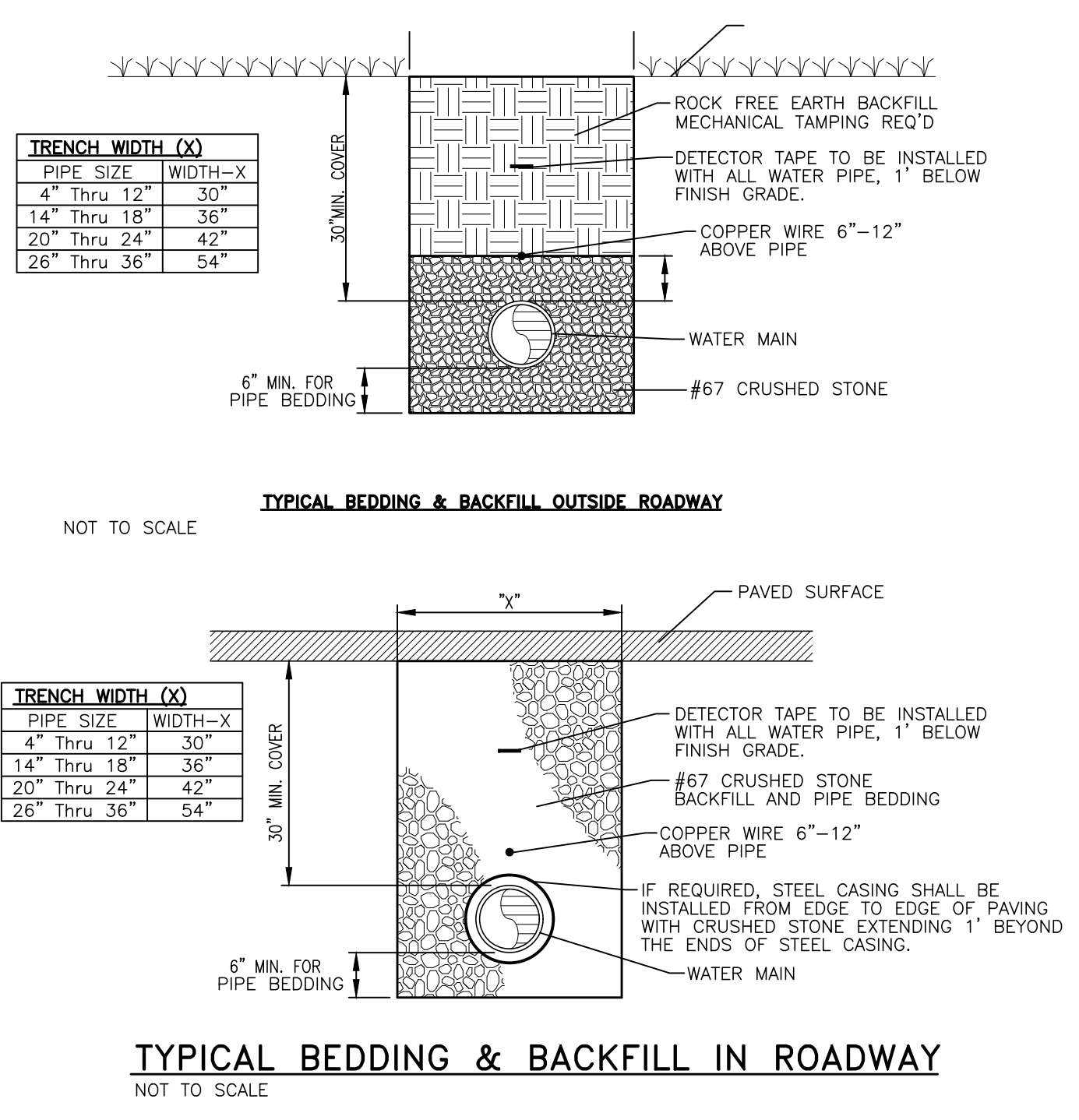
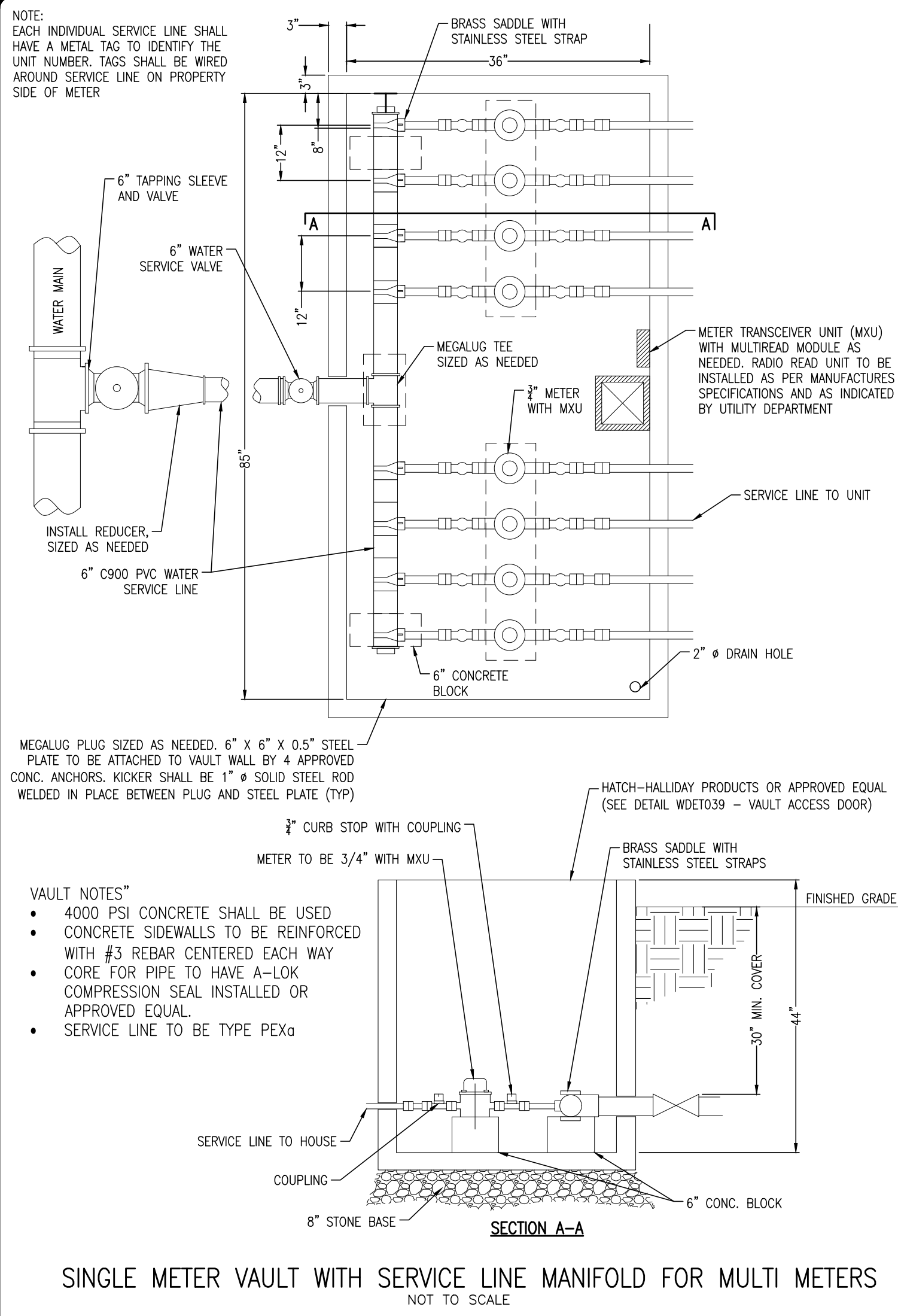
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CHECKED BY: JML  
DATE: 5/7/24  
PROJECT NO.: C02624

**WATERLINE DETAILS**

SHEET NUMBER  
**C2.02**

ITEM # 4

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NO.	BY	DATE	DESCRIPTION

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

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CHECKED BY: JML  
DATE: 5/7/24  
PROJECT NO.: C02624

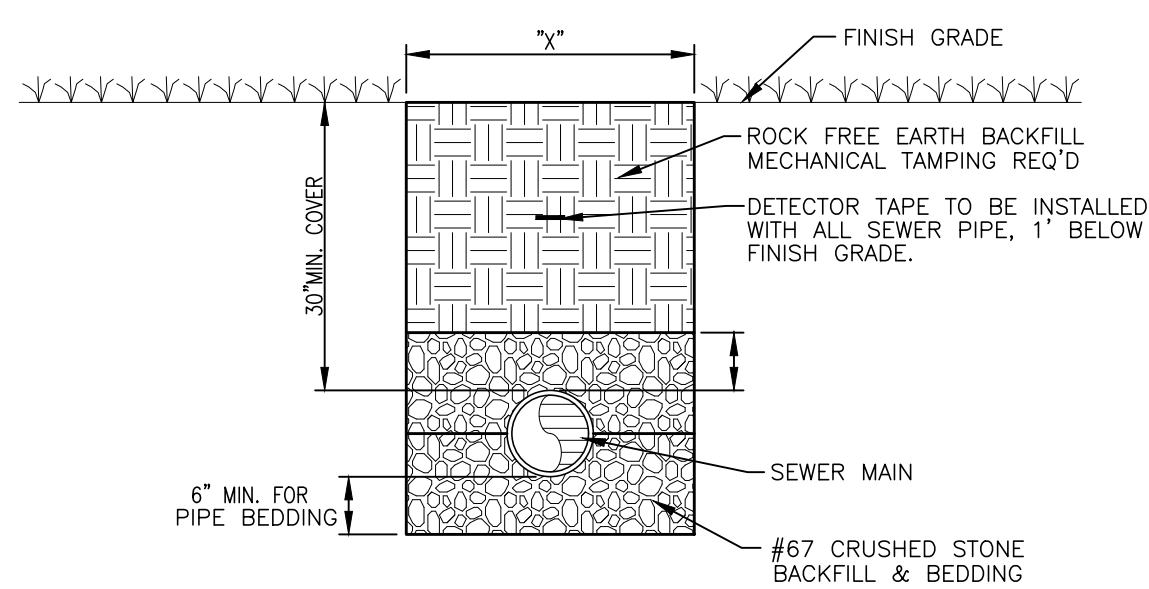
**WATERLINE  
DETAILS**

SHEET NUMBER  
**C2.03**

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TRENCH WIDTH (X)	
PIPE SIZE	BUCKET WIDTH-X
6"	18"
8"	24"
10"	30"

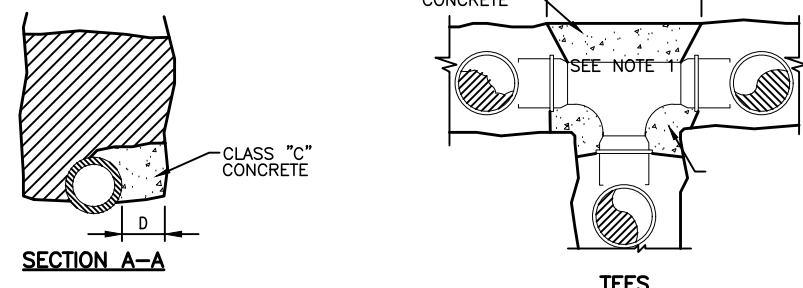


**TYPICAL BEDDING & BACKFILL OUTSIDE ROADWAY**  
NOT TO SCALE

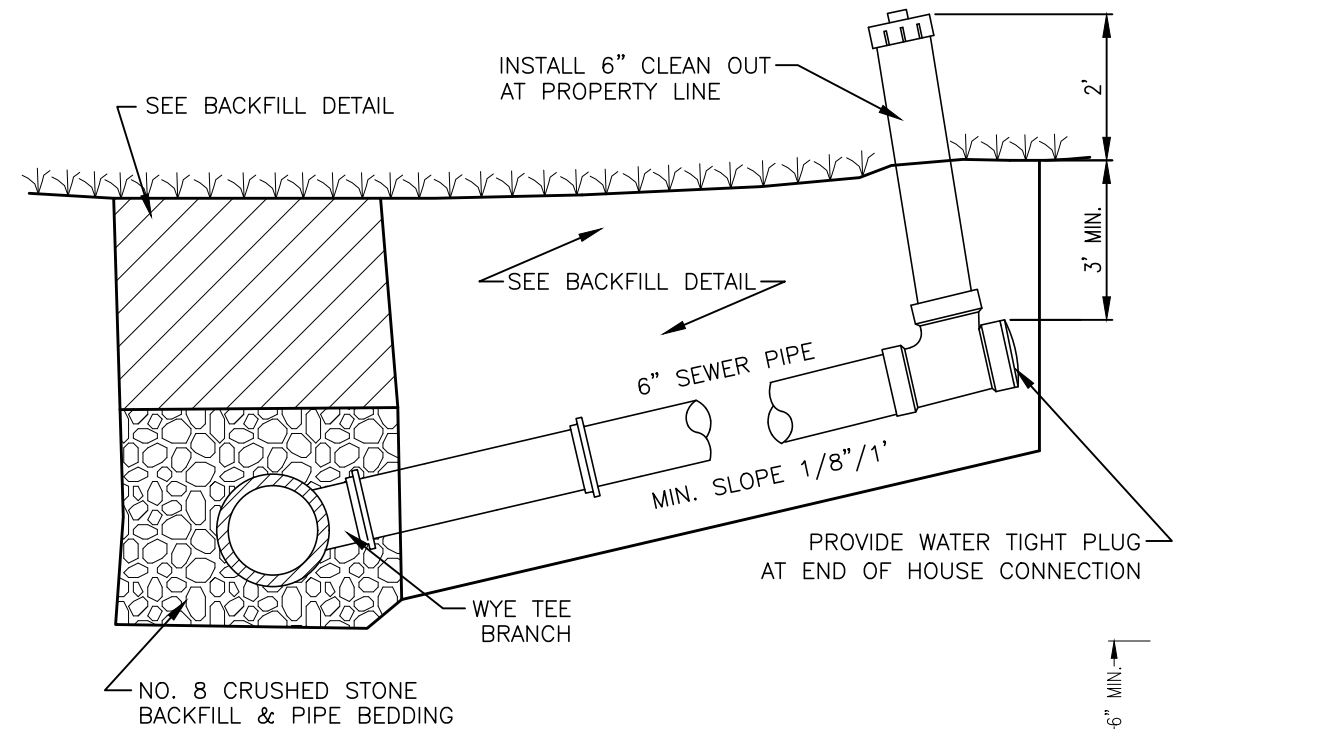
PLUGS & TEES	
SIZE	1/2" 3/4" 1" 1 1/4" 1 1/2" 2"
D	6" 8" 10" 12" 14" 16"
Length	14" 18" 22" 26" 30" 34"
<b>(45°) EIGHTH BENDS</b>	
SIZE	1/2" 3/4" 1" 1 1/4" 1 1/2" 2"
D	6" 8" 10" 12" 14" 16"
L	12" 14" 16" 18" 20" 22"
T	10" 12" 14" 16" 18" 20"

NOTE 1: Restrained Joints Required: Concrete Thrust Blocks May Be Used In Addition To Restrained Joints, Per 5.3.1 And 5.3.2.

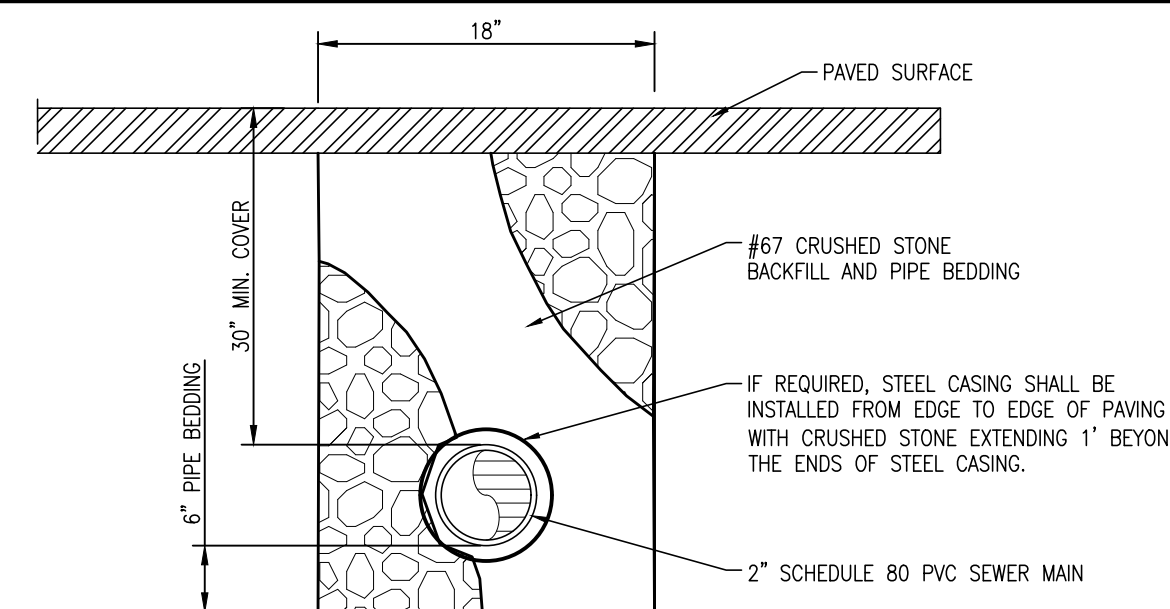
NOTE 2: Felt Paper Or Plastic Sheet Shall Be Installed Around Tee Before Kicker Is Poured To Protect Hardware.



**CONCRETE THRUST BLOCK DETAIL**  
NOT TO SCALE



**TYPICAL SERVICE CONNECTION**  
NOT TO SCALE

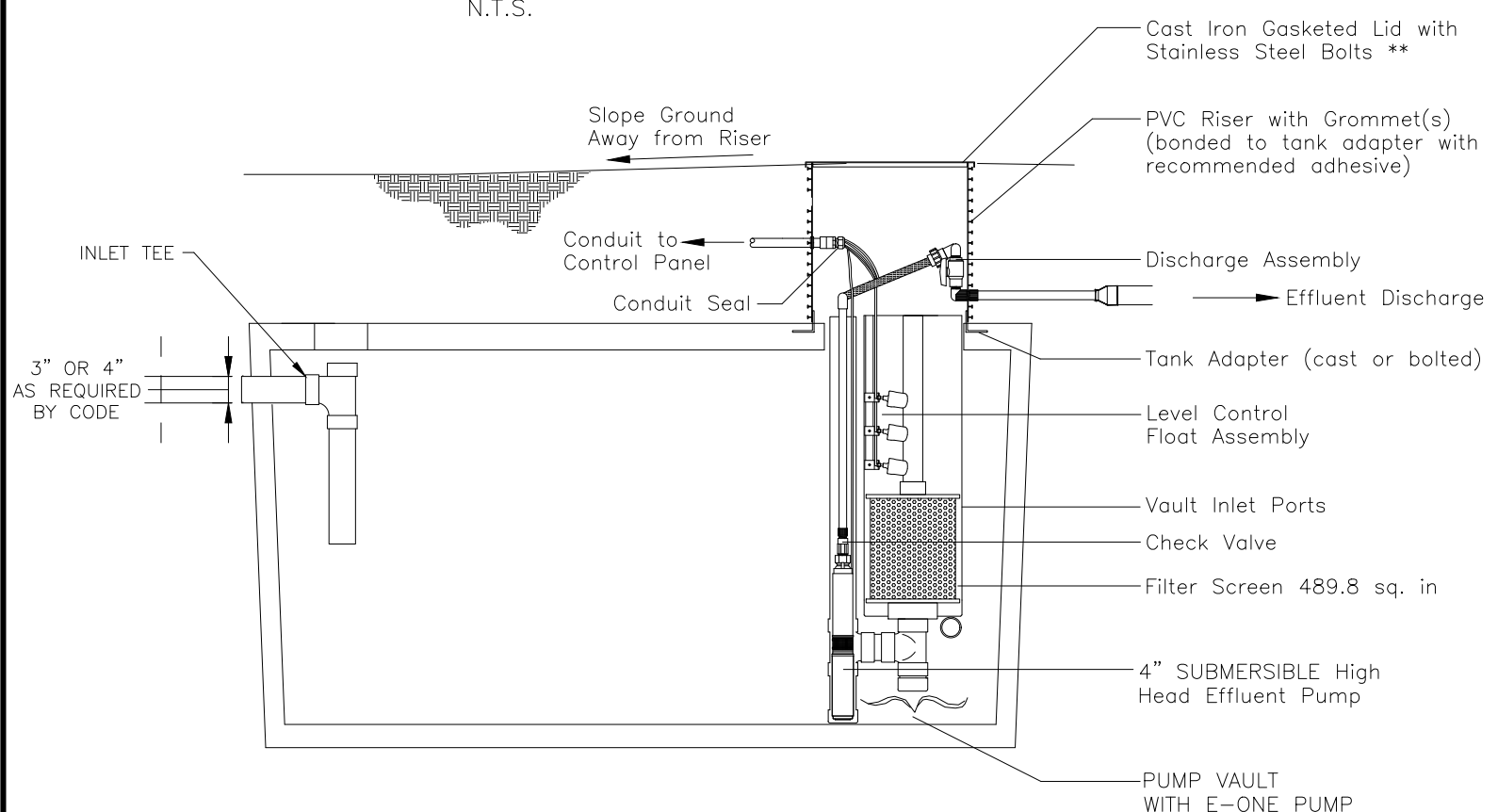


**TYPICAL BEDDING & BACKFILL IN ROADWAY**  
NOT TO SCALE



\*\* POLYCARBONITE/FIBERGLASS LIDS ARE NO LONGER ACCEPTABLE

**PLAN VIEW**  
N.T.S.

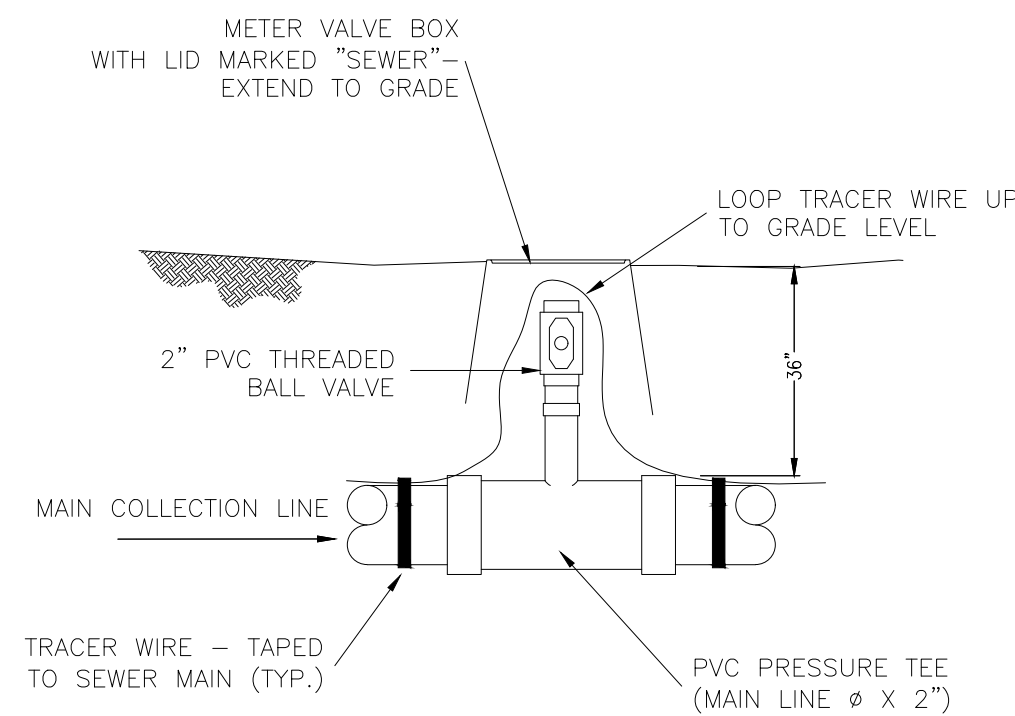


**1500 GALLON STEP TANK**

TANK WILL BE A 1500 GALLON, WATERTIGHT PRE-CAST STEP TANK, AS MANUFACTURED BY JARRETT CONCRETE PRODUCTS, OR APPROVED EQUAL. CONTACT: 615.792.9332

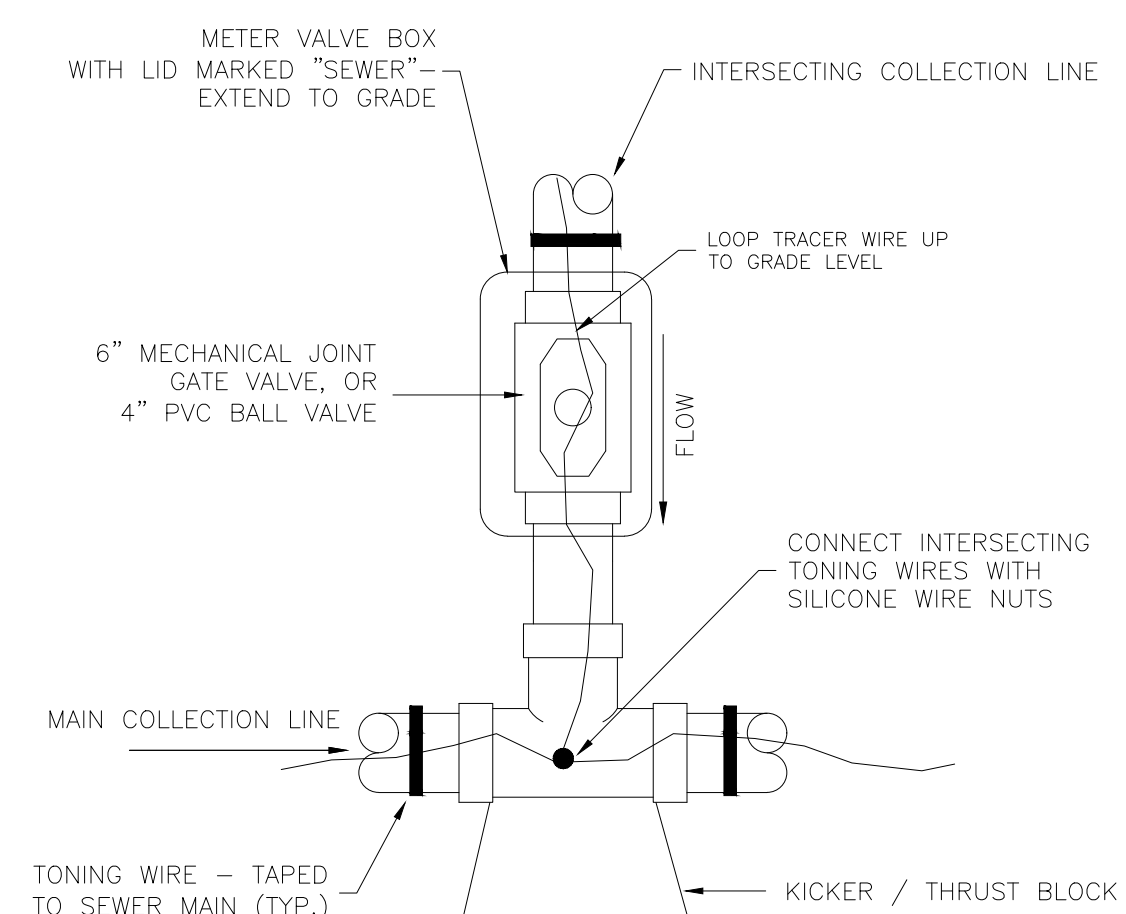
ALL TANKS SHALL BE ONE-PIECE, STRUCTURALLY SOUND, WATERTIGHT TANKS AS MANUFACTURED BY JARRETT CONCRETE PRODUCTS, OR APPROVED EQUAL

\*\* IN ORDER TO DEMONSTRATE WATER TIGHTNESS, TANKS SHALL BE TESTED TWICE PRIOR TO ACCEPTANCE. EACH TANK SHALL BE TESTED AT THE FACTORY, PRIOR TO SHIPPING, BY FILLING TO TWO (2) INCHES ABOVE THE TOP OF THE LID AND THE EXFILTRATION RATE SHALL BE DETERMINED BY MEASURING THE WATER LOSS DURING THE NEXT TWO HOURS. THE SAME TEST WILL BE CONDUCTED ONCE THE TANK IS IN THE FIELD, PRIOR TO BACKFILLING. AFTER TANKS ARE FILLED 2" INTO THE RISER, THERE SHOULD BE LESS THAN 1/2" DROP IN 24 HOURS.



**TYPICAL COLLECTION MAIN TESTING PORT**  
N.T.S.

INSTALL ONE (1) TESTING PORT PER COLLECTION LINE. COORDINATE INSTALLATION/LOCATION WITH UTILITY INSPECTOR, OR ADENUS ENGINEER. LOCATION OF TESTING PORT TO BE NOTED ON AS-BUILT DRAWINGS.

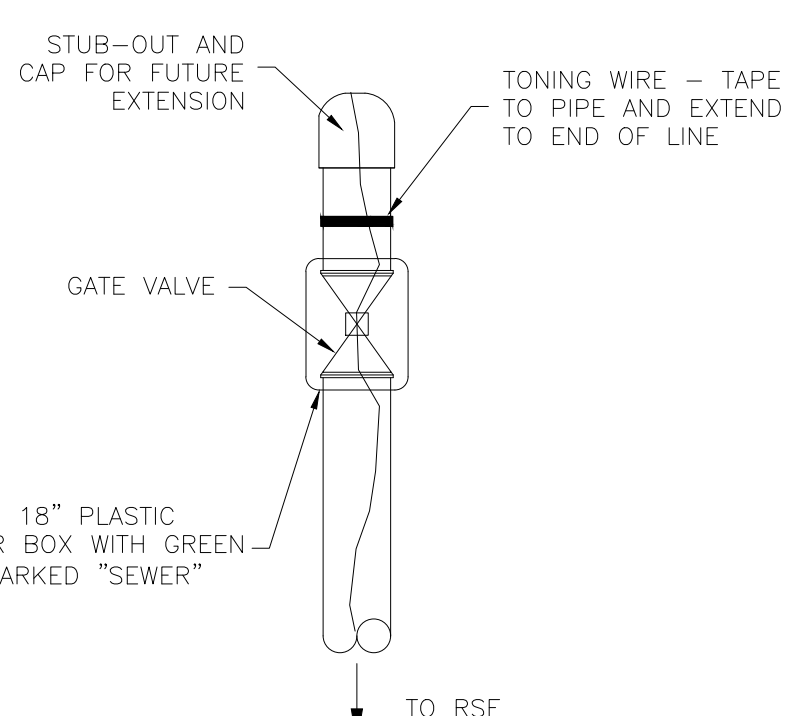


**TYPICAL COLLECTION LINE INTERSECTION**  
SCALE: N.T.S.

\*\* GATE VALVE / BALL VALVE NOTE

ON COLLECTION LINES 4" AND SMALLER, SCH40 PVC BALL VALVES WILL BE USED.

ON COLLECTION LINES 6" AND LARGER, MECHANICAL JOINT GATE VALVES WILL BE USED.

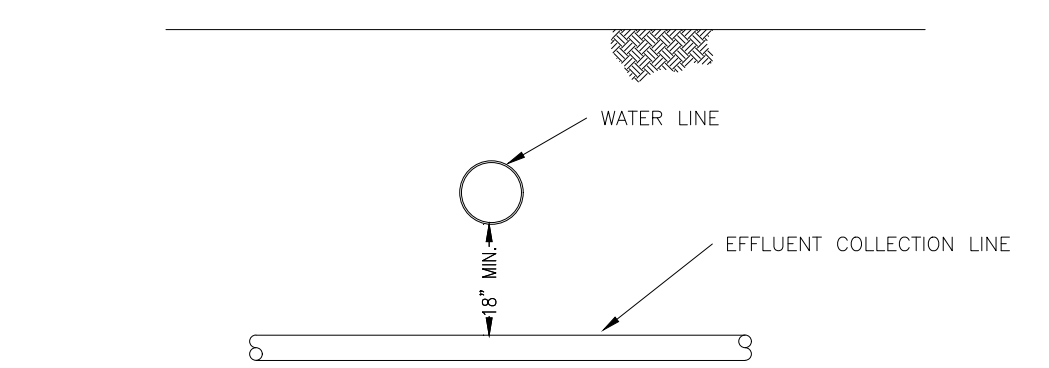


**TYPICAL STUB FOR EXTENSION**  
N.T.S.

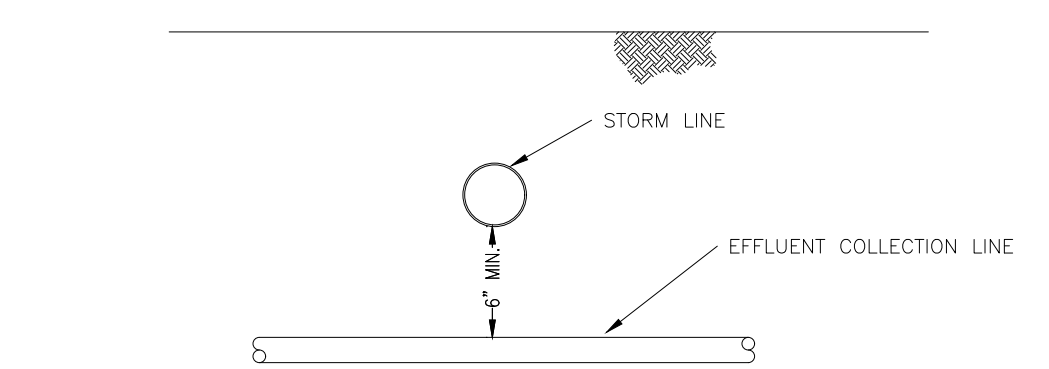
\*\* GATE VALVE / BALL VALVE NOTE

ON COLLECTION LINES 4" AND SMALLER, SCH40 PVC BALL VALVES WILL BE USED.

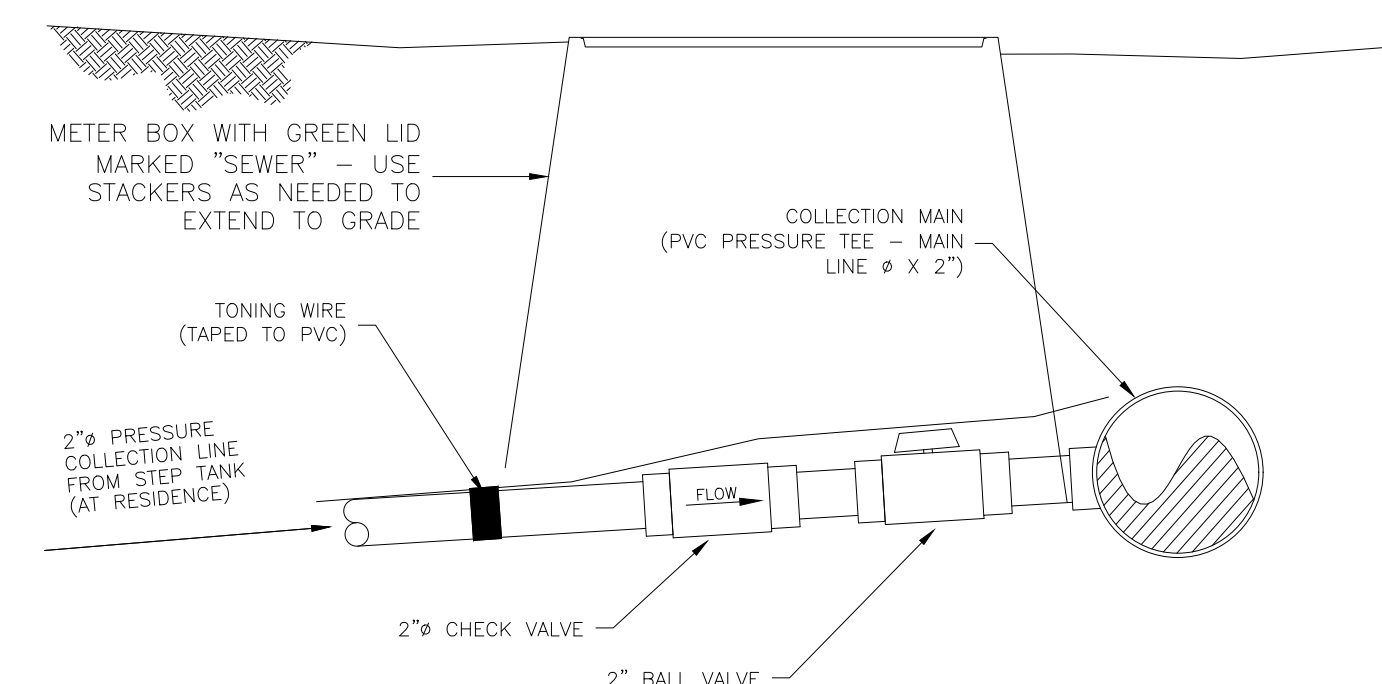
ON COLLECTION LINES 6" AND LARGER, FLOWMASTER MECHANICAL JOINT SQUARE HEAD VALVES, OR EQUAL WILL BE USED.



**TYPICAL SEWER - WATER LINE CROSSING**  
SCALE: N.T.S.

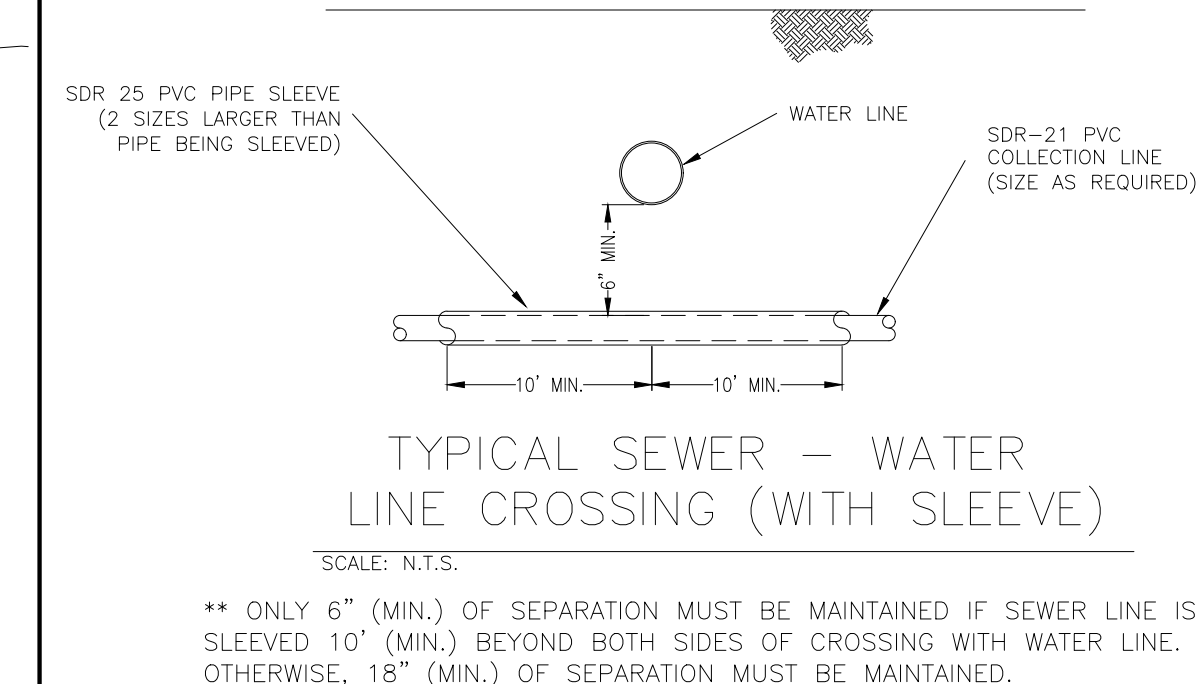


**TYPICAL SEWER - STORM LINE CROSSING**  
SCALE: N.T.S.



**TYPICAL SERVICE CONNECTION (PRESSURE)**  
N.T.S.

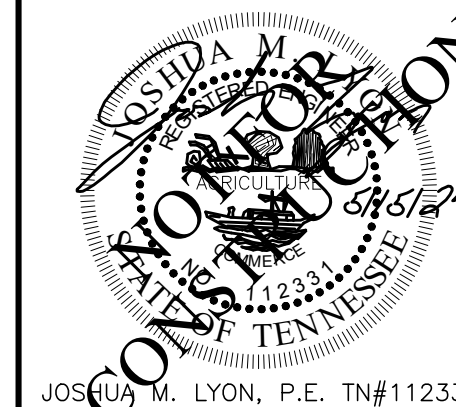
ALL FITTINGS AND VALVES TO BE SCH40 PVC GLUE JOINT PRESSURE RATED



**TYPICAL SEWER - WATER LINE CROSSING (WITH SLEEVE)**  
SCALE: N.T.S.

\*\* ONLY 6" (MIN.) OF SEPARATION MUST BE MAINTAINED IF SEWER LINE IS SLEEVED 10" (MIN.) BEYOND BOTH SIDES OF CROSSING WITH WATER LINE. OTHERWISE, 18" (MIN.) OF SEPARATION MUST BE MAINTAINED.

NO.	BY	DATE	DESCRIPTION



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

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CHEATHAM COUNTY

DRAWN BY:	CJN
CHECKED BY:	JML
DATE:	5/7/24
PROJECT NO.:	C02624

**SEWER LINE DETAILS**

SHEET NUMBER  
**C2.04**

ITEM # 4

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# **STORMWATER DESIGN CALCULATIONS**

FOR

**Ace Retail Center**  
1209 TN-Hwy 12  
Ashland City, TN 37015

May 15, 2024



Prepared By

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





## 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. Predeveloped runoff is based on

Storm Event	Total Pre-Developed Runoff (1R)	Post-Developed to Pond (3S)	Post-Developed Pond Bypass (4S)	Total Post Developed Discharge (2R)	Pond Elevation: TOB: 405.50
2 yr.	13.38	16.23	0.63	12.69	403.16
5 yr.	16.98	20.10	0.94	15.59	403.45
10 yr.	19.82	23.16	1.21	17.88	403.67
25 yr.	23.81	27.53	1.61	21.07	403.98
50 yr.	27.00	31.06	1.95	23.57	404.23
100yr.	30.24	34.67	2.31	26.05	404.49

### 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 WARIO TO WAY #708  
 ASHLAND CITY, TN 37105

**DEED REFERENCE:**  
 MAP 55, PARCEL 36  
 LEE BAXSON 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.

**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 TRANSMITTERS 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 POLICES 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.

**LOT COVERAGE:**  
 EXISTING BUILDING AREA = 22,225 S.F.  
 NEW BUILDING AREA = 24,090 S.F.  
 BUILDING COVERAGE = 20.5%  
 MAX BUILDING HEIGHT: 40'-07"  
 EXISTING CONCRETE SURFACE: ±350 S.F.  
 EXISTING ASPHALT SURFACE: ±41,782 S.F.  
 EXISTING IMPERVIOUS AREA: ±64,357 S.F. = 28.46%  
 PROPOSED ASPHALT SURFACE: ±19,144 S.F.  
 PROPOSED IMPERVIOUS AREA: ±106,591 S.F. = 47.13%

**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.

**GENERAL NOTES:**

- 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.
- ALL CONSTRUCTION ON THIS SITE SHALL COMPLY WITH APPLICABLE REGULATIONS AS SPECIFIED BY THE CITY OF MILLERSVILLE AND THE STATE OF TENNESSEE.
- TOPSOIL SHALL BE PLACED ON EXCAVATED AREAS WHICH REQUIRE NEW VEGETATION. GROUND COVER SHALL BE REESTABLISHED WITH KENTUCKY 31 FESCUE SEEDING AT A MINIMUM OF 250 LBS. PER ACRE. SLOPES 3:1 OR GREATER SHALL BE LINED WITH NORTH AMERICAN GREEN 5150 GRASS MATTING OR EQUAL.
- 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.
- 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.
- THE TOPOGRAPHIC SURVEY SHOWN HEREON WAS TAKEN FROM A SURVEY BY STEVEN E. ARTZ SURVEYING OF SPRINGFIELD, TN.
- CONSTRUCTION WILL BEGIN FOLLOWING PLAN APPROVAL BY THE CITY OF ASHLAND CITY. THE BUILDING SHOULD FRONT TED DORRIS ROAD, AND BE SERVICED BY UNDERGROUND UTILITY LINES.
- 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.
- ALL ADDITIONS IN THE FUTURE MUST BE BUILT TO THESE STANDARDS.
- THIS PROPERTY IS LOCATED IN ZONE "A" AND ZONE "X" (AREAS OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN AS SHOWN ON NFP FIRM MAP ACCORDING TO THE FEMA MAP PANEL NUMBER 47021C01700, DATED 9/10/2010).

**NPDES PERMIT NOTE:**  
 THE MAXIMUM DISTURBED AREA FOR THIS PROJECT IS OVER 1 ACRE. THIS SITE IS CURRENTLY COVERED UNDER PERMIT NUMBER TNR245326.

*Joshua M. Lyon*  
 JOSHUA M. LYON, P.E.  
 PROJECT MANAGER

**EP&SC NOTES:**

- 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 THROUGHOUT 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.
- ALL EP&SC DEVICES ARE TO REMAIN IN PLACE UNTIL THE SITE HAS BEEN STABILIZED AND A GOOD STAND OF GRASS HAS BEEN ESTABLISHED.
- 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).
- 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.
- EXCAVATED TOPSOIL TO BE REUSED MUST BE STOCKPILED AND ENCLOSED WITH SILT FENCING.
- 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.
- APPROVED ALIET PROTECTIONS FOR NEARBY STORM SEWER CURBS AND DROP INLETS MUST BE INSTALLED WITHIN 24 HOURS OF GRADING COMMENCEMENT.
- VEGETATIVE BUFFERS OR OTHER PROTECTION MUST BE PROVIDED ALONG STREAMS, RIVERS, AND PONDS TO AVOID EROSION OF BANKS.
- 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.
- 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.
- SEDIMENT MUST BE REMOVED FROM SEDIMENT BARRIERS, PONDS, AND OTHER SEDIMENT CONTROLS WHEN DESIGN CAPACITY HAS BEEN REDUCED BY 50%.
- SEDIMENT THAT HAS ESCAPED THE CONSTRUCTION SITE AND HAS COLLECTED IN THE BUILDING OR DRAINAGE STRUCTURES MUST IMMEDIATELY BE PHYSICALLY REMOVED.
- 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.
- 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.

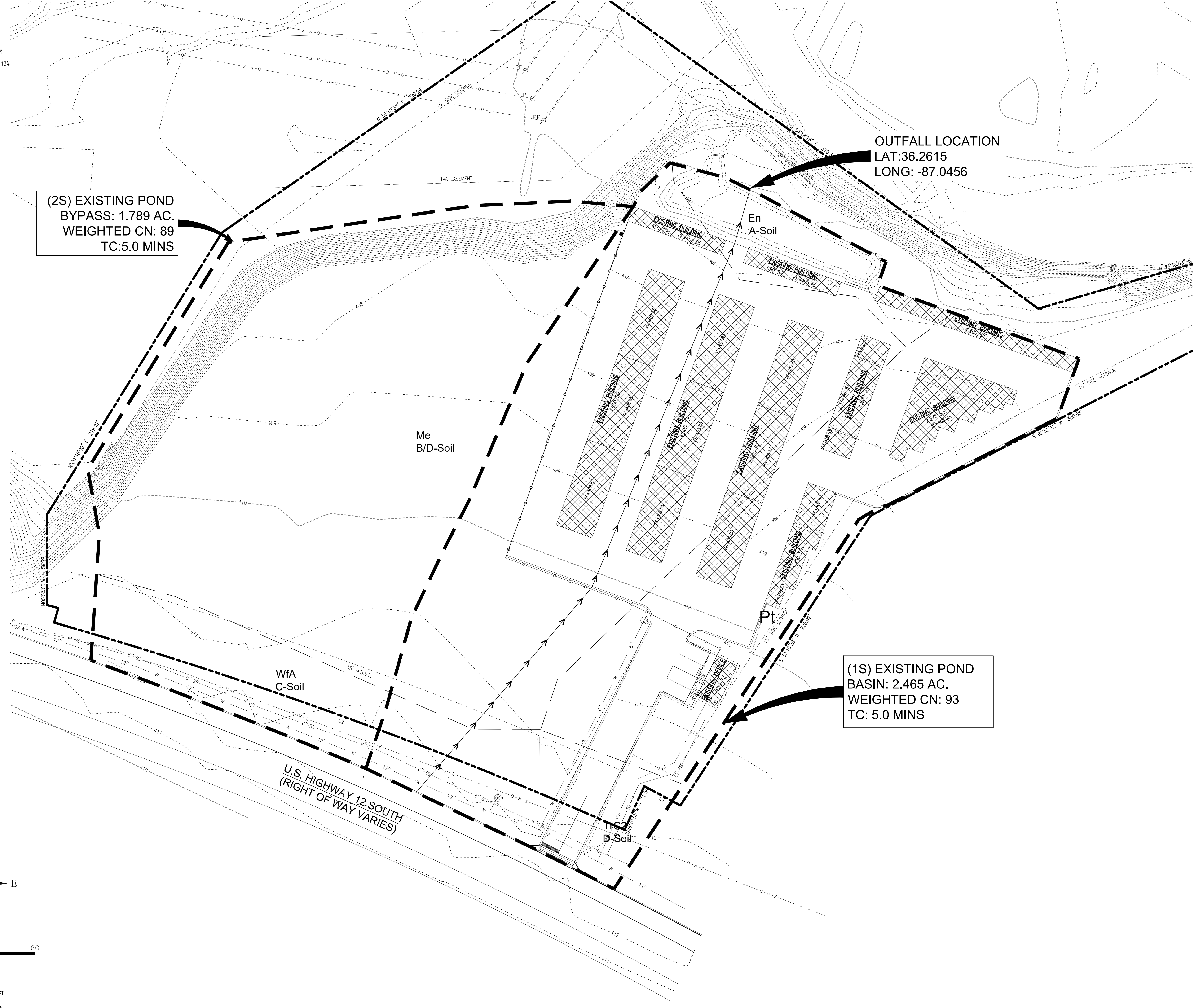
**CALL BEFORE YOU DIG**

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

IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT UTILITY LOCATORS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION TO OBTAIN APPROXIMATE AND POSSIBLE PROXIMATE UTILITY LOCATIONS AND TO LOCATE ALL UNDERGROUND UTILITIES IN THE FIELD.

**LEGEND:**

— W — 8" SS — 6"	PROPERTY LINE	⊗	MANHOLE	— 25.42 —	PPE INVERT
— 8" SS — 6"	EXISTING WATER LINE	⊙	CLEAN OUT	⊙	SPOT ELEVATION
— 8" SS — 6"	EXISTING SEWER LINE	⊙	POWER POLE	28.14	—
— 8" SS — 6"	EXISTING ELECTRIC LINE	⊙	WATER METER	—	—
—	NEW CURB	⊙	FIRE HYDRANT	—	—
—	SILT FENCE	⊙	IRON ROD OLD	—	—
—	NEW 1" CONTOUR	⊙	IRON ROD NEW	—	—
—	EXISTING 1" CONTOUR	—	—	—	—
—	DEM. LINE	—	—	—	—



(2S) EXISTING POND  
 BYPASS: 1.789 AC.  
 WEIGHTED CN: 89  
 TC: 5.0 MINS

OUTFALL LOCATION  
 LAT:36.2615  
 LONG: -87.0456

(1S) EXISTING POND  
 BASIN: 2.465 AC.  
 WEIGHTED CN: 93  
 TC: 5.0 MINS

NOT FOR CONSTRUCTION

**KLOBER ENGINEERING SERVICES**

SERVING CLIENTS WITH CIVIL ENGINEERING & LAND DEVELOPMENT SERVICES  
 3556 TOLSON ROAD, SUITE 100, ASHLAND, TN 37017  
 PHONE: (615) 385-2000 FAX: (615) 374-0488  
 www.klobereing.com

NO.	DATE	DESCRIPTION

**JOSEPH M. LYON**  
 REGISTERED PROFESSIONAL ENGINEER  
 STATE OF TENNESSEE  
 JOSHUA M. LYON, P.E. TN#112331

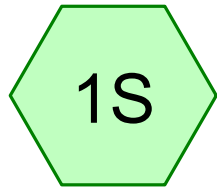
**ACE MINI STORAGE**

ASHLAND CITY, TN  
 CHEATHAM COUNTY

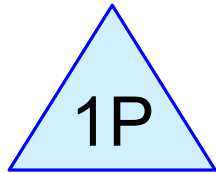
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 CHECKED BY: JML  
 DATE: 8/31/23  
 PROJECT NO.: C05823

PRE DEVELOPED DRAINAGE SHEET NUMBER  
**DM-1**

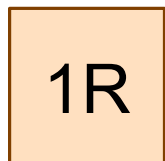
ITEM # 4



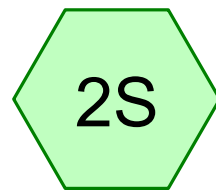
Existing Pond Basin



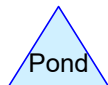
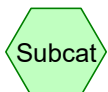
Existing Detention Pond



Total Pre



Existing Pond Bypass



**Routing Diagram for Drainage**  
Prepared by Klobner Engineering, Printed 8/25/2023  
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**Drainage**

Prepared by Klober Engineering

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NOAA 24-hr B 2-Year Rainfall=3.60"

Printed 8/25/2023

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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"

Routed to Pond 1P : Existing Detention Pond

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					<b>Direct Entry,</b>

**Summary for Subcatchment 2S: Existing Pond Bypass**

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

Routed to Reach 1R : Total Pre

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					<b>Direct Entry,</b>

**Summary for Reach 1R: Total Pre**

Inflow Area = 4.254 ac, 14.83% Impervious, Inflow Depth > 2.53" for 2-Year event

Inflow = 13.38 cfs @ 12.14 hrs, Volume= 0.896 af

Outflow = 13.38 cfs @ 12.14 hrs, Volume= 0.896 af, Atten= 0%, Lag= 0.0 min

**Drainage**

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NOAA 24-hr B 2-Year Rainfall=3.60"

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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 = 7.59 cfs @ 12.17 hrs, Volume= 0.551 af, Atten= 22%, Lag= 3.4 min  
 Primary = 7.59 cfs @ 12.17 hrs, Volume= 0.551 af  
 Routed to Reach 1R : Total Pre

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 402.65' @ 12.17 hrs Surf.Area= 2,933 sf Storage= 2,453 cf

Plug-Flow detention time= 4.9 min calculated for 0.551 af (100% of inflow)  
 Center-of-Mass det. time= 4.1 min ( 760.2 - 756.1 )

Volume	Invert	Avail.Storage	Storage Description
#1	401.25'	11,230 cf	<b>DETENTION POND (Irregular)</b> 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	401.45'	<b>2.0' long x 3.50' rise Sharp-Crested Rectangular Weir</b> 2 End Contraction(s)

**Primary OutFlow** Max=7.42 cfs @ 12.17 hrs HW=402.63' (Free Discharge)  
 ↳1=Sharp-Crested Rectangular Weir (Weir Controls 7.42 cfs @ 3.56 fps)



## Drainage

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NOAA 24-hr B 5-Year Rainfall=4.39"

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### Summary for Subcatchment 1S: Existing Pond Basin

Runoff = 12.21 cfs @ 12.11 hrs, Volume= 0.702 af, Depth> 3.42"  
Routed to Pond 1P : Existing Detention Pond

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"  
Routed to Reach 1R : Total Pre

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 = 16.98 cfs @ 12.14 hrs, Volume= 1.152 af  
Outflow = 16.98 cfs @ 12.14 hrs, Volume= 1.152 af, Atten= 0%, Lag= 0.0 min

**Drainage**

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NOAA 24-hr B 5-Year Rainfall=4.39"

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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 = 9.52 cfs @ 12.17 hrs, Volume= 0.701 af, Atten= 22%, Lag= 3.4 min  
 Primary = 9.52 cfs @ 12.17 hrs, Volume= 0.701 af  
 Routed to Reach 1R : Total Pre

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 402.87' @ 12.17 hrs Surf.Area= 3,085 sf Storage= 3,117 cf

Plug-Flow detention time= 4.9 min calculated for 0.701 af (100% of inflow)  
 Center-of-Mass det. time= 4.1 min ( 755.8 - 751.7 )

Volume	Invert	Avail.Storage	Storage Description
#1	401.25'	11,230 cf	<b>DETENTION POND (Irregular)</b> 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	401.45'	<b>2.0' long x 3.50' rise Sharp-Crested Rectangular Weir</b> 2 End Contraction(s)

**Primary OutFlow** Max=9.32 cfs @ 12.17 hrs HW=402.85' (Free Discharge)  
 ↑1=Sharp-Crested Rectangular Weir (Weir Controls 9.32 cfs @ 3.87 fps)

**Drainage**

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NOAA 24-hr B 10-Year Rainfall=5.02"

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**Summary for Subcatchment 1S: Existing Pond Basin**

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

Routed to Pond 1P : Existing Detention Pond

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					<b>Direct Entry,</b>

**Summary for Subcatchment 2S: Existing Pond Bypass**

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

Routed to Reach 1R : Total Pre

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					<b>Direct Entry,</b>

**Summary for Reach 1R: Total Pre**

Inflow Area = 4.254 ac, 14.83% Impervious, Inflow Depth > 3.83" for 10-Year event

Inflow = 19.82 cfs @ 12.14 hrs, Volume= 1.357 af

Outflow = 19.82 cfs @ 12.14 hrs, Volume= 1.357 af, Atten= 0%, Lag= 0.0 min

**Drainage**

NOAA 24-hr B 10-Year Rainfall=5.02"

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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 = 11.04 cfs @ 12.17 hrs, Volume= 0.821 af, Atten= 22%, Lag= 3.4 min  
 Primary = 11.04 cfs @ 12.17 hrs, Volume= 0.821 af  
 Routed to Reach 1R : Total Pre

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 403.04' @ 12.17 hrs Surf.Area= 3,201 sf Storage= 3,645 cf

Plug-Flow detention time= 4.9 min calculated for 0.819 af (100% of inflow)  
 Center-of-Mass det. time= 4.1 min ( 753.2 - 749.1 )

Volume	Invert	Avail.Storage	Storage Description
#1	401.25'	11,230 cf	<b>DETENTION POND (Irregular)</b> 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	401.45'	<b>2.0' long x 3.50' rise Sharp-Crested Rectangular Weir</b> 2 End Contraction(s)

**Primary OutFlow** Max=10.81 cfs @ 12.17 hrs HW=403.02' (Free Discharge)  
 ↑1=Sharp-Crested Rectangular Weir (Weir Controls 10.81 cfs @ 4.09 fps)

## Drainage

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NOAA 24-hr B 25-Year Rainfall=5.92"

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### Summary for Subcatchment 1S: Existing Pond Basin

Runoff = 16.92 cfs @ 12.11 hrs, Volume= 0.994 af, Depth> 4.84"  
Routed to Pond 1P : Existing Detention Pond

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"  
Routed to Reach 1R : Total Pre

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 = 23.81 cfs @ 12.13 hrs, Volume= 1.652 af  
Outflow = 23.81 cfs @ 12.13 hrs, Volume= 1.652 af, Atten= 0%, Lag= 0.0 min

**Drainage**

NOAA 24-hr B 25-Year Rainfall=5.92"

Prepared by Klober Engineering

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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 = 13.16 cfs @ 12.17 hrs, Volume= 0.993 af, Atten= 22%, Lag= 3.4 min  
 Primary = 13.16 cfs @ 12.17 hrs, Volume= 0.993 af  
 Routed to Reach 1R : Total Pre

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= 3,355 sf Storage= 4,404 cf

Plug-Flow detention time= 4.9 min calculated for 0.990 af (100% of inflow)  
 Center-of-Mass det. time= 4.2 min ( 750.3 - 746.1 )

Volume	Invert	Avail.Storage	Storage Description
#1	401.25'	11,230 cf	<b>DETENTION POND (Irregular)</b> 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	401.45'	<b>2.0' long x 3.50' rise Sharp-Crested Rectangular Weir</b> 2 End Contraction(s)

**Primary OutFlow** Max=12.89 cfs @ 12.17 hrs HW=403.24' (Free Discharge)  
 ↑1=Sharp-Crested Rectangular Weir (Weir Controls 12.89 cfs @ 4.38 fps)



## Drainage

Prepared by Klober Engineering

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NOAA 24-hr B 50-Year Rainfall=6.65"

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### Summary for Subcatchment 1S: Existing Pond Basin

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

Routed to Pond 1P : Existing Detention Pond

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"

Routed to Reach 1R : Total Pre

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 = 27.00 cfs @ 12.13 hrs, Volume= 1.892 af

Outflow = 27.00 cfs @ 12.13 hrs, Volume= 1.892 af, Atten= 0%, Lag= 0.0 min

**Drainage**

NOAA 24-hr B 50-Year Rainfall=6.65"

Prepared by Klober Engineering

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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 = 14.84 cfs @ 12.17 hrs, Volume= 1.132 af, Atten= 23%, Lag= 3.4 min  
 Primary = 14.84 cfs @ 12.17 hrs, Volume= 1.132 af  
 Routed to Reach 1R : Total Pre

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 403.45' @ 12.17 hrs Surf.Area= 3,478 sf Storage= 5,026 cf

Plug-Flow detention time= 4.9 min calculated for 1.129 af (100% of inflow)  
 Center-of-Mass det. time= 4.2 min ( 748.5 - 744.2 )

Volume	Invert	Avail.Storage	Storage Description
#1	401.25'	11,230 cf	<b>DETENTION POND (Irregular)</b> 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	401.45'	<b>2.0' long x 3.50' rise Sharp-Crested Rectangular Weir</b> 2 End Contraction(s)

**Primary OutFlow** Max=14.54 cfs @ 12.17 hrs HW=403.42' (Free Discharge)  
 ↑1=Sharp-Crested Rectangular Weir (Weir Controls 14.54 cfs @ 4.59 fps)

**Drainage**

Prepared by Klobner Engineering

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NOAA 24-hr B 100-Year Rainfall=7.40"

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**Summary for Subcatchment 1S: Existing Pond Basin**

Runoff = 21.45 cfs @ 12.11 hrs, Volume= 1.277 af, Depth> 6.22"  
 Routed to Pond 1P : Existing Detention Pond

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					<b>Direct Entry,</b>

**Summary for Subcatchment 2S: Existing Pond Bypass**

Runoff = 14.98 cfs @ 12.11 hrs, Volume= 0.864 af, Depth> 5.79"  
 Routed to Reach 1R : Total Pre

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					<b>Direct Entry,</b>

**Summary for Reach 1R: Total Pre**

Inflow Area = 4.254 ac, 14.83% Impervious, Inflow Depth > 6.03" for 100-Year event  
 Inflow = 30.24 cfs @ 12.13 hrs, Volume= 2.139 af  
 Outflow = 30.24 cfs @ 12.13 hrs, Volume= 2.139 af, Atten= 0%, Lag= 0.0 min

**Drainage**

NOAA 24-hr B 100-Year Rainfall=7.40"

Prepared by Klober Engineering

Printed 8/25/2023

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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 = 16.53 cfs @ 12.17 hrs, Volume= 1.276 af, Atten= 23%, Lag= 3.4 min  
 Primary = 16.53 cfs @ 12.17 hrs, Volume= 1.276 af  
 Routed to Reach 1R : Total Pre

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 403.64' @ 12.17 hrs Surf.Area= 3,604 sf Storage= 5,673 cf

Plug-Flow detention time= 4.9 min calculated for 1.271 af (100% of inflow)  
 Center-of-Mass det. time= 4.3 min ( 746.9 - 742.7 )

Volume	Invert	Avail.Storage	Storage Description
#1	401.25'	11,230 cf	<b>DETENTION POND (Irregular)</b> 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	401.45'	<b>2.0' long x 3.50' rise Sharp-Crested Rectangular Weir</b> 2 End Contraction(s)

**Primary OutFlow** Max=16.21 cfs @ 12.17 hrs HW=403.60' (Free Discharge)  
 ↳ **1=Sharp-Crested Rectangular Weir** (Weir Controls 16.21 cfs @ 4.80 fps)

# **POST-DEVELOPED**



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

**DEED REFERENCE:**  
 MAP 55, PARCEL 36  
 LEE HANSON 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: GENERAL RETAIL,  
 PROFESSIONAL SERVICES-NON MEDICAL

**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  
 TRANSMITTERS 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 SEED 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 CHANDLER SURVEYING OF PLEASANT VIEW, TN.
7. CONSTRUCTION WILL BE FOLLOWING PLAN APPROVAL BY THE CITY OF ASHLAND CITY.
8. 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.
9. ALL ADDITIONS IN THE FUTURE MUST BE BUILT TO THESE STANDARDS.
10. ACCORDING TO MAP 02702(C)70E, DATED 02/28/2021, PORTIONS OF THE SITE ARE LOCATED WITHIN FLOOD HAZARD AREAS 'AE' AND 'X'.

**LOT COVERAGE:**  
 EXISTING BUILDING AREA = 49,755 S.F.  
 NEW BUILDING AREA = 20,552 S.F.  
 BUILDING COVERAGE = 31.1%  
 PROPOSED BUILDING HEIGHT: 33'-1"  
 MAX BUILDING HEIGHT: 40'-0"  
 EXISTING CONCRETE SURFACE: ±350 S.F.  
 EXISTING ASPHALT SURFACE: ±59,926 S.F.  
 EXISTING IMPERVIOUS AREA: ±110,031 S.F. = 48.65%  
 PROPOSED ASPHALT SURFACE: ±23,008 S.F.  
 PROPOSED IMPERVIOUS AREA: ±15,028 S.F. = 20.00%

**PARKING INFORMATION:**  
 REQUIRED PARKING:  
 GENERAL RETAIL: 11,000/250 = 44 SPACES  
 PROFESSIONAL SERVICES: 9,562/400 = 24 SPACES  
 TOTAL PARKING: 68 SPACES,  
 INCLUDING 4 HANDICAP SPACES

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

**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 TRANSMITTERS 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:**

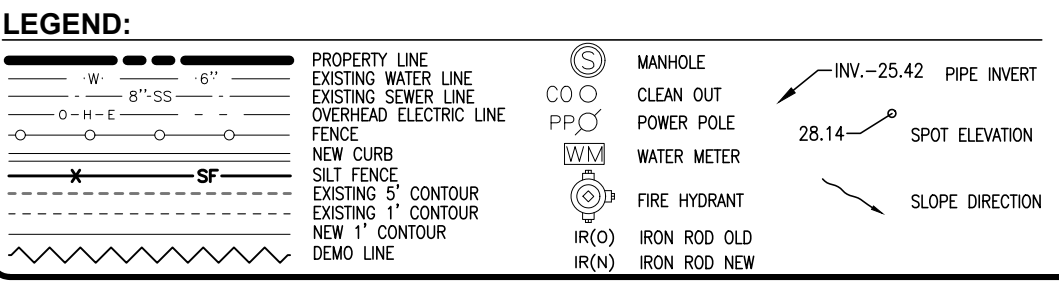
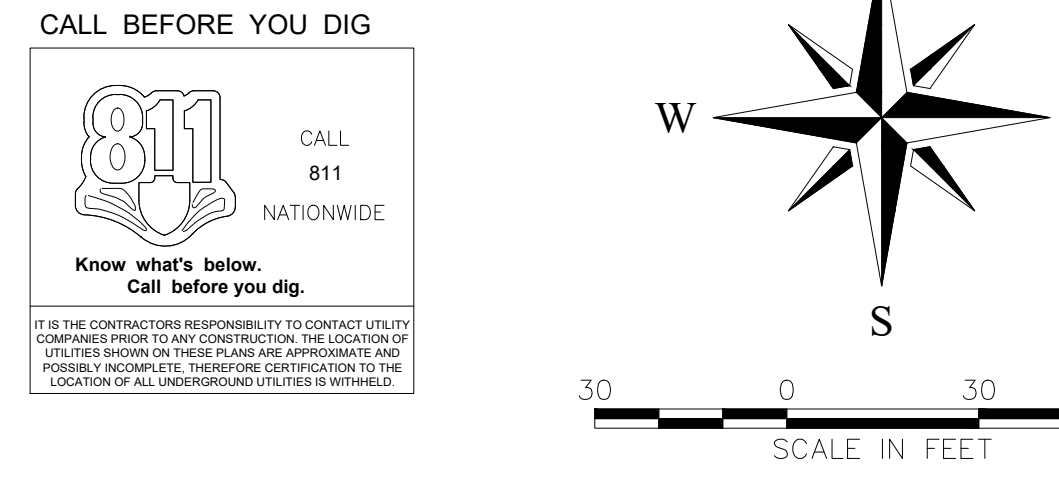
1. PRIOR TO BEGINNING CONSTRUCTION ON THIS SITE THE LOCATION OF UTILITIES MUST BE IDENTIFIED BY CALLING THE TOLL-FREE TENNESSEE ONE CALL REFERENCE NUMBER 1-800-351-1111.
2. ALL CONSTRUCTION ON THIS SITE SHALL COMPLY WITH APPLICABLE REGULATIONS AS SPECIFIED BY THE CITY OF MILLERSVILLE AND THE STATE OF TENNESSEE.
3. TOPSOIL SHALL BE PLACED ON EXCAVATED AREAS WHICH REQUIRE NEW VEGETATION. GROUND COVER SHALL BE REESTABLISHED WITH KENTUCKY 31 FESCUE SEED 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 CHANDLER SURVEYING OF PLEASANT VIEW, TN.
7. CONSTRUCTION WILL BE FOLLOWING PLAN APPROVAL BY THE CITY OF ASHLAND CITY.
8. 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.
9. ALL ADDITIONS IN THE FUTURE MUST BE BUILT TO THESE STANDARDS.
10. ACCORDING TO MAP 02702(C)70E, DATED 02/28/2021, PORTIONS OF THE SITE ARE LOCATED WITHIN FLOOD HAZARD AREAS 'AE' AND 'X'.

**NPDES PERMIT NOTE:**  
 THE MAXIMUM DISTURBED AREA FOR THIS PROJECT IS OVER 1 ACRE. THIS SITE IS CURRENTLY COVERED UNDER PERMIT NUMBER TNR245326.

*Joshua M. Lyon, P.E.*  
 JOSHUA M. LYON, P.E.  
 PROJECT MANAGER

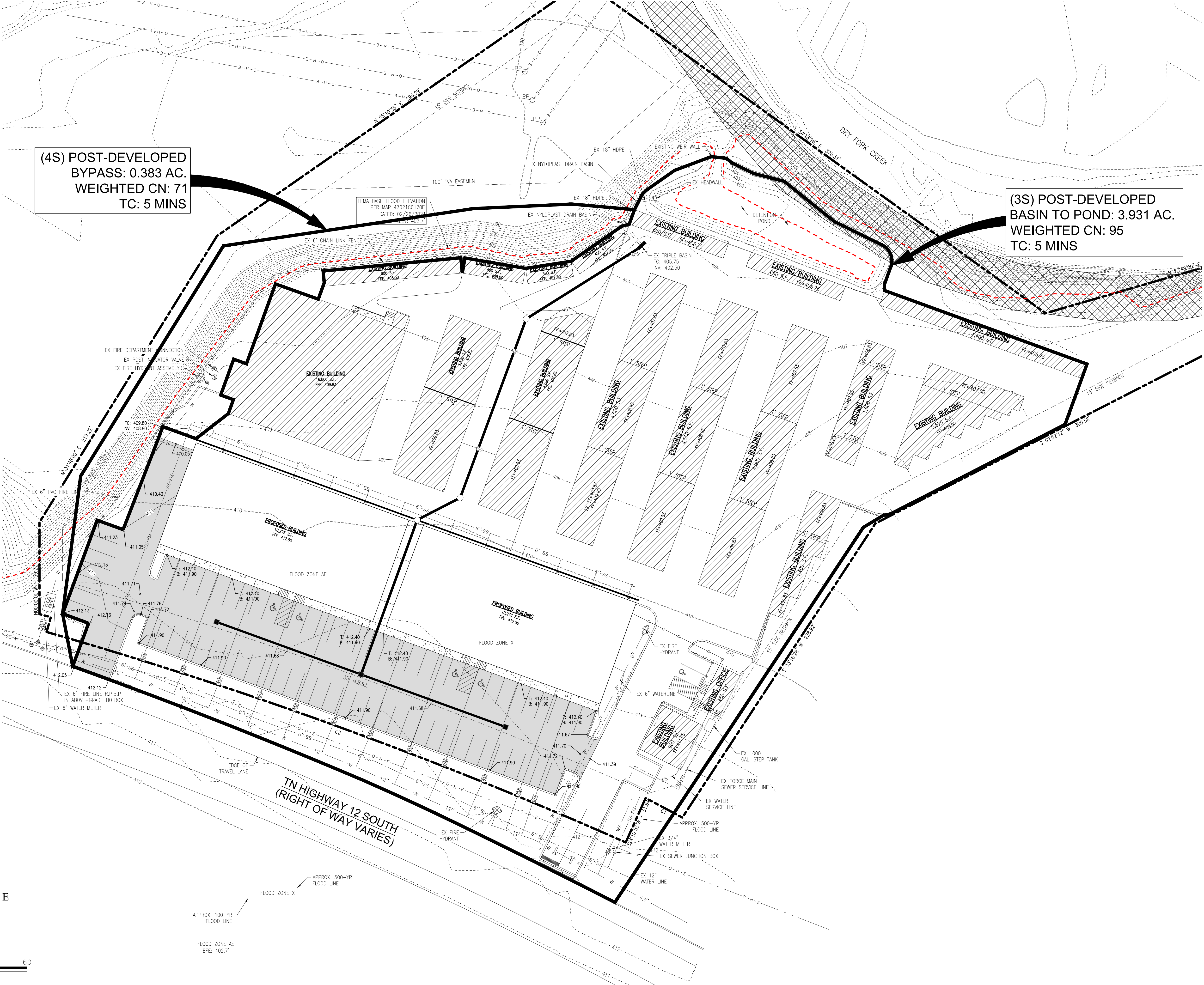
**EP&SC NOTES:**

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 ENCLOSED 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 REACHED BY 50%.
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.



(4S) POST-DEVELOPED BYPASS: 0.383 AC.  
 WEIGHTED CN: 71  
 TC: 5 MINS

(3S) POST-DEVELOPED BASIN TO POND: 3.931 AC.  
 WEIGHTED CN: 95  
 TC: 5 MINS



CONSTRUCTION CONSIDERATIONS

**KLOBER ENGINEERING SERVICES**

SEMPER PARATUS

SEMPER PARATUS  
 SERVING CLIENTS WITH CIVIL ENGINEERING & LAND DEVELOPMENT SERVICES  
 3556 TOLSON ROAD, SUITE 200  
 ASHLAND CITY, TN 37015  
 PHONE: (615) 382-2000 FAX: (615) 371-4488  
 www.kloberegs.com

NO.	DATE	DESCRIPTION

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

**ACE RETAIL CENTER**

1209 TN HWY-12 SOUTH  
 ASHLAND CITY, TN 37015  
 CHEATHAM COUNTY

**POST DEVELOPED DRAINAGE MAP**

SHEET NUMBER **DM-2**

ITEM # 4

DRAWN BY: CIN  
 CHECKED BY: JML  
 DATE: 5/7/24  
 PROJECT NO.: C02624

REPRODUCTION OF THESE DRAWINGS OR ANY PART THEREOF IS PROHIBITED WITHOUT WRITTEN APPROVAL OF KLOBER ENGINEERING SERVICES. THESE DRAWINGS ARE PROTECTED BY U.S. COPYRIGHT LAWS AND VIOLATORS ARE SUBJECT TO LEGAL RECOURSE.



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

**DEED REFERENCE:**  
 MAP 55, PARCEL 36  
 LEE BAXSON 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: GENERAL RETAIL,  
 PROFESSIONAL SERVICES-NON MEDICAL

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

**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  
 TRANSMITTERS 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.

**LOT COVERAGE:**  
 EXISTING BUILDING AREA = 49,755 S.F.  
 NEW BUILDING AREA = 20,552 S.F.  
 BUILDING COVERAGE = 31.1%  
 PROPOSED BUILDING HEIGHT: 33'-1"  
 MAX BUILDING HEIGHT: 40'-0"  
 EXISTING CONCRETE SURFACE: ±350 S.F.  
 EXISTING ASPHALT SURFACE: 159,926 S.F.  
 EXISTING IMPERVIOUS AREA: ±110,031 S.F. = 48.65%  
 PROPOSED ASPHALT SURFACE: ±23,008 S.F.  
 PROPOSED IMPERVIOUS AREA: ±145,088 S.F. = 20.00%

**PARKING INFORMATION:**  
 REQUIRED PARKING:  
 GENERAL RETAIL: 11,000/250 = 44 SPACES  
 PROFESSIONAL SERVICES: 9,562/400 = 24 SPACES  
 TOTAL PARKING: 68 SPACES,  
 INCLUDING 4 HANDICAP SPACES

**UTILITY NOTE:**  
 COORDINATE ALL UTILITY INSTALLATIONS  
 WITH GOVERNING ENTITIES.

**GENERAL NOTES:**

- 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.
- ALL CONSTRUCTION ON THIS SITE SHALL COMPLY WITH APPLICABLE REGULATIONS AS SPECIFIED BY THE CITY OF MILLERSVILLE AND THE STATE OF TENNESSEE.
- TOPSOIL SHALL BE PLACED ON EXCAVATED AREAS WHICH REQUIRE NEW VEGETATION. GROUND COVER SHALL BE REESTABLISHED WITH KENTUCKY 31 FESCUE SEED 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.
- 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.
- 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.
- THE TOPOGRAPHIC SURVEY SHOWN HEREON WAS TAKEN FROM A SURVEY BY CHANDLER SURVEYING OF PLEASANT VIEW, TN.
- CONSTRUCTION WILL BEGIN FOLLOWING PLAN APPROVAL BY THE CITY OF ASHLAND CITY.
- 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.
- ALL ADDITIONS IN THE FUTURE MUST BE BUILT TO THESE STANDARDS.
- ACCORDING TO MAP 42021C0170E, DATED 02/26/2021, PORTIONS OF THE SITE ARE LOCATED WITHIN FLOOD HAZARD AREAS 'AE' AND 'X'.

**NPDES PERMIT NOTE:**  
 THE MAXIMUM DISTURBED AREA FOR THIS PROJECT IS OVER 1 ACRE. THIS SITE IS CURRENTLY COVERED UNDER PERMIT NUMBER TNR245326.

**EPASC NOTES:**

- AN EROSION PREVENTION SITUATION CONTROL PLAN (EPASC) 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 EPASC 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 EPASC 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.
- ALL EPASC DEVICES ARE TO REMAIN IN PLACE UNTIL THE SITE HAS BEEN STABILIZED AND A GOOD STAND OF GRASS HAS BEEN ESTABLISHED.
- 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).
- 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.
- EXCAVATED TOPSOIL TO BE REUSED MUST BE STOCKPILED AND ENCLOSED WITH SILT FENCING.
- 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.
- APPROVED INLET PROTECTIONS FOR NEARBY STORM SEWER CURB AND DROP INLETS MUST BE INSTALLED WITHIN 24 HOURS OF GRADING COMMENCEMENT.
- VEGETATIVE BUFFERS OR OTHER PROTECTION MUST BE PROVIDED ALONG STREAMS, RIVERS, AND PONDS TO AVOID EROSION OF BANKS.
- 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.
- 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.
- SEDIMENT MUST BE REMOVED FROM SEDIMENT BARRIERS, PONDS, AND OTHER SEDIMENT CONTROLS WHEN DESIGN CAPACITY HAS BEEN REACHED BY 50%.
- SEDIMENT THAT HAS ESCAPED THE CONSTRUCTION SITE AND HAS COLLECTED IN THE STREET OR DRAINAGE STRUCTURES MUST IMMEDIATELY BE PHYSICALLY REMOVED.
- 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.
- 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 NATIONWIDE

Know what's below. Call before you dig.

IF THE CONTRACTOR'S RESPONSIBILITY TO CONTACT UTILITY COMPANIES PRIOR TO ANY CONSTRUCTION IS NOT APPROPRIATE AND UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE AND POSSIBLY INCOMPLETE, THEREFORE CONSTRUCTION TO THE LOCATION OF ALL UNDERGROUND UTILITIES IS WARRANTEED.

**LEGEND:**

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

**ACE RETAIL CENTER**

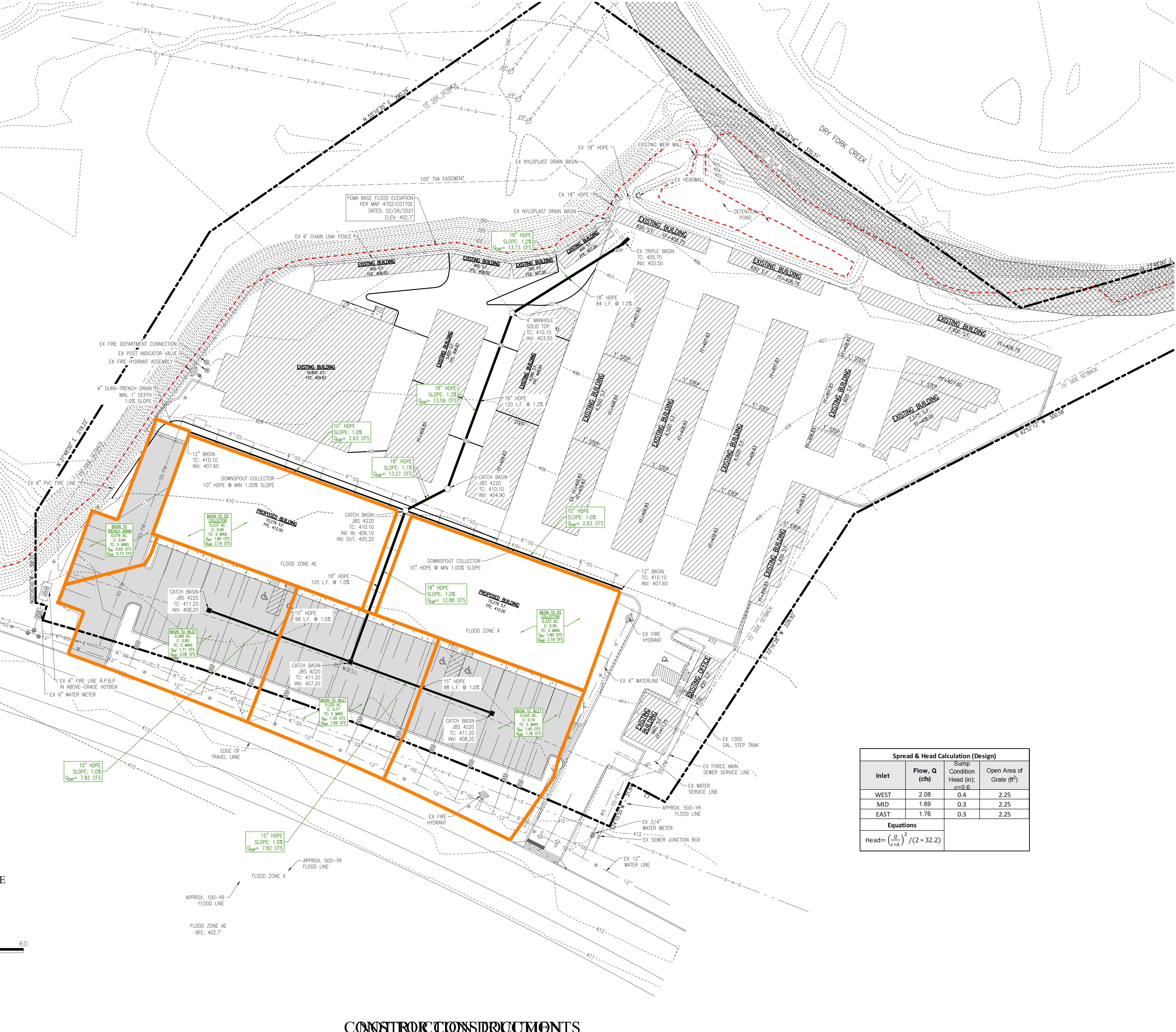
1209 TN HWY-12 SOUTH  
 ASHLAND CITY, TN 37105  
 CHEATHAM COUNTY

**CONSTRUCTION DOCUMENTS**

**DM-3**

SHEET NUMBER

**ITEM # 4**



**Spread & Head Calculation (Design)**

Inlet	Flow, Q (cfs)	Sump Condition Head (in), c=0.6	Open Area of Grate (ft²)
WEST	2.08	0.4	2.25
MID	1.69	0.3	2.25
EAST	1.76	0.3	2.25

**Equations**

$$\text{Head} = \left( \frac{Q}{CVA} \right)^2 / (2 + 32.2)$$

**KLOBER ENGINEERING SERVICES**

SERVING CLIENTS WITH CIVIL ENGINEERING & LAND DEVELOPMENT SERVICES  
 3556 TOWN CENTER DR. #100  
 ASHLAND CITY, TN 37105  
 PHONE: (615) 382-2000 FAX: (615) 371-4448  
 www.klobereing.com

NO.	DATE	REVISIONS	DESCRIPTION

**OSHA 10 HOUR**

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

**ACE RETAIL CENTER**

1209 TN HWY-12 SOUTH  
 ASHLAND CITY, TN 37105  
 CHEATHAM COUNTY

DRAWN BY: CIN  
 CHECKED BY: JML  
 DATE: 5/7/24  
 PROJECT NO.: C02624

**SUBCATCHMENT MAP**

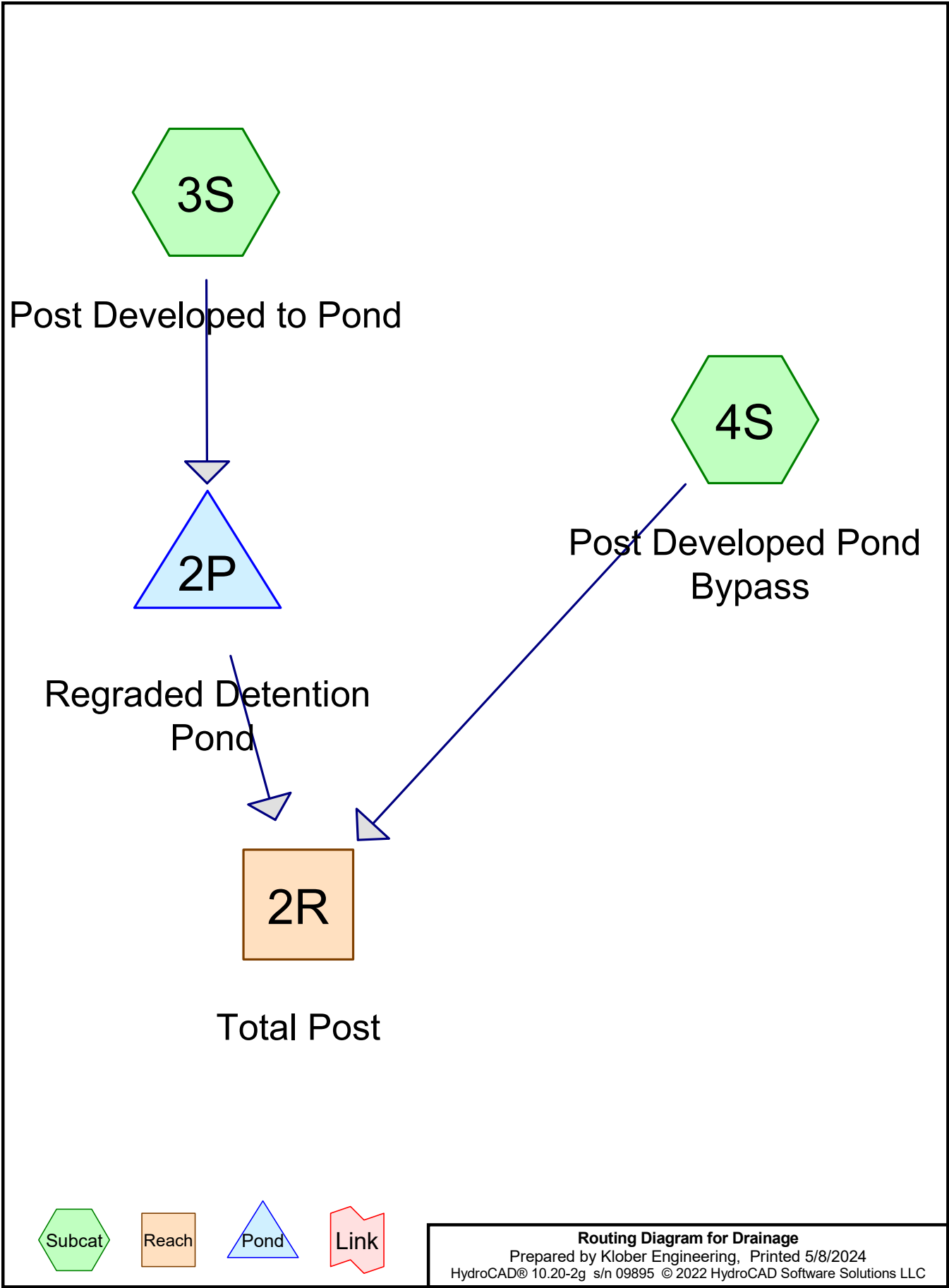
SHEET NUMBER

**DM-3**

ITEM # 4

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**Drainage**

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NOAA 24-hr B 2-Year Rainfall=3.60"

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Page 2

**Summary for Subcatchment 3S: Post Developed to Pond**

Runoff = 16.23 cfs @ 12.11 hrs, Volume= 0.945 af, Depth> 2.88"

Routed to Pond 2P : Regraded Detention Pond

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
0.139	49	50-75% Grass cover, Fair, HSG A
0.062	79	50-75% Grass cover, Fair, HSG C
0.228	79	50-75% Grass cover, Fair, HSG C
0.074	84	50-75% Grass cover, Fair, HSG D
0.091	96	Gravel surface, HSG C
* 1.428	98	Roofs, HSG C
1.909	98	Unconnected pavement, HSG C
3.931	95	Weighted Average
0.594		15.11% Pervious Area
3.337		84.89% Impervious Area
1.909		57.21% Unconnected

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

**Summary for Subcatchment 4S: Post Developed Pond Bypass**

Runoff = 0.63 cfs @ 12.13 hrs, Volume= 0.033 af, Depth> 1.03"

Routed to Reach 2R : Total Post

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
0.362	69	50-75% Grass cover, Fair, HSG B
0.021	98	Paved parking, HSG B
0.383	71	Weighted Average
0.362		94.52% Pervious Area
0.021		5.48% Impervious Area

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

**Drainage**

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NOAA 24-hr B 2-Year Rainfall=3.60"

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**Summary for Reach 2R: Total Post**

Inflow Area = 4.314 ac, 77.84% Impervious, Inflow Depth > 2.72" for 2-Year event  
Inflow = 12.69 cfs @ 12.17 hrs, Volume= 0.977 af  
Outflow = 12.69 cfs @ 12.17 hrs, Volume= 0.977 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: Regraded Detention Pond**

Inflow Area = 3.931 ac, 84.89% Impervious, Inflow Depth > 2.88" for 2-Year event  
Inflow = 16.23 cfs @ 12.11 hrs, Volume= 0.945 af  
Outflow = 12.15 cfs @ 12.17 hrs, Volume= 0.944 af, Atten= 25%, Lag= 3.6 min  
Primary = 12.15 cfs @ 12.17 hrs, Volume= 0.944 af

Routed to Reach 2R : Total Post

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Peak Elev= 403.16' @ 12.17 hrs Surf.Area= 4,137 sf Storage= 3,864 cf

Plug-Flow detention time= 2.7 min calculated for 0.941 af (100% of inflow)  
Center-of-Mass det. time= 2.6 min ( 751.2 - 748.6 )

Volume	Invert	Avail.Storage	Storage Description			
#1	401.45'	12,821 cf	<b>DETENTION POND (Irregular)</b> Listed below (Recalc)			
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)	
401.45	16	16.0	0	0	16	
402.00	1,807	216.0	365	365	3,709	
403.00	4,007	353.0	2,835	3,200	9,919	
404.00	4,834	361.0	4,414	7,614	10,497	
405.00	5,589	331.0	5,207	12,821	12,185	

Device	Routing	Invert	Outlet Devices				
#1	Primary	401.45'	<b>2.0' long x 3.50' rise Sharp-Crested Rectangular Weir</b> 2 End Contraction(s)				
#2	Primary	404.95'	<b>10.0' long x 0.5' breadth Broad-Crested Rectangular Weir</b> 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=11.93 cfs @ 12.17 hrs HW=403.14' (Free Discharge)

- 1=Sharp-Crested Rectangular Weir (Weir Controls 11.93 cfs @ 4.25 fps)
- 2=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

**Drainage**

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NOAA 24-hr B 5-Year Rainfall=4.39"

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**Summary for Subcatchment 3S: Post Developed to Pond**

Runoff = 20.10 cfs @ 12.11 hrs, Volume= 1.185 af, Depth> 3.62"

Routed to Pond 2P : Regraded Detention Pond

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
0.139	49	50-75% Grass cover, Fair, HSG A
0.062	79	50-75% Grass cover, Fair, HSG C
0.228	79	50-75% Grass cover, Fair, HSG C
0.074	84	50-75% Grass cover, Fair, HSG D
0.091	96	Gravel surface, HSG C
* 1.428	98	Roofs, HSG C
1.909	98	Unconnected pavement, HSG C
3.931	95	Weighted Average
0.594		15.11% Pervious Area
3.337		84.89% Impervious Area
1.909		57.21% Unconnected

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

**Summary for Subcatchment 4S: Post Developed Pond Bypass**

Runoff = 0.94 cfs @ 12.12 hrs, Volume= 0.049 af, Depth> 1.54"

Routed to Reach 2R : Total Post

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
0.362	69	50-75% Grass cover, Fair, HSG B
0.021	98	Paved parking, HSG B
0.383	71	Weighted Average
0.362		94.52% Pervious Area
0.021		5.48% Impervious Area

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

**Drainage**

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NOAA 24-hr B 5-Year Rainfall=4.39"

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**Summary for Reach 2R: Total Post**

Inflow Area = 4.314 ac, 77.84% Impervious, Inflow Depth > 3.43" for 5-Year event  
 Inflow = 15.59 cfs @ 12.17 hrs, Volume= 1.234 af  
 Outflow = 15.59 cfs @ 12.17 hrs, Volume= 1.234 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: Regraded Detention Pond**

Inflow Area = 3.931 ac, 84.89% Impervious, Inflow Depth > 3.62" for 5-Year event  
 Inflow = 20.10 cfs @ 12.11 hrs, Volume= 1.185 af  
 Outflow = 14.80 cfs @ 12.17 hrs, Volume= 1.185 af, Atten= 26%, Lag= 3.8 min  
 Primary = 14.80 cfs @ 12.17 hrs, Volume= 1.185 af

Routed to Reach 2R : Total Post

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 403.45' @ 12.17 hrs Surf.Area= 4,370 sf Storage= 5,086 cf

Plug-Flow detention time= 3.0 min calculated for 1.181 af (100% of inflow)  
 Center-of-Mass det. time= 2.9 min ( 748.0 - 745.1 )

Volume	Invert	Avail.Storage	Storage Description			
#1	401.45'	12,821 cf	<b>DETENTION POND (Irregular)</b> Listed below (Recalc)			
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)	
401.45	16	16.0	0	0	16	
402.00	1,807	216.0	365	365	3,709	
403.00	4,007	353.0	2,835	3,200	9,919	
404.00	4,834	361.0	4,414	7,614	10,497	
405.00	5,589	331.0	5,207	12,821	12,185	

Device	Routing	Invert	Outlet Devices				
#1	Primary	401.45'	<b>2.0' long x 3.50' rise Sharp-Crested Rectangular Weir</b>				
			2 End Contraction(s)				
#2	Primary	404.95'	<b>10.0' long x 0.5' breadth Broad-Crested Rectangular Weir</b>				
			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=403.42' (Free Discharge)

1=Sharp-Crested Rectangular Weir (Weir Controls 14.53 cfs @ 4.59 fps)  
 2=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

**Drainage**

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NOAA 24-hr B 10-Year Rainfall=5.02"

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**Summary for Subcatchment 3S: Post Developed to Pond**

Runoff = 23.16 cfs @ 12.11 hrs, Volume= 1.377 af, Depth> 4.20"  
Routed to Pond 2P : Regraded Detention Pond

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
0.139	49	50-75% Grass cover, Fair, HSG A
0.062	79	50-75% Grass cover, Fair, HSG C
0.228	79	50-75% Grass cover, Fair, HSG C
0.074	84	50-75% Grass cover, Fair, HSG D
0.091	96	Gravel surface, HSG C
* 1.428	98	Roofs, HSG C
1.909	98	Unconnected pavement, HSG C
3.931	95	Weighted Average
0.594		15.11% Pervious Area
3.337		84.89% Impervious Area
1.909		57.21% Unconnected

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

**Summary for Subcatchment 4S: Post Developed Pond Bypass**

Runoff = 1.21 cfs @ 12.12 hrs, Volume= 0.063 af, Depth> 1.98"  
Routed to Reach 2R : Total Post

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
0.362	69	50-75% Grass cover, Fair, HSG B
0.021	98	Paved parking, HSG B
0.383	71	Weighted Average
0.362		94.52% Pervious Area
0.021		5.48% Impervious Area

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

**Drainage**

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NOAA 24-hr B 10-Year Rainfall=5.02"

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**Summary for Reach 2R: Total Post**

Inflow Area = 4.314 ac, 77.84% Impervious, Inflow Depth > 4.01" for 10-Year event  
Inflow = 17.88 cfs @ 12.17 hrs, Volume= 1.440 af  
Outflow = 17.88 cfs @ 12.17 hrs, Volume= 1.440 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: Regraded Detention Pond**

Inflow Area = 3.931 ac, 84.89% Impervious, Inflow Depth > 4.20" for 10-Year event  
Inflow = 23.16 cfs @ 12.11 hrs, Volume= 1.377 af  
Outflow = 16.81 cfs @ 12.18 hrs, Volume= 1.377 af, Atten= 27%, Lag= 3.9 min  
Primary = 16.81 cfs @ 12.18 hrs, Volume= 1.377 af

Routed to Reach 2R : Total Post

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Peak Elev= 403.67' @ 12.18 hrs Surf.Area= 4,551 sf Storage= 6,055 cf

Plug-Flow detention time= 3.2 min calculated for 1.372 af (100% of inflow)  
Center-of-Mass det. time= 3.1 min ( 746.1 - 743.1 )

Volume	Invert	Avail.Storage	Storage Description			
#1	401.45'	12,821 cf	<b>DETENTION POND (Irregular)</b> Listed below (Recalc)			
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)	
401.45	16	16.0	0	0	16	
402.00	1,807	216.0	365	365	3,709	
403.00	4,007	353.0	2,835	3,200	9,919	
404.00	4,834	361.0	4,414	7,614	10,497	
405.00	5,589	331.0	5,207	12,821	12,185	

Device	Routing	Invert	Outlet Devices				
#1	Primary	401.45'	<b>2.0' long x 3.50' rise Sharp-Crested Rectangular Weir</b>				
			2 End Contraction(s)				
#2	Primary	404.95'	<b>10.0' long x 0.5' breadth Broad-Crested Rectangular Weir</b>				
			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=16.57 cfs @ 12.18 hrs HW=403.64' (Free Discharge)

1=Sharp-Crested Rectangular Weir (Weir Controls 16.57 cfs @ 4.84 fps)

2=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)



**Drainage**

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NOAA 24-hr B 25-Year Rainfall=5.92"

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**Summary for Subcatchment 3S: Post Developed to Pond**

Runoff = 27.53 cfs @ 12.11 hrs, Volume= 1.651 af, Depth> 5.04"  
Routed to Pond 2P : Regraded Detention Pond

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
0.139	49	50-75% Grass cover, Fair, HSG A
0.062	79	50-75% Grass cover, Fair, HSG C
0.228	79	50-75% Grass cover, Fair, HSG C
0.074	84	50-75% Grass cover, Fair, HSG D
0.091	96	Gravel surface, HSG C
* 1.428	98	Roofs, HSG C
1.909	98	Unconnected pavement, HSG C
3.931	95	Weighted Average
0.594		15.11% Pervious Area
3.337		84.89% Impervious Area
1.909		57.21% Unconnected

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

**Summary for Subcatchment 4S: Post Developed Pond Bypass**

Runoff = 1.61 cfs @ 12.12 hrs, Volume= 0.084 af, Depth> 2.64"  
Routed to Reach 2R : Total Post

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
0.362	69	50-75% Grass cover, Fair, HSG B
0.021	98	Paved parking, HSG B
0.383	71	Weighted Average
0.362		94.52% Pervious Area
0.021		5.48% Impervious Area

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

**Drainage**

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NOAA 24-hr B 25-Year Rainfall=5.92"

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**Summary for Reach 2R: Total Post**

Inflow Area = 4.314 ac, 77.84% Impervious, Inflow Depth > 4.83" for 25-Year event  
Inflow = 21.07 cfs @ 12.17 hrs, Volume= 1.735 af  
Outflow = 21.07 cfs @ 12.17 hrs, Volume= 1.735 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: Regraded Detention Pond**

Inflow Area = 3.931 ac, 84.89% Impervious, Inflow Depth > 5.04" for 25-Year event  
Inflow = 27.53 cfs @ 12.11 hrs, Volume= 1.651 af  
Outflow = 19.68 cfs @ 12.18 hrs, Volume= 1.651 af, Atten= 29%, Lag= 4.0 min  
Primary = 19.68 cfs @ 12.18 hrs, Volume= 1.651 af

Routed to Reach 2R : Total Post

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Peak Elev= 403.98' @ 12.18 hrs Surf.Area= 4,819 sf Storage= 7,528 cf

Plug-Flow detention time= 3.4 min calculated for 1.645 af (100% of inflow)  
Center-of-Mass det. time= 3.3 min ( 744.1 - 740.8 )

Volume	Invert	Avail.Storage	Storage Description			
#1	401.45'	12,821 cf	<b>DETENTION POND (Irregular)</b> Listed below (Recalc)			
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)	
401.45	16	16.0	0	0	16	
402.00	1,807	216.0	365	365	3,709	
403.00	4,007	353.0	2,835	3,200	9,919	
404.00	4,834	361.0	4,414	7,614	10,497	
405.00	5,589	331.0	5,207	12,821	12,185	

Device	Routing	Invert	Outlet Devices				
#1	Primary	401.45'	<b>2.0' long x 3.50' rise Sharp-Crested Rectangular Weir</b>				
			2 End Contraction(s)				
#2	Primary	404.95'	<b>10.0' long x 0.5' breadth Broad-Crested Rectangular Weir</b>				
			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=19.42 cfs @ 12.18 hrs HW=403.95' (Free Discharge)

1=Sharp-Crested Rectangular Weir (Weir Controls 19.42 cfs @ 5.17 fps)

2=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

**Drainage**

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NOAA 24-hr B 50-Year Rainfall=6.65"

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**Summary for Subcatchment 3S: Post Developed to Pond**

Runoff = 31.06 cfs @ 12.11 hrs, Volume= 1.873 af, Depth> 5.72"  
Routed to Pond 2P : Regraded Detention Pond

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
0.139	49	50-75% Grass cover, Fair, HSG A
0.062	79	50-75% Grass cover, Fair, HSG C
0.228	79	50-75% Grass cover, Fair, HSG C
0.074	84	50-75% Grass cover, Fair, HSG D
0.091	96	Gravel surface, HSG C
* 1.428	98	Roofs, HSG C
1.909	98	Unconnected pavement, HSG C
3.931	95	Weighted Average
0.594		15.11% Pervious Area
3.337		84.89% Impervious Area
1.909		57.21% Unconnected

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

**Summary for Subcatchment 4S: Post Developed Pond Bypass**

Runoff = 1.95 cfs @ 12.12 hrs, Volume= 0.102 af, Depth> 3.21"  
Routed to Reach 2R : Total Post

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
0.362	69	50-75% Grass cover, Fair, HSG B
0.021	98	Paved parking, HSG B
0.383	71	Weighted Average
0.362		94.52% Pervious Area
0.021		5.48% Impervious Area

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

**Drainage**

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NOAA 24-hr B 50-Year Rainfall=6.65"

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**Summary for Reach 2R: Total Post**

Inflow Area = 4.314 ac, 77.84% Impervious, Inflow Depth > 5.49" for 50-Year event  
 Inflow = 23.57 cfs @ 12.17 hrs, Volume= 1.975 af  
 Outflow = 23.57 cfs @ 12.17 hrs, Volume= 1.975 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: Regraded Detention Pond**

Inflow Area = 3.931 ac, 84.89% Impervious, Inflow Depth > 5.72" for 50-Year event  
 Inflow = 31.06 cfs @ 12.11 hrs, Volume= 1.873 af  
 Outflow = 21.93 cfs @ 12.18 hrs, Volume= 1.872 af, Atten= 29%, Lag= 4.1 min  
 Primary = 21.93 cfs @ 12.18 hrs, Volume= 1.872 af

Routed to Reach 2R : Total Post

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 404.23' @ 12.18 hrs Surf.Area= 5,006 sf Storage= 8,766 cf

Plug-Flow detention time= 3.6 min calculated for 1.872 af (100% of inflow)  
 Center-of-Mass det. time= 3.5 min ( 742.9 - 739.4 )

Volume	Invert	Avail.Storage	Storage Description			
#1	401.45'	12,821 cf	<b>DETENTION POND (Irregular)</b> Listed below (Recalc)			
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)	
401.45	16	16.0	0	0	16	
402.00	1,807	216.0	365	365	3,709	
403.00	4,007	353.0	2,835	3,200	9,919	
404.00	4,834	361.0	4,414	7,614	10,497	
405.00	5,589	331.0	5,207	12,821	12,185	

Device	Routing	Invert	Outlet Devices				
#1	Primary	401.45'	<b>2.0' long x 3.50' rise Sharp-Crested Rectangular Weir</b>				
			2 End Contraction(s)				
#2	Primary	404.95'	<b>10.0' long x 0.5' breadth Broad-Crested Rectangular Weir</b>				
			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=21.65 cfs @ 12.18 hrs HW=404.20' (Free Discharge)

1=Sharp-Crested Rectangular Weir (Weir Controls 21.65 cfs @ 5.43 fps)  
 2=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

**Drainage**

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NOAA 24-hr B 100-Year Rainfall=7.40"

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**Summary for Subcatchment 3S: Post Developed to Pond**

Runoff = 34.67 cfs @ 12.11 hrs, Volume= 2.100 af, Depth> 6.41"

Routed to Pond 2P : Regraded Detention Pond

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
0.139	49	50-75% Grass cover, Fair, HSG A
0.062	79	50-75% Grass cover, Fair, HSG C
0.228	79	50-75% Grass cover, Fair, HSG C
0.074	84	50-75% Grass cover, Fair, HSG D
0.091	96	Gravel surface, HSG C
* 1.428	98	Roofs, HSG C
1.909	98	Unconnected pavement, HSG C
3.931	95	Weighted Average
0.594		15.11% Pervious Area
3.337		84.89% Impervious Area
1.909		57.21% Unconnected

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

**Summary for Subcatchment 4S: Post Developed Pond Bypass**

Runoff = 2.31 cfs @ 12.12 hrs, Volume= 0.122 af, Depth> 3.81"

Routed to Reach 2R : Total Post

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
0.362	69	50-75% Grass cover, Fair, HSG B
0.021	98	Paved parking, HSG B
0.383	71	Weighted Average
0.362		94.52% Pervious Area
0.021		5.48% Impervious Area

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



**Drainage**

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NOAA 24-hr B 100-Year Rainfall=7.40"

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**Summary for Reach 2R: Total Post**

Inflow Area = 4.314 ac, 77.84% Impervious, Inflow Depth > 6.18" for 100-Year event  
 Inflow = 26.05 cfs @ 12.17 hrs, Volume= 2.221 af  
 Outflow = 26.05 cfs @ 12.17 hrs, Volume= 2.221 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: Regraded Detention Pond**

Inflow Area = 3.931 ac, 84.89% Impervious, Inflow Depth > 6.41" for 100-Year event  
 Inflow = 34.67 cfs @ 12.11 hrs, Volume= 2.100 af  
 Outflow = 24.15 cfs @ 12.18 hrs, Volume= 2.100 af, Atten= 30%, Lag= 4.2 min  
 Primary = 24.15 cfs @ 12.18 hrs, Volume= 2.100 af

Routed to Reach 2R : Total Post

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 404.49' @ 12.18 hrs Surf.Area= 5,198 sf Storage= 10,080 cf

Plug-Flow detention time= 3.8 min calculated for 2.093 af (100% of inflow)  
 Center-of-Mass det. time= 3.6 min ( 741.9 - 738.3 )

Volume	Invert	Avail.Storage	Storage Description			
#1	401.45'	12,821 cf	<b>DETENTION POND (Irregular) Listed below (Recalc)</b>			
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)	
401.45	16	16.0	0	0	16	
402.00	1,807	216.0	365	365	3,709	
403.00	4,007	353.0	2,835	3,200	9,919	
404.00	4,834	361.0	4,414	7,614	10,497	
405.00	5,589	331.0	5,207	12,821	12,185	

Device	Routing	Invert	Outlet Devices				
#1	Primary	401.45'	<b>2.0' long x 3.50' rise Sharp-Crested Rectangular Weir</b>				
			2 End Contraction(s)				
#2	Primary	404.95'	<b>10.0' long x 0.5' breadth Broad-Crested Rectangular Weir</b>				
			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=23.86 cfs @ 12.18 hrs HW=404.46' (Free Discharge)

1=Sharp-Crested Rectangular Weir (Weir Controls 23.86 cfs @ 5.67 fps)  
 2=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

## 4 INTERNAL TRENCH WIDTH

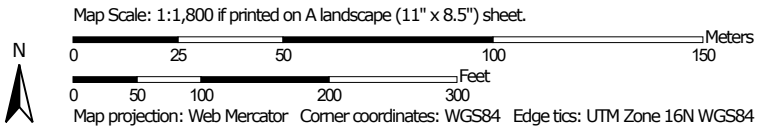
0.013 MANNINGS ROUGHNESS (CONC)  
 0.009 MANNINGS ROUGHNESS (FRP)  
 0.75 GRATE HEIGHT (IN)  
 2 BOTTOM CORNER RADIUS (IN)

\*NOTES: All flow and volume calculations are below grate  
 All section depths can be made with no slope. Sections shown are 8' long (typ.)

SLOPE (%)	SECTION #	START INVERT (IN)	END INVERT (IN)	FLOW RATE FORMING SYSTEMS (CFS)	FLOW RATE FORMING SYSTEMS (GPM)	FLOW RATE PRECAST SYSTEM (CFS)	FLOW RATE PRECAST SYSTEM (GPM)	RADIUS SECTION STORAGE (GAL)
0.5	4.5	4.0	4.5	0.17	78	0.25	113	5.5
	5.0	4.5	5.0	0.21	93	0.30	134	6.4
	5.5	5.0	5.5	0.24	108	0.35	155	7.2
	6.0	5.5	6.0	0.27	122	0.39	177	8.0
	6.5	6.0	6.5	0.31	137	0.44	198	8.8
	7.0	6.5	7.0	0.34	152	0.49	219	9.7
	7.5	7.0	7.5	0.37	167	0.54	241	10.5
	8.0	7.5	8.0	0.41	182	0.59	263	11.3
	8.5	8.0	8.5	0.44	197	0.63	284	12.2
	9.0	8.5	9.0	0.47	212	0.68	306	13.0
	9.5	9.0	9.5	0.51	227	0.73	328	13.8
	10.0	9.5	10.0	0.54	242	0.78	350	14.7
	10.5	10.0	10.5	0.57	257	0.83	371	15.5
	11.0	10.5	11.0	0.61	272	0.88	393	16.3
	11.5	11.0	11.5	0.64	287	0.92	415	17.2
	12.0	11.5	12.0	0.67	303	0.97	437	18.0
	12.5	12.0	12.5	0.71	318	1.02	459	18.8
	13.0	12.5	13.0	0.74	333	1.07	481	19.6
	13.5	13.0	13.5	0.78	348	1.12	503	20.5
	14.0	13.5	14.0	0.81	363	1.17	525	21.3
	14.5	14.0	14.5	0.84	378	1.22	547	22.1
	15.0	14.5	15.0	0.88	394	1.27	569	23.0
	15.5	15.0	15.5	0.91	409	1.32	591	23.8
	16.0	15.5	16.0	0.94	424	1.36	613	24.6
	16.5	16.0	16.5	0.98	439	1.41	635	25.5
	17.0	16.5	17.0	1.01	455	1.46	657	26.3
	17.5	17.0	17.5	1.05	470	1.51	679	27.1
	18.0	17.5	18.0	1.08	485	1.56	701	28.0
	18.5	18.0	18.5	1.11	500	1.61	723	28.8
	19.0	18.5	19.0	1.15	515	1.66	745	29.6
	19.5	19.0	19.5	1.18	531	1.71	767	30.5
	20.0	19.5	20.0	1.22	546	1.76	789	31.3
	20.5	20.0	20.5	1.25	561	1.81	811	32.1
	21.0	20.5	21.0	1.28	576	1.86	833	32.9
	21.5	21.0	21.5	1.32	592	1.90	855	33.8
	22.0	21.5	22.0	1.35	607	1.95	877	34.6
	22.5	22.0	22.5	1.39	622	2.00	899	35.4


SLOPE (%)	SECTION #	START INVERT (IN)	END INVERT (IN)	FLOW RATE FORMING SYSTEMS (CFS)	FLOW RATE FORMING SYSTEMS (GPM)	FLOW RATE PRECAST SYSTEM (CFS)	FLOW RATE PRECAST SYSTEM (GPM)	RADIUS SECTION STORAGE (GAL)
1.0	5	4.0	5.0	0.29	131	0.42	190	6.4
	6	5.0	6.0	0.39	173	0.56	250	8.0
	7	6.0	7.0	0.48	215	0.69	310	9.7
	8	7.0	8.0	0.57	257	0.83	371	11.3
	9	8.0	9.0	0.67	300	0.96	433	13.0
	10	9.0	10.0	0.76	342	1.10	494	14.7
	11	10.0	11.0	0.86	385	1.24	556	16.3
	12	11.0	12.0	0.95	428	1.38	618	18.0
	13	12.0	13.0	1.05	471	1.51	680	19.6
	14	13.0	14.0	1.14	514	1.65	742	21.3
	15	14.0	15.0	1.24	557	1.79	804	23.0
	16	15.0	16.0	1.34	600	1.93	866	24.6
	17	16.0	17.0	1.43	643	2.07	928	26.3
	18	17.0	18.0	1.53	686	2.21	991	28.0
	19	18.0	19.0	1.62	729	2.35	1053	29.6
	20	19.0	20.0	1.72	772	2.48	1115	31.3
	21	20.0	21.0	1.82	815	2.62	1178	32.9
	22	21.0	22.0	1.91	858	2.76	1240	34.6
	23	22.0	23.0	2.01	902	2.90	1302	36.3
	24	23.0	24.0	2.10	945	3.04	1365	37.9
	25	24.0	25.0	2.20	988	3.18	1427	39.6
	26	25.0	26.0	2.30	1031	3.32	1489	41.3
	27	26.0	27.0	2.39	1074	3.46	1552	42.9
	28	27.0	28.0	2.49	1118	3.60	1614	44.6
	29	28.0	29.0	2.59	1161	3.74	1677	46.2
	30	29.0	30.0	2.68	1204	3.87	1739	47.9
	31	30.0	31.0	2.78	1247	4.01	1801	49.6
	32	31.0	32.0	2.87	1290	4.15	1864	51.2
	33	32.0	33.0	2.97	1334	4.29	1926	52.9
	34	33.0	34.0	3.07	1377	4.43	1989	54.6
	35	34.0	35.0	3.16	1420	4.57	2051	56.2
	36	35.0	36.0	3.26	1463	4.71	2114	57.9
	37	36.0	37.0	3.36	1506	4.85	2176	59.5
	38	37.0	38.0	3.45	1550	4.99	2238	61.2
	39	38.0	39.0	3.55	1593	5.13	2301	62.9
	40	39.0	40.0	3.65	1636	5.27	2363	64.5
	41	40.0	41.0	3.74	1679	5.40	2426	66.2

Hydrologic Soil Group—Cheatham County, Tennessee  
(Soil Map)



### 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%
<b>Totals for Area of Interest</b>			<b>7.4</b>	<b>100.0%</b>



## 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



# Town of Ashland City Building & Codes Department

233 Tennessee Waltz Parkway Suite 103  
Ashland City TN 37015  
(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 C2 district.

Description of Property (Attach Map): Property being separated from another parcel Map 055C Parcel S 007.02

Reason for Reclassification Request: Build a residential home-rezone to R-1

Address: Boyd St  
strattonfamilyproperties@gmail.com

**NOTE:**

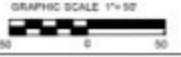
1. All applications for rezoning must be turned into City Hall no later than thirty (30) days prior to the upcoming planning commission meeting if they are to be entertained at said meeting.
2. An accurate graphic plat prepared and stamped by a registered design professional and a legal description of property to be rezoned must be submitted to the Building Official prior to consideration by the Town Planning 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.

Send application and other documents to [amartin@ashlandcitytn.gov](mailto:amartin@ashlandcitytn.gov)

[Signature] Applicant 5/14/24 Date

# FINAL PLAT OF THE STRATTON FAMILY PROPERTIES PROPERTY LOCATED IN THE 1ST CIVIL DISTRICT ASHLAND CITY, CHEATHAM COUNTY TENNESSEE

**B2L LAND SURVEYORS**  
LICENSED BY THE KY. & AL.  
1108 OLD PINEAPPLE RD. HOUSTON, TN 37060  
PHONE: (615) 272-5702 FAX: 603-940@gmail.com



**SCOPE OF SURVEY**  
TENNESSEE STATE PLACE LOCATIONS SURVEYED  
ON THIS SURVEY INCLUDES: NONE LISTED  
THE SURVEYOR HAS BY THIS INSTRUMENT SHALL  
BE LIMITED TO THE ORIGINAL PLAT/RECORD WHICH  
HE HAS MADE OR TO THE ORIGINAL PLAT/RECORD WHICH  
HE HAS REPRODUCED BY MEANS OF A COPY OF THE  
ORIGINAL PLAT/RECORD.

**NOTE:** The location and extent of the survey shall be determined on or about December 31st 2024. The surveyor shall be responsible for the location and extent of the survey. The location and extent of the survey shall be determined on or about December 31st 2024.

- GENERAL NOTES**
1. ALL SURVEYING SHALL BE CONDUCTED IN ACCORDANCE WITH THE TENNESSEE SURVEYING ACT AND THE RULES AND REGULATIONS OF THE BOARD OF SURVEYING AND MAPPING.
  2. THE SURVEYOR SHALL BE RESPONSIBLE FOR THE LOCATION AND EXTENT OF THE SURVEY.
  3. THE SURVEYOR SHALL BE RESPONSIBLE FOR THE LOCATION AND EXTENT OF THE SURVEY.
  4. THE SURVEYOR SHALL BE RESPONSIBLE FOR THE LOCATION AND EXTENT OF THE SURVEY.
  5. THE SURVEYOR SHALL BE RESPONSIBLE FOR THE LOCATION AND EXTENT OF THE SURVEY.
  6. THE SURVEYOR SHALL BE RESPONSIBLE FOR THE LOCATION AND EXTENT OF THE SURVEY.
  7. THE SURVEYOR SHALL BE RESPONSIBLE FOR THE LOCATION AND EXTENT OF THE SURVEY.
  8. THE SURVEYOR SHALL BE RESPONSIBLE FOR THE LOCATION AND EXTENT OF THE SURVEY.
  9. THE SURVEYOR SHALL BE RESPONSIBLE FOR THE LOCATION AND EXTENT OF THE SURVEY.
  10. THE SURVEYOR SHALL BE RESPONSIBLE FOR THE LOCATION AND EXTENT OF THE SURVEY.

**NOTE:** THE SURVEYOR HAS BY THIS INSTRUMENT SHALL BE LIMITED TO THE ORIGINAL PLAT/RECORD WHICH HE HAS MADE OR TO THE ORIGINAL PLAT/RECORD WHICH HE HAS REPRODUCED BY MEANS OF A COPY OF THE ORIGINAL PLAT/RECORD.

**NOTE:** THE SURVEYOR HAS BY THIS INSTRUMENT SHALL BE LIMITED TO THE ORIGINAL PLAT/RECORD WHICH HE HAS MADE OR TO THE ORIGINAL PLAT/RECORD WHICH HE HAS REPRODUCED BY MEANS OF A COPY OF THE ORIGINAL PLAT/RECORD.

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JAMES L. & DEENA D. WALKER TRUSTEE  
MAP 055C GRP 3 PARCEL 00131  
DB 407 PAGE 1764

### LEGEND

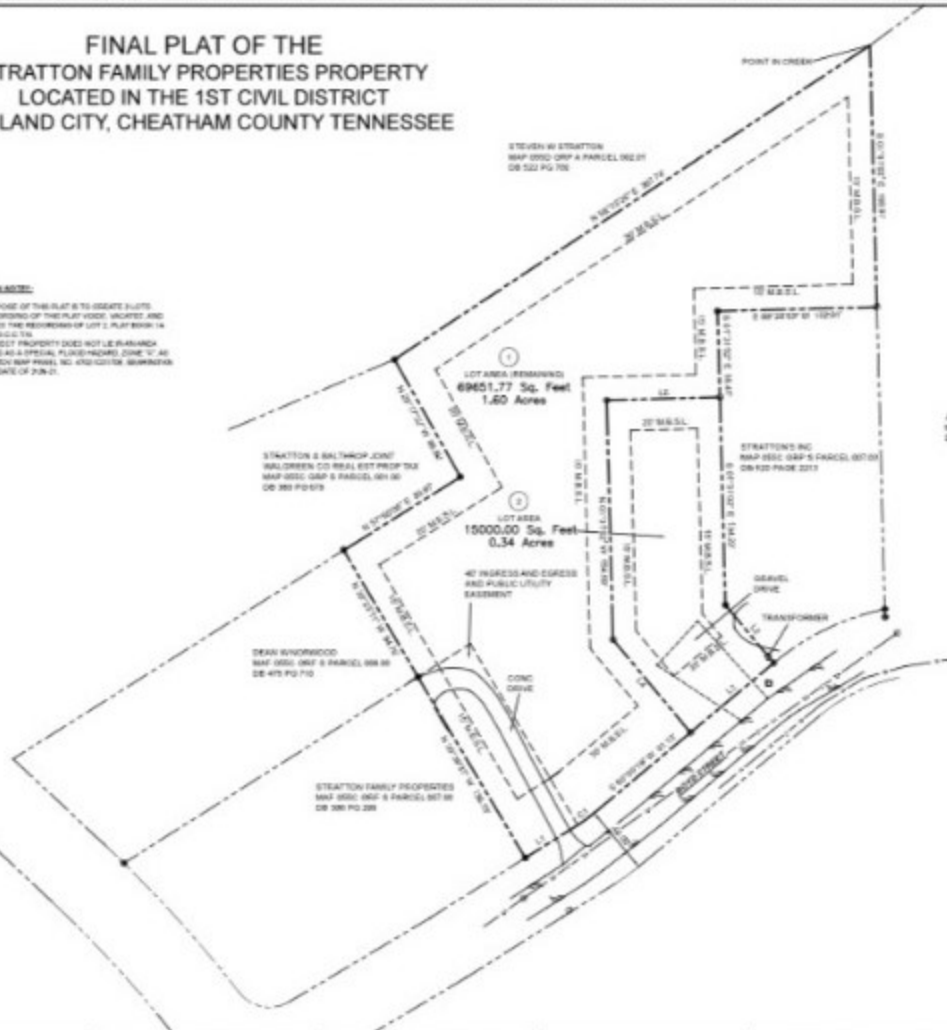
These symbols need not be found in the platting

- IRON PIN (FOUND)
- IRON PIN (NOT)
- IRON PIPE (FOUND)
- IRON PIPE (NOT)
- POWER POLE
- SEWER MANHOLE
- COMMUNICATION BOX
- T. POST
- UNDERGROUND WATER LINE
- - - UNDERGROUND SEWER LINE

DATE	BY	REVISION
12/15/2023	JL	1
12/15/2023	JL	2
12/15/2023	JL	3
12/15/2023	JL	4
12/15/2023	JL	5
12/15/2023	JL	6
12/15/2023	JL	7
12/15/2023	JL	8
12/15/2023	JL	9
12/15/2023	JL	10



- SUBDIVISION NOTES:**
1. THE PURPOSE OF THIS PLAT IS TO CREATE PLOTS.
  2. THE RECORDING OF THIS PLAT DOES NOT CONSTITUTE A GUARANTEE OF THE ACCURACY OF THE INFORMATION CONTAINED HEREIN.
  3. THE SURVEYOR HAS BY THIS INSTRUMENT SHALL BE LIMITED TO THE ORIGINAL PLAT/RECORD WHICH HE HAS MADE OR TO THE ORIGINAL PLAT/RECORD WHICH HE HAS REPRODUCED BY MEANS OF A COPY OF THE ORIGINAL PLAT/RECORD.
  4. THE SURVEYOR HAS BY THIS INSTRUMENT SHALL BE LIMITED TO THE ORIGINAL PLAT/RECORD WHICH HE HAS MADE OR TO THE ORIGINAL PLAT/RECORD WHICH HE HAS REPRODUCED BY MEANS OF A COPY OF THE ORIGINAL PLAT/RECORD.



CERTIFICATE OF APPROVAL FOR RECORDING	CERTIFICATE OF APPROVAL OF PUBLIC WAYS	CERTIFICATE OF APPROVAL OF PUBLIC SEWER SYSTEM	CERTIFICATE OF APPROVAL OF WATER SYSTEM	CERTIFICATE OF OWNERSHIP & DEDICATION	CERTIFICATE OF SURVEY ACCURACY
I hereby certify that the subdivision plat shown herein has been found to comply with the Ashland City, Tennessee Subdivision Regulations, with the exception of such variations, if any, as are noted in the minutes of the planning commission, and that it has been approved for recording in the Office of the County Register.	I hereby certify (1) that all designated public ways on this final subdivision plat have been indicated in an appropriate manner and according to the specifications of the Ashland City, Tennessee Subdivision Regulations, or (2) that a performance bond or other surety has been posted with the planning commission to guarantee completion of all required improvements in case of default.	I hereby certify that the sewer system(s) outlined or indicated on the final subdivision plat entitled STRATTON FAMILY PROPERTIES has been installed in accordance with current local and state government requirements, or a performance bond or other surety has been filed to guarantee said installation.	I hereby certify that the water system(s) outlined or indicated on the final subdivision plat entitled STRATTON FAMILY PROPERTIES has been installed in accordance with current local and state government requirements, or a performance bond or other surety has been filed to guarantee said installation.	I (we) hereby certify that I am (we and the owner(s) of the property shown and described herein as evidenced in Book Number 000 page 000, County Register's Office, and that I (we) hereby attested the plan of subdivision with my (our) true names, establish the minimum building setbacks from, and that all other necessary dedications for all public ways, utilities, and other facilities have been filed.	I (we) hereby certify that to the best of my (our) knowledge and belief this is a true and accurate survey of the property shown herein, that this is a category _____ Land Survey as defined in the KC Chapter 13, Tennessee Code Annotated, and that the accuracy thereof is greater than or equal to 1 _____ 10,000, and that the requirements have been placed on all plots herein, to the specifications in these regulations, or that a survey instrument or performance bond has been filed to guarantee their installation.
DATE _____ Name, Title, and Agency of Authorized/Approved Agent _____	DATE _____ Name, Title, and Agency of Authorized/Approved Agent _____	DATE _____ Name, Title, and Agency of Authorized/Approved Agent _____	DATE _____ Name, Title, and Agency of Authorized/Approved Agent _____	DATE _____ Name, Title, and Agency of Authorized/Approved Agent _____	DATE _____ Name, Title, and Agency of Authorized/Approved Agent _____



JEFFREY A. LEONARD R.L.S. 1017  
FEBRUARY 28, 2024

ITEM # 5.







# Town of Ashland City Building & Codes Department

233 Tennessee Waltz Parkway Suite 103  
Ashland City TN 37015  
(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 Low Density Residential district.

Description of Property (Attach Map): Map 62 Parcel 41&41.01  
See Attached Survey and property description

Reason for Reclassification Request: We would like to rezone the property to I-1 in order to satisfy TDOT/TDEC requirements to clean up and stabilize the site and return it to stable condition.

Address: 1840 Highway 12 South

### 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 Town Planning 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.

Send application and other documents to [anicholson@ashlandcitytn.gov](mailto:anicholson@ashlandcitytn.gov)

Jason Walker  
Applicant

5/14/2024  
Date

**Property Description of  
The Jason Walker Property  
Tax Map 062, Parcels 041.00 & 041.01  
Record Book 562, Page 1434, R.O.C.C.T.**

Being a Tract of land situated in the 1<sup>st</sup> Civil District of Cheatham County, Tennessee, said Tract being 3.63 miles, more or less, southeast of downtown Ashland City, and generally located north of Gallaher Road, south of Williamsburg Road, east of the Cumberland River, and west of, and adjacent to State Route 12, said Tract being more particularly described as follows:

Beginning at an existing concrete monument in the western right-of-way of State Route 12, said concrete monument being 0.29 miles, more or less, south of the centerline of Williamsburg Road, as measured along the said western right-of-way, said concrete monument also being the southeastern corner of the James W. Stinnett, Jr., ET UX property, as recorded in Record Book 363, Page 134, R.O.C.C.T.;

Thence with the western right-of-way of State Route 12 for the next 4 courses as follows: South 24 degrees 27 minutes 25 seconds East 220.48 feet to an existing ½” iron pin with an illegible cap; Thence South 24 degrees 27 minutes 49 seconds East 153.66 feet to an existing concrete monument; Thence South 07 degrees 53 minutes 54 seconds East 282.83 feet to an existing ½” iron pin, cap #1837; Thence South 10 degrees 39 minutes 45 seconds West, passing an existing concrete monument at 306.79 feet, in all 323.62 feet to an existing ½” iron pin, cap #1837, said iron pin being in the northern line of the Jerry Reed property, as recorded in Record Book 242, Page 245, R.O.C.C.T.;

Thence with the northern line of the said Reed property, North 81 degrees 31 minutes 01 second West 315.78 feet to an existing ½” iron pin, cap #1837, said iron pin being the northeastern corner of the Rod E. Wilkins property, as recorded in Record Book 548, Page 942, R.O.C.C.T.;

Thence with the northern line of the said Wilkins property, North 82 degrees 21 minutes 31 seconds West 862.26 feet to an existing ½” iron pin, uncapped, said iron pin being the southeastern corner of the Anthony D. Hooten property, as recorded in Record Book 246, Page 852, R.O.C.C.T.;

Thence with the southern line of the said Hooten property, North 53 degrees 18 minutes 47 seconds East 647.44 feet to an existing ½” iron pin, uncapped;

Thence continuing with the southern line of the said Hooten property, North 53 degrees 19 minutes 34 seconds East 396.24 feet to an existing ½” iron pin, uncapped, said iron pin being the southwestern corner of the said Stinnett property;

Thence with the southern line of the said Stinnett property, North 51 degrees 50 minutes 21 seconds East 249.31 feet to the point of beginning.

Said Tract contains 13.684 Acres (596,079.7 sq. ft.) more or less.

Property is subject to all easements, rights-of-way, covenants, and restrictions of record.

Property description is based on a physical survey by Billy Ray Suiter, PLS 1837, on June 1, 2020.

All iron pins set are ½” x 18” rebar with plastic cap stamped “SUITER 1837”.



MAP #	OWNER
062-043.01	James W. Stinnett, Jr., Et Ux 1830 Hwy 12 S. Ashland City, TN 37015
062-044.00	Victor Richardson 1820 Hwy 12 S. Ashland City, TN 37015
062-042.00	Victor Richardson 1820 Hwy 12 S. Ashland City, TN 37015
062-046.00	Jackie L. Kern, Jr., Et Ux 1816 Hwy 12 S. Ashland City, TN 37015
062-047.00	Jarrett S. Watts 1812 Hwy 12 S. Ashland City, TN 37015
062-048.00	Sherri Raymer 1808 Hwy 12 S. Ashland City, TN 37015
062-057.00	Diana G. Meadows, Et Vir 1022 Meadow Brook Rd. Ashland City, TN 37015
062-058.00	Artenzia C. Young-Seigler 1115 Allenwood Dr. Ashland City, TN 37015
062-059.00	Sandra C. Braden 1119 Allenwood Dr. Ashland City, TN 37015
062-062.00	Belton M. Deville, Et Ux 1123 Allenwood Dr. Ashland City, TN 37015
062-062.01	Jenny M. Green 1125 Allenwood Dr. Ashland City, TN 37015

062-077.15	Anthony D. Hooten 2305 Siefried St Nashville, TN 37208
062-077.02	Anthony D. Hooten 2305 Siefried St Nashville, TN 37208
062-077.03	Cheryl A. Long, Et Vir 1011 Riverview Ln Ashland City, TN 37015
062-077.04	Bonnie Jerson, Et Vir 1015 Riverview Ln Ashland City, TN 37015
062-077.07	Henry A. Miklich, Et Ux 1921 Hwy 12 S. Ashland City, TN 37015
062-077.11	Edward M. Amonett 1012 Riverview Ln Ashland City, TN 37015
062-077.12	Yasmine S. Ali 1010 Riverview Ln Ashland City, TN 37015
062-063.00	John F. Williamson, Et Ux 1128 Allenwood Dr. Ashland City, TN 37015
062-077.13	Robert W. Williams 6060 N. Central Expy, Ste. 200 Dallas, TX 75206
062-064.00	Derek Adamberger, Et Ux 1114 Allenwood Dr. Ashland City, TN 37015
062-065.00	Bryan W. Kephart 500 Waycross Dr Nashville, TN 37211

062-066.00	Kevin Hounihan 1108 Allenwood Dr. Ashland City, TN 37015
065-086.00	Cheatham County 1037 Thompson Rd Ashland City, TN 37015
065-024.00	The Bassickhis Co. c/o Strategic Materials PO Box 968 Katy, TX 77492
065-041.00	Judy Walkup 1040 Gallaher Rd Ashland City, TN 37015
065-041.01	Steve Newman, Et Ux 1032 Gallaher Rd Ashland City, TN 37015
065-041.02	Donald Walkup, Et Ux 1040 Gallaher Rd Ashland City, TN 37015
065-042.00	Rod E. Wilkins 6441 Bresslyn Rd Nashville, TN 37205
065-040.01	Jerry Reed 1030 Fox Hill Rd Ashland City, TN 37015
065-040.00	Margaret S. & Jerry Reed, LLC. 21 Washington Park Nashville, TN 37205
065-040.02	Donald F. Thompson, Etal 1160 Chickadee Cir Hermitage, TN 37076
065-039.02	Gate Precast Company 1 Bluegrass Dr Ashland City, TN 37015



065-39.00

Gate Precast Company  
PO Box 4156  
Winchester, KY 40392

065-044.00

John Weaks, Jr.  
1915 Hwy 12 S.  
Ashland City, TN 37015

062-038.00

Jason L. Walker  
PO Box 849  
Ashland City, TN 37015

062-038.02

Nathan C. Batson c/o Jack Batson  
5325 Buena Vista Pk  
Nashville, TN 37218

062-038.01

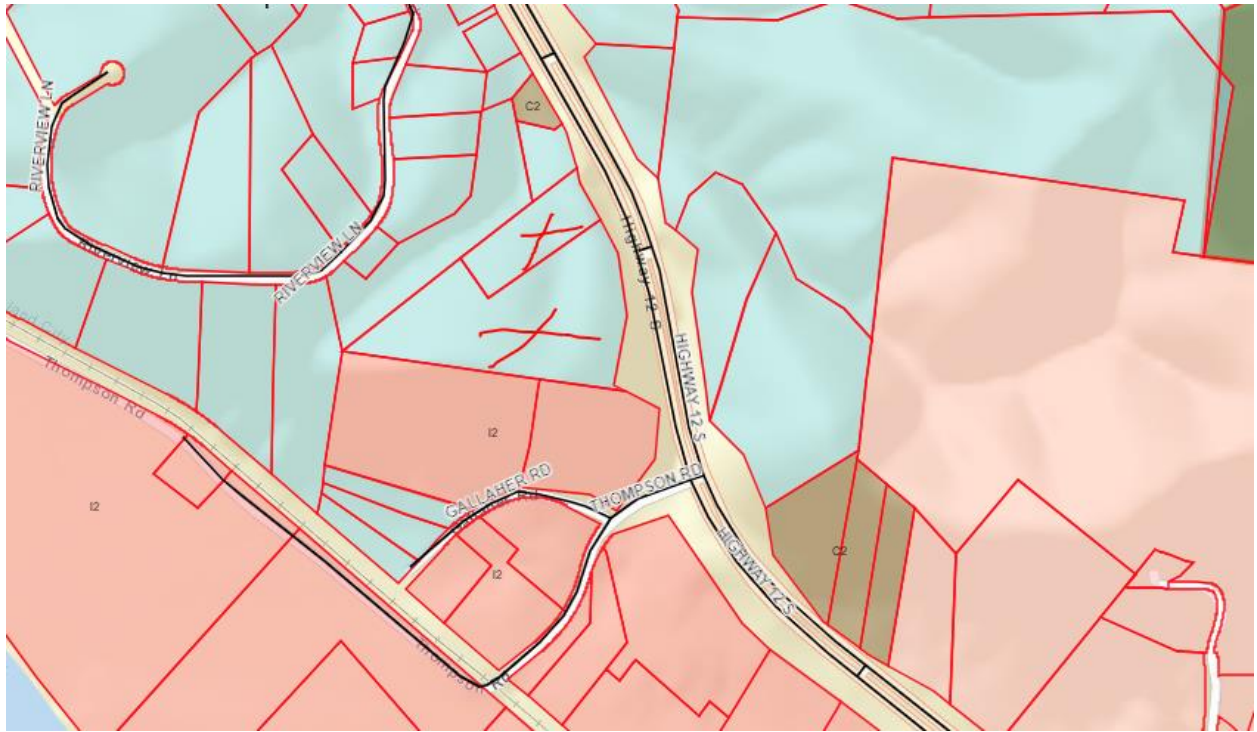
Mary B. Beasley  
PO Box 26  
Ashland City, TN 37015

062-043.00

Regina Layton  
PO Box 26  
Ashland City, TN 37015

062-035.01

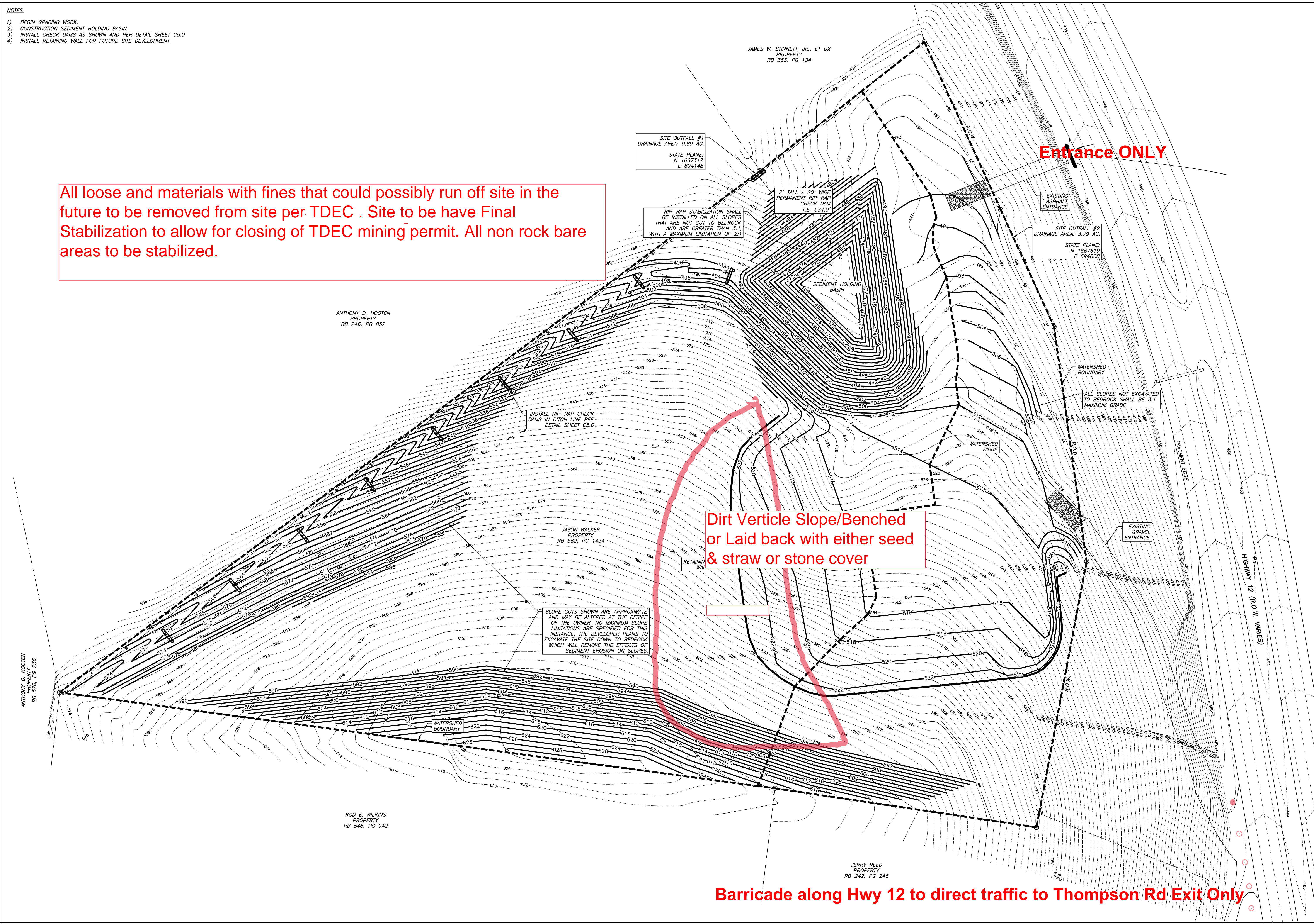
Micah A. Ferebee  
1811 Hwy 12 S.  
Ashland City, TN 37015





- NOTES:
- 1) BEGIN GRADING WORK.
  - 2) CONSTRUCTION SEDIMENT HOLDING BASIN.
  - 3) INSTALL CHECK DAMS AS SHOWN AND PER DETAIL SHEET C5.0
  - 4) INSTALL RETAINING WALL FOR FUTURE SITE DEVELOPMENT.

All loose and materials with fines that could possibly run off site in the future to be removed from site per TDEC . Site to be have Final Stabilization to allow for closing of TDEC mining permit. All non rock bare areas to be stabilized.



Dirt Verticle Slope/Benched or Laid back with either seed & straw or stone cover

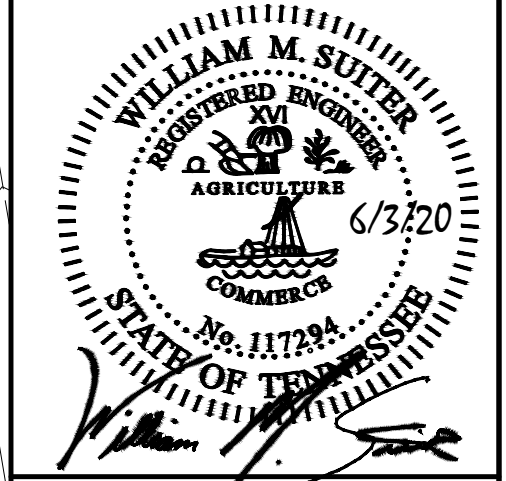
Barricade along Hwy 12 to direct traffic to Thompson Rd Exit Only

Entrance ONLY

**Sutler Surveying & Land Planning**  
 CIVIL ENGINEERING & LAND SURVEYING  
 P.O. Box 30271  
 1805A Alpine Drive  
 Clarksville, TN, 37040  
 ph. # (931) 920-1750  
 Fax # (931) 920-8490

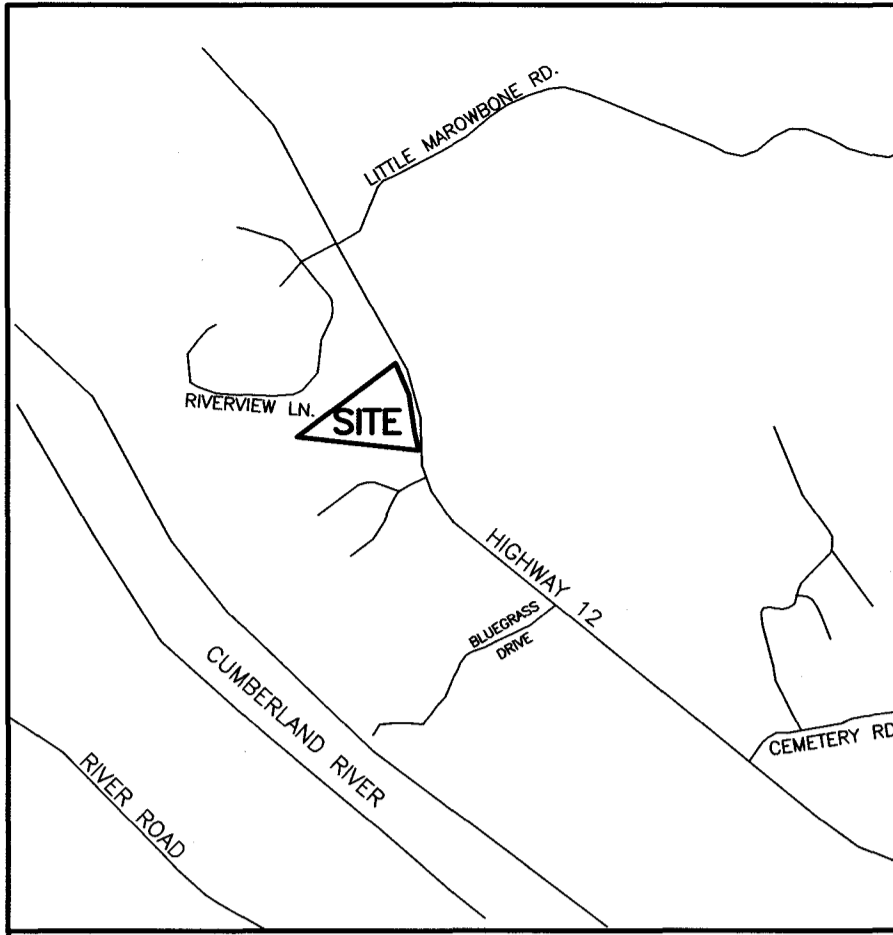
REV.#	DATE	REVISION
0	6/3/20	INITIAL SUBMITTAL

**WALKER TRUCKING FACILITY**  
**HIGHWAY 12**  
**EPSC PHASE II**  
**SCALE: 1" = 50'**



C3.0





VICINITY MAP



NORTH BASED ON NAD 83  
TENNESSEE STATE PLANE  
COORDINATE SYSTEM

**BOUNDARY & TOPOGRAPHIC SUREY**  
**JASON WALKER PROPERTY**  
RECORD BOOK 562, PAGE 1434  
CHEATHAM COUNTY, TENNESSEE  
DATE: JUNE 01, 2020  
SCALE: 1" = 60'  
TOTLA AREA: 13.68 ACRES +/-  
TAX MAP 62, PARCELS 41 & 41.01

P.O. Box 30271  
1805A Alpha Drive  
Clarksville, Tenn. 37040  
Ph: # (931) 920-1750  
Fax: # (931) 920-6490  
**Suiter**  
**Surveying**  
& Land Planning, Inc.  
CIVIL ENGINEERING & LAND SURVEYING

**JASON WALKER PROPERTY**  
**HIGHWAY 12**  
**ASHLAND CITY, TENNESSEE**  
**BOUNDARY & TOPOGRAPHIC SURVEY**

REVISION NO.	DATE	REVISION

DATE: 6-01-2020

C-1

**LEGEND**  
 IP(O) = IRON PIN OLD FOUND  
 IP(N) = 1/2" IRON PIN NEW SET CAP NO. 1837  
 PP = POWER POLE  
 GA-GUY ANCHOR  
 OUL-OVERHEAD UTILITY LINE  
 LP-LIGHT POLE  
 WV-WATER VALVE  
 FH-FIRE HYDRANT  
 MH-MANHOLE  
 TE-TOP ELEVATION  
 IE-INVERT ELEVATION  
 CB-CATCH BASIN  
 SPOT ELEVATION +44.17  
 PP = POWER POLE  
 WM = WATER METER  
 GM = GAS METER  
 AC = AIR CONDITIONER PAD  
 FFE = FINISH FLOOR ELEVATION  
 R.O.W. = RIGHT OF WAY  
 M.B.S.L. = MINIMUM BUILDING SETBACK LINE  
 P.U.D.E. = PUBLIC UTILITY AND DRAINAGE EASEMENT  
 POINT OF CURVATURE: O  
 CONCRETE MONUMENT: □  
 EASEMENT LINE: - - - - -  
 MINIMUM BUILDING SETBACK LINE: - - - - -  
 CENTERLINE: - - - - -  
 BOUNDARY LINE: - - - - -  
 RIGHT-OF-WAY LINE: - - - - -

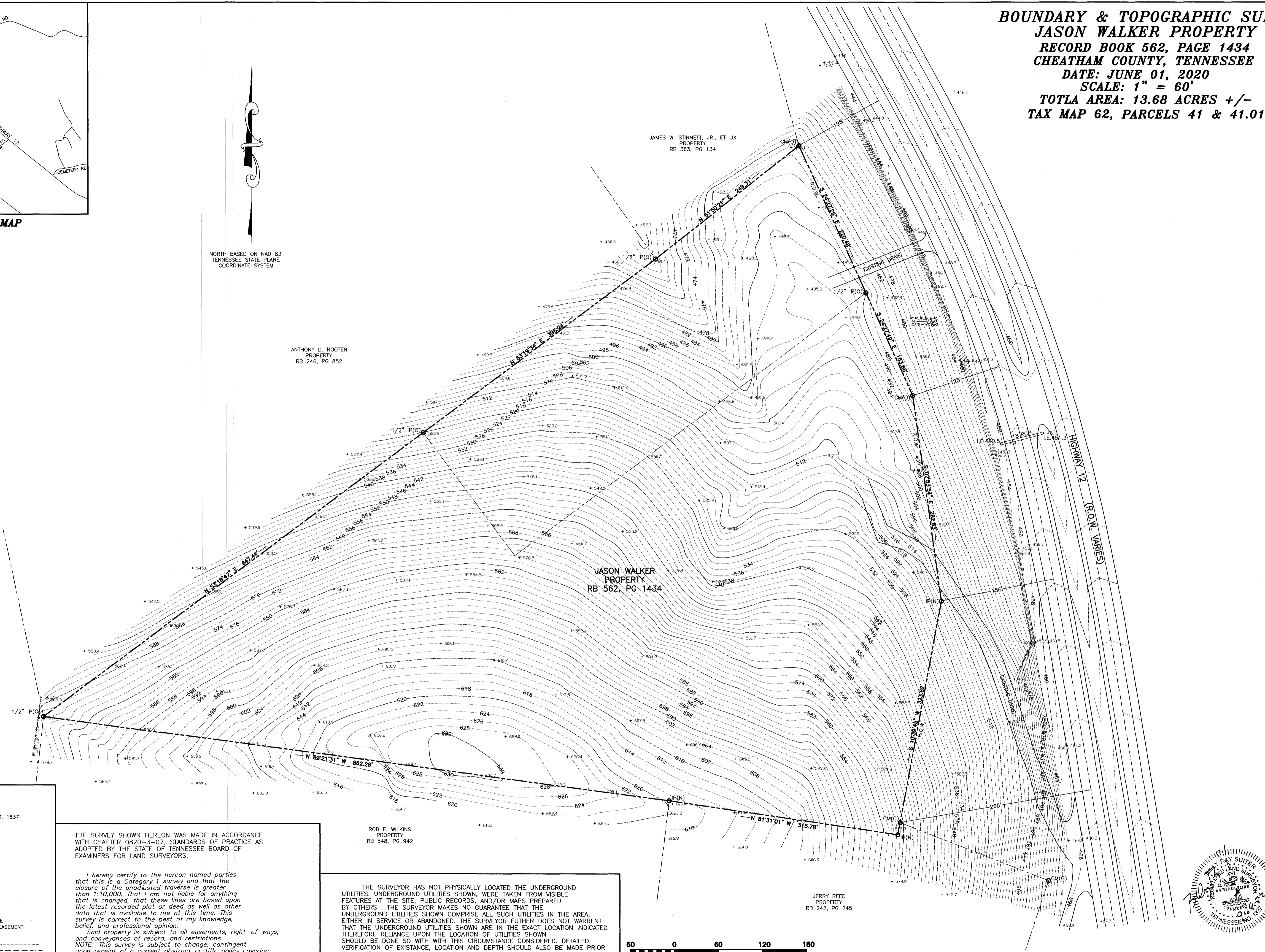
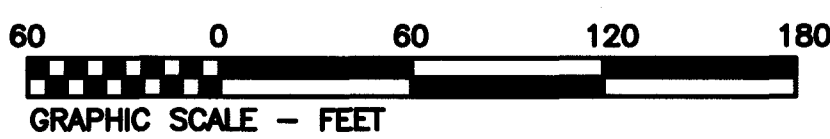
THE SURVEY SHOWN HEREON WAS MADE IN ACCORDANCE WITH CHAPTER 0820-3-07, STANDARDS OF PRACTICE AS ADOPTED BY THE STATE OF TENNESSEE BOARD OF EXAMINERS FOR LAND SURVEYORS.

I hereby certify to the hereon named parties that this is a Category 1 survey and that the closure of the unadjusted traverse is greater than 1:10,000. That I am not liable for anything that is changed, that these lines are based upon the latest recorded plat or deed as well as other data that is available to me at this time. This survey is correct to the best of my knowledge, belief, and professional opinion.

Said property is subject to all easements, right-of-ways, and conveyances of record, and restrictions.

NOTE: This survey is subject to change, contingent upon receipt of a current abstract or title policy covering the property shown hereon.

THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. UNDERGROUND UTILITIES SHOWN, WERE TAKEN FROM VISIBLE FEATURES AT THE SITE, PUBLIC RECORDS, AND/OR MAPS PREPARED BY OTHERS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED THEREFORE RELIANCE UPON THE LOCATION OF UTILITIES SHOWN SHOULD BE DONE SO WITH THIS CIRCUMSTANCE CONSIDERED. DETAILED VERIFICATION OF EXISTANCE, LOCATION AND DEPTH SHOULD ALSO BE MADE PRIOR TO ANY DECISION RELATIVE THERETO IS MADE AVAILABILITY AND COST OF SERVICE SHOULD BE CONFIRMED WITH THE APPROPRIATE UTILITY COMPANY.





**STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION**

**REGION 3**

6601 CENTENNIAL BOULEVARD  
NASHVILLE, TENNESSEE 37243  
(615) 350-4300

**BUTCH ELEY**  
DEPUTY GOVERNOR &  
COMMISSIONER OF TRANSPORTATION

**BILL LEE**  
GOVERNOR

January 4, 2024

Walker Trucking & Excavating  
Attn: Jason Walker  
P.O. Box 849  
Ashland City, TN 37015

Dear Mr. Walker,

This letter is a response in regards to your letter to the City of Ashland City and your plan of operation at 1840 South Highway 12. The Department's understanding based on conversations with you was that operations were concluding. After reviewing your plan and understanding the scope and scale of this work, this is a much larger and longer operation than anticipated. Removing 200,000 Cubic Yards of material over a minimum of 12 months will require you to follow the guidance set out below.

After revisiting the Walker Quarry site on State Route 12 in Ashland City, the Tennessee Department of Transportation has determined that neither of the two driveways have been permitted and neither conform to the TDOT Highway System Access Manual. The Commissioner of the Tennessee Department of Transportation is authorized to adopt reasonable and proper rules governing the construction of driveway entrances into highways on the State Highway System in order to maintain proper drainage, preserve the roadway from damage, and prevent interference with or the creation of hazards to public travel. Tenn. Code Ann. § 54-5-301. The primary function of a state highway is to provide system continuity and efficiency of state highway system operation and maintenance activities. The Department of Transportation recognizes that property owners have the right of reasonable access to their property, and the Department will work with property owners and local government authorities to provide reasonable access to the state highway system that is safe and enhances the movement of traffic through a permitting process that assesses the number, location, width, and design of driveways, whether residential or commercial. These rules establish procedures to apply for a driveway permit on a state highway, standards or guidelines for granting a driveway permit, and provisions for requesting a variance from the standards established in these rules. In order for Walker Trucking's driveways to comply with state law the following steps will need to be taken:

1<sup>st</sup> – TDOT will require a letter from the Ashland City that the Walker Quarry site has been approved for industrial use by Ashland City.

2<sup>nd</sup> – A temporary construction access permit will be required before any operations can resume after Step 1. Walker Trucking will be required to post sufficient bond and provide a certificate of adequate liability insurance. It is recommended that access be through Thompson Road due to the high number of dump trucks that are expected to come out of the rock quarry and allow proper acceleration and sight distance for SR 12. Barrier rail will be required along SR 12 and the area that is currently graveled must be constructed back to the original seed and straw stabilization. “TRUCKS ENTERING HIGHWAY” signs per MUTCD standards will be required in each direction along SR 12. The temporary access will be allowed for 120 days. If operations continue after 120 days, a permanent TDOT commercial driveway permit will be required.

3<sup>rd</sup> – The permanent TDOT commercial driveway shall follow all standards in the TDOT System Highway Access Manual, including but not limited to number of entrances, sight distance, clearance requirements, driveway widths, and driveway surface. The construction plans shall be stamped by a TN Licensed Professional Engineer.

These 3 steps shall be required from Walker Trucking to operate safe and efficiently along the SR 12 corridor in Ashland City. Section 54-5-301 of the Tennessee Code provides:

*Notwithstanding any law to the contrary, the construction of an unauthorized entrance onto a highway in the state highway system is an offense punishable as a Class B misdemeanor, punishable by a fine only of five hundred dollars (\$500). If the entrance violates any rule or regulation of the department, the owner of the entrance shall have thirty (30) days to comply with all applicable rules and regulations. The department may impose a penalty of one hundred dollars (\$100) for failure to comply with all applicable rules and regulations within thirty (30) days. Each day an entrance is in violation of this subsection (b) after the thirty-day period shall be considered a separate offense. The owner of an unauthorized entrance shall be civilly liable for any injuries proximately caused by the entrance.*

Tenn. Code Ann. § 54-5-301(b). The Department previously notified Walker Trucking that its use of the unauthorized commercial entrance(s) constituted violation of the above-cited statute. Any further use in excess of or outside the above-enumerated steps will constitute a separate violation and require additional enforcement measures.

Thank you for your cooperation; TDOT looks forward to working with you. Motorist safety is TDOT’s top priority and must be maintained along all state routes and interstates.

Sincerely,



James C. Norris IV, P.E.  
Assistant Chief Engineer

CC: Allen Nicholson  
Building & Codes Director  
Town of Ashland City  
Nathan Vatter  
Zane Pannell  
Derek Pryor  
Lindsay Sisco



Resolution 2004-05


A resolution of the Mayor and Council of Ashland City, Tennessee adopting the Hwy 12S Land Use Plan as presented as a guide for improving the condition and quality of life in Ashland City.

BE IT RESOLVED, by the Mayor and Council of Ashland City, Tennessee:

That the Hwy 12S Land Use Plan hereby attached is approved and adopted as a guide for improving the condition and quality of life of Ashland City.

This resolution to become effective from and after its adoption, the welfare of Ashland City requiring it.

Adopted this 9<sup>th</sup> day of March, 2004.

  
\_\_\_\_\_  
Gary Norwood, Mayor

  
\_\_\_\_\_  
Phyllis Schaeffer, City Recorder

# **Highway 12 Land Use Plan**

**Town of Ashland City, Tennessee**

**February 2004**

**Prepared by:**

**Gresham, Smith and Partners  
1400 Nashville City Center  
511 Union Street  
Nashville, Tennessee 37219**

# Highway 12 Land Use Plan

## **Introduction**

The City of Ashland City has identified a need for a more comprehensive approach to general land use planning for the Highway 12 corridor in the eastern sector of the community. To address that need, the City has taken the initiative to commission the preparation of this Highway 12 Land Use Plan (hereafter referred to as the "Plan"). The resulting Plan is comprised of the following components:

- Purpose Statement
- Planning Area
- Existing Conditions
- Land Use Planning Goals and Objectives
- Land Use Policy Classifications Defined
- The Highway 12 Land Use Plan
- Appendices

## **Purpose Statement**

This Land Use Plan for Highway 12 is intended to serve as the community's collective vision and goal for the long-term utilization of land along this important gateway corridor into Ashland City. The Plan is designed to be used as a guide to decision making processes. City officials and the general public should refer to the Plan when addressing decisions relating to property zoning, the subdivision of land and for the planning and budgeting of major capital improvements along the Highway 12 corridor.

This Land Use Plan is not a zoning document. The Zoning Ordinance and its associated Zoning Map, along with the City's Subdivision Regulations represent two of the key regulatory tools used to implement the land use goals of the Plan. While this plan identifies specific goals relating to development practices and performance standards (e.g. goals relating to landscaping, traffic access management, water quality or flood plain management), actual implementation of those goals must be addressed specifically by the applicable regulatory document. The Zoning Code and Subdivision Regulations in particular should be constantly monitored in terms of their effectiveness in implementing the development goals of the Land Use Plan. Applicable regulatory documents should be updated on a regular basis as needs or deficiencies are identified.

While serving as a guide to decision making processes, the land use policies of this Plan are not intended to be viewed or applied as absolutely "inviolable". There are many variables that come into play in decisions of property zoning and development practices that were not, or could not, be anticipated in the initial formulation of a long range Land Use Plan. City officials should utilize this Plan as an important resource in the decision making process, but not as the sole determining factor.

## **The Land Use Planning Area**

The geographic boundaries of this particular Land Use Plan Land are generally defined by the Cumberland River to the south, the Cheatham/Davidson County line to the east, Dry Fork Creek to the west and to the north, and those properties whose development opportunities are considered to be significantly influenced by proximity to the Highway 12 corridor. The area encompassed by this Land Use Plan is identified in Exhibit 1.



## Existing Conditions

### A. Environmental Considerations

With respect to natural systems, the study area can be characterized as being encumbered by prominent flood plains, bisected by major drainage systems, and having a broad range of topographic relief. Exhibit 2 identifies the area's flood plains and topographic relief.

Portions of the study area are encumbered by both 100 and 500 year flood plains as identified by the Federal Emergency Management Agency (FEMA). The southerly boundary of the study area is defined by the Cumberland River and its associated flood plain. Water elevations of the Cumberland River are controlled by the Army Corps of Engineers via their operation of the Cheatham Dam. The extent of the Cumberland River flood plain as it relates to the study area is generally defined by the existing railroad bed. The westerly portion of the study area is also bisected by the Marrowbone Creek drainage system. FEMA has identified and mapped a large flood plain within that basin. In the lower reaches of the Marrowbone system, the northern flood plain boundary is generally defined by Highway 12. As a general rule, properties abutting the southerly margin of Highway 12 lying west of Little Marrowbone Creek Road are currently encumbered by 100 year flood plain.

The City's main water intake point is located in the lower reaches of the Marrowbone Creek system, in the extreme western edge of the study area. A significant portion of the study area drains naturally into the Marrowbone Creek watershed, and thus past the water intake point. Therefore, long-term preservation of the lower Marrowbone Creek natural ecosystem and its associated water quality is of major importance to the City.

Significant portions of the study area are encumbered by steep topography (see Exhibit 2). Small pockets of flatter land exist along Highway 12. The presence of steep slopes have significant influence on development patterns, especially in those areas that have natural slopes in excess of 20% where conventional forms of development are limited due to constraints in roadway design, drainage, erosion, and utility extensions. Overcoming the challenges of developing on steep topography can also have a profound impact on the resulting "aesthetic" character of the development. In the context of development adaptability, industrial users are least adaptable to steeply sloping land while certain forms of single family development are often the most adaptable. Parking lot design is usually the driving factor in trying to adapt commercial uses to steep sites.

### B. Infrastructure

Land development must be sustained by sufficient levels of support infrastructure. In the development of a Highway 12 Land Use Plan two key infrastructure components must be addressed: the transportation system and sewage disposal. The provision of potable water to the study area is not considered a significant obstacle to future property development within the corridor study area.

State Highway 12 is the predominant roadway system serving the study area. As previously stated, this highway also serves as the eastern gateway to the community. This five lane arterial facility is an integral part of a regional state highway system and serves to connect Ashland City to Nashville and Davidson County to the east. The upgrade and partial realignment of Highway

## Highway 12 Land Use Plan

12 by TDOT in recent years has greatly expanded both the operational capacity of the facility as a regional highway and improved the safety of access to and from properties abutting properties within the study area. As a five lane facility, the current design of Highway 12 should adequately accommodate continued development of properties along the corridor as described elsewhere in this plan. Continued development along the corridor, however, will warrant consideration of an access management program to balance the competing needs of property access with overall roadway operations and safety.

The importance of re-establishing rail service to support continued industrial growth within the study area is difficult to ascertain. The basic nature of industrial activities has shifted significantly away from historic "smoke stack" operations and towards more fabrication and assembly type operations. The state and federal highway system is now the backbone of interstate transportation of goods and products. For this reason, the re-establishment of rail service to the study area is not considered essential to maintaining the viability of existing industrial activities or for attracting new facilities.

The Cumberland River continues to provide an efficient and cost-effective means of transporting bulk material by barge for certain types of industrial end-users. Therefore, river frontage should be viewed as a potential marketing asset for recruiting new industrial employers in the area.

The entire Highway 12 Land Use Plan area lies within the Ashland City Utility District (see Exhibit 3). At the current time, the City continues to discuss the relative merits of alternative engineering approaches to sewer collection and disposal. It is beyond the scope of this land use plan to identify a preferred method of sewage collection and disposal. Nevertheless, the provision of some form of coordinated sewage collection and treatment program is considered a prerequisite for continued development of the corridor.

### **C. Past and Present Land Use Patterns**

Traditionally, the predominant forms of land use along the Highway 12 corridor have been either industrial-related facilities or highway-oriented commercial activities. Industrial uses gravitated to this particular corridor due to proximity to the State highway system, good access both to the Cumberland River and a once-active rail line, relatively flat topography (mostly flood plain) and general remoteness from the established residential areas of the community. The intersection of a local rural road with the State highway provided an opportunity for the introduction of a small-scale, highway oriented commercial activity such as a convenience markets or restaurant. With the exception of somewhat scattered residential enclaves, the majority of the land along the corridor remained predominantly undeveloped due to lack of market demand and/or environmental constraints.

In more recent times both the mix of land use types and the general character of new development has changed along the corridor. The realignment and widening of Highway 12 by TDOT greatly improved the operational capacity and function of that important roadway facility in addition to re-defining the visual image of the corridor as an eastern "gateway" to the community. From an industrial growth perspective, recruitment of new industry to the community has now become extremely competitive at not only the local, but also at the state, regional and international levels.





## Highway 12 Land Use Plan

In recent years segments of the corridor have seen the introduction of new residential and consumer-related forms of development. Residential initiatives include a mix of single-family subdivisions, multi-family condominiums and senior housing opportunities. Consumer-based retail development is increasing, as witnessed by a proposed Wal-Mart store along the corridor. Additional community service type facilities have also been introduced along the corridor, including a new fire hall and a City-owned park.

### D. Existing Land Use

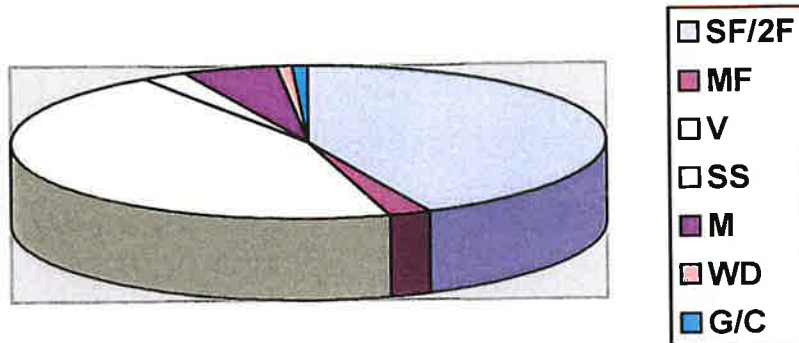
In order to plan for the future, it is first necessary to understand the composition of the City as it exists today. The land use inventory is a current identification of the uses of land within Ashland City.

There are approximately 3,389.59 acres of land within this project area for Ashland City. Of this total, 1,862.03 acres (or about 55%) contain some type of development. This does not include land owned by the Army Corps of Engineers to the south of Highway 12 and by the Dry Fork Creek area.

Existing land use data is presented in both tabular and graphic form below. The land use information is not a plan, but a tool used to understand the composition of project area within Ashland City.

Land Use Category	Acres	% Total Acres
Single/Two Family Residences	1,472.67	43.45%
Multi-family Residences	74.76	2.21%
Retail Sales and Service	84.37	2.49%
Manufacturing/fabrication	172.60	5.09%
Warehousing/Distribution	31.33	0.92%
Government/Civic/Church	26.30	0.77%
<b>Developed Land Subtotal</b>	<b>1,862.03</b>	<b>54.93%</b>
Vacant/Undeveloped (V)	1,527.56	45.07%
<b>TOTAL</b>	<b>3,389.59</b>	<b>100.00%</b>

**Distribution of Land Use According to Acres**



The existing land use data is segregated according to the following classifications:

*SINGLE/TWO FAMILY RESIDENTIAL (SF/2F)*

Property contains single or two family residences (size of parcel is not a factor). The total existing acreage within the study area limits is 1,472.67. This category comprises about 43.45% of the land within the Ashland City project area. Breaking down the acreage of the SF/2F category, 156.22 acres are from parcels composed of five (5) acres or less, and 1316.45 acres are from parcels composed of five (5) or more acres.

Of the total 155 SF/2F parcels, 115 of the parcels are composed of less than five (5) acres. The other 40 parcels are equal to or more than five (5) acres. The latter figure includes an acreage of 130 acres that is counted as one parcel for this study, although the area is the Caldwell Estates subdivision on the general map. See Appendix 1 for the specific parcel numbers and acreages. The latter figure also includes an acreage of 40 acres that is counted as one parcel for this study, although the area is the L.C. Cunniff subdivision.

*MULTI-FAMILY (MF)*

Property contains apartments, duplexes and similar land uses. The study area of the Ashland City currently contains approximately 74.76 acres in this category. This represents about 2.21% of the land in the study area. The total number of MF parcels in the study area is seven (7).

*RETAIL SALES AND SERVICE (SS)*

This is a commercial category, which currently comprises 84.37 acres, and thus 2.49% of the land in the study area. The total number of SS parcels in the study area is nine (9).

## Highway 12 Land Use Plan

### MANUFACTURING/FABRICATION (M)

This land is primarily used for manufacturing and fabrication activities. At 172.60 acres, this land currently comprises 5.09% of the land in the study area. The total number of M parcels in the study area is 13.

### WAREHOUSING/DISTRIBUTION (WD)

This is land primarily used for warehousing, storage, trucking distribution, and mini warehouses. At 31.33 acres, this land currently comprises 0.92% of the land in the study area. The total number of WD parcels in the study area is six (6).

### GOVERNMENT/CIVIC/CHURCH (G/C)

This category includes all land used by governmental, civic or religious groups. Within this study area, Ashland City has 26.30 acres devoted to these uses; 0.77% of the land in the study area. The total number of G/C parcels in the study area is two (2).

### VACANT(V)

This category represents undeveloped land that, for various reasons, has not developed. Some of this land is constrained environmentally by steep slopes, sinkholes, or floodplains. It is normal for any community to have numerous parcels of undeveloped property. Within the Ashland City study area, there 1527.56 acres of undeveloped property, composed of 93 parcels. This represents 45.07% of the total land in the study area.

## **E. Existing Zoning**

The majority of the existing zoning along the Highway 12 corridor is R-1, Low-density Residential. Light industrial zoning composes the second to largest current zoning category, while spots of highway commercial zoning are randomly spread along the corridor. The Floodway District runs south of the railroad, follows the bend in the Cumberland River, and runs just south of Highway 12 until it crosses Highway 12 and follows Marrowbone Creek to the northeast. The existing zoning pattern is depicted in Exhibit 5.

The zoning categories are those of the zoning ordinance of the Town of Ashland City and are defined below:

- R-1, Low-density Residential
- R-3, Medium-density Residential
- R-4, High-density Residential
- C-2, Highway Service District
- I-1, Light Industrial District
- I-2, Light Industrial District
- I-3, Heavy Industrial District
- F-1, Floodway District

## **RESIDENTIAL ZONING**

### **R-1, Low-density Residential**

"This district is designed to provide suitable areas for low-density residential development characterized by an open appearance. Most generally this district will consist of single-family detached dwellings. This district also includes community facilities, public utilities, and open



## Highway 12 Land Use Plan

uses which specifically serve the residents of the district, or which are benefited by and compatible with a residential environment. Further, it is the intent of this ordinance that this district be located so that the provision of appropriate urban services and facilities will be physically and economically facilitated. It is the express purpose of this ordinance to exclude from this district all buildings or other structures and uses having commercial characteristics whether operated for profit or otherwise, except that special exception uses and home occupations specifically provided for in these regulations for this district shall be considered as not having such characteristics, if they otherwise conform to the provisions of this ordinance." Within the Ashland City study area, there are 178 parcels currently zoned as R-1. Another 38 parcels are zoned as R-1 but lie within a flood zone as well.

### **R-3, Medium Density Residential**

"This district is designed to provide suitable areas for medium density residential development where complete urban services and facilities are provided or where the extension of such services and facilities will be physically and economically facilitated.

Most generally this district will be characterized by single and two-family (duplex) detached dwellings and such other structures as are accessory thereto. As well, multi-family dwellings developed at a medium density as planned developments may also be allowed. This district is intended also to permit community facilities and public utility installations which are necessary to service and do service specifically to the residents of the district, or which are benefited by and compatible with a residential environment. It is the express purpose of this ordinance to exclude from this district all buildings or other structures and uses having commercial characteristics and not planned as an integral part of a total residential environment, whether operated for profit or otherwise, except that special exception uses and home occupations specifically provided for in these regulations for this district shall be considered as not having such characteristics if they otherwise conform to the provisions of this ordinance." Within the Ashland City study area, there are eight (8) parcels that are currently zoned as R-3. Another parcel is zoned as R-3 but is located in the flood zone as well.

### **R-4, High Density Residential District**

"This district is designed to provide suitable areas for high density residential developments where sufficient urban facilities are available or where such facilities will be available prior to development. This district is primarily characterized by residential structures each containing a multiple number of dwelling units, as well as two-family (duplex) detached dwellings. This district is intended also to permit community facility and public utility installations which are necessary to service and do specifically service the residents of the district, or which facilities and services are benefited by and compatible with a residential environment. It is the express purpose of this ordinance to exclude from this district all buildings or other structures and uses having commercial characteristics and not planned as an integral part of a total residential development, whether operated for profit or otherwise, except that special exception uses and home occupations specifically provided for in these regulations for this district shall be considered as not having such characteristics, if they otherwise conform to the provisions of this ordinance." Within the Ashland City study area, there are two (2) parcels that are currently zoned as R-4. One (1) parcel is zoned as R-4 and R-1.

## COMMERCIAL ZONING

### **C-1, Central Business District**

"This district is designed to provide for a wide range of retail, office, amusement, and service uses, as well as light industrial processes involving high performance standards. In addition, this district provides for governmental uses, and community facilities and utility services necessary to serve the district, or which are required for the general community welfare. These regulations are structured to permit maximum freedom of pedestrian movement. Relatively high density and intensity of use is permitted in this district." Currently, there are no parcels in the Ashland City study area that are zoned as C-1.

### **C-2, Highway Service District**

"This district is designed to provide adequate space in appropriate locations for uses which serve the needs of the motoring public. Automobile and other vehicular service establishments, transient sleeping accommodations, and eating and drinking establishments primarily characterize this district. In addition, commercial trade and service uses are permitted if necessary to serve the recurring needs of persons frequenting these districts. Community facilities and utilities necessary to serve these districts, or those which are necessary for the general community welfare, are also permitted. Bulk limitations required of uses in these districts, in part, are designed to maximize compatibility with lesser intense uses of land or buildings in proximate residential districts. Appropriate locations for these districts are along major traffic arteries. Such districts should be situated near major transportation interchanges in clustered developments patterns, and not patterns of striped commercial development extending in a continuous manner along such major traffic arteries." Within the Ashland City study area, there are currently seven (7) parcels zoned as C-2. An additional parcel is zoned C-2 and R-1.

## INDUSTRIAL ZONING

### **I-1, Light Industrial District**

"This district is primarily designed to accommodate existing industrial areas within the community that are relatively limited in their amount of developable acreage, due to the pre-existing layout of streets and blocks within such areas. Within this district therefore, the necessary yard requirements are less restrictive than those cited within the I-2 and I-3 Industrial Districts. The I-1 District is designed for a wide range of industrial and related uses which conform to a high level of performance standards. Industrial establishments of this type, within completely enclosed buildings, provide a buffer between Commercial Districts and other more intensive industrial uses which involve more objectionable nuisances. New residential development is excluded from this district, both to protect residences from an undesirable environment and to ensure the reservation of adequate areas for industrial development. Community facilities which provide needed services to industrial developments are permitted." Within the Ashland City study area, there are currently seven (7) parcels zoned as I-1.

### **I-2, Light Industrial District**

"This district like the I-1 District is designed for a wide range of industrial and related uses which conform to a relatively high level of performance standards. Industrial establishments of this type, within completely enclosed buildings, provide a buffer between Commercial Districts and other industrial uses which involve more objectionable influences. New residential

## Highway 12 Land Use Plan

developments are excluded from this district, both to protect residences from an undesirable environment, and to ensure the reservation of adequate areas of industrial development. Community facilities which provide needed services to industrial developments are permitted." Within the Ashland City study area, there are currently fourteen (14) parcels zoned as I-2. Seven (7) other parcels are zoned I-2 and are also located in the flood zone.

### **I-3, Heavy Industrial District**

"This district is designed to accommodate industrial uses which involve more objectionable influences and hazards, and which therefore, cannot be reasonable expected to conform to a high level of performance standards, but which are essential for the economic viability of the Ashland City area. No new residential developments are permitted within this district, thereby insuring protection of such developments from an undesirable environment, while at the same time ensuring adequate acreage tracts of industrial activities." Within the Ashland City study area, there is currently one (1) parcel zoned as I-3, and it is also located within the flood zone.

## **FLOOD DISTRICT ZONING**

### **F-1, Floodway District**

Floodways are hereby established for the purpose of meeting the needs of the streams to safely carry floodwaters; to protect the stream channels and their floodplains from encroachment so that flood heights and flood damages will not be appreciably increased; to provide the necessary regulation for the protection of the public health and safety in areas subject to flooding; and to reduce the financial burdens imposed on the community by floods. The floodway is delineated by the Flood Insurance Study, Town of Ashland City, Tennessee, Cheatham County, and all subsequent revisions thereto.

"The Floodway District established by this ordinance is designed to promote the public health, safety, and general welfare and to minimize or eliminate loss of life and property, health and safety hazards, disruption of commerce and governmental services, unusual public expenditures for flood protection and relief, and the impairment of the tax base by provisions designed to prohibit or restrict developments which are dangerous to health, safety, or property in times of flood, or which cause undue increases in flood heights or velocities; to require that developments vulnerable to floods, including public facilities which serve such developments, shall be protected against flood damage at the time of initial construction; and to protect individuals from purchasing lands which are unsuitable for development purposes because of flood hazards." Within the Ashland City study area, there are currently 19 parcels zoned as F-1.



## The Highway 12 Land Use Planning Approach

### Introduction

Land use planning is not an exact science. The formulation of a long range land use plan starts with a careful assessment of opportunities and constraints associated with the aforementioned existing conditions: the natural systems; available and planned infrastructure; existing land use patterns; and current zoning entitlements. In planning for future growth, the basic values and goals of the community also must be taken into consideration, along with a realistic assessment of what role the subject area will play within the overall context of the City-wide land use. Some level of judgment is required both in the basic assignment of specific land use types geographically within the study area, and in the proportional assignments of those land use classifications.

### Long-term Role of the Corridor

The Highway 12 corridor is, and will continue to be, an important "gateway" into the community. As such, the resulting character of this gateway experience to resident and visitor alike will be greatly influenced both by the type of land uses permitted along the corridor and by the physical characteristics of those uses. The evolution of this corridor away from a predominantly industrial orientation to greater diversity of land uses has already begun. New residential housing units are currently under development in more than one location along the corridor. A new Wal-Mart store is soon to be constructed on the corridor, and the City is currently constructing a new fire hall to serve this growing part of the community. The corridor should continue to attract new residential development given the advent of more convenient shopping opportunities in the area, increased public services, and a much improved State highway system that now provides safe and convenient access to major employment centers in Nashville and the middle Tennessee region. Continued residential growth in this area will in turn create the market base necessary to sustain new businesses offering consumer retail sales and services.

Assessing the preferred mix and scale of land uses along the Highway 12 corridor must take into consideration the role of the corridor itself within the context of the overall community and the region. The City also serves as the County seat, and there is currently an initiative underway to revitalize and strengthen the long-term viability of the downtown area. From a long-term land use perspective, development of the Highway 12 corridor should be complementary to, and not competitive with, the re-establishment of an economically healthy and viable downtown area.

In addressing proposals for new retail oriented development within the community, the City should consider both the type of business proposed and the physical form of construction required to ascertain if that business should be encouraged to locate in the downtown area or along the Highway 12 corridor. For example, a big-box retailer with a regional market base should be directed to the highway corridor and not into the finer grained historic fabric of the downtown area. The downtown area is more conducive to smaller scale establishments that contribute to, and benefit from, the synergy created by a walkable downtown environment. The Highway 12 corridor, on the other hand, is the more appropriate setting for the aforementioned big-box, community/regional oriented retail businesses, for a more diverse range of highway-oriented businesses, and to some extent for neighborhood scale sales and service establishments providing convenient shopping opportunities for nearby residential areas.

**LAND PLANNING PRINCIPLES**

How residential, commercial and industrial districts should be related to each other and to those uses which are not clustered into neighborhoods is as important an issue as the structure of the neighborhoods themselves. No part of the community is autonomous. It is crucial that the connections between various parts be well conceived and implemented if the livability of the community and the convenience of the citizenry are to be maximized. It is possible to state general objectives that the community as a whole should strive to achieve.

- Legibility - It should be possible for the residents of Ashland City and even visitors to recognize and understand the pattern of development in the City. If this pattern can be visualized, it will be substantially easier to locate various land uses and remain oriented to all parts of the community.
- Efficiency - The various neighborhoods and land uses should be distributed and organized in a manner which maximizes accessibility while retaining sufficient clustering of similar uses. This will tend to minimize travel time and energy expenditures without sacrificing the economic advantages of locating complementary uses together.
- Diversity - Ashland City should provide the opportunity for as wide a selection of land uses as can reasonably be accommodated. A wide variety of development opportunities will help to ensure that the needs of all of Ashland City's citizens are being met. It will also encourage a healthy diversification of business interests, housing types, physical forms and cultural and social opportunities.

Neighborhood and community design objectives can be expanded into more specific statements referred to here as "planning principles." These principles outline general relationships between various districts and land uses, which if followed, will improve the development pattern of Ashland City.

**1. LAND USE**

- A. Residential development should be located and developed in a manner which reinforces the neighborhood structure of the community. Single-family residences, a low-intensity land use, should be buffered from higher intensity land uses. At the same time, however, they should include or be adjacent to neighborhood services and facilities such as schools, parks, and convenience shopping.

Multi-family residences are a somewhat higher intensity use and should, therefore, be clustered within a neighborhood rather than scattered at random. They, too, should be reasonably near neighborhood support facilities. Multi-family development, in fact, can often function as a transitional use between single-family residences and neighborhood commercial centers or other incongruous uses.

- B. Commercial development should be located and developed in a manner consistent with the type and size of market to be served. Convenience or neighborhood commercial centers provide the local residents of adjacent residential areas with basic food and

## Highway 12 Land Use Plan

household supplies. These centers are usually developed around a convenience store or small grocery store and occupy five to ten acres. Zoning should be used to carefully control the ranged permitted commercial uses, and the size of those centers intended to serve the reoccurring shopping needs of the neighborhood.

The second type of commercial center is generally referred to as the community center. Although it may include neighborhood-type services, its primary emphasis should be merchandising goods which require a large trade area City-wide or regional market. It should be centrally located within the community with direct access to major streets. These centers are developed around a major supermarket and general retail area. Community Center should be located along arterial streets at points of maximum accessibility.

The final type of commercial area includes those highway or general commercial uses which require access to major thoroughfares and require excessively large lots for outdoor displays. This category includes such uses as automobile sales lots, equipment repair and building supply yards. These uses should be concentrated along a major arterial street. To avoid the inevitable traffic congestion and accident problems of multiple curb cuts along a heavily traveled thoroughfare, access management should be required with carefully controlled access points. Landscaping and design controls should govern their development to minimize any negative visual impact these uses might have on the community.

- C. Industrial uses should be located where they will not adversely affect other land uses. Proximity to major highways, railroad lines, airport facilities and relatively flat topography are important industrial site considerations. Preferably, industrial development can be directed into industrial park settings where landscaping controls can minimize the visual impact of these uses.

### II. URBAN DESIGN

- A. Where possible, neighborhood and community design should take advantage of physical landmarks and functional focal points. Much like shopping malls are centered around large "anchor" stores, neighborhoods and entire communities can be oriented around either physical landmarks or functional focal points. This makes the organization of the community easier to understand and aids in maintaining one's bearings when traveling through various parts of the community. Landmarks are unique physical structures that visually stand out from the surrounding area. Functional focal points are major activity centers to which the adjacent areas relate.
- B. Adjacent dissimilar uses should be buffered through the use of appropriate barriers. This is a function of the community zoning code. Landscaping, fencing, earth berms, and numerous other barriers can minimize the negative effects of dissimilar uses. However, the choice of which type of buffer to use should address the existing specific problems. For example, where the problem is solely a visual one, dense landscaping should be sufficient. However, if the problem is controlling access or noise, then a fence or earth berm might be more suitable.



III. PUBLIC FACILITIES

- A. Streets should be located and organized in accordance with a function hierarchy. There are three primary classifications of streets: local, collector, and arterial. Traffic should be routed onto the appropriate type of street depending upon its destination. Movements from one section of the City to another are carried along the arterial streets which ideally are infrequently interrupted corridors designed for the smooth flow of large volumes of traffic. Sub-section movement occurs on "collector" streets, connecting residential areas with the arterial streets, neighborhood commercial areas, schools, and other higher intensity uses. The lowest level of the street system, the "local" street, carries the traffic flow from collectors or arterials to individual properties.

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**PLANNING GOALS AND OBJECTIVES FOR HIGHWAY 12**

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A prerequisite for future planning is the listing of municipal policies relating to physical development. This represents the goals and aspirations of the residents of Ashland City regarding the growth and development of their Town. These policies are specific enough that they can be used in the day-to-day evaluation of development proposals.

Although the future land use map provided later in this document is useful as a general guide to future growth, the development policies will prove to be more valuable for day-to-day decision-making purposes. Their value is that they will remain useful for a long period of time, they are precise enough to be applied directly to development proposals, and they can be easily updated.

Unfortunately, it is almost inevitable that there will eventually be some conflict between a development policy and real-world constraints and opportunities, or even between two conflicting policies. After the specifics of the situation and the objectives of the policies are fully understood, the conflict should be resolved using the best judgment of the Planning Commission and the City Council. In some cases, compromise may be necessary. However, it is of the utmost importance that the development policies be applied consistently to every developmental proposal. To keep the development policies current, it will be necessary to periodically review and modify them to reflect changes in community attitudes, lifestyles, and building technology.

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**GENERAL DEVELOPMENT GOALS**

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**TO PROVIDE AMPLE OPPORTUNITY FOR CONTINUED DEVELOPMENT WITHIN AN ORDERLY, EFFICIENT AND ENVIRONMENTALLY SAFE PLANNING FRAMEWORK.**

**OBJECTIVE**

*Control the location and design of new development in order to minimize initial and future public and private costs.*

**Policy**                      New urban development should be encouraged to locate in areas where municipal services and public facilities are already present or where service extensions can be easily accomplished.

## Highway 12 Land Use Plan

- Policy** Over zoning should be avoided to prevent a scattering of uses and a reduced marketability of land within the City.
- Policy** Streets and utility extensions should be designed to provide service to the maximum area with the least length of extension. Interconnection of streets, shared parking, and the clustering of housing units should be encouraged. Closed street patterns (with access only to major streets) should be discouraged. Development pattern should match the land type and topography. Inter-connected street patterns are the favored development type where appropriate.
- Policy** Curb cuts onto arterial streets should be kept to a minimum. Joint driveways and cross-access easements are encouraged.
- Policy** New developments should be required to provide adequate street right-of-way for public use. Where they adjoin planned transportation improvements, right-of-way should be dedicated, or additional setbacks provided.
- Policy** There should be provisions for the maintenance of minor drainage ways by abutting property owners.
- Policy** Residential densities in areas without sanitary sewer availability should be at densities of less than one dwelling unit per acre. As sanitary sewer service becomes available, higher densities should be considered based on land use transition needs.

### **OBJECTIVE**

*Restrict development to areas with few environmental hazards and minimize the loss of natural resources due to urbanization.*

- Policy** New developments should be located in areas, which are relatively free of environmental problems relating to soil, slope, bedrock, and flooding.
- Policy** Residential development should be avoided in the 100-year floodplain. Development in the floodplain areas should consist of activities that do not obstruct, or reduce the storage capacity of the floodplain. Under no circumstances should development be allowed in the floodway.
- Policy** New development should avoid, where practicable, significant natural resources.
- Policy** Increased stormwater runoff attributable to new development should not adversely affect downstream properties or structures.

## Highway 12 Land Use Plan

- Policy** Land adjacent to identified "blue-line" streams should be left in a natural state to control erosion and sedimentation. Alteration of natural drainage courses shall be avoided wherever possible.
- Policy** Construction on slopes greater than 20%, should be discouraged wherever possible. Clustering of development into more usable areas is encouraged.
- Policy** Natural vegetation should be preserved as much as possible in environmentally sensitive areas by utilizing noninvasive design and development practices. Environmentally sensitive areas consist of:
- Natural slopes of 20% or greater,  
Floodplain,  
Streams, creeks and major drainage ways,  
Wetlands,  
Areas of historical or archeological significance.

### **OBJECTIVE**

*Consider design elements to assure that the character of the community is preserved or enhanced.*

- Policy** Signs should provide the necessary information to the motorist or the pedestrian without increasing the probability of accidents by causing too much visual confusion.
- Policy** All development should be provided with adequate landscaping to improve the aesthetics of the use, to absorb additional stormwater runoff, and to reduce summer surface temperatures. Landscaping should be used as transitional screening and throughout individual developments.
- Policy** Development of all types should be appropriately clustered to preserve the character and natural features of the City.
- Policy** Existing "significant" trees shall be preserved as part of new development. As part of this process, the City will initiate a street tree program to preserve and enhance existing street trees.

### **HOUSING GOALS**

**TO PROVIDE DECENT AND AFFORDABLE HOUSING FOR PRESENT AND FUTURE POPULATIONS OF ASHLAND CITY WHILE PRESERVING EXISTING RESIDENTIAL AREAS.**



**OBJECTIVE**

*Provide for quality residential and neighborhood environments. Existing residential neighborhoods are to be protected.*

- Policy** Residential areas should be protected from incompatible activities.
- Policy** Medium density development should generally be used in residential areas to provide transition to higher density areas.
- Policy** Densities in residential development areas should be determined by the land and infrastructure conditions in the area.
- Policy** Medium and High-density developments should be located with direct access to a major street (collector or arterial).
- Policy** Medium and High-density development should be discouraged in areas having average slopes of 20% or greater.
- Policy** As a general rule, compatible land uses should be provided on both sides of local streets and adjacent property lines. Transitions in land use (from residential to commercial or industrial) should occur at rear property lines, adjacent to collector or arterial streets, through the use of a natural feature or a man made buffer.

**OBJECTIVE**

*Provide adequate amounts of multiple-family housing in suitable locations.*

- Policy** Medium- to high- density multiple-family projects should be located in close proximity to a major street specifically designated as a collector or arterial. These developments should be located within one block of an arterial street to avoid large amounts of traffic traversing single-family areas.
- Policy** Multi-family residential developments may be located to provide transition between single-family residential areas and commercial and industrial uses. These uses are also appropriately located along arterial streets between major intersections.
- Policy** Public sewer service should be available, and trunk lines, lift stations, and treatment plants should be capable of carrying additional anticipated loads.

## Highway 12 Land Use Plan

**Policy** Public water service should be available, and line size and storage facilities should be capable of providing adequate water pressure and supply.

### COMMERCIAL GOALS

TO PROVIDE SUFFICIENT NEIGHBORHOOD AND COMMUNITY-WIDE SHOPPING FACILITIES EFFICIENTLY DISTRIBUTED THROUGHOUT THE COMMUNITY AND ADEQUATE OPPORTUNITY FOR COMMERCIAL EXPANSION.

### OBJECTIVE

*Encourage the development or enhancement of the downtown area.*

**Policy** The downtown should be the focus of the community. Public and civic uses should be concentrated wherever possible in the downtown area.

**Policy** Other compatible and supporting uses such as office buildings, community-wide civic structures, government functions and residential neighborhoods should be encouraged to locate in the downtown area.

**Policy** The character of the downtown area should be established by maintaining some degree of conformity of design and scale. Structures of architectural significance should be provided, whenever practicable. Ease and convenience of pedestrian circulation should be given priority over vehicular circulation and parking.

**Policy** Office development should be encouraged to locate in the downtown area. The number of areas and acres available for office development outside of the downtown area should not undermine the economic viability of the center itself.

### OBJECTIVE

*Provide areas away from downtown for clustered and coordinated commercial development.*

**Policy** Planned commercial areas should be provided for large lot users (i.e., lumber yards, auto and farm implement dealers).

**Policy** The areas containing uses requiring large land areas should be located on a major arterial street with careful access controls and sufficient buffers from any adjacent residential uses.

**Policy** Large lot commercial uses should be clustered to minimize their impact on surrounding uses and traffic patterns rather than be allowed to form a long commercial strip.

## Highway 12 Land Use Plan

### OBJECTIVE

*Provide neighborhood convenience shopping adjacent to residential areas but discourage "spot commercial" zoning.*

- Policy** Coordinated neighborhood shopping centers or groups of stores which primarily provide goods and services to local residents only, such as convenience stores, pharmacies and laundromats, should be located at the edges of neighborhoods provided that they are located on an arterial street and nearby residences are adequately buffered.
- Policy** Non-neighborhood oriented commercial development should be encouraged to locate in commercial centers on the arterial corridors or in the downtown area, and not at the gateways into residential neighborhoods.
- Policy** Neighborhood shopping centers should be sized to accommodate the specific market base of the neighborhood.
- Policy** The enhancement of neighborhood shopping centers should be encouraged to attract both shoppers and prospective businesses through the development and redevelopment efforts of the private and public sectors.

### OBJECTIVE

*Discourage the expansion of strip commercial development along the major streets of the City.*

- Policy** Strip commercial development (typically characterized by individual commercial uses stringing out along a street) should be limited to highway commercial areas catering to the motoring public with uses such as motels, service stations and fast-food restaurants.
- Policy** Strip commercial development should be limited to major highway entrances to the City and should be permitted only limited access to major streets via frontage roads or shared driveways/cross access easements.
- Policy** Commercial development serving the neighborhood or community shall be concentrated in locations of high accessibility, either at the intersection of two arterial streets, or at the intersection of an arterial or collector street.



## Highway 12 Land Use Plan

### **OBJECTIVE**

*Assure the provision of adequate pedestrian and vehicular access and parking at all commercial and employment centers.*

**Policy**            Require adequate off-street parking for all new commercial and office development and require appropriate buffering between parking areas and adjacent residential uses.

**Policy**            Provide safe and convenient pedestrian access from surrounding residential areas and internal pedestrian circulation in all commercial centers.

### **INDUSTRIAL GOALS**

TO PROVIDE SUFFICIENT OPPORTUNITIES FOR INDUSTRIAL DEVELOPMENT AT LOCATIONS WITH SUITABLE ACCESS, ADEQUATE COMMUNITY FACILITIES AND WITHOUT SERIOUS ENVIRONMENTAL OR LAND USE LIMITATIONS.

### **OBJECTIVE**

*Industrial development should be located so as to maximize efficient usage of the public and semi-public facilities necessary for this type of development.*

**Policy**            Industrial sites should have good access to arterial streets, preferably those leading directly to interstate highways. Access to rail facilities and to navigatable rivers is also an important consideration.

**Policy**            Wherever possible, public water and sewer service should be provided.

**Policy**            Industrial development should be located or designed so as to be afforded adequate police and fire protection.

### **OBJECTIVE**

*Industrial development should be located so as to minimize the negative impact on the environment and on other less intensive uses, as well as minimize the costs of development.*

**Policy**            New industrial uses should be appropriately separated or buffered from surrounding non-industrial uses.

**Policy**            Future industrial expansion areas should be evaluated in light of existing soil, slope, bedrock, and flooding conditions. Industrial development should not be allowed in areas where such development may result in substantial, long-term environmental damage.

## Highway 12 Land Use Plan

- Policy** Vehicular access should be provided to industrial areas in a manner, which prevents traffic through residential areas. Direct access to major thoroughfares is preferred.
- Policy** Industrial uses such as salvage yards should be located and screened so as to minimize their visual impact upon the community.
- Policy** Areas with the public facilities and environmental conditions suitable for industrial development should not be developed for residential or other low-intensity purposes.

### Land Use Policies

The basic land-use building blocks are referred to in this plan as Land Use Policy Classifications. The policy classifications are defined as general groupings of land uses that have common operational and/or development characteristics. For example, residential is a basic type of land use intended for human habitation. Throughout a community, however, the characteristics of residential developments may differ. People choose to live in many different types of residences, whether they are single-family homes, apartments, townhouses, or retirement centers. Residential development also occurs in a wide range of intensities, measured as density in terms of the number of residences per given acre of land. As an example, one house situated on a one-acre tract of land has a density of one residential unit per acre. Two houses developed on that same one acre of land would have a density of two units per acre.

In the context of general land use planning, the Plan attempts to classify residential land uses according to general density ranges rather than by a specific type of residential structure, since it is the general density of residential development (rather than the form of the development itself) that dictates how the City must plan and budget for the public services (such as water, sewer, police and fire protection) that will be necessary to support and protect that development. The City therefore establishes land use policies according to defined intensity/density ranges. Each of those land use policy classifications can be contained in the City's Zoning Code. The Highway 12 Land Use Plan therefore, serves as the City's guidebook for making land use and development decisions utilizing the zoning districts and development standards contained in the Zoning Code, but it is not a "zoning plan."

The Highway 12 Land Use Plan is comprised of the following Land Use Policy Classifications:

- RE Rural/Estate
- RL Residential Low Density
- RLM Residential Medium Density
- RM Residential High Density
- CN Commercial Neighborhood
- CC Commercial Community
- CH Commercial Highway
- IL Industrial Light
- IG Industrial General
- G/C Government/Civic

### **RURAL/ESTATE (RE)**

Rural/Estate policy areas are areas that may be suitable for development beyond the planning period, but should remain essentially undeveloped over the next 20 years. The predominant type of development in RE areas is very low density residential (greater than 5 acre lots) and agricultural uses.

Residential development should be designed with an anticipation of later intensification as the city begins to expand into these areas. Non-residential development should be at similar scale and intensity as the residential development and should serve convenience retail functions. Impacting uses that are found to be public necessities such as quarries and landfills, may be appropriately located in these areas.

### **RESIDENTIAL POLICY AREAS**

Residential uses typically comprise the largest single type of development in any community. Ashland City is no exception to this pattern. The type and pattern of residential development, therefore, has a significant impact on the structure of the town. One of the more important goals in this plan is for Ashland City to continue the present pattern of providing a diversity of housing options to accommodate the varying needs and lifestyles of the various household types. From single adults to young families, to empty nesters, to retirees, the City's goal is to be as inclusive as possible. At the same time, care must be taken to ensure compatibility with other land uses, and among differing housing types.

The delivery of services is influenced to a great extent by the spatial pattern of residential development. In general, higher densities are preferred for new residential development, as these densities allow for fiscally responsible service delivery. However, it is important to respect the carrying capacity of the land and infrastructure.

#### General Guidelines for Residential Development

- The primary land use in residential policy areas is permanent residential development
- Other uses, which may be associated with residential areas, include recreational and other community facility activities, traditional office uses, local convenience and neighborhood scale retail uses.
- The development of small pockets of vacant land within larger developed areas (infill) should generally be at comparable densities and housing types with that of the surrounding area.
- Density is measured by units per acre, and is expressed as a range. Generally, residential developments in a policy area should be within the density range of the policy category.
- Any non-residential activities within a residential area should be compatible in scale and intensity (building size, shape and footprint) to the surrounding residential areas.

### **RESIDENTIAL-LOW (RL)**

Residential-Low provides for densities equivalent to one acre or larger lots. The predominant development type for these areas is single-family homes within residential subdivisions that have their own street systems. The subdivisions in this policy area should be designed as a final development pattern, since no additional intensification is anticipated.



## Highway 12 Land Use Plan

Community infrastructure will be provided to these areas on the same basis as more intensively developed areas of Ashland City. Sanitary sewer service, roadway improvements, fire suppression services, and all other municipal services will be provided. This infrastructure will be sized to meet the needs of lower intensity areas.

Higher intensity residential and the non-residential policy areas should not derive their primary access through Residential-Low areas. Where planned collector roadway facilities traverse Residential-Low Policy areas, higher densities within the policy category should be located along those collector streets. Higher densities should also generally be located near the arterial street system.

As the Residential-Low policy areas fill out during the twenty-year planning period, new development should be compatible with adjoining developments. Interconnected street systems between developments within the policy area are encouraged. The edges of the Residential-Low policy areas should provide for a character and discernable boundaries and transitions that distinguish Residential-Low areas from other areas.

### **RESIDENTIAL MEDIUM (RM)**

The Residential Medium land use policy category contains much of the existing development within the city. Subdivision lot sizes in this category range from 1/4 acre up to one acre. Other forms of residential development at equivalent densities may also be considered (e.g. cluster lot subdivisions or multi-family developments). The intensity of the Residential Medium category provides for a good service base and ease of pedestrian connections to community hubs.

This policy category provides sufficient intensity to provide all municipal services. Recreational opportunities, parks and greenways should focus themselves on these areas to the extent practicable. Development at the upper end of the density range is recommended at locations along collector streets and in the vicinity of arterial streets, provided that access to the collector or arterial street is not through a lower density policy area. Development at the lower end of the density range (one acre lots) is recommended in areas away from arterial and collector streets.

The predominant development type for Residential Medium policy areas is single family residential. Small areas of duplex, town-home or multi-family housing development may also be appropriate in transitional areas.

Residential Medium areas should be in the path of urban expansion and extension of support services, particularly sewers and transportation infrastructure. Development at Medium intensity should only occur in areas with firm plans for public safety services (police and fire), urban drainage, recreational facilities and transportation improvements.

While the overall goal within and between Residential Medium areas is connectivity, careful attention should be paid to the boundaries of the policy areas. The goal should not be to erect barriers that prevent the integration of the policy areas into a single community, but also the areas of intensity should be separated and have a recognizable boundary.

Areas of existing Residential Medium development should establish the overall character of newer Residential Medium areas, unless higher intensity is necessary for other reasons outlined above.

**RESIDENTIAL HIGH (RH)**

Residential High areas are anticipated to accommodate residential development with densities exceeding four (4) units per acre. Suitable for multi-family use, a variety of housing types are appropriate in most Residential-High areas. The most common types are a mixture of compact single-family detached units (patio homes), town homes, duplex and four-plex units, and walk-up apartments.

Connectivity of the street system is of critical importance in Residential High policy areas. Within the policy areas, connections should be made between areas of varying densities. Connections to other policy categories (especially Residential-Low and Medium policy areas that will develop in the future) are also very important. The strategy is to ensure an integrated street system in these areas and avoid concentration of traffic onto a few major streets.

Development at the upper end of the intensity range is appropriate at locations along and in the vicinity of arterial streets and park facilities.

Residential High areas should be in the path of urban expansion and extension of support services, particularly sewers and transportation infrastructure. Development at High intensity should only occur in areas that have public safety services (police and fire), urban drainage, recreational facilities and transportation systems that can support them.

Areas designated Residential High should be convenient to neighborhood or community scale commercial centers and other community services.

**COMMERCIAL POLICY AREAS**

Commercial activities are divided in several different ways. The distinction between retail sales (the sale of products) and office (the performance of services) is an important one from a land use perspective. The other important distinction is the focus of the commercial activity, whether within Ashland City or outside the City limits. The focus of activity relates strongly to its location in the city. The distinction between goods or services relates to the immediate impact the use will have on the surrounding area.

**GENERAL GUIDELINES FOR COMMERCIAL DEVELOPMENT**

Intensity refers to the level of concentration or activities in use on a piece of property. Generally the more intensive the use, the more traffic and other disruptive effects it generates on a regular basis. Higher intensity uses should be located further from residential uses than lower intensity ones. Higher intensity uses should also be placed adjacent to major transportation facilities.

Buffering techniques should be used at the edges of commercial policy areas to reduce the interference of the commercial uses with the adjacent areas. To the extent possible buffering should use natural features such as topography or drains to separate land uses. These natural features should be supplemented by landscaping and other elements to reduce impacts on adjacent uses.

Convenience retail activities located within residential settings should be carefully governed by well-documented local market demands. The location of such uses should be restricted to the intersections of collector and/or arterial streets. Such uses should be sensitively designed to respect the scale and form of the neighborhood.

### **COMMERCIAL NEIGHBORHOOD (CN)**

CN policy areas are designated to accommodate uses that provide routinely needed goods and services, such as convenience markets, video rental stores, restaurants and dry cleaners. The customer base for Commercial Neighborhood areas is generally from 1,000 to 10,000 people. Size of the policy area is typically from 5 to 10 acres.

The CN area should be at the intersection of either an arterial and collector street, or two collector streets that are the focal point of traffic in the area. Typical spacing for CN clusters of uses range from 2 miles in lower density residential areas to a mile in higher density areas. Under certain conditions and circumstances, market demand may be such that closer spacing may be appropriate. When appropriate, consideration may be given to permitting residential-scale office activities to serve as a land use transition between the more intensive commercial activities and abutting residential properties. Such office activities should be limited in scale and intensity should commensurate with the character of the immediate neighborhood.

### **COMMERCIAL COMMUNITY (CC)**

CC areas are designed to accommodate concentrations of community scale retail. Community scale retail includes many forms of retail activity, including most retail shops, restaurants, entertainment and consumer services. CC areas are typically anchored by a large grocery store or big-box general retailer. These clusters serve a market area of 10,000 to 50,000 people and a trade area of 1-5 miles. Frequently these areas also serve the neighborhood shopping needs for an area, or contain highway oriented uses. Aggregate size is from 10 to 50 acres depending on the mix of uses.

CC areas should be located at intersections of arterial streets. Preference should be given to arterial intersections in which both streets have or are planned to have 4 or more lanes. Intersections of a four-lane and a two-lane arterial, or as a last resort, a four-lane arterial and a collector street may be appropriate.

A component arrangement of development is recommended for CC areas. Commercial uses should not develop as strip commercial. To prevent "stripping," natural features or transitional uses should be used to provide firm edges to CC areas. When appropriate, consideration may be given to permitting small to moderate scale office developments as land use transitions between more intensive commercial activities and abutting residential properties.

CC areas are more flexible in their locational requirements than industrial uses. Therefore CC policy should not be applied to locations that will be needed for larger scale commercial or industrial activities.

### **COMMERCIAL HIGHWAY (CH)**

Highway Commercial areas are those areas devoted to uses that are oriented to the traffic that passes by them. They provide services to pass-by motorists. Typical uses are hotels and motels, restaurants, gas stations and convenience stores, auto repair and sales and other similar uses.

Due to their location close to interchanges and along major arterials, careful access management must be exercised in these areas for both capacity and overall safety reasons. Should the policy area adjoin a less intensive policy area, careful transition should be put in place to avoid detrimental impacts on the adjoining use. These transitions may be "land use"



transitions by placing less intensive uses at the policy boundary, or they may utilize some natural feature that clearly demarks the line.

### **INDUSTRIAL POLICY AREAS**

These areas of the City are devoted to major employment of either service based or fabrication based. This category includes both industrial and distribution centers, and research or office park uses. Critical to the determination of these areas is accessibility. Consequently, they should be located near regional and national transportation facilities on suitable land with adequate services.

These uses are of critical importance to the vibrancy and health of the City, and at the same time are the most difficult to locate. Industrial uses in particular have many negative impacts on the surrounding areas, and at the same time are very sensitive to site location. Care must be taken not to allow other uses, especially residential uses, to encroach on these sites.

#### **INDUSTRIAL LIGHT (IL)**

This policy category includes distribution and light fabrication types of uses. Their orientation is outside the city, although City residents may work with them. This distinguishes them from local service office and mixed service areas that serve largely a local trade area. One of the major goals in the plan is to diversify the employment base within the City, to bring jobs to the city. These policy areas provide that capability.

The uses in the Industrial Light policy categories are entirely contained within the structure, and no noise, odor or smoke escapes the confines of the building. All the uses require good accessibility for both the purposes of their labor force and to transport goods to other sites.

These sites are extremely sensitive to locational conditions, and site meeting their criteria are somewhat difficult to provide. These sites must be protected from encroachment by other uses, especially residential areas. Because they are relatively flat and have good access, they are attractive for other uses. However, the uses in this category also have negative and impacting use characteristics. If residential is permitted to encroach into these areas, its value for employment and light industrial uses is compromised.

Industrial Light areas should be at least 50 acres in size and have direct access to an arterial street. Traffic from these uses should not travel through any other policy area to obtain this arterial access.

#### **INDUSTRIAL GENERAL (IG)**

This policy classification consists of heavy manufacturing and fabrication of goods. This policy requires many of the same features as the Industrial Light areas; good access, flat land and tolerant adjacent land uses. In addition, the manufacturing processes found here can generate noise, smoke and odor that have a negative impact on surrounding uses.

#### **CIVIC/GOVERNMENT**

This policy classification includes governmental buildings, such as offices, libraries, and neighborhood parks, as well as other civic facilities that are privately funded or owned by non-profit organizations and are used for the benefit of the community. Examples include museums, places of worship, schools, and community centers. These types of activities may be located in close proximity to industrial, commercial, or residential areas, provided that the necessary buffering requirements are established.

## The Highway 12 Land Use Plan

The Highway 12 Land Use Plan is depicted in Exhibit 6. The Plan represents an application of the aforementioned planning goals and objectives utilizing the land use policy classifications. The Plan anticipates and encourages that the corridor continue to evolve and develop with a more diverse range of land uses while respecting and protecting those natural attributes that will preserve the corridor as an attractive gateway into the community.

### South Side of Highway 12

As a general rule, non-residential land use classifications will continue to dominate those land areas lying south of Highway 12. This is both reflective of the established industrial land uses that already exist south of the highway, and the relatively shallow depth of properties lying between the highway and the railway line in the eastern sector of the corridor, and between the highway and the Marrowbone Creek flood plain in the western sector. An exception to the non-residential orientation in this southern area is the large, relatively undeveloped land area lying between Robin Hood Road to the west and the Tall Tree Estates Subdivision to the east. The relative isolation of this area, its attractive orientation to the Cumberland River, its variable topography rising above the 100 year flood plain, and its limited access opportunities combine to make this area a suitable location for low density residential development. From a public safety standpoint, vehicular ingress and egress to this future residential enclave should be provided via an improved Robin Hill Road to the west and from an extension of either Riverview Lane or Allenwood Drive to the east.

Industrially oriented land uses will continue to dominate the eastern sector of the corridor south of Highway 12, between the highway cut just west of Thompson Road and the Davidson County line to the east. Exceptions include the application of Highway Commercial policy to the relatively shallow properties generally opposite Caldwell Road to the north, and a relatively small area of Residential Low policy immediately contiguous to the county line.

In the western sector of the corridor, still on the south side of Highway 12, a mix of commercial and residential policies apply. Residential Low policy has been applied to the Tall Tree Estates Subdivision in deference to current development intensity. Residential Medium policy is applied to currently undeveloped land lying immediately to the west of the Tall Tree Estates Subdivision largely based on its direct access to Highway 12 and adjacency to existing single family development. Residential High density policy is applied to a large acreage tract lying along the western margin of Little Marrowbone Creek based on the existence of new residential development directly opposite that tract along the north margin of Highway 12. Commercial Community policy is applied to those remaining properties along the south margin of Highway 12 that contain sufficient depth to accommodate the big-box form of development typically required by those types of commercial establishments. A limited amount of Commercial Highway policy is applied in the far western sector to those relatively shallow properties that front the south margin of the highway. For those parcels lying immediately west and east of Robin Hill Road, the feasibility of actual commercial development is questionable due to flooding potential. Conservation of those properties in a natural state would be preferable both from the standpoint of protecting water quality near the City's water intake point and to enhance the gateway character of the corridor. The City should explore such options with the respective owners of these properties.

## Highway 12 Land Use Plan

### North Side of Highway 12

The predominant land use classification is residential for those portions of the study area lying north of Highway 12. As a general rule, for those residential properties oriented directly to Highway 12, the recommended density of development increases moving east to west toward the center of the community. Residential density classifications north of the highway are also dictated by proximity to street intersections and by topographic conditions. Residential Medium density areas are clustered around major street intersections along the corridor, often contiguous to a Commercial Neighborhood policy (see next paragraph for Commercial Neighborhood policy). A large percentage of the land north of the highway designated for residential use contains relatively steep topography. A number of those sites could be sensitively developed as residential subdivisions, provided that flexible zoning and subdivision techniques are employed to cluster lots on the less steep portions of the property and the remainder in common open space is preserved. Residential Low density policy is applied to those areas. Rural Estate policy (5 acre or larger lots) is applied selectively to two large areas in the easterly sector of the corridor based on severe topographic conditions and/or distance for the center of the community. Both of the Rural Estate areas directly abut land owned by the City for a park.

Non-residential land use policy on the north side of Highway 12 is generally limited to neighborhood oriented retail sales and service activities. Small "nodes" of Commercial Neighborhood policy are strategically located at street intersections that lead into existing or future residential neighborhoods. These areas are appropriate for small to moderate scale commercial establishments that satisfy the more day-to-day shopping and service needs of nearby residential areas. Small areas of Commercial Highway policy is applied to selected sites in the western sector of the corridor, being generally oriented around the Dry Fork Road intersection. Some of these properties have very shallow depths, being remnants of the Highway 12 reconstruction project. Utilization of the more shallow parcels as gateway enhancement features may be an option worth exploring by the City.

Only one area along the north margin of Highway 12 is policed Industrial Light. One large and one small tract of land in this immediate area are currently zoned for light industrial activities. The majority of this industrial zoned land currently remains in an undeveloped state. The Industrial Light policy area recommended for this area is applied only to those portions of the property considered as reasonably feasible for industrial or commercial development based on topographic conditions. The steeper ridge top areas of that large tract should be consolidated with adjoining residential lands and developed accordingly.

### Plan Implementation

The primary means of implementing a land use plan fall to the City's zoning ordinance and subdivision regulations. It is through the application of specific zoning district classifications on a parcel by parcel basis that the City regulates both the "use" of property, the "intensity" of development occurring on the property, and the physical appearance of the development itself. To effectively implement the stated goals and objectives of the Highway 12 Land Use Plan, therefore, the City must ensure that both the Zoning Ordinance and the Subdivision Regulations adequately address the types of land uses permitted in the various zoning districts used to implement the plan, as well as the performance standards applied to new development. Both regulatory documents should be reviewed and updated as needed on a regular basis to ensure consistency with the Plan.



## Highway 12 Land Use Plan

The City's guidelines related to storm water quality and flood plain management should also be reviewed on a regular basis. The City should strive for a balanced approach to the sensitive issue of flood plain alteration vs. preservation. Within the Highway 12 corridor area, part of that balancing act involves allowing sufficient flood plain manipulation to permit the reasonable use of valuable land fronting a State highway while at the same time reasonably protecting the natural ecosystem of Marrowbone Creek and the quality of water reaching the City's water intake system.

Establishing and maintaining a high quality "gateway" image for the corridor requires careful attention to land use type and specific development standards. The Zoning Ordinance should clearly articulate the community's minimum standards for perimeter and internal landscaping, building setbacks and orientation, the screening of service corridors and dumpsters, site lighting, and the placement, height and size of signs. An access management program should be developed for the Highway 12 corridor and incorporated within both the Zoning Ordinance and the Subdivision Regulations. Components of an effective access management program would include requirements for intra-parcel driveway connectivity, especially between individual commercial sites along the corridor, and a systematic and planned approach to the location of major driveways and traffic signals.

**EXISTING AND PROPOSED LAND USE ALLOCATIONS**

<b>GENERAL LAND USE</b>	<b>EXISTING ACRES</b>	<b>EXISTING % OF ACRES</b>	<b>PLANNED ACRES</b>	<b>PLANNED % OF TOTAL</b>
RESIDENTIAL	1547.43	45.66%	2524.72	74.49%
COMMERCIAL	84.37	2.49%	212.54	6.27%
INDUSTRIAL	203.93	6.01%	544.97	16.07%
GOVERNMENT/ CIVIC	26.30	0.77%	107.36	3.17%
VACANT	1527.56	45.07%		
<b>TOTALS</b>	<b>3389.59</b>	<b>100.00%</b>	<b>3389.59</b>	<b>100.00%</b>

## PROPOSED LAND USE ALLOCATIONS

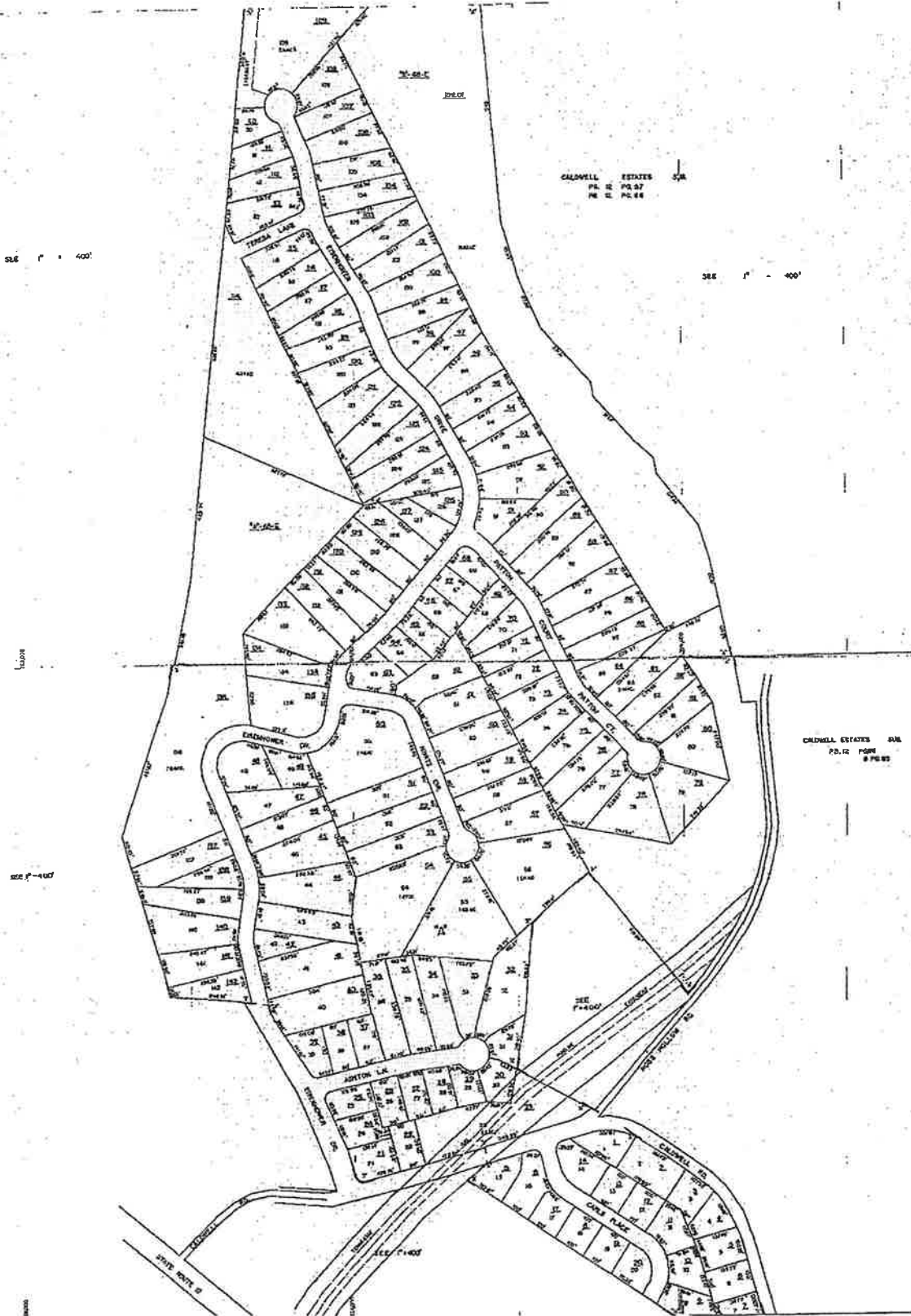
Land Use Policy	Acres	% of total acres	Average Utilization Rate	Build-Out Yield
Rural/Estate	909.26	26.83%	0.2 DU/AC	180 DU
Residential Low Density	1337.68	39.46%	0.75 DU/AC	1,003 DU
Residential Medium Density	156.91	4.63%	3.00 DU/AC	470 DU
Residential High Density	120.87	3.57%	6.00 DU/AC	725 DU
Commercial Neighborhood	9.61	0.28%	0.15 FAR	62,791 GFA
Commercial Community	149.79	4.42%	0.20 FAR	652,485 GFA
Commercial Highway	53.14	1.57%	0.15 FAR	173,608 GFA
Industrial General	100.8	2.97%	0.20 FAR	439,085 GFA
Industrial Light	444.17	13.10%	0.20 FAR	1,934,805 GFA
Government/Civic	107.36	3.17%		
<b>TOTAL</b>	<b>3389.59</b>	<b>100.00%</b>		
Flood Plain (Per FEMA)	1352.8 acres			
DU: Dwelling Unit				
GFA: Gross Floor Area				
DU/AC (Dwelling Units Per Acre): Total Dwelling Units/ Total (Gross) Site Area				
FAR (Floor Area Ratio): Total Floor Area / Total Site Area				

# Highway 12 Land Use Plan

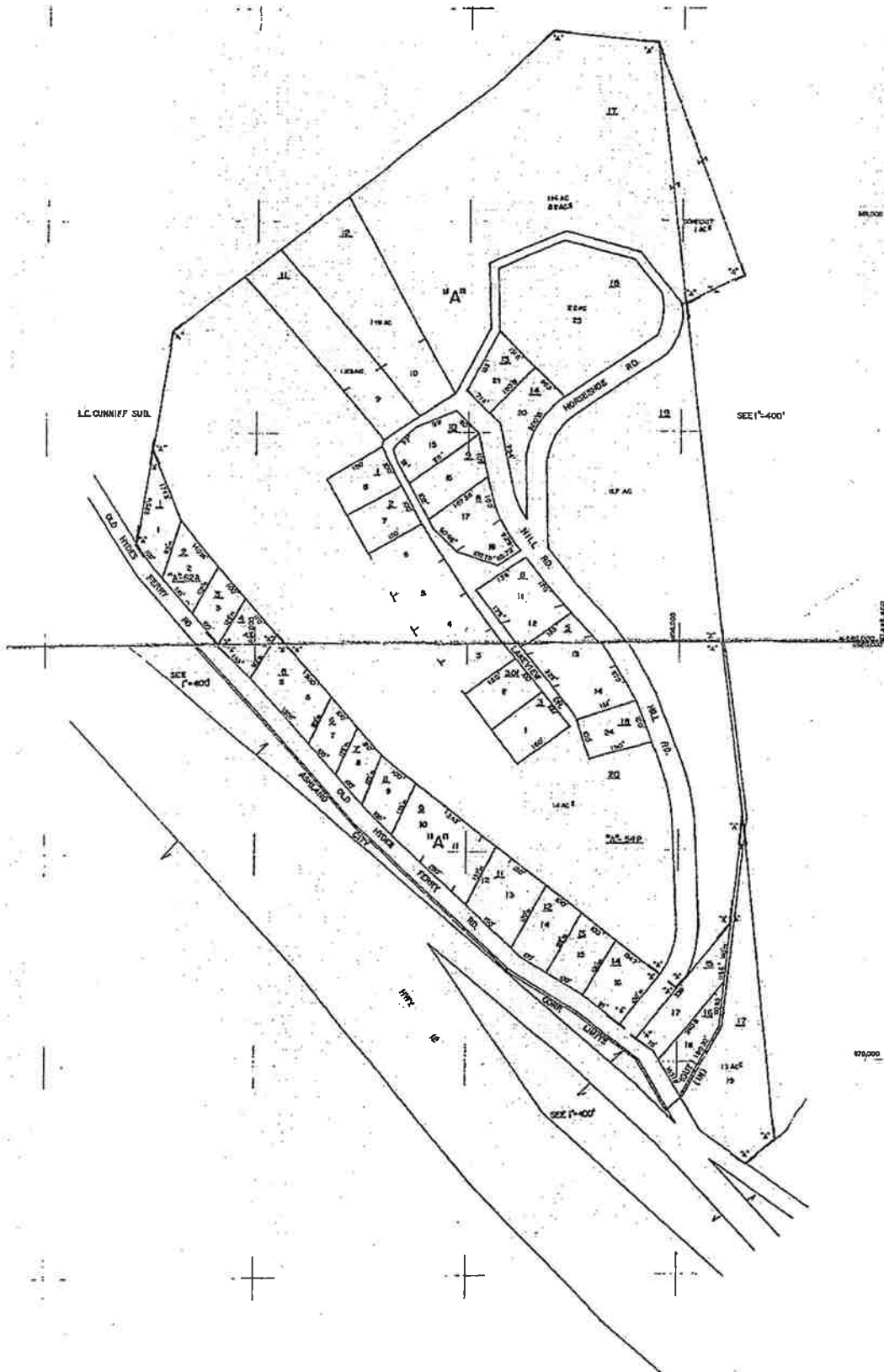
## APPENDICES



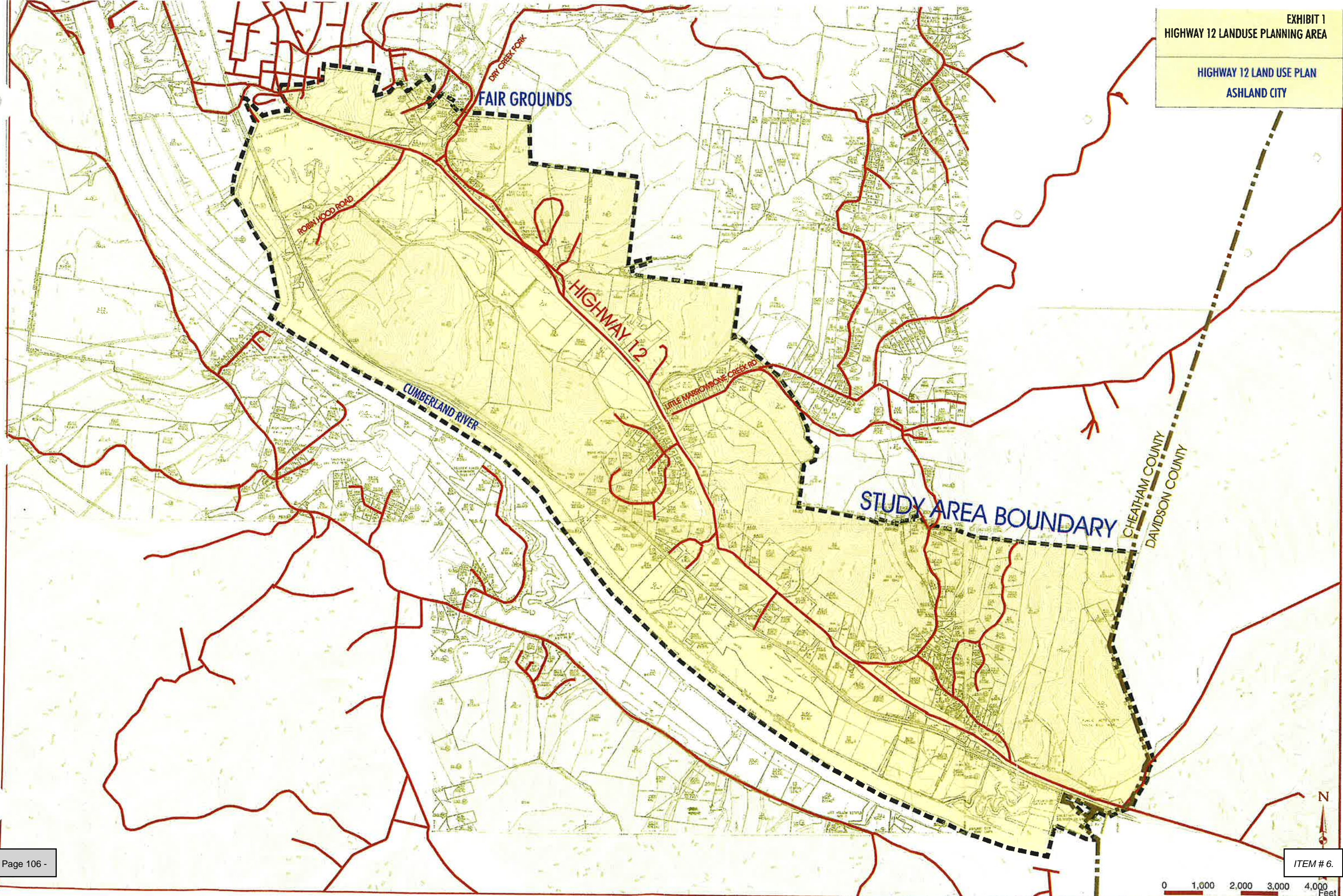
APPENDIX 1: CALDWELL ESTATES SUBDIVISION



APPENDIX 2: L.C. CUNIFF SUBDIVISION





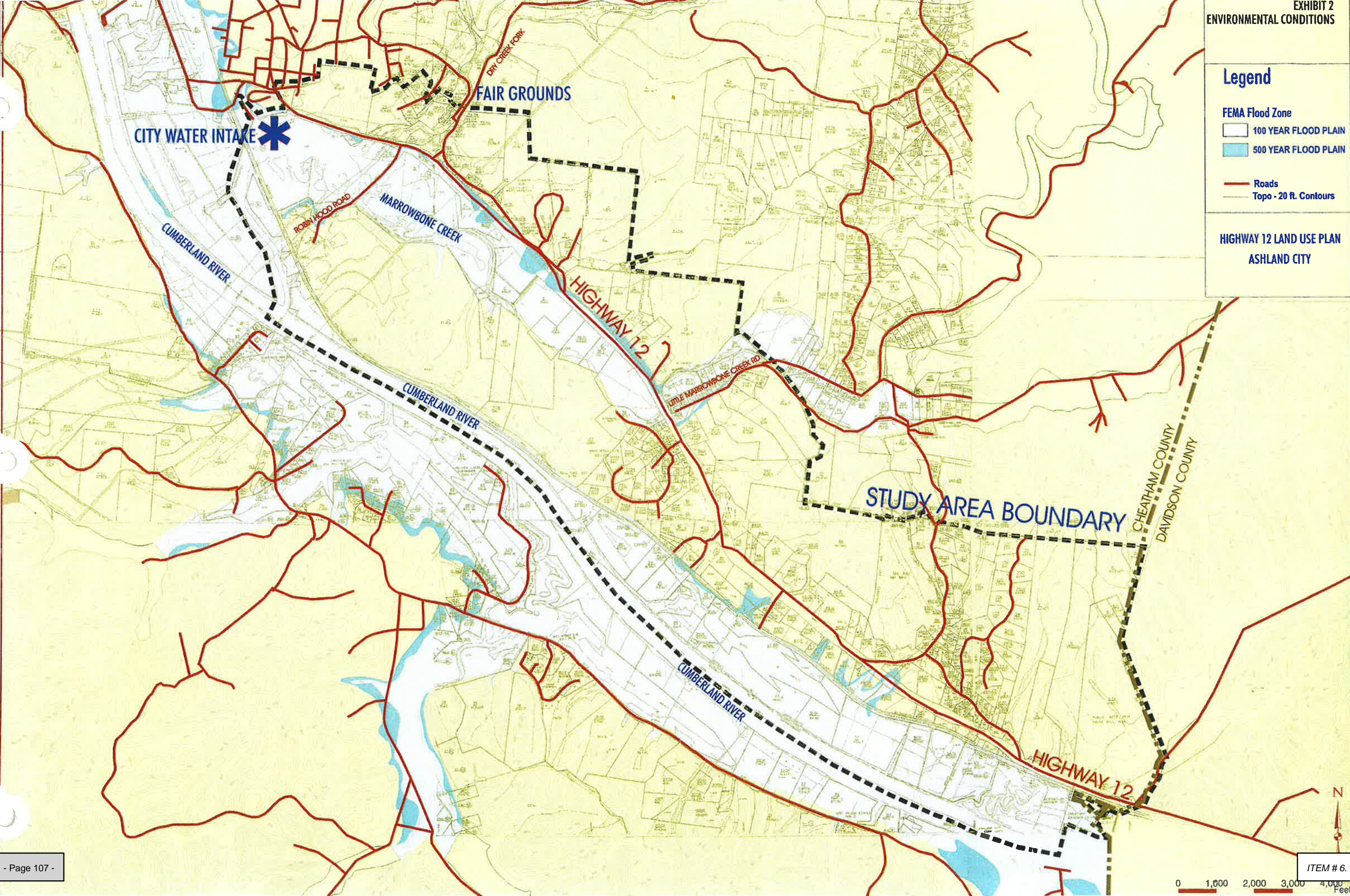




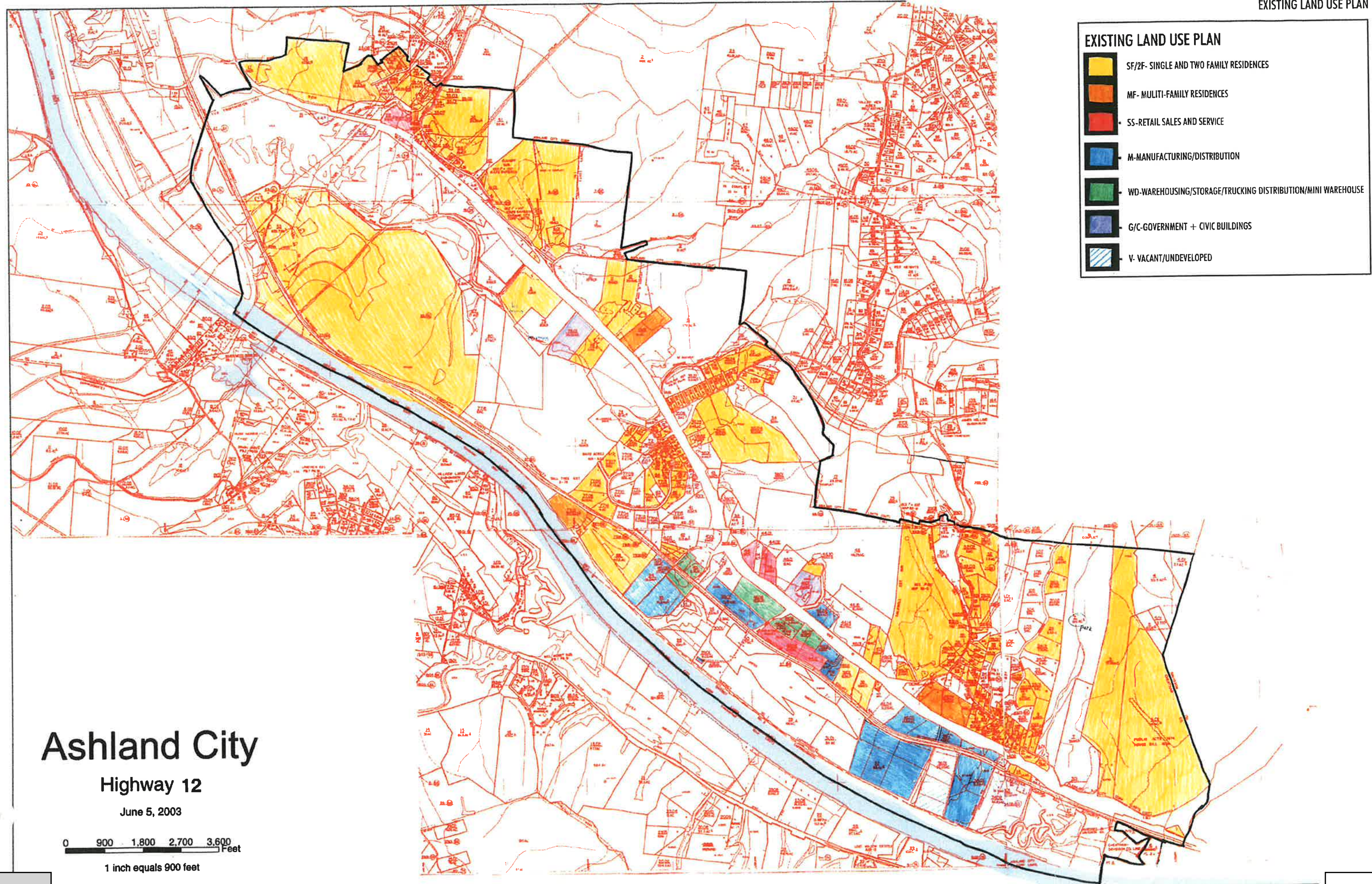
**Legend**

- FEMA Flood Zone
  - 100 YEAR FLOOD PLAIN
  - 500 YEAR FLOOD PLAIN
- Roads
- Topo - 20 ft. Contours

**HIGHWAY 12 LAND USE PLAN  
ASHLAND CITY**







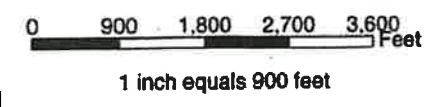
**EXISTING LAND USE PLAN**

- SF/2F- SINGLE AND TWO FAMILY RESIDENCES
- MF- MULTI-FAMILY RESIDENCES
- SS-RETAIL SALES AND SERVICE
- M-MANUFACTURING/DISTRIBUTION
- WD-WAREHOUSING/STORAGE/TRUCKING DISTRIBUTION/MINI WAREHOUSE
- G/C-GOVERNMENT + CIVIC BUILDINGS
- V- VACANT/UNDEVELOPED

# Ashland City

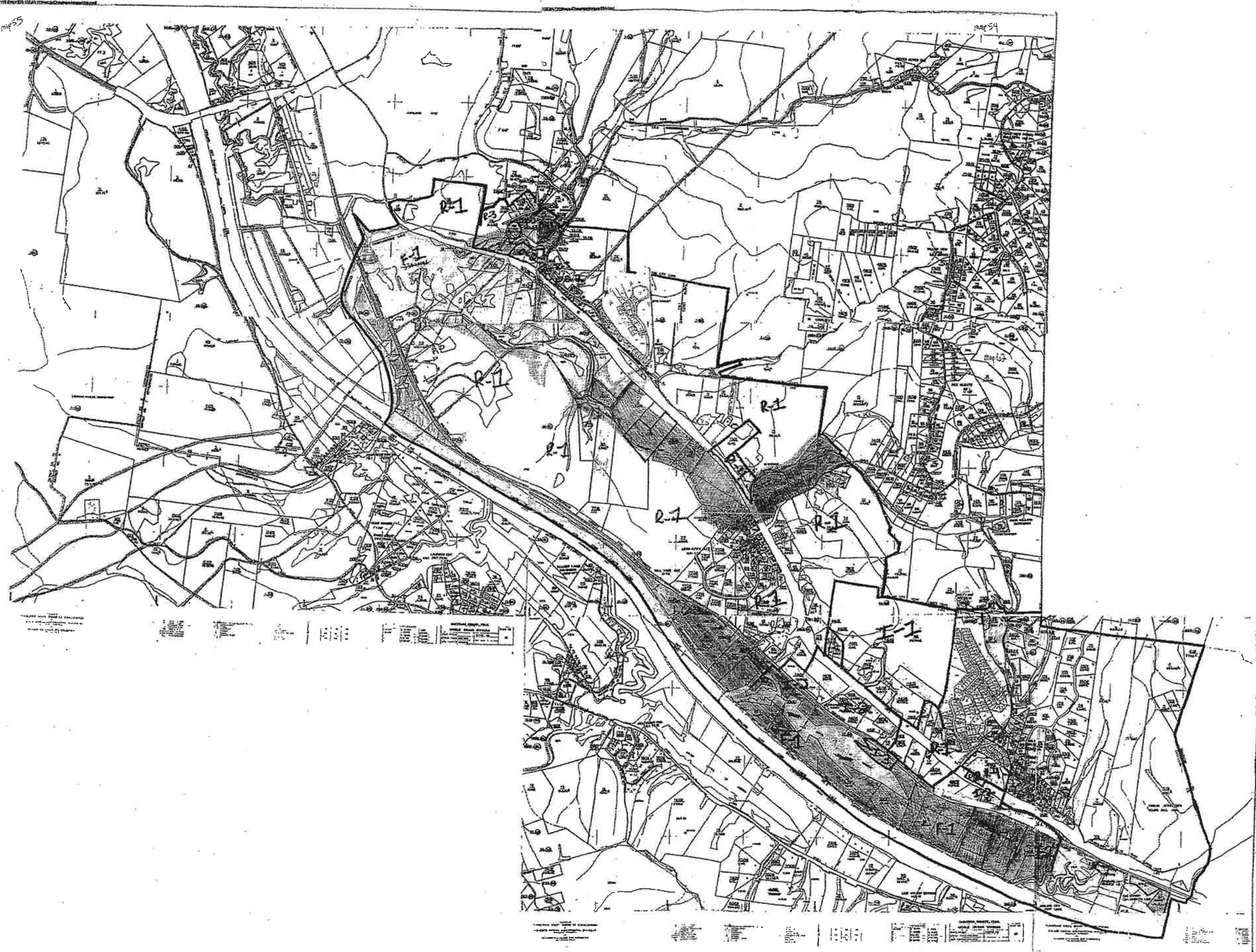
Highway 12

June 5, 2003





HIGHWAY 12 LAND USE PLAN  
ASHLAND CITY

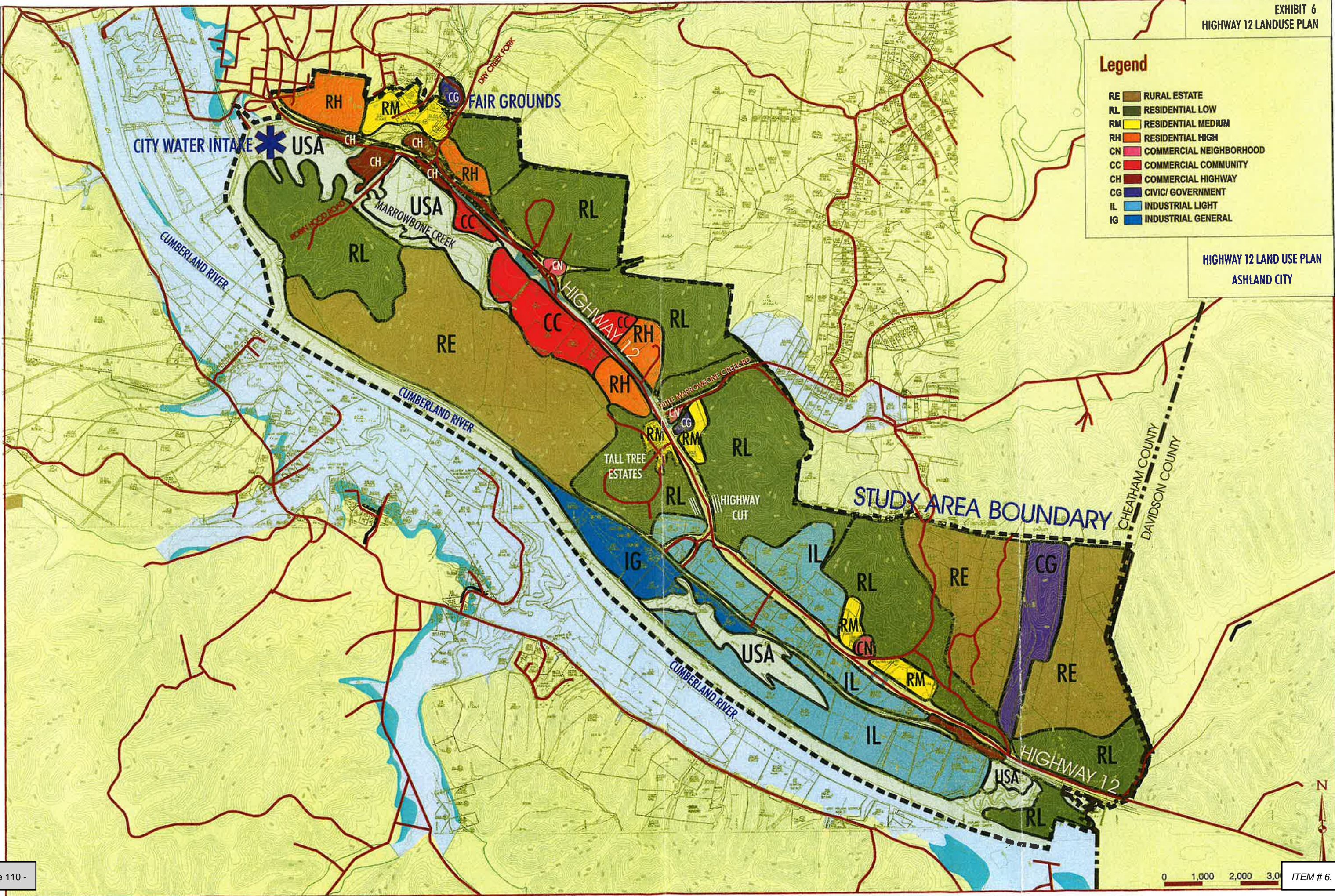




**Legend**

RE	RURAL ESTATE
RL	RESIDENTIAL LOW
RM	RESIDENTIAL MEDIUM
RH	RESIDENTIAL HIGH
CN	COMMERCIAL NEIGHBORHOOD
CC	COMMERCIAL COMMUNITY
CH	COMMERCIAL HIGHWAY
CG	CIVIC/ GOVERNMENT
IL	INDUSTRIAL LIGHT
IG	INDUSTRIAL GENERAL

HIGHWAY 12 LAND USE PLAN  
ASHLAND CITY







# Town of Ashland City

## Building & Codes Department

233 Tennessee Waltz Parkway Suite 103  
Ashland City TN 37015  
(615) 792-6455

### PLANNING COMMISSION SITE PLAN CHECKLIST

NAME OF SITE \_\_\_\_\_

LOCATION \_\_\_\_\_ ZONING DISTRICT \_\_\_\_\_

OWNER \_\_\_\_\_

ENGINEER \_\_\_\_\_

1. Three (3) copies of the site plan **at a scale no smaller than 1"=60'**. Please indicate at time of application if you would like any of the remaining copies after your case is heard and voted on.
2. Three (3) copies and an electronic PDF of revised site plans made available to the Building and Codes Department – according to planner/engineer comments. Also written response to all comments to match what was changed on revised site plans.
3. Location map of the site at a scale of not less than 1" = 2000' (USGS map is acceptable). Map must show the following:
  - a. Approximate site boundary
  - b. Public streets in the vicinity
  - c. Types of development of surrounding parcels
  - d. Public water and sewer lines serving the site
  - e. Map # and Parcel # of site location
4. Site boundary, stamped and signed by a registered surveyor.
5. **The number of stories of all proposed structures on the site (residential and commercial structures three (3) or more stories in height must have their plans approved by the State Fire Marshall's Office).**
6. **The number of dwelling units per acre, if applicable.**
7. The shape, size, and location of all existing buildings on the lot.
8. The existing **zoning and existing and** intended use of the lot and of structures on it. If residential, give the number of dwelling units per building.
9. **Topographic survey of the entire site development with contour intervals at no greater than 2' intervals (no less than 10' beyond the limits of proposed grading),** stamped and signed by a registered surveyor.
10. Location of all driveways and entrances with dimensions from the centerline of the drive to the nearest property corner and to the nearest intersection (if the intersection is closer than 200 feet).
11. **All required building setbacks and other yard requirements.**



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12. List minimum parking requirements and parking provided.
13. Dimensioned layout and location of all parking spaces including handicapped spaces and statement that plans meet all applicable handicap rules and regulations.
14. Indication/Notation of any major design criteria utilized in development and aiding in design intent of the site plans.
15. Dimensioned layout and location of on-site and off-street loading bays, docks and maneuvering areas.
16. Location and area of open space.
17. A table showing the ground coverage, total floor area and building heights.
18. Location, dimension and heights of all fences and walls with materials specified.
19. Location, type and amount of landscaping demonstrating compliance with Town regulations.
20. Proposed means of surface drainage, including locations and sizes of all culverts, ditches and detention structures, storm-water system to be designed as per the requirements of the Ashland City Planning Commission.
21. Provide all finished floor elevations for all structures as required by Ordinance #477 Ashland City Municipal Floodplain Zoning Ordinance.
22. Provide detail sheet for items, including, but not limited to: site features, headwalls, detention structures, pavement, curb, sidewalk width and thickness, and landscape plantings, etc.
23. Openings for ingress and egress to public streets.
24. Location of the centerline, right(s)-of-way, and the edge of pavement of existing streets, as well as the location of existing curbing where applicable.
25. Total square footage of all on-site paved areas.
26. Dimensioned location of all easements and right-of-ways.
27. Location of all portions of the site that are within the floodway and the 100-year floodplain. A note will be included which gives the FEMA map number from which this information was developed. In addition, if portions of the site are within the 100-year floodplain and/or the floodway, the 100-year flood elevation(s) at the site will be listed on the plan.



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28. Location, size, and distance to all public utilities serving the site including all existing and proposed fire hydrants (dimension to nearest existing). Include all proposed private-side utility installations necessary for the site development. Details shall be included in accordance with the applicable servicing public utility.
29. Any offsite utility installations (public or private) that may be required as part of the site development and resultant capacity analyses provided by the utility providers.
30. Location, by type and size of all proposed signs, (Please note that signs larger than 50 sq. ft. are not permitted per the sign ordinance for the Town of Ashland City).
31. Location and details about all lighting proposed on the site and to be attached to building(s).
32. Location and screening methods of dumpsters.
33. Vegetation, show at minimum the following:
  - a. Existing tree masses and hedgerows
  - b. General description of the tree types and sizes within the tree masses
  - c. Location and identification of trees 18" in caliper (measured 4' above the ground) or larger
  - d. Description of landscaping requirements for the site based upon surrounding land uses (see Zoning Ordinance Section 3.140)
34. Identification of slopes greater than 15% and identification of those soils (SCS soil mapping is acceptable) on those slopes.
35. Location and types of all erosion control and tree protection methods in accordance with applicable Town and State requirements.
36. Sidewalks in accordance with Ordinance #527
37. Site plan application fee \$100
38. Additional engineering review etc., site inspection charges are subject to Section 14-301 of the Ashland City Municipal Code per Ordinance #165.
39. Three (3) sets of the construction plans for the site.
40. Submittal must be made at least 20 working days?? prior to the Planning Commission meeting to be heard.
41. If applicant is requesting a variance, application is to be submitted to the Building Official in accordance with Section 7.080 of the Ashland City Zoning Ordinance.



TABLE I									
BULK, YARD AND DENSITY REGULATIONS									
RESIDENTIAL DISTRICTS									
		R1	R2	R3	R4	R4 MDR	R5	MR-PO	RPUD
Minimum Lot Size								25,000	8,000
	Single Family	15,000	12,000	10,000	NA		10,000		
	Duplex			15,000	12,000		NA		
	Multi-Family			10 Acres	15,000		NA		
	Planned Developments				10 Acres		NA		5 Acres
	Mobile Home Single Lot						10,000		
	Mobile Home Park						2 Acres		
Minimum Lot Area Per Family*								4,000	
	Single Family Detached			10,000					
	Single Wide - Single Lot						10,000		
	Single Wide - MH Park						4,000		
	Double Wide - MH Park						6,400		
	Duplex					6,000			
	<b>(Detached)</b>			7,500					
	Multi-Family			5,000	3,000			25,000	
	Multi-Use							25,000	
	Planned Developments				3,000				
Minimum Lot Width** (in feet)							70***		
	W/Public Water	100	90	80/50****	75/37.5*****				75
Maximum Lot Coverage - Principal and Accessory Bldgs									
		35%	35%	40%	40%		40%	60%	
Maximum Height		35'	35'	35'	4 Stories		30'	4 Stories	4 Stories
Minimum Yard Requirements (in feet)									
Front		40	40	35	35		35/30/10	35/10	30/0
Side		15	12	12	12 Duplex 15 MultiFam		20/15/10	20/12	
Rear		25	20	20	20 Duplex 30 MultiFam		20/15/10	25/10	
									30
Accessory Structures*****									
		8	8	8	8		8		
* May also be used as "density" for calculating dwelling units per acre									
** Lot width shall be measured at the minimum front setback line as specified above									
*** Single Lot - Mobile Home Park									
**** 80 Feet Minimum Width - Zero Lot Line Developments May Have a Minimum Lot Width of 50 Feet									
***** 75 Feet or 37.5 Feet for Zero Lot Line Dwelling									
***** Accessory Structures are to be located in the rear yard and not closer than 8 feet to any lot line									
Refer to Article V for Planned Unit Development Requirements									
Residential Planned Unit Development Densities are shown in Section 5.090.D									

COMMERCIAL DISTRICTS										
			C-1	C-2	C-3	P-O	MR-PO	CPUD	DOD	
Minimum Lot Size (in square feet)			None	20000*	10,000	20,000	20,000		5000/2500**	
Minimum Street Frontage (in feet)									50	
Minimum Lot Width*** (in feet)										
Maximum Floor Area Ratio									1	
Maximum Lot Coverage (all buildings)			None	70%	60%	60%	60%		50%****	
Maximum Height (in stories)			4 (60'*****)	4	4	4	4	4	10***** (120')	
Minimum Setback (in feet)										
Front			25	35	30	35	35/10		15	
Side				15	20	20	20/12		5	
Rear				20	20	25	25/10		30	
Maximum Front Setback (in feet)									20	
Minimum Yard Regulations										
Minimum Front Yard							10			
Minimum Side Yard							12			
Minimum Rear Yard							10			
Accessory Structures*****										
* May be 15,000 as permitted by ordinance #378										
** 5,000 for First Unit, 2,500 for each additional unit										
*** The width of a lot at the building setback line measured at right angles to its depth.										
**** C1 Has No Maximum Lot Coverage										
***** Add 1.5 feet, to a maximum of 60 feet, for each foot the building is setback from the street line.										
***** For each story above 2, the side and rear setbacks shall increase 5 feet.										
***** Accessory Structures shall be setback from any side lot line, rear lot line or any other building										

TABLE III							
BULK, LOT AND OPEN SPACE REQUIREMENTS							
INDUSTRIAL DISTRICTS							
				I-1	I-2	I-3	
Minimum Lot Size				None	None	None	
Maximum Lot Coverage (all buildings)				60%	50%	50%	
Maximum Height (in feet)				40*	40**	40**	
Minimum Setback Requirements (in feet)							
Front				40	60	100	
Side				25	30	50	
Rear				30	35	50	
* May be 50' if on-site facilities are approved by fire department							
** May be 60' if on-site facilities are approved by fire department							



TABLE IV

**Fee Schedule**

<b>Planning Commission</b>	<b>Application Fee</b>	<b>Public Notice Signage</b>	<b>Certified Letters</b>	<b>Archive Fee</b>
Rezone Application				
Site Plan Application				
Plat Amendment Application				
Minor Subdivision Application				
Major Subdivision Application				
<b>Board of Zoning Appeals</b>				
All Applications to the BZA				
<b>Construction Board of Appeals</b>				