METRO WATER SERVICE - NASHVILLE, TN

APPROVED FOR CONSTRUCTION

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Stormwater: 2023000749
Site Utility: N/A

MWS Reviewer: Evan Low
Date: 05/18/2023

APPROVAL EXPIRES ONE YEAR FROM THE DATE ABOVE

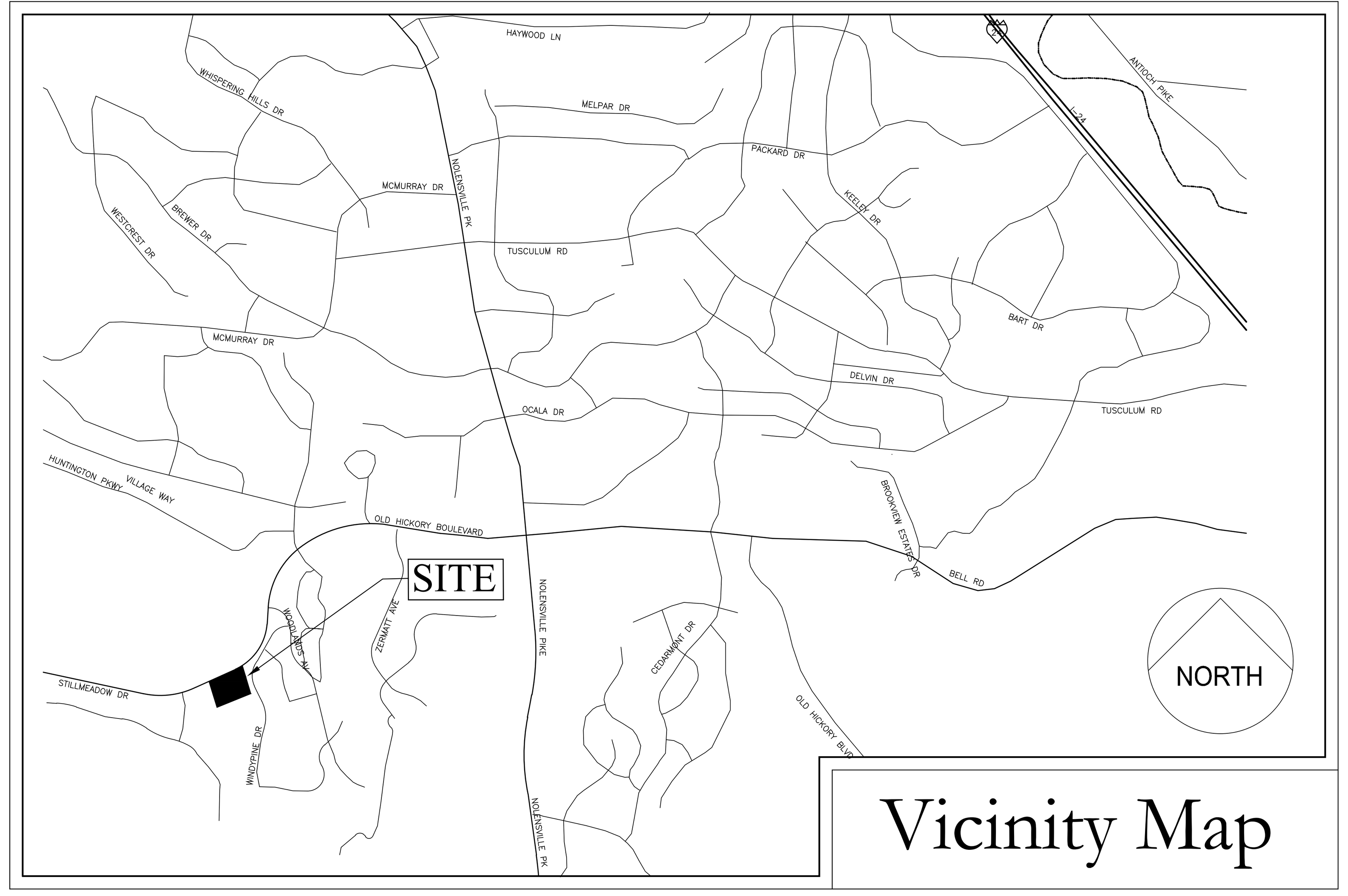
Development Plans

0 Old Hickory Boulevard

Map 161, Parcel 90-07
Nashville, Davidson Co., Tennessee
Case No. 2022S-151-002

General Development Plan Notes

1. The purpose of this Development Plan is to create 5 lots.
2. The base zoning district is R15.
3. All lots to be served by public water and sewer. Individual water and/or sanitary sewer service lines are required for each lot.
4. Any excavation, fill or disturbance of the existing ground elevation must be done in accordance with Storm Water Management Ordinance no. 78-840 and approved by the Metropolitan Department of Water Services.
5. This property does not lie in a flood hazard zone as identified by FEMA Maps 47037C0386H April 5, 2017.
6. All public sidewalks are to be constructed in conformance with Metro Public Works' sidewalk design standards.
7. Wheelchair accessible curb ramps, complying with applicable Metro Public Works standards, shall be constructed at street crossings.
8. The required fire flow shall be determined by the Metropolitan Fire Marshal's office, prior to the issuance of a building permit. Fire hydrants shall be in service before any combustible material is brought on site.
9. No part of any building shall be more than 500 feet from a fire hydrant via an approved hard surfaced road. Metro Ordinance 095-1541 Section 1568.020 B.
10. Size driveway culverts per the design criteria set forth by the Metro Stormwater Manual. (Minimum driveway culvert in Metro R.O.W. is 18" RCP).
11. Metro Water Services shall be provided sufficient and unencumbered ingress and egress at all times in order to maintain, repair, replace, and inspect any stormwater facilities within the property.
12. No building permit may be issued on any lot until street name signs are installed and verified by the Metropolitan Department of Public Works on all streets on which the lot depends for access.
13. Solid waste pickup to be provided via individual roll-away containers. Plan & pickup to be coordinated with the Metro Public Works Solid Waste Department.
14. All work within the public right-of-way shall require a permit from the Department of Public Works.
15. Provide the full water quality treatment of 80% Tv. Various quantity/quality GIPS shall be utilized.
16. All setbacks shall be per Metro Zoning Code.
17. Prior to the issuance of any building permit for a lot designed as a critical lot on this plan, a grading plan know as a 'critical lot plan,' must be submitted to the Metro Planning Department as required by Appendix C of the Metro Subdivision Regulations. The critical lot plan will be evaluated for consistency with the regulations, including, but not limited to, the degree to which grading is minimized to preserve the natural features of the lot and the amount of cut/fill required to prepare the lot for construction. It is emphasized that a typical house design may not be suitable for a critical lot.
18. All utilities shall be placed underground as required by Section 17.28.103 of the Metro Zoning Code.
19. This parcel is located within the Airport Overlay District.
20. The development of this project shall comply with the requirements of the adopted tree ordinance 2008-328 (Metro Code Chapter 17.24, Article II, Tree Protection and Replacement; and Chapter 17.40, Article X, Tree Protection and Replacement Procedures.
21. The final site plan/building permit site plan shall depict the required public sidewalks, any required grass strip or frontage zone and the location of all existing and proposed vertical obstructions within the required sidewalk and grass strip or frontage zone. Prior to the issuance of use and occupancy permits, existing vertical obstructions shall be relocated outside of the required sidewalk. Vertical obstructions are only permitted within the required grass strip or frontage zone.



Vicinity Map

Site Details:

Area:	2.50 Acres
Current Use:	Residential
Proposed Use:	Residential
Property Zoning:	R15
Surrounding Zoning:	R15, RM6

Site Criteria:	Required
Lot Size:	Min. 15,000 sf
Maximum Building Coverage:	Max 35%
Street Setbacks:	Per Metro Zoning Code
Side Yard:	5' Side Setbacks / 15' Side Setback Along Eastern Windypine Dr.
Rear Yard:	80.4' Minimum Rear Setback
Height Standards:	Max 3 stories

Parking:	Required
Required parking:	Single Family: 2 Stalls per Lot

Access to Windypine Drive:	
Access drives allowed:	1 - Access Easement off Old Hickory Boulevard
Access drives proposed:	1- Access Easement off Old Hickory Boulevard

Property Information
Tax Map 151, Parcel 90-07
Old Hickory Boulevard (Unnumbered)
Nashville, Tennessee 37211
2.50 Acres (2.22 Acres Disturbed)
Council District 04: Robert Swope

Property Owner
Alemayehu Tesfaye
860 Dover Glen Drive
Antioch, Tennessee 37013

Civil Engineer
Dale & Associates
516 Heather Place
Nashville, Tennessee 37204
Contact: Michael Garrigan, PE
Phone: 615.297.5166
Email: michael@daleandassociates.net

Surveyor
Dale & Associates
516 Heather Place
Nashville, Tennessee 37204
Contact: Steven Matthews, RLS
Phone: 615.297.5166
Email: Steve@daleandassociates.net

Flood Note
This property is not located within a Flood Hazard Area as depicted on the current Flood Insurance Rate Map (FIRM) Number 47037C0386H dated April 5, 2017.

Site Benchmark
Spike set in Utility Pole located along Site Frontage. NAVD 88 Elevation 739.19

SHEET SCHEDULE

MICHAEL CHRISTOPHER GARRIGAN
REGISTERED ENGINEER
AGRICULTURE COMMERCE
NO. 00110726
STATE OF TENNESSEE
4/26/2023

Adjacant Hydrant Test

Forthcoming

Existing fire hydrants, tag bolt numbers XXXXX & XXXXX along Brick Church Pike and Brick Drive were flow tested on X/XX/21 by Metro Water Services, below is a summary of the flow results:

Static Pressure:	XX psi
Residual Pressure:	XX psi
Flow:	XXXX gpm
Flow @ 20 psi:	XXXX gpm

Based on table H.5.1 of the current NFPA, the building will not require a fire suppression system.

PERMITS:

Case No.	2022S-151-002
SWGR	2023000749
MWS	23-SL-0008 (2023001753)

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1-800-351-1111
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Dale & Associates
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Land Planning & Zoning
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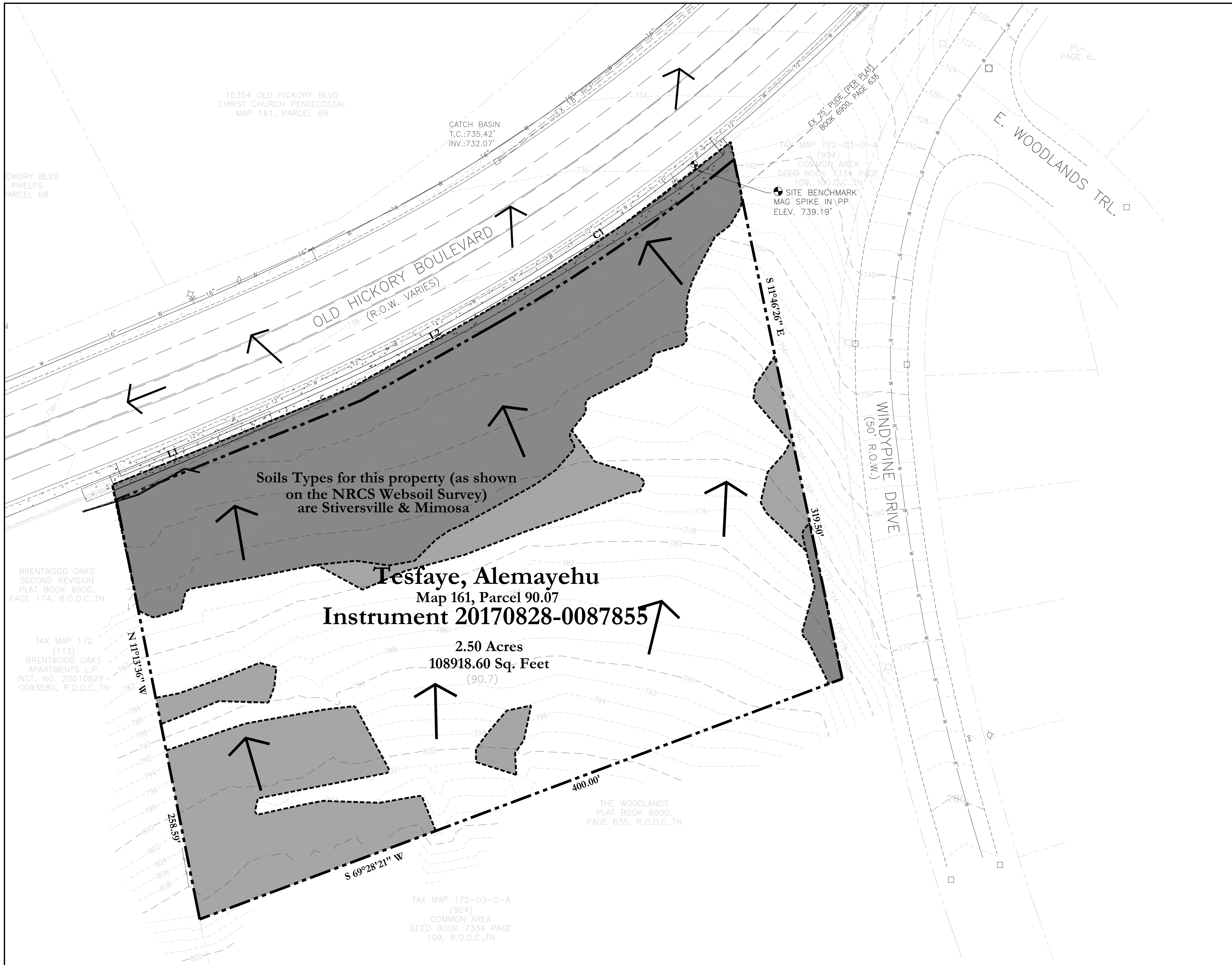
D&A Project #20162
0 Old Hickory Boulevard

C0.0



SLOPES:

- = REPRESENTS SLOPES 20 - 25%
- = REPRESENTS SLOPES 25% OR GREATER

Line Table

LINE	BEARING	DISTANCE
L1	N 67°54'46" E	151.80'
L2	N 60°24'47" E	85.21'
L3	N 67°54'46" E	154.12'
L4	N 60°24'47" E	85.80'

Curve Table

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	176.50'	996.93'	10°08'38"	N 55°20'27" E	176.27'
C2	173.32'	1005.93'	9°52'20"	N 55°28'37" E	173.11'

N (NAD 83)

SCALE: 1" = 30'

GROSS SITE AREA = 2.50 Ac
TOTAL DISTURBANCE = 2.22 Ac (Includes Offsite Sewer)

PERMITS:

Case No.	2022S-151-002
SWGR	20230000749
MWS	23-SL-0008 (2023001753)

Dale & Associates
Civil Engineering
Land Planning & Zoning
Surveying
516 Heather Place
Nashville, TN 37204
(615) 297-5166

Drawing Date:
December 2022

Revisions

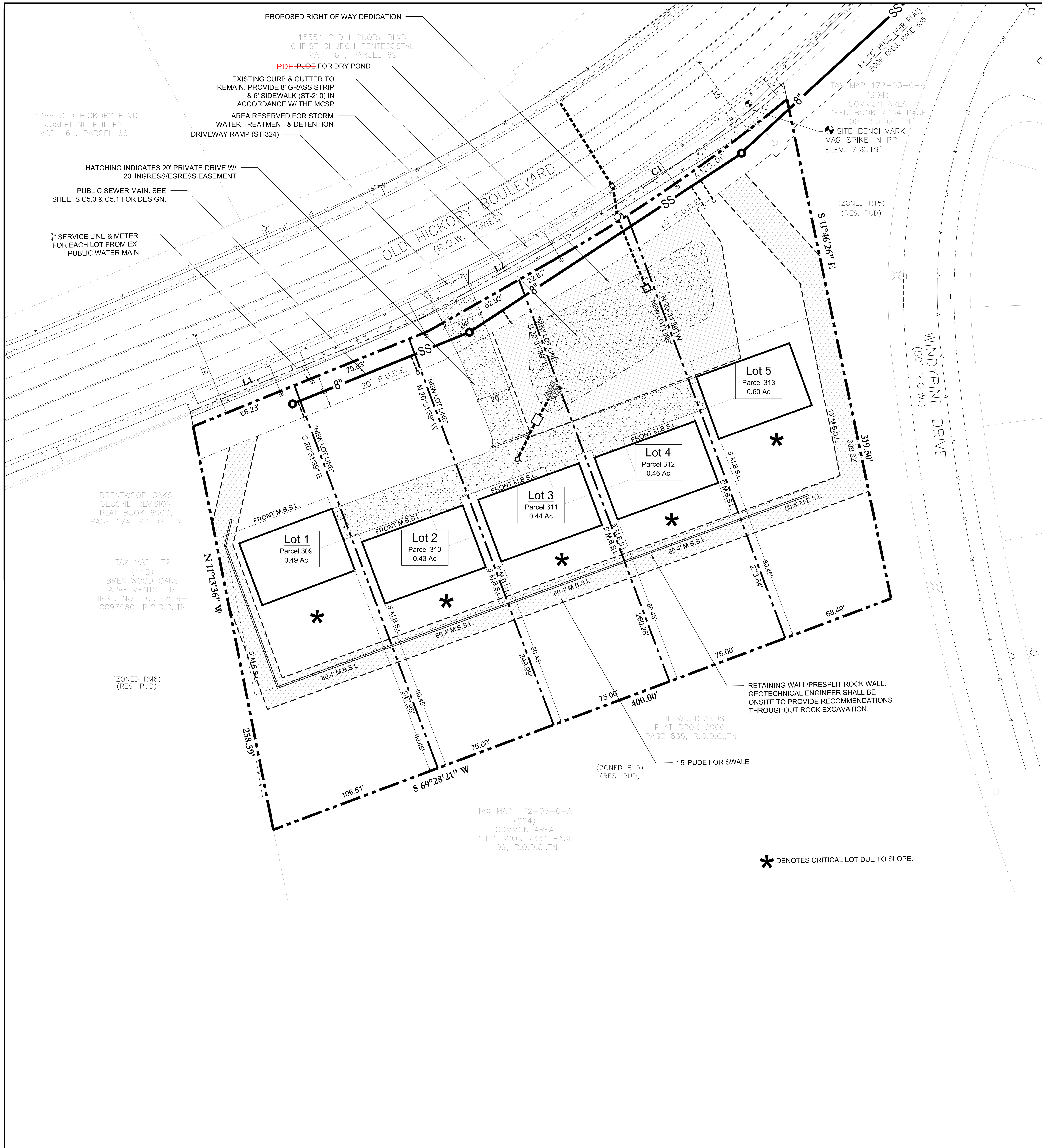
Development Plans
0 Old Hickory Boulevard
Map 161 Parcel 90.07
Nashville, Davidson County, Tennessee

4/26/2023

Existing Conditions Plan

D&A Project #20162
0 Old Hickory Boulevard

C1.0



* DENOTES CRITICAL LOT DUE TO SLOPE.

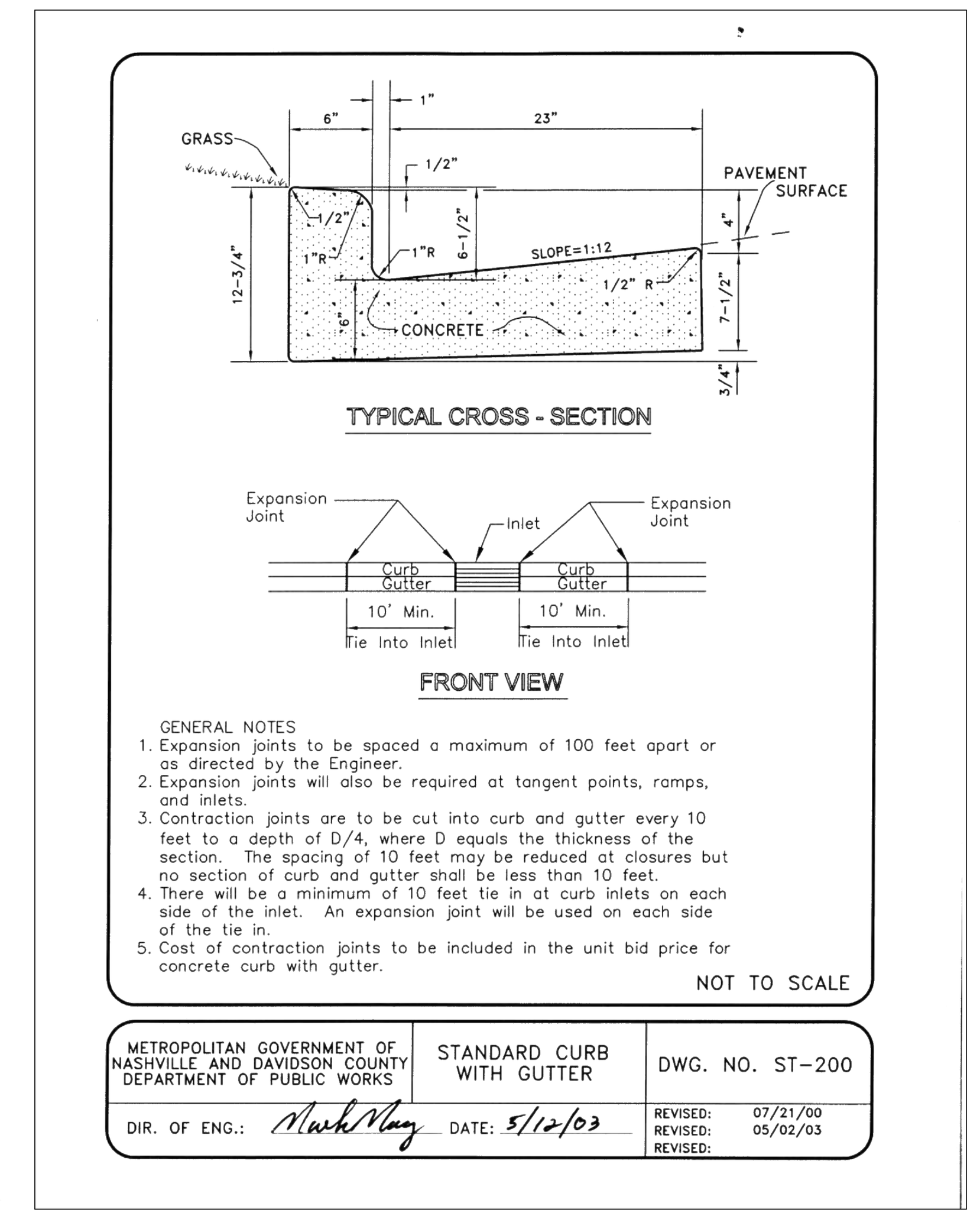
Note:
No proposed Duplex Lots.

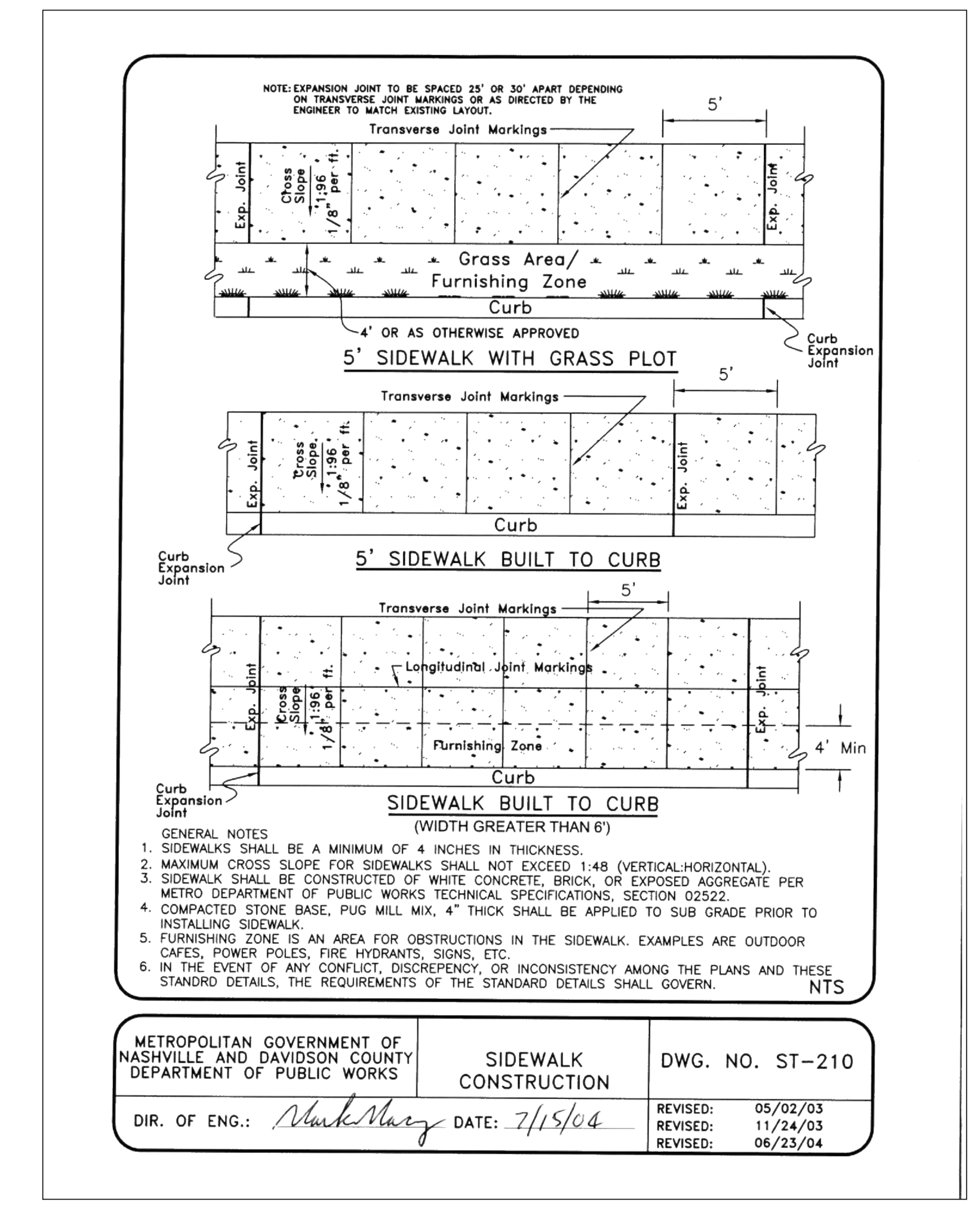
LOT TABLE

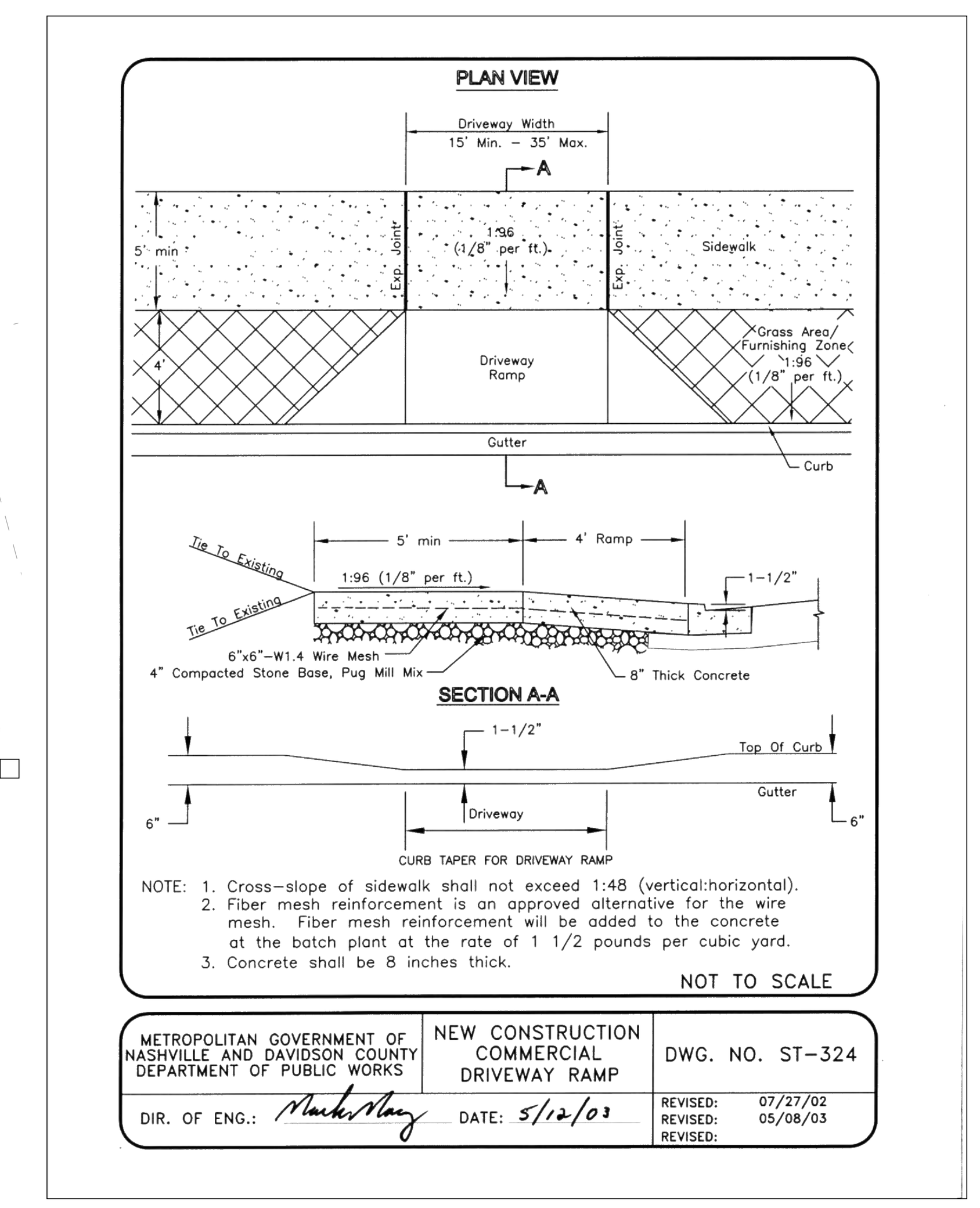
#	Sq Ft
1	21,316
2	18,672
3	19,081
4	19,991
5	26,136

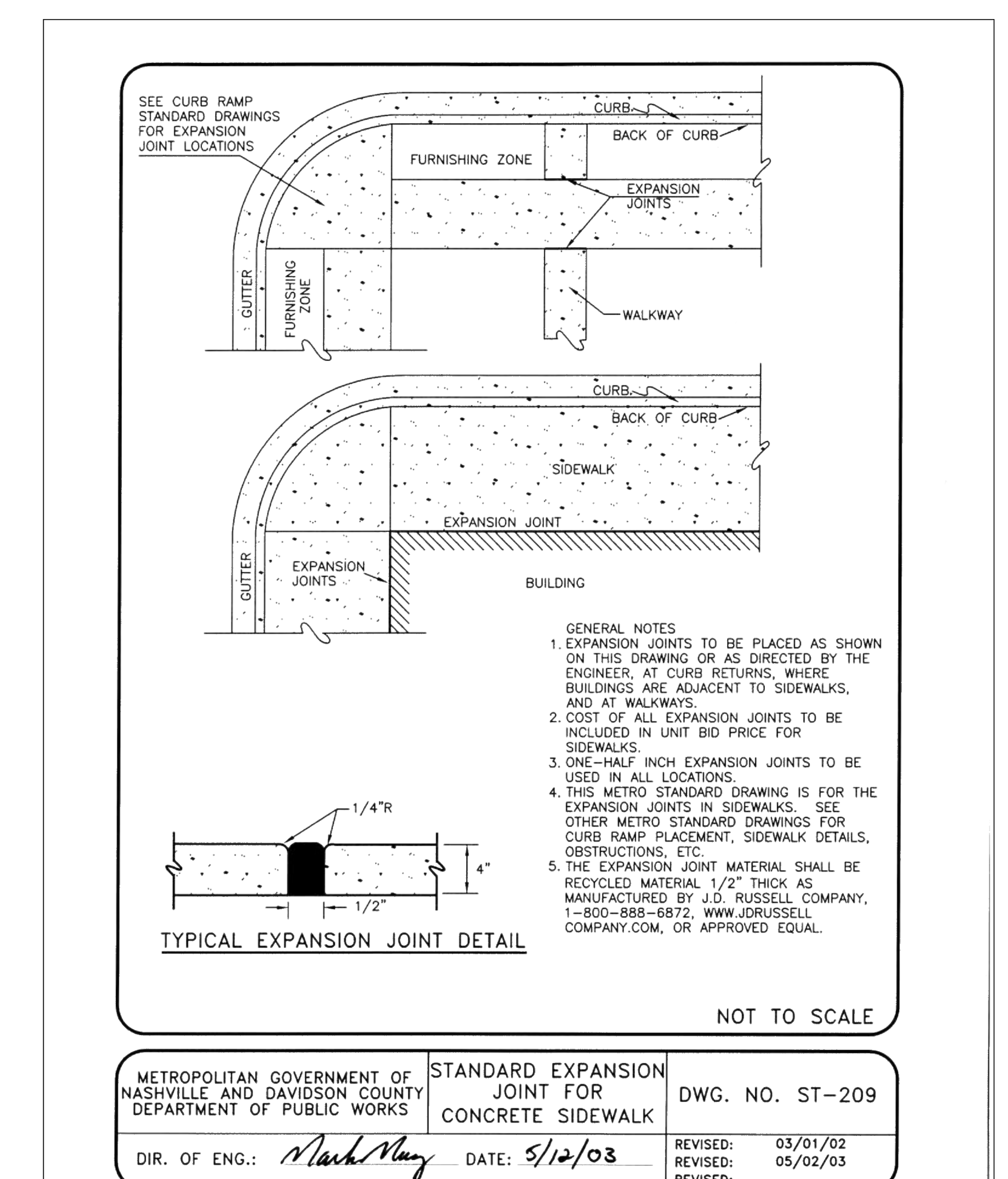
Public Works Notes

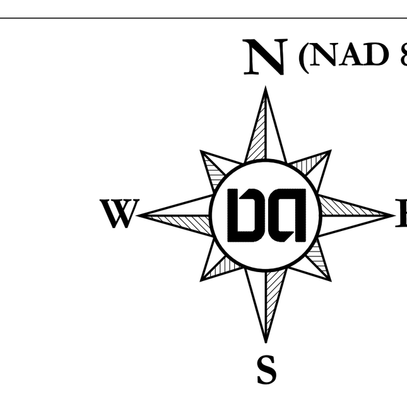
1. All work within the public right of way requires an excavation permit from the department of public works.
2. Proof-rolling of all street subgrades is required in the presence of the NDOT/ public works inspector. Inspection of the binder course is required prior to final paving in the presence of the public works inspector. These requests are to be made 24 hours in advance.
3. Stop signs are to be 30 inch by 30 inch.
4. Street name signs to have six inch white letters on a nine inch green aluminum blade, and be mounted vertically staggered.
5. Street name signs shall be assembled using extruded sign blades.
6. All signs to have 3M reflective coating.











30 0 30 60

SCALE: 1" = 30'

GROSS SITE AREA = 2.50 Ac
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PERMITS:

Case No.	2022S-151-002
SWGR	2023000749
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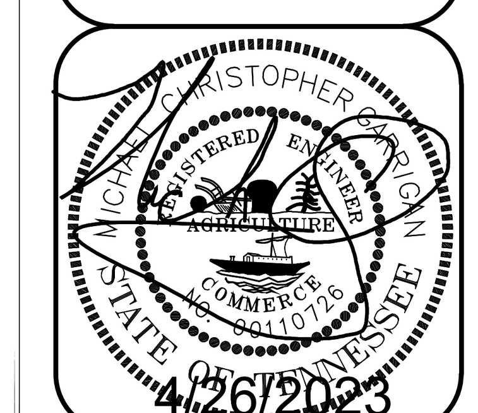
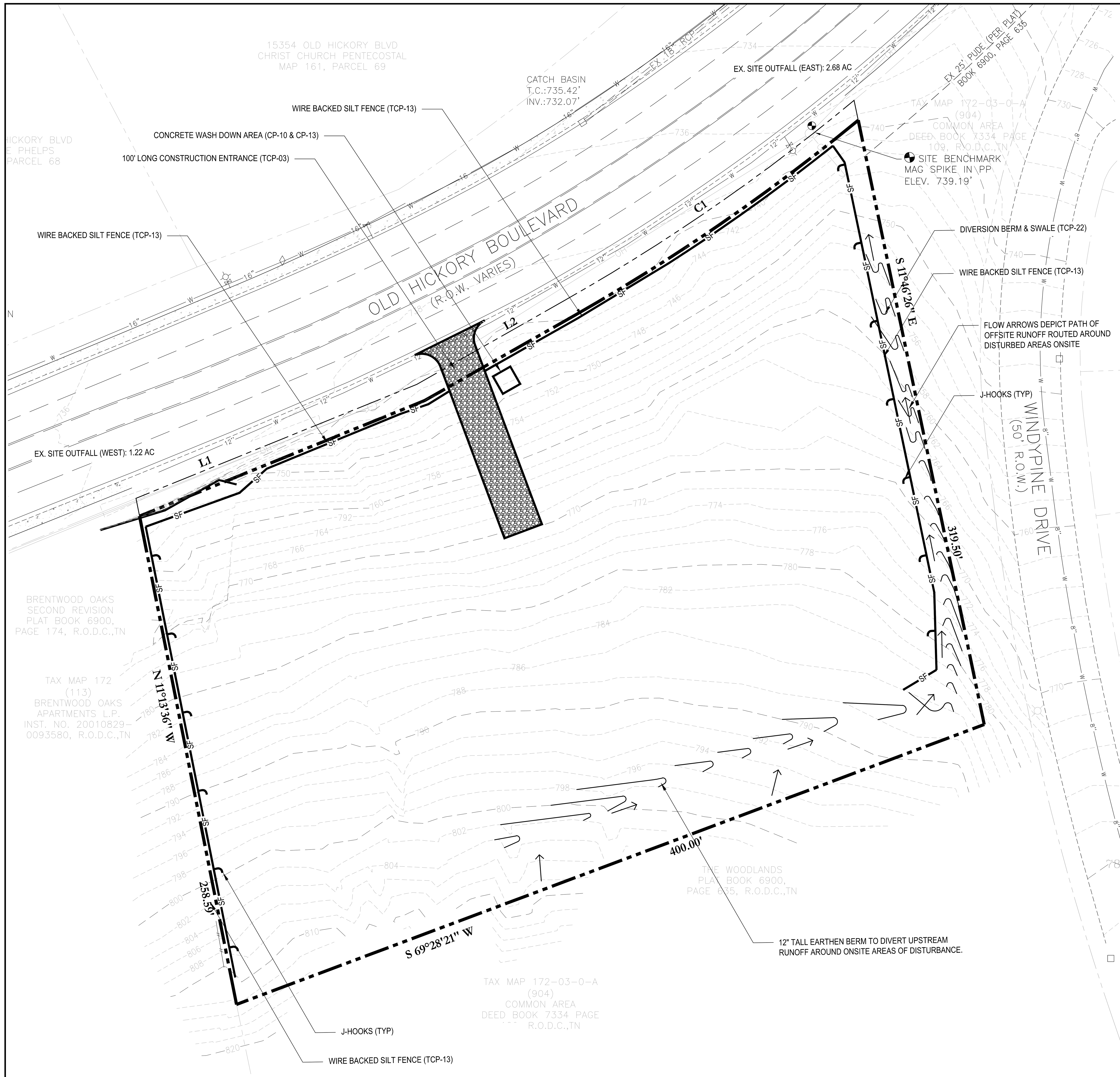


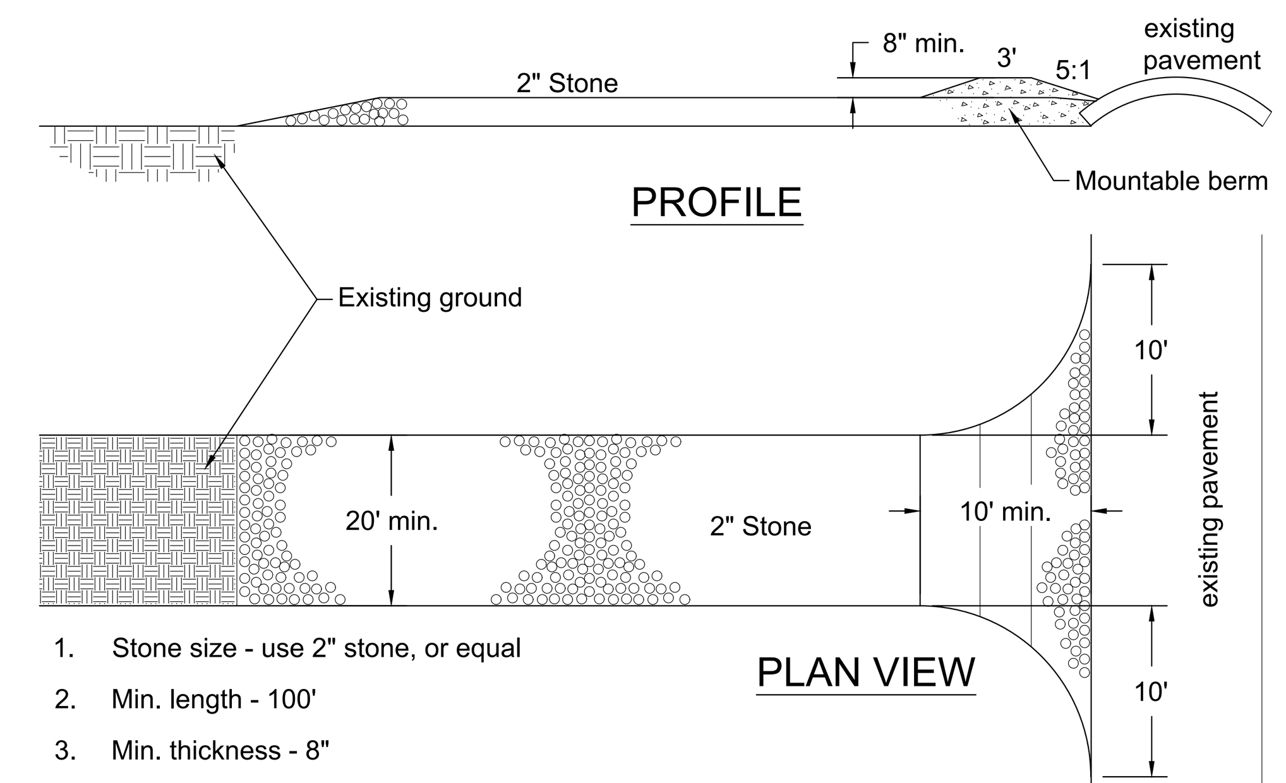
4/26/2023

Layout and Utility Plan

D&A Project #20162
0 Old Hickory Boulevard

C2.0

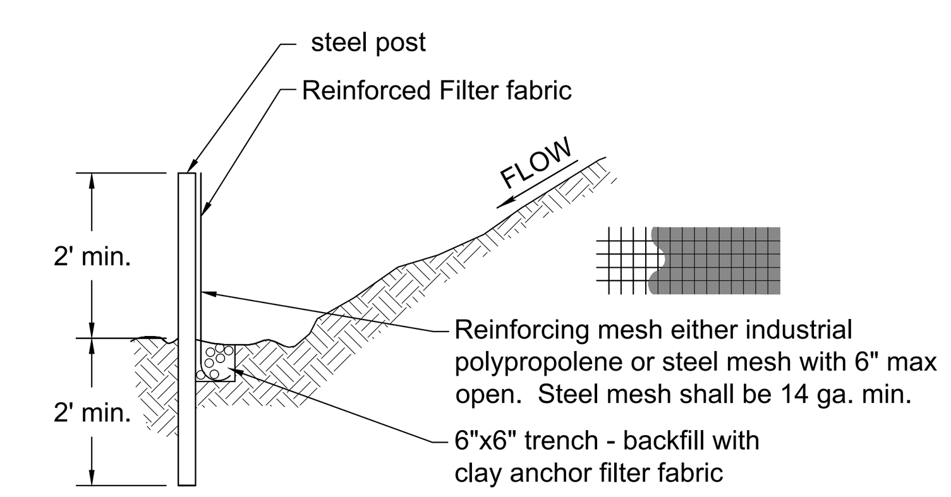




1. Stone size - use 2" stone, or equal
2. Min. length - 100'
3. Min. thickness - 8"
4. Min. width - 20'
5. Filter cloth will be placed over the entire area prior to placing of stone.
6. Surface water all surface water flowing or diverted toward construction entrances shall be piped across the entrance.
7. Maintenance - the entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand, and repair and/or clean out of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.

TEMPORARY CONSTRUCTION EXIT TCP-03

N.T.S.



Silt Fence Maintenance Notes:

1. Inspect weekly and after each rainfall.
2. Repair wherever fence is damaged.
3. Remove sediment when it reaches 1/3 the height of the fence.
4. Inspect silt fence when rain is forecast. Perform required maintenance before the storm event.
5. Remove silt fence when no longer needed. Fill and compact past holes and anchor trench remove sediment accumulation, and grade alignment to blend with adjacent ground.

Silt Fence Notes:

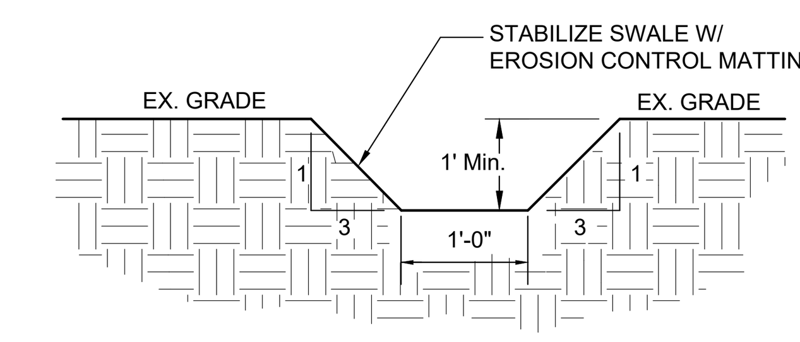
1. Filter fabric fence to be placed prior to start of rough grading.
2. Steel posts shall be approved by owner prior to use.
3. Wood posts shall be 2"x 2" min., oak or similar hardwood.
4. Posts shall be spaced at 6' intervals.
5. Filter fabric shall be securely bound to posts with either staples or wire ties.
6. Filter fabric shall be polypropylene fabric by Corps of Engineers guide spec. CW 02215. With equivalent opening size (eos) of no.100 sieve min., no.40 sieve max., as determined.
7. J-Hooks to be used when silt fence is not installed along a contour.

WIRE BACK SILT FENCE DETAIL (TCP-13)

N.T.S.

Erosion Control and Grading Notes

1. Expose as small an area of soil as possible on the site for no more than 15 days. Keep dust within tolerable limits by sprinkling or other acceptable means.
2. All cut/fill areas to have a minimum of 6" of topsoil cover. Areas dressed with topsoil shall receive 12 lbs. per 1000 sq. ft. of 10-10-10 fertilizer (unless otherwise specified in written specifications), 5 lbs. or more of Kentucky 31 fescue seed per 1000 sq. ft., and a straw mulch cover of 70%-80% coverage (approximately 125 lbs. per 1000 sq. ft.), unless otherwise noted within written specifications.
3. Erosion control barrier is called out on plans and is to comply with the Metropolitan stormwater management manual.
4. Disturbed areas are to be graded to drain as indicated in the plan to sediment barriers during and upon the completion of construction.
5. The contractor shall be responsible for the verification and the location of any existing utilities. It shall be the responsibility of the contractor to avoid damage to all existing utilities during construction. If damage does occur to any such installation, full repair will be accomplished as per the current specification governing such work.
6. Any access routes to the site shall be based with crushed stone, ASTM #1 stone, 100' long and at least 6" thick.
7. The placing and spreading of any fill material is to be started at the lowest point and brought up in horizontal layers of 8" thickness (or as directed by the soils investigative report). Said fill material is to be free of sod, roots, frozen soils, or any other decomposable material. Said fill is to be compacted to a minimum of 95% standard proctor, or as otherwise specified by the soils report or written specifications.
8. The contractor shall notify the Metro Davidson County department of Public Works construction compliance division, three days prior to beginning the work.
9. The contractor shall locate and stake the layout of the site in the field for inspection by the engineer. The contractor shall check the grades and final dimensions on the ground, and report any discrepancies to the engineer immediately for a decision.
10. Surplus excavation of topsoil shall be placed on the site as approved by the owner for the purpose of future landscape use.
11. The contractor shall furnish and install all necessary temporary works for the protection of the public and employees, including warning signs and lights.
12. The contractor shall be responsible for any damage done to the premises or adjacent premises or injuries to the public during the construction caused by himself, his sub-contractors, or the carelessness of any of his employees.
13. All work is to be completed with compliance to the rules and regulations set forth by Metro Water Services. The contractor shall give all necessary notice, obtain all permits, and pay fees required for the completion of his portion of the work. He shall also comply with all city, county and state laws and ordinance or regulations relating to portions of work which he is to perform.
14. All erosion control measures shall remain in place until site is stabilized & construction is complete.
15. Contractor to provide an area for concrete wash down and equipment fueling in accordance with metro CP-10 and CP-13, respectively. Contractor to coordinate exact location with NPDES department during the pre-construction meeting. Grading permittee to include bmp's designed to control site wastes such as discarded building materials, chemicals, litter and sanitary wastes that may cause adverse impacts to water quality. The location of and/or notes referring to said bmp's shall be shown on the EPSC plan.
16. The buffer along waterways will be an area where the surface is left in a natural state, and is not disturbed by construction activity. This is in accordance with the Stormwater Management Manual Volume 1 - Regulations.



DIVERSION SWALE TCP-22

N.T.S.

The Project associates with these submitted plans is covered under Tennessee Construction General Permit TNR 246554. The Total Disturbed Area is 2.22 acres.

Check all that apply: This site discharges into waters identified by TDEC as:
☒ Impaired for siltation ☐ Impaired for habitat alteration
☐ Exceptional

Engineer [signature] 4/26/23 Date

I [signature], as the "Certified" Erosion Control Specialist for this Site, have Reviewed and Approved the Erosion Prevention and Sediment Control BMP's of these Plans on 4/26/23

N (NAD 83)

W E S

30 0 30 60

SCALE: 1" = 30'

GROSS SITE AREA = 2.50 Ac
TOTAL DISTURBANCE = 2.22 Ac (Includes Offsite Sewer)

EPSC NOTES

1. ALL PERIMETER EPSC MEASURES MUST BE IN PLACE PRIOR TO GRADING.
2. ALL SLOPES 3:1 OR GREATER AND CHANNEL SIDE SLOPES TO RECEIVE EROSION CONTROL MATTING.
3. CONTRACTOR SHALL PROVIDE AN AREA FOR CONCRETE WASH DOWN AND EQUIPMENT FUELING IN ACCORDANCE WITH METRO CP-10 AND CP-13 RESPECTIVELY. CONTRACTOR TO COORDINATE EXACT LOCATION WITH NPDES DEPARTMENT DURING PRE-CONSTRUCTION MEETING. CONTROL OF OTHER SITE WASTES SUCH AS DISCARDED BUILDING MATERIALS, CHEMICALS, LITTER AND SANITARY WASTES THAT MAY CAUSE ADVERSE IMPACTS TO WATER QUALITY ARE ALSO REQUIRED BY THE GRADING PERMITTEE.

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MWS Reviewer: Evan Low
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Drawing Date:
December 2022

Revisions

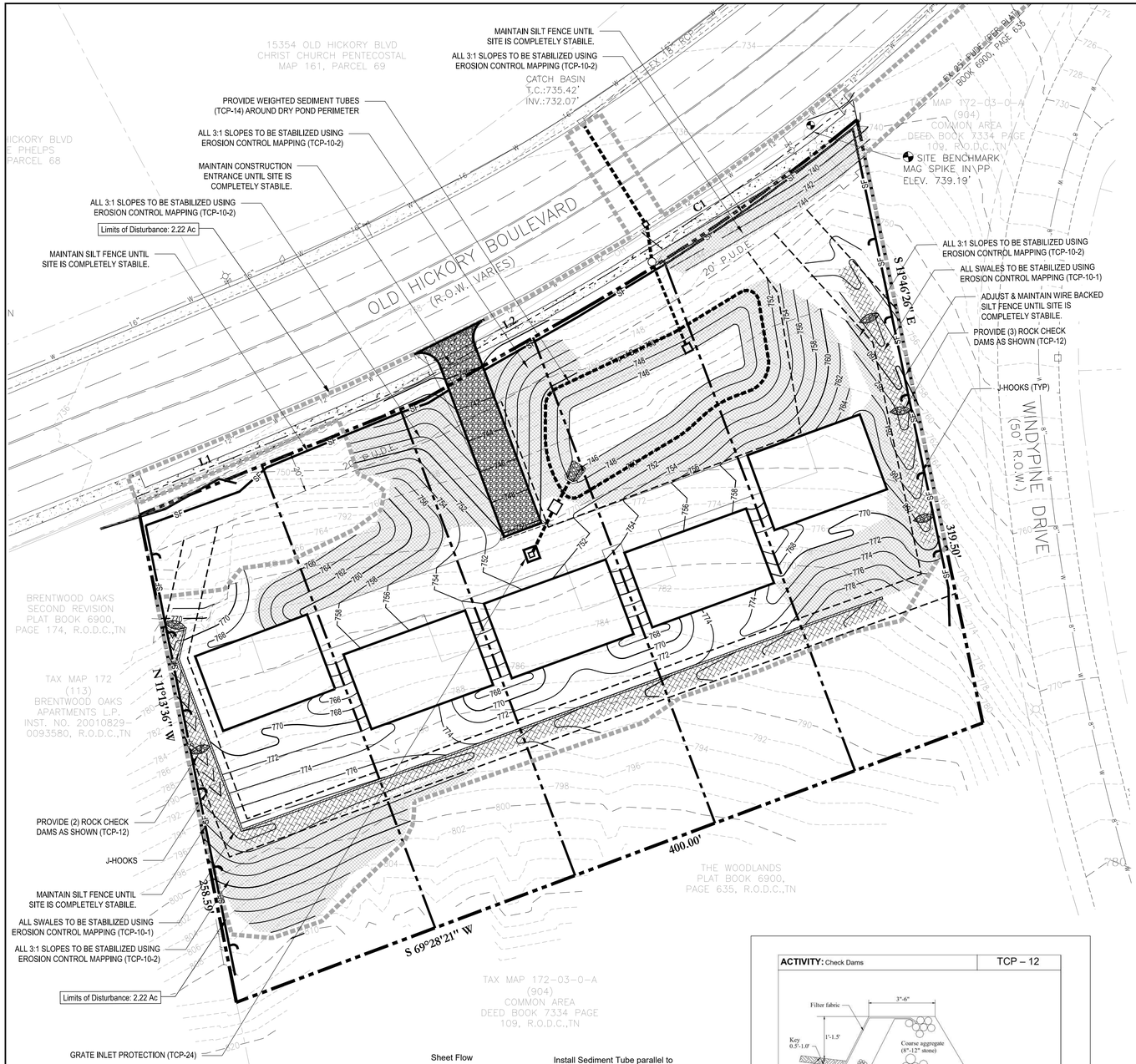
Development Plans
0 Old Hickory Boulevard
Map 161 Parcel 90.07
Nashville, Davidson County, Tennessee

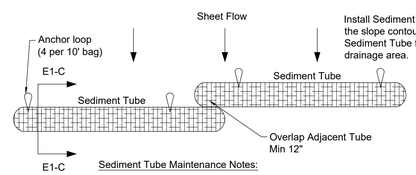
STATE OF TENNESSEE REGISTERED ENGINEER AGRICULTURE COMMERCE CHRISTOPHER
4/26/2023

Initial Erosion Control Plan

D&A Project #20162
0 Old Hickory Boulevard

C3.0





Sediment Tube General Notes:

1. Weighted sediment tubes have not been as effective due to improper use. These barriers have been placed in swales and drainageways where runoff volumes and velocities have caused the tubes to wash out. In addition, failure to stake the sediment tube will allow undercutting and end flow.
2. Weighted sediment tubes are not to be used for extended periods of time because they tend to rot and fall apart.
3. Limit length of any single row of tubes to 500 ft. (157 m).
4. Not appropriate for large drainage areas, limit to five acres or less.
5. Sediment tubes may lose their effectiveness due to degradation, thus constant maintenance is required.
6. Not intended for inlet protection or streams.
7. Tube bindings of jute or cotton not recommended as they quickly deteriorate and fail.
8. Limit to locations suitable for temporary ponding or deposition of sediment.
9. Slopes of 3:1 (H:V) or flatter are preferred. If the slope exceeds 3:1 (H:V), use a different management practice or limit the length of slope upstream of the tube to less than 25 ft (15.7 m).

Sediment Tube Maintenance Notes:

1. Inspect weekly and within 24 hours after the end of a storm event.
2. Replace tubes that have decomposed.
3. Repair washouts or other damage as needed.
4. Remove sediment when accumulations reach one-half the original height of either a single tube or stacked tubes. Sediments removed shall be disposed of properly.
5. Remove tubes when no longer needed. Re-grade and stabilize the area.
6. Inspect weighted sediment tubes when rain is forecast. Be sure the tubes are overlapped or butted end to end.

WEIGHTED SEDIMENT TUBE DETAIL

REFER TO METRO DETAIL TCP-14
N.T.S.

ACTIVITY: Check Dams — TCP – 12

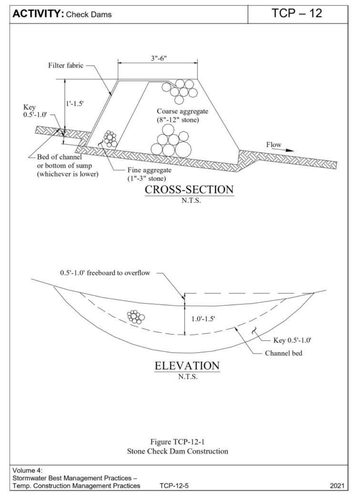
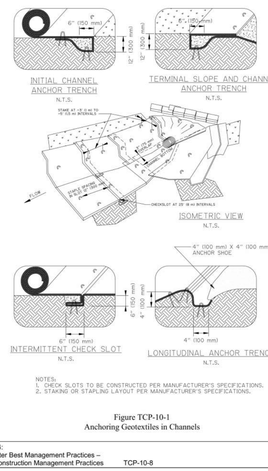


Figure TCP-12-1
Stone Check Dam Construction

Volume 4: Stormwater Best Management Practices – Temp. Construction Management Practices — TCP-12-5 — 2021

ACTIVITY: Geotextiles — TCP – 10

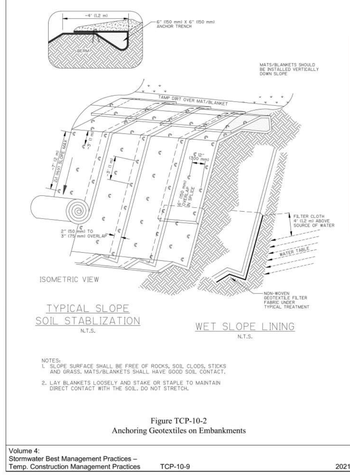


NOTES:
1. CHECK SLOTS TO BE CONSTRUCTED PER MANUFACTURER'S SPECIFICATIONS.
2. STAKING OR STAPLING LAYOUT PER MANUFACTURER'S SPECIFICATIONS.

Figure TCP-10-1
Anchoring Geotextiles in Channels

Volume 4: Stormwater Best Management Practices – Temp. Construction Management Practices — TCP-10-8 — 2021

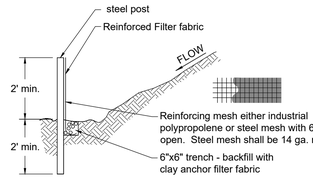
ACTIVITY: Geotextiles — TCP – 10



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

Figure TCP-10-2
Anchoring Geotextiles on Embankments

Volume 4: Stormwater Best Management Practices – Temp. Construction Management Practices — TCP-10-9 — 2021



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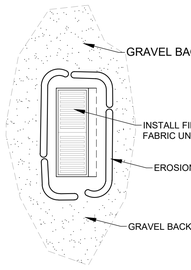
7. J-Hooks to be used when silt fence is not installed along a contour.

WIRE BACK SILT FENCE DETAIL (TCP-13)

N.T.S.



TO BE INSTALLED AS NOTED ON PLAN
LEFT IN PLACE UNTIL PROPOSED PAVEMENT IS IN PLACE AND GRASS IS ESTABLISHED OVER DISTURBED AREA.

GRATE INLET PROTECTION

REFER TO METRO DETAIL TCP-24
N.T.S.

EPSC NOTES

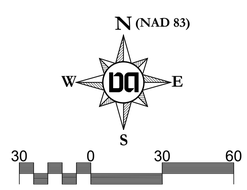
1. ALL PERIMETER EPSC MEASURES MUST BE IN PLACE PRIOR TO GRADING.
2. ALL SLOPES 3:1 OR GREATER AND CHANNEL SIDE SLOPES TO RECEIVE EROSION CONTROL MATTING.
3. CONTRACTOR SHALL PROVIDE AN AREA FOR CONCRETE WASH DOWN AND EQUIPMENT FUELING IN ACCORDANCE WITH METRO CP-10 AND CP-13 RESPECTIVELY. CONTRACTOR TO COORDINATE EXACT LOCATION WITH NPDES DEPARTMENT DURING PRE-CONSTRUCTION MEETING. CONTROL OF OTHER SITE WASTES SUCH AS DISCARDED BUILDING MATERIALS, CHEMICALS, LITTER AND SANITARY WASTES THAT MAY CAUSE ADVERSE IMPACTS TO WATER QUALITY ARE ALSO REQUIRED BY THE GRADING PERMITTEE.

The Project associates with these submitted plans is covered under Tennessee Construction General Permit TNR 246554. The Total Disturbed Area is 2.22 acres.

Check all that apply: This site discharges into waters identified by TDEC as:
☒ Impaired for siltation ☐ Impaired for habitat alteration
☐ Exceptional

Engineer 4/26/23 Date

I _____, as the "Certified" Erosion Conrol Specialist for this Site, have Reviewed and Approved the Erosion Prevention and Sediment Control BMP's of these Plans on 4/26/23



SCALE: 1" = 30'

GROSS SITE AREA = 2.50 Ac
TOTAL DISTURBANCE = 2.22 Ac (Includes Offsite Sewer)

PERMITS:	
Case No.	2022S-151-002
SWGR	2023000749
MWS	23-SL-0008 (2023001753)

TENNESSEE ONE CALL SYSTEM, INC. 1-800-351-1111 STOP, CALL BEFORE YOU DIG!

Drawing Date: December 2022

Revisions

METRO WATER SERVICE - NASHVILLE, TN

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Stormwater: 2023000749
Site Utility: N/A
MWS Reviewer: Evan Low
Date: 05/18/2023

APPROVAL EXPIRES ONE YEAR FROM THE DATE ABOVE

Development Plans

0 Old Hickory Boulevard

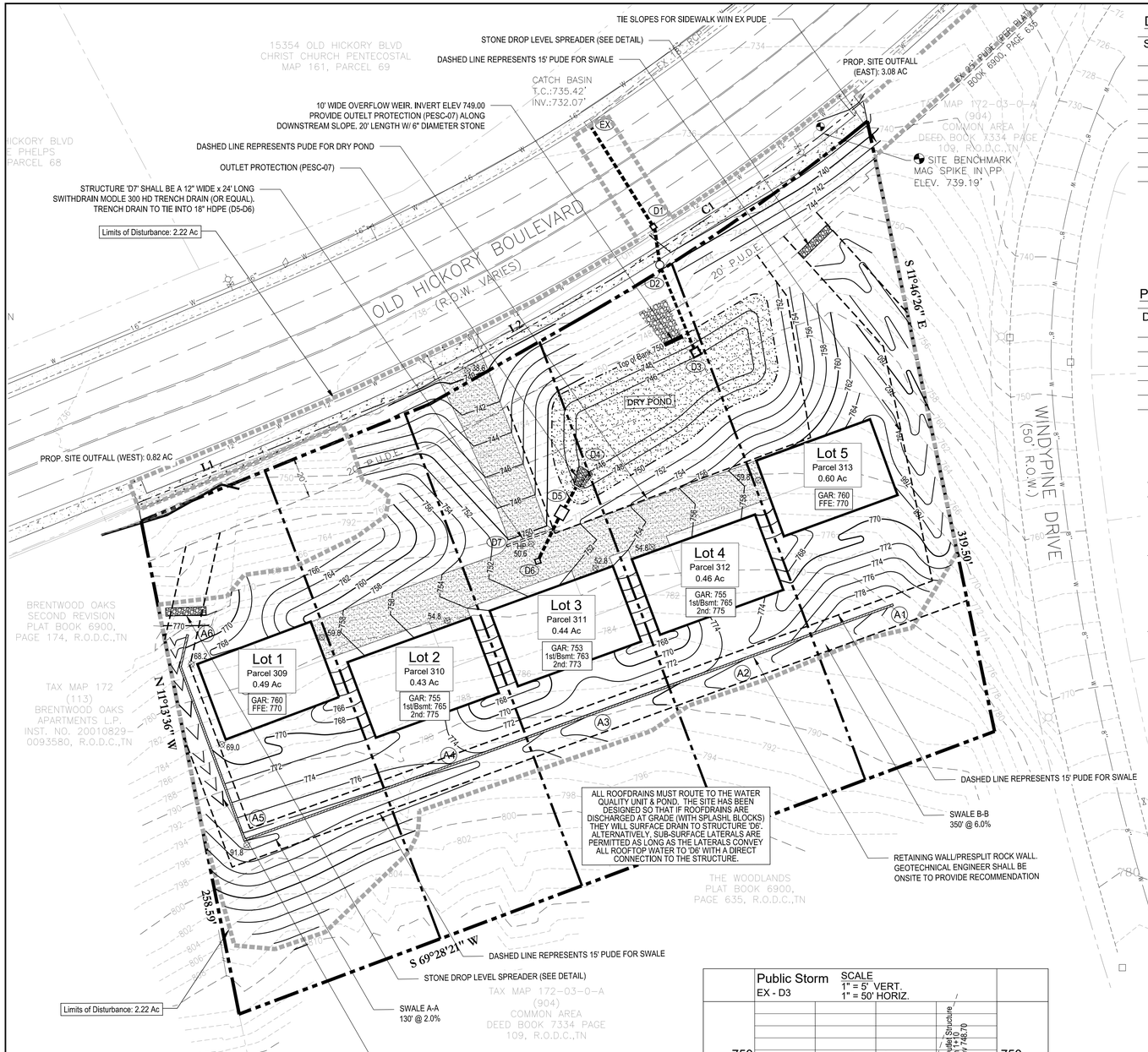
Map 161 Parcel 90.07
Nashville, Davidson County, Tennessee

Intermediate & Final Erosion Control Plan

Dale & Associates
Civil Engineering
Land Planning & Zoning
Surveying
516 Heather Place
Nashville, TN 37204
(615) 297-5166

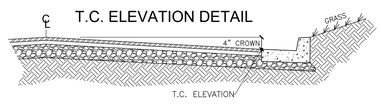
D&A Project #20162
0 Old Hickory Boulevard

C3.1



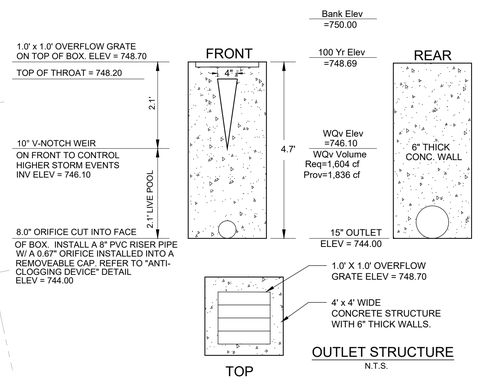
Drainage Structure Schedule

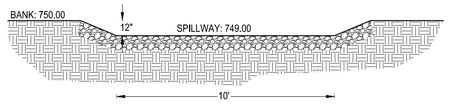
Structure Label	Structure Type	T.C. Elev.	Invert In	Invert Out
EX	Ex. Single Inlet	735.42	732.17	732.07
D1	Single Curb Inlet	737.82	732.84	732.74
D2	Storm Manhole	740.00	736.50	733.00
D3	Outlet Structure	748.70	------	744.00
D4	Headwall	748.55	746.05	------
D5	Water Quality Vault	750.50	746.17	746.17
D6	Double Grate Inlet	750.20	------	746.70
D7	12" Trench Drain	750.25	------	------



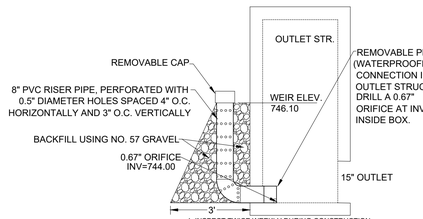
Pipe Schedule

Downstream Structure	Invert	Upstream Structure	Invert	Pipe Size	Length (ft)	Slope (%)
EX	732.17	D1	732.74	18" RCP	52	1.10
D1	732.84	D2	733.00	18" RCP	16	1.00
D2	736.50	D3	744.00	15" RCP	42	17.9
D4	746.05	D5	746.17	18" HDPE	12	1.00
D5	746.17	D6	746.70	18" HDPE	22	2.41





POND OVERFLOW WEIR
N.T.S.



ANTI-CLOGGING DEVICE
FOR OUTLET STRUCTURE

Developer As-Built Note

Prior to the issuance of a Use and Occupancy (U&O) permit or the full release of the performance bond for a development or for any structure in a development (unless exempted by Sections 3.4 and 3.5), a Tennessee registered engineer shall submit to MWS a certification letter stating that the site has been inspected and that the stormwater management system and stormwater control measures (both structural and non-structural) are complete and functional in accordance with the plans approved by MWS. Any deviations from the approved plans shall be noted on as-built drawings submitted. The as-built plan should be submitted electronically as a CAD file and should be registered to the TN State Plane Coordinate System, North American Datum 1983 (NAD83). Data should be placed in separate layers and should be labeled for easy identification.

To ensure the adequacy of stormwater quantity detention facilities, stormwater quality management practices, and public infrastructure, the certification submittal shall also include the following as a part of the as-built package:

a. An engineer sealed certification letter from TN registered P.E. stating that the site has been inspected and that the stormwater management system and stormwater control measures (both structural and non-structural) are complete and functional in accordance with the plans approved by MWS.

b. An as-built LID spreadsheet, as warranted from changes.

c. Hydrologic and hydraulic calculations for as-built conditions, as required.

d. As-built drawings showing final topographic features of all these facilities. This shall include invert elevations of outlet control structures.

e. Any deviations from the approved plans shall be noted on as-built drawings submitted.

f. Copy of as-built plan CAD file registered to the TN State Plane Coordinate System, North American Datum 1983 (NAD83) and vertical elevations are to be tied to the North American Vertical Datum 1988 (NAVD88). Data should be submitted electronically and be placed in separate layers and should be labeled / named for easy identification.

g. Cut and fill balance certification for floodplain and sinkhole alterations.

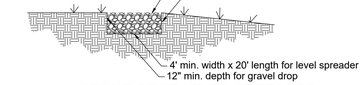
h. Water quality buffers shall be surveyed and included with the as-built submittal.

i. Any public (to become the responsibility of Metro to maintain) stormwater infrastructure shall be video-inspected to verify proper installation with the video recording and any associated inspection report submitted as part of as-built record. In general, video ratings of 1 and 2 are usually minor and don't need to be addressed. However, MWS reserves the right to require remedy or repair to the structure(s) rated 1 and 2 as deemed necessary by the design engineer or MWS reviewer.

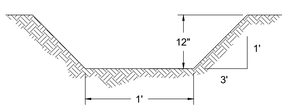
j. Additional testing may be required as/if warranted by video inspection.
Prior to the issuance of a U&O permit or the full release of the performance bond for any new or substantially improved structure subject to minimum floor elevation requirements, a registered engineer and/or registered land surveyor shall submit to MWS certification of the elevation (in relation to mean sea level) of the lowest floor (including basement); or if the structure has been floodproofed, the elevation (in relation to mean sea level) to which the structure was floodproofed. This information must be provided on a FEMA Elevation Certificate. To ensure that floodplain cut and fill balances have been achieved, as-built plans, cross-sections, and related calculations must be submitted for all floodplain manipulations

Wall Schedule

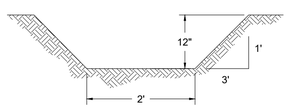
Section	Station	Top Elev	Bottom Elev	Height
A1	0+00	780	780	0'
A2	0+78	788	775	13'
A3	1+53	792	774	18'
A4	2+28	794	775	19'
A5	3+43	792	778	14'
A6	4+50	771	771	0'



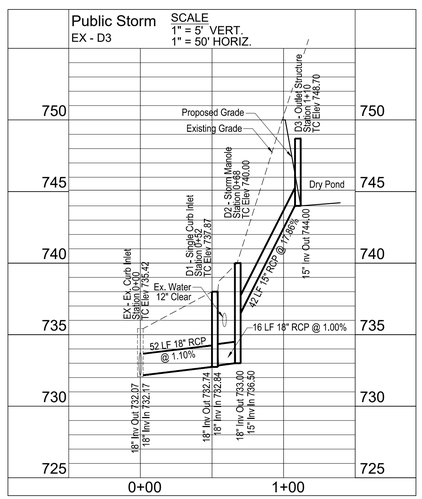
STONE DROP LEVEL SPREADER
N.T.S.

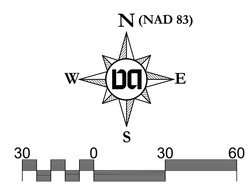


SWALE SECTION A-A
N.T.S.



SWALE SECTION B-B
N.T.S.





GROSS SITE AREA = 2.50 Ac
TOTAL DISTURBANCE = 2.22 Ac (Includes Offsite Sewer)

METRO WATER SERVICE - NASHVILLE, TN

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Stormwater: 2023000749
Site Utility: N/A
MWS Reviewer: Evan Low
Date: 05/18/2023

APPROVAL EXPIRES ONE YEAR FROM THE DATE ABOVE

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1-800-351-1111
STOP! CALL BEFORE YOU DIG!

PERMITS:	
Case No.	2022S-151-002
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Drawing Date:
December 2022

Revisions

Development Plans

Old Hickory Boulevard

Map 161 Parcel 90.07
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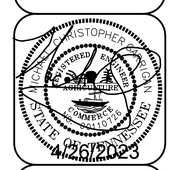

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D&A Project #20162
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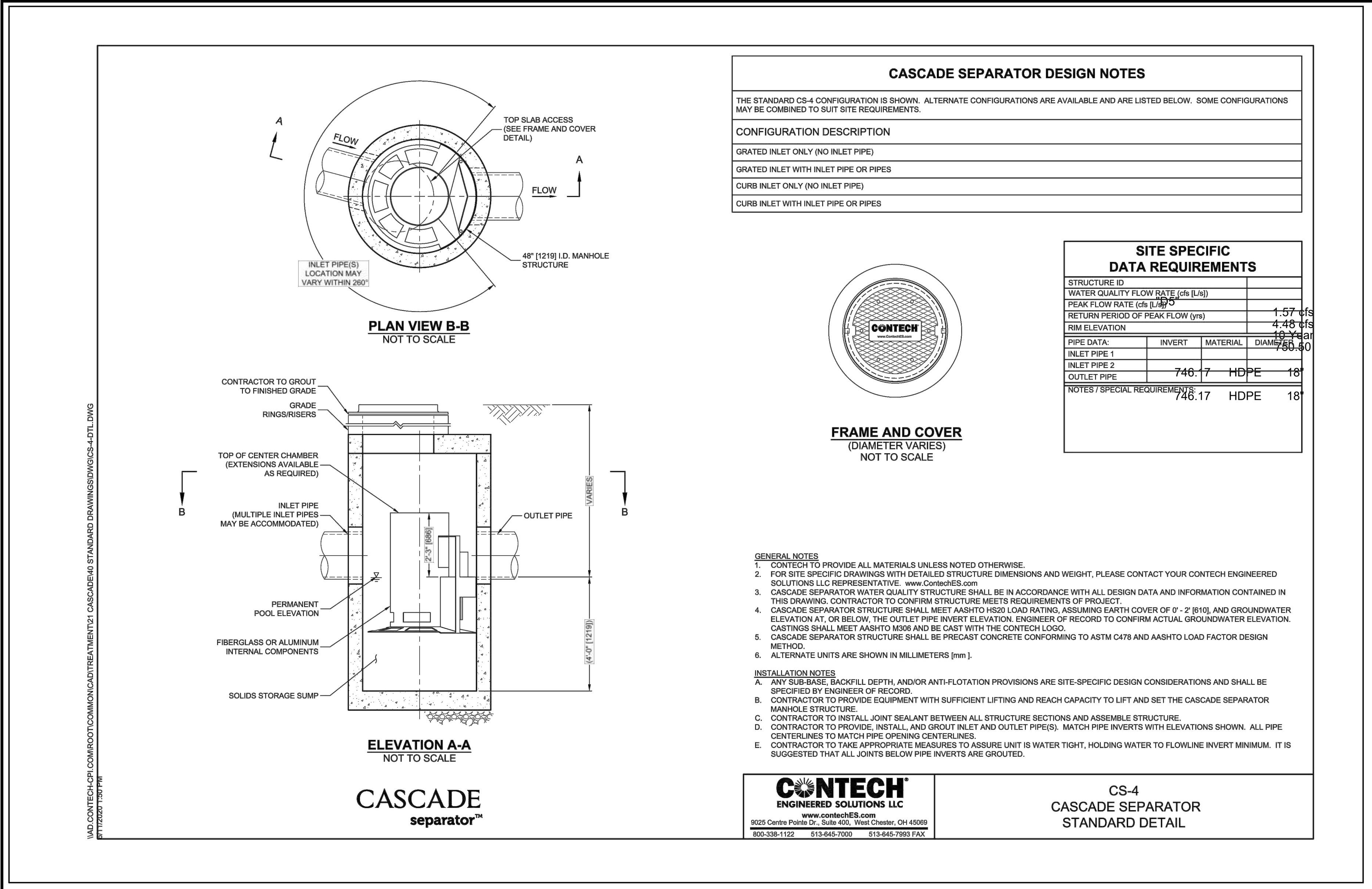
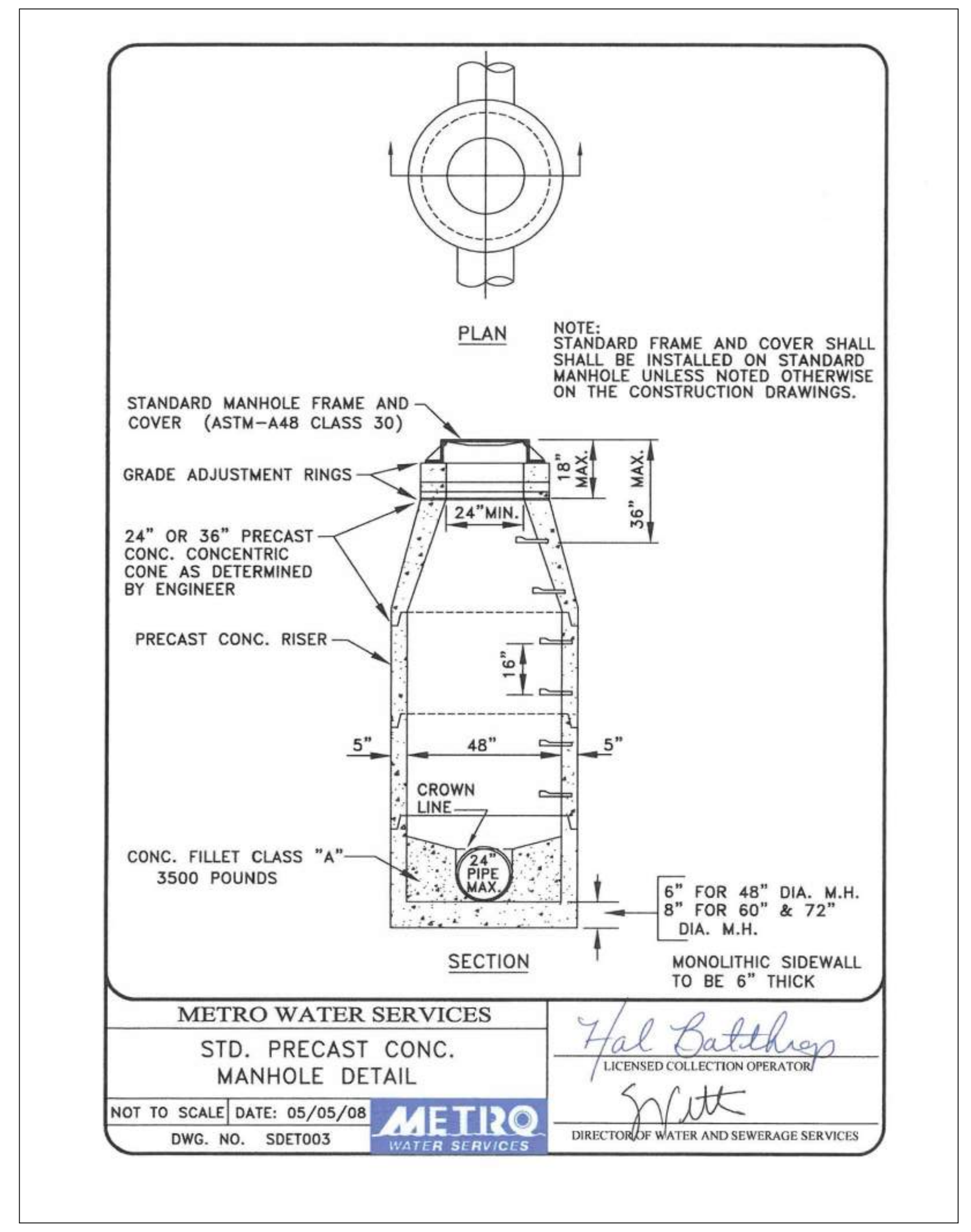
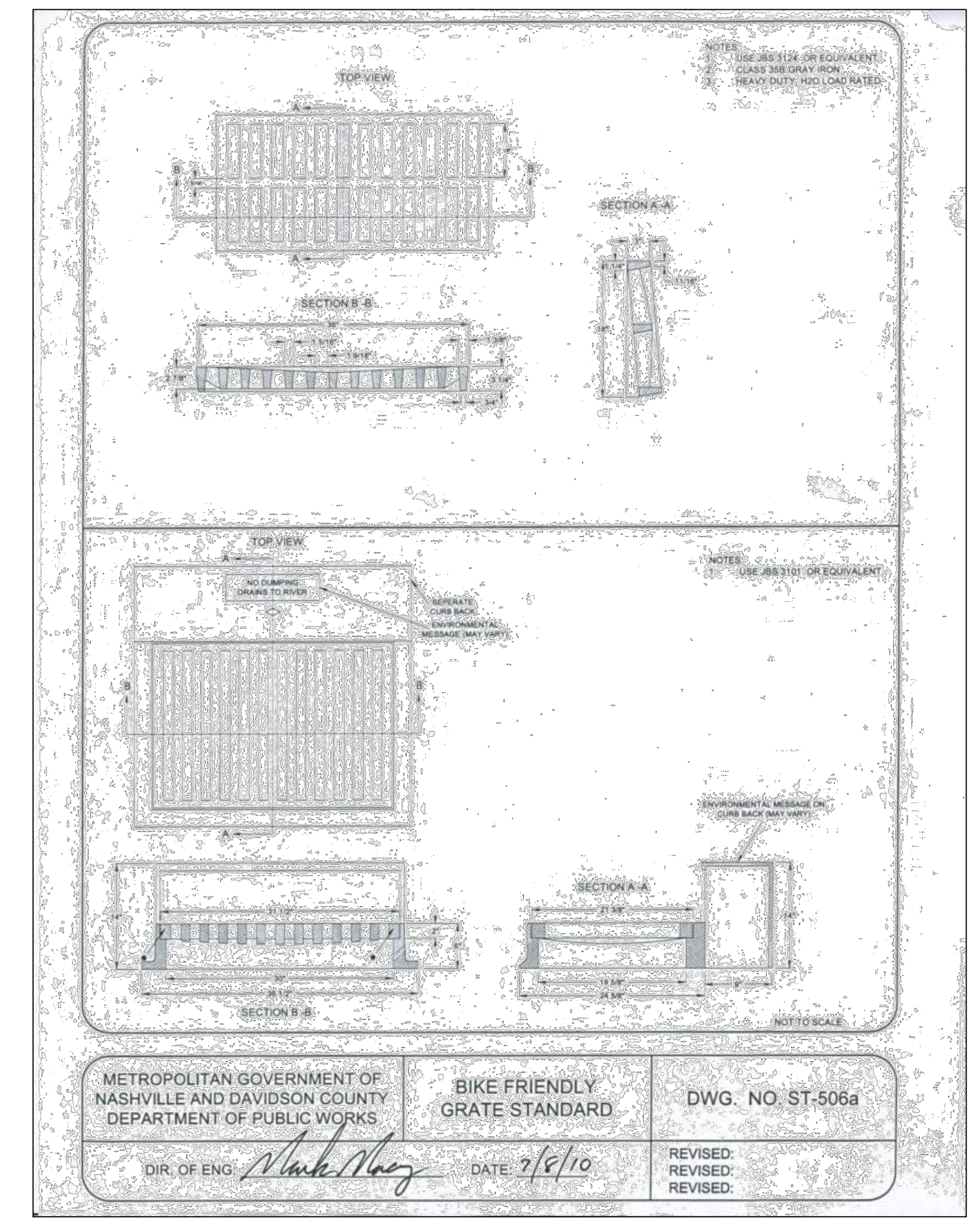
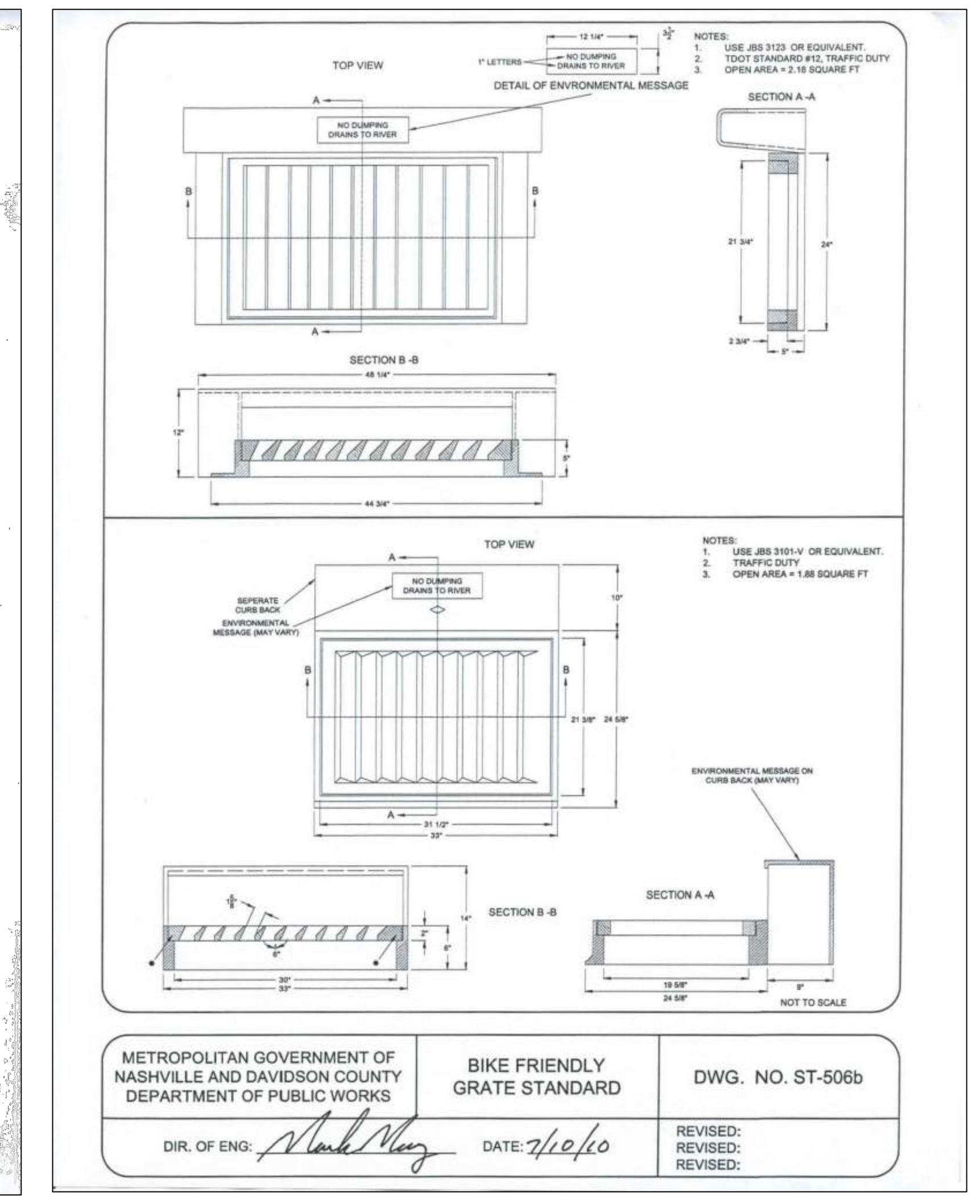
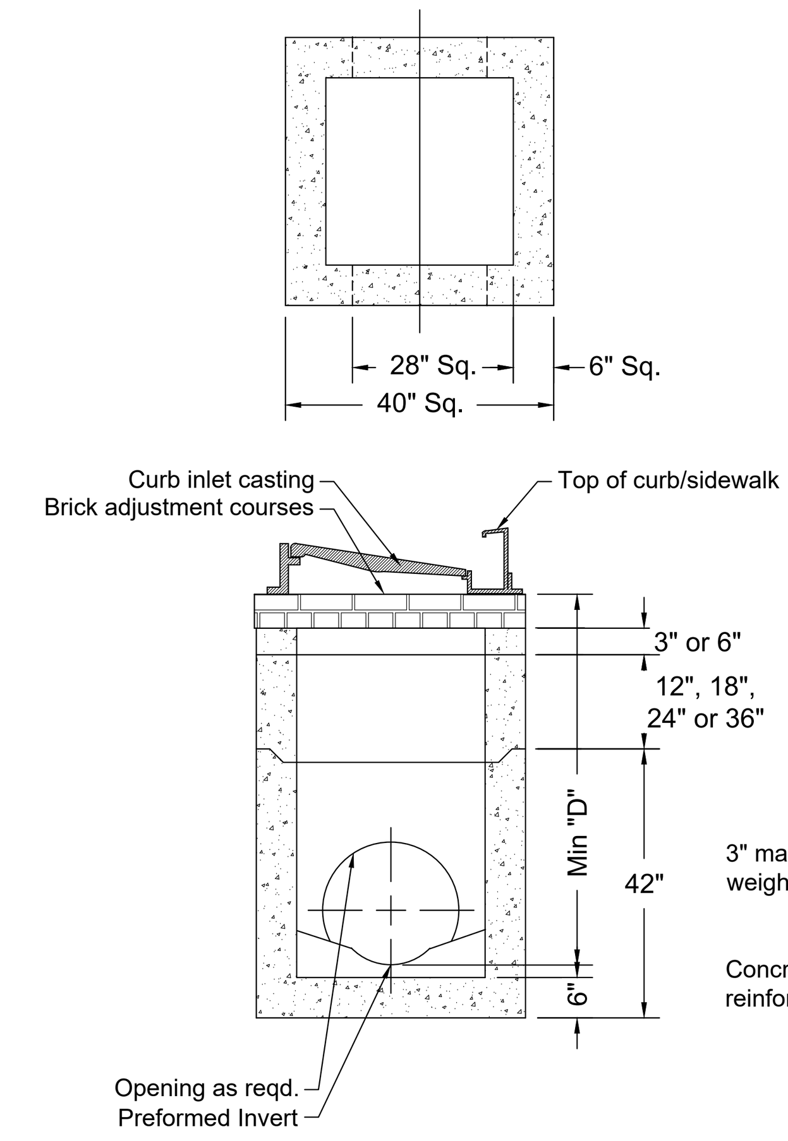
C4.0





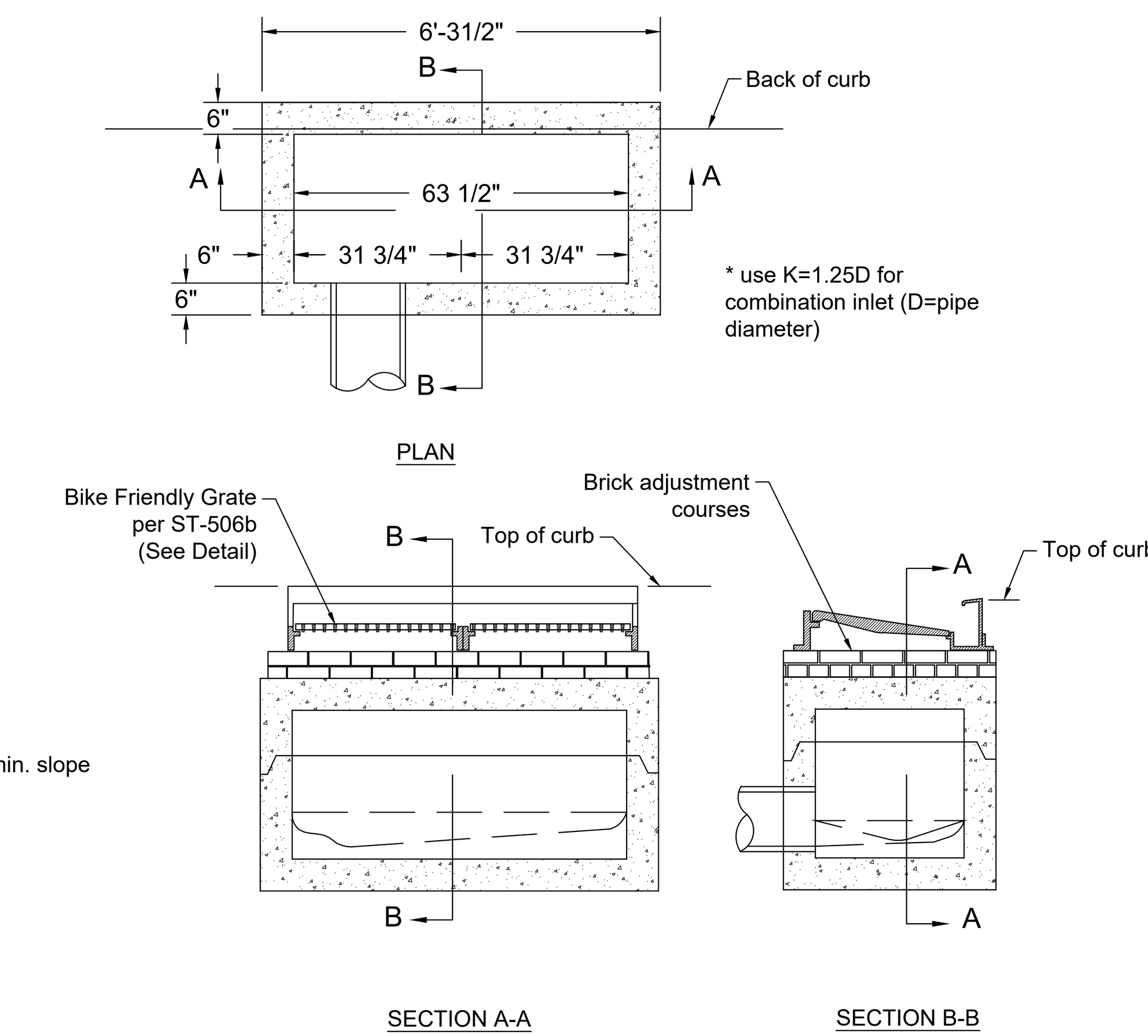




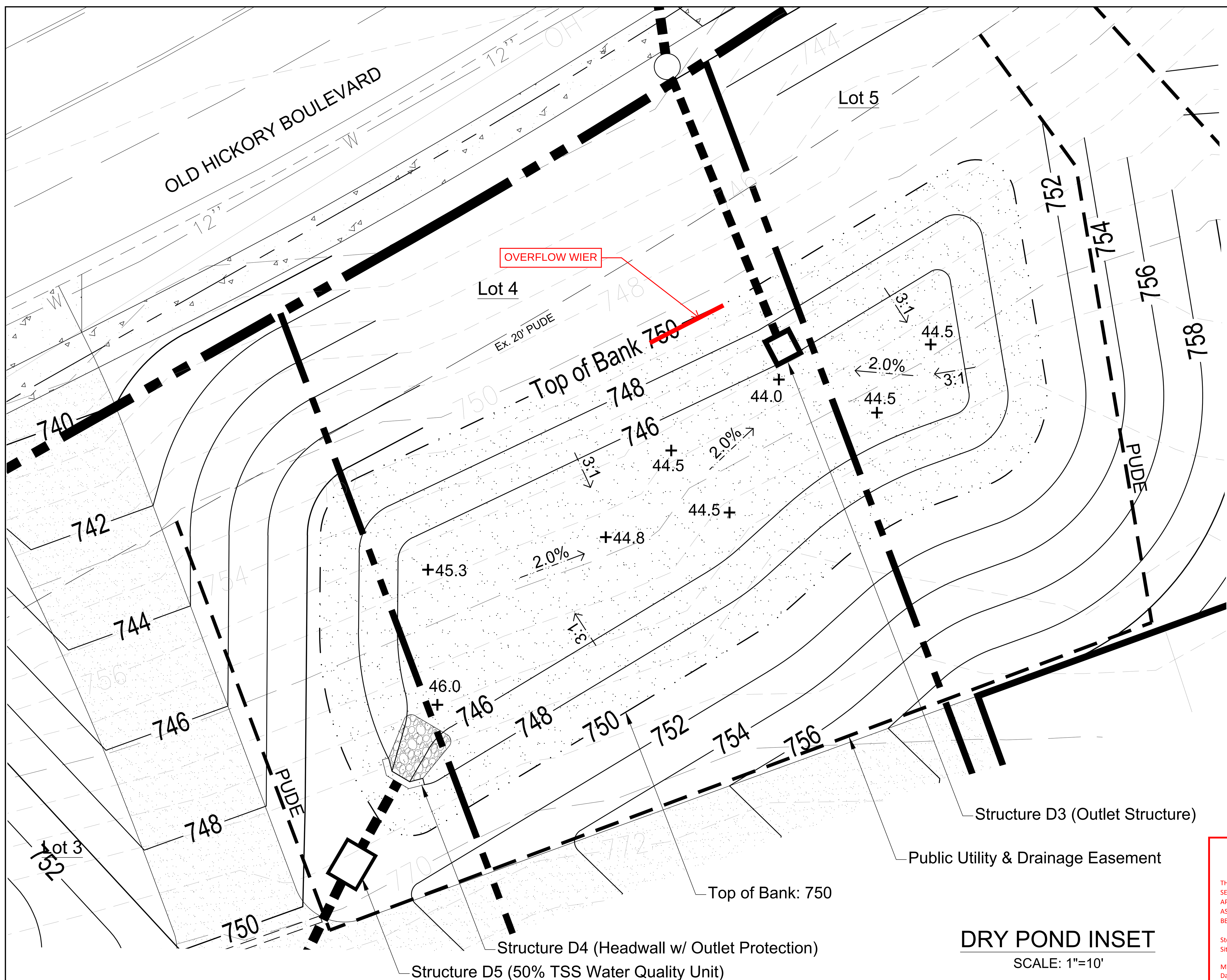


Min. depth for RCP PIPE	"d"
12"	2.08'
15"	2.40'
18"	2.70'
24"	3.16'
30"	4.20'
36"	4.70'
42"	5.20'
48"	5.75'

SINGLE INLET (PRECAST)
N.T.S.

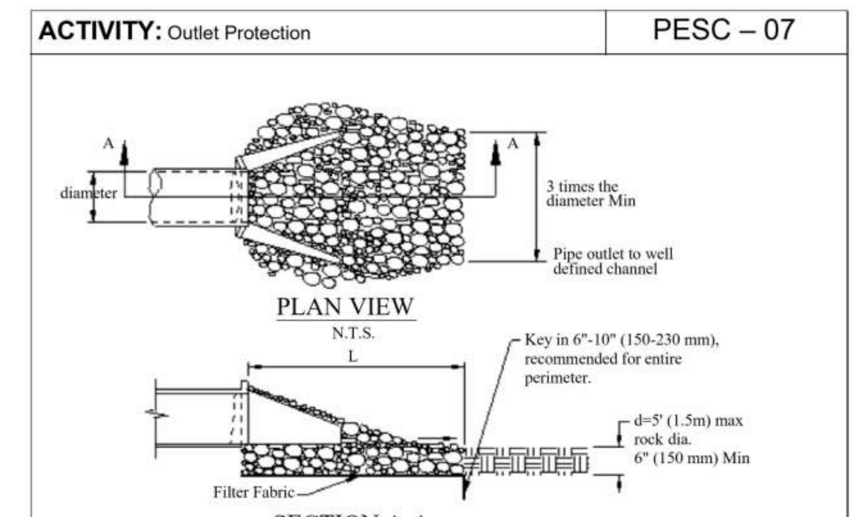


DOUBLE INLET (PRECAST)
N.T.S.



DRY POND INSET
SCALE: 1"=10'

ACTIVITY: Outlet Protection | PESC – 07



SECTION A-A
N.T.S.
Adapted from: Virginia Erosion & Sediment Control Handbook, 1992

Pipe Diameter in (mm)	Discharge ft³/s (m³/s)	Apron Length, L ft (m)	Rip-Rap D_{50} Diameter Min in (mm)
12 (300)	4.9 (0.14)	10 (3)	4 (100)
	9.89 (0.28)	13 (4)	6 (150)
18 (450)	9.89 (0.28)	10 (3)	6 (150)
	20.13 (0.57)	16 (5)	8 (200)
	30.01 (0.85)	23 (7)	12 (300)
	39.90 (1.13)	26 (8)	16 (400)
24 (600)	30.01 (0.85)	16 (5)	8 (200)
	39.90 (1.13)	26 (8)	8 (200)
	50.14 (1.42)	26 (8)	12 (300)
	60.03 (1.70)	30 (9)	16 (400)
For larger or higher flows, consult a registered civil engineer			

Source: Adapted from USDA-SCS

Figure PESC-07-1
Outlet Protection Sizing

…4: …r Development Activity – …anent E&S Control Management Practices PESC-07-3 2021

approved as marked

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Site Utility: N/A

MWS Reviewer: Evan Low
Date: 05/18/2023

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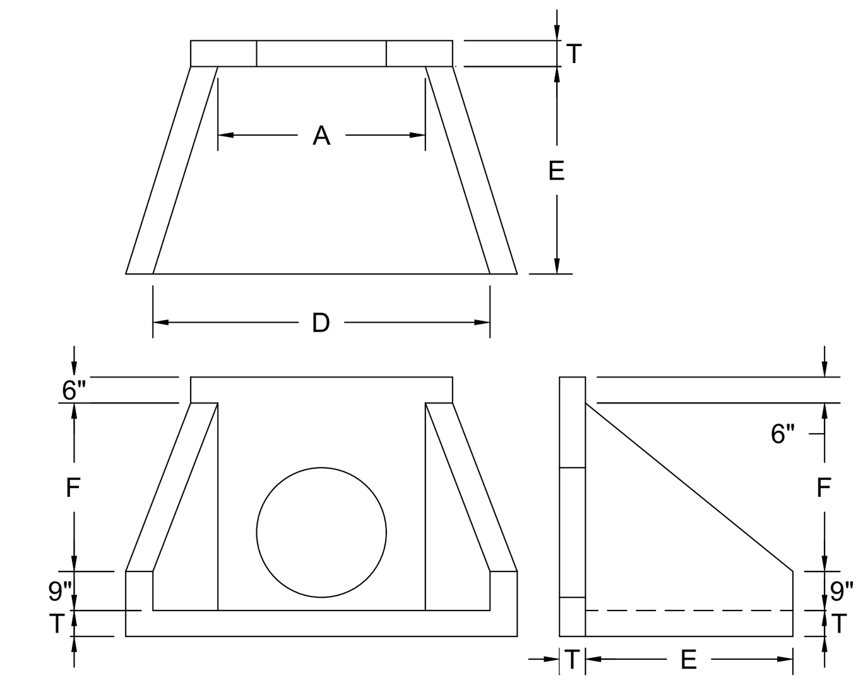

Table of dimensions

Size	A	D	E	F	T (min.)
15"	2'-6"	5'-0"	2'-6"	1'-9"	6"
18"	2'-6"	5'-0"	2'-6"	1'-9"	6"
21"	2'-6"	5'-0"	2'-6"	1'-9"	6"
24"	4'-0"	6'-6"	4'-0"	3'-3"	6"
30"	4'-0"	6'-6"	4'-0"	3'-3"	6"
36"	5'-6"	8'-0"	3'-6"	4'-5"	6"
42"	5'-6"	8'-0"	3'-6"	4'-5"	6"
48"	5'-6"	8'-0"	3'-6"	4'-5"	6"
54"	7'-0"	9'-5"	4'-6"	5'-9"	6"
60"	7'-0"	9'-5"	4'-6"	5'-9"	6"
66"	8'-6"	11'-0"	5'-6"	6'-11"	6"
72"	8'-6"	11'-0"	5'-6"	6'-11"	6"

NOTES:
1. Concrete shall be 4000 psi @ 28 days reinforced with #4 bars @ 10' o.c., each way with wings and toe slab doweled to headwall with #5 bars

2. 3/4" chamfer on all exposed edges.

PRECAST CONCRETE HEADWALL
N.T.S.

PERMITS:

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MWS	23-SL-0008 (2023001753)

Drawing Date:
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C4.1

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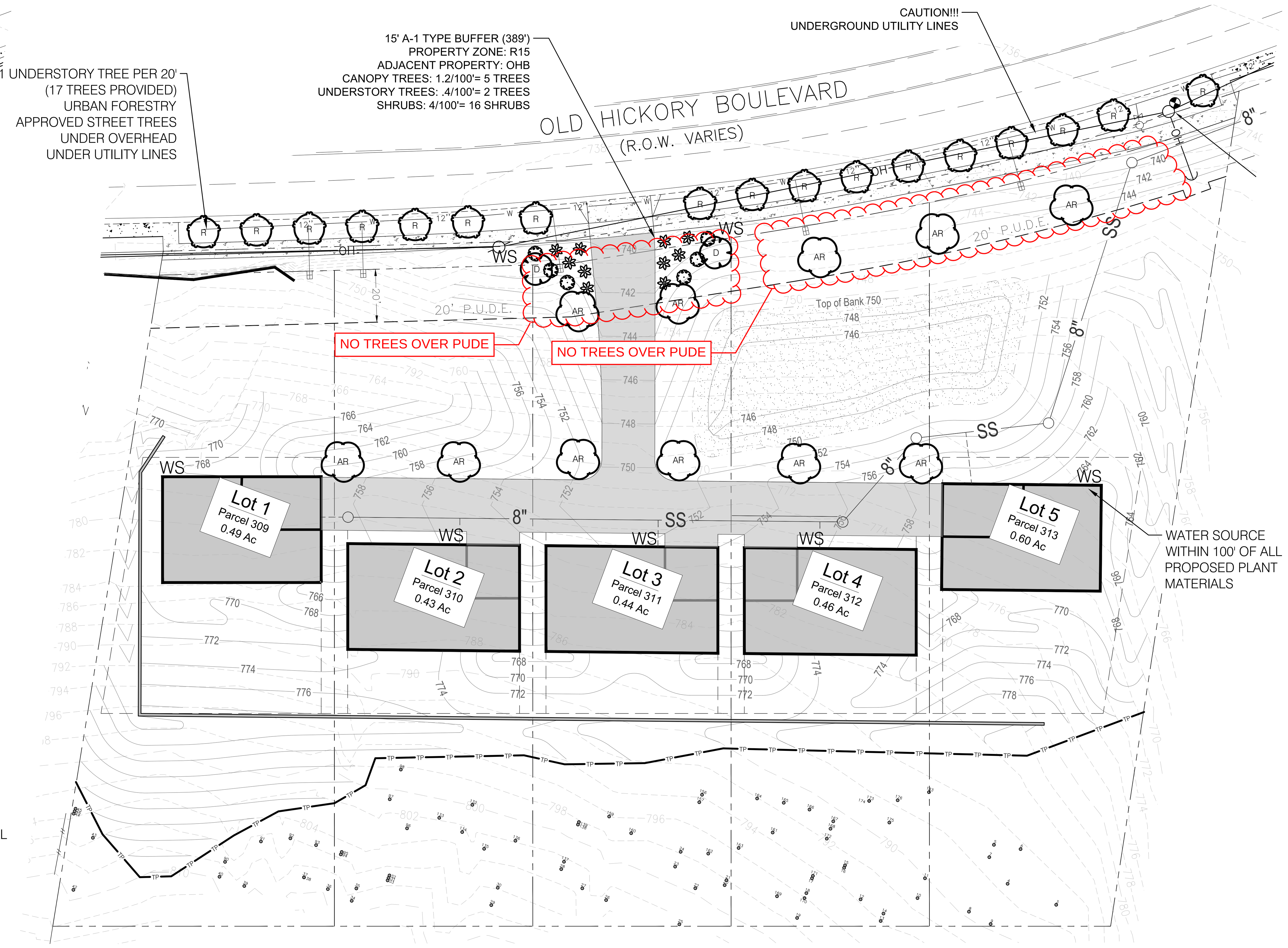
approved as marked

LOT 1-TDU: 42.6 LOT 2-TDU: 44.1 LOT 3-TDU: 52.5 LOT 4-TDU: 78 LOT 5-TDU: 21

TREE REMOVAL PLAN



LANDSCAPE PLAN

NUMBER	SIZE	TYPE	
0	6	Hackberry	REMOVE
1	6	ash	REMOVE
2	6	ash	REMOVE
3	9	cedar	2.7
4	15	ash	4.5
5	9	cedar	2.7
6	8	cedar	2.4
7	7	cedar	2.1
8	16	ash	4.8
9	6	cedar	1.8
10	10	cedar	3
11	7	redbud	2.1
12	14	ash	4.2
13	12	ash	3.6
14	7	cedar	2.1
15	13	ash	3.9
16	16	ash	4.8
17	7	cedar	2.1
18	6	cedar	1.8
19	7	cedar	2.1
20	8	cedar	2.4
21	12	ash	3.6
22	16	ash	4.8
23	12	ash	3.6
24	6	cedar	1.8
25	11	ash	3.3
26	15	ash	4.5
27	12	cedar	3.6
28	17	ash	5.1
29	6	cedar	1.8
30	9	elm	2.7
31	9	ash	2.7
32	10	ash	3
33	10	ash	3
34	11	ash	3.3
35	8	ash	2.4
36	15	ash	4.5
37	12	ash	3.6
38	8	red oak	2.4
39	12	ash	3.6
40	10	cedar	3
41	8	ash	REMOVE
42	14	ash	4.2
43	7	elm	2.1
44	11	ash	3.3
45	11	ash	3.3
46	6	cedar	1.8
47	16	ash	REMOVE
48	9	ash	REMOVE
49	7	cedar	REMOVE
50	12	cedar	REMOVE
51	9	cedar	REMOVE
52	11	elm	REMOVE
53	8	red oak	REMOVE
54	17	cedar	REMOVE
55	9	swamp white oak	REMOVE
56	6	elm	REMOVE
57	10	swamp white oak	REMOVE
58	14	elm	REMOVE
59	17	ash	REMOVE
60	9	cedar	REMOVE
61	6	walnut	REMOVE
62	17	red oak	REMOVE
63	17	red oak	REMOVE
64	6	black locust	REMOVE
65	7	Hackberry	REMOVE
66	6	Hackberry	REMOVE
67	6	ash	REMOVE
68	7	mimosa	REMOVE
69	6	ash	REMOVE
70	6	ash	REMOVE
71	6	black locust	REMOVE
72	6	black locust	REMOVE
73	6	Hackberry	REMOVE
74	6	redbud	REMOVE
75	10	cedar	REMOVE
76	6	cedar	REMOVE
77	10	elm	REMOVE
78	8	cedar	REMOVE
79	10	cedar	REMOVE
80	14	red oak	REMOVE
81	15	red oak	REMOVE
82	7	ash	REMOVE
83	11	ash	REMOVE
84	13	red oak	REMOVE
85	19	ash	REMOVE
86	11	ash	REMOVE
87	6	black locust	REMOVE
88	8	cedar	REMOVE
89	6	cedar	REMOVE
90	9	ash	2.7
91	8	elm	2.4
92	12	ash	3.6
93	7	cedar	2.1
94	11	ash	3.3
95	11	ash	3.3
96	6	cedar	1.8
97	7	ash	2.1
98	6	cedar	1.8
99	7	black locust	REMOVE
100	16	ash	REMOVE
101	15	ash	REMOVE
102	6	cedar	REMOVE
103	6	elm	REMOVE
104	11	elm	REMOVE
105	11	ash	REMOVE
106	14	ash	REMOVE
107	10	ash	REMOVE
108	8	ash	REMOVE
109	7	cedar	REMOVE
110	6	cedar	REMOVE
111	7	cedar	REMOVE
112	12	elm	REMOVE
113	7	ash	REMOVE
114	12	ash	REMOVE
115	6	cedar	REMOVE
116	17	ash	REMOVE
117	8	cedar	REMOVE
118	10	cedar	REMOVE
119	10	ash	REMOVE
120	6	cedar	REMOVE
121	6	cedar	REMOVE
122	7	cedar	REMOVE
123	6	cedar	REMOVE
124	11	ash	REMOVE
125	7	cedar	REMOVE
126	14	ash	REMOVE
127	14	ash	REMOVE
128	7	cedar	REMOVE
129	20	ash	REMOVE
130	19	ash	REMOVE
131	7	cedar	REMOVE
132	7	cedar	2.1
133	14	ash	4.2
134	8	cedar	2.4
135	7	ash	2.1
136	7	elm	2.1
137	8	cedar	2.4
138	6	cedar	1.8
139	12	elm	3.6
140	10	ash	REMOVE
141	8	cedar	REMOVE
142	7	cedar	REMOVE
143	6	cedar	REMOVE
144	12	cedar	REMOVE
145	22	ash	REMOVE
146	8	elm	REMOVE
147	6	cedar	REMOVE
148	7	cedar	REMOVE
149	8	cedar	REMOVE
150	7	cedar	REMOVE
151	16	elm	REMOVE
152	9	cedar	REMOVE
153	7	black locust	REMOVE
154	6	cedar	REMOVE
155	8	cedar	REMOVE
156	7	elm	2.1
157	6	cedar	1.8
158	18	ash	REMOVE
159	7	cedar	2.1
160	14	ash	4.2
161	18	ash	5.4
162	6	cedar	1.8
163	8	ash	2.4
164	9	cedar	2.7
165	8	sugar maple	2.4
166	8	cedar	2.4
167	21	ash	6.3
168	6	ash	1.8
169	14	ash	4.2
170	7	ash	2.1
171	6	ash	1.8
172	7	swamp white oak	2.1
173	6	cedar	1.8
174	9	cedar	2.7
175	13	cedar	3.9
176	11	ash	3.3
177	8	cedar	REMOVE
178	19	ash	REMOVE
179	7	redbud	REMOVE
180	9	redbud	REMOVE
181	6	redbud	REMOVE
182	6	redbud	REMOVE
183	10	ash	3
184	6	black locust	REMOVE
185	7	ash	REMOVE

TREE DENSITY UNIT (TDU) WORKSHEET (Ordinance 94-1104) REV Sept-2019

Date
Map: 16100009007-LOT 1- PARCEL 309
Application Number:
Project Name: 0 OLD HICKORY BLVD
Address: 0 OLD HICKORY BLVD

Site Acreage		0.49
Minus Dedicated City ROW & PW Drainage EASM	(-)	0
Minus Building Coverage Area	(-)	0.05
Equals Adjusted Acreage	(=)	0.44
Multiply by Required Tree Density Unit per acre	(x)	22
Required TDU for Project	(=)	**9.68**

REPLACEMENT TREE(S)- LARGE & MEDIUM CANOPY TREES			
DBH	# of Trees	Value	TDU
2"	0	x .5	0
3"		x .6	0
		Total	0

REPLACEMENT TREE(S)- LARGE & MEDIUM COLUMNAR,			
DBH	# of Trees	Value	TDU
2"	3	x .25	0.75
3"		x .3	0
		total	0.75

Total TDU for Protected Trees	(+)	42.6
Total TDU for Replacement ¯ps	(+)	0.75
Total Density Units Provided	(=)	**43.35**

Interioir Green Space: NA
IRRIGATION TO BE PROVIDED BY HOSE BIBS
Tree Cut Permit Required

TREE DENSITY UNIT (TDU) WORKSHEET (Ordinance 94-1104) REV Sept-2019

Date
Map: 16100009007-LOT 2- PARCEL 310
Application Number:
Project Name: 0 OLD HICKORY BLVD
Address: 0 OLD HICKORY BLVD

Site Acreage		0.43
Minus Dedicated City ROW & PW Drainage EASM	(-)	0
Minus Building Coverage Area	(-)	0.05
Equals Adjusted Acreage	(=)	0.38
Multiply by Required Tree Density Unit per acre	(x)	22
Required TDU for Project	(=)	**8.36**

REPLACEMENT TREE(S)- LARGE & MEDIUM CANOPY TREES			
DBH	# of Trees	Value	TDU
2"	2	x .5	1
3"		x .6	0
		Total	1

REPLACEMENT TREE(S)- LARGE & MEDIUM COLUMNAR,			
DBH	# of Trees	Value	TDU
2"	3	x .25	0.75
3"		x .3	0
		total	0.75

Total TDU for Protected Trees	(+)	44.1
Total TDU for Replacement ¯ps	(+)	1.75
Total Density Units Provided	(=)	**45.85**

Interioir Green Space: NA
IRRIGATION TO BE PROVIDED BY HOSE BIBS
Tree Cut Permit Required

TREE DENSITY UNIT (TDU) WORKSHEET (Ordinance 94-1104) REV Sept-2019

Date
Map: 16100009007- LOT 5- PARCEL 313
Application Number:
Project Name: 0 OLD HICKORY BLVD
Address: 0 OLD HICKORY BLVD

Site Acreage		0.6
Minus Dedicated City ROW & PW Drainage EASM	(-)	0
Minus Building Coverage Area	(-)	0.05
Equals Adjusted Acreage	(=)	0.55
Multiply by Required Tree Density Unit per acre	(x)	22
Required TDU for Project	(=)	**12.1**

REPLACEMENT TREE(S)- LARGE & MEDIUM CANOPY TREES			
DBH	# of Trees	Value	TDU
2"	2	x .5	1
3"		x .6	0
		Total	1

REPLACEMENT TREE(S)- LARGE & MEDIUM COLUMNAR,			
DBH	# of Trees	Value	TDU
2"	5	x .25	1.25
3"		x .3	0
		total	1.25

Total TDU for Protected Trees	(+)	21
Total TDU for Replacement ¯ps	(+)	2.25
Total Density Units Provided	(=)	**23.25**

Interioir Green Space: NA
IRRIGATION TO BE PROVIDED BY HOSE BIBS
Tree Cut Permit Required

TREE DENSITY UNIT (TDU) WORKSHEET (Ordinance 94-1104) REV Sept-2019

Date
Map: 16100009007- LOT 3- PARCEL 311
Application Number:
Project Name: 0 OLD HICKORY BLVD
Address: 0 OLD HICKORY BLVD

Site Acreage		0.44
Minus Dedicated City ROW & PW Drainage EASM	(-)	0
Minus Building Coverage Area	(-)	0.05
Equals Adjusted Acreage	(=)	0.39
Multiply by Required Tree Density Unit per acre	(x)	22
Required TDU for Project	(=)	**8.58**

REPLACEMENT TREE(S)- LARGE & MEDIUM CANOPY TREES			
DBH	# of Trees	Value	TDU
2"	4	x .5	2
3"		x .6	0
		Total	2

REPLACEMENT TREE(S)- LARGE & MEDIUM COLUMNAR,			
DBH	# of Trees	Value	TDU
2"	4	x .25	1
3"		x .3	0
		total	1

Total TDU for Protected Trees	(+)	52.5
Total TDU for Replacement ¯ps	(+)	3
Total Density Units Provided	(=)	**55.5**

Interioir Green Space: NA
IRRIGATION TO BE PROVIDED BY HOSE BIBS
Tree Cut Permit Required

TREE DENSITY UNIT (TDU) WORKSHEET (Ordinance 94-1104) REV Sept-2019

Date
Map: 16100009007- LOT 4- PARCEL 312
Application Number:
Project Name: 0 OLD HICKORY BLVD
Address: 0 OLD HICKORY BLVD

Site Acreage		0.46
Minus Dedicated City ROW & PW Drainage EASM	(-)	0
Minus Building Coverage Area	(-)	0.05
Equals Adjusted Acreage	(=)	0.41
Multiply by Required Tree Density Unit per acre	(x)	22
Required TDU for Project	(=)	**9.02**

REPLACEMENT TREE(S)- LARGE & MEDIUM CANOPY TREES			
DBH	# of Trees	Value	TDU
2"	3	x .5	1.5
3"		x .6	0
		Total	1.5

REPLACEMENT TREE(S)- LARGE & MEDIUM COLUMNAR,			
DBH	# of Trees	Value	TDU
2"	4	x .25	1
3"		x .3	0
		total	1

Total TDU for Protected Trees	(+)	78
Total TDU for Replacement ¯ps	(+)	2.5
Total Density Units Provided	(=)	**80.5**

Interioir Green Space: NA
IRRIGATION TO BE PROVIDED BY HOSE BIBS
Tree Cut Permit Required

SEE SHEET L1.1 FOR NOTES, DETAILS, AND PLANT SCHEDULES

NORTH SCALE: 1" = 30' 0 30 60 90 feet

H+B LAND DESIGN
1894 Gen. Geo. Patton Dr.
Suite 400
Franklin, TN 37067
Tel: 615.376.2421
www.hblanddesign.com

PROPOSED SITE FOR:
0 Old Hickory Boulevard
NASHVILLE, DAVIDSON COUNTY, TENNESSEE

Job # - 23145 BY: cb

LANDSCAPE PLAN

L1.1

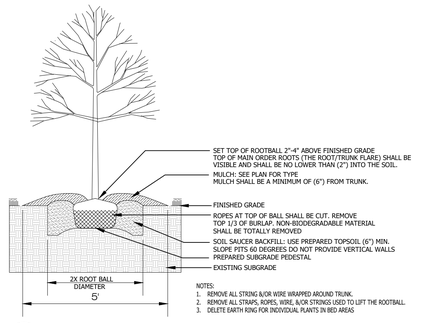
PLANT STANDARDS
The standards set forth in "American Standard for Nursery Stock" represent general guideline specifications only and will constitute minimum quality requirements for plant material. All plants must meet minimum size noted at the materials schedule. And meet the characteristics stated on this drawing. All material installed on the site MUST meet or exceed these specifications. Any trees or shrubs not meeting these standards can be rejected at time of inspection.

TREE SPECIFICATIONS: ALL TREES SHALL HAVE THE FOLLOWING CHARACTERISTICS:
1. Deciduous trees shall have one dominant single straight trunk with the tip of the leader on the main trunk left intact and the terminal bud on the central leader is at the highest point on the tree.
2. Trees with forked trunks are acceptable if all the following conditions are met:
   a. The fork occurs in the upper 1/3 of the tree.
   b. One fork is less than 2/3 the diameter of the dominant fork.
   c. The top 1/3 of the smaller fork is removed at the time of planting.
3. No branch is greater than 2/3 the diameter of the trunk directly above the branch.
4. The trunk and/or major branches shall not touch
5. Several branches are larger in diameter and obviously more dominant.
6. Branching habit is more horizontal than vertical, and no branches are oriented nearly vertical to the trunk.
7. Branches are evenly distributed around the trunk with no more than one major branch located directly above another and the crown is full of foliage evenly distributed around the tree
8. Crown spread shall look proportional to the tree.
9. NO flush cuts or open trunk wounds or other bark injury
10. Root ball meets all ANSI standards and is appropriately sized

DEFICIENCIES NOT ACCEPTED:
1. Tip dieback on 5% of branches
2. Crown thin/spasely foliated
3. Included bark
4. Major Branches touching
5. Asymmetrical branching

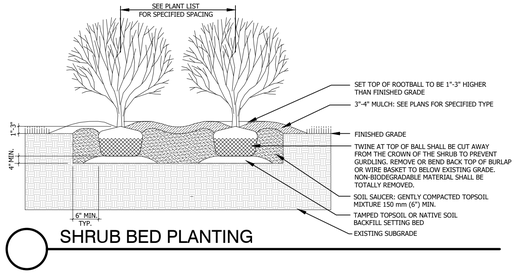
Landscape shall not obstruct visibility or access to fire protection equipment including, but not limited to, fire hydrants and fire department connections

PLANTING NOTES:
1. Refer to all written specifications; adhere to Plans and Specifications for all phases of work.
2. Verify all utility locations in the field before work begins. Repair damaged utilities to owners satisfaction at no additional cost.
3. Verify all material quantities on the drawing during bidding and pricing. In the event of a discrepancy, the quantities drawn on the plan will take precedence over the material schedule.
4. All materials are subject to the approval of the Landscape Architect, City, and Owner.
5. Once unloaded from truck, immediately stand all trees up. DO NOT lie the trees down. This will reduce the risk of sunscald.
6. Plants shall meet specifications. Root balls shall meet or exceed size standards as set forth by 'American Standards for Nursery Stock'. Main leaders of all trees shall remain intact.
7. Mulch plant pits and planting beds with specified mulch to the depth indicated on drawings.
8. Prepare all topsoil used in tree, shrub, and seed mixes in accordance with the specifications
9. Discard any material which turns brown or defoliates within 5 days after planting. Replace immediately with approved specified material at no additional cost.
10. Maintain all plant material and lawns until project is accepted in full by the City.
11. Guarantee all workmanship and materials for a period of 1 calendar year.
12. Install all plant material in accordance with all local codes and ordinances. Obtain any required permits necessary to complete the work.
13. Provide 6" of topsoil for lawn areas (12" min. over rock), min. 24" of topsoil for shrub zones, and min. 48" deep for tree pits. Refer to specific root ball sizes for the min. diameter tree pit.
14. Trees shall be first quality representatives of their species and shall meet all requirements otherwise stipulated. The Landscape Architect reserves the right to reject plant materials in the field, at the growing location, or at the job site at any time during the project.
15. Test all tree pits for drainage. Any tree pit that holds water for more than 24 hours shall be installed using filter fabric wrapped perforated drainage tube (sloped to low point) and a washed pea gravel pit well drain



DECIDUOUS TREE PLANTING

P-NO-12



SHRUB BED PLANTING

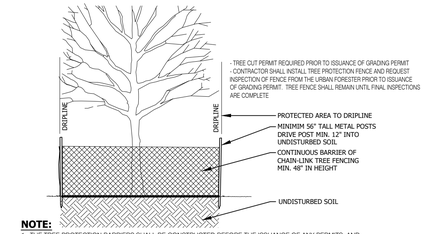
LANDSCAPE NOTES:
1. Contractor responsible for locating and protecting all underground utilities prior to digging.
2. Contractor responsible for protecting existing trees from damage during construction as shown on plans.
3. Contractor to install 6" minimum depth of clean, friable topsoil at all planting beds and lawn areas prior to fine grading. see topsoil specification sheet I-1.3.
4. All shrub beds (existing and new) to be mulched with a 3-4 inch minimum layer of mulch .
5. Existing grass in proposed planting areas to be killed and removed and area to be hand raked to remove all rocks and debris larger than 1 inch in diameter prior to planting shrubs or laying sod. Landscape contractor to provide fine grading.
6. Any existing grass disturbed during construction to be fully removed, re-graded and replaced. All tire marks and indention to be repaired.
7. Soil to be tested to determine fertilizer and lime requirements and distributed prior to laying sod.
8. Sod to be delivered fresh (cut less than 24 hours prior to arriving on site), laid immediately, rolled, and watered thoroughly immediately after planting. edge of sod adjacent to mulch beds to be shovel cut. All sod to be delivered in largest rolls available. there shall be no gaps between sod joints.
9. Planting mix to be provided as specified in the landscape specifications.
10. The landscape contractor shall guarantee all plants installed for one full year from date of acceptance. All plants shall be alive and at a vigorous rate of growth at the end of the guarantee period. The landscape contractor shall not be responsible for acts of god or vandalism.
11. Any plant that is determined dead, in an unhealthy or unsightly condition, lost its shape due to dead branches or other symptoms of poor, non-vigorous growth, as determined by the landscape architect, shall be replaced by the landscape contractor at no cost to owner.
12. Prior to installation, the landscape contractor shall inspect the subgrade, general site conditions, verify elevations, utility locations, irrigation, approve topsoil provided by general contractor and observe the site conditions under which the work is to be done. Notify general contractor of any unsatisfactory conditions, and work shall not proceed until such conditions have been corrected.
13. Water all plant material that are newly planted thoroughly twice in first 24 hours and apply mulch immediately.
14. All trees and shrubs shall be coordinated with lighting plan prior to installation.
15. All shrubs to be 3' back of curb.
16. All areas of disturbance outside of landscape beds shall be repaired with turf.
17. Any utility structure, light poles, sign, or other feature may not be added to any required landscape island in such a manner that would displace the required element(s) (trees, shrubs, etc.)

SUBSTITUTION NOTE:
1. Requirements shown are per the City Zoning Ordinance. Substitutions are not allowed unless approved by the City and Heibert+Ball Land Design

TO AVOID OVERHEAD LIGHT POLE CONFLICTS:
In the event proposed canopy trees are in conflict (within 15') with proposed or existing light pole locations, the landscape contractor shall stop work and contact Heibert+Ball Land Design immediately for coordination and field adjustment

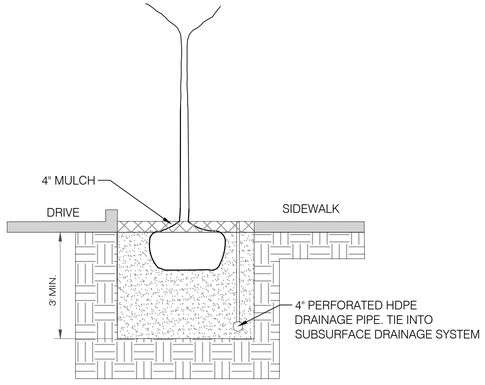
TO AVOID OVERHEAD UTILITY CONFLICTS:
In the event proposed canopy trees are in conflict (within 25') with proposed or existing overhead utility locations, the landscape contractor shall stop work and contact Heibert+Ball Land Design immediately for coordination and field adjustment.

UTILITY SCREEN
All utility structures, transformers, meters, and/or units shall be screened with plant material tall enough to provide an effective screen. Structures not shown on landscape plans will be required to be screened. If utilities are added to the site, contact Heibert+Ball Land Design for screening recommendations



NOTE:
1. THE TREE PROTECTION BARRIERS SHALL BE CONSTRUCTED BEFORE THE ISSUANCE OF ANY PERMITS; AND SHALL REMAIN INTACT THROUGHOUT THE ENTIRE PERIOD OF CONSTRUCTION.
2. THE TREE PROTECTION BARRIER SHALL BE INSTALLED AS LABELED ON THIS PLAN OR TO A DISTANCE OF THE RADIUS OF THE DRIPLINE, WHICHEVER IS GREATEST, AS MEASURED FROM THE TRUNK OF THE PROTECTED TREE(S)
4. ANY REQUIRED EXCAVATION IN OR AROUND THE PROTECTION ZONE TO ACCOMMODATE UNDERGROUND SERVICES, FOOTINGS, ETC; SHALL BE INDICATED ON THE PLAN, AND SHALL BE EXCAVATED BY HAND. IN ADDITION, RELATED ROOT PRUNING SHALL BE ACCOMPLISHED VIA ANSI A-300-95 STANDARD SO AS TO MINIMIZE IMPACT ON THE GENERAL ROOT SYSTEM. ROOT PRUNING TO OCCUR PRIOR TO GRADING
5. THE STORAGE OF BUILDING MATERIALS OR STOCKPILING SHALL NOT BE PERMITTED WITHIN THE LIMITS OF OR AGAINST THE PROTECTION BARRIERS.
6. TREES WITHIN THE PROTECTION BARRIERS MUST BE ADEQUATELY CARED FOR THROUGHOUT THE CONSTRUCTION PROCESS (I.E., THEY MUST BE WATERED SUFFICIENTLY, PARTICULARLY IF THE TREE'S ROOT SYSTEM HAS BEEN DISTURBED BY EXCAVATION.) FILL SHALL NOT BE PLACED UPON THE ROOT SYSTEM AS TO ENDANGER THE HEALTH OR LIFE OF THE AFFECTED TREE.
7. HEAVY ACCUMULATION OF DUST FROM CONSTRUCTION ACTIVITIES MAY OCCUR ON THE SURFACE OF THE TREE FOLIAGE. TO CONTROL DUST, TREE FOLIAGE MAY BE HOSED DOWN UPON THE REQUEST OF THE LANDSCAPE ARCHITECT, OWNERS REP, OR CITY.
8. REMOCAL OF ALL TREE PROTECTION FENCING WILL BE DONE BY THE CONTRACTOR. RESTORATION OF ALL AREAS DISTURBED BY THE FENCING WILL BE THE CONTRACTORS RESPONSIBILITY

TREE PROTECTION DETAIL



STREET TREE PLANTING

1. AT PLANTING, TREES SHALL MEET THE REQUIREMENTS FOR STREET TREES SER OUT IN AMERICAN STANDARD FOR NURSERY STOCK
2. ALL NURSERY STOCK USED AS STREET TREES SHALL BE VIGOROUS, HEALTHY AND FREE OF DISEASES OR INFESTATIONS
3. TREES SHALL NE ACCOMMODATED IN PLANTING AREAS WITH A MINIMUM DEPTH OF 3 FEET AND A MINIMUM VOLUME OF 400 CUBIC FEET

STREET TREES SHALL HAVE A CLEAR HEIGHT OF 80 INCHES WHERE THE TREE CANOPY IS WITHIN A PATH OF TRAVEL, AND NO MORE THAN 50% OF THE TREE HEIGHT SHALL BE CLEARED TO MEET THE ADA CLEARANCE REQUIREMENTS

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

PLANT SCHEDULE

CANOPY TREES	QTY	COMMON / BOTANICAL NAME	CONT	CAL	SIZE
AR	11	Summer Red Maple / Acer rubrum 'HOSR' TM 5` Clear Trunk. Evenly Branched. Matched. See Tree Specifications	B & B	2"Cal	12`-14` HT
UNDERSTORY/COLUMNAR TREES	**QTY**	**COMMON / BOTANICAL NAME**	**CONT**	**CAL**	**SIZE**
R	17	Eastern Redbud / Cercis canadensis 4` Clear Trunk. Evenly Branched. Matched. See Tree Specifications	B & B	2"Cal	10`-12` HT
D	2	Dogwood / Cornus flordia 4` Clear Trunk. Evenly Branched. Matched. See Tree Specifications	B & B	2"Cal	8`-10` HT
BUFFER SHRUBS	**QTY**	**COMMON / BOTANICAL NAME**	**HT / CONT.**	**WIDTH**	
	6	Snow Queen Oakleaf Hydrangea / Hydrangea quercifolia `Snow Queen` Full; Dense; Well Rooted	24" HT		
	10	Grey Owl Juniper / Juniperus virginiana `Grey Owl` Full. Heavy. Well Branched.	18" HT		

PLAN NOTES:
1. ALL LANDSCAPE BEDS SHALL BE NEATLY TRENCHED WITH A BED EDGE AND HAVE 3" MINIMUM DEPTH OF PINE BARK MULCH.
2. ALL TREES AND SHRUBS SHALL BE COORDINATED WITH LIGHTING PLAN PRIOR TO INSTALLATION. LIGHT POLES MUST NOT BE LOCATED IN TREE ISLANDS. ALL TREES TO BE INSTALLED 15' FROM ANY LIGHT POLE.
3. ALL AREAS OF DISTURBANCE SHALL BE SODDED WITH REBEL III TALL FESCUE UNLESS OTHERWISE NOTED ON GRADING PLANS
4. ANY CHANGES TO TREE SPECIES OR LOCATIONS MAY REQUIRE THE CONTRACTOR TO PROVIDE AN AS-BUILT OF THE INSTALLED LANDSCAPE AND POSSIBLY DELAY APPROVAL OF THE SITE BY THE URBAN FORESTRY DEPARTMENT.

HB LAND DESIGN
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PROPOSED SITE FOR:
0 Old Hickory Boulevard
NASHVILLE, DAVIDSON COUNTY, TENNESSEE

CONNER L. BALL REGISTERED AGRICULTURE FORESTRY LANDSCAPE ARCHITECT

Job # - 23145
BY: cb

L1.2

LANDSCAPE NOTES