CITY OF GOODLETTSVILLE PLANNING COMMISSION

MEETING AGENDA

Monday December 6, 2021 5:00 PM

Call Meeting to Order and Member Roll Call

Public Forum on Planning Related Topics

ITEM#1 Approval of Agenda

ITEM#2 Approval of November 1, 2021 Meeting Minutes

ITEM#3 B&T Landscaping/Ragan Smith Associates: Request site plan approval for a nursery/landscaping facility including 9,600 sq. ft. of buildings on 56.27 acres on Long Drive. Property is zoned R40, Low Density Residential and is referenced as Sumner County Tax Map/Parcel# 14008409 000. Property Owners: Shelly and Timothy Tinnin. (#15-21)

ITEM#4 Cedars at Dry Creek/Ragan Smith Associates: Requests final master plan approval for 117 townhouse units on 19.83 acres and future commercial development area of 3.23 acres at Dry Creek Road, Dickerson Road Hwy 41/SR-11, and Robert Cartwright Drive. Property is zoned HDRPUD, High Density Residential Planned Unit Development and CPUD, Commercial Planned Unit Development and referenced as Davidson County Tax Map/Parcels# 03300029700/ 03300004200. Property Owner: Dry Creek, LLC. (#03-21) *preliminary master plan approved as Dry Creek PUD*

ITEM#5 Stone Bridge Lots/Studio A-Architecture, Inc: Request final master plan approval for 310 multi-family apartment units and 6,000 sq. ft. of commercial space on 19.22 acres at 619 N. Main Street/ Hwy 41/SR-11. Property is zoned HDRPUD, High Density Residential Planned Unit Development and referenced as Davidson County Tax Map/Parcel# 01812006900. Property Owner: Proctor Family Partnership (#012-20) *preliminary master plan approved as 619 N. Main Street.*

ITEM#6 Kim Gregory, Property Owner: Request recommendation to the City Commission to rezone the property or amend the Zoning Ordinance to permit a two (2) family detached dwelling unit at 410 Moss Trail. The 0.91-acre property is zoned R-25, Low Density Residential and is referenced as Davidson County Tax Map/Parcel# 02609005500.

ITEM#7 Community Development Staff: Requests approval of the 2022 Planning Commission Meeting and Plan Submittal Calendar

DISCUSSION ITEM:

Lamar Advertising Company of Nashville requests discussion on preliminary signage proposal to remove two (2) existing pole signs and replacing with one sign with equal square footage at 707 Rivergate Parkway

OFFICIAL MINUTES OF THE MEETING

GOODLETTSVILLE PLANNING AND ZONING COMMISSION

November 1, 2021 Goodlettsville City Hall

5:00 p.m. Massie Chambers-Auditorium

Present: Chairman Tony Espinosa, Vice Chairman Scott Trew, Jeff Duncan, Jim Hitt, Grady McNeal, Jeff Parnell, Mayor Rusty Tinnin, Judy Wheeler, Bob Whittaker

Absent: None

Also Present: Addam McCormick (Staff), City Manager Tim Ellis, Russell Freeman, Mary Laine Hucks, and Sharon Reed

Espinosa called the meeting to order and Trew offered prayer.

Item #1 Approval of Agenda: Due to no representation and information received Item #9 Kenjoh Outdoor Advertising and Item #10 John and Nicole Levoy were removed from agenda. Hitt made a motion to approve the agenda, Tinnin seconded the motion. The motion passed unanimously.

Item #2 Approval of October 4, 2021 Meeting Minutes: Wheeler made a motion to approve the minutes of the October 4, 2021 meetings, Trew seconded the motion. Motion passed.

AGENDA

Item #3 Copper Creek 2-5/Meritage Homes: Requests recommendation to the City Commission for acceptance of public improvements with a one-year maintenance bond. Planning staff to define final improvement completion status.

Item Representative: N/A

Staff Discussion:
-Detention ponds clean out and final stabilization is ongoing. Contractor expects work to be completed weather permitting within two (2) weeks.
-Sidewalk and curb repairs work has been awarded to a new subcontractor. Work has started on the repairs.
-Final paving of section 2-5 the paving contractor is expected to complete binder repairs and asphalt surface the first two (2) weeks of November.
-Staff would recommend approval with a $ 47,000 one-year maintenance bond with completion of the remaining improvements.

Motion: Motion by Parnell to approve the request, seconded by Hitt. The motion passed unanimously.

Item #4 Villas at Highland Park/TTL/Sage Legacy, Developer: Request preliminary master plan approval for 133 townhouse units on 19.12 acres on Dickerson Road. The plan includes the addition of a 1.2-acre property on Dickerson Road zoned CPUD, Commercial Planned Unit Development that does not include any residential units. Planning Commission at the April 27, 2020 meeting recommend approval

to the City Commission to rezone the 19.12 acres from A, Agricultural to HDRPUD, High Density Residential Planned Unit Development. Properties referenced as Davidson County Tax Map/Parcels#02500006000, 0250021900, 0250021800, and 02500006200. Property Owners: Thomas and Tammy Cox and Robert and William Burton (#9- 21) (*Deferred at October 4, 2021 Meeting*)

Item Representative: George Grundler, Sage Legacy LLC

Staff Discussion:

-After the Planning and Zoning Commission meeting on October 4, 2021, a Planning Commission Study Session was conducted on October 18th, 2021 to discuss the project site design.
-The project plan has been flipped with reduced project setbacks along the south property line.
-The number of proposed units 132.
-The plans include a revised list of permitted commercial uses for the proposed frontage commercial area excluding drive thru lanes, car washes and fuel pumps, and live outside music venues associated with restaurants.
-The building architectural design revised to reflect the City's Design Guideline of fifty (50%) percent brick or stone with a Hardi board mixture on all exterior elevations.
-The City Commission at the July 23, 2020 meeting approved the rezoning ordinance on first reading only with the project guidelines.
-Items and comments discussed at the October 18th, 2021 Planning Commission Study Session
-Staff would recommend approval with the following stipulations being included on plans referenced in stipulation items.
-Stipulation-Submitted with revised preliminary master plans submitted to the City Commission. Revised building design information including increasing the one car garage dimension to twelve (12') feet x twenty-two (22') feet and Planning Commission's determination on revised design including all two (2) story units versus a mixture of one and two (2) story units per original guidelines. If Planning Commission determines the proposed two (2) story townhouse design will be recommended, then staff recommends submittal of revised building designs to provide variety in roof lines and building designs as discussed at the October 18th study session.
-Stipulation-Revise loop roadway and unit design with final master to ensure the rear parking for units backing up to roadway include sufficient dimension for off-street parking
-Stipulation-Restrictive covenants submitted with final master plan to include statement of for-sale units.
-Stipulation-Drainage and engineering site grading design review with final master plan to ensure storm water quality and quantity design are routed into engineered sized detention facilities with revised plan layout.
-Stipulation-The design of the proposed sidewalks and roadways included in the proposed public rights-of-ways to be reviewed with final master plan to ensure the designs meet the City's Street Design standards regarding sidewalk location in relation to curbs and two (2) lane-twenty-four (24') feet minimum street widths.

Planning Commission Discussion:

-Espinosa thanked everyone who attended and participated in the Planning Commission Study Session.
-Grundler discussed the flipped site design and new conceptual plan

-Grundler discussed the benefits of flipping the site design, increasing the space between future homes and adjacent properties, additional green and open space, increased landscaping and greenery buffer adjacent to the conservation easement.
-Grundler discussed a landscaping island and a walkable pedestrian community
-Glen Garrett-resident 107 Roanoke Dr.- discussed the flipped design being a better transition with the adjacent residential properties but thinks the density is still too high
-Garrett shared his thoughts with the development being spread over the entire area including the commercial property in front
-Garrett discussed landscaping better than a fence for multiple reasons
-Trew asked Garrett what type of landscape buffer he would like to see in the area
-Garrett discussed natural barriers and evergreens
-Grundler explains with the new conceptual plan there are additional landscaping pods added and along the front of conservation easement landscaping will be installed
-Hitt asked if the commercial property was now part of the proposal and how that improves the site
-McCormick responded it is part of the proposal and explains the 1.2 acres defined uses for commercial area
-Duncan asked for clarification of commercial property use (i.e., real estate office, engineering firm)
-McCormick responded and discussed general business would be permitted for commercial use
-Tinnin discussed his concern with the density, one- and two-story appearance looking like apartments
-Grundler explained they will submit a final construction drawing as part of the construction approval process as required
-Espinosa shared concern with the density and number of units
-Grundler discussed the zoning of 133 units, and they are planning 132 on the 19.12 acres
-Tinnin asked McCormick how they will proceed with the existing approval for one- and two-story units
-McCormick responded it would be an amended ordinance going to City Commission for second reading
-Ellis discussed the City Commission first reading ordinance and the one- and two-level units
-Freeman explains the City Commission will need to make an amendment to the ordinance

Motion: Duncan made a motion to approve the request with stipulations referenced in meeting, seconded by Whittaker. Parnell abstained. Roll call vote completed. The motion passed 5-3.

Item #5 Planning and Development Services Staff: Requests an amendment of the City's Comprehensive Land Use Plan to change an area designation from residential low density to high density residential for the requested rezoning and preliminary master for properties on Dickerson Road as referenced in Item#4. (*Deferred at the October 4th Meeting*)

Staff Discussion:

-The Planning Commission at the June 5, 2020 meeting held a public hearing to discuss the amendment. The amendment was deferred until a preliminary master plan was submitted for the project.
-The amendment area is adjacent to a Commercial Development classification and an existing apartment complex.
-The Comprehensive Plan amendment is needed to support the High Density Residential Planned Unit Development rezoning proposal.

Motion: Duncan made the motion to approve, seconded by Hitt. Parnell abstained. Roll call vote completed. The motion passed 8-0.

Item #6 Advanced Care Medical/CESO, Inc/American Development Partners: Requests site plan approval for a 3,550 sq. ft. medical office facility on 1.05 acres at the corner of Long Hollow Pike/SR 174 and Loretta Drive. Property is referenced as Sumner County Tax Map/Parcel# 143JG00400 and is zoned CPUDL, Commercial Planned Unit Development Limited. Property Owner: Seeley Wallis Investments LLC (#11-21)

Item Representative: Kelly Hiett, CESO, Inc.

Staff Discussion:

-The site plan includes the site development of the Caldwell Square/Publix Center out-lot at the corner of Long Hollow Pike/ SR-174 and Loretta Drive.
-The site development access includes the shared Long Hollow Pike access point and internal access.
-The building design includes materials and colors to match the center design and a section of decorative siding.
-Staff would recommend approval with applicant complying with the revised consultant engineer comments regarding storm water and utility design prior to permit issuance

Planning Commission Discussion:

-Parnell asked about signage for building elevations
-Hiett explains still working with the sign vendor, but they will meet the City's Design sign requirements
-McCormick responded and discussed the proposed building signage
-Trew discussed the fence in back of the building

Motion: Duncan made the motion to approve the request, seconded by Tinnin. The motion passed unanimously.

Item #7 Dry Creek Townhomes/Wamble & Associates/Gallardia Properties: Request preliminary master plan approval for thirty-seven (37) townhouses on 11.00 acres on Dry Creek Road. Property is referenced as Davidson County Tax Map/Parcel# 03300020500 and is zoned HDRPUD, High Density Residential Planned Unit Development. Property Owner: Gallardia Properties, LLC (#12-21)

Item Representative: Danny Wamble, Engineer, and Clay Cauble, Vastland Co.

Staff Discussion:

-The property is currently zoned HDRPUD, High Density Residential Planned Unit Development.
-Staff would recommend approval with following stipulations:
-Stipulation - provide sewer availability letter from City of Goodlettsville Public Works- currently in review stage
-Stipulation - at final master plan provide revised building elevations (instead of photos submitted) to reflect compliance with the City's Design Guideline requirements.

-Staff discussed the proposal for 50% brick, 45% hardi-board (type) and 5% vinyl accents and issue with vinyl but with limited percentage and recent state law addressing this would not be problem in limited instances.

Planning Commission Discussion:
-Wamble agrees and accepts conditions for approval.
-Wamble discussed the density allowed for the development
-Duncan asked if the units are for individual own with a HOA or rentals
-Wamble explains the plan of development is for units to be sold and a HOA established
-Parnell asked if units are identical to Dry Creek Commons
-Cauble discussed the difference in Dry Creek Commons and Dry Creek Townhomes

Motion: Wheeler made a motion to approve the request with stipulations referenced in meeting, seconded by Trew. The motion passed unanimously.

Item #8 Vintage Northcreek Phase Two/Ragan Smith/Jason Philips-Vintage Northcreek LLC: Request recommendation to the City Commission to rezone 2.26 acres on North Creek Boulevard from CPUD, Commercial Planned Unit Development to HDRPUD, High Density Residential Planned Unit Development preliminary master plan approval for seventy-six (76) apartment units and a one-acre commercial lot. Property is referenced as Davidson County Tax Map/Parcel# 01914001900. Property Owner: LNS Development Tennessee General Partnership (#13-21)

Item Representative: Matt Lackey, PE and Jason Phillips, Developer

Staff Discussion:
-The development proposal is an expansion of the recently completed Vintage Northcreek Apartment complex.
-The design includes maintaining a one-acre commercial frontage lot along North Creek Boulevard. At this time the commercial development is preliminary without defined commercial tenants. Similar to the review and approval process of the existing complex, the proposal is being developed per the increased residential density provision in the Zoning Ordinance-Planned Unit Development section.
-The increased density is permitted when a project is a mixed used development or included in a commercial setting. Also, like the review and approval process of the existing complex, the proposal is being reviewed consistent with the Comprehensive Land Use Plan Commercial Development Designation due to the mixed-use project setting. The project density for both the existing section and proposed phase two is based on the combined acreage of lots two (2), three (3), five (5), and six (6) including a total of 203 units on 16.13 acres.
-Staff would recommend approval with the stipulation that staff's approval of the two (2) lot subdivision plat is subject to City Commission approval of rezoning and preliminary master plan.

Planning Commission Discussion:
-Trew asked if there is access behind Kroger
-McCormick responded in addition to the access behind Kroger there are multiple access points to the property
-Duncan questioned traffic during the development of Lot 3

-Lackey discussed the joint access easement would be constructed per staff expectations with Lot 7 to access 4-way stop
-Parnell questioned the mitigation measures for this area
-McCormick responded and discussed the FEMA map amendment for the property
-Lackey discussed the letter for a map amendment removing the area from flood plain
-Parnell discussed the need of a City wide ordinance for mitigation for future areas
-McCormick responded and discussed the FEMA ordinance, storm water ordinance, and flood plains, and floodways.
-McCormick revised stipulation that final plat for two (2) lot could be approved as minor staff approval prior to City commission is agreed upon by both property owners.

Motion: Tinnin made a motion to approve the request with stipulation referenced in meeting, seconded by Duncan. The motion passed unanimously.

Item #11 Zoning Ordinance Amendment-Planning Staff: Request recommendation to the City Commission to amend the Zoning Ordinance Section 14-208 Supplementary District Regulations (o) Temporary Use Permits to replace ordinance with an updated section including revised review and approval process.

Staff Discussion:
-The proposed amendments are to update the existing regulations including more defined limitations, review and approval process, and additional uses.
-The Board of Zoning Appeals and Sign Appeal's review of new temporary uses is proposed to be limited to major uses in residential zoning districts or major uses within 500 feet of residential zoning districts.
-Staff presented the proposed major and minor "Temporary Use Permit" ordinance section

Planning Commission Discussion:
-Freeman asked how the decision for Item (ix) Farmers Market (i.e., farmers selling cheese for 30 days) but you can sell Christmas trees for 60 days and how other example ordinances were different
-McCormick responded and discussed Item (vii) Christmas Tree/Holiday Merchandise Sale and (ix) Farmers Market and that Farmers Market could be included in food sales
-Trew asked how the City benefits from temporary use permits (i.e., fireworks stand, farmers markets)
-McCormick responded and discussed the opportunities for different type of businesses in the community for residents

Motion: Tinnin made a motion to approve the request, seconded by Hitt. The motion passed unanimously.

Item # 12 Zoning Ordinance Amendment-Planning Staff: Request recommendation to the City Commission to amend the Zoning Ordinance Section 14-202 Use Classification (6)(c) Auto Repair and Cleaning Establishments and (h) Convenience Commercial to add automated car washes in the convenience commercial classification.

Item Representative: Galyna Saltkovska

Staff Discussion:

-The existing car wash at 155 Long Hollow Pike is proposed to be demolished and replaced with a fully automated car wash including a coffee shop.
-The property is zoned CPUD, Commercial Planned Unit development which does not permit auto repair uses including car washes. The existing carwash use is a legal non-conforming use.
-Staff discussed with the applicant that per the State's Non-Conforming Zoning Use provisions that they can demolish and rebuild but they wanted their proposed use to not have any non-conforming issues and discussed a possible property rezoning.
-The City in 2020 amended the Zoning Ordinance to remove auto service and sales uses from the CPUD zoning.
-The auto repair and cleaning use was not included in recent amendment since it was already prohibited in the CPUD zoning district.
-The rezoning request would require either the CS, Commercial Services or CG, Commercial General zoning which neither zones are adjacent to the property.
-Staff discussed an option to review a Zoning Ordinance amendment instead of a rezoning request due to either the CS or CG zoning in this location could be considered a spot zoning.
-The proposed amendment is to include automated car washes similar to the convenience commercial-fuel service use only within the CPUD zoning districts.

Planning Commission Discussion:

-Espinosa asked for clarification on Zoning Ordinance section "Convenience commercial"
-McCormick responded and discussed the amendment to the "Convenience commercial" section
-Parnell asked for explanation of square footage limitations
-McCormick discussed the ordinance square footage in the "Convenience commercial" section

Motion: Trew made a motion to approve the request, seconded by Wheeler. The motion passed unanimously.

Item #13 Zoning Ordinance Amendment/ Planning and Development Services Staff: Request recommendation to the City Commission to the amend the Zoning Ordinance Section 14-209 Floodplain Districts to incorporate the updated Davidson County Flood Insurance Rate Maps (FIRM) and Flood Insurance Study report (FIS) set to be effective February 25, 2022 and other sections of the ordinance to incorporate the updated sections of the State of Tennessee Model Flood Hazard Protection Ordinance

Staff Discussion:
-The amended model ordinance is to incorporate the Davidson County revised FEMA flood maps and associated flood studies in the City's Zoning Ordinance.
-The maps and flood studies will be effective February 25, 2022.
-The amended ordinance is the model ordinance provided by the State of Tennessee Flood Plain Coordinator

Motion: Hitt made a motion to approve the request, seconded by Parnell. The motion passed unanimously.

Item #14 Planning and Development Services Staff: Request recommendation to the City Commission to amend the Zoning Map to align the R-10, Medium Density Residential, CSL, Commercial Services Limited, and CCO, Commercial Overlay zoning districts with the rear property line at 115 Hollywood Street

Staff Discussion:
-The property owner at 115 Hollywood Street discussed during recent discussion regarding fence and landscape buffer with the adjacent project at 120 Rivergate Drive that the property lines and dimensions were recently amended between the two (2) property owners.
-The amendment is to relocate the area zoning boundaries to align with the revised property lines.
-The owner at 115 Hollywood Street discussed the need to have the zoning boundaries consistent with the new property line dimesons due to concerns with possible property tax assessments issues.
-Staff discussed with the property owner the request would be administered by City Staff to the Planning Commission and City Commission.
-Parnell discussed the zoning districts in the area

Motion: Tinnin made a motion to approve the request, seconded by Duncan. The motion passed unanimously.

DISCUSSION ITEMS:

McCormick reminded the members of the TAPA training on Friday November 5th presented in zoom format. The training is free and will be recorded for those who can't make the live session.

Espinosa opened the Public Forum on Planning Related Topics

No one requested to speak at the meeting the public forum was closed.
Trew made a motion to close the public forum, seconded by Hitt.

Espinosa thanked everyone for their work and attending the study session for Item #4.

With no further business, the meeting adjourned at 7:00 pm.

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Tony Espinosa, Chairman Sharon Reed, Planning Assistant

DRAFT

SITE DATA

OWNER:	TINNIN, TIMOTHY & SHELLEY
ADDRESS:	0 LORETTA DRIVE , GOODLETTSVILLE, TN 37070
COUNTY:	SUMNER
DISTRICT:	11
PARCEL ID:	140 084.09 000
OVERALL LOT SIZE:	56.27 AC (2,451,121 SF)
B&T LANDSCAPE LOT SIZE:	16.08 AC (700,275 SF) (CONDITIONAL USE AREA)
ZONING:	R40
CONDITIONAL USE:	PLANT & FOREST NURSERY/ R40
MAX F.A.R:	.25
PROPOSED F.A.R:	.027
(PRINCIPAL & ACCESSORY STRUCTURES)	
MAX BLDG HEIGHT:	35'
PROPOSED BLDG HEIGHT:	OFFICE - N/A - 35' MAX'
	MECHANIC SHOP - N/A - 35' MAX'
	STORAGE BLDGS - N/A - 35' MAX'
PARKING PROVIDED:	48 SPACES (INCLUDES 1 ADA VAN AND 1 ADA STANDARD SPACE)
(+/- 40 EMPLOYEES + OFFICE GUEST PARKING)	

SETBACKS/ YARD REQUIREMENTS

FRONT: 50'
SIDE: 20'
REAR: 40'

SITE PLANS
FOR
B & T LANDSCAPING
SHELLEY & TIM TINNIN

CONTACTS

OWNER/DEVELOPER
SHELLEY & TIM TINNIN
2007 BAKER ROAD
GOODLETSVILLE, TN 37072
tinnifamily@comcast.net

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LAWRENCE J. KILGORE
RAGAN SMITH
315 WOODLAND STREET
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HEATHER GRIMES
COMPANY LANDSCAPE
315 WOODLAND STREET
NASHVILLE, TN 37206
(615) 244-8591
hgrimes@ragansmith.com

UTILITY PROVIDERS

WATER
WHITE HOUSE UTILITY DISTRICT
3303 US-31W
WHITE HOUSE, TN 37188
(615) 672-4110

SEWER
CITY OF GOODLETTSVILLE
215 CARTWRIGHT STREET
GOODLETTSVILLE, TN 37072
(615) 859-2740

ELECTRIC
NASHVILLE ELECTRIC SERVICE
1214 CHURCH ST.
NASHVILLE, TN 37246
(615) 736-6900

LOCATION MAP
NOT TO SCALE

INDEX OF SHEETS

SHEET	DESCRIPTION
CVR	COVER SHEET
CIVIL PLANS	
C0.1	CIVIL NOTES
C1.0	SITE PLAN
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C2.1	INTERMEDIATE EPSC PLAN
C3.0	GRADING AND DRAINAGE PLAN
C4.0	UTILITY PLAN
C5.0	BIORETENTION DETAILS
C5.1	BIORETENTION DETAILS
C5.2	DETENTION POND DETAILS
C5.3	EROSION CONTROL DETAILS
C5.4	SITE DETAILS
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C5.6	WATER DETAILS
C5.7	SEWER DETAILS
C5.8	BRIDGE DETAILS
C5.9	BRIDGE DETAILS
C5.10	BRIDGE DETAILS
C5.11	BRIDGE DETAILS
C5.12	BRIDGE DETAILS
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L0.0	EXISTING TREE INVENTORY
L1.0	OVERALL LANDSCAPE PLAN
L2.0	BIORETENTION LANDSCAPE PLANS
L3.0	LANDSCAPE NOTES, SCHEDULES, & DETAILS
ARCHITECTURAL PLANS	
A1.0	ARCHITECTURAL IMAGERY

GOODLETTSVILLE, TENNESSEE

RaganSmith
Nashville - Murfreesboro - Chattanooga
ragansmith.com

LAWRENCE J. KILGORE
REGISTERED ENGINEER
AGRICULTURE
No. 109400
STATE OF TENNESSEE
2021.11.29

B & T LANDSCAPING
FOR
SHELLEY & TIM TINNIN
GOODLETTSVILLE, TENNESSEE

Scale: NTS
Date: NOVEMBER 8, 2021
Approved By: L.J. KILGORE
Revisions:
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Drawing Title:
COVER

Drawing No.
CVR

Project No.
21-0127

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

G:\21-0127\CIVIL ENGINEERING\PLAN SHEETS\21-0127 COVER.DWG
PLOTTED BY: JEFF MCKENNEY ON: 11/29/2021 1:31 PM LAST UPDATED BY: TYSCHER ON: 11/29/2021 10:53 AM

RSA STANDARD NOTES

SITE GENERAL NOTES

1. The contractor shall verify the location of all existing utilities in the proximity of the construction area and report any discrepancies to the owner's representative prior to beginning work.
2. The contractor shall conform to all local, state and federal codes and obtain all permits prior to beginning work.
3. The contractor shall check all finished grades and dimensions and report any discrepancies to the owner's representative prior to beginning work.
4. Dimensions are to the face of curb, edge of concrete and face of building unless noted otherwise.
5. Proposed building footprint is for graphic purposes only. Contractor shall use the current architectural drawings for building stakeout and verify that there are no discrepancies with these plans.
6. All traffic markings shall conform to the manual of uniform traffic control device (MUTCD). All pavement marking shall be thermoplastic unless directed otherwise by the owner's representative.
7. All handicap ramps, parking spaces and accessible routes shall comply with the current ADA requirements.
8. Exterior door landings shall be provided per the local building code. Contractor shall coordinate door locations and adjacent sidewalk/landing grades with these plans and report any discrepancies to the owner's representative.
9. Maintain one set of as-built drawings on the job site for distribution to the architect/engineer upon completion: include detention pond topo, all utility locations, and all new sidewalk ramps. elevations for all sanitary and storm sewer structures shall be included, drawings shall include vertical and horizontal information on all new utilities as well as existing utilities discovered during construction. final drawings shall be produced and stamped by licensed surveyor.
10. Provide a smooth transition between existing pavement and new pavement. Field adjustment of final grades may be necessary. Install all utilities prior to installation of pavement.

SITE CONSTRUCTION NOTES

1. The necessary permits for the work shown on these site development plans will be obtained by the contractor prior to commencement of any work on this project. The contractor shall give all necessary notices and obtain all permits and pay all fees involved in securing said permits. He shall also comply with all city, county and state building laws, ordinances or regulations relating to the construction of the project.
2. The contractor shall be responsible for and shall bear all expenses of field staking necessary for site and building layout. All layout shall be performed in accordance with the site layout plan.
3. The location of existing piping and underground utilities, such as water and gas lines, electrical and telephone conduits, etc., as shown on this portion of the plans have been determined from the best available information by actual surveys, or taken from the records and drawings of the existing utilities. However, the civil engineer does not assume responsibility that, during construction, the possibility of utilities other than those shown may be encountered or that actual location of those shown may vary somewhat from the location designated on this portion of the plans. In areas where it is necessary that the exact locations of underground lines be known, the contractor shall, at this own expense, furnish all labor and tools to either verify and substantiate or definitively establish the location of the lines.
4. The contractor must understand that the work is entirely at his risk until same is accepted and he will be held responsible for its safety by the owner. Therefore, the contractor shall furnish and install all necessary temporary works for the protection of the work, including barricades, warning signs, and lights.
5. The site development portion of this project will be subject to the inspection and final approval of the local planning, codes, water and sewer departments (and/or utility districts), engineering/public works departments and fire marshal's office.
6. If, during the construction of the site development portion of this project, a question of intent or clarity arises from either the plans or specifications, the contractor will immediately bring the matter to the attention of the civil engineer or owner's representative for resolution before the affected work items are initiated or pursued further.
7. The contractor will exercise extreme caution in the use of equipment in and around overhead and/or underground power lines. If at any time in the pursuit of this work the contractor must work in close proximity of the above-noted lines, the electric and/or telephone companies shall be contacted prior to such work and the proper safety measures taken. The contractor should make a thorough examination of the overhead lines in the project area prior to the initiation of construction.
8. The contractor shall be responsible for any damage done to the premises or adjacent premises, or injuries to the public during the construction of the work, caused by himself, his subcontractors, or the carelessness of any of his employees.

DEMOLITION NOTES

1. The contractor will be required to remove all excavated materials and such items shall become the property of the contractor. All items shall be properly disposed of at an off-site location. The contractor shall outline any and all possible haul routes and shall be prepared to submit such to the local jurisdiction public works department, the civil engineer and other authorities for approval.
2. If, at any time, prior to or during the demolition work, hazardous material is encountered, the contractor shall notify the owner's representative and appropriate governmental agency.
3. The contractor shall notify adjacent owners of work that may affect their property, potential noise, utility outage or disruption. Such operations shall be conducted by the contractor with minimum interference to adjacent owners. Adjacent egress and access shall be properly maintained at all times. Do not close or obstruct any roadways, parking or sidewalks without permission from the adjacent owners or the local jurisdiction public works department.
4. Prior to the commencement of demolition/grading operations, all overhead and underground utilities shall be located. All removal and/or relocation of utilities shall be coordinated with the respective utility companies.
5. The contractor will provide all necessary protective measures to safeguard existing utilities from damage during construction of this project. In the event that special equipment is required to work over or around the utilities, the contractor will be required to furnish such equipment at no additional cost to owner.
6. The contractor will be solely responsible for contacting all affected utilities prior to submitting his bid to determine the extent to which utility disconnections and/or adjustments will have upon the schedule of the work for the project. Some utility facilities may need to be adjusted concurrently with the contractor's operations, while some work may be required 'around' utility facilities that will remain in place. It is understood and agreed that the contractor will receive no additional compensation for delays or inconvenience caused by the utility adjustment.

EROSION PREVENTION AND SEDIMENT CONTROLS

1. All control measures must be properly installed and maintained in accordance with the manufacturer's specifications, TDEC and local standards.
2. Design, inspection, and maintenance of BMPs described and shown on these plans shall be consistent or exceed recommendations contained in the current edition of TDEC's Tennessee erosion control handbook.
3. BMP capacity [sediment traps, silt fences, sedimentation ponds, and other sediment control] shall not be reduced by more than 50% at any given time. if periodic inspections or other information indicates a control has been used inappropriately or incorrectly, the contractor must replace or modify the control for relevant site situations.
4. Where permanent or temporary vegetation cover is used as a control measure, the timing of the planting is critical. planning for planting of vegetation cover during winter or dry months should be avoided.
5. If sediment escapes the permitted area, off-site accumulations of sediment that have not reached a stream must be removed at a frequency sufficient to minimize offsite impacts. The contractor shall not initiate remediation/restoration of a stream without consulting the division first. The NOI general permit does not authorize access to private property. arrangements concerning removal of sediment on adjoining property must be settled by the contractor and adjoining landowner.
6. Litter, construction debris, and construction chemicals exposed to storm water shall be picked up prior to anticipated storm events or before being carried off of the site by wind or otherwise prevented from becoming a pollutant source for storm water discharges. After use, materials used for EPSC should be removed or otherwise prevented from becoming a pollutant source for storm water discharge.
7. Erodible material storage areas (including overburden and stockpiles of soil) and borrow pits are considered part of the site and should be addressed with appropriate bmp's accordingly.
8. Pre-construction vegetative ground cover shall not be destroyed, removed, or disturbed more than 14 days prior to grading or earth moving unless the area is stabilized. contractor shall sequence events to minimize the exposure time of graded or denuded areas. Clearing and grubbing shall be held to the minimum necessary for grading and equipment operation. Existing vegetation at the site should be preserved to the maximum extent practicable.
9. EPSC measures must be in place and functional before moving operations begin and must be constructed and maintained throughout the construction period. Temporary measures may be removed at the beginning of the workaday, but must be replaced at the end of the workday.
10. The following records shall be maintained on or near site: the dates when major grading activities occur; the dates when construction activities temporarily or permanently cease or a portion of the site; the dates when stabilization measures are initiated; inspection records and rainfall records. Contractor shall maintain a rain gauge and daily rainfall records at the site, or use a reference site for a record of daily amount of precipitation.
11. A copy of the SWPPP shall be retained on-site and should be accessible to the director and the public. Once site is inactive or does not have an onsite location adequate to store the SWPPP, the location of the SWPPP, along with a contact phone number, shall be posted on-site. If the SWPPP is located off-site, reasonable local access to the plan, during normal working hours, must be provided.
12. Off-site vehicle tracking of sediments and the generation of dust shall be minimized. A stabilized construction access (a point of entrance/exit to a construction site) shall be constructed as needed to reduce the tracking of mud and dirt onto public roads by construction vehicles.
13. Inspections must be performed at least twice every calendar week. Inspections shall be performed at least 72 hours apart. where sites or portions of construction sites have been temporarily stabilized, or runoff is unlikely due to winter conditions or due to extreme drought, such inspection has to be conducted once per month until thawing or precipitation results in runoff or construction activities resumes. Inspection requirement do not apply to definable areas that have been finally stabilized, as designed by the engineer. Written notification of the intent to change the inspection frequency and the justification for such request must be submitted to the local environmental field office, or the division's Nashville central office for projects of TDOT or TVA. Should the division discover that monthly inspection of the division discover that monthly inspections of the site are not appropriate due to insufficient stabilization measures or otherwise, twice weekly inspections shall resume. The division may inspect the site to confirm or deny the notification to conduct monthly inspections.
14. Inspectors performing the required twice weekly inspections must have an active certification and a record of certification must be kept on site. Based on the results of the inspection, any inadequate control measures or control measures in disrepair shall be replaced or modified, or repaired as necessary, before the next rain event, but in no case more than 7 days after the need identified.
15. Outfall points shall be inspected to determine whether EPSC measures are effective in preventing significant impacts to receiving waters. Where discharge locations are inaccessible, nearby downstream locations shall be inspected. Locations where vehicles enter or exit the site shall be inspected for evidence of offsite sediment tracking.

TREE PROTECTION NOTES

1. 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 by a certified arborist via ANSI A-300-95 standard so as to minimize impact of the general root system.
2. The storage of building materials or stockpiling shall not be permitted within the limits of or against the protection barriers.
3. 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 in such a manner as to endanger the health or life of the affected tree.
4. Tree protection barrier shall be constructed prior to the issuance of any permits and shall remain intact throughout the entire period of construction.

SITE GRADING & STORM DRAINAGE NOTES

1. Erosion control sediment barriers and tree protection barrier shall be installed prior beginning site work.
2. No heavy equipment shall cross or be stored outside the limits of construction, within tree protections zones, or under the drip line of existing trees to remain.
3. Topsoil stripped from areas to be graded shall be stockpiled on site in a location approved by the owner's representative. Drainage shall be routed around stockpile locations for the duration of grading operations. Erosion control measures shall be installed to prevent loss of topsoil material.
4. Prior to beginning construction, contractor shall review geotechnical report.
5. All cut and fill shall be performed under the direction/observation of the geotechnical engineer.
6. The suitability of soils for fill material shall be determined by the geotechnical engineer.
7. Unless directed otherwise by geotechnical engineer, all fill areas shall be raised in lifts not exceeding 8" in thickness. the relative compaction of each layer shall not be less than 95% of the standard proctor maximum dry density (ASTM D-698) in all areas of fill within open areas and 98% of same specification for areas under roads, parking, sidewalks, building slabs, and foundations.
8. All grading shall be completed to the grades indicated within these plans. final grades shall provide proper drainage and prevent standing water.
9. All storm drainage castings to be John Bouchard & Sons Co. or approved equal, unless otherwise noted.
10. All storm drainage pipes to be RCP, Class III, unless otherwise noted.
11. Installation of pipe material shall be placed with a screen stone envelope and when under pavement entire trench to be backfilled with screen stone to subgrade. Size of stone, envelopes, and trenches to be specified by municipalities for public lines and private lines to adhere to common practices for installation requirements.
12. Existing structure castings to remain shall be adjusted to match new grade.

SITE UTILITY NOTES

1. All materials and workmanship for utility lines and appurtenances shall be in strict compliance with the governing utility company and local codes. Prior to construction contractor shall notify utility company. (see utility contact information)
2. Contractor shall coordinate site electrical, gas, telephone, and cable with the respective utility company for service layout and design information. Any proposed layout of these utilities depicted on these drawings is graphical only and not intended to represent design of these utilities.
3. Prior to commencement of construction, contractor shall obtain all permits and pay any required tap and connection fees.
4. All trenching, pipe laying and backfilling shall be in accordance with federal OSHA regulations.
5. Site contractor shall construct all utility services to within 5' of building.
6. Contractor shall be responsible for coordinating the sequencing of construction for all utility lines to avoid conflicts.
7. Contractor shall coordinate size and location of water, sewer and stormwater connections to the building as depicted on the building mechanical plans and the site utility plan and notify the engineer or owner's representative of any discrepancies.
8. Water services lines ¼" - 3" shall be Type-K copper and 4" or larger shall be ductile iron pipe - Class 52 unless otherwise required by utility company.
9. Fire line installation and thrust blocking location and sizing shall be per N.F.P.A. and local fire department requirements.
10. Water meter manufacturer/model number and vault specifications shall be per the water utility company.
11. Backflow device (RPBP/DDCVA) manufacturer/model number shall be per the water utility company.
12. Contractor shall install hot box enclosure (pre-finished dark green) on all exterior above-ground backflow devices. Domestic and fire backflow devices shall be heated. Contractor shall coordinate providing appropriate electrical service to backflow device.
13. Contractor shall coordinate location of backflow device with the building mechanical drawings.
14. Sanitary sewer service lines shall be SDR 35 PVC unless specified otherwise.
15. Maintain a 10' horizontal and 18" vertical separation between sanitary sewer and water lines.
16. All fire line mains to be installed by licensed fire protection contractor.
17. Installation of pipe material shall be placed with a screen stone envelope and when under pavement entire trench to be backfilled with screen stone to subgrade. Size of stone, envelopes, and trenches to be specified by municipalities for public lines and private lines to adhere to common practices for installation requirements.
18. Contact local fire department before locating and installing fire department connection. Location and type subject to change to meet required codes.
19. Coordinate with local utility and/or fire department on approved meter, fire hydrant, reduced pressure backflow preventor, and double detector check valve assembly and vault manufacturers.
20. Detailed water and sanitary sewer plans and shop drawings to be approved by jurisdictional agencies prior to construction.
21. Any existing water or sewer service that will no longer remain active at the completion of construction must be removed and capped at the main. All trench work and paving repair shall comply with current metro public works standards.

GEOTECHNICAL NOTE

1. No geotechnical study has been conducted on this site. However, the design for the site improvements shown on this plan has relied on experience with similar projects and similar soil/site conditions. If, in the pursuit of this work by the contractor, conditions or circumstances are encountered that are different than reflected in these plans or that appear to impact the scope of the work, the contractor will immediately notify the civil engineer, and the owner/developer before any remedial course of action or design change is initiated. All parties (owner, civil engineer, proper governmental agencies, and contractor) must be in agreement and the magnitude of the cost/time required for the measures established.

RSA SPECIAL NOTES

PROJECT SPECIFIC NOTES

1. Contractor to adjust exiting utility castings as necessary.
2. Pavement dimensions shown are from edge of pavement to edge of pavement.
3. This project will be subject to the inspection and final approval of the City of Goodlettsville.
4. Driveways to be replaced with like materials to the tie down locations shown on plans. Any necessary paving of driveways will be done during paving operations on the main roadway.
5. All pay items have been explicitly set forth as such in the proposal; all other items of cost are to be included in the price of the items actually bid upon.
6. Before any clearing/grubbing work is initiated, the contractor and representatives of both architect and civil engineer will "walk-out" the "limit of clear line" and insure that it is clearly marked and visible.
7. The contractor shall make available soils test reports taken during and after the grading operation to show that the compaction requirements have been met. The cost of this report shall be borne by the contractor.

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B & T LANDSCAPING
FOR
SHELLEY & TIM TINNIN
GOODLETTSVILLE, TENNESSEE

Scale: NTS

Date: NOVEMBER 8, 2021

Approved By: L.J. KILGORE

Revisions:

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Drawing Title:

CIVIL NOTES

Drawing No.

C0.1

Project No.

21-0127

HATCH LEGEND:
- EXISTING ASPHALT
- LIGHT DUTY ASPHALT
- HEAVY DUTY ASPHALT
- CONCRETE WALK
- CONCRETE PAVEMENT
- PROPOSED BUILDING
- PROPOSED BUILDING
- GREEN SPACE

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0 50 100

471 BASE FLOOD ELEVATION
470 BASE FLOOD ELEVATION
FLOODWAY AREA IN ZONE "AE"
ZONE "AE"
ZONE "X" (OTHER FLOOD AREAS)
LONG DRIVE
BESSIE LONG SUBDIVISION
PLAT BOOK 26 PAGE 174
R.O.S.C.T.
MARY JOYCE SAMMERS
JENNIFER ANN TRAUGHBER
JOSEPH JONATHAN LONG
DEED BOOK 3177 PAGE 486
R.O.S C.T
MAP 140, PARCEL 084.01
AMON RINGEMANN
ANNA RINGEMANN
RECORD BOOK 4952, PAGE 209
R.O.S.C.T.
MAP 140, PARCEL 084
WAIROA FAMILY HOLD
RECORD BOOK 4738, PAG
R.O.S.C.T.
MAP 140, PARCEL 084.09
BRAXTON PARK AT WOODWYN HILLS, L.L.C.
RECORD BOOK 623, PAGE 69
R.O.S.C.T.
LOTS 1 & 2
S PROPERTY
PAGE 28
PROXIMATE
CL) OF SLATER CREEK
N CL OF CREEK
SLATER CREEK
STREAM
COMMERCIAL / RESIDENTIAL SPLIT
CONDITIONAL USE AREA BOUNDARY

NOTE:
PRIOR TO PROJECT CONSTRUCTION - OWNER TO MEET WITH MILLERSVILLE PUBLIC WORKS TO COORDINATE LONG DRIVE IMPACTS.

- R30.0' / R30.0'
- 3' x 15' TDOT SLAB BRIDGE
- P&T
- 24.0'
- R20.0'
- +/-155'
- HEAVY DUTY ASPHALT PAVEMENT
- R10.0'
- R5.0'
- 9 SPACES @ 9' WIDE
- 10 SPACES @ 9' WIDE
- 18.0'
- 24.0'
- 9.0'
- EMPLOYEE PARKING
- R4.5'
- EXTRUDED CURB (TYP)
- SLIDING GATE (TYP)
- TRENCH DRAIN (TYP)
- OFFICE/GUEST PARKING
- 5' SIDEWALK
- OFFICE
- 60.0'
- 80.0'
- 5.0'
- 60' AVERAGE STREAM BUFFER (MIN. 30' FROM TOP OF BANK)
- 22.0'
- 20.0'
- 10.0'
- CONCRETE DUMPSTER PAD
- 56.5'
- TRUCK PARKING
- CONCRETE PAVEMENT
- 30.0'
- 20.0'
- 50.0'
- 48.0'
- 170.0'
- ABOVE GROUND FUEL TANKS WITH CANOPY
- 50.0'
- 110.0'
- SUPPLIES BUILDING
- SOD STORAGE SPACE
- 56.0'
- 104.0'
- 100.0'
- DIRT STORAGE BUILDING
- 40.0'
- 80.0'
- TREES
- GREEN HOUSES
- 140.0'
- CHAIN LINK FENCE (TYP)
- TERMINATE FENCE AT WALL
- GRAVEL
- GRAVEL PAVEMENT
- LIGHT POLE, TYPICAL
- TERMINATE FENCE AT WALL
- 117.5'
- SHOP
- 24.0'
- 80.0'
- 60.0'
- 68.0'
- WALL PACK LIGHT, TYPICAL
- 45.0'
- MULCH STORAGE BUILDING
- GRAVEL STORAGE BUILDING
- 120.0'
- SUPPLIES BUILDING
- 10.0'
- 100.0'
- 30.0'
- PROPOSED BUFFER AROUND UNCLASSIFIED DRAINAGE
- 250' MINIMUM BUFFER TO EXISTING NEIGHBORHOOD
- TEMPORARY CONCRETE BARRIERS TO BE INSTALLED IN CONFORMANCE WITH THE TERMS OF THE CONDITIONAL USE LETTER
- 60' RIGHT-OF-WAY

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LAWRENCE J. KILGORE
REGISTERED ENGINEER
AGRICULTURE
LICENSE NO. 109405
STATE OF TENNESSEE
2021.11.29

B&T LANDSCAPING

FOR

SHELLEY & TIM TINNIN

GOODLETTSVILLE, TENNESSEE

Scale: 1"=50'

Date: NOVEMBER 8, 2021

Approved By: L.J. KILGORE

Revisions:

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Drawing Title:

SITE PLAN

Drawing No.

C1.0

Project No.

21-0127

G:\21-0127\CIVIL ENGINEERING\PLANSHEETS\1-10 SITE PLAN.DWG
PLOTTED BY JEFF MCKENNEY ON 11/29/2021 1:32 PM
LAST UPDATED BY JMCKENNEY ON 11/29/2021 1:17 PM

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CONSTRUCTION SEQUENCE

* INITIAL EROSION CONTROL MEASURES
* TEMPORARY SEDIMENT BASIN WITH NAG SC150 EROSION CONTROL MATTING INSTALLED ON SIDE SLOPES OF TRAP
* DIVERSION SWALES
* BEGIN GRADING OPERATIONS
* INTERMEDIATE EROSION CONTROL MEASURES
* INSTALL SANITARY SEWER, STORM DRAINAGE AND UTILITIES
* INSTALL ROADS AND REMOVE INLET PROTECTION –
* STABILIZE SLOPES AND SITE, FINAL GRADING AND CONVERT TEMPORARY SEDIMENT BASIN TO DETENTION POND
* ONCE SITE IS STABILIZED, INSTALL BIO–RETENTION PONDS, REMOVE TEMPORARY EROSION CONTROL MEASURES

CAUTION
OVERHEAD POWER LINES
& UNDERGROUND WATER

471 BASE FLOOD ELEVATION

ZONE "X" (OTHER FLOOD AREAS)

ZONE "AE"

LONG DRIVE

BESSIE LONG SUBDIVISION
PLAT BOOK 26 PAGE 174
R.O.S.C.T.

MARY JOYCE SAMMERS
JENNIFER ANN TRAUGHBER
JOSEPH JONATHAN LONG
DEED BOOK 3177 PAGE 486
R.O.S C.T

MAP 140, PARCEL 084.01
AMON RINGEMANN
ANNA RINGEMANN
RECORD BOOK 4952, PAGE 209
R.O.S.C.T.

P&T

1B

470 BASE FLOOD ELEVATION

FLOODWAY AREA IN ZONE "AE"

TEMPORARY SEDIMENT/ DETENTION POND

TEMPORARY CONSTRUCTION ENTRANCE

WIRE BACKED SILT FENCE (TYP)

60' AVERAGE (30' MINIMUM FROM TOP OF BANK) TDEC STREAM BUFFER

SUBDIVISION OF LOTS 1 & 2
THE DEANA GIBBS PROPERTY
PLAT BOOK 16, PAGE 28
R.O.S.C.T.

1

2

3

4

5

SLATER CREEK

ZONE "AE"

ZONE "X" (OTHER FLOOD AREAS)

LIMITS OF DISTURBANCE 9.18 ACRES

60' AVERAGE (30' MINIMUM FROM TOP OF BANK) TDEC STREAM BUFFER

DIVERSION DITCH TO POND

STREAM

LIMITS OF DISTURBANCE 9.18 ACRES

DITCH ON TOP OF WALL

H.P.

COMMERCIAL / RESIDE

MAP
WAIR
RECORD

Know what's below. Call before you dig.

0 50 100

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PLOTTED BY: JEFF MORENNEY ON - 11/29/2021 - 1:32 PM LAST UPDATED BY: JMORENNEY ON - 11/29/2021 1:18 PM

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STATE OF TENNESSEE
2021.11.29

B & T LANDSCAPING

FOR

SHELLEY & TIM TINNIN

GOODLETTSVILLE, TENNESSEE

Scale: 1"=50'

Date: NOVEMBER 8, 2021

Approved By: L.J. KILGORE

Revisions:

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1 2021.11.29 PER CITY COMMENTS

Drawing Title:

INITIAL EPSC PLAN

Drawing No.

C2.0

Project No.

21-0127

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471 BASE FLOOD ELEVATION

ZONE "X" (OTHER FLOOD AREAS)

CAUTION
OVERHEAD POWER LINES & UNDERGROUND WATER

MARY JOYCE SAMMERS
JENNIFER ANN TRAUGHBER
JOSEPH JONATHAN LONG
DEED BOOK 3177 PAGE 486
R.O.S C.T

BESSIE LONG SUBDIVISION
PLAT BOOK 26 PAGE 174
R.O.S.C.T.

LONG DRIVE

ZONE "AE"

INLET PROTECTION (TYP)

TEMPORARY CONSTRUCTION ENTRANCE

MAP 140, PARCEL 084.01
AMON RINGEMANN
ANNA RINGEMANN
RECORD BOOK 4952, PAGE 209
R.O.S.C.T.

3' x 16' TDOT SLAB BRIDGE

DRAINAGE STRUCTURE DESIGNATION SEE TABLES ON SHEET C5.2 (TYP)

RIP RAP APRON

GRAVEL CHECK DAM TOP ELEV. 477.0

BIO-DETENTION POND #2

SILTATION TUBE AROUND BIO-RETENTION (TCP-14)

470 BASE FLOOD ELEVATION

FLOODWAY AREA IN ZONE "AE"

TEMPORARY SEDIMENT/ DETENTION POND

SILTATION TUBE AROUND BIO-RETENTION AREA (TCP-14)

3' CURB CUT

FOREBAY

WIRE BACKED SILT FENCE (TYP)

BIO-DETENTION POND #3

BIO-DETENTION POND #1

OFFICE

STREAM BUFFER

FOREBAY

GRAVEL CHECK DAM TOP ELEV. 477.0

TRENCH DRAIN

TRENCH DRAIN

FOREBAY

GRAVEL CHECK DAM TOP ELEV. 479.0

SILTATION TUBE AROUND BIO-RETENTION (TCP-14)

STREAM

SLATER CREEK

ZONE "AE"

ZONE (OTHER FLOOD AREAS)

SHOP

STREAM BUFFER

LIMITS OF DISTURBANCE
9.18 ACRES

COMMERCIAL / RESIDENTIAL SPLIT

DIVERSION DITCH ON TOP OF WALL

PRE-SPLIT WALL (BY OTHERS)

MAP 140, PARCEL 084.09
BRAXTON PARK AT WOODWYN HILLS, L.L.C.
RECORD BOOK 623, PAGE 69
R.O.S.C.T.

APPROXIMATE
ERLINE (CL) OF SLATER CREEK
POINTS IN CL OF CREEK

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No. 109405
STATE OF TENNESSEE
11.11.21

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FOR

SHELLEY & TIM TINNIN

GOODLETTSVILLE, TENNESSEE

Scale: 1"=50'

Date: NOVEMBER 8, 2021

Approved By: L.J. KILGORE

Revisions:

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Drawing Title:

INTERMEDIATE EPSC & GRADING PLAN

Drawing No.

C2.1

Project No.

21-0127

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PLOTTED BY JEFF MCKENNEY ON 11/09/2021 1:32 PM LAST UPDATED BY JKILGORE ON 11/09/2021 11:55 AM

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0 50 100

STABILIZE SLOPES 3:1 OR GREATER WITH NA GREEN SC 250 OR APPROVED EQUAL

3' x 15' TDOT SLAB BRIDGE

P&T

DRAINAGE STRUCTURE DESIGNATION SEE TABLES ON SHEET C5.2 (TYP)

OFFICE FFE: 480.5

SHOP FFE: 487

60' AVERAGE STREAM BUFFER

60' AVERAGE STREAM BUFFER

STABILIZE SLOPES 3:1 OR GREATER WITH NA GREEN SC 250 OR APPROVED EQUAL

LIMITS OF DISTURBANCE 9.18 ACRES

COMMERCIAL / RESIDENTIAL SPLIT

PRE-SPLIT WALL (BY OTHERS)

1B

1

2

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LAWRENCE J. KILGORE REGISTERED ENGINEER AGRICULTURE LICENSE NO. 109400 STATE OF TENNESSEE 2021.11.29

B & T LANDSCAPING

FOR

SHELLEY & TIM TINNIN

GOODLETTSVILLE, TENNESSEE

Scale: #"=###'

Date: NOVEMBER 8, 2021

Approved By: L.J. KILGORE

Revisions:

1 2021.11.29 PER CITY COMMENTS

Drawing Title:

FINAL GRADING PLAN

Drawing No.

C3.0

Project No.

21-0127

G:\21-0127\CIVIL ENGINEERING\PLAN SHEETS\21-0127 FINAL GRADING PLAN.DWG
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471 BASE FLOOD ELEVATION

BESSIE LONG SUBDIVISION
PLAT BOOK 26 PAGE 174
R.O.S.C.T.

LONG DRIVE

ZONE "AE"

470 BASE FLOOD ELEVATION

FLOODWAY AREA IN ZONE "AE"

DIVISION OF LOTS 1 & 2
DEANA GIBBS PROPERTY
BOOK 16, PAGE 28
R.O.S.C.T.

ZONE "X"
(OTHER FLOOD AREAS)

ZONE "AE"

SLATER CREEK

APPROXIMATE
CENTERLINE (CL) OF SLATER CREEK
POINTS IN CL OF CREEK

MAP 140, PARCEL 084.09
BRAXTON PARK AT WOODWYN HILLS, L.L.C.
RECORD BOOK 623, PAGE 69
R.O.S.C.T.

MARY JOYCE SAMMERS
JENNIFER ANN TRAUGHBER
JOSEPH JONATHAN LONG
DEED BOOK 3177 PAGE 486
R.O.S.C.T

MAP 140, PARCEL 084.01
AMON RINGEMANN
ANNA RINGEMANN
RECORD BOOK 4952, PAGE 209
R.O.S.C.T.

MAP 140,
WAIROA F.
RECORD BOO
F

CAUTION
OVERHEAD POWER LINES
& UNDERGROUND WATER

INSTALL:
1-12" x6" TAPPING
SLEEVE AND VALVE

LOCATION OF 12" EXISTING WATER LINE
TO BE FIELD DETERMINED PRIOR TO
CONSTRUCTION

3' x 15' TDOT
SLAB BRIDGE

60' AVERAGE (MINIMUM 30')
FROM TOP OF BANK) TDEC
STREAM BUFFER

APPROXIMATE LOCATION OF EXISTING
MANHOLE - LOCATION AND ELEVATION
SHALL BE FIELD VERIFIED PRIOR TO
CONSTRUCTION

INSTALL:
1-FIRE HYDRANT ASSEMBLY COMPLETE
1-6"x2" REDUCER
1-2"x1" TEE
1-1" WATER METER
AND BOX
1-1" IRRIGATION METER
AND BOX+1-1" REDUCED PRESSURE
BACKFLOW PREVENTOR AND
HOT BOX
1-1"x1" TEE

SANITARY SEWER SERVICE
CLEANOUT (TYP)

STREAM

60' AVERAGE (MINIMUM 30'
FROM TOP OF BANK) TDEC
STREAM BUFFER

COMMERCIAL / RESIDENTIAL SPL

PRE-SPLIT WALL
(BY OTHERS)

0 50 100

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REGISTERED ENGINEER
AGRICULTURE
No. 109400
STATE OF TENNESSEE
2021.11.29

B & T LANDSCAPING

FOR

SHELLEY & TIM TINNIN

GOODLETTSVILLE, TENNESSEE

Scale: 1"=50'

Date: NOVEMBER 8, 2021

Approved By: L.J. KILGORE

Revisions:

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Drawing Title:

UTILITY PLAN

Drawing No.

C4.0

Project No.

21-0127

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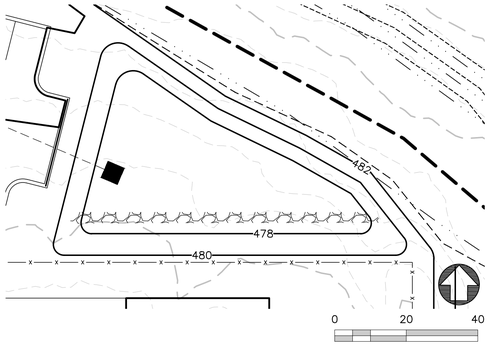

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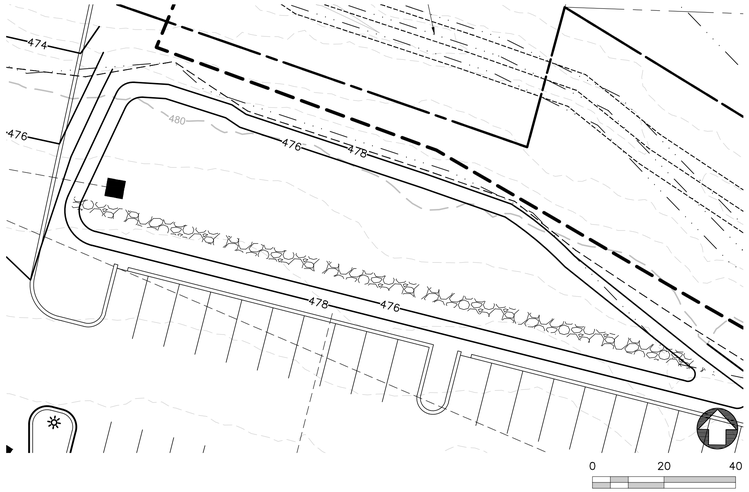

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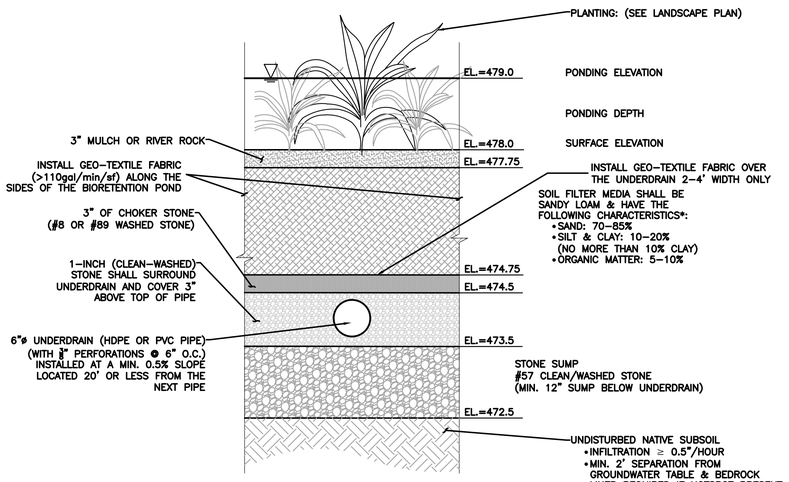
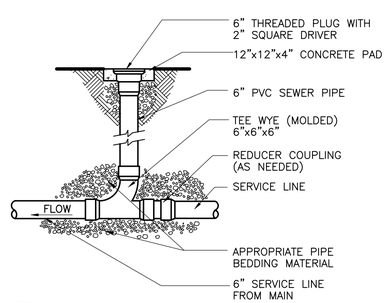


BIORETENTION 1 CROSS-SECTION (GIP-01)-LEVEL 2

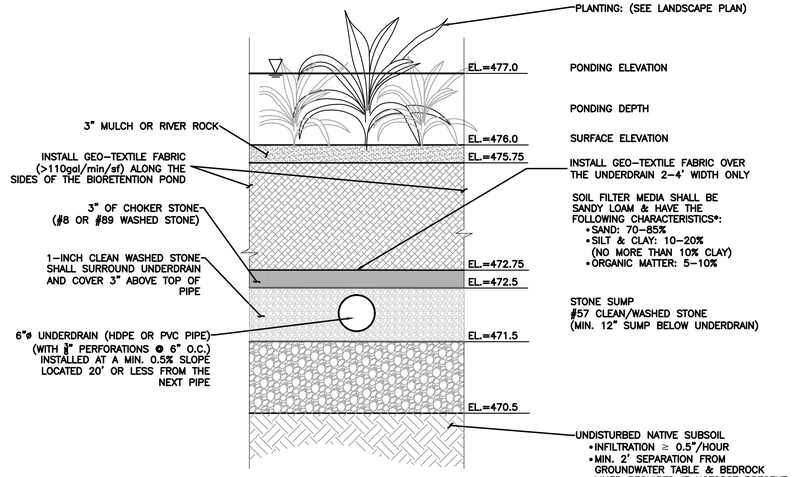
NOT TO SCALE



NOTES:
1. ALL FITTINGS AND LINES TO BE PVC. SOLVENT WELD (SDR-33).
2. WHEN SERVICE LINE FROM MAIN LINE IS 4", ALL FITTINGS AND LINES TO BE 4".

CLEANOUT

NOT TO SCALE

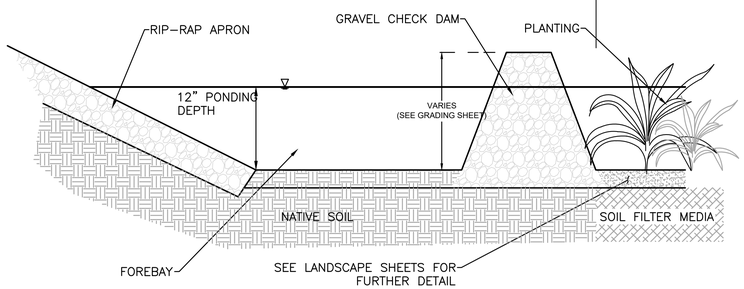


BIORETENTION 2 CROSS-SECTION (GIP-01)-LEVEL 2

NOT TO SCALE

NOTE:

CONTRACTOR, ENGINEER, OR OWNERS REPRESENTATIVE SHALL NOTIFY CITY OF GOODLETSVILLE REVIEW AT LEAST 24 HOURS PRIOR TO INSTALLATION OF THE PLANTING SOIL FILTER BED. AT THE COMPLETION OF INSTALLATION, THE ABOVE REFERENCED PERSON WILL COLLECT ON SAMPLE PER BIORETENTION BED FOR ANALYSIS AND CONFIRMATION OF THE SOIL CHARACTERISTICS AS DEFINED BY GIP-01, FILTER MEDIA AND SURFACE COVER, SECTION 6.6, PAGE 20.



BIORETENTION PRETREATMENT CELL (TYPICAL)

NOT TO SCALE

BIORETENTION AREA NOTES:

1. THE PLANTING SOIL BED MUST BE AT LEAST 3 FEET DEEP.
2. THE MAXIMUM PONDING DEPTH IN THE BIORETENTION IS 12-INCHES.
3. THE RIVER ROCK LAYER MUST CONSIST OF 2-3 INCHES OF RIVER ROCK.
4. THE UNDERDRAIN COLLECTION SYSTEM MUST BE EQUIPPED WITH A 6-INCH PERFORATED PIPE IN AN 12-INCH GRAVEL LAYER. THE PIPE MUST HAVE 3/8-INCH PERFORATIONS, SPACED ON 6-INCH CENTERS WITH A MINIMUM OF 4 HOLES PER ROW. THE PIPE IS SPACED A MAXIMUM OF 10 FEET ON CENTER, AND A MINIMUM GRADE OF 0.5 PERCENT MUST BE MAINTAINED. A PERMEABLE FILTER FABRIC SHALL BE PLACED BETWEEN THE GRAVEL LAYER AND THE PLANTING SOIL BED.
5. THE AREA THAT WILL HOUSE BIORETENTION MUST NOT BE USED AS SEDIMENT CONTROL MEASURE DURING ACTIVE CONSTRUCTION.

RaganSmith
Nashville - Murfreesboro - Chattanooga
ragansmith.com

LAWRENCE J. KILGORE REGISTERED ENGINEER AGRICULTURE No. 109400 STATE OF TENNESSEE 2021.11.29

B & T LANDSCAPING

FOR

SHELLEY & TIM TINNIN

GOODLETTSVILLE, TENNESSEE

Scale: NTS

Date: NOVEMBER 8, 2021

Approved By: L.J. KILGORE

Revisions:

Drawing Title:

BIORETENTION DETAILS

Drawing No.

C5.0

Project No.

21-0127

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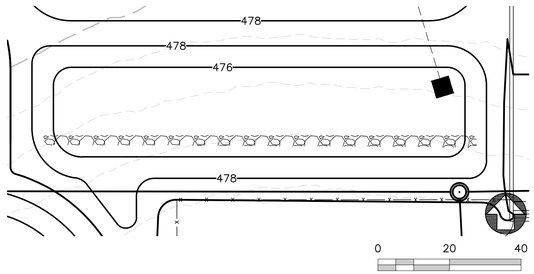

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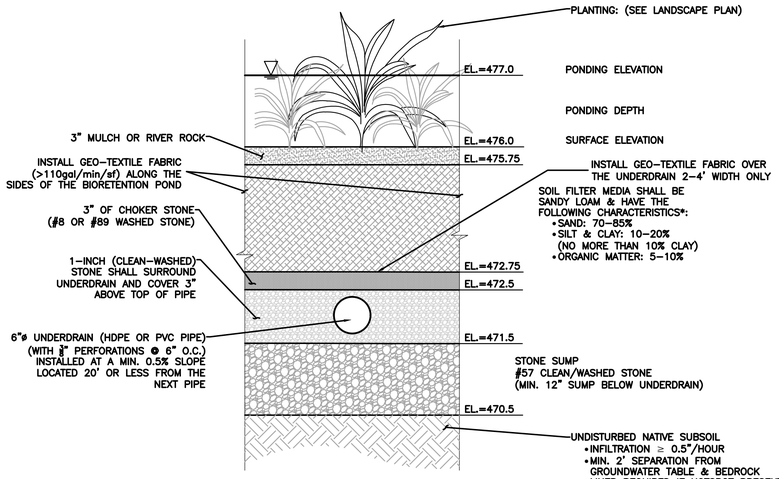
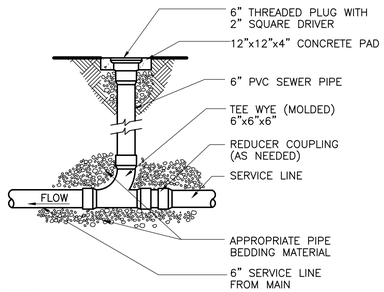


BIORETENTION 1 CROSS-SECTION (GIP-01)-LEVEL 2

NOT TO SCALE



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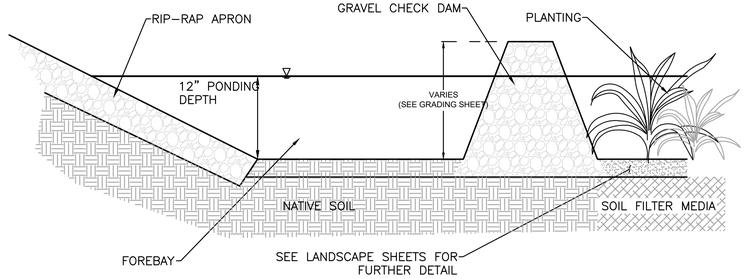

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LAWRENCE J. KILGORE
REGISTERED ENGINEER
AGRICULTURE
No. 108400
STATE OF TENNESSEE
2021.11.29

B & T LANDSCAPING
FOR
SHELLEY & TIM TINNIN
GOODLETTSVILLE, TENNESSEE

Scale: NTS
Date: NOVEMBER 8, 2021
Approved By: L.J. KILGORE
Revisions:
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Drawing Title:
BIORETENTION DETAILS
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Drawing No.
C5.1

Project No.
21-0127

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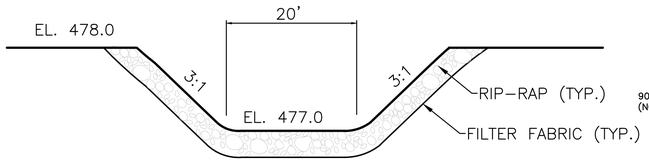
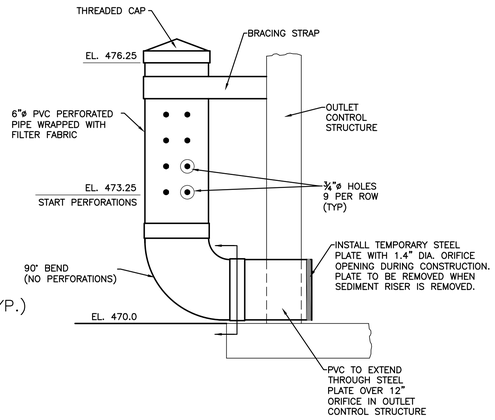


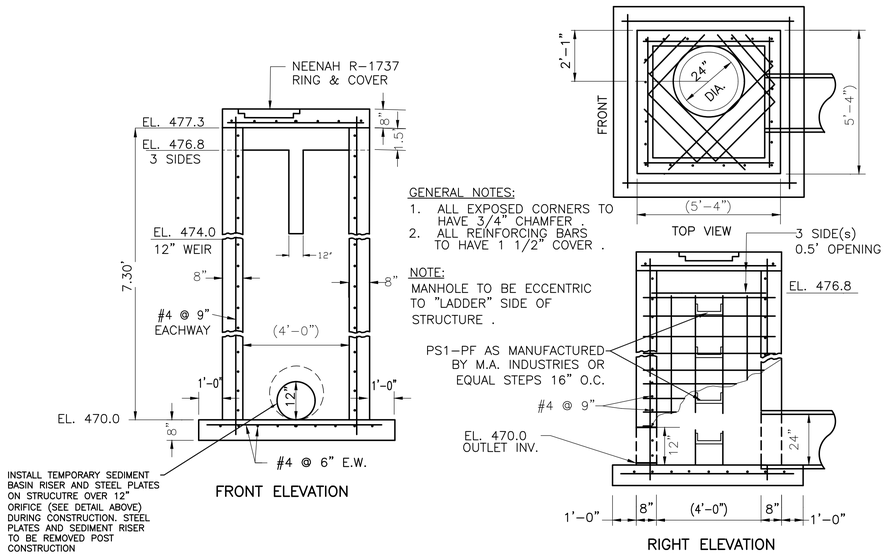
EMERGENCY OVERFLOW SECTION VIEW

NOT TO SCALE



SEDIMENT BASIN RISER DETAIL

NOT TO SCALE



OUTLET CONTROL STRUCTURE DETENTION POND 2

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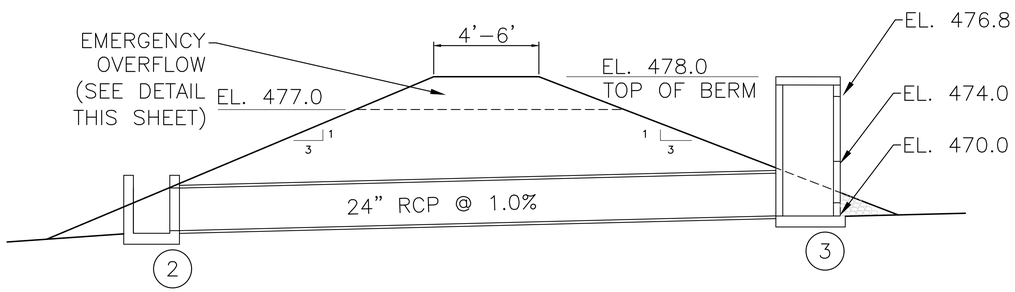

BERM/OUTLET DRAINAGE SECTION DETENTION POND

NOT TO SCALE

DRAINAGE STRUCTURE SCHEDULE				
NO.	TYPE*	CASTING	RIM	INVERTS
Structure – (29)	CONCRETE RECTANGULAR WINGED HEADWALL	REINFORCED CONCRETE	-----	
Structure – (28)	CONCRETE RECTANGULAR WINGED HEADWALL	REINFORCED CONCRETE	-----	
1	RECTANGULAR JUNCTION STRUCTURE NF	3300	471.00	468.00 (2)
2	RECTANGULAR JUNCTION STRUCTURE NF	3300	472.00	468.50 (1) 468.50 (3)
3	RECTANGULAR JUNCTION STRUCTURE NF	3300	478.00	470.00 (2)
4	CONCRETE RECTANGULAR WINGED HEADWALL	---	-----	470.20 (5)
5	CONCRETE RECTANGULAR WINGED HEADWALL	---	-----	470.50 (4)
6	CONCRETE RECTANGULAR WINGED HEADWALL	---	-----	471.50 (7)
7	RECTANGULAR JUNCTION STRUCTURE NF	4310	479.00	474.00 (6)
8	CONCRETE RECTANGULAR WINGED HEADWALL	---	-----	471.50 (9)
9	RECTANGULAR JUNCTION STRUCTURE NF	4310	477.00	472.00 (8)
10	CONCRETE RECTANGULAR WINGED HEADWALL	---	-----	471.50 (11)
11	RECTANGULAR JUNCTION STRUCTURE NF	4310	477.00	472.00 (10)
12	CONCRETE RECTANGULAR WINGED HEADWALL	---	-----	476.00 (13)
13	CONCRETE RECTANGULAR WINGED HEADWALL	REINFORCED CONCRETE	-----	476.75 (12)

PIPE TABLE			
LINE	SIZE/TYPE	LENGTH	SLOPE
1–2	Concrete Pipe	29'	1.70%
2–3	Concrete Pipe	48'	3.12%
4–5	Concrete Pipe	76'	0.39%
6–7	HDPE Pipe	292'	0.86%
8–9	HDPE Pipe	67'	0.75%
10–11	HDPE Pipe	35'	1.42%
12–13	HDPE Pipe	75'	1.00%

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B & T LANDSCAPING
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SHELLEY & TIM TINNIN
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Revisions:

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Drawing Title:

DETENTION POND DETAILS

Drawing No.

C5.2

Project No.

21-0127

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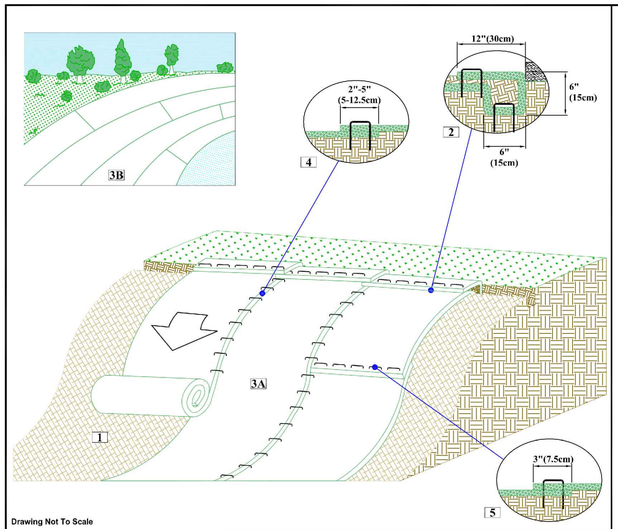


Drawing Not To Scale

SLOPE INSTALLATION DETAIL

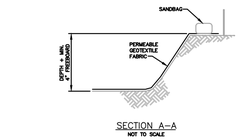
1. Prepare soil before installing rolled erosion control products (RECPs), including any necessary application of lime, fertilizer, and seed.
2. Begin at the top of the slope by anchoring the RECPs in a 6"(15cm) deep X 6"(15cm) wide trench with approximately 12" (30cm) of RECPs extended beyond the up-slope portion of the trench. Anchor the RECPs with a row of staples/stakes approximately 12" (30cm) apart in the bottom of the trench. Backfill and compact the trench after stapling. Apply seed to the compacted soil and fold the remaining 12"(30cm) portion of RECPs back over the seed and compacted soil. Secure RECPs over compacted soil with a row of staples/stakes spaced approximately 12"(30cm) apart across the width of the RECPs.
3. Roll the RECPs (A) down or (B) horizontally across the slope. RECPs will unroll with appropriate side against the soil surface. All RECPs must be securely fastened to soil surface by placing staples/stakes in appropriate locations as shown in the staple pattern guide.
4. The edges of parallel RECPs must be stapled with approximately 2" - 5" (5-12.5cm) overlap depending on the RECPs type.
5. Consecutive RECPs spliced down the slope must be end over end (Shingle style) with an approximate 3"(7.5cm) overlap. Staple through overlapped area, approximately 12"(30cm) apart across entire RECPs width.

*NOTE:
In loose soil conditions, the use of staple or stake lengths greater than 6"(15cm) may be necessary to properly secure the RECP's.

Tensar. NORTH AMERICAN GREEN
5401 St. Wendel - Cynthiana Rd. PH: 800-772-2040
Poseyville, IN 47633 www.tensarnagreen.com

Disclaimer:
The information presented herein is general design information only. For specific applications, consult an independent professional for further design guidance.

Drawn on: 3-16-11



SECTION A–A
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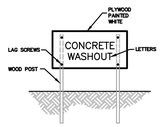
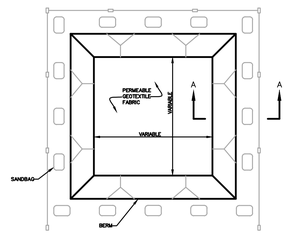


CONCRETE WASHOUT SIGN (OR EQUIVALENT)

SECTION B–B
NOT TO SCALE

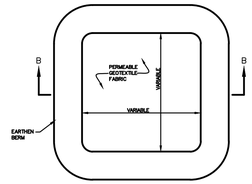


PLAN VIEW
NOT TO SCALE

TYPE "BELOW GRADE"

NOTES:
1. ACTUAL LAYOUT DETERMINED IN THE FIELD.
2. SIGNAGE IDENTIFYING THE CONCRETE WASHOUT AREA SHALL BE INSTALLED WITHIN 5FT.OF THE WASHOUT FACILITY.

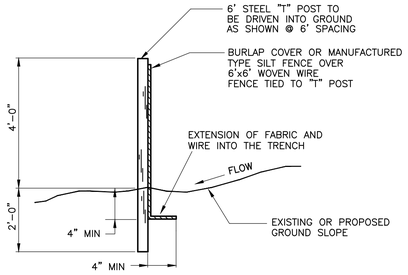
EROSION CONTROL PLAN LEGEND: CONCRETE WASHOUT



PLAN VIEW
NOT TO SCALE

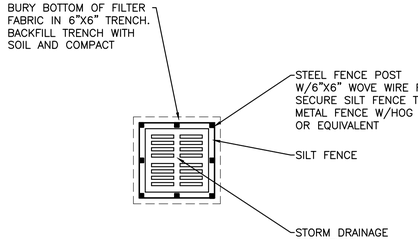
TYPE "ABOVE GRADE" WITH EATHERN BERMS

CONCRETE WASHOUT DETAIL
NOT TO SCALE



TO BE INSTALLED AS NOTED ON PLAN BEFORE COMMENCING GRADING OPERATION AND LEFT IN PLACE UNTIL A GOOD STAND OF GRASS IS ESTABLISHED OVER ALL DISTURBED AREAS.

TCP–13
NOT TO SCALE



INLET PROTECTION W/FABRIC FENCE
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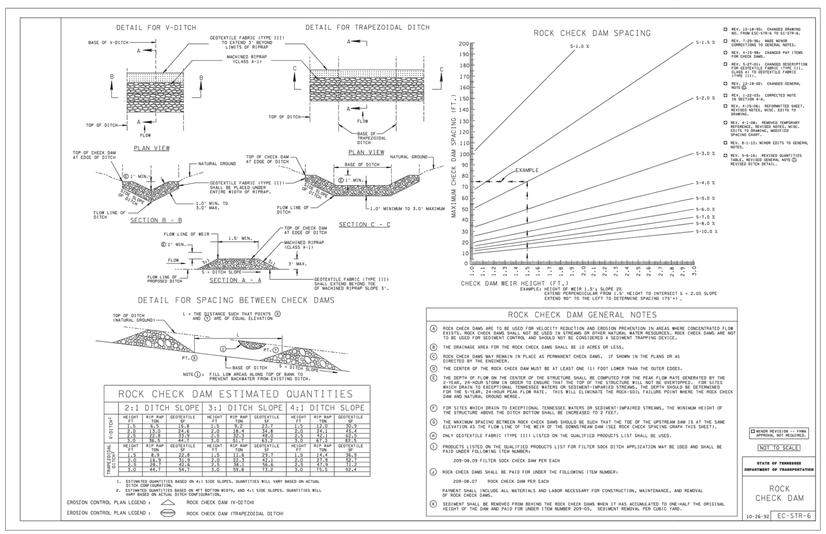
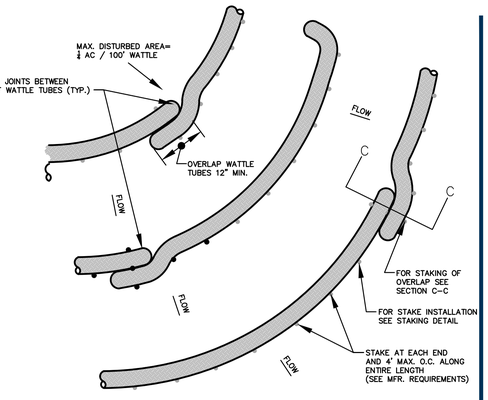
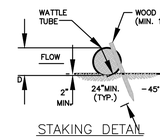
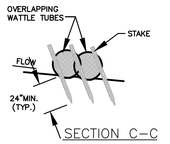




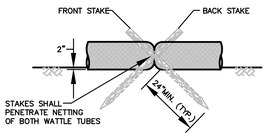
PLAN VIEW FOR SLOPE APPLICATION



STAKING DETAIL



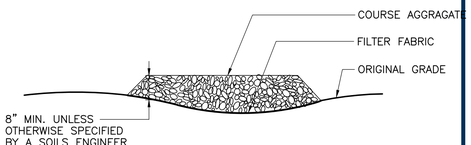
SECTION C–C



JOINT STAKING DETAIL

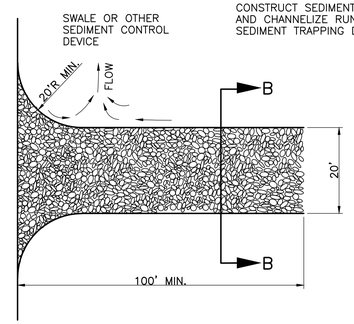
SEDIMENT TUBE (WATTLES) DETAIL
NOT TO SCALE

EROSION CONTROL PLAN LEGEND:



SECTION B–B

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



PLAN

STABILIZED CONSTRUCTION ENTRANCE
METRO FIGURE TCP–03–1
NOT TO SCALE

METRO CASE # 93-86P-002
GRADING PERMIT SWGR #2019060785

RaganSmith

Nashville - Murfreesboro - Chattanooga
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LAWRENCE J. KILGORE REGISTERED ENGINEER AGRICULTURE LICENSE NO. 109405 STATE OF TENNESSEE 2021.11.29

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EROSION CONTROL DETAILS

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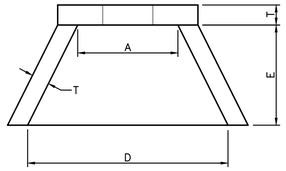
G:\21-0127\-CIVIL ENGINEERING\SHEETS\21-0127 CIVIL DETAILS.DWG
PLOTTED BY JEFF MOADSWAY ON: 11/29/2021 1:34 PM LAST UPDATED BY: FTISCHER ON: 11/29/2021 1:33 PM

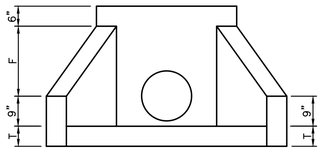


TOP VIEW

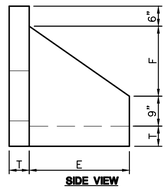
TABLE OF DIMENSIONS					
PIPE SIZES	A	D	E	F	T (MIN.)
15"	2'-6"	5'-0"	2'-6"	1'-9"	6"
18"	2'-6"	5'-0"	2'-6"	1'-9"	6"
21"	2'-6"	5'-0"	2'-6"	1'-9"	6"
24"	4'-0"	6'-6"	3'-0"	3'-3"	6"
30"	4'-0"	6'-6"	3'-0"	3'-3"	6"
36"	5'-6"	8'-0"	3'-6"	4'-5"	6"
42"	5'-6"	8'-0"	3'-6"	4'-5"	6"
48"	5'-6"	8'-0"	3'-6"	4'-5"	6"
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"

CONCRETE: 4000 PSI AT 28 DAYS
REINFORCED WITH NO. 4 BARS 10"C.C.
EACH WAY WITH WINGS AND TOE SLAB
DOGWELLED TO HEADWALL WITH NO.5 BARS.

¾" CHAMFER ON ALL EXPOSED EDGES



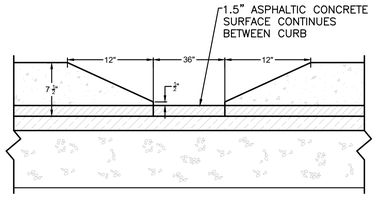
FRONT VIEW



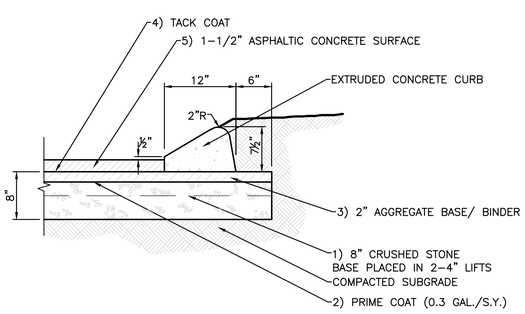
SIDE VIEW

METRO STANDARD DR-160

CONCRETE HEADWALL
NOT TO SCALE

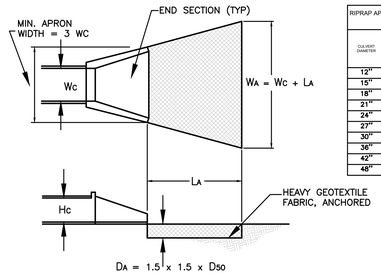


EXTRUDED CURB CUT SECTION



EXTRUDED CURB & HEAVY DUTY PAVEMENT
NOT TO SCALE

Hc = HEIGHT OF CULVERT
Wc = WIDTH OF CULVERT
La = LENGTH OF RIP-RAP APRON
Wa = WIDTH OF RIP-RAP APRON AT END
D50 = MEDIAN RIP-RAP SIZE
DMAX = MAXIMUM SIZE OF RIP-RAP = 1.5 D50
DA = DEPTH OF RIP-RAP APRON = 1.5 DMAX
SEPARATOR = GEOTEXTILE UNDERLAYMENT OR GRAVEL FILTER BLANKET

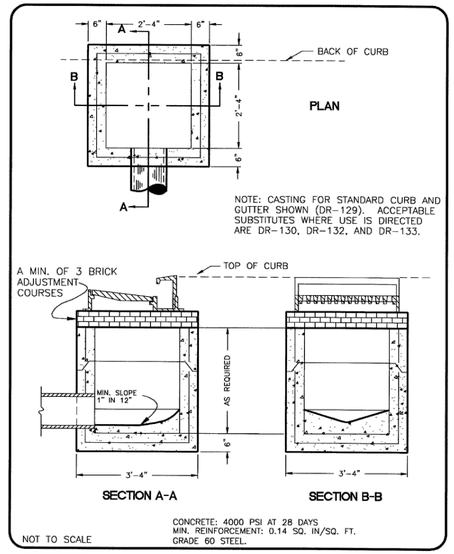


RIPRAP APRONS FOR LOW TAILWATER (DOWNSTREAM FLOW DEPTH < 0.5 x PIPE DIAMETER)

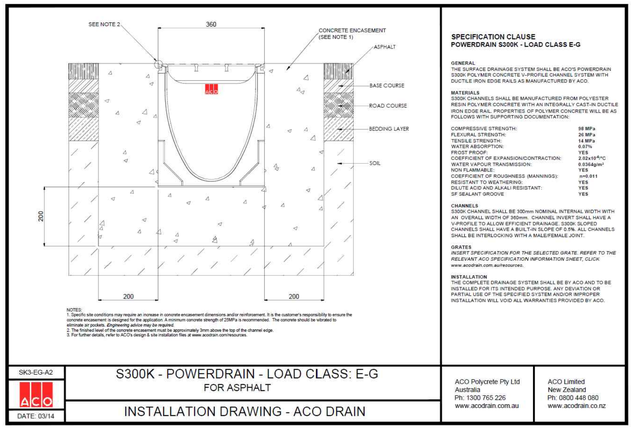
CULVERT DIAMETER	LOWEST VALUE			INTERMEDIATE VALUES TO INTERPOLATE FROM									HIGHEST VALUE		
	Q	La	D50	Q	La	D50	Q	La	D50	Q	La	D50	Q	La	D50
	Cfs	Ft	In	Cfs	Ft	In	Cfs	Ft	In	Cfs	Ft	In	Cfs	Ft	In
12"	4	7	2.5	6	10	3.5	9	13	5	6	12	16	7	14	17	8.5
15"	6.5	8	3	10	12	5	15	16	7	20	18	10	25	20	12
18"	10	9	3.5	15	14	5.5	20	17	7	30	22	11	40	25	14
21"	15	11	4	25	18	7	35	22	10	45	26	13	60	29	18
24"	21	13	5	35	20	8.5	50	26	12	65	30	16	80	33	19
27"	27	14	5.5	50	24	9.5	70	29	14	90	34	18	110	37	22
30"	36	16	6	60	25	9.5	90	33	15.5	120	38	20	140	41	24
36"	56	20	7	100	32	13	140	40	18	180	45	23	220	50	28
42"	82	22	8.5	120	32	12	160	39	17	200	45	20	260	52	26
48"	120	26	10	170	37	14	220	46	19	270	54	23	320	64	37

TAILWATER < 0.5 Hc AND ASSUMING FULL CULVERT FLOW (LOW TAILWATER CONDITIONS)

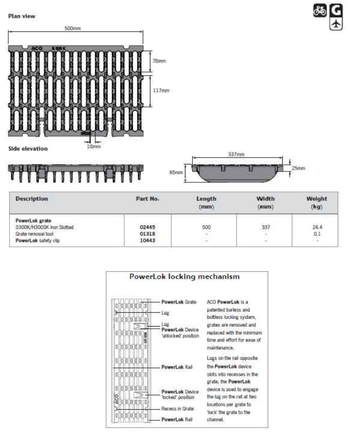
RIP-RAP OUTLET PROTECTION DETAIL
(PESC-07)
NOT TO SCALE



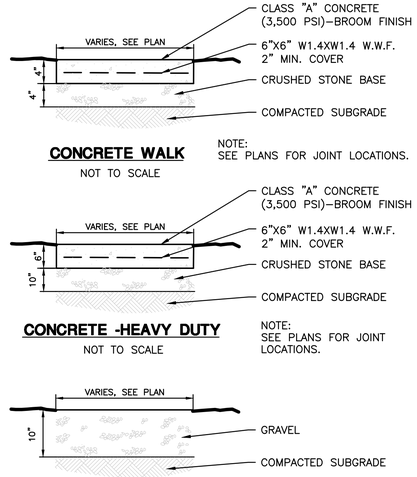
METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY DEPARTMENT OF PUBLIC WORKS	SINGLE INLET (PRECAST)	DWG. NO. DR-105
ASST. DIR. - ENG.:	DATE:	
DIRECTOR:	DATE: 3/14/00	REVISED: 02/08/00



TRENCH DRAIN AND GRATE (BASIS OF DESIGN)
NOT TO SCALE



Description	Part No.	Length (mm)	Width (mm)	Weight (kg)
PowerLok grate S300K/X300S Iron Slotted	02445	500	337	24.4
Grate removal tool	01318	-	-	0.1
PowerLok safety clip	10443	-	-	-



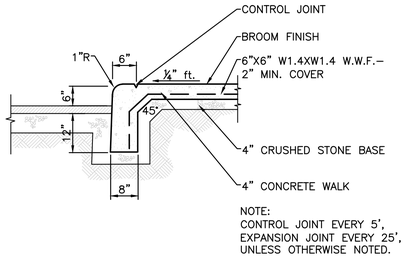
CONCRETE WALK
NOT TO SCALE

NOTE:
SEE PLANS FOR JOINT LOCATIONS.

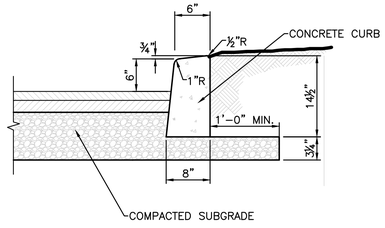
CONCRETE -HEAVY DUTY
NOT TO SCALE

NOTE:
SEE PLANS FOR JOINT LOCATIONS.

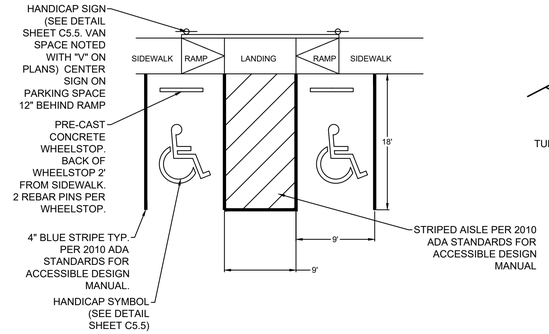
GRAVEL SURFACE
NOT TO SCALE



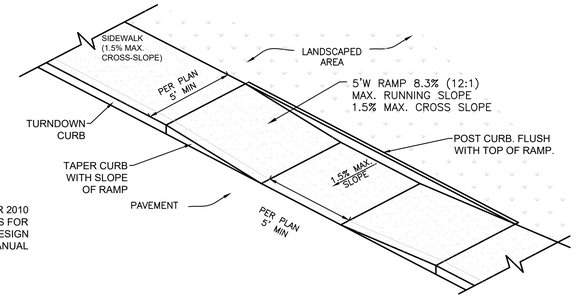
CONCRETE WALK & TURN DOWN CURB
NOT TO SCALE



POST CURB
NOT TO SCALE



HANDICAP PARKING LAYOUT
NOT TO SCALE



PARALLEL RAMP AT HANDICAP PARKING
NOT TO SCALE

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ragansmith.com

LAWRENCE J. KILGORE
REGISTERED ENGINEER
AGRICULTURE
LICENSE NO. 109400
STATE OF TENNESSEE
2021.11.29

B & T LANDSCAPING
FOR
SHELLEY & TIM TINNIN
GOODLETTSVILLE, TENNESSEE

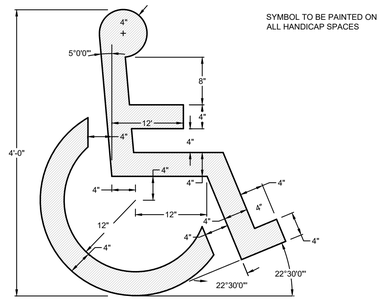
Scale: NTS
Date: NOVEMBER 8, 2021
Approved By: L.J. KILGORE
Revisions:
- - -
- - -
- - -
- - -
- - -
- - -

Drawing Title:
SITE DETAILS

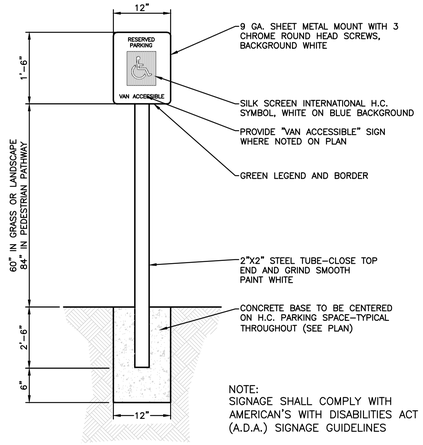
Drawing No.
C5.4

Project No.
21-0127

G:\21-0127\CIVIL ENGINEERING\PLAN SHEETS\21-0127 CIVIL DETAILS.DWG
PLOTTED BY JEFF MCKENNEY ON: 11/29/2021 - 3:54PM LAST UPDATED BY TYISCHER ON: 11/29/2021 1:54 PM



HANDICAP PARKING SYMBOL
NOT TO SCALE



EXTERIOR ACCESSIBLE PARKING SIGN
NOT TO SCALE

BLACK VINYL COATED CHAIN LINK FENCE (DESIGN INTENT)
NOT TO SCALE

SLIDING GATE (DESIGN INTENT)
NOT TO SCALE

DOUBLE WALL FUEL TANK- ABOVE GROUND (DESIGN INTENT)
NOT TO SCALE

LIGHT POLE AND FIXTURE (18-20' HEIGHT)
NOT TO SCALE

NOTE:
ALL RETAINING WALLS MUST BE DESIGNED AND SEALED BY A STRUCTURAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF TENNESSEE. RAGAN SMITH ASSOCIATES ACCEPTS NO RESPONSIBILITY FOR ANY RETAINING WALL DESIGN OR CONSTRUCTION. OWNER/CONTRACTOR TO ACQUIRE ALL NECESSARY PERMITS PRIOR TO BLASTING.

PRE-SPLIT WALL/ NATURAL ROCK FACE
NOT TO SCALE

MODULAR BLOCK WALL/ SPLIT FACE BLOCKS (DESIGN INTENT)
NOT TO SCALE

RaganSmith
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ragansmith.com

LAWRENCE J. KILGORE
REGISTERED ENGINEER
AGRICULTURE
No. 109400
2021.11.29
STATE OF TENNESSEE

B & T LANDSCAPING
FOR
SHELLEY & TIM TINNIN
GOODLETTSVILLE, TENNESSEE

Scale: NTS
Date: NOVEMBER 8, 2021
Approved By: L.J. KILGORE

Revisions:
- – –
- – –
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- – –
- – –

Drawing Title:
SITE DETAILS

Drawing No.
C5.5

Project No.
21-0127

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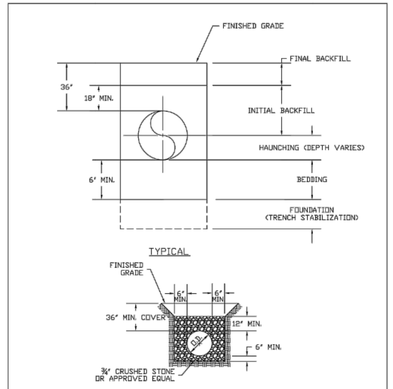
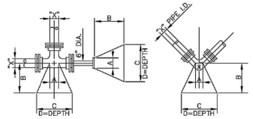


ROCK / EARTH TRENCH

NOTES:
1. BEDDING, HAUNCHING AND INITIAL BACKFILL LAYERS SHALL BE ¾" CRUSHED STONE OR APPROVED EQUAL.
2. TRENCH SLOPE TO MEET CURRENT OSHA AND STATE GUIDELINES.
3. SEE APPROVED W.H.U.D. MATERIALS LIST.

White House Utility District	WHITE HOUSE UTILITY DISTRICT	DATE : JUNE 2016 SCALE : N.T.S.
	PIPE TRENCHING, BEDDING, AND HAUNCHING DETAILS	STD-G-05



100 PSI TEST PRESSURE (SANITARY SEWER FORCE MAIN)
200 PSI TEST PRESSURE (WATER MAIN)
2000 PSF SOIL BEARING

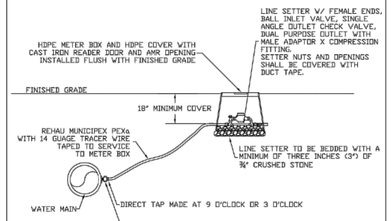
BLOCKING DIMENSIONS

		X*	A	B	C	D
DEAD END		16"	1'-0"	2'-6"	4'-0"	2'-6"
		8"	0'-10"	2'-3"	3'-3"	2'-0"
		6"	0'-8"	1'-6"	2'-6"	1'-6"
90° BENDS		16"	1'-0"	3'-6"	5'-0"	2'-9"
		8"	0'-10"	2'-5"	4'-0"	2'-3"
		6"	0'-8"	2'-0"	3'-6"	1'-9"
	45° BENDS	16"	1'-0"	1'-9"	3'-0"	2'-6"
		8"	0'-10"	1'-6"	2'-6"	2'-0"
		6"	0'-8"	1'-3"	2'-0"	1'-6"
	22½° BENDS	16"	1'-0"	1'-4"	2'-6"	1'-6"
		8"	0'-10"	1'-0"	2'-0"	1'-3"
		6"	0'-8"	0'-9"	1'-6"	1'-0"
	11½° BENDS	16"	1'-0"	0'-6"	1'-6"	1'-3"
		8"	0'-10"	0'-6"	1'-4"	1'-0"
		6"	0'-8"	0'-5"	1'-0"	0'-9"

X* = DIAMETER OF PIPE TO BE BLOCKED

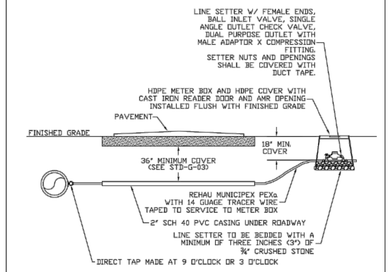
NOTES:
1. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3500 PSI.
2. SEE APPROVED WHUD MATERIALS LIST.

White House Utility District	WHITE HOUSE UTILITY DISTRICT	DATE : AUG 2008 SCALE : N.T.S.
	TYPICAL BLOCKING DETAIL	STD-G-09



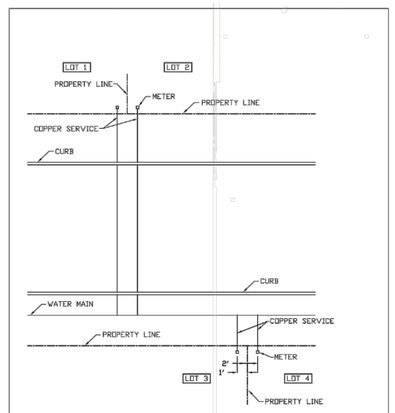
NOTES:
1. ¾" AND 1" METERS FURNISHED BY W.H.U.D.
2. SEE STD-W-03 AND STD-W-04 FOR ¾" WATER SERVICE ARRANGEMENTS.
3. SEE APPROVED W.H.U.D. MATERIAL LIST.

White House Utility District	WHITE HOUSE UTILITY DISTRICT	DATE : FEBRUARY 2016 SCALE : N.T.S.
	3/4" AND 1" SHORT TAP ASSEMBLY DETAIL	STD-W-01P



NOTES:
1. ¾" AND 1" METERS FURNISHED BY W.H.U.D.
2. SEE STD-W-03 AND STD-W-04 FOR ¾" WATER SERVICE ARRANGEMENTS.
3. SEE APPROVED W.H.U.D. MATERIAL LIST.

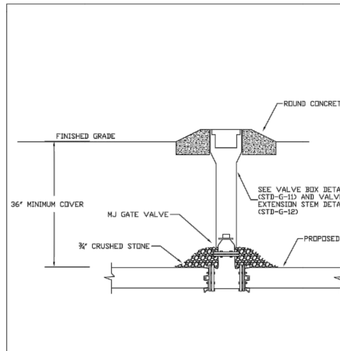
White House Utility District	WHITE HOUSE UTILITY DISTRICT	DATE : FEBRUARY 2016 SCALE : N.T.S.
	3/4" AND 1" LONG TAP ASSEMBLY DETAIL	STD-W-02P



DUAL SERVICE LINE AND METER

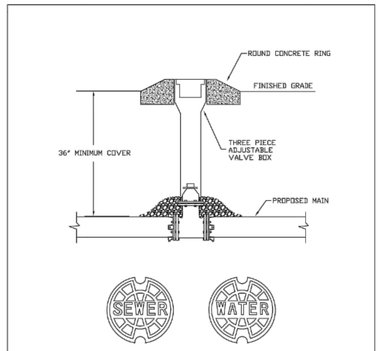
NOTES:
1. SEE APPROVED W.H.U.D. MATERIALS LIST..

White House Utility District	WHITE HOUSE UTILITY DISTRICT	DATE : AUG 2009 SCALE : N.T.S.
	TYPICAL ¾" WATER SERVICE ARRANGEMENT	STD-W-03



NOTES:
1. VALVE STEM AND BOX EXTENSION TO COMPLY WITH CURRENT W.H.U.D. CONSTRUCTION SPECIFICATIONS.
2. IF MAIN IS DUCTILE IRON PIPE, INSTALL MECHANICAL JOINT RESTRAINTS AS PER MANUFACTURER'S SPECIFICATIONS.
3. SEE APPROVED W.H.U.D. MATERIAL LIST.

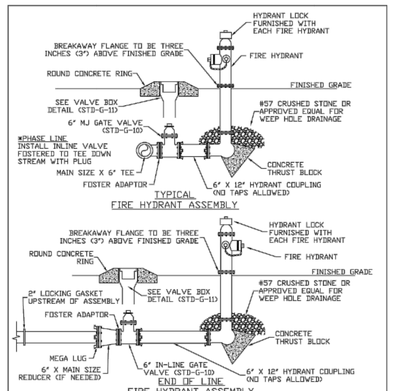
White House Utility District	WHITE HOUSE UTILITY DISTRICT	DATE : AUG 2008 SCALE : N.T.S.
	GATE VALVE INSTALLATION DETAIL	STD-G-10



ROUND CAST-IRON, VALVE BOX LID SHALL BE LABELED WITH APPROPRIATE CALLOUT, "SEWER" OR "WATER"

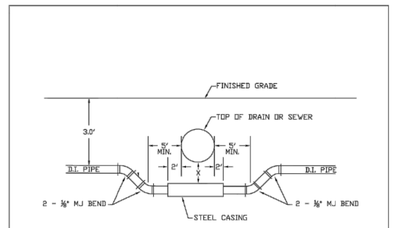
NOTES:
1. EXTENSION STEMS ARE REQUIRED IF BURY DEPTH FROM VALVE OPERATING NUT TO FINISHED GRADE IS GREATER THAN 48". (SEE STD-G-12).
2. SEE APPROVED W.H.U.D. MATERIALS LIST.

White House Utility District	WHITE HOUSE UTILITY DISTRICT	DATE : AUG 2008 SCALE : N.T.S.
	VALVE BOX DETAIL	STD-G-11



NOTES:
1. IF FIRE HYDRANT ASSEMBLY IS INSTALLED WITH NEW DEVELOPMENT, THE DEVELOPER SHALL SUPPLY A MINIMUM OF ONE (1) FIRE HYDRANT WRENCH EACH TO W.H.U.D. INSPECTOR AND THE LOCAL FIRE DEPARTMENT.
2. SERVICE LINES ARE NOT PERMITTED ON FIRE HYDRANT ASSEMBLY SECTION.
3. THE 6" GATE VALVE CAN BE ATTACHED TO A TEE OR REDUCER IF FOSTER COUPLINGS ARE USED.
4. MECHANICAL JOINT RESTRAINTS SHALL BE USED ON ALL MECHANICAL JOINT FITTINGS.
5. CONCRETE THRUST BLOCKS ARE REQUIRED FOR TEE AND 90° BEND ON FIRE HYDRANT ASSEMBLIES. SEE DETAIL STD-G-09 FOR TYPICAL CONCRETE BLOCKING REQUIREMENTS.
6. SEE APPROVED W.H.U.D. MATERIAL LIST.

White House Utility District	WHITE HOUSE UTILITY DISTRICT	DATE : FEB 2012 SCALE : N.T.S.
	FIRE HYDRANT ASSEMBLY DETAIL	STD-W-18



SIDE VIEW
(THIS DETAIL IS VERTICAL ONLY, NOT HORIZONTAL)

WATER CROSSING	
PIPE SIZE	MIN. CASING SIZE
6"	12"
8"	16"
12"	20"
16"	24"
24"	36"
30"	42"

NOTES:
1. THE MINIMUM CASING LENGTH SHALL BE TEN LINEAR FEET (10 L.F.).
2. THE MINIMUM SEPARATION DISTANCE BETWEEN THE WATER MAIN AND THE STORM DRAIN/SANITARY SEWER (X") SHALL BE EIGHTEEN INCHES (18").
3. CONTRACTOR SHALL MAINTAIN A MINIMYM FOUR FEET (4') SEPARATION DISTANCE BETWEEN ALL FITTINGS.

White House Utility District	WHITE HOUSE UTILITY DISTRICT	DATE : FEB 2012 SCALE : N.T.S.
	STORM DRAIN OR SANITARY SEWER MAIN & WATER MAIN CROSSING DETAIL	STD-W-20

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No. 109405
2021.11.29
STATE OF TENNESSEE

B & T LANDSCAPING

FOR

SHELLEY & TIM TINNIN

GOODLETTSVILLE, TENNESSEE

Scale: #"=##'

Date: NOVEMBER 8, 2021

Approved By: L.J. KILGORE

Revisions:

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Drawing Title:

WATER DETAILS

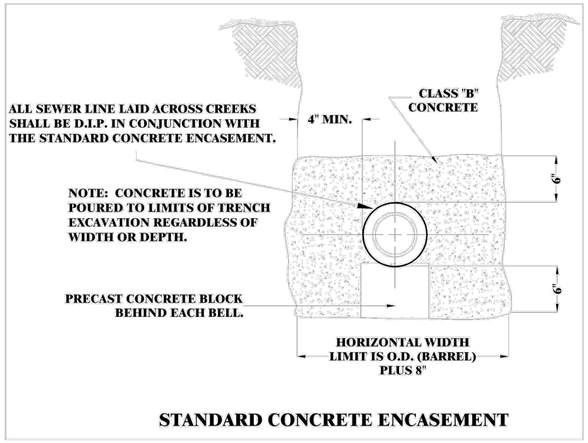
Drawing No.

C5.6

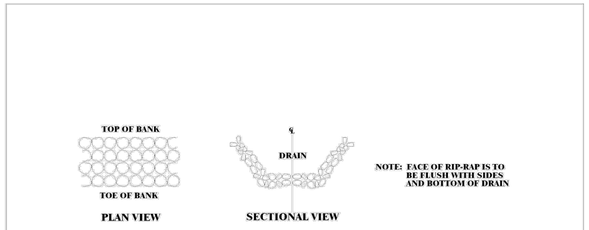
Project No.

21-0127

G:\21-0127\1-CIVIL ENGINEERING\PLAN SHEETS\21-0127 CIVIL DETAILS.DWG
PLOTTED BY JEFF MCKENNEY ON 11/29/2021 1:34 PM LAST UPDATED BY TYSCHER ON 11/29/2021 1:04 PM



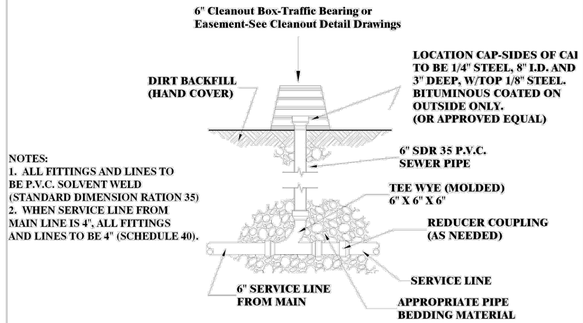
STANDARD CONCRETE ENCASEMENT



RIP-RAP STABILIZATION WHERE NOTED WILL CONSIST OF HAND-PLACED NATIVE LIMESTONE, HAVING A MAXIMUM LENGTH/WIDTH DIMENSION OF 12" IN EITHER DIRECTION AND A MAXIMUM THICKNESS OF 6". TREATMENT WILL BE PLACED IN TWO INTERLOCKING (NESTING) LAYERS. RIP-RAP SHALL BE PLACED FOR THE FULL WIDTH OF AREA DISTURBED BY PIPE LAYING OPERATIONS. LIMIT OF WIDTH FOR PAYMENT OF RIP-RAP SHALL BE AS FOLLOWS:

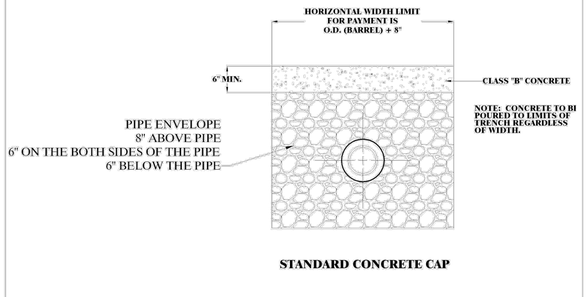
PIPE DIAMETER	RIP-RAP WIDTH
8"	5'
10"	5.5'
12"	6'
15"-16"	7'
18"	8.5'
21"	9'
24"	10'

RIP-RAP DETAIL

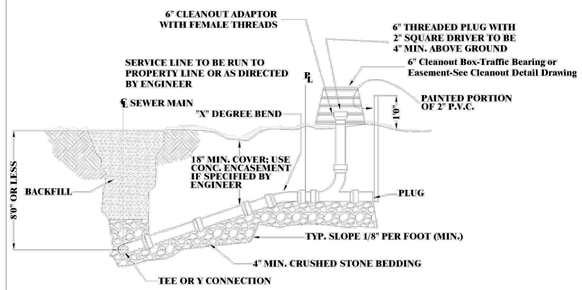


NOTES:
1. ALL FITTINGS AND LINES TO BE P.V.C. SOLVENT WELD (STANDARD DIMENSION RATION 35)
2. WHEN SERVICE LINE FROM MAIN LINE IS 4", ALL FITTINGS AND LINES TO BE 4" (SCHEDULE 40).

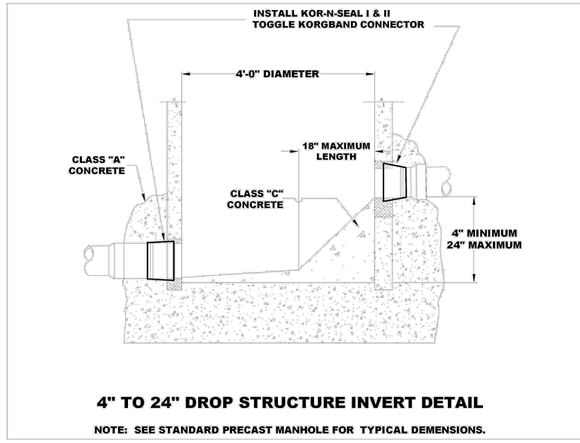
CLEANOUT



STANDARD CONCRETE CAP

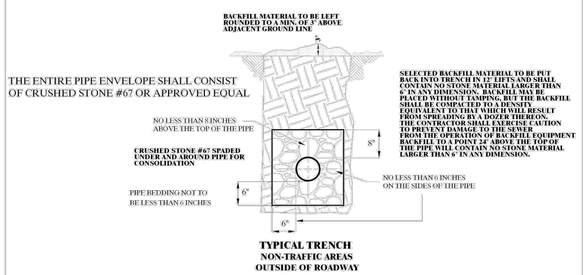


TYPICAL SERVICE LINE DETAIL



4" TO 24" DROP STRUCTURE INVERT DETAIL

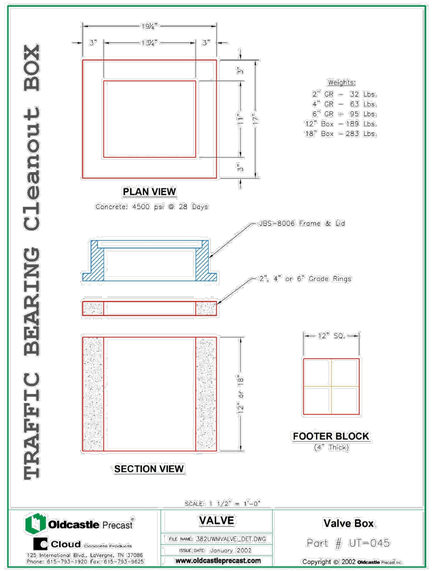
NOTE: SEE STANDARD PRECAST MANHOLE FOR TYPICAL DEMENSIONS.

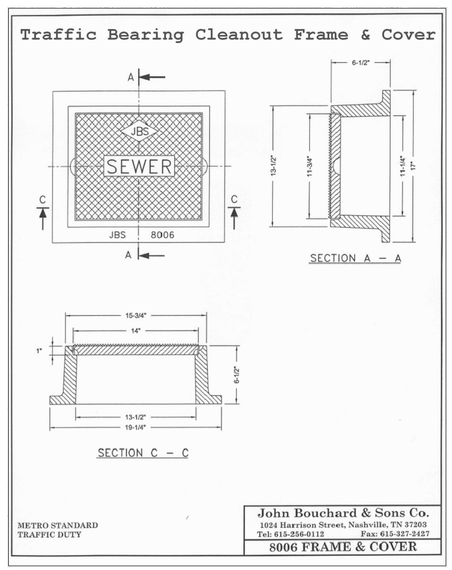


TYPICAL TRENCH
NON-TRAFFIC AREAS
OUTSIDE OF ROADWAY

1. BACKFILL ON SERVICE LINES TO BE AS DESCRIBED IN PROJECT SPECS.
2. SERVICE LINES FOR DEEP TRENCHES TO BE USED WHERE SHOWN ON PLANS OR AS DIRECTED BY ENGINEER. SERVICE FOR DEEP TRENCHES SHALL BE CONSTRUCTED AS SHOWN IN DETAIL ABOVE IN LIEU OF VERTICAL STACKS ENCASED IN CONCRETE.
3. BATTER BOARDS NO REQUIRED FOR LAYING PIPE, BUT GRADE TO BE REASONABLY UNIFORM AND ALIGNMENT STRAIGHT. GRADE SHALL BE THAT WHICH IS SUFFICIENT TO PROVIDE SERVICE TO BUILDING OR AS DIRECTED BY ENGINEER WITH MINIMUM TO BE THAT ALLOWED BY LOCAL PLUMBING CODE OR 1/8" PER FOOT MINIMUM OR AS NOTED ON PLANS.
4. MARKING ROD SHALL EXTEND FROM BOTTOM OF END OF SERVICE LINE TO 1'0" ABOVE GROUND.

SERVICE LINE TRENCHING DETAILS





RaganSmith
Nashville - Murfreesboro - Chattanooga
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LAWRENCE J. KILGORE REGISTERED ENGINEER AGRICULTURE No. 109400 STATE OF TENNESSEE 2021.11.29

B & T LANDSCAPING
FOR
SHELLEY & TIM TINNIN
GOODLETTSVILLE, TENNESSEE

Scale: #"=##'
Date: NOVEMBER 8, 2021
Approved By: L.J. KILGORE

Revisions:
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Drawing Title:
SEWER DETAILS

Drawing No.
C5.7

Project No.
21-0127

G:\21-0127\-CIVIL ENGINEERING\P-PLAN SHEETS\21-0127 CIVIL DETAILS.DWG
PLOTTED BY: JEFF MADRANDY ON: 11/29/2021 1:34 PM LAST UPDATED BY: TYRSCHER ON: 11/29/2021 1:34 PM

STD-122¢121¢122_1BARREL_SLAB16'.DGN

1 @ 16 x 6 REINFORCED CONCRETE SLAB BRIDGE

Fill Height ft.	Dimensions			Bars TST				Bars TSB				Bars EWE				Bars EWI				Bars LNT	Bars LND	Bars WS	Bars WF	Bars EWF	Concrete	Reinf. Steel
	ST in.	WT in.	BW ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	No.	No.	No.	No.	Length ft.	CY/LF	LB/LF
No Fill	11.5	8	17.33	4	1	12	16.83	9	2	6	16.83	4	2	12	4.50	5	2	12	4.50	39	32	2	2	1.67	1.08	262
3	14	8	17.33	4	1	12	16.83	8	2	6	16.83	4	2	12	4.50	5	2	12	4.50	39	32	2	2	1.67	1.21	237
5	14	8	17.33	4	1	12	16.83	8	2	6	16.83	4	2	12	4.50	5	2	12	4.50	56	0	2	2	1.67	1.21	215
10	15	8	17.33	4	1	12	16.83	9	2	6	16.83	4	2	12	4.50	5	2	12	4.50	56	0	2	2	1.67	1.27	239
20	19	8	17.33	4	1	12	16.83	10	2	6	16.83	4	2	12	4.50	5	2	12	4.50	56	0	2	2	1.67	1.48	270
30	26	8	17.33	4	1	12	16.83	9	2	6	16.83	4	2	12	4.50	5	2	12	4.50	56	0	2	2	1.67	1.85	239
40	32	8	17.33	4	1	12	16.83	9	2	6	16.83	4	2	12	4.50	5	2	12	4.50	56	0	2	2	1.67	2.17	239
50	37	8	17.33	4	1	12	16.83	10	2	6	16.83	4	2	12	4.50	5	2	12	4.50	56	0	2	2	1.67	2.44	270
60	41	9	17.50	4	1	12	17.00	10	2	6	17.00	4	2	12	4.50	5	2	12	4.50	56	0	2	2	1.75	2.71	272

1 @ 16 x 7 REINFORCED CONCRETE SLAB BRIDGE

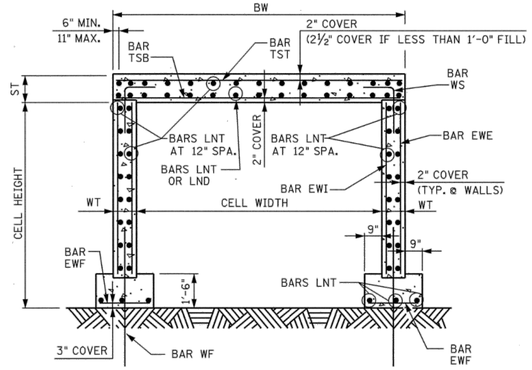
Fill Height ft.	Dimensions			Bars TST				Bars TSB				Bars EWE				Bars EWI				Bars LNT	Bars LND	Bars WS	Bars WF	Bars EWF	Concrete	Reinf. Steel
	ST in.	WT in.	BW ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	No.	No.	No.	No.	Length ft.	CY/LF	LB/LF
No Fill	11.5	8	17.33	4	1	12	16.83	9	2	6	16.83	4	2	12	5.50	5	2	12	5.50	43	32	2	2	1.67	1.13	268
3	14	8	17.33	4	1	12	16.83	8	2	6	16.83	4	2	12	5.50	5	2	12	5.50	43	32	2	2	1.67	1.26	243
5	14	8	17.33	4	1	12	16.83	8	2	6	16.83	4	2	12	5.50	5	2	12	5.50	60	0	2	2	1.67	1.26	221
10	15	8	17.33	4	1	12	16.83	9	2	6	16.83	4	2	12	5.50	5	2	12	5.50	60	0	2	2	1.67	1.31	246
20	19	8	17.33	4	1	12	16.83	10	2	6	16.83	4	2	12	5.50	5	2	12	5.50	60	0	2	2	1.67	1.53	276
30	26	8	17.33	4	1	12	16.83	9	2	6	16.83	4	2	12	5.50	5	2	12	5.50	60	0	2	2	1.67	1.90	246
40	32	9	17.50	4	1	12	17.00	9	2	6	17.00	4	2	12	5.50	5	2	12	5.50	60	0	2	2	1.75	2.28	247
50	37	9	17.50	4	1	12	17.00	10	2	6	17.00	4	2	12	5.50	5	2	12	5.50	60	0	2	2	1.75	2.55	278
60	41	10	17.67	4	1	12	17.17	10	2	6	17.17	4	2	12	5.50	5	2	12	5.50	60	0	2	2	1.83	2.83	279

1 @ 16 x 8 REINFORCED CONCRETE SLAB BRIDGE

Fill Height ft.	Dimensions			Bars TST				Bars TSB				Bars EWE				Bars EWI				Bars LNT	Bars LND	Bars WS	Bars WF	Bars EWF	Concrete	Reinf. Steel
	ST in.	WT in.	BW ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	Size	No.	Spacing in.	Length ft.	No.	No.	No.	No.	Length ft.	CY/LF	LB/LF
No Fill	11.5	8	17.33	4	1	12	16.83	9	2	6	16.83	4	2	12	6.50	5	2	12	6.50	47	32	2	2	1.67	1.18	274
3	14	8	17.33	4	1	12	16.83	8	2	6	16.83	4	2	12	6.50	5	2	12	6.50	47	32	2	2	1.67	1.31	249
5	14	8	17.33	4	1	12	16.83	8	2	6	16.83	4	2	12	6.50	5	2	12	6.50	64	0	2	2	1.67	1.31	227
10	15	8	17.33	4	1	12	16.83	9	2	6	16.83	4	2	12	6.50	5	2	12	6.50	64	0	2	2	1.67	1.36	252
20	19	8	17.33	4	1	12	16.83	10	2	6	16.83	4	2	12	6.50	6	2	12	6.50	64	0	2	2	1.67	1.58	288
30	26	9	17.50	4	1	12	17.00	9	2	6	17.00	4	2	12	6.50	5	2	12	6.50	64	0	2	2	1.75	2.02	253
40	32	10	17.67	4	1	12	17.17	9	2	6	17.17	4	2	12	6.50	5	2	12	6.50	64	0	2	2	1.83	2.41	254
50	37	11	17.83	4	1	12	17.33	10	2	6	17.33	4	2	12	6.50	5	2	12	6.50	64	0	2	2	1.92	2.75	287
60	41	12	18.00	4	1	12	17.50	10	2	6	17.50	4	2	12	6.50	5	2	12	6.50	66	0	2	2	2.00	3.04	290

Note: Maximum fill height shown in the table is measured from the bottom of the top slab. To obtain the total fill height from the flow line, add the height of the box.
Note: When height of fill above the top slab is less than 1 foot, the top mat of reinforcing in the top slab shall be constructed with 2-1/2 inches of concrete cover.

The following bar information applies to all fill cases in the tables above:
Bars LNT Size = 4 Spacing = 12 in.
Bars LND Size = 5 Spacing = 6 in.
Bars WS Size = 8 Length = 5.00 ft. Spacing = 12 in.
Bars WF Size = 8 Length = 6.00 ft. Spacing = 12 in.
Bars EWF Size = 4 No. = 2 Spacing = 12 in.



TYPICAL SECTION

NOTE: FOR DESCRIPTIONS OF BOX DIMENSIONS AND REINFORCING BAR DESIGNATIONS SEE STANDARD DRAWING NO. STD-17-5.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
STANDARD REINFORCED CONCRETE SLAB BRIDGE
INTERIOR SECTION
SPANS: 1 BARREL AT 16'-0"
CLEAR HEIGHTS 6'-0" THRU 8'-0"
0' THRU 60' FILL
2010

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

STD-17-122

DESIGNED BY	RLL/ALP	DATE 12-09
DRAWN BY	KEVIN MARTINKO	DATE 1-10
SUPERVISED BY	EPW/RLC	DATE 12-09
CHECKED BY	RLL/ALP	DATE 2-10

CONST. NO.

PROJECT NO.	YEAR	SHEET NO.
	2010	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

RaganSmith

Nashville - Murfreesboro - Chattanooga
ragansmith.com

LAWRENCE J. KILGORE REGISTERED ENGINEER AGRICULTURE No. 108400 STATE OF TENNESSEE 2021.11.29

B & T LANDSCAPING
FOR
SHELLEY & TIM TINNIN
GOODLETTSVILLE, TENNESSEE

Scale: NTS
Date: NOVEMBER 8, 2021
Approved By: L.J. KILGORE
Revisions:
- - -
- - -
- - -
- - -
- - -
- - -

Drawing Title:
BRIDGE DETAILS

Drawing No.
C5.8

Project No.
21-0127

BOX_SPANS\#Bridges\tables\1-6-10\Prefab Culvert Files 1-6-10\US-Span\STD-17-122&123&124_Short=#L-#08@18".dgn
D:\S-0127\CIVIL ENGINEERING\PLANSHEETS\1-10 CIVIL DETAILS.DWG
PLOTTED BY JEFF MCKENNEY ON 11/29/2021 1:54 PM LAST UPDATED BY TYSCHER ON 11/29/2021 1:54 PM

STD17.DGN

INDEX OF DRAWINGS

STD-17-0 INDEX OF DRAWINGS
STD-17-1 TERMINOLOGY OF DRAWINGS
STD-17-2 GENERAL NOTES
STD-17-3 DESIGN SECTION LIMITS
STD-17-4 TYPICAL SECTION AND DETAILS
STD-17-5 TYPICAL ELEVATION
STD17-7 CURB, RAIL AND EDGE BEAM DETAILS - SKEW ANGLE
STD-17-8 SLOPE PROTECTION DETAILS FOR FILLS GREATER THAN 3'-6"
STD-17-9 INTERIOR WALL END TREATMENTS
STD-17-10 TYPICAL WINGWALL DETAILS AND NOTES
STD-17-11 WINGWALL DIMENSIONS AND QUANTITIES
STD-17-12 WINGWALL DIMENSIONS AND QUANTITIES
STD-17-13 WINGWALL DIMENSIONS AND QUANTITIES
STD-17-14 WINGWALL DIMENSIONS AND QUANTITIES
STD-17-15 WINGWALL & SPECIAL RETAINING WALL DESIGN SECTIONS
STD-17-16 WINGWALL DESIGN SECTION
STD-17-17 BACKFILL AND DRAINAGE DETAILS
STD-17-18 BACKFILL AND DRAINAGE DETAILS
STD-17-19 PAVED OUTLET DETAIL
STD-17-20 LOW FLOW CHANNEL CONSTRUCTION DETAILS
STD17-21 DEBRIS DEFLECTION WALL
STD-17-22 DEBRIS DEFLECTION WALL
STD-17-23 SIDEWALK AND MISCELLANEOUS DETAILS
STD-17-24 WARPED SLOPE DETAIL
STD-17-25 PHASE CONSTRUCTION WORK DETAIL
STD-17-26 EXTENSION DETAILS
STD-17-27 EXTENSION DETAILS FOR SCOURED OUTLETS
STD-17-28 END SECTION DETAILS
STD-17-29 PRECAST BOX CULVERT DETAILS
STD-17-30 THRU 33 RESERVED FOR FUTURE EXPANSION.
STD-17-34 STANDARD INTERNAL ENERGY DISSIPATOR
STD-17-35 THRU 50 RESERVED FOR FUTURE EXPANSION.

INTERIOR SECTIONS

STD-17-51 BOX BRIDGE, 1 BARREL AT 6'-0" CLEAR HTS, 3'-0" R. TO 6'-0" R. FOR 60° FOOT FILL
STD-17-52 BOX BRIDGE, 1 BARREL AT 8'-0" CLEAR HTS, 3'-0" R. TO 6'-0" R. FOR 60° FOOT FILL
STD-17-53 BOX BRIDGE, 1 BARREL AT 10'-0" CLEAR HTS, 3'-0" R. TO 6'-0" R. FOR 60° FOOT FILL
STD-17-54 BOX BRIDGE, 1 BARREL AT 12'-0" CLEAR HTS, 3'-0" R. TO 6'-0" R. FOR 60° FOOT FILL
STD-17-55 BOX BRIDGE, 1 BARREL AT 14'-0" CLEAR HTS, 3'-0" R. TO 6'-0" R. FOR 60° FOOT FILL
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STD-17-59 BOX BRIDGE, 1 BARREL AT 8'-0" CLEAR HTS, 6'-0" R. TO 9'-0" R. FOR 60° FOOT FILL
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STD-17-71 BOX BRIDGE, 1 BARREL AT 18'-0" CLEAR HTS, 9'-0" R. TO 12'-0" R. FOR 60° FOOT FILL
STD-17-72 BOX BRIDGE, 2 BARRELS AT 6'-0" CLEAR HTS, 3'-0" R. TO 6'-0" R. FOR 60° FOOT FILL
STD-17-73 BOX BRIDGE, 2 BARRELS AT 8'-0" CLEAR HTS, 3'-0" R. TO 6'-0" R. FOR 60° FOOT FILL
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STD-17-87 BOX BRIDGE, 2 BARRELS AT 6'-0" CLEAR HTS, 12'-0" R. TO 14'-0" R. FOR 60° FOOT FILL
STD-17-88 BOX BRIDGE, 2 BARRELS AT 18'-0" CLEAR HTS, 15'-0" R. TO 18'-0" R. FOR 60° FOOT FILL
STD-17-89 RESERVED FOR FUTURE EXPANSION.
STD-17-90 RESERVED FOR FUTURE EXPANSION.
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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

INDEX OF DRAWINGS

STANDARD REINFORCED CONCRETE BRIDGE BOX AND SLAB TYPE

2010

CORRECT Edward P. Wasserman
CHIEF ENGINEER OF STANDARDS

STD-17-1

CONST. NO.

PROJECT NO.	YEAR	SHEET NO.
	2010	

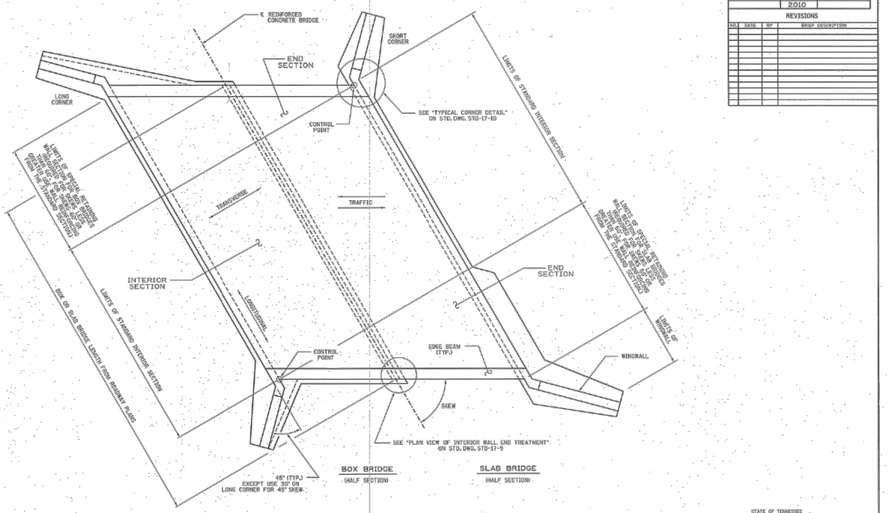
REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

DESIGNED BY ADAM J. MAAS DATE 12-2019
DRAWN BY SUZANNE WILSON DATE 01-2020
SUPERVISED BY/R.O.W. / DEPT. OF ROAD J. MAAS DATE 12-2019
CHECKED BY DATE

STD17.DGN

REINFORCED CONCRETE BRIDGE TERMINOLOGY



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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TERMINOLOGY OF DRAWINGS

STANDARD REINFORCED CONCRETE BRIDGE BOX AND SLAB TYPE

2010

CORRECT Edward P. Wasserman
CHIEF ENGINEER OF STANDARDS

STD-17-2

STD17.DGN

DESIGN NOTES

SPECIFICATIONS: TDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION (MARCH 1, 2006 EDITION) AND SUPPLEMENTAL SPECIFICATIONS.

DESIGN SPECIFICATIONS: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 4TH EDITION (2007) WITH 2009 INTERIMS.

LOADING: HL-93 LIVE LOADING.

EARTH LOADS: BASED ON SOIL WEIGHT OF 120 PCF AND 1.15 SOIL-STRUCTURE INTERACTION FACTOR. LATERAL EARTH PRESSURE: MAXIMUM OF 0.60 TIMES SOIL WEIGHT; MINIMUM OF 0.25 TIMES SOIL WEIGHT.

CONCRETE: SHALL BE CLASS "A" (CAST IN PLACE) WITH CONCRETE STRENGTH f'c = 3000 psi.

WHEN HEIGHT OF FILL ABOVE THE TOP SLAB IS LESS THAN 1 FOOT, THE TOP MAT OF REINFORCING IN THE TOP SLAB SHALL BE CONSTRUCTED WITH 2½ INCHES OF CONCRETE COVER.

REINFORCING STEEL: SHALL BE ASTM A615 GRADE 60. SEE SECTION 604 AND 907 OF THE STANDARD SPECIFICATIONS AND SUPPLEMENTAL SPECIFICATIONS 600. WHEN FILL ON THE STRUCTURE IS LESS THAN 1 FOOT, EPOXY COATED REINFORCING STEEL SHALL BE USED IN THE TOP MAT OF THE TOP SLAB AND CURBS INCLUDING THE TIE (STIRRUP) BARS IN THE CURBS.

SPAN AND FILL HEIGHT: BOX AND SLAB BRIDGES ARE DESIGNED FOR THE SPANS AND FILL HEIGHTS SHOWN IN THE TABLES. FOR OTHER SPANS OR FILL HEIGHTS, A SPECIAL DESIGN IS REQUIRED. FILL HEIGHT, AS SHOWN IN THE TABLES, IS MEASURED FROM THE BOTTOM OF THE TOP SLAB TO THE TOP OF THE FILL. TO OBTAIN THE TOTAL HEIGHT OF FILL FROM THE FLOW LINE, ADD THE HEIGHT OF THE BOX. WHEN THE FILL ON THE STRUCTURE IS LESS THAN 1 FOOT, USE THE "NO FILL" SECTION AS SHOWN IN THE TABLES.

NON-UNIFORM LOADS: THE BOX AND SLAB BRIDGE DESIGNS SHOWN ASSUME UNIFORM LOADING ON EACH EXTERIOR WALL. FOR SIGNIFICANTLY NON-UNIFORM LOADS (FOR EXAMPLE, IF THE BOX OR SLAB BRIDGE RUNS ALONG THE TOE OF AN EMBANKMENT OR NEXT TO A RETAINING WALL) A SPECIAL DESIGN IS REQUIRED.

FOUNDATION BEARING PRESSURE: BOX AND SLAB BRIDGE FOOTINGS AND WINGWALL FOOTINGS SHALL BE FOUNDED ON SUITABLE FOUNDATION MATERIAL. UNSATISFACTORY MATERIAL IN THE FOUNDATION SHALL BE REMOVED IN ACCORDANCE WITH SECTION 204.10 OF THE SPECIFICATIONS.

CONSTRUCTION NOTES

BOX AND SLAB CONSTRUCTION DRAWINGS: THE CONTRACTOR SHALL PREPARE WORKING DRAWINGS WHICH SHOW PROPOSED CONSTRUCTION JOINTS, CONTRACTION JOINTS, SPLICES OF REINFORCING, AND THE BILL OF STEEL. THESE WORKING DRAWINGS SHALL BE SUBMITTED TO THE FIELD ENGINEER FOR REVIEW PRIOR TO BEGINNING CONSTRUCTION.

REINFORCING BAR SUPPORT DETAILS: SEE STANDARD DRAWING STD-9-1.

BRIDGE DECK FORMS: BRIDGE DECK FORMS FOR BOX AND SLAB BRIDGE CONCRETE DECKS SHALL BE CONSTRUCTED USING EITHER REMOVABLE FORMS OR PERMANENT FORMS. PERMANENT FORMS MAY BE REMAIN-IN-PLACE STEEL FORMS SHALL BE ATTACHED BY MEANS OTHER THAN WELDING TO REINFORCING STEEL. SEE SECTION 604.05 OF THE SPECIFICATIONS. WALL HEIGHTS SHALL BE INCREASED THE DEPTH OF THE CORRUGATIONS OF THE METAL DECKING IN ORDER TO MAINTAIN THE CLEAR BOX DIMENSIONS CALLED FOR ON THE PLANS. PRECAST PRESTRESSED CONCRETE DECK PANELS ARE NOT ALLOWED.

BACKFILL: BACKFILLING OF BOX AND SLAB BRIDGES AND WINGWALLS SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 204.11 OF THE STANDARD SPECIFICATIONS. THE REQUIREMENTS FOR STEPPING OF BOUNDARY SLOPES TO PREVENT WEDGE ACTION, FOR PROPER LAYERING AND COMPACTING OF BACKFILL, AND FOR MAINTAINING (AT ALL TIMES) EQUAL HEIGHTS OF BACKFILL AGAINST EXTERIOR WALLS OF BOX AND SLAB BRIDGES SHALL BE STRICTLY ENFORCED. SEE STANDARD STD-17-17 & 18 FOR OTHER NOTES AND DETAILS.

PAVED OUTLET DETAILS: SEE STANDARD DRAWING STD-17-19. PAVED OUTLETS SHALL BE USED WHEN SPECIFIED ON THE PLANS.

DEBRIS DEFLECTION WALL: SEE STANDARD STD-17-21 & 22. A DEBRIS DEFLECTION WALL SHALL BE CONSTRUCTED ON THE INLET END OF THE BOX OR SLAB BRIDGE WHEN SPECIFIED ON THE PLANS.

CONTRACTION JOINTS: UNLESS OTHERWISE SPECIFIED ON THE PLANS, TRANSVERSE CONTRACTION JOINTS SHALL BE PLAIN BUTT JOINTS, AND LONGITUDINAL REINFORCEMENT SHALL NOT EXTEND ACROSS THE JOINT. CONTRACTION JOINTS SHALL BE SPACED AT INTERVALS OF 30 FEET TO 40 FEET. THE LOCATION OF JOINTS SHALL BE PREDETERMINED, AND WHEN PRACTICABLE, SHALL BE LOCATED AT CHANGES IN THE BOX OR SLAB BRIDGE SECTION. THESE JOINTS SHALL BE LOCATED PERPENDICULAR TO THE WALLS. WHERE THE BOX OR SLAB BRIDGE TOP SLAB IS TO BE THE RIDING SURFACE, NO CONTRACTION JOINTS SHALL BE USED, REGARDLESS OF THE LENGTH OF THE BARRELS.

STAGE CONSTRUCTION JOINTS (FILL NOT GREATER THAN 3'-6"): WHEN A BOX OR SLAB BRIDGE MUST BE STAGE CONSTRUCTED SUCH THAT THE CONSTRUCTION JOINT IS NOT PERPENDICULAR TO THE BRIDGE, THE STAGE CONSTRUCTION JOINT SHALL BE A PLAIN BUTT JOINT, AND NO REINFORCEMENT SHALL EXTEND ACROSS THE JOINT. ADDITIONAL SLAB REINFORCEMENT PLACED PARALLEL TO THE JOINT AND DOWEL BARS PERPENDICULAR TO THE JOINT IN ACCORDANCE WITH STANDARD DRAWING STD-17-29 SHALL BE PROVIDED. THE STAGE CONSTRUCTION JOINT SHALL NOT BE LOCATED WITHIN A FINAL TRAFFIC LANE.

STAGE CONSTRUCTION JOINTS (FILL GREATER THAN 3'-6"): A JOINT SHALL BE CONSTRUCTED AS SPECIFIED FOR CONTRACTION JOINTS. SEE SKETCH THIS SHEET.

STAGE CONSTRUCTION OF BARRELS: FOR A MULTI-BARREL BOX OR SLAB BRIDGE WHERE BARRELS ARE STAGE CONSTRUCTED, THE SLAB BARS SHALL BE SPLICED THE MINIMUM LENGTH IN ACCORDANCE WITH THE TABLE ON THIS DRAWING. THE CONTRACTOR SHALL SUBMIT HIS PLAN FOR STAGE CONSTRUCTION SHOWING PROPOSED JOINT LOCATION AND BAR SPLICE LENGTHS TO THE FIELD ENGINEER FOR REVIEW PRIOR TO BEGINNING CONSTRUCTION.

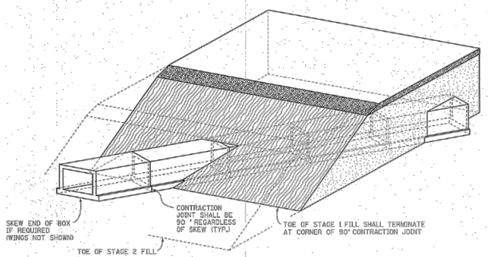
SLAB BRIDGE FOOTINGS ON ROCK: THE BOTTOM OF FOOTING SHALL FOLLOW THE ROCK SURFACE ALONG THE WALL LINE. HOLES 1.5 INCH IN DIAMETER AND 2'-6" IN DEPTH SHALL BE DRILLED ON 12 INCH CENTERS INTO COMPETENT ROCK. THE HOLES SHALL BE AIR BLOWN TO REMOVE ALL DEBRIS AND FILLED WITH NON-SHRINK GROUT. ALL GROUTING MATERIAL SHALL BE APPROVED BY THE DIVISION OF MATERIALS AND TESTS AND PLACED IN THE DRILL HOLE AS RECOMMENDED BY THE MANUFACTURER. IF THE HOLE CANNOT BE DEWATERED THEN THE GROUT MUST BE PLACED THROUGH A TREMIE TUBE OR PRESSURE PUMPED WITH THE INITIAL PUMP NOZZLE AT BOTTOM OF HOLE. NO. 6 REINFORCING BARS SHALL BE ROTATED FULL DEPTH OF HOLES. SLIGHT TAPPING WILL BE ALLOWED DURING THE BAR ROTATION PROCESS BUT TAPPING WITHOUT ROTATION WILL NOT BE ALLOWED.

BOX EXTENSION DETAILS: SEE STANDARD DRAWINGS STD-17-26 AND 27.

CURING CONCRETE SLABS: FOR BOX AND SLAB BRIDGES SHALL BE CURED IN ACCORDANCE WITH ARTICLE 604.23 OF THE STANDARD SPECIFICATIONS.

REMOVAL OF FORMS: FORM REMOVAL SHALL BE IN ACCORDANCE WITH ARTICLE 604.19 AND 604.20 OF THE STANDARD SPECIFICATIONS. GENERALLY, FORMS FOR WALLS MAY BE REMOVED WITHIN 12-48 HOURS. FALSEWORK FOR SLABS MAY BE REMOVED AFTER 7 DAYS OF CURING ABOVE 40° F. AND THE REQUIRED CONCRETE STRENGTH IS REACHED. NO LOADS SHALL BE PLACED ON THE SLAB UNTIL 10 ADDITIONAL DAYS AFTER REMOVING FORMS HAVE ELAPSED.

CONCRETE FINISH: SEE STANDARD SPECIFICATION ARTICLES 604.21 AND 604.22. IN GENERAL, CURBS, EDGES OF SLAB, EXPOSED FACES AND ENDS OF WINGWALLS, DEBRIS DEFLECTION WALLS, ENDS OF INTERIOR WALLS, AND EXPOSED FACE OF ENDWALLS SHALL RECEIVE A CLASS II FINISH.



STAGE CONSTRUCTION SKETCH (FILL GREATER THAN 3'-6")

LIST OF STANDARD DRAWINGS

	DWG. NO.
REINFORCING BAR SUPPORT DETAILS FOR CONCRETE SLABS	STD-9-1

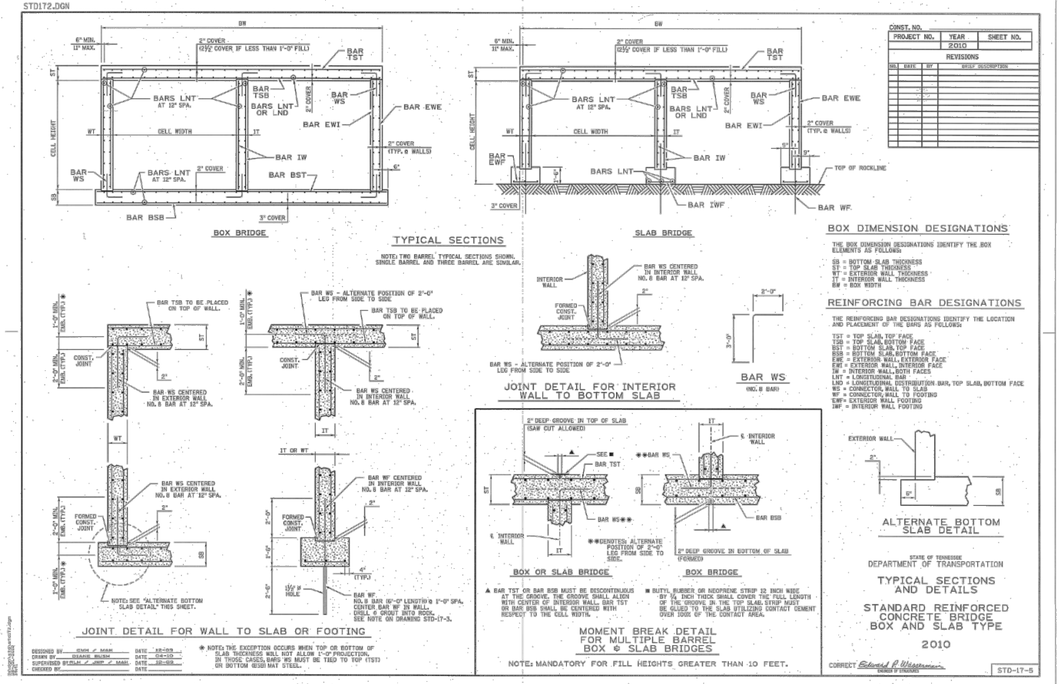
REINFORCING BAR MIN. SPLICE LENGTHS

BAR SIZE	MIN. SPLICE LENGTH	LB./ SPLICE
4	1'-11"	1.28
5	2'-5"	2.52
6	3'-7"	4.63
7	4'-2"	8.52
8	5'-5"	14.46
9	6'-11"	23.52
10	8'-9"	37.65
11	10'-9"	57.41

EPOXY BAR MIN. SPLICE LENGTHS

BAR SIZE	MIN. SPLICE LENGTH	LB./ SPLICE
4	2'-4"	1.56
5	2'-11"	3.04
6	3'-9"	5.83
7	5'-0"	10.22
8	6'-7"	17.56

STD172.DGN



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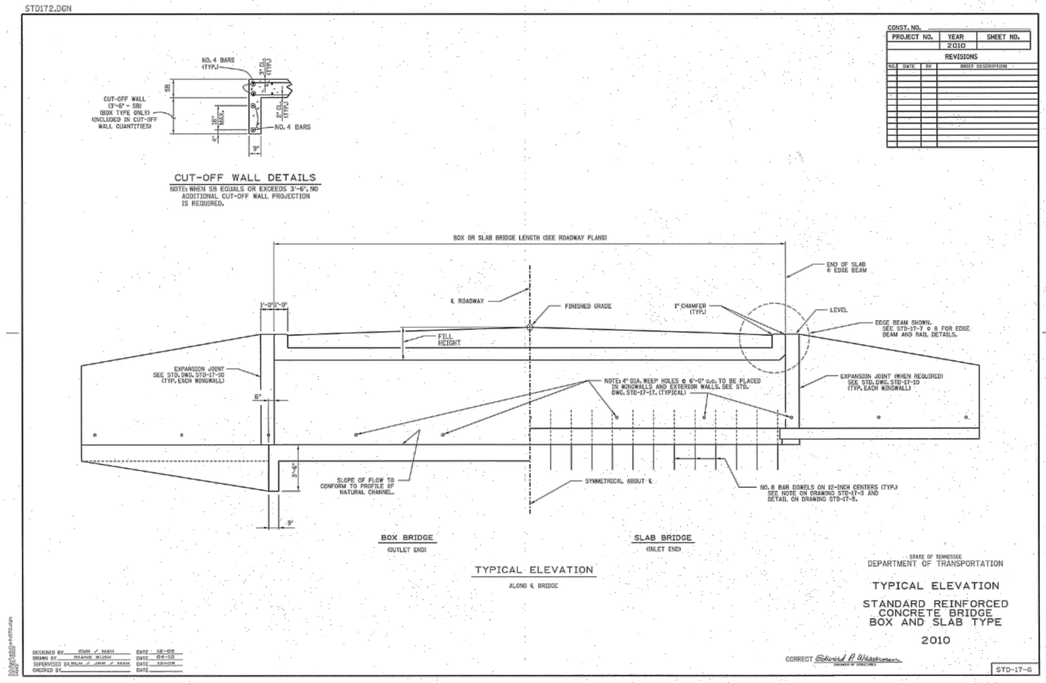

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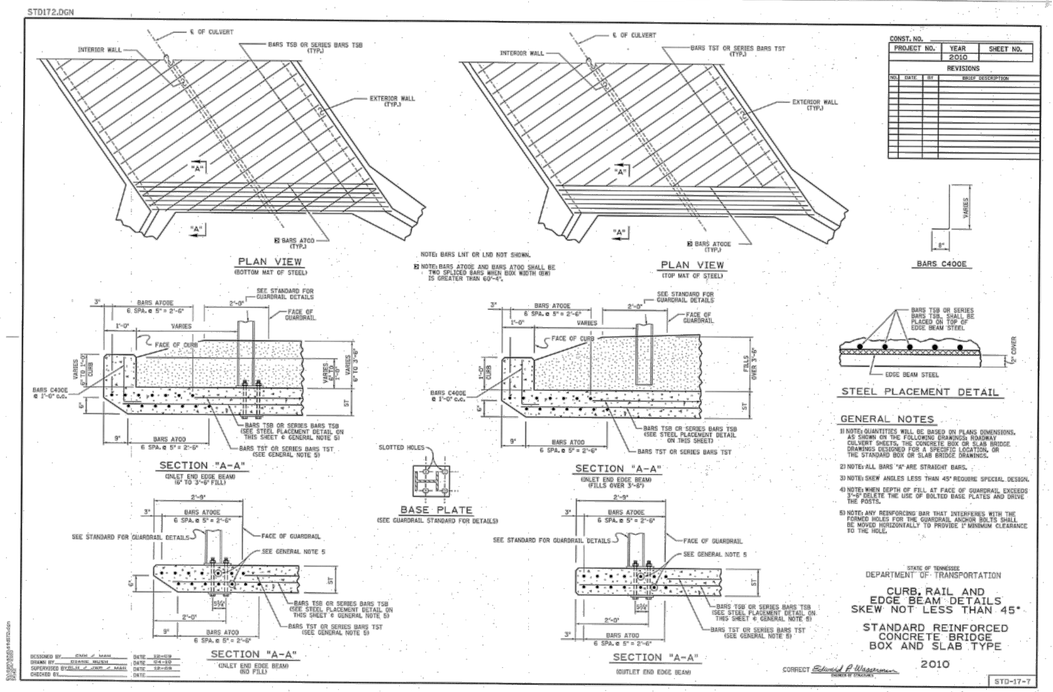

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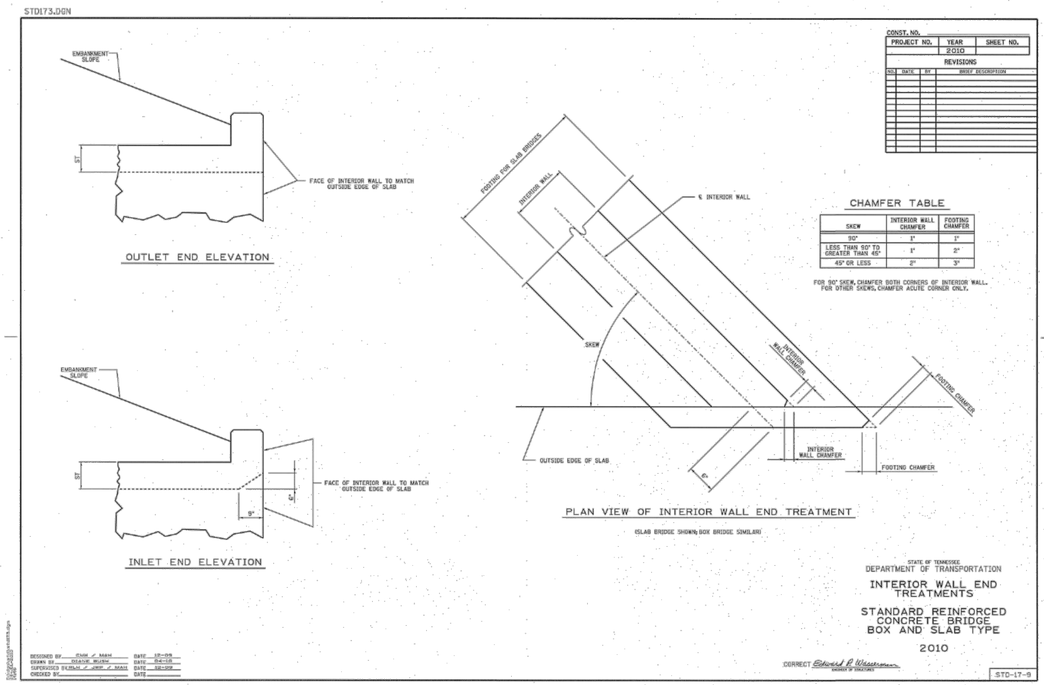

RaganSmith
Nashville - Murfreesboro - Chattanooga
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LAWRENCE J. KILGORE REGISTERED ENGINEER AGRICULTURE CERTIFICATE NO. 109405 2021.11.29 STATE OF TENNESSEE

B&T LANDSCAPING

FOR

SHELLEY & TIM TINNIN

GOODLETTSVILLE, TENNESSEE

Scale: NTS

Date: NOVEMBER 8, 2021

Approved By: L.J. KILGORE

Revisions:

- – –
- – –
- – –
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- – –

Drawing Title:

BRIDGE DETAILS

Drawing No.

C5.10

Project No.

21-0127

STDI74.DGN

45° SKEW

2:1 SLOPE

H	WL	HJ	WS	hts	CONCRETE (C.Y.)	REINF. STEEL (LBS.)
4	5.75	2.50	4.50	1.75	4.9	720
4.5	11.09	2.75	5.00	1.75	5.9	792
5	12.25	3.25	5.50	2.00	7.6	896
5.5	13.75	3.50	6.25	2.25	9.1	1,057
6	15.09	3.75	6.75	2.50	10.5	1,173
6.5	16.23	4.25	7.25	2.75	12.2	1,242
7	17.75	4.50	8.00	3.00	14.7	1,614
7.5	19.00	4.75	8.50	3.00	16.4	1,731
8	20.25	5.25	9.25	3.25	18.1	1,878
8.5	21.59	5.50	9.75	3.50	21.3	2,090
9	23.09	5.75	10.25	3.75	24.6	3,137
9.5	24.25	6.25	10.75	4.00	27.3	3,253
10	25.50	6.50	11.50	4.00	29.9	3,673
10.5	26.75	6.75	12.00	4.25	32.8	3,756
11	28.25	7.25	12.50	4.50	37.7	4,237
11.5	29.59	7.50	13.25	4.75	42.4	5,191
12	30.75	7.75	13.75	5.00	46.1	5,256
12.5	32.25	8.25	14.25	5.25	50.2	5,730
13	33.50	8.50	15.00	5.25	57.0	6,783
13.5	34.75	8.75	15.50	5.50	60.9	7,336
14	36.09	9.00	16.09	5.75	66.2	7,741
14.5	37.50	9.50	16.75	6.00	71.5	8,221
15	38.75	9.75	17.25	6.25	80.1	8,868
15.5	40.00	10.00	17.75	6.50	84.8	9,888
16	41.25	10.50	18.50	6.50	90.3	10,387
16.5	42.75	10.75	19.00	6.75	97.0	10,228
17	44.00	11.00	19.75	7.00	109.0	13,789
17.5	45.29	11.50	20.25	7.25	115.7	13,669
18	46.75	11.75	20.75	7.50	122.1	14,206
18.5	48.00	12.00	21.50	7.75	128.6	14,503
19	49.25	12.50	22.00	7.75	140.7	15,966
19.5	50.50	12.75	22.50	8.00	148.4	18,028
20	52.00	13.00	23.25	8.25	161.3	19,025
20.5	53.25	13.50	23.75	8.50	169.1	19,598
21	54.50	13.75	24.25	8.75	189.1	21,559

3:1 SLOPE

H	WL	HJ	WS	hts	CONCRETE (C.Y.)	REINF. STEEL (LBS.)
4	11.25	3.00	6.50	2.00	6.0	765
4.5	12.75	3.25	6.25	2.25	7.3	845
5	14.25	3.75	7.00	2.50	9.4	967
5.5	15.75	4.00	7.75	2.75	11.1	1,057
6	17.25	4.50	8.50	3.00	13.0	1,272
6.5	18.75	4.75	9.25	3.25	14.9	1,376
7	20.25	5.25	10.00	3.50	18.4	1,776
7.5	21.75	5.50	10.75	3.75	20.8	1,935
8	23.25	6.00	11.50	4.00	22.8	2,047
8.5	24.75	6.25	12.25	4.50	26.2	2,302
9	26.25	6.75	13.00	4.75	30.4	3,505
9.5	27.75	7.00	13.50	5.00	34.3	3,703
10	29.25	7.50	14.25	5.25	37.8	4,078
10.5	30.75	7.75	15.00	5.50	41.3	4,295
11	32.25	8.25	15.75	5.75	46.6	4,795
11.5	33.50	8.50	16.50	6.00	51.5	5,897
12	35.00	8.75	17.25	6.25	56.1	6,256
12.5	36.50	9.25	18.00	6.50	61.8	6,504
13	38.00	9.50	18.75	6.75	70.3	7,629
13.5	39.50	10.00	19.50	7.00	76.2	8,298
14	41.00	10.25	20.25	7.25	81.5	8,673
14.5	42.50	10.75	21.00	7.50	87.3	9,189
15	44.00	11.00	21.50	7.75	101.3	10,056
15.5	45.50	11.50	22.25	8.00	107.8	11,271
16	47.00	11.75	23.00	8.25	114.3	11,938
16.5	48.50	12.25	23.75	8.50	123.4	14,123
17	50.00	12.50	24.50	8.75	132.4	15,415
17.5	51.50	13.00	25.25	9.00	145.7	15,980
18	53.00	13.25	26.00	9.25	153.4	16,233
18.5	54.50	13.75	26.75	9.50	161.8	16,591
19	56.00	14.00	27.50	9.75	177.5	18,233
19.5	57.59	14.50	28.25	10.00	187.1	20,634
20	59.00	14.75	29.00	10.25	196.0	21,405
20.5	60.50	15.25	29.75	10.50	212.2	23,465
21	61.75	15.50	30.25	10.75	234.6	24,597

4:1 SLOPE

H	WL	HJ	WS	hts	CONCRETE (C.Y.)	REINF. STEEL (LBS.)
4	12.25	3.25	6.50	2.25	6.9	809
4.5	13.75	3.50	7.25	2.75	8.3	987
5	15.50	4.00	8.00	3.00	10.7	1,023
5.5	17.00	4.25	9.00	3.25	12.5	1,225
6	18.75	4.75	9.75	3.50	14.7	1,369
6.5	20.25	5.25	10.50	3.75	17.4	1,474
7	21.75	5.50	11.50	4.00	20.6	1,585
7.5	23.50	6.00	12.25	4.50	23.5	2,009
8	25.00	6.25	13.00	4.75	26.2	2,183
8.5	26.50	6.75	14.00	5.00	29.7	2,451
9	28.25	7.25	14.75	5.25	33.6	3,819
9.5	29.75	7.50	15.50	5.50	38.3	3,972
10	31.25	8.00	16.50	6.00	42.4	4,366
10.5	33.00	8.25	17.25	6.25	46.3	4,594
11	34.50	8.75	18.00	6.50	52.0	5,106
11.5	36.00	9.00	19.00	6.75	59.3	6,335
12	37.75	9.50	19.75	7.00	64.3	6,784
12.5	39.25	10.00	20.50	7.25	70.0	6,997
13	40.75	10.25	21.25	7.75	79.3	8,146
13.5	42.59	10.75	22.25	8.00	85.6	8,938
14	44.00	11.00	23.00	8.25	94.3	9,374
14.5	45.75	11.50	23.75	8.50	101.2	9,976
15	47.25	12.00	24.75	8.75	113.9	10,766

CONST. NO.	PROJECT NO.	YEAR	SHEET NO.
		2010	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

NOTE: QUANTITIES ON THIS SHEET ARE ESTIMATED TOTALS FOR ALL FOUR WINGWALLS.

NOTE: ADDITIONAL CONCRETE AND REINFORCEMENT QUANTITIES FOR BOX CULVERT CUT-OFF WALL DOWELS TO BE ADJUSTED BASED ON AS-BUILT DIMENSIONS.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

WINGWALL DIMENSIONS AND QUANTITIES

STANDARD REINFORCED CONCRETE BRIDGE BOX AND SLAB TYPE

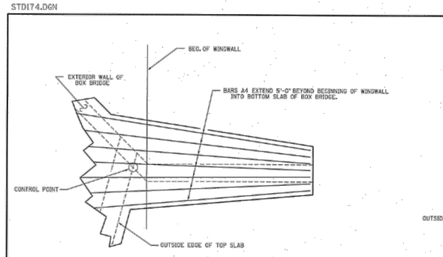
2010

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

STD-17-14

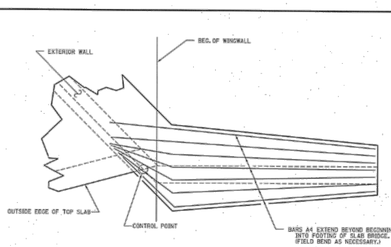
DESIGNED BY: CHAD J. MAAS — DATE: 12-09
DRAWN BY: DUANE MUSIC — DATE: 04-05
SUPERVISED BY: CHAD J. MAAS — DATE: 12-09
CHECKED BY: — DATE:

STDI74.DGN



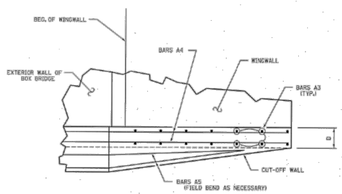
PLAN OF WING FOOTING DETAIL FOR CONCRETE BOX BRIDGE

NOTE: FOR CROSS SECTION OF WINGWALL & FOOTING, SEE "SECTION" ON SHEET STD-17-15.

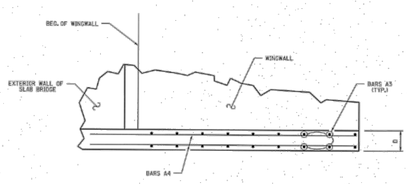


PLAN OF WING FOOTING DETAIL FOR SLAB TYPE BRIDGE

NOTE: FOR CROSS SECTION OF WINGWALL & FOOTING, SEE "SECTION" ON SHEET STD-17-15.



ELEVATION OF WING FOOTING DETAIL FOR CONCRETE BOX BRIDGE



ELEVATION OF WING FOOTING DETAIL FOR SLAB TYPE BRIDGE

NOTE: FOR ADDITIONAL INFORMATION ABOUT FOOTINGS @ WINGWALLS, SEE TABLE OF WALL DIMENSIONS, REINFORCING STEEL SCHEDULE AND QUANTITIES ON DWG. STD-17-13.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

WINGWALL DESIGN SECTIONS

STANDARD REINFORCED CONCRETE BRIDGE BOX AND SLAB TYPE

2010

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

STD-17-16

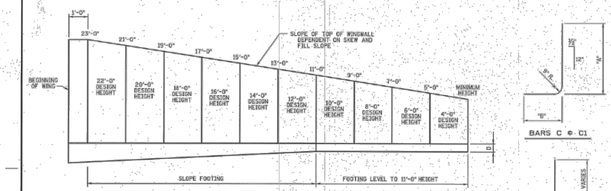
DESIGNED BY: CHAD J. MAAS — DATE: 12-09
DRAWN BY: DUANE MUSIC — DATE: 04-05
SUPERVISED BY: CHAD J. MAAS — DATE: 12-09
CHECKED BY: — DATE:

G:\21-0127\C-CIVIL ENGINEERING\PLANS-SHEETS\21-0127 CIVIL DETAILS.DWG
PLOTTED BY JEFF MCKENNEY ON: 11/29/2021 1:34 PM
LAST UPDATED BY THSCHER ON: 11/29/2021 1:34 PM

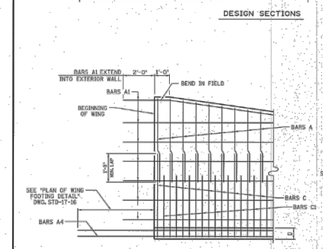
STDI74.DGN

DESIGN SECTION	WALL DIMENSIONS: DESIGN HEIGHT	BASE	TOE	W	HEEL	D	REINFORCING STEEL SCHEDULE: BARS C: SIZE	SPACING	A	B	LENGTH	BARS C1: SIZE	SPACING	A	B	LENGTH	BARS A: SIZE	SPACING	LENGTH	BARS A2: SIZE	SPACING	LENGTH	BARS A3: SIZE	SPACING	LENGTH	* QUANTITIES PER LINEAR FOOT: WALL & FOOTING: CONCRETE (C.Y.)	REINFORCING (LBS.)	DESIGN HEIGHT	DESIGN SECTION
1	4'-0"	2'-9"	1'-3"	1'-	7"	9"	4	1'-0"	4'-0"	1'-10"	6'-3"	--	--	--	--	--	--	--	--	4	1'-0"	2'-5"	4	1'-0"	2'-5"	.20	23.73	4'-0"	1
2	6'-0"	2'-9"	1'-6"	1'-0"	1'-3"	9"	4	1'-0"	6'-0"	2'-1"	8'-4"	--	--	--	--	--	--	--	--	6'-5"	4	1'-0"	3'-4"	.36	27.68	6'-0"	2
3	8'-0"	4'-7"	1'-9"	1'-6"	1'-9"	1'-0"	5"	4	8"	8'-6"	2'-0"	10'-10"	--	--	--	--	--	--	--	8'-5"	4	1'-0"	4'-3"	.40	37.65	8'-0"	3
4	10'-0"	5'-7"	1'-9"	1'-9"	2'-3"	2'-6"	5"	5	1'-0"	5'-6"	2'-3"	7'-9"	5	1'-0"	4'-3"	2'-5"	7'-1"	4	1'-0"	10'-5"	5	10"	5'-3"	.51	54.82	10'-0"	4
5	12'-0"	6'-7"	2'-3"	1'-3"	3'-2"	11"	6	1'-0"	6'-6"	3'-1"	9'-5"	6	1'-0"	4'-3"	3'-4"	7'-10"	4	1'-0"	8'-0"	12'-4"	5"	8"	6'-0"	.67	76.16	12'-0"	5
6	14'-0"	7'-6"	2'-0"	1'-4"	3'-9"	1'-2"	6	10"	9'-0"	3'-10"	12'-6"	6	11"	6'-0"	3'-5"	10'-3"	4	10"	7'-5"	14'-4"	5	7"	7'-0"	.84	97.82	14'-0"	6
7	15'-0"	8'-6"	2'-8"	1'-5"	4'-5"	1'-3"	6	10"	9'-6"	3'-9"	13'-4"	6	10"	7'-1"	3'-5"	10'-10"	4	10"	9'-4"	15'-10"	5	6"	8'-1"	1.04	117.65	15'-0"	7
8	15'-0"	9'-4"	3'-0"	1'-6"	4'-10"	1'-4"	6	9"	12'-3"	3'-4"	16'-4"	6	9"	7'-9"	4'-3"	11'-10"	4	9"	8'-9"	19'-0"	6	1"	9'-0"	1.21	145.73	15'-0"	8
9	20'-0"	10'-4"	3'-2"	1'-7"	5'-7"	1'-6"	8	1'-0"	13'-8"	4'-4"	18'-0"	6	1'-0"	8'-10"	4'-4"	13'-2"	4	1'-0"	9'-6"	21'-2"	6	6"	9'-10"	1.44	186.62	20'-0"	9
10	23'-0"	11'-8"	3'-5"	1'-8"	6'-7"	1'-9"	8	10"	15'-3"	4'-9"	20'-0"	8	10"	9'-10"	4'-9"	14'-6"	4	10"	10'-8"	23'-5"	6	4"	11'-3"	1.74	269.89	22'-6"	10

* QUANTITIES FOR REINFORCING STEEL INCLUDES BARS A1 AND A4 NOT SHOWN IN SCHEDULE. ALL BARS A ARE STRAIGHT BARS.

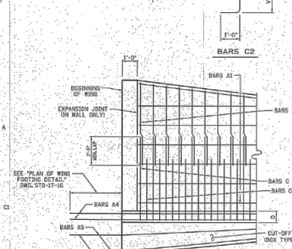


DESIGN SECTIONS



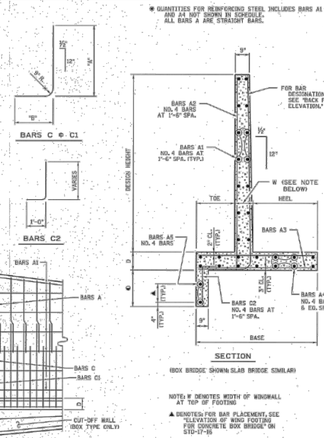
BACK FACE ELEVATION

(SLAB BRIDGES WITH WINGWALLS ≤ 15 FEET IN LENGTH)



BACK FACE ELEVATION

(ALL BOX BRIDGES AND SLAB BRIDGES WITH WINGWALLS > 15 FEET IN LENGTH)



BARS C2

SECTION

(BOX BRIDGE SHOWN SLAB BRIDGE SIMILAR)

NOTE: W DENOTES WIDTH OF WINGWALL AT TOP OF FOOTING

▲ DENOTES FOR BAR PLACEMENT, SEE "ELEVATION OF WING FOOTING FOR CONCRETE BOX BRIDGE" ON STD-17-16

● DENOTES CUT-OFF WALL VARIES FROM 2'-11" TO 4'-7" IN (BOX TYPE ONLY) INCLUDES 1'-0" CUT-OFF WALL QUANTITIES

CONST. NO. | PROJECT NO. | YEAR 2010 | SHEET NO.

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

NOTES

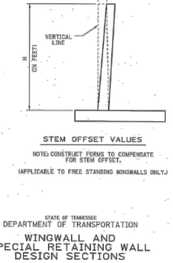
CONCRETE TO BE CLASS "A" f'c = 3000 psi REINFORCED TO BE ASTM A615 GRADE 60

STEM OFFSET

Δ (IN INCHES)

$\Delta = \frac{H}{16}$, FOR H ≤ 12'-0"

$\Delta = \frac{H-6}{8}$, 2½" MAX., FOR H > 12'-0"



STEM OFFSET VALUES

NOTE: CONSTRUCT FORMS TO COMPENSATE FOR STEM OFFSET.

(APPLICABLE TO FREE STANDING WINGWALLS ONLY.)

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

WINGWALL AND SPECIAL RETAINING WALL DESIGN SECTIONS

STANDARD REINFORCED CONCRETE BRIDGE BOX AND SLAB TYPE

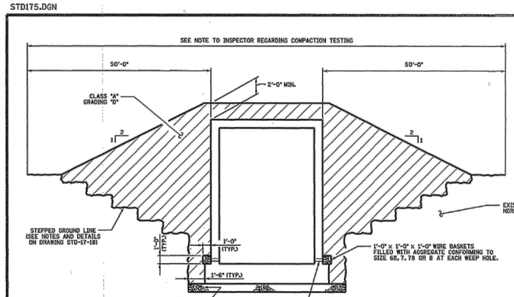
2010

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

STD-17-15

DESIGNED BY: CHAD J. MAAS — DATE: 12-09
DRAWN BY: DUANE MUSIC — DATE: 04-05
SUPERVISED BY: CHAD J. MAAS — DATE: 12-09
CHECKED BY: — DATE:

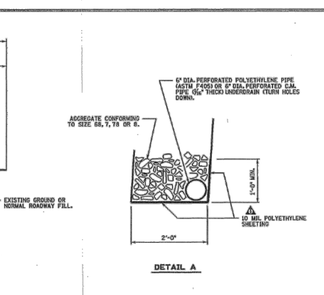
STDI75.DGN



BACKFILL PLACEMENT

(BOX CULVERT SHOWN; SLAB BRIDGES SIMILAR)

NOTE: CLASS "A" GRADING "D" LIMITS ARE TYPICAL FOR BOX CULVERT OR BRIDGE AND WINGWALLS.



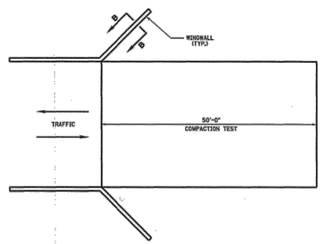
DETAIL A

NOTES

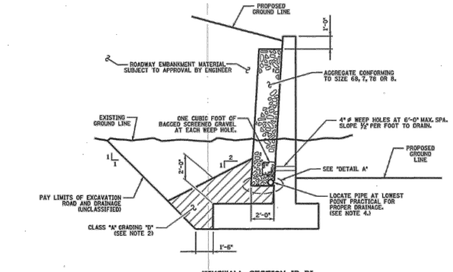
1. BACKFILLING UNLESS OTHERWISE SPECIFIED OR DIRECTED, THE CONTRACTOR SHALL BACKFILL BEHIND EXTERIOR WALLS AND WINGWALLS OF BOX AND SLAB BRIDGES AS SOON AS POSSIBLE AS SOON AS THE FOLLOWING CONDITIONS ARE MET:
   A. CONCRETE SURFACES AGAINST WHICH BACKFILL WILL BE PLACED HAVE BEEN GIVEN A CLASS 1 FINISH AS SPECIFIED IN SUBSECTION 604.21.
   B. REPRESENTATIVE SPECIMENS OF THE CONCRETE IN THE STRUCTURE SECTION OR UNIT, CURED BY THE METHOD AND IN THE MANNER THAT THE CONCRETE WHICH THEY REPRESENT IS CURED, HAVE ATTAINED A COMPRESSIVE STRENGTH OF 3000 PSI.
   C. THE CONCRETE SHALL HAVE BEEN PLACED A MINIMUM OF SEVENTY-TWO HOURS (3 DAYS) OR TWENTY-FOUR HOURS EACH IN WHICH THE TEMPERATURE FALLS BELOW 40°F OR 2) CALENDAR DAYS WHICHEVER OCCURS FIRST.

   THE PLACEMENT OF BACKFILL AND EMBANKMENT SHALL BE IN ACCORDANCE WITH SUBSECTION 209.03 AND SUBSECTION 209.04, RESPECTIVELY, AND AS SPECIFIED ON THE PLANS.
2. IN LIEU OF THE CLASS "A" GRADING "D" MATERIAL SHOWN, CLASS "B" GRADING "A" OR "B" MAY BE USED.
3. BACKFILL: BACKFILLING OF BOX AND SLAB BRIDGES AND WINGWALLS SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 204.11 OF THE STANDARD SPECIFICATIONS. THE REQUIREMENTS FOR STEPPING OF FOUNDATION EXCAVATION TO PREVENT SLIDING ACTION, AND FOR PLACING AND COMPACTING LAYERS OF BACKFILL, AND FOR MAINTAINING EAT ALL TIMES EQUAL HEIGHTS OF BACKFILL AGAINST EXTERIOR WALLS OF BOX AND SLAB BRIDGES SHALL BE STRICTLY ENFORCED. SEE STANDARD STD-17-18 FOR OTHER NOTES AND DETAILS.
4. LOCATE PIPE AT LOWEST POINT PRACTICAL FOR PROPER DRAINAGE WITH SLOPE PARALLEL TO ABUTMENT BEAM OR RETAINING WALL (5% PER FOOT MINIMUM). INSTALL PIPE AND 1'-0" OF COVER AS SOON AS POSSIBLE AFTER FORMING WALL.
5. WEEP HOLES SHALL BE PROVIDED AT A SPACING NOT TO EXCEED 5 FEET IN THE WINGWALLS AND 5 FEET IN THE BOX OR SLAB BRIDGE EXTERIOR WALLS.

NOTE TO INSPECTOR: SEE MATERIALS AND TESTS SAMPLING AND TESTING SCHEDULE FOR FREQUENCY OF COMPACTION TESTING OF EMBANKMENT AND BACKFILL MATERIAL. ALSO, NOTE 1.



PLAN OF APPROACH ROADWAY AND CULVERT



WINGWALL SECTION "B-B"

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

BACKFILL AND DRAINAGE DETAILS

STANDARD REINFORCED CONCRETE BRIDGE BOX AND SLAB TYPE

2010

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

STD-17-17

RaganSmith

Nashville - Murfreesboro - Chattanooga
ragansmith.com

LAWRENCE J. KILGORE — REGISTERED ENGINEER — AGRICULTURE — LICENSE NO. 109405 — 20 21.11.29 — STATE OF TENNESSEE

B&T LANDSCAPING

FOR

SHELLEY & TIM TINNIN

GOODLETTSVILLE, TENNESSEE

Scale: NTS

Date: NOVEMBER 8, 2021

Approved By: L.J. KILGORE

Revisions:

- - -
- - -
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- - -
- - -

Drawing Title:

BRIDGE DETAILS

Drawing No.

C5.11

Project No.

21-0127

STD175.DGN

NOTE: UNIFORM BACKFILLING IS REQUIRED TO PREVENT SLIDING OR RACKING OF THE STRUCTURE DUE TO UNEQUAL LOADING. THE MAXIMUM DEVIATION FROM EQUAL BACKFILLING REQUIREMENTS SHALL BE 30 INCHES.

NOTE: LOOSELY-PACKED LIFTS WHICH WILL BE TAMPED MECHANICALLY SHALL NOT BE MORE THAN SIX INCHES. IF TAMPING ROLLERS ARE USED, 10-INCH LIFTS ARE ACCEPTABLE.

CONST. NO.		
PROJECT NO.	YEAR	SHEET NO.
	2010	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

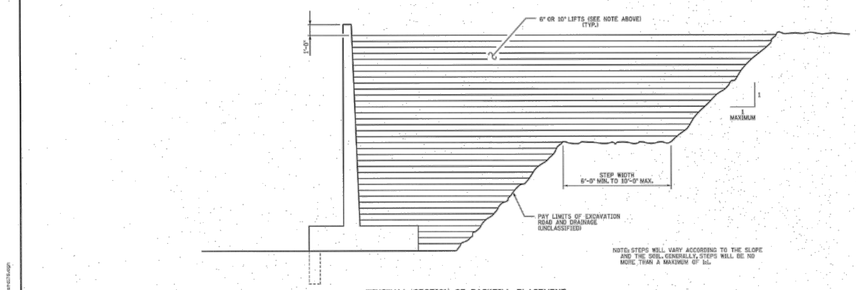
NOTE: IF ANY PART OF THE STRUCTURE IS TO FUNCTION AS A RETAINING FOR BACKFILL (SUCH AS ABUTMENTS, RETAINING WALLS, WINGWALLS, AND WINGS OF BOX CULVERTS OR HOUSE STRUCTURES), THE ROUGHEST SLOPES SHOULD BE STEPPED IN ORDER TO PREVENT ANY WEDGE ACTION. SEE NOTE REGARDING BACKFILL ON DRAWING STD-17-2 AND OTHER NOTES AND DETAILS ON DRAWING STD-17-1.

PAY LIMITS OF EXCAVATION ROAD AND DRAINAGE (UNCLASSIFIED)

NOTE: NUMBERING OF LIFTS SHOWN BASED ON 10 INCH LIFTS.

UNIFORM BACKFILL PLACEMENT

(BOX BRIDGE SHOWN; SLAB BRIDGES SIMILAR)



NOTE: STEPS WILL VARY ACCORDING TO THE SLOPE AND THE SOIL. GENERALLY, STEPS WILL BE NO MORE THAN A MAXIMUM OF 5'.

WINGWALL SECTION OF BACKFILL PLACEMENT

(BOX BRIDGE SHOWN; SLAB BRIDGE SIMILAR)

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

BACKFILL DETAILS

STANDARD REINFORCED CONCRETE BRIDGE BOX AND SLAB TYPE

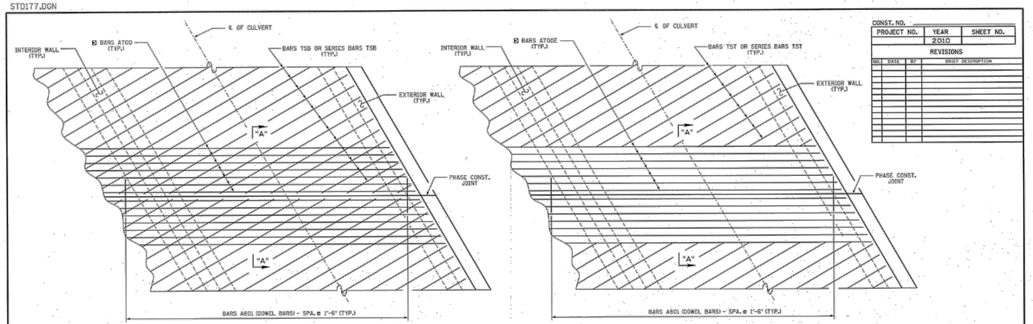
2010

CORRECT Edward P. Wasserman
DIRECTOR OF ENGINEERING

STD-17-18

DESIGNED BY: STATE OF TENN. DATE: 10-09
DRAWN BY: HEATHER WILSON DATE: 04-10
SUPERVISED BY: CHIEF OF BRANCH DATE: 10-09
CHECKED BY: DATE:

STD177.DGN



PLAN VIEW
(BOTTOM MAT OF STEEL)

PLAN VIEW
(TOP MAT OF STEEL)

CONST. NO.		
PROJECT NO.	YEAR	SHEET NO.
	2010	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

EDGE BEAM ESTIMATED QUANTITIES

QUANTITIES PER FOOT	
BAR	REINFORCING LBS.
AT0DE	28.62
AT0D	28.62

NOTE: SKEW ANGLES LESS THAN 45° REQUIRE SPECIAL DESIGN.

NOTES

SEE STD-17-3 FOR STAGE CONSTRUCTION NOTES.

GENERAL NOTES

NOTE: DIMENSIONS WILL BE BASED ON PLANS DIMENSIONS SHOWN ON THE FOLLOWING DRAWINGS: ROADWAY CULVERT SHEETS, THE CONCRETE BOX OR SLAB BRIDGE DRAWINGS DESIGNED FOR A SPECIFIC LOCATION, OR THE STANDARD BOX OR SLAB BRIDGE DRAWINGS.

NOTE: ALL BARS "A" ARE STRAIGHT BARS.

BARS TSB OR SERIES BARS TSB SHALL BE PLACED ON TOP OF EDGE BEAM STEEL

EDGE BEAM STEEL

STEEL PLACEMENT DETAIL

BARS AT2DE
6 SPA. @ 5" = 2'-6"
PHASE CONST. JOINT
*BARS AB2D 2'-0" DOWEL BAR
1'-0"
1'-6"
SURFACE OF ASPHALT OR TOP OF FILL
BARS TST OR SERIES BARS TST
BARS TSB OR SERIES BARS TSB
BARS AT2D
6 SPA. @ 5" = 2'-6"
5"

* DENOTES BARS AB2D TO BE SPA. @ 1'-6" c.c.

SECTION "A-A"
(LOCATED @ PHASE CONST. JOINT)

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION JOINT DETAIL (FILL ABOVE TOP OF SLAB NOT GREATER THAN 3'-6")

STANDARD REINFORCED CONCRETE BRIDGE BOX OR SLAB TYPE

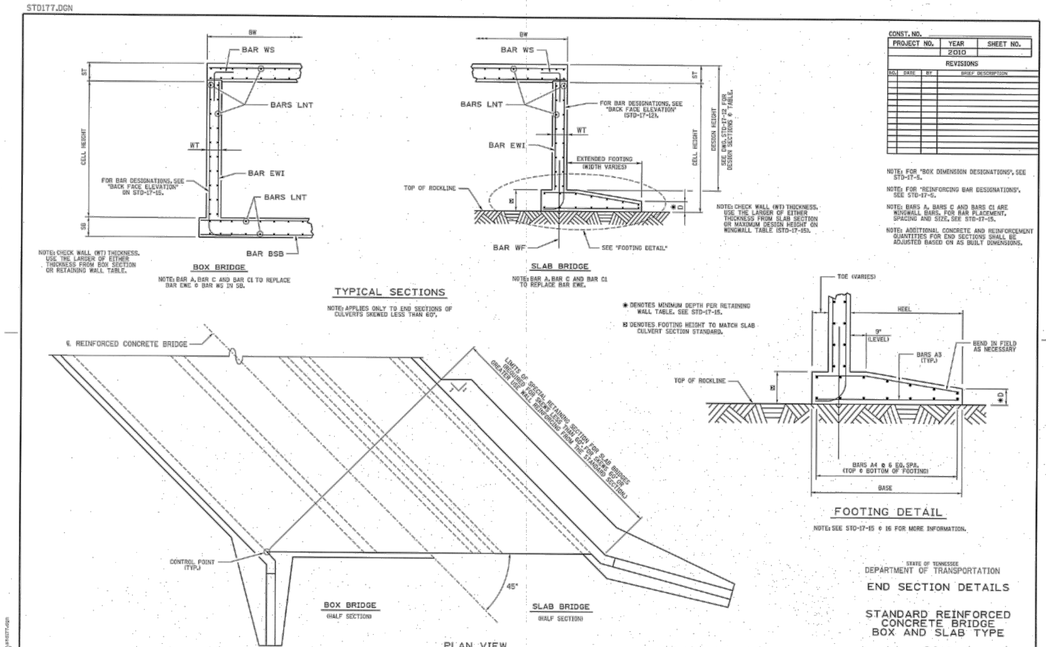
2010

CORRECT Edward P. Wasserman
DIRECTOR OF ENGINEERING

STD-17-25

DESIGNED BY: STATE OF TENN. DATE: 10-09
DRAWN BY: HEATHER WILSON DATE: 04-10
SUPERVISED BY: CHIEF OF BRANCH DATE: 10-09
CHECKED BY: DATE:

STD177.DGN



TYPICAL SECTIONS

NOTE: APPLIES ONLY TO END SECTIONS OF CULVERTS SKEWED LESS THAN 60°.

CONST. NO.		
PROJECT NO.	YEAR	SHEET NO.
	2010	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

NOTE: FOR "BOX DIMENSION DESIGNATIONS", SEE STD-17-5.

NOTE: FOR "REINFORCING BAR DESIGNATIONS", SEE STD-17-5.

NOTE: BARS A, BARS C AND BARS C1 ARE WINGWALL BARS. FOR BAR PLACEMENT, SPACING AND SIZE, SEE STD-17-15.

NOTE: ADDITIONAL CONCRETE AND REINFORCEMENT QUANTITIES FOR END SECTIONS SHALL BE ADJUSTED BASED ON AS BUILT DIMENSIONS.

* DENOTES MINIMUM DEPTH FOR RETAINING WALL TABLE, SEE STD-17-15.

H DENOTES FOOTING HEIGHT TO MATCH SLAB CULVERT SECTION STANDARD.

FOOTING DETAIL

NOTE: SEE STD-17-15 & 16 FOR MORE INFORMATION.

HALF SECTION

PLAN VIEW

(3 BARREL SHOWN; 1 AND 2 BARREL SIMILAR)
(APPLIES ONLY TO END SECTIONS OF CULVERTS SKEWED LESS THAN 60°)

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

END SECTION DETAILS

STANDARD REINFORCED CONCRETE BRIDGE BOX AND SLAB TYPE

2010

CORRECT Edward P. Wasserman
DIRECTOR OF ENGINEERING

STD-17-28

DESIGNED BY: STATE OF TENN. DATE: 10-09
DRAWN BY: HEATHER WILSON DATE: 04-10
SUPERVISED BY: CHIEF OF BRANCH DATE: 10-09
CHECKED BY: DATE:

G:\21-0127\CIVIL ENGINEERING\PLAN SHEETS\21-0127 CIVIL DETAILS.DWG
PLOTTED BY JEFF MCKENNEY ON 11/3/2021 1:34 PM LAST UPDATED BY THACHER ODIN 11/3/2021 1:54 PM

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LAWRENCE J. KILGORE REGISTERED ENGINEER AGRICULTURE No. 109400 STATE OF TENNESSEE 2021.11.29

B & T LANDSCAPING

FOR

SHELLEY & TIM TINNIN

GOODLETTSVILLE, TENNESSEE

Scale: NTS

Date: NOVEMBER 8, 2021

Approved By: L.J. KILGORE

Revisions:

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Drawing Title:

BRIDGE DETAILS

Drawing No.

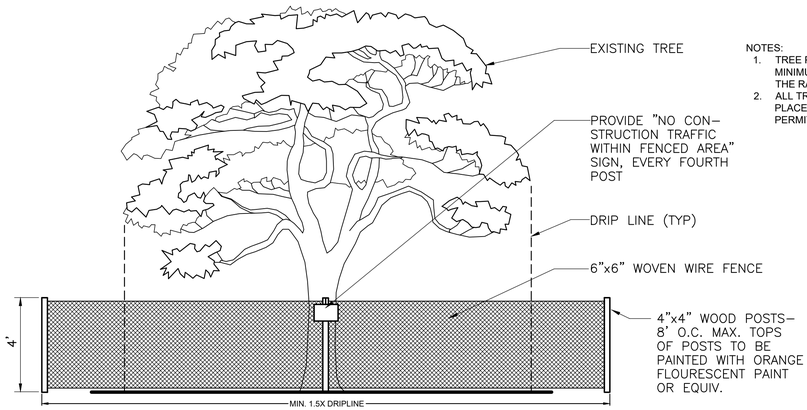
C5.12

Project No.

21-0127

SAMPLE AREA

POINT #	SIZE (CAL)	SPECIES
42000	14	OSAGE ORANGE
42001	14	HACKBERRY
42002	12	BOXELDER
42003	16	HACKBERRY
42004	12	ELM
42005	12	WALNUT
42006	14	WALNUT
42007	12	WALNUT
42008	14	WALNUT
42009	14	WALNUT
42010	11	HACKBERRY
42011	8	ELM
42012	15	HACKBERRY
42013	10	HACKBERRY
42014	12	HACKBERRY
42015	9	HACKBERRY
42016	14	HACKBERRY
42017	14	HACKBERRY
42018	8	HACKBERRY
42019	8	HACKBERRY
42020	10	BOXELDER
42021	10	HACKBERRY
42022	38	BODDOCK
42023	10	ELM
42024	8	ELM
42025	8	BOXELDER
42026	10	WALNUT
42027	12	HACKBERRY
42028	12	BOXELDER
42029	14	HACKBERRY
42030	35	ELM
42031	8	HACKBERRY
42032	14	BOXELDER
42033	12	HACKBERRY
42034	18	HACKBERRY
42035	14	BOXELDER
42036	10	HACKBERRY
42037	8	BODDOCK
42038	10	HACKBERRY
42039	10	HACKBERRY
42040	12	HACKBERRY
42041	8	HACKBERRY
42042	8	HACKBERRY
42043	8	HACKBERRY
42044	8	BOXELDER
42045	10	HACKBERRY
42046	10	HACKBERRY
42047	8	HACKBERRY
42048	18	HACKBERRY
42049	8	HACKBERRY
42050	16	OAK
42051	10	CHERRY
42052	12	HACKBERRY
42053	20	ASH
42054	14	WALNUT
42055	14	ASH
42056	14	HACKBERRY
42057	12	CEDAR
42058	8	HACKBERRY
42059	10	CEDAR
42060	18	ASH
42061	10	HACKBERRY
42062	12	CEDAR
42063	12	CEDAR
42064	10	HACKBERRY
42065	16	BOXELDER
42066	12	BOXELDER
42067	9	BOXELDER
42068	10	WALNUT
42069	10	PERSIMON
42070	10	WALNUT
42071	14	HACKBERRY
42072	9	HACKBERRY
42073	8	OSAGE ORANGE
42074	8	HACKBERRY
42075	18	HACKBERRY
42076	10	ELM
42077	12	HACKBERRY
42078	14	CHERRY
42079	8	HACKBERRY
42080	8	HACKBERRY
42081	12	WALNUT
42082	38	OSAGE ORANGE
42083	14	OSAGE ORANGE
42084	22	OSAGE ORANGE
42085	12	WALNUT
42086	12	BOXELDER
42087	8	HACKBERRY
42088	8	HACKBERRY
42089	10	HACKBERRY
42090	24	OSAGE ORANGE
42091	8	WALNUT
42092	10	HACKBERRY
42093	12	CEDAR
42094	14	HACKBERRY
42095	14	BOXELDER
42096	10	CHERRY
42097	16	BOXELDER
42098	10	BOXELDER
42099	8	BOXELDER
42100	10	HACKBERRY
42101	18	HACKBERRY
42102	18	OAK
42103	18	OSAGE ORANGE



TREE PROTECTION DETAIL

NOT TO SCALE

NOTES:
1. TREE PROTECTION TO BE INSTALLED AT A MINIMUM DISTANCE OF ONE AND A HALF TIMES THE RADIUS OF THE DRIP LINE.
2. ALL TREE PROTECTION FENCING SHALL BE IN PLACE PRIOR TO THE ISSUANCE OF A GRADING PERMIT.

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

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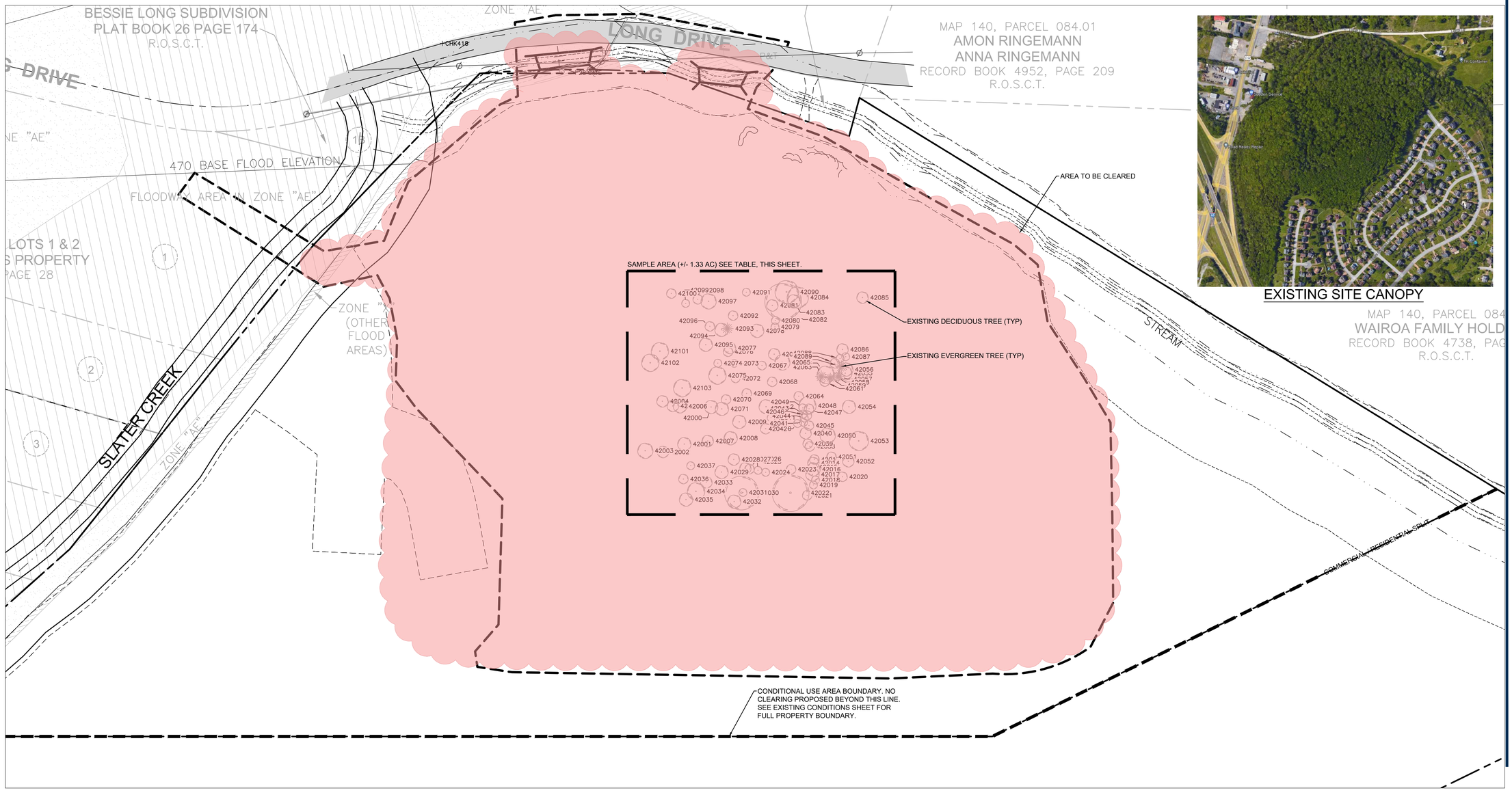
TREE REMOVAL CALCULATIONS:	
TOTAL SITE AREA:	56.27 AC
AREA TO BE CLEARED:	+/- 8.65 AC
AVG CAL. PER ACRE: (PER SAMPLE AREA)	+/- 984 CAL
TOTAL CAL. ON PROPERTY:	+/- 55,314
TOTAL CAL. TO BE REMOVED:	+/- 8,512 CAL (15.4%)
TOTAL CAL. TO REMAIN:	+/- 46,802 CAL (84.6%)



EXISTING SITE CANOPY

MAP 140, PARCEL 084
WAIROA FAMILY HOLD
RECORD BOOK 4738, PAG
R.O.S.C.T.

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TYLOR LEWARON FISCHER REGISTERED AGRICULTURE TENNESSEE NO. 1111 LANDSCAPE ARCHITECT 11/29/21

B & T LANDSCAPING

FOR

SHELLEY & TIM TINNIN

GOODLETTSVILLE, TENNESSEE

Scale: 1"=50'

Date: NOVEMBER 8, 2021

Approved By: TF

Revisions:

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Drawing Title:

EXISTING TREE INVENTORY

Drawing No.

L0.0

Project No.

21-0127

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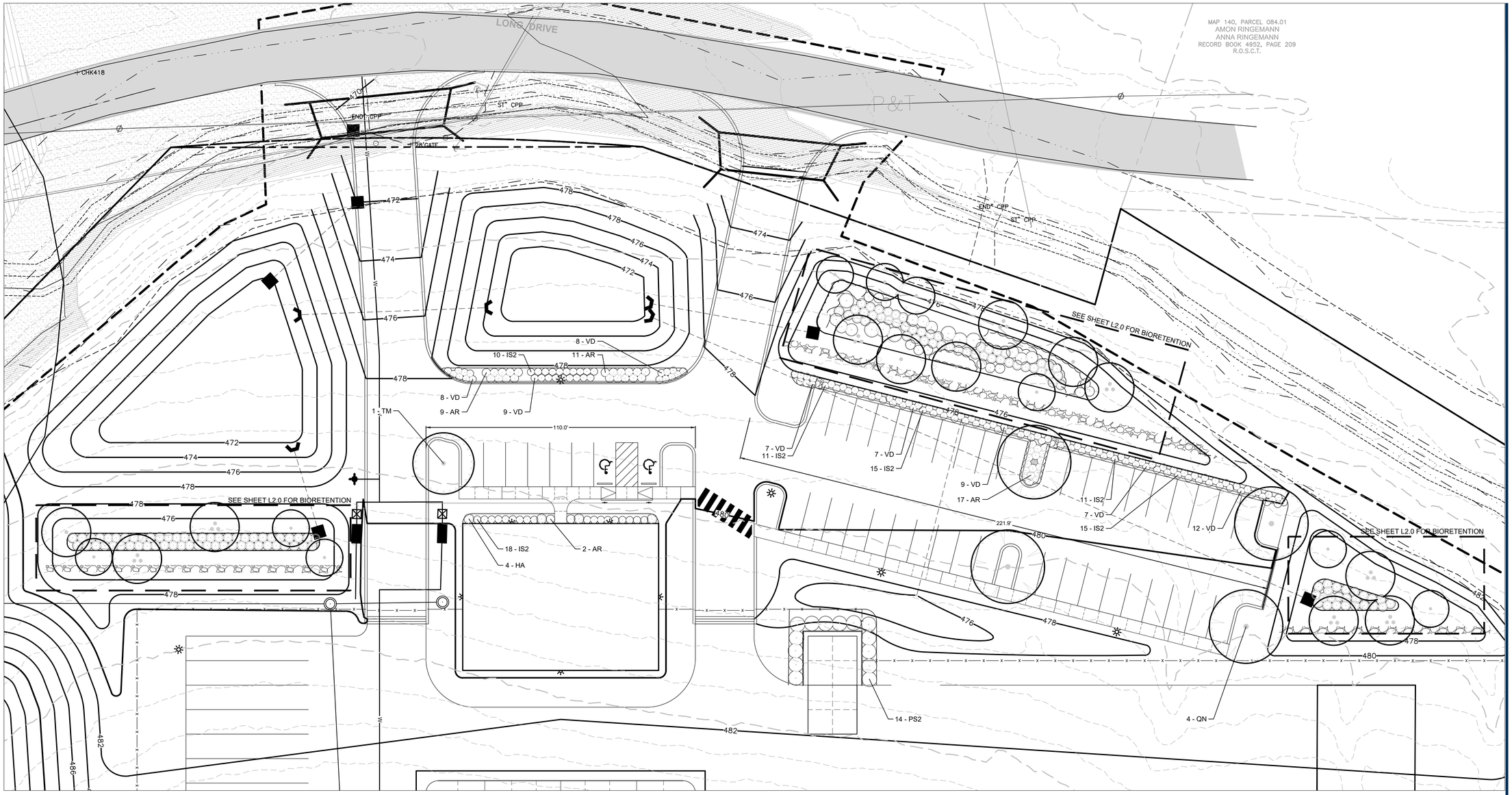
PLOTTED BY TYLOR FISCHER ON 11/29/2021 12:01 PM LAST UPDATED BY TFISCHER ON 11/29/2021 10:58 AM



CITY OF GOODLETSVILLE NOTES:

1. ALL REQUIRED LANDSCAPING SHALL BE AUTOMATICALLY IRRIGATED, AND SUCH IRRIGATION SHALL BE FULLY OPERATIONAL PRIOR TO THE ISSUANCE OF THE FINAL CERTIFICATE OF OCCUPANCY.
2. ALL PARKING ISLANDS ARE TO BE INSPECTED AND APPROVED BY THE CITY OF GOODLETSVILLE PLANNING DEPARTMENT PRIOR TO THE INSTALLATION OF ANY PLANT MATERIAL OR SOIL.

LANDSCAPE CALCULATIONS:

PARKING LOT TREES REQUIRED: 5 (1 PER 15 SPACES)
PARKING LOT TREES PROVIDED: 5

PARKING LOT SCREENING LENGTH: 332 LF
PARKING LOT SCREEN SHRUBS REQUIRED: 166 (1 PER 2 LF)
PARKING LOT SCREEN SHRUBS PROVIDED: 166

FOUNDATION PLANTING PROVIDED: 24 SHRUBS

DUMPSTER SCREENING PROVIDED: 14 SHRUBS (EVERGREEN)

* DUE TO EXISTING STREAM AND EXISTING TREES ON SITE, NO STREET FRONTAGE TREES HAVE BEEN PROPOSED FOR THIS DEVELOPMENT.

PLANT SCHEDULE REQUIRED PLANTING

SITE TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	TYPE	SIZE	HEIGHT	SPACING	REMARKS
	QN	4	QUERCUS NUTTALLII	NUTTALL OAK	DECIDUOUS	3" CAL.	14–16' HT	SEE PLANS	B&B, STRONG CENTRAL LEADER, 6' CLEAR TRUNK, MATCHED TREES.
	TM	1	TAXODIUM DISTICHUM 'AUTUMN GOLD'	BALD CYPRESS	DECIDUOUS	3" CAL.	12–14' HT	SEE PLANS	B&B, STRONG CENTRAL LEADER, 6' CLEAR TRUNK.
SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	TYPE	SIZE/HT	SPREAD	SPACING	REMARKS
	AR	39	ABELIA X 'ROSE CREEK'	ROSE CREEK ABELIA	EVERGREEN	24" HT	24"	SEE PLANS	FULL PLANT, MATCHING
	HA	4	HYDRANGEA ARBORESCENS 'ABETWO'	INCREDIBALL HYDRANGEA	DECIDUOUS	24" HT	24"	SEE PLANS	FULL PLANT, MATCHING
	IS2	80	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY HOLLY	EVERGREEN	24" HT	24"	SEE PLANS	FULL PLANT, MATCHING
	PS2	14	PRUNUS LAUROCERASUS 'SCHIPKAENSIS'	SCHIPKA ENGLISH LAUREL	EVERGREEN	36" HT.	48"	SEE PLANS	FULL PLANT, MATCHING. ← DUMPSTER SCREENING
	VD	67	VIBURNUM DAVIDII	DAVID VIBURNUM	SEMI–EVERGREEN	24" HT	24"	SEE PLANS	FULL PLANT, MATCHING

LISTED PLANT SIZES ARE MINIMUMS. LARGER MATERIAL IS ACCEPTABLE.

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TYLOR LEWARON FISCHER REGISTERED LANDSCAPE ARCHITECT TENNESSEE NO. 1111 — 11/29/21

B&T LANDSCAPING

FOR

SHELLEY & TIM TINNIN

GOODLETTSVILLE, TENNESSEE

Scale: 1"=20'

Date: NOVEMBER 8, 2021

Approved By: TF

Revisions:

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Drawing Title:

OVERALL LANDSCAPE PLAN

Drawing No.

L1.0

Project No.

21-0127

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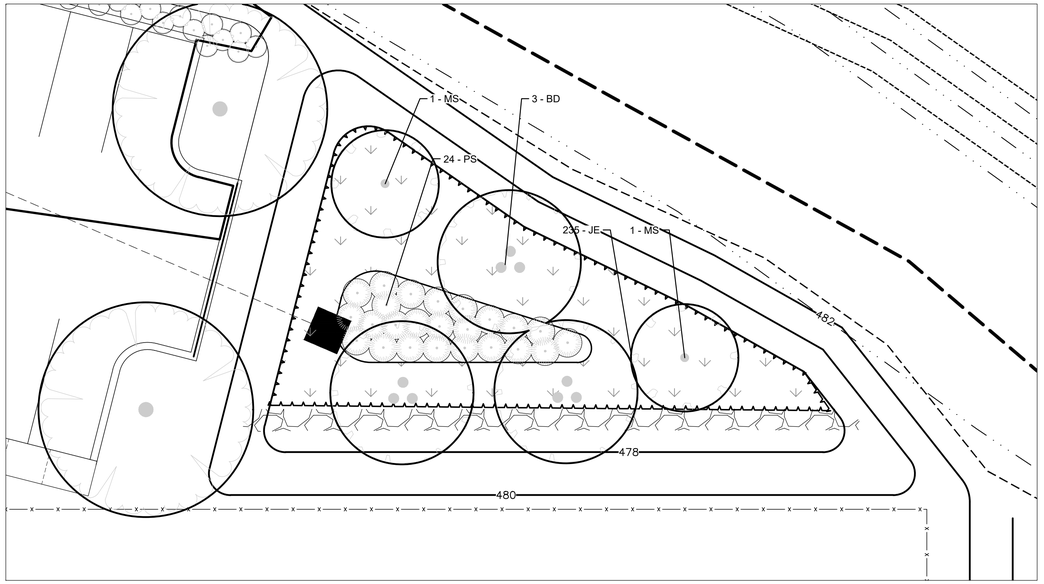
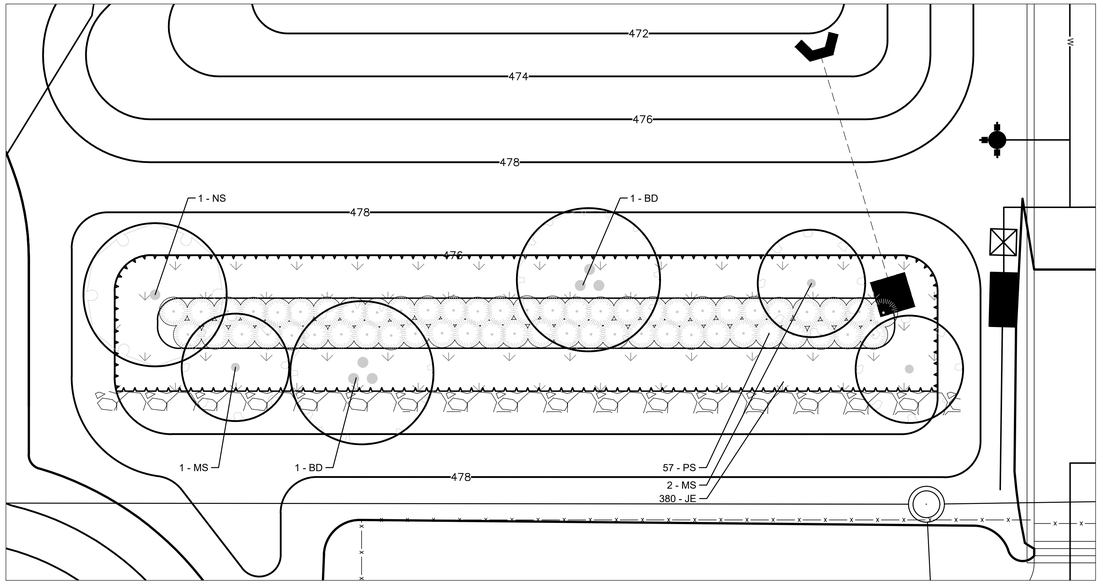
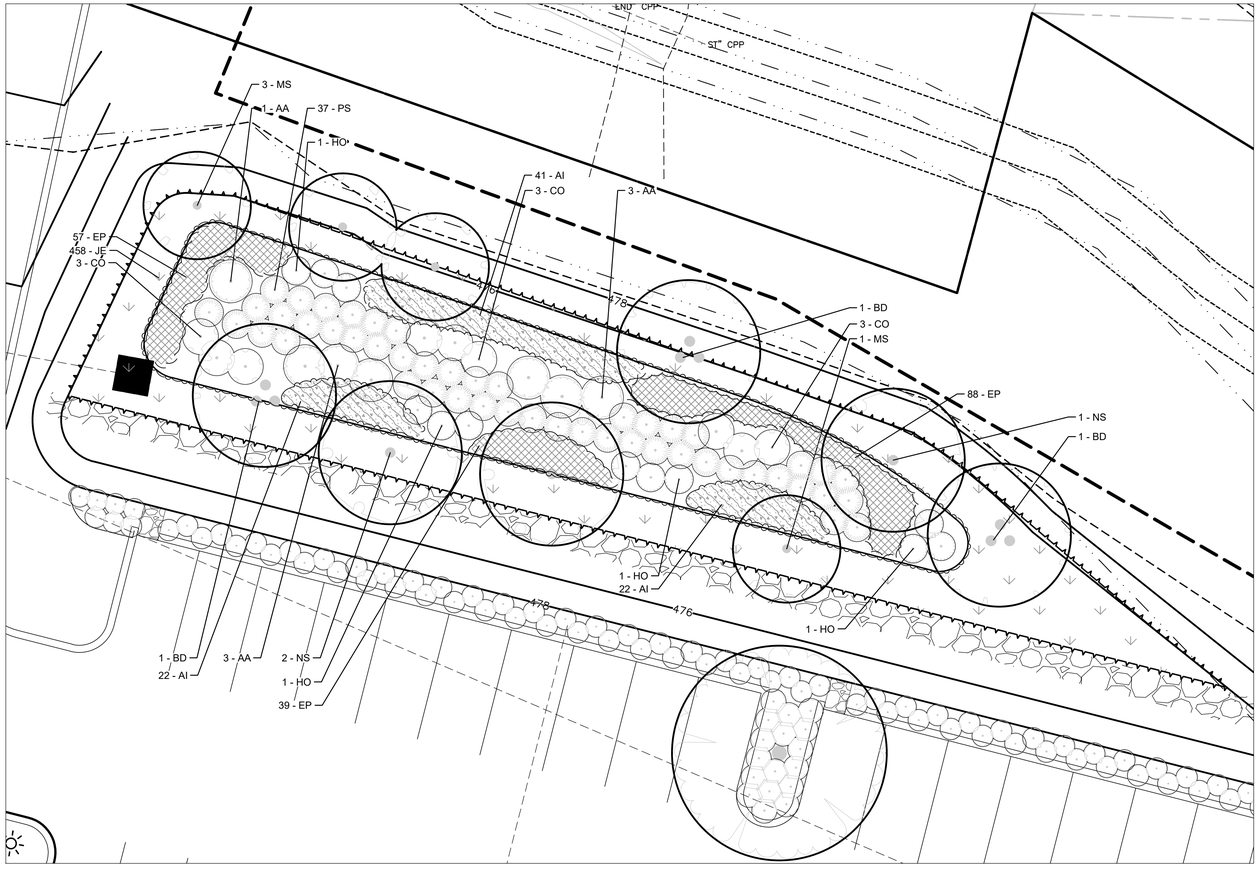


BIORETENTION POND 1



BIORETENTION POND 3



BIORETENTION POND 2

BIORETENTION CALCULATIONS:

BIORETENTION POND 1

LEVEL:	2
SIZE:	1680 SF
TREES REQ:	5 (1/ 400 SF)
COVER:	95-100% @ MATURITY

BIORETENTION POND 2

LEVEL:	2
SIZE:	3850 SF
TREES REQ:	10 (1/ 400 SF)
COVER:	95-100% @ MATURITY

BIORETENTION POND 3

LEVEL:	2
SIZE:	2175 SF
TREES REQ:	6 (1/ 400 SF)
COVER:	95-100% @ MATURITY

PLANT SCHEDULE BIORETENTION

BIO-RETENTION TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	TYPE	SIZE	HEIGHT	SPACING	REMARKS
	BD	8	BETULA NIGRA 'BNMTF' TM	DURA HEAT RIVER BIRCH	DECIDUOUS	2" CAL.	12-14' HT	SEE PLANS	B&B, MULTI-TRUNK (3 CANES MAX)
	MS	9	MAGNOLIA VIRGINIANA	SWEETBAY MAGNOLIA	DECIDUOUS	2" CAL.	8' HT. MIN.	SEE PLANS	B&B, MULTI-TRUNK (3-5 CANES MAX)
	NS	4	NYSSA SYLVATICA	TUPELO	DECIDUOUS	2" CAL.	12-14' HT	SEE PLANS	B&B, STRONG CENTRAL LEADER.
BIORENTENTION GRASSES	CODE	QTY	BOTANICAL NAME	COMMON NAME	TYPE	SIZE/HT	SPREAD	SPACING	REMARKS
	PS	130	PANICUM VIRGATUM 'SHENANDOAH'	SHENANDOAH SWITCH GRASS	ORNAMENTAL GRASS	1 GAL.			
BIORETENTION SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	TYPE	SIZE/HT	SPREAD	SPACING	REMARKS
	AA	7	ARONIA ARBUTIFOLIA	RED CHOKEBERRY	DECIDUOUS	3 GAL			
	CO	9	CEPHALANTHUS OCCIDENTALIS	BUTTONBUSH	DECIDUOUS	3 GAL			
	HO	12	HYDRANGEA QUERCIFOLIA 'SNOW QUEEN'	SNOW QUEEN OAKLEAF HYDRANGEA	DECIDUOUS	3 GAL			
BIORETENTION GRASS AREAS	CODE	QTY	BOTANICAL NAME	COMMON NAME	TYPE	CONT	SPREAD	SPACING	REMARKS
	JE	1,196	JUNCUS EFFUSUS	COMMON RUSH	ORNAMENTAL GRASSES	4" POT			
BIORETENTION GROUNDCOVERS	CODE	QTY	BOTANICAL NAME	COMMON NAME	TYPE	CONT	SPREAD	SPACING	REMARKS
	AI	85	ASCLEPIAS INCARNATA	SWAMP MILKWEED	PERENNIAL	4" POT			
	EP	184	ECHINACEA PURPUREA	CONEFLOWER	PERENNIAL	4" POT			

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TYLOR LEWARON FISCHER REGISTERED LANDSCAPE ARCHITECT TENNESSEE NO. 1111 DEPARTMENT OF AGRICULTURE
11/29/21

B & T LANDSCAPING

FOR

SHELLEY & TIM TINNIN

GOODLETTSVILLE, TENNESSEE

Scale: 1"=10'

Date: NOVEMBER 8, 2021

Approved By: TF

Revisions:

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Drawing Title:

BIORETENTION LANDSCAPE PLANS

Drawing No.

L2.0

Project No.

21-0127

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PLOTTED BY: TYLOR FISCHER ON: 11/29/2021 12:01 PM LAST UPDATED BY: TYFISCHER ON: 11/29/2021 10:55 AM

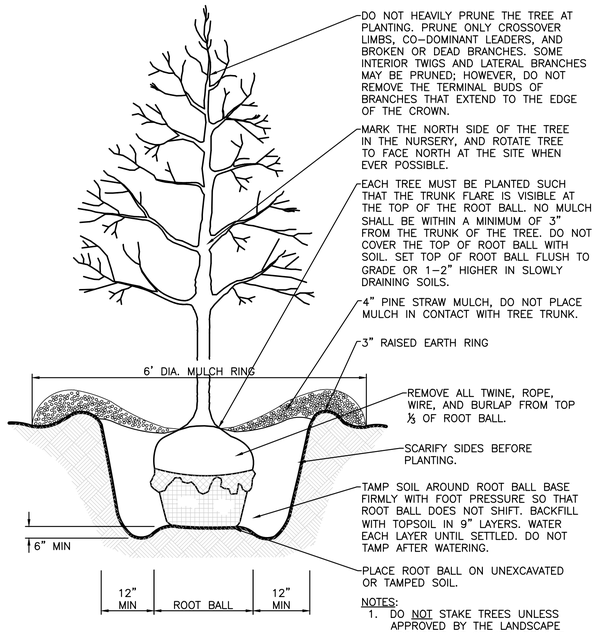
PLANTING NOTES:

1. ANY SERIES OF TREES TO BE PLACED IN A PARTICULAR ARRANGEMENT WILL BE FIELD CHECKED FOR ACCURACY. ANY PLANTS MISARRANGED WILL BE RELOCATED.
2. SOIL USED IN BACKFILLING PLANTING PITS SHALL BE TOPSOIL AND MIXED WITH 25% PEAT BY VOLUME. EXCEPT FOR ERICACEOUS PLANTS, VERY ACID OR SOUR SOIL (SOIL HAVING A pH less than 6) SHALL BE MIXED WITH SUFFICIENT LIME TO PRODUCE A SLIGHTLY ACID REACTION (A pH of 6.0 to 6.5). ADD 10–10–10 COMMERCIAL FERTILIZER AT THE RATE OF 2 POUNDS PER CUBIC YARD. MIX BOTH FERTILIZER AND PEAT THOROUGHLY BY HAND OR ROTARY TILLER.
3. SOIL USED IN BACKFILLING ERICACEOUS PLANTS SHALL BE TOPSOIL MIXED WITH 50% PEAT BY VOLUME. ADD 5–10–5 COMMERCIAL FERTILIZER AT THE RATE OF 5 POUNDS PER CUBIC YARD. MIX BOTH FERTILIZER AND PEAT THOROUGHLY BY HAND OR ROTARY TILLER.
4. UPON SECURING PLANT MATERIAL AND BEFORE INSTALLATION, THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE FOR A PRE–INSTALLATION INSPECTION TO VERIFY ALL PLANT MATERIAL MEETS SPECIFICATION. MATCH TREES OF SAME SPECIES IN GROWTH CHARACTER AND UNIFORMITY.
5. APPLY HERBICIDE (TREFLAN OR EQUIVALENT) TO ALL PLANT BEDS PRIOR TO PLANTING FOR NOXIOUS WEED CONTROL AT A RATE OF 2 POUNDS PER 1,000 SQUARE FEET.
6. CONTRACTOR SHALL SUBMIT A 10 OUNCE SAMPLE OF THE TOPSOIL PROPOSED TO A TESTING LABORATORY FOR ANALYSIS. SUBMIT TEST RESULTS WITH RECOMMENDATIONS FOR SUITABILITY TO THE OWNER'S REPRESENTATIVE FOR APPROVAL.
7. PLANTS SHALL BE ORIENTED FOR BEST APPEARANCE AND VERTICAL.ALL NON–BIODEGRADABLE ROOT CONTAINERS SHALL BE REMOVED.
8. SELECTIVELY TRIM TREE BRANCHES BY 25%, MAINTAINING NATURAL SHAPE. PRUNE ALL DEAD AND BROKEN BRANCHES IN TREES AND SHRUBS. REMOVE TAGS, TWINE OR OTHER NON–BIODEGRADABLE MATERIAL.
9. SCARIFY SUBSOIL IN PLANTING BEDS TO A DEPTH OF 3 INCHES. ALL PLANTING BEDS SHALL RECEIVE A MINIMUM OF 6 INCHES OF TOPSOIL.
10. CONTRACTOR SHALL PROVIDE SMOOTH, NEATLY TRENCHED (3 INCH DEEP) BED EDGES.
11. ALL PLANTING BEDS TO HAVE A MINIMUM 4 INCH DEEP TRIPLE SHREDDED HARDWOOD MULCH. COLOR TO BE SELECTED BY OWNER.
12. DIMENSIONS FOR TRUNK CALIPER, HEIGHTS, AND SPREAD SPECIFIED ON THE MATERIAL SCHEDULE ARE A GENERAL GUIDE FOR THE MINIMUM REQUIRED SIZE OF EACH PLANT. QUALITY AND SIZE OF PLANTS, SPREAD OF ROOTS AND SIZE OF BALLS SHALL BE IN ACCORDANCE WITH A.N.S.I. Z60.1 "AMERICAN STANDARD FOR NURSERY STOCK" (CURRENT EDITION) AS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC.
13. TREES OF THE SAME SPECIES SHALL HAVE THE FOLLOWING CHARACTERISTICS: MATCHED BY BRANCHING HEIGHT, CALIPER, HEIGHT OF TREE, SPREAD OF BRANCHES AND BRANCHING STRUCTURE, AND OVERALL CANOPY SHAPE.
14. THE QUANTITIES INDICATED ON THE MATERIAL SCHEDULE ARE PROVIDED FOR THE BENEFIT OF THE CONTRACTOR, BUT SHOULD NOT BE ASSUMED TO ALWAYS BE CORRECT. IN THE EVENT OF A DISCREPANCY, THE PLANTING PLAN (PLANT SYMBOLS) WILL TAKE PRECEDENCE OVER THE MATERIAL SCHEDULE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HIS/HER OWN QUANTITY CALCULATIONS AND THE LIABILITY PERTAINING TO THOSE QUANTITIES AND ANY RELATED CONTRACT DOCUMENTS AND/OR PRICE QUOTATIONS.
15. CONTRACTOR TO WARRANTY ALL MATERIAL FOR ONE YEAR AFTER DATE OF FINAL ACCEPTANCE.

SEEDING NOTES:

1. SEED ALL DISTURBED AREAS WITH TURF–TYPE TALL FESCUE. THE SEED SHALL BE A BLEND OF 3–5 VARIETIES (ADDRESSING BOTH COLD HARDINESS AND DROUGHT TOLERANCE) FROM THE TOP 10% SELECTIONS IN THE NATIONAL TURFGRASS EVALUATION PROGRAM (N.T.E.P) TALL FESCUE TRIALS, MOST RECENT EVALUATION YEAR (WWW.NTEP.ORG). THE SEED SHALL BE CROP AND WEED FREE. SEED AT THE RATE OF 5 POUNDS PER 1,000 S.F. ALL SEED TO BE 98% PURE WITH 85% GERMINATION AND CONFORM TO ALL STATE REQUIREMENTS FOR GRASS SEED. THE FERTILIZER TO BE 6–12–12 COMMERCIAL TYPE WITH 50% OF ITS ELEMENTS DERIVED FROM ORGANIC SOURCES.
2. PLACE STRAW MULCH ON SEEDED AREAS. STRAW TO BE OATS OR WHEAT STRAW, FREE FROM WEEDS, FOREIGN MATTER DETRIMENTAL TO PLANT LIFE, AND DRY. HAY OR CHOPPED CORNSTALKS ARE NOT ACCEPTABLE.
3. THE CONTRACTOR SHALL VERIFY THAT THE PREPARED SOIL BASE IS READY TO RECEIVE WORK. CULTIVATE THE TOPSOIL TO A DEPTH OF 4 INCHES WITH A MECHANICAL TILLER AND SUBSEQUENTLY RAKE UNTIL SMOOTH. REMOVE FOREIGN MATERIALS COLLECTED DURING CULTIVATION AND RAKING OPERATIONS.
4. APPLY FERTILIZER ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. LIMESTONE MAY BE APPLIED WITH THE FERTILIZER. APPLY FERTILIZER AFTER SMOOTH RAKING AND PRIOR TO ROLLER COMPACTION AND MIX THOROUGHLY IN THE UPPER 2 INCHES OF TOPSOIL.
5. APPLY SEED EVENLY IN TWO INTERSECTING DIRECTIONS AND RAKE IN LIGHTLY. WATER TOPSOIL LIGHTLY PRIOR TO APPLYING SEED. DO NOT SEED AREA IN EXCESS OF THAT WHICH CAN BE MULCHED ON THE SAME DAY.
6. ROLL SEEDED AREA WITH ROLLER NOT EXCEEDING 112 POUNDS.
7. IMMEDIATELY FOLLOWING SEEDING AND COMPACTING, APPLY STRAW MULCH AT THE RATE OF ONE AND ONE HALF BALES PER 1,000 SQUARE FEET. IMMEDIATELY AFTER MULCHING, APPLY WATER WITH A FINE SPRAY AND SATURATE THE GROUND TO A DEPTH OF 4 INCHES.
8. CONTRACTOR IS RESPONSIBLE FOR WATERING SEEDED AREAS TO PREVENT GRASS AND SOIL FROM DRYING OUT UNTIL THE INSTALLATION IS INSPECTED AND ACCEPTED BY THE OWNER'S REPRESENTATIVE.
9. CONTRACTOR IS RESPONSIBLE FOR RESEEDING BARE SPOTS FOR A PERIOD OF ONE YEAR AFTER ACCEPTANCE OF INSTALLATION.

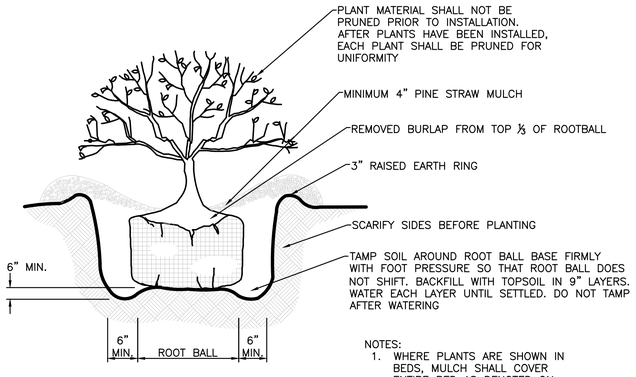
811 Know what's below. Call before you dig.



NOTES:
1. DO NOT STAKE TREES UNLESS APPROVED BY THE LANDSCAPE ARCHITECT. IF STAKED, REMOVE AFTER ONE GROWING SEASON.
2. DO NOT WRAP TREE TRUNKS UNLESS APPROVED BY THE LANDSCAPE ARCHITECT. REMOVE WRAP AFTER PLANTING.
3. NON–BIODEGRADABLE BURLAP TO BE REMOVED OR ROLLED UNDER ROOT BALL AFTER PLANT IS PLACED IN HOLE.

TREE PLANTING
NOT TO SCALE

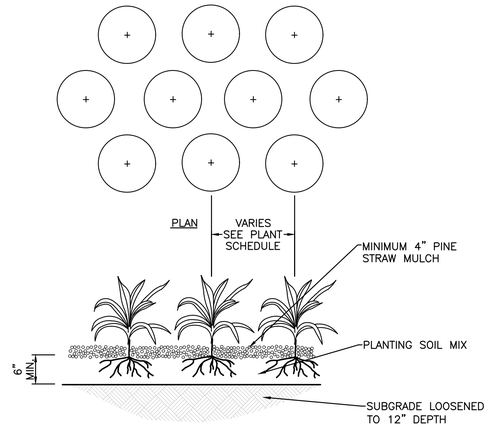
1 NTS TREE PLANTING DETAL



NOTES:
1. WHERE PLANTS ARE SHOWN IN BEDS, MULCH SHALL COVER ENTIRE BED AS DENOTED ON THE PLANS.
2. CONTAINER GROWN PLANT MATERIAL MAY BE SUBSTITUTED FOR BURLAP MATERIAL

SHRUB PLANTING
NOT TO SCALE

2 NTS SHRUB PLANTING DETAL



SECTION

GROUNDCOVER PLANTING
NOT TO SCALE

3 NTS GROUNDCOVER PLANTING DETAL

RaganSmith
Nashville - Murfreesboro - Chattanooga
ragansmith.com

TYLOR LEWARON FISCHER REGISTERED LANDSCAPE ARCHITECT TENNESSEE NO. 1111 11/29/21

B & T LANDSCAPING
FOR
SHELLEY & TIM TINNIN
GOODLETTSVILLE, TENNESSEE

Scale: NTS
Date: NOVEMBER 8, 2021
Approved By: TF
Revisions:
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Drawing Title:
LANDSCAPE NOTES, SCHEDULES, & DETAILS

Drawing No.
L3.0

Project No.
21-0127

G:\21-0127\-CIVIL ENGINEERING\PLAN SHEETS\21-0127 LANDSCAPE.DWG
PLOTTED BY TYLOR FISCHER ON 11/29/2021 12:01 PM LAST UPDATED BY TYBSCHER ON 11/29/2021 10:58 AM

MAIN OFFICE BUILDING (DESIGN INTENT)

STORAGE BUILDINGS AND FUEL STATION CANOPY (DESIGN INTENT)
STORAGE BUILDINGS HAVE 3 SIDES. FUEL CANOPY OPEN ON ALL SIDES

MAINTENANCE SHOP / GARAGE BUILDING (DESIGN INTENT)

G:\21-0127\1-CIVIL ENGINEERING\PLAN SHEETS\21-0127 CIVIL DETAILS.DWG
PLOTTED BY TYLOR FISCHER ON: 11/29/2021 1:41 PM LAST UPDATED BY TFISCHER ON: 11/29/2021 1:54 PM

RaganSmith
Nashville - Murfreesboro - Chattanooga
ragansmith.com

B & T LANDSCAPING

FOR

SHELLEY & TIM TINNIN

GOODLETTSVILLE, TENNESSEE

Scale: NTS

Date: NOVEMBER 8, 2021

Approved By: L.J. KILGORE

Revisions:

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Drawing Title:

ARCHITECTURAL IMAGERY

Drawing No.

A1.0

Project No.

21-0127

11/08/2021

Goodlettsville

Sumner County, Tennessee

RSA Project #: 21-0127

SCOPE

B &T Landscape is a commercial landscape business is on roughly 16 Acres

LID Design has been utilized to meet water quality requirements, and a detention pond has been utilized to meet quantity requirements.

DETENTION REPORT

To meet the stormwater requirements for Goodlettsville as set forth in the Stormwater Management Regulations; Ragan-Smith-Associates has completed a stormwater detention report for the development. The following methods and calculations were used to show that the proposed development meets the stormwater detention requirements. Drainage Maps have been included to show the Areas with their corresponding hydrographs.

DETENTION ANALYSIS

The SCS method was used to generate the runoff hydrographs for the detention analysis. The times of concentrations for the existing drainage basins were calculated using the TR-55 Method and are shown in the report below. The time of concentrations for the post construction drainage basins were assumed to be 5 minutes. Rainfall information was taken from Nashville Stormwater Management Manual. The 2-, 5- ,10- , 25-, 50-, and 100-year return. Curve Numbers were assigned based on the soil types and ground cover. That information was then inserted into the LID spreadsheet to calculate the CN. The pre-developed CN=73 was determined from the soil types.

The post-developed CN = 80 was determined from the use of land post construction as routed through the LID spreadsheet.

Hydrograph #1 was calculated for the Pre-developed Area of the site. The hydrogaph for post developed bypass area was calculated as hydrograph #2.

The post developed flow to the Pond was calculated and shown as hydrograph #3. This was then routed through the pond and shown as hydrograph #4.

The post development flow from the Pond hydrograph #4 was combined with the post developed Bypass hydrograph #2 to determine the Total post developed flow hydrograph #5. The post developed flow from hydrograph #5 is less than the pre-developed flow from basin hydrograph #1. Thus satisfying the detention requirements of the Metro Nashville Stormwater Management Regulations. Below are the results.

Frequency (yrs.)	*Pre-Dev Runoff (cfs) (Hydrograph #1)*	*Post-Dev Runoff (cfs) (Hydrograph #5)*
2	12.17	6.08
5	21.56	7.84
10	27.82	10.65
25	36.51	15.35
50	43.12	18.88
100	49.73	21.94

SITE PLANS
FOR
CEDARSIDE AT DRY CREEK
PREVIOUSLY SUBMITTED AS DRY CREEK PUD
NATELLI COMMUNITIES

SITE DATA:

PROPERTY INFORMATION:

PROJECT NAME:	CEDARSIDE AT DRY CREEK / DRY CREEK RD AND DICKERSON PIKE
TAX MAP / PARCEL:	MAP 33 GROUP 2 / PARCEL 42.00 & 97.00
ACREAGE:	19.83 (863,794 SF±)
EX. ZONING CLASSIFICATION:	CPUD : COMMERCIAL PLANNED UNIT DEVELOPMENT
PROPOSED ZONING CLASSIFICATION:	HDRPUD
EX. L.AND USE POLICY:	COMMERCIAL DEVELOPMENT RESIDENTIAL DEVELOPMENT - HIGH DENSITY

OWNER NAME:	DEVELOPER NAME:
DRY CREEK, LLC	NATELLI COMMUNITIES
506 MAIN STREET, 3RD FLOOR	MICHAEL NATELLI
GAITHERSBURG, MD 20878	506 MAIN STREET, 3RD FLOOR
(301) 670-4020	GAITHERSBURG, MD 20878
MNATELLI@NATELLI.COM	(301) 670-4020
	MNATELLI@NATELLI.COM

LANDSCAPE ARCHITECT (APPLICANT):	ENGINEER:
SCOTTY M. BERNICK	GEORGE WELCH
RAGAN-SMITH & ASSOCIATES, INC.	RAGAN-SMITH & ASSOCIATES, INC.
315 WOODLAND STREET	315 WOODLAND STREET
NASHVILLE, TN 37206	NASHVILLE, TN 37206
(615) 244-8591	(615) 244-8591
SBERNICK@RAGANSMITH.COM	GWELCH@RAGANSMITH.COM

DEVELOPMENT INFORMATION:

EXISTING ACREAGE:	23.06 AC (1,004,493 SF±)
ACREAGE TO REMAIN CPUD:	3.23 AC (140,698 SF±)
PROPOSED ACREAGE HDRPUD:	19.83 AC (863,794 SF±)
PROPOSED MBSL:	
FRONT (EXTERNAL):	30' MAX / ATTACHED DWELLING
ATTACHED DWELLING:	
FRONT (INTERNAL):	WAIVED / HDRPUD
SIDE (EXTERNAL):	30' MAX
SIDE (INTERNAL):	N/A
REAR (EXTERNAL):	30' MAX
REAR (INTERNAL):	N/A
MAX ALLOWED TOWNHOME UNITS:	149 UNITS
TOWNHOME UNITS (SHOWN):	117 UNITS
ALLOWED DENSITY:	7 UNITS / AC VIA HDRPUD
PROPOSED DENSITY:	5.9 UNITS / AC @ 117 UNITS
MAX. BUILDING HT. ALLOWED:	2-STORIES (ATTACHED DWELLING)
PROPOSED BUILDING HEIGHT:	2 STORIES
PROPOSED FLOOR AREA:	181,340± SF (MULTI-FAMILY)
MAXIMUM FAR ALLOWED:	0.2 VIA HDRPUD
PROPOSED FAR:	0.20
PARKING REQUIRED:	234± SPACES (123 2-3 BED UNITS X 2 SPACES)
PARKING PROVIDED:	234 DRIVE WAY AND GARAGE SPACES 22 GUEST SPACES 256± TOTAL SPACES
IMPERVIOUS SURFACE AREA:	223,960 ± SF
ISR ALLOWED:	.8
ISR PROVIDED:	.25±
OPEN SPACE AREA	
REQUIRED:	20% (172,760± SF)
PROVIDED:	74% (640,014± SF)

SURVEY INFORMATION:
BOUNDARY INFORMATION COMPILED FROM AVAILABLE DEEDS & GIS DATA. ELEVATIONS SHOWN HEREON ARE BASED ON NAVD 83. CONTOURS ARE AT ONE FOOT INTERVALS AND ARE BASED ON A FIELD RUN SURVEY USING RANDOM SPOT ELEVATIONS. CONTOURS WERE DERIVED USING SURFACE MODELING TECHNIQUES.

UTILITY INFORMATION:
WATER SERVICE FOR MULTI-FAMILY UNITS WILL BE PROVIDED BY MADISON SUBURBAN UTILITY DISTRICT. SEWER SERVICE FOR MULTI-FAMILY UNITS WILL BE PROVIDED BY THE GOODLETTSVILLE SEWER DEPARTMENT.

SITE MAINTENANCE:
THE DEVELOPMENT AND OPEN SPACE WILL BE MAINTAINED BY THE HOMEOWNER'S ASSOCIATION THAT WILL EMPLOY A COMMUNITY MANAGEMENT COMPANY..

DEVELOPMENT SCHEDULE:
THE DEVELOPMENT WILL BE BUILT IN TWO PHASES WITH AN ANTICIPATED CONSTRUCTION COMMENCEMENT OF JANUARY 2022 AND CONSTRUCTION COMPLETION BY SEPTEMBER 2023.

CERTIFICATION OF FINANCIAL RESPONSIBILITY:
THE DEVELOPER WILL FINANCE THE TOWNHOME DEVELOPMENT ALONG DRY CREEK ROAD AND DICKERSON PIKE.

CHARACTER & IMPACT STATEMENT:
THE PROPOSED PUD OFFERS A TOWNHOME DEVELOPMENT THAT WILL, IN PART, LINE DRY CREEK ROAD AND ROBERT CARTWRIGHT DRIVE. CONFORMING WITH LOCAL STANDARDS, LIVING UNITS WILL HAVE PRIVACY FROM DRY CREEK ROAD AND ROBERT CARTWRIGHT DRIVE. THIS PROPOSED PUD RESERVES TWO SEPERATE OUTPARCELS TO REMAIN COMMERCIAL. EXISTING CANOPY ALONG DRY CREEK ON THE EASTERN AND WESTERN SIDES WILL BE PRESERVED. A TOT LOT PLAYGROUND IS PROPOSED TO SERVE THE RESIDENTS OF THIS DEVELOPMENT.

PRELIMINARY MASTER PLAN (DRY CREEK PUD) PREVIOUSLY APPROVED.

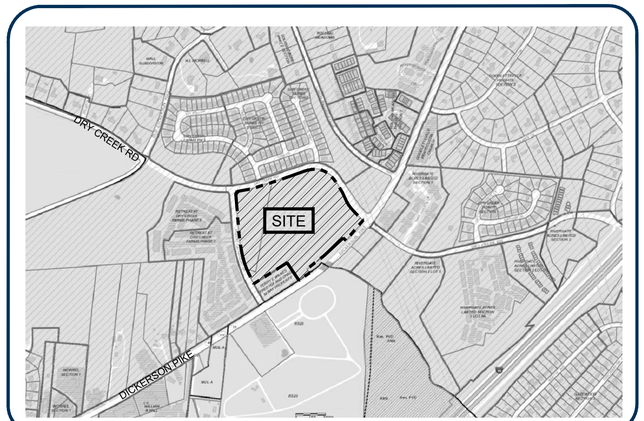
CONTACTS

WATER
MSUD
108 WEST WEBSTER STREET
MADISON, TN 37115
(615) 868.3201
INFO@MSUD.NET

SANITARY
CITY OF GOODLETTSVILLE
215 CARTWRIGHT STREET
GOODLETTSVILLE, TN 37072
(615) 851-2200

ELECTRIC
NES
1214 CURCH STREET
NASHVILLE, TN 37246
(615) 736.6900

ARCHITECTURE
JOHN NEHRENZ
NVR, INC.
5285 WESTVIEW DRIVE, SUITE 100
FREDERICK, MD, 21703
(615) 716-4412
jnehrenz@nvrinc.com



LOCATION MAP
N.T.S.

Sheet List Table

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C0.2	EXISTING CONDITIONS & DEMOLITION PLAN
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C1.2	ENLARGED SITE PLAN 2
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C3.0	OVERALL GRADING PLAN
C3.1	GRADING, DRAINAGE & INTERMEDIATE EPSC PLAN 1
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L1.5	ENLARGED LANDSCAPE PLAN 5
L2.0	LANDSCAPE NOTES & DETAILS

10TH COUNCIL DISTRICT, CITY OF GOODLETTSVILLE, DAVIDSON COUNTY, TENNESSEE

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SAMUEL H CHRISTMAN
REGISTERED ENGINEER
XVI
AGRICULTURE
COMMERCE
No. 122747
STATE OF TENNESSEE

CEDARSIDE AT DRY CREEK
FOR
NATELLI COMMUNITIES
10TH COUNCIL DISTRICT, CITY OF GOODLETTSVILLE, DAVIDSON COUNTY, TENNESSEE

Scale: NOT TO SCALE
Date: NOVEMBER 8, 2021
Approved By: G. WELCH

Revisions:
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1 2121.11.29 PER CITY COMMENTS

Drawing Title:
COVER

Drawing No.
C0.0

Project No.
84144-2096

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PLOTTED BY JEFF BOCKRATH ON 11/29/2021 12:19 PM LAST UPDATED BY JBOCKRATH ON 11/29/2021 12:09 PM

RSA STANDARD NOTES

SITE GENERAL NOTES

1. The contractor shall verify the location of all existing utilities in the proximity of the construction area and report any discrepancies to the owner's representative prior to beginning work.
2. The contractor shall conform to all local, state and federal codes and obtain all permits prior to beginning work.
3. The contractor shall check all finished grades and dimensions and report any discrepancies to the owner's representative prior to beginning work.
4. Dimensions are to the face of curb, edge of concrete and face of building unless noted otherwise.
5. Proposed building footprint is for graphic purposes only. Contractor shall use the current architectural drawings for building stakeout and verify that there are no discrepancies with these plans.
6. All traffic markings shall conform to the manual of uniform traffic control device (MUTCD). All pavement marking shall be thermoplastic unless directed otherwise by the owner's representative.
7. All handicap ramps, parking spaces and accessible routes shall comply with the current ADA requirements.
8. Exterior door landings shall be provided per the local building code. Contractor shall coordinate door locations and adjacent sidewalk/landing grades with these plans and report any discrepancies to the owner's representative.
9. Maintain one set of as-built drawings on the job site for distribution to the architect/engineer upon completion: include detention pond topo, all utility locations, and all new sidewalk ramps. elevations for all sanitary and storm sewer structures shall be included, drawings shall include vertical and horizontal information on all new utilities as well as existing utilities discovered during construction. final drawings shall be produced and stamped by licensed surveyor.
10. Provide a smooth transition between existing pavement and new pavement. Field adjustment of final grades may be necessary. Install all utilities prior to installation of pavement.

SITE CONSTRUCTION NOTES

1. The necessary permits for the work shown on these site development plans will be obtained by the contractor prior to commencement of any work on this project. The contractor shall give all necessary notices and obtain all permits and pay all fees involved in securing said permits. He shall also comply with all city, county and state building laws, ordinances or regulations relating to the construction of the project.
2. The contractor shall be responsible for and shall bear all expenses of field staking necessary for site and building layout. All layout shall be performed in accordance with the site layout plan.
3. The location of existing piping and underground utilities, such as water and gas lines, electrical and telephone conduits, etc., as shown on this portion of the plans have been determined from the best available information by actual surveys, or taken from the records and drawings of the existing utilities. However, the civil engineer does not assume responsibility that, during construction, the possibility of utilities other than those shown may be encountered or that actual location of those shown may vary somewhat from the location designated on this portion of the plans. In areas where it is necessary that the exact locations of underground lines be known, the contractor shall, at this own expense, furnish all labor and tools to either verify and substantiate or definitively establish the location of the lines.
4. The contractor must understand that the work is entirely at his risk until same is accepted and he will be held responsible for its safety by the owner. Therefore, the contractor shall furnish and install all necessary temporary works for the protection of the work, including barricades, warning signs, and lights.
5. The site development portion of this project will be subject to the inspection and final approval of the local planning, codes, water and sewer departments (and/or utility districts), engineering/public works departments and fire marshal's office.
6. If, during the construction of the site development portion of this project, a question of intent or clarity arises from either the plans or specifications, the contractor will immediately bring the matter to the attention of the civil engineer or owner's representative for resolution before the affected work items are initiated or pursued further.
7. The contractor will exercise extreme caution in the use of equipment in and around overhead and/or underground power lines. If at any time in the pursuit of this work the contractor must work in close proximity of the above-noted lines, the electric and/or telephone companies shall be contacted prior to such work and the proper safety measures taken. The contractor should make a thorough examination of the overhead lines in the project area prior to the initiation of construction.
8. The contractor shall be responsible for any damage done to the premises or adjacent premises, or injuries to the public during the construction of the work, caused by himself, his subcontractors, or the carelessness of any of his employees.

DEMOLITION NOTES

1. The contractor will be required to remove all excavated materials and such items shall become the property of the contractor. All items shall be properly disposed of at an off-site location. The contractor shall outline any and all possible haul routes and shall be prepared to submit such to the local jurisdiction public works department, the civil engineer and other authorities for approval.
2. If, at any time, prior to or during the demolition work, hazardous material is encountered, the contractor shall notify the owner's representative and appropriate governmental agency.
3. The contractor shall notify adjacent owners of work that may affect their property, potential noise, utility outage or disruption. Such operations shall be conducted by the contractor with minimum interference to adjacent owners. Adjacent egress and access shall be properly maintained at all times. Do not close or obstruct any roadways, parking or sidewalks without permission from the adjacent owners or the local jurisdiction public works department.
4. Prior to the commencement of demolition/grading operations, all overhead and underground utilities shall be located. All removal and/or relocation of utilities shall be coordinated with the respective utility companies.
5. The contractor will provide all necessary protective measures to safeguard existing utilities from damage during construction of this project. In the event that special equipment is required to work over or around the utilities, the contractor will be required to furnish such equipment at no additional cost to owner.
6. The contractor will be solely responsible for contacting all affected utilities prior to submitting his bid to determine the extent to which utility disconnections and/or adjustments will have upon the schedule of the work for the project. Some utility facilities may need to be adjusted concurrently with the contractor's operations, while some work may be required 'around' utility facilities that will remain in place. It is understood and agreed that the contractor will receive no additional compensation for delays or inconvenience caused by the utility adjustment.

EROSION PREVENTION AND SEDIMENT CONTROLS

1. All control measures must be properly installed and maintained in accordance with the manufacturer's specifications, TDEC and local standards.
2. Design, inspection, and maintenance of BMPs described and shown on these plans shall be consistent or exceed recommendations contained in the current edition of TDEC's Tennessee erosion control handbook.
3. BMP capacity [sediment traps, silt fences, sedimentation ponds, and other sediment control] shall not be reduced by more than 50% at any given time. if periodic inspections or other information indicates a control has been used inappropriately or incorrectly, the contractor must replace or modify the control for relevant site situations.
4. Where permanent or temporary vegetation cover is used as a control measure, the timing of the planting is critical. planning for planting of vegetation cover during winter or dry months should be avoided.
5. If sediment escapes the permitted area, off-site accumulations of sediment that have not reached a stream must be removed at a frequency sufficient to minimize offsite impacts. The contractor shall not initiate remediation/restoration of a stream without consulting the division first. The NOI general permit does not authorize access to private property. arrangements concerning removal of sediment on adjoining property must be settled by the contractor and adjoining landowner.
6. Litter, construction debris, and construction chemicals exposed to storm water shall be picked up prior to anticipated storm events or before being carried off of the site by wind or otherwise prevented from becoming a pollutant source for storm water discharges. After use, materials used for EPSC should be removed or otherwise prevented from becoming a pollutant source for storm water discharge.
7. Erodible material storage areas (including overburden and stockpiles of soil) and borrow pits are considered part of the site and should be addressed with appropriate bmp's accordingly.
8. Pre-construction vegetative ground cover shall not be destroyed, removed, or disturbed more than 15 days prior to grading or earth moving unless the area is stabilized. contractor shall sequence events to minimize the exposure time of graded or denuded areas. Clearing and grubbing shall be held to the minimum necessary for grading and equipment operation. Existing vegetation at the site should be preserved to the maximum extent practicable.
9. EPSC measures must be in place and functional before moving operations begin and must be constructed and maintained throughout the construction period. Temporary measures may be removed at the beginning of the workaday, but must be replaced at the end of the workday.
10. The following records shall be maintained on or near site: the dates when major grading activities occur; the dates when construction activities temporarily or permanently cease or a portion of the site; the dates when stabilization measures are initiated; inspection records and rainfall records. Contractor shall maintain a rain gauge and daily rainfall records at the site, or use a reference site for a record of daily amount of precipitation.
11. A copy of the SWPPP shall be retained on-site and should be accessible to the director and the public. Once site is inactive or does not have an onsite location adequate to store the SWPPP, the location of the SWPPP, along with a contact phone number, shall be posted on-site. If the SWPPP is located off-site, reasonable local access to the plan, during normal working hours, must be provided.
12. Off-site vehicle tracking of sediments and the generation of dust shall be minimized. A stabilized construction access (a point of entrance/exit to a construction site) shall be constructed as needed to reduce the tracking of mud and dirt onto public roads by construction vehicles.
13. Inspections must be performed at least twice every calendar week. Inspections shall be performed at least 72 hours apart. where sites or portions of construction sites have been temporarily stabilized, or runoff is unlikely due to winter conditions or due to extreme drought, such inspection has to be conducted once per month until thawing or precipitation results in runoff or construction activities resumes. Inspection requirement do not apply to definable areas that have been finally stabilized, as designed by the engineer. Written notification of the intent to change the inspection frequency and the justification for such request must be submitted to the local environmental field office, or the division's Nashville central office for projects of TDOT or TVA. Should the division discover that monthly inspection of the division discover that monthly inspections of the site are not appropriate due to insufficient stabilization measures or otherwise, twice weekly inspections shall resume. The division may inspect the site to confirm or deny the notification to conduct monthly inspections.
14. Inspectors performing the required twice weekly inspections must have an active certification and a record of certification must be kept on site. Based on the results of the inspection, any inadequate control measures or control measures in disrepair shall be replaced or modified, or repaired as necessary, before the next rain event, but in no case more than 7 days after the need identified.
15. Outfall points shall be inspected to determine whether EPSC measures are effective in preventing significant impacts to receiving waters. Where discharge locations are inaccessible, nearby downstream locations shall be inspected. Locations where vehicles enter or exit the site shall be inspected for evidence of offsite sediment tracking.

TREE PROTECTION NOTES

1. 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 by a certified arborist via ANSI A-300-95 standard so as to minimize impact of the general root system.
2. The storage of building materials or stockpiling shall not be permitted within the limits of or against the protection barriers.
3. 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 in such a manner as to endanger the health or life of the affected tree.
4. Tree protection barrier shall be constructed prior to the issuance of any permits and shall remain intact throughout the entire period of construction.

SITE GRADING & STORM DRAINAGE NOTES

1. Erosion control sediment barriers and tree protection barrier shall be installed prior beginning site work.
2. No heavy equipment shall cross or be stored outside the limits of construction, within tree protections zones, or under the drip line of existing trees to remain.
3. Topsoil stripped from areas to be graded shall be stockpiled on site in a location approved by the owner's representative. Drainage shall be routed around stockpile locations for the duration of grading operations. Erosion control measures shall be installed to prevent loss of topsoil material.
4. Prior to beginning construction, contractor shall review geotechnical report.
5. All cut and fill shall be performed under the direction/observation of the geotechnical engineer.
6. The suitability of soils for fill material shall be determined by the geotechnical engineer.
7. Unless directed otherwise by geotechnical engineer, all fill areas shall be raised in lifts not exceeding 8" in thickness. the relative compaction of each layer shall not be less than 95% of the standard proctor maximum dry density (ASTM D-698) in all areas of fill within open areas and 98% of same specification for areas under roads, parking, sidewalks, building slabs, and foundations.
8. All grading shall be completed to the grades indicated within these plans. final grades shall provide proper drainage and prevent standing water.
9. All storm drainage castings to be John Bouchard & Sons Co. or approved equal, unless otherwise noted.
10. All storm drainage pipes to be RCP, Class III, unless otherwise noted.
11. Installation of pipe material shall be placed with a screen stone envelope and when under pavement entire trench to be backfilled with screen stone to subgrade. Size of stone, envelopes, and trenches to be specified by municipalities for public lines and private lines to adhere to common practices for installation requirements.
12. Existing structure castings to remain shall be adjusted to match new grade.

SITE UTILITY NOTES

1. All materials and workmanship for utility lines and appurtenances shall be in strict compliance with the governing utility company and local codes. Prior to construction contractor shall notify utility company. (see utility contact information)
2. Contractor shall coordinate site electrical, gas, telephone, and cable with the respective utility company for service layout and design information. Any proposed layout of these utilities depicted on these drawings is graphical only and not intended to represent design of these utilities.
3. Prior to commencement of construction, contractor shall obtain all permits and pay any required tap and connection fees.
4. All trenching, pipe laying and backfilling shall be in accordance with federal OSHA regulations.
5. Site contractor shall construct all utility services to within 5' of building.
6. Contractor shall be responsible for coordinating the sequencing of construction for all utility lines to avoid conflicts.
7. Contractor shall coordinate size and location of water, sewer and stormwater connections to the building as depicted on the building mechanical plans and the site utility plan and notify the engineer or owner's representative of any discrepancies.
8. Water services lines ¼" - 3" shall be Type-K copper and 4" or larger shall be ductile iron pipe - Class 52 unless otherwise required by utility company.
9. Fire line installation and thrust blocking location and sizing shall be per N.F.P.A. and local fire department requirements.
10. Water meter manufacturer/model number and vault specifications shall be per the water utility company.
11. Backflow device (RPBP/DDCVA) manufacturer/model number shall be per the water utility company.
12. Contractor shall install hot box enclosure (pre-finished dark green) on all exterior above-ground backflow devices. Domestic and fire backflow devices shall be heated. Contractor shall coordinate providing appropriate electrical service to backflow device.
13. Contractor shall coordinate location of backflow device with the building mechanical drawings.
14. Sanitary sewer service lines shall be SDR 35 PVC unless specified otherwise.
15. Maintain a 10' horizontal and 18" vertical separation between sanitary sewer and water lines.
16. All fire line mains to be installed by licensed fire protection contractor.
17. Installation of pipe material shall be placed with a screen stone envelope and when under pavement entire trench to be backfilled with screen stone to subgrade. Size of stone, envelopes, and trenches to be specified by municipalities for public lines and private lines to adhere to common practices for installation requirements.
18. Contact local fire department before locating and installing fire department connection. Location and type subject to change to meet required codes.
19. Coordinate with local utility and/or fire department on approved meter, fire hydrant, reduced pressure backflow preventor, and double detector check valve assembly and vault manufacturers.
20. Detailed water and sanitary sewer plans and shop drawings to be approved by jurisdictional agencies prior to construction.
21. Any existing water or sewer service that will no longer remain active at the completion of construction must be removed and capped at the main. All trench work and paving repair shall comply with current metro public works standards.

GEOTECHNICAL NOTE

1. No geotechnical study has been conducted on this site. However, the design for the site improvements shown on this plan has relied on experience with similar projects and similar soil/site conditions. If, in the pursuit of this work by the contractor, conditions or circumstances are encountered that are different than reflected in these plans or that appear to impact the scope of the work, the contractor will immediately notify the civil engineer, and the owner/developer before any remedial course of action or design change is initiated. All parties (owner, civil engineer, proper governmental agencies, and contractor) must be in agreement and the magnitude of the cost/time required for the measures established.

RSA SPECIAL NOTES

PROJECT SPECIFIC NOTES

1. All work shall comply with the City of Goodlettsville standards.
2. Contractor to adjust exiting utility castings as necessary.
3. Pavement dimensions shown are from edge of pavement to edge of pavement.
4. This project will be subject to the inspection and final approval of City of Goodlettsville.
5. Driveways to be replaced with like materials to the tie down locations shown on plans. Any necessary paving of driveways will be done during paving operations on the main roadway.
6. All pay items have been explicitly set forth as such in the proposal; all other items of cost are to be included in the price of the items actually bid upon.
7. Before any clearing/grubbing work is initiated, the contractor and representatives of both architect and civil engineer will "walk-out" the "limit of clear line" and insure that it is clearly marked and visible.
8. The contractor shall make available soils test reports taken during and after the grading operation to show that the compaction requirements have been met. The cost of this report shall be borne by the contractor.

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SAMUEL H CHRISTMAN
REGISTERED ENGINEER
XVI
AGRICULTURE
COMMERCE
No. 122747
STATE OF TENNESSEE

CEDARSIDE AT DRY CREEK

FOR

NATELLI COMMUNITIES

10TH COUNCIL DISTRICT, CITY OF GOODLETTSVILLE, DAVIDSON COUNTY, TENNESSEE

Scale: NOT TO SCALE

Date: NOVEMBER 8, 2021

Approved By: G. WELCH

Revisions:

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1 2021.11.29 PER CITY COMMENTS

Drawing Title:

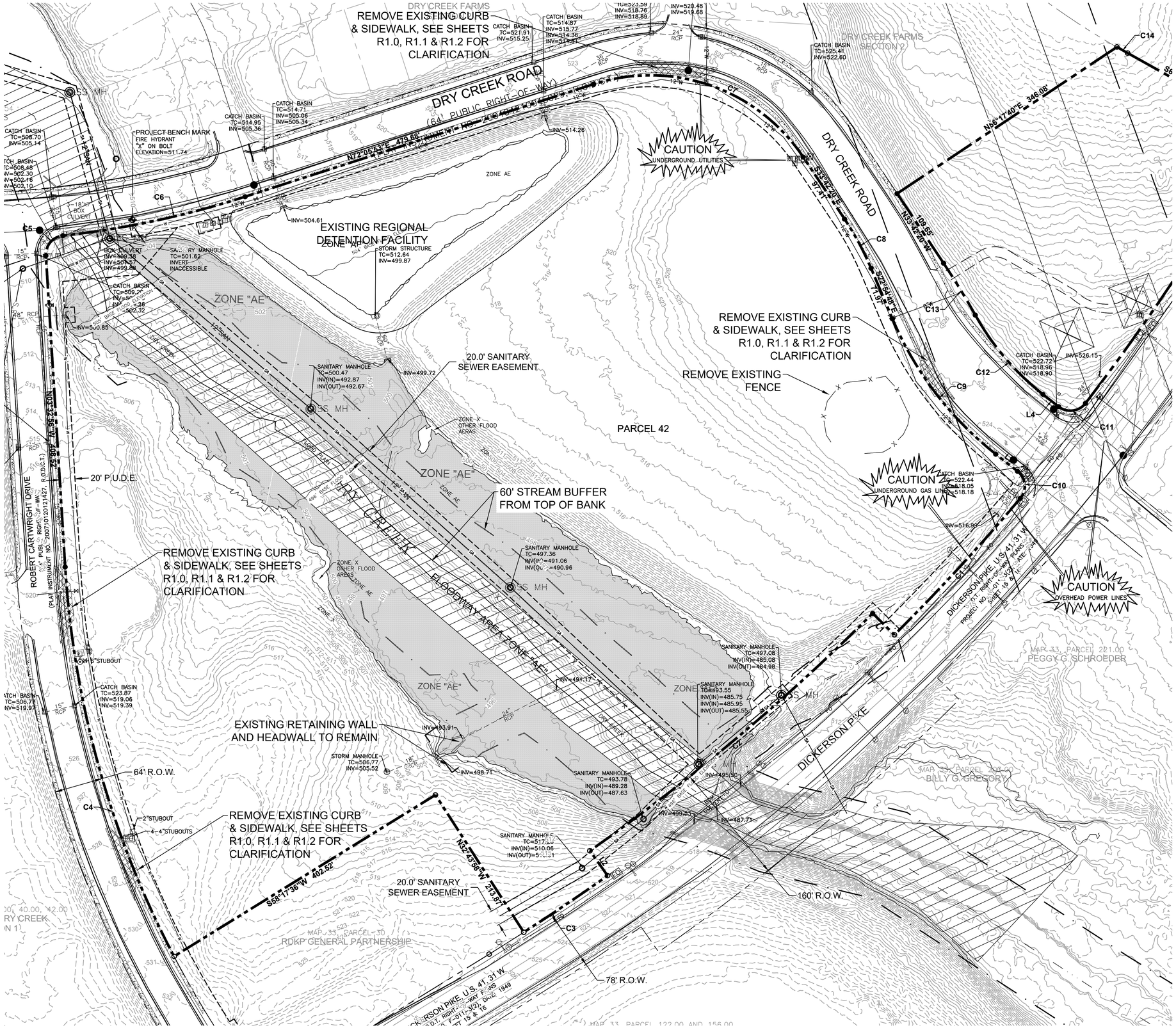
CIVIL SITE NOTES

Drawing No.

C0.1

Project No.

84144-2096



LINE TABLE		
LINE	BEARING	DISTANCE
L1	N45°23'31"W	40.00'
L2	S35°26'02"E	40.00'
L3	S51°48'11"E	36.10'
L4	N51°48'11"W	26.13'

CURVE TABLE						
CURVE	RADIUS	LENGTH	DELTA	TANGENT	CHORD	CHD BRG
C1	2825.00'	242.93'	4°55'37"	121.54	242.85'	S42°41'53"W
C2	2785.00'	484.32'	9°57'50"	242.77	483.71'	S49°58'03"W
C3	2825.00'	132.52'	2°41'16"	66.27	132.51'	S55°59'12"W
C4	1268.00'	533.71'	24°06'58"	270.86	529.78'	N15°36'25"W
C5	25.00'	38.11'	87°19'51"	23.86	34.52'	N40°06'59"E
C6	1199.00'	244.50'	11°41'02"	122.68	244.08'	N77°56'24"E
C7	241.00'	312.09'	74°11'47"	182.25	290.73'	S70°48'14"E
C8	390.00'	73.46'	10°47'32"	36.84	73.35'	S28°18'34"E
C9	447.00'	225.39'	28°53'23"	115.14	223.01'	S37°21'30"E
C10	25.00'	40.25'	92°14'43"	26.00	36.04'	S05°40'50"E
C11	25.00'	39.57'	90°41'24"	25.30	35.57'	S82°51'06"W
C12	347.00'	137.28'	22°40'00"	69.55	136.38'	N40°28'12"W
C13	1000.00'	79.75'	4°34'09"	39.89	79.72'	N31°25'16"W
C14	1076.07'	15.96'	0°50'59"	7.98	15.96'	S60°25'53"E
C15	2944.35'	429.10'	8°21'00"	214.93	428.72'	S33°19'54"W

EXISTING LEGEND

CM(O)	MONUMENT (OLD)		UTILITY POLE
IR(O)	IRON ROD (OLD)		UTILITY POLE W/ ANCHOR
IR(N)	IRON ROD (NEW) (1/2" X 18" W/CAP STAMPED "RAGAN SMITH & ASSOCIATES")		UTILITY POLE W/ LIGHT
	FIRE HYDRANT		GAS VALVE
	WATER VALVE		GAS METER
	WATER METER		SIGN
	CATCH BASIN	—P—	OVERHEAD ELECTRIC POWER LINE
	AREA DRAIN	—T—	OVERHEAD TELEPHONE LINE
ST	STORM MANHOLE	—P&T—	OVERHEAD POWER AND TELEPHONE LINES
SS	SANITARY SEWER MANHOLE	—CATV—	OVERHEAD CABLE TELEVISION LINE
T	TELEPHONE MANHOLE	—SA—	SANITARY SEWER LINE
	TELEPHONE RISER	—G—	GAS LINE
FO	FIBER OPTIC BOX	—W—	WATER LINE
	CABLE TV BOX	—F—	FIRE LINE
E	ELECTRIC MANHOLE	—FM—	FORCE MAIN
	ELECTRIC BOX	—FO—	FIBER OPTIC
P	TRANSFORMER PAD	—UGT—	UNDERGROUND TELEPHONE LINE
	LIGHT STANDARD	—UGE—	UNDERGROUND ELECTRIC LINE
P.U.D.E.	PUBLIC UTILITY & DRAINAGE EASEMENT	RCP	REINFORCED CONCRETE PIPE
R.O.D.C.T.	REGISTER'S OFFICE FOR DAVIDSON COUNTY, TENNESSEE	CMP	CORRUGATED METAL PIPE
	ASPHALT SURFACE	—X—X—	FENCE
			GUARDRAIL
			CONCRETE SURFACE

LEGEND

FLOODPLAIN

ZONE AE

0 60 120

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SAMUEL H CHRISTMAN REGISTERED ENGINEER XVI AGRICULTURE COMMERCE No. 122747 STATE OF TENNESSEE

CEDARSIDE AT DRY CREEK

FOR

NATELLI COMMUNITIES

10TH COUNCIL DISTRICT, CITY OF GOODLETTSVILLE, DAVIDSON COUNTY, TENNESSEE

Scale: 1"=100'

Date: NOVEMBER 8, 2021

Approved By: G. WELCH

Revisions:

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1 2021.11.29 PER CITY COMMENTS

Drawing Title:

EXISTING CONDITIONS & DEMOLITION PLAN

Drawing No.

C0.2

Project No.

84144-2096

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PLOTTED BY JEFF WICKERSHEY ON 11/29/2021 11:44 AM LAST UPDATED BY JWICKERSHEY ON 11/29/2021 11:47 AM

SITE DATA:

PROPERTY INFORMATION:

PROJECT NAME:	DRY CREEK / DRY CREEK RD AND DICKERSON PIKE
TAX MAP / PARCEL:	MAP 33 GROUP 2 / PARCEL 42.00 & 97.00
ACREAGE:	19.83 (863,794 SF±)
EX. ZONING CLASSIFICATION:	CPUD : COMMERCIAL PLANNED UNIT DEVELOPMENT
PROPOSED ZONING CLASSIFICATION:	HDRPUD
EX. L AND USE POLICY:	COMMERCIAL DEVELOPMENT RESIDENTIAL DEVELOPMENT - HIGH DENSITY

OWNER NAME:	DEVELOPER NAME:
TERRY WILKES / FRED HIX	NATELLI COMMUNITIES
2405 DICKERSON ROAD	MICHAEL NATELLI
NASHVILLE TN, 37207	506 MAIN STREET, 3RD FLOOR
	GAITHERSBURG, MD 20878
	(301) 670-4020
	MNATELLI@NATELLI.COM

LANDSCAPE ARCHITECT (APPLICANT):	ENGINEER:
SCOTTY M. BERNICK	GEORGE WELCH
RAGAN-SMITH & ASSOCIATES, INC.	RAGAN-SMITH & ASSOCIATES, INC.
315 WOODLAND STREET	315 WOODLAND STREET
NASHVILLE, TN 37206	NASHVILLE, TN 37206
(615) 244-8591	(615) 244-8591
SBERNICK@RAGANSMITH.COM	GWELCH@RAGANSMITH.COM

DEVELOPMENT INFORMATION:

EXISTING ACREAGE:	23.06 AC (1,004,493 SF±)
ACREAGE TO REMAIN CPUD:	3.23 AC (140,698 SF±)
PROPOSED ACREAGE HDRPUD:	19.83 AC (863,794 SF±)
PROPOSED MBSL:	
FRONT (EXTERNAL):	30' MAX / ATTACHED DWELLING
ATTACHED DWELLING:	
FRONT (INTERNAL):	WAIVED / HDRPUD
SIDE (EXTERNAL):	30' MAX
SIDE (INTERNAL):	N/A
REAR (EXTERNAL):	30' MAX
REAR (INTERNAL):	N/A
MAX ALLOWED TOWNHOME UNITS:	149 UNITS
TOWNHOME UNITS (SHOWN):	117 UNITS
ALLOWED DENSITY:	7 UNITS / AC VIA HDRPUD
PROPOSED DENSITY:	5.9 UNITS / AC @ 117 UNITS
MAX. BUILDING HT. ALLOWED:	2-STORIES (ATTACHED DWELLING)
PROPOSED BUILDING HEIGHT:	2 STORIES
PROPOSED FLOOR AREA:	181,340± SF (MULTI-FAMILY)
MAXIMUM FAR ALLOWED:	0.2 VIA HDRPUD
PROPOSED FAR:	0.20
PARKING REQUIRED:	234± SPACES (123 2-3 BED UNITS X 2 SPACES)
PARKING PROVIDED:	234 DRIVE WAY AND GARAGE SPACES 18 GUEST SPACES 252± TOTAL SPACES
IMPERVIOUS SURFACE AREA:	223,960 ± SF
ISR ALLOWED:	.8
ISR PROVIDED:	.25±
OPEN SPACE AREA	
REQUIRED:	20% (172,760± SF)
PROVIDED:	74% (640,014± SF)

SURVEY INFORMATION:
BOUNDARY INFORMATION COMPILED FROM AVAILABLE DEEDS & GIS DATA. TOPOGRAPHIC INFORMATION COMPILED FROM LIDAR DATA.

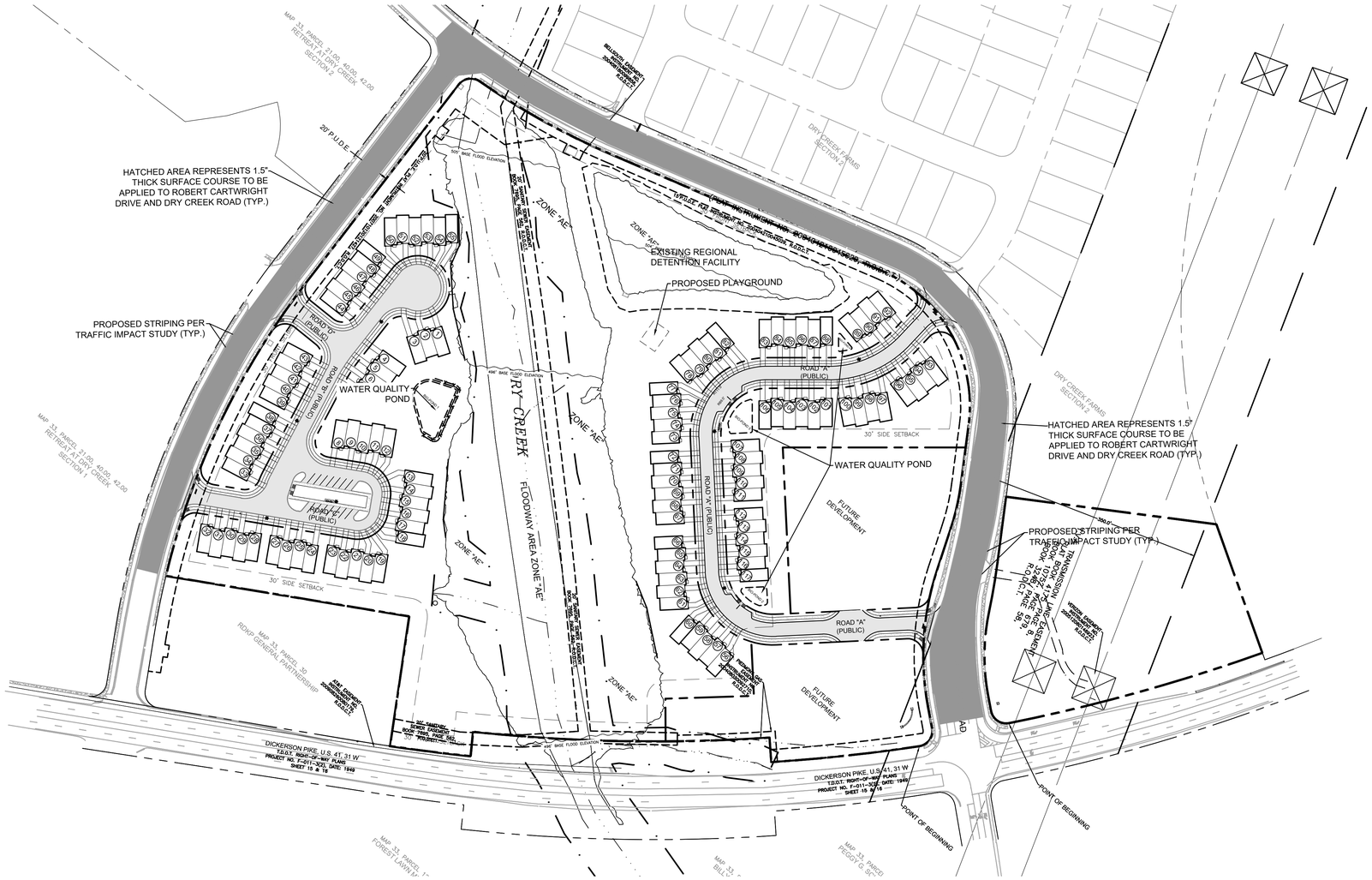
UTILITY INFORMATION:
WATER SERVICE FOR MULTI-FAMILY UNITS WILL BE PROVIDED BY MADISON SUBURBAN UTILITY DISTRICT.
SEWER SERVICE FOR MULTI-FAMILY UNITS WILL BE PROVIDED BY THE GOODLETTSVILLE SEWER DEPARTMENT.

SITE MAINTENANCE:
THE DEVELOPMENT AND OPEN SPACE WILL BE MAINTAINED BY THE HOMEOWNER'S ASSOCIATION THAT WILL EMPLOY A COMMUNITY MANAGEMENT COMPANY..

DEVELOPMENT SCHEDULE:
THE DEVELOPMENT WILL BE BUILT IN TWO PHASES WITH AN ANTICIPATED CONSTRUCTION COMMENCEMENT OF JANUARY 2022 AND CONSTRUCTION COMPLETION BY SEPTEMBER 2023.

CERTIFICATION OF FINANCIAL RESPONSIBILITY:
THE DEVELOPER WILL FINANCE THE TOWNHOME DEVELOPMENT ALONG DRY CREEK ROAD AND DICKERSON PIKE.

CHARACTER & IMPACT STATEMENT:
THE PROPOSED PUD OFFERS A TOWNHOME DEVELOPMENT THAT WILL, IN PART, LINE DRY CREEK ROAD AND ROBERT CARTWRIGHT DRIVE. CONFORMING WITH LOCAL STANDARDS, LIVING UNITS WILL HAVE PRIVACY FROM DRY CREEK ROAD AND ROBERT CARTWRIGHT DRIVE. THIS PROPOSED PUD RESERVES TWO SEPERATE OUTPARCELS TO REMAIN COMMERCIAL. EXISTING CANOPY ALONG DRY CREEK ON THE EASTERN AND WESTERN SIDES WILL BE PRESERVED. A TOT LOT PLAYGROUND IS PROPOSED TO SERVE THE RESIDENTS OF THIS DEVELOPMENT.



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PLOTTED BY: JEFF MCKENNEY ON: 11/29/2021 11:49 AM LAST UPDATED BY: JMCKENNEY ON: 11/29/2021 11:37 AM

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CEDARSIDE AT DRY CREEK

FOR

NATELLI COMMUNITIES

10TH COUNCIL DISTRICT, CITY OF GOODLETTSVILLE, DAVIDSON COUNTY, TENNESSEE

Scale: #"=##'

Date: NOVEMBER 8, 2021

Approved By: G. WELCH

Revisions:

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Drawing Title:

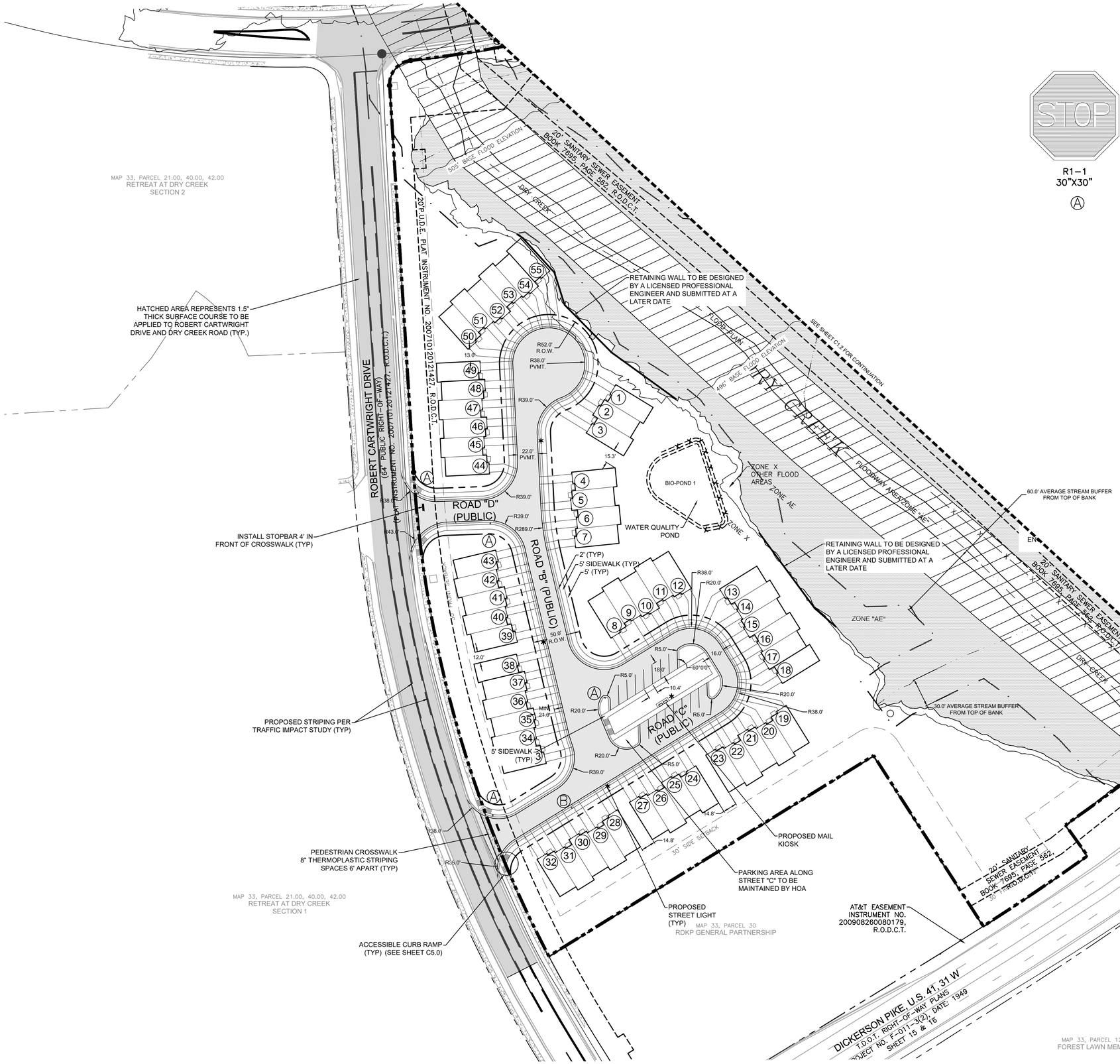
OVERALL SITE PLAN

Drawing No.

C1.0

Project No.

84144-2096



R1-1
30"X30"
Ⓐ

R2-1
Ⓑ

R2-1
Ⓒ

SEE SHEET SHEET C5.0 FOR TYPICAL STREET SIGN DETAIL

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1 2021.11.29 PER CITY COMMENTS

Drawing Title:

ENLARGED SITE PLAN

Drawing No.

C1.1

Project No.

84144-2096

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PLOTTED BY: JEFF MCKENNEY ON: 11/29/2021 11:41 AM LAST UPDATED BY: JMCKENNEY ON: 11/29/2021 10:57 AM

DRY CREEK ROAD
(64' PUBLIC RIGHT-OF-WAY)
(PLAT INSTRUMENT NO. 20040421004502g, R.O.D.C.T.)

DRY CREEK FARMS
SECTION 2

PROPOSED STRIPING PER TRAFFIC IMPACT STUDY (TYP.)

BELLSOUTH EASEMENT INSTRUMENT NO. 200408180099856, R.O.D.C.T.

15' P.U.D.E. PLAT INSTRUMENT NO. 20040421004502g, R.O.D.C.T.

WATER QUALITY POND

RETAINING WALL TO BE DESIGNED BY A LICENSED PROFESSIONAL ENGINEER AND SUBMITTED AT A LATER DATE

EXISTING REGIONAL DETENTION FACILITY

ZONE "AE"

504' BASE FLOOD ELEVATION

PROPOSED PLAYGROUND

MAIL KIOSK

ROAD "A" (PUBLIC)

ACCESSIBLE RAMPS (TYP) (SEE SHEET C5.0)

HATCHED AREA REPRESENTS 1.5" THICK SURFACE COURSE TO BE APPLIED TO ROBERT CARTWRIGHT DRIVE AND DRY CREEK ROAD (TYP.)

350.0'

T.V.A. TRANSMISSION LINE EASEMENT PLAT BOOK 4175, PAGE 679, BOOK 3248, PAGE 58, R.O.D.C.T.

VERIZON EASEMENT INSTRUMENT NO. 200512060146923, R.O.D.C.T.

30' SIDE SETBACK

WATER QUALITY POND

5' SIDEWALK (TYP)

FUTURE DEVELOPMENT

4' GREENSPACE (TYP)

PROPOSED STREET LIGHT (TYP)

WATER QUALITY POND

BIO-POND 1

BIO-POND 2

BIO-POND 3

DRY CREEK ROAD

PROPOSED STRIPING PER TRAFFIC IMPACT STUDY (TYP.)

FUTURE DEVELOPMENT

DICKERSON PIKE, U.S. 41, 31 W
T.D.O.T. RIGHT-OF-WAY PLANS
PROJECT NO. F-011-3(20) DATE: 1949
SHEET 15 & 16

PIEDMONT GAS EASEMENT INSTRUMENT NO. 200408030092710, R.O.D.C.T.

20' SANITARY SEWER EASEMENT BOOK 7695, PAGE 562, R.O.D.C.T.

20' SANITARY SEWER EASEMENT BOOK 7695, PAGE 562, R.O.D.C.T.

RETAINING WALL TO BE DESIGNED BY A LICENSED PROFESSIONAL ENGINEER AND SUBMITTED AT A LATER DATE

RETAINING WALL TO BE DESIGNED BY A LICENSED PROFESSIONAL ENGINEER AND SUBMITTED AT A LATER DATE

60.0' AVERAGE STREAM BUFFER FROM TOP OF BANK

ZONE X
OTHER FLOOD AERAS

ZONE "AE"

FLOOD PLAIN

496' BASE FLOOD ELEVATION

DRY CREEK

SEE SHEET C1.1 FOR CONTINUATION

SEE SHEET SHEET C5.0 FOR TYPICAL STREET SIGN DETAIL

R1-1
30"X30"
Ⓐ

R2-1
Ⓑ

R2-1
Ⓒ

SEE SHEET SHEET C5.0 FOR TYPICAL STREET SIGN DETAIL

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1 2021.11.29 PER CITY COMMENTS

Drawing Title:

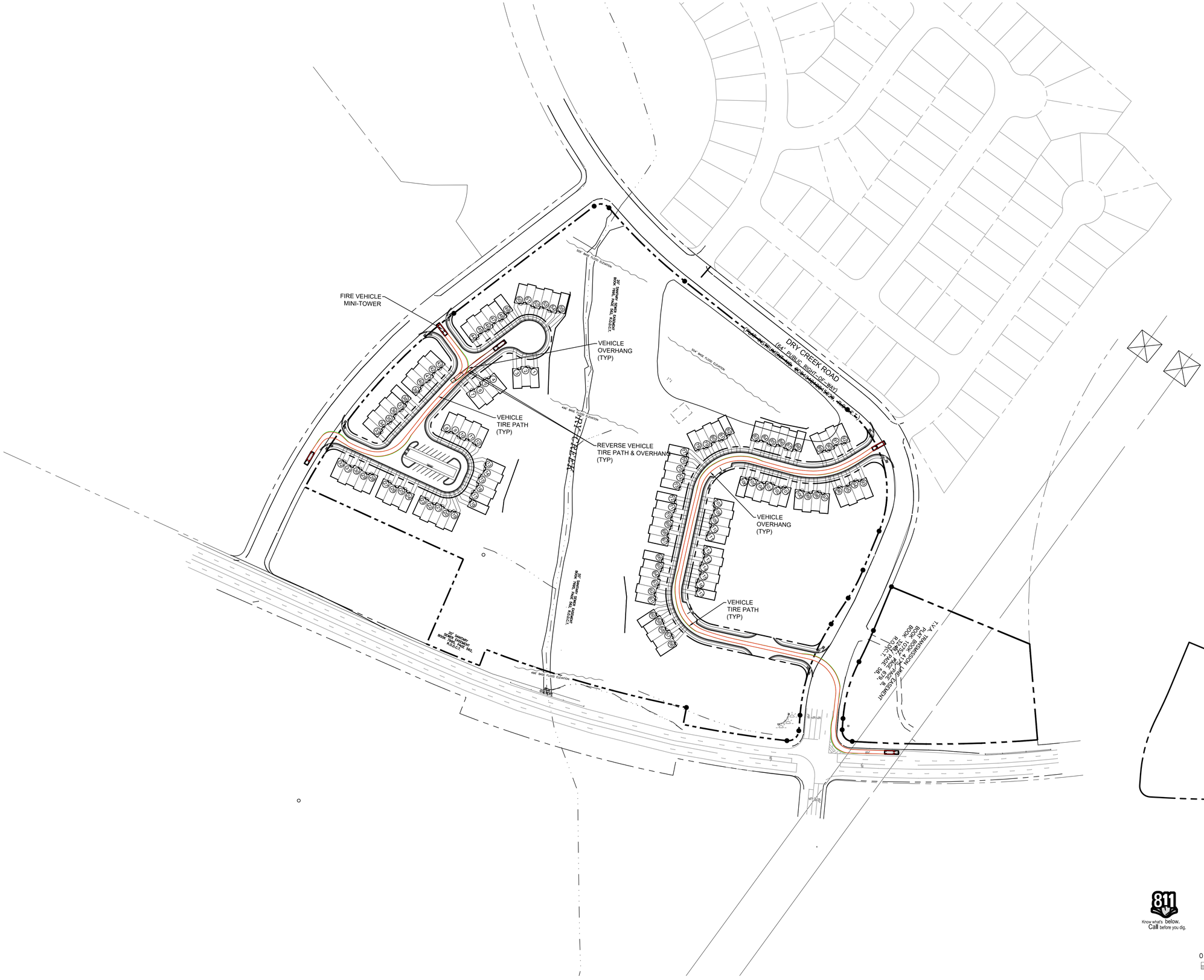
ENLARGED SITE PLAN 2

Drawing No.

C1.2

Project No.

84144-2096



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Scale: 1"=100'

Date: NOVEMBER 8, 2021

Approved By: G. WELCH

Revisions:

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Drawing Title:

CIRCULATION PLAN

Know what's below. Call before you dig.

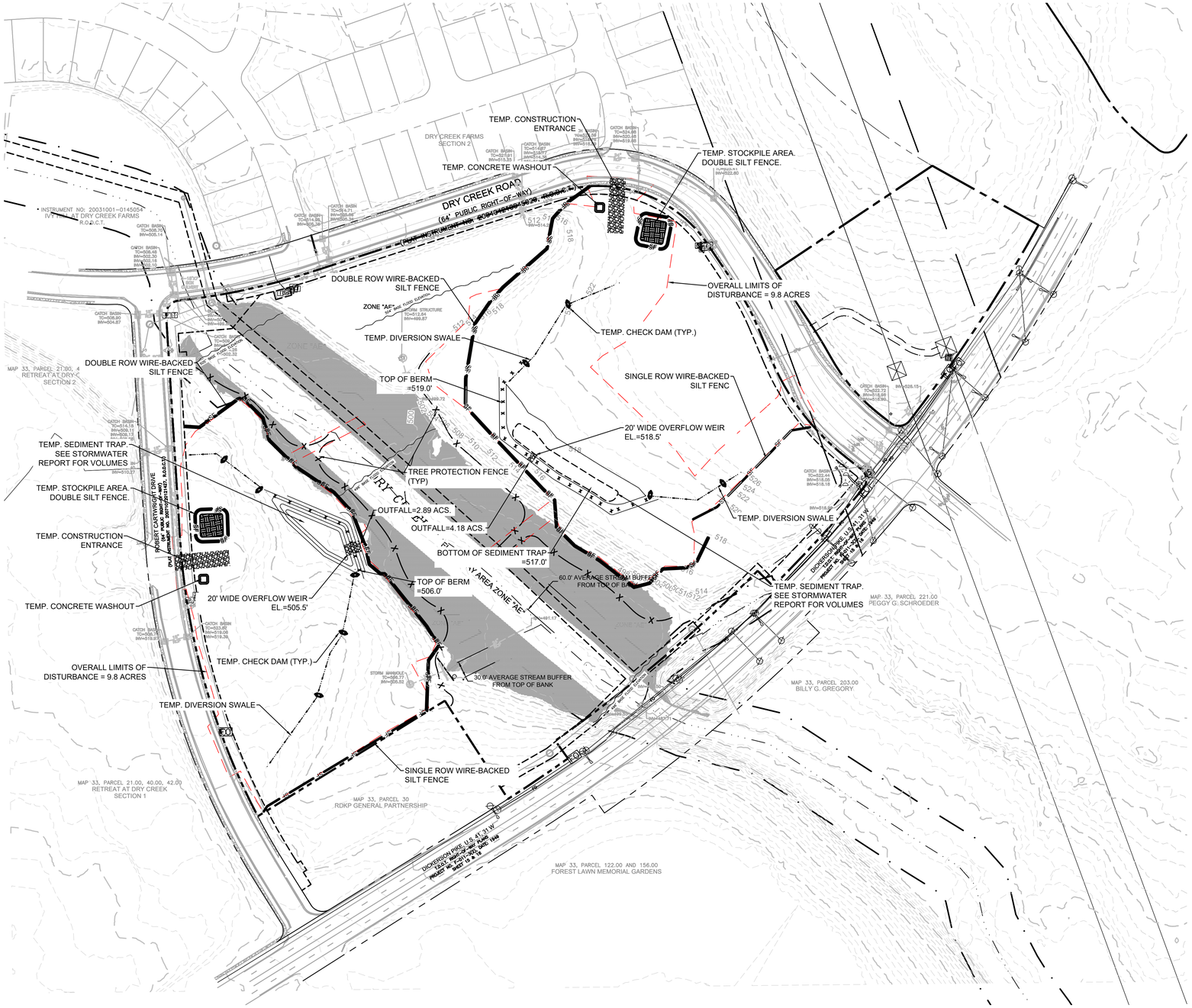
0 100 200

Drawing No.

C1.3

Project No.

84144-2096



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SAMUEL H CHRISTMAN
REGISTERED ENGINEER
XVI
AGRICULTURE
COMMERCE
No. 122747
STATE OF TENNESSEE

CEDARSIDE AT DRY CREEK

FOR

NATELLI COMMUNITIES

10TH COUNCIL DISTRICT, CITY OF GOODLETTSVILLE, DAVIDSON COUNTY, TENNESSEE

Scale: 1"=100'

Date: NOVEMBER 8, 2021

Approved By: G. WELCH

Revisions:

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Drawing Title:

INITIAL EPSC

Drawing No.

C2.0

Project No.

84144-2096

G:\84144-2096\1-CIVIL ENGINEERING\3-PLAN SHEETS\00W-METAL EPSC.DWG
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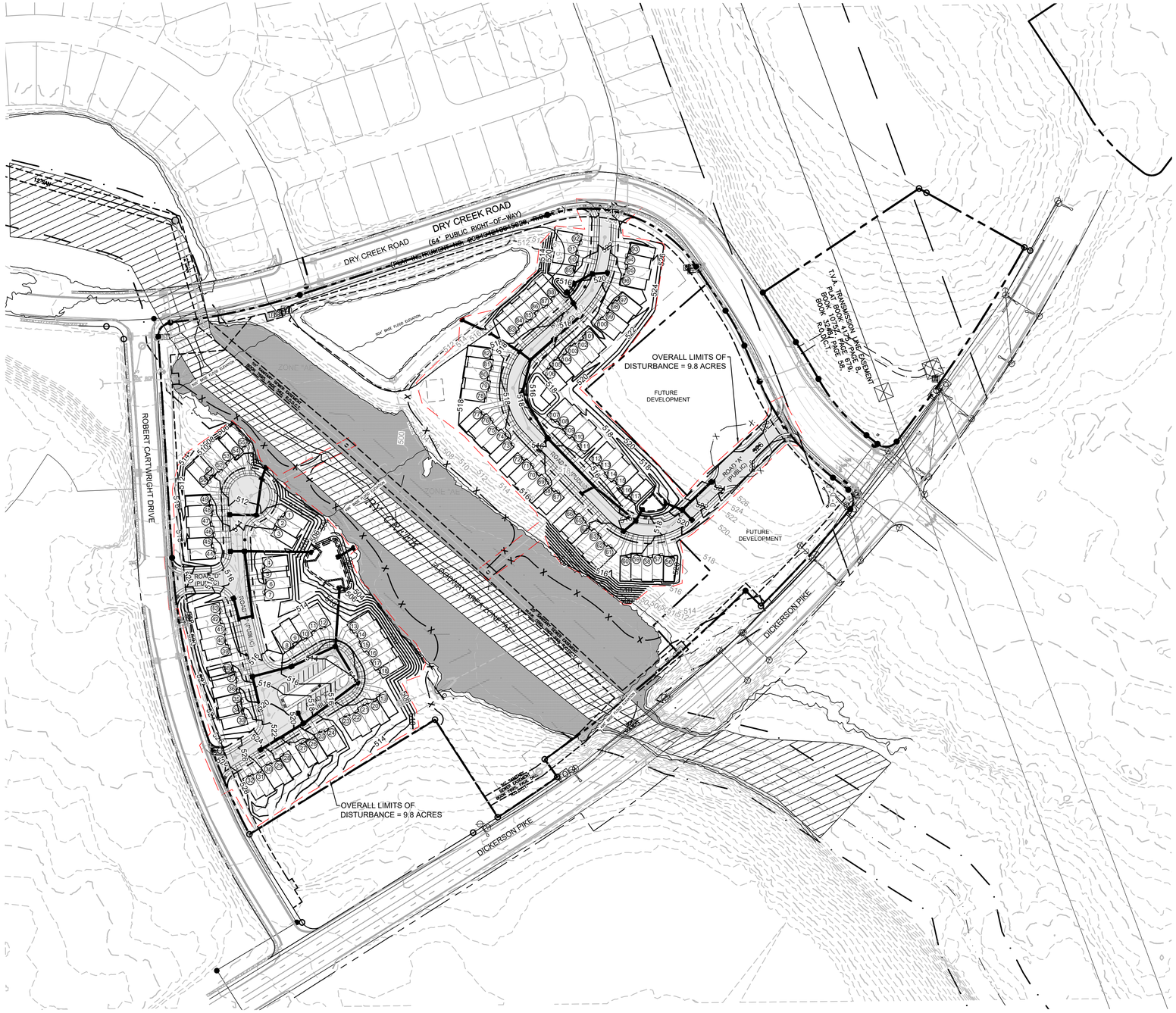

Know what's below. Call before you dig.

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STATE OF TENNESSEE

CEDARSIDE AT DRY CREEK

FOR

NATELLI COMMUNITIES

10TH COUNCIL DISTRICT, CITY OF GOODLETTSVILLE, DAVIDSON COUNTY, TENNESSEE

Scale: 1"=100'

Date: NOVEMBER 8, 2021

Approved By: G. WELCH

Revisions:

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Drawing Title:

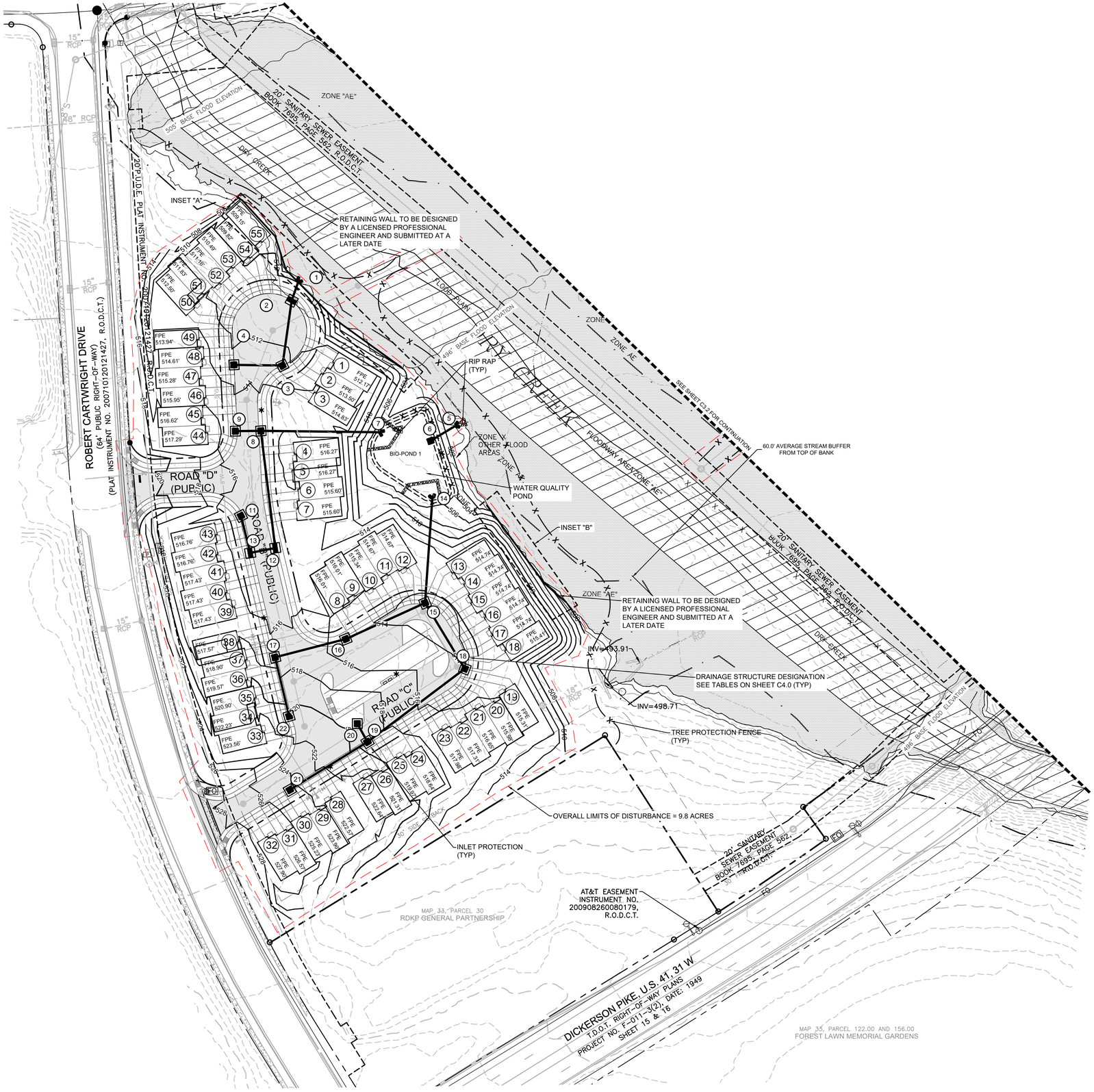
OVERALL GRADING PLAN

Drawing No.

C3.0

Project No.

84144-2096



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PLOTTED BY: JEFF MOSKOWITZ ON: 11/29/2021 11:43 AM LAST UPDATED BY: JMOSKOWITZ ON: 11/29/2021 10:57 AM

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STATE OF TENNESSEE

CEDARSIDE AT DRY CREEK

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10TH COUNCIL DISTRICT, CITY OF GOODLETTSVILLE, DAVIDSON COUNTY, TENNESSEE

Scale: #"=##

Date: NOVEMBER 8, 2021

Approved By: G. WELCH

Revisions:

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1 2021.11.29 PER CITY COMMENTS

Drawing Title:

GRADING, DRAINAGE & INTERMEDIATE EPSC PLAN 1

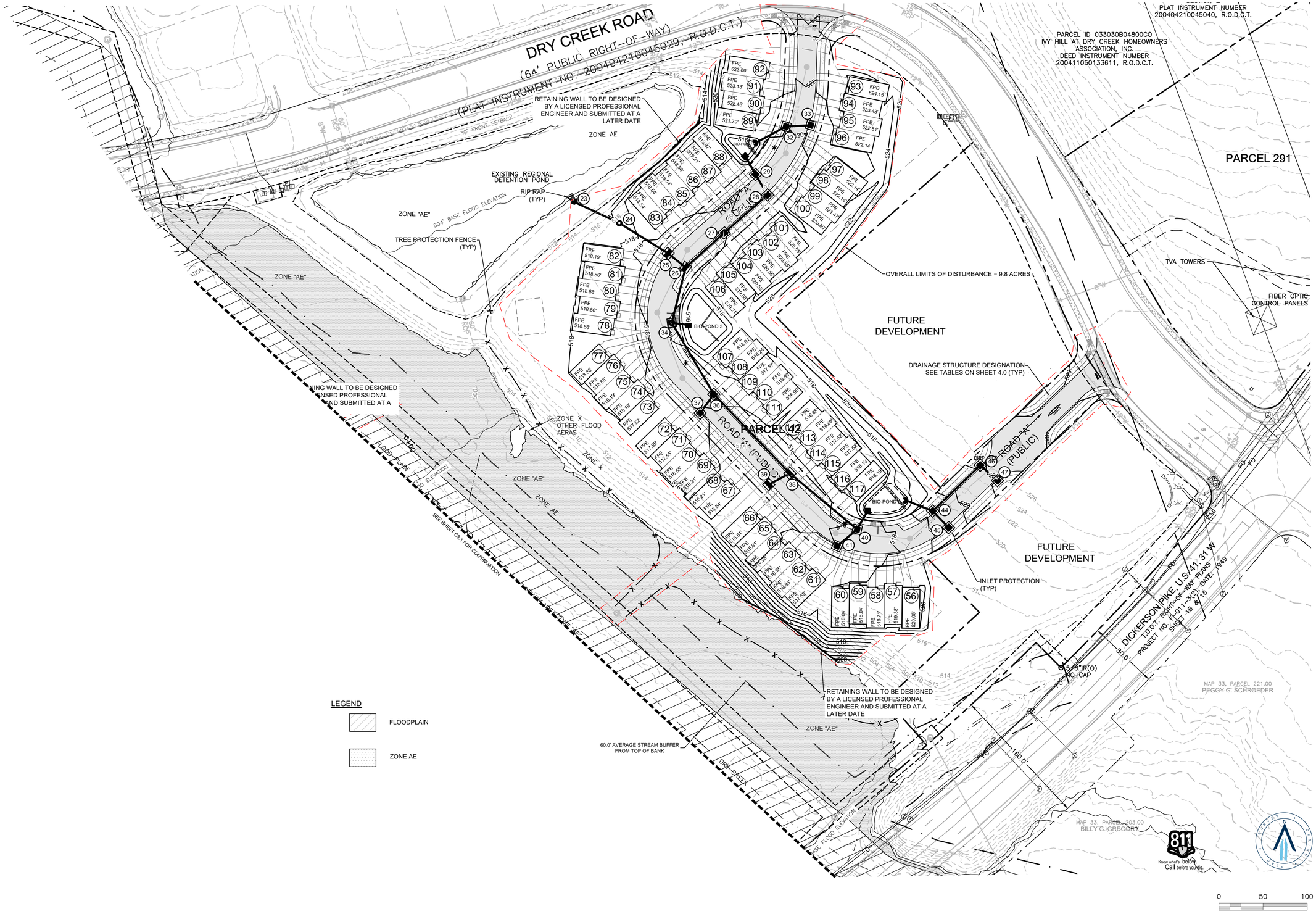
Drawing No.

C3.1

Project No.

84144-2096

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



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CEDARSIDE AT DRY CREEK

FOR

NATELLI COMMUNITIES

10TH COUNCIL DISTRICT, CITY OF GOODLETTSVILLE, DAVIDSON COUNTY, TENNESSEE

Scale: #"=##'

Date: NOVEMBER 8, 2021

Approved By: G. WELCH

Revisions:

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1 2021.11.29 PER CITY COMMENTS

Drawing Title:

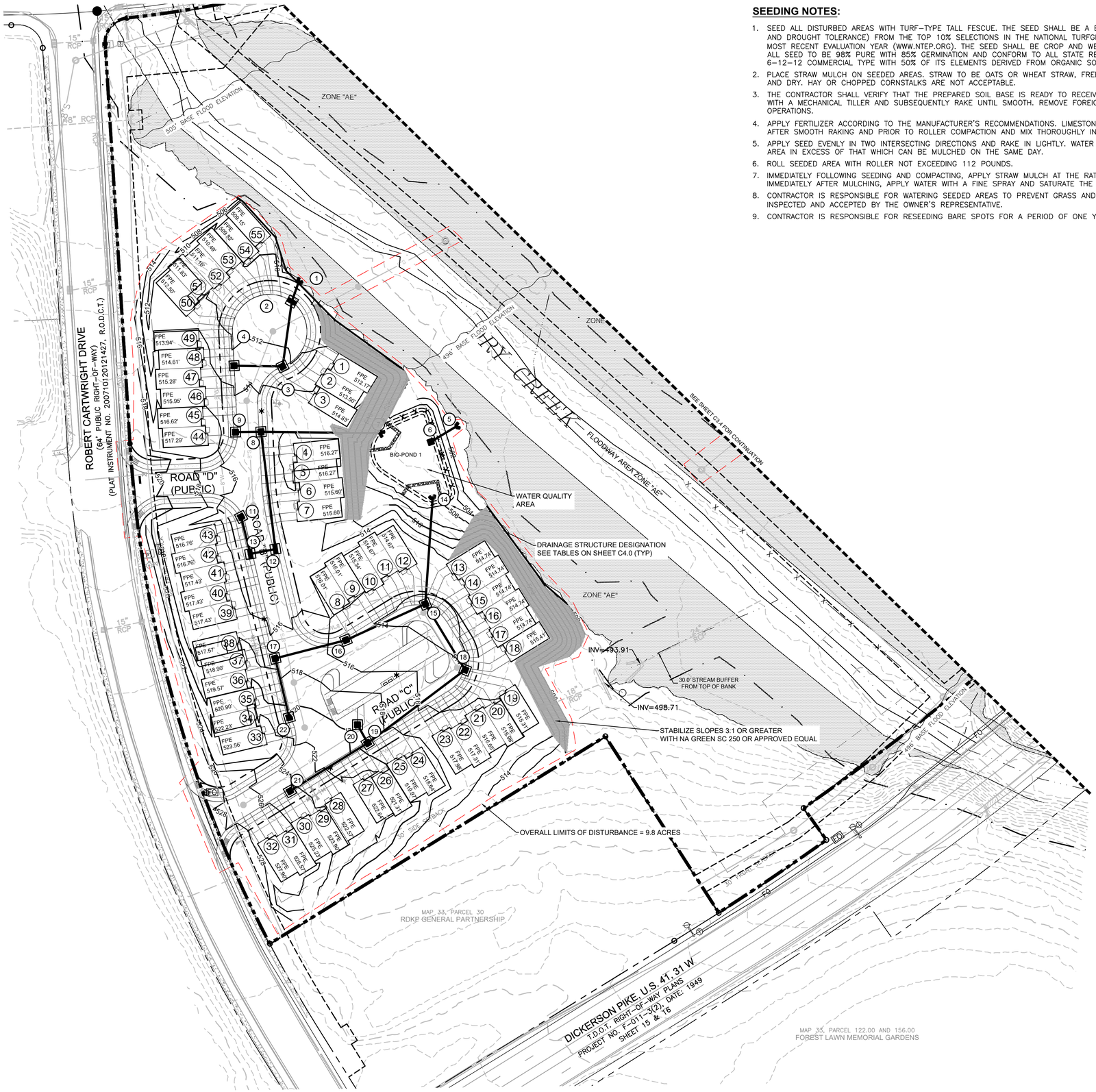
GRADING, DRAINAGE & INTERMEDIATE EPSC PLAN 2

Drawing No.

C3.2

Project No.

84144-2096



SEEDING NOTES:

1. SEED ALL DISTURBED AREAS WITH TURF-TYPE TALL FESCUE. THE SEED SHALL BE A BLEND OF 3-5 VARIETIES (ADDRESSING BOTH COLD HARDINESS AND DROUGHT TOLERANCE) FROM THE TOP 10% SELECTIONS IN THE NATIONAL TURFGRASS EVALUATION PROGRAM (N.T.E.P) TALL FESCUE TRIALS, MOST RECENT EVALUATION YEAR (WWW.NTEP.ORG). THE SEED SHALL BE CROP AND WEED FREE. SEED AT THE RATE OF 5 POUNDS PER 1,000 S.F. ALL SEED TO BE 98% PURE WITH 85% GERMINATION AND CONFORM TO ALL STATE REQUIREMENTS FOR GRASS SEED. THE FERTILIZER TO BE 6-12-12 COMMERCIAL TYPE WITH 50% OF ITS ELEMENTS DERIVED FROM ORGANIC SOURCES.
2. PLACE STRAW MULCH ON SEEDED AREAS. STRAW TO BE OATS OR WHEAT STRAW, FREE FROM WEEDS, FOREIGN MATTER DETRIMENTAL TO PLANT LIFE, AND DRY. HAY OR CHOPPED CORNSTALKS ARE NOT ACCEPTABLE.
3. THE CONTRACTOR SHALL VERIFY THAT THE PREPARED SOIL BASE IS READY TO RECEIVE WORK. CULTIVATE THE TOPSOIL TO A DEPTH OF 4 INCHES WITH A MECHANICAL TILLER AND SUBSEQUENTLY RAKE UNTIL SMOOTH. REMOVE FOREIGN MATERIALS COLLECTED DURING CULTIVATION AND RAKING OPERATIONS.
4. APPLY FERTILIZER ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. LIMESTONE MAY BE APPLIED WITH THE FERTILIZER. APPLY FERTILIZER AFTER SMOOTH RAKING AND PRIOR TO ROLLER COMPACTION AND MIX THOROUGHLY IN THE UPPER 2 INCHES OF TOPSOIL.
5. APPLY SEED EVENLY IN TWO INTERSECTING DIRECTIONS AND RAKE IN LIGHTLY. WATER TOPSOIL LIGHTLY PRIOR TO APPLYING SEED. DO NOT SEED AREA IN EXCESS OF THAT WHICH CAN BE MULCHED ON THE SAME DAY.
6. ROLL SEEDED AREA WITH ROLLER NOT EXCEEDING 112 POUNDS.
7. IMMEDIATELY FOLLOWING SEEDING AND COMPACTING, APPLY STRAW MULCH AT THE RATE OF ONE AND ONE HALF BALES PER 1,000 SQUARE FEET. IMMEDIATELY AFTER MULCHING, APPLY WATER WITH A FINE SPRAY AND SATURATE THE GROUND TO A DEPTH OF 4 INCHES.
8. CONTRACTOR IS RESPONSIBLE FOR WATERING SEEDED AREAS TO PREVENT GRASS AND SOIL FROM DRYING OUT UNTIL THE INSTALLATION IS INSPECTED AND ACCEPTED BY THE OWNER'S REPRESENTATIVE.
9. CONTRACTOR IS RESPONSIBLE FOR RESEEDING BARE SPOTS FOR A PERIOD OF ONE YEAR AFTER ACCEPTANCE OF INSTALLATION.

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SAMUEL H CHRISTMAN
REGISTERED ENGINEER
No. 122747
STATE OF TENNESSEE

CEDARSIDE AT DRY CREEK

FOR

NATELLI COMMUNITIES

10TH COUNCIL DISTRICT, CITY OF GOODLETTSVILLE, DAVIDSON COUNTY, TENNESSEE

Scale: 1"=50'

Date: NOVEMBER 8, 2021

Approved By: G. WELCH

Revisions:

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Drawing Title:

FINAL GRADING PLAN 1

Drawing No.

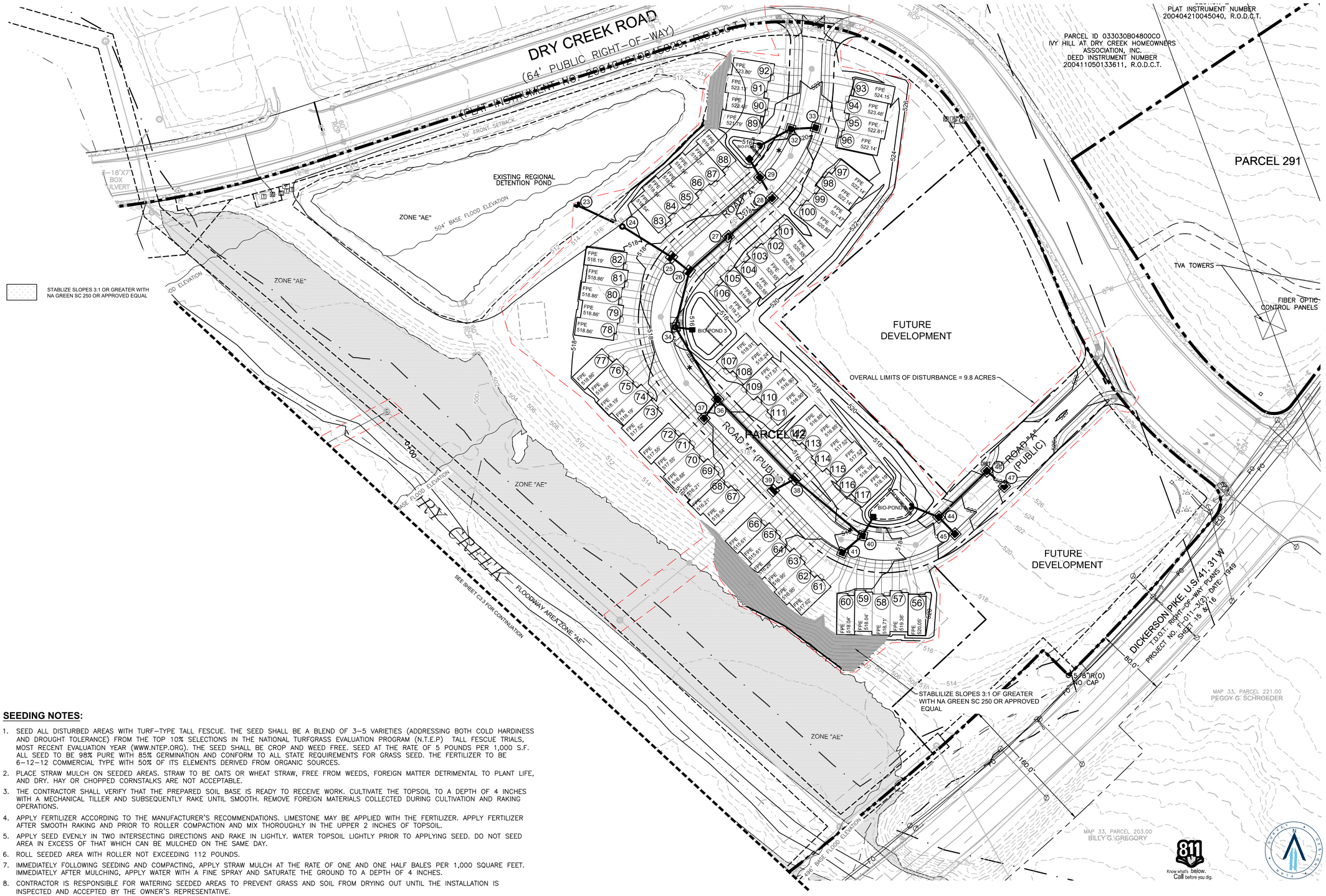
C3.3

Project No.

84144-2096

Know what's below. Call before you dig.

G:\84144-2096\CIVIL ENGINEERING\PLANS\SHEETS\2096 FINAL EPIC PLANE.DWG
PLOTTED BY JEFF BOESENER ON 11/3/2021 11:44 AM LAST UPDATED BY JBOESENER ON 11/04/2021 12:27 PM



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G:\84144-2096\CIVIL ENGINEERING\PLAN SHEETS\2096 FINAL EPIC PLANS.DWG
PLOTTED BY JEFF MCSWEENY ON 11/29/2021 11:43 AM LAST UPDATED BY JMCSWEENY ON 11/24/2021 12:27 PM

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SAMUEL H CHRISTMAN XVI REGISTERED ENGINEER STATE OF TENNESSEE No. 122747

CEDARSIDE AT DRY CREEK

FOR

NATELLI COMMUNITIES

10TH COUNCIL DISTRICT, CITY OF GOODLETTSVILLE, DAVIDSON COUNTY, TENNESSEE

Scale: 1"=50'

Date: NOVEMBER 8, 2021

Approved By: G. WELCH

Revisions:

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Drawing Title:

FINAL GRADING PLAN 2

Drawing No.

C3.4

Project No.

84144-2096

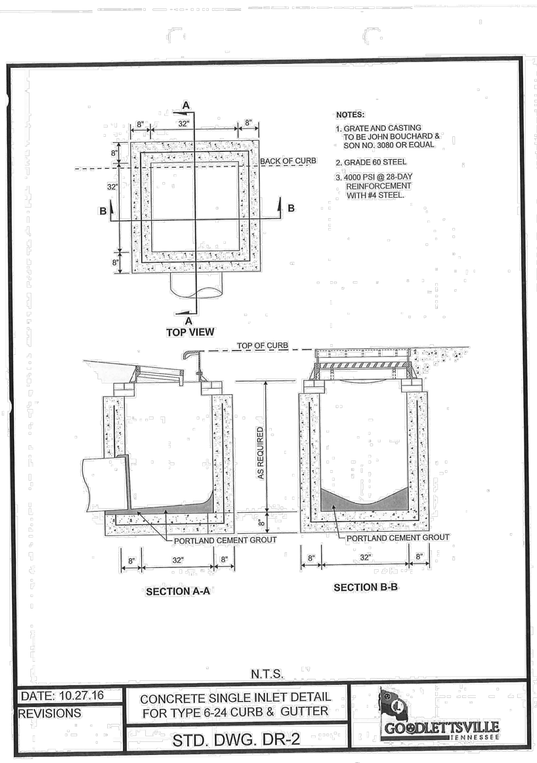
DRAINAGE STRUCTURE SCHEDULE				
NO.	TYPE*	CASTING	RIM	INVERTS
1	HEADWALL	----	506.21	504.00 (2)
2	DOUBLE CURB INLET	3300	510.57	506.57 (3) 506.37 (1)
3	SINGLE CURB INLET	3300	512.32	508.38 (4) 508.18 (2)
4	SINGLE CURB INLET	3300	512.62	508.62 (3)
5	HEADWALL	----	502.21	500.00 (6)
6	SINGLE GRATE INLET	4310	503.50	500.15 (5)
7	HEADWALL	----	506.21	504.00 (8)
8	SINGLE CURB INLET	3300	515.53	511.18 (9) 509.33 (7) 509.53 (12)
9	SINGLE CURB INLET	3300	515.51	511.31 (8)
11	SINGLE CURB INLET	3300	514.91	510.86 (13)
12	DOUBLE CURB INLET	3300	514.89	510.33 (13) 510.13 (8)
13	DOUBLE CURB INLET	3300	514.89	510.46 (12) 510.66 (11)
14	HEADWALL	----	506.21	504.00 (15)
15	SINGLE CURB INLET	3300	513.80	509.71 (16) 509.21 (14) 509.41 (18)
16	SINGLE CURB INLET	3300	515.50	511.50 (17) 511.30 (15)
17	SINGLE CURB INLET	3300	517.46	513.21 (16) 513.41 (22)
18	SINGLE CURB INLET	3300	514.00	510.00 (19) 509.80 (15)
19	SINGLE CURB INLET	3300	519.51	515.80 (20) 515.60 (18) 515.80 (21)
20	SINGLE CURB INLET	3300	519.91	515.91 (19)
21	SINGLE CURB INLET	3300	523.97	519.64 (19)

DRAINAGE STRUCTURE SCHEDULE				
NO.	TYPE*	CASTING	RIM	INVERTS
22	SINGLE CURB INLET	3300	520.67	516.24 (17)
23	HEADWALL	----	508.78	506.57 (24)
24	JUNCTION	1111	518.13	507.05 (25) 506.85 (23)
25	DOUBLE CURB INLET	3300	517.37	507.58 (26) 507.38 (24)
26	DOUBLE CURB INLET	3300	517.00	508.63 (27) 507.70 (25) 507.90 (34)
27	SINGLE CURB INLET	3300	517.90	509.12 (28) 508.92 (26)
28	SINGLE CURB INLET	3300	518.75	509.65 (29) 509.45 (27)
29	SINGLE CURB INLET	3300	518.84	509.78 (28)
30	SINGLE GRATE INLET	4310	517.00	
31	HEADWALL	----	518.21	516.00 (32)
32	SINGLE CURB INLET	3300	520.44	516.96 (31) 517.16 (33)
33	SINGLE CURB INLET	3300	520.80	517.30 (32)
34	JUNCTION	1111	518.10	508.25 (26) 508.45 (36)
35	SINGLE GRATE INLET	4310	517.00	
36	SINGLE CURB INLET	3300	516.39	512.16 (37) 508.91 (34) 509.11 (38)
37	SINGLE CURB INLET	3300	516.30	512.30 (36)
38	DOUBLE CURB INLET	3300	515.58	509.93 (40) 509.73 (36) 509.93 (39)
39	DOUBLE CURB INLET	3300	515.21	510.79 (38)
40	SINGLE CURB INLET	3300	516.87	510.42 (38) 512.41 (41)
41	SINGLE CURB INLET	3300	516.55	512.55 (40)

DRAINAGE STRUCTURE SCHEDULE				
NO.	TYPE*	CASTING	RIM	INVERTS
42	SINGLE GRATE INLET	4310	516.00	
43	HEADWALL	----	514.62	512.41 (44)
44	SINGLE CURB INLET	3300	520.96	516.63 (43) 516.83 (45) 516.83 (46)
45	SINGLE CURB INLET	3300	520.96	516.96 (44)
46	SINGLE CURB INLET	3300	524.25	520.00 (44) 520.20 (47)
47	SINGLE CURB INLET	3300	524.33	520.33 (46)

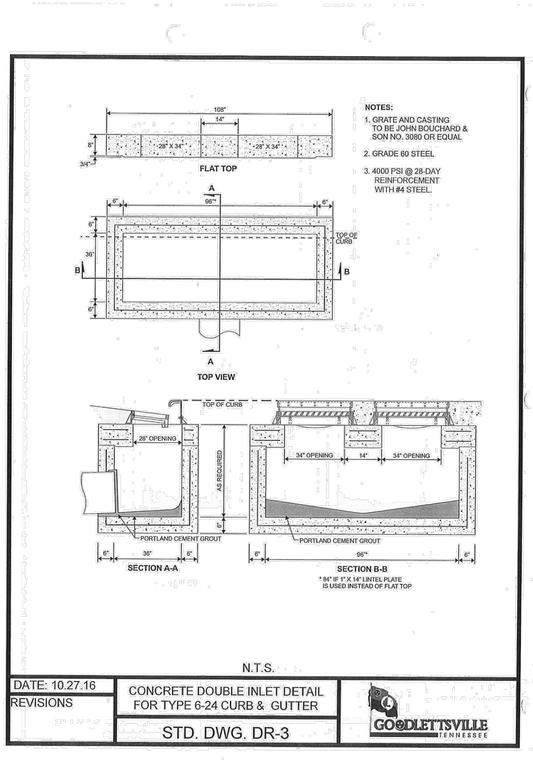
PIPE TABLE			
LINE	SIZE/TYPE	LENGTH	SLOPE
2–1	18" RCP	22'	10.97%
3–2	18" RCP	67'	2.40%
4–3	18" RCP	49'	0.50%
6–5	18" RCP	31'	0.50%
8–7	18" RCP	122'	4.35%
9–8	18" RCP	26'	0.50%
11–13	18" RCP	39'	0.50%
12–8	18" RCP	120'	0.50%
13–12	18" RCP	26'	0.50%
15–14	18" RCP	108'	4.82%
16–15	18" RCP	89'	1.80%
17–16	18" RCP	75'	2.28%
18–15	18" RCP	79'	0.50%
19–18	18" RCP	124'	4.50%
20–19	18" RCP	21'	0.50%
21–19	18" RCP	93'	4.12%
22–17	18" RCP	62'	4.56%
24–23	18" RCP	55'	0.50%
25–24	18" RCP	65'	0.50%
26–25	18" RCP	25'	0.50%

PIPE TABLE			
LINE	SIZE/TYPE	LENGTH	SLOPE
27–26	18" RCP	58'	0.50%
28–27	18" RCP	65'	0.50%
29–28	18" RCP	27'	0.50%
32–31	18" RCP	38'	2.53%
33–32	18" RCP	28'	0.50%
34–26	18" RCP	65'	0.54%
36–34	18" RCP	94'	0.49%
37–36	18" RCP	26'	0.50%
38–36	18" RCP	124'	0.50%
39–38	18" RCP	27'	3.18%
40–38	18" RCP	99'	0.50%
41–40	18" RCP	29'	0.50%
44–43	18" RCP	32'	13.10%
45–44	18" RCP	26'	0.50%
46–44	18" RCP	75'	4.24%
47–46	18" RCP	26'	0.50%



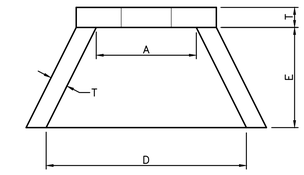
N.T.S.

DATE: 10.27.16	CONCRETE SINGLE INLET DETAIL FOR TYPE 6-24 CURB & GUTTER	GOODLETTSVILLE TENNESSEE
REVISIONS	STD. DWG. DR-2	



N.T.S.

DATE: 10.27.16	CONCRETE DOUBLE INLET DETAIL FOR TYPE 6-24 CURB & GUTTER	GOODLETTSVILLE TENNESSEE
REVISIONS	STD. DWG. DR-3	

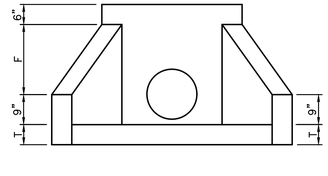


TOP VIEW

CONCRETE: 4000 PSI AT 28 DAYS
REINFORCED WITH NO. 4 BARS 10"C.C. EACH WAY WITH WINGS AND TOE SLAB DOGWELLED TO HEADWALL WITH NO.5 BARS.

¾" CHAMFER ON ALL EXPOSED EDGES

TABLE OF DIMENSIONS					
PIPE SIZES	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"	3'–0"	3'–3"	6"
30"	4'–0"	6'–6"	3'–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"



FRONT VIEW

SIDE VIEW

METRO STANDARD DR–160

CONCRETE HEADWALL

NOT TO SCALE

RaganSmith

Nashville - Murfreesboro - Chattanooga

SAMUEL H CHRISTMAN
REGISTERED ENGINEER
XVI
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COMMERCE
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STATE OF TENNESSEE

CEDARSIDE AT DRY CREEK

FOR

NATELLI COMMUNITIES

10TH COUNCIL DISTRICT, CITY OF GOODLETTSVILLE, DAVIDSON COUNTY, TENNESSEE

Scale: NOT TO SCALE

Date: NOVEMBER 8, 2021

Approved By: G. WELCH

Revisions:

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Drawing Title:

STORM SCHEDULE & DETAILS

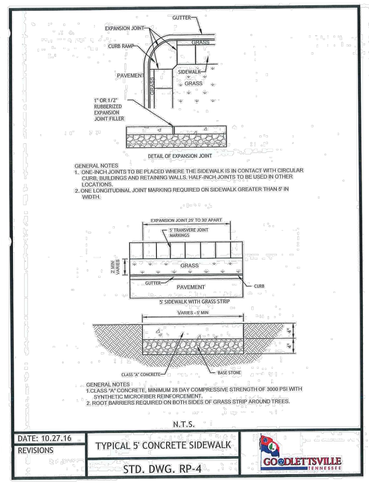
Drawing No.

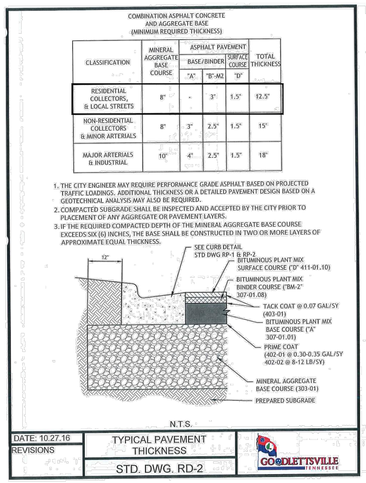
C4.0

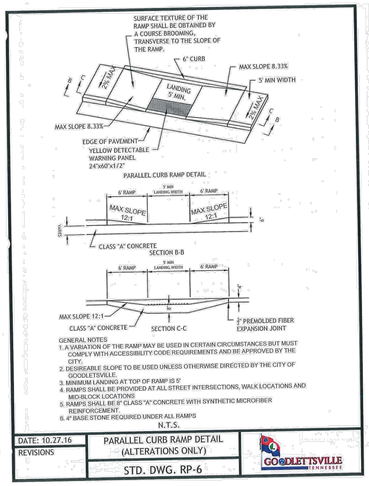
Project No.

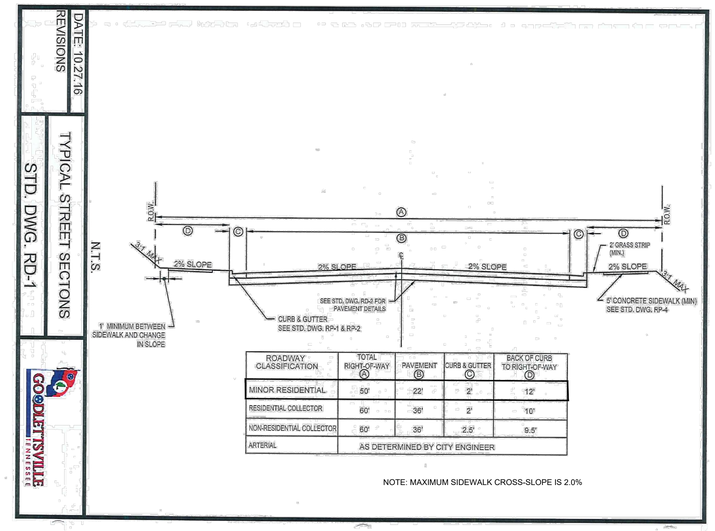
84144-2096

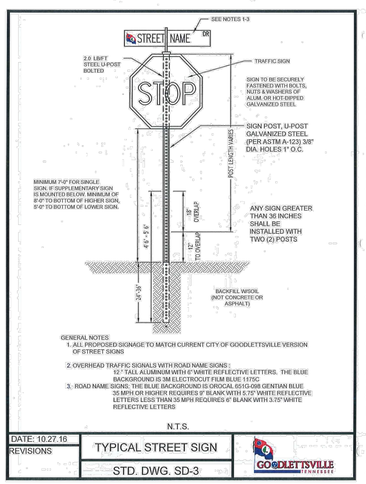
811 Know what's below. Call before you dig.

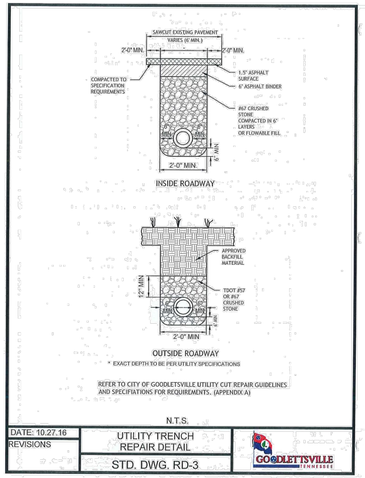


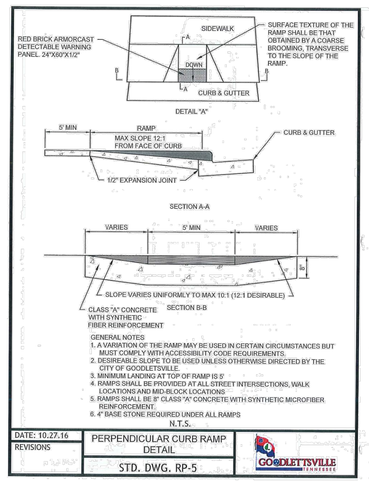


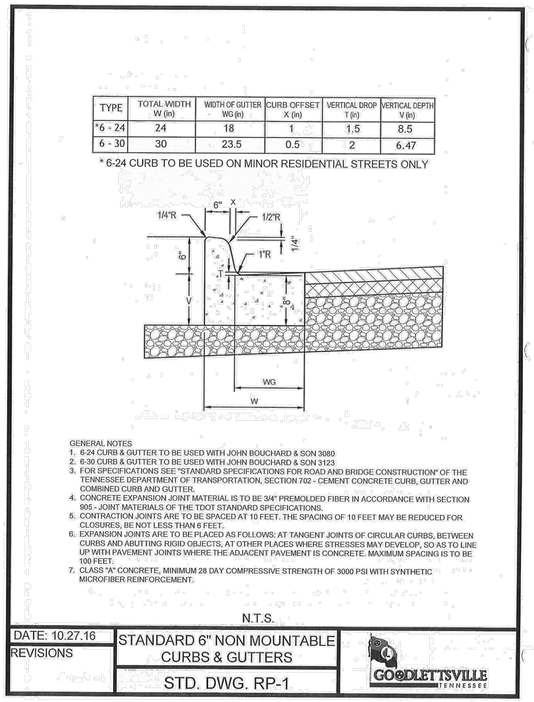












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SAMUEL H CHRISTMAN REGISTERED ENGINEER XVI AGRICULTURE No. 122747 COMMERCE STATE OF TENNESSEE

DRY CREEK SUBDIVISION

FOR

NATELLI COMMUNITIES

10TH COUNCIL DISTRICT CITY OF GOODLETTSVILLE DAVIDSON COUNTY TENNESSEE

Scale: NOT TO SCALE

Date: NOVEMBER 8, 2021

Approved By: G. WELCH

Revisions:

- – –
- – –
- – –
- – –
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- – –

Drawing Title:

CIVIL DETAILS

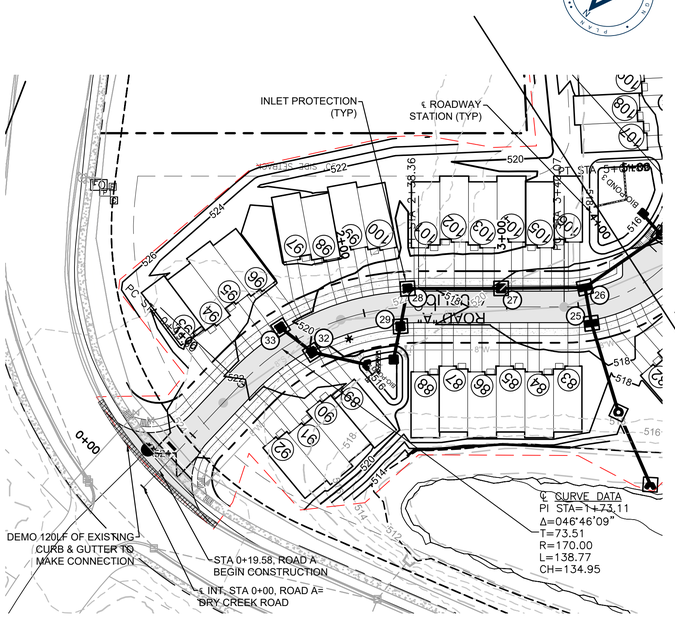
Drawing No.

C5.0

Project No.

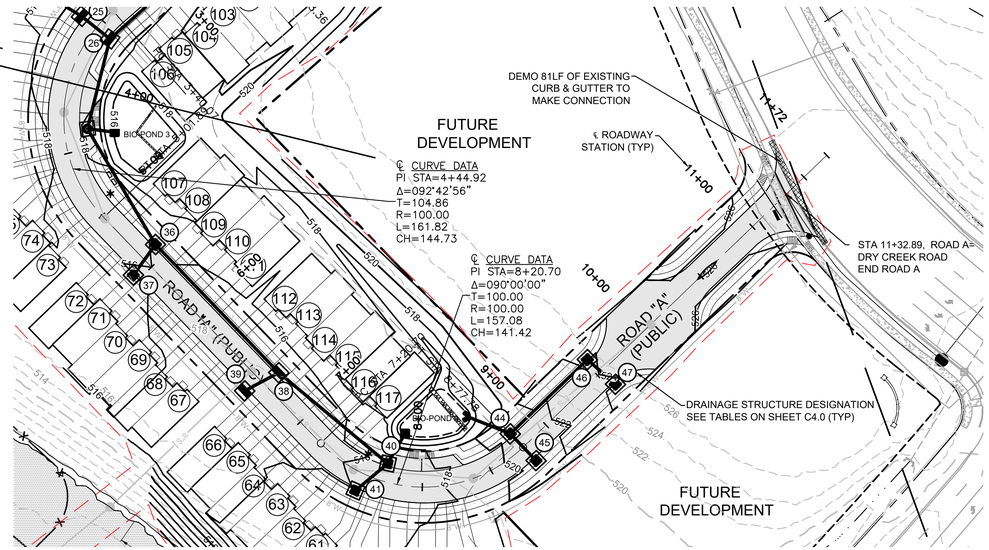
84144

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



SCALES:

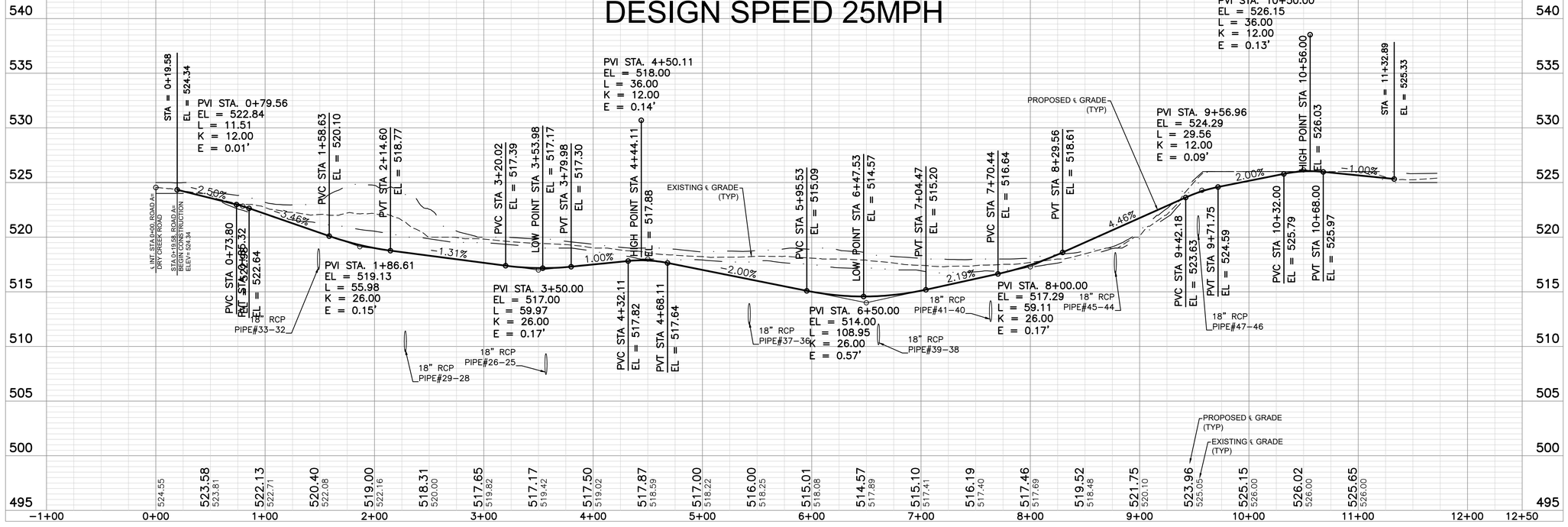
PLAN VIEW	PROFILE VIEW
1" =50'	1" =50' HORIZONTAL
	1" =5' VERTICAL



LEGEND
25' LT
℄
25' RT

0 50 100

ROAD "A"
DESIGN SPEED 25MPH



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SAMUEL H CHRISTMAN REGISTERED ENGINEER XVI AGRICULTURE COMMERCE No. 122747 STATE OF TENNESSEE

CEDARSIDE AT DRY CREEK
FOR
NATELLI COMMUNITIES
10TH COUNCIL DISTRICT, CITY OF GOODLETTSVILLE, DAVIDSON COUNTY, TENNESSEE

Scale: AS SHOWN
Date: NOVEMBER 8, 2021
Approved By: G. WELCH
Revisions:

Drawing Title:
ROAD A - PLAN AND PROFILE

Drawing No.
R1.0

Project No.
84144-2096

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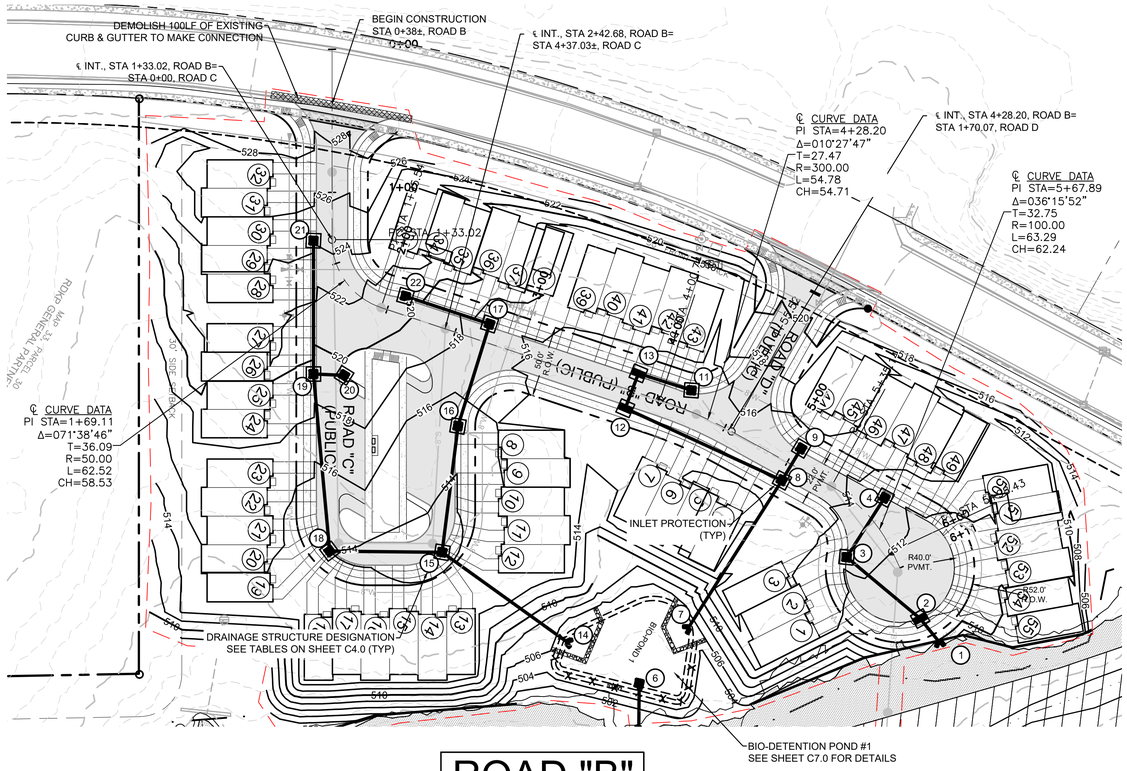
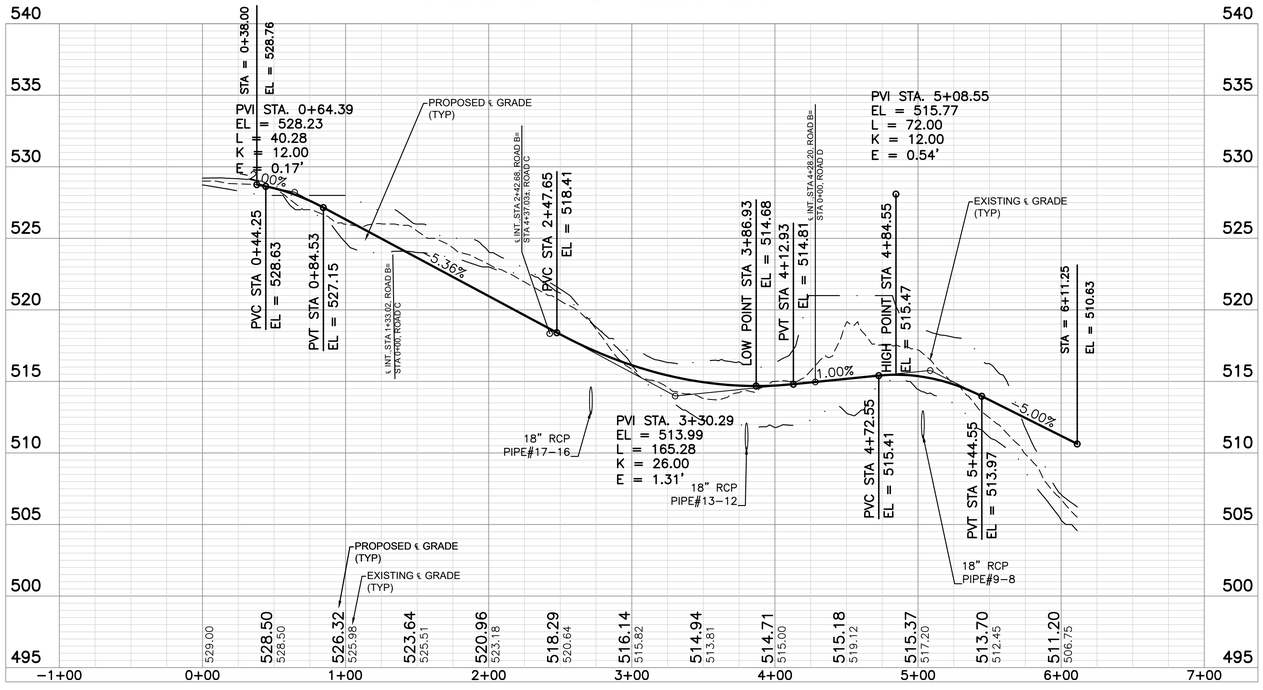


ROAD "B"

DESIGN SPEED 25MPH



SCALES:

PLAN VIEW	PROFILE VIEW
1" =50'	1" =50' HORIZONTAL
	1" =5' VERTICAL

LEGEND
25' LT
℄
25' RT

0 50 100

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CEDARSIDE AT DRY CREEK

FOR

NATELLI COMMUNITIES

10TH COUNCIL DISTRICT, CITY OF GOODLETTSVILLE, DAVIDSON COUNTY, TENNESSEE

Scale: AS SHOWN

Date: NOVEMBER 8, 2021

Approved By: G. WELCH

Revisions:

- – –
- – –
- – –
- – –
- – –
- – –

Drawing Title:

ROAD B - PLAN AND PROFILE

Drawing No.

R1.1

Project No.

84144-2096

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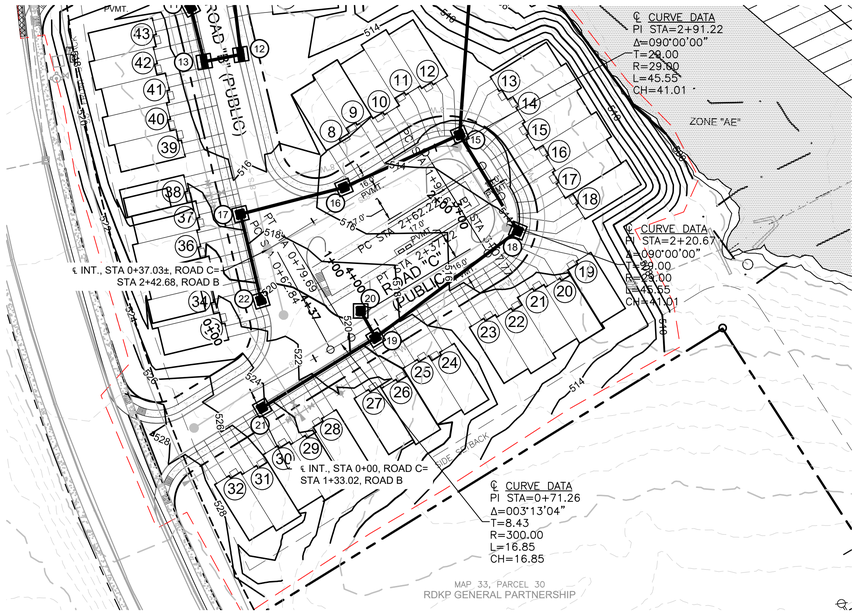
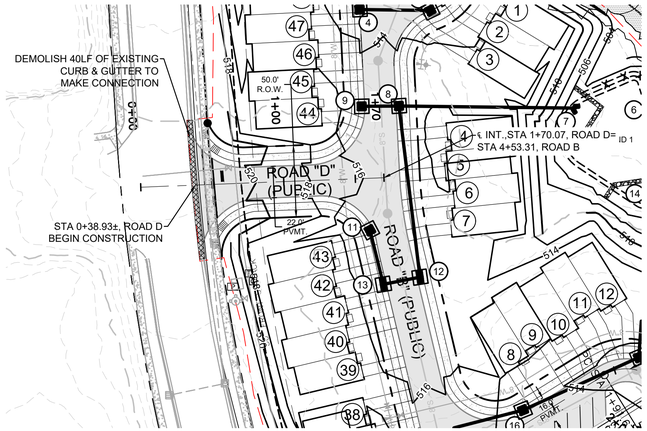




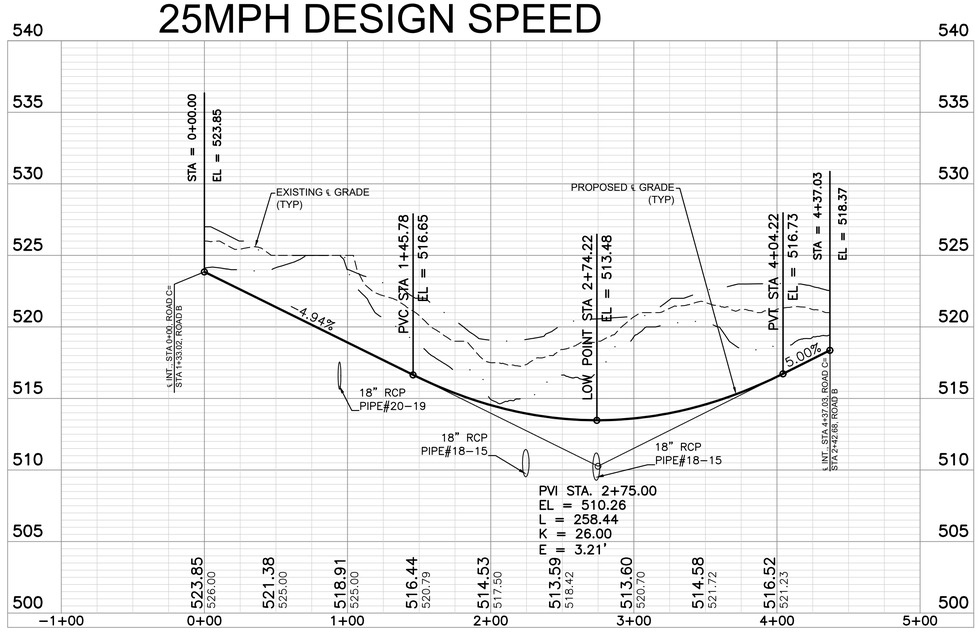
SCALES:

PLAN VIEW	PROFILE VIEW
1" =50'	1" =50' HORIZONTAL
	1" =5' VERTICAL

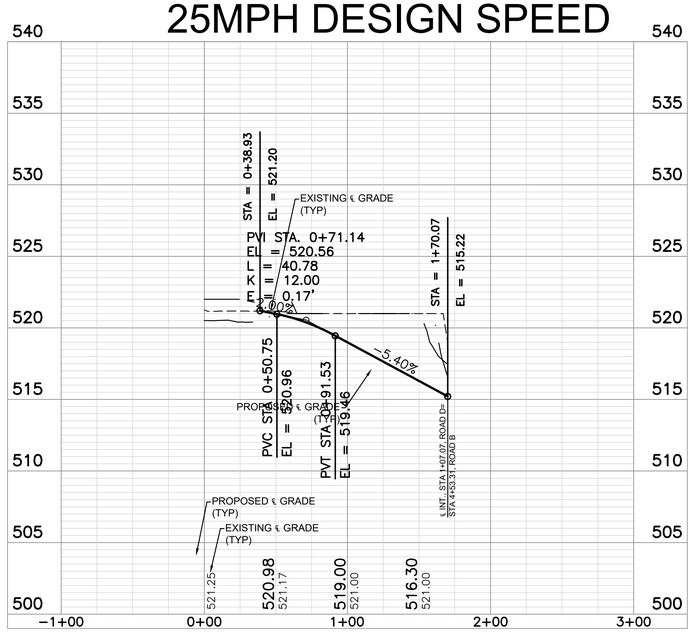
LEGEND
25' LT
℄
25' RT

0 50 100

ROAD "C"
25MPH DESIGN SPEED



ROAD "D"
25MPH DESIGN SPEED



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SAMUEL H CHRISTMAN
REGISTERED ENGINEER
No. 122747
STATE OF TENNESSEE

CEDARSIDE AT DRY CREEK
FOR
NATELLI COMMUNITIES
10TH COUNCIL DISTRICT, CITY OF GOODLETTSVILLE, DAVIDSON COUNTY, TENNESSEE

Scale: AS SHOWN
Date: NOVEMBER 8, 2021
Approved By: G. WELCH
Revisions:
- – –
- – –
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- – –

Drawing Title:
ROAD C & ROAD D - PLAN AND PROFILE

Drawing No.
R1.2

Project No.
84144-2096

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

G:\84144-2096\1-CIVIL_ENGINEERING\PLAN SHEETS\ROAD C PROFILE.DWG
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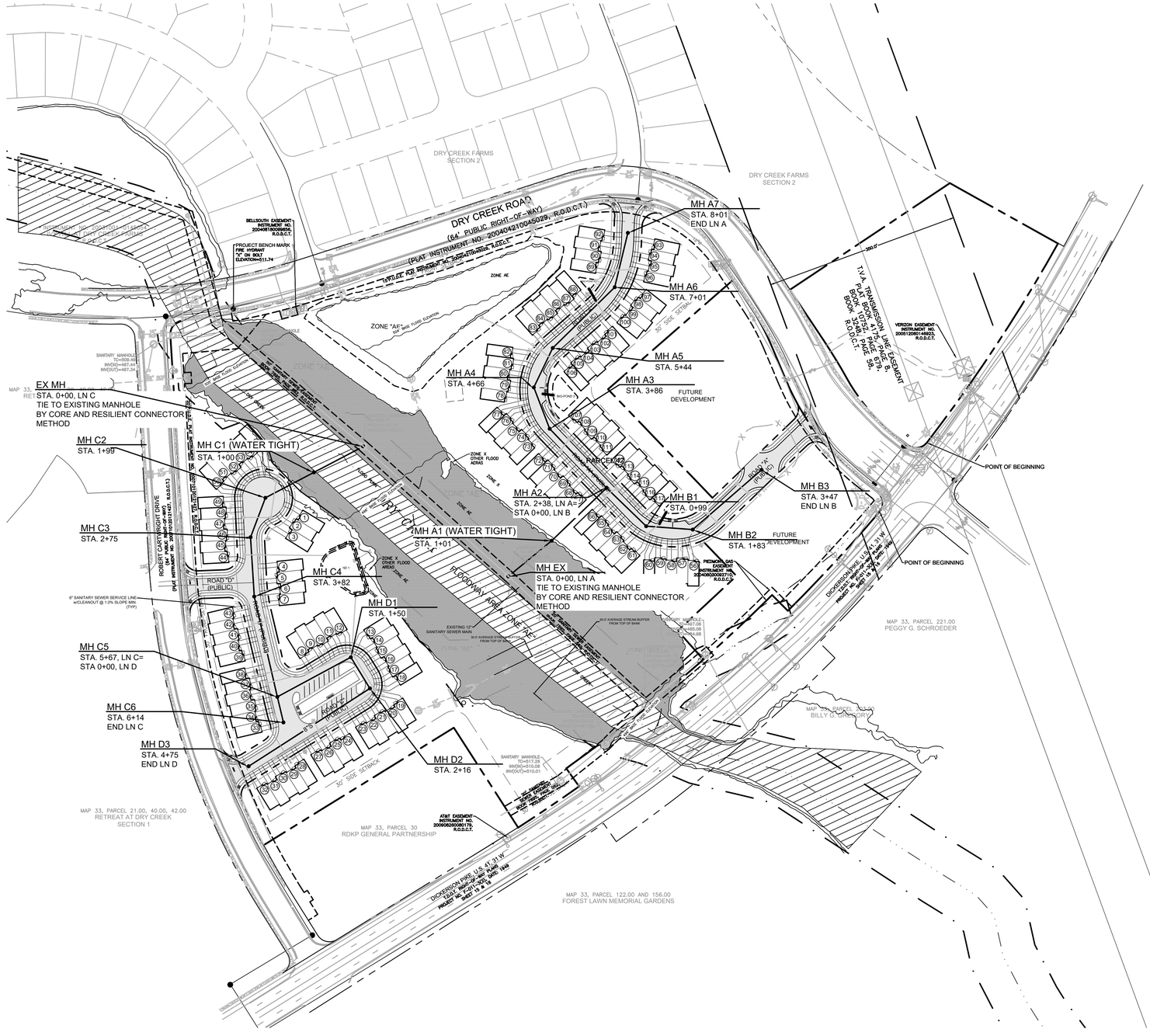

0 100 200

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CEDARSIDE AT DRY CREEK

FOR

NATELLI COMMUNITIES

10TH COUNCIL DISTRICT, CITY OF GOODLETTSVILLE, DAVIDSON COUNTY, TENNESSEE

Scale: 1"=100'

Date: NOVEMBER 8, 2021

Approved By: G. WELCH

Revisions:

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Drawing Title:

OVERALL SANITARY SEWER

Drawing No.

S1.0

Project No.

84144-2096

G:\84144-2096_CIVIL ENGINEERING\X-PLAN SHEETS\OVERALL SANITARY SEWER.DWG
PLOTTED BY: JEFF MCKENNEY ON: 11/29/2021 11:49 AM LAST UPDATED BY: SCHRISTMAN ON: 11/30/2021 3:19 PM

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PLOTTED BY: JEFF MORONEY ON: 11/29/2021 11:59 AM LAST UPDATED BY: JMORONEY ON: 11/7/2021 11:18 AM

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STATE OF TENNESSEE

CEDARSIDE AT DRY CREEK

FOR

NATELLI COMMUNITIES

10TH COUNCIL DISTRICT, CITY OF GOODLETTSVILLE, DAVIDSON COUNTY, TENNESSEE

Scale: 1"=50'

Date: NOVEMBER 8, 2021

Approved By: G. WELCH

Revisions:

- – –
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Drawing Title:

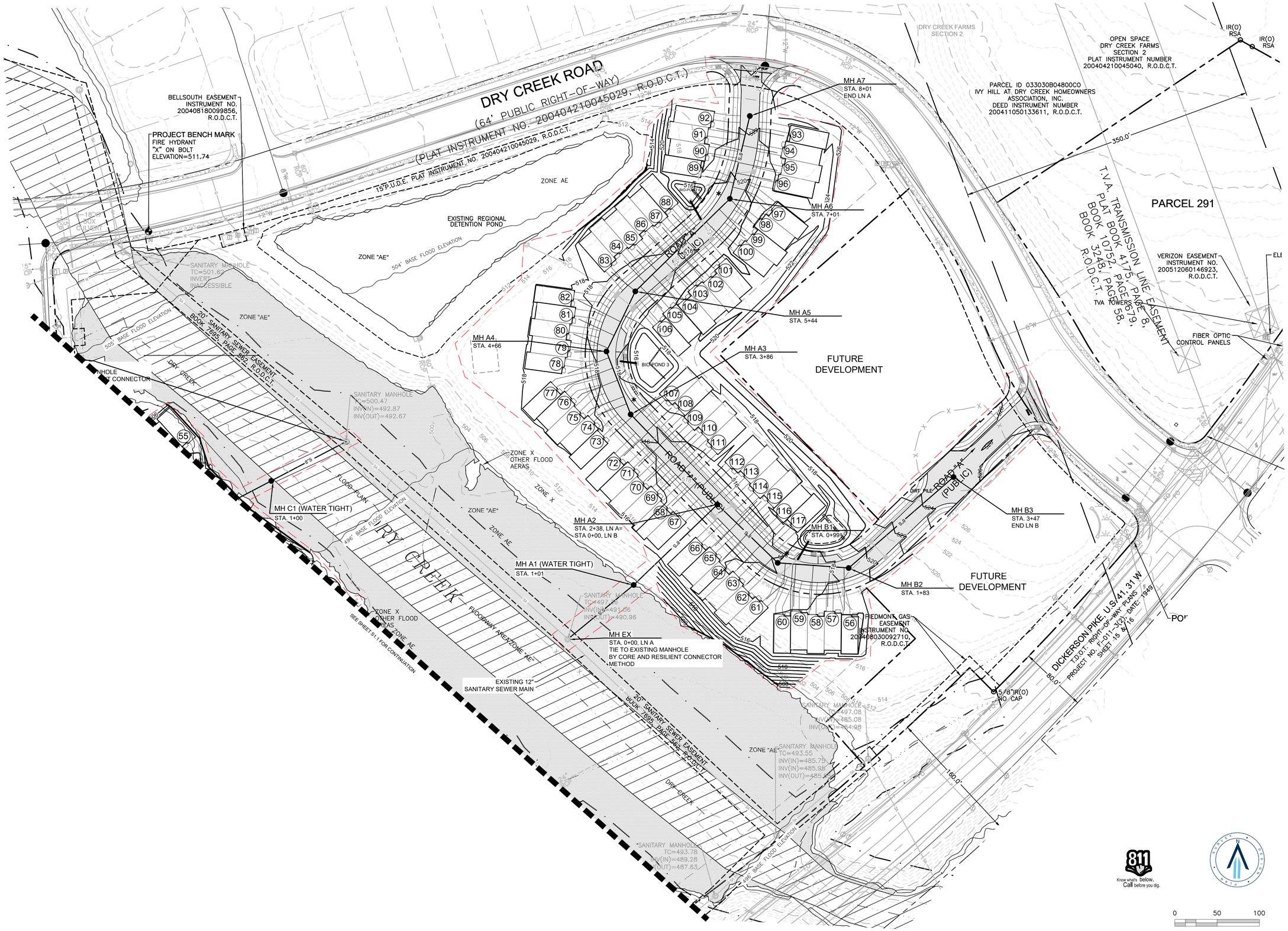
ENLARGED SANITARY SEWER 1

Drawing No.

S1.1

Project No.

84144-2096



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CEDARSIDE AT DRY CREEK

FOR

NATELLI COMMUNITIES

10TH COUNCIL DISTRICT, CITY OF GOODLETTSVILLE, DAVIDSON COUNTY, TENNESSEE

Scale:	#"=##'
Date:	NOVEMBER 8, 2021
Approved By:	G. WELCH

Revisions:

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Drawing Title:

ENLARGED SANITARY SEWER 2

Drawing No.

S1.2

Project No.

84144-2096

Know what's below. Call before you dig.

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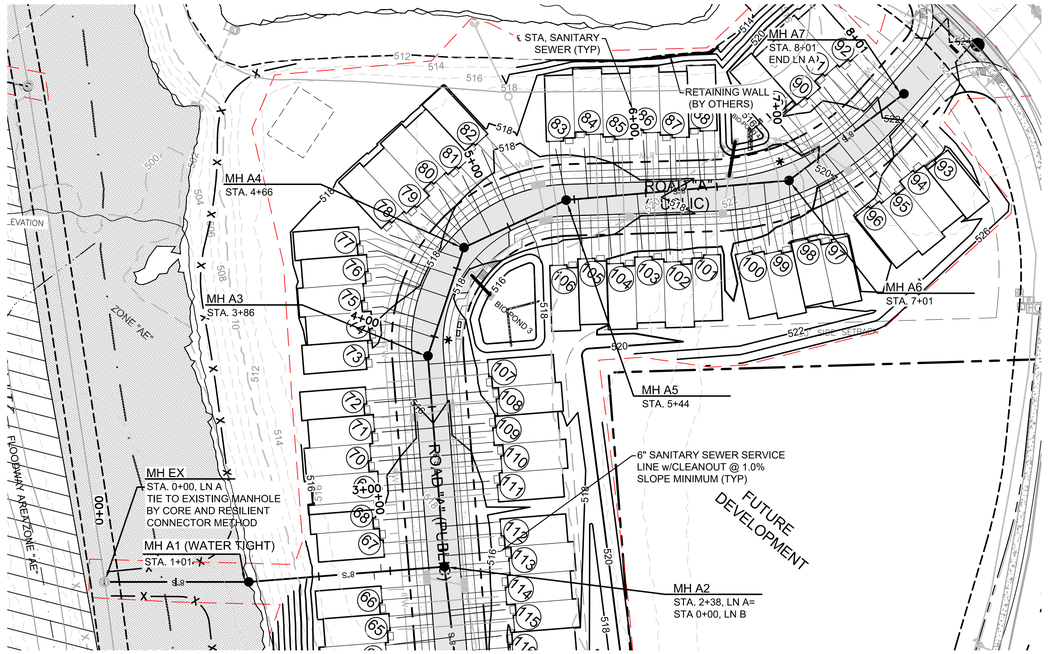
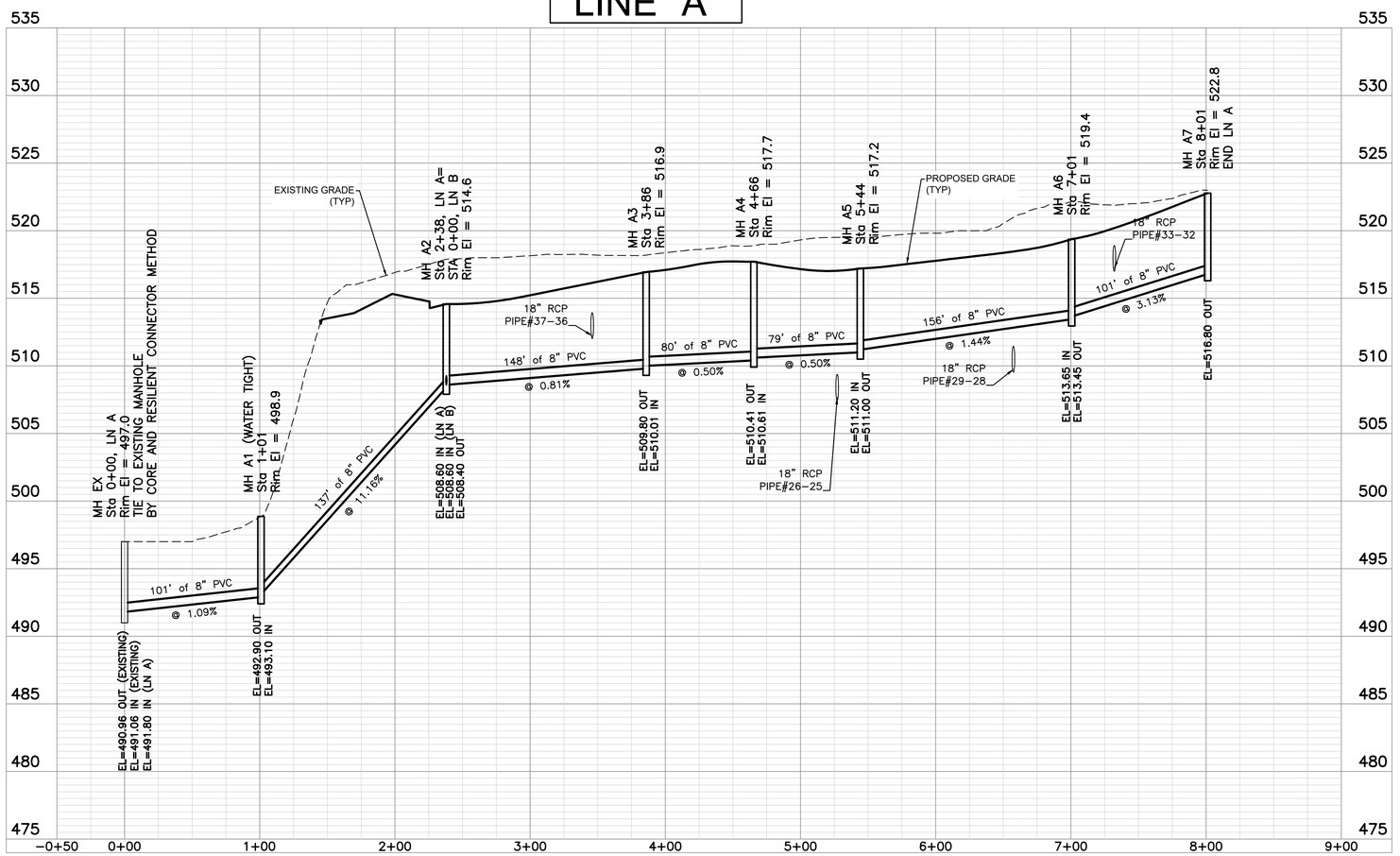


LINE "A"



SCALES:

PLAN VIEW	PROFILE VIEW
1" =50'	1" =50' HORIZONTAL
	1" =5' VERTICAL

0 50 100

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REGISTERED ENGINEER
No. 122747
STATE OF TENNESSEE

CEDARSIDE AT DRY CREEK

FOR

NATELLI COMMUNITIES

10TH COUNCIL DISTRICT, CITY OF GOODLETTSVILLE, DAVIDSON COUNTY, TENNESSEE

Scale:	AS SHOWN
Date:	NOVEMBER 8, 2021
Approved By:	G. WELCH

Revisions:

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Drawing Title:

LINE A - PLAN AND PROFILE

Drawing No.

S1.4

Project No.

84144-2096

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

G:\84144-2096\-CIVIL ENGINEERING\A-PLAN SHEETS\LINE A PROFILE.DWG
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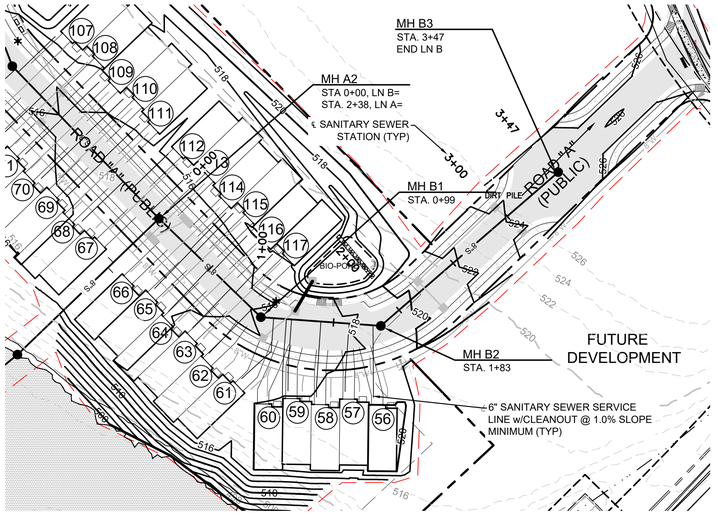
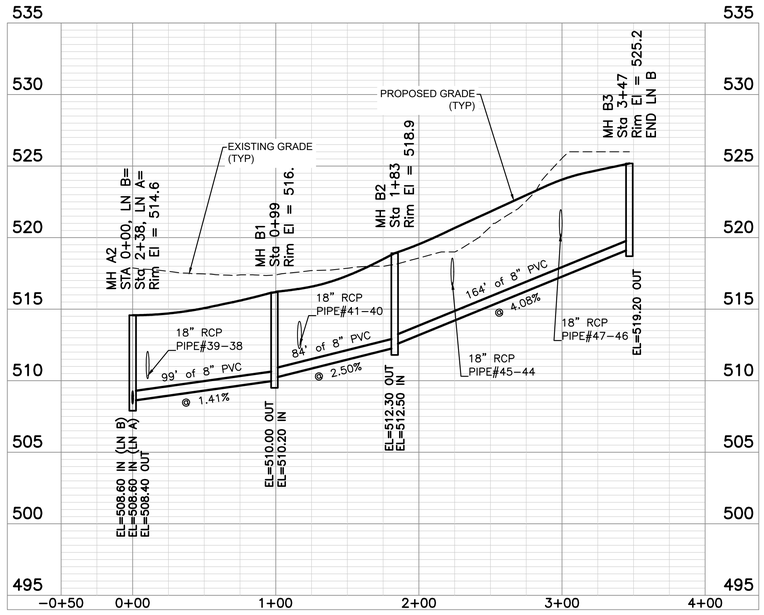


LINE "B"

SCALES:

PLAN VIEW	PROFILE VIEW
1" =50'	1" =50' HORIZONTAL
	1" =5' VERTICAL

0 50 100



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XVI
AGRICULTURE
COMMERCE
No. 122747
STATE OF TENNESSEE

CEDARSIDE AT DRY CREEK

FOR

NATELLI COMMUNITIES

10TH COUNCIL DISTRICT, CITY OF GOODLETTSVILLE, DAVIDSON COUNTY, TENNESSEE

Scale:	AS SHOWN
Date:	NOVEMBER 8, 2021
Approved By:	G. WELCH

Revisions:

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Drawing Title:

LINE B - PLAN AND PROFILE

Drawing No.

S1.5

Project No.

84144-2096

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

G:\84144-2096\CIVIL ENGINEERING\PLAN SHEETS\LINE B PROFILE.DWG
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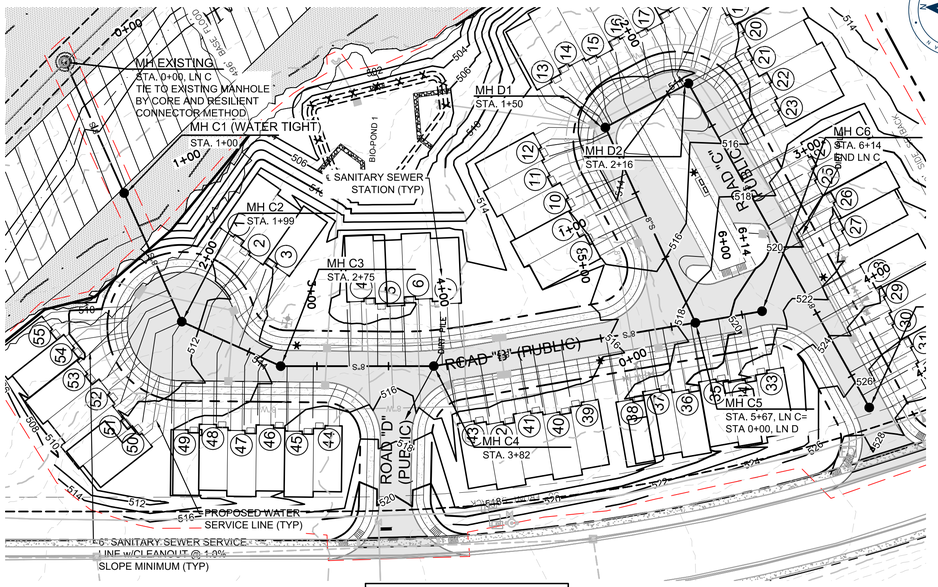
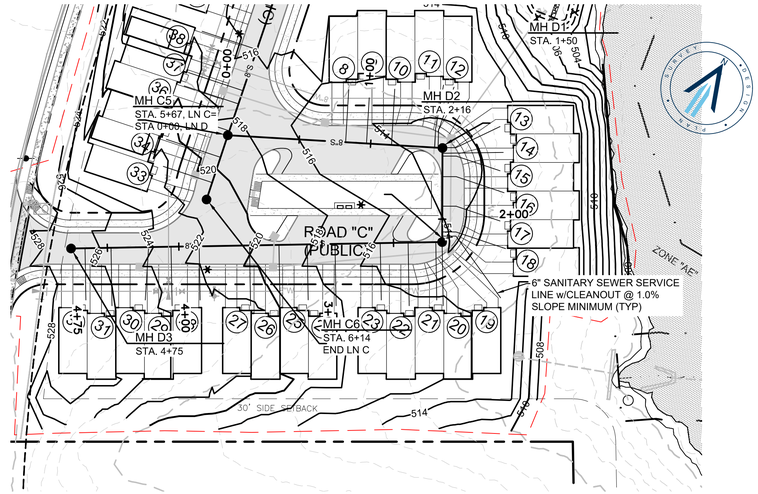


LINE "C"

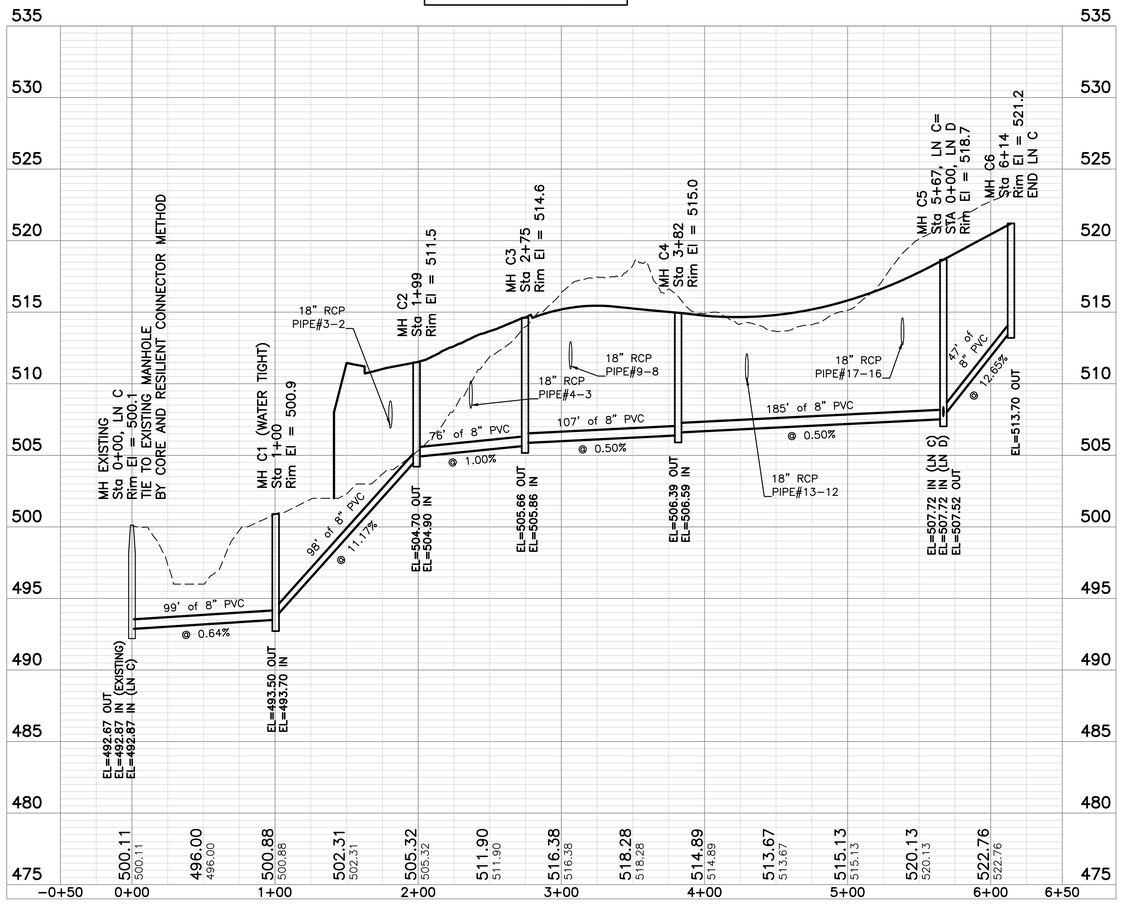
SCALES:

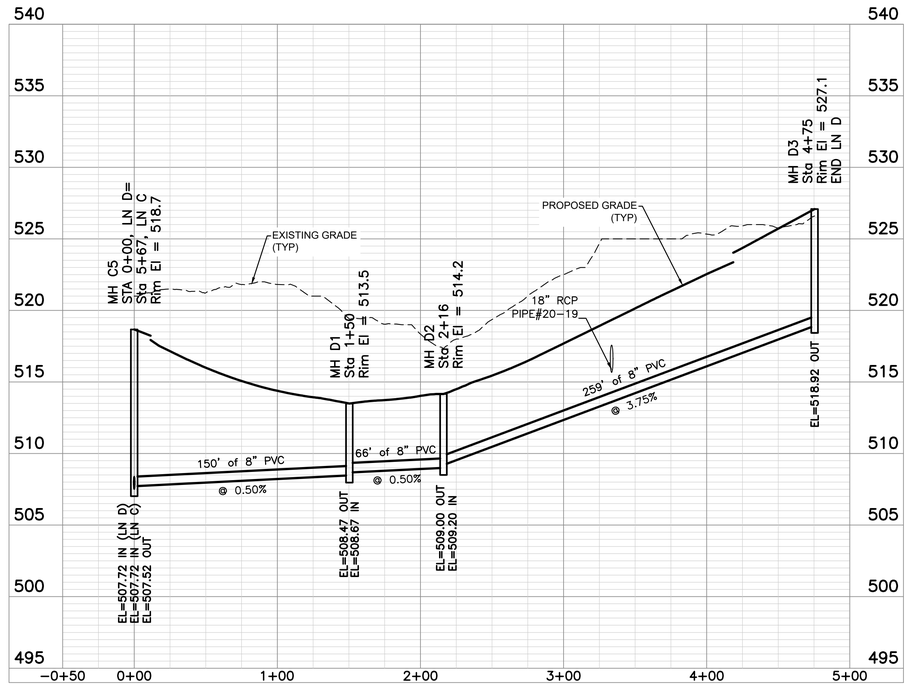
PLAN VIEW	PROFILE VIEW
1" =50'	1" =50' HORIZONTAL
	1" =5' VERTICAL

0 50 100



LINE "D"





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REGISTERED ENGINEER
No. 122747
STATE OF TENNESSEE

CEDARSIDE AT DRY CREEK

FOR

NATELLI COMMUNITIES

10TH COUNCIL DISTRICT, CITY OF GOODLETTSVILLE, DAVIDSON COUNTY, TENNESSEE

Scale: AS SHOWN

Date: NOVEMBER 8, 2021

Approved By: G. WELCH

Revisions:

- – –
- – –
- – –
- – –
- – –
- – –

Drawing Title:

LINE C & D - PLAN AND PROFILE

Drawing No.

S1.6

Project No.

84144-2096

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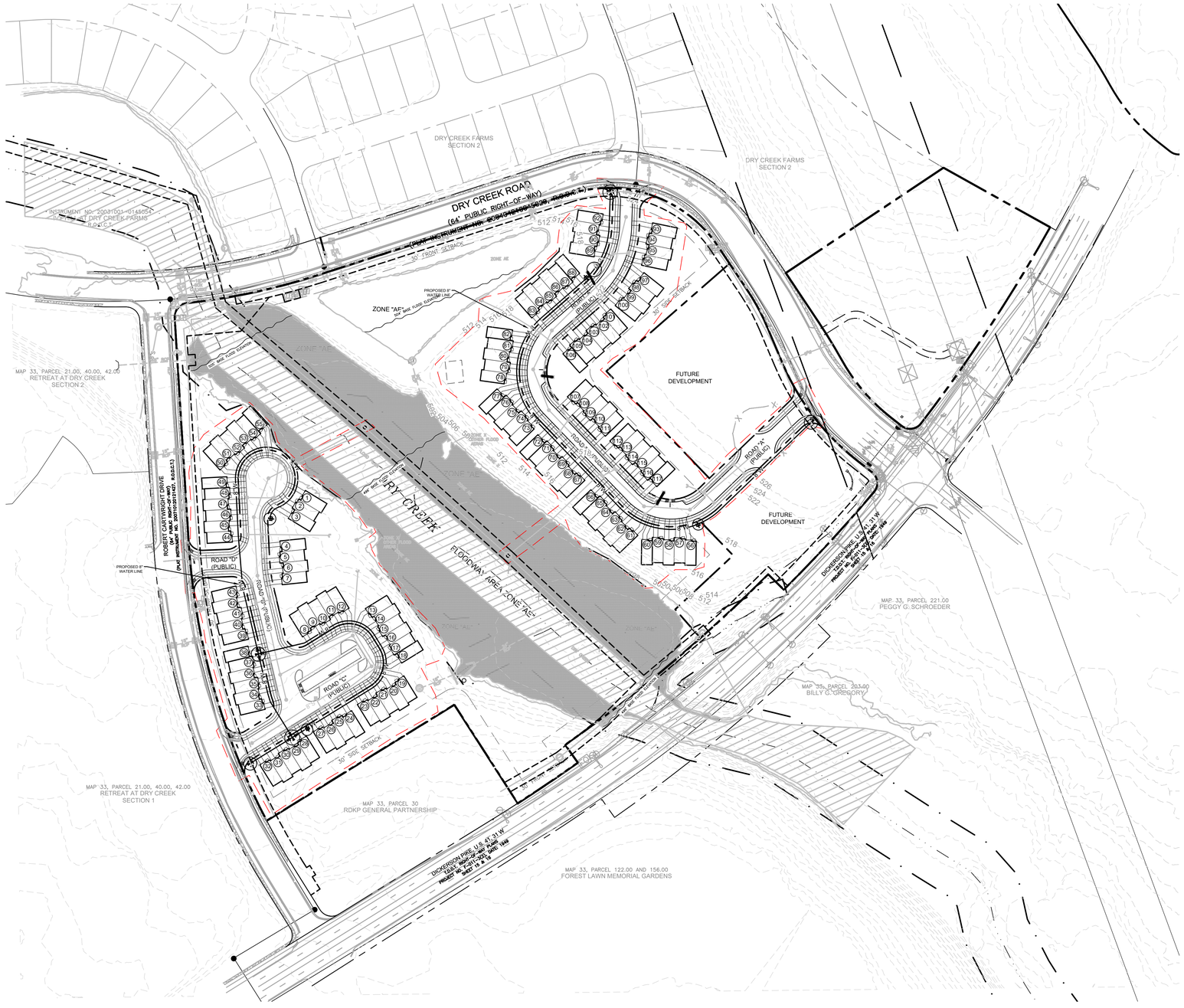

0 100 200

Know what's below. Call before you dig.

G:\84144-2096\-CIVIL ENGINEERING\PLAN SHEETS\SWK WATER PLANS.DWG
PLOTTED BY: JEFF KROBNENDY ON: 11/29/2021 11:59 AM LAST UPDATED BY: JKROBNENDY ON: 11/7/2021 11:15 AM

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AGRICULTURE
COMMERCE
No. 122747
STATE OF TENNESSEE

CEDARSIDE AT DRY CREEK

FOR

NATELLI COMMUNITIES

10TH COUNCIL DISTRICT, CITY OF GOODLETTSVILLE, DAVIDSON COUNTY, TENNESSEE

Scale: 1"=100'

Date: NOVEMBER 8, 2021

Approved By: G. WELCH

Revisions:

- – –
- – –
- – –
- – –
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- – –

Drawing Title:

OVERALL WATER PLAN

Drawing No.

W1.0

Project No.

84144-2096

MAP 33, PARCEL 21.00, 40.00, 42.00
RETREAT AT DRY CREEK
SECTION 2

24" RCP

505' BASE FLOOD ELEVATION

20' SANITARY SEWER EASEMENT
BOOK 7695, PAGE 562, R.O.D.C.T.

60.0' AVERAGE STREAM BUFFER
FROM TOP OF BANK

SEE SHEET W1.2 FOR CONTINUATION

436' BASE FLOOD ELEVATION

DRY CREEK

FLOODWAY AREA ZONE "AE"

INSTALL:
1-FIRE HYDRANT
ASSEMBLY COMPLETE

ROAD "D"
(PUBLIC)

ROAD "B" (PUBLIC)

ROAD "C"
(PUBLIC)

ZONE "AE"

30.0' AVERAGE STREAM BUFFER
FROM TOP OF BANK

INSTALL:
1-8"x8"x8" TEE
3-8" GATE VALVES
w/BOX
1-CONCRETE KICKER

WATER SERVICE
LINE w/METER
(TYP)

INSTALL:
1-FIRE HYDRANT
ASSEMBLY COMPLETE

30' SIDE SETBACK

INSTALL:
1-8"x8"x8" TEE
3-8" GATE VALVES
w/BOX
1-CONCRETE KICKER

MAP 33, PARCEL 21.00, 40.00, 42.00
RETREAT AT DRY CREEK
SECTION 1

TIE TO EXISTING
12" WATER LINE
INSTALL:
1-12"x12"x8" TEE
2-12" GATE VALVES
w/BOX
1-8" GATE VALVE
w/BOX
1-CONCRETE KICKER

MAP 33, PARCEL 30
RDKP GENERAL PARTNERSHIP

20' SANITARY
SEWER EASEMENT
BOOK 7695, PAGE 562,
R.O.D.C.T.

MAP 33, PARCEL 122.00 AND 156.00
FOREST LAWN MEMORIAL GARDENS

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

0 50 100

G:\84144-2096\CIVIL ENGINEERING\PLAN SHEETS\2096 ENLARGED_WATER PLANS.DWG
PLOTTED BY JEFF MCKENNEY ON 11/5/2021 11:55 AM LAST UPDATED BY JMCKENNEY ON 11/4/2021 2:39 PM

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SAMUEL H CHRISTMAN
REGISTERED ENGINEER
XVI
AGRICULTURE
COMMERCE
No. 122747
STATE OF TENNESSEE

CEDARSIDE AT DRY CREEK

FOR

NATELLI COMMUNITIES

10TH COUNCIL DISTRICT, CITY OF GOODLETTSVILLE, DAVIDSON COUNTY, TENNESSEE

Scale: 1"=50'

Date: NOVEMBER 8, 2021

Approved By: G. WELCH

Revisions:

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Drawing Title:

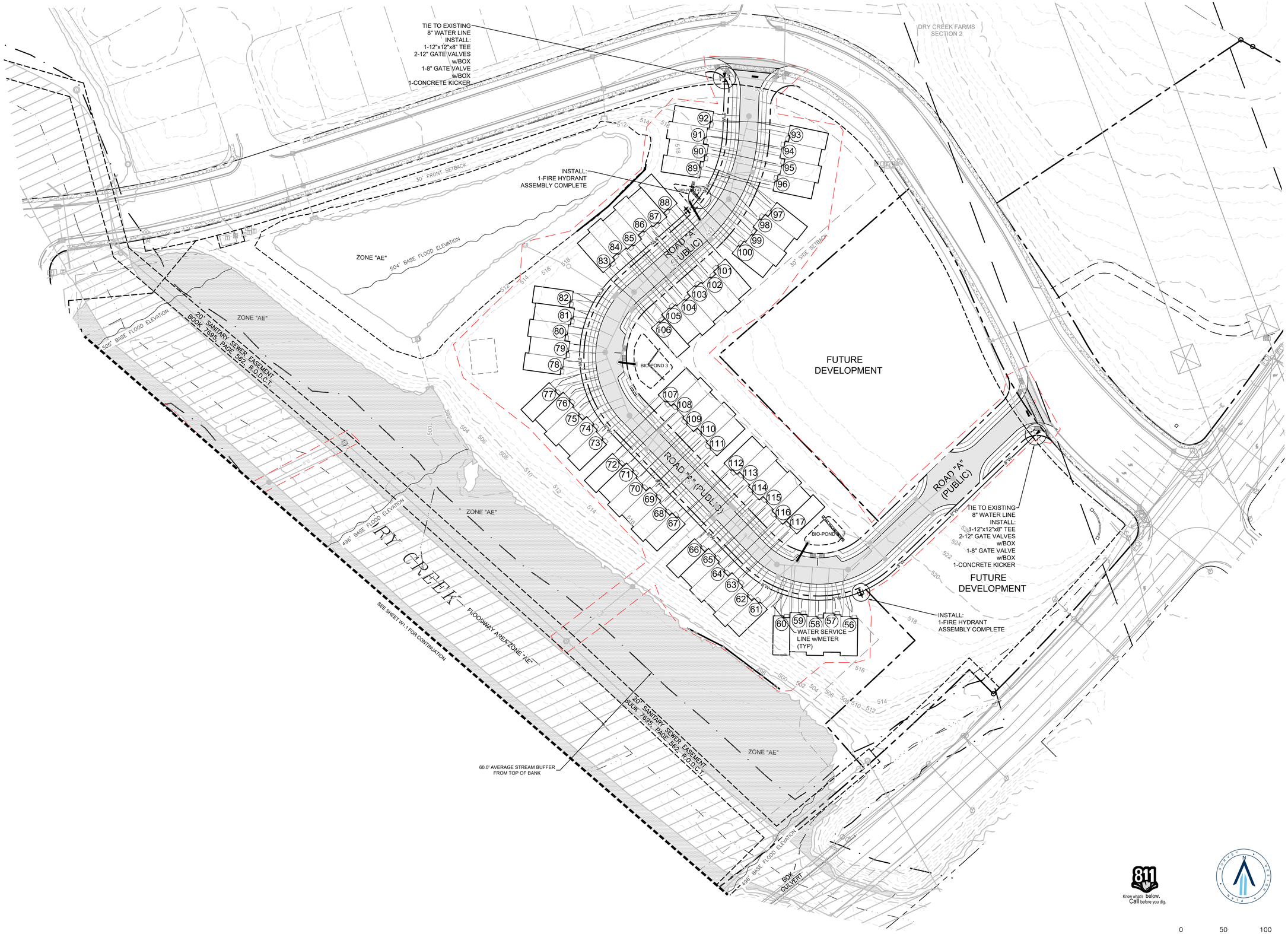
ENLARGED WATER PLAN 1

Drawing No.

W1.1

Project No.

84144-2096



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SAMUEL H CHRISTMAN
REGISTERED ENGINEER
No. 122747
STATE OF TENNESSEE

CEDARSIDE AT DRY CREEK

FOR

NATELLI COMMUNITIES

10TH COUNCIL DISTRICT, CITY OF GOODLETTSVILLE, DAVIDSON COUNTY, TENNESSEE

Scale: 1"=50'

Date: NOVEMBER 8, 2021

Approved By: G. WELCH

Revisions:

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Drawing Title:

ENLARGED WATER PLAN 2

Drawing No.

W1.2

Project No.

84144-2096

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

G:\84144-2096\CIVIL ENGINEERING\PLAN SHEETS\WW ENLARGED WATER PLANS.DWG
PLOTTED BY: JEFF MCKENNEY ON: 11/29/2021 11:56 AM LAST UPDATED BY: JEFF MCKENNEY ON: 11/4/2021 2:38 PM

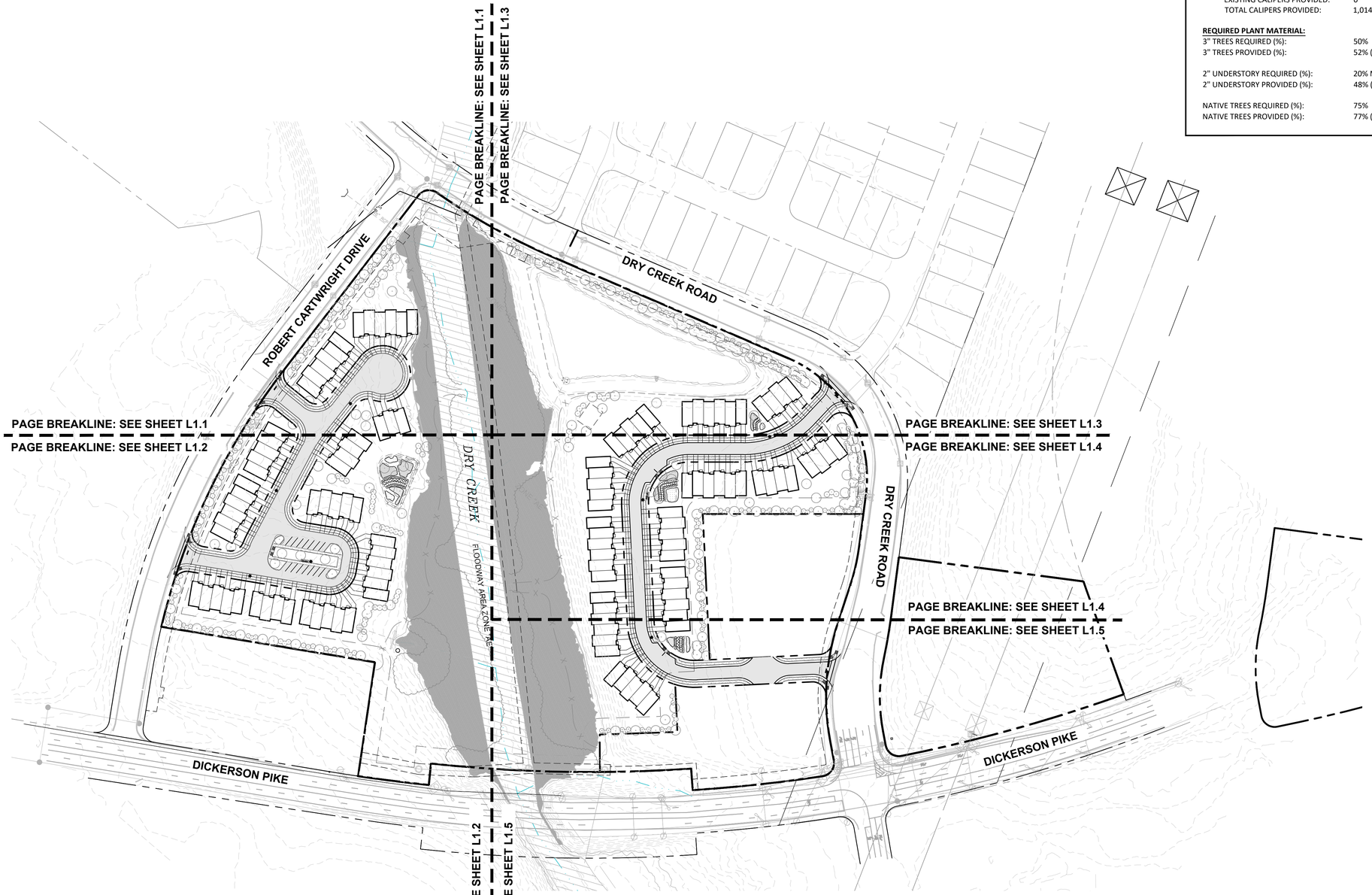
LANDSCAPE CALCULATIONS:

REQUIRED CALIPERS:

TOTAL SITE ACRES:	19.83 AC (863,794 SF)
ACREAGE W/IN CREEK:	6.57 AC (286,189 SF)
ADJ. SITE ACREAGE:	13.26 AC (577,605 SF)
REQUIRED CALIPERS:	928" (13.26 X 70)
REQUIRED REPLACEMENT CALIPERS:	0" (0" X 50%)
TOTAL REQUIRED CALIPERS ON SITE:	928"
NEW CALIPERS PROVIDED:	1,014"
EXISTING CALIPERS PROVIDED:	0"
TOTAL CALIPERS PROVIDED:	1,014"

REQUIRED PLANT MATERIAL:

3" TREES REQUIRED (%):	50%
3" TREES PROVIDED (%):	52% (208/403=52%)
2" UNDERSTORY REQUIRED (%):	20% MINIMUM - 50% MAXIMUM
2" UNDERSTORY PROVIDED (%):	48% (195/403=48%)
NATIVE TREES REQUIRED (%):	75%
NATIVE TREES PROVIDED (%):	77% (311/403=77%)



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TROY PATRICK GARDNER REGISTERED AGRICULTURE & ENVIRONMENTAL CONSULTANT TENNESSEE NO. 1095 LANDSCAPE ARCHITECT
11.29.2021

CEDARSIDE AT DRY CREEK

FOR

NATELLI COMMUNITIES

10TH COUNCIL DISTRICT, CITY OF GOODLETTSVILLE, DAVIDSON COUNTY, TENNESSEE

Scale: 1"=100'

Date: NOVEMBER 8, 2021

Approved By: S. BERNICK

Revisions:

1 11/29/2021 PER CITY COMMENTS

Drawing Title:

OVERALL LANDSCAPE PLAN

Drawing No.

L1.0

Project No.

84144-2096

G:\84144-2096\CIVIL ENGINEERING\PLAN SHEETS\2096_LANDSCAPE.DWG
PLOTTED BY: ANDREW.TARBUSH ON 11/29/2021 10:25 AM LAST UPDATED BY: AYARBROUGH ON 11/29/2021 10:23 AM

PLANT LEGEND		
BIO-RETENTION TREES	BOTANICAL NAME	COMMON NAME
NB	NYSSA SYLVATICA 'BLACK TUPELO'	SOUR GUM
TD2	TAXODIUM DISTICHUM	BALD CYPRESS
CANOPY	BOTANICAL NAME	COMMON NAME
AL	ACER SACCHARUM 'LEGACY'	LEGACY SUGAR MAPLE
JV	JUNIPERUS VIRGINIANA 'BURKII'	BURK RED CEDAR
LS	LIQUIDAMBAR STYRACIFLUA 'ROTUNDILOBA'	SEEDLESS SWEETGUM
MG	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA
PS	PINUS STROBUS	WHITE PINE
QS	QUERCUS SHUMARDII	SHUMARD RED OAK
TD	TAXODIUM DISTICHUM 'SHAWNEE BRAVE'	BALD CYPRESS
ZG	ZELKOVA SERRATA 'GREEN VASE'	GREEN VASE SAWLEAF ZELKOVA
UNDERSTORY	BOTANICAL NAME	COMMON NAME
IA	ILEX OPACA	AMERICAN HOLLY
IN	ILEX 'NELLIE R. STEVENS'	'NELLIE R. STEVENS' HOLLY
JC	JUNIPERUS CHINENSIS 'BLUE POINT'	'BLUE POINT' JUNIPER
LN	PRUNUS CAROLINIANA	CHERRY LAUREL
CL	X CUPRESSOCYPARIS LEYLANDII	LEYLAND CYPRESS
BIORETENTION SHRUBS	BOTANICAL NAME	COMMON NAME
HQ	HYDRANGEA QUERCIFOLIA 'MUNCHKIN'	OAKLEAF HYDRANGEA
IS	ILEX GLABRA 'SHAMROCK'	INKBERRY
IV	ITEA VIRGINICA 'LITTLE HENRY' TM	VIRGINIA SWEETSPIRE
BIORETENTION GROUNDCOVERS	BOTANICAL NAME	COMMON NAME
AT	ASCLEPIAS TUBEROSA	BUTTERFLY MILKWEED
AP	ASTER NOVAE-ANGLIAE 'PURPLE DOME'	PURPLE DOME NEW ENGLAND ASTER
CM	COREOPSIS MAJOR	WHORLED COREOPSIS
EP	EUPATORIUM PURPUREUM 'LITTLE JOE'	DWARF JOE-PYE WEED
FB	FESTUCA ARUNDINACEA BLEND	TURF-TYPE TALL FESCUE BLEND

NOTES:
1. ALL DISTURBED AREAS NOT OTHERWISE PLANTED SHALL BE SEEDED PER SEEDING NOTES ON SHEET L2.0.
2. SEE SHEET L2.0 FOR OVERALL PLANT MATERIAL QUANTITIES.

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TROY PATRICK GARDNER REGISTERED AGRICULTURE AND LANDSCAPE ARCHITECT TENNESSEE NO. 1065 11-22-21

CEDARSIDE AT DRY CREEK

FOR

NATELLI COMMUNITIES

10TH COUNCIL DISTRICT, CITY OF GOODLETTSVILLE, DAVIDSON COUNTY, TENNESSEE

Scale: 1"=20'

Date: NOVEMBER 8, 2021

Approved By: S. BERNICK

Revisions:

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Drawing Title:

ENLARGED LANDSCAPE PLAN 1

Drawing No.

L1.1

Project No.

84144-2096

G:\84144-2096\CIVIL ENGINEERING\LP-PLAN SHEETS\84144_LANDSCAPE.DWG
PLOTTED BY: ANDREW.TARBI ON: 11/29/2021 10:29 AM LAST UPDATED BY: ATARBI ON: 11/29/2021 10:33 AM

PLANT LEGEND

BIO–RETENTION TREES	BOTANICAL NAME	COMMON NAME
NB	NYSSA SYLVATICA 'BLACK TUPELO'	SOUR GUM
TD2	TAXODIUM DISTICHUM	BALD CYPRESS
CANOPY	BOTANICAL NAME	COMMON NAME
AL	ACER SACCHARUM 'LEGACY'	LEGACY SUGAR MAPLE
JV	JUNIPERUS VIRGINIANA 'BURKII'	BURK RED CEDAR
LS	LIQUIDAMBAR STYRACIFLUA 'ROTUNDILOBA'	SEEDLESS SWEETGUM
MG	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA
PS	PINUS STROBUS	WHITE PINE
QS	QUERCUS SHUMARDII	SHUMARD RED OAK
TD	TAXODIUM DISTICHUM 'SHAWNEE BRAVE'	BALD CYPRESS
ZG	ZELKOVA SERRATA 'GREEN VASE'	GREEN VASE SAWLEAF ZELKOVA
UNDERSTORY	BOTANICAL NAME	COMMON NAME
IA	ILEX OPACA	AMERICAN HOLLY
IN	ILEX 'NELLIE R. STEVENS'	'NELLIE R. STEVENS' HOLLY
JC	JUNIPERUS CHINENSIS 'BLUE POINT'	'BLUE POINT' JUNIPER
LN	PRUNUS CAROLINIANA	CHERRY LAUREL
CL	X CUPRESSOCYPARIS LEYLANDII	LEYLAND CYPRESS

NOTES:
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2. SEE SHEET L2.0 FOR OVERALL PLANT MATERIAL QUANTITIES.

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TROY PATRICK GARDNER REGISTERED AGRICULTURE & LANDSCAPE ARCHITECT TENNESSEE NO. 1095 11/24/2021

CEDARSIDE AT DRY CREEK

FOR

NATELLI COMMUNITIES

10TH COUNCIL DISTRICT, CITY OF GOODLETTSVILLE, DAVIDSON COUNTY, TENNESSEE

Scale: 1"=20'

Date: NOVEMBER 8, 2021

Approved By: S. BERNICK

Revisions:

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Drawing Title:

ENLARGED LANDSCAPE PLAN 2

Drawing No.

L1.2

Project No.

84144-2096

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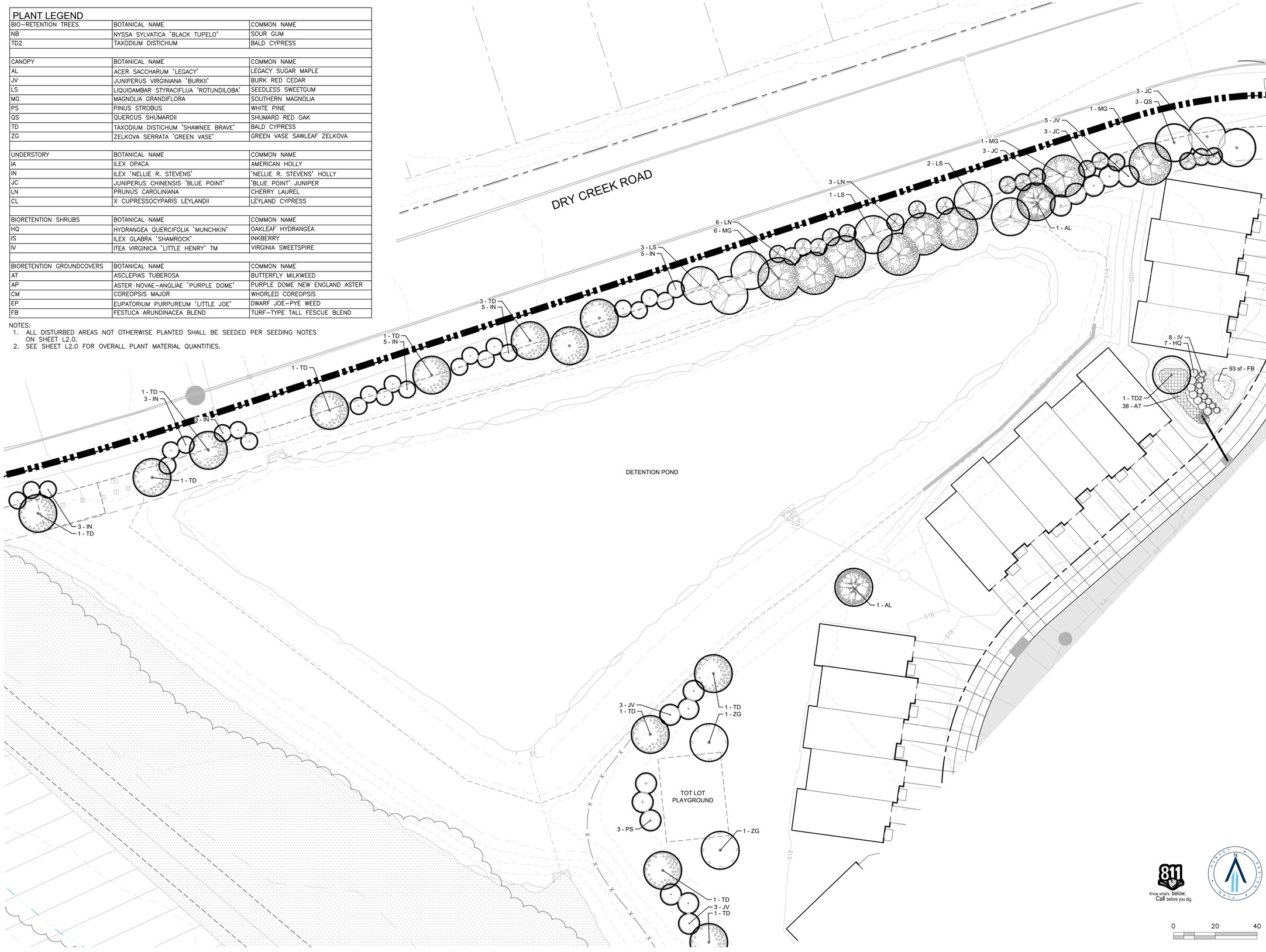
PLOTTED BY ANDREW PARR ON 11/29/2021 10:29 AM LAST UPDATED BY AYARS ON 11/29/2021 10:23 AM

PLANT LEGEND

BIO–RETENTION TREES	BOTANICAL NAME	COMMON NAME
NB	NYSSA SYLVATICA 'BLACK TUPELO'	SOUR GUM
TD2	TAXODIUM DISTICHUM	BALD CYPRESS
CANOPY	BOTANICAL NAME	COMMON NAME
AL	ACER SACCHARUM 'LEGACY'	LEGACY SUGAR MAPLE
JV	JUNIPERUS VIRGINIANA 'BURKII'	BURK RED CEDAR
LS	LIQUIDAMBAR STYRACIFLUA 'ROTUNDILOBA'	SEEDLESS SWEETGUM
MG	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA
PS	PINUS STROBUS	WHITE PINE
QS	QUERCUS SHUMARDII	SHUMARD RED OAK
TD	TAXODIUM DISTICHUM 'SHAWNEE BRAVE'	BALD CYPRESS
ZG	ZELKOVA SERRATA 'GREEN VASE'	GREEN VASE SAWLEAF ZELKOVA
UNDERSTORY	BOTANICAL NAME	COMMON NAME
IA	ILEX OPACA	AMERICAN HOLLY
IN	ILEX 'NELLIE R. STEVENS'	'NELLIE R. STEVENS' HOLLY
JC	JUNIPERUS CHINENSIS 'BLUE POINT'	'BLUE POINT' JUNIPER
LN	PRUNUS CAROLINIANA	CHERRY LAUREL
CL	X CUPRESSOCYPARIS LEYLANDII	LEYLAND CYPRESS
BIORETENTION SHRUBS	BOTANICAL NAME	COMMON NAME
HQ	HYDRANGEA QUERCIFOLIA 'MUNCHKIN'	OAKLEAF HYDRANGEA
IS	ILEX GLABRA 'SHAMROCK'	INKBERRY
IV	ITEA VIRGINICA 'LITTLE HENRY' TM	VIRGINIA SWEETSPIRE
BIORETENTION GROUNDCOVERS	BOTANICAL NAME	COMMON NAME
AT	ASCLEPIAS TUBEROSA	BUTTERFLY MILKWEED
AP	ASTER NOVAE–ANGLIAE 'PURPLE DOME'	PURPLE DOME NEW ENGLAND ASTER
CM	COREOPSIS MAJOR	WHORLED COREOPSIS
EP	EUPATORIUM PURPUREUM 'LITTLE JOE'	DWARF JOE–PYE WEED
FB	FESTUCA ARUNDINACEA BLEND	TURF–TYPE TALL FESCUE BLEND

NOTES:
1. ALL DISTURBED AREAS NOT OTHERWISE PLANTED SHALL BE SEEDED PER SEEDING NOTES ON SHEET L2.0.
2. SEE SHEET L2.0 FOR OVERALL PLANT MATERIAL QUANTITIES.


DRY CREEK ROAD
DETENTION POND
TOT LOT PLAYGROUND
3 - JC
3 - QS
1 - MG
5 - JV
3 - JC
1 - MG
3 - JC
2 - LS
3 - LN
1 - LS
6 - LN
6 - MG
3 - LS
5 - IN
1 - AL
3 - TD
5 - IN
1 - TD
5 - IN
1 - TD
1 - TD
3 - IN
3 - IN
1 - TD
3 - IN
1 - TD
8 - IV
7 - HQ
93 sf - FB
1 - TD2
38 - AT
1 - AL
3 - JV
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1 - ZG
3 - PS
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1 - TD
3 - JV
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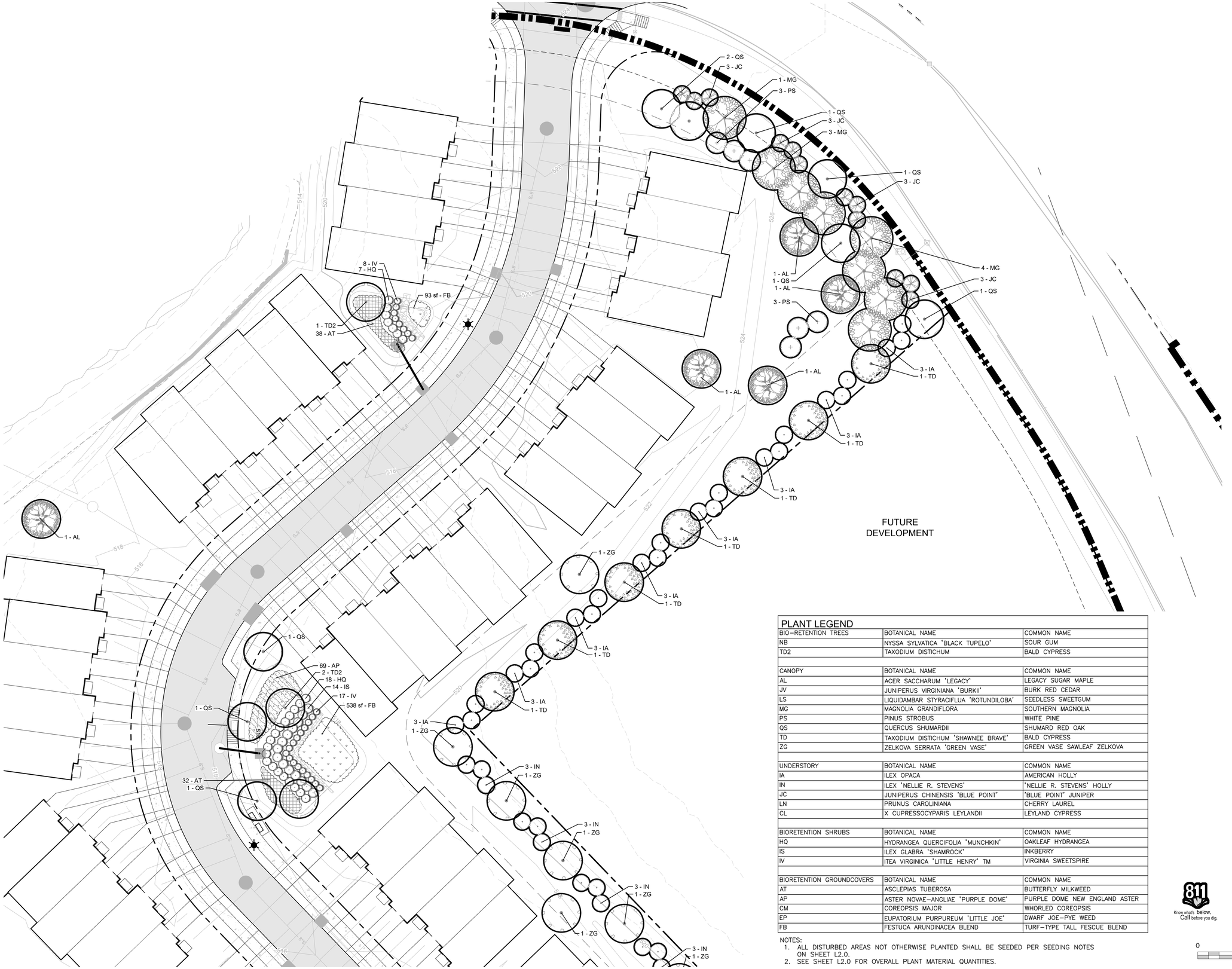

PLANT LEGEND		
BIO–RETENTION TREES	BOTANICAL NAME	COMMON NAME
NB	NYSSA SYLVATICA 'BLACK TUPELO'	SOUR GUM
TD2	TAXODIUM DISTICHUM	BALD CYPRESS
CANOPY	BOTANICAL NAME	COMMON NAME
AL	ACER SACCHARUM 'LEGACY'	LEGACY SUGAR MAPLE
JV	JUNIPERUS VIRGINIANA 'BURKII'	BURK RED CEDAR
LS	LIQUIDAMBAR STYRACIFLUA 'ROTUNDILOBA'	SEEDLESS SWEETGUM
MG	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA
PS	PINUS STROBUS	WHITE PINE
QS	QUERCUS SHUMARDII	SHUMARD RED OAK
TD	TAXODIUM DISTICHUM 'SHAWNEE BRAVE'	BALD CYPRESS
ZG	ZELKOVA SERRATA 'GREEN VASE'	GREEN VASE SAWLEAF ZELKOVA
UNDERSTORY	BOTANICAL NAME	COMMON NAME
IA	ILEX OPACA	AMERICAN HOLLY
IN	ILEX 'NELLIE R. STEVENS'	'NELLIE R. STEVENS' HOLLY
JC	JUNIPERUS CHINENSIS 'BLUE POINT'	'BLUE POINT' JUNIPER
LN	PRUNUS CAROLINIANA	CHERRY LAUREL
CL	X CUPRESSOCYPARIS LEYLANDII	LEYLAND CYPRESS
BIORETENTION SHRUBS	BOTANICAL NAME	COMMON NAME
HQ	HYDRANGEA QUERCIFOLIA 'MUNCHKIN'	OAKLEAF HYDRANGEA
IS	ILEX GLABRA 'SHAMROCK'	INKBERRY
IV	ITEA VIRGINICA 'LITTLE HENRY' TM	VIRGINIA SWEETSPIRE
BIORETENTION GROUNDCOVERS	BOTANICAL NAME	COMMON NAME
AT	ASCLEPIAS TUBEROSA	BUTTERFLY MILKWEED
AP	ASTER NOVAE–ANGLIAE 'PURPLE DOME'	PURPLE DOME NEW ENGLAND ASTER
CM	COREOPSIS MAJOR	WHORLED COREOPSIS
EP	EUPATORIUM PURPUREUM 'LITTLE JOE'	DWARF JOE–PYE WEED
FB	FESTUCA ARUNDINACEA BLEND	TURF–TYPE TALL FESCUE BLEND

NOTES:
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2. SEE SHEET L2.0 FOR OVERALL PLANT MATERIAL QUANTITIES.

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TROY PATRICK GARDNER REGISTERED AGRICULTURE AND LANDSCAPE ARCHITECT TENNESSEE NO. 1086 11.29.21

CEDARSIDE AT DRY CREEK

FOR

NATELLI COMMUNITIES

10TH COUNCIL DISTRICT, CITY OF GOODLETTSVILLE, DAVIDSON COUNTY, TENNESSEE

Scale: 1"=20'

Date: NOVEMBER 8, 2021

Approved By: S. BERNICK

Revisions:

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1 11/29/2021 PER CITY COMMENTS

Drawing Title:

ENLARGED LANDSCAPE PLAN 4

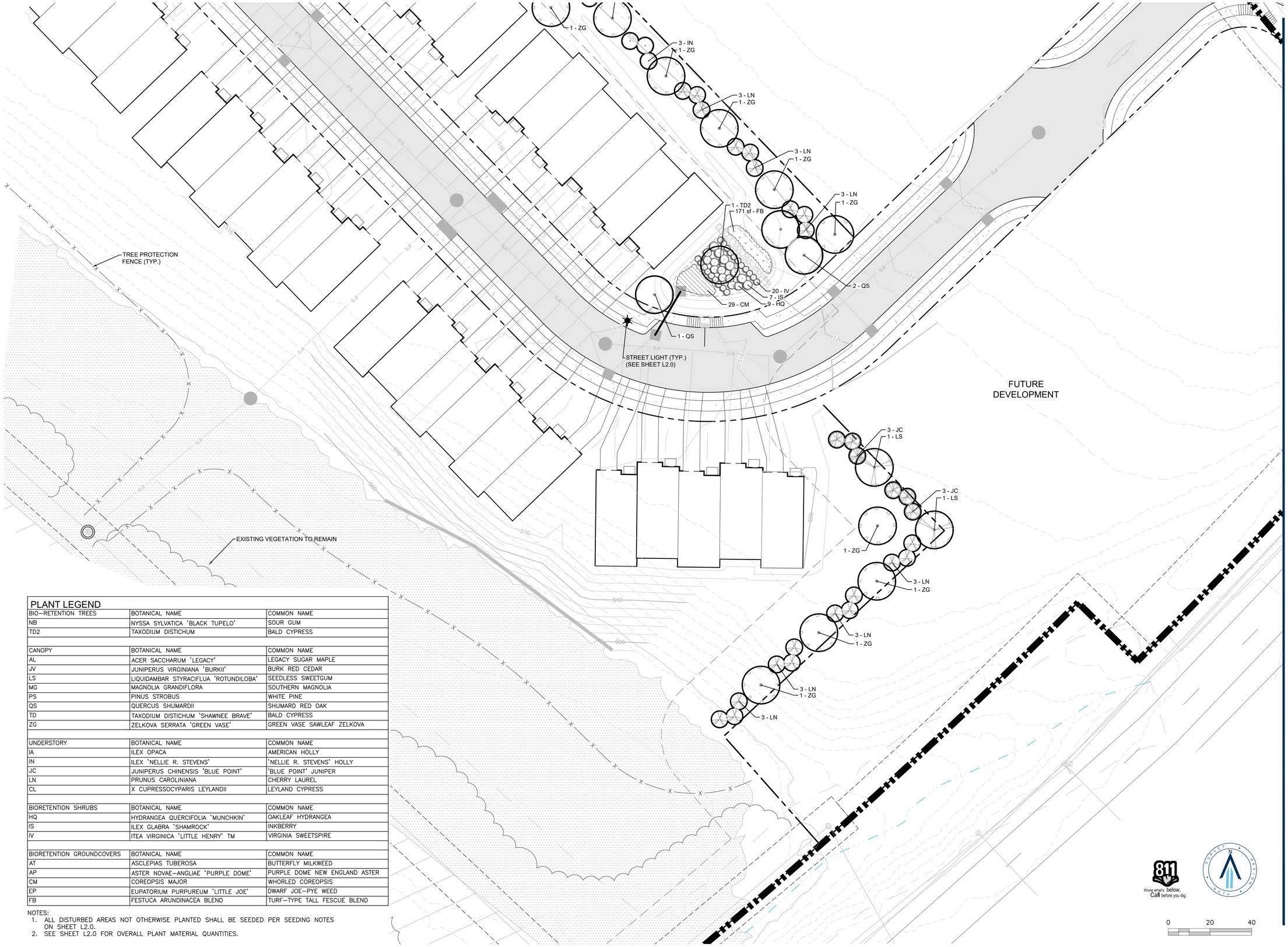
Drawing No.

L1.4

Project No.

84144-2096

G:\84144-2096\1-CIVIL ENGINEERING\LPA PHASE\TS\PDR\LANDSCAPE.DWG
PLOTTED BY: ANDREW FARIS ON 11/29/2021 10:23 AM LAST UPDATED BY: AFARIS ON 11/29/2021 10:23 AM



PLANT LEGEND		
BIO–RETENTION TREES	BOTANICAL NAME	COMMON NAME
NB	NYSSA SYLVATICA 'BLACK TUPELO'	SOUR GUM
TD2	TAXODIUM DISTICHUM	BALD CYPRESS
CANOPY	BOTANICAL NAME	COMMON NAME
AL	ACER SACCHARUM 'LEGACY'	LEGACY SUGAR MAPLE
JV	JUNIPERUS VIRGINIANA 'BURKII'	BURK RED CEDAR
LS	LIQUIDAMBAR STYRACIFLUA 'ROTUNDILOBA'	SEEDLESS SWEETGUM
MG	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA
PS	PINUS STROBUS	WHITE PINE
QS	QUERCUS SHUMARDII	SHUMARD RED OAK
TD	TAXODIUM DISTICHUM 'SHAWNEE BRAVE'	BALD CYPRESS
ZG	ZELKOVA SERRATA 'GREEN VASE'	GREEN VASE SAWLEAF ZELKOVA
UNDERSTORY	BOTANICAL NAME	COMMON NAME
IA	ILEX OPACA	AMERICAN HOLLY
IN	ILEX 'NELLIE R. STEVENS'	'NELLIE R. STEVENS' HOLLY
JC	JUNIPERUS CHINENSIS 'BLUE POINT'	'BLUE POINT' JUNIPER
LN	PRUNUS CAROLINIANA	CHERRY LAUREL
CL	X CUPRESSOCYPARIS LEYLANDII	LEYLAND CYPRESS
BIORETENTION SHRUBS	BOTANICAL NAME	COMMON NAME
HQ	HYDRANGEA QUERCIFOLIA 'MUNCHKIN'	OAKLEAF HYDRANGEA
IS	ILEX GLABRA 'SHAMROCK'	INKBERRY
IV	ITEA VIRGINICA 'LITTLE HENRY' TM	VIRGINIA SWEETSPIRE
BIORETENTION GROUNDCOVERS	BOTANICAL NAME	COMMON NAME
AT	ASCLEPIAS TUBEROSA	BUTTERFLY MILKWEED
AP	ASTER NOVAE–ANGLIAE 'PURPLE DOME'	PURPLE DOME NEW ENGLAND ASTER
CM	COREOPSIS MAJOR	WHORLED COREOPSIS
EP	EUPATORIUM PURPUREUM 'LITTLE JOE'	DWARF JOE–PYE WEED
FB	FESTUCA ARUNDINACEA BLEND	TURF–TYPE TALL FESCUE BLEND

NOTES:
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2. SEE SHEET L2.0 FOR OVERALL PLANT MATERIAL QUANTITIES.

Know what's below. Call before you dig.

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PLOTTED BY: ANDREW.FARBER ON: 11/29/2021 10:29 AM LAST UPDATED BY: AFARBER ON: 11/29/2021 10:23 AM

RaganSmith
Nashville - Murfreesboro - Chattanooga
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TROY PATRICK GARDNER REGISTERED AGRICULTURE & LANDSCAPE ARCHITECT TENNESSEE NO. 1060 COMMERCE
11/29/2021

CEDARSIDE AT DRY CREEK

FOR

NATELLI COMMUNITIES

10TH COUNCIL DISTRICT, CITY OF GOODLETTSVILLE, DAVIDSON COUNTY, TENNESSEE

Scale: 1"=20'

Date: NOVEMBER 8, 2021

Approved By: S. BERNICK

Revisions:

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Drawing Title:

ENLARGED LANDSCAPE PLAN 5

Drawing No.

L1.5

Project No.

84144-2096

1

OVERALL PLANT SCHEDULE

BIO–RETENTION TREES	QTY	BOTANICAL NAME	COMMON NAME	TYPE	SIZE	HEIGHT	SPACING	REMARKS
NB	2	NYSSA SYLVATICA 'BLACK TUPELO'	SOUR GUM	DECIDUOUS	3" CAL.	10–12' HT	AS SHOWN	B&B, STRONG CENTRAL LEADER
TD2	7	TAXODIUM DISTICHUM	BALD CYPRESS	DECIDUOUS	3" CAL.	10–12' HT	AS SHOWN	B&B, STRONG CENTRAL LEADER
CANOPY	QTY	BOTANICAL NAME	COMMON NAME	TYPE	SIZE	HEIGHT	SPACING	REMARKS
AL	16	ACER SACCHARUM 'LEGACY'	LEGACY SUGAR MAPLE	DECIDUOUS	3" CAL.	10–12' HT	AS SHOWN	B&B, STRONG CENTRAL LEADER
JV	26	JUNIPERUS VIRGINIANA 'BURKII'	BURK RED CEDAR	EVERGREEN	3" CAL.	8' HT. MIN.	AS SHOWN	FULL TO GROUND
LS	14	LIQUIDAMBAR STYRACIFLUA 'ROTUNDILOBA'	SEEDLESS SWEETGUM	DECIDUOUS	3" CAL.	10–12' HT	AS SHOWN	B&B, STRONG CENTRAL LEADER, SEEDLESS
MG	16	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA	EVERGREEN	3" CAL.	8' HT. MIN.	AS SHOWN	FULL TO GROUND
PS	31	PINUS STROBUS	WHITE PINE	EVERGREEN	3" CAL.	8' HT. MIN.	AS SHOWN	FULL TO GROUND
QS	41	QUERCUS SHUMARDII	SHUMARD RED OAK	DECIDUOUS	3" CAL.	10–12' HT	AS SHOWN	B&B, STRONG CENTRAL LEADER
TD	26	TAXODIUM DISTICHUM 'SHAWNEE BRAVE'	BALD CYPRESS	DECIDUOUS	3" CAL.	10–12' HT	AS SHOWN	B&B, STRONG CENTRAL LEADER
ZG	29	ZELKOVA SERRATA 'GREEN VASE'	GREEN VASE SAWLEAF ZELKOVA	DECIDUOUS	3" CAL.	10–12' HT	AS SHOWN	B&B, STRONG CENTRAL LEADER
UNDERSTORY	QTY	BOTANICAL NAME	COMMON NAME	TYPE	SIZE	HEIGHT	SPACING	REMARKS
IA	24	ILEX OPACA	AMERICAN HOLLY	EVERGREEN	2" CAL.	6–8' HT	AS SHOWN	B&B, FULL TO BASE
IN	72	ILEX 'NELLIE R. STEVENS'	'NELLIE R. STEVENS' HOLLY	EVERGREEN	2" CAL.	6–8' HT	AS SHOWN	B&B, FULL TO BASE
JC	27	JUNIPERUS CHINENSIS 'BLUE POINT'	'BLUE POINT' JUNIPER	EVERGREEN	2" CAL.	6–8' HT	AS SHOWN	B&B, FULL TO BASE
LN	30	PRUNUS CAROLINIANA	CHERRY LAUREL	EVERGREEN	2" CAL.	6–8' HT	AS SHOWN	B&B, FULL TO BASE
CL	42	X CUPRESSOCYPARIS LEYLANDII	LEYLAND CYPRESS	EVERGREEN	2" CAL.	6–8' HT	AS SHOWN	B&B, FULL TO BASE
BIORETENTION SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	TYPE	SIZE/HT	SPREAD	SPACING	REMARKS
HQ	51	HYDRANGEA QUERCIFOLIA 'MUNCHKIN'	OAKLEAF HYDRANGEA	DECIDUOUS	24" HT	24"	48"O.C.	FULL CONTAINER
IS	32	ILEX GLABRA 'SHAMROCK'	INKBERRY	EVERGREEN	24" HT	24"	48"O.C.	B&B OR FULL CONTAINER
IV	78	ITEA VIRGINICA 'LITTLE HENRY' TM	VIRGINIA SWEETSPIRE	DECIDUOUS	24" HT	24"	48"O.C.	FULL CONTAINER
BIORETENTION GROUNDCOVERS	QTY	BOTANICAL NAME	COMMON NAME	TYPE	CONT	SPREAD	SPACING	REMARKS
AT	175	ASCLEPIAS TUBEROSA	BUTTERFLY MILKWEED	PERENNIAL	#1		30"O.C.	TRIANGULATE SPACING
AP	69	ASTER NOVAE–ANGLIAE 'PURPLE DOME'	PURPLE DOME NEW ENGLAND ASTER	PERENNIAL	#1		30"O.C.	TRIANGULATE SPACING
CM	90	COREOPSIS MAJOR	WHORLED COREOPSIS	PERENNIAL	#1		30"O.C.	TRIANGULATE SPACING
EP	102	EUPATORIUM PURPUREUM 'LITTLE JOE'	DWARF JOE–PYE WEED	PERENNIAL	#1		30"O.C.	TRIANGULATE SPACING
FB	1,196 SF	FESTUCA ARUNDINACEA BLEND	TURF–TYPE TALL FESCUE BLEND	SOD				

NOTES:ALL DISTURBED AREAS NOT OTHERWISE PLANTED SHALL BE SEEDED PER SEEDING NOTES.

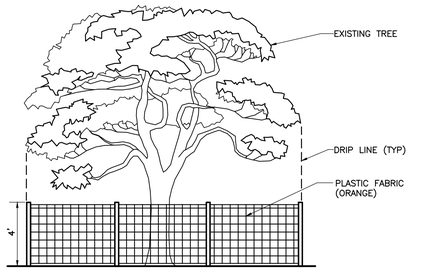
Residential Fixtures

Holophane Granville

NES Stock Code: 303 295 500

Manufacturer:	Holophane
Catalog #:	GVU-1SAHP-MA-B-3-R-S-B-HP
Lamp:	150W High Pressure Sodium with Mogul Base
Control:	Integral Twist-lock Photocell
Pole:	NES Approved Residential 12' Decorative Poles (p.9)
Photometric File:	44468.IES
Manufacturer's Representative:	Sean Clare, Holophane Lighting, (615) 885-2831
Website:	https://www.acuitybrands.com/products/detail/88993/holophane/granville/prismatic-acorns---glass

STREET LIGHTING DETAIL

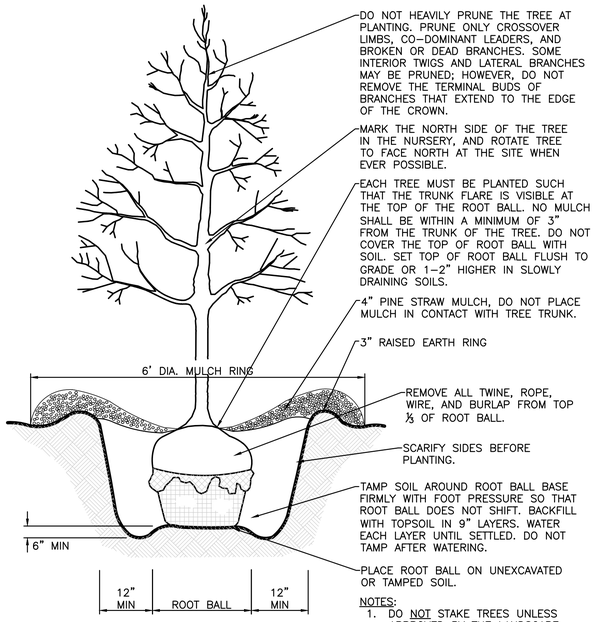


TREE PROTECTION DETAIL

NOT TO SCALE

NOTE:
ALL TREE PROTECTION FENCING SHALL BE IN PLACE PRIOR TO THE ISSUANCE OF A GRADING PERMIT.

NOTE:
POSTS TO BE PLACED AT DRIP LINE– SEE PLANS FOR FENCE LOCATION.



NOTES:
1. DO NOT STAKE TREES UNLESS APPROVED BY THE LANDSCAPE ARCHITECT. IF STAKED, REMOVE AFTER ONE GROWING SEASON.
2. DO NOT WRAP TREE TRUNKS UNLESS APPROVED BY THE LANDSCAPE ARCHITECT. REMOVE WRAP AFTER PLANTING.
3. NON–BIODEGRADABLE BURLAP TO BE REMOVED OR ROLLED UNDER ROOT BALL AFTER PLANT IS PLACED IN HOLE.

TREE PLANTING

NOT TO SCALE

PLANTING NOTES:

1. ANY SERIES OF TREES TO BE PLACED IN A PARTICULAR ARRANGEMENT WILL BE FIELD CHECKED FOR ACCURACY. ANY PLANTS MISARRANGED WILL BE RELOCATED.
2. SOIL USED IN BACKFILLING PLANTING PITS SHALL BE TOPSOIL AND MIXED WITH 25% PEAT BY VOLUME. EXCEPT FOR ERICACEOUS PLANTS, VERY ACID OR SOUR SOIL (SOIL HAVING A pH less than 6) SHALL BE MIXED WITH SUFFICIENT LIME TO PRODUCE A SLIGHTLY ACID REACTION (A pH of 6.0 to 6.5). ADD 10–10–10 COMMERCIAL FERTILIZER AT THE RATE OF 2 POUNDS PER CUBIC YARD. MIX BOTH FERTILIZER AND PEAT THOROUGHLY BY HAND OR ROTARY TILLER.
3. SOIL USED IN BACKFILLING ERICACEOUS PLANTS SHALL BE TOPSOIL MIXED WITH 50% PEAT BY VOLUME. ADD 5–10–5 COMMERCIAL FERTILIZER AT THE RATE OF 5 POUNDS PER CUBIC YARD. MIX BOTH FERTILIZER AND PEAT THOROUGHLY BY HAND OR ROTARY TILLER.
4. UPON SECURING PLANT MATERIAL AND BEFORE INSTALLATION, THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE FOR A PRE–INSTALLATION INSPECTION TO VERIFY ALL PLANT MATERIAL MEETS SPECIFICATION. MATCH TREES OF SAME SPECIES IN GROWTH CHARACTER AND UNIFORMITY.
5. APPLY HERBICIDE (TREFLAN OR EQUIVALENT) TO ALL PLANT BEDS PRIOR TO PLANTING FOR NOXIOUS WEED CONTROL AT A RATE OF 2 POUNDS PER 1,000 SQUARE FEET.
6. CONTRACTOR SHALL SUBMIT A 10 OUNCE SAMPLE OF THE TOPSOIL PROPOSED TO A TESTING LABORATORY FOR ANALYSIS. SUBMIT TEST RESULTS WITH RECOMMENDATIONS FOR SUITABILITY TO THE OWNER'S REPRESENTATIVE FOR APPROVAL.
7. PLANTS SHALL BE ORIENTED FOR BEST APPEARANCE AND VERTICAL.ALL NON–BIODEGRADABLE ROOT CONTAINERS SHALL BE REMOVED.
8. SELECTIVELY TRIM TREE BRANCHES BY 25%, MAINTAINING NATURAL SHAPE. PRUNE ALL DEAD AND BROKEN BRANCHES IN TREES AND SHRUBS. REMOVE TAGS, TWINE OR OTHER NON–BIODEGRADABLE MATERIAL.
9. SCARIFY SUBSOIL IN PLANTING BEDS TO A DEPTH OF 3 INCHES. ALL PLANTING BEDS SHALL RECEIVE A MINIMUM OF 6 INCHES OF TOPSOIL.
10. CONTRACTOR SHALL PROVIDE SMOOTH, NEATLY TRENCHED (3 INCH DEEP) BED EDGES.
11. ALL PLANTING BEDS TO HAVE A MINIMUM 4 INCH DEEP PINE BARK MULCH, PINE STRAW MULCH OR OTHER MULCH AS SPECIFIED.
12. DIMENSIONS FOR TRUNK CALIPER, HEIGHTS, AND SPREAD SPECIFIED ON THE MATERIAL SCHEDULE ARE A GENERAL GUIDE FOR THE MINIMUM REQUIRED SIZE OF EACH PLANT. QUALITY AND SIZE OF PLANTS, SPREAD OF ROOTS AND SIZE OF BALLS SHALL BE IN ACCORDANCE WITH A.N.S.I. Z60.1 'AMERICAN STANDARD FOR NURSERY STOCK' (CURRENT EDITION) AS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC.
13. TREES OF THE SAME SPECIES SHALL HAVE THE FOLLOWING CHARACTERISTICS: MATCHED BY BRANCHING HEIGHT, CALIPER, HEIGHT OF TREE, SPREAD OF BRANCHES AND BRANCHING STRUCTURE, AND OVERALL CANOPY SHAPE.
14. THE QUANTITIES INDICATED ON THE MATERIAL SCHEDULE ARE PROVIDED FOR THE BENEFIT OF THE CONTRACTOR, BUT SHOULD NOT BE ASSUMED TO ALWAYS BE CORRECT. IN THE EVENT OF A DISCREPANCY, THE PLANTING PLAN (PLANT SYMBOLS) WILL TAKE PRECEDENCE OVER THE MATERIAL SCHEDULE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HIS/HER OWN QUANTITY CALCULATIONS AND THE LIABILITY PERTAINING TO THOSE QUANTITIES AND ANY RELATED CONTRACT DOCUMENTS AND/OR PRICE QUOTATIONS.
15. CONTRACTOR TO WARRANTY ALL MATERIAL FOR ONE YEAR AFTER DATE OF FINAL ACCEPTANCE.

IRRIGATION NOTES:

1. ALL PROPOSED PLANTED AREAS ARE TO BE IRRIGATED UTILIZING FULL COVERAGE DESIGN.
2. SUBMIT PROPOSED IRRIGATION PLAN TO THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE FOR GENERAL REVIEW AND ACCEPTANCE.
3. PROPOSED IRRIGATION SYSTEM SHOULD UTILIZE ANY RECLAIMED/REUSED/GRAY WATER PUBLIC SYSTEMS IF ACCESSIBLE.
4. SHOULD RECLAIMED/REUSED/GRAY WATER NOT BE AVAILABLE, BELOW GRADE CISTERNS OR ON–SITE RETENTION PONDS SHOULD BE CONSIDERED FOR AN IRRIGATION WATER SOURCE. USE OF PUBLIC POTABLE WATER SOURCE SHOULD BE A LAST CASE RESORT AND DESIGNED AS A TEMPORARY IRRIGATION SYSTEM UTILIZED TO ESTABLISHED PROPOSED PLANT MATERIAL THROUGH ITS FIRST TWO YEARS OF GROWTH.
5. PROPOSED IRRIGATION DESIGN SHOULD UTILIZE WATER EFFICIENT DESIGN TECHNIQUES SUCH AS THE USE OF DRIP IRRIGATION, MOISTURE SENSORS AND RAIN SENSORS TO MAXIMIZE WATER EFFICIENCY.
6. IRRIGATION CONTRACTOR IS RESPONSIBLE FOR INSTALLING AN IRRIGATION SYSTEM THAT FUNCTIONS PROPERLY PER THE INTENT OF THE DESIGN. SHOULD THE IRRIGATION CONTRACTOR SEE A FLAW IN THE PROPOSED DESIGN AND/OR FINDS A PROBLEM IN THE FIELD THAT WILL NEGATIVELY AFFECT THE PERFORMANCE OF THE PROPOSED IRRIGATION SYSTEM, THE SAID CONTRACTOR IS RESPONSIBLE FOR INFORMING THE LANDSCAPE ARCHITECT/OWNER'S REPRESENTATIVE PRIOR TO INSTALLING OR ORDERING MATERIAL FOR THE PROPOSED IRRIGATION SYSTEM.
7. IRRIGATION PLANS TO BE SUBMITTED PRIOR TO ISSUANCE OF PERMITS.

SEEDING NOTES:

1. SEED ALL DISTURBED AREAS WITH TURF–TYPE TALL FESCUE. THE SEED SHALL BE A BLEND OF 3–5 VARIETIES (ADDRESSING BOTH COLD HARDINESS AND DROUGHT TOLERANCE) FROM THE TOP 10% SELECTIONS IN THE NATIONAL TURFGRASS EVALUATION PROGRAM (N.T.E.P) TALL FESCUE TRIALS, MOST RECENT EVALUATION YEAR (WWW.NTEP.ORG). THE SEED SHALL BE CROP AND WEED FREE. SEED AT THE RATE OF 5 POUNDS PER 1,000 S.F. ALL SEED TO BE 98% PURE WITH 85% GERMINATION AND CONFORM TO ALL STATE REQUIREMENTS FOR GRASS SEED. THE FERTILIZER TO BE 6–12–12 COMMERCIAL TYPE WITH 50% OF ITS ELEMENTS DERIVED FROM ORGANIC SOURCES.
2. PLACE STRAW MULCH ON SEEDED AREAS. STRAW TO BE OATS OR WHEAT STRAW, FREE FROM WEEDS, FOREIGN MATTER DETRIMENTAL TO PLANT LIFE, AND DRY. HAY OR CHOPPED CORNSTALKS ARE NOT ACCEPTABLE.
3. THE CONTRACTOR SHALL VERIFY THAT THE PREPARED SOIL BASE IS READY TO RECEIVE WORK. CULTIVATE THE TOPSOIL TO A DEPTH OF 4 INCHES WITH A MECHANICAL TILLER AND SUBSEQUENTLY RAKE UNTIL SMOOTH. REMOVE FOREIGN MATERIALS COLLECTED DURING CULTIVATION AND RAKING OPERATIONS.
4. APPLY FERTILIZER ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. LIMESTONE MAY BE APPLIED WITH THE FERTILIZER. APPLY FERTILIZER AFTER SMOOTH RAKING AND PRIOR TO ROLLER COMPACTION AND MIX THOROUGHLY IN THE UPPER 2 INCHES OF TOPSOIL.
5. APPLY SEED EVENLY IN TWO INTERSECTING DIRECTIONS AND RAKE IN LIGHTLY. WATER TOPSOIL LIGHTLY PRIOR TO APPLYING SEED. DO NOT SEED AREA IN EXCESS OF THAT WHICH CAN BE MULCHED ON THE SAME DAY.
6. ROLL SEEDED AREA WITH ROLLER NOT EXCEEDING 112 POUNDS.
7. IMMEDIATELY FOLLOWING SEEDING AND COMPACTING, APPLY STRAW MULCH AT THE RATE OF ONE AND ONE HALF BALES PER 1,000 SQUARE FEET. IMMEDIATELY AFTER MULCHING, APPLY WATER WITH A FINE SPRAY AND SATURATE THE GROUND TO A DEPTH OF 4 INCHES.
8. CONTRACTOR IS RESPONSIBLE FOR WATERING SEEDED AREAS TO PREVENT GRASS AND SOIL FROM DRYING OUT UNTIL THE INSTALLATION IS INSPECTED AND ACCEPTED BY THE OWNER'S REPRESENTATIVE.
9. CONTRACTOR IS RESPONSIBLE FOR RESEEDING BARE SPOTS FOR A PERIOD OF ONE YEAR AFTER ACCEPTANCE OF INSTALLATION.

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

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PLOTTED BY: ANDREW TARBSON, 11/29/2021 10:29 AM LAST UPDATED BY: AYARS ON 11/29/2021 10:23 AM

RaganSmith
Nashville - Murfreesboro - Chattanooga
ragansmith.com

TROY PATRICK GARDNER REGISTERED LANDSCAPE ARCHITECT STATE OF TENNESSEE NO. 1005 11/29/2021

CEDARSIDE AT DRY CREEK

FOR

NATELLI COMMUNITIES

10TH COUNCIL DISTRICT, CITY OF GOODLETTSVILLE, DAVIDSON COUNTY, TENNESSEE

Scale: NOT TO SCALE

Date: NOVEMBER 8, 2021

Approved By: S. BERNICK

Revisions:

- – –
- – –
- – –
- – –
- – –

1 11/29/2021 PER CITY COMMENTS

Drawing Title:

LANDSCAPE NOTES & DETAILS

Drawing No.

L2.0

Project No.

84144-2096

VI. TRANSPORTATION ANALYSIS

A. Intersection Capacity Analysis

In order to gauge the site impact and identify capacity deficiencies, intersection capacity analyses were conducted at the proposed Cedarside at Dry Creek study area intersections. Capacity analyses were conducted according to the methodology and procedures outlined in the *Highway Capacity Manual*, HCM 2010, published by Transportation Research Board. Intersections were analyzed for capacity deficiencies and geometric improvement needs during the a.m. and p.m. peak hours for existing, background and total traffic conditions.

Level of service (LOS) criteria for signalized intersections is shown in Table 4 below.

TABLE 4

LEVEL OF SERVICE DESCRIPTIONS FOR SIGNALIZED INTERSECTIONS

Level of Service	Description	Control Delay (sec. /veh.)
A	Free Flow	0 - 10
B	Stable Flow (Slight Delays)	> 10 – 20
C	Stable Flow (Acceptable Delays)	> 20 – 35
D	Approaching Unstable Flow (Tolerable Delay)	> 35 – 55
E	Unstable Flow (Intolerable Delay)	> 55 – 80
F	Forced Flow (Congested and Queues Fail to Clear)	> 80

Source: Highway Capacity Manual, HCM 2010

Level of service (LOS) criteria for unsignalized intersections is shown in Table 5 below.

TABLE 5

LEVEL OF SERVICE DESCRIPTIONS FOR UNSIGNALIZED INTERSECTIONS

Level of Service	Description	Control Delay (sec. /veh.)
A	Usually no conflicting traffic	0 - 10
B	Occasionally some delay due to conflicting traffic	> 10 - 15
C	Delay is noticeable but not inconveniencing	> 15 - 25
D	Delay is noticeable and irritating, increased risk taking	> 25 - 35
E	Delay approaches tolerance level, risk taking likely	> 35 - 50
F	Delay exceeds tolerance level, high likelihood of risk taking	> 50

Source: Highway Capacity Manual, HCM 2010

Capacity analysis results for the a.m. peak hour are shown in Table 6.

TABLE 6

INTERSECTION CAPACITY RESULTS – A.M. PEAK HOUR

Intersection	Condition[1]	Level of Service (avg. delay/vehicle – sec.)		
		2021 Existing	2023 Background	2023 Total
Dickerson Pike at Dry Creek Road	Overall Intersection	B (18.3)	B (18.5)	B (18.9)
Dickerson Pike at Robert Cartwright Drive	EB Left	A (9.4)	A (9.8)	A (9.9)
	WB Left	A (7.8)	A (7.9)	A (7.9)
	TWSC NB	A (9.1)	A (9.2)	A (9.2)
	TWSC SB	B (14.1)	B (13.9)	B (14.4)
Dry Creek Road at Robert Cartwright Drive	WB Left	A (7.3)	A (7.3)	A (7.3)
	TWSC NB	A (8.6)	A (8.6)	A (8.6)
Robert Cartwright Drive at Project Access #1	SB Left	-	-	A (7.3)
	TWSC WB	-	-	A (9.2)
Robert Cartwright Drive at Project Access #2	SB Left	-	-	A (7.3)
	TWSC WB	-	-	A (9.2)
Dry Creek Road at Project Access #3	NB Left	-	-	A (7.4)
	TWSC EB	-	-	A (8.8)
Dry Creek Road at Project Access #4	WB Left	-	-	A (7.4)
	TWSC NB	-	-	A (8.8)
Dry Creek Road at Commercial Access #1	NB Left	-	-	A (7.4)
	TWSC EB	-	-	A (8.8)
Dickerson Pike at Commercial Access #2	EB Left	-	-	A (9.6)
	TWSC SB	-	-	B (13.5)

[1] TWSC = Two-way Stop Control

Capacity analysis results for the p.m. peak hour are shown in Table 7.

TABLE 7

INTERSECTION CAPACITY RESULTS – P.M. PEAK HOUR

Intersection	Condition[1]	Level of Service (avg. delay/vehicle – sec.)		
		2021 Existing	2023 Background	2023 Total
Dickerson Pike at Dry Creek Road	Overall Intersection	C (23.3)	C (33.1)	D (38.3)
Dickerson Pike at Robert Cartwright Drive	EB Left	A (8.9)	A (9.2)	A (9.4)
	WB Left	B (12.4)	B (12.9)	B (13.1)
	TWSC NB	D (31.8)	E (39.4)	E (42.7)
	TWSC SB	B (14.0)	B (13.5)	B (14.3)
Dry Creek Road at Robert Cartwright Drive	WB Left	A (7.3)	A (7.3)	A (7.3)
	TWSC NB	A (8.9)	A (8.8)	A (8.9)
Robert Cartwright Drive at Project Access #1	SB Left	-	-	A (7.5)
	TWSC WB	-	-	A (9.6)
Robert Cartwright Drive at Project Access #2	SB Left	-	-	A (7.5)
	TWSC WB	-	-	A (9.5)
Dry Creek Road at Project Access #3	NB Left	-	-	A (7.5)
	TWSC EB	-	-	A (8.9)
Dry Creek Road at Project Access #4	WB Left	-	-	A (7.4)
	TWSC NB	-	-	A (8.9)
Dry Creek Road at Commercial Access #1	NB Left	-	-	A (7.4)
	TWSC EB	-	-	A (8.9)
Dickerson Pike at Commercial Access #2	EB Left	-	-	A (9.1)
	TWSC SB	-	-	C (15.1)

[1] TWSC = Two-way Stop Control

B. Turn Lane Warrants

The National Cooperative Highway Research Program (NCHRP) Report 457 provides guidance for evaluating intersection improvements at unsignalized intersections. Specific volume-based warrants have been checked to evaluate the need for right turn and left turn deceleration and storage lanes.

Table 8 below details pertinent right turn lane warrant information for applicable intersections in the study area.

TABLE 8

RIGHT TURN LANE WARRANT ANALYSIS

Location	Peak Hour	Advancing Volume	Right Turn Volume	Speed (mph)	Right Turn Lane Warranted[1]
Dry Creek Road (EB) at Robert Cartwright Drive	A.M.	38	9	30	No
	P.M.	30	6		No
Robert Cartwright Drive (NB) at Project Access #1	A.M.	35	2	30	No
	P.M.	130	5		No
Robert Cartwright Drive (NB) at Project Access #2	A.M.	35	3	30	No
	P.M.	126	9		No
Dry Creek Road (EB) at Project Access #4	A.M.	64	1	30	No
	P.M.	73	2		No
Dry Creek Road (SB) at Commercial Access #1	A.M.	73	1	30	No
	P.M.	77	2		No
Dickerson Pike (WB) at Commercial Access #2	A.M.	766	6	40	No
	P.M.	645	11		No

[1] Evaluating Intersection Improvements: An Engineering Study Guide, NCHRP Report 457 Transportation Research Board, pg. 22-23

VII. CONCLUSIONS AND RECOMMENDATIONS

A. Dickerson Pike at Dry Creek Road

The following recommendations are offered for the intersection of Dickerson Pike at Dry Creek Road:

- Traffic operations at this intersection will be characterized by level of service D or better after full build-out of the Cedarside at Dry Creek development. No intersection control changes or additional laneage are recommended at this intersection due to the impact of Cedarside at Dry Creek development.

- The signalized intersection currently has existing pedestrian ramps at three of the corners at the intersection but no pedestrian signal equipment. The City of Goodlettsville could install pedestrian signal equipment as part of a future signal system or resurfacing project.

B. Dickerson Pike at Robert Cartwright Drive

The following recommendations are offered for the intersection of Dickerson Pike at Robert Cartwright Drive:

- Traffic operations at this intersection will be characterized by level of service E or better after full build-out of the Cedarside at Dry Creek development. This level of service is common on minor street, stop-controlled approaches to arterial streets. No intersection control changes or additional laneage are recommended at this intersection due to the impact of Cedarside at Dry Creek development.

- The westbound approach of Dickerson Pike to the intersection includes pavement improvements sufficient to provide a right turn lane. The pavement markings on the westbound approach of Dickerson Pike should be modified to provide a right turn lane as part of the Cedarside at Dry Creek development.

- The adjacent project, Avalon Gas Station, has proposed to install pavement markings on Robert Cartwright Drive to provide three lanes in the existing 36-foot roadway width. This improvement will also provide a southbound left turn lane on Robert Cartwright Drive at Dickerson Pike. If the Avalon Gas Station does not install the striping, the Cedarside at Dry Creek development should provide the pavement markings.

C. Dry Creek Road at Robert Cartwright Drive

The following recommendations are offered for the intersection of Dry Creek Road at Robert Cartwright Drive:

- Traffic operations at this intersection will be characterized by level of service A or better after full build-out of the Cedarside at Dry Creek development. No intersection control changes or additional laneage are recommended at this intersection due to the impact of Cedarside at Dry Creek development.

- Right turn lane warrants were evaluated for the intersection to determine if the projected total traffic volumes meet the volume-based warrants. It was determined that additional turn lanes are not warranted based on the expected traffic volumes.

- The adjacent project, Avalon Gas Station, has proposed to install pavement markings on Robert Cartwright Drive to provide three lanes in the existing 36-foot roadway width. This improvement will also provide a northbound left turn lane on Robert Cartwright Drive at Dry Creek Road. If the Avalon Gas Station does not install the striping, the Cedarside at Dry Creek development should provide the pavement markings.

D. Robert Cartwright Drive at Project Access #1

The following recommendations are offered for the intersection of Robert Cartwright Drive at Project Access #1:

- Traffic operations at this intersection will be characterized by level of service A or better after full build-out of the Cedarside at Dry Creek development. No intersection control changes or additional laneage are recommended at this intersection due to the impact of Cedarside at Dry Creek development.

- Right turn lane warrants were conducted for the intersection to determine if the projected total traffic volumes meet the volume-based warrants. It was determined that additional turn lanes are not warranted based on the expected traffic volumes.

- The west leg of the intersection should be designed to meet City of Goodlettsville standards, with a minimum of one lane exiting and one lane entering.

- Proposed grading, landscaping, and monument signage at the entrance to the Cedarside at Dry Creek development should be located outside the intersection sight triangles. Features within the intersection sight triangles should be designed so that sight lines are not obstructed.

- During the design of the Cedarside at Dry Creek Project Access #1, it should be confirmed that there is the minimum sight distance available.

E. Robert Cartwright Drive at Project Access #2

The following recommendations are offered for the intersection of Robert Cartwright Drive at Project Access #2:

- Traffic operations at this intersection will be characterized by level of service A or better after full build-out of the Cedarside at Dry Creek development. No intersection control changes or additional laneage are recommended at this intersection due to the impact of Cedarside at Dry Creek development.

- Right turn lane warrants were conducted for the intersection to determine if the projected total traffic volumes meet the volume-based warrants. It was determined that additional turn lanes are not warranted based on the expected traffic volumes.

- The west leg of the intersection should be designed to meet City of Goodlettsville standards, with a minimum of one lane exiting and one lane entering.

- Proposed grading, landscaping, and monument signage at the entrance to the Cedarside at Dry Creek development should be located outside the intersection sight triangles. Features within the intersection sight triangles should be designed so that sight lines are not obstructed.

- During the design of the Cedarside at Dry Creek Project Access #2, it should be confirmed that there is the minimum sight distance available.

F. Dry Creek Road at Project Access #3

The following recommendations are offered for the intersection of Dry Creek Road at Project Access #3:

- Traffic operations at this intersection will be characterized by level of service A or better after full build-out of the Cedarside at Dry Creek development. No intersection control changes or additional laneage are recommended at this intersection due to the impact of Cedarside at Dry Creek development.

- Right turn lane warrants were conducted for the intersection to determine if the projected total traffic volumes meet the volume-based warrants. It was determined that additional turn lanes are not warranted based on the expected traffic volumes.

- The west leg of the intersection should be designed to meet City of Goodlettsville standards, with a minimum of one lane exiting and one lane entering.

- Proposed grading, landscaping, and monument signage at the entrance to the Cedarside at Dry Creek development should be located outside the intersection sight triangles. Features within the intersection sight triangles should be designed so that sight lines are not obstructed.

- During the design of the Cedarside at Dry Creek Project Access #3, it should be confirmed that there is the minimum sight distance available.

G. Dry Creek Road at Project Access #4

The following recommendations are offered for the intersection of Dry Creek Road at Project Access #4:

- Traffic operations at this intersection will be characterized by level of service A or better after full build-out of the Cedarside at Dry Creek development. No intersection control changes or additional laneage are recommended at this intersection due to the impact of Cedarside at Dry Creek development.

- Right turn lane warrants were conducted for the intersection to determine if the projected total traffic volumes meet the volume-based warrants. It was determined that additional turn lanes are not warranted based on the expected traffic volumes.

- The south leg of the intersection should be designed to meet City of Goodlettsville standards, with a minimum of one lane exiting and one lane entering.

- Proposed grading, landscaping, and monument signage at the entrance to the Cedarside at Dry Creek development should be located outside the intersection sight triangles. Features within the intersection sight triangles should be designed so that sight lines are not obstructed.

- During the design of the Cedarside at Dry Creek Project Access #4, it should be confirmed that there is the minimum sight distance available.

H. Dry Creek Road at Commercial Access #1

The following recommendations are offered for the intersection of Dry Creek Road at Commercial Access #1:

- Traffic operations at this intersection will be characterized by level of service A or better after full build-out of the Cedarside at Dry Creek development. No intersection control changes or additional laneage are recommended at this intersection due to the impact of Cedarside at Dry Creek development.

- Right turn lane warrants were conducted for the intersection to determine if the projected total traffic volumes meet the volume-based warrants. It was determined that additional turn lanes are not warranted based on the expected traffic volumes.

- The west leg of the intersection should be designed to meet City of Goodlettsville standards, with a minimum of one lane exiting and one lane entering.

- Proposed grading, landscaping, and monument signage at the entrance to the Cedarside at Dry Creek development should be located outside the intersection sight triangles. Features within the intersection sight triangles should be designed so that sight lines are not obstructed.

- During the design of the Cedarside at Dry Creek Commercial Access #1, it should be confirmed that there is the minimum sight distance available.

I. Dickerson Pike at Commercial Access #2

The following recommendations are offered for the intersection of Dickerson Pike at Commercial Access #2:

- Traffic operations at this intersection will be characterized by level of service C or better after full build-out of the Cedarside at Dry Creek development. No intersection control changes or additional laneage are recommended at this intersection due to the impact of Cedarside at Dry Creek development.

- Right turn lane warrants were conducted for the intersection to determine if the projected total traffic volumes meet the volume-based warrants. It was determined that additional turn lanes are not warranted based on the expected traffic volumes.

- The north leg of the intersection should be designed to meet City of Goodlettsville standards, with a minimum of one lane exiting and one lane entering.

- Proposed grading, landscaping, and monument signage at the entrance to the Cedarside at Dry Creek development should be located outside the intersection sight triangles. Features within the intersection sight triangles should be designed so that sight lines are not obstructed.

- During the design of the Cedarside at Dry Creek Commercial Access #2, it should be confirmed that there is the minimum sight distance available.

- A Tennessee Department of Transportation (TDOT) Grading and Entrance permit will need to be obtained prior to the construction of the entrance. The driveway should be designed in a way that meets all requirements in the 2015 Manual for Constructing Driveway Entrances on State Highways. Special consideration should be taken to ensure the driveway meets the minimum corner clearance.

J. Dry Creek Road and Robert Cartwright Drive Pavement Marking

Dry Creek Road and Robert Cartwright Drive provide approximately 36 feet to 48 feet of pavement but do not currently have pavement striping.

- The adjacent project, Avalon Gas Station, has proposed to install pavement markings on Robert Cartwright Drive to provide three lanes in the existing 36-foot roadway width. If the Avalon Gas Station does not install the striping, the Cedarside at Dry Creek development should provide the pavement markings.

- The Cedarside at Dry Creek development should provide pavement markings, including a two-way left turn median, on Dry Creek Road and Robert Cartwright Drive per the conceptual layout provided in Figure 8.

11/08/2021

City of Goodlettsville

Davidson County, Tennessee

RSA Project #: 84-144/2096

DETENTION REPORT

Ridgeview is a proposed single-family residential development located on the property northwest of the intersection of Dry Creek Road and Dickerson Pike in Goodlettsville, Tennessee. The property is approximately 19.83 Acres and will feature 117 single-family units. To meet the detention and water quality requirements for City of Goodlettsville, Ragan-Smith-Associates has completed a detention report for this site. The existing regional detention facility shown on the construction plans will provide detention for the subdivision. For the developed portion of the site, curve number reduction, due to LID practices (particularly bioretention), has been accounted for in the detention calculations. Drainage maps have been included to show the areas with their corresponding hydrographs.

DETENTION ANALYSIS

The SCS method was used to generate the runoff hydrographs for detention analysis. Rainfall information was taken from Nashville Stormwater Management Manual. The 2- through 100-year return frequencies were considered. Soil types were obtained from the NRCS Web Soil Survey for Davidson County, Tennessee.

The analyzed portion of the property consists of a drainage basin with the outfall location being where Dry Creek runs underneath Dickerson Pike. The area was analyzed as a whole, both off-site and on-site contributions. A portion of the neighboring subdivision, to the north, drains to the regional drainage facility. The regional detention facility outfalls into Dry Creek.

After development, the eastern portion of the site will drain towards the existing regional detention facility. The on-site area draining to the detention pond is represented by Hydrograph 6 and the off-site area draining to the detention pond is represented by Hydrograph 5. A portion of the site will bypass the detention ponds and is represented by Hydrographs 7 & 8. Some undeveloped areas will bypass treatment and have been accounted for in the detention model and LID

calculations. The overall post developed peak flow is represented in Hydrograph 11. Hydrograph 11 should be compared to Hydrograph 4 to analyze the overall detention and runoff for the project.

Below is a table summarizing the pre-developed and post-developed flows for the 2-, 5-, 10-, 25-, 50-, and 100-year return intervals.

Cedarside at Dry Creek Peak Runoff Comparisons						
	2 yr (cfs)	**5 yr (cfs)**	**10 yr (cfs)**	**25 yr (cfs)**	**50 yr (cfs)**	**100 yr (cfs)**
Pre Dev (Hyd. 4)	86.32	133.45	164.12	203.98	231.91	258.06
Post Dev (Hyd. 11)	83.66	127.73	155.87	192.37	218.70	243.31

WATER QUALITY

To meet the Low Impact Development (LID) requirements of Metropolitan Nashville, the proposed development has implemented bioretention areas to achieve 80% runoff reduction and promote infiltration of the first 1-inch of stormwater runoff. LID spreadsheets are included.

Hydrograph Return Period Recap

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020.4

Hyd. No.	Hydrograph type (origin)	Inflow hyd(s)	Peak Outflow (cfs)								Hydrograph Description
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	
1	SCS Runoff	------	-------	89.81	-------	134.10	163.49	200.96	228.71	256.00	Existing Offsite/Onsite to Detention
2	SCS Runoff	------	-------	30.95	-------	51.70	66.08	84.86	99.01	113.07	On Site Bypass
3	Reservoir	1	-------	55.37	-------	81.75	98.05	119.11	132.90	144.99	Ex Thru Detention
4	Combine	2, 3	-------	86.32	-------	133.45	164.12	203.98	231.91	258.06	Dry Creek Outfall Ex
5	SCS Runoff	------	-------	69.85	-------	104.30	127.16	156.31	177.89	199.11	Existing Offsite to Detention
6	SCS Runoff	------	-------	19.07	-------	30.47	38.35	48.55	56.19	63.74	Onsite to Detention
7	SCS Runoff	------	-------	11.50	-------	18.70	23.63	30.04	34.85	39.61	East Bypass
8	SCS Runoff	------	-------	23.31	-------	36.41	45.25	56.61	65.08	73.43	West Bypass
9	Combine	5, 6,	-------	88.77	-------	134.77	165.51	204.86	234.08	262.85	Prop. To Detention
10	Reservoir	9	-------	54.64	-------	81.93	98.94	120.87	135.14	145.91	Prop. Thru Detention
11	Combine	7, 8, 10	-------	83.66	-------	127.73	155.87	192.37	218.70	243.31	Prop. Dry Creek Outfall

Hydrograph Summary Report

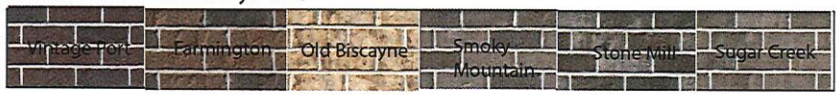
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020.4

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	89.81	2	716	182,384	------	------	------	Existing Offsite/Onsite to Detention
2	SCS Runoff	30.95	2	722	88,458	------	------	------	On Site Bypass
3	Reservoir	55.37	2	722	182,383	1	502.43	33,552	Ex Thru Detention
4	Combine	86.32	2	722	270,841	2, 3	------	------	Dry Creek Outfall Ex
5	SCS Runoff	69.85	2	716	141,854	------	------	------	Existing Offsite to Detention
6	SCS Runoff	19.07	2	718	38,279	------	------	------	Onsite to Detention
7	SCS Runoff	11.50	2	722	32,572	------	------	------	East Bypass
8	SCS Runoff	23.31	2	716	47,066	------	------	------	West Bypass
9	Combine	88.77	2	716	180,134	5, 6,	------	------	Prop. To Detention
10	Reservoir	54.64	2	722	180,133	9	502.42	33,028	Prop. Thru Detention
11	Combine	83.66	2	720	259,771	7, 8, 10	------	------	Prop. Dry Creek Outfall

Modern Farmhouse Theme - Hardie

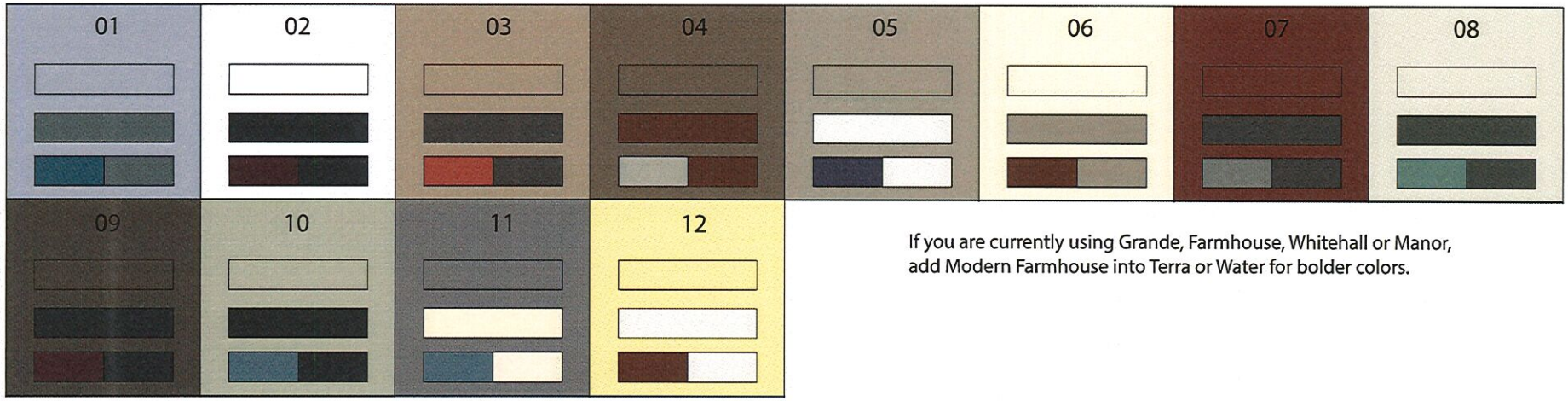
This theme has bold colors associated with farmhouses.
- It is best used on houses without shutters, although shutter colors are available if needed.
- This theme does NOT have contrasting accent colors.
- This theme does NOT have an option for lower gauge sidings or profiles. This theme must take SUE and SUF or SUH.

Meridian Brick - Salisbury Plant

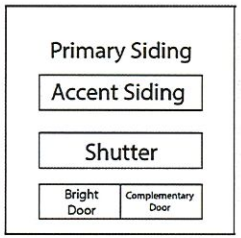


Environmental Stone

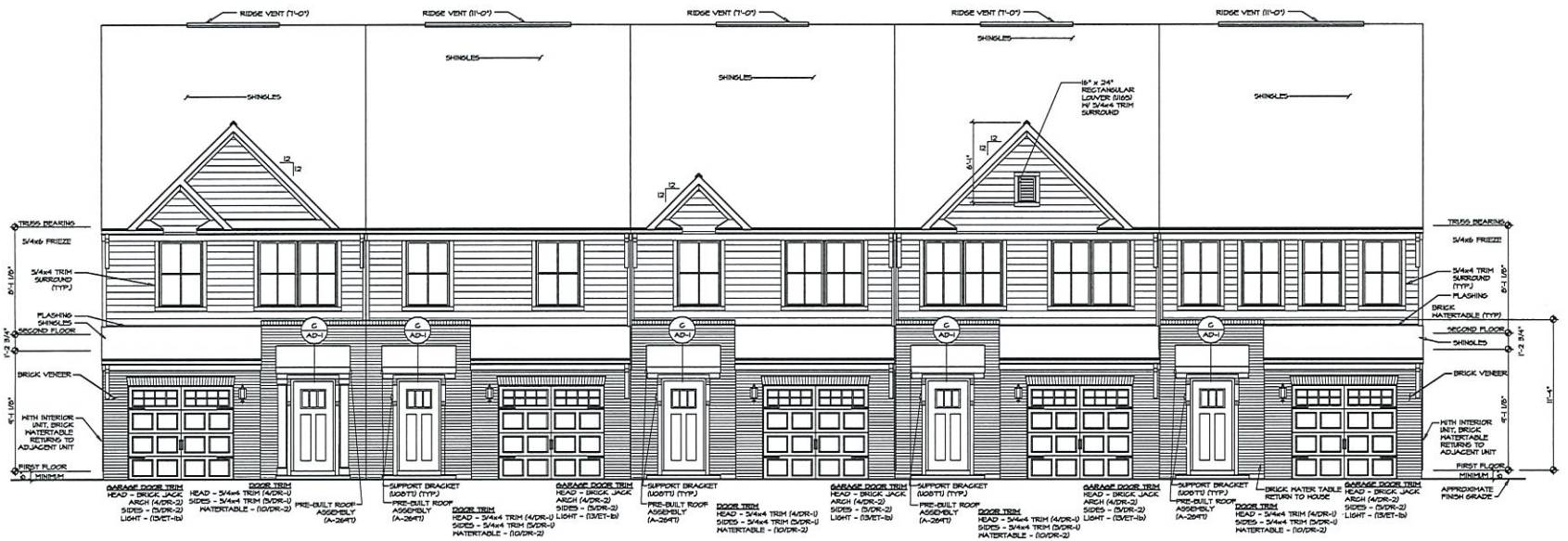
Colors - Available only in .046 Gauge (SUE) and D4 or D4.5 DL Profiles



If you are currently using Grande, Farmhouse, Whitehall or Manor, add Modern Farmhouse into Terra or Water for bolder colors.



All schemes can have white or bronze trim.
Beige trim is not preferred.
Buff or gray mortar can be used.
Modern Farmhouse may NOT be used alone.
It is an add-in theme to Water or Terra.



UNIT "E" ELEVATION "C" REVERSE ODESSA

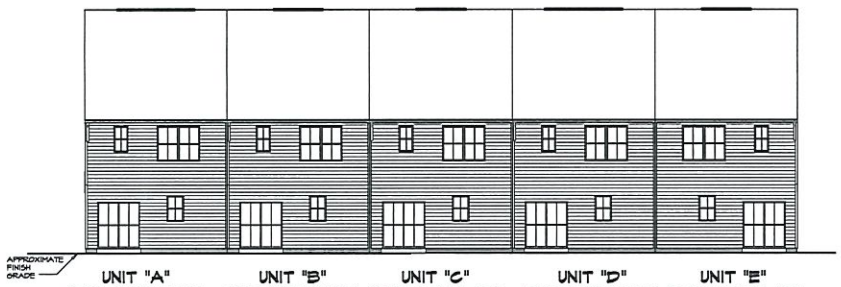
UNIT "D" ELEVATION "A" PER PLAN ODESSA

UNIT "C" ELEVATION "D" PER PLAN ODESSA

UNIT "B" ELEVATION "B" PER PLAN ODESSA

UNIT "A" ELEVATION "E" PER PLAN ODESSA

1 A-1 **FRONT ELEVATION**
SCALE: 1/4" = 1'-0"



UNIT "A" ELEVATION "E" PER PLAN ODESSA

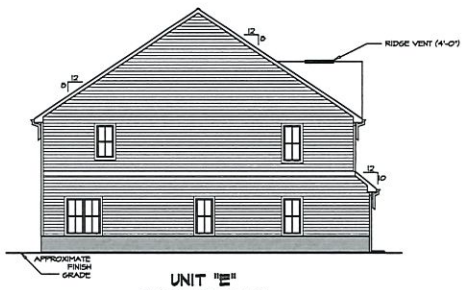
UNIT "B" ELEVATION "B" PER PLAN ODESSA

UNIT "C" ELEVATION "D" PER PLAN ODESSA

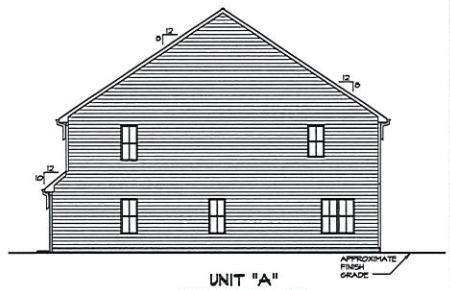
UNIT "D" ELEVATION "A" PER PLAN ODESSA

UNIT "E" ELEVATION "C" REVERSE ODESSA

2 A-1 **REAR ELEVATION**
SCALE: 1/8" = 1'-0"



UNIT "E" ELEVATION "C" REVERSE ODESSA



UNIT "A" ELEVATION "E" PER PLAN ODESSA

3 A-1 **SIDE ELEVATIONS**
SCALE: 1/8" = 1'-0"

NOTE:
GRILLES IN GLAZING OF ALL EXTERIOR DOORS AND SIDELIGHTS TO BE OMITTED WITH BRONZE WINDOWS

CITY-COUNTY-LOT-UNIT
RHN-GG-0001 A-E
COUNTY-LOT
DRAWN BY
T. ROBINSON
OWNER
STREET ADDRESS
APT. NO.
CITY
STATE
ZIP

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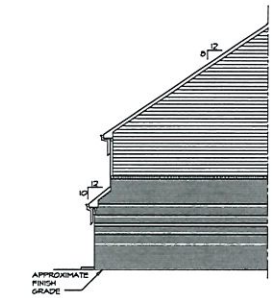
Frederick, MD 21703

SET NO. 05500
ISSUE DATE 03
DRAWN BY
DATE:
OPTION PTS

MODEL ODESSA
DRAWING TITLE ELEVATIONS
OPTION DESCRIPTION LEVEL ENTRY ON SLAB

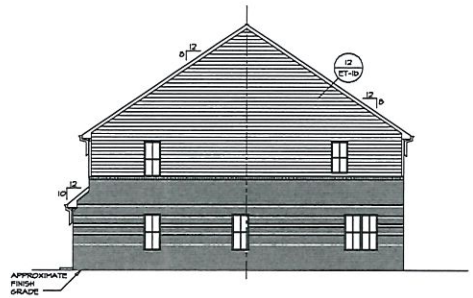
SHEET NO. A-1
4



3 A-2 PARTIAL SIDE ELEVATION

SCALE: 1/8" = 1'-0"

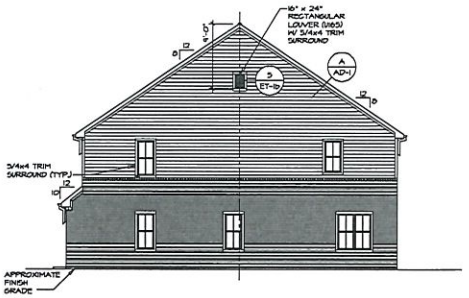
ELEVATION "A" "ELA"
ELEVATION "E" "ELE"
W/ PARTIAL STONE VENEER FRONT "EVV"



1 A-2 SIDE ELEVATION

SCALE: 1/8" = 1'-0"

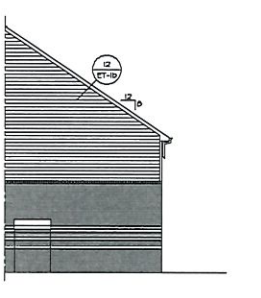
ELEVATION "A" "ELA"
ELEVATION "E" "ELE"
W/ PARTIAL BRICK VENEER FRONT "EVM"
W/ WINDOW END UNIT SIDE "WCC"



4 A-2 SIDE ELEVATION

SCALE: 1/8" = 1'-0"

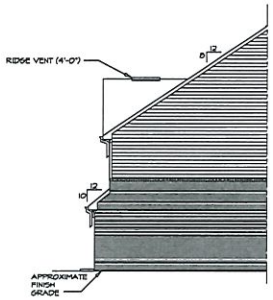
ELEVATION "A" "ELA"
W/ WINDOW END UNIT SIDE "WCC"
W/ EXTERIOR TRIM ADDITIONAL SIDE "STP"



5 A-2 PARTIAL SIDE ELEVATION

SCALE: 1/8" = 1'-0"

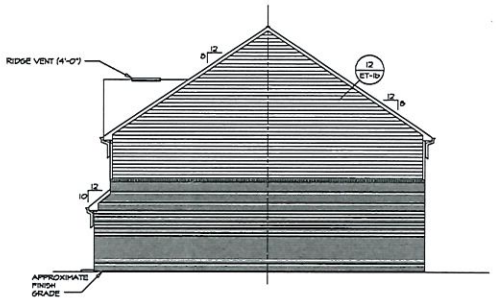
OPT. FIREPLACE FAMILY ROOM SIDE "LDF"



6 A-2 PARTIAL SIDE ELEVATION

SCALE: 1/8" = 1'-0"

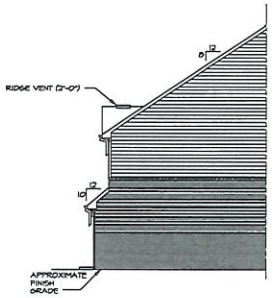
ELEVATION "B" "ELB"
ELEVATION "C" "ELC"
W/ PARTIAL STONE VENEER FRONT "EVV"



2 A-2 SIDE ELEVATION

SCALE: 1/8" = 1'-0"

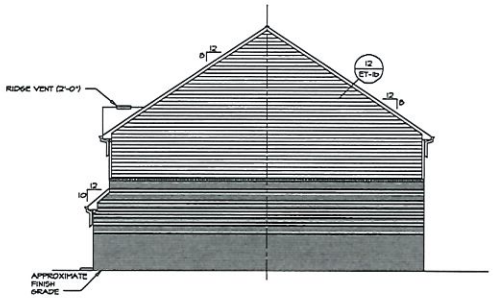
ELEVATION "B" "ELB"
ELEVATION "C" "ELC"
W/ PARTIAL BRICK VENEER FRONT "EVM"



7 A-2 PARTIAL SIDE ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION "D" "ELD"
W/ PARTIAL STONE VENEER FRONT "EVV"



3 A-2 SIDE ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION "D" "ELD"
W/ PARTIAL BRICK VENEER FRONT "EVM"

NOTE:
OPTIONAL EXTERIOR TRIM ADDITIONAL (SIDES) "STP" TO INCLUDE LOUVER AND FRIEZE BOARD.

REMARKS

REV. NO. DATE

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SET NO. 05500
VERSION # 03
DRAWN BY HT
DATE: 11/10/17
OPTION

MODEL ODESSA
DRAWING TITLE SIDE ELEVATIONS
OPTION DESCRIPTION

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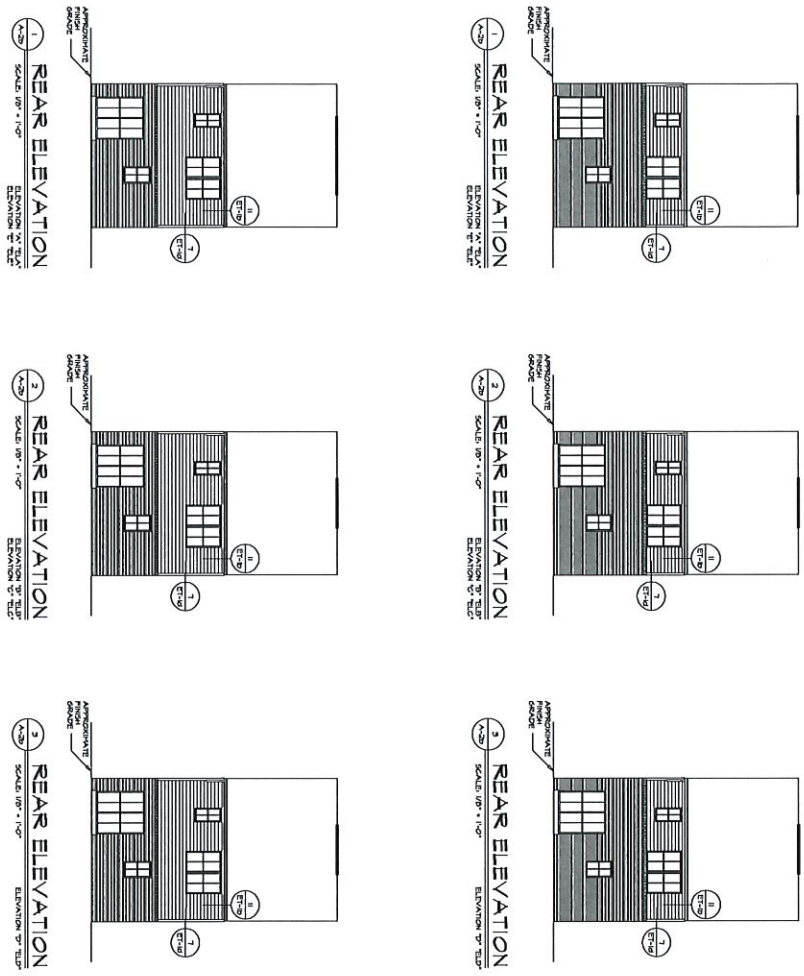

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		DATE: 11/10/17
7	OPTION DESCRIPTION	OPTION

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REV. NO.	DATE	REMARKS

I:\PROJECTS\RYANHOMES\ODESSA_00500_03\Sheets\Master Set\Elevations\7 A-2b ELV REAR.dwg 02/07/20 - 9:55 am

EXECUTIVE SUMMARY

INTRODUCTION

The proposed development at 619 North Main Street is located between North Main Street and the CSXT railroad north of Tinnin Avenue and south of Fannin Drive in the City of Goodlettsville, Tennessee. When completed, 619 North Main Street will consist of 307 multifamily units and 15,000 square feet of commercial space. Access to 619 North Main Street is proposed at two (2) locations on North Main Street and also by the extension of Church Street to the project.

BACKGROUND TRAFFIC

The year 2023 is established as the horizon year for this study. Background traffic growth was established by increasing existing traffic by ***2.0 percent annually*** for the period from 2021 to 2023.

SITE TRAFFIC

619 NORTH MAIN STREET									
TRIP GENERATION [1]									
Land Use	Land Use Code	Total Units	Daily Trips	A.M. Peak Hour			P.M. Peak Hour		
				Enter	Exit	Total	Enter	Exit	Total
Multifamily (Low-Rise)	220	310 Units	2,303	32	108	140	102	60	162
General Office	710	6,000 sf	58	6	1	7	1	6	7
Total			**2,361**	**38**	**109**	**147**	**103**	**66**	**169**
[1] *Trip Generation Manual, 10th Edition* published by the Institute of Transportation Engineers (ITE)									

TRANSPORTATION ANALYSIS

The following public intersections were analyzed for capacity deficiencies and improvement needs:

- North Main Street at New Brick Church Pike/Lindberg Avenue
- North Main Street at Fannin Drive
- East Cedar Street at Church Street
- Project Access Locations on North Main Street

For these intersections, the following traffic scenarios were analyzed, where applicable:

- 2021 Existing Traffic
- 2023 Background Traffic
- 2023 Total Traffic with all traffic projected in the study area, including 619 North Main Street

CONCLUSIONS AND RECOMMENDATIONS

North Main Street at New Brick Church Pike / Lindberg Avenue

- No improvements are recommended at the intersection of North Main Street and New Brick Church Pike / Lindberg Avenue due to the development at 619 North Main Street.

North Main Street at Fannin Drive

- No improvements are recommended at the intersection of North Main Street and Fannin Drive due to the development at 619 North Main Street.

East Cedar Street at Church Street

- No improvements are recommended at the intersection of East Cedar Street and Church Street due to the development at 619 North Main Street.

North Main Street at Private Drive / Project Access (South)

- The project access should be constructed to allow one (1) ingress lane and two (2) egress lanes. The egress lanes should be marked as a combined left/through lane and a right turn lane.
- Turn lane warrants were checked for a northbound right turn lane on North Main Street. Based on the forecasted traffic volumes, a right turn lane is warranted on North Main Street at this access. However, the proximity of Tinnin Avenue to the project access limits the available length for a turn lane at this location to less than 100 feet.
- Signal warrant evaluation results indicate that the installation of a traffic signal will not be justified or supported by the MUTCD criteria at the project access.
- A TDOT entrance permit will be required for this proposed access after site plans have been approved by the City of Goodlettsville.

North Main Street at Project Access (North)

- The project access should be constructed to allow one (1) ingress lane and one (1) egress lanes.
- Turn lane warrants were checked for a northbound right turn lane on North Main Street. Based on the forecasted traffic volumes, a right turn lane is not warranted on North Main Street at this access.
- A TDOT entrance permit will be required for this proposed access after site plans have been approved by the City of Goodlettsville.

Church Street Extension

- The Church Street Extension should be designed to stay within existing public right-of-way and with a comparable cross section to existing sections of Church Street. City of Goodlettsville design standards for a local street should be used to the extent possible.

V. PROPOSED SITE TRAFFIC

A. Site Trip Generation

In order to quantify site-related impacts within the study area, some estimates of site trip generation and traffic assignment had to be established. Trip generation rates for the development were established using information for the weekday a.m. and p.m. peak hour of the adjacent street as shown in the ITE *Trip Generation Manual, 10th Edition.*

The trip generation for 619 North Main Street is shown in Table 2.

TABLE 2

TRIP GENERATION: 619 NORTH MAIN STREET

Land Use	Land Use Code	Total Units	Daily Trips	A.M. Peak Hour			P.M. Peak Hour		
				Enter	Exit	Total	Enter	Exit	Total
Multifamily (Low-Rise)	220	310 Units	2,303	32	108	140	102	60	162
General Office	710	6,000 sf	58	6	1	7	1	6	7
Total			**2,361**	**38**	**109**	**147**	**103**	**66**	**169**

B. Site Trip Distribution and Assignment

Site trips were distributed based primarily upon the prevalent commuter traffic patterns in the area and the proximity and routes to major transportation facilities. Figure 5 shows the distribution of residential site trips for 619 North Main Street.

Site traffic volumes generated by 619 North Main Street in the horizon year 2023 are shown in Figure 6. The accumulation of 2021 existing traffic, background traffic growth, and site-generated traffic for the horizon year 2023 is shown in Figure 7.

VI. TRANSPORTATION ANALYSIS

A. Intersection Capacity Analysis

In order to gauge the site impact and identify capacity deficiencies, intersection capacity analyses were conducted at the 619 North Main Street study area intersections. Capacity analyses were conducted according to the methodology and procedures outlined in the *Highway Capacity Manual, 6th Edition*, published by Transportation Research Board. Intersections were analyzed for capacity deficiencies and geometric improvement needs during the a.m. and p.m. peak hours for existing, background and total traffic conditions.

Capacity analysis results for the a.m. peak hour are shown in Table 3.

TABLE 3

INTERSECTION CAPACITY RESULTS – A.M. PEAK HOUR

Intersection	Condition [1]	Level of Service (avg. delay/vehicle – sec.)		
		2021 Existing	2023 Background	2023 Total
North Main Street at New Brick Church Pike / Lindberg Avenue	NB Left	C (17.2)	C (18.2)	C (18.9)
	SB Left	A (8.1)	A (8.2)	A (8.2)
	TWSC EB	D (31.4)	D (35.0)	E (37.5)
	TWSC WB	A (9.4)	A (9.5)	A (9.6)
North Main Street at Fannin Drive	NB Left	C (16.1)	C (16.8)	C (17.1)
	TWSC EB	C (24.3)	D (25.9)	D (26.2)
East Cedar Street at Church Street	EB Left	A (7.6)	A (7.6)	A (7.6)
	TWSC SB	B (12.3)	B (12.5)	B (13.4)
North Main Street at Project Access (South) / Private Drive	NB Left	-	-	C (17.2)
	SB Left	-	-	A (8.2)
	TWSC EB	-	-	D (32.2)
	TWSC WB Left	-	-	D (26.8)
	TWSC WB Right	-	-	A (9.7)
North Main Street at Project Access (South)	SB Left	-	-	A (8.2)
	TWSC WB	-	-	C (17.1)

[1] TWSC = Two-way Stop Control

Capacity analysis results for the p.m. peak hour are shown in Table 4.

TABLE 4

INTERSECTION CAPACITY RESULTS – P.M. PEAK HOUR

Intersection	Condition [1]	Level of Service (avg. delay/vehicle – sec.)		
		2021 Existing	2023 Background	2023 Total
North Main Street at New Brick Church Pike / Lindberg Avenue	NB Left	B (10.6)	B (10.9)	B (11.1)
	SB Left	C (15.2)	C (15.9)	C (16.4)
	TWSC EB	C (19.3)	C (20.9)	C (21.7)
	TWSC WB	D (33.1)	E (36.4)	E (38.5)
North Main Street at Fannin Drive	NB Left	A (9.9)	B (10.1)	B (10.3)
	TWSC EB	C (19.9)	C (20.7)	C (21.2)
East Cedar Street at Church Street	EB Left	A (8.1)	A (8.2)	A (8.3)
	TWSC SB	B (14.1)	B (14.5)	C (15.5)
North Main Street at Project Access (South) / Private Drive	NB Left	-	-	A (9.9)
	SB Left	-	-	C (17.5)
	TWSC EB	-	-	C (18.8)
	TWSC WB Left	-	-	F (88.1)
	TWSC WB Right	-	-	C (19.5)
North Main Street at Project Access (South)	SB Left	-	-	C (16.4)
	TWSC WB	-	-	E (39.9)

[1] TWSC = Two-way Stop Control

Level of service (LOS) criteria for unsignalized intersections is shown in Table 5 below.

TABLE 5

LEVEL OF SERVICE DESCRIPTIONS FOR UNSIGNALIZED INTERSECTIONS

Level of Service	Description	Control Delay (sec. /veh.)
A	Usually no conflicting traffic	0 - 10
B	Occasionally some delay due to conflicting traffic	> 10 - 15
C	Delay is noticeable but not inconveniencing	> 15 - 25
D	Delay is noticeable and irritating, increased risk taking	> 25 - 35
E	Delay approaches tolerance level, risk taking likely	> 35 - 50
F	Delay exceeds tolerance level, high likelihood of risk taking	> 50

Source: Highway Capacity Manual, HCM 2010

B. Turn Lane Warrants

The National Cooperative Highway Research Program (NCHRP) Report 457 provides guidance for evaluating intersection improvements at unsignalized intersections. Specific volume-based warrants have been checked to evaluate the need for right turn and left turn deceleration and storage lanes at 619 North Main Street.

Table 6 below details pertinent right turn lane warrant information for the intersections that will provide access to 619 North Main Street.

TABLE 6

RIGHT TURN LANE WARRANT ANALYSIS

Location	Peak Hour	Advancing Volume	Right Turn Volume	Speed (mph)	Right Turn Lane Warranted [1]
North Main Street at Project Access (South)	A.M.	384	11	40	No
	P.M.	1,730	31		Yes
North Main Street at Project Access (North)	A.M.	400	4	40	No
	P.M.	1,717	10		No
East Cedar Street at Church Street	A.M.	152	43	30	No
	P.M.	375	94		No

[1] Evaluating Intersection Improvements: An Engineering Study Guide, NCHRP Report 457 Transportation Research Board, pg. 22-23

Table 7 below summarizes the left turn lane warrant analysis for the project access intersections in the study area.

TABLE 7

LEFT TURN LANE WARRANT ANALYSIS

Location	Peak Hour	Advancing Volume	Opposing Volume	L%	Speed (mph)	Left Turn Lane Warranted [1]
East Cedar Street at Church Street	A.M.	281	152	1.8	30	No
	P.M.	175	375	6.3		No

[1] Evaluating Intersection Improvements: An Engineering Study Guide, NCHRP Report 457 Transportation Research Board, pg. 21-22

C. Traffic Signal Warrants

The traffic signal warrants in the Federal Highway Administration's Manual on Uniform Traffic Control Devices (MUTCD) were checked to assess the need for a traffic signal at the primary access for 619 North Main Street. The purpose of the signal warrant is to consider factors related to the operation and safety of the intersection and the potential to improve these conditions. The MUTCD provides guidance that a traffic signal should not be installed unless one or more of the signal warrants are satisfied. In addition, the ITE Trip Generation Manual provides trip distribution percentages for a 24-hour period. These percentages were used to generate 12 hours of traffic data for the planned development to evaluate the traffic volume-based signal warrants. Table 8 below summarizes the results of the signal warrant analysis.

TABLE 8							
TRAFFIC SIGNAL WARRANT SUMMARY: DICKERSON PIKE AT 619 NORTH MAIN STREET PROJECT ACCESS (SOUTH)							
Time Period	**Major Street Volume**	**Minor Street Volume**	**Traffic Signal Warrant**				
			#1			**#2**	**#3B**
			Cond. A (100%)	**Cond. B (100%)**	**Combination (80%)**	**100%**	**100%**
7 a.m. – 8 a.m.	1,659	44					
8 a.m. – 9 a.m.	2,089	70					
9 a.m. – 10 a.m.	1,552	55					
10 a.m. – 11 a.m.	1,136	31					
11 a.m. – 12 p.m.	1,129	31					
12 p.m. – 1 p.m.	1,294	31					
1 p.m. – 2 p.m.	1,441	27					
2 p.m. – 3 p.m.	1,414	29					
3 p.m. – 4 p.m.	1,465	31					
4 p.m. – 5 p.m.	1,981	35					
5 p.m. – 6 p.m.	2,312	37					
6 p.m. – 7 p.m.	2,253	49					
No. of Hours that Warrant is Satisfied			0	0	0	0	0
Minimum Hours to Satisfy Warrant			8	8	8	4	1
Is Warrant Met?			**NO**			**NO**	**NO**

Based on the expected site traffic volumes, the minimum traffic volumes necessary to meet the MUTCD signal warrant criteria may not be satisfied for any hours of a typical day and are unlikely to satisfy the criteria for the eight-hour and four-hour periods necessary to warrant a traffic signal under warrants #1 and #2.

The results of the signal warrant evaluation indicate that the installation of a traffic signal will not be justified or supported by the MUTCD criteria at the project access.

ORDINANCE NO. 21-984

AN ORDINANCE TO AMEND THE OFFICIAL ZONING MAP OF GOODLETTSVILLE ADOPTED PER ORDINANCE 15-851 TO CHANGE A PROPERTY ON N. MAIN STREET FROM CS, COMMERCIAL SERVICES TO HDRPUD, HIGH DENSITY RESIDENTIAL PLANNED UNIT DEVELOPMENT AND PRELIMINARY MASTER PLAN APPROVAL.

WHEREAS, the City's Zoning Ordinance intent and purpose includes but is not limited to dividing the city into zones and districts restricting and regulating therein the location, construction, and use of residential buildings, structures; and,

WHEREAS, the City's Zoning Ordinance intent and purpose includes but is not limited to protecting the character and maintain the stability of residential and business areas within the city, and to promote the orderly and beneficial development of such areas; and,

WHEREAS, the City's 2020 Growth Plan intent and purpose includes but is not limited to permitting residential developments to develop at a density appropriate for the area and high density developments should be located with direct access to a major street; and,

WHEREAS, the Planned Unit Development section of the City's Zoning Ordinance intent and purpose includes but is not limited to promoting flexibility in design and permit planned diversification in the location of structures; to promote efficient use of land that will facilitate a more economic arrangement of buildings; circulation systems, land use, and utilities; to preserve as much as possible existing landscape features and utilize them in a harmonious fashion; to encourage the total planning of tracts of land; and to provide a mechanism for the ownership of land, utilities, streets, and facilities in common as well as the maintenance and disposition thereof; and,

WHEREAS, the Goodlettsville Planning Commission has reviewed and discussed this proposed amendment and voted on February 1, 2021 to recommend its passage to the Board of Commissioners based on the designation of the City's Comprehensive Land Use Plan to provide additional housing opportunities for residents in a mixed used commercial and development; and,

WHEREAS, the Goodlettsville Planning Commission also approved and recommended passage of the 619 N. Main Street Preliminary Master Plan dated January 25, 2021 for the High Density Residential Planned Unit Development Master Plan including three hundred and eleven (311) multifamily apartment units, live work units, and 7,500 square feet retail and service center, and;

WHEREAS, the Goodlettsville Planning Commission recommend 619 N. Main Street Preliminary Master Plan approval includes the defined permitted commercial uses in the live work and retail and service center, forty-three (43) parking space count variance request based on anticipated parking demands for the project, Design Guideline variance request to permit building exteriors with twenty-five (25%) percent brick and seventy-five (75%) percent cement

fiber board siding with the exception of the building façade fronting N. Main Street to include seventy (75%) percent brick and twenty-five (25%) percent cement fiber board siding and glass and the side of the northern buildings visible from N. Main Street include a minimum fifty (50%) percent brick with the cement fiber board, and;

WHEREAS, The Goodlettsville Planning Commission recommend 619 N. Main Street Preliminary Master Plan approval includes street upgrades on Church Street and a resident access gate on Church Street, and;

WHEREAS, The Goodlettsville Planning Commission recommend 619 N. Main Street Preliminary Master Plan approval includes that the live work unit leases will require a commercial business being included with a residential use.

NOW, THEREFORE, BE IT ORDAINED AND IT IS HEREBY ORDAINED BY THE BOARD OF COMMISSIONERS OF THE CITY OF GOODLETTSVILLE, TENNESSEE, AS FOLLOWS:

SECTION 1. That the Official Zoning Map adopted by Ordinance No. 15-851 entered on second reading on November 12, 2015 being the municipal zoning map of Goodlettsville, Tennessee, be and the same is hereby amended as follows:

By changing the existing CS, Commercial Services zoning classification and replacing the property zoning designation to HDRPUD, High Density Residential Planned Unit Development, per the 619 N. Main Street Preliminary Master Plan Dated January 25, 2021 for the properties attached as "EXHIBIT A" and described as follows:

PROPERTY TAX MAP 18-12, PARCEL 69.00 CONTAINING APPROXIMATELY 20.75 ACRES AS SHOWN IN THE RECORDS OF THE ASSESSOR OF PROPERTY OF DAVIDSON COUNTY, TENNESSEE.

SECTION 2. That the Commissioners of the City of Goodlettsville, Tennessee, hereby certify that this Ordinance has been submitted to the Planning Commission of the City of Goodlettsville for a recommendation, and a notice of hearing thereon has been ordered after at least fifteen (15) days notice of the time and place of said meeting has been published in a newspaper circulated in the City of Goodlettsville, Tennessee. This Ordinance shall take effect fifteen (15) days from the date of its final passage, the public welfare demanding it.

SECTION 3. All live work units on the ground floor units of the northern building fronting N. Main Street include a commercial business and the preliminary master plan for the project is being amended to include the following statement under the permitted uses, *live/work units shall contain a commercial use per the defined permitted uses listed below and may also contain a residential dwelling unit for the residence of the commercial use operator. The commercial use requires applicable city and county business licenses.*

SECTION 4. If any section, clause, provision, or portion of this Ordinance is for any reason declared invalid or unconstitutional by any court of competent jurisdiction, such holding

shall not affect any other section, clause, provision or portion of this Ordinance which is not itself invalid or unconstitutional.

SECTION 5. In case of conflict between this Ordinance or any part thereof and the whole or part of any existing or future Ordinance of the City of Goodlettsville, the most restrictive shall in all cases apply.

MAYOR RUSTY TINNIN

CITY RECORDER

APPROVED AS TO LEGALITY AND FORM:

CITY ATTORNEY

Passed First Reading: February 11, 2021
Passed Second Reading: March 11, 2021

Stormwater Narrative 10-27-2021:

Summary

The Stone Bridge Lofts project is located at 619 North Main Street Goodlettsville, Tennessee 37072 (Map: 18-12, Parcel: 69). The project consists of the introduction of 9 new multifamily units, a clubhouse, a pool, and the necessary parking with associated site drainage. With the current topography the site ultimately drains to the four corners of the site. In its current state, the site is a covered by trees. In the proposed conditions, the site will be treated using level two bioretention areas that also serve as detention ponds. A breakdown of areas treated is shown on sheet D2.0. After the site has been treated, it will then be routed to the existing drainage pipe that is located to the southwest and the existing swale located to the northwest.

Description of Stormwater Components

As previously stated, the site will be treated though the use of two level two bioretention areas. A comprehensive description of the treatment areas is shown on the D2.0 sheet. The roof areas and the surface parking that will be introduced will be the focus of the treatment. These areas are ultimately routed to one of the bioretention areas through the proposed storm pipe system. The project meets the goal of 80% removal rate. After the runoff is treated, it is routed to an existing storm pipe and an existing swale. Refer to the grading and drainage sheet C2.0 for the proposed stormwater infrastructure.

Existing (Pre) vs. Proposed (Post) Conditions

Using the LID techniques discussed previously, the overall peak flows will increase from the existing to proposed site conditions. Because of this, stormwater detention has been proposed. Refer to the Hydrographs "Return Period Recap" for the comparison of pre and post development peak flows for the listed storm events. The calculations will be included in the report.

Site Water Quality

The site will achieve water quality treatment by means of LID Volume 5 measures. This will include the use of two level 2 bioretention areas. The TRR percentage of

80% for the proposed conditions is met. Refer to LID exhibit on sheet D2.0. See the attached LID calculation spreadsheets included in this report.

Offsite Storm Water and Downstream Structure Analysis

The drainage sheets show proposed basins three and four draining to existing stormwater facilities. The flow leaving basin three enters an existing 24" pipe that is routed to a downstream channel. This 24" pipe is 75' long at a slope of around 2% and can handle the flow produced in this basin from a ten-year storm event. Proposed basin four flows into an existing swale that continues north. This swale is well defined and deep enough to handle the flow leaving the site in this direction. The site does not discharge to waters identified as impaired or high quality by TDEC.

FEMA Flood Maps and Information

The project lies on the FEMA Flood Map numbered 47037C0129H and dated April 5, 2017. These map shows the site to be outside of the flood plain in the zone labeled Zone X.

Forebay Sizing Calculator

							Porosity
Bioretention Area:	SW BIO				Ponding Depth:	1	1
Bioretention Required Tv:	19173	cf			Stone Depth:	0	0.4
Forebay Required Tv:	2876	cf			Equivalent Storage Depth:	1	
Required Surface Area:	2876	sf					
Provided Surface Area:	3393	sf					

							Porosity
Bioretention Area:	NW BIO				Ponding Depth:	1	1
Bioretention Required Tv:	15003	cf			Stone Depth:	0	0.4
Forebay Required Tv:	2250	cf			Equivalent Storage Depth:	1	
Required Surface Area:	2250	sf					
Provided Surface Area:	2252	sf					

Appendix C:

Hydraflow Hydographs Report

	STORM EVENT					
BASIN 1	Q2	Q5	Q10	Q25	Q50	Q100
EXISTING	5.989	9.601	12.070	15.260	17.650	20.100
PROPOSED	4.478	7.069	8.835	11.110	12.810	14.490

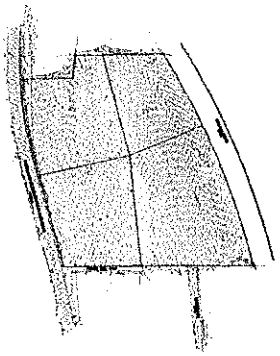
	STORM EVENT					
BASIN 2	Q2	Q5	Q10	Q25	Q50	Q100
EXISTING	8.605	13.830	17.430	22.090	25.590	29.060
PROPOSED	7.549	12.060	15.130	19.110	22.080	25.020

	STORM EVENT					
BASIN 3	Q2	Q5	Q10	Q25	Q50	Q100
EXISTING	5.458	9.530	12.430	16.290	19.210	22.140
PROPOSED	2.426	8.429	12.040	15.390	17.600	18.950

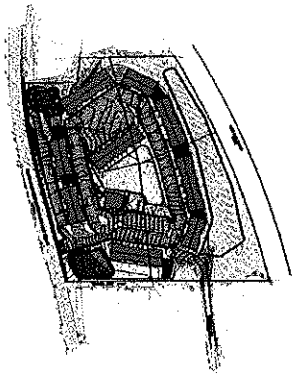
	STORM EVENT					
BASIN 4	Q2	Q5	Q10	Q25	Q50	Q100
EXISTING	5.529	9.654	12.600	16.500	19.470	22.430
PROPOSED	3.580	7.944	10.460	13.060	14.810	16.400

	POND FLOWS											
STORM	Q2		Q5		Q10		Q25		Q50		Q100	
FLOW	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
NORTH	18.20	1.644	25.28	4.307	30.01	5.739	36.07	7.048	40.60	7.831	45.07	8.484
SOUTH	25.43	1.871	36.17	7.035	43.39	9.601	52.72	12.04	59.69	12.71	66.58	13.12

EXISTING CONDITIONS

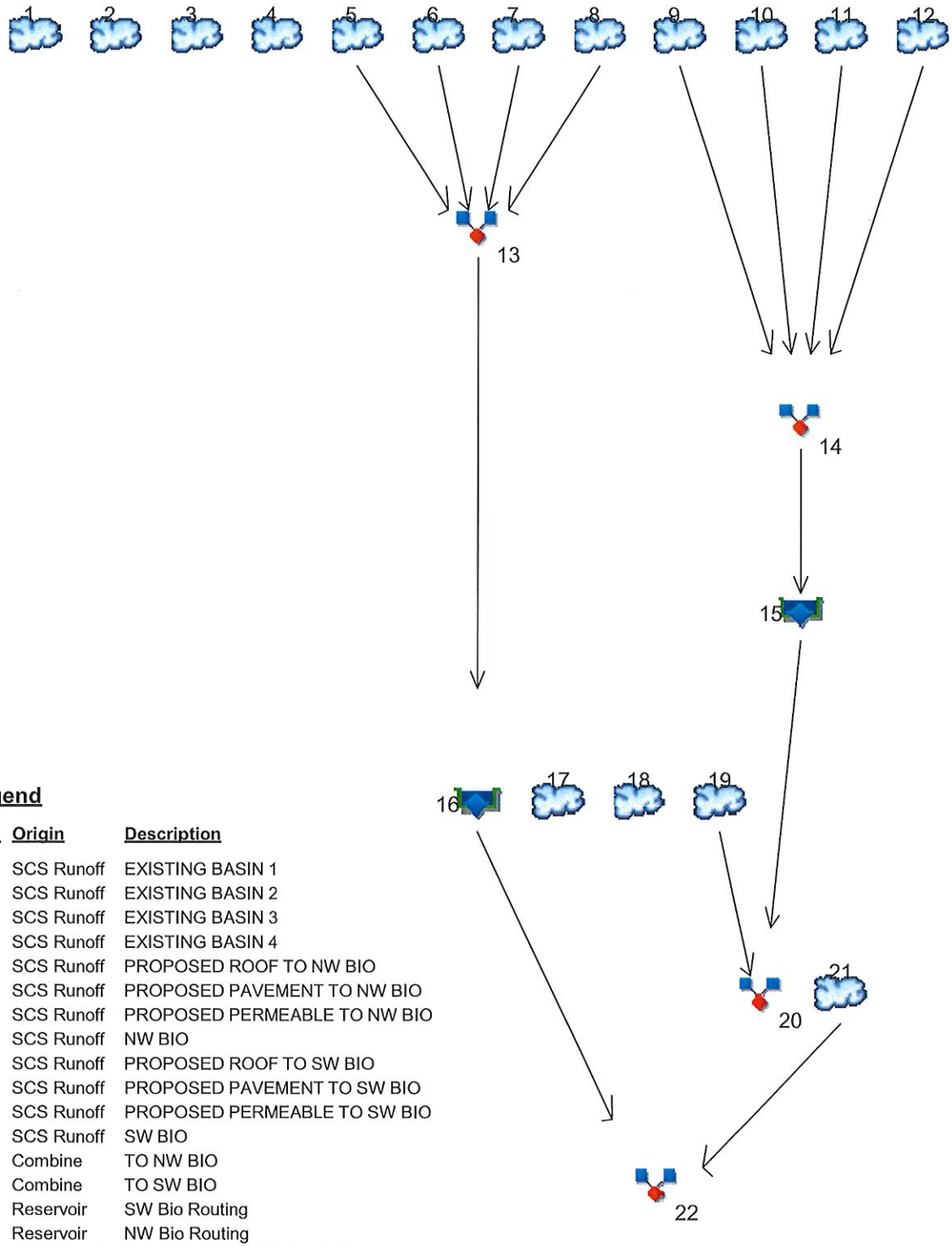


PROPOSED CONDITIONS



Watershed Model Schematic

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020



Legend

Hyd.	Origin	Description
1	SCS Runoff	EXISTING BASIN 1
2	SCS Runoff	EXISTING BASIN 2
3	SCS Runoff	EXISTING BASIN 3
4	SCS Runoff	EXISTING BASIN 4
5	SCS Runoff	PROPOSED ROOF TO NW BIO
6	SCS Runoff	PROPOSED PAVEMENT TO NW BIO
7	SCS Runoff	PROPOSED PERMEABLE TO NW BIO
8	SCS Runoff	NW BIO
9	SCS Runoff	PROPOSED ROOF TO SW BIO
10	SCS Runoff	PROPOSED PAVEMENT TO SW BIO
11	SCS Runoff	PROPOSED PERMEABLE TO SW BIO
12	SCS Runoff	SW BIO
13	Combine	TO NW BIO
14	Combine	TO SW BIO
15	Reservoir	SW Bio Routing
16	Reservoir	NW Bio Routing
17	SCS Runoff	PROPOSED BYPASS BASIN 1
18	SCS Runoff	PROPOSED BYPASS BASIN 2
19	SCS Runoff	PROPOSED BYPASS BASIN 3
20	Combine	TOTAL FLOW PROPOSED BASIN 3
21	SCS Runoff	PROPOSED BYPASS BASIN 4
22	Combine	TOTAL FLOW PROPOSED BASIN 4

Hydrograph Return Period Recap

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020

Hyd. No.	Hydrograph type (origin)	Inflow hyd(s)	Peak Outflow (cfs)								Hydrograph Description
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	
1	SCS Runoff	------	-------	5.989	-------	9.601	12.07	15.26	17.65	20.01	EXISTING BASIN 1
2	SCS Runoff	------	-------	8.605	-------	13.83	17.43	22.09	25.59	29.06	EXISTING BASIN 2
3	SCS Runoff	------	-------	5.458	-------	9.530	12.43	16.29	19.21	22.14	EXISTING BASIN 3
4	SCS Runoff	------	-------	5.529	-------	9.654	12.60	16.50	19.47	22.43	EXISTING BASIN 4
5	SCS Runoff	------	-------	7.054	-------	9.407	10.95	12.92	14.37	15.81	PROPOSED ROOF TO NW BIO
6	SCS Runoff	------	-------	8.566	-------	11.42	13.30	15.68	17.45	19.19	PROPOSED PAVEMENT TO NW BI
7	SCS Runoff	------	-------	2.179	-------	3.676	4.726	6.138	7.206	8.270	PROPOSED PERMEABLE TO NW B
8	SCS Runoff	------	-------	0.475	-------	0.802	1.031	1.339	1.572	1.804	NW BIO
9	SCS Runoff	------	-------	7.467	-------	9.957	11.59	13.67	15.21	16.73	PROPOSED ROOF TO SW BIO
10	SCS Runoff	------	-------	12.18	-------	16.25	18.92	22.31	24.82	27.30	PROPOSED PAVEMENT TO SW BI
11	SCS Runoff	------	-------	5.229	-------	8.822	11.34	14.73	17.29	19.85	PROPOSED PERMEABLE TO SW BI
12	SCS Runoff	------	-------	0.713	-------	1.203	1.547	2.009	2.358	2.706	SW BIO
13	Combine	5, 6, 7,	-------	18.20	-------	25.28	30.01	36.07	40.60	45.07	TO NW BIO
14	Combine	8, 9, 10, 11, 12,	-------	25.43	-------	36.17	43.39	52.72	59.69	66.58	TO SW BIO
15	Reservoir	14	-------	1.899	-------	7.079	9.639	12.08	12.72	13.13	SW Bio Routing
16	Reservoir	13	-------	1.644	-------	4.307	5.739	7.048	7.831	8.484	NW Bio Routing
17	SCS Runoff	------	-------	4.478	-------	7.069	8.835	11.11	12.81	14.49	PROPOSED BYPASS BASIN 1
18	SCS Runoff	------	-------	7.549	-------	12.06	15.13	19.11	22.08	25.02	PROPOSED BYPASS BASIN 2
19	SCS Runoff	------	-------	2.426	-------	3.546	4.284	5.221	5.914	6.595	PROPOSED BYPASS BASIN 3
20	Combine	15, 19	-------	2.426	-------	8.429	12.04	15.39	17.60	18.95	TOTAL FLOW PROPOSED BASIN 3
21	SCS Runoff	------	-------	2.419	-------	3.912	4.934	6.259	7.252	8.235	PROPOSED BYPASS BASIN 4
22	Combine	16, 21	-------	3.580	-------	7.944	10.46	13.06	14.81	16.40	TOTAL FLOW PROPOSED BASIN 4

Proj. file: StoneBridge Apartments Hydrographs.gpw | Friday, 10 / 29 / 2021

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020

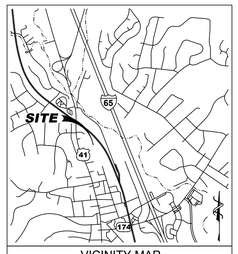
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	5.989	2	724	18,900	------	------	------	EXISTING BASIN 1
2	SCS Runoff	8.605	2	734	37,702	------	------	------	EXISTING BASIN 2
3	SCS Runoff	5.458	2	728	19,751	------	------	------	EXISTING BASIN 3
4	SCS Runoff	5.529	2	728	20,009	------	------	------	EXISTING BASIN 4
5	SCS Runoff	7.054	2	716	16,544	------	------	------	PROPOSED ROOF TO NW BIO
6	SCS Runoff	8.566	2	716	20,090	------	------	------	PROPOSED PAVEMENT TO NW BI
7	SCS Runoff	2.179	2	718	4,360	------	------	------	PROPOSED PERMEABLE TO NW B
8	SCS Runoff	0.475	2	718	951	------	------	------	NW BIO
9	SCS Runoff	7.467	2	716	17,511	------	------	------	PROPOSED ROOF TO SW BIO
10	SCS Runoff	12.18	2	716	28,577	------	------	------	PROPOSED PAVEMENT TO SW BI
11	SCS Runoff	5.229	2	718	10,463	------	------	------	PROPOSED PERMEABLE TO SW BI
12	SCS Runoff	0.713	2	718	1,427	------	------	------	SW BIO
13	Combine	18.20	2	716	41,945	5, 6, 7, 8,	------	------	TO NW BIO
14	Combine	25.43	2	716	57,978	9, 10, 11, 12,	------	------	TO SW BIO
15	Reservoir	1.899	2	750	28,840	14	510.93	36,003	SW Bio Routing
16	Reservoir	1.644	2	744	22,739	13	496.12	25,956	NW Bio Routing
17	SCS Runoff	4.478	2	718	9,017	------	------	------	PROPOSED BYPASS BASIN 1
18	SCS Runoff	7.549	2	722	21,279	------	------	------	PROPOSED BYPASS BASIN 2
19	SCS Runoff	2.426	2	716	4,964	------	------	------	PROPOSED BYPASS BASIN 3
20	Combine	2.426	2	716	33,805	15, 19	------	------	TOTAL FLOW PROPOSED BASIN 3
21	SCS Runoff	2.419	2	720	6,320	------	------	------	PROPOSED BYPASS BASIN 4
22	Combine	3.580	2	724	29,059	16, 21	------	------	TOTAL FLOW PROPOSED BASIN 4

StoneBridge Apartments Hydrographs.gpw | Return Period: 2 Year | Friday, 10 / 29 / 2021

Forebay Sizing Calculator

							Porosity
Bioretention Area:	SW BIO				Ponding Depth:	1	1
Bioretention Required Tv:	19173	cf			Stone Depth:	0	0.4
Forebay Required Tv:	2876	cf			Equivalent Storage Depth:	1	
Required Surface Area:	2876	sf					
Provided Surface Area:	3393	sf					

							Porosity
Bioretention Area:	NW BIO				Ponding Depth:	1	1
Bioretention Required Tv:	15003	cf			Stone Depth:	0	0.4
Forebay Required Tv:	2250	cf			Equivalent Storage Depth:	1	
Required Surface Area:	2250	sf					
Provided Surface Area:	2252	sf					



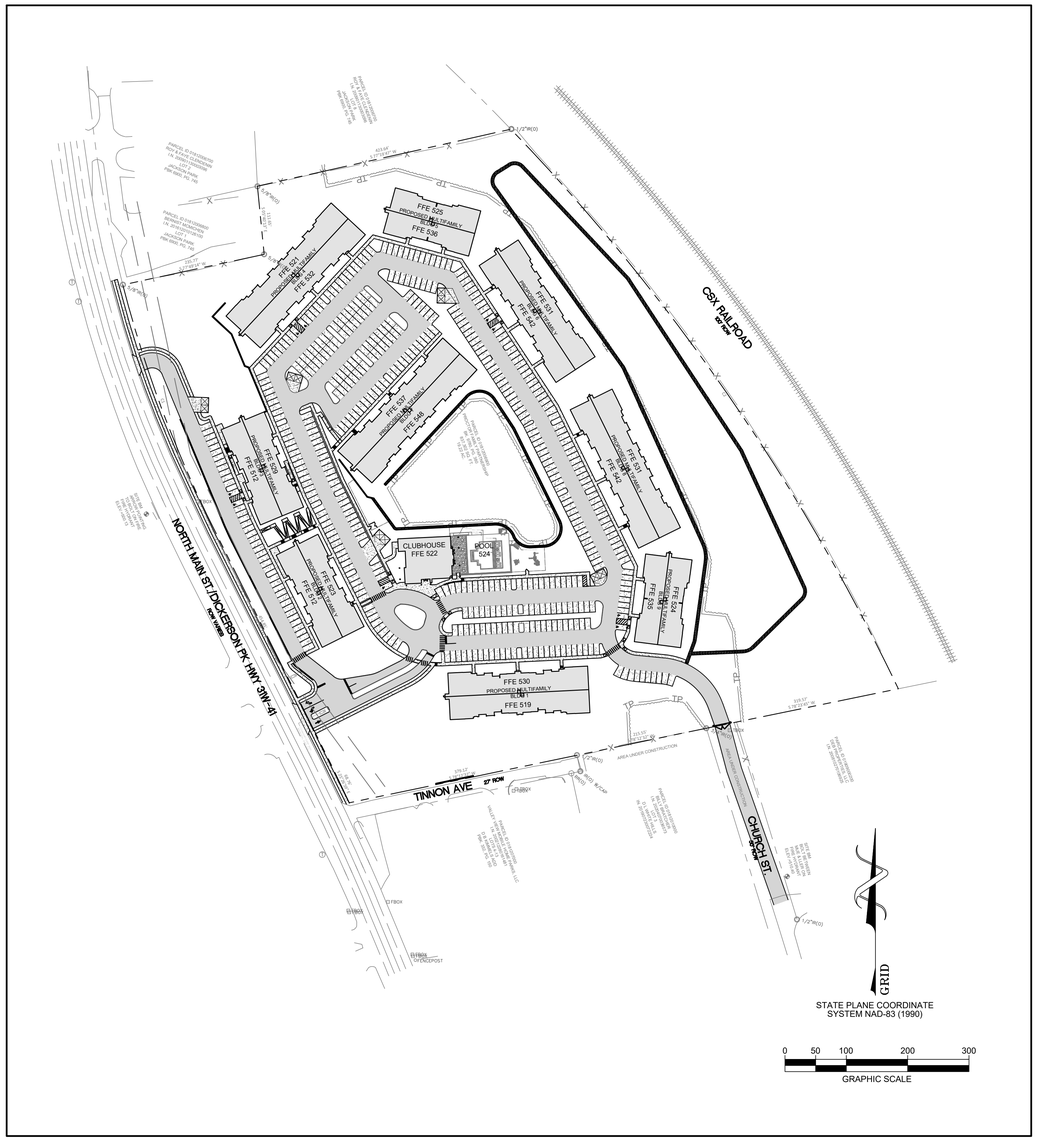
VICINITY MAP
N.T.S.

CONSTRUCTION DOCUMENTS
FOR
STONE BRIDGE LOFTS MUILTIFAMILY DEVELOPMENT
619 N. MAIN STREET
GOODLETTSVILLE, TENNESSEE

DAVIDSON COUNTY MAP: XX PARCELS: XXX

SITE DATA	
OWNER	PROCTOR FAMILY PARTNERSHIP
COUNCIL DISTRICT	10
COUNCIL MEMBER	ZACH YOUNG
PARCEL ID	1812006900
SITE ADDRESS	619 NORTH MAIN STREET GOODLETTSVILLE, TN 37072
PROPOSED USE	MULTIFAMILY RESIDENTIAL
FEMA PANEL	THE SUBJECT PROPERTY DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD ZONE ACCORDING TO FLOOD MAP NO. 47037CO129H, EFFECTIVE 04/05/2017
ZONING	HDRPUD / CS
SITE ACREAGE	19.22 AC
FAR ALLOWED / PROVIDED	1.0 / 0.51
BUILDING SF ALLOWED / PROVIDED	837,302 SF / 427,852 SF
OPEN SPACE REQUIRED / PROVIDED	20% / 54.23%
ISR ALLOWED / PROVIDED	0.8 / 0.46
BUILDING HEIGHT ALLOWED / PROVIDED	4 STORIES / 4 STORIES

FEDERAL COMPLIANCE NOTE:
ALL DEVELOPMENT WITHIN THE BOUNDARIES OF THIS PLANS MEETS THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT AND THE FAIR HOUSING ACT. ADA: http://www.ada.gov/ U.S. JUSTICE DEPT.: http://www.justice.gov/crt/housing/about_fairhousingact.htm



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C0.1 EXISTING CONDITIONS
C1.0 OVERALL SITE LAYOUT
C1.1 ENLARGED SITE LAYOUT
C1.2 ENLARGED SITE LAYOUT
C1.3 ENLARGED SITE LAYOUT
C1.4 ENLARGED SITE LAYOUT
C2.0 OVERALL GRADING AND DRANAGE
C2.1 ENLARGED GRADING AND DRANAGE
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LANDSCAPE PLANS
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L2.03 LANDSCAPE PLANS
L2.04 LANDSCAPE DETAILS & SCHEDULES
SITE PLAN PHOTOMETRIC

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134 4th Avenue N.
Franklin, TN 37064
615-628-7270

FOOD SERVICE:
Dine Company
3110 Preston Hwy
Louisville, KY 40213
502-637-3232

Project Name

STONE BRIDGE LOFTS

619 NORTH MAIN STREET GOODLETTSVILLE TN 37072

Client

HOLLADAY VENTURES

JOHN R. GORE REGISTERED ENGINEER AGRICULTURAL & BIOSYSTEMS ENGINEER NO. 120855 STATE OF TENNESSEE 11/02/21

NOT FOR CONSTRUCTION

Revisions

No.	Description	Date

COVER SHEET

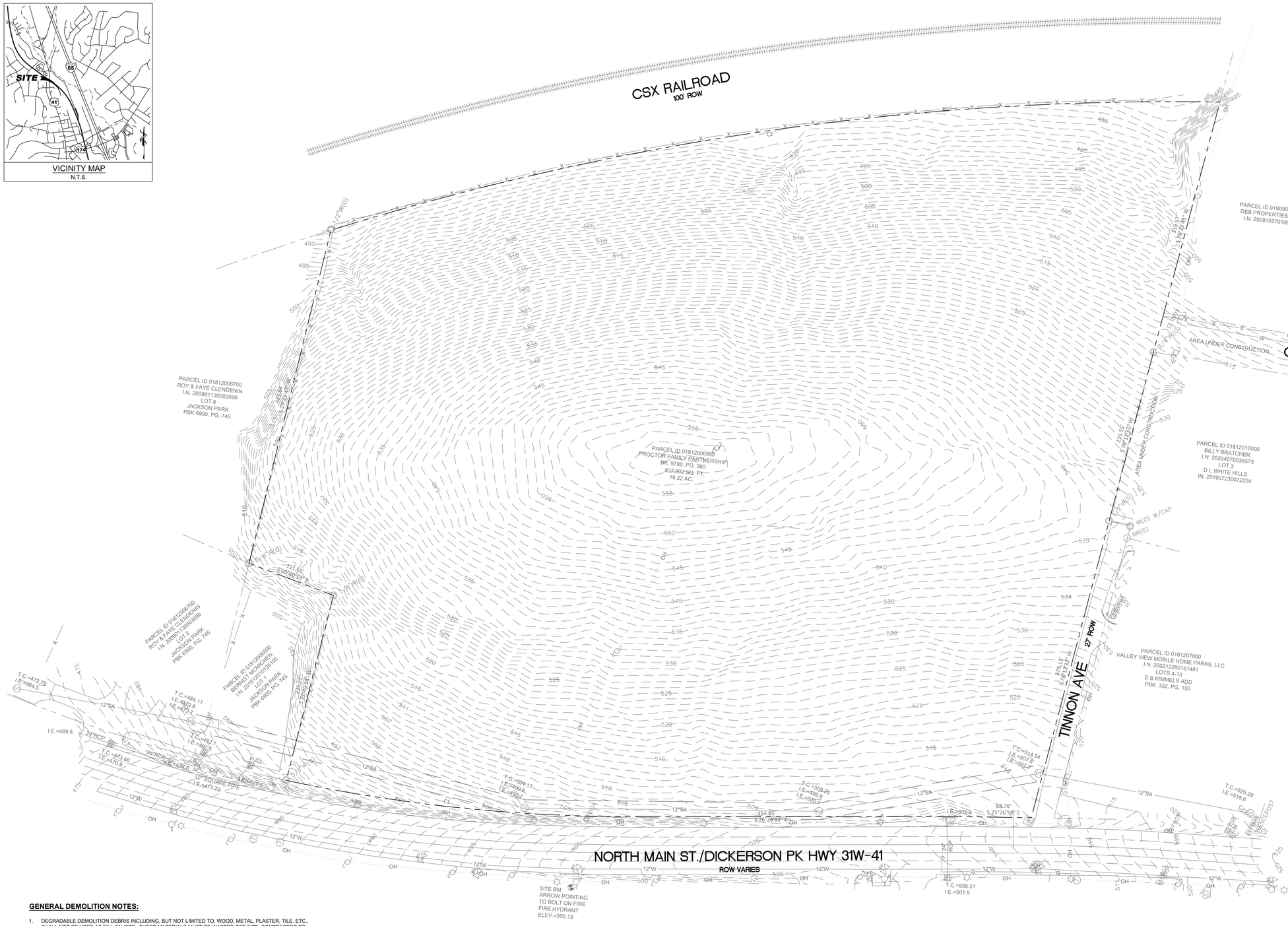
Project number	20HH01
Date	11.03.2021

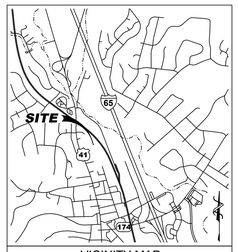
C0.0

Scale	As indicated

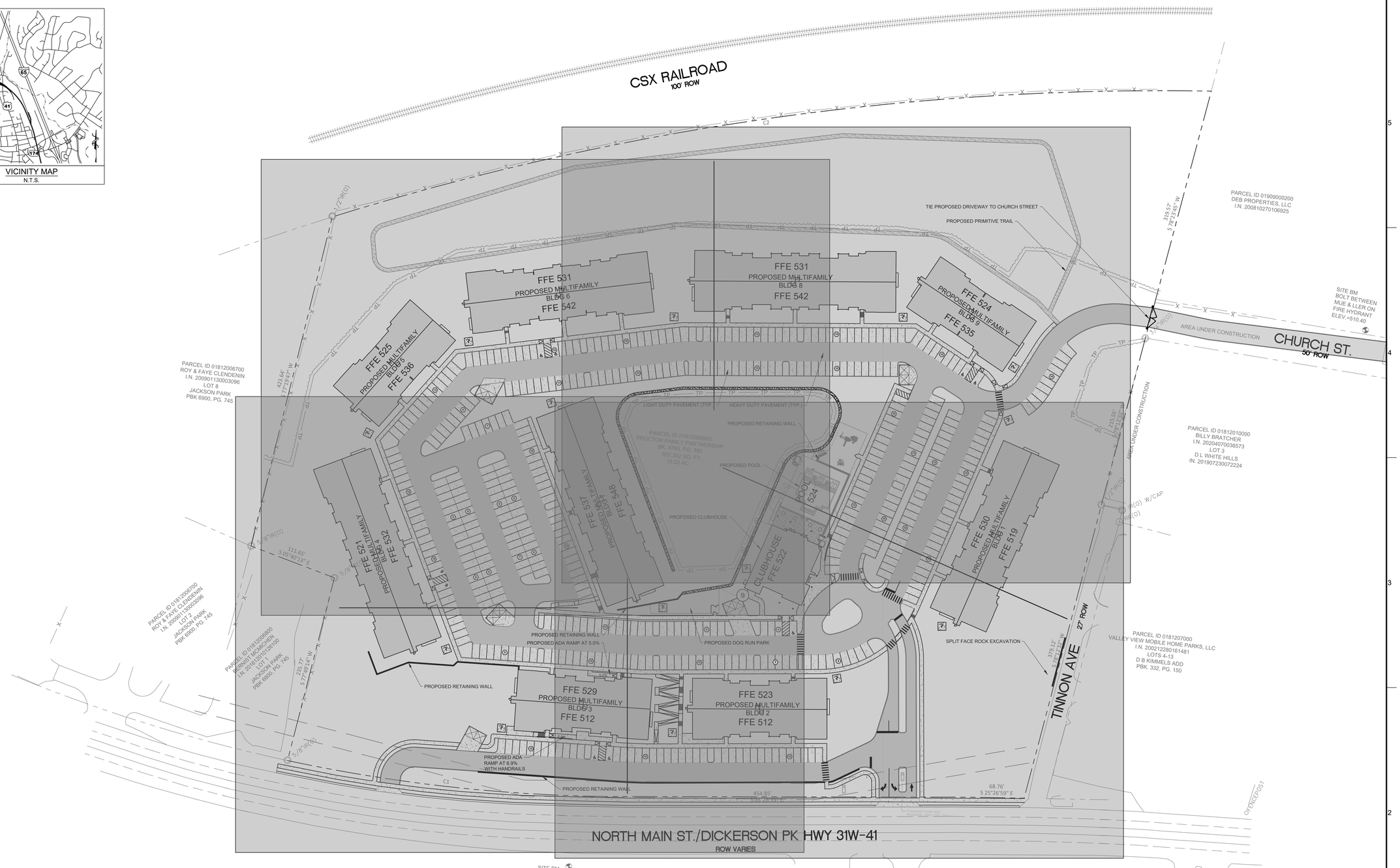
P:\2980 Holladay Ventures\2980-01 MF 619 N Main Goodlttsville\Dwg\C0.0-COVR-2980-01.dwg-C0.0 COVER

VICINITY MAP
N.T.S.


CSX RAILROAD
100' ROW
NORTH MAIN ST./DICKERSON PK HWY 31W-41
ROW VARIES
CHURCH ST.
50' ROW
TINNON AVE
27' ROW
AREA UNDER CONSTRUCTION
PARCEL ID 01812006700
ROY & FAYE CLENDENIN
I.N. 200901130003096
LOT 8
JACKSON PARK
PBK 6900, PG. 745
PARCEL ID 01812006900
PROCTOR FAMILY PARTNERSHIP
BK. 9780, PG. 380
837,302 SQ. FT.
19.22 AC.
PARCEL ID 01909000200
DEB PROPERTIES, LLC
I.N. 200810270106925
PARCEL ID 01812010000
BILLY BRATCHER
I.N. 20204070036573
LOT 2
D L WHITE HILLS
IN. 201907230072224
PARCEL ID 01812007000
VALLEY VIEW MOBILE HOME PARKS, LLC
I.N. 200212280161481
LOTS 4-13
D B KIMMELS ADD
PBK. 332, PG. 150
PARCEL ID 01812006800
BERNIST MCMICHEN
I.N. 201612070128100
LOT 1
JACKSON PARK
PBK 6900, PG. 745
SITE BM
BOLT BETWEEN
MUE & LLER ON
FIRE HYDRANT
ELEV.=510.40
SITE BM
ARROW POINTING
TO BOLT ON FIRE
FIRE HYDRANT
ELEV.=500.13
T.C.=506.51
I.E.=501.5
68.76'
S.25°26'58" E
454.85'
S.26°28'33" E
S.79°31'37" W
S.79°31'37" W
S.79°31'37" W



VICINITY MAP
N.T.S.



SITE BM
ARROW POINTING
TO BOLT ON FIRE
HYDRANT
ELEV.=500.13

GENERAL CONSTRUCTION NOTES:

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

SITE DATA

OWNER	PROCTOR FAMILY PARTNERSHIP
COUNCIL DISTRICT	10
COUNCIL MEMBER	ZACH YOUNG
PARCEL ID	1812006900
SITE ADDRESS	619 NORTH MAIN STREET GOODLETTSVILLE, TN 37072
PROPOSED USE	MULTIFAMILY RESIDENTIAL
FEMA PANEL	THE SUBJECT PROPERTY DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD ZONE ACCORDING TO FLOOD MAP NO. 47037C0129H, EFFECTIVE 04/05/2017
ZONING	HDRPUD / CS
SITE ACREAGE	19.22 AC
FAR ALLOWED / PROVIDED	1.0 / 0.51
BUILDING SF ALLOWED / PROVIDED	837,302 SF / 427,852 SF
OPEN SPACE REQUIRED / PROVIDED	20% / 54.23%
ISR ALLOWED / PROVIDED	0.8 / 0.46
BUILDING HEIGHT ALLOWED / PROVIDED	4 STORIES / 4 STORIES

(X) - INDICATES NUMBER OF PARKING SPACES IN AN AREA

PARKING TABLE

6000 SF COMMERCIAL SPACE - 4 SPACES PER 1000 SF:	24 SPACES
310 UNITS - 1.5 SPACES PER UNIT:	465 SPACES
PARKING SPACES REQUIRED:	489 SPACES
PARKING SPACES PROVIDED:	497 SPACES

GRID

STATE PLANE COORDINATE
SYSTEM NAD-83 (1990)

0 25 50 100 150
GRAPHIC SCALE

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502-637-3232

Project Name

STONE BRIDGE LOFTS

619 NORTH
MAIN STREET
GOODLETTSVILLE
TN 37072

Client

HOLLADAY VENTURES

JOHN R. GOOCH
REGISTERED ENGINEER
AGRICULTURE
NUMBER
120885
STATE OF TENNESSEE
11/03/21

NOT FOR CONSTRUCTION

Revisions

No.	Description	Date

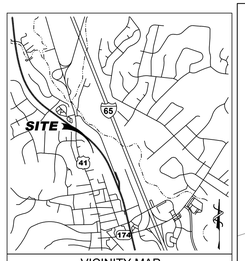
OVERALL SITE LAYOUT PLAN

Project number	20HH01
Date	11.03.2021

C1.0

Scale: As indicated

P:\2980 Holladay Ventures\2980-01 MF 619 N Main Goodltsvle\Dwg\C1.0-SITE-2980-01.dwg-C1.0 SITE



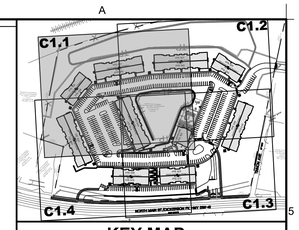
VICINITY MAP
N.T.S.

SITE PLAN KEYNOTES:

1. LIGHT DUTY ASPHALT PAVEMENT (TYP), SEE DETAIL SHEET C5.0
2. HEAVY DUTY ASPHALT PAVEMENT (TYP), SEE DETAIL SHEET C5.0
3. CONCRETE PAVEMENT, SEE DETAIL SHEET C5.0
4. POST CURB (TYP), SEE DETAIL SHEET C5.0
5. CONCRETE SIDEWALK (TYP), SEE DETAIL SHEET C5.0
6. INTEGRAL CONCRETE CURB & SIDEWALK, SEE DETAIL SHEET C5.0
7. PROPOSED DESIGN / BUILD GRAVITY WALL, DESIGN BY OTHERS
8. PROPOSED BUILDING, SEE ARCHITECTURAL PLANS FOR DETAILS
9. TRASH ENCLOSURE, REFER TO ARCHITECTURAL DRAWINGS FOR DETAILS
10. ACCESSIBLE PARKING SPACE (TYP), SEE DETAIL SHEET C5.0
12. ACCESSIBLE CONCRETE RAMP WITH HANDRAILS, SEE DETAIL SHEET C5.0
15. CONCRETE STAIRS WITH HANDRAILS. SEE DETAIL SHEET C5.0

ALL RADII 3' UNLESS OTHERWISE NOTED

MATCHLINE SEE SHEET C1.2



KEY MAP

PROPOSED PRIMITIVE TRAIL

FFE 531
PROPOSED MULTIFAMILY
BLDG 6
FFE 542

FFE 531
PROPOSED MULTIFAMILY
BLDG 8
FFE 542

FFE 525
PROPOSED MULTIFAMILY
BLDG 5
FFE 536

PROPOSED DUMPSTER ENCLOSURE

FFE 521
PROPOSED MULTIFAMILY
BLDG 4
FFE 532

FFE 537
PROPOSED MULTIFAMILY
BLDG 7
FFE 548

PARCEL ID 01812006900
PROCTOR FAMILY PARTNERSHIP
BK. 9780, PG. 380
837,302 SQ. FT.
19.22 AC.

SPLIT FACE ROCK EXCAVATION

INDICATES BUILDING STEP

OPEN SPACE

TREE PROTECTION FENCE, SEE LANDSCAPE PLANS FOR DETAILS

PROPOSED DESIGN/BUILD GRAVITY WALL

POOL
524

CLUBHOUSE

423.64'
S 77°19'47" W

111.65'
S 05°40'13" E

MATCHLINE SEE SHEET C1.4

GRID

STATE PLANE COORDINATE SYSTEM NAD-83 (1990)

0 10 20 40 60
GRAPHIC SCALE

NOTE:
1. SEE SHEET C1.0 FOR GENERAL CONSTRUCTION NOTES.

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615-255-5218

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Franklin, TN 37064
615-628-7270

FOOD SERVICE:
Dine Company
3110 Preston Hwy
Louisville, KY 40213
502-637-3232

Project Name

STONE BRIDGE LOFTS

619 NORTH MAIN STREET
GOODLETTSVILLE TN 37072

Client

HOLLADAY VENTURES

JOHN R. GORE
REGISTERED ENGINEER
AGENT OF RECORD
NO. 120855
STATE OF TENNESSEE
11/02/21

NOT FOR CONSTRUCTION

Revisions

No.	Description	Date

ENLARGED SITE LAYOUT PLAN

Project number	20HH01
Date	11.03.2021

C1.1

Scale	As indicated

P:\2980 Holladay Ventures\2980-01 MF 619 N Main Goodlts\vle\Dwg\C1.0-SITE-2980-01.dwg-C1.1

VICINITY MAP
N.T.S.

SITE PLAN KEYNOTES:

1. LIGHT DUTY ASPHALT PAVEMENT (TYP), SEE DETAIL SHEET C5.0
2. HEAVY DUTY ASPHALT PAVEMENT (TYP), SEE DETAIL SHEET C5.0
3. CONCRETE PAVEMENT, SEE DETAIL SHEET C5.0
4. POST CURB (TYP), SEE DETAIL SHEET C5.0
5. CONCRETE SIDEWALK (TYP), SEE DETAIL SHEET C5.0
6. INTEGRAL CONCRETE CURB & SIDEWALK, SEE DETAIL SHEET C5.0
7. PROPOSED DESIGN / BUILD GRAVITY WALL, DESIGN BY OTHERS
8. PROPOSSED BUILDING, SEE ARCHITECTURAL PLANS FOR DETAILS
9. TRASH ENCLOSURE, REFER TO ARCHITECTURAL DRAWINGS FOR DETAILS
10. ACCESSIBLE PARKING SPACE (TYP), SEE DETAIL SHEET C5.0
12. ACCESSIBLE CONCRETE RAMP WITH HANDRAILS, SEE DETAIL SHEET C5.0
15. CONCRETE STAIRS WITH HANDRAILS. SEE DETAIL SHEET C5.0

ALL RADII 3' UNLESS OTHERWISE NOTED

MATCHLINE SEE SHEET C1.1

FFE 531
PROPOSED MULTIFAMILY
BLDG 8
FFE 542

FFE 524
PROPOSED MULTIFAMILY
BLDG 9
FFE 535

542

PARCEL ID 01812006900
PROCTOR FAMILY PARTNERSHIP
BK. 9780, PG. 380
837,302 SQ. FT.
19.22 AC.

MATCHLINE SEE SHEET C1.3

POOL
524

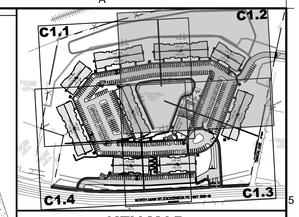
CLUBHOUSE
FFE 522

FFE 537
PROPOSED MULTIFAMILY
BLDG 7
FFE 548

FFE 530
PROPOSED MULTIFAMILY
BLDG 1
FFE 519

1:12 ADA RAMP

215.55'
S78°12'32"W



KEY MAP

GRID

STATE PLANE COORDINATE
SYSTEM NAD-83 (1990)

0 10 20 40 60
GRAPHIC SCALE

NOTE:
1. SEE SHEET C1.0 FOR GENERAL CONSTRUCTION NOTES.

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Project Name

STONE BRIDGE LOFTS

619 NORTH
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GOODLETTSVILLE
TN 37072

Client

HOLLADAY VENTURES

JOHN R GORE
REGISTERED ENGINEER
AGENT
NO. 108856
STATE OF TENNESSEE
11/08/21

NOT FOR CONSTRUCTION

Revisions

No.	Description	Date

ENLARGED SITE LAYOUT PLAN

Project number	20HH01
Date	11.03.2021

C1.2

Scale	As indicated

P:\2980 Holladay Ventures\2980-01 MF 619 N Main Goodlettsville\Dwg\C1.0-SITE-2980-01.dwg-C1.2

VICINITY MAP
N.T.S.

SITE PLAN KEYNOTES:

1. LIGHT DUTY ASPHALT PAVEMENT (TYP), SEE DETAIL SHEET C5.0
2. HEAVY DUTY ASPHALT PAVEMENT (TYP), SEE DETAIL SHEET C5.0
3. CONCRETE PAVEMENT, SEE DETAIL SHEET C5.0
4. POST CURB (TYP), SEE DETAIL SHEET C5.0
5. CONCRETE SIDEWALK (TYP), SEE DETAIL SHEET C5.0
6. INTEGRAL CONCRETE CURB & SIDEWALK, SEE DETAIL SHEET C5.0
7. PROPOSED DESIGN / BUILD GRAVITY WALL, DESIGN BY OTHERS
8. PROPOSED BUILDING, SEE ARCHITECTURAL PLANS FOR DETAILS
9. TRASH ENCLOSURE, REFER TO ARCHITECTURAL DRAWINGS FOR DETAILS
10. ACCESSIBLE PARKING SPACE (TYP), SEE DETAIL SHEET C5.0
12. ACCESSIBLE CONCRETE RAMP WITH HANDRAILS, SEE DETAIL SHEET C5.0
13. TDOT STANDARD CURB & GUTTER (RD01-TS-6), SEE DETAIL SHEET C5.0
15. CONCRETE STAIRS WITH HANDRAILS. SEE DETAIL SHEET C5.0
16. MSUD CONCRETE DRIVE RAMP (ST-314), SEE DETAIL SHEET C5.0

ALL RADII 3' UNLESS NOTED OTHERWISE

PARCEL ID 01812006900
PROCTOR FAMILY PARTNERSHIP
BK. 9780, PG. 380
837,302 SQ. FT.
19.22 AC.

MATCHLINE SEE SHEET C1.2

MATCHLINE SEE SHEET C1.4

POOL 524

CLUBHOUSE FFE 522

FFE 530
PROPOSED MULTIFAMILY
BLDG 1
FFE 519

FFE 529
PROPOSED MULTIFAMILY
BLDG 3
FFE 512

FFE 523
PROPOSED MULTIFAMILY
BLDG 2
FFE 512

PAVEMENT MARKING (TYP.) PEDESTRIAN CROSSWALK, SEE DETAIL SHEET C5.1

24" WIDE STOP BAR (TYP.) (WHITE REFLECTIVE PAINT)

PROPOSED MONUMENT SIGN PER GOODLETTSVILLE ZONING REQUIREMENTS

COMMUNITY ENTRY SIGN: RESIDENTIAL, SHEET L3.00 - DETAIL 1

454.85'
S 26°26'33" E

68.76'
S 25°26'59" E

379.12'
S 78°12'32" W

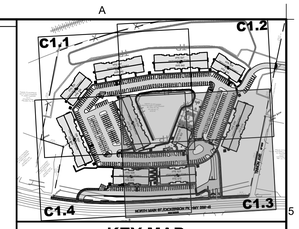
27' ROW

TINNON AVE

VALLE

NORTH MAIN ST./DICKERSON PK HWY 31W-41

ROW VARIES



KEY MAP

GRID

STATE PLANE COORDINATE SYSTEM NAD-83 (1950)

0 10 20 40 60
GRAPHIC SCALE

NOTE:
1. SEE SHEET C1.0 FOR GENERAL CONSTRUCTION NOTES.

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Nashville, TN 37209
615-356-9911

LANDSCAPE:
Hawkins Partners
1900 Church Street, Suite 402
Nashville, TN 37203
615-255-5218

STRUCTURAL / MEP:
Genesis Engineering
134 4th Avenue N.
Franklin, TN 37064
615-628-7270

FOOD SERVICE:
Dine Company
3110 Preston Hwy
Louisville, KY 40213
502-637-3232

Project Name

STONE BRIDGE LOFTS

619 NORTH MAIN STREET
GOODLETTSVILLE
TN 37072

Client

HOLLADAY VENTURES

JOHN R GORE
REGISTERED
ARCHITECT
102855
STATE OF TENNESSEE
11/03/21

NOT FOR CONSTRUCTION

Revisions

No.	Description	Date

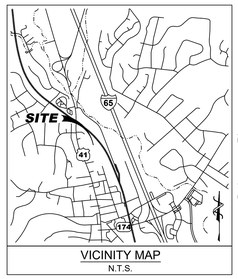
ENLARGED SITE LAYOUT PLAN

Project number	20HH01
Date	11.03.2021

C1.3

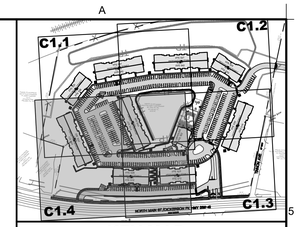
Scale	As indicated

P:\2980 Holladay Ventures\2980-01 MF 619 N Main Goodlettsville\Dwg\C1.0-SITE-2980-01.dwg-C1.3



SITE PLAN KEYNOTES:

1. LIGHT DUTY ASPHALT PAVEMENT (TYP), SEE DETAIL SHEET C5.0
2. HEAVY DUTY ASPHALT PAVEMENT (TYP), SEE DETAIL SHEET C5.0
3. CONCRETE PAVEMENT, SEE DETAIL SHEET C5.0
4. POST CURB (TYP), SEE DETAIL SHEET C5.0
5. CONCRETE SIDEWALK (TYP), SEE DETAIL SHEET C5.0
6. INTEGRAL CONCRETE CURB & SIDEWALK, SEE DETAIL SHEET C5.0
7. PROPOSED DESIGN / BUILD GRAVITY WALL, DESIGN BY OTHERS
8. PROPOSSED BUILDING, SEE ARCHITECTURAL PLANS FOR DETAILS
9. TRASH ENCLOSURE, REFER TO ARCHITECTURAL DRAWINGS FOR DETAILS
10. ACCESSIBLE PARKING SPACE (TYP), SEE DETAIL SHEET C5.0
11. MPW SIDEWALK CONSTRUCTION (ST-210), SEE DETAIL SHEET C5.0
12. ACCESSIBLE CONCRETE RAMP WITH HANDRAILS, SEE DETAIL SHEET C5.0
13. MPW STANDARD CURB & GUTTER (ST-200), SEE DETAIL SHEET C5.0
14. PROPOSED STORMWATER AREA FOR DETENTION AND WATER QUALITY. SEE GRADING AND DRAINAGE DRAWINGS FOR DETAILS
15. CONCRETE STAIRS WITH HANDRAILS. SEE DETAIL SHEET C5.0
16. MSUD CONCRETE DRIVE RAMP (ST-314), SEE DETAIL SHEET C5.0



KEY MAP

PARCEL ID 01812006900
PROCTOR FAMILY PARTNERSHIP
BK. 9780, PG. 380
837,302 SQ. FT.
19.22 AC.

PARCEL ID 01812006800
JERNIST MCMICHEN
I.N. 201612010126100
LOT 1
JACKSON PARK
PBK 6900, PG. 745

S 77°49'14" W
235.77'

5/8"IR(O)

MATCHLINE SEE SHEET C1.1

MATCHLINE SEE SHEET C1.3

C1

NORTH MAIN ST./DICKEF

ROW VAR

GRID

STATE PLANE COORDINATE SYSTEM NAD-83 (1990)

0 10 20 40 60
GRAPHIC SCALE

NOTE:
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Project Name

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TN 37072

Client

HOLLADAY VENTURES

JOHN R. GOFF
REGISTERED ENGINEER
AGRICULTURE
NO. 108956
STATE OF TENNESSEE
11/03/21

NOT FOR CONSTRUCTION

Revisions

No.	Description	Date

ENLARGED SITE LAYOUT PLAN

Project number	20HH01
Date	11.03.2021

C1.4

Scale: As indicated

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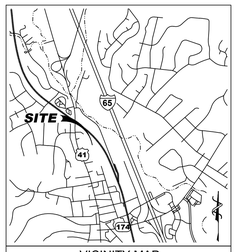


VICINITY MAP
N.T.S.

STATE PLANE COORDINATE
SYSTEM NAD-83 (1990)

0 25 50 100 150
GRAPHIC SCALE

STORM STRUCTURE TABLE

STRUC. #	TYPE	CASTING FRAME	TOP OF CASTING (Elev.)	PIPE I.E. (IN)	PIPE I.E. (OUT)
S1	DR-150 WINGED HEADWALL	---	---	480.00	---
S2	SINGLE CURB INLET REC STR	STANDARD	486.75	481.50 481.50	481.50
S3	SINGLE CURB INLET REC STR	STANDARD	493.00	488.00	488.00
S4	SINGLE CURB INLET REC STR	STANDARD	501.00	493.00	493.00
S5	SINGLE CURB INLET REC STR	STANDARD	505.50	---	496.00
S6	SINGLE CURB INLET REC STR	STANDARD	509.00	502.90	---
S7	AREA INLET REC STR REC FRAME	STANDARD	499.00	---	485.05
S8	DR-150 WINGED HEADWALL	---	---	496.00	---
S9	TRIPLE CURB INLET REC STR	STANDARD	530.67	499.00	498.00
S10	SINGLE CURB INLET REC STR	STANDARD	534.00	522.00	522.00
S11	DOUBLE CURB INLET REC STR	STANDARD	521.54	---	529.00
S12	DR-150 WINGED HEADWALL	---	---	496.00	---
S13	SINGLE CURB INLET REC STR	STANDARD	509.50	497.55	497.55
S14	SINGLE CURB INLET REC STR	STANDARD	512.42	500.26	500.26
S15	SINGLE CURB INLET REC STR	STANDARD	509.20	502.00	502.00
S16	SINGLE CURB INLET REC STR	STANDARD	509.92	503.00	503.00
S17	SINGLE CURB INLET REC STR	STANDARD	512.92	---	505.00
S18	DR-150 WINGED HEADWALL	---	---	511.00	---
S19	SINGLE CURB INLET REC STR	STANDARD	515.92	511.39	511.39
S20	SINGLE CURB INLET REC STR	STANDARD	517.50	512.00	512.00
S21	DOUBLE CURB INLET REC STR	STANDARD	519.12	512.25	512.25
S22	SINGLE CURB INLET REC STR	STANDARD	0.92	---	520.00
S23	DR-150 WINGED HEADWALL	---	---	511.00	---
S24	SINGLE CURB INLET REC STR	STANDARD	523.20	515.20	515.20
S25	SINGLE CURB INLET REC STR	STANDARD	523.80	515.85	515.85
S26	SINGLE CURB INLET REC STR	STANDARD	532.29	526.40	526.40
S27	DOUBLE CURB INLET REC STR	STANDARD	536.92	---	530.75
S28	DR-150 WINGED HEADWALL	---	---	511.00	---
S29	ADS NYLOPLAST STRUCTURE	STANDARD	517.50	511.50	511.50
S30	ADS NYLOPLAST STRUCTURE	STANDARD	517.50	512.50	512.50
S31	ADS NYLOPLAST STRUCTURE	STANDARD	517.50	514.00	514.00
S32	SINGLE CURB INLET REC STR	STANDARD	526.50	---	520.00
S33	AREA INLET REC STR REC FRAME	STANDARD	514.00	---	506.00

STORM PIPE TABLE

UPSTREAM STRUCTURE	DOWNSTREAM STRUCTURE	PIPE SIZE (INCHES)	PIPE MATERIAL	SLOPE (%)	LENGTH (L.F.)
S2	S1	24	RCP	1.41%	106.32
S3	S2	15	RCP	4.49%	144.91
S4	S3	15	RCP	2.40%	208.15
S5	S4	15	RCP	1.44%	208.49
S7	S2	15	RCP	5.17%	68.73
S9	S8	15	HDPE	8.13%	24.59
S10	S9	15	HDPE	7.61%	302.13
S11	S10	15	HDPE	5.14%	136.20
S13	S12	15	HDPE	1.00%	155.21
S14	S13	15	HDPE	1.04%	260.71
S15	S14	15	HDPE	1.38%	125.73
S16	S15	15	HDPE	1.80%	55.70
S17	S16	15	HDPE	3.31%	60.49
S19	S18	18	HDPE	1.01%	38.55
S20	S19	18	HDPE	1.24%	49.23
S21	S20	18	HDPE	1.05%	23.72
S22	S21	15	HDPE	2.83%	274.22
S24	S23	15	HDPE	3.00%	140.14
S25	S24	15	HDPE	3.01%	21.57
S26	S25	15	HDPE	4.66%	226.30
S27	S26	15	HDPE	5.43%	80.05
S29	S28	15	HDPE	1.25%	39.90
S30	S29	15	HDPE	1.14%	87.75
S31	S30	15	HDPE	1.28%	116.81
S32	S31	15	HDPE	4.23%	141.85
S33	S6	15	RCP	3.22%	96.26

AS-BUILT NOTE: IN ACCORDANCE WITH THE METRO STORMWATER MANAGEMENT MANUAL, VOLUME 1, SECTION 3.9, AS-BUILT CERTIFICATIONS, MWS STORMWATER DIVISION MUST APPROVE THE FOLLOWING AS-BUILTS PRIOR TO ISSUANCE OF THE USE AND OCCUPANCY PERMIT:

- UNDERGROUND DETENTION AND WATER QUALITY INFRASTRUCTURE
- ABOVE GROUND DETENTION AND WATER QUALITY INFRASTRUCTURE
- PUBLIC STORM SEWER INFRASTRUCTURE
- CUT AND FILL IN THE FLOODPLAIN
- SINK HOLE ALTERATIONS
- BIORETENTION
- URBAN BIORETENTION
- PERVIOUS PAVERS

ADA NOTES:
ALL CONSTRUCTION ACTIVITIES SHALL BE COMPLETED IN FULL COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT ("ADA") AND ARCHITECTURAL AND TRANSPORTATION BARRIERS COMPLIANCE BOARD, FEDERAL REGISTER 36 CFR PARTS 1190 AND 1191, ACCESSIBILITY GUIDELINES; PROPOSED RULE, PUBLISHED IN THE FEDERAL REGISTER ON JULY 23, 2004, AS HAS BEEN ADOPTED BY METRO.

ALL ADA CONCRETE RAMPS SHALL HAVE A MINIMUM 5' X 5' LEVEL (MAXIMUM 2% SLOPE IN ANY DIRECTION) LANDING AT TOP AND BOTTOM OF RAMP.

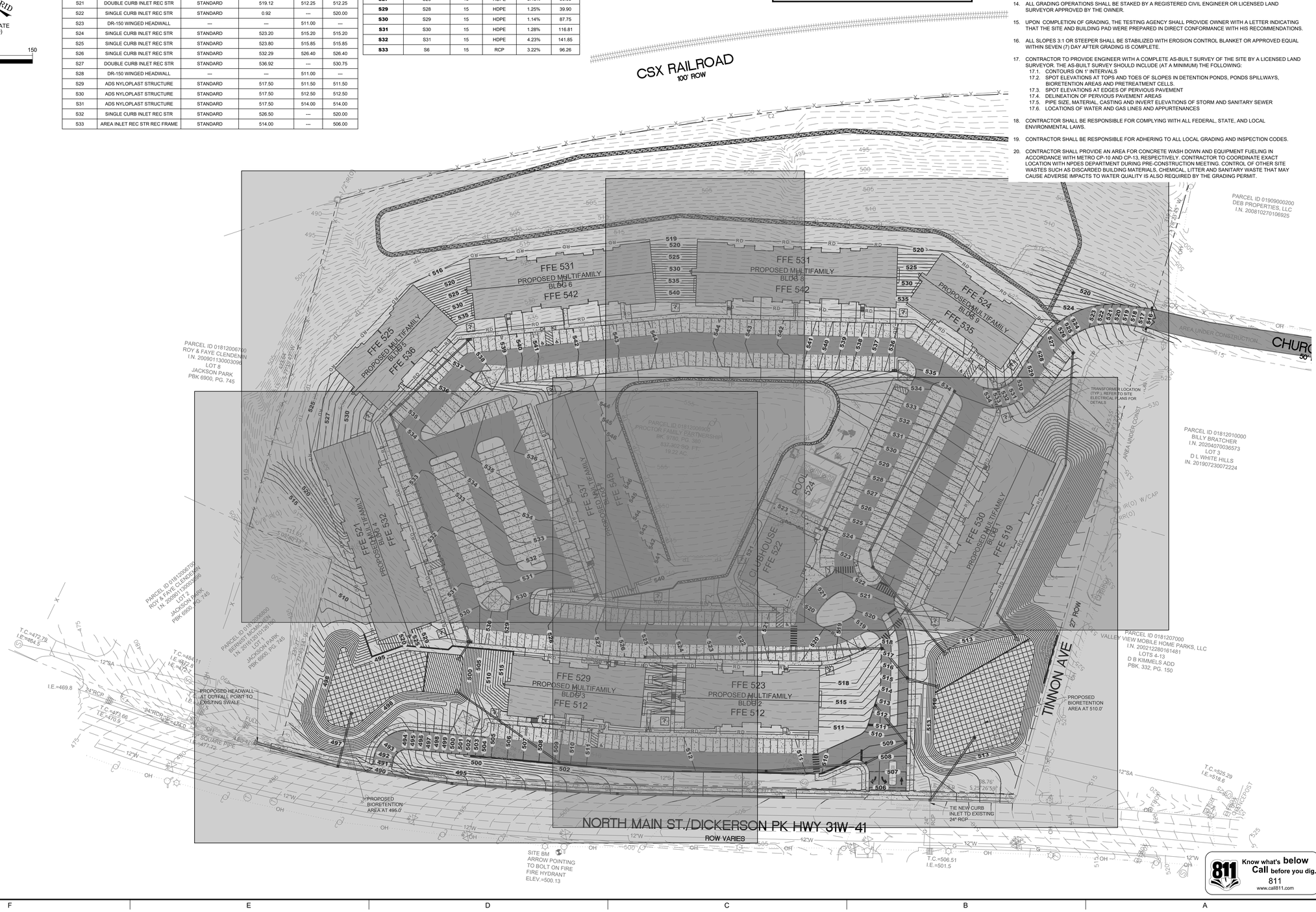
ALL SIDEWALKS ON SITE SHALL BE ADA COMPLIANT IN ACCORDANCE WITH METRO CODE. ALL SIDEWALKS SHALL HAVE 5% OR LESS RUNNING SLOPE. RAMPS AND LANDINGS REQUIRED IF SLOPE IS OVER 5%. MAXIMUM CROSS SLOPE ALLOWED IS 2%.

FEMA DATA FOR PROJECT LOCATION:

THE SUBJECT PROPERTY DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD ZONE ACCORDING TO FLOOD MAP NO. 47037C0129H, EFFECTIVE 04/05/2017

GRADING AND DRAINAGE NOTES:

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



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Project Name

STONE BRIDGE LOFTS

619 NORTH
MAIN STREET
GOODLETTSVILLE
TN 37072

Client

HOLLADAY VENTURES

JOHN R. GORE
REGISTERED ENGINEER
AGENCY
108856
STATE OF TENNESSEE
11/08/21

NOT FOR CONSTRUCTION

Revisions

No.	Description	Date

OVERALL GRADING AND DRAINAGE

Project number	20HH01
Date	11.03.2021

C2.0

Scale	As indicated

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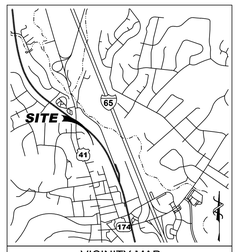
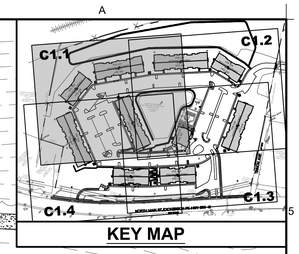
P:\2980 Holladay Ventures\2980-01 MF 619 N Main Goodlettsville\Dwg\C2.0-GRAD-2980-01.dwg-C2.0 GRADING & DRAINAGE PLAN



GRADING & DRAINAGE KEYNOTES:

1. CONNECT ADS UNDERDRAIN TO PROPOSED ROOF DRAIN LEADERS, VERIFY SIZE AND METHOD OF CONNECTION WITH ARCHITECTURAL DRAWINGS
2. ACCESSIBLE PARKING SPACES, CROSS SLOPE SHALL NOT EXCEED 2% IN ANY DIRECTION.
3. INLET REFER TO STRUCTURE TABLE ON SHEET C2.0, FOR DETAILS SEE SHEET C5.1

NOTES:
1. SEE SHEET C2.0 FOR STORM STRUCTURE SCHEDULE AND STORM PIPE SCHEDULE
2. REFER TO SHEET C4.0 THRU C4.2 FOR EROSION CONTROL MEASURES.
3. SEE SHEET C2.0 FOR GRADING AND DRAINAGE NOTES.



FFE 531
PROPOSED MULTIFAMILY
BLDG 6
FFE 542

FFE 525
PROPOSED MULTIFAMILY
BLDG 5
FFE 536

FFE 521
PROPOSED MULTIFAMILY
BLDG 4
FFE 532

FFE 537
PROPOSED MULTIFAMILY
BLDG 7
FFE 548

CLUBHOUSE
FFE 522

SEWER LINE, SEE SHEET C3.0

SPLIT FACE ROCK EXCAVATION

TREE PROTECTION FENCE, SEE LANDSCAPE PLANS FOR DETAILS

PARCEL ID 01812006900
PROCTOR FAMILY PARTNERSHIP
BK. 9780, PG. 380
837,302 SQ. FT.
19.22 AC.

423.64'
S 77°19'47" W

111.65'
S 05°40'13" E

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10885
STATE OF TENNESSEE
11/08/21

NOT FOR CONSTRUCTION

Revisions

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ENLARGED GRADING AND DRAINAGE

Project number	20HH01
Date	11.03.2021

C2.1

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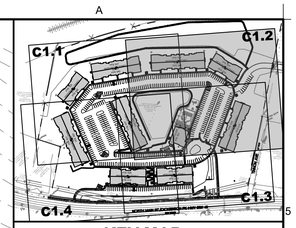

GRID

STATE PLANE COORDINATE SYSTEM NAD-83 (1990)

0 10 20 40 60

GRAPHIC SCALE

FFE 531
PROPOSED MULTIFAMILY
BLDG 8
FFE 542

FFE 524
PROPOSED MULTIFAMILY
BLDG 9
FFE 535

FFE 530
PROPOSED MULTIFAMILY
BLDG 1
FFE 519

FFE 548

CLUBHOUSE
FFE 522

POOL
524

SEWER LINE, SEE SHEET C3.0

8" PVC

15"HDPE

SPLIT FACE ROCK EXCAVATION

TREE PROTECTION FENCE, SEE LANDSCAPE PLANS FOR DETAILS

TRANSFORMER LOCATION (TYP.), REFER TO SITE ELECTRICAL PLANS FOR DETAILS

PARCEL ID 01812006900
PROCTOR FAMILY PARTNERSHIP
BK. 9780, PG. 380
837,302 SQ. FT.
19.22 AC.

215.55'
S78°12'32" W

AREA UNDER CONSTRUCTION

27' ROW

IR(O) W/CAP

RR(O)

NOTES:
1. SEE SHEET C2.0 FOR STORM STRUCTURE SCHEDULE AND STORM PIPE SCHEDULE
2. REFER TO SHEET C4.0 THRU C4.2 FOR EROSION CONTROL MEASURES.
3. SEE SHEET C2.0 FOR GRADING AND DRAINAGE NOTES.

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11/08/21

NOT FOR CONSTRUCTION

Revisions

No.	Description	Date

ENLARGED GRADING AND DRAINAGE

Project number	20HH01
Date	11.03.2021

C2.2

Scale	As indicated

P:\20980 Holladay Ventures\20980-01 MF 619 N Main Goodlettsville\Dwg\C2.0-GRAD-20980-01.dwg-C2.2

GRADING & DRAINAGE KEYNOTES:

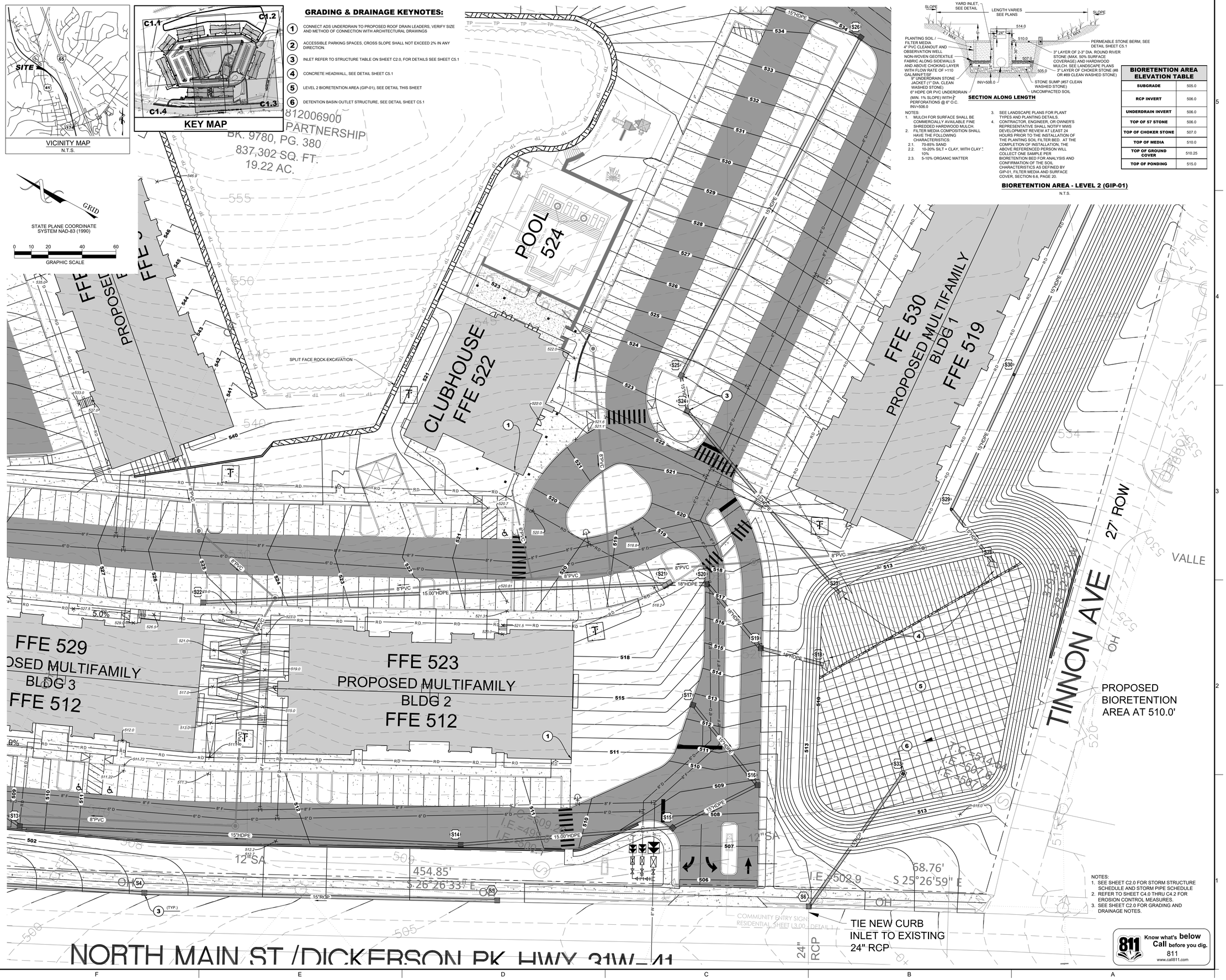
1. CONNECT ADS UNDERDRAIN TO PROPOSED ROOF DRAIN LEADERS, VERIFY SIZE AND METHOD OF CONNECTION WITH ARCHITECTURAL DRAWINGS
2. ACCESSIBLE PARKING SPACES, CROSS SLOPE SHALL NOT EXCEED 2% IN ANY DIRECTION.
3. INLET REFER TO STRUCTURE TABLE ON SHEET C2.0, FOR DETAILS SEE SHEET C5.1
4. CONCRETE HEADWALL, SEE DETAIL SHEET C5.1
5. LEVEL 2 BIORETENTION AREA (GIP-01), SEE DETAIL THIS SHEET
6. DETENTION BASIN OUTLET STRUCTURE, SEE DETAIL SHEET C5.1

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

SECTION ALONG LENGTH

BIORETENTION AREA ELEVATION TABLE	
SUBGRADE	505.0
RCP INVERT	506.0
UNDERDRAIN INVERT	506.0
TOP OF 57 STONE	506.0
TOP OF CHOKER STONE	507.0
TOP OF MEDIA	510.0
TOP OF GROUND COVER	510.25
TOP OF PONDING	515.0

BIORETENTION AREA - LEVEL 2 (GIP-01)
N.T.S.



NOTES:
1. SEE SHEET C2.0 FOR STORM STRUCTURE SCHEDULE AND STORM PIPE SCHEDULE
2. REFER TO SHEET C4.0 THRU C4.2 FOR EROSION CONTROL MEASURES.
3. SEE SHEET C2.0 FOR GRADING AND DRAINAGE NOTES.

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134 4th Avenue N.
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FOOD SERVICE:
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502-637-3232

Project Name

STONE BRIDGE LOFTS

619 NORTH
MAIN STREET
GOODLETTSVILLE
TN 37072

Client

HOLLADAY VENTURES

JOHN R GORE REGISTERED PROFESSIONAL ENGINEER NO. 109855 STATE OF TENNESSEE 11/08/21

NOT FOR CONSTRUCTION

Revisions

No.	Description	Date

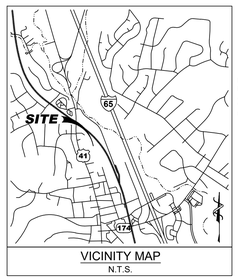
ENLARGED GRADING AND DRAINAGE

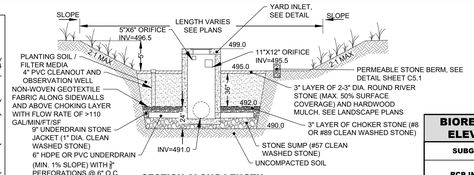
Project number	20HH01
Date	11.03.2021

C2.3

Scale: As indicated

P:\2980 Holladay Ventures\2980-01 MF 619 N Main Goodlettsville\Dwg\C2.0-GRAD-2980-01.dwg,C2.3





SECTION ALONG LENGTH

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BIORETENTION AREA ELEVATION TABLE

SUBGRADE	490.0
RCP INVERT	491.0
UNDERDRAIN INVERT	491.0
TOP OF 57 STONE	491.0
TOP OF CHOKER STONE	492.0
TOP OF MEDIA	495.0
TOP OF GROUND COVER	495.25
TOP OF PONDING	500.0

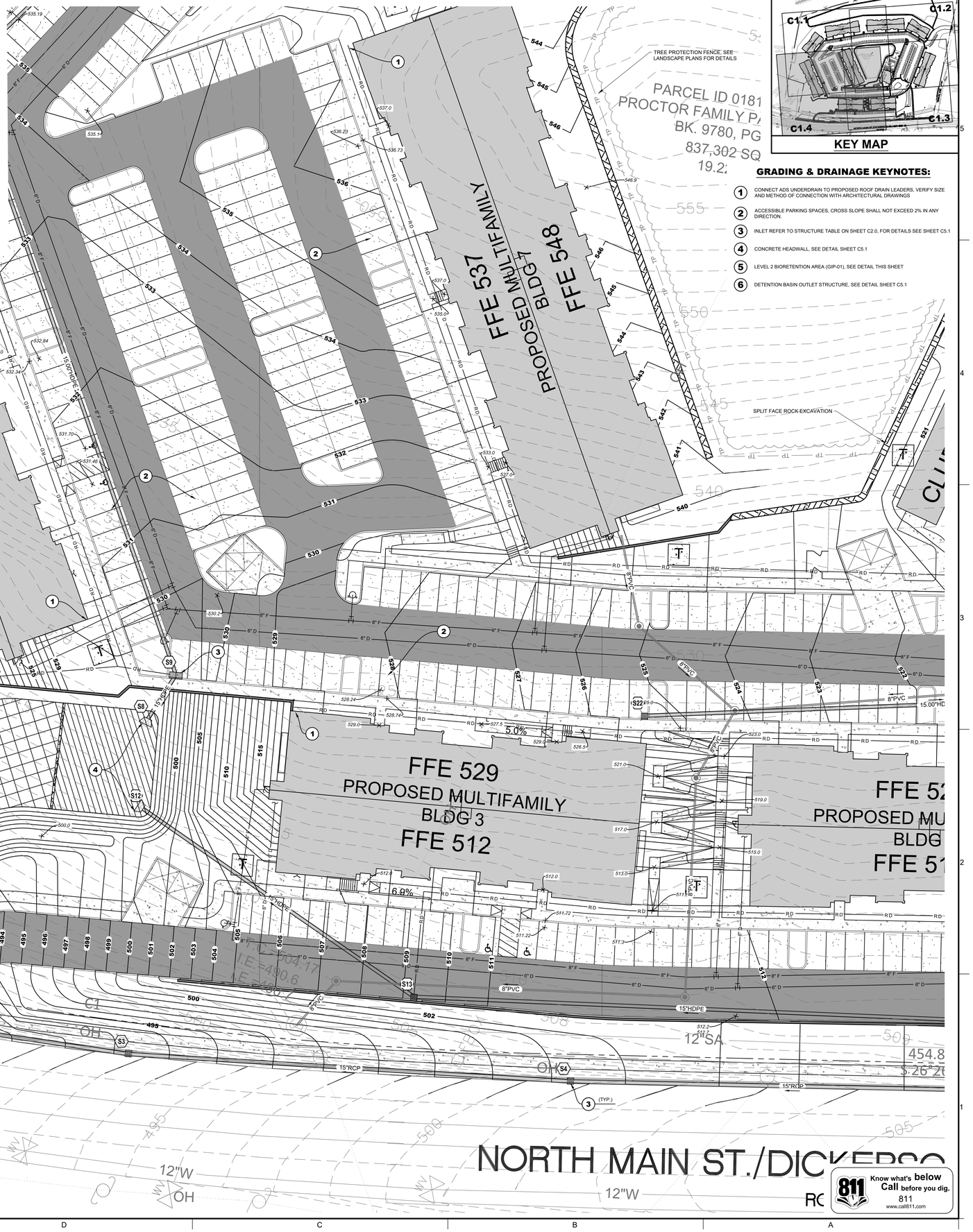
BIORETENTION AREA - LEVEL 2 (GIP-01)
N.T.S.

GRID

STATE PLANE COORDINATE SYSTEM NAD-83 (1990)

0 10 20 40 60
GRAPHIC SCALE

NOTES:
1. SEE SHEET C2.0 FOR STORM STRUCTURE SCHEDULE AND STORM PIPE SCHEDULE
2. REFER TO SHEET C4.0 THRU C4.2 FOR EROSION CONTROL MEASURES.
3. SEE SHEET C2.0 FOR GRADING AND DRAINAGE NOTES.



GRADING & DRAINAGE KEYNOTES:

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5. LEVEL 2 BIORETENTION AREA (GIP-01), SEE DETAIL THIS SHEET
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Project Name

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619 NORTH MAIN STREET GOODLETTSVILLE TN 37072

Client

HOLLADAY VENTURES

JOHN R GORE
REGISTERED ENGINEER
AGRICULTURE
0.108854
STATE OF TENNESSEE
11/08/21

NOT FOR CONSTRUCTION

Revisions

No.	Description	Date

ENLARGED GRADING AND DRAINAGE

Project number 20HH01
Date 11.03.2021

C2.4

Scale As indicated

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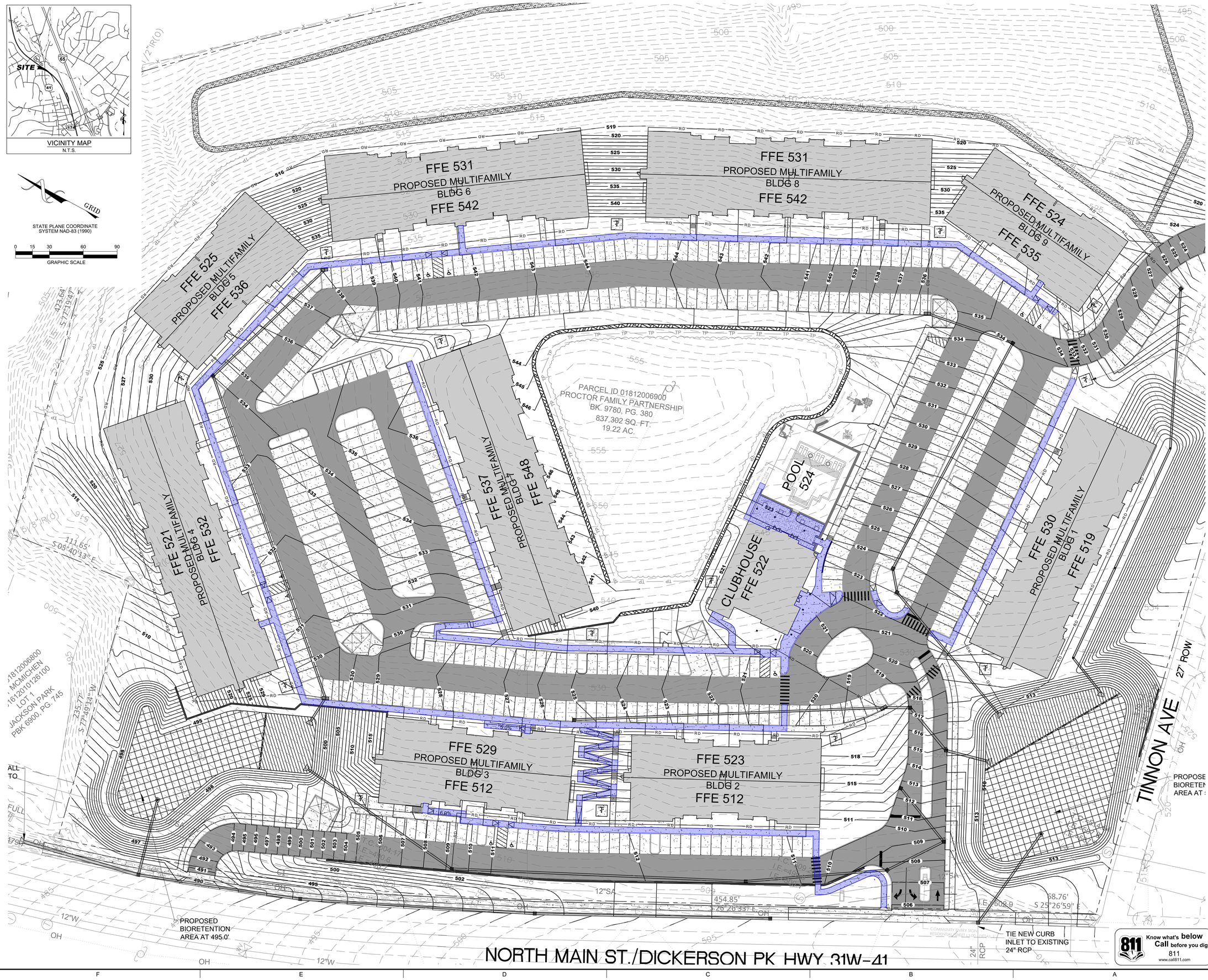

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HOLLADAY VENTURES

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11/08/21

NOT FOR CONSTRUCTION

Revisions

No.	Description	Date

ADA PATH SHEET

Project number	20HH01
Date	11.03.2021

C2.5

Scale	As indicated

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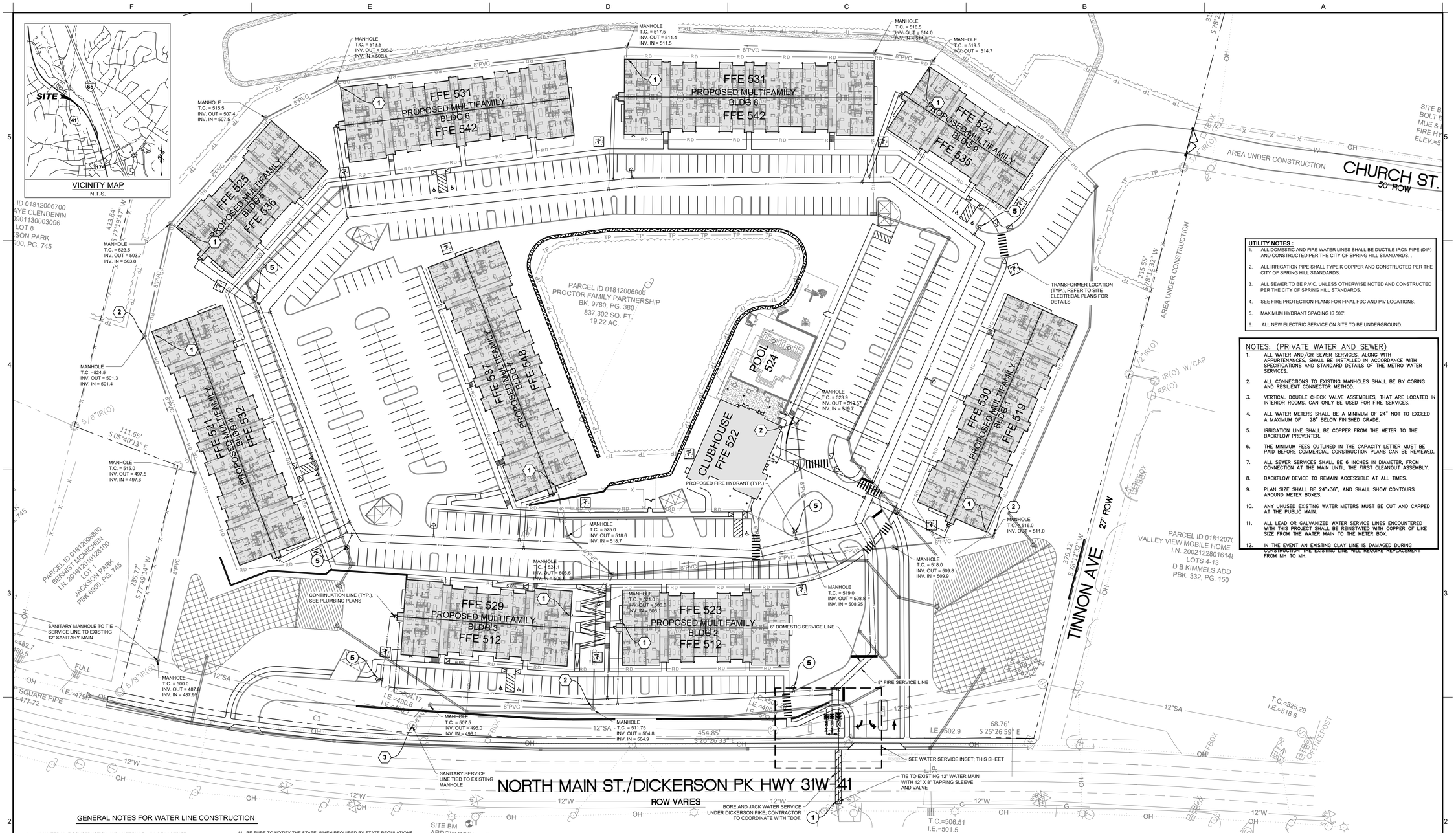


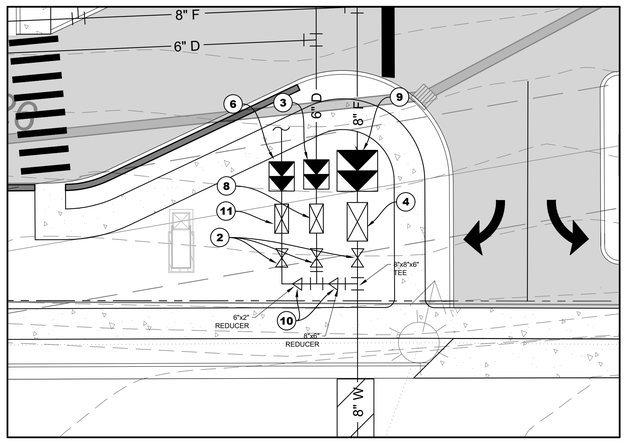
GENERAL NOTES FOR WATER LINE CONSTRUCTION

1. ALL WATER LINE CONSTRUCTION AND MATERIALS WILL BE IN STRICT COMPLIANCE WITH THE CURRENT APPROVED SPECIFICATIONS FOR THE MADISON SUBURBAN UTILITY DISTRICT (MSUD) AS ON FILE WITH THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION, DIVISION OF WATER QUALITY CONTROL.
2. BEFORE ANY WATER LINE WORK IS INITIATED ON THIS PROJECT, THE CONTRACTOR SHOULD CONTACT MSUD AND SATISFY ALL REQUIREMENTS OF MSUD. UPON COMPLETION OF THE WATER LINE INSTALLATION, THE CONTRACTOR WILL PERFORM A PRESSURE TEST AND DISINFECT THE LINE UNDER THE INSPECTION OF MSUD. THE OWNER / DEVELOPER SHALL BE RESPONSIBLE FOR THE COST OF REASONABLE INSPECTION FEES OF MSUD.
3. ANY AND ALL FEES, LICENSES, AND PERMITS NECESSARY FOR THIS CONSTRUCTION AND ARE TO BE OBTAINED AND PAID PRIOR TO THE INITIATION OF CONSTRUCTION AND THE COST THEREFORE WILL BE BORNE BY THE CONTRACTOR.
4. MSUD WILL SUPPLY THE APPROPRIATE WATER METER(S) AND SHALL BE REIMBURSED BY THE CONTRACTOR FOR MATERIAL COSTS.
5. WATER LINE CONSTRUCTION IS TO BE COMPLETED BY THE CONTRACTOR EXCEPT FOR THE ACTUAL CONNECTIONS TO EXISTING WATER LINE. AT LEAST 72 HOURS PRIOR TO CONNECTING PROPOSED WATER LINE TO THE SYSTEM, THE CONTRACTOR WILL NOTIFY MSUD AND COORDINATE METHOD OF CONNECTION AND TIME TO SHUT DOWN EXISTING WATER LINE IF REQUIRED.
6. THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL EXISTING UTILITIES (INCLUDING STORM DRAINAGE PIPES OR STRUCTURES) BEFORE COMMENCEMENT OF CONSTRUCTION.
7. WATER LINE MATERIAL WILL BE DUCTILE IRON PIPE, CLASS #52 WITH DUCTILE IRON FITTINGS AND DUCTILE IRON OR BRASS TAPS AS APPROPRIATE.
8. THE CONTRACTOR IS REQUIRED TO LOCATE ALL NEW TIE-INS, FITTINGS, VALVES, VAULTS, PRESSURE REDUCING VALVES, WATER UTILITY CROSSINGS OF OTHER UTILITIES OR STREAMS, CASING PIPE ENDS, CONCRETE ENCASEMENT ENDS, AND FIRE HYDRANTS UTILIZING THE GLOBAL POSITIONING SYSTEM (GPS). POINTS ON THE WATER MAIN EVERY 50 FEET BETWEEN THESE ITEMS SHALL ALSO BE LOCATED. ELEVATIONS AND COORDINATES (NORTHING AND EASTING BASED UPON THE TENNESSEE RECTANGULAR GRID SYSTEM, 1983 NORTH AMERICA DATUM OR UPDATED VERSION) OF EACH OF THESE ITEMS SHALL BE OBTAINED AND PROVIDED TO THE MADISON SUBURBAN UTILITY DISTRICT. THIS GPS INFORMATION SHALL INCLUDE REAL TIME SIGNAL CORRECTION. THE CONTRACTOR SHALL COORDINATE THE DEVELOPMENT OF THIS DATA WITH THE M.S.U.D. PROJECT INSPECTOR. FINAL ACCEPTANCE OF THE NEW FACILITIES BY M.S.U.D. IS CONTINGENT UPON RECEIPT OF THIS INFORMATION. TWO (2) 24" x 36" HARD COPIES AND ONE (1) ELECTRONIC COPY (MICROSTATION V7 OR AUTOCAD2000) OF THE AS-BUILT PLANS, INCLUDING THIS GPS DATA, ARE TO BE PROVIDED TO M.S.U.D., ONCE CONSTRUCTION IS COMPLETED. THE ELECTRONIC COPY SHALL BE UTILIZED SOLELY FOR THE PURPOSE OF TRANSFERRING AS-BUILT INFORMATION TO M.S.U.D.'s WATER SYSTEM DISTRIBUTION MAPS.
9. ALL BENDS, TEES, CROSSES, PLUGS, AND PRESSURE CONNECTIONS, ETC., SHALL BE BACKED UP AND ANCHORED WITH CONCRETE BLOCKING.
11. BE SURE TO NOTIFY THE STATE, WHEN REQUIRED BY STATE REGULATIONS, BEFORE YOU BEGIN ANY WATER LINE CONSTRUCTION.
12. ALL VALVES SHALL OPEN BY TURNING TO THE LEFT AND BE SECURED USING MEGA-LUGS. ALL PIPE FITTINGS SHALL BE SECURED USING MEGA-LUGS.
10. BACKFLOW PREVENTER ARE TO BE INSTALLED BY TENNESSEE CERTIFIED INSTALLERS WHO SPECIALIZE IN BACKFLOW PREVENTION. ALL INSTALLATIONS ARE TO MEET M.S.U.D.'s REQUIREMENTS. ALSO, THE CONTRACTOR MUST SCHEDULE A TIME FOR TESTING OF THE DEVICE WITH THE DISTRICT'S INSPECTOR BEFORE COMPLETION OF THE PROJECT. IT IS NECESSARY FOR THE CONTRACTOR TO BE PRESENT DURING THIS TEST IN ORDER TO CORRECT ANY POTENTIAL PROBLEMS PRIOR TO OCCUPANCY OF THE PROPERTY.
15. UNLESS WRITTEN AUTHORIZATION FROM MSUD PROVIDES OTHERWISE, NO FIRE HYDRANTS SHALL BE PLACED BETWEEN A SIDEWALK AND THE ROAD OR CURBING.
16. UNLESS WRITTEN AUTHORIZATION FROM MSUD PROVIDES OTHERWISE, NO WATER MAINS SHALL BE PLACED UNDER A SIDEWALK, EXTENDING PARALLEL TO THE SIDEWALK.
17. ANY WATER MAINS INSTALLED CROSSING UNDER PAVEMENT CARRYING VEHICULAR TRAFFIC SHALL BE BACKFILLED WITH STONE, PER MSUD TRENCH DETAIL - TYPE B. ANY PAVEMENT CARRYING VEHICULAR TRAFFIC, PLACED OVER EXISTING WATER MAINS, SHALL REQUIRE THE MAIN TO BE BEDDED WITH STONE, PER MSUD TRENCH DETAIL-TYPE B.
18. UNLESS WRITTEN AUTHORIZATION FROM MSUD PROVIDES OTHERWISE, NO WATER VALVES SHALL BE PLACED IN SIDEWALKS OR RESIDENTIAL DRIVEWAYS.
19. UNLESS WRITTEN AUTHORIZATION FROM MSUD PROVIDES OTHERWISE, WATER MAINS IN RESIDENTIAL DEVELOPMENTS SHALL BE PLACED IN THE MIDDLE OF ONE LANE OF A STREET.
20. ON-SITE MSUD APPROVAL OF A PART OF A PROJECTS WATER SYSTEM INSTALLATION DOES NOT CONSTITUTE THE DISTRICTS APPROVAL OF ALL OF THE PROJECT'S WATER SYSTEM INSTALLATION. FINAL ON-SITE APPROVAL OF THE PROJECT'S TOTAL WATER SYSTEM INSTALLATION MUST BE OBTAINED BEFORE THE MSUD WILL RECEIVE OWNERSHIP OF THAT WATER SYSTEM. FROM THE TIME OF THE ON-SITE INSPECTION AND FINAL APPROVAL OF THE TOTAL WATER SYSTEM INSTALLATION BY A REPRESENTATIVE OF THE MSUD, FURTHER CHANGES IMPACTING THE CONDITIONS OF OR THE ACCESSIBILITY TO THE WATER SYSTEM FACILITIES ARE STRICTLY FORBIDDEN, WITHOUT THE PRIOR APPROVAL OF THE MSUD. THESE INCLUDE, BUT ARE NOT LIMITED TO, CHANGES IN OVERBURDEN SLOPE OR DEPTH ON THE WATER MAIN, CHANGES THAT ADVERSELY EFFECT, IN THE OPINION OF THE MSUD, VEHICULAR OR EQUIPMENT ACCESS TO THE WATER MAINS, THE PLANTING OF TREES, SHRUBS, ETC. IN THE WATER UTILITIES EASEMENT OR THE LATER CONSTRUCTION OR PLACEMENT OF STRUCTURES CONSTRICTING THE WIDTH OF THE WATER UTILITIES EASEMENT. SHOULD THESE OR OTHER TYPES OF CHANGES BE MADE WITHOUT PRIOR APPROVAL OF THE MSUD, THEY SHALL BE RETURNED BACK TO THE ORIGINAL CONDITIONS AT THE TIME OF FINAL APPROVAL, AT THE COST OF THE PROPERTY OWNER DURING THOSE CHANGES.
13. IF STATE REVIEW AND APPROVAL REQUIRED, OWNER/DEVELOPER SHALL SUBMIT A STATE APPROVED SET OF PLANS TO M.S.U.D. A MINIMUM OF TWO (2) WEEKS PRIOR TO BEGINNING CONSTRUCTION. CONTRACTOR SHALL MAINTAIN A SET OF STATE APPROVED PLANS AND SPECIFICATIONS ON THE PROJECT SITE AT ALL TIMES.
14. UNLESS WRITTEN AUTHORIZATION FROM MSUD PROVIDES OTHERWISE, ALL WATER METERS SHALL BE PLACED IN AN ALIGNMENT THAT IS PERPENDICULAR TO THE ROAD FRONTING THE STRUCTURE BEING SERVED; THEY SHALL BE PLACED A MINIMUM OF 2'-0" FROM ANY STRUCTURE, INCLUDING, BUT NOT LIMITED TO SIDEWALKS, DRIVEWAYS, MAILBOXES, TREES, ETC.; AND THEY SHALL BE LOCATED AT THE FRONT OF THE STRUCTURE.
21. THE ENGINEER OR ARCHITECT OF THE PROJECT PLANS BEING SUBMITTED TO THE MSUD FOR APPROVAL OF THE WATER SYSTEM INSTALLATION SHALL BE RESPONSIBLE FOR INSURING THAT THOSE PLANS INCLUDE ALL ASPECTS OF THE PROJECT IMPACTING THE WATER SYSTEM ADDITIONS OR MODIFICATIONS. ANY SUBSEQUENT CHANGES IN PLANS, ADVERSELY IMPACTING THE WATER SYSTEM INSTALLATION, IN THE OPINION OF THE MSUD, AFTER APPROVAL OF THE ORIGINAL PLANS SUBMITTED TO THE MSUD, SHALL NEGATE THE PRIOR APPROVAL AND GIVE CAUSE FOR A RESUBMITTAL OF THE REVISED PLANS TO THE MSUD FOR APPROVAL. THE PLAN SHEETS OF THE WATER SYSTEM ADDITIONS OR MODIFICATIONS SHALL BE THE CONTROL SHEETS FOR THE REVIEW OF THE MSUD FOR APPROVAL AND SHALL INCLUDE ALL PROPER CROSS-REFERENCE NOTES TO ANY OTHER SHEETS SHOWING INFORMATION RELATED TO PIPE DEPTH, GROUND SLOPE, ETC. THE WATER MAIN DEPTH, AT ALL TIMES, SHALL BE THREE (3) FEET FROM THE GROUND ELEVATION TO THE TOP OF THE PIPE, UNLESS OTHER PROJECT ISSUES, SUCH AS EXISTING UTILITIES, ETC., REQUIRE A GREATER DEPTH FOR THE WATER MAIN. UNLESS APPROVAL HAS BEEN PROVIDED BY THE MSUD, NO WATER MAIN DEPTH SHALL BE GREATER THAN SIX (6) FEET UPON FINAL CONSTRUCTION OF THE PROJECT.
22. THE ENGINEER OR ARCHITECT OF THE PROJECT PLANS BEING SUBMITTED TO THE MSUD FOR APPROVAL OF THE WATER SYSTEM / FIRE SPRINKLER INSTALLATION SHALL INCLUDE ONE COPY OF THE SPRINKLER CALCULATIONS FOR REVIEW AND APPROVAL BY THE MSUD.
23. NEW WATER MAINS TO BE OWNED AND MAINTAINED BY THE M.S.U.D., OUTSIDE OF ROAD RIGHT-OF-WAYS, SHALL NOT BE INSTALLED UNDER PAVEMENT AND/OR PAVERS IN PRIVATE PROPERTY, UNLESS THERE ARE NO OTHER OPTIONS FOR THE ROUTE OF THE MAIN. SHOULD THE WATER MAIN HAVE TO BE INSTALLED UNDER PAVEMENT AND/OR PAVERS, OUTSIDE THE ROAD RIGHT-OF-WAY, THE PROPERTY OWNER AGREES TO ASSUME ALL COSTS AND RESPONSIBILITIES OF RESTORING THE PAVEMENT, AND/OR PAVERS SHOULD THE M.S.U.D. BE REQUIRED TO ACCESS THE WATER MAIN FOR MAINTENANCE, REPAIR OR REVISION.

UTILITY KEYNOTES:

1. TIE PROPOSED 8" WATER LINE TO EXISTING MAIN AT THIS LOCATION. CONTRACTOR SHALL CONTACT UTILITY COMPANY, 72 HOURS PRIOR TO WORK TO COORDINATE METHOD OF CONNECTION
2. GATE VALVE
3. 6" DOMESTIC REDUCED PRESSURE BACKFLOW PREVENTER, SEE DETAIL SHEET C5.2
4. WATER METER ASSEMBLY, SEE DETAIL SHEET C5.2
5. FIRE HYDRANT ASSEMBLY, SEE DETAIL SHEET C5.2
6. 2" IRRIGATION REDUCE PRESSURE BACKFLOW PREVENTER, SEE DETAIL SHEET C5.2
7. FIRE DEPARTMENT CONNECTION (FDC)
8. 6" DOMESTIC WATER METER ASSEMBLY, SEE DETAIL SHEET C5.2
9. 8" DDCVA ABOVE GROUND HOT BOX, SEE DETAIL SHEET C5.2
10. CONCENTRIC WATER REDUCERS
11. 2" IRRIGATION METER ASSEMBLY, SEE DETAIL SHEET C5.2
12. CONCRETE THRUST BLOCKING/KICKERS, SEE DETAIL SHEET C5.2

1. SEWER SERVICE, SEE PLUMBING DRAWINGS FOR CONTINUATION TO BUILDING.
2. SANITARY SEWER MANHOLE, SEE DETAIL SHEET C5.2 (TYP.)
3. TIE 8" PROPOSED SANITARY SEWER LINE INTO EXISTING MANHOLE



WATER SERVICES INSET
1" = 10'

UTILITY NOTES :

1. ALL DOMESTIC AND FIRE WATER LINES SHALL BE DUCTILE IRON PIPE (DIP) AND CONSTRUCTED PER THE CITY OF SPRING HILL STANDARDS. .
2. ALL IRRIGATION PIPE SHALL TYPE K COPPER AND CONSTRUCTED PER THE CITY OF SPRING HILL STANDARDS.
3. ALL SEWER TO BE P.V.C. UNLESS OTHERWISE NOTED AND CONSTRUCTED PER THE CITY OF SPRING HILL STANDARDS.
4. SEE FIRE PROTECTION PLANS FOR FINAL FDC AND PIV LOCATIONS.
5. MAXIMUM HYDRANT SPACING IS 500'.
6. ALL NEW ELECTRIC SERVICE ON SITE TO BE UNDERGROUND.

NOTES: (PRIVATE WATER AND SEWER)

1. ALL WATER AND/OR SEWER SERVICES, ALONG WITH APPURTENANCES, SHALL BE INSTALLED IN ACCORDANCE WITH SPECIFICATIONS AND STANDARD DETAILS OF THE METRO WATER SERVICES.
2. ALL CONNECTIONS TO EXISTING MANHOLES SHALL BE BY CORING AND RESILIENT CONNECTOR METHOD.
3. VERTICAL DOUBLE CHECK VALVE ASSEMBLIES, THAT ARE LOCATED IN INTERIOR ROOMS, CAN ONLY BE USED FOR FIRE SERVICES.
4. ALL WATER METERS SHALL BE A MINIMUM OF 24" NOT TO EXCEED A MAXIMUM OF 28" BELOW FINISHED GRADE.
5. IRRIGATION LINE SHALL BE COPPER FROM THE METER TO THE BACKFLOW PREVENTER.
6. THE MINIMUM FEES OUTLINED IN THE CAPACITY LETTER MUST BE PAID BEFORE COMMERCIAL CONSTRUCTION PLANS CAN BE REVIEWED.
7. ALL SEWER SERVICES SHALL BE 6 INCHES IN DIAMETER, FROM CONNECTION AT THE MAIN UNTIL THE FIRST CLEANOUT ASSEMBLY.
8. BACKFLOW DEVICE TO REMAIN ACCESSIBLE AT ALL TIMES.
9. PLAN SIZE SHALL BE 24"x36", AND SHALL SHOW CONTOURS AROUND METER BOXES.
10. ANY UNUSED EXISTING WATER METERS MUST BE CUT AND CAPPED AT THE PUBLIC MAIN.
11. ALL LEAD OR GALVANIZED WATER SERVICE LINES ENCOUNTERED WITH THIS PROJECT SHALL BE REINSTATED WITH COPPER OF LIKE SIZE FROM THE WATER MAIN TO THE METER BOX.
12. IN THE EVENT AN EXISTING CLAY LINE IS DAMAGED DURING CONSTRUCTION THE EXISTING LINE WILL REQUIRE REPLACEMENT FROM MH TO MH.

STATE PLANE COORDINATE SYSTEM NAD-83 (1990)

0 20 40 80 120
GRAPHIC SCALE

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Client

HOLLADAY VENTURES

JOHN R. GORE
REGISTERED ENGINEER
AGENCY
10/06/21
STATE OF TENNESSEE

NOT FOR CONSTRUCTION

Revisions

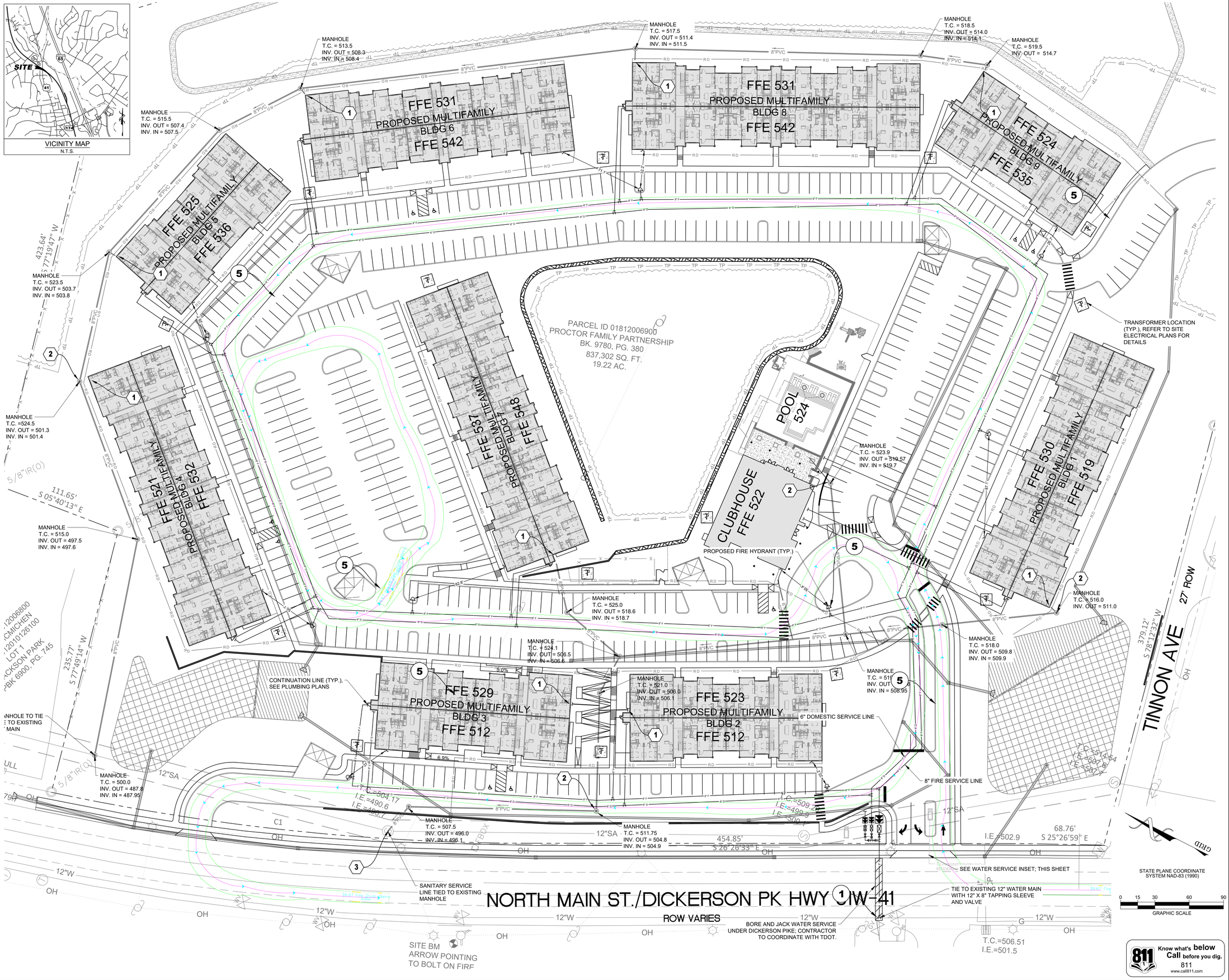
No.	Description	Date

SITE UTILITY PLAN

Project number	20HH01
Date	11.03.2021

C3.0

Scale	As indicated



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louisville, ky 40206
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f: (502) 589-8004
www.studioaarch.com

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615-356-9911

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134 4th Avenue N.
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615-628-7270

FOOD SERVICE:
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Louisville, KY 40213
502-637-3232

Project Name

STONE BRIDGE LOFTS

619 NORTH
MAIN STREET
GOODLETTSVILLE
TN 37072

Client

HOLLADAY VENTURES

JOHN R. GORE
REGISTERED ENGINEER
AGENT
No. 108854
STATE OF TENNESSEE
11/08/21

NOT FOR CONSTRUCTION

Revisions

No.	Description	Date

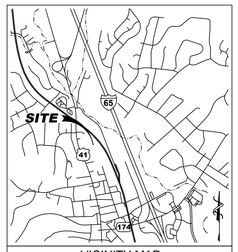
FIRE TRUCK TURN RADIUS

Project number	20HH01
Date	11.03.2021

C3.1

Scale: As indicated

P:\2980 Holladay Ventures\2980-01 MF 619 N Main Goodlettsville\Dwg\C3.0-UTIL-2980-01.dwg-C3.1



VICINITY MAP
N.T.S.

TDEC NOC: XXXXXXX

GRADING PERMIT: XXXXXXXXXXXX

ALL PERIMETER MEASURES MUST BE IN PLACE BEFORE GRADING

TENNESSEE CONSTRUCTION GENERAL PERMIT
NOTICE OF COVERAGE CERTIFICATION:

THE PROJECT ASSOCIATED WITH THESE SUBMITTED PLANS IS COVERED UNDER TENNESSEE CONSTRUCTION GENERAL PERMIT TNR:

THE TOTAL DISTURBED AREA : _____ ACRES.

CHECK ALL THAT APPLY: THIS SITE DISCHARGES INTO THE CUMBERLAND RIVER IDENTIFIED BY TDEC AS:

[ ] IMPAIRED FOR SILTATION [ ] IMPAIRED FOR HABITAT ALTERATION [ ] EXCEPTIONAL

SIGNATURE DATE

LESS NOTE:
I HEREBY CERTIFY THAT I AM THE EROSION PREVENTION AND SEDIMENT CONTROL SPECIALIST FOR THIS PROJECT, UNTIL AN ALTERNATE IS DESIGNATED BY THE CONTRACTOR:

(RECERTIFIED 2019)
DATE

CONSTRUCTION SCHEDULE:

1. PRE-CONSTRUCTION MEETING
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3. EROSION INSPECTION BY EPSC AND METRO
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6. SUBMITTAL OF AS-BUILT DRAWINGS TO METRO WATER SERVICES STORMWATER DIVISION.

SPECIAL NOTE:

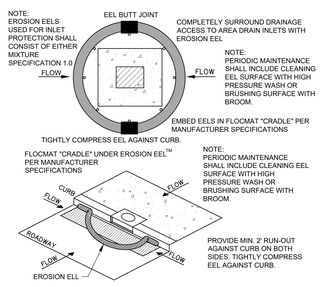
ALL GRADING OPPERATIONS, INCLUDING BUT NOT LIMITED TO EXCAVATION, FILL, COMPACTION TESTING AND BACKFILL SHALL BE OBSERVED, TESTED AND APPROVED BY A LICENSED SOILS ENGINEER.

FEMA DATA FOR PROJECT LOCATION:

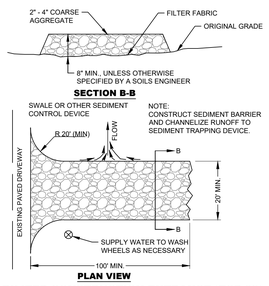
THE SUBJECT PROPERTY DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD ZONE ACCORDING TO FLOOD MAP NO. 47037CO129H, EFFECTIVE 04/05/2017

INITIAL EPSC KEYNOTE

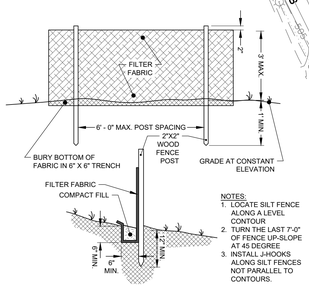
1. LIMIT OF DISTURBANCE= XX ACRES
2. SILT FENCE (TCP-13), SEE DETAIL SHEET
3. INLET PROTECTION (TCP-24), SEE DETAIL SHEET
4. WEIGHTED SEDIMENT TUBE (TCP-14), SEE DETAIL SHEET
5. STABILIZED CONSTRUCTION ENTRANCE (TCP-03), SEE DETAIL SHEET



TEMPORARY INLET PROTECTION (TCP-24)
N.T.S.



STABILIZED CONSTRUCTION ENTRANCE (TCP-03)
N.T.S.

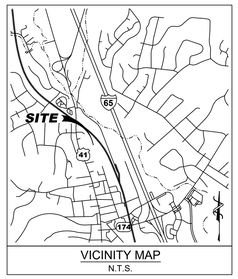


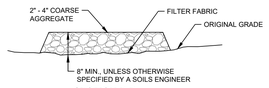
SILT FENCE (TCP-13)
N.T.S.

EROSION CONTROL (EPSC) NOTES:

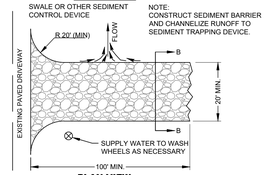
1. ALL EROSION CONTROL PLANS SHALL BE KEPT CURRENT, AND WILL BE AVAILABLE TO ALL OPERATORS AND SITE PERSONNEL INVOLVED WITH EROSION PREVENTION AND SEDIMENT CONTROL. FOR PROJECTS REQUIRING COVERAGE UNDER THE TENNESSEE CONSTRUCTION GENERAL PERMIT, A COPY OF THE SWPPP, AND NOI WILL ALSO BE AVAILABLE TO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

PARCEL ID 018I2206700
ROY & FAYE CLENDENIN
I.N. 20090511 0026035096
LOT 1
JACKSON PARK
PBK 6900, PG. 745
PARCEL ID 018I2006800
BERNIST MCMICHEN
I.N. 20161210101261000
LOT 1
JACKSON PARK
PBK 6900, PG. 745
PARCEL ID 018I2007000
PROCTOR FAMILY PROPERTIES, LLC
BK 07902, PG. 360
19.22 AC
CSX RAILROAD
100' ROW
NORTH MAIN ST./DICKERSON PK. HWY 31W-41
ROW VARIES
TINNON AVE
27' ROW
CHURCH ST.
50' ROW
AREA UNDER CONSTRUCTION
PARCEL ID 018I2012000
BILLY BRADY TRUSTEE
I.N. 20070103 0036973
PARCEL ID 018I2010000
VALLEY VIEW CEMETERY ASSOC. PARKS, LLC
I.N. 20070124 0010481
D.B. 1049, PG. 400
PBK 324, PG. 150
PARCEL ID 018I2010000
D. L. WHITE HEIRS
I.N. 20190723072224
PARCEL ID 019I0900200
GERBPROPERTIES, LLC
I.N. 20081007 0106805
SITE BM
BOLT BETWEEN
FIRE FLUER ON
MUE RYDRANT
ELEV.=510.46
TBM
TBM
TBM



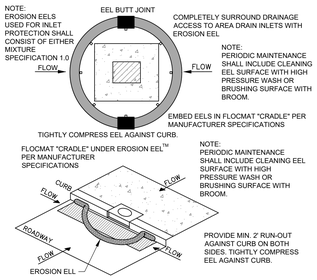


SECTION B-B

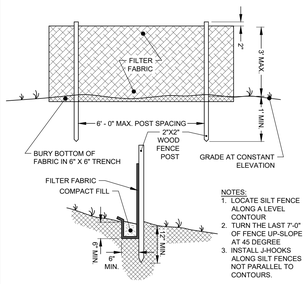


PLAN VIEW

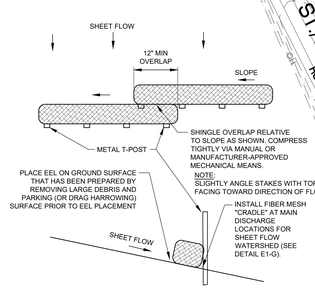
STABILIZED CONSTRUCTION ENTRANCE (TCP-03)
N.T.S.



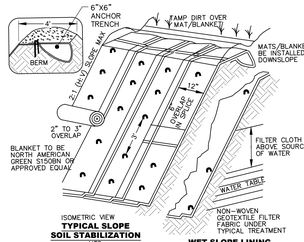
TEMPORARY INLET PROTECTION (TCP-24)
N.T.S.



SILT FENCE (TCP-13)
N.T.S.

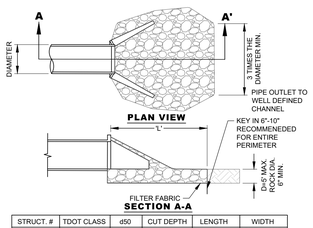


WEIGHTED SEDIMENT TUBE (EROSION EEL) (TCP-14)
N.T.S.



NOTES:
1. SLOPE SURFACE SHALL BE FREE OF ROCKS, SOIL CLODS, STICKS, AND GRASS. MATS/BLANKETS SHALL HAVE GOOD SOIL CONTACT.
2. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN

ANCHORING GEOTEXTILE ON EMBANKMENT(TCP-10)
N.T.S.



STRUCT. #	TDOT CLASS	d50	CUT DEPTH	LENGTH	WIDTH
#	CLASS X	X"	X"	X'	SEE PLANS
#	CLASS X	X"	X"	X'	SEE PLANS
#	CLASS X	X"	X"	X'	SEE PLANS
#	CLASS X	X"	X"	X'	SEE PLANS
#	CLASS X	X"	X"	X'	SEE PLANS
#	CLASS X	X"	X"	X'	SEE PLANS

RIPRAP APRON (TCP-20)
N.T.S.

INTERMEDIATE EPSC KEYNOTE

1. LIMIT OF DISTURBANCE= XX ACRES
2. SILT FENCE (TCP-13), SEE DETAIL SHEET
3. INLET PROTECTION (TCP-24), SEE DETAIL SHEET
4. WEIGHTED SEDIMENT TUBE (TCP-14), SEE DETAIL SHEET
5. STABILIZED CONSTRUCTION ENTRANCE (TCP-03), SEE DETAIL SHEET
6. PROVIDE SILT FENCE (TCP-13) AROUND BIORETENTION AREAS
7. RIP-RAP OUTLET PROTECTION (TCP-20), SEE DETAIL SHEET
8. ANCHORD GEOTEXTILE EROSION CONTROL MATTING (TCP-10), SEE DETAIL SHEET

NOTE:
1. SEE CIVIL SITE NOTES; SHEET C4.1 FOR EROSION CONTROL (EPSC) NOTES.

TENNESSEE CONSTRUCTION GENERAL PERMIT
NOTICE OF COVERAGE CERTIFICATION:

THE PROJECT ASSOCIATED WITH THESE SUBMITTED PLANS IS COVERED UNDER TENNESSEE CONSTRUCTION GENERAL PERMIT TNR:

THE TOTAL DISTURBED AREA : _____ ACRES.

CHECK ALL THAT APPLY: THIS SITE DISCHARGES INTO THE CUMBERLAND RIVER IDENTIFIED BY TDEC AS:

[ ] IMPAIRED FOR SILTATION [ ] IMPAIRED FOR HABITAT ALTERATION [ ] EXCEPTIONAL

SIGNATURE DATE

EPSC NOTE:
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(RECERTIFIED 2019)
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CONSTRUCTION SCHEDULE:

1. PRE-CONSTRUCTION MEETING
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SPECIAL NOTE:

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FEMA DATA FOR PROJECT LOCATION:

THE SUBJECT PROPERTY DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD ZONE ACCORDING TO FLOOD MAP NO. 47037C0129H, EFFECTIVE 04/05/2017

TDEC NOC: XXXXXXX

GRADING PERMIT: XXXXXXXXXXXX

ALL PERIMETER MEASURES MUST BE IN PLACE BEFORE GRADING

CSX RAILROAD
100' ROW

NORTH MAIN ST./DICKERSON PK. HWY 31W-41
ROW VARIES

TINNON AVE
27' ROW

CHURCH ST.
50' ROW

AREA UNDER CONSTRUCTION

STATE PLANE COORDINATE SYSTEM NAD-83 (1990)

GRID

0 25 50 100 150
GRAPHIC SCALE

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Project Name

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619 NORTH MAIN STREET GOODLETTSVILLE TN 37072

Client

HOLLADAY VENTURES

JOHN R. GORE
REGISTERED ENGINEER
AGRICULTURAL & BIOSYSTEMS
109856
STATE OF TENNESSEE
09/2/21

NOT FOR CONSTRUCTION

Revisions

No.	Description	Date

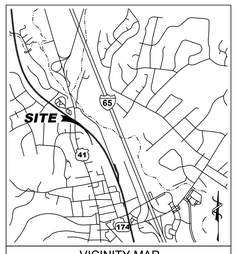
INTERMEDIATE EPSC PLAN

Project number	20HH01
Date	11.03.2021

C4.1

Scale	As indicated

P:\2980 Holladay Ventures\2980-001 MF 619 N Main Goodlts\vie\Dwg\C4.0-EPSC-2980-01.dwg-C4.1



FINAL EPSC KEYNOTE

1. STORM SYSTEM
2. BIORETENTION AREA
3. DETENTION AREA
4. PERMANENT OUTLET PROTECTION (TCP-20), SEE DETAIL SHEET
5. EROSION CONTROL MATTING (TCP-10), ON ALL SLOPES 4:1 OR GREATER, SEE DETAIL SHEET

NOTE:
1. SEE CIVIL SITE NOTES; SHEET C4.0 FOR EROSION CONTROL (EPSC) NOTES.

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TDEC NOC: XXXXXXX

GRADING PERMIT: XXXXXXXXXXXX

ALL PERIMETER MEASURES MUST BE IN PLACE BEFORE GRADING

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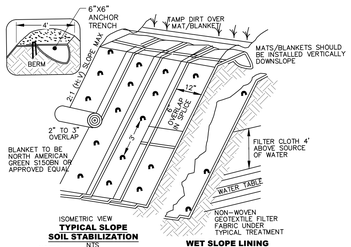
#	CLASS X	X"	X"	X'	SEE PLANS
#	CLASS X	X"	X"	X'	SEE PLANS
#	CLASS X	X"	X"	X'	SEE PLANS
#	CLASS X	X"	X"	X'	SEE PLANS

RIPRAP APRON (TCP-20)
N.T.S.



NOTES:
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ANCHORING GEOTEXTILE ON EMBANKMENT(TCP-10)
N.T.S.

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TN 37072

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JOHN R. GORE
REGISTERED ENGINEER
AGRICULTURAL
NUMBER
0.108854
STATE OF TENNESSEE
11/08/21

NOT FOR CONSTRUCTION

Revisions

No.	Description	Date

FINAL EPSC PLAN

Project number	20HH01
Date	11.03.2021

C4.2

Scale	As indicated

STATE PLANE COORDINATE SYSTEM NAD-83 (1990)

GRAPHIC SCALE
0 25 50 100 150

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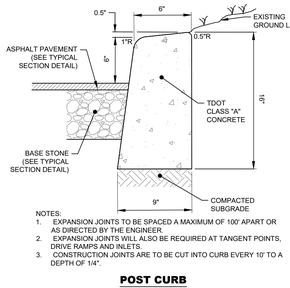
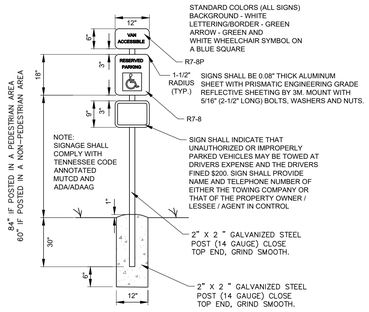
P:\2980 Holladay Ventures\2980-01 MF 619 N Main Goodlettsville\Dwg\C4.0-EPSC-2980-01.dwg-C4.2



NOTES:
1. EXPANSION JOINTS TO BE SPACED A MAXIMUM OF 100' APART OR AS DIRECTED BY THE ENGINEER.
2. EXPANSION JOINTS WILL ALSO BE REQUIRED AT TANGENT POINTS, DRIVE RAMPS AND INLETS.
3. CONSTRUCTION JOINTS ARE TO BE CUT INTO CURB EVERY 10' TO A DEPTH OF 1/4".

POST CURB
(N.T.S.)

15



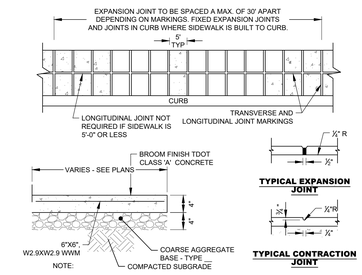
STANDARD COLORS (ALL SIGNS)
BACKGROUND - WHITE
LETTERING/BORDER - GREEN
ARROW - GREEN AND
WHITE WHEELCHAIR SYMBOL ON A BLUE SQUARE

SIGNS SHALL BE 0.08" THICK ALUMINUM SHEET WITH PRISMATIC ENGINEERING GRADE REFLECTIVE SHEETING BY 3M. MOUNT WITH 5/16" (2-1/2" LONG) BOLTS, WASHERS AND NUTS.

SIGN SHALL INDICATE THAT UNAUTHORIZED OR IMPROPERLY PARKED VEHICLES MAY BE TOWED AT DRIVERS EXPENSE AND THE DRIVERS FINED $200. SIGN SHALL PROVIDE NAME AND TELEPHONE NUMBER OF EITHER THE TOWING COMPANY OR THAT OF THE PROPERTY OWNER / LESSEE / AGENT IN CONTROL

EXTERIOR ACCESSIBLE SIGN
N.T.S.

11

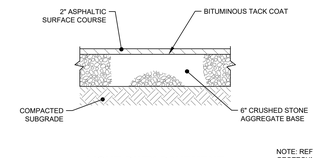


PREFORMED ½" EXPANSION JOINTS SHALL BE EQUALLY SPACED AT 20' MAX. CENTERS, WITH ½" CONTRACTION JOINTS EQUALLY SPACED AT 5' MAX. CENTERS BETWEEN EXPANSION JOINTS. JOINTS IN SIDEWALK TO BE IN LINE WITH JOINTS IN CURB AND GUTTER.

MAXIMUM CROSS SLOPE TO BE 2%.

TYPICAL CONCRETE SIDEWALK
N.T.S.

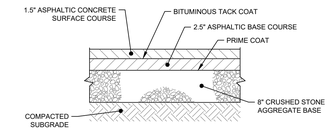
7



LIGHT DUTY PAVEMENT
N.T.S.

NOTE: REFER TO THE GEOTECHNICAL STUDY, BY GTA, INC. DATED: MAY 24, 2021 GTA PROG #21075

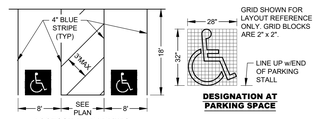
1A



HEAVY DUTY PAVEMENT
N.T.S.

NOTE: REFER TO THE GEOTECHNICAL STUDY, BY GTA, INC. DATED: MAY 24, 2021 GTA PROG #21075

1B



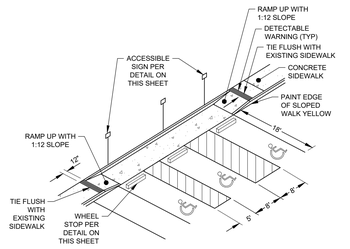
ACCESSIBLE PARKING STALL LAYOUT

DESIGNATION AT PARKING SPACE

1. ALL PAINTED PARKING STALL LINES FOR ACCESSIBLE PARKING SPACES SHALL BE BLUE 4" WIDE LINES.
2. CROSSHATCHING IN THE ACCESS AISLE SHALL BE 4" WIDE SOLID BLUE LINES, TO EMPHASIZE THAT PARKING IS PROHIBITED IN CROSSHATCHED AREAS.
3. THE ACCESS AISLE MAY BE SHARED BY 2 ACCESSIBLE SPACES.
4. ONE OF EVERY 6 ACCESSIBLE SPACES AND NO LESS THAN ONE SHALL BE VAN ACCESSIBLE.
5. A SEPARATE SIGN SHALL BE PROVIDED FOR EACH ACCESSIBLE PARKING SPACE.
6. ACCESSIBLE PARKING MUST BE PLACED IN THE NEAREST ACCESSIBLE PATHWAY TO ENTRANCE.
7. ACCESS AISLE SHALL BE 60" MIN. WIDTH PER ADA 2010 SECT. 502.3 FOR ALL PUBLIC ACCESSIBLE SPACES AND PER ANSI 2009 SECT. 502.4 FOR ALL TENANT USES PARKING.

ADA PARKING SPACE
N.T.S.

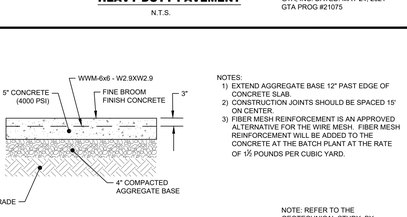
12



NOTES:
1. ALL PAINTED LINES AND STRIPING SHALL BE 4" WIDE; STRIPING SHALL BE SPACED AT 18" ON CENTER; COLOR SHALL BE BLUE.
2. SURFACE TEXTURE OF THE RAMP SHALL BE STABLE, FIRM, AND SLIP-RESISTANT; THE SURFACE SHALL BE COARSE BROOM FINISH TRANSVERSE TO THE SLOPE OF THE RAMP.
3. MAXIMUM SLOPE IN ANY DIRECTION IN ACCESSIBLE PAVING AREA TO BE 2.0%.

ACCESSIBLE RAMP
N.T.S.

8

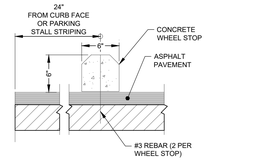


NOTES:
1) EXTEND AGGREGATE BASE 12" PAST EDGE OF CONCRETE SLAB.
2) CONSTRUCTION JOINTS SHOULD BE SPACED 15' ON CENTER.
3) FIBER MESH REINFORCEMENT IS AN APPROVED ALTERNATIVE FOR THE WIRE MESH. FIBER MESH REINFORCEMENT WILL BE ADDED TO THE CONCRETE AT THE BATCH PLANT AT THE RATE OF 1½ POUNDS PER CUBIC YARD.

CONCRETE PAVEMENT
(N.T.S.)

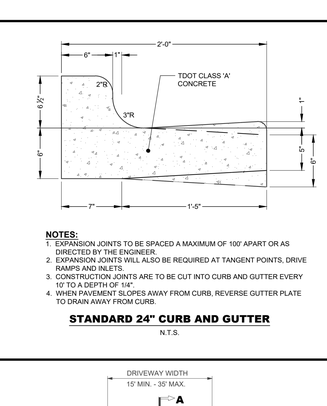
NOTE: REFER TO THE GEOTECHNICAL STUDY, BY GTA, INC. DATED: MAY 24, 2021 GTA PROG #21075

2



6" CONCRETE WHEEL STOP
N.T.S.

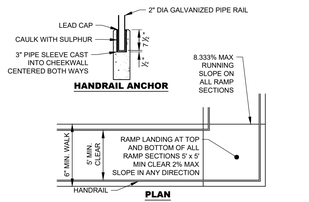
3



NOTES:
1. EXPANSION JOINTS TO BE SPACED A MAXIMUM OF 100' APART OR AS DIRECTED BY THE ENGINEER.
2. EXPANSION JOINTS WILL ALSO BE REQUIRED AT TANGENT POINTS, DRIVE RAMPS AND INLETS.
3. CONSTRUCTION JOINTS ARE TO BE CUT INTO CURB AND GUTTER EVERY 10' TO A DEPTH OF 1/4".
4. WHEN PAVEMENT SLOPES AWAY FROM CURB, REVERSE GUTTER PLATE TO DRAIN AWAY FROM CURB.

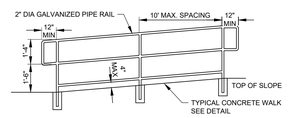
STANDARD 24" CURB AND GUTTER
N.T.S.

13



HANDRAIL ANCHOR

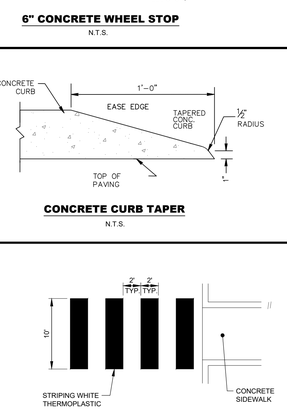
PLAN



ELEVATION

ACCESSIBLE RAMP WITH HANDRAIL
N.T.S.

9

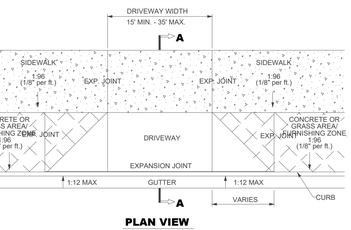


CONCRETE CURB TAPER
N.T.S.

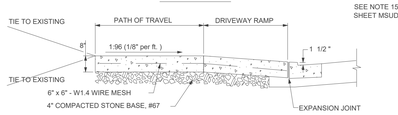
4

CROSSWALK STRIPING
N.T.S.

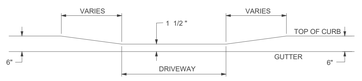
5



PLAN VIEW



SECTION A-A

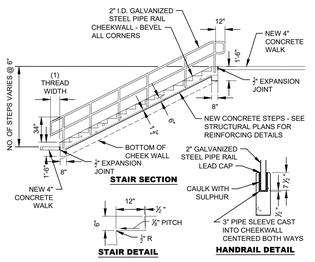


CURB TAPER FOR DRIVEWAY RAMP

NOTE: CROSS-SLOPE OF SIDEWALK SHALL NOT EXCEED 1:48 (VERTICAL:HORIZONTAL)

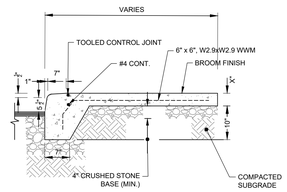
COMMERCIAL CONCRETE DRIVEWAY RAMP (ST-314)
NOT TO SCALE

14



TYPICAL CONCRETE STAIRS WITH HANDRAIL
N.T.S.

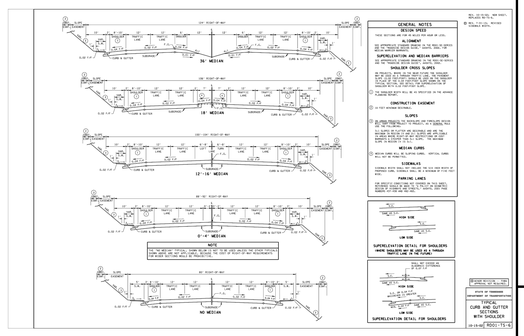
10



NOTE: CROSS SLOPES OF SIDEWALK NOT TO EXCEED 2.0%

INTEGRAL CONCRETE CURB & WALK
N.T.S.

6



RESERVED
NOT TO SCALE

17

18

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134 4th Avenue N.
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FOOD SERVICE:
Dine Company
3110 Preston Hwy
Louisville, KY 40213
502-637-3232

Project Name

STONE BRIDGE LOFTS

619 NORTH
MAIN STREET
GOODLETTSVILLE
TN 37072

Client

HOLLADAY VENTURES

JOHN R. GORE
REGISTERED ENGINEER
AGENT
COMMERCIAL
No. 108856
STATE OF TENNESSEE
11/05/21

NOT FOR CONSTRUCTION

Revisions

No.	Description	Date

SITE DETAILS

Project number	20HH01
Date	11.03.2021

C5.0

Scale	As indicated

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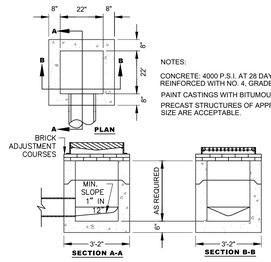
P:\2980 Holladay Ventures\2980-01 MF 619 N Main Goodlettsville\Dwg\C5.0-DETAIL-2980-01.dwg-C500



NOTES:

CONCRETE: 4000 P.S.I. AT 28 DAYS REINFORCED WITH NO. 4, GRADE 60 BARS

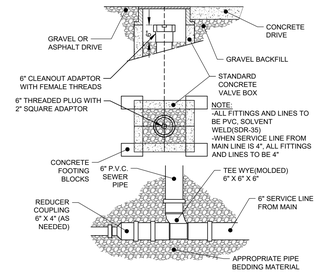
PAINT CASTINGS WITH BITUMOUS PAINT

PRECAST STRUCTURES OF APPROPRIATE SIZE ARE ACCEPTABLE.

AREA DRAIN

N.T.S.

9

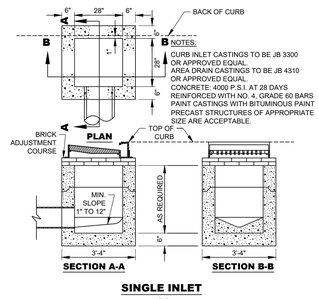


NOTE:
-ALL FITTINGS AND LINES TO BE PVC, SOLVENT WELD(SDR-35)
-WHEN SERVICE LINE FROM MAIN LINE IS 4", ALL FITTINGS AND LINES TO BE 4"

INSPECTION CLEANOUT DETAIL

N.T.S.

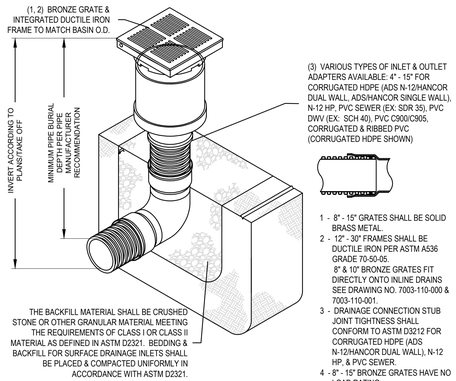
5



SINGLE INLET

N.T.S.

1



(3) VARIOUS TYPES OF INLET & OUTLET ADAPTERS AVAILABLE: 4" - 15" FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL, ADS/HANCOR SINGLE WALL), N-12 HP, PVC SEWER (EX: SDR 35), PVC DWV (EX: SCH 40), PVC C900/C905, CORRUGATED & RIBBED PVC (CORRUGATED HDPE SHOWN)

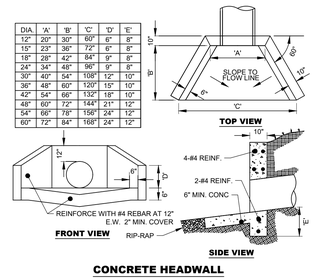
1 - 8" - 15" GRATES SHALL BE SOLID BRASS METAL.
2 - 12" - 30" FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
8" & 10" BRONZE GRATES FIT DIRECTLY ONTO INLINE DRAINS SEE DRAWING NO. 7003-110-000 & 7003-110-001.
3 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER.
4 - 8" - 15" BRONZE GRATES HAVE NO LOAD RATING.

8" - 15" NYLOPLAST INLINE DRAIN WITH BRONZE GRATE

N.T.S.

10

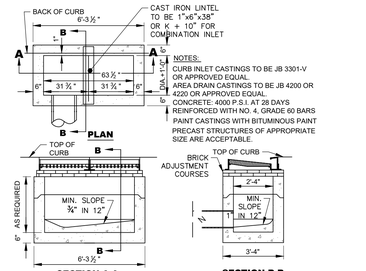
DIA.	'A'	'B'	'C'	'D'	'E'
12"	20"	30"	60"	6"	8"
15"	23"	36"	72"	6"	8"
18"	28"	42"	84"	9"	8"
24"	34"	48"	96"	9"	8"
30"	40"	54"	108"	12"	10"
36"	48"	60"	120"	15"	10"
42"	54"	66"	132"	18"	10"
48"	60"	72"	144"	21"	12"
54"	60"	78"	156"	24"	12"
60"	72"	84"	168"	24"	12"



CONCRETE HEADWALL

N.T.S.

6



NOTES:
CURB INLET CASTINGS TO BE JB 3301-V OR APPROVED EQUAL.
AREA DRAIN CASTINGS TO BE JB 4200 OR 4220 OR APPROVED EQUAL.
CONCRETE: 4000 P.S.I. AT 28 DAYS
REINFORCED WITH NO. 4, GRADE 60 BARS
PAINT CASTINGS WITH BITUMINOUS PAINT
PRECAST STRUCTURES OF APPROPRIATE SIZE ARE ACCEPTABLE.

DOUBLE INLET

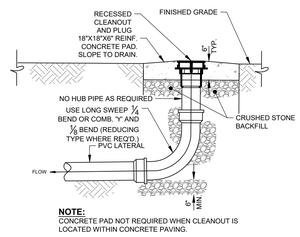
N.T.S.

2

RESERVED

NOT TO SCALE

11

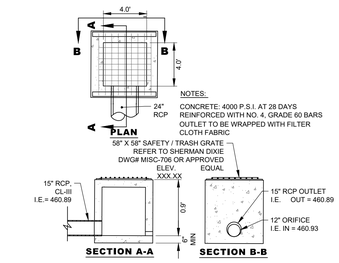


NOTE:
CONCRETE PAD NOT REQUIRED WHEN CLEANOUT IS LOCATED WITHIN CONCRETE PAVING.

CLEANOUT

N.T.S.

7



DETENTION BASIN OUTLET STRUCTURE

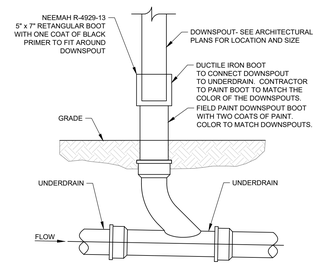
N.T.S.

3

RESERVED

NOT TO SCALE

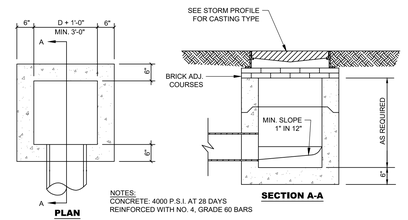
12



DOWNSPOUT BOOT CONNECTION

N.T.S.

8



NOTES:
CONCRETE: 4000 P.S.I. AT 28 DAYS REINFORCED WITH NO. 4, GRADE 60 BARS

PAINT CASTINGS WITH BITUMOUS PAINT

PRECAST STRUCTURES OF APPROPRIATE SIZE ARE ACCEPTABLE.

SINGLE INLET / JUNCTION BOX / AREA DRAIN

N.T.S.

4

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GOODLETTSVILLE TN 37072

Client

HOLLADAY VENTURES

JOHN R. GOBLE — REGISTERED ENGINEER — AGENT — No. 109859 — STATE OF TENNESSEE — 11/05/21

NOT FOR CONSTRUCTION

Revisions

No.	Description	Date

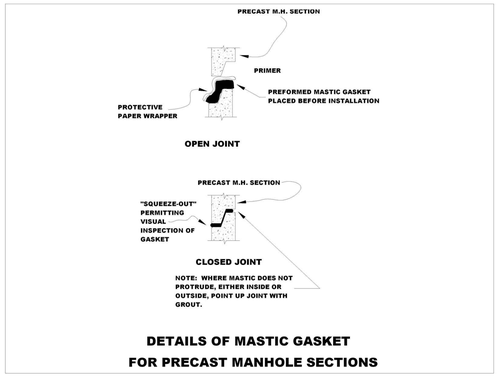
SITE DETAILS

Project number	20HH01
Date	11.03.2021

C5.1

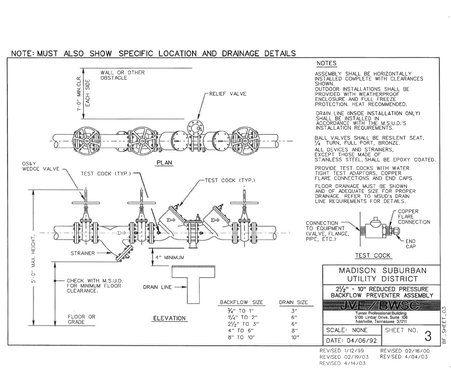
Scale	As indicated

P:\2980 Holladay Ventures\2980-01 MF 619 N Main Goodlts\vle\Dwg\C5.0-DETAIL-2980-01.dwg-C501



DETAILS OF MASTIC GASKET FOR PRECAST MANHOLE SECTIONS

12



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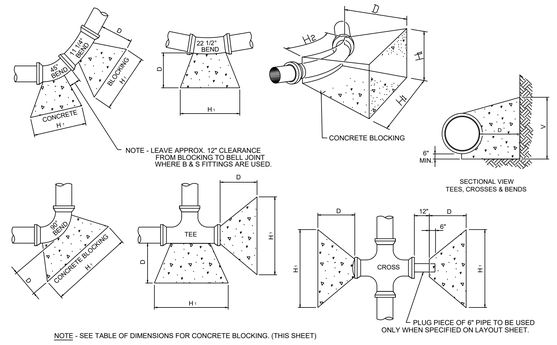
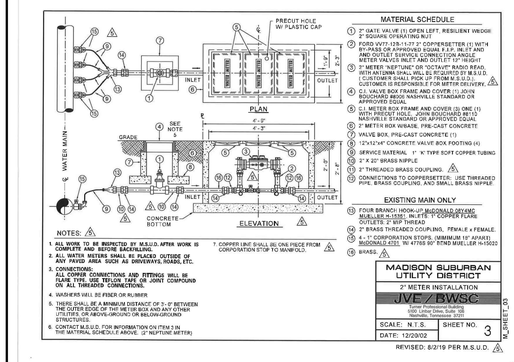


NOTE - SEE TABLE OF DIMENSIONS FOR CONCRETE BLOCKING. (THIS SHEET)

CONCRETE BLOCKING

5



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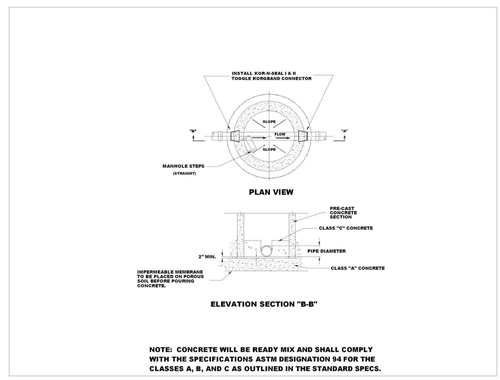
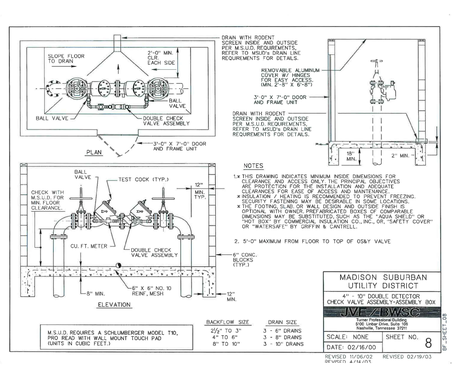


NOTE: CONCRETE WILL BE READY MIX AND SHALL COMPLY WITH THE SPECIFICATIONS ASTM DESIGNATION 94 FOR THE CLASSES A, B, AND C AS OUTLINED IN THE STANDARD SPECS.

13



9

SIZE OF PIPE	TAPPING SLEEVES TEES & PLUGS					90° BENDS					45° BENDS					22 1/2 ° BENDS					11 1/4 ° BENDS				
	H_1	H_2	V	D	CU. FT.	H_1	H_2	V	D	CU. FT.	H_1	H_2	V	D	CU. FT.	H_1	H_2	V	D	CU. FT.	H_1	H_2	V	D	CU. FT.
2"&2 1/2	48"	10"	12"	18"	1.90	18"	10"	12"	18"	1.90	18"	6"	12"	18"	1.50	18"	6"	12"	18"	1.50	18"	6"	12"	18"	1.50
3"&4"	24"	12"	12"	18"	2.25	24"	12"	12"	18"	2.25	18"	8"	12"	18"	1.60	18"	8"	12"	18"	1.60	18"	8"	12"	18"	1.60
6"	24"	16"	18"	18"	3.50	30"	16"	18"	18"	4.05	24"	10"	16"	18"	3.20	24"	10"	16"	18"	3.20	24"	10"	16"	18"	3.20
8"	36"	18"	18"	18"	5.05	39"	18"	24"	18"	7.30	30"	11"	18"	18"	3.95	24"	11"	18"	18"	3.40	24"	11"	16"	18"	3.40
10"	48"	24"	18"	24"	7.15	54"	32"	12"	18"	10.25	24"	18"	21"	18"	4.60	24"	18"	21"	18"	4.60	24"	18"	21"	18"	4.60
12"	54"	30"	24"	24"	13.4	54"	36"	26"	24"	18.15	42"	18"	24"	24"	9.60	24"	18"	24"	24"	6.80	24"	18"	21"	24"	6.10
16"	66"	34"	36"	24"	22.5	69"	48"	48"	24"	29.0	48"	30"	36"	24"	17.0	24"	30"	27"	24"	11.8	27"	24"	27"	24"	9.10
24"	84"	48"	46"	30"	75.6	88"	68"	68"	36"	126.8	60"	36"	42"	36"	48.0	36"	30"	42"	36"	22.7	36"	30"	42"	36"	22.7

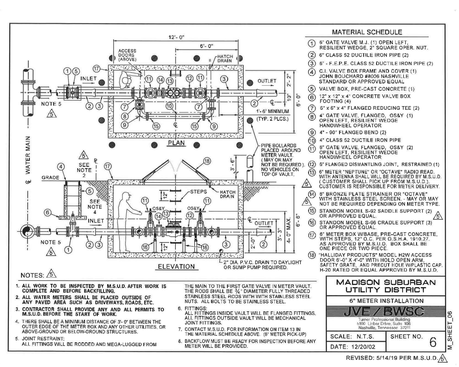
TABLE IS BASED ON 225 P.S.I. OR 150 P.S.I. WORKING PRESSURE PLUS 50% WATER HAMMER.

NOTE: CONCRETE USED FOR BLOCKING SHALL BE 3500#/sq. in

EARTH PRESSURES ARE FIGURED AT 400#/# PER SQ. FT. BEARING AREA OF KICKERS SHALL BE INCREASED WHEN POURED AGAINST SAND, LOOSE FILL, WET EARTH, CINDERS, ETC.

TABLE OF DIMENSIONS FOR CONCRETE BLOCKING

5



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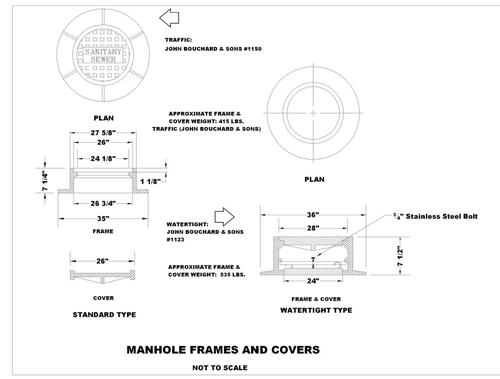
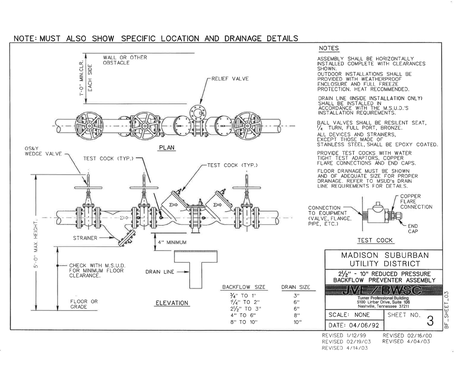


MANHOLE FRAMES AND COVERS

NOT TO SCALE

14



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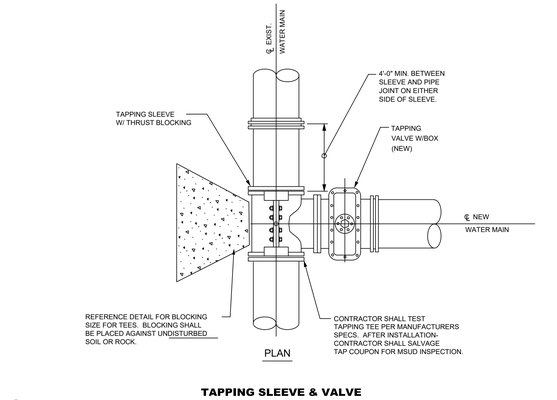
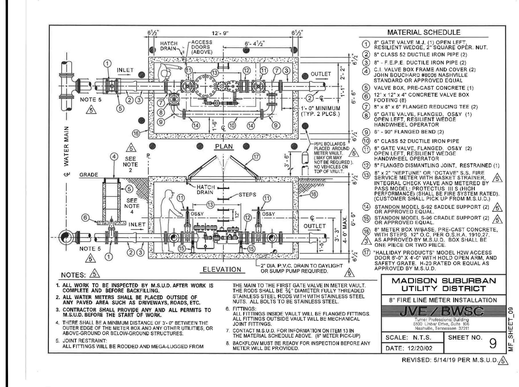


TAPPING SLEEVE & VALVE

N.T.S.

6



3

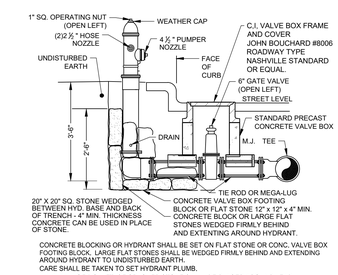
MANHOLE FRAMES AND COVERS

NOT TO SCALE

11

RESERVED

NOT TO SCALE



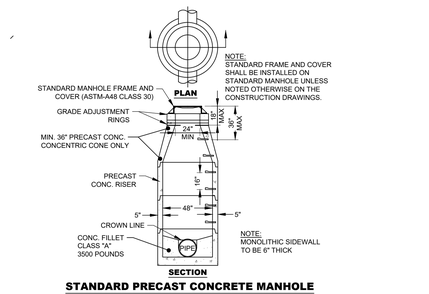
CONCRETE BLOCKING OR HYDRANT SHALL BE SET ON FLAT STONE OR CONC. VALVE BOX FOOTING BLOCK. LARGE FLAT STONES SHALL BE WEDGED FIRMLY BEHIND AND EXTENDING AROUND HYDRANT TO UNDISTURBED EARTH. CARE SHALL BE TAKEN TO SET HYDRANT PLUMB.

A MINIMUM OF 2 CU. FT. OF CRUSHED STONE SHALL BE PLACED AROUND LEAD ADJOINING BLOCKING FOR DRAINAGE FROM WASTE OPENING.

FIRE HYDRANT INSTALLTION

N.T.S.

7



STANDARD PRECAST CONCRETE MANHOLE

N.T.S.

4

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134 4th Avenue N.
Franklin, TN 37064
615-628-7270

FOOD SERVICE:
Dine Company
3110 Preston Hwy
Louisville, KY 40213
502-637-3232

Project Name

STONE BRIDGE LOFTS

619 NORTH MAIN STREET GOODLETTSVILLE TN 37072

Client

HOLLADAY VENTURES

JOHN R. GRIFFIN — REGISTERED ENGINEER — AGRICULTURAL — CIVIL — STRUCTURAL — 20885 — STATE OF TENNESSEE — 08/12/21

NOT FOR CONSTRUCTION

Revisions

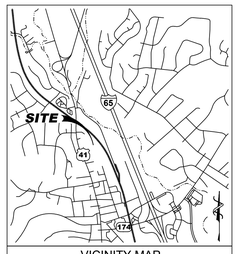
No.	Description	Date

SITE DETAILS

Project number	20HH01
Date	11.03.2021

C5.2

Scale: As indicated



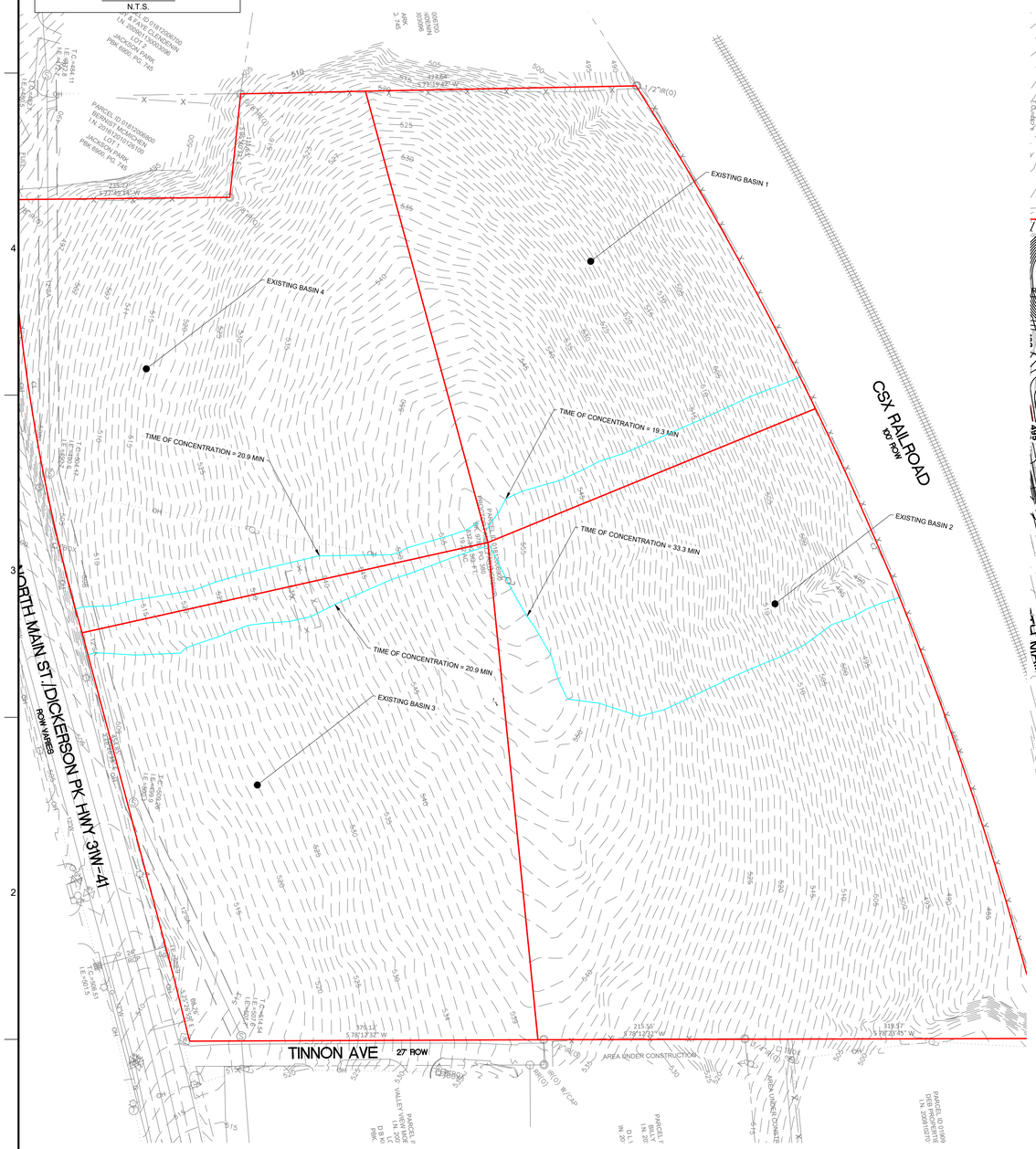
VICINITY MAP
N.T.S.

EXISTING CONDITIONS

	BASIN 1	BASIN 2	BASIN 3	BASIN 4
Q2	5.989	8.605	5.458	5.529
Q5	9.601	13.830	9.530	9.654
Q10	12.070	17.430	12.430	12.600
Q25	15.260	22.090	16.290	16.500
Q50	17.650	25.590	19.210	19.470
Q100	20.010	29.060	22.140	22.430

PROPOSED CONDITIONS

	BASIN 1	BASIN 2	BASIN 3	BASIN 4
Q2	4.478	7.549	2.426	3.580
Q5	7.069	12.060	8.429	7.944
Q10	8.835	15.130	12.040	10.460
Q25	11.110	19.110	15.390	13.060
Q50	12.810	22.080	17.600	14.810
Q100	14.490	25.020	18.950	16.400



GRID

STATE PLANE COORDINATE SYSTEM NAD-83 (1990)

0 30 60 120 180

GRAPHIC SCALE

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Louisville, KY 40213
502-637-3232

Project Name

STONE BRIDGE LOFTS

619 NORTH MAIN STREET
GOODLETTSVILLE
TN 37072

Client

HOLLADAY VENTURES

JOHN R. GORE
REGISTERED ENGINEER
AGENCY NUMBER
109850
STATE OF TENNESSEE
11/08/21

NOT FOR CONSTRUCTION

Revisions

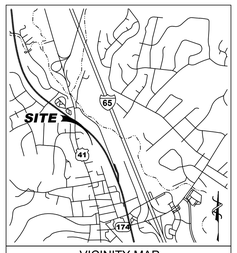
No.	Description	Date

SITE DRAINAGE PLAN

Project number	20HH01
Date	11.03.2021

D1.0

Scale	As indicated



VICINITY MAP
N.T.S.

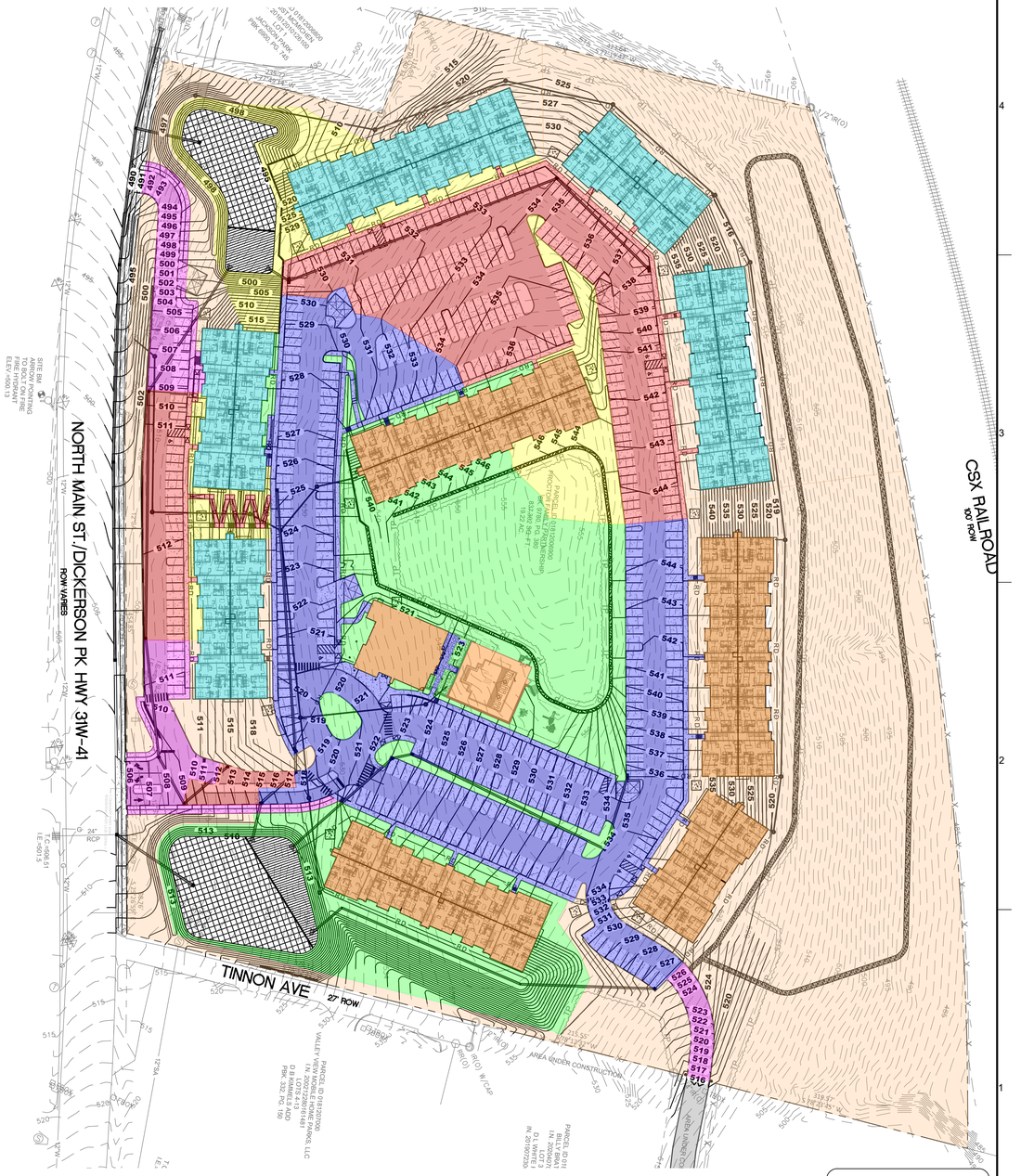
STATE PLANE COORDINATE SYSTEM NAD-83 (1990)

0 30 60 120 180

GRAPHIC SCALE

EXISTING CONDITIONS	
EXISTING FOREST (19.22 AC.)	

PROPOSED CONDITIONS	
PROPOSED ROOF TO NORTHWEST BIO (1.54 AC.)	
PROPOSED ROOF TO SOUTHWEST BIO (1.63 AC.)	
PROPOSED PAVEMENT TO NORTHWEST BIO (1.87 AC.)	
PROPOSED PAVEMENT TO SOUTHWEST BIO (2.66 AC.)	
PROPOSED PERMEABLE TO NORTHWEST BIO (1.10 AC.)	
PROPOSED PERMEABLE TO SOUTHWEST BIO (2.64 AC.)	
PROPOSED PERMEABLE BYPASS (7.12 AC.)	
PROPOSED IMPERMEABLE BYPASS (0.56 AC.)	
PROPOSED LEVEL 2 BIORETENTION AREA (0.60 AC.)	



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FOOD SERVICE:
Dine Company
3110 Preston Hwy
Louisville, KY 40213
502-637-3232

Project Name

STONE BRIDGE LOFTS

619 NORTH
MAIN STREET
GOODLETTSVILLE
TN 37072

Client

HOLLADAY VENTURES

JOHN R. GORE
REGISTERED ENGINEER
AGENT
NO. 109855
STATE OF TENNESSEE
11/05/21

NOT FOR CONSTRUCTION

Revisions

No.	Description	Date

LID PLAN

Project number	20HH01
Date	11.03.2021

D2.0

Scale	As indicated

DESIGN SERVICES FOR STONE BRIDGE LOFTS APARTMENTS

619 MAIN ST.
GOODLETTSVILLE, TN 37072
APPLICATION SET

STONE BRIDGE LOFTS APARTMENTS

Address: Nashville, TN

BLDG TYPE A

Unit Type	Total # of Units	1st Floor	2nd Floor	3rd Floor	4th Floor	GSF PER UNIT	GSF UNIT TOTAL	NRA PER UNIT	NRA UNIT TOTAL	Porch Area	Unit Description
1BR	14	2	4	4	4	761	10,654	711	9,954	64	1 bdr; 1 bath
2BR	14	2	4	4	4	1,140	15,960	1,075	15,050	65	2 bdr; 2 bath
3BR	14	2	4	4	4	1,360	19,040	1,290	18,060	71	3 bdr; 2 bath
TOTAL	42	6	12	12	12		45,654		43,064		

BLDG TYPE B

Unit Type	Total # of Units	1st Floor	2nd Floor	3rd Floor	4th Floor	GSF PER UNIT	GSF UNIT TOTAL	NRA PER UNIT	NRA UNIT TOTAL	Porch Area	Unit Description
1BR	28	4	8	8	8	761	21,308	711	19,908	64	1 bdr; 1 bath
2BR	14	2	4	4	4	1,140	15,960	1,075	15,050	65	2 bdr; 2 bath
TOTAL	42	6	12	12	12		37,268		34,958		

BLDG TYPE C

Unit Type	Total # of Units	1st Floor	2nd Floor	3rd Floor	4th Floor	GSF PER UNIT	GSF UNIT TOTAL	NRA PER UNIT	NRA UNIT TOTAL	Porch Area	Unit Description
1BR	14	2	4	4	4	761	10,654	711	9,954	64	1 bdr; 1 bath
3BR	14	2	4	4	4	1,360	19,040	1,290	18,060	71	3 bdr; 2 bath
TOTAL	28	4	8	8	8		29,694		28,014		

BLDG TYPE D - Commercial space

Unit Type	Total # of Units	1st Floor	2nd Floor	3rd Floor	4th Floor	GSF PER UNIT	GSF UNIT TOTAL	NRA PER UNIT	NRA UNIT TOTAL	Porch Area	Unit Description
2BR	12		4	4	4	1,140	13,680	1,075	12,900	65	2 bdr; 2 bath
3BR	12		4	4	4	1,360	16,320	1,290	15,480	71	3 bdr; 2 bath
TOTAL	24	-	8	8	8		30,000		28,380		

BLDG TYPE E - Work spaces

Unit Type	Total # of Units	1st Floor	2nd Floor	3rd Floor	4th Floor	GSF PER UNIT	GSF UNIT TOTAL	NRA PER UNIT	NRA UNIT TOTAL	Porch Area	Unit Description
2BR	10		2	4	4	1,140	11,400	1,075	10,750	65	2 bdr; 2 bath
3BR	11		3	4	4	1,360	14,960	1,290	14,190	71	3 bdr; 2 bath
TOTAL	21	-	5	8	8		26,360		24,940		

ACCESSIBLE UNITS:	ACCESSIBLE UNIT LOCATIONS SHOWN ON A0#1 ACCESSIBLE AND SENSORY UNIT LOCATIONS PLAN. NUMBER OF ACCESSIBLE UNITS PROVIDED PER TABLE BELOW.
ANSI TYPE B:	ALL 1ST FLOOR UNITS THAT ARE NOT ACCESSIBLE UNITS SHALL BE TYPE B UNITS PER ANSI 117.1a
GSF:	GROSS SQUARE FOOTAGE: OUTSIDE FACE OF EXTERIOR WALL STUDS OF THE UNIT OR BUILDING. DOES NOT INCLUDE PATIOS OR BALCONIES. INCLUDES BREEZEWAYS.
NRA:	NET RENTABLE AREA (PAINT-TO-PAINT AREA OF THE CONDITIONED SPACE OF THE APARTMENT, INCLUDING ALL INTERIOR WALL OF PARTITIONS.)

NRA (Not Rentable Area) of Dwelling Units

	1st Floor	2nd Floor	3rd Floor	4th Floor	Total
BLDG TYPE A	6,152 NRA	12,304 NRA	12,304 NRA	12,304 NRA	43,064 NRA
BLDG TYPE B	4,994 NRA	9,988 NRA	9,988 NRA	9,988 NRA	34,958 NRA
BLDG TYPE C	4,002 NRA	8,004 NRA	8,004 NRA	8,004 NRA	28,014 NRA
BLDG TYPE D - Commercial space	9,460 NRA	9,460 NRA	9,460 NRA	9,460 NRA	28,380 NRA
BLDG TYPE E - Work spaces	6,020 NRA	9,460 NRA	9,460 NRA	9,460 NRA	24,940 NRA
			Total all Bldgs		300,350 NRA

GSF (Gross Square Footage) - Residential bldgs.

	1st Floor	2nd Floor	3rd Floor	4th Floor	Total
BLDG TYPE A	7,470 GSF	14,984 GSF	14,940 GSF	14,940 GSF	52,334 GSF
BLDG TYPE B	8,229 GSF	16,501 GSF	16,457 GSF	16,457 GSF	57,644 GSF
BLDG TYPE C	4,879 GSF	9,801 GSF	9,757 GSF	9,757 GSF	34,194 GSF
BLDG TYPE D -	5,579 GSF	11,201 GSF	11,157 GSF	11,157 GSF	39,094 GSF
BLDG TYPE E -	5,631 GSF	11,262 GSF	11,262 GSF	11,262 GSF	39,417 GSF
				Total All Residential Bldgs	424,496 GSF

TOTAL # DWELLING UNITS

Dwelling Units - Total	311 UNITS
1BR + 1BR accessible units	140 UNITS
2BR + 2BR accessible units	92 UNITS
3BR + 3BR accessible units	79 UNITS
Dwelling Units - Total GSF	318,860 GSF

Gross Square Footage - Other Amenities

Building	Quantity	GSF
Clubhouse	1	5,484 GSF
Total - Amenities		5,484 GSF
TOTAL GSF - SITE		429,980 GSF

 # OF ACCESSIBLE AND SENSORY UNITS

UNITS	ACCESSIBLE - 5%		SENSORY - 2%	
	REQUIRED	PROVIDED	REQUIRED	PROVIDED
1BR	7.0 UNITS	7 UNITS	2.8 UNITS	3 UNITS
2BR	4.6 UNITS	5 UNITS	1.8 UNITS	2 UNITS
3BR	4.0 UNITS	4 UNITS	1.6 UNITS	2 UNITS
TOTAL	15.6 UNITS	16 UNITS	6.2 UNITS	7 UNITS

TOTAL # BUILDINGS

Building Type	Quantity	BLDG # - REFER TO CIVIL
BLDG TYPE A	2	
BLDG TYPE B	3	
BLDG TYPE C	2	
BLDG TYPE D - Com	1	
BLDG TYPE E - Work	1	
TOTAL	9	

BUILDING INFORMATION

	BLDG TYPE A	BLDG TYPE B	BLDG TYPE C	BLDG TYPE D - Commercial space	BLDG TYPE E - Work spaces	CLUBHOUSE			
CONSTRUCTION TYPE	S-A	S-A	S-A	S-A	S-A	S-B			
USE GROUP	R-2	R-2	R-2	R-2	R-2	B/A-3			
SPRINKLER SYSTEM	NFPA 13R	NFPA 13R	NFPA 13R	NFPA 13R	NFPA 13R	none			
MEDIAN ROOF HEIGHT									

OWNER	ARCHITECT	MEP & STRUCTURAL ENGINEERS	CIVIL ENGINEER	CONTRACTOR
	STUDIO A, LLC 2330 FRANKFORT AVE. LOUISVILLE, KY 40206 (502) 589-8007	GENESIS ENGINEERING GROUP, INC. 134 4TH AVENUE NORTH FRANKLIN, TN 37064 (615) 628-7270	BARGE CAUTHEN & ASSOC. 6606 CHARLOTTE PIKE SUITE 210 NASHVILLE, TN 37209 (615)-356-9911	

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A102	BUILDING TYPE A - 4TH FLOOR AND ROOF PLANS	Nov. 03, 2021		
A103	BUILDING TYPE B - 1ST, 2ND, & 3RD FLOOR PLANS	Nov. 03, 2021		
A104	BUILDING TYPE B - 4TH FLOOR AND ROOF PLANS	Nov. 03, 2021		
A105	BUILDING TYPE C - 1ST, 2ND, & 3RD FLOOR PLANS	Nov. 03, 2021		
A106	BUILDING TYPE C - 4TH FLOOR AND ROOF PLANS	Nov. 03, 2021		
A107	BUILDING TYPE D - 1ST, 2ND, & 3RD FLOOR PLANS	Nov. 03, 2021		
A108	BUILDING TYPE D 4TH FLOOR AND ROOF PLANS	Nov. 03, 2021		
A109	BUILDING TYPE E - 1ST, 2ND FLOOR PLANS	Nov. 03, 2021		
A110	BUILDING TYPE E 3RD FLOOR PLAN	Nov. 03, 2021		
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A112	CLUBHOUSE FLOOR PLAN	Nov. 03, 2021		
A113	CLUBHOUSE ROOF PLAN	Nov. 03, 2021		
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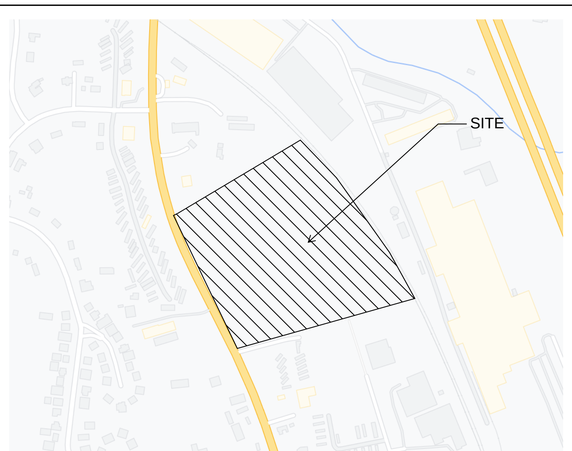
06 Architectural Schematics				
SD2.101	SCHEMATIC ELEVATIONS - BUILDING A	Nov. 03, 2021		
SD2.102	SCHEMATIC ELEVATIONS - BUILDING B	Nov. 03, 2021		
SD2.103	SCHEMATIC ELEVATIONS - BUILDING C	Nov. 03, 2021		
SD2.104	SCHEMATIC ELEVATIONS - BUILDING D	Nov. 03, 2021		
SD2.105	SCHEMATIC ELEVATIONS - BUILDING E	Nov. 03, 2021		
SD2.106	SCHEMATIC ELEVATIONS - CLUBHOUSE	Nov. 03, 2021		

VICINITY MAP



GOVERNING CODES W/ LOCAL AMENDMENTS

2012 INTERNATIONAL BUILDING CODE (IBC)

2012 INTERNATIONAL RESIDENTIAL CODE (IRC)

2012 INTERNATIONAL MECHANICAL CODE (IMC)

2012 INTERNATIONAL PLUMBING CODE (IPC)

2012 INTERNATIONAL FIRE CODE (IFC)

2014 NATIONAL ELECTRIC CODE (NEC)

2012 INTERNATIONAL ENERGY CONVERVATION CODE (IECC)

MINIMUM PROPERTY STANDARDS FOR HOUSING, 1994 EDITION 4910.1

2009 ANSI 117.1 ACCESIBLE & USABLE BUILDINGS PER CHAPTER 11 OF IBC FAIR HOUSING ACCESSIBILITY GUIDELINES

FAIR HOUSING ACT ACCESSIBLE GUIDELINES

2010 ADA AMERICANS W/ DISABILITIES ACT

DEFERRED SUBMITTAL ITEMS

THE FOLLOWING LISTED BELOW ARE DEFERRED SUBMITTAL ITEMS. ALL HUD REQUIRED DESIGN DOCUMENTATIONS, DRAWINGS, AND/OR SPECIFICATIONS NOT ATTACHED TO THIS SET WILL BE SUBMITTED AT A LATER DATE.

1. WOOD FLOOR AND ROOF JOISTS
2. IRRIGATION SYSTEM
3. FIRE SUPPRESSION (SPRINKLER) SYSTEM
4. FIRE ALARM SYSTEM
5. SIGNAGE
6. RADON CONTROL SYSTEM
7. POOL

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Consultants

Project Name

Stone Bridge Lofts

619 MAIN ST.
GOODLETTSVILLE, TN 37072

Client

Holladay Ventures

ANTHONY M. BUTLER — REGISTERED ARCHITECT — STATE OF TENNESSEE

NOT FOR CONSTRUCTION

Revisions

No.	Description	Date

COVER SHEET

Project number 20HD01
Date Nov. 03, 2021

G000

Scale As indicated

Plotted: 11/3/2021 2:34:54 PM
S:\Projects\20HD01 Stone Bridge Lofts\Arch\20HD01 Stone Bridge Lofts Arch R20.rvt

1 Schematic Elevation- Type A - Front
SD2.101 1/8" = 1'-0"

2 Schematic Elevation- Type A - Rear
SD2.101 1/8" = 1'-0"

3 Schematic Elevation- Type A - Left
SD2.101 1/8" = 1'-0"

4 Schematic Elevation- Type A - Right
SD2.101 1/8" = 1'-0"

4A. FACE BRICK (RUNNING BOND PATTERN) - COLOR: CHARCOAL - B.O.D. BELDEN BLACK DIAMOND VELOUR

4B. SOLDIER COURSE BRICK - COLOR: ARTIC WHITE - B.O.D. BELDEN ALASKA WHITE DARTTEX

4C. SOLDIER COURSE BRICK - COLOR: CHARCOAL - B.O.D. BELDEN BLACK DIAMOND VELOUR

6A. WOOD BRACKET - EXTERIOR COATED - B.O.D. TIMBERBUILD WOOD BRACKET 13T7

6B. FIELD FABRICATED TRUSS, WRAP WITH FIBER CEMENT

7A. PRE-FINISHED 12" FIBER CEMENT VERTICAL BOARD & BATTEN SIDING - B.O.D. ALLURA TRADITIONAL LAP COLOR: KNIGHT'S ARMOR

7B. PRE-FINISHED 5" FIBER CEMENT LAP SIDING - B.O.D. ALLURA TRADITIONAL LAP COLOR: SNOW

7C. PRE-FINISHED 12" FIBER CEMENT VERTICAL BOARD & BATTEN SIDING - B.O.D. ALLURA TRADITIONAL LAP COLOR: SNOW

7D. PRE-FINISHED FIBER CEMENT PANELS BEAM & TRUSS WRAP - B.O.D. ALLURA TRADITIONAL LAP COLOR: CARAMELIZED PEARS

7E. PRE-FINISHED FIBER CEMENT 4" TRIM PANELS - B.O.D. ALLURA TRADITIONAL LAP COLOR: SNOW

7F. ARCHITECTURAL TAB SHINGLES w/ 25-YEAR WARRANTY

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Client

Holladay Ventures

ANTHONY M. BUTLER
REGISTERED ARCHITECT
STATE OF TENNESSEE

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Revisions

No.	Description	Date

SCHEMATIC ELEVATIONS - BUILDING A

Project number 20HD01
Date Oct. 12, 2021

SD2.101

Scale 1/8" = 1'-0"

BIM 360://20-01 Stone Bridge Lofts/20HD01-Stone Bridge Lofts-Arch-R20.rvt

1 Schematic Elevation- Type B - Front
SD2.102 1/8" = 1'-0"

2 Schematic Elevation- Type B - Rear
SD2.102 1/8" = 1'-0"

3 Schematic Elevation- Type B - Left
SD2.102 1/8" = 1'-0"

4 Schematic Elevation- Type B - Right
SD2.102 1/8" = 1'-0"

4A. FACE BRICK (RUNNING BOND PATTERN) - COLOR: CHARCOAL - B.O.D. BELDEN BLACK DIAMOND VELOUR

4B. SOLDIER COURSE BRICK - COLOR: ARTIC WHITE - B.O.D. BELDEN ALASKA WHITE DARTTEX

4C. SOLDIER COURSE BRICK - COLOR: CHARCOAL - B.O.D. BELDEN BLACK DIAMOND VELOUR

6A. WOOD BRACKET - EXTERIOR COATED - B.O.D. TIMBERBUILD WOOD BRACKET 13T7

6B. FIELD FABRICATED TRUSS, WRAP WITH FIBER CEMENT

7A. PRE-FINISHED 12" FIBER CEMENT VERTICAL BOARD & BATTEN SIDING - B.O.D. ALLURA TRADITIONAL LAP COLOR: KNIGHT'S ARMOR

7B. PRE-FINISHED 5" FIBER CEMENT LAP SIDING - B.O.D. ALLURA TRADITIONAL LAP COLOR: SNOW

7C. PRE-FINISHED 12" FIBER CEMENT VERTICAL BOARD & BATTEN SIDING - B.O.D. ALLURA TRADITIONAL LAP COLOR: SNOW

7D. PRE-FINISHED FIBER CEMENT PANELS BEAM & TRUSS WRAP - B.O.D. ALLURA TRADITIONAL LAP COLOR: CARAMELIZED PEARS

7E. PRE-FINISHED FIBER CEMENT 4" TRIM PANELS - B.O.D. ALLURA TRADITIONAL LAP COLOR: SNOW

7F. ARCHITECTURAL TAB SHINGLES w/ 25-YEAR WARRANTY

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STATE OF TENNESSEE

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Revisions

No.	Description	Date

SCHEMATIC ELEVATIONS - BUILDING B

Project number 20HD01
Date Oct. 12, 2021

SD2.102

Scale 1/8" = 1'-0"

BIM 360://20HD01 Stone Bridge Lofts/20HD01 Stone Bridge Lofts Arch.rvt
2/2/2022 4:47:54 PM

1 Schematic Elevation- Type C - Front
SD2.103 1/8" = 1'-0"

2 Schematic Elevation- Type C - Rear
SD2.103 1/8" = 1'-0"

3 Schematic Elevation- Type C - Left
SD2.103 1/8" = 1'-0"

4 Schematic Elevation- Type C - Right
SD2.103 1/8" = 1'-0"

4A. FACE BRICK (RUNNING BOND PATTERN) - COLOR: CHARCOAL - B.O.D. BELDEN BLACK DIAMOND VELOUR

4B. SOLDIER COURSE BRICK - COLOR: ARTIC WHITE - B.O.D. BELDEN ALASKA WHITE DARTTEX

4C. SOLDIER COURSE BRICK - COLOR: CHARCOAL - B.O.D. BELDEN BLACK DIAMOND VELOUR

6A. WOOD BRACKET - EXTERIOR COATED - B.O.D. TIMBERBUILD WOOD BRACKET 13T7

6B. FIELD FABRICATED TRUSS, WRAP WITH FIBER CEMENT

7A. PRE-FINISHED 12" FIBER CEMENT VERTICAL BOARD & BATTEN SIDING - B.O.D. ALLURA TRADITIONAL LAP COLOR: KNIGHT'S ARMOR

7B. PRE-FINISHED 5" FIBER CEMENT LAP SIDING - B.O.D. ALLURA TRADITIONAL LAP COLOR: SNOW

7C. PRE-FINISHED 12" FIBER CEMENT VERTICAL BOARD & BATTEN SIDING - B.O.D. ALLURA TRADITIONAL LAP COLOR: SNOW

7D. PRE-FINISHED FIBER CEMENT PANELS BEAM & TRUSS WRAP - B.O.D. ALLURA TRADITIONAL LAP COLOR: CARAMELIZED PEARS

7E. PRE-FINISHED FIBER CEMENT 4" TRIM PANELS - B.O.D. ALLURA TRADITIONAL LAP COLOR: SNOW

7F. ARCHITECTURAL TAB SHINGLES w/ 25-YEAR WARRANTY

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Revisions

No.	Description	Date

SCHEMATIC ELEVATIONS - BUILDING C

Project number 20HD01
Date Oct. 12, 2021

SD2.103

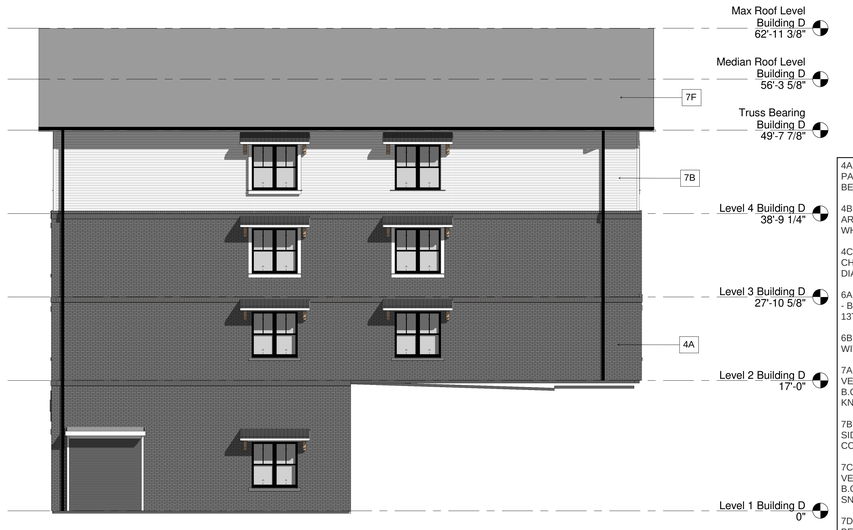
Scale 1/8" = 1'-0"

BIM 360://20HD1-Stone Bridge Lofts/SHD01-Stone Bridge Lofts-Arch-R20.rvt
2/25/2021 4:47:49 PM

1 Schematic Elevation- Type D - Front
SD2.104 1/8" = 1'-0"

2 Schematic Elevation- Type D - Rear
SD2.104 1/8" = 1'-0"

3 Schematic Elevation- Type D - Left
SD2.104 1/8" = 1'-0"



4 Schematic Elevation- Type D - Right
SD2.104 1/8" = 1'-0"

4A. FACE BRICK (RUNNING BOND PATTERN) - COLOR: CHARCOAL - B.O.D. BELDEN BLACK DIAMOND VELOUR

4B. SOLDIER COURSE BRICK - COLOR: ARTIC WHITE - B.O.D. BELDEN ALASKA WHITE DARTTEX

4C. SOLDIER COURSE BRICK - COLOR: CHARCOAL - B.O.D. BELDEN BLACK DIAMOND VELOUR

6A. WOOD BRACKET - EXTERIOR COATED - B.O.D. TIMBERBUILD WOOD BRACKET 13T7

6B. FIELD FABRICATED TRUSS, WRAP WITH FIBER CEMENT

7A. PRE-FINISHED 12" FIBER CEMENT VERTICAL BOARD & BATTEN SIDING - B.O.D. ALLURA TRADITIONAL LAP COLOR: KNIGHT'S ARMOR

7B. PRE-FINISHED 5" FIBER CEMENT LAP SIDING - B.O.D. ALLURA TRADITIONAL LAP COLOR: SNOW

7C. PRE-FINISHED 12" FIBER CEMENT VERTICAL BOARD & BATTEN SIDING - B.O.D. ALLURA TRADITIONAL LAP COLOR: SNOW

7D. PRE-FINISHED FIBER CEMENT PANELS BEAM & TRUSS WRAP - B.O.D. ALLURA TRADITIONAL LAP COLOR: CARAMELIZED PEARS

7E. PRE-FINISHED FIBER CEMENT 4" TRIM PANELS - B.O.D. ALLURA TRADITIONAL LAP COLOR: SNOW

7F. ARCHITECTURAL TAB SHINGLES w/ 25-YEAR WARRANTY

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Client

Holladay Ventures

ANTHONY M. BUTLER
REGISTERED ARCHITECT
STATE OF TENNESSEE

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Revisions

No.	Description	Date

SCHEMATIC ELEVATIONS - BUILDING D

Project number 20HD01
Date Oct. 12, 2021

SD2.104

Scale 1/8" = 1'-0"

BIM 360://20HD01 Stone Bridge Lofts/20HD01 Stone Bridge Lofts_Arch R20.rvt

1 SD2.105 Schematic Elevation- Type E - Front
1/8" = 1'-0"

2 SD2.105 Schematic Elevation- Type E - Rear
1/8" = 1'-0"

3 SD2.105 Schematic Elevation- Type E - Left
1/8" = 1'-0"

4 SD2.105 Schematic Elevation- Type E - Right
1/8" = 1'-0"

4A. FACE BRICK (RUNNING BOND PATTERN) - COLOR: CHARCOAL - B.O.D. BELDEN BLACK DIAMOND VELOUR

4B. SOLDIER COURSE BRICK - COLOR: ARTIC WHITE - B.O.D. BELDEN ALASKA WHITE DARTTEX

4C. SOLDIER COURSE BRICK - COLOR: CHARCOAL - B.O.D. BELDEN BLACK DIAMOND VELOUR

6A. WOOD BRACKET - EXTERIOR COATED - B.O.D. TIMBERBUILD WOOD BRACKET 13T7

6B. FIELD FABRICATED TRUSS, WRAP WITH FIBER CEMENT

7A. PRE-FINISHED 12" FIBER CEMENT VERTICAL BOARD & BATTEN SIDING - B.O.D. ALLURA TRADITIONAL LAP COLOR: KNIGHT'S ARMOR

7B. PRE-FINISHED 5" FIBER CEMENT LAP SIDING - B.O.D. ALLURA TRADITIONAL LAP COLOR: SNOW

7C. PRE-FINISHED 12" FIBER CEMENT VERTICAL BOARD & BATTEN SIDING - B.O.D. ALLURA TRADITIONAL LAP COLOR: SNOW

7D. PRE-FINISHED FIBER CEMENT PANELS BEAM & TRUSS WRAP - B.O.D. ALLURA TRADITIONAL LAP COLOR: CARAMELIZED PEARS

7E. PRE-FINISHED FIBER CEMENT 4" TRIM PANELS - B.O.D. ALLURA TRADITIONAL LAP COLOR: SNOW

7F. ARCHITECTURAL TAB SHINGLES w/ 25-YEAR WARRANTY

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STATE OF TENNESSEE

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Revisions

No.	Description	Date

SCHEMATIC ELEVATIONS - BUILDING E

Project number 20HD01
Date Oct. 12, 2021

SD2.105

Scale 1/8" = 1'-0"

BIM 360://20-HD1-Stone Bridge Lofts/20HD1-Stone Bridge Lofts-Arch-R2c.rvt
2/26/2021 4:13:47 PM

5 Axon-Clubhouse 1
SD2.106

4A. FACE BRICK (RUNNING BOND PATTERN) - COLOR: CHARCOAL - B.O.D. BELDEN BLACK DIAMOND VELOUR

4B. SOLDIER COURSE BRICK - COLOR: ARTIC WHITE - B.O.D. BELDEN ALASKA WHITE DARTTEX

4C. SOLDIER COURSE BRICK - COLOR: CHARCOAL - B.O.D. BELDEN BLACK DIAMOND VELOUR

6A. WOOD BRACKET - EXTERIOR COATED - B.O.D. TIMBERBUILD WOOD BRACKET 13T7

6B. FIELD FABRICATED TRUSS, WRAP WITH FIBER CEMENT

7A. PRE-FINISHED 12" FIBER CEMENT VERTICAL BOARD & BATTEN SIDING - B.O.D. ALLURA TRADITIONAL LAP COLOR: KNIGHT'S ARMOR

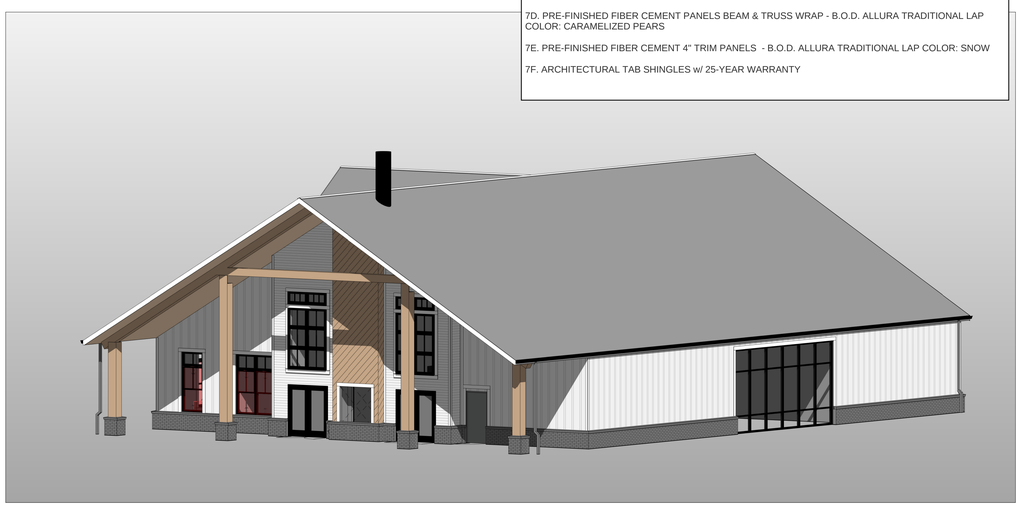
7B. PRE-FINISHED 5" FIBER CEMENT LAP SIDING - B.O.D. ALLURA TRADITIONAL LAP COLOR: SNOW

7C. PRE-FINISHED 12" FIBER CEMENT VERTICAL BOARD & BATTEN SIDING - B.O.D. ALLURA TRADITIONAL LAP COLOR: SNOW

7D. PRE-FINISHED FIBER CEMENT PANELS BEAM & TRUSS WRAP - B.O.D. ALLURA TRADITIONAL LAP COLOR: CARAMELIZED PEARS

7E. PRE-FINISHED FIBER CEMENT 4" TRIM PANELS - B.O.D. ALLURA TRADITIONAL LAP COLOR: SNOW

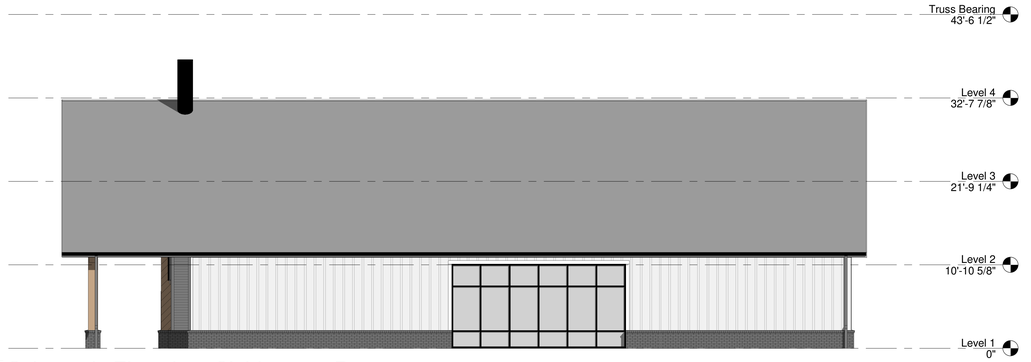
7F. ARCHITECTURAL TAB SHINGLES w/ 25-YEAR WARRANTY



6 Axon-Clubhouse 2
SD2.106

1 Schematic Elevation- Clubhouse - Front
SD2.106 1/8" = 1'-0"

2 Schematic Elevation- Clubhouse - Left
SD2.106 1/8" = 1'-0"



3 Schematic Elevation- Clubhouse - Rear
SD2.106 1/8" = 1'-0"

4 Schematic Elevation- Clubhouse - Right
SD2.106 1/8" = 1'-0"

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Client

Holladay Ventures

ANTHONY M. BUTLER
REGISTERED ARCHITECT
STATE OF TENNESSEE

NOT FOR CONSTRUCTION

Revisions

No.	Description	Date

SCHEMATIC ELEVATIONS - CLUBHOUSE

Project number 20HD01
Date Oct. 12, 2021

SD2.106

Scale 1/8" = 1'-0"

BIM 360:20-CDS-Stone Bridge Lofts/20HD01-Stone Bridge Lofts_Arch-R20.rvt
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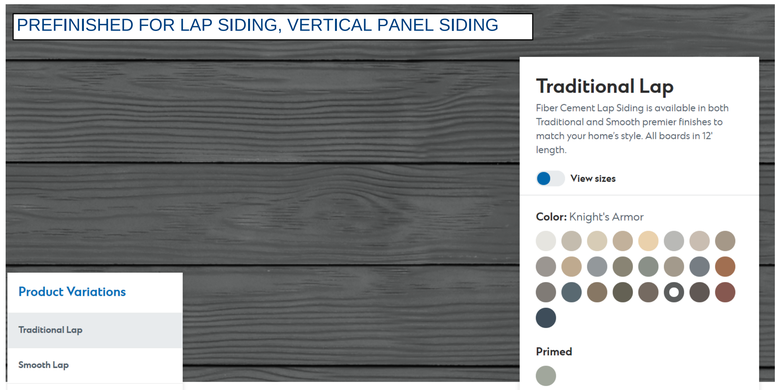
PREFINISHED FOR LAP SIDING, VERTICAL PANEL SIDING



Traditional Lap

Fiber Cement Lap Siding is available in both Traditional and Smooth premier finishes to match your home's style. All boards in 12' length.

View sizes

Color: Knight's Armor

Primed

Product Variations

- Traditional Lap
- Smooth Lap
- 7" Perfection Shingles

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Home › Products › Allura™ Lap Siding

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PREFINISHED FOR LAP SIDING, VERTICAL PANEL SIDING

Traditional Lap

Fiber Cement Lap Siding is available in both Traditional and Smooth premier finishes to match your home's style. All boards in 12' length.

View sizes

Color: Snow

Primed

Product Variations

- Traditional Lap
- Smooth Lap
- 7" Perfection Shingles

allura

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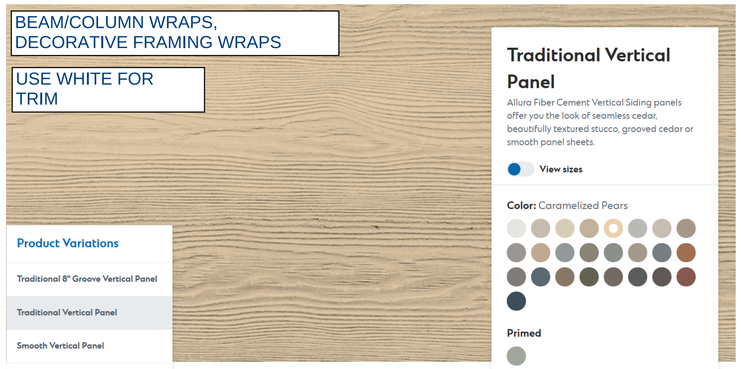
BEAM/COLUMN WRAPS, DECORATIVE FRAMING WRAPS

USE WHITE FOR TRIM



Traditional Vertical Panel

Allura Fiber Cement Vertical Siding panels offer you the look of seamless cedar, beautifully textured stucco, grooved cedar or smooth panel sheets.

View sizes

Color: Caramelized Pears

Primed

Product Variations

- Traditional 8" Groove Vertical Panel
- Traditional Vertical Panel
- Smooth Vertical Panel
- Stucco Vertical Panel

TimberBuild

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PRODUCTS CUSTOM WORK INSPIRATION RESOURCES SUPPORT CONTEST

HOME / WOODEN BRACKETS / WOOD BRACKET 13T7

22″

24″

Wood Bracket 13T7

MPN: B13T722X24
PRODUCT LINE: Brackets - 13
PROJECTION: 22 in
HEIGHT: 24 in
THICKNESS: 3 1/4 in
BRACE THICKNESS: 3 1/4 in
BRACE SETTING: Flush
BODY TIMBER: 3 1/4 in x 3 1/4 in

PRICE:
$139.00

BRACKET FINISH: REQUIRED
SMOOTH

QUANTITY: 1

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NEW CONSTRUCTION — VINYL

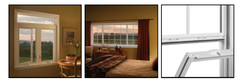
You can count on 1100 series windows for performance, style and value in a low-maintenance vinyl window line that provides the energy-efficient options your new home needs.

3 Interior Color Options

5 Exterior Color Options

BLACK

WHERE TO BUY



Due to screen resolution limitations, product colors may not be exactly as shown.

Black and Bronze exterior are only available with a white interior.

Gutters & downspouts: color black
Breezeways & porches: lightweight concrete topping

apartment roofs: black architectural shingles
clubhouse: metal standing seam roof

BELDEN THE BELDEN BRICK COMPANY

News Distributor Login

Brick Gallery Company Resources Where To Buy Contact

Search catalog color, size, texture

Home / Brick / Face / Black / Black Diamond Velour

use darker grout

BLACK DIAMOND VELOUR

Type	Face
Color	Black
Texture	Velour
Plant	Plant 2
Manufacturing Method	Extruded
Coating	Ceramic Based Colorant

Gallery

Black Diamond Velour

BELDEN THE BELDEN BRICK COMPANY

Brick Gallery Company Resources Where To Buy Contact

Home / Brick / Face / White / Alaska White Dart-Tex

white brick for soldier headers

ALASKA WHITE DART-TEX

Type	Face
Color	White
Texture	Dart-Tex
Plant	Plant 6
Manufacturing Method	Extruded
Coating	Engobe

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REGISTERED ARCHITECT
STATE OF TENNESSEE

NOT FOR CONSTRUCTION

Revisions

No.	Description	Date

Material Board

Project number 20HD01
Date 11/03/21

A800

Scale

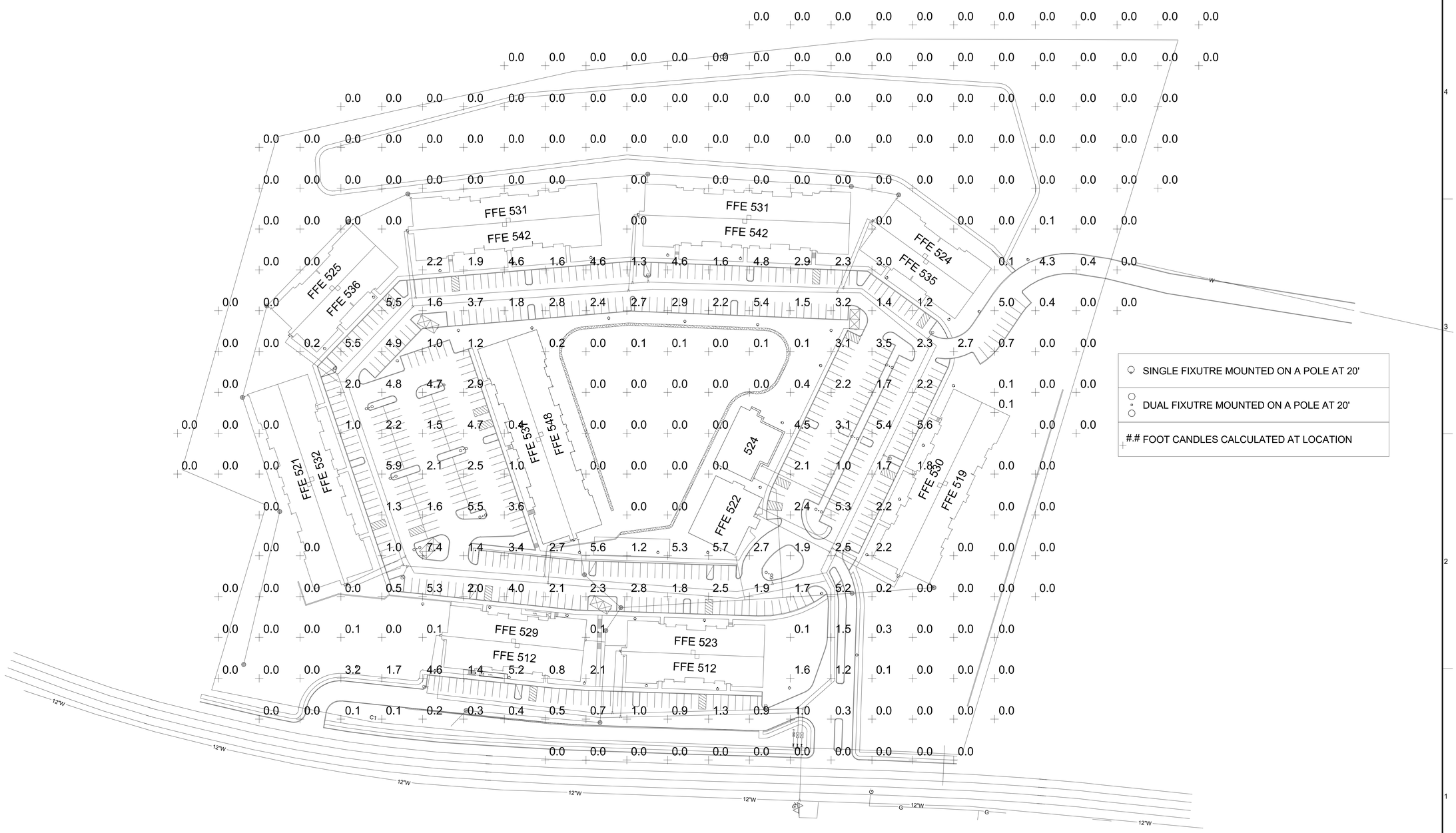
EXPORT 2021 Stone Bridge Lofts.rvt 11/3/2021 2:37:37 PM

LUMINAIRE SCHEDULE

TAG	TYPE	MANUFACTURER	CATALOG NUMBER	VOLT	LAMP	TOTAL WATTS	LUMENS	INSTALLATION	REMARKS
S1	POLE MOUNTED SITE LIGHTING	LSI INDUSTRIES	OPS-14L-4F-40K8	120-277	LED	103	14,000	20' POLE MOUNTING	

GENERAL NOTES, LUMINAIRE SCHEDULE

1. MODEL IS GIVEN FOR QUALITY ONLY, SUBSTITUTE LIGHT FIXTURES SHALL BE OF EQUAL OR GREATER QUALITY AND MATCH THE DESIGN INTENT OF THE ENGINEER/LIGHTING SYSTEM DESIGNER.
2. ALL FIXTURES TO BE PROVIDED WITH LAMPS INSTALLED.
3. ALL FIXTURES TO BE PROVIDED WITH REQUIRED MOUNTING HARDWARE FOR INSTALLATION TYPE SHOWN.
4. ANY SITE LIGHTING SUBSTITUTIONS SHALL BE ACCOMPANIED BY COMPLETE POINT-BY-POINT SITE PHOTOMETRICS AND SHALL MEET DESIGNED LIGHT LEVELS AND CUT-OFFS. ANY SUBSTITUTIONS SUBMITTED WITHOUT CALCULATIONS WILL BE REJECTED.



SINGLE FIXUTRE MOUNTED ON A POLE AT 20'
DUAL FIXUTRE MOUNTED ON A POLE AT 20'
#.# FOOT CANDLES CALCULATED AT LOCATION

1 SITE PLAN PHOTOMETRIC
1" = 50'-0"

STUDIO A architecture
2330 frankfort ave
louisville, ky 40206
p: (502) 589-8007
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Consultants

genesis engineering group, llc.
134 fourth avenue north
franklin, tn 37064
www.geneng.net
project #21-126-TN

Project Name

Stone Bridge Lofts

619 MAIN ST.
GOODLETTSVILLE, TN 37072

Client

Holladay Ventures

Seal

DANIEL M. SCHAFFER
REGISTERED ENGINEER
No. 119550
STATE OF TENNESSEE

NOT FOR CONSTRUCTION

Revisions

No.	Description	Date

SITE PLAN PHOTOMETRIC

Project number 20HD01
Date 11/05/21

ES001

Scale As indicated

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Plotted By: Daniel Schaffer
Plotted On: 11/5/2021 2:21:12 PM
File Name: J:\Projects_2021\2021-21-126-TN Stone Bridge Apartments\Revit\21-126-TN Stone Bridge Apartments_20HD01_Daniel.rvt

Catalog #: OPS-14L-4F-40K8 Project: 21-126 STONE BRIDGE

Prepared By: GENESIS ENGINEERING Date: 11/05/2021 Type: SITE LIGHTING

Opulence Small Side Arm Mount (OPS SA)

Outdoor Area Light

IP66

OVERVIEW	
Lumen Output Range	3,000 – 14,000
Wattage	22 – 103
Efficacy Range (LPW)	95 – 168
Fixture Weight lbs (kg)	16.5 (7.5)

QUICK LINKS

Ordering Guide | Performance | Photometrics | Dimensions

FEATURES & SPECIFICATIONS

Construction

- Rugged die-cast aluminum housing.
- Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling. Other standard LSI finishes available. Consult factory.

Optical System

- High density LED optical system delivers industry leading optical performance and visual comfort.
- 7 distribution types 3W, 4F, 5Q, 5C, 5R, 5D, AD
- Diffused lens version provides maximum visual comfort with reduced brightness and LED pixelization
- Zero uplight.
- Available in 5000K, 4000K, 3500K, 3000K and 2700K color temperatures per ANSI C78.377.
- Minimum CRI of 80

Electrical

- High-performance driver features overvoltage, under-voltage, short-circuit and over temperature protection (6kV surge standard).
- 0-10V dimming (10% - 100%) standard.
- Standard Universal Voltage (120-277 VAC) Input 50/60 Hz or optional High Voltage (347-480 VAC).
- Total harmonic distortion: <20%
- Operating temperature: -40°C to +40°C (-40°F to +104°F).
- Power factor: >.90
- Input power stays constant over life.
- Field replaceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).
- Driver is fully encased in potting material for moisture resistance and complies with FCC standards. Driver and key electronic components can easily be accessed.

Controls

- Integral passive infrared Bluetooth™ motion and photocell sensor options. Fixtures operate independently and can be commissioned via an iOS or Android configuration app.
- LSI's AirLink™ Blue lighting control system is a simple feature rich wireless Bluetooth mesh network. The integrated fixture sensor module provides wireless control of grouped fixtures based on motion sensors, daylight or a fully customizable schedule. Updates and modifications to the control strategy are easily implemented via an intuitive iOS app.

Installation

- Designed to mount to square or round poles.
- Utilizes LSI's B2 drill pattern.

Warranty

- LSI luminaires carry a 5-year limited warranty. Refer to https://www.lsicorp.com/resources/terms-conditions-warranty/ for more information.

Listings

- Listed to UL 1598 and UL 8750.
- Meets Buy American Act requirements.
- IDA compliant, with 3000K and warmer color temperature selection.
- Title 24 Compliant; see local ordinance for qualification information.
- Suitable for wet locations.
- IP66 rated Luminaire per IEC 60598-1.
- 3G rated for ANSI C136.31 high vibration applications.
- DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

Specifications and dimensions subject to change without notice.

Type: _____

Opulence Small Side Arm Mount

ORDERING GUIDE

Back to Quick Links

TYPICAL ORDER EXAMPLE: **OPS SA 8L 4F UNV 40K8 BLK ALBCS1**

Prefix	Mounting	Lumen Package*	Distribution
OPS - Opulance Small	**SA** - Side Arm Mount	**3L** - 3,000 Lumens **5L** - 5,000 Lumens **6L** - 6,000 Lumens **8L** - 8,000 Lumens **10L** - 10,000 Lumens **12L** - 12,000 Lumens **14L** - 14,000 Lumens	**5Q** - Type 5 Square **5C** - Type 5 Concentrated **5R** - Type 5 Rectangular **3W** - Type 3 (Wide Throw) **4F** - Type 4 (Forward Throw) **5D** - Type 5 Diffused **AD** - Asymmetrical Diffused

Voltage	Color Temp	Finish	Controls	Options
UNV - Universal Voltage (120-277V) **HV** - High Voltage (347-480V)	**30K3** - 3,000K CCT - 80 CRI **40K3** - 4,000K CCT - 80 CRI **35K3** - 3,500K CCT - 80 CRI **30K3** - 3,000K CCT - 80 CRI **27K3** - 2,700K CCT - 80 CRI	**BRZ** - Dark Bronze **BLK** - Black **GPT** - Graphite **GMG** - Gun Metal Gray **MSV** - Metallic Silver **PLP** - Platinum Plus **WHT** - White	**(Blank)** - None **Wireless Controls System** **ALBCS1** - AirLink Blue Wireless Motion & Photo Sensor Controller (8-24' MH)[1] **ALBCS2** - AirLink Blue Wireless Motion & Photo Sensor Controller (25-40' MH)[1] **Stand-Alone Controls** **CSTP** - 7 Pin Control Receptacle ANSI C136.41 * **IMSBT1** - Integral Bluetooth™ Motion and Photocell Sensor (8-24' MH) [1,2] **IMSBT2** - Integral Bluetooth™ Motion and Photocell Sensor (25-40' MH) [1,2]	**(Blank)** - None **BB** - Battery Back-up (0°C)* **CWBB** - Cold Weather Battery Back-up (-20°C)*

Accessory Ordering Information

CONTROLS ACCESSORIES	
Description	**Order Number**
Twist Lock Photocell (120V) for use with CR7P	122514
Twist Lock Photocell (208-277) for use with CR7P	122515
Twist Lock Photocell (347V) for use with CR7P	122216
Twist Lock Photocell (480V) for use with CR7P	122517/85
AirLink 5 Pin Twist Lock Controller	661409
AirLink 7 Pin Twist Lock Controller	661410
Shorting Cap for use with CR7P	140838

FUSING ACCESSORIES*	
Description	**Order Number**
Single Fusing (120V)	FA120
Single Fusing (277V)	FA277
Double Fusing (480V)	DFA480
Double Fusing (347V)	DFA347

MOUNTING ACCESSORIES*	
Description	**Order Number**
Wall Mount Bracket	7504451LR
Square Pole Tenon Adapter	674296KLR
Round Pole Tenon Adapter	BKA 2998K TN120 CLR
Square Pole Quick Mount Bracket	751534 CLR
15° Square Pole Quick Mount Bracket	740002 CLR
Round Pole Quick Mount Bracket	BKS PQMH RD B2 CLR
15° Round Pole Quick Mount Bracket	BKS PQ15 RD B2 CLR
Decorative Base Cover (4 / 5" Round Poles)	460860KLR
1/4" Linear Strut Spike Kit (4 Recommended per Luminaire)	751632

FOOTNOTES:
1 - Consult factory for 347-480V.
2 - Control device or shorting cap must be ordered separately. See Accessory Ordering Information.
3 - Can be field programmed or configured via the LSI app that can be downloaded from your smartphone's native app store.
4 - Accessories are shipped separately and field installed.
5 - Fusing must be located in hand hole of pole.
6 - "CLR" denotes finish. See Finish options.

Type: _____

Opulence Small Side Arm Mount

PERFORMANCE

Back to Quick Links

DELIVERED LUMENS (OPS)*

Lumen Package	Distribution	CRI	2700K CCT			3000K CCT			3500K CCT			4000K CCT			5000K CCT			Wattage
			Delivered Lumens	Efficacy	BUG Rating	Delivered Lumens	Efficacy	BUG Rating	Delivered Lumens	Efficacy	BUG Rating	Delivered Lumens	Efficacy	BUG Rating	Delivered Lumens	Efficacy	BUG Rating	
3L	5Q	80	3151	144	B2-U0-G1	3297	151	B2-U0-G1	3444	157	B2-U0-G1	3590	164	B2-U0-G1	3590	164	B2-U0-G1	22
	5C		3230	148	B2-U0-G0	3380	154	B2-U0-G0	3530	161	B2-U0-G0	3680	168	B2-U0-G0	3680	168	B2-U0-G0	
	5R		3088	141	B2-U0-G2	3231	148	B2-U0-G2	3375	154	B2-U0-G2	3518	161	B2-U0-G2	3518	161	B2-U0-G2	
	4F		2992	137	B1-U0-G1	3132	143	B1-U0-G1	3271	149	B1-U0-G1	3411	156	B1-U0-G1	3411	156	B1-U0-G1	
	3W		3119	143	B1-U0-G1	3264	149	B1-U0-G1	3409	156	B1-U0-G1	3554	162	B1-U0-G1	3554	162	B1-U0-G1	
	5D		2426	111	B1-U0-G1	2539	116	B1-U0-G1	2652	121	B1-U0-G1	2764	126	B1-U0-G1	2764	126	B1-U0-G1	
5L	5Q	80	4359	144	B3-U0-G1	4561	151	B3-U0-G1	4764	157	B3-U0-G1	4966	164	B3-U0-G1	4966	164	B3-U0-G1	30
	5C		4468	148	B2-U0-G2	4675	154	B2-U0-G2	4883	161	B2-U0-G2	5090	168	B2-U0-G2	5090	168	B2-U0-G2	
	5R		4272	141	B2-U0-G2	4470	148	B2-U0-G2	4668	154	B2-U0-G2	4867	161	B2-U0-G2	4867	161	B2-U0-G2	
	4F		4141	137	B1-U0-G1	4333	143	B1-U0-G1	4525	149	B1-U0-G1	4718	156	B1-U0-G1	4718	156	B1-U0-G1	
	3W		4315	143	B1-U0-G1	4516	149	B1-U0-G1	4716	156	B1-U0-G1	4916	162	B1-U0-G1	4916	162	B1-U0-G1	
	5D		3356	111	B1-U0-G1	3512	116	B1-U0-G1	3668	121	B1-U0-G1	3824	126	B1-U0-G1	3824	126	B1-U0-G1	
6L	5Q	80	5356	140	B3-U0-G1	5605	146	B3-U0-G1	5853	153	B3-U0-G1	6102	159	B3-U0-G1	6102	159	B3-U0-G1	38
	5C		5490	143	B2-U0-G0	5745	150	B2-U0-G0	6000	156	B2-U0-G0	6255	163	B2-U0-G0	6255	163	B2-U0-G0	
	5R		5249	137	B3-U0-G0	5492	143	B3-U0-G0	5736	149	B3-U0-G0	5980	156	B3-U0-G0	5980	156	B3-U0-G0	
	4F		5088	133	B1-U0-G1	5324	139	B1-U0-G1	5561	145	B1-U0-G1	5797	151	B1-U0-G1	5797	151	B1-U0-G1	
	3W		5302	138	B1-U0-G1	5548	145	B1-U0-G1	5795	151	B1-U0-G1	6041	157	B1-U0-G1	6041	157	B1-U0-G1	
	5D		4124	107	B2-U0-G1	4316	112	B2-U0-G1	4507	117	B2-U0-G1	4699	122	B2-U0-G1	4699	122	B2-U0-G1	
8L	5Q	80	7228	140	B3-U0-G1	7564	146	B3-U0-G1	7899	153	B3-U0-G2	8235	159	B3-U0-G2	8235	159	B3-U0-G2	52
	5C		7409	143	B2-U0-G0	7753	150	B2-U0-G0	8097	156	B2-U0-G0	8441	163	B2-U0-G0	8441	163	B2-U0-G0	
	5R		7083	137	B3-U0-G2	7412	143	B3-U0-G2	7741	149	B3-U0-G2	8070	156	B3-U0-G2	8070	156	B3-U0-G2	
	4F		6867	133	B1-U0-G2	7185	139	B1-U0-G2	7504	145	B1-U0-G2	7823	151	B1-U0-G2	7823	151	B1-U0-G2	
	3W		7156	138	B1-U0-G1	7488	145	B1-U0-G1	7820	151	B2-U0-G2	8153	157	B2-U0-G2	8153	157	B2-U0-G2	
	5D		5566	107	B2-U0-G1	5824	112	B2-U0-G1	6082	117	B2-U0-G1	6341	122	B2-U0-G1	6341	122	B2-U0-G1	
10L	5Q	80	8837	133	B4-U0-G2	9032	146	B3-U0-G2	10082	153	B3-U0-G2	10082	159	B3-U0-G2	10082	159	B3-U0-G2	66
	5C		9052	137	B3-U0-G0	9473	143	B3-U0-G0	9893	149	B3-U0-G0	10314	156	B3-U0-G0	10314	156	B3-U0-G0	
	5R		8655	131	B3-U0-G2	9057	137	B3-U0-G2	9459	143	B3-U0-G2	9861	149	B3-U0-G2	9861	149	B3-U0-G2	
	4F		8390	127	B1-U0-G2	8780	133	B1-U0-G2	9169	139	B1-U0-G2	9559	144	B1-U0-G2	9559	144	B1-U0-G2	
	3W		8743	132	B2-U0-G2	9150	138	B2-U0-G2	9555	144	B2-U0-G2	9961	150	B2-U0-G2	9961	150	B2-U0-G2	
	5D		6803	103	B2-U0-G1	7116	107	B2-U0-G1	7430	112	B2-U0-G1	7746	117	B2-U0-G1	7746	117	B2-U0-G1	
12L	5Q	70	10498	133	B4-U0-G2	10985	139	B4-U0-G2	11473	145	B4-U0-G2	11960	151	B4-U0-G2	11960	151	B4-U0-G2	79
	5C		10760	136	B3-U0-G0	11260	142	B3-U0-G0	11759	148	B3-U0-G0	12259	155	B3-U0-G0	12259	155	B3-U0-G0	
	5R		10288	130	B3-U0-G2	10765	136	B3-U0-G2	11243	142	B3-U0-G2	11721	148	B3-U0-G2	11721	148	B3-U0-G2	
	4F		9973	126	B2-U0-G2	10436	132	B2-U0-G2	10899	138	B2-U0-G2	11362	143	B2-U0-G2	11362	143	B2-U0-G2	
	3W		10393	131	B2-U0-G2	10875	137	B2-U0-G2	11358	143	B2-U0-G2	11840	149	B2-U0-G2	11840	149	B2-U0-G2	
	5D		8083	102	B3-U0-G1	8458	107	B3-U0-G1	8834	112	B3-U0-G2	9209	116	B3-U0-G2	9209	116	B3-U0-G2	
14L	5Q	80	12190	118	B4-U0-G2	12756	123	B4-U0-G2	13322	129	B4-U0-G2	13888	134	B4-U0-G2	13888	134	B4-U0-G2	103
	5C		12494	121	B3-U0-G0	13075	126	B3-U0-G0	13655	132	B3-U0-G0	14235	137	B3-U0-G1	14235	137	B3-U0-G1	
	5R		11946	115	B3-U0-G2	12501	121	B3-U0-G2	13055	126	B4-U0-G4	13610	131	B4-U0-G4	13610	131	B4-U0-G4	
	4F		11580	112	B2-U0-G2	12118	117	B2-U0-G2	12656	122	B2-U0-G2	13194	127	B2-U0-G2	13194	127	B2-U0-G2	
	3W		12068	116	B2-U0-G2	12626	122	B2-U0-G2	13180	127	B2-U0-G2	13740	133	B2-U0-G2	13740	133	B2-U0-G2	
	5D		9386	81	B3-U0-G2	9822	95	B3-U0-G2	10258	99	B3-U0-G2	10694	103	B3-U0-G2	10694	103	B3-U0-G2	

Type: _____

Opulence Small Side Arm Mount

PERFORMANCE

Back to Quick Links

ELECTRICAL DATA*						
Lumens	**120V**	**208V**	**240V**	**277V**	**347**	**480V**
3L	0.18	0.11	0.09	0.08	0.06	0.05
5L	0.25	0.14	0.13	0.11	0.09	0.06
6L	0.32	0.18	0.16	0.14	0.11	0.08
8L	0.43	0.25	0.22	0.19	0.15	0.11
10L	0.55	0.32	0.28	0.24	0.19	0.14
12L	0.66	0.38	0.33	0.29	0.23	0.16
14L	0.86	0.50	0.43	0.37	0.30	0.21

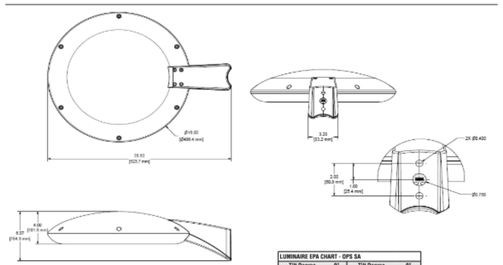
*Electrical data at 25C (77F). Actual wattage may differ by +/-10%.

RECOMMENDED LUMEN MAINTENANCE (1)				
Ambient Temp	**Lumen Multiplier**			
°C	0 hrs. (2)	25K hrs. (2)	50K hrs. (2)	75K hrs. (3)	100K hrs. (3)
0 C - 40 C	100%	99%	96%	93%	89%

1. Lumen maintenance values are calculated per TM-21 based on LM-80 data and in-situ luminaire testing.
2. In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X)the IESNA LM-80-08 total test duration (in hours) for the device under testing ((DUT) i.e. the packaged LED chip).
3. In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times NA LM-80-08 total test duration (in hours) for the device under testing ((DUT) i.e. the packaged LED chip).

PRODUCT DIMENSIONS

Back to Quick Links



LUMINAIRE EPA CHART - OPS SA					
Tilt Degree	**0°**		**Tilt Degree**	**0°**	
Single	0.6		T90°	1.0	
D180°	1.1		TW120°	1.0	
D90°	1.2		Q90°	1.0	

Type: _____

Opulence Small Side Arm Mount

CONTROLS

Integral Bluetooth™ Motion and Photocell Sensor (IMSBT)

Slim low profile sensor provides multi-level control based on motion and/or daylight. Sensor controls 0-10 VDC LED drivers and is rated for cold and wet locations (-30° C to 70° C). Two unique PIR lenses are available and used based on fixture mounting height. All control parameters are adjustable via an iOS or Android App capable of storing and transmitting sensor profiles.

Click here to learn more about IMSBT.

AirLink Blue

Wireless Bluetooth Mesh Outdoor Lighting Control System that provides energy savings, code compliance and enhanced safety/security for parking lots and parking garages. Three key components; Bluetooth wireless radio/sensor controller, Time Keeper and an iOS App. Capable of grouping multiple fixtures and sensors as well as scheduling time-based events by zone. Radio/Sensor Controller is factory integrated into Area/Site, Wall Mounted, Parking Garage and Canopy luminaires.

Click here to learn more about AirLink Blue.

POLES & BRACKETS

LSI offers a full line of poles and mounting accessories to complete your lighting assembly. Aluminum and steel in both square and round shafts. In addition, LSI offers round tapered, fluted and hinge based poles. Designed and engineered for durability and protected with our oven baked DuraGrip Protection System. Also available with our DuraGrip+ Protection system for unmatched corrosion resistance and an extended warranty. American made in our Ohio facility with industry leading lead times.

Click here to learn more details about poles & brackets.

SPUN ALUMINUM COLLAR
Round Straight

Optional one-piece spun aluminum collar for 4" or 5" diameter straight round poles. Features durable, high quality construction with aesthetically pleasing design that slips over the pole for increased theft deterrent.

CONTEMPORARY BASE COVER & TAPERED POLE

Optional contemporary base cover is cast from 356 alloy aluminum and provided with an access door. Available with 10 - 18' round taper pole shafts. The complete assembly is heat-treated to a T6 temper.

DECORATIVE BASE COVER
Round Straight

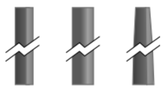
Optional decorative base cover has a two-piece die cast construction with stainless steel fasteners. Base cover is polyester powder coated to match pole. GBC base cover fits 4" and 5" diameter straight round poles. Includes 4" round pole adaptor molded from black silicone rubber.

BKS PQMH CLR

The Pole Quick Mount Bracket allows for precast 15° uplift of LSI luminaires for greater throw of light and increased vertical illumination as well as fast installation onto poles with LSI's B2, B3 or B5 bolt pattern.

BKS PQMH CLR

The Pole Quick Mount Bracket allows for lightning fast installation of LSI luminaires onto existing and new construction poles with LSI's B2, B3 or B5 standard pole bolt patterns.



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www.genesg.net
project #21-126-TN

Project Name

Stone Bridge Lofts

619 MAIN ST.
GOODLETTSVILLE, TN 37072

Client

Holladay Ventures

Seal

DANIEL M. SCHRAN
REGISTERED ENGINEER
No. 119550
STATE OF TENNESSEE

NOT FOR CONSTRUCTION

Revisions

No.	Description	Date

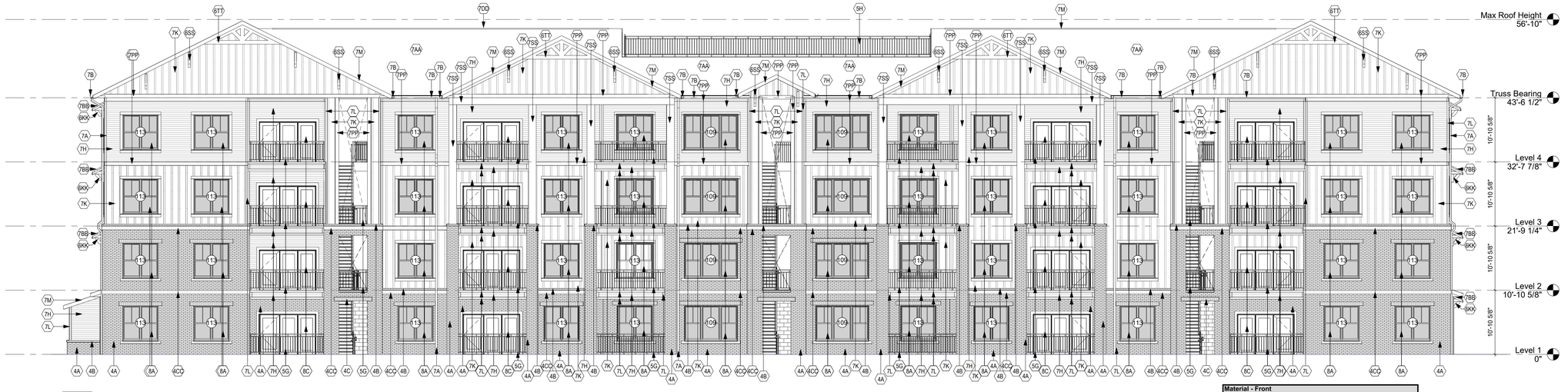
SITE PLAN PHOTOMETRIC ii

Project number 20HD01
Date 11/05/21

ES002

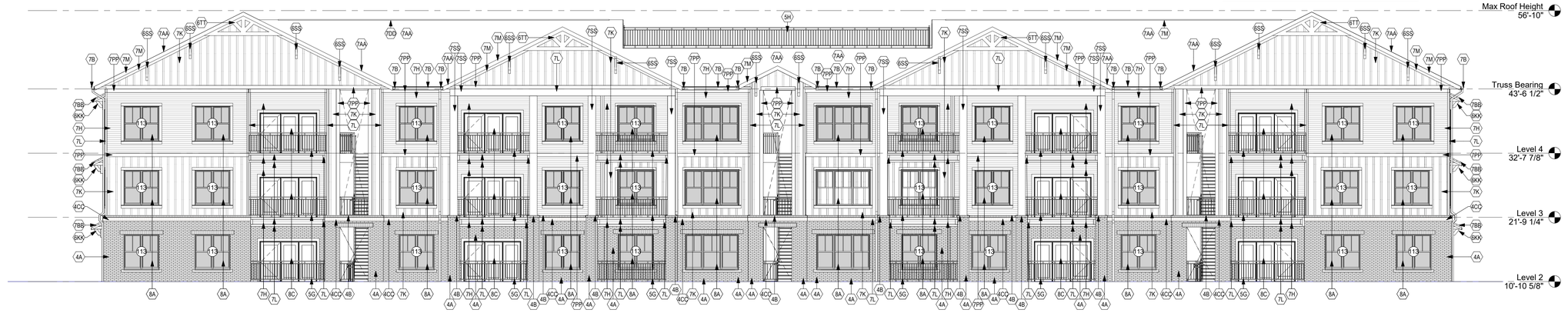
Scale 1" = 50'-0"

Plotted: 11/5/2021 3:05:03 PM
Plotted By: Matthew Schran
File Name: P:\Projects_2021\2021-21-126-TN Stone Bridge Apartments\Revit\21-126-TN Stone Bridge Apartments_2021.rvt



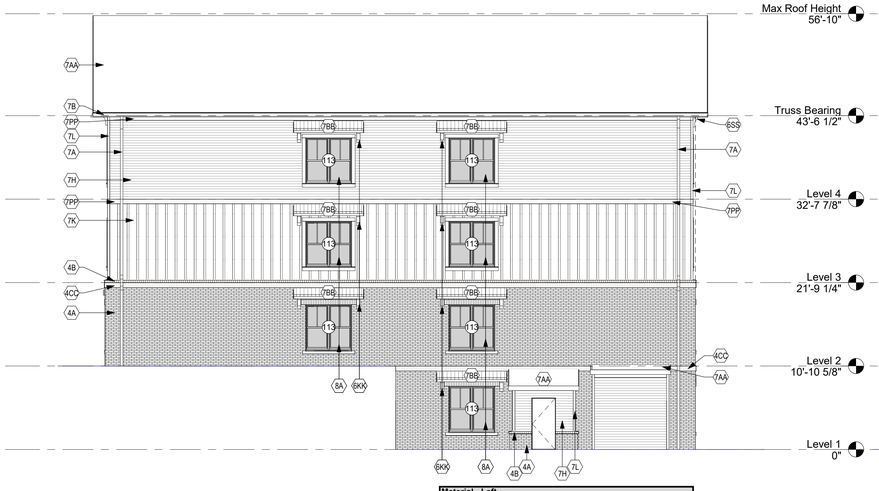
1 Elevation - Type A - Front
A201 1/8" = 1'-0"

Material - Front		
Material	*SQFT*	*Percent*
Glazing	3,011 SQFT	**22%**
Masonry	4,241 SQFT	**31%**
Fiber-Cement	6,331 SQFT	**47%**
	Total	**13,583 SQFT**



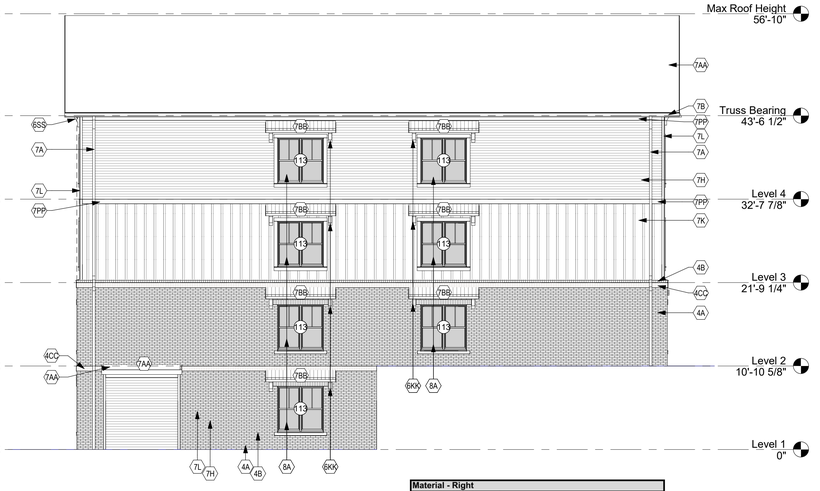
2 Elevation - Type A - Rear
A201 1/8" = 1'-0"

Material - Back		
Material	*SQFT*	*Percent*
Glazing	2,258 SQFT	**22%**
Masonry	2,435 SQFT	**23%**
Fiber-Cement	5,790 SQFT	**55%**
	Total	**10,483 SQFT**



3 Elevation - Type A- Left
A201 1/8" = 1'-0"

Material - Left		
Material	*SQFT*	*Percent*
Glazing	252 SQFT	**9%**
Masonry	1,157 SQFT	**39%**
Fiber-Cement	1,524 SQFT	**52%**
	Total	**2,934 SQFT**



4 Elevation - Type A - Right
A201 1/8" = 1'-0"

Material - Right		
Material	*SQFT*	*Percent*
Glazing	252 SQFT	**8%**
Masonry	1,019 SQFT	**34%**
Fiber-Cement	1,737 SQFT	**58%**
	Total	**3,008 SQFT**

Key Value	Keynote Text
4A	SOUTHERN CLASSIC BRICK. INSTALL PER MFR'S RECOMMENDATION - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT. PROVIDE CONT. FOUNDATION WEEP SCREED, REFER TO WALL SECTIONS.
4B	SOUTHERN CLASSIC BRICK SILL TO MATCH WALL BRICK.
4C	SOUTHERN CLASSIC BRICK HEADER - TO MATCH WALL BRICK.
4CC	SOUTHERN CLASSIC BRICK SOLDIER COURSE - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT.
5G	DECORATIVE GUARDRAIL - SEE FABRICATION DETAILS
5H	42" HIGH 1-1/2" DIA. GUARDRAIL - SECURED TO ROOF - COLOR TO BE SELECTED BY INTERIOR DESIGNER/DESIGN ARCHITECT.
6KK	DECORATIVE CORBEL, SMALL, SEE DTL. X/XXX.
6SS	DECORATIVE CORBEL, MEDIUM, SEE DTL. X/XXX.
6TT	DECORATIVE GABLE TRUSS, SEE DTL. X/XXX.
7A	5"x4" PRE-FINISHED METAL DOWNSPOUT. COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT. ROUTE TO STORM PIPING, SEE CIVIL DRAWINGS. COORDINATE WITH DOWNSPOUT ADAPTER DETAIL - SEE A500 SERIES DRAWINGS.
7AA	ASPHALT COMPOSITE SEAL TAB-TYPE SHINGLES WITH 25-YEAR PRODUCT WARRANTY MIN OVER SYNTHETIC UNDERLAYMENT OVER EXTERIOR GRADE ROOF SHEATHING w/ CLIPS - REFER TO STRUCTURAL DRAWINGS
7B	6" WIDE PRE-FINISHED K-STYLE METAL GUTTER, COLOR TO BE SELECTED BY INTERIOR DESIGNER/DESIGN ARCHITECT.
7BB	STANDING SEAM METAL ROOF, COLOR TO BE SELECTED BY INTERIOR DESIGNER/DESIGN ARCHITECT.
7DD	RIDGE VENT
7H	7-1/4" (6" EXPOSURE) CEDAR FINISHED FIBER-CEMENT LAP SIDING BOARDS - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT.
7K	12" NOMINAL BOARD & BATTEN CEDAR FINISHED FIBER-CEMENT SIDING w/ 1" TRIM - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT
7L	4" NOMINAL CEDAR FINISHED FIBER-CEMENT TRIM BOARDS - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT.
7M	6" NOMINAL CEDAR FINISHED FIBER-CEMENT TRIM BOARDS - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT.
7PP	8" NOMINAL CEDAR FINISHED FIBER CEMENT TRIM BOARDS - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT.
7SS	CEDAR FINISHED FIBER CEMENT TRIM BOARDS - PROVIDE AS NECESSARY TO WRAP BEAM. SEAL & CAULK JOINTS
8A	SINGLE HUNG VINYL WINDOW UNIT WITH INSULATED GLAZING, REFER TO WINDOW SCHEDULE FOR ADDITIONAL INFORMATION. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
8C	EXTERIOR PATIO DOOR, REFER TO DOOR SCHEDULE FOR ADDITONAL INFORMATION

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Consultants

Project Name

Stone Bridge Lofts

619 MAIN ST.
GOODLETTSVILLE, TN 37072

Client

Holladay Ventures

225 GENTRY AVE
NASHVILLE, TN 37206

Seal

NOT FOR CONSTRUCTION

Revisions

No.	Description	Date

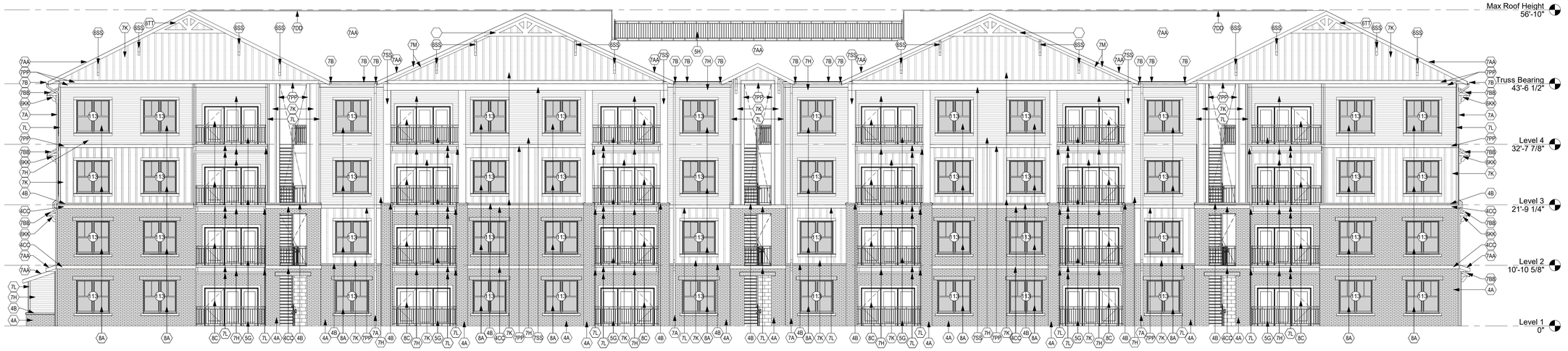
BUILDING TYPE A - EXTERIOR ELEVATIONS

Project number	20HD01
Date	Oct. 10, 2019

A201

Scale 1/8" = 1'-0"

File: 2020\20HD01-Stone Bridge Lofts\05Arch\Stone Bridge Lofts Arch R20.rvt

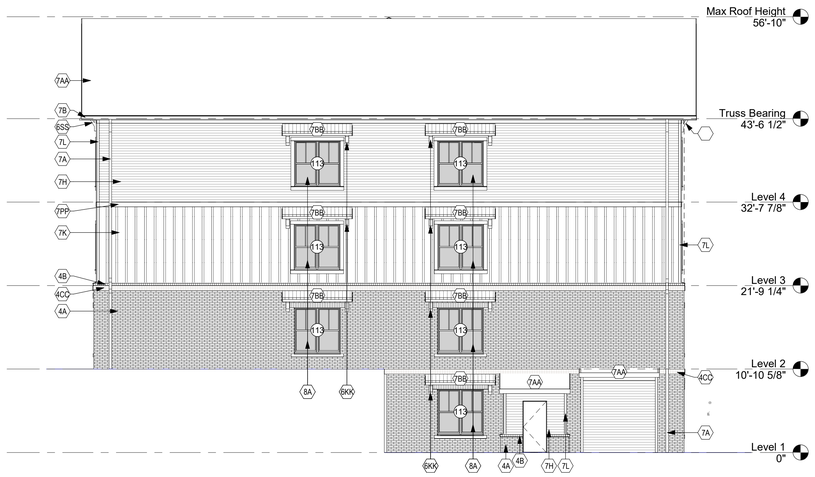


1 A202 Elevation - Type B - Front
1/8" = 1'-0"

Material - Front		
Material	*SQFT*	*Percent*
Glazing	3,316 SQFT	23%
Masonry	4,473 SQFT	31%
Fiber-Cement	6,515 SQFT	46%
	Total	14,304 SQFT

2 A202 Elevation - Type B - Rear
1/8" = 1'-0"

Material - Back		
Material	*SQFT*	*Percent*
Glazing	2,487 SQFT	23%
Masonry	2,435 SQFT	22%
Fiber-Cement	6,124 SQFT	55%
	Total	11,046 SQFT



3 A202 Elevation - Type B - Left
1/8" = 1'-0"

Material - Left		
Material	*SQFT*	*Percent*
Glazing	252 SQFT	8%
Masonry	1,008 SQFT	34%
Fiber-Cement	1,732 SQFT	58%
	Total	2,992 SQFT

4 A202 Elevation - Type B - Right
1/8" = 1'-0"

Material - Right		
Material	*SQFT*	*Percent*
Glazing	252 SQFT	9%
Masonry	1,047 SQFT	36%
Fiber-Cement	1,619 SQFT	55%
	Total	2,917 SQFT

Key Value	Keynote Text
4A	SOUTHERN CLASSIC BRICK, INSTALL PER MFR'S RECOMMENDATION - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT. PROVIDE CONT. FOUNDATION WEEP SCREED, REFER TO WALL SECTIONS.
4B	SOUTHERN CLASSIC BRICK SILL TO MATCH WALL BRICK.
4CC	SOUTHERN CLASSIC BRICK SOLDIER COURSE - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT.
5G	DECORATIVE GUARDRAIL - SEE FABRICATION DETAILS
5H	42" HIGH 1-1/2" DIA. GUARDRAIL - SECURED TO ROOF - COLOR TO BE SELECTED BY INTERIOR DESIGNER/DESIGN ARCHITECT.
6KK	DECORATIVE CORBEL, SMALL, SEE DTL. X/XXX.
6SS	DECORATIVE CORBEL, MEDIUM, SEE DTL. X/XXX.
6TT	DECORATIVE GABLE TRUSS, SEE DTL. X/XXX.
7A	5"x4" PRE-FINISHED METAL DOWNSPOUT. COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT. ROUTE TO STORM PIPING, SEE CIVIL DRAWINGS. COORDINATE WITH DOWNSPOUT ADAPTER DETAIL - SEE A500 SERIES DRAWINGS.
7AA	ASPHALT COMPOSITE SEAL TAB-TYPE SHINGLES WITH 25-YEAR PRODUCT WARRANTY MIN OVER SYNTHETIC UNDERLAYMENT OVER EXTERIOR GRADE ROOF SHEATHING w/ CLIPS - REFER TO STRUCTURAL DRAWINGS
7B	6" WIDE PRE-FINISHED K-STYLE METAL GUTTER, COLOR TO BE SELECTED BY INTERIOR DESIGNER/DESIGN ARCHITECT.
7BB	STANDING SEAM METAL ROOF, COLOR TO BE SELECTED BY INTERIOR DESIGNER/DESIGN ARCHITECT.
7DD	RIDGE VENT
7H	7-1/4" (6" EXPOSURE) CEDAR FINISHED FIBER-CEMENT LAP SIDING BOARDS - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT.
7K	12" NOMINAL BOARD & BATTEN CEDAR FINISHED FIBER-CEMENT SIDING w/ 1" TRIM - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT
7L	4" NOMINAL CEDAR FINISHED FIBER-CEMENT TRIM BOARDS - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT.
7M	6" NOMINAL CEDAR FINISHED FIBER-CEMENT TRIM BOARDS - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT.
7PP	8" NOMINAL CEDAR FINISHED FIBER CEMENT TRIM BOARDS - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT.
7SS	CEDAR FINISHED FIBER CEMENT TRIM BOARDS - PROVIDE AS NECESSARY TO WRAP BEAM. SEAL & CAULK JOINTS
8A	SINGLE HUNG VINYL WINDOW UNIT WITH INSULATED GLAZING, REFER TO WINDOW SCHEDULE FOR ADDITIONAL INFORMATION. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
8C	EXTERIOR PATIO DOOR, REFER TO DOOR SCHEDULE FOR ADDITIONAL INFORMATION

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Seal

NOT FOR CONSTRUCTION

Revisions

No.	Description	Date

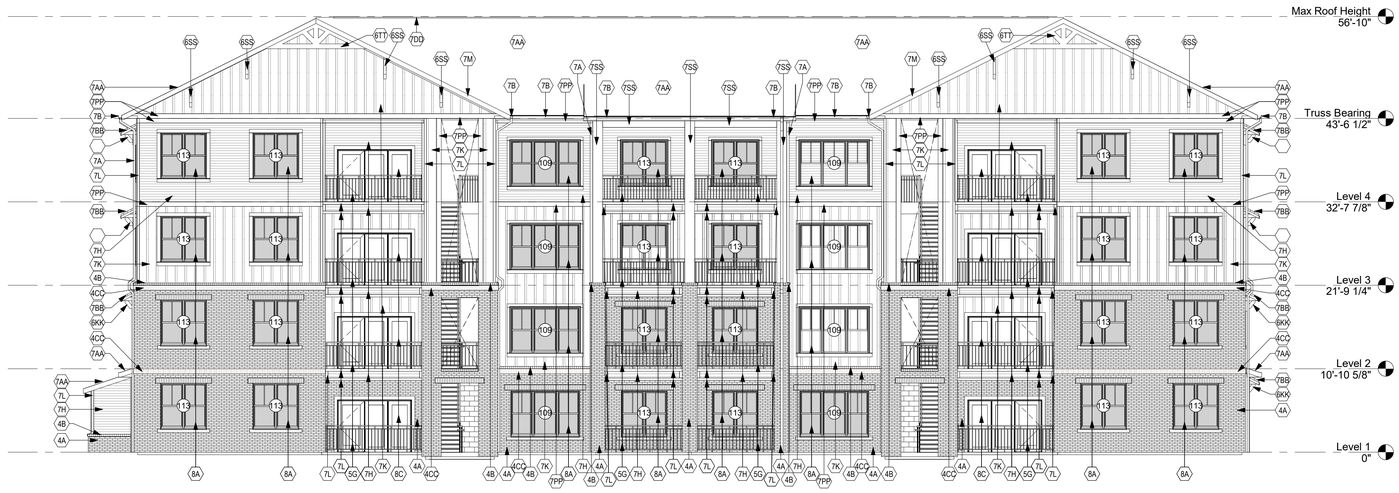
BUILDING TYPE B - EXTERIOR ELEVATIONS

Project number	20HD01
Date	Oct. 10, 2019

A202

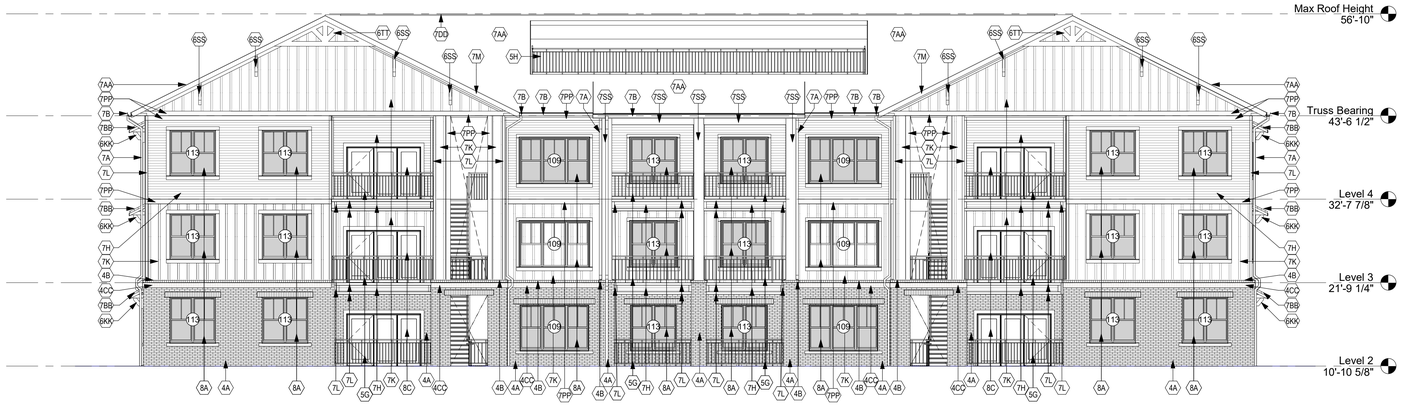
Scale 1/8" = 1'-0"

819 3RD STREET SOUTH
NASHVILLE, TENNESSEE 37210



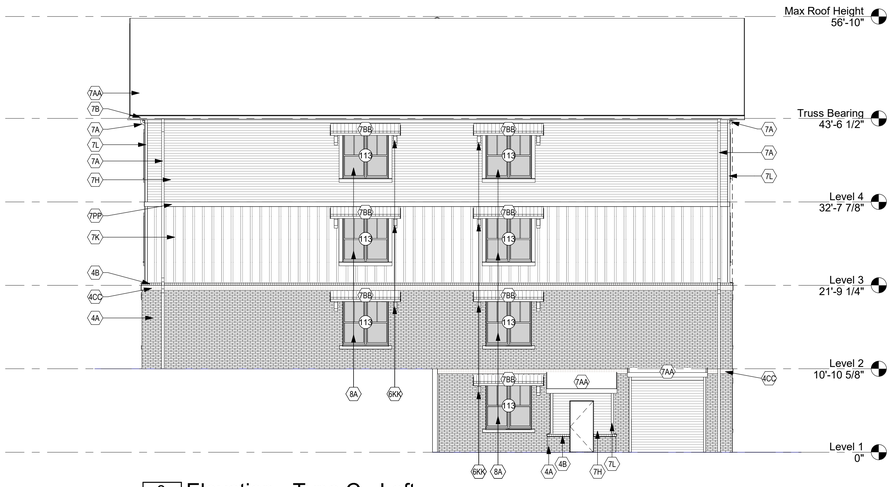
1 Elevation - Type C - Front
A203 1/8" = 1'-0"

Material - Front		
Material	*SQFT*	*Percent*
Glazing	1,986 SQFT	**21%**
Masonry	3,111 SQFT	**33%**
Fiber-Cement	4,288 SQFT	**46%**
	Total	**9,384 SQFT**



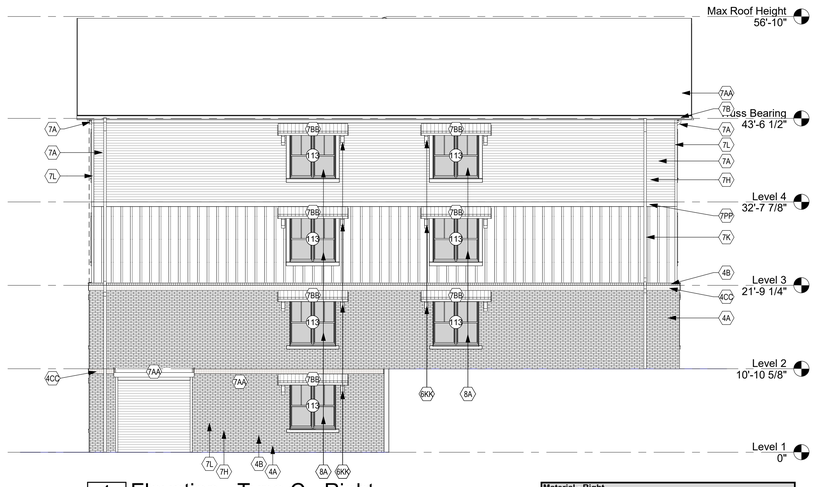
2 Elevation - Type C - Rear
A203 1/8" = 1'-0"

Material - Back		
Material	*SQFT*	*Percent*
Glazing	1,489 SQFT	**21%**
Masonry	1,699 SQFT	**24%**
Fiber-Cement	3,966 SQFT	**55%**
	Total	**7,154 SQFT**



3 Elevation - Type C - Left
A203 1/8" = 1'-0"

Material - Left		
Material	*SQFT*	*Percent*
Glazing	252 SQFT	**8%**
Masonry	1,012 SQFT	**34%**
Fiber-Cement	1,732 SQFT	**58%**
	Total	**2,995 SQFT**



4 Elevation - Type C - Right
A203 1/8" = 1'-0"

Material - Right		
Material	*SQFT*	*Percent*
Glazing	252 SQFT	**9%**
Masonry	1,050 SQFT	**36%**
Fiber-Cement	1,619 SQFT	**55%**
	Total	**2,921 SQFT**

Key Value	Keynote Text
4A	SOUTHERN CLASSIC BRICK, INSTALL PER MFR'S RECOMMENDATION - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT. PROVIDE CONT. FOUNDATION WEEP SCREED, REFER TO WALL SECTIONS.
4B	SOUTHERN CLASSIC BRICK SILL TO MATCH WALL BRICK.
4CC	SOUTHERN CLASSIC BRICK SOLDIER COURSE - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT.
5G	DECORATIVE GUARDRAIL - SEE FABRICATION DETAILS
5H	42" HIGH 1-1/2" DIA. GUARDRAIL - SECURED TO ROOF - COLOR TO BE SELECTED BY INTERIOR DESIGNER/DESIGN ARCHITECT.
6KK	DECORATIVE CORBEL, SMALL, SEE DTL. X/XXX.
6SS	DECORATIVE CORBEL, MEDIUM, SEE DTL. X/XXX.
6TT	DECORATIVE GABLE TRUSS, SEE DTL. X/XXX.
7A	5"x4" PRE-FINISHED METAL DOWNSPOUT, COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT. ROUTE TO STORM PIPING, SEE CIVIL DRAWINGS. COORDINATE WITH DOWNSPOUT ADAPTER DETAIL - SEE A500 SERIES DRAWINGS.
7AA	ASPHALT COMPOSITE SEAL TAB-TYPE SHINGLES WITH 25-YEAR PRODUCT WARRANTY MIN OVER SYNTHETIC UNDERLAYMENT OVER EXTERIOR GRADE ROOF SHEATHING w/ CLIPS - REFER TO STRUCTURAL DRAWINGS
7B	6" WIDE PRE-FINISHED K-STYLE METAL GUTTER, COLOR TO BE SELECTED BY INTERIOR DESIGNER/DESIGN ARCHITECT.
7BB	STANDING SEAM METAL ROOF, COLOR TO BE SELECTED BY INTERIOR DESIGNER/DESIGN ARCHITECT.
7DD	RIDGE VENT
7H	7-1/4" (6" EXPOSURE) CEDAR FINISHED FIBER-CEMENT LAP SIDING BOARDS - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT.
7K	12" NOMINAL BOARD & BATTEN CEDAR FINISHED FIBER-CEMENT SIDING w/ 1" TRIM - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT
7L	4" NOMINAL CEDAR FINISHED FIBER-CEMENT TRIM BOARDS - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT.
7M	6" NOMINAL CEDAR FINISHED FIBER-CEMENT TRIM BOARDS - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT.
7PP	8" NOMINAL CEDAR FINISHED FIBER CEMENT TRIM BOARDS - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT.
7SS	CEDAR FINISHED FIBER CEMENT TRIM BOARDS - PROVIDE AS NECESSARY TO WRAP BEAM, SEAL & CAULK JOINTS
8A	SINGLE HUNG VINYL WINDOW UNIT WITH INSULATED GLAZING, REFER TO WINDOW SCHEDULE FOR ADDITIONAL INFORMATION. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
8C	EXTERIOR PATIO DOOR, REFER TO DOOR SCHEDULE FOR ADDITONAL INFORMATION

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NASHVILLE, TN 37206

Seal

NOT FOR CONSTRUCTION

Revisions

No.	Description	Date

BUILDING TYPE C - EXTERIOR ELEVATIONS

Project number 20HD01
Date 05/01/20

A203

Scale 1/8" = 1'-0"

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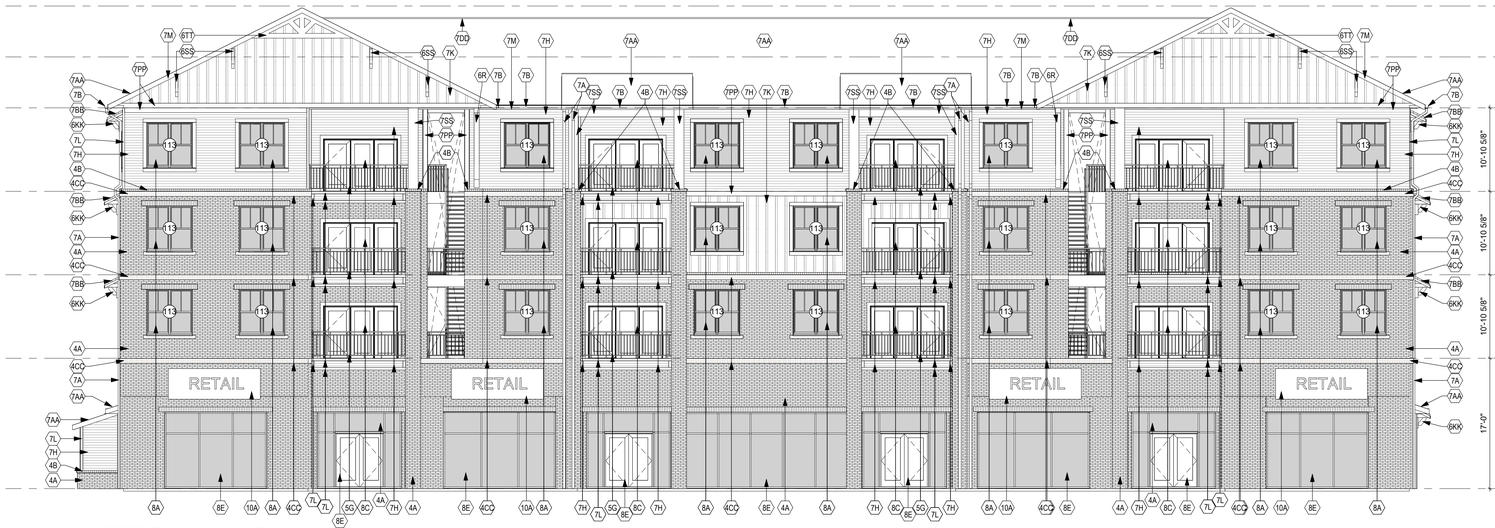


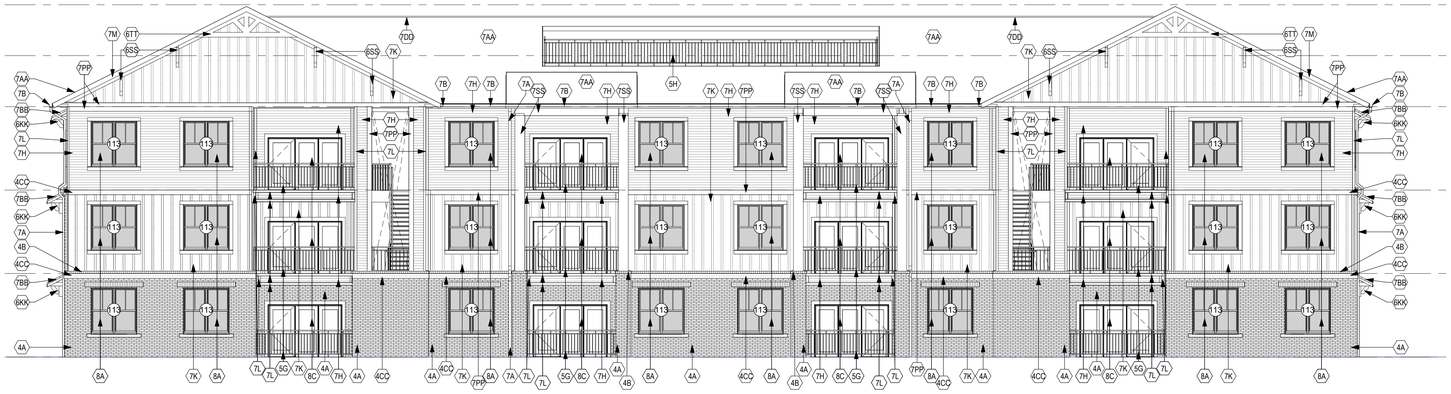
Max Roof Level Building D 62'-11 3/8"
Median Roof Level Building D 56'-3 5/8"
Truss Bearing Building D 49'-7 7/8"
Level 4 Building D 38'-9 1/4"
Level 3 Building D 27'-10 5/8"
Level 2 Building D 17'-0"
Level 1 Building D 0"

10'-10 5/8" | 10'-10 5/8" | 10'-10 5/8" | 17'-0"

Material - Front

Material	SQFT	Percent
Glazing	2,874 SQFT	29%
Masonry	4,410 SQFT	45%
Fiber-Cement	2,528 SQFT	26%
	Total	9,812 SQFT

1 A204 — Elevation - Type D - Front
1/8" = 1'-0"

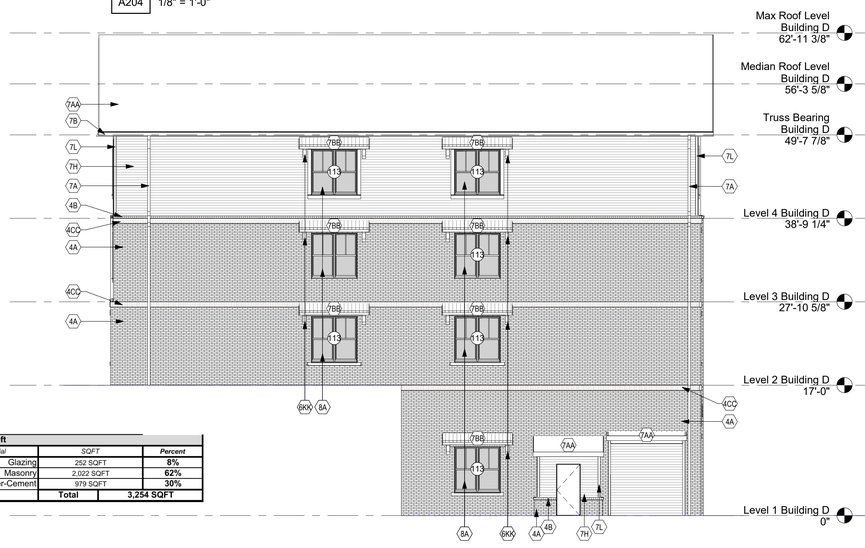


Max Roof Level Building D 62'-11 3/8"
Median Roof Level Building D 56'-3 5/8"
Truss Bearing Building D 49'-7 7/8"
Level 4 Building D 38'-9 1/4"
Level 3 Building D 27'-10 5/8"
Level 2 Building D 17'-0"
Level 1 Building D 0"

Material - Back

Material	SQFT	Percent
Glazing	1,658 SQFT	25%
Masonry	1,476 SQFT	23%
Fiber-Cement	3,382 SQFT	52%
	Total	6,517 SQFT

2 A204 — Elevation - Type D - Rear
1/8" = 1'-0"

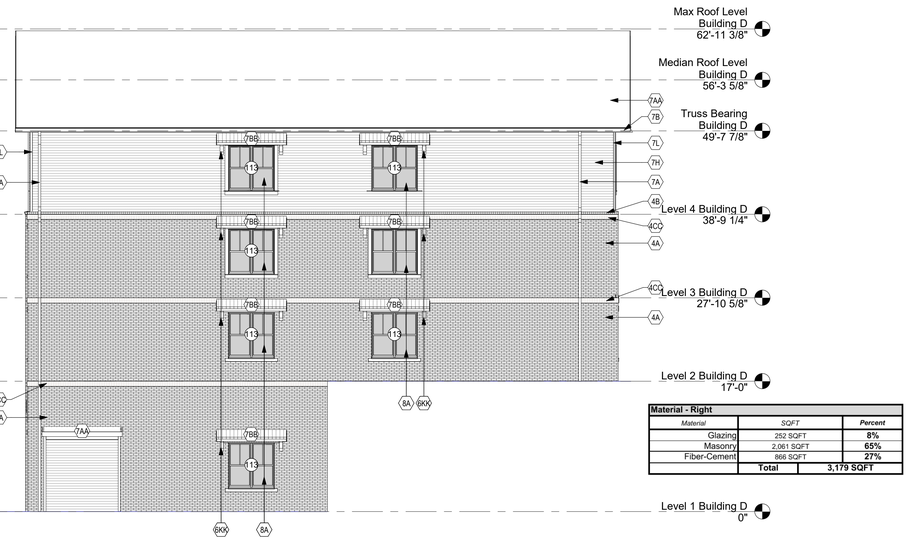


Max Roof Level Building D 62'-11 3/8"
Median Roof Level Building D 56'-3 5/8"
Truss Bearing Building D 49'-7 7/8"
Level 4 Building D 38'-9 1/4"
Level 3 Building D 27'-10 5/8"
Level 2 Building D 17'-0"
Level 1 Building D 0"

Material - Left

Material	SQFT	Percent
Glazing	252 SQFT	8%
Masonry	2,022 SQFT	62%
Fiber-Cement	979 SQFT	30%
	Total	3,254 SQFT

3 A204 — Elevation - Type D - Left
1/8" = 1'-0"



Max Roof Level Building D 62'-11 3/8"
Median Roof Level Building D 56'-3 5/8"
Truss Bearing Building D 49'-7 7/8"
Level 4 Building D 38'-9 1/4"
Level 3 Building D 27'-10 5/8"
Level 2 Building D 17'-0"
Level 1 Building D 0"

Material - Right

Material	SQFT	Percent
Glazing	252 SQFT	8%
Masonry	2,061 SQFT	65%
Fiber-Cement	866 SQFT	27%
	Total	3,179 SQFT

4 A204 — Elevation - Type D - Right
1/8" = 1'-0"

Key Value	Keynote Text
4A	SOUTHERN CLASSIC BRICK, INSTALL PER MFR'S RECOMMENDATION - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT. PROVIDE CONT. FOUNDATION WEEP SCREED, REFER TO WALL SECTIONS.
4B	SOUTHERN CLASSIC BRICK SILL TO MATCH WALL BRICK.
4CC	SOUTHERN CLASSIC BRICK SOLDIER COURSE - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT.
5G	DECORATIVE GUARDRAIL - SEE FABRICATION DETAILS
5H	42" HIGH 1-1/2" DIA. GUARDRAIL - SECURED TO ROOF - COLOR TO BE SELECTED BY INTERIOR DESIGNER/DESIGN ARCHITECT.
6KK	DECORATIVE CORBEL, SMALL, SEE DTL. X/XXX.
6R	DECORATIVE CORBEL, LARGE, SEE DTL. X/XXX.
6SS	DECORATIVE CORBEL, MEDIUM, SEE DTL. X/XXX.
6TT	DECORATIVE GABLE TRUSS, SEE DTL. X/XXX.
7A	5"x4" PRE-FINISHED METAL DOWNSPOUT. COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT. ROUTE TO STORM PIPING, SEE CIVIL DRAWINGS. COORDINATE WITH DOWNSPOUT ADAPTER DETAIL - SEE A500 SERIES DRAWINGS.
7AA	ASPHALT COMPOSITE SEAL TAB-TYPE SHINGLES WITH 25-YEAR PRODUCT WARRANTY MIN OVER SYNTHETIC UNDERLAYMENT OVER EXTERIOR GRADE ROOF SHEATHING w/ CLIPS - REFER TO STRUCTURAL DRAWINGS
7B	6" WIDE PRE-FINISHED K-STYLE METAL GUTTER, COLOR TO BE SELECTED BY INTERIOR DESIGNER/DESIGN ARCHITECT.
7BB	STANDING SEAM METAL ROOF, COLOR TO BE SELECTED BY INTERIOR DESIGNER/DESIGN ARCHITECT.
7DD	RIDGE VENT
7H	7-1/4" (6" EXPOSURE) CEDAR FINISHED FIBER-CEMENT LAP SIDING BOARDS - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT.
7K	12" NOMINAL BOARD & BATTEN CEDAR FINISHED FIBER-CEMENT SIDING w/ 1" TRIM - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT
7L	4" NOMINAL CEDAR FINISHED FIBER-CEMENT TRIM BOARDS - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT.
7M	6" NOMINAL CEDAR FINISHED FIBER-CEMENT TRIM BOARDS - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT.
7PP	8" NOMINAL CEDAR FINISHED FIBER CEMENT TRIM BOARDS - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT.
7SS	CEDAR FINISHED FIBER CEMENT TRIM BOARDS - PROVIDE AS NECESSARY TO WRAP BEAM. SEAL & CAULK JOINTS
8A	SINGLE HUNG VINYL WINDOW UNIT WITH INSULATED GLAZING, REFER TO WINDOW SCHEDULE FOR ADDITIONAL INFORMATION. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
8C	EXTERIOR PATIO DOOR, REFER TO DOOR SCHEDULE FOR ADDITONAL INFORMATION
8E	ALUMINUM STOREFRONT DOOR & WINDOW ASSEMBLY 1" THICK INSULATED GLAZING, REFER TO WINDOW SCHEDULE FOR ADDITIONAL INFORMATION
10A	BUILDING SIGNAGE PROVIDED & INSTALLED BY OWNER, SEE ELECTRICAL FOR POWER REQUIREMENTS.

STUDIO A LLC
2330 frankfort ave
louisville, ky 40206
p: (502) 589-8007
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Consultants

Project Name
Stone Bridge Lofts

619 MAIN ST.
GOODLETTSVILLE, TN 37072

Client
Holladay Ventures

225 GENTRY AVE
NASHVILLE, TN 37206

Seal

NOT FOR CONSTRUCTION

Revisions

No.	Description	Date

BUILDING TYPE D - EXTERIOR ELEVATIONS

Project number 20HD01
Date 11/15/21

A204

Scale 1/8" = 1'-0"

Plot: 2021-12-14 4:01:11 PM | Stone Bridge Lofts\20HD01-Stone Bridge Lofts.rvt | A204

1 A205 — Elevation - Type E - Front

1/8" = 1'-0"

Material - Front		
Material	*SQFT*	*Percent*
Glazing	2,308 SQFT	**24%**
Masonry	4,661 SQFT	**49%**
Fiber-Cement	2,518 SQFT	**27%**
	Total	**9,487 SQFT**

2 A205 — Elevation - Type E - Rear

1/8" = 1'-0"

Material - Back		
Material	*SQFT*	*Percent*
Glazing	1,658 SQFT	**23%**
Masonry	1,650 SQFT	**23%**
Fiber-Cement	3,939 SQFT	**54%**
	Total	**7,248 SQFT**

4 A205 — Elevation - Type E - Left

1/8" = 1'-0"

Material - Left		
Material	*SQFT*	*Percent*
Glazing	252 SQFT	**9%**
Masonry	1,703 SQFT	**58%**
Fiber-Cement	979 SQFT	**33%**
	Total	**2,935 SQFT**

3 A205 — Elevation - Type E - Right

1/8" = 1'-0"

Material - Right		
Material	*SQFT*	*Percent*
Glazing	252 SQFT	**9%**
Masonry	1,742 SQFT	**61%**
Fiber-Cement	866 SQFT	**30%**
	Total	**2,860 SQFT**

Key Value	Keynote Text
4A	SOUTHERN CLASSIC BRICK, INSTALL PER MFR'S RECOMMENDATION - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT. PROVIDE CONT. FOUNDATION WEEP SCREED, REFER TO WALL SECTIONS.
4B	SOUTHERN CLASSIC BRICK SILL TO MATCH WALL BRICK.
4CC	SOUTHERN CLASSIC BRICK SOLDIER COURSE - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT.
5G	DECORATIVE GUARDRAIL - SEE FABRICATION DETAILS
6KK	DECORATIVE CORBEL, SMALL, SEE DTL. X/XXX.
6SS	DECORATIVE CORBEL, MEDIUM, SEE DTL. X/XXX.
6TT	DECORATIVE GABLE TRUSS, SEE DTL. X/XXX.
7A	5"x4" PRE-FINISHED METAL DOWNSPOUT. COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT. ROUTE TO STORM PIPING, SEE CIVIL DRAWINGS. COORDINATE WITH DOWNSPOUT ADAPTER DETAIL - SEE A500 SERIES DRAWINGS.
7AA	ASPHALT COMPOSITE SEAL TAB-TYPE SHINGLES WITH 25-YEAR PRODUCT WARRANTY MIN OVER SYNTHETIC UNDERLAYMENT OVER EXTERIOR GRADE ROOF SHEATHING w/ CLIPS - REFER TO STRUCTURAL DRAWINGS
7B	6" WIDE PRE-FINISHED K-STYLE METAL GUTTER. COLOR TO BE SELECTED BY INTERIOR DESIGNER/DESIGN ARCHITECT.
7BB	STANDING SEAM METAL ROOF. COLOR TO BE SELECTED BY INTERIOR DESIGNER/DESIGN ARCHITECT.
7H	7-1/4" (6" EXPOSURE) CEDAR FINISHED FIBER-CEMENT LAP SIDING BOARDS - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT.
7K	12" NOMINAL BOARD & BATTEN CEDAR FINISHED FIBER-CEMENT SIDING w/ 1" TRIM - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT
7L	4" NOMINAL CEDAR FINISHED FIBER-CEMENT TRIM BOARDS - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT.
7M	6" NOMINAL CEDAR FINISHED FIBER-CEMENT TRIM BOARDS - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT.
7PP	8" NOMINAL CEDAR FINISHED FIBER CEMENT TRIM BOARDS - COLOR TO BE SELECTED BY INTERIOR DESIGNER/ DESIGN ARCHITECT.
8A	SINGLE HUNG VINYL WINDOW UNIT WITH INSULATED GLAZING, REFER TO WINDOW SCHEDULE FOR ADDITIONAL INFORMATION. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
8C	EXTERIOR PATIO DOOR, REFER TO DOOR SCHEDULE FOR ADDITONAL INFORMATION
8E	ALUMINUM STOREFRONT DOOR & WINDOW ASSEMBLY 1" THICK INSULATED GLAZING, REFER TO WINDOW SCHEDULE FOR ADDITIONAL INFORMATION
10D	

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Project Name

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GOODLETTSVILLE, TN 37072

Client

Holladay Ventures

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NASHVILLE, TN 37206

Seal

NOT FOR CONSTRUCTION

Revisions

No.	Description	Date

BUILDING TYPE E - EXTERIOR ELEVATIONS

Project number	20HD01
Date	09/23/21

A205

Scale 1/8" = 1'-0"

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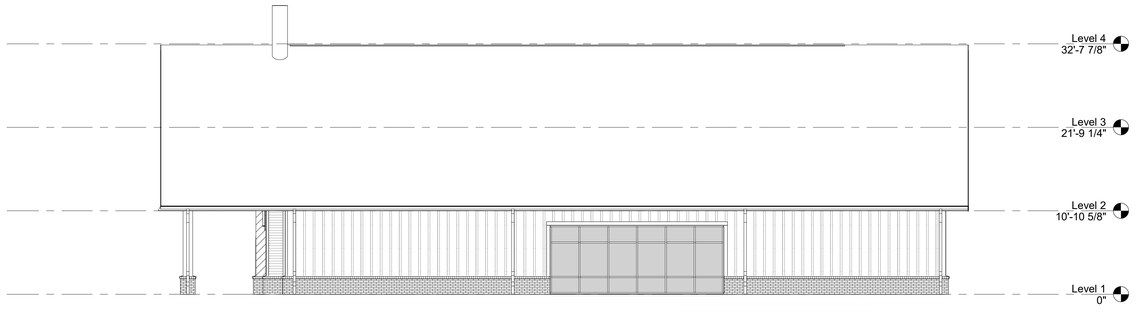
Key Value | Keynote Text

1 A211 Elevation - Clubhouse - Front
1/8" = 1'-0"

Material - Front		
Material	*SQFT*	*Percent*
Glazing	276 SQFT	**16%**
Masonry	672 SQFT	**39%**
Fiber-Cement	782 SQFT	**45%**
	Total	**1,730 SQFT**



2 A211 Elevation - Clubhouse - Rear
1/8" = 1'-0"

Material - Back		
Material	*SQFT*	*Percent*
Glazing	204 SQFT	**22%**
Masonry	153 SQFT	**16%**
Fiber-Cement	580 SQFT	**62%**
	Total	**937 SQFT**

3 A211 Elevation - Clubhouse - Left
1/8" = 1'-0"

Material - Left		
Material	*SQFT*	*Percent*
Glazing	365 SQFT	**20%**
Masonry	599 SQFT	**33%**
Fiber-Cement	843 SQFT	**47%**
	Total	**1,807 SQFT**

4 A211 Elevation - Clubhouse - Right
1/8" = 1'-0"

Material - Right		
Material	*SQFT*	*Percent*
Glazing	282 SQFT	**16%**
Masonry	153 SQFT	**9%**
Fiber-Cement	1,314 SQFT	**75%**
	Total	**1,748 SQFT**

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Project Name
Stone Bridge Lofts

619 MAIN ST.
GOODLETTSVILLE, TN 37072

Client
Holladay Ventures

225 GENTRY AVE
NASHVILLE, TN 37206

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Revisions

No.	Description	Date

CLUBHOUSE - EXTERIOR ELEVATIONS

Project number	20HD01
Date	05/01/20

A211

Scale 1/8" = 1'-0"

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TREE REMOVAL CALCULATION : DATA

TREES TO BE REMOVED: 8" THRU 17" DIAMETER : 11,870'

TREES TO BE REMOVED: 18" AND GREATER: 824"

TREE REPLACEMENT: 8" THRU 17" DIAMETER: 5,935"
TREE REPLACEMENT: 18" AND GREATER: 824"
COMBINED TREE REPLACEMENT: 6,759"

150% MAX REPLACEMENT TO REQUIRED ACI: 2,016

TREE REMOVAL - GENERAL NOTES

1. TREE SURVEY PROVIDED BY PANTHER CREEK FORESTRY, LLC : 931.474.6203

2. PRIOR TO ANY TREE REMOVAL TAKING PLACE ON SITE, TREE PROTECTION FENCING IS TO BE INSTALLED TO MEET CITY OF GOODLETTSVILLE STANDARDS.

3. NO TREES WITHIN TREE PROTECTION FENCE SHALL BE DAMAGED OR REMOVED WITHOUT PRIOR WRITTEN CONSENT BY PROJECT & CITY LANDSCAPE ARCHITECT.

4. ALL TREES NOT WITHIN TREE PROTECTION FENCE BOUNDARY ARE TO BE REMOVED AS PART OF CONSTRUCTION.

5. SEE SHEET L1.01 FOR ALL TREE REMOVAL AND PRESERVATION DATA CHARTS & DETAILS

SEE SHEET L 1.01 FOR TREE REMOVAL CHARTS

0' 40' 80' 160' NORTH

CONSULTANTS

EDGE PLANNING LANDSCAPE ARCHITECTURE URBAN DESIGN
210 12th AVENUE SOUTH, SUITE 202
NASHVILLE, TN 37203
615.250.8154
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Barge Cauthen ASSOCIATES
CIVIL ENGINEER
BARGE CAUTHEN & ASSOCIATES
6606 CHARLOTTE PIKE, STE 210
NASHVILLE, TN 37209
615-356-9911

PROJECT NAME

South Bridge

Site Plan

619 North Main St
Goodlettsville, TN

CLIENT

Holladay Ventures

225 Gentry Avenue
Nashville, TN 37206

PROJECT NO.	21150
Date:	5/14/2021
Issued for:	City Permit

REVISIONS

1	11/29/2021	CITY COMMENTS

Sheet Title

SITE TREE REMOVAL PLAN

SEAL

DAVID HAASE REGISTERED LANDSCAPE ARCHITECT TENNESSEE NO. 339 AGRICULTURE
5/14/2021

Sheet Number

L1.00

TREES TO BE REMOVED			TREES TO BE REMOVED			TREES TO BE REMOVED			TREES TO BE REMOVED			TREES TO BE REMOVED			TREES TO BE REMOVED		
No.	*Cal. Inch*	*Species*	*No.*	*Cal. Inch*	*Species*	*No.*	*Cal. Inch*	*Species*	*No.*	*Cal. Inch*	*Species*	*No.*	*Cal. Inch*	*Species*	*No.*	*Cal. Inch*	*Species*
24	10	Cedar	**764**	14	Hackberry	**1091**	10	Walnut	**1455**	13	walnut	**1856**	8	Sugar maple	**2217**	8	hackberry
25	14	Cedar	**765**	8	Buckeye	**1092**	12	Walnut	**1456**	11	walnut	**1860**	8	Honey locust	**2218**	10	Osage Orange
31	18	elm	**766**	11	Hackberry	**1095**	10	Osage Orange	**1457**	13	cedar	**1863**	8	Hackberry	**2220**	11	hackberry
32	13	osage orange	**767**	8	Hackberry	**1097**	11	walnut	**1461**	8	cedar	**1864**	8	Hackberry	**2223**	12	Hackberry
34	23	persimmon	**768**	10	Hackberry	**1099**	8	hackberry	**1462**	8	cedar	**1865**	8	Osage orange	**2224**	12	Hackberry
35	8	hackberry	**769**	12	Hackberry	**1100**	11	hackberry	**1463**	12	cedar	**1868**	10	Hackberry	**2228**	9	Hackberry
36	15	Chinquapin oak	**770**	11	Hackberry	**1101**	8	Elm	**1464**	8	cedar	**1869**	9	Osage orange	**2231**	9	Hackberry
37	14	Red oak	**772**	10	Osage orange	**1102**	10	Osage Orange	**1465**	12	cedar	**1870**	12	Elm	**2232**	8	Hackberry
45	14	black cherry	**773**	11	osage orange	**1103**	8	hackberry	**1466**	10	cedar	**1871**	8	Cedar	**2233**	10	Black locust
65	12	Elm	**774**	11	black cherry	**1104**	11	cedar	**1468**	10	Black cherry	**1872**	9	Cedar	**2234**	8	Black locust
76	11	hackberry	**775**	8	osage orange	**1105**	13	cedar	**1469**	9	Walnut	**1873**	9	Cedar	**2235**	8	Black locust
77	17	elm	**776**	14	osage orange	**1106**	8	Hackberry	**1471**	11	Cedar	**1874**	10	Cedar	**2236**	8	Hackberry
78	12	elm	**777**	8	hackberry	**1113**	8	Honey locust	**1472**	10	Cedar	**1875**	11	Hackberry	**2237**	8	Black locust
81	18	hackberry	**778**	10	osage orange	**1114**	12	Cedar	**1474**	8	Elm	**1876**	9	Hackberry	**2238**	8	Hackberry
82	14	hackberry	**779**	18	osage orange	**1115**	12	hackberry	**1475**	10	Walnut	**1877**	8	Hackberry	**2239**	11	Hackberry
83	9	elm	**781**	8	black cherry	**1116**	13	hackberry	**1476**	9	Walnut	**1878**	10	Hackberry	**2240**	8	Hackberry
84	22	elm	**782**	8	hackberry	**1117**	21	hackberry	**1477**	9	Walnut	**1880**	11	Hackberry	**2241**	11	Hackberry
85	9	elm	**784**	13	black cherry	**1118**	16	hackberry	**1479**	8	Cedar	**1881**	8	Hackberry	**2244**	8	Hackberry
86	18	hackberry	**786**	11	osage orange	**1119**	19	hackberry	**1480**	10	Cedar	**1882**	8	Hackberry	**2245**	9	Hackberry
93	8	hackberry	**787**	15	black cherry	**1120**	22	osage orange	**1481**	10	cedar	**1883**	9	Honey locust	**2246**	10	Hackberry
129	8	honey locust	**788**	15	black cherry	**1121**	15	hackberry	**1482**	10	Osage orange	**1884**	16	Osage orange	**2247**	21	Mulberry
130	10	elm	**790**	15	black cherry	**1122**	18	hackberry	**1483**	10	Cedar	**1886**	8	Hackberry	**2248**	8	Hackberry
133	14	Elm	**791**	12	black cherry	**1123**	13	hackberry	**1485**	8	Cedar	**1889**	14	Honey locust	**2249**	9	Mulberry
134	14	Elm	**792**	8	osage orange	**1124**	18	hackberry	**1490**	8	Walnut	**1891**	9	Hackberry	**2250**	8	Hackberry
135	8	hackberry	**794**	12	hackberry	**1125**	14	hackberry	**1495**	9	Cedar	**1892**	12	Honey locust	**2252**	15	Hackberry
137	12	cedar	**795**	9	hackberry	**1126**	16	hackberry	**1496**	8	Walnut	**1894**	9	Elm	**2255**	8	Hackberry
138	13	cedar	**796**	10	black cherry	**1127**	8	osage orange	**1498**	11	Cedar	**1897**	10	hackberry	**2259**	10	Hackberry
139	9	Osage Orange	**800**	8	hackberry	**1128**	11	Osage orange	**1502**	15	Black Cherry	**1898**	8	hackberry	**2261**	8	Hackberry
140	8	Osage Orange	**801**	10	black cherry	**1129**	8	Ash	**1503**	8	Hackberry	**1900**	8	hackberry	**2262**	11	Black locust
141	12	Osage Orange	**802**	18	black cherry	**1130**	8	Osage orange	**1504**	10	Cedar	**1905**	10	shumard oak	**2264**	8	Hackberry
142	8	Osage Orange	**804**	14	black cherry	**1133**	9	cedar	**1505**	8	Cedar	**1907**	12	walnut	**2266**	11	elm
143	11	hackberry	**806**	14	hackberry	**1143**	8	Walnut	**1506**	9	Elm	**1908**	12	hackberry	**2269**	12	hackberry
147	16	cedar	**808**	8	osage orange	**1146**	10	Cedar	**1508**	12	Cedar	**1909**	8	hackberry	**2270**	8	black locust
148	18	cedar	**809**	8	hackberry	**1149**	8	Cedar	**1511**	11	Cedar	**1910**	8	hackberry	**2271**	8	hackberry
154	8	boxelder	**810**	10	hackberry	**1151**	10	Walnut	**1512**	11	Cedar	**1911**	9	elm	**2274**	10	hackberry
155	14	osage orange	**811**	9	black cherry	**1152**	11	Walnut	**1514**	13	Cedar	**1914**	11	hackberry	**2275**	10	hackberry
158	12	osage orange	**812**	9	black cherry	**1156**	8	Black cherry	**1516**	8	Cedar	**1917**	9	Walnut	**2276**	9	hackberry
161	12	osage orange	**813**	12	hackberry	**1158**	9	Walnut	**1517**	9	Cedar	**1919**	9	Walnut	**2281**	12	hackberry
162	8	hackberry	**814**	13	hackberry	**1160**	14	cedar	**1518**	9	Cedar	**1920**	11	Cedar	**2282**	9	osage orange
163	10	honey locust	**815**	8	hackberry	**1161**	9	cedar	**1519**	11	Cedar	**1922**	9	Walnut	**2283**	10	hackberry
165	12	osage orange	**816**	15	hackberry	**1167**	11	cedar	**1520**	11	Cedar	**1933**	8	Cedar	**2284**	12	hackberry
167	8	osage orange	**821**	8	hackberry	**1173**	8	cedar	**1521**	9	Cedar	**1934**	8	Cedar	**2285**	14	hackberry
172	8	hackberry	**822**	9	hackberry	**1181**	10	osage orange	**1522**	9	Cedar	**1935**	11	Cedar	**2287**	28	hackberry
174	8	osage orange	**826**	12	hackberry	**1184**	9	osage orange	**1523**	8	Cedar	**1945**	16	Black cherry	**2288**	8	black locust
175	15	osage orange	**828**	8	hackberry	**1187**	8	Honey locust	**1525**	8	Cedar	**1949**	8	Cedar	**2289**	10	hackberry
176	9	hackberry	**829**	12	Osage orange	**1190**	10	Black cherry	**1526**	8	Cedar	**1950**	11	Hackberry	**2291**	8	hackberry
177	8	hackberry	**832**	10	Elm	**1191**	9	Black cherry	**1527**	10	Walnut	**1951**	10	Hackberry	**2297**	8	Hackberry
180	8	hackberry	**834**	18	Black cherry	**1192**	9	Black cherry	**1528**	12	Cedar	**1952**	12	Walnut	**2298**	8	Hackberry
182	8	hackberry	**837**	10	Hackberry	**1193**	10	Walnut	**1529**	11	Cedar	**1954**	9	Chinquapin oak	**2300**	10	Hackberry
183	8	elm	**838**	16	Black cherry	**1194**	8	Walnut	**1530**	10	Cedar	**1956**	10	Chinquapin oak	**2304**	11	Osage orange
221	12	Osage orange	**841**	10	Hackberry	**1196**	11	Cedar	**1531**	11	Cedar	**1957**	8	walnut	**2306**	8	Hackberry
223	8	Black cherry	**843**	8	Osage orange	**1197**	8	Osage orange	**1532**	11	Cedar	**1959**	8	hackberry	**2307**	8	Hackberry
226	10	Osage orange	**844**	8	Hackberry	**1198**	12	Cedar	**1533**	8	Cedar	**1963**	13	chinquapin oak	**2309**	12	Walnut
227	8	Osage orange	**845**	10	Black cherry	**1199**	11	Cedar	**1534**	11	Cedar	**1964**	10	walnut	**2312**	10	Walnut
229	9	Black cherry	**849**	17	Elm	**1201**	10	Cedar	**1535**	10	Cedar	**1966**	12	walnut	**2314**	8	Osage orange
231	9	Elm	**851**	10	Honey locust	**1202**	8	Black cherry	**1536**	15	Cedar	**1967**	10	walnut	**2316**	8	Walnut
232	8	Hackberry	**852**	8	Hackberry	**1203**	8	Black cherry	**1537**	12	Cedar	**1968**	9	walnut	**2317**	10	Hackberry
235	8	Hackberry	**855**	8	Hackberry	**1204**	8	Black cherry	**1538**	10	Cedar	**1969**	13	walnut	**2320**	9	Hackberry
238	8	Hackberry	**857**	8	Hackberry	**1205**	10	Black cherry	**1540**	9	Cedar	**1970**	11	walnut	**2321**	8	Hackberry
240	10	Elm	**861**	11	Black cherry	**1208**	10	Osage orange	**1542**	10	Cedar	**1972**	10	black cherry	**2322**	8	Hackberry
243	8	Sassafras	**862**	15	Black cherry	**1209**	36	Hackberry	**1543**	9	Cedar	**1974**	9	hackberry	**2323**	11	Elm
244	8	Sassafras	**864**	9	Hackberry	**1210**	8	Walnut	**1546**	11	Cedar	**1976**	9	black cherry	**2326**	12	Osage orange
245	9	Sassafras	**865**	9	Hackberry	**1211**	8	Hackberry	**1547**	8	Cedar	**1985**	10	Walnut	**2327**	8	Osage orange
256	8	Osage orange	**866**	9	Hackberry	**1214**	18	Walnut	**1551**	8	Cedar	**1986**	16	Black cherry	**2328**	9	Hackberry
257	8	Elm	**868**	8	Hackberry	**1215**	15	Walnut	**1552**	11	Cedar	**1987**	12	Walnut	**2331**	8	Hackberry
258	18	Cedar	**870**	8	Hackberry	**1216**	8	Cedar	**1553**	9	Osage orange	**1988**	9	Walnut	**2333**	10	osage orange
259	17	Elm	**872**	10	Hackberry	**1217**	12	Hackberry	**1554**	13	Cedar	**1989**	12	Walnut	**2339**	9	hackberry
260	9	Cedar	**873**	9	Hackberry	**1218**	10	Honey locust	**1555**	15	Cedar	**1991**	23	Black cherry	**2343**	8	cedar
261	11	Persimmon	**875**	8	Hackberry	**1220**	12	Elm	**1556**	11	Cedar	**1993**	8	Hackberry	**2344**	8	cedar
262	12	Persimmon	**876**	10	Hackberry	**1221**	10	Hackberry	**1557**	10	Cedar	**1994**	8	Hackberry	**2353**	9	hackberry
263	12	Osage orange	**877**	12	hackberry	**1222**	8	Hackberry	**1558**	8	Cedar	**1995**	9	Honey locust	**2355**	9	hackberry
264	12	Osage orange	**878**	14	walnut	**1223**	10	Walnut	**1559**	8	Cedar	**1996**	8	Black cherry	**2356**	12	hackberry
265	14	Osage orange	**879**	8	elm	**1224**	8	Black Cherry	**1560**	13	Cedar	**1997**	8	Black cherry	**2357**	10	hackberry
266	11	Osage orange	**880**	13	walnut	**1226**	12	Walnut	**1564**	8	Cedar	**1998**	10	Hackberry	**2361**	10	hackberry
267	13	Osage orange	**882**	8	walnut	**1227**	9	Walnut	**1565**	8	Cedar	**2002**	10	Hackberry	**2362**	17	hickory
268	12	Black Cherry	**883**	19	walnut	**1229**	8	Hackberry	**1566**	11	Cedar	**2005**	13	Walnut	**2363**	12	hickory
269	15	Cedar	**885**	10	hackberry	**1230**	8	Walnut	**1567**	8	Cedar	**2009**	8	Osage orange	**2364**	18	hickory
270	8	Sugar maple	**886**	10	hackberry	**1231**	8	Elm	**1569**	9	Cedar	**2010**	13	Walnut	**2365**	9	black locust
271	12	Cedar	**887**	12	hackberry	**1232**	10	Black Cherry	**1570**	9	Cedar	**2011**	10	Walnut	**2366**	9	black locust
272	14	Osage orange	**888**	13	black cherry	**1234**	13	Hackberry	**1571**	9	Cedar	**2016**	15	Walnut	**2367**	10	hackberry
273	21	Elm	**890**	8	hackberry	**1235**	14	Box elder	**1572**	10	Cedar	**2018**	9	Hackberry	**2372**	8	hackberry
274	11	Cedar	**891**	8	hackberry	**1236**	9	Hackberry	**1573**	9	Cedar	**2021**	13	Black cherry	**2373**	12	hackberry
275	15	Osage orange	**892**	9	hackberry	**1237**	8	Cedar	**1574**	8	Mimosa	**2025**	9	Cedar	**2374**	8	hackberry
276	8	Hackberry	**895**	8	hackberry	**1238**	16	Elm	**1575**	8	Cedar	**2026**	8	Osage orange	**2375**	8	Elm
278	9	Hackberry	**896**	14	cedar	**1240**	8	Hackberry	**1576**	9	Cedar	**2027**	9	Cedar	**2377**	8	Walnut
280	27	Osage orange	**897**	12	cedar	**1242**	12	Cedar	**1577**	9	Cedar	**2028**	9	Black cherry	**2378**	13	Cedar
284	9	Box elder	**899**	10	ash	**1244**	8	Cedar	**1578**	8	Cedar	**2029**	12	Cedar	**2379**	8	Hackberry
290	8	Osage orange	**900**	18	black cherry	**1245**	12	Cedar	**1579**	11	Cedar	**2034**	8	Elm	**2381**	14	Hackberry
327	11	Osage Orange	**901**	10	black cherry	**1246**	12	Honey locust	**1580**	11	Cedar	**2035**	11	black locust	**2382**	8	Walnut
329	10	Osage Orange	**902**	8	black cherry	**1248**	14	Cedar	**1581**	9	Cedar	**2036**	13	black locust	**2385**	9	Black Cherry
347	8	Black locust	**906**	8	black cherry	**1249**	8	Hackberry	**1582**	8	Cedar	**2038**	10	cedar	**2386**	9	Hackberry
348	11	Elm	**908**	8	osage orange	**1250**	8	Hackberry	**1583**	12	Cedar	**2040**	11	cedar	**2387**	10	Hackberry
349	11	Black locust	**909**	8	hackberry	**1252**	9	Cedar	**1584**	9	Cedar	**2041**	11	cedar	**2388**	9	Hackberry
350	9	Hackberry	**910**	11	hackberry	**1253**	9	Cedar	**1586**	8	Walnut	**2042**	9	cedar	**2392**	11	Hackberry
352	9	Osage orange	**913**	8	Osage Orange	**1256**	9	Cedar	**1589**	8	Cedar	**2044**	12	hackberry	**2393**	12	Honey locust
353	9	Walnut	**917**	8	Osage Orange	**1259**	10	Cedar	**1590**	8	Cedar	**2045**	11	ash	**2394**	8	Honey locust
354	11	Hackberry	**918**	10	Osage Orange	**1260**	14	Cedar	**1591**	8	Cedar	**2047**	9	ash	**2396**	11	Walnut

TREES TO BE REMOVED			TREES TO BE REMOVED			TREES TO BE REMOVED			TREES TO BE REMOVED			TREES TO BE REMOVED			TREES TO BE REMOVED		
No.	*Cal. Inch*	*Species*	*No.*	*Cal. Inch*	*Species*	*No.*	*Cal. Inch*	*Species*	*No.*	*Cal. Inch*	*Species*	*No.*	*Cal. Inch*	*Species*	*No.*	*Cal. Inch*	*Species*
358	10	Black locust	**919**	12	Osage Orange	**1261**	10	Cedar	**1592**	8	Cedar	**2050**	12	ash	**2397**	9	Cedar
362	13	Hackberry	**920**	10	walnut	**1262**	10	Cedar	**1594**	8	hackberry	**2052**	8	hackberry	**2398**	8	Osage orange
366	8	Hackberry	**921**	12	Osage Orange	**1263**	11	Cedar	**1605**	8	cedar	**2053**	12	walnut	**2399**	8	Osage orange
368	8	Hackberry	**922**	8	Osage Orange	**1264**	8	Cedar	**1608**	9	cedar	**2054**	8	hackberry	**2400**	8	Osage orange
369	16	Hackberry	**923**	9	Osage Orange	**1266**	10	Cedar	**1609**	8	cedar	**2055**	8	cedar	**2402**	10	Black Cherry
370	10	Hackberry	**924**	10	Osage Orange	**1269**	8	Cedar	**1610**	13	cedar	**2056**	10	cedar	**2405**	8	Cedar
371	15	Hackberry	**925**	10	Osage Orange	**1270**	9	Cedar	**1611**	8	cedar	**2058**	8	cedar	**2407**	8	Cedar
372	13	Hackberry	**926**	10	Osage Orange	**1271**	10	Cedar	**1612**	12	cedar	**2060**	9	cedar	**2408**	10	Black Cherry
375	18	Hackberry	**927**	9	Osage Orange	**1272**	9	Cedar	**1614**	12	cedar	**2061**	8	cedar	**2409**	10	Osage orange
378	14	Hackberry	**928**	11	cedar	**1273**	13	Cedar	**1618**	10	hickory	**2062**	8	hackberry	**2412**	12	Hackberry
380	10	Elm	**929**	9	walnut	**1275**	9	Cedar	**1619**	12	hickory	**2064**	13	Walnut	**2415**	10	Hackberry
381	8	Black Cherry	**937**	9	osage orange	**1276**	8	Cedar	**1620**	10	cedar	**2065**	10	Walnut	**2416**	8	Hackberry
382	14	Cedar	**944**	8	hackberry	**1277**	9	Cedar	**1621**	8	cedar	**2066**	11	Walnut	**2419**	8	Hackberry
383	12	Cedar	**945**	8	osage orange	**1278**	8	Cedar	**1624**	11	cedar	**2068**	9	Hackberry	**2420**	10	Hackberry
386	11	Box elder	**947**	8	cedar	**1279**	10	Cedar	**1625**	12	cedar	**2069**	8	Walnut	**2425**	15	Cedar
389	8	Box elder	**948**	11	cedar	**1280**	10	cedar	**1626**	10	ash	**2070**	8	Hackberry	**2426**	8	Hackberry
390	8	Hackberry	**950**	16	osage orange	**1281**	12	ash	**1627**	10	cedar	**2072**	8	Hackberry	**2429**	8	Mulberry
392	17	Elm	**951**	8	hackberry	**1284**	8	osage orange	**1628**	9	ash	**2073**	14	Elm	**2433**	10	Hackberry
395	14	Black Cherry	**953**	10	osage orange	**1289**	12	walnut	**1631**	10	cedar	**2074**	19	Black Cherry	**2434**	8	Hackberry
396	8	Hackberry	**955**	12	osage orange	**1290**	10	black cherry	**1633**	11	cedar	**2078**	10	Hackberry	**2436**	8	hackberry
397	19	Black Cherry	**956**	16	osage orange	**1291**	8	Black cherry	**1635**	13	cedar	**2079**	8	Hackberry	**2439**	9	hackberry
398	11	Cedar	**958**	15	osage orange	**1293**	8	osage orange	**1636**	10	cedar	**2081**	8	Black Cherry	**2440**	10	hackberry
434	12	Osage orange	**961**	10	Osage orange	**1294**	8	hickory	**1637**	12	cedar	**2085**	14	Elm	**2441**	8	black locust
441	10	Ash	**962**	11	Osage orange	**1295**	10	walnut	**1638**	8	cedar	**2086**	14	Hackberry	**2442**	10	hackberry
442	8	Ash	**963**	10	Osage orange	**1299**	11	black cherry	**1639**	12	cedar	**2089**	8	Hackberry	**2445**	10	hackberry
464	15	hackberry	**964**	9	Osage orange	**1302**	8	Osage orange	**1640**	9	cedar	**2090**	9	Elm	**2446**	12	hackberry
465	11	hackberry	**965**	9	Osage orange	**1303**	10	walnut	**1641**	8	cedar	**2093**	9	Hackberry	**2449**	9	hackberry
466	8	osage orange	**966**	11	Hackberry	**1304**	10	walnut	**1644**	8	cedar	**2094**	17	Black Cherry	**2450**	8	hackberry
470	8	osage orange	**968**	9	Osage orange	**1305**	11	ash	**1645**	10	cedar	**2095**	8	Cedar	**2452**	8	hackberry
509	18	Osage orange	**969**	10	Osage orange	**1307**	12	ash	**1646**	8	cedar	**2096**	8	Cedar	**2454**	8	hackberry
531	8	boxelder	**970**	8	Osage orange	**1308**	8	boxelder	**1658**	11	Cedar	**2099**	10	Elm	**2458**	8	hackberry
532	8	boxelder	**971**	9	Osage orange	**1309**	8	elm	**1659**	8	Cedar	**2100**	9	Hackberry	**2464**	12	hackberry
535	8	boxelder	**975**	11	Osage orange	**1311**	8	Black cherry	**1661**	12	Cedar	**2101**	11	Hackberry	**2467**	8	black locust
538	8	boxelder	**979**	8	Osage orange	**1312**	8	black cherry	**1662**	11	Cedar	**2102**	13	Hackberry	**2468**	9	hackberry
540	9	hackberry	**980**	8	Osage orange	**1313**	10	black cherry	**1663**	10	Chinquapin oak	**2103**	8	Cedar	**2469**	8	hackberry
541	9	hackberry	**982**	8	Hackberry	**1315**	12	cedar	**1666**	9	Osage orange	**2104**	8	Honey locust	**2470**	9	elm
542	16	hackberry	**983**	14	Osage orange	**1320**	8	black cherry	**1667**	9	Cedar	**2105**	8	Cedar	**2473**	10	hackberry
546	8	boxelder	**984**	15	Osage orange	**1324**	11	cedar	**1678**	9	Hackberry	**2107**	9	Osage orange	**2477**	19	hackberry
547	13	hackberry	**985**	16	Osage orange	**1325**	8	black cherry	**1680**	9	Walnut	**2109**	11	Osage orange	**2478**	8	black locust
548	15	cedar	**987**	8	Hackberry	**1326**	12	elm	**1700**	11	Walnut	**2111**	8	Hackberry	**2481**	9	black locust
549	14	cedar	**988**	8	Hackberry	**1327**	11	cedar	**1706**	9	osage orange	**2112**	14	Walnut	**2482**	12	honey locust
556	8	osage orange	**990**	10	Hackberry	**1328**	8	elm	**1712**	8	black cherry	**2113**	13	Elm	**2484**	8	hackberry
593	12	Hackberry	**991**	12	Hackberry	**1329**	15	cedar	**1716**	8	cedar	**2114**	12	Cedar	**2485**	8	black locust
596	8	Cedar	**993**	8	Walnut	**1331**	10	Cedar	**1717**	9	cedar	**2117**	12	Osage orange	**2486**	12	osage orange
597	8	Hackberry	**994**	10	Hackberry	**1332**	11	Cedar	**1718**	10	cedar	**2120**	11	Cedar	**2487**	10	Osage orange
598	14	Osage orange	**996**	8	Walnut	**1334**	9	Cedar	**1719**	11	cedar	**2121**	9	Hackberry	**2488**	8	Cedar
599	9	Osage orange	**997**	9	Hackberry	**1336**	9	Cedar	**1723**	9	cedar	**2123**	8	Cedar	**2496**	11	Elm
600	9	Hackberry	**998**	9	Hackberry	**1337**	8	Elm	**1725**	8	cedar	**2124**	11	Hackberry	**2497**	10	Elm
601	16	Hackberry	**1002**	11	Walnut	**1339**	12	Cedar	**1726**	8	cedar	**2125**	8	Elm	**2500**	10	Honey locust
602	12	Black Cherry	**1003**	12	Walnut	**1341**	10	Cedar	**1727**	8	cedar	**2127**	8	Hackberry	**2502**	10	Cedar
605	13	Hackberry	**1004**	12	Walnut	**1342**	9	Honey locust	**1728**	9	persimmon	**2128**	8	Hackberry	**2504**	11	Cedar
633	12	Osage orange	**1005**	12	Walnut	**1343**	10	Cedar	**1729**	11	black cherry	**2130**	9	Cedar	**2505**	8	Osage orange
634	8	Cedar	**1006**	9	Hackberry	**1344**	12	Cedar	**1731**	12	black cherry	**2131**	9	Hackberry	**2507**	9	Cedar
635	9	Hackberry	**1007**	9	Hackberry	**1345**	13	Cedar	**1749**	8	cedar	**2132**	9	Hackberry	**2508**	10	Cedar
636	9	Hackberry	**1013**	8	Osage orange	**1346**	8	Elm	**1751**	10	cedar	**2134**	8	Osage orange	**2509**	8	Cedar
637	8	Hackberry	**1017**	10	Walnut	**1349**	8	Elm	**1752**	10	walnut	**2135**	8	Osage orange	**2511**	11	Cedar
638	8	Hackberry	**1019**	10	Hackberry	**1350**	11	Osage orange	**1753**	8	cedar	**2136**	8	Osage orange	**2513**	12	Cedar
639	10	Hackberry	**1020**	12	Elm	**1351**	10	Cedar	**1755**	8	cedar	**2138**	8	Osage orange	**2514**	10	Elm
640	8	Osage orange	**1021**	8	Walnut	**1352**	10	Cedar	**1756**	8	cedar	**2139**	8	Hackberry	**2515**	9	Cedar
641	16	Osage orange	**1022**	14	Walnut	**1353**	11	Cedar	**1757**	10	black locust	**2140**	8	Hackberry	**2518**	8	Black locust
642	8	Hackberry	**1023**	12	Walnut	**1354**	11	Cedar	**1758**	10	hackberry	**2141**	8	Hackberry	**2519**	8	Osage orange
643	17	Black Cherry	**1024**	25	Hackberry	**1355**	8	cedar	**1759**	9	walnut	**2142**	11	Hackberry	**2521**	9	Elm
644	8	Hackberry	**1025**	12	Hackberry	**1356**	8	Cedar	**1761**	10	hackberry	**2144**	11	walnut	**2522**	8	Honey locust
645	12	Elm	**1026**	17	Hackberry	**1357**	14	Cedar	**1763**	10	black cherry	**2145**	14	walnut	**2523**	12	Cedar
647	10	Hackberry	**1027**	12	Hackberry	**1358**	9	Cedar	**1765**	11	black locust	**2146**	10	walnut	**2524**	10	Cedar
648	10	Hackberry	**1028**	23	Elm	**1359**	14	Cedar	**1766**	12	black locust	**2147**	9	walnut	**2526**	9	hackberry
650	10	Cedar	**1029**	16	Hackberry	**1360**	9	Cedar	**1767**	10	black locust	**2149**	17	walnut	**2532**	9	Black locust
651	9	osage orange	**1030**	23	Hackberry	**1361**	19	Sassafras	**1768**	11	black locust	**2151**	11	walnut	**2537**	9	Elm
652	11	cedar	**1031**	13	Hackberry	**1362**	8	Cedar	**1769**	10	hackberry	**2152**	8	osage orange	**2545**	9	Cedar
653	12	cedar	**1032**	20	Hackberry	**1363**	8	Box elder	**1770**	12	hackberry	**2153**	8	hackberry	**2548**	9	Cedar
654	8	cedar	**1034**	9	Hackberry	**1364**	9	Cedar	**1772**	8	hackberry	**2157**	9	cedar	**2549**	13	Cedar
655	13	osage orange	**1035**	12	Black locust	**1366**	10	Cedar	**1773**	8	hackberry	**2158**	9	cedar	**2552**	12	Cedar
656	11	walnut	**1037**	8	Hackberry	**1367**	8	Cedar	**1779**	8	hackberry	**2167**	9	cedar	**2554**	11	Walnut
657	12	cedar	**1040**	9	Osage orange	**1370**	9	black cherry	**1781**	9	hackberry	**2168**	12	cedar	**2556**	8	Cedar
658	8	osage orange	**1043**	8	Hackberry	**1372**	10	black cherry	**1782**	10	hackberry	**2173**	8	Hackberry	**2559**	11	Shumard oak
659	12	osage orange	**1044**	8	Hackberry	**1373**	9	black cherry	**1783**	15	osage orange	**2174**	11	Walnut	**2560**	10	Walnut
660	8	ash	**1049**	8	Osage orange	**1376**	8	osage orange	**1788**	10	Cedar	**2175**	11	Walnut	**2561**	9	Mulberry
664	8	hackberry	**1050**	11	Osage orange	**1378**	10	Elm	**1791**	10	Cedar	**2176**	9	Hackberry	**2567**	10	cedar
665	10	cedar	**1053**	10	Osage orange	**1393**	13	Black cherry	**1796**	11	Cedar	**2178**	9	Osage orange	**2569**	8	cedar
667	27	walnut	**1060**	8	hackberry	**1394**	11	Walnut	**1800**	11	Cedar	**2179**	11	Hackberry	**2572**	9	cedar
670	14	walnut	**1061**	8	osage orange	**1398**	8	Walnut	**1802**	8	Cedar	**2181**	13	Hackberry	**2574**	23	cedar
678	12	Black Cherry	**1062**	8	osage orange	**1399**	9	Hackberry	**1804**	8	Cedar	**2182**	13	Hackberry	**2576**	10	walnut
681	9	Black Cherry	**1063**	9	willow	**1400**	9	Hackberry	**1805**	8	Cedar	**2184**	13	Hackberry	**2578**	8	cedar
728	9	hackberry	**1064**	8	osage orange	**1401**	10	Walnut	**1806**	10	Cedar	**2185**	9	Hackberry	**2580**	11	cedar
729	13	hackberry	**1066**	11	osage orange	**1404**	8	black cherry	**1810**	9	Cedar	**2187**	14	Walnut	**2582**	8	cedar
**730

TREE REMOVAL CALCULATION : DATA

TREES TO BE REMOVED: 8" THRU 17" DIAMETER : 11,870'

TREES TO BE REMOVED: 18" AND GREATER: 824"

TREE REPLACEMENT: 8" THRU 17" DIAMETER: 5,935"
TREE REPLACEMENT: 18" AND GREATER: 824"
COMBINED TREE REPLACEMENT: 6,759"

150% MAX REPLACEMENT TO REQUIRED ACI: 2,016

TREE PRESERVATION- GENERAL NOTES

1. TREE SURVEY PROVIDED BY PANTHER CREEK FORESTRY, LLC : 931.474.6203

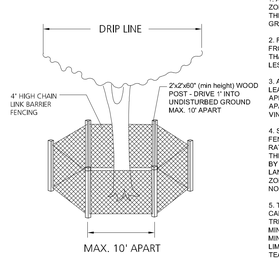
2. PRIOR TO ANY TREE REMOVAL TAKING PLACE ON SITE, TREE PROTECTION FENCING IS TO BE INSTALLED TO MEET CITY OF GOODLETTSVILLE STANDARDS.

3. NO TREES WITHIN TREE PROTECTION FENCE SHALL BE DAMAGED OR REMOVED WITHOUT PRIOR WRITTEN CONSENT BY PROJECT & CITY LANDSCAPE ARCHITECT.

4. ALL TREES INDICATED INSIDE THE TREE PROTECTION FENCE 6" AND GREATER ARE TO BE PRESERVED.

5. SEE SHEET L1.03 FOR ALL TREE PRESERVATION DATA CHARTS & DETAILS

SEE SHEET L 1.03 FOR TREE PRESERVATION CHARTS



1 PROTECTIVE TREE BARRIER

NOTE:

1. ALL SPECIMEN TREES, TREES IN A TREE PROTECTION ZONE, AND TREES INTENDED FOR USE AS CREDIT TOWARDS THE LANDSCAPING STANDARDS SHALL BE FENCED BEFORE GRADING OR OTHER LAND-DISTRUBING ACTIVITY BEGINS.

2. FENCING SHALL EXTEND AT LEAST ONE FOOT IN DISTANCE FROM THE EDGE OF THE TREE FOR EACH INCH OF DBH, SO THAT EACH TREE'S DRIPLINE IS PROTECTED, BUT NO CASE LESS THAN TEN FEET FROM THE TRUNK.

3. ALL FENCING REQUIRED SHALL BE CHAIN LINK FENCING AT LEAST FOUR FEET IN HEIGHT AND SECURED USING APPROPRIATE POSTS SPACED NOT MORE THAN TEN FEET APART. SUCH CHAIN LINK FENCING IS NOT REQUIRED TO BE VINYL COATED.

4. SIGNS SHALL BE INSTALLED ON THE TREE PROTECTION FENCE VISIBLE ON ALL SIDES OF THE FENCED-IN AREA AT A RATE OF AT LEAST ONE SIGN FOR EVERY 150 LINEAR FEET. THE SIZE OF EACH SIGN MUST BE A MINIMUM OF TWO FEET BY TWO FEET AND SHALL CONTAIN THE FOLOWING LANGUAGE IN ENGLISH AND SPANISH: "TREE PROTECTION ZONE. KEEP OUT. ZONA DE LA PROTECC-RION DEL ARBOL. NO SE PERMITE ENTRAR."

5. THE REMOVAL OF TREES ADJACENT TO TREE SAVE AREAS CAN CAUSE INADVERTENT DAMAGE TO THE PROTECTED TREES. PRIOR TO CLEARING ACTIVITIES, TRENCHES WITH A MINIMUM WIDTH OF ONE-AND-ONE-HALF INCHES AND A MINIMUM DEPTH OF 30 INCHES SHALL BE CUT ALONG THE LIMITS OF LAND DISTURBANCE, SO AS TO CUT, RATHER THAN TEAR TREE ROOTS.

6. ALL TREE PROTECTION MEASURES SHALL BE INSPECTED AND APPROVED BY THE CODES DEPARTMENT PRIOR TO START OF ANY LAND DISTURBING ACTIVITIES.

0' 40' 80' 160' NORTH

EDGE PLANNING LANDSCAPE ARCHITECTURE URBAN DESIGN
210 12th AVENUE SOUTH, SUITE 202
NASHVILLE, TN 37203
615.250.8154
www.edgela.com

CONSULTANTS
Barge Cauthen ASSOCIATES
CIVIL ENGINEER
BARGE CAUTHEN & ASSOCIATES
6606 CHARLOTTE PIKE, STE 210
NASHVILLE, TN 37209
615-356-9911

PROJECT NAME
South Bridge

Site Plan

619 North Main St
Goodlettsville, TN

CLIENT
Holladay Ventures

225 Gentry Avenue
Nashville, TN 37206

PROJECT NO. 21150
Date: 5/14/2021
Issued for: City Permit

REVISIONS
1 11/29/2021 CITY COMMENTS

Sheet Title
SITE TREE PRESERVATION PLAN

SEAL
DAVID HAASE REGISTERED LANDSCAPE ARCHITECT AGRICULTURE TENNESSEE 2021

Sheet Number
L1.02

TREES TO BE PRESERVED			TREES TO BE PRESERVED			TREES TO BE PRESERVED			TREES TO BE PRESERVED			TREES TO BE PRESERVED		
No.	*Cal. Inch*	*Species*	*No.*	*Cal. Inch*	*Species*	*No.*	*Cal. Inch*	*Species*	*No.*	*Cal. Inch*	*Species*	*No.*	*Cal. Inch*	*Species*
1	7	Redbud	203	10	hackberry	410	6	Hackberry	521	11	osage orange	706	7	Hackberry
6	7	Hackberry	204	7	cedar	411	14	Black Cherry	522	7	hackberry	707	8	Honey locust
7	7	Hackberry	205	7	Osage Orange	412	11	Cedar	523	8	hackberry	708	16	Black cherry
8	6	Hackberry	206	10	cedar	413	11	Box elder	524	7	hackberry	709	9	Osage orange
10	6	hackberry	207	11	cedar	414	14	Walnut	525	10	elm	710	10	Osage orange
11	6	elm	208	7	Osage Orange	415	10	Osage orange	526	6	boxelder	711	6	cedar
12	8	black cherry	209	10	Osage Orange	416	14	Osage orange	527	6	boxelder	712	7	cedar
13	6	mulberry	210	6	hackberry	417	18	Black Cherry	550	14	cedar	713	7	Osage Orange
14	6	ash	211	16	walnut	418	9	Osage orange	551	6	hackberry	714	7	cedar
15	8	walnut	212	8	Elm	419	6	Elm	552	16	black cherry	715	6	Elm
16	6	redbud	213	8	Osage Orange	420	15	Black Cherry	553	6	cedar	716	7	Ash
17	6	ash	214	9	Osage Orange	421	8	Hackberry	554	9	osage orange	717	11	walnut
18	7	hackberry	215	7	walnut	422	8	Box elder	555	7	osage orange	718	6	Osage Orange
19	10	Black locust	216	7	Elm	423	6	Hackberry	558	6	osage orange	719	9	Osage Orange
20	6	Elm	217	13	cedar	424	7	Hackberry	560	16	osage orange	720	14	Ash
38	8	hackberry	218	24	Shumard oak	425	16	Walnut	561	6	osage orange	721	18	hackberry
39	6	hackberry	219	6	Cedar	426	8	Walnut	562	16	elm	722	10	hackberry
40	8	hackberry	220	8	Elm	427	9	Hackberry	563	7	boxelder	723	8	hackberry
46	7	hackberry	247	10	Hackberry	428	11	Hackberry	564	12	black cherry	724	12	hackberry
47	8	elm	248	6	Elm	429	12	Black Cherry	565	8	osage orange	725	14	hackberry
48	6	hackberry	249	19	Black cherry	430	12	Osage orange	566	14	cedar	726	10	hackberry
49	12	honey locust	250	17	Black cherry	431	7	Hackberry	567	9	osage orange	727	13	hackberry
50	6	hackberry	251	6	Elm	432	8	Elm	568	10	Osage orange	732	8	hackberry
51	8	hackberry	252	6	Hackberry	433	14	Black Cherry	569	7	Hackberry	735	8	Osage Orange
52	9	hackberry	253	13	Cedar	435	8	Osage orange	570	10	Osage orange	745	15	Osage orange
53	7	hackberry	254	8	Hackberry	436	10	Osage orange	571	7	Hackberry	746	11	Black Cherry
54	8	elm	281	9	Hackberry	437	7	Hackberry	572	14	Osage orange	747	17	Black Cherry
55	6	hackberry	282	12	Hackberry	438	10	Hackberry	573	18	Osage orange	748	9	Hackberry
56	7	cedar	283	8	Box elder	439	7	Ash	574	8	Cedar	749	8	Hackberry
57	6	cedar	286	9	Box elder	440	10	Ash	575	7	Hackberry	750	8	Redbud
58	7	hackberry	287	9	Black Cherry	444	8	cedar	576	9	Hackberry	751	6	Walnut
59	6	hackberry	288	13	Box elder	445	7	hackberry	577	9	Hackberry	753	10	Hackberry
60	10	cedar	289	10	Box elder	446	10	walnut	578	16	Osage orange	754	13	Hackberry
61	9	osage orange	291	7	Box elder	447	10	Osage Orange	579	6	Hackberry	755	12	Hackberry
62	10	osage orange	292	8	Box elder	448	6	hackberry	580	6	Osage orange	756	7	Hackberry
63	8	elm	293	15	osage orange	449	6	sugar maple	581	10	Hackberry	757	9	Hackberry
64	7	elm	294	6	hackberry	450	6	hackberry	582	15	Osage orange	758	10	Hackberry
66	8	hackberry	295	19	osage orange	451	6	hackberry	583	6	Hackberry	847	9	Hackberry
67	8	hackberry	296	6	hackberry	452	12	ash	584	14	Black Cherry	1418	8	Black cherry
68	8	Elm	297	10	hackberry	453	15	hackberry	585	17	Black Cherry	1524	11	Cedar
69	7	hackberry	298	7	osage orange	455	6	osage orange	586	8	Hackberry	1647	6	cedar
70	11	cedar	299	8	hackberry	456	7	hackberry	587	15	Osage orange	1648	7	cedar
71	6	Hackberry	300	7	hackberry	457	6	ash	588	12	Osage orange	1649	9	cedar
72	9	Elm	301	9	osage orange	458	12	ash	606	12	Hackberry	1650	10	cedar
73	11	Elm	302	13	osage orange	459	13	ash	607	11	Hackberry	1651	12	cedar
74	12	Hackberry	303	10	osage orange	460	10	hackberry	608	7	Box elder	1652	8	cedar
75	10	Elm	304	7	osage orange	461	8	hackberry	609	13	Ash	1653	6	cedar
91	6	Hackberry	305	14	hackberry	462	19	hackberry	610	10	Osage orange	1655	8	cedar
92	6	Hackberry	306	6	hackberry	463	19	hackberry	611	7	Osage orange	1677	9	Osage orange
94	7	Hackberry	307	21	osage orange	467	12	osage orange	612	12	Ash	1686	7	Hackberry
95	6	Hackberry	308	7	hackberry	468	13	hackberry	613	14	Hickory	1687	6	Hackberry
96	12	hackberry	309	10	hackberry	469	12	osage orange	614	8	Osage orange	1688	7	Elm
97	6	hackberry	310	13	elm	471	14	black cherry	615	10	Osage orange	1689	10	Honey locust
98	6	elm	311	8	elm	472	19	osage orange	616	11	Elm	1690	6	Hackberry
99	8	boxelder	312	9	hackberry	473	7	Hackberry	617	7	Osage orange	1691	6	Hackberry
100	6	boxelder	313	7	osage orange	474	11	Hackberry	618	12	Osage orange	1692	6	Hackberry
101	13	hackberry	314	6	osage orange	475	7	Osage orange	619	7	Cedar	1693	10	Cedar
102	12	honey locust	315	7	osage orange	476	6	Honey locust	620	16	Osage orange	1694	10	Cedar
103	6	cedar	316	8	osage orange	477	10	Honey locust	621	10	Cedar	1695	9	Elm
104	6	honey locust	317	6	cedar	478	30	Hackberry	622	8	Osage orange	1696	7	Hackberry
106	8	boxelder	318	10	Osage orange	479	7	Hackberry	623	13	Osage orange	1697	18	Hackberry
107	10	walnut	319	6	hackberry	480	7	Mulberry	624	11	Osage orange	1698	7	Honey locust
108	7	hackberry	320	11	walnut	481	10	Black locust	625	14	Osage orange	1699	7	Hackberry
109	7	Hackberry	321	8	hackberry	482	8	Osage orange	626	8	Osage orange	1732	6	walnut
110	7	Cedar	322	12	Osage Orange	483	10	Black locust	627	6	Osage orange	1733	8	cedar
111	7	Hackberry	323	10	Elm	484	6	Osage orange	628	19	Black Cherry	1734	8	cedar
112	6	Hackberry	324	6	hackberry	485	11	Black locust	629	8	Black Cherry	1735	6	osage orange
113	12	Elm	325	7	Osage Orange	486	13	Black locust	630	9	Hackberry	1736	6	elm
114	10	ash	326	9	cedar	487	8	Mulberry	668	14	osage orange	1737	6	cedar
115	11	ash	328	8	Red Oak	488	7	Hackberry	669	12	cedar	1738	6	elm
116	12	osage orange	330	10	Osage Orange	489	8	Osage orange	671	6	cedar	1739	10	cedar
117	16	cedar	331	10	Osage Orange	490	12	Osage orange	672	6	hackberry	1740	7	cedar
118	6	elm	332	12	Osage Orange	491	12	Osage orange	673	8	osage orange	1741	8	cedar
119	8	hackberry	333	13	Osage Orange	492	12	Osage orange	674	10	Cedar	1742	6	cedar
120	16	walnut	334	18	Cedar	493	8	Osage orange	675	7	Osage orange	1743	6	cedar
121	10	cedar	335	6	Osage orange	494	16	Hackberry	676	6	Osage orange	1744	6	cedar
122	7	hackberry	336	8	Cedar	495	10	Hackberry	677	10	Hackberry	1745	7	cedar
123	8	elm	337	16	Osage orange	496	6	Elm	682	8	Hackberry	1746	8	cedar
124	7	osage orange	338	10	Osage orange	497	8	Hackberry	683	12	Honey locust	1794	7	Cedar
126	10	honey locust	339	6	Black locust	498	7	Honey locust	684	6	Hackberry	1795	7	Cedar
127	10	persimmon	340	7	Black cherry	499	6	Hackberry	685	6	Hackberry	1814	9	Cedar
128	14	walnut	341	10	Mulberry	500	6	Hackberry	686	7	Hackberry	1815	11	Cedar
149	6	Redbud	342	8	Osage orange	501	7	Osage orange	687	7	Hackberry	1816	11	Cedar
150	7	hackberry	343	6	Osage orange	502	6	Hackberry	688	6	Walnut	1817	7	Cedar
186	15	osage orange	344	10	Black cherry	503	14	Osage orange	689	9	Hackberry	1818	10	Cedar
187	6	cedar	345	8	Cedar	504	7	Osage orange	691	8	Hackberry	1819	6	Cedar
188	10	osage orange	346	9	Black locust	505	11	Osage orange	692	6	Hackberry	1820	15	Walnut
189	7	osage orange	363	15	Hackberry	506	6	Osage orange	693	7	Osage orange	1821	7	Sugar maple
190	6	black cherry	364	8	Black locust	507	9	Osage orange	694	6	Osage orange	1822	7	Redbud
191	10	osage orange	399	10	Black Cherry	508	8	Osage orange	695	15	Osage orange	1825	6	Walnut
192	8	hackberry	400	9	Cedar	510	6	hackberry	696	6	Osage orange	1826	8	Walnut
193	7	osage orange	401	6	Hackberry	511	6	hackberry	697	9	Osage orange	1827	9	Elm
194	15	osage orange	402	10	Hackberry	512	16	hackberry	698	8	Hackberry	1828	9	Elm
195	17	ash	403	7	Hackberry	513	6	hackberry	699	8	Hackberry	1829	8	Cedar
196	7	elm	404	6	Box elder	514	9	hackberry	700	6	Hackberry	1830	6	Walnut
197	13	osage orange	405	9	Ash	515	11	hackberry	701	6	Hackberry	1831	7	Cedar
198	7	hackberry	406	9	Black locust	516	9	hackberry	702	7	Osage orange	1857	8	Hackberry
199	7	hackberry	407	6	Hackberry	517	12	hackberry	703	7	Osage orange	1858	6	Hackberry
200	7	osage orange	408	10	Ash	518	13	hackberry	704	7	Hackberry	1859	9	Hackberry
201	6	osage orange	409	8	Hackberry	519	6	hackberry	705	6	Hackberry	1887	6	Hackberry

TREE REMOVAL CALCULATION : DATA

TREES TO BE PRESERVED: 4,596"

CALIPER INCH CREDIT TO REQUIRED ACI: 2,298" (50%)

TREE PRESERVATION - GENERAL NOTES

1. TREE SURVEY PROVIDED BY PANTHER CREEK FORESTRY, LLC : 931.474.6203

2. PRIOR TO ANY TREE REMOVAL TAKING PLACE ON SITE, TREE PROTECTION FENCING IS TO BE INSTALLED TO MEET CITY OF GOODLETTSVILLE STANDARDS.

3. NO TREES WITHIN TREE PROTECTION FENCE SHALL BE DAMAGED OR REMOVED WITHOUT PRIOR WRITTEN CONSENT BY PROJECT & CITY LANDSCAPE ARCHITECT.

4. ALL TREES INDICATED INSIDE THE TREE PROTECTION FENCE 6" AND GREATER ARE TO BE PRESERVED.

5. SEE SHEET L1.03 FOR ALL TREE PRESERVATION DATA CHARTS & DETAILS

SEE SHEET L 1.01 FOR TREE REMOVAL CHARTS

0' 40' 80' 160' NORTH

CONSULTANTS

EDGE PLANNING LANDSCAPE ARCHITECTURE URBAN DESIGN
210 12th AVENUE SOUTH, SUITE 202
NASHVILLE, TN 37203
615.250.8154
www.edgela.com

Barge Cauthen ASSOCIATES
CIVIL ENGINEER
BARGE CAUTHAN & ASSOCIATES
6606 CHARLOTTE PIKE, STE 210
NASHVILLE, TN 37209
615-356-9911

PROJECT NAME

South Bridge

Site Plan

619 North Main St
Goodlettsville, TN

CLIENT

Holladay Ventures

225 Gentry Avenue
Nashville, TN 37206

PROJECT NO.	21150
Date:	5/14/2021
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REVISIONS

1	11/29/2021	CITY COMMENTS

Sheet Title

TREE PRESERVATION CHARTS

SEAL

Sheet Number

L1.03

SEE SHEET L 2.04 FOR PLANT SCHEDULE

0' 30' 60' 120' NORTH

GENERAL NOTES - LANDSCAPE PLANTING

1. EACH CONTRACTOR IS TO VERIFY WITH OWNER AND UTILITY COMPANIES THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION, TO DETERMINE IN THE FIELD THE ACTUAL LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT. THE CONTRACTOR SHALL CALL UTILITY PROTECTION SERVICE 72 HOURS PRIOR TO CONSTRUCTION.

2. EXAMINE FINISH SURFACE, GRADES, TOPSOIL QUALITY AND DEPTH. DO NOT START ANY WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED. VERIFY LIMITS OF WORK BEFORE STARTING.

3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM ALL WORK IN A MANNER THAT PROTECTS COMPLETED WORK BY OTHERS, SUCH AS CURBS, UTILITIES, STORM DRAINAGE, FENCES, DRIVEWAY APRONS, DRIVES, VEGETATION, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF SATISFACTORY REPAIR OF ALL DAMAGE IN KIND RESULTING FROM HIS FAILURE TO COMPLY.

4. ALL PLANTING OPERATIONS SHALL ADHERE TO THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1) 2014. CONTRACTOR IS RESPONSIBLE FOR ALL PLANT QUANTITIES SHOWN ON THE PLANS

5. QUANTITIES OF PLANTS AS SHOWN BY PLANT SYMBOLS ON THE PLAN SHALL GOVERN OVER THE QUANTITIES SHOWN IN THE PLANT LIST. THE CONTRACTOR IS TO VERIFY PLANT LIST TOTALS WITH QUANTITIES SHOWN ON PLAN. THE LANDSCAPE ARCHITECT SHALL BE ALERTED BY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO FINAL BID NEGOTIATION.

6. ALL WORK SHALL MEET OR EXCEED THE REQUIREMENTS OF ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS, ORDINANCES AND REQUIREMENTS.

7. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE LANDSCAPE ARCHITECT. THE OWNER SHALL RECEIVE TAGS FROM EACH PLANT SPECIES AND A LIST OF PLANT SUPPLIERS.

8. PLANT SHALL BE PRUNED PRIOR TO DELIVERY ONLY UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT.

9. ARE TO BE REMOVED AND BURLAP IS TO BE ROLLED BACK ONE-THIRD ON ALL B&B PLANT MATERIAL, ANY SYNTHETIC BURLAP SHALL BE COMPLETELY REMOVED FROM ANY PLANT MATERIAL

10. SHADE TREE MEASUREMENT: CALIPER SHALL BE MEASURED AT SIX INCHES ABOVE THE ROOTBALL. HEIGHT SHALL BE MEASURED FROM THE CROWN OF THE ROOT BALL TO THE TOP OF MATURE GROWTH. SPREAD SHALL BE MEASURED TO THE END OF BRANCHING EQUALLY AROUND THE CROWN FROM THE CENTER OF THE TRUNK. MEASUREMENTS ARE NOT TO INCLUDE ANY TERMINAL GROWTH. SINGLE TRUNK TREES SHALL BE FREE OF "V" CROTCHES THAT COULD BE POINTS OF WEAK LIMB STRUCTURE OR DISEASE INFESTATION. WHERE TREES ARE PLANTED IN ROWS, THEY SHALL BE UNIFORM IN SIZE AND SHAPE

11. SHRUBS MEASUREMENT: HEIGHT SHALL BE MEASURED FROM THE GROUND TO THE TOP OF THE PLANT. SPREAD SHALL BE MEASURED TO THE END OF BRANCHING EQUALLY AROUND THE SHRUB MASS. MEASUREMENTS ARE NOT TO INCLUDE ANY TERMINAL GROWTH.

12. ALL SOIL IN PLANT BED AREAS IS TO BE A BLEND OF CLEAN SIFTED TOP SOIL AND ORGANIC CONTENT. SEE NOTE #16.

13. ALL LANDSCAPE BED AREAS TO BE IRRIGATED WITH UNDERGROUND SYSTEM. IRRIGATION PLAN TO BE SUBMITTED TO LANDSCAPE ARCHITECT FOR REVIEW PRIOR TO INSTALLATION.

14. NO SUBSTITUTIONS OF PRODUCTS, PLANT TYPES OR SIZES SHALL BE MADE WITHOUT THE WRITTEN APPROVAL OF THE OWNER, LANDSCAPE ARCHITECT AND COUNTY REVIEW AGENCY. REQUESTS FOR SUBSTITUTION SHALL BE IN WRITING, AND SHALL STATE THE REASONS FOR THE SUBSTITUTION REQUEST, THE SUGGESTED ALTERNATIVE, AND THE CHANGES IN COST. REQUESTS FOR SUBSTITUTION IN PLANT MATERIALS SHALL STATE THE NAMES OF NURSERIES WHO HAVE BEEN UNABLE TO SUPPLY THE ORIGINALLY SPECIFIED MATERIAL.

15. FINISHED PLANTING BEDS SHALL BE GRADED SO AS NOT TO IMPEDE DRAINAGE AWAY FROM BUILDINGS.

16. ACCEPTABLE TOPSOIL SHALL BE A FERTILE, FRIABLE NATURAL LOAM, UNIFORM IN COMPOSITION, FREE OF STONES, LIMBS, PLANTS AND THEIR ROOTS, DEBRIS AND OTHER EXTRANEOUS MATTER OVER 1 INCH IN DIAMETER. THE SOIL SHALL BE CAPABLE OF SUSTAINED PLANT GROWTH AND HAVE A 5% MINIMUM ORGANIC CONTENT

17. NO TREES SHALL BE PLANTED WITHIN 10' OF A SEWER OR WATER LINE.

18. SURVEY AND UTILITY PLANS PROVIDED BY BARGE CAUTHAN AND ASSOCIATES

19. SEE CIVIL DRAWINGS FOR ALL UTILITY AND GRADING INFORMATION. ANY CONFLICTS BETWEEN THE DRAWINGS ARE THE RESPONSIBILITY OF THE CONTRACTOR TO

20. ALL HVAC CONDENSER UNITS WILL BE PLACED ON BUILDING ROOFS, NO GROUND MOUNTED UNITS TO BE PROVIDED.

SITE LANDSCAPING CALCULATIONS

Landscape Site Data Table

Site Area	19.22 Acres
Required Site ACI	1,345 Caliper Inches
Preserved Tree Area	4,596 Caliper Inches
Tree Removal 8" - 17"	11,870 Caliper Inches
Tree Removal 18" & Greater	824 Caliper Inches
Combined Required Tree Replacement	**6,759 Caliper Inches**
150% Max Replacement to Required Site ACI	2,016 Caliper Inches
Less Preserved Trees	2,298 Caliper Inches
Proposed Site Trees	786 Caliper Inches
Final Overall Tree Replacement Provided	**3,084 Caliper Inches**

EDGE PLANNING LANDSCAPE ARCHITECTURE URBAN DESIGN
210 12th AVENUE SOUTH, SUITE 202
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CONSULTANTS

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CIVIL ENGINEER
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615-356-9911

PROJECT NAME

South Bridge

Site Plan

619 North Main St
Goodlettsville, TN

CLIENT

Holladay Ventures

225 Gentry Avenue
Nashville, TN 37206

PROJECT NO. 21150
Date: 5/14/2021
Issued for: City Permit

REVISIONS

1	11/29/2021	CITY COMMENTS

Sheet Title

LANDSCAPE PLANS

SEAL

DAVID HAYES REGISTERED LANDSCAPE ARCHITECT TENNESSEE NO. 328 LANDSCAPE ARCHITECTURE 2021

Sheet Number

L 2.00

GENERAL NOTES - LANDSCAPE PLANTING

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SEE SHEET L 2.04 FOR PLANT SCHEDULE

0' 30' 60' 120' NORTH

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Nashville, TN 37206

PROJECT NO.	21150
Date:	5/14/2021
Issued for:	City Permit

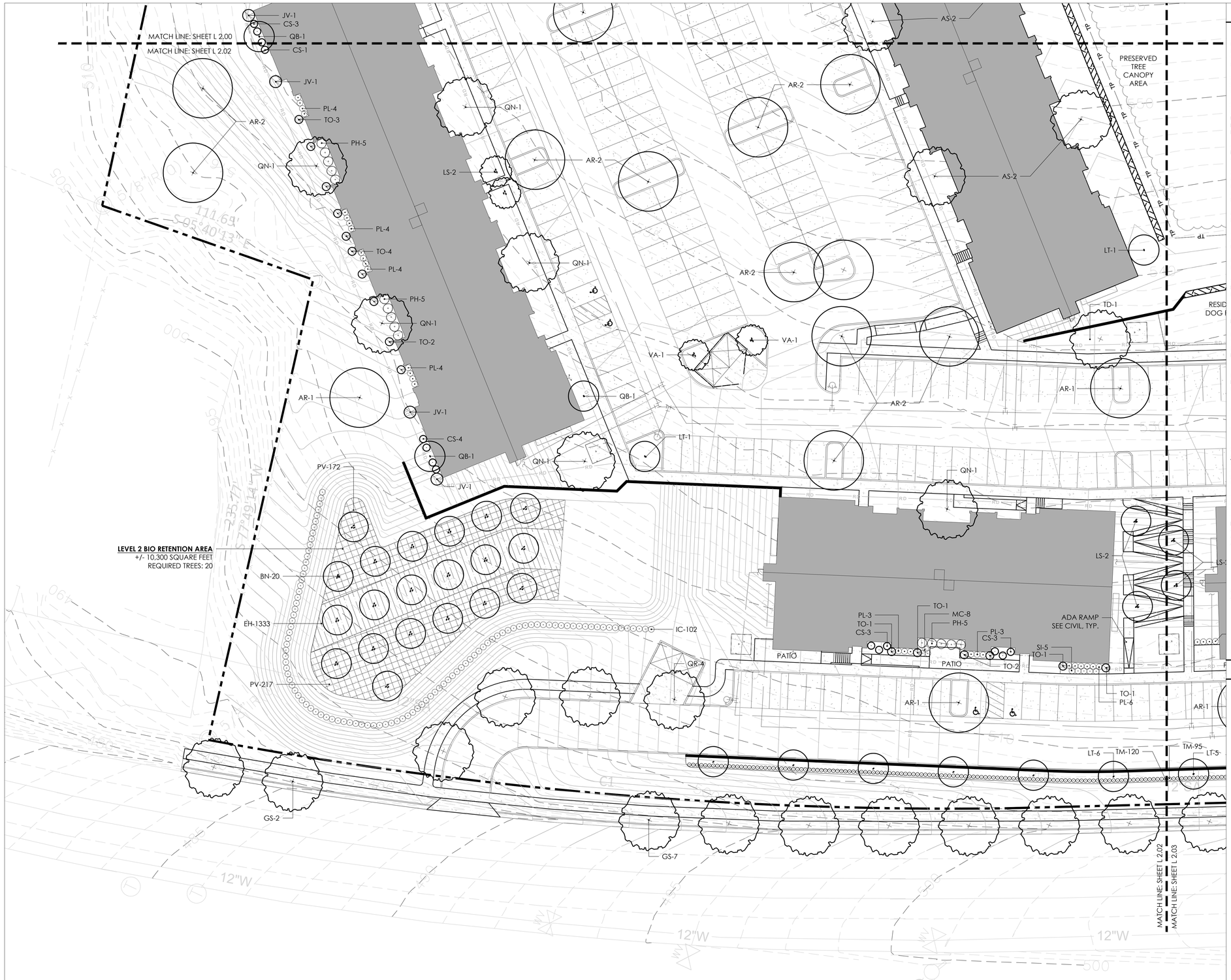
REVISIONS

1	11/29/2021	CITY COMMENTS

Sheet Title
LANDSCAPE PLANS

SEAL
REGISTERED LANDSCAPE ARCHITECT
TENNESSEE NO. 000000
DAVID HAYES
2021

Sheet Number
L 2.01



GENERAL NOTES - LANDSCAPE PLANTING

1. EACH CONTRACTOR IS TO VERIFY WITH OWNER AND UTILITY COMPANIES THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION, TO DETERMINE IN THE FIELD THE ACTUAL LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT. THE CONTRACTOR SHALL CALL UTILITY PROTECTION SERVICE 72 HOURS PRIOR TO CONSTRUCTION.

2. EXAMINE FINISH SURFACE, GRADES, TOPSOIL QUALITY AND DEPTH. DO NOT START ANY WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED. VERIFY LIMITS OF WORK BEFORE STARTING.

3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM ALL WORK IN A MANNER THAT PROTECTS COMPLETED WORK BY OTHERS, SUCH AS CURBS, UTILITIES, STORM DRAINAGE, FENCES, DRIVEWAY APRONS, DRIVES, VEGETATION, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF SATISFACTORY REPAIR OF ALL DAMAGE IN KIND RESULTING FROM HIS FAILURE TO COMPLY.

4. ALL PLANTING OPERATIONS SHALL ADHERE TO THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1) 2014. CONTRACTOR IS RESPONSIBLE FOR ALL PLANT QUANTITIES SHOWN ON THE PLANS

5. QUANTITIES OF PLANTS AS SHOWN BY PLANT SYMBOLS ON THE PLAN SHALL GOVERN OVER THE QUANTITIES SHOWN IN THE PLANT LIST. THE CONTRACTOR IS TO VERIFY PLANT LIST TOTALS WITH QUANTITIES SHOWN ON PLAN. THE LANDSCAPE ARCHITECT SHALL BE ALERTED BY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO FINAL BID NEGOTIATION.

6. ALL WORK SHALL MEET OR EXCEED THE REQUIREMENTS OF ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS, ORDINANCES AND REQUIREMENTS.

7. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE LANDSCAPE ARCHITECT. THE OWNER SHALL RECEIVE TAGS FROM EACH PLANT SPECIES AND A LIST OF PLANT SUPPLIERS.

8. PLANT SHALL BE PRUNED PRIOR TO DELIVERY ONLY UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT.

9. ARE TO BE REMOVED AND BURLAP IS TO BE ROLLED BACK ONE-THIRD ON ALL B&B PLANT MATERIAL, ANY SYNTHETIC BURLAP SHALL BE COMPLETELY REMOVED FROM ANY PLANT MATERIAL

10. SHADE TREE MEASUREMENT: CALIPER SHALL BE MEASURED AT SIX INCHES ABOVE THE ROOTBALL. HEIGHT SHALL BE MEASURED FROM THE CROWN OF THE ROOT BALL TO THE TOP OF MATURE GROWTH. SPREAD SHALL BE MEASURED TO THE END OF BRANCHING EQUALLY AROUND THE CROWN FROM THE CENTER OF THE TRUNK. MEASUREMENTS ARE NOT TO INCLUDE ANY TERMINAL GROWTH. SINGLE TRUNK TREES SHALL BE FREE OF "V" CROTCHES THAT COULD BE POINTS OF WEAK LIMB STRUCTURE OR DISEASE INFESTATION. WHERE TREES ARE PLANTED IN ROWS, THEY SHALL BE UNIFORM IN SIZE AND SHAPE

11. SHRUBS MEASUREMENT: HEIGHT SHALL BE MEASURED FROM THE GROUND TO THE TOP OF THE PLANT. SPREAD SHALL BE MEASURED TO THE END OF BRANCHING EQUALLY AROUND THE SHRUB MASS. MEASUREMENTS ARE NOT TO INCLUDE ANY TERMINAL GROWTH.

12. ALL SOIL IN PLANT BED AREAS IS TO BE A BLEND OF CLEAN SIFTED TOP SOIL AND ORGANIC CONTENT. SEE NOTE #16.

13. ALL LANDSCAPE BED AREAS TO BE IRRIGATED. IRRIGATION PLAN TO BE SUBMITTED TO LANDSCAPE ARCHITECT FOR REVIEW PRIOR TO INSTALLATION.

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17. NO TREES SHALL BE PLANTED WITHIN 10' OF A SEWER OR WATER LINE.

18. SURVEY AND UTILITY PLANS PROVIDED BY BARGE CAUTHAN AND ASSOCIATES

19. SEE CIVIL DRAWINGS FOR ALL UTILITY AND GRADING INFORMATION. ANY CONFLICTS BETWEEN THE DRAWINGS ARE THE RESPONSIBILITY OF THE CONTRACTOR TO

SITE LANDSCAPING CALCULATIONS

Landscape Site Data Table

Site Area	19.22 Acres
Required Site ACI	1,345 Caliper Inches
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SEE SHEET L 2.04 FOR PLANT SCHEDULE

0' 30' 60' 120' NORTH

EDGE PLANNING LANDSCAPE ARCHITECTURE URBAN DESIGN
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NASHVILLE, TN 37203
615.250.8154
www.edgela.com

CIVIL ENGINEER
BARGE CAUTHAN & ASSOCIATES
6606 CHARLOTTE PIKE, STE 210
NASHVILLE, TN 37209
615-356-9911

CONSULTANTS

PROJECT NAME
South Bridge

Site Plan

619 North Main St
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CLIENT
Holladay Ventures

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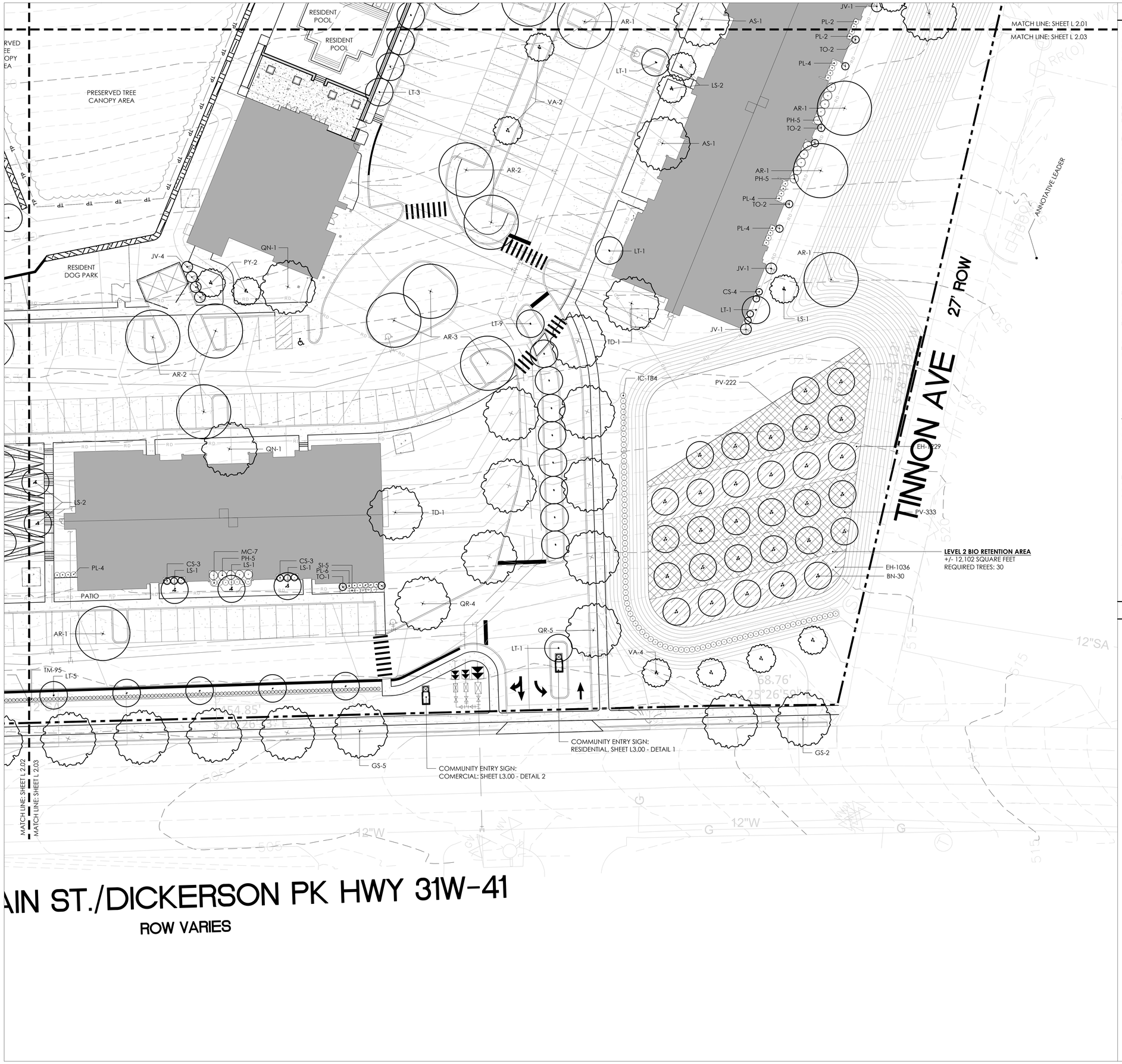
SEAL
TENNESSEE REGISTERED LANDSCAPE ARCHITECT
JAMES SEE NO. 328
2021

Sheet Number
L 2.02



AIN ST./DICKERSON PK HWY 31W-41

ROW VARIES

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Tennessee811 Know what's below. Call before you dig.

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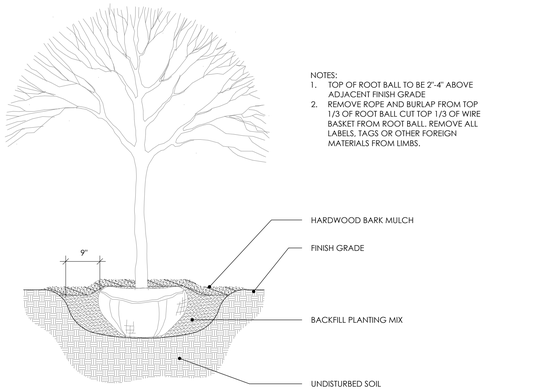
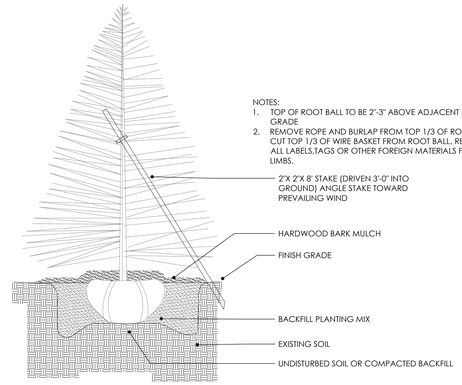
TENNESSEE REGISTERED LANDSCAPE ARCHITECT 2021

Sheet Number

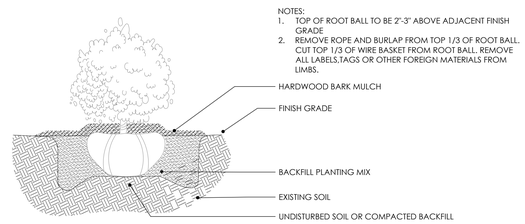
L 2.03



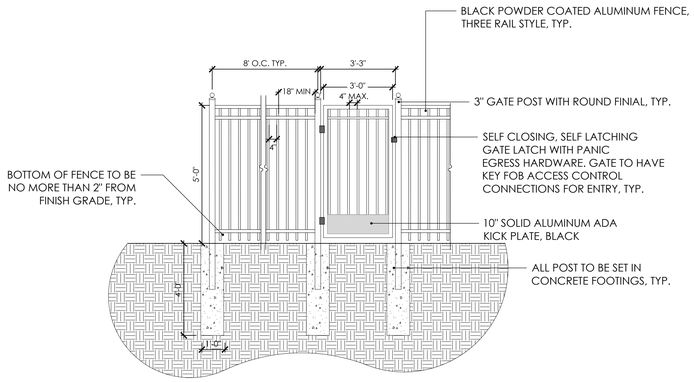
1 TREE PLANTING
SCALE 3/4" = 1'-0"



2 EVERGREEN TREE PLANTING
SCALE 3/4" = 1'-0"



3 SHRUB PLANTING
SCALE 3/4" = 1'-0"



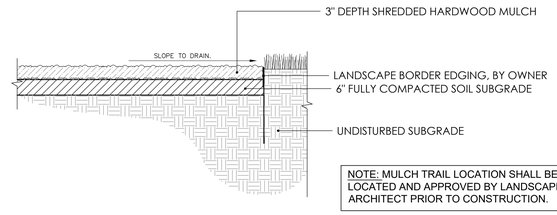
4 5' POOL GATE AND FENCE
3/8" = 1'-0"

GATE GENERAL NOTES:
1. GATE SHALL BE 5' IN HEIGHT
2. ALL FIELD WELDING SHALL BE GROUND SMOOTH AND CLEANED PRIOR TO PAINTING.
3. FINISH TO BE POWDER COATED- COLOR BLACK.
4. PICKET SPACING SHALL BE SET TO PROVIDE A MAX. OF 4" SPACE BETWEEN PICKETS.
5. INSTALL PER MANUFACTURER SPECIFICATIONS.
6. GATES TO BE ALUMINUM CUSTOM FABRICATED WITH POWDERCOAT FINISH. FINISH TO BE BLACK.
7. GATES TO MEET ALL POOL ENCLOSURE REQUIREMENTS PER STATE/ LOCAL POOL CODE.
8. GATE POST TO BE MOUNTED TO STRUCTURAL SLAB PER MANUFACTURER'S SPECS.
9. SUBMIT SHOP DRAWING FOR APPROVAL.

POOL FENCE BY:
AMERISTAR
MONTAGE SERIES
MAJESTIC STYLE
2 RAIL PANELS, ⅝" PICKETS
WWW.AMERISTARFENCE.COM
888.333.3422

OR APPROVED EQUAL

POOL GATE LOCK BY:
LOCINOX
ITEM NO: MAG-RAL 9005
www.locinoxusa.com
877.562.4663



5 PRIMATIVE TRAIL
NTS

STONE BRIDGE : PERMIT DRAWINGS: 11.29.2021								
	QTY	BOTANICAL NAME	COMMON NAME	SIZE / CAL	HEIGHT	SPREAD	SPACING	REMARKS
ADDITIONAL PLANT MATERIAL								
Deciduous Trees								
AR	42	Acer rubrum 'October Glory'	October Glory Red Maple	3" Cal. Min.	12' Ht. Min.		Per Plans	Limbed Up 6' Min.
AS	12	Acer saccharum 'Green Mountain'	Green Mountain Sugar Maple	3" Cal. Min.	12' Ht. Min.		Per Plans	Limbed Up 6' Min.
BN	64	Betula nigra 'BNMTF'	Dura Heat River Birch	3" Cal. Min.	12' Ht. Min.		Per Plans	3 trunk max - Matched Specimens .
LT	40	Liodendron tulipifera	Tulip Poplar	3" Cal. Min.	12' Ht. Min.		Per Plans	Limbed Up 6' Min.
QB	8	Quercus bicolor 'Bonnie & Mike'	Beacon Swamp White Oak	3" Cal. Min.	12' Ht. Min.		Per Plans	
QN	11	Quercus nutalli ' Ruby Springs'	Nuttall Oak ' Ruby Springs'	3" Cal. Min.	12' Ht. Min.		Per Plans	Limbed Up 6' Min.
QR	10	Quercus rubra	Northern Red Oak	3" Cal. Min.	12' Ht. Min.		Per Plans	
TD	7	Taxodium distichum	Bald Cypress	3" Cal. Min.	12' Ht. Min.		Per Plans	
Evergreen Trees								
GS	19	Magnolia Viginiana 'Green Shadow' Standard	Green Shadow Magnolia	3" Cal. Min.	12' Ht. Min.		Per Plans	Limb up 6' Min. -Street Tree - Standard Trunk
TO	23	Thuja occidentalis 'Smaragd'	Emerald Green Arborvitae	2" Cal Min.	8' Ht. Min.		Per Plans	Matched Specimen - Single Central Leader
JB	7	Juniperus virginiana 'Burkii'	Burkii Eastern Red Cedar	2" Cal Min.	8' Ht. Min.		Per Plans	
JV	12	Juniperus virginiana 'Brodie'	Brodie Eastern Red Cedar	2" Cal Min.	8' Ht. Min.		Per Plans	
UNDERSTORY TREES								
LS	17	Lagerstroemia 'Sarah's Favorite'	Sarah's Favorite Crape Myrtle	1.5" Cal Min.	-		Per Plans	Single Trunk - 4' Clear
PY	4	Prusnus x. yedoensis	Yoshino Cherry	1.5" Cal Min.	-		Per Plans	
VA	11	Vitex agnus-castus 'White'	White Chaste Tree	1.5" Cal Min.	-		Per Plans	
Shrubs								
PH	30	Phydrangea paniculata 'Limelight'	Lime Light Hydrangea	-	5 Gal.		4' O.C.	
CS	28	Cortaderia selloana 'Pumila'	Ivory Feathers Dwarf Pampass Grass	-	5 Gal.		4' O.C.	
IC	184	Ilex Cornuta 'Dwarf Burford'	Dwarf Burford Holly	-	36" Ht. Min.		3' O.C.	
PL	54	Prunus laurocerasus 'Skipkaensis'	Schip Laurel	-	24"-30" Ht.		3' O.C.	
MC	10	Muhlenbergia capillaris 'Lenca'	Regal Mist Pink Muhly Grass	-	18-24" Ht.		3' O.C.	
TM	215	Taxus x. media 'Meyeri'	Meyers Yew	-	24" Ht. Min		24" O.C.	
SI	10	Salix Integra 'Hakuro-nishiki'	Tri-color Dappled Willow	-	18-24" Ht.		24" O.C.	
Shrubs								
EH	4427	Equisetum hyemale	Horsetail	Plugs	-		18" O.C.	
PV	944	Panicum virgatum	Switchgrass	1 Gallon	-		48" O.C.	

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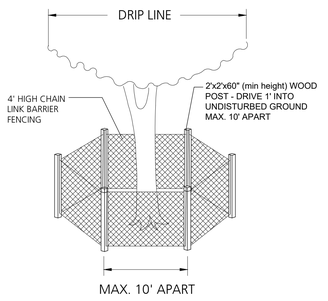

6 PROTECTIVE TREE BARRIER

NOTE:

1. ALL SPECIMEN TREES, TREES IN A TREE PROTECTION ZONE, AND TREES INTENDED FOR USE AS CREDIT TOWARDS THE LANDSCAPING STANDARDS SHALL BE FENCED BEFORE GRADING OR OTHER LAND-DISTRUBING ACTIVITY BEGINS.

2. FENCING SHALL EXTEND AT LEAST ONE FOOT IN DISTANCE FROM THE EDGE OF THE TREE FOR EACH INCH OF DBH, SO THAT EACH TREE'S DRIPLINE IS PROTECTED, BUT NO CASE LESS THAN TEN FEET FROM THE TRUNK.

3. ALL FENCING REQUIRED SHALL BE CHAIN LINK FENCING AT LEAST FOUR FEET IN HEIGHT AND SECURED USING APPROPRIATE POSTS SPACED NOT MORE THAN TEN FEET APART. SUCH CHAIN LINK FENCING IS NOT REQUIRED TO BE VINYL COATED.

4. SIGNS SHALL BE INSTALLED ON THE TREE PROTECTION FENCE VISIBLE ON ALL SIDES OF THE FENCED-IN AREA AT A RATE OF AT LEAST ONE SIGN FOR EVERY 150 LINEAR FEET. THE SIZE OF EACH SIGN MUST BE A MINIMUM OF TWO FEET BY TWO FEET AND SHALL CONTAIN THE FOLOWING LANGUAGE IN ENGLISH AND SPANISH: "TREE PROTECTION ZONE: KEEP OUT. ZONA DE LA PROTECC-RION DEL ARBOL. NO SE PERMITE ENTRAR".

5. THE REMOVAL OF TREES ADJACENT TO TREE SAVE AREAS CAN CAUSE INADVERTENT DAMAGE TO THE PROTECTED TREES. PRIOR TO CLEARING ACTIVITIES, TRENCHES WITH A MINIMUM WIDTH OF ONE-AND-ONE-HALF INCHES AND A MINIMUM DEPTH OF 30 INCHES SHALL BE CUT ALONG THE LIMITS OF LAND DISTURBANCE, SO AS TO CUT, RATHER THAN TEAR TREE ROOTS.

6. ALL TREE PROTECTION MEASURES SHALL BE INSPECTED AND APPROVED BY THE CODES DEPARTMENT PRIOR TO START OF ANY LAND DISTURBING ACTIVITIES.

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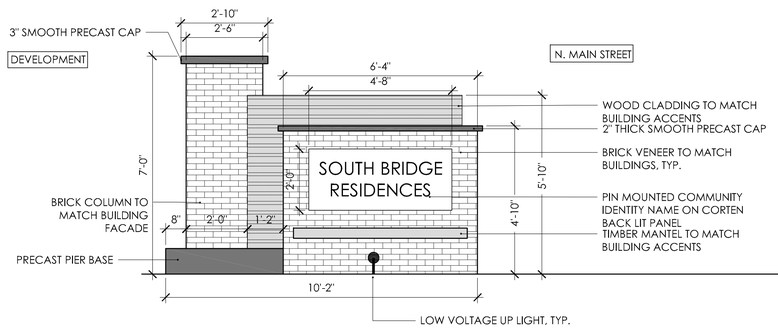

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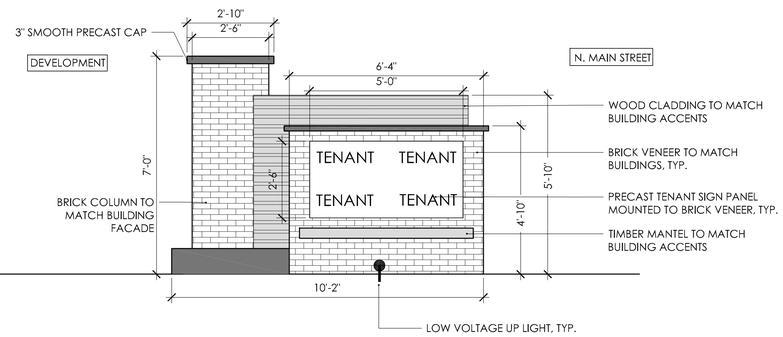

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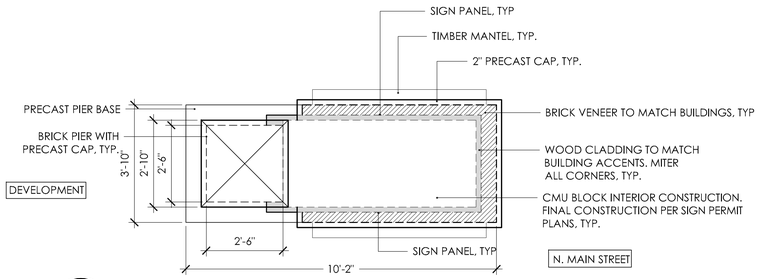
SCALE 1/2" = 1' -0"

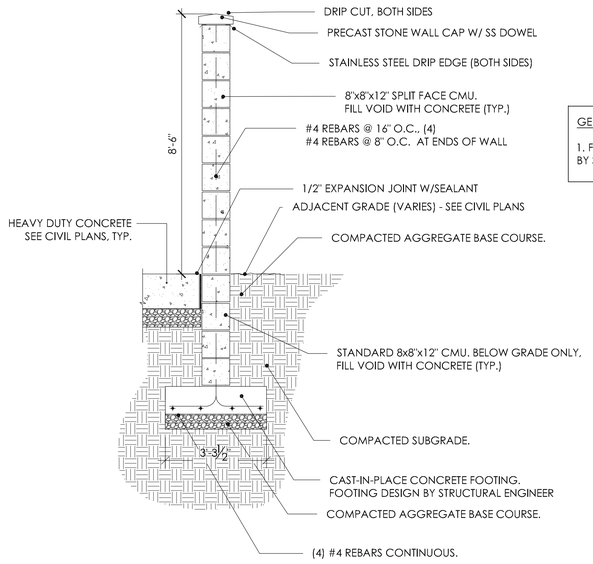


3 COMMUNITY ENTRY SIGNS - PLAN VIEW

SCALE 1/2" = 1' -0"

GENERAL NOTE: ENTRY SIGNS

1. SIGNS ARE TO DEPICT DESIGN AND MATERIAL INTENT. FINAL CONSTRUCTION DRAWINGS TO BE SUBMITTED FOR PERMITTING AND APPROVAL BY CITY OF GOODLETTSVILLE.
2. ENTRY SIGNS TO BE TWO SIDED AND LOCATED PER SITE PLANS.
3. SIGN PANELS TO HAVE LOW VOLTAGE FLOOD LIGHT ILLUMINATE SIGN PANELS

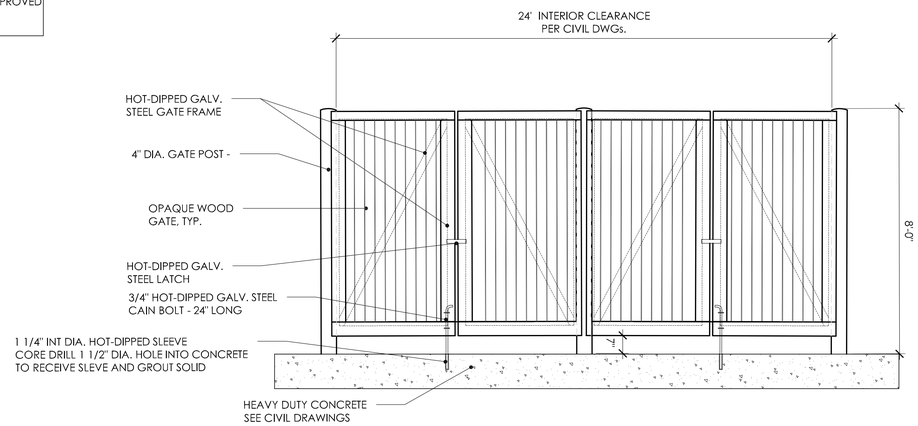


GENERAL NOTES:

1. FINAL WALL DESIGN TO BE APPROVED BY STRUCTURAL ENGINEER

4 DUMPSTER ENCLOSURE - CMU WALL

SCALE 1/2" = 1' -0"



5 DUMPSTER - GATE ENCLOSURE ELEVATION

SCALE 1/2" = 1' -0"

EDGE PLANNING LANDSCAPE ARCHITECTURE URBAN DESIGN
330 W. SPRING STREET, SUITE 350
COLUMBUS, OH 43215
614.486.3343
www.edgela.com

CONSULTANTS
Barge Cauthen & Associates
CIVIL ENGINEER
BARGE CAUTHEN & ASSOCIATES
6606 CHARLOTTE PIKE, STE 210
NASHVILLE, TN 37209
615-356-9911

PROJECT NAME
South Bridge

Site Plan

619 North Main St
Goodlettsville, TN

CLIENT
Holladay Ventures

225 Gentry Avenue
Nashville, TN 37206

PROJECT NO. 21150
Date: 5/14/2021
Issued for: City Permit

REVISIONS
1 11/29/2021 CITY COMMENTS

Sheet Title
SITE DETAILS

SEAL
DAVID HAAS REGISTERED LANDSCAPE ARCHITECT TENNESSEE NO. 329 5/14/2021

Sheet Number
L3.00

Rhonda Carson

GOODLETTSVILLE BOARD OF ZONING AND SIGN APPEALS
GOODLETTSVILLE CITY HALL – 105 SOUTH MAIN STREET
GOODLETTSVILLE, TENNESSEE 37072

APPLICATION FOR A ZONING ORDINANCE VARIANCE

Applicant Kim K Gregory Case No. _____

Owner Kim K Gregory Map No. _____

Address 2018 Crencor Dr Parcel No. _____

Based on the powers and jurisdiction of the Goodlettsville Board of Zoning Appeals as set forth in Title 14, Section 14-213(8) of the Municipal Code, a variance is hereby requested for an exception to the zoning regulations as follows:

The home to be zoned as a duplex. There are several duplexes on the road. The home was bought as a duplex. I had walls torn out + make stair rail to enter aptmt upstairs from the living space downstairs

at (physical address) 410 Moss Trail

The undersigned agrees to appear at the public hearing for the request and shall furnish all required plans and data.

_____
Owner Signature (if Different from Applicant)

_____
Print Name of Owner/Applicant

Kim K Gregory
Applicant (Signature)

2018 Crencor Dr
Address

Goodlettsville, TN 37072
City ST Zip

615-478-9768
Phone (Daytime)

KimKgregory1@gmail.com
E-Mail Address

1. REQUIRED APPLICATION FEE $200.00
2. ATTACH ALL REQUIRED PLANS AND SUPPORTING DOCUMENTS.
3. THE APPLICANT WILL BE NOTIFIED OF THE APPEALS BOARD MEETING DATE.

ACTION TAKEN: _____ DATE: _____

Form D

ACTION OF BOARD OF ZONING APPEALS
GOODLETTSVILLE, TENNESSEE

Appeals Case No. 85-136

Date: Sept. 19, 1985

Mr. Bill Carrigan
410 Moss Trail
Goodlettsville, TN. 37072

At the meeting of the Board of Zoning Appeals held on Sept. 9, 1985 your appeal was considered and the following resolution was adopted.

WHEREAS there was no one present to speak for the variance; and

WHEREAS there was many people present that were against the variance;

BE IT THEREFORE RESOLVED THAT the request of Bill Carrigan for a variance in Title 11, Chapter 5, Section 11-506 be denied.

Goodlettsville requies 1 space per 200 sf. He stated further that the proposed plan contains 62,686 sf. of that 5250 sf. is an atrium and would be used for aesthetic purposes only. Kimley-Horn proposes 234 parking spaces. Proposed parking ratio would be 1 space per 268 sf., well within the limits of surrounding areas named. A variance would also be required allowing 9 ft. X 18 ft. parking spaces, since 229 of the 234 spaces they proposed are only 9 ft. X 18 ft., in violation of the City's 10 ft. X 20 ft. requirement. David Wilson, City Manager stated that Goodlettsville's parking requirements are more restrictive than surrounding areas. He further stated that the entire zoning ordinance including parking requirements would be revised by the staff planner until then, however, he stated the the City Commission was considering asking the Planning Commission to recommend a temporary revision of the parking requirements. Niebruegge asked what parking requirements the Board had in mind to adopt. Wilson stated that they had none at this time but the matter was under study.

Tongate, asked how many of the cities named allowed 9 ft. X 18 ft. spaces. Spilka stated Brentwood, Metro, and Hendersonville allow 9 ft. X 18 ft. spaces he was unsure whether Gallatin did. Niebruegge stated that parking requirements according to the current ordinance were 314 spaces. Tongate stated that at a ratio of 1 space per 300 sf. requirement would be 210 spaces. Morton asked how many employees were expected to work at the facility ? Ray Evans stated there was no way of knowing at this time. Niebruegge asked where the nearest parking overflow area is ? Ray Evans stated that this facility is part of an office park. The concept of which was approved by the Planning Commission. Niebruegge asked if there was anyone who would like to speak against the variance. There was no opposition. Morton stated that if the artium was left out proposed parking ratio would be 1 space per 245 sf. Chilton asked if more parking were installed would it eliminate some of the landscaping. Evans agreed. On a motion by morton seconded by ajckson the board voted unanamously to adopt the following resoulution:

WHEREAS facts presented show that Goodlettsville Parking Ordinance is overly restrictive compared to surrounding areas and cities of similar size; and

WHEREAS the proposed plan presented by Kimley-Horn and Associates is well within reasonable limits as to ratio and size of spaces;

BE IT THEREFORE RESOLVED THAT a variance be granted Kimley-Horn and Assoc.to build a 62,686 sf. office bldg. with 229 9 ft. by 18 ft. parking spaces and 5 12.5 ft. by 18 ft. handicap parking spaces.

APPEALS CASE # 85-136 - To consider the request of Bill Carrigan for a variance in Title 11, Chapter 5, Section 11-506 (Lot area coverage), in order to use a house located at 410 Moss Trail as a duplex.

Spilka stated that he was contacted by Bill Carrigan representing the owner William Sanders. He requested a building permit in order to add a separate electrical meter to serve the upstairs apartment. In reviewing the application Spilka discovered that the house had never been offically converted to a duplex and further that it did not meet the lot area coverage requirement of 1500 sf. Niebruegge asked if there was anyone present to speak for the variance. There was no reply. On a motion made by Tongate and seconded by Jackson the Board voted unanimously to adop the following resoulution:

WHEREAS there was no one present to speak for the variance; and

WHEREAS there was many people present that were against the variance;

BE IT THEREFORE RESOLVED THAT the request of Bill Carrigan for a variance in Title 11, Chapter 5, Section 11-506 be denied.

Fee Cost $ 5.00

Sewer Tap $ ——

Date 11-4-85

Building Permit ● 003083

Map 26-J

Parcel No. 55

Floor Area 51 Sq. Ft.

APPLICATION TO CITY OF GOODLETTSVILLE, TENN. FOR BUILDING PERMIT AND CERTIFICATE OF OCCUPANCY.

Application is hereby made for a permit to erect/alter a structure as described herein and in accompanying plans, to be located as shown on the accompanying plot plan. The description given herein and in the accompanying plans and plot plan are made a part of this application, in reliance upon which the City of Goodlettsville is requested to issue a Building Permit.

It is hereby agreed that these premises will not be used as living or business quarters or put to uses accessory to housekeeping or living purposes, or business until a Certificate is hereby applied for. Such Certificate of Occupancy shall be issued within five days of receipt by the City Manager, City of Goodlettsville, of written notice from the owner or his agent, that these premises or this building is ready for occupancy, provided said Manager finds the conditions of the Building Permit have been complied with.

It is understood and agreed by this applicant that any error, misstatement or misrepresentation of material fact or expression of material fact, either with or without intention on the part of this applicant, such as might, or would operate to cause a refusal of this application, or any material alteration or change in the accompanying plans, specifications or structure made subsequent to the issuance of a certificate of compliance in accordance with this application, without the approval of the City Manager, shall constitute sufficient ground for the revocation of such certificate of compliance.

It is further understood and agreed that each day of violation of this permit shall constitute a separate offense.

Located on the N Side of MOSS TRAIL

House No. 410 Lot No. 26 Subdivision GOODLETTSVILLE HTS, SEC II

Located in a ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural District. Purpose ADD CLOSET AND CONVERT TO DUPLEX

Estimated Cost of Construction 1980 Families 2 Rooms 1 Baths ——

Height in feet 8 Floors 1 Chimneys —— Flues —— Heated with ☐ Elec. ☐ Gas ☐ Coal ☐ Oil ☐ Central Air Conditioning

Floor Area Sq. ft. 51 Sign Area Sq. ft. N/A

Type Construction	Foundation	Material in Construction	Roof	Garage	Required Driveway
☐ New	☐ Block	☐ Brick Veneer	☐ Metal	☐ Port	Culvert Size N/A
☒ Addition	☒ Concrete	☐ Stone Veneer	☒ Comp.	☐ Detached	Tank & O.F. N/A
☐ Alteration	☐ Post	☐ Block	☐ Built Up	☐ Attached	Sewer Av. N/A
☐ Repair	☐ Stone	☒ Frame		☐ Basement	Water Supply: N/A
		☐ Concrete			
		☐ Metal			
		☐ Asbestos Side			
		☐ Bd. & Batten			

Architect —— Address ——

Engineer —— Address ——

Contractor WILLIAM SANDERS License # SELF Address 401 ELLEN DR

Owner " " Address " " "

NOTICE: Separate permits are required for electrical, plumbing, heating, ventilating or air conditioning.

This permit becomes null and void if work or construction authorized is not commenced within 6 months, or if construction or work is suspended or abandoned for a period of 1 year at any time after work is commenced.

I hereby certify that I have read and examined this application and know the same to be true and correct. All provisions of laws and ordinances governing this type of work will be complied with whether specified herein or not. The granting of a permit does not presume to give authority to violate or cancel the provisions of any other state or local law regulating construction or the performance of construction.

X W. B. Sanders Date 11-4 19 85
Signature of Owner (If Builder)

—— Date —— 19 ——
Signature of Contractor

Building Permit ~~Approved~~ / ~~Denied~~ 11-4 19 85 For Reason ——

Codes Administrator, City of Goodlettsville

Re: Building Permit No. ——

CERTIFICATE OF OCCUPANCY CITY OF GOODLETTSVILLE

The completed building authorized by Building Permit No. —— Issued —— 19 ——

to —— has been inspected. The use of these premises complies with the provisions of the permit issued by the City of Goodlettsville, Tenn. Certificate of Occupancy of these premises is granted this —— day of —— 19 ——

City Manager, City of Goodlettsville

City of Goodlettsville Municipal Planning Commission
2022 Meeting and Plan Submittal/Review Schedule

Planning Commission Meeting at 5pm	Applicant Initital Submittal due by 4 PM	Staff Comments Due to Applicant	Applicant Revised Submittal due by 4 PM
1/3/2022	12/6/2021	12/14/2021	12/23/2021
2/7/2022	1/3/2022	1/13/2022	1/27/2022
3/7/2022	1/31/2022	2/10/2022	2/24/2022
4/4/2022	2/28/2022	3/10/2022	3/24/2022
5/2/2022	3/28/2022	4/7/2022	4/21/2022
6/6/2022	5/2/2022	5/12/2022	5/26/2022
7/11/2022*	6/6/2022	6/16/2022	6/30/2022
8/1/2022	6/27/2022	7/7/2022	7/21/2022
9/12/2022*	8/8/2022	8/18/2022	9/1/2022
10/3/2022	8/29/2022	9/8/2022	9/22/2022
11/7/2022	10/3/2022	10/13/2022	10/27/2022
12/5/2022	10/31/2022	11/10/2022	***11/28/2022****
1/9/2023*	11/28/2022	12/8/2022	***12/22/2022****

Dates altered due to Holidays and Special Events

Community Development Services Staff may alter dates for submittals which do not require plan review, previous deferred actions, or due to other special circumstances

Initial Plan Submittal: Application with one (1) full size plan copy and 1 digital (pdf) copy including any reports and calculations. ***Plan review fee to be paid with initial plan submittal- $ 1,600 including engineering consultant review and $ 600 not requiring engineering consultant review***

Revised Plan Submittal: One (1) full size plan copy and eight (8) half size or 11" x 17" sheets with digital (pdf) copy including response letter and any revised reports and support calculations with one (1) digital (pdf) copy. Additional items may be required and will be listed in staff review comments.