



Administrative Approval Action

S-41-18 / Stoneridge Estates
Transaction # 566586, AA # 3931

City of Raleigh
Development Services Department
One Exchange Plaza
Raleigh, NC 27602
(919) 996-2495
DS.help@raleighnc.gov
www.raleighnc.gov

LOCATION: This site is located on the west side of Ebenezer Church Road, and north side of Stoneridge Road. The site is addressed at 3901 Ebenezer Church Rd, which is outside the City corporate limits.

REQUEST: Subdivision of a 16.94-acre tract zoned R-2 with Metro Park Overlay District (MPOD) under the Conservation Development Option. Development plans propose 27 lots for detached homes and 2 common open lots.

DESIGN ADJUSTMENT(S)/ALTERNATES, ETC: A design adjustment for lots 1 through 19 has been submitted to the block perimeter requirements of Unified Development Ordinance Article 8.3.

FINDINGS: City Administration finds that this request, with the below conditions of approval being met, conforms to the Unified Development Ordinance. This approval is based on a preliminary plan dated 1/28/2019 by *Bohler Engineering NC PLLC*.

CONDITIONS OF APPROVAL and NEXT STEPS:

This document must be applied to the second sheet of all future submittals except for final plats. This is a preliminary plan and as such no permits have been issued with this approval. To obtain permits and/or completion of the project, the following steps are required:

CONCURRENT SITE REVIEW NOT REQUIRED AT THIS TIME – However, plan revisions or further development that includes land disturbance of 12,000 square feet or greater, public or private infrastructure, shared stormwater devices, etc. will require concurrent site review.

CONCURRENT SITE REVIEW - For land disturbance of 12,000 square feet or greater, public or private infrastructure, shared stormwater devices, etc. Concurrent Site Review may be submitted upon receipt of this signed approval document.

The following items are required prior to approval of Concurrent Site Review plans:

Engineering

1. Required NCDOT encroachment and/or driveway permits must be approved and copies provided to Development Services – Development Engineering prior to concurrent review approval.
2. A right-of-way obstruction permit must be obtained from Right-of-way Services prior to the commencement of any construction activities within the right-of-way.

Stormwater

3. A 100-year floodplain analysis shall be submitted and approved by the Engineering Services Department prior to the issuance of any grading or site permit (UDO 9.3).



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4. The State of North Carolina shall approve any proposed disturbance within the riparian buffer prior to the issuance of any grading or site permit. If applicable, State and ACOE approvals for impacts to wetlands and stream will also be required. (UDO 9.2.3.E).
5. A stormwater control plan with a stormwater operations and maintenance manual and budget shall be approved (UDO 9.2).
6. A surety equal to of the cost of clearing, grubbing and reseeding a site, shall be paid to the City (UDO 9.4.4).

Urban Forestry

7. Submit a final tree conservation plan that includes metes and bounds descriptions of all tree conservation areas and tree protection fencing as required (UDO 9.1.5).
8. Tree protection fence must be inspected by Urban Forestry staff prior to the issuance of a grading permit.

General

9. That access easement(s) from the proposed Stoneridge Forest Drive be provided to Open Space Lot 29 in accordance with UDO Sections 2.5.3.D and 2.5.3.F. The access easement shall be shown on all concurrent site review plans and plats for recordation.

LEGAL DOCUMENTS - Email to legaldocumentreview@raleighnc.gov. Legal documents must be approved, executed, and recorded prior to or in conjunction with the recorded plat on which the associated easements are shown. Copies of recorded documents must be returned to the City within one business day of recording to avoid withholding of further permit issuance.

<input checked="" type="checkbox"/>	City Code Covenant	<input checked="" type="checkbox"/>	Slope Easement
<input checked="" type="checkbox"/>	Stormwater Maintenance Covenant	<input type="checkbox"/>	Transit Easement
<input checked="" type="checkbox"/>	Utility Placement Easement	<input type="checkbox"/>	Cross Access Easement
<input type="checkbox"/>	Sidewalk Easement	<input type="checkbox"/>	Public Access Easement
		<input type="checkbox"/>	Other:

RECORDED MAP(S) - Submit plat to record new property lines, easements, tree conservation areas, etc.). Plats may be submitted for review when the Concurrent Site Review plans, if required, have been deemed ready for mylar signature.

The following items must be approved prior to recording the plat:

General

10. The City Code Covenant shall be approved by the City and recorded with the county register of deeds office where the property is located and a copy of the recorded document shall be provided to the City by the end of the next business day following the recordation of the final plat. Further



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recordings and building permits will be withheld if the recorded document is not provided to the City.

11. Street names for this development shall be approved by the Raleigh GIS Division and by Wake County.
12. A Type C2 Street Protective Yard is required for this project and a note shall be placed on the final plat stating this requirement.

Engineering

13. The required right of way for proposed and/or existing streets shall be dedicated to the City of Raleigh and shown on the map approved for recordation.
14. A 5' general utility easement and associated deed of easement shall be approved by the City and the location of the easement shall be shown on the map approved for recordation. The deed of easement shall be recorded at Wake County Register of Deeds within one day of recordation of the recorded plat. A recorded copy of these documents must be provided to the Development Services Department within one day from authorization of lot recordation. If recorded copies of the documents are not provided, further recordings and building permit issuance will be withheld.
15. Slope easements and associated deeds of easement shall be approved by the City and the location of the easement shall be shown on the map approved for recordation. The deed of easement shall be recorded at Wake County Register of Deeds within one day of recordation of the recorded plat. A recorded copy of these documents must be provided to the Development Services Department within one day from authorization of lot recordation. If recorded copies of the documents are not provided, further recordings and building permit issuance will be withheld.
16. A fee-in-lieu for 6' wide sidewalks along both the Stoneridge Drive and Ebenezer Church Road frontages and ½ of a 30' back to back street along Ebenezer Church Road frontage is paid to the City of Raleigh (UDO 8.1.10).
17. A public infrastructure surety is provided to the City of Raleigh Development Services – Development Engineering program (UDO 8.1.3).

Public Utilities

18. Infrastructure Construction Plans (concurrent submittal) must be approved by the City of Raleigh Public Utilities Department for all public water, public sewer and/or private sewer extensions.
19. A Petition for Annexation into the City limits shall be submitted in accordance with City Council policy for extension of utility service to properties currently outside of the City limits. This voluntary annexation in no way obligates the City to extend utility services to the property.

Stormwater

20. A payment equal to twenty-four percent (24%) of the estimated cost of constructing all stormwater control facilities shown on the development plans shall be paid by the developer to the City stormwater facility replacement fund (UDO 9.2.2.G.3).



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21. The flood prone areas, as approved by the City Stormwater Engineer and shown on the preliminary plan, shall be shown on the recorded map (UDO 9.3.3.G).
22. The City form document entitled Declaration of Maintenance Covenant and Grant of Protection Easement for Stormwater Control Facilities shall be approved by the City and recorded with the county register of deeds office (UDO 9.2.2.G).
23. All stormwater control measures and means of transporting stormwater runoff to and from any nitrogen and stormwater runoff control measures shall be shown on all plats for recording as private drainage easements (UDO 9.2).
24. The riparian buffers, in accordance with the preliminary plan and the State of North Carolina regulations, shall be shown on plats for recording along with required buffer statement (Recorded Map Checklist).
25. A surety equal to 125% of the cost of the construction of a stormwater device shall be paid to the Engineering Services Department (UDO 9.2.2.D.1.d).

Urban Forestry

26. A tree conservation plat shall be recorded with metes and bounds showing the designated tree conservation areas (UDO 9.1). This development proposes 2.838 acres of tree conservation area.

EXPIRATION DATES: If significant construction has not taken place on a project after preliminary subdivision approval, that approval may "sunset" and be declared void, requiring re-approval before permits may be issued. To avoid allowing this preliminary approval to "sunset", the following must take place by the following dates:

3-Year Sunset Date: 3/6/2022

Record at least ½ of the land area approved.

5-Year Sunset Date: 3/6/2024

Record entire subdivision.

I hereby certify this administrative decision.

Signed:(Development Services Dir./Designee)

Date: 3/6/19

Staff Coordinator: Ryan Boivin

Design Adjustment Staff Response



**DEVELOPMENT
SERVICES
DEPARTMENT**

Per Section 10.2.18.C of the Unified Development Ordinance, the Development Services Director, or designee, shall consult with the heads of other City Departments regarding the review of the request. The Development Services Director, or designee, shall approve, approve with conditions or deny the request, but must do so within 60 days of the receipt of a completed application. Additional time may be necessary if a municipal or state entity is incorporated in the review process or if a detailed engineering study is submitted in conjunction with the request.

PROJECT	Project Name	Stoneridge Estates		
	Development Case Number	S-41-2018		
	Transaction Number	566586		
	Design Adjustment Number	DA - 1 - 2019		
Staff recommendation based upon the findings in the applicable code(s):				
<input checked="" type="checkbox"/> <u>UDO Art. 8.3 Blocks, Lots, Access</u>		<input type="checkbox"/> <u>UDO Art. 8.5 Existing Streets</u>		
<input type="checkbox"/> <u>UDO Art. 8.4 New Streets</u>		<input type="checkbox"/> <u>Raleigh Street Design Manual</u>		
Staff <input checked="" type="checkbox"/> SUPPORTS <input checked="" type="checkbox"/> DOES NOT SUPPORT <input type="checkbox"/> the design adjustment request.				
DEPARTMENTS				
STAFF RESPONSE	<input type="checkbox"/> Dev. Services Planner		<input type="checkbox"/> City Planning	
	<input checked="" type="checkbox"/> Development Engineering <i>K. Kinko 2-15-19</i>		<input type="checkbox"/> Transportation	
	<input type="checkbox"/> Engineering Services		<input type="checkbox"/> Parks & Recreation and Cult. Res.	
	<input type="checkbox"/> Public Utilities			
	CONDITIONS:			
Development Services Director or Designee Action: <input checked="" type="checkbox"/> APPROVE <input type="checkbox"/> APPROVE WITH CONDITIONS <input type="checkbox"/> DENY				

D
DANIEL G. KINKO, PE
3/6/19
 Authorized Signature ENGINEERING REVIEW MANAGER Date

*The Development Services Director may authorize a designee to sign in his/her stead. Please print name and title next to signature. Appeal of the decision from the Development Services Director, or his or her designee, shall be made in writing within 30 days to the Board of Adjustment (see Section 10.2.18.C3b).

Staff Response

Article 8.3 Blocks Lots, Access



DEVELOPMENT
SERVICES
DEPARTMENT

The Development Services Director may in accordance with Sec. 10.2.18. approve a design adjustment, subject to all of the following findings.

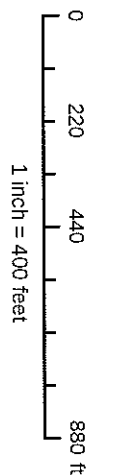
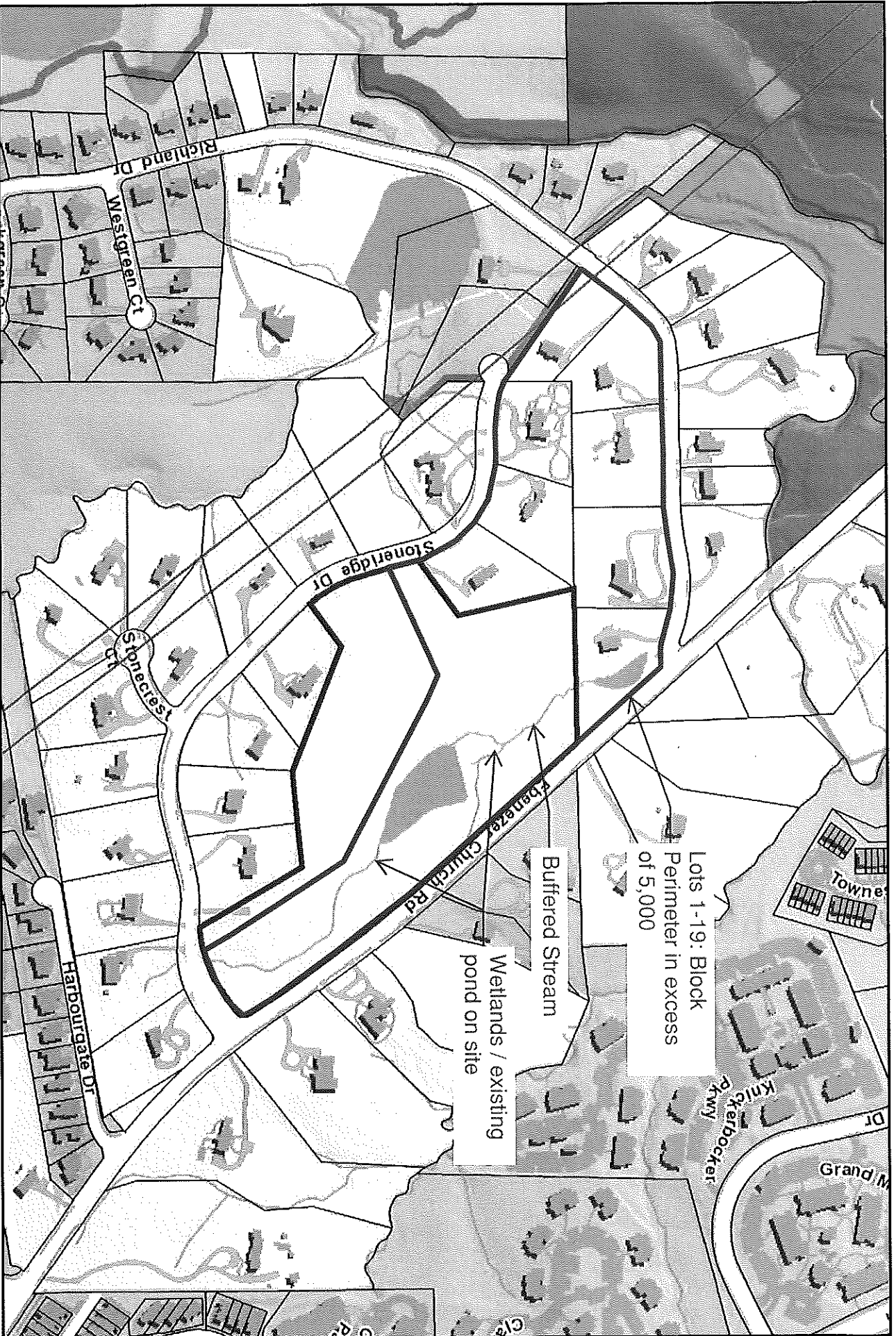
- A. The requested design adjustment meets the intent of this Article;
YES NO
- B. The requested design adjustment conforms with the Comprehensive Plan and adopted City plans;
YES NO
- C. The requested design adjustment does not increase congestion or compromise Safety;
YES NO
- D. The requested design adjustment does not create any lots without direct street Frontage;
YES NO
- E. The requested design adjustment is deemed reasonable due to one or more of the following:
1. Topographic changes are too steep;
 2. The presence of existing buildings, stream and other natural features;
 3. Site layout of developed properties;
 4. Adjoining uses or their vehicles are incompatible;
 5. Strict compliance would pose a safety hazard; or
 6. Does not conflict with an approved or built roadway construction project
 7. adjacent to or in the vicinity of the site.
- YES NO

STAFF FINDINGS

There is a portion of the subdivision that does not meet the block perimeter requirements of Unified Development Ordinance Article 8.3. Lots 1 through 19 do not meet block perimeter while lots 20 through 27 do. The design adjustment is supported by staff as the request meets the following allowances from Unified Development Ordinance Section 8.3.6 (E) (2) and (3).

There is a Neuse Riparian Buffer and jurisdictional wetland on the parcel that prohibits a road crossing. The US Army Corp of Engineers determination (action ID 2018-01267) of jurisdictional wetlands is included with the staff response.

Stoneridge Estates Block Exhibit



Disclaimer
 Maps make every effort to produce and publish the most current and accurate information possible. However, the maps are produced for information purposes, and are NOT surveys. No warranties, expressed or implied, are provided for the data therein, its use, or its interpretation.

Design Adjustment Application



DEVELOPMENT SERVICES DEPARTMENT

The purpose of this request is to seek a Design Adjustment from the Development Services Director, or designee, for a specific project only and, if granted, may be approved with special conditions and provisions. This application and all further action shall be consistent with Section 10.2.18 in the Unified Development Ordinance (UDO). The consideration and decision of this request shall be based solely on the conformance of the findings, as outlined in Sec. 8.3.6, Sec. 8.4.1.E and Sec. 8.5.1.G of the UDO or the Raleigh Street Design Manual.

PROJECT	Project Name Stoneridge Estates		
	Case Number S-41-18		
	Transaction Number 566586		
OWNER	Name Stephen and Kathleen Malik		
	Address 1020 Dickinson Cir		City Raleigh
	State North Carolina	Zip Code 27614	Phone
CONTACT	Name Mike Roselli, P.E.		Firm Bohler Engineering NC, PLLC
	Address 4130 Parklake Ave., Suite 130		City Raleigh
	State North Carolina	Zip Code 27612	Phone (919) 578-9000
REQUEST	I am seeking a Design Adjustment from the requirements set forth in the following:		
	<input checked="" type="checkbox"/> UDO Art. 8.3 Blocks, Lots, Access	- See page 2 for findings	
	<input type="checkbox"/> UDO Art. 8.4 New Streets	- See page 3 for findings	
	<input type="checkbox"/> UDO Art. 8.5 Existing Streets	- See page 4 for findings	
	<input type="checkbox"/> Raleigh Street Design Manual	- See page 5 for findings	
	Provide details about the request; (please attach a memorandum if additional space is needed):		
<p>A design adjustment is requested for lots 1-19 that do not conform to block perimeter requirements due to the following hardships in accordance with COR UDO section 8.3.6 and as shown on attached block perimeter exhibit.</p> <ul style="list-style-type: none"> -Presence of buffered stream/wetlands and other natural features -Site layout of developed properties along Stoneridge Drive do not form a closed block <p>See next sheet for full justification.</p>			

It is the responsibility of the applicant to provide all pertinent information needed for the consideration of this request. Applicant must be the Property Owner.

By signing this document, I hereby acknowledge the information on this application is, to my knowledge, accurate.

Owner/Owner's Representative Signature

Date

CHECKLIST

Signed Design Adjustment Application	<input type="checkbox"/> Included
Page(s) addressing required findings	<input type="checkbox"/> Included
Plan(s) and support documentation	<input type="checkbox"/> Included
Notary page (page 6) filled out; Must be signed by property owner	<input type="checkbox"/> Included
First Class stamped and addressed envelopes with completed notification letter	<input type="checkbox"/> Included

Submit all documentation, with the exception of the required addressed envelopes and letters to designadjustments@raleighnc.gov.

Deliver the addressed envelopes and letters to:
 Development Services, Development Engineering
 One Exchange Plaza, Suite 500
 Raleigh NC, 27601

For Office Use Only	RECEIVED DATE:	DA -
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Individual Acknowledgement



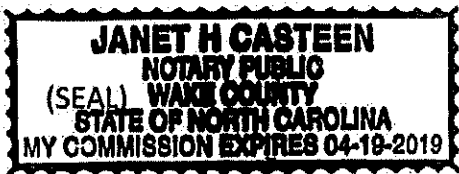
DEVELOPMENT
SERVICES
DEPARTMENT

STATE OF NORTH CAROLINA
COUNTY OF Wake

INDIVIDUAL

I, Janet H. Casteen, a Notary Public do hereby certify that
Michael Roselli personally appeared before me this day and
acknowledged the due execution of the forgoing instrument.

This the 8th day of January, 2019.



Notary Public *Janet H. Casteen*

My Commission Expires: April 19, 2019

**U.S. ARMY CORPS OF ENGINEERS
WILMINGTON DISTRICT**

Action Id. 2018-01267 County: Wake U.S.G.S. Quad: NC- Raleigh West

NOTIFICATION OF JURISDICTIONAL DETERMINATION

Property Owner: Stephen & Kathleen Malik
Address: 1020 Dickson Circle
Raleigh, NC 27614
Telephone Number: 919-882-2880
E-mail: malik@northcarolinafc.com

Size (acres)	<u>16.98</u>	Nearest Town	<u>Raleigh</u>
Nearest Waterway	<u>Richland Creek</u>	River Basin	<u>Neuse</u>
USGS HUC	<u>03020201</u>	Coordinates	Latitude: <u>35.831152</u> Longitude: <u>-78.718785</u>

Location description: The property is located immediately northwest of the intersection of Ebenezer Church Road and Stoneridge Drive, Raleigh, Wake County, North Carolina.

Indicate Which of the Following Apply:

A. Preliminary Determination

- There appear to be waters including wetlands, on the above described project area/property, that may be subject to Section 404 of the Clean Water Act (CWA)(33 USC § 1344) and/or Section 10 of the Rivers and Harbors Act (RHA) (33 USC § 403). The waters including wetlands, have been delineated, and the delineation has been verified by the Corps to be sufficiently accurate and reliable. The approximate boundaries of these waters are shown on the enclosed delineation map, Figure 3, dated 6/6/2018. Therefore this preliminary jurisdiction determination may be used in the permit evaluation process, including determining compensatory mitigation. For purposes of computation of impacts, compensatory mitigation requirements, and other resource protection measures, a permit decision made on the basis of a preliminary JD will treat all waters and wetlands that would be affected in any way by the permitted activity on the site as if they are jurisdictional waters of the U.S. This preliminary determination is not an appealable action under the Regulatory Program Administrative Appeal Process (Reference 33 CFR Part 331). However, you may request an approved JD, which is an appealable action, by contacting the Corps district for further instruction.
- There appear to be waters including wetlands, on the above described project area/property, that may be subject to Section 404 of the Clean Water Act (CWA)(33 USC § 1344) and/or Section 10 of the Rivers and Harbors Act (RHA) (33 USC § 403). However, since the waters including wetlands, have not been properly delineated, this preliminary jurisdiction determination may not be used in the permit evaluation process. Without a verified wetland delineation, this preliminary determination is merely an effective presumption of CWA/RHA jurisdiction over all of the waters including wetlands, at the project area, which is not sufficiently accurate and reliable to support an enforceable permit decision. We recommend that you have the waters including wetlands, on your project area/property delineated. As the Corps may not be able to accomplish this wetland delineation in a timely manner, you may wish to obtain a consultant to conduct a delineation that can be verified by the Corps.

B. Approved Determination

- There are Navigable Waters of the United States within the above described project area/property subject to the permit requirements of Section 10 of the Rivers and Harbors Act (RHA) (33 USC § 403) and Section 404 of the Clean Water Act (CWA)(33 USC § 1344). Unless there is a change in law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
- There are waters including wetlands, on the above described project area/property subject to the permit requirements of Section 404 of the Clean Water Act (CWA) (33 USC § 1344). Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
- We recommend you have the waters including wetlands, on your project area/property delineated. As the Corps may not be able to accomplish this wetland delineation in a timely manner, you may wish to obtain a consultant to conduct a delineation that can be verified by the Corps.

2018-01267

- The waters including wetlands, on your project area/property have been delineated and the delineation has been verified by the Corps. The approximate boundaries of these waters are shown on the enclosed delineation map dated DATE. We strongly suggest you have this delineation surveyed. Upon completion, this survey should be reviewed and verified by the Corps. Once verified, this survey will provide an accurate depiction of all areas subject to CWA jurisdiction on your property which, provided there is no change in the law or our published regulations, may be relied upon for a period not to exceed five years.
- The waters including wetlands, have been delineated and surveyed and are accurately depicted on the plat signed by the Corps Regulatory Official identified below on DATE. Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
- There are no waters of the U.S., to include wetlands, present on the above described project area/property which are subject to the permit requirements of Section 404 of the Clean Water Act (33 USC 1344). Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
- The property is located in one of the 20 Coastal Counties subject to regulation under the Coastal Area Management Act (CAMA). You should contact the Division of Coastal Management in Morehead City, NC, at (252) 808-2808 to determine their requirements.

Placement of dredged or fill material within waters of the US, including wetlands, without a Department of the Army permit may constitute a violation of Section 301 of the Clean Water Act (33 USC § 1311). Placement of dredged or fill material, construction or placement of structures, or work within navigable waters of the United States without a Department of the Army permit may constitute a violation of Sections 9 and/or 10 of the Rivers and Harbors Act (33 USC § 401 and/or 403). If you have any questions regarding this determination and/or the Corps regulatory program, please contact Tasha Alexander at 919-554-4884 ext. 35 or Tasha.L.Alexander@usace.army.mil.

C. Basis For Determination: See the preliminary jurisdictional determination form dated 12/10/2018.

D. Remarks: Site visit was conducted on June 26, 2018. Potential waters are depicted on Figure 3, Wetland Sketch Map, Malik Property, dated June 6, 2018.

E. Attention USDA Program Participants

This delineation/determination has been conducted to identify the limits of Corps' Clean Water Act jurisdiction for the particular site identified in this request. The delineation/determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are USDA Program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service, prior to starting work.

F. Appeals Information (This information applies only to approved jurisdictional determinations as indicated in B. above)

This correspondence constitutes an approved jurisdictional determination for the above described site. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and request for appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA form to the following address:

US Army Corps of Engineers
South Atlantic Division
Attn: Jason Steele, Review Officer
60 Forsyth Street SW, Room 10M15
Atlanta, Georgia 30303-8801

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by Not applicable.

It is not necessary to submit an RFA form to the Division Office if you do not object to the determination in this correspondence.

Corps Regulatory Official: Tasha Alexander

Date of JD: 12/10/2018 Expiration Date of JD: Not applicable

2018-01267

The Wilmington District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete the Customer Satisfaction Survey located at http://corpsmapu.usace.army.mil/cm_apex/f?p=136:4:0

Copy furnished:

Agent: **Sage Ecological Services, Inc.**
Sean Clark
Telephone Number: **919-335-6757**
E-mail: **SClark@sageecological.com**

- 1) The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.
- 2) In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre- construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an AJD for the activity, the permit applicant is hereby made aware that: (1) the permit applicant has elected to seek a permit authorization based on a PJD, which does not make an official determination of jurisdictional aquatic resources; (2) the applicant has the option to request an AJD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an AJD could possibly result in less compensatory mitigation being required or different special conditions; (3) the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) undertaking any activity in reliance upon the subject permit authorization without requesting an AJD constitutes the applicant's acceptance of the use of the PJD; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a PJD constitutes agreement that all aquatic resources in the review area affected in any way by that activity will be treated as jurisdictional, and waives any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an AJD or a PJD, the JD will be processed as soon as practicable. Further, an AJD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331. If, during an administrative appeal, it becomes appropriate to make an official determination whether geographic jurisdiction exists over aquatic resources in the review area, or to provide an official delineation of jurisdictional aquatic resources in the review area, the Corps will provide an AJD to accomplish that result, as soon as is practicable. This PJD finds that there "may be" waters of the U.S. and/or that there "may be" navigable waters of the U.S. on the subject review area, and identifies all aquatic features in the review area that could be affected by the proposed activity, based on the following information:

PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PJD: 12/10/2018

B. NAME AND ADDRESS OF PERSON REQUESTING PJD: Stephen & Kathleen, Stephen & Kathleen Malik, 1020 Dickson Circle, Raleigh, NC 27614

C. DISTRICT OFFICE, FILE NAME, AND NUMBER: Wilmington District, Malik Property, 2018-01267

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION: The property is located immediately northwest of the intersection of Ebenezer Church Road and Stoneridge Drive, Raleigh, Wake County, North Carolina.

(USE THE TABLE BELOW TO DOCUMENT MULTIPLE AQUATIC RESOURCES AND/OR AQUATIC RESOURCES AT DIFFERENT SITES)

State: NC

County: Wake

City: Raleigh

Center coordinates of site (lat/long in degree decimal format): Latitude: 35.831152 Longitude: -78.718785

Universal Transverse Mercator:

Name of nearest waterbody: Richland Creek

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date:

Field Determination. Date(s): June 26, 2018

TABLE OF AQUATIC RESOURCES IN REVIEW AREA WHICH "MAY BE" SUBJECT TO REGULATORY JURISDICTION IS ATTACHED, SAW-2018-01267

SAW 2018-0267

TABLE OF AQUATIC RESOURCES IN REVIEW AREA WHICH "MAY BE" SUBJECT TO REGULATORY JURISDICTION.

Site Number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resources in review area (acreage and linear feet, if applicable)	Type of aquatic resources (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404)
Wetland WA	35.830881°N	78.717482°W	+/- 0.011 acre	Wetland	Section 404
Wetland WB	35.831715°N	78.807954° W	+/- 0.114 acre	Wetland	Section 404
Wetland WC	35.832139°N	78.718501°W	+/- 0.004 acre	Wetland	Section 404
Pond I	35.831277°N	78.718120°W	+/- 0.953 Acre	Non-Wetland	Section 404
Tributary A	35.831838°N	78.718581°W	+/- 315 LF	Non-Wetland	Section 404

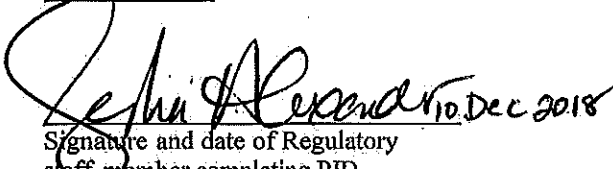
to Richland Creek


SUPPORTING DATA. Data reviewed for PJD (check all that apply)

Checked items should be included in subject file. Appropriately reference sources below where indicated for all checked items:

- Maps, plans, plots or plat submitted by or on behalf of the PJD requestor:
Map: _____
- Data sheets prepared/submitted by or on behalf of the PJD requestor.
- Office concurs with data sheets/delineation report.
- Office does not concur with data sheets/delineation report. Rationale: _____
- Data sheets prepared by the Corps: _____
- Corps navigable waters' study: _____
- U.S. Geological Survey Hydrologic Atlas: _____
- USGS NHD data.
- USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: 1:24,000 Raleigh West, NC Quadrangle
- Natural Resources Conservation Service Soil Survey. Citation: Wake County Soil Survey (Sheet 38)
- National wetlands inventory map(s). Cite name: _____
- State/local wetland inventory map(s): _____
- FEMA/FIRM maps: _____
- 100-year Floodplain Elevation is: _____ (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): _____
or Other (Name & Date): Site Photos
- Previous determination(s). File no. and date of response letter: _____
- Other information (please specify): _____

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.


Signature and date of Regulatory
staff member completing PJD

 June 12, 2018
Signature and date of person
requesting PJD (REQUIRED,
unless obtaining the signature
is impracticable)¹

¹ Districts may establish timeframes for requester to return signed PJD forms. If the requester does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.

PRELIMINARY SUBDIVISION SUBMITTAL

FOR STONERIDGE ESTATES

LOCATION OF SITE

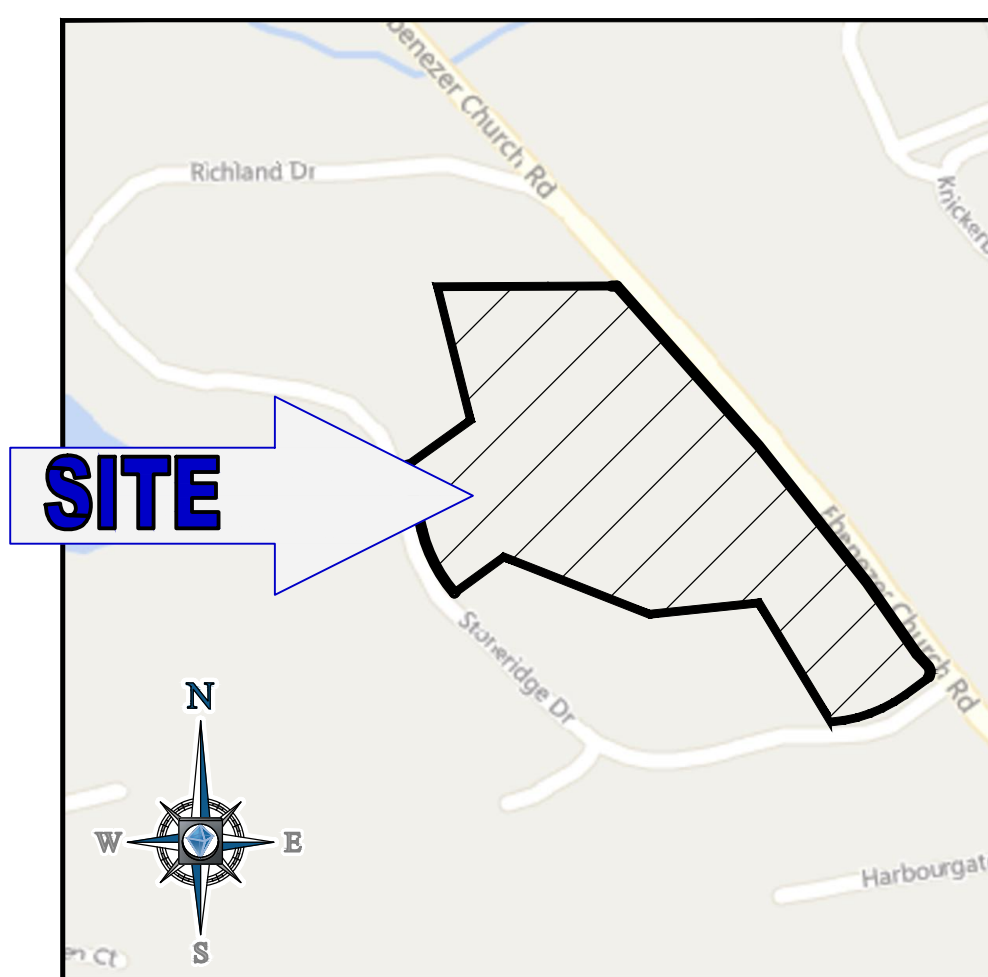
3901 EBENEZER CHURCH ROAD
RALEIGH, NC 27612, WAKE COUNTY

PIN #: 0785-37-3709

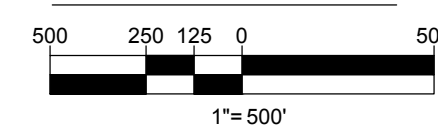
SKETCH REVIEW TRANSACTION #554402

TRANSACTION #566586

CASE NUMBER S-41-18



LOCATION MAP



SITE DATA

ADDRESS:	3901 EBENEZER CHURCH ROAD RALEIGH, NC 27612	REQUIRED OPEN SPACE:	40%
PIN #:	0785-37-3709	CONTIGUOUS	(60%)
SITE AREA (PRE ROW DEDICATION)	16.94 AC.	MINIMUM LOTS ABUTTING OPEN SPACE (%)	50
PROJECT AREA (POST ROW DEDICATION)	16.65 AC.	MINIMUM WIDTH OF OPEN SPACE (FT)	50
EXISTING ZONING:	R-2	TREE CONSERVATION AREA (AC.)	±3.428
OVERLAY ZONING:	METRO PARK OVERLAY DISTRICT	PROPOSED OPEN SPACE (AC.)	16.89
WATERSHED:	CRABTREE CREEK	INFRASTRUCTURE QUANTITIES	
PROPOSED STANDARDS:	R2 CONSERVATION	STREETS (LF)	1,504
PROPOSED # OF UNITS:	27	DOMESTIC WATERLINE (LF)	2,192
ALLOWABLE DENSITY (DU/AC)	4	SANITARY SEWER (LF)	2,307
PROPOSED DENSITY (DU/AC)	1.6	PROPOSED # OF DOMESTIC WATER TAPS:	27
MINIMUM LOT SIZE (SF)	10,000	PROPOSED # OF SEWER TAPS:	27
MINIMUM LOT WIDTH (FT)	65 (80 CORNER LOT)	IMPERVIOUS SURFACES	
MINIMUM LOT DEPTH (FT)	100	STREETS (SF)	42,392
MAX BUILDING HEIGHT (FT)	40	DRIVEWAYS/SIDEWALKS (SF)	35,797
		ROOFS (SF)	96,525
		ADDITIONAL IMPERVIOUS (SF)	4,000
		TOTAL (SF)	178,714
		PERCENT IMPERVIOUS (%)	4.10 AC / 116.94 AC 24.2%
		SUBDIVISION DISTURBED AREA (AC.)	11.6 AC

CONTACT INFORMATION

REFERENCES	
SURVEY "PRELIMINARY SURVEY FOR EBENEZER CHURCH ROAD" PREPARED BY BOHLER ENGINEERING NC, PLLC BOHLER JOB NO. NSR182054 DATED: AUGUST 8, 2018	
ENVIRONMENTAL AND CULTURAL RESOURCES REPORT "ENVIRONMENTAL AND CULTURAL RESOURCES DUE DILIGENCE REPORT" PREPARED BY SAGE ECOLOGICAL SERVICES, INC 3707 SWIFT DRIVE RALEIGH, NC 27606 (919) 559-1537 SAGE PROJECT # 2018.37 DATE: JUNE 11, 2018	
GOVERNING AGENCIES	
CITY OF RALEIGH PLANNING DIVISION ONE EXCHANGE PLAZA, SUITE 400 RALEIGH, NC 27601 CONTACT: KEN BOWERS PHONE: (919) 996-2633	CITY OF RALEIGH TRANSPORTATION TRANSPORTATION DEPARTMENT 222 W HARGETT STREET, SUITE 400, RALEIGH, NC 27601 CONTACT: MICHAEL MOORE, DIRECTOR OF TRANSPORTATION PHONE: (919) 996-3030
CITY OF RALEIGH PUBLIC UTILITIES 222 FAYETTEVILLE STREET RALEIGH, NC 27601 PHONE: (919) 996-4540	CITY OF RALEIGH STORMWATER MANAGEMENT ONE EXCHANGE PLAZA RALEIGH, NC 27601 CONTACT: BEN BROWN, PE EMAIL: BEN.BROWN@RALEIGHNC.GOV PHONE: (919) 996-3515
CITY OF RALEIGH FIRE DEPARTMENT FIRE DEPARTMENT SERVICES DIVISION 4120 NEW BERN AVENUE, RALEIGH NC 27610 CONTACT: JOHN MCGRATH, FIRE CHIEF PHONE: (919) 996-6115	
UTILITY CONTACTS	
CITY OF RALEIGH PUBLIC UTILITIES 222 FAYETTEVILLE STREET RALEIGH, NC 27601 PHONE: (919) 996-4540	ELECTRIC DUKE ENERGY 411 FAYETTEVILLE STREET, RALEIGH, NC 27601 PHONE: 1-(800) 419-6356
GAS PSNC 901 E. CHATHAM STREET, RALEIGH, NC 27511 PHONE: 1-(877) 776-2427	PHONE/INTERNET AT&T PHONE: 1-(888) 757-6500

GENERAL NOTES:

- FLOOD NOTE: THIS PROPERTY IS NOT LOCATED IN A SPECIAL FLOOD HAZARD ZONE, BASED ON FEMA FIRM MAP #3720078500J DATED 5/2/2006.
- THERE ARE TWO WETLANDS ONSITE AND ONE BUFFERED STREAM ON THE NORTHERN PART OF THE SITE PER ENVIRONMENTAL AND CULTURAL DUE DILIGENCE REPORT BY SAGE ECOLOGICAL SERVICES PERFORMED ON 8/11/2018.
- THIS SITE IS LOCATED WITHIN THE CITY OF RALEIGH ETJ. ANNEXATION FOR PETITION WILL BE MADE PRIOR TO ISSUANCE OF BUILDING PERMITS.
- ALL CONSTRUCTION SHOULD BE DONE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND NCDOT STANDARDS AND SPECIFICATIONS.
- SOLID WASTE PICK UP WILL BE HANDLED BY CITY OF RALEIGH SOLID WASTE SERVICES AND SHALL BE IN COMPLIANCE WITH THE REQUIREMENTS SET FORTH IN THE CITY OF RALEIGH SOLID WASTE DESIGN MANUAL. STANDARD 96 GALLON RESIDENTIAL ROLL OUT CARTS SHALL SERVE THE 27 LOTS ON SITE.

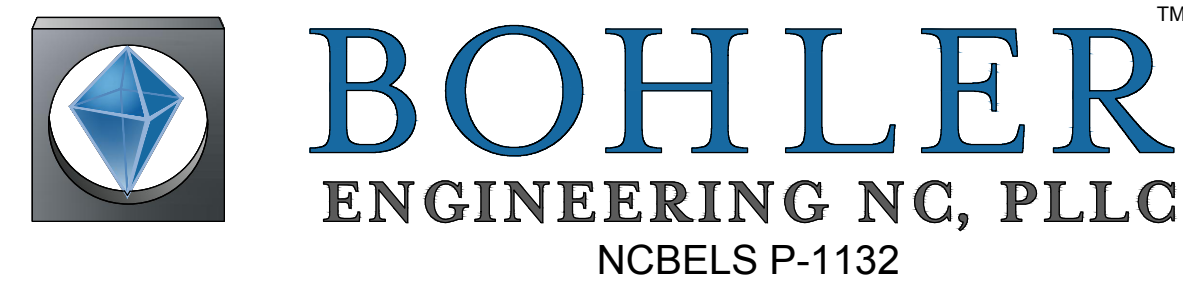
SHEET INDEX

Sheet Number	Sheet Title
C-101	COVER SHEET
C-102	GENERAL NOTES
C-201	EXISTING CONDITIONS & DEMOLITION PLAN
C-301	SITE PLAN
C-302	OPEN SPACE PLAN
C-401	GRADING PLAN
C-402	POND PLAN
C-501	UTILITY PLAN
C-502	UTILITY PLAN
C-701	OVERALL LANDSCAPE PLAN
C-702	LANDSCAPE PLAN
C-703	LANDSCAPE PLAN
C-704	LANDSCAPE PLAN
C-705	LANDSCAPE NOTES & DETAILS
C-706	TREE CONSERVATION PLAN

OWNER

STEPHEN AND KATHLEEN MALIK
1020 DICKINSON CIR
RALEIGH, NC 27614

PREPARED BY



4130 PARKLAKE AVE., SUITE 130

RALEIGH, NC 27612

Phone: (919) 578-9000

Fax: (919) 703-2665

NC@BohlerEng.com

CONTACT: MIKE ROSELLI - MROSELLI@BOHLERENG.COM

DEVELOPER

A2 GROUP, LLC.
610 PRESIDENTS WALK LANE
CARY, NC 27519
CONTACT: TOM ANHUT
(919) 291 3023

DocuSign Envelope ID: 14EAFAB-8605-4E8A-B8BD-E967A8C482A

Preliminary Subdivision Plan Application

Development Services Customer Service Center | 1 Exchange Plaza, Suite 400 | Raleigh, NC 27601 | 919-996-2405 | ext 919-996-1831
Litchford Satellite Office | 8320 - 130 Litchford Road | Raleigh, NC 27601 | 919-996-4300

When submitting plans, please check the appropriate review type and include the Plan Checklist document.

Office Use Only:	Transaction #	Project Coordinator	Team Leader
PRELIMINARY APPROVALS			
<input checked="" type="checkbox"/> Subdivision * <input type="checkbox"/> Conventional Subdivision <input type="checkbox"/> Compact Development <input checked="" type="checkbox"/> Conservative Subdivision			
*May require City Council approval if in a Metro Park Overlay or Historic Overlay District			
If your project has been through the Due Diligence process, provide the transaction #: 554402			
GENERAL INFORMATION			
Development Name			
Proposed Use: Single-Family Subdivision			
Property Address(es): 3901 Ebenezer Church Road, Raleigh, NC			
Wake County Property Identification Number(s) for each parcel to which these guidelines will apply:			
PIN Recorded Deed	PIN Recorded Deed	PIN Recorded Deed	PIN Recorded Deed
0785373709			
What is your project type?			
<input checked="" type="checkbox"/> Single family <input type="checkbox"/> Townhouse <input type="checkbox"/> Subdivision in a non-residential zoning district			
<input type="checkbox"/> Other (describe):			
OWNER/DEVELOPER INFORMATION			
Company Name		Owner/Developer Name Stephen, Kathleen Malik	
Address 1020 Dickinson Cir Raleigh, NC 27614-9803			
Phone (919) 882-2893	Email NChometown@gmail.com	Fax	
CONSULTANT/CONTACT PERSON FOR PLANS			
Company Name Bohler Engineering NC PLLC		Contact Name Mike Roselli, PE	
Address 4130 Parklake Ave Suite 130, Raleigh, NC 27612			
Phone (919) 578-9000	Email mroselli@bohlereng.com	Fax	

PAGE 1 OF 3 WWW.RALEIGHNC.GOV REVISION 03.11.16

DocuSign Envelope ID: 14EAFAB-8605-4E8A-B8BD-E967A8C482A

DEVELOPMENT TYPE AND SITE DATA TABLE (Applicable to all developments)

ZONING INFORMATION			
Zoning District(s) R-2			
If more than one district, provide the acreage of each:			
Overlay District?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Inside City Limits?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
CUD (Conditional Use District) Case # 2-			
CDA (Certificate of Appropriateness) Case #			
BOA (Board of Adjustment) Case # A-			
STORMWATER INFORMATION			
Existing Impervious Surface	0.8C acres/sf	Flood Hazard Area	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Proposed Impervious Surface	4.10 BC acres/sf	Neuse River Buffer	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
		Wetlands	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If in a Flood Hazard Area, provide the following:			
Alluvial Soils	Flood Study	FEMA Map Panel # 3720078500J	
NUMBER OF LOTS AND DENSITY			
Total # of Townhouse Lots:	Detached	Attached	
Total # of Single Family Lots:	27	Total # of All Lots: 27	
Overall Unit(s)/Acre Densities Per Zoning District: Max= 4 units /AC Proposed = 1.6 units/AC			
Total # of Open Space and/or Common Area Lots 2			
SIGNATURE BLOCK (Applicable to all developments)			
In filing this plan as the property owner(s), I/we do hereby agree and firmly bind ourselves, my/our heirs, executors, administrators, successors and assigns jointly and severally to construct all improvements and make all dedications as shown on this proposed subdivision plan as approved by the City.			
I hereby designate Mike Roselli to serve as my agent regarding this application, to receive and respond to administrative comments, to resubmit plans on my behalf, and to represent me in any public meeting regarding this application.			
I/we have read, acknowledge, and affirm that this project is conforming to all application requirements applicable with the proposed development use.			
Signature	Date	8 / 15 / 2018	
Signature	Date	8 / 15 / 2018	

PAGE 2 OF 3 WWW.RALEIGHNC.GOV REVISION 03.11.16



REVISIONS

REV	DATE	COMMENT	BY
1	11/2/18	REVISIONS PER CITY COMMENTS	PMA
2	12/27/18	REVISIONS PER CITY COMMENTS	PMA
3	1/28/19	REVISIONS PER CITY COMMENTS	PMA



NOT APPROVED FOR CONSTRUCTION

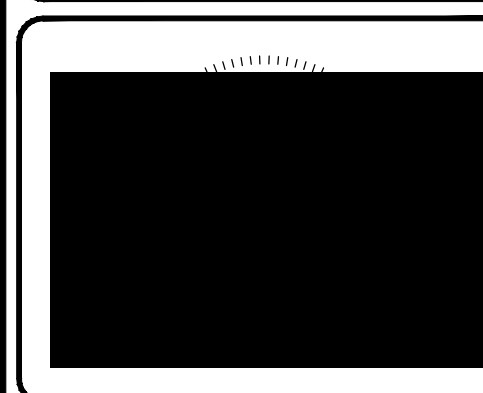
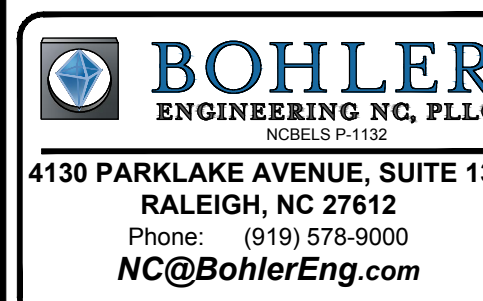
PROJECT No.:	NCR182054
DRAWN BY:	CEM
CHECKED BY:	PMA
DATE:	08/17/18
SCALE:	N/A
CAD I.D.:	SD0

PROJECT:
**PRELIMINARY
SUBDIVISION PLAN**

FOR
**STONERIDGE
ESTATES**

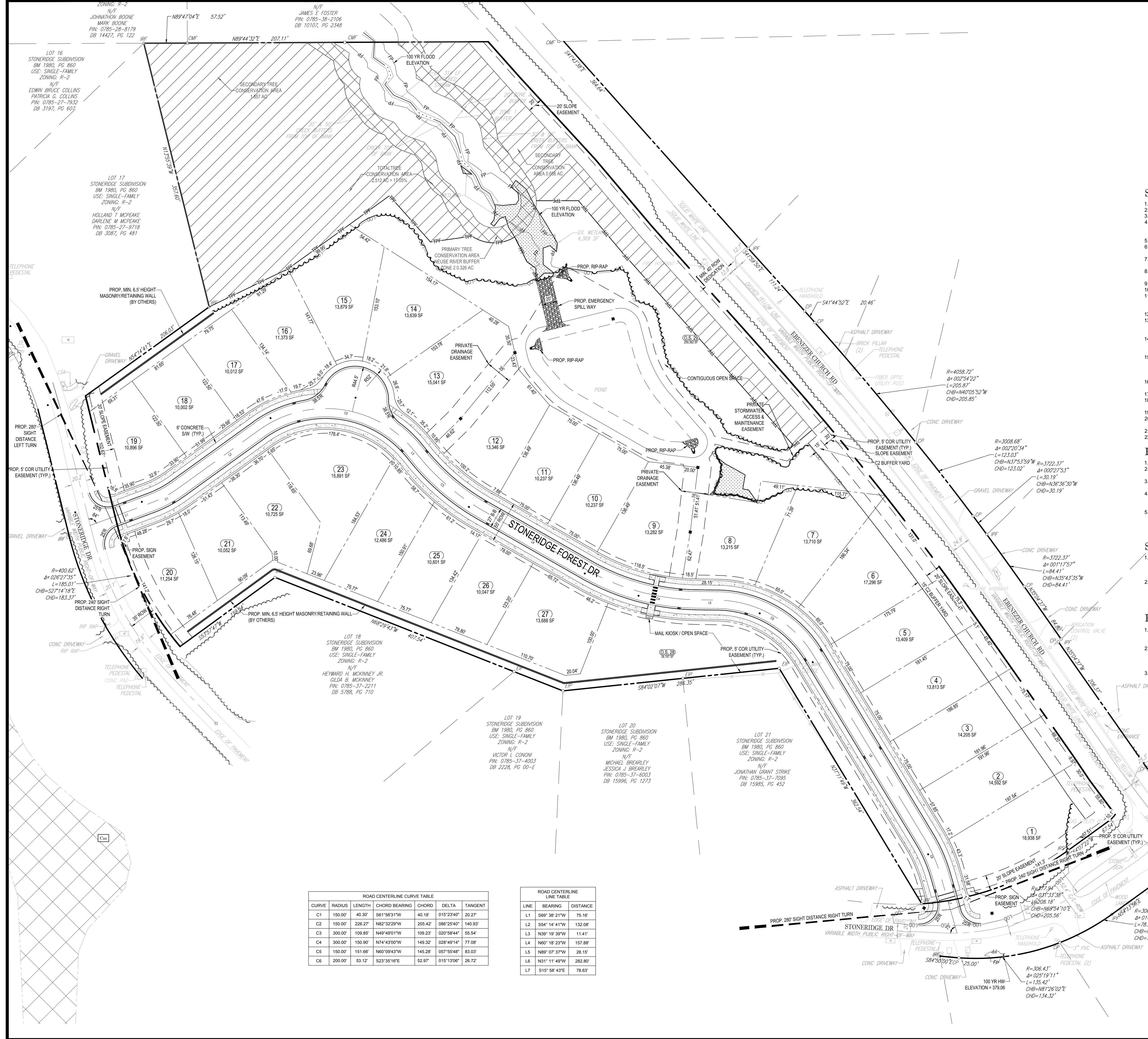
LOCATION OF SITE
3901 EBENEZER CHURCH RD.
RALEIGH, NC 27612
WAKE COUNTY

TRANSACTION #: 566586



SHEET TITLE:
COVER SHEET

SHEET NUMBER:
C-101



GRAPHIC LEGEND		
EXISTING NOTE	TYPICAL NOTE TEXT	PROPOSED NOTE
---	PROPERTY/EASEMENT LINE	---
---	ADJACENT LOT LINE	---
---	CURB & GUTTER	---
---	FLUSH CURB	---
---	PAVEMENT STRIPING - 4" SSYL	---
---	STOP SIGN	---
---	ADA ACCESSIBLE PARKING SIGN	---
---	PAINTED STOP BAR	---
---	STORM INLET	---

- ### SUBDIVISION NOTES
- REFER TO GENERAL NOTES ON SHEET C-102.
 - THE SITE DOES NOT CONTAIN ANY FLOODPLAINS PER FEMA FLOOD MAP #3720078500J DATED: 5/2/06.
 - ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH STANDARDS AND SPECIFICATIONS.
 - ALL CONSTRUCTION SHALL CONFORM TO ALL STATE AND LOCAL STANDARDS AND SPECIFICATIONS AND CODE REQUIREMENTS. NOTIFY DESIGNER OF ANY DISCREPANCIES. IF DISCREPANCIES ARE FOUND THE MORE STRINGENT REQUIREMENTS WILL PREVAIL.
 - ALL UTILITIES SHALL BE LOCATED UNDERGROUND.
 - SETBACKS ARE SHOWN IN ACCORDANCE WITH THE APPROVED CITY OF RALEIGH STANDARDS. REFER TO CITY OF RALEIGH LAND DEVELOPMENT ORDINANCE FOR PORCHES, DECKS, GARAGES, ETC.
 - UTILITY AND PIPELINE EASEMENTS SHALL BE RECORDED AS PART OF THE SUBDIVISION PLAT AFTER CONSTRUCTION IS COMPLETED.
 - ALL HANDICAP RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT CITY OF RALEIGH STANDARD DETAILS.
 - COMMON OPEN SPACE SHALL BE MAINTAINED BY THE NEIGHBORHOOD HOMEOWNERS ASSOCIATION.
 - ADJACENT OPEN SPACE WILL BE RECORDED AS LOTS ARE RECORDED.
 - STORMWATER DETENTION DEVICES VISIBLE FROM THE REAR YARD OF ANY ADJOINING DWELLING SHALL BE SCREENED FROM OFF-SITE VIEWS, EXCEPT WHERE DEVICE PLANTINGS ALSO SERVE AS BUFFER PLANTING MATERIALS.
 - TREES SHALL NOT BE PLANTED IN ANY CITY OF RALEIGH SANITARY SEWER EASEMENTS.
 - ALL PROPOSED PAVEMENT SECTIONS ARE MINIMUM STANDARDS. FINAL PROPOSED PAVEMENT SECTION DESIGNS WILL NEED TO BE PROVIDED TO THE CITY FOR REVIEW AND APPROVAL PRIOR TO PLACEMENT OF ANY BASE MATERIAL.
 - A SIGHT DISTANCE TRIANGLE SHALL BE RECORDED ON ANY LOT WHERE THE SIGHT DISTANCE TRIANGLE EXTENDS OUTSIDE OF THE RIGHT OF WAY AS DEPICTED ON THESE PLANS. A MINIMUM OF 18' OF DRIVEWAY SHALL BE PROVIDED OUTSIDE OF THE EASEMENT ON THESE LOTS.
 - THE DEVELOPER WILL BE RESPONSIBLE FOR ALL INSTALLATION COSTS ASSOCIATED WITH STREET LIGHTING ALONG PROPOSED STREETS, ADJACENT STREETS AND THOROUGHFARES AS REQUIRED PER CITY OF RALEIGH POLICY STATEMENT. THE DEVELOPER SHALL CONTACT DUKE ENERGY AFTER PLAN APPROVAL AND PRIOR TO CONSTRUCTION IN ORDER TO DEVELOP A STREET LIGHTING PLAN FOR THE SITE/SUBDIVISION PLAN.
 - ALL INTERSECTION RADI ARE 20 FOOT RADIUS, MEETING CITY STANDARDS (MIN. 20'), UNLESS OTHERWISE NOTED.
 - EROSION CONTROL PLANS SHALL BE APPROVED PRIOR TO ANY GRADING OF THIS SITE.
 - BOUNDARY INFORMATION SHALL BE FIELD VERIFIED BY PROFESSIONAL SURVEYOR BEFORE CONSTRUCTION STAKING BEGINS.
 - SOLID WASTE: STANDARD 96 GALLON RESIDENTIAL ROLL OFF CARTS SHALL SERVE THE 27 LOTS ON SITE.
 - FINAL LOCATION OF CUBS, HANDICAP RAMPS, AND 15 MINUTE PARKING SIGNS MAY BE FIELD ADJUSTED AS ALLOWABLE BY THE SITE ZONING INSPECTOR.
 - REFER TO DETAIL #10.10 ON THIS SHEET FOR PAVEMENT DESIGN.
 - PROPOSED STREETS WILL HAVE A 25 MPH SPEED LIMIT POSTED.

- ### PAVEMENT MARKING & SIGNAGE NOTES
- ALL PAVEMENT MARKINGS AND STREET SIGNAGE SHALL BE IN ACCORDANCE WITH THE MUTCD.
 - PAVEMENT MARKINGS SHALL BE THERMOPLASTIC AND SHALL COMPLY WITH NCDOT STANDARDS AND SPECIFICATIONS.
 - SIGNS MUST USE PRISMATIC SHEETING AND MEET THE MINIMUM RETROREFLECTIVITY LEVELS SHOWN IN THE LATEST EDITION OF THE MUTCD.
 - ALL SPECIALTY TRAFFIC CONTROL AND STREET NAME SIGNS AND POSTS MUST COMPLY WITH CITY OF RALEIGH POLICY STATEMENT NUMBER 85 INCLUDING ALL AMENDMENTS AS APPROVED BY THE CITY COUNCIL. REQUESTS FOR SPECIALTY SIGNS SHALL BE SUBMITTED TO AND APPROVED BY THE ENGINEERING DEPARTMENT.
 - ALL STREET NAME SIGNS SHALL ADHERE TO THE 2008 MUTCD REQUIREMENTS RELATED TO COLOR, LETTER CASE AND LETTER HEIGHTS. SIGN DESIGNS SHALL BE SUBMITTED TO CITY STAFF APPROVAL PRIOR TO ACCEPTANCE OF STREETS FOR MAINTENANCE.

- ### STREET LIGHTING NOTES
- IN ACCORDANCE WITH THE CITY OF RALEIGH'S STREET LIGHT POLICY, THE OWNER, DEVELOPER OR SUBDIVIDER OF A SITE PLAN OR SUBDIVISION IS REQUIRED TO INSTALL STREET LIGHTING VIA UNDERGROUND CONTRIBUTION ALONG ALL PROPOSED STREETS AND ALONG ALL EXISTING STREETS WHICH ADJOIN THE PROPERTY.
 - THE DEVELOPER WILL BE RESPONSIBLE FOR ALL INSTALLATION COSTS ASSOCIATED WITH STREET LIGHTING ALONG PROPOSED STREETS, ADJACENT STREETS, AND THOROUGHFARES AS REQUIRED PER CITY OF RALEIGH POLICY STATEMENT NO. 13. THE DEVELOPER SHALL CONTACT DUKE PROGRESS OF CAROLINAS AFTER PLAN APPROVAL AND PRIOR TO CONSTRUCTION IN ORDER TO DEVELOP A STREET LIGHTING PLAN FOR THE SITE/SUBDIVISION PLANS.

- ### REQUIRED GENERAL NOTES
- SIGN PERMITTING IS A SEPARATE APPROVAL PROCESS AND HAS NOT BEEN REVIEWED OR APPROVED WITH THIS SITE PLAN. AS MASTER SIGN PLAN SHALL BE APPROVED BY THE PLANNING DEPARTMENT PRIOR TO RECORDATION OF LOTS WITHIN THE SUBDIVISION.
 - NO FENCING SHALL BE PLACED WITHIN A BUFFER UNLESS INSTALLED AT ONE TIME FOR THE ENTIRE LENGTH OF BUFFER OR STREETScape. NEITHER INDIVIDUAL LOT OWNERS NOR THE HOME OWNER'S ASSOCIATION SHALL INSTALL FENCES IN A PIECEMEAL FASHION. PRIOR TO PLACING A FENCE IN A BUFFER OR STREETScape, THE FENCE SHALL BE SUBMITTED TO AND APPROVED BY THE CITY OF RALEIGH.
 - DECORATIVE FENCING, PRIVACY FENCING, AND ENTRANCE WALLS PROPOSED TO BE LOCATED WITHIN BUFFERS AND ALONG STREET RIGHTS OF WAY MUST BE APPROVED. PROPOSED LANDSCAPING ASSOCIATED WITH THE FENCE INSTALLATION, AS REQUIRED BY THE ZONING ORDINANCE, MUST ALSO BE SHOWN ON THE ENTRANCE FEATURE PLAN.

BOHLER ENGINEERING NC, PLLC
 SITE CIVIL AND CONSULTING ENGINEERING
 LAND SURVEYING
 PROGRAM MANAGEMENT
 LANDSCAPE ARCHITECTURE
 SUSTAINABLE DESIGN
 PERMITTING SERVICES
 TRAFFIC ENGINEERING
 FROM MAJOR HIGHWAYS TO LOCAL STREETS AND RURAL ROADS. WE'VE GOT YOU COVERED.

REVISIONS			
REV	DATE	COMMENT	BY
1	11/21/18	REVISIONS PER CITY COMMENTS	PMA
2	12/27/18	REVISIONS PER CITY COMMENTS	PMA
3	1/28/19	REVISIONS PER CITY COMMENTS	PMA

811
 KNOW WHAT'S BELOW
 ALWAYS CALL 811
 BEFORE YOU DIG
 It's fast. It's free. It's the law.

NOT APPROVED FOR CONSTRUCTION

PROJECT No.: NCR182054
 DRAWN BY: CEM
 CHECKED BY: PMA
 DATE: 08/17/18
 SCALE: 1" = 50'
 CAD I.D.: BPO

PRELIMINARY SUBDIVISION PLAN

FOR
STONERIDGE ESTATES

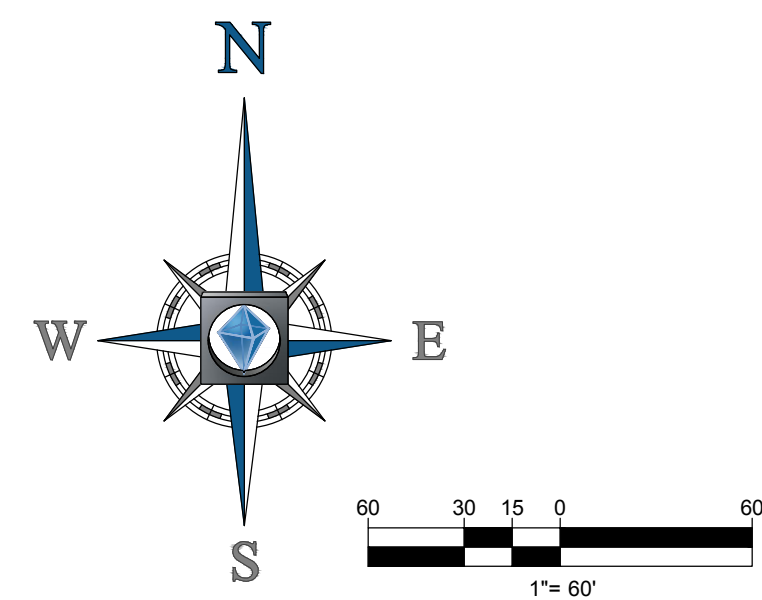
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 WAKE COUNTY

TRANSACTION #: 566586

BOHLER ENGINEERING NC, PLLC
 NCEBS P-1122
 4130 PARKLAKE AVENUE, SUITE 1130
 RALEIGH, NC 27612
 Phone: (919) 578-9000
 NC@BohlerEng.com

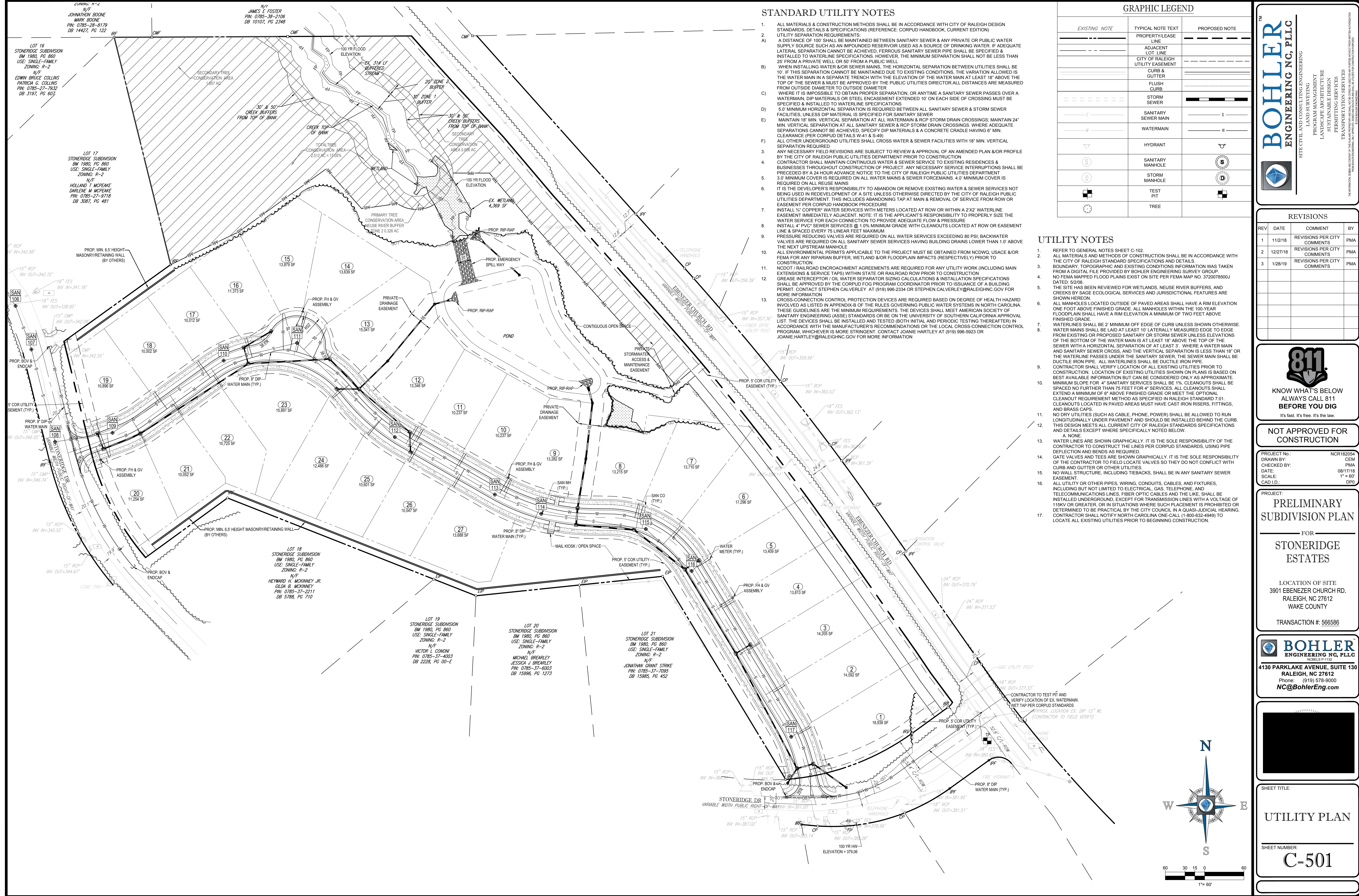
ROAD CENTERLINE CURVE TABLE					
CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	TANGENT
C1	150.00'	40.30'	S61°56'31"W	40.18'	015°23'40"
C2	150.00'	226.27'	N82°32'29"W	205.42'	086°25'40"
C3	300.00'	109.85'	N49°49'01"W	109.23'	020°58'44"
C4	300.00'	150.00'	N74°43'00"W	149.32'	028°49'14"
C5	150.00'	151.66'	N60°59'43"W	145.28'	057°59'48"
C6	200.00'	53.12'	S23°35'16"E	52.97'	015°13'06"

ROAD CENTERLINE LINE TABLE		
LINE	BEARING	DISTANCE
L1	S69°38'21"W	75.16'
L2	S54°14'41"W	132.08'
L3	N39°19'39"W	11.41'
L4	N60°18'23"W	157.88'
L5	N89°07'37"W	28.15'
L6	N31°11'49"W	282.80'
L7	S15°58'43"E	78.63'



SHEET TITLE:
SITE PLAN

SHEET NUMBER:
C-301



STANDARD UTILITY NOTES

- ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH DESIGN STANDARDS, DETAILS & SPECIFICATIONS (REFERENCE: CORPUD HANDBOOK, CURRENT EDITION)
- UTILITY SEPARATION REQUIREMENTS:
 - A DISTANCE OF 100' SHALL BE MAINTAINED BETWEEN SANITARY SEWER & ANY PRIVATE OR PUBLIC WATER SUPPLY SOURCE SUCH AS AN IMPOUNDED RESERVOIR USED AS A SOURCE OF DRINKING WATER. IF ADEQUATE LATERAL SEPARATION CANNOT BE ACHIEVED, FERROUS SANITARY SEWER PIPE SHALL BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS. HOWEVER, THE MINIMUM SEPARATION SHALL NOT BE LESS THAN 25' FROM A PRIVATE WELL OR 50' FROM A PUBLIC WELL.
 - WHEN INSTALLING WATER & OR SEWER MAINS, THE HORIZONTAL SEPARATION BETWEEN UTILITIES SHALL BE 10' IF THIS SEPARATION CANNOT BE MAINTAINED DUE TO EXISTING CONDITIONS. THE VARIATION ALLOWED IS THE WATER MAIN IN A SEPARATE TRENCH WITH THE ELEVATION OF THE WATER MAIN AT LEAST 18" ABOVE THE TOP OF THE SEWER & MUST BE APPROVED BY THE PUBLIC UTILITIES DIRECTOR. ALL DISTANCES ARE MEASURED FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER.
 - WHERE IT IS IMPOSSIBLE TO OBTAIN PROPER SEPARATION, OR ANYTIME A SANITARY SEWER PASSES OVER A WATERMAIN, DIP MATERIALS OR STEEL ENGAGEMENT EXTENDED 10' ON EACH SIDE OF CROSSING MUST BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS.
 - 5.0' MINIMUM HORIZONTAL SEPARATION IS REQUIRED BETWEEN ALL SANITARY SEWER & STORM SEWER FACILITIES, UNLESS DIP MATERIAL IS SPECIFIED FOR SANITARY SEWER.
 - MAINTAIN 18" MIN. VERTICAL SEPARATION AT ALL WATERMAIN & RCP STORM DRAIN CROSSINGS; MAINTAIN 24" MIN. VERTICAL SEPARATION AT ALL SANITARY SEWER & RCP STORM DRAIN CROSSINGS. WHERE ADEQUATE SEPARATIONS CANNOT BE ACHIEVED, SPECIFY DIP MATERIALS & A CONCRETE CRADLE HAVING 6" MIN. CLEARANCE (PER CORPUD DETAILS W-41 & S-49).
 - ALL OTHER UNDERGROUND UTILITIES SHALL CROSS WATER & SEWER FACILITIES WITH 18" MIN. VERTICAL SEPARATION REQUIRED.
 - ANY NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW & APPROVAL OF AN AMENDED PLAN &/OR PROFILE BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT PRIOR TO CONSTRUCTION.
 - CONTRACTOR SHALL MAINTAIN CONTINUOUS WATER & SEWER SERVICE TO EXISTING RESIDENCES & BUSINESSES THROUGHOUT CONSTRUCTION OF PROJECT. ANY NECESSARY SERVICE INTERRUPTIONS SHALL BE PRECEDED BY A 24 HOUR ADVANCE NOTICE TO THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT.
 - 3.0' MINIMUM COVER IS REQUIRED ON ALL WATER MAINS & SEWER FORCE MAINS. 4.0' MINIMUM COVER IS REQUIRED ON ALL REUSE MAINS.
 - IT IS THE DEVELOPER'S RESPONSIBILITY TO ABANDON OR REMOVE EXISTING WATER & SEWER SERVICES NOT BEING USED IN REDEVELOPMENT OF A SITE UNLESS OTHERWISE DIRECTED BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT. THIS INCLUDES ABANDONING TAP AT MAIN & REMOVAL OF SERVICE FROM ROW OR EASEMENT PER CORPUD HANDBOOK PROCEDURE.
 - INSTALL 3/4" COPPER WATER SERVICES WITH METERS LOCATED AT ROW OR WITHIN A 2'X2' WATERLINE EASEMENT IMMEDIATELY ADJACENT. NOTE: IT IS THE APPLICANT'S RESPONSIBILITY TO PROPERLY SIZE THE WATER SERVICE FOR EACH CONNECTION TO PROVIDE ADEQUATE FLOW & PRESSURE.
 - INSTALL 4" PVC SEWER SERVICES @ 1.0% MINIMUM GRADE WITH CLEANOUTS LOCATED AT ROW OR EASEMENT LINE & SPACED EVERY 75 LINEAR FEET MAXIMUM.
 - PRESSURE REDUCING VALVES ARE REQUIRED ON ALL WATER SERVICES EXCEEDING 80 PSI; BACKWATER VALVES ARE REQUIRED ON ALL SANITARY SEWER SERVICES HAVING BUILDING DRAINS LOWER THAN 1.0' ABOVE THE NEXT UPSTREAM MANHOLE.
 - ALL ENVIRONMENTAL PERMITS APPLICABLE TO THE PROJECT MUST BE OBTAINED FROM NCDWQ, USACE &/OR FEMA FOR ANY RIPARIAN BUFFER, WETLAND &/OR FLOODPLAIN IMPACTS (RESPECTIVELY) PRIOR TO CONSTRUCTION.
 - NCDOT / RAILROAD ENCROACHMENT AGREEMENTS ARE REQUIRED FOR ANY UTILITY WORK (INCLUDING MAIN EXTENSIONS & SERVICE TAPS) WITHIN STATE OR RAILROAD ROW PRIOR TO CONSTRUCTION.
 - GREASE INTERCEPTOR / OIL WATER SEPARATOR SIZING CALCULATIONS & INSTALLATION SPECIFICATIONS SHALL BE APPROVED BY THE CORPUD FOG PROGRAM COORDINATOR PRIOR TO ISSUANCE OF A BUILDING PERMIT. CONTACT STEPHEN CALVERLEY AT (919) 996-2334 OR STEPHEN.CALVERLEY@RALEIGHNC.GOV FOR MORE INFORMATION.
 - CROSS-CONNECTION CONTROL PROTECTION DEVICES ARE REQUIRED BASED ON DEGREE OF HEALTH HAZARD INVOLVED AS LISTED IN APPENDIX-B OF THE RULES GOVERNING PUBLIC WATER SYSTEMS IN NORTH CAROLINA. THESE GUIDELINES ARE THE MINIMUM REQUIREMENTS. THE DEVICES SHALL MEET AMERICAN SOCIETY OF SANITARY ENGINEERS (ASSE) STANDARDS OR BE ON THE UNIVERSITY OF SOUTHERN CALIFORNIA APPROVAL LIST. THE DEVICES SHALL BE INSTALLED AND TESTED (BOTH INITIAL AND PERIODIC TESTING THEREAFTER) IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS OR THE LOCAL CROSS-CONNECTION CONTROL PROGRAM, WHICHEVER IS MORE STRINGENT. CONTACT JOANIE HARTLEY AT (919) 996-9923 OR JOANIE.HARTLEY@RALEIGHNC.GOV FOR MORE INFORMATION.

GRAPHIC LEGEND

EXISTING NOTE	TYPICAL NOTE TEXT	PROPOSED NOTE
---	PROPERTY LEASE LINE	---
---	ADJACENT LOT LINE	---
---	CITY OF RALEIGH UTILITY EASEMENT	---
---	CURB & GUTTER	---
---	FLUSH CURB	---
---	STORM SEWER	---
---	SANITARY SEWER MAIN	---
---	WATERMAIN	---
---	HYDRANT	---
---	SANITARY MANHOLE	---
---	STORM MANHOLE	---
---	TEST PIT	---
---	TREE	---

UTILITY NOTES

- REFER TO GENERAL NOTES SHEET C-102.
- ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF RALEIGH STANDARD SPECIFICATIONS AND DETAILS.
- BOUNDARY, TOPOGRAPHIC AND EXISTING CONDITIONS INFORMATION WAS TAKEN FROM A DIGITAL FILE PROVIDED BY BOHLER ENGINEERING SURVEY GROUP.
- NO FEMA MAPPED FLOOD PLAINS EXIST ON SITE PER FEMA MAP NO. 372007850J DATED: 5/2/06.
- THE SITE HAS BEEN REVIEWED FOR WETLANDS, JURISDICTION RIVER BUFFERS, AND CREEKS BY SAGE ECOLOGICAL SERVICES AND NEURISDICAL FEATURES ARE SHOWN HEREON.
- ALL MANHOLES LOCATED OUTSIDE OF PAVED AREAS SHALL HAVE A RIM ELEVATION ONE FOOT ABOVE FINISHED GRADE. ALL MANHOLES WITHIN THE 100-YEAR FLOODPLAIN SHALL HAVE A RIM ELEVATION A MINIMUM OF TWO FEET ABOVE FINISHED GRADE.
- WATERLINES SHALL BE 2" MINIMUM OFF EDGE OF CURB UNLESS SHOWN OTHERWISE.
- WATER MAINS SHALL BE LAID AT LEAST 10' Laterally Measured Edge to Edge FROM EXISTING OR PROPOSED SANITARY OR STORM SEWER UNLESS ELEVATIONS OF THE BOTTOM OF THE WATER MAIN IS AT LEAST 18" ABOVE THE TOP OF THE SEWER WITH A HORIZONTAL SEPARATION OF AT LEAST 3'. WHERE A WATER MAIN AND SANITARY SEWER CROSS, AND THE VERTICAL SEPARATION IS LESS THAN 18" OR THE WATERLINE PASSES UNDER THE SANITARY SEWER, THE SEWER MAIN SHALL BE DUCTILE IRON PIPE. ALL WATERLINES SHALL BE DUCTILE IRON PIPE.
- CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. LOCATION OF EXISTING UTILITIES SHOWN ON PLANS IS BASED ON BEST AVAILABLE INFORMATION BUT CAN BE CONSIDERED ONLY AS APPROXIMATE. MINIMUM SLOPE FOR 4" SANITARY SERVICES SHALL BE 1%. CLEANOUTS SHALL BE SPACED NO FURTHER THAN 75 FEET FOR 4" SERVICES. ALL CLEANOUTS SHALL EXTEND A MINIMUM OF 6" ABOVE FINISHED GRADE OR MEET THE OPTIONAL CLEANOUT REQUIREMENT METHOD AS SPECIFIED IN RALEIGH STANDARD 7.01. CLEANOUTS LOCATED IN PAVED AREAS MUST HAVE CAST IRON RISERS, FITTINGS, AND BRASS CAPS.
- NO DRY UTILITIES (SUCH AS CABLE, PHONE, POWER) SHALL BE ALLOWED TO RUN LONGITUDINALLY UNDER PAVEMENT AND SHOULD BE INSTALLED BEHIND THE CURB. THIS DESIGN MEETS ALL CURRENT CITY OF RALEIGH STANDARDS SPECIFICATIONS AND DETAILS EXCEPT WHERE SPECIFICALLY NOTED BELOW.
 - NONE.
- WATER LINES ARE SHOWN GRAPHICALLY. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONSTRUCT THE LINES PER CORPUD STANDARDS, USING PIPE DEFLECTION AND BENDS AS REQUIRED.
- GATE VALVES AND TEES ARE SHOWN GRAPHICALLY. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO FIELD LOCATE VALVES SO THEY DO NOT CONFLICT WITH CURB AND GUTTER OR OTHER UTILITIES.
- NO WALL STRUCTURE, INCLUDING TIEBACKS, SHALL BE IN ANY SANITARY SEWER EASEMENT.
- ALL UTILITY OR OTHER PIPES, WIRING, CONDUITS, CABLES, AND FIXTURES, INCLUDING BUT NOT LIMITED TO ELECTRICAL, GAS, TELEPHONE, AND TELECOMMUNICATIONS LINES, FIBER OPTIC CABLES AND THE LIKE, SHALL BE INSTALLED UNDERGROUND EXCEPT FOR TRANSMISSION LINES WITH A VOLTAGE OF 115KV OR GREATER, OR IN SITUATIONS WHERE SUCH PLACEMENT IS PROHIBITED OR DETERMINED TO BE PRACTICAL BY THE CITY COUNCIL IN A QUASI-JUDICIAL HEARING. CONTRACTOR SHALL NOTIFY NORTH CAROLINA ONE-CALL (1-800-632-4949) TO LOCATE ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION.

BOHLER ENGINEERING NC, PLLC
 SITE CIVIL AND CONSULTING ENGINEERING
 LAND SURVEYING
 PROGRAM MANAGEMENT
 LANDSCAPE ARCHITECTURE
 SUSTAINABLE DESIGN
 PERMITTING SERVICES
 TRAIL DESIGN
 FROM CONCEPT TO CONSTRUCTION

REVISIONS

REV	DATE	COMMENT	BY
1	11/21/18	REVISIONS PER CITY COMMENTS	PMA
2	12/27/18	REVISIONS PER CITY COMMENTS	PMA
3	1/28/19	REVISIONS PER CITY COMMENTS	PMA

811
 KNOW WHAT'S BELOW
 ALWAYS CALL 811
 BEFORE YOU DIG
 It's fast. It's free. It's the law.

NOT APPROVED FOR CONSTRUCTION

PROJECT No.: NCR182054
 DRAWN BY: CEM
 CHECKED BY: PMA
 DATE: 08/17/18
 SCALE: 1" = 60'
 CAD I.D.: DPO

PRELIMINARY SUBDIVISION PLAN

FOR
STONERIDGE ESTATES

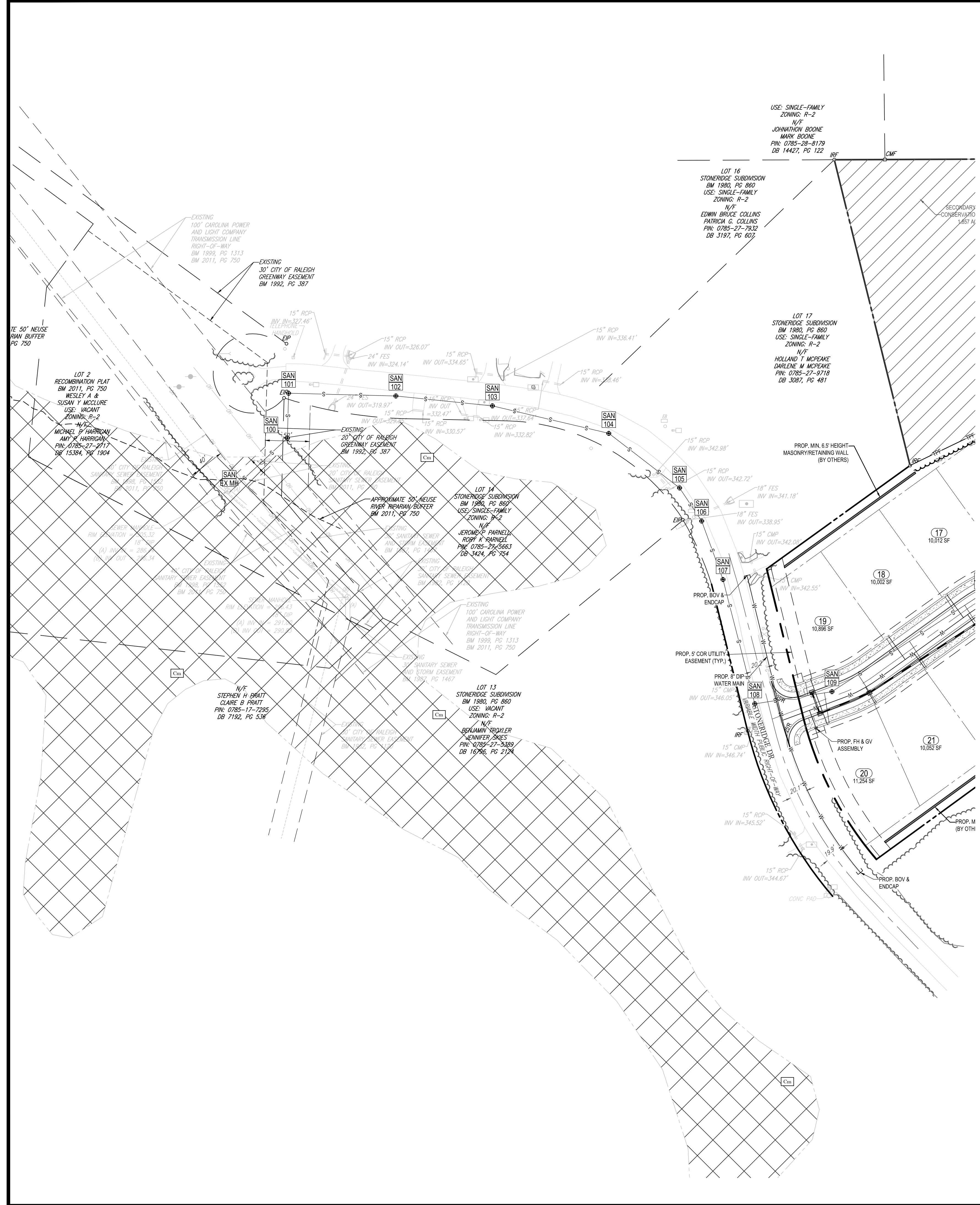
LOCATION OF SITE
 3901 EBENEZER CHURCH RD.
 RALEIGH, NC 27612
 WAKE COUNTY

TRANSACTION #: 566586

BOHLER ENGINEERING NC, PLLC
 NCELS P-1122
 4130 PARKLAKE AVENUE, SUITE 130
 RALEIGH, NC 27612
 Phone: (919) 578-9000
 NC@BohlerEng.com

SHEET TITLE:
UTILITY PLAN

SHEET NUMBER:
C-501



STANDARD UTILITY NOTES

- ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH DESIGN STANDARDS, DETAILS & SPECIFICATIONS (REFERENCE: CORPUD HANDBOOK, CURRENT EDITION)
- UTILITY SEPARATION REQUIREMENTS
- A DISTANCE OF 100' SHALL BE MAINTAINED BETWEEN SANITARY SEWER & ANY PRIVATE OR PUBLIC WATER SUPPLY SOURCE SUCH AS AN IMPOUNDED RESERVOIR USED AS A SOURCE OF DRINKING WATER. IF ADEQUATE LATERAL SEPARATION CANNOT BE ACHIEVED, FERROUS SANITARY SEWER PIPE SHALL BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS. HOWEVER, THE MINIMUM SEPARATION SHALL NOT BE LESS THAN 25' FROM A PRIVATE WELL OR 50' FROM A PUBLIC WELL
- WHEN INSTALLING WATER & OR SEWER MAINS, THE HORIZONTAL SEPARATION BETWEEN UTILITIES SHALL BE 10' IF THIS SEPARATION CANNOT BE MAINTAINED DUE TO EXISTING CONDITIONS, THE VARIATION ALLOWED IS THE WATER MAIN IN A SEPARATE TRENCH WITH THE ELEVATION OF THE WATER MAIN AT LEAST 18" ABOVE THE TOP OF THE SEWER & MUST BE APPROVED BY THE PUBLIC UTILITIES DIRECTOR. ALL DISTANCES ARE MEASURED FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER
- WHERE IT IS IMPOSSIBLE TO OBTAIN PROPER SEPARATION, OR ANYTIME A SANITARY SEWER PASSES OVER A WATERMAIN, DIP MATERIALS OR STEEL ENCASEMENT EXTENDED 10' ON EACH SIDE OF CROSSING MUST BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS
- 5.0' MINIMUM HORIZONTAL SEPARATION IS REQUIRED BETWEEN ALL SANITARY SEWER & STORM SEWER FACILITIES, UNLESS DIP MATERIAL IS SPECIFIED FOR SANITARY SEWER
- MAINTAIN 18" MIN. VERTICAL SEPARATION AT ALL WATERMAIN & RCP STORM DRAIN CROSSINGS; MAINTAIN 24" MIN. VERTICAL SEPARATION AT ALL SANITARY SEWER & RCP STORM DRAIN CROSSINGS. WHERE ADEQUATE SEPARATIONS CANNOT BE ACHIEVED, SPECIFY DIP MATERIALS & A CONCRETE CRADLE HAVING 6" MIN. CLEARANCE (PER CORPUD DETAILS W-41 & S-49)
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- INSTALL 3/4" COPPER WATER SERVICES WITH METERS LOCATED AT ROW OR WITHIN A 2X2' WATERLINE EASEMENT IMMEDIATELY ADJACENT. NOTE: IT IS THE APPLICANT'S RESPONSIBILITY TO PROPERLY SIZE THE WATER SERVICE FOR EACH CONNECTION TO PROVIDE ADEQUATE FLOW & PRESSURE
- INSTALL 4" PVC SEWER SERVICES @ 1.0% MINIMUM GRADE WITH CLEANOUTS LOCATED AT ROW OR EASEMENT LINE & SPACED EVERY 75 LINEAR FEET MAXIMUM
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- NC DOT / RAILROAD ENCROACHMENT AGREEMENTS ARE REQUIRED FOR ANY UTILITY WORK (INCLUDING MAIN EXTENSIONS & SERVICE TAPS) WITHIN STAGE OR RAILROAD ROW PRIOR TO CONSTRUCTION
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- WATERLINES SHALL BE 2" MINIMUM OFF EDGE OF CURB UNLESS SHOWN OTHERWISE.
- WATER MAINS SHALL BE LAID AT LEAST 10' LATERALLY MEASURED EDGE TO EDGE FROM EXISTING OR PROPOSED SANITARY OR STORM SEWER UNLESS ELEVATIONS OF THE BOTTOM OF THE WATER MAIN IS AT LEAST 18" ABOVE THE TOP OF THE SEWER WITH A HORIZONTAL SEPARATION OF AT LEAST 3'. WHERE A WATER MAIN AND SANITARY SEWER CROSS, AND THE VERTICAL SEPARATION IS LESS THAN 18" OR THE WATERLINE PASSES UNDER THE SANITARY SEWER, THE SEWER MAIN SHALL BE DUCTILE IRON PIPE. ALL WATERLINES SHALL BE DUCTILE IRON PIPE
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- A. NONE
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SITE CIVIL AND CONSULTING ENGINEERING
 LAND SURVEYING
 PROGRAM MANAGEMENT
 LANDSCAPE ARCHITECTURE
 SUSTAINABLE DESIGN
 PERMITTING SERVICES
 TRAIL DESIGN
 FROM MAINTENANCE ONLY PROJECTS TO FULL SCALE CONSTRUCTION PROJECTS

REVISIONS

REV	DATE	COMMENT	BY
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2	12/27/18	REVISIONS PER CITY COMMENTS	PMA
3	1/28/19	REVISIONS PER CITY COMMENTS	PMA

811

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NOT APPROVED FOR CONSTRUCTION

PROJECT No.: NCR182054
 DRAWN BY: CEM
 CHECKED BY: PMA
 DATE: 08/17/18
 SCALE: 1" = 60'
 CAD I.D.: DPO

PRELIMINARY SUBDIVISION PLAN

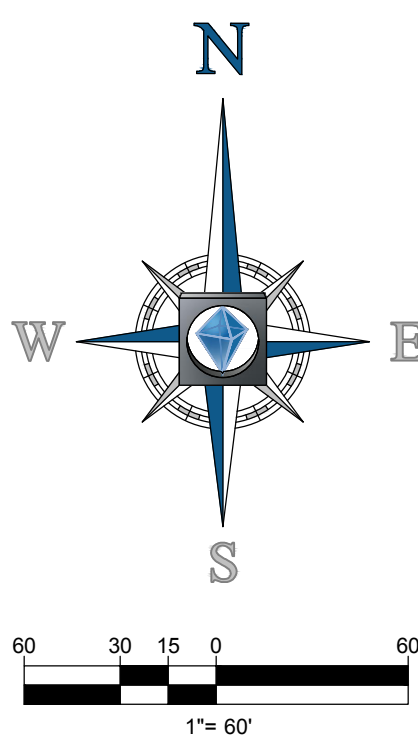
FOR
STONERIDGE ESTATES

LOCATION OF SITE
 3901 EBENEZER CHURCH RD.
 RALEIGH, NC 27612
 WAKE COUNTY

TRANSACTION #: 566586

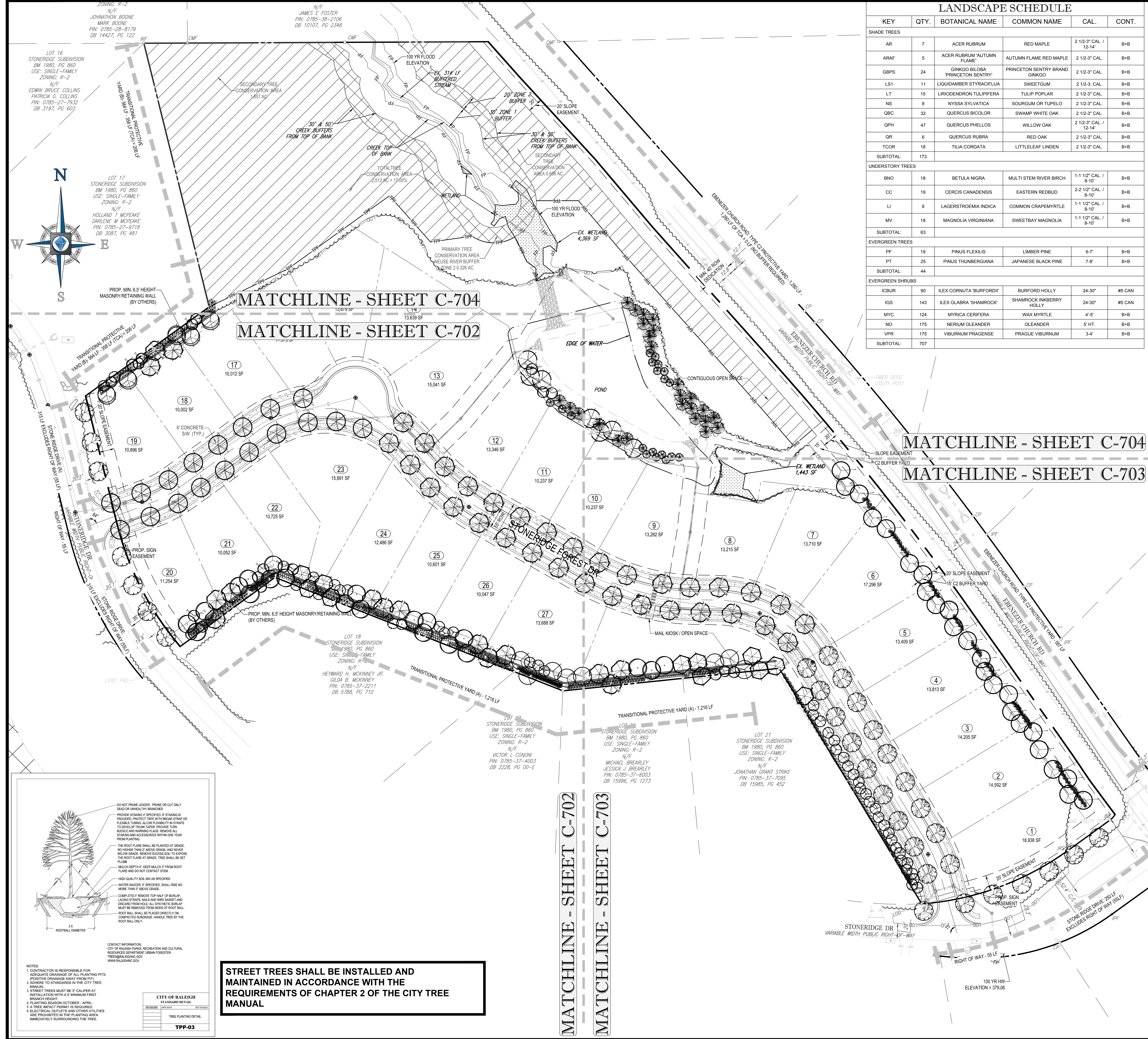
BOHLER ENGINEERING NC, PLLC

4130 PARKLAKE AVENUE, SUITE 130
 RALEIGH, NC 27612
 Phone: (919) 578-9000
NC@BohlerEng.com



SHEET TITLE:
UTILITY PLAN

SHEET NUMBER:
C-502



LANDSCAPE SCHEDULE

KEY	QTY.	BOTANICAL NAME	COMMON NAME	CAL.	CONT.
SHADE TREES					
AR	7	ACER RUBRUM	RED MAPLE	2 1/2" CAL / 12-14'	B+B
ARAF	5	ACER RUBRUM 'AUTUMN FLAME'	AUTUMN FLAME RED MAPLE	2 1/2" CAL.	B+B
GBPS	24	GINKGO BILOBA 'PRINCETON SENTINEL'	PRINCETON SENTRY BRAD GINKGO	2 1/2" CAL.	B+B
LS1	11	LIQUIDAMBER STYRACIFLUA	SWEETGUM	2 1/2" CAL.	B+B
LT	15	LIRIODENDRON TULIPIFERA	TULIP POPLAR	2 1/2" CAL.	B+B
NS	8	NYSSA SYLVATICA	SOURGUM OR TUPELO	2 1/2" CAL.	B+B
QBC	32	QUERCUS BICOLOR	SWAMP WHITE OAK	2 1/2" CAL.	B+B
QPH	47	QUERCUS PHellos	WILLOW OAK	2 1/2" CAL. / 12-14'	B+B
QR	6	QUERCUS RUBRA	RED OAK	2 1/2" CAL.	B+B
TCOR	18	TILIA CORDATA	LITTLELEAF LINDEN	2 1/2" CAL.	B+B
SUBTOTAL: 173					
UNDERSTORY TREES					
BNO	18	BETULA NIGRA	MULTI STEM RIVER BIRCH	1-1 1/2" CAL. / 8-10'	B+B
CC	19	CERCIS CANADENSIS	EASTERN REDBUD	2-2 1/2" CAL. / 8-10'	B+B
LI	8	LAGERSTROEMIA INDICA	COMMON CRAPEMYRTLE	1-1 1/2" CAL. / 8-10'	B+B
MV	18	MAGNOLIA VIRGINIANA	SWEETBAY MAGNOLIA	1-1 1/2" CAL. / 8-10'	B+B
SUBTOTAL: 63					
EVERGREEN TREES					
PF	19	PINUS FLEXILIS	LIMBER PINE	6-7'	B+B
PT	25	PINUS THUNBERGIANA	JAPANESE BLACK PINE	7-8'	B+B
SUBTOTAL: 44					
EVERGREEN SHRUBS					
ICBUR	90	ILEX CORNUTA 'BURFORDII'	BURFORD HOLLY	24-30"	#5 CAN
IGS	143	ILEX GLABRA 'SHAMROCK'	SHAMROCK HOLLIBERRY	24-30"	#5 CAN
MYC	124	MYRICA CERIFERA	WAX MYRTLE	4'-5'	B+B
NO	175	NERIUM OLEANDER	OLEANDER	5' HT.	B+B
VPR	175	VIBURNUM PRAGENSE	PRAGUE VIBURNUM	3-4'	B+B
SUBTOTAL: 707					

CITY OF RALEIGH, NORTH CAROLINA COMPLIANCE CHARTS

SECTION	REQUIREMENTS
SECTION 7.2.4 PROTECTIVE YARDS	<p>SCREENING TYPE: STORM WATER RETENTION POND (SECTION 7.2.6 C)</p> <p>REQUIRED:</p> <ol style="list-style-type: none"> ALL VEGETATIVE SCREENING SHALL BE 75% LOCALLY-ADAPTED EVERGREEN SPECIES. ALL VEGETATIVE MATERIAL SHALL BE PLANTED SO AS TO ATTAIN A SCREEN OCCUPYING AT LEAST 75% OF A VERTICAL PLANE AROUND THE PERIMETER OF THE FACILITY TO AN AVERAGE MATURE HEIGHT OF 6 FEET ABOVE GRADE. SCREENING SHALL BE REQUIRED AROUND THE BASE OF THE DAM STRUCTURE (AS APPLICABLE), BUT NOT ON THE DAM STRUCTURE. WITH THOSE PLANT MATERIALS IN IMMEDIATE PROXIMITY TO THE DAM CHARACTERIZED BY SHALLOW, NON-INVASIVE ROOT SYSTEMS. SCREENING SHALL NOT BE REQUIRED WITHIN REQUIRED FACILITY INLETS OR FACILITY OUTLETS OR WITHIN A MAINTENANCE ACCESS PATH PROVIDED THAT SUCH PATH DOES NOT EXCEED 12 FEET IN WIDTH IN ALL OTHER INSTANCES. AT AN AVERAGE MATURE HEIGHT OF PLANTING, THE MAXIMUM OPEN HORIZONTAL SPACE BETWEEN VEGETATIVE SCREENING MATERIALS SHALL NOT BE MORE THAN 2 FEET IN WIDTH. VEGETATIVE MATERIAL COMPOSING THE SCREEN SHALL BE SELECTED AND INSTALLED SO AS TO EXHIBIT VARIETY IN TEXTURE, COLOR, SPREAD AND HEIGHT BY USING ORNAMENTAL OR DECIDUOUS SHADE TREES IN COMBINATION WITH EVERGREEN MATERIALS. IN SOME CASES, VEGETATIVE MATERIAL MAY BE PLACED IN CLUSTERS OR GROUPS TO ADD ADDITIONAL VISUAL INTEREST AS WELL AS TO ACHIEVE INTERMITTENT SCREENING. IN SITUATIONS WHERE THE STORMWATER CONTROL FACILITY UTILIZES A FENCE, ALL VEGETATIVE MATERIAL ASSOCIATED WITH SCREENING THE FACILITY SHALL BE LOCATED OUTSIDE THE FENCE. IN SITUATIONS WHERE A FENCE AND GATE ARE PROPOSED, THE FENCE AND GATE SHALL BE COLORED BLACK, FOREST GREEN, DARK BROWN OR SIMILAR DARK COLOR, UNLESS THE FENCE IS CONSTRUCTED OF MASONRY, WOOD OR SIMILAR NATURAL MATERIAL, IN WHICH CASE THE FENCE SHALL BE COLORED TO MATCH THE SURROUNDING ENVIRONMENT. <p>PROVIDED:</p> <ol style="list-style-type: none"> REQUIREMENT SATISFIED SHADE TREES: 3 UNDERSTORY TREES / 44 NATIVE EVERGREEN TREES (81% EVERGREEN SCREEN) <p>2. REQUIREMENT SATISFIED</p> <p>670 LF. AROUND POND</p> <p>524 LF. SCREENED BY VEGETATION (78%)</p> <p>3. REQUIREMENT SATISFIED</p> <p>4. REQUIREMENT SATISFIED</p> <p>5. REQUIREMENT SATISFIED</p> <p>6. REQUIREMENT SATISFIED</p> <p>7. N/A</p> <p>8. N/A</p>
SECTION 7.2.4 PROTECTIVE YARDS	<p>TRANSITIONAL PROTECTIVE YARD (A) - 1,216 LF</p> <p>REQUIRED: TYPE B1 TRANSITIONAL PROTECTIVE YARD</p> <p>WIDTH (AVG. MIN): 20 LF WALL HEIGHT (MINIMUM): 6.5' SHADE TREES (MINIMUM OF 4 PER 100 LF): 1,216 LF / 100 = 12.16 TREES: 82 TREES REQUIRED UNDERSTORY TREES (MINIMUM OF 4 PER 100 LF): 1,216 LF / 100 = 12.16 TREES: 82 TREES REQUIRED SHRUBS (MINIMUM OF 40 PER 100 LF): 1,216 LF / 100 = 12.16 SHRUBS: 529 SHRUBS REQUIRED SHRUB HEIGHT (MINIMUM): 3 FT</p> <p>PROVIDED: TYPE B1 TRANSITIONAL PROTECTIVE YARD</p> <p>WIDTH: 20 LF SHADE TREES: 82 UNDERSTORY TREES: 82 SHRUBS: 529 SHRUB HEIGHT: 3'-5'</p> <p>THE SYMBOL "A" IS USED TO IDENTIFY PLANT MATERIAL USED TO SATISFY THIS PLANTING REQUIREMENT</p> <p>TRANSITIONAL PROTECTIVE YARD (B) - 564 LF - 358 LF (TCA) = 206 LF</p> <p>REQUIRED: TYPE B1 TRANSITIONAL PROTECTIVE YARD</p> <p>WIDTH (AVG. MIN): 20 LF WALL HEIGHT (MINIMUM): 6.5' SHADE TREES (MINIMUM OF 4 PER 100 LF): 206 LF / 100 = 2.06 TREES: 8 TREES REQUIRED UNDERSTORY TREES (MINIMUM OF 4 PER 100 LF): 206 LF / 100 = 2.06 TREES: 8 TREES REQUIRED SHRUBS (MINIMUM OF 40 PER 100 LF): 206 LF / 100 = 2.06 SHRUBS: 89 SHRUBS REQUIRED SHRUB HEIGHT (MINIMUM): 3 FT</p> <p>PROVIDED: TYPE B1 TRANSITIONAL PROTECTIVE YARD</p> <p>WIDTH: 20 LF SHADE TREES: 8 UNDERSTORY TREES: 8 SHRUBS: 89 SHRUB HEIGHT: 3'-5'</p> <p>THE SYMBOL "B" IS USED TO IDENTIFY PLANT MATERIAL USED TO SATISFY THIS PLANTING REQUIREMENT</p> <p>EXISTING STREET: STONE RIDGE DRIVE (A) - 315 LF EXCLUDES RIGHT OF WAY (85 LF)</p> <p>REQUIRED:</p> <p>SHADE TREES (40 FEET ON CENTER): 315 LF - 85 LF = 230 LF 260 LF / 40 = 6.5 TREES</p> <p>PROVIDED:</p> <p>7 SHADE TREES</p> <p>THE SYMBOL "A" IS USED TO IDENTIFY PLANT MATERIAL USED TO SATISFY THIS PLANTING REQUIREMENT</p> <p>EXISTING STREET: STONE RIDGE DRIVE (B) - 250 LF EXCLUDES RIGHT OF WAY (85 LF)</p> <p>REQUIRED:</p> <p>SHADE TREES (40 FEET ON CENTER): 250 LF - 85 LF = 165 LF 195 LF / 40 = 4.87 TREES</p> <p>PROVIDED:</p> <p>7 SHADE TREES</p> <p>THE SYMBOL "B" IS USED TO IDENTIFY PLANT MATERIAL USED TO SATISFY THIS PLANTING REQUIREMENT</p> <p>EXISTING STREET: EBENEZER CHURCH RD. - 1,280 LF - 1,280 (TCA) = 0 LF (85 LF REQUESTED)</p> <p>REQUIRED:</p> <p>WHERE DEVELOPMENT ADJUTS A STREET CONTROLLED BY NDOT, STREET TREES MAY NOT BE REQUIRED IN THE RIGHT OF WAY, AT THE DISCRETION OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION. IN THIS INSTANCE, A TYPE C2 STREET PROTECTIVE YARD IS REQUIRED IN ACCORDANCE WITH SECTION 7.2.4.</p> <p>WIDTH (AVG. MIN): 15 LF SHADE TREES (MINIMUM OF 4 PER 100 LF): 85 LF / 100 = 0.85 TREES: 4 TREES REQUIRED UNDERSTORY TREES (NOT REQUIRED) SHRUBS (MINIMUM OF 15 PER 100 LF): 85 LF / 100 = 0.85 SHRUBS: 13 SHRUBS REQUIRED SHRUB HEIGHT (MINIMUM): 5 FT</p> <p>PROVIDED: TYPE C2 PROTECTIVE YARD</p> <p>WIDTH: 15 LF SHADE TREES: 4 UNDERSTORY TREES: NOT REQUIRED SHRUBS: 13 SHRUB HEIGHT: 5 FT</p> <p>THE SYMBOL "B" IS USED TO IDENTIFY PLANT MATERIAL USED TO SATISFY THIS PLANTING REQUIREMENT</p> <p>STREET TYPE: NEIGHBORHOOD YIELD (SECTION 4.2.1)</p> <p>STONE RIDGE FOREST DRIVE - 1,491 LF</p> <p>REQUIRED:</p> <p>SHADE TREES (AVERAGE): 1 TREE PLANTED: 40 LF O.C. 1,391 LF / 40 = 34.8 x 2 = 69.6 (EITHER SIDE OF RIGHT OF WAY) (68) SHADE TREES REQUIRED</p> <p>PROVIDED: NEIGHBORHOOD YIELD</p> <p>SHADE TREES: 68</p> <p>THE SYMBOL "B" IS USED TO IDENTIFY PLANT MATERIAL USED TO SATISFY THIS PLANTING REQUIREMENT</p>
SECTION 8.5 EXISTING STREETS	<p>SECTION 8.5.1 GENERAL PROVISIONS</p> <p>D4: TREE PLANTING</p> <p>REQUIRED:</p> <p>SHADE TREES: 68</p> <p>THE SYMBOL "B" IS USED TO IDENTIFY PLANT MATERIAL USED TO SATISFY THIS PLANTING REQUIREMENT</p>
STREET DESIGN MANUAL, SECTION 4.2 NEIGHBORHOOD YIELD	<p>REQUIRED:</p> <p>SHADE TREES: 68</p> <p>THE SYMBOL "B" IS USED TO IDENTIFY PLANT MATERIAL USED TO SATISFY THIS PLANTING REQUIREMENT</p>

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PRELIMINARY SUBDIVISION PLAN

FOR

STONERIDGE ESTATES

LOCATION OF SITE
3901 EBENEZER CHURCH RD.
RALEIGH, NC 27612
WAKE COUNTY

TRANSACTION #: 566586

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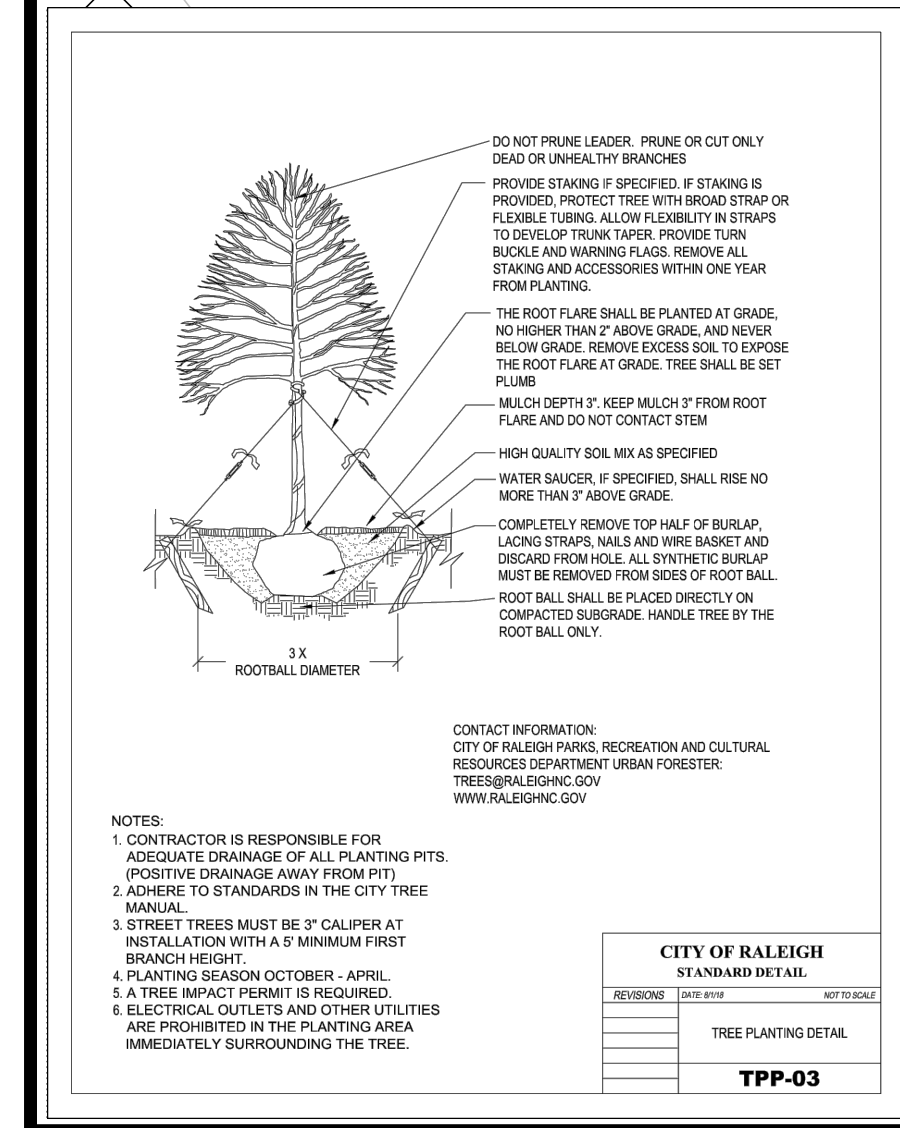
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SHEET NUMBER:

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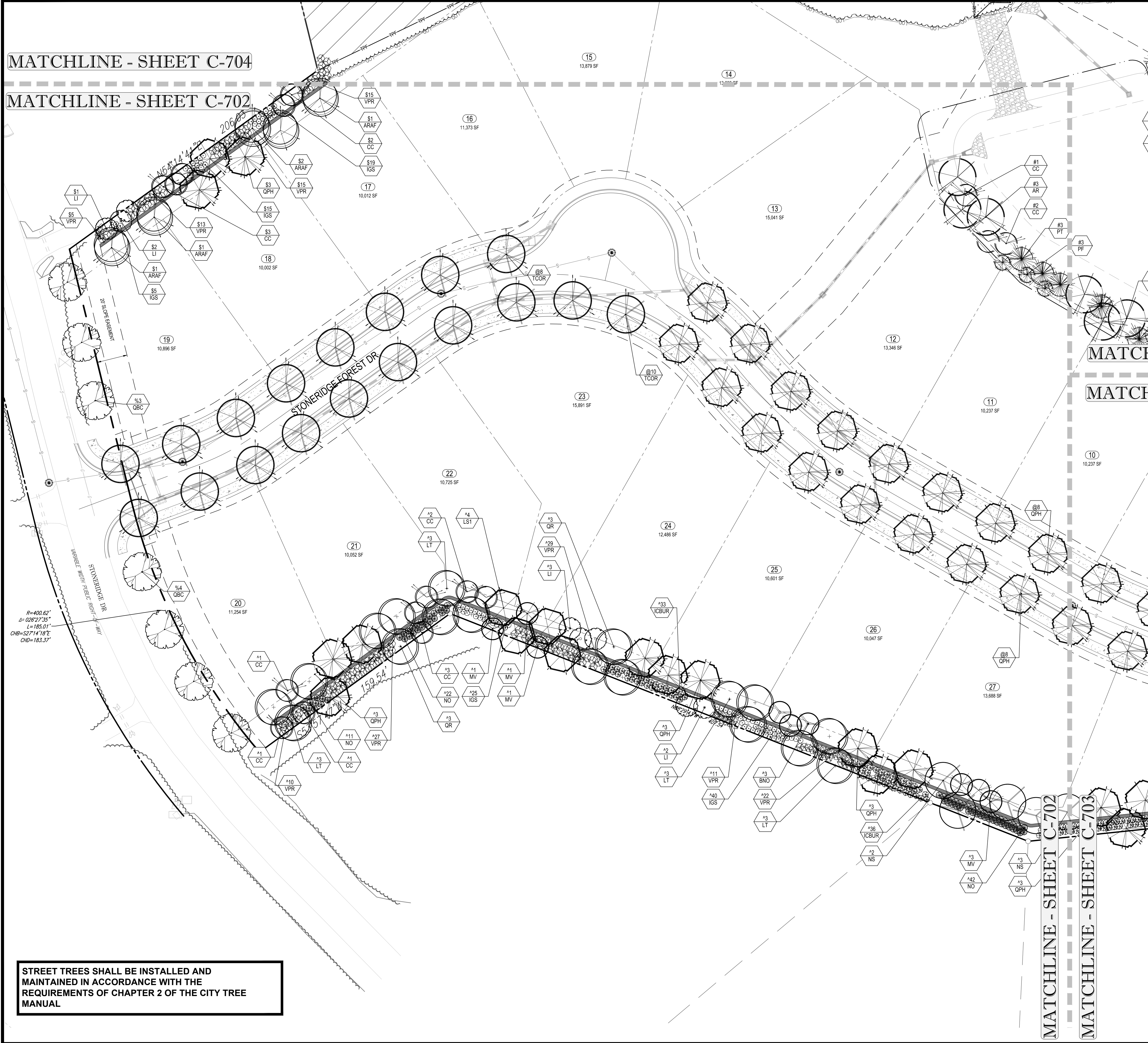
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MATCHLINE - SHEET C-704

MATCHLINE - SHEET C-703

MATCHLINE - SHEET C-702

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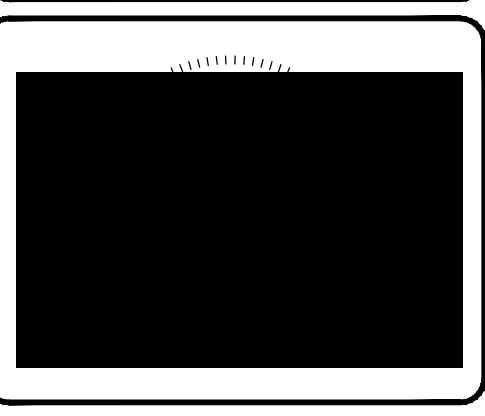
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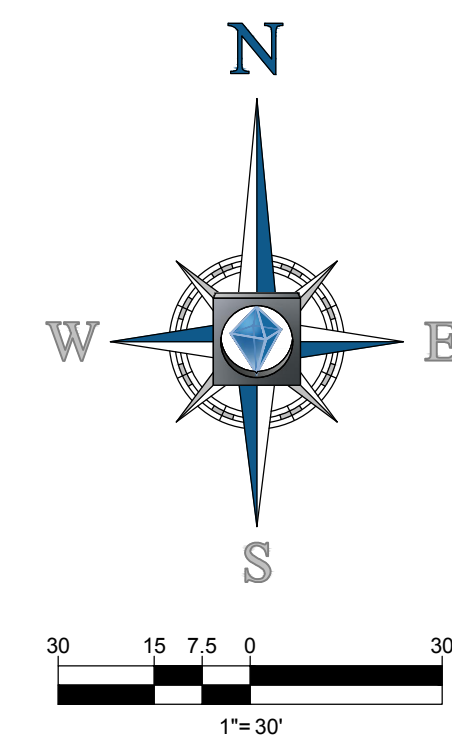
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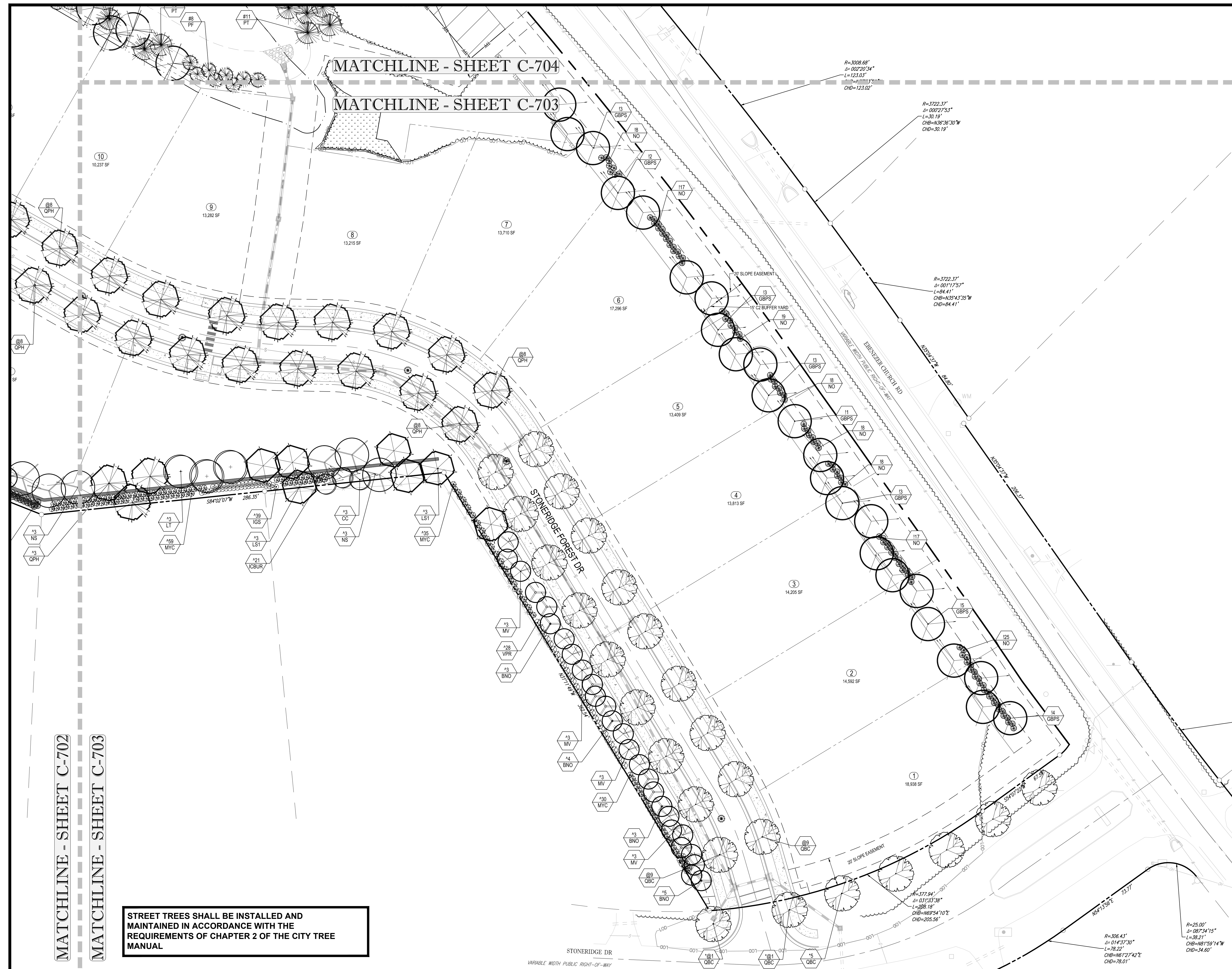
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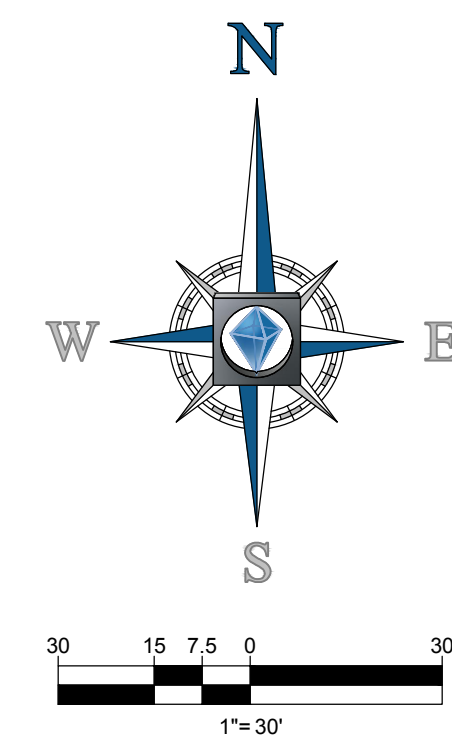
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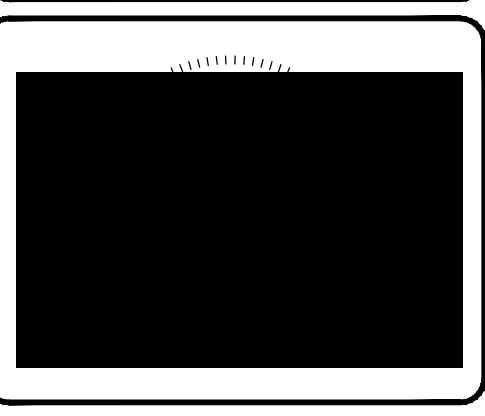
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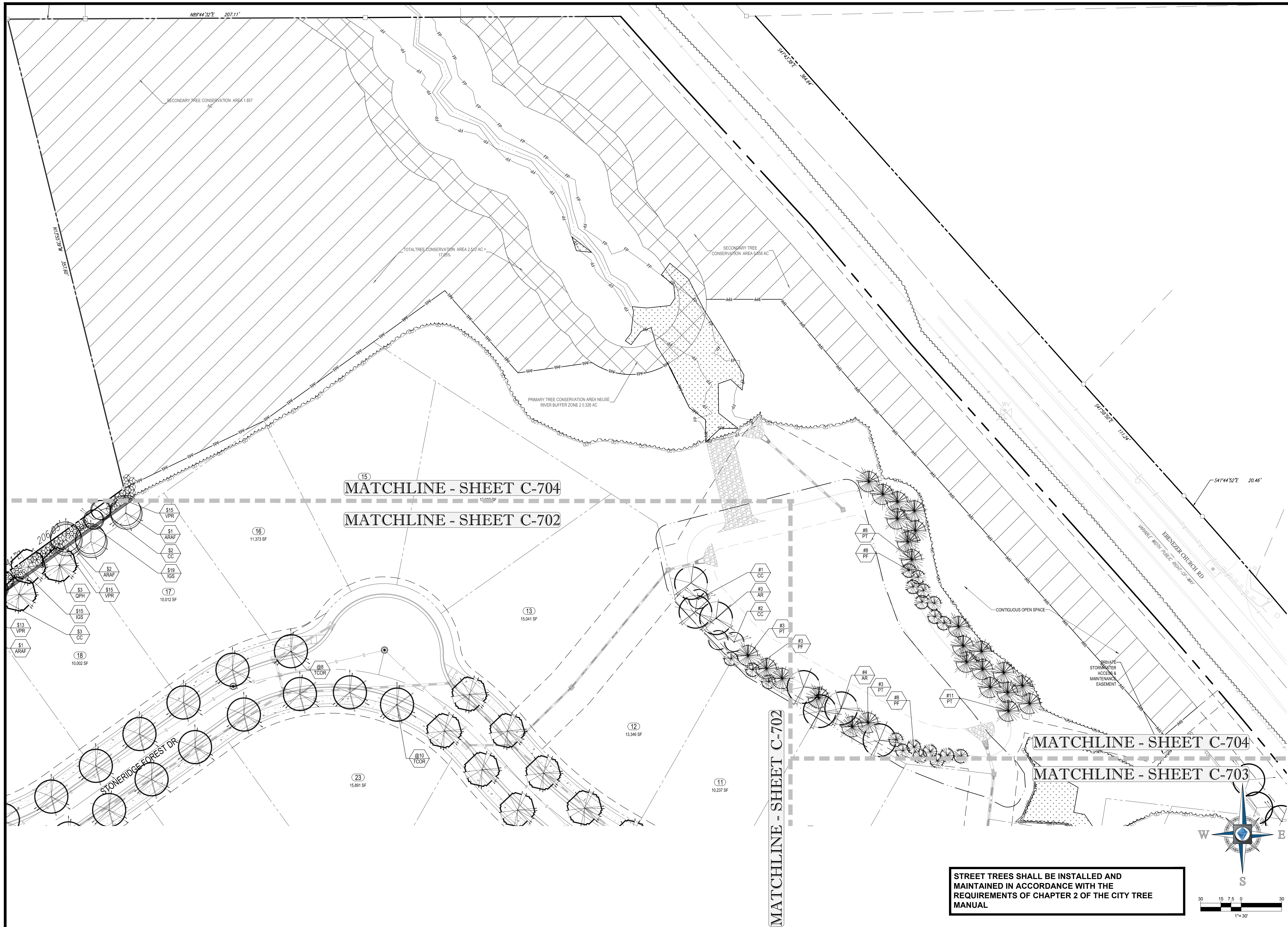
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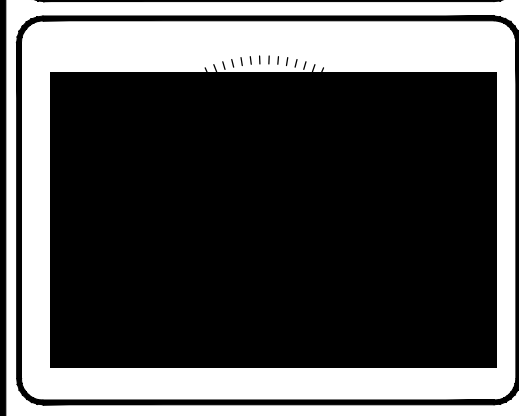
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