

TRINITY AT NORTHLAKE



ENGINEERING PCO / DETENTION / DRAINAGE PLAN
EROSION CONTROL
URBAN FORESTRY TREE ORDINANCE
CDOT
NOTE: SCHEDULE PRE-CONSTRUCTION MEETING AT LEAST 48 HRS. PRIOR TO ANY LAND DISTURBING ACTIVITY USING THE ONLINE FORM AT http://development.charmeck.org

APPROVED
By mark chapman at 2:45 pm, Mar 10, 2017

APPROVED

APPROVED

APPROVED

CITY OF CHARLOTTE
MECKLENBURG COUNTY, NORTH CAROLINA

APPROVED FOR CONSTRUCTION
CHARLOTTE-MECKLENBURG PLANNING DEPARTMENT
BY: Joshua Weaver 3-10-2017

PREPARED FOR :

D.R. Horton, Inc.

8001 Arrowridge Boulevard
Charlotte, NC 28273
Phone: (704) 377-2006

PLAN SHEET INDEX:

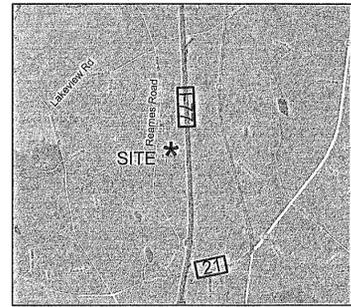
COVER	COVER SHEET
SP-1	SITE PLAN
SP-2	STREET TREE & PLANTING PLAN
SP-3	SIGHT DISTANCE AND PROFILE
SP-4 - SP-7	SITE PLAN DETAILS
EC-1 - EC-2	EROSION CONTROL PLANS
EC-3 - EC-5	EROSION CONTROL DETAILS
EC-6 - EC-7	EROSION CONTROL DRAINAGE AREAS
GP-1 - GP-2	GRADING PLAN
GP-3	GRADING PLAN STORM DRAIN CHARTS
GP-4	RETAINING WALL PROFILE
BMP-1 - BMP-4	BMP PLAN & DETAILS
BMP-5	BMP DRAINAGE AREA
PRE-DA	PRE-DEVELOPMENT DRAINAGE AREA
POST-DA	POST-DEVELOPMENT DRAINAGE AREA
SD-DA	STORM DRAINAGE AREAS
SD-1 - SD-7	STORM DRAIN PROFILES
RP-1 - RP-3	ROADWAY PLAN & PROFILES

January 4, 2016

PREPARED BY:



R. Joe Harris & Associates, Inc.
Engineering • Land Surveying • Planning
Management
127 Ben Casey Drive, Suite 101, Fort Mill, SC 29708 Phone: (803) 802-1799



VICINITY MAP - N.T.S.

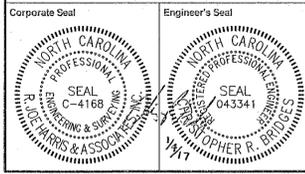
DATE	ISSUED FOR	REV
7/5/2016	Initial Submittal to City of Charlotte & NCDOT	0
9/29/2016	Second Submittal to City of Charlotte	1
11/9/2016	Third Submittal to City of Charlotte	2
1/4/2017	Fourth Submittal to City of Charlotte	3



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www.rjoharris.com

This drawing shall not be used for construction purposes until the seal and signature of the responsible registrant appears on the drawing, and proper permit forms and related fees are transmitted by the Owner, Owner's Agent or Contractor to the Authority having jurisdiction.



Project Manager C. Bridges	Drawn C. Bridges
Department Manager P. Murphy	Checked P. Murphy

Print/Plot Date
January 4, 2016
Client

D.R. HORTON, INC.
8001 ARROWRIDGE BOULEVARD
CHARLOTTE, NC 28273
P: (704) 377-2006

Project:
Trinity At Northlake

Drawing Title:
Cover

Project No. 2295	Drawing No. COVER
DWG File Name: 2295-Cover	

NOTE: ROADWAY IMPROVEMENTS ALONG REAMES ROAD ARE BOUND UNDER SEPARATE COVER ENTITLED "TRINITY AT NORTHLAKE DRIVEWAY IMPROVEMENTS"

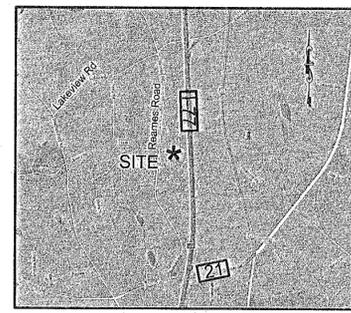
PROPOSED IMPERVIOUS SIDEWALK ROAD 26,011 SF 54,500 SF 80,511 SF SUM

HIGH DENSITY > 24% CALCULATIONS DRAINAGE AREA: 14.22 AC = 619,423 SF

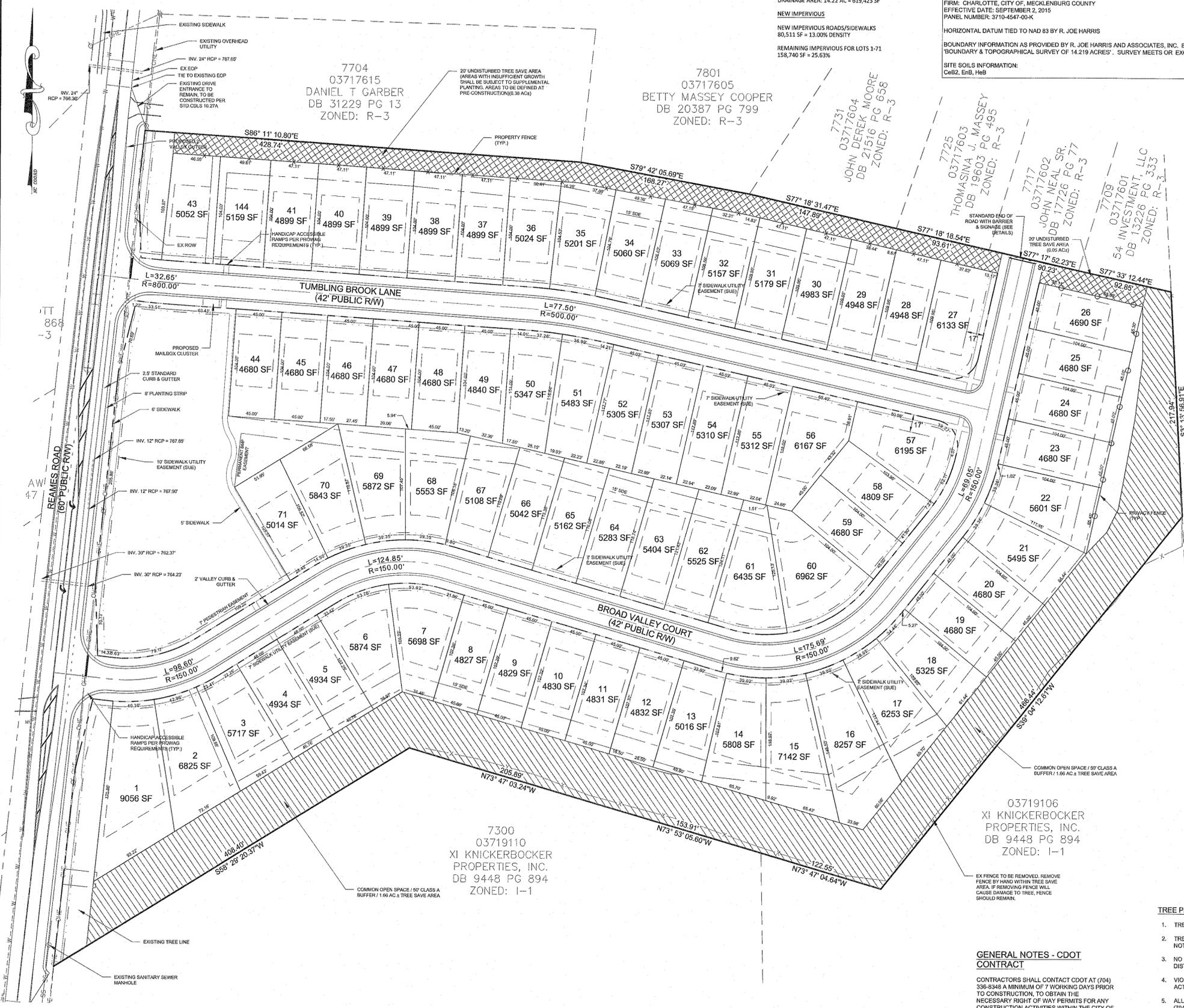
NEW IMPERVIOUS NEW IMPERVIOUS ROADS/SIDEWALKS 80,511 SF = 13.00% DENSITY REMAINING IMPERVIOUS FOR LOTS 1-71 158,740 SF = 25.63%

OFF SITE TOPOGRAPHY PROVIDED BY MECKLENBURG COUNTY LIDAR.

ON SITE TOPOGRAPHY PROVIDED BY "CLASS A" FIELD SURVEY PERFORMED BY R. JOE HARRIS AND ASSOCIATES, INC.
 NO PORTION OF THESE 71 LOTS IS LOCATED WITHIN THE 100 YEAR FLOOD HAZARD ZONE AS DEFINED ON FEMA FLOOD INFORMATION AND COMMUNITY FLOOD INFORMATION TAKEN FROM AVAILABLE DATA AS DOWNLOADED FROM THE NORTH CAROLINA FLOODPLAIN MAPPING CENTER, CURRENT AS OF SEPTEMBER 1, 2015.
 FIRM: CHARLOTTE, CITY OF MECKLENBURG COUNTY EFFECTIVE DATE: SEPTEMBER 2, 2015 PANEL NUMBER: 3710-4547-00-K
 HORIZONTAL DATUM TIED TO NAD 83 BY R. JOE HARRIS
 BOUNDARY INFORMATION AS PROVIDED BY R. JOE HARRIS AND ASSOCIATES, INC. BOUNDARY INFORMATION FROM SURVEY ENTITLED "BOUNDARY & TOPOGRAPHICAL SURVEY OF 14.219 ACRES". SURVEY MEETS OR EXCEEDS REQUIREMENTS FOR A CLASS "A" SURVEY.
 SITE SOILS INFORMATION: CoB2, EnB, HeB



DATE	ISSUED FOR	REV
7/5/2016	Initial Submittal to City of Charlotte & NCDOT	0
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DEVELOPMENT INFORMATION

- PROJECT NAME: TRINITY AT NORTHLAKE CHARLOTTE, NC
- OWNER: LIBERTY OAK INC 6130 HARRIS TECHNOLOGY BLVD CHARLOTTE, NC 28269
- DEVELOPER: D.R. HORTON, INC. 8001 ARROWRIDGE BOULEVARD CHARLOTTE, NC 28273
- TAX PARCEL NO.: 037-176-15, 037-176-17
- EXISTING ZONING: R-5(CD)
- RE-ZONING PETITION NO.: 2014-101
- TOTAL SITE AREA: 14.22 AC
- TREE SAVE: REQUIRED: 10% x 14.22 AC = 1.42 AC PROVIDED: 1.66 ACRES (11.67%)
- DENSITY: ALLOWABLE: 14.22 ACRES X 5 LOTS = 71 LOTS PROVIDED: 71 LOTS
- OPEN SPACE: REQUIRED: 14.22 ACRES X 0.175 = 2.49 PROVIDED: 3.12 ACRES (21.94%)
- DISTRICT STANDARDS*

FRONT SETBACK	24'
SIDE YARD	5'
REAR YARD	30'
GARAGE SETBACK (FROM SIDEWALK)	20'
MIN. LOT WIDTH	40'
MIN. LOT AREA	4,500 SQ.FT.
TOTAL NO. LOTS	71
TOTAL ACREAGE	14.22 AC

GENERAL NOTES - SITE DEVELOPMENT (AS APPLICABLE):

- COORDINATE ALL CURB AND STREET GRADES IN INTERSECTION WITH INSPECTOR.
- ALL ROAD IMPROVEMENTS AT EXIST. REAMES RD ARE TO BE COORDINATED WITH THE CITY OF CHARLOTTE ENGINEERING DEPARTMENT PRIOR TO CONSTRUCTION.
- DEVELOPER WILL PROVIDE STREET SIGNS PER CLDSMF 50.05 (9' SIGNS ONLY)
- SIGHT TRIANGLES SHOWN ARE THE MINIMUM REQUIRED.
- IN ROLLING AND HILLY TERRAINS, SWEEPING OF THE STONE BASE AND/OR APPLICATION OF A TACK COAT MAY BE REQUIRED NEAR INTERSECTIONS. THESE REQUIREMENTS WILL BE ESTABLISHED BY THE INSPECTOR AND BASED ON FIELD CONDITIONS.
- APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED FROM THE AFFECTED PROPERTY OWNERS.
- IN ORDER TO ENSURE PROPER DRAINAGE, KEEP A MINIMUM OF 0.5% SLOPE ON THE CURB.
- SUBSURFACE DRAINAGE FACILITIES MAY BE REQUIRED IN THE STREET RIGHT-OF-WAY IF DEEMED NECESSARY BY THE INSPECTOR.
- CURB AND GUTTER SHOWN ON PLANS ALONG EXIST. REAMES RD MAY BE ADJUSTED BASED UPON FIELD STAKING BY CITY ENGINEERING. ASSOCIATED STORM DRAINAGE MAY ALSO REQUIRE MODIFICATION BASED UPON FIELD CONDITIONS.
- THE PURPOSE OF THE STORM DRAINAGE EASEMENT (SDE) IS TO PROVIDE STORM WATER CONVEYANCE. BUILDINGS ARE NOT PERMITTED IN THE EASEMENT AREA. ANY OTHER OBJECTS WHICH IMPEDE STORM WATER FLOW OR SYSTEM MAINTENANCE ARE ALSO PROHIBITED.
- HIGH-DENSITY POLYETHYLENE (HDPE) STORM DRAINAGE PIPE INSTALLED WITHIN EXISTING OR PROPOSED PUBLIC STREET RIGHT-OF-WAY MUST BE APPROVED BY THE CITY'S INSPECTOR PRIOR TO ANY BACKFILL BEING PLACED. BACKFILL MATERIAL MUST BE APPROVED BY THE CITY INSPECTOR PRIOR TO PLACEMENT OF THE MATERIAL WITHIN THE PUBLIC STREET RIGHT-OF-WAY.
- PRE-PAID SHOP DRAWINGS FOR RETAINING WALL MUST BE SUBMITTED TO CITY ENGINEER PRIOR TO CONSTRUCTION.
- "AS-BUILT" DRAWINGS AND PLANS OF THE STORM DRAINAGE SYSTEM, INCLUDING DESIGNED DITCHES, MUST BE SUBMITTED PRIOR TO SUBDIVISION FINAL INSPECTION TO THE CITY/COUNTY ENGINEERING DEPARTMENT IN ACCORDANCE WITH THE CITY/COUNTY SUBDIVISION ORDINANCE.
- NO ONSITE DEMOLITION LANDFILL SHALL BE USED ON SITE.
- ESTIMATED TIMETABLE OF COMPLETION OF PROJECT TO BE DETERMINED BY OWNER. PLANS ARE VALID FOR 3 YEARS FROM DATE OF APPROVAL.
- NON-STANDARD ITEMS (IE: PAVERS, IRRIGATION SYSTEMS, ETC.) IN THE RIGHT-OF-WAY REQUIRE A RIGHT-OF-WAY ENCROACHMENT AGREEMENT WITH THE (CHARLOTTE DEPARTMENT OF TRANSPORTATION/NORTH CAROLINA DEPARTMENT OF TRANSPORTATION) BEFORE INSTALLATION.
- PRIOR TO INSTALLATION, PE SEALED SHOP DRAWINGS FOR UNDERGROUND DETENTION SYSTEMS MUST BE FURNISHED TO CITY OF CHARLOTTE ENGINEERING FOR APPROVAL.
- PRIOR TO CO. SURVEYOR SEALED AS-BUILT DRAWINGS OF ALL WATER QUALITY BMP'S AND DETENTION MUST BE PROVIDED.
- PRIOR TO PLAT RECORDATION, OFFSITE RW AND/OR CONSTRUCTION EASEMENTS ARE REQUIRED TO BE OBTAINED ACCORDING TO THE GUIDELINES OF THE "OFFSITE RW ACQUISITION PROCESS". THESE NEEDED RW AND CONSTRUCTION LIMITS ARE CLEARLY SHOWN ON THE ROADWAY IMPROVEMENT PLAN.
- CERTIFICATION AND STREET CUT PERMITS ARE REQUIRED FOR UTILITY CUTS ON CITY STREETS. ALLOW 7 DAYS PROCESSING FOR PERMIT. FOR INFORMATION CONTACT CHARLOTTE DEPARTMENT OF TRANSPORTATION (704-336-4225) OR VISIT [HTTP://WWW.CHARMECK.ORG/DEPARTMENTS/TRANSPORTATION/STREET-MAINTENANCE/HOME.HTM](http://www.charmeck.org/departments/transportation/street-maintenance/home.htm)
- PER SECTION 18-175(E) OF CITY CODE AND SECTION 10.0 OF THE CITY'S POST CONSTRUCTION CONTROLS ADMINISTRATIVE MANUAL, ALL REQUIRED NATURAL AREAS AND/OR POST CONSTRUCTION CONTROLS EASEMENTS (PCCES) MUST BE RECORDED PRIOR TO THE ISSUANCE OF THE CERTIFICATE OF OCCUPANCY.

GENERAL NOTES - CDOT CONTRACT

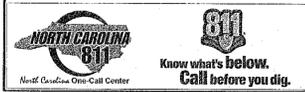
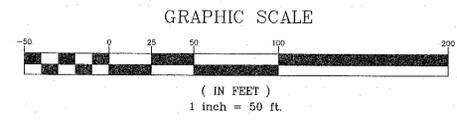
CONTRACTORS SHALL CONTACT CDOT AT (704) 336-8348 A MINIMUM OF 7 WORKING DAYS PRIOR TO CONSTRUCTION, TO OBTAIN THE NECESSARY RIGHT OF WAY PERMITS FOR ANY CONSTRUCTION ACTIVITIES WITHIN THE CITY OF CHARLOTTE RIGHT OF WAY.

GENERAL NOTES - WATCH PLAN

CONTRACTOR TO FOLLOW T.T.C. PLAN OUTLINED IN 2014 W.A.T.C.H. EDITION, SECTION 22 (TYPICAL DIAGRAMS). DIAGRAM #9. SPACING WILL FOLLOW 25 M.P.H. (TYP.)

TREE PROTECTION NOTES FOR SUBDIVISION:

- TREE PROTECTION FENCE/BARRICADES MUST MEET OR EXCEED TREE ORDINANCE REQUIREMENTS.
- TREE PROTECTION FENCE/BARRICADES MUST BE INSTALLED BEFORE ANY DEMOLITION/CLEARING/ GRADING/CONSTRUCTION AND NOT REMOVED UNTIL AFTER AN INSPECTION BY URBAN FORESTRY
- NO SOIL DISTURBANCE OR COMPACTION, CONSTRUCTION MATERIALS, TRAFFIC, BURIAL PITS, TRENCHING OR OTHER LAND DISTURBING ACTIVITIES ALLOWED IN TREE SAVE AREAS.
- VIOLATIONS OF THE TREE PROTECTION REQUIREMENTS ARE SUBJECT TO FINES, AND/OR IMMEDIATE CORRECTIVE ACTION/NOTIFICATION.
- ALL TREES ON PUBLIC PROPERTY ARE PROTECTED BY ORDINANCE AND REMOVAL MUST BE APPROVED BY THE CITY ARBORIST @ (704) 336-4262.
- SHOW TREE PROTECTION FENCE AT LEAST 5 FEET BEYOND THE DAPLINE OF THE DESIGNATED TREE SAVE AREA(S) WHENEVER POSSIBLE AT NO LESS THAN THE LOCATIONS SHOWN ON CONSTRUCTION PLANS
- TREE SAVE FENCING MAY BE REMOVED/OMITTED UPON ALL COMPLETED AND BUILT-OUT PORTIONS OF THE DEVELOPMENT (EXAMPLE: OCCUPIED HOME LOTS).
- TREE PROTECTION FENCE MAY BE TEMPORARILY REMOVED AND REPLACED FOR APPROVED UTILITY/STORM DRAINAGE WORK AND INSTALLATION OF ANY REQUIRED LANDSCAPE PLANTINGS.
- COORDINATE ALL ACTIVITIES WITHIN THE TREE SAVE LIMITS WITH THE URBAN FORESTRY SPECIALIST, GARY TURNER, AT (704) 517-5964



Engineer:



R. Joe Harris & Associates, Inc.
 Engineering • Land Surveying • Planning Management
 127 Ben Casey Drive, Suite 101, Fort Mill, S.C. 29708 P: (803) 803-1799

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Corporate Seal and Engineer's Seal for R. Joe Harris & Associates, Inc. and P. Murphy.

Project Manager C. Bridges	Drawn C. Bridges
Department Manager P. Murphy	Checked P. Murphy
Print/Plot Date January 4, 2016	Client D.R. HORTON, INC.

8001 ARROWRIDGE BOULEVARD
 CHARLOTTE, NC 28273
 P: (704) 377-2006

Project:
Trinity At Northlake

Drawing Title:
SITE PLAN

Project No. 2295	Drawing No. SP-1
DWG File Name: 2295-Site Plan	