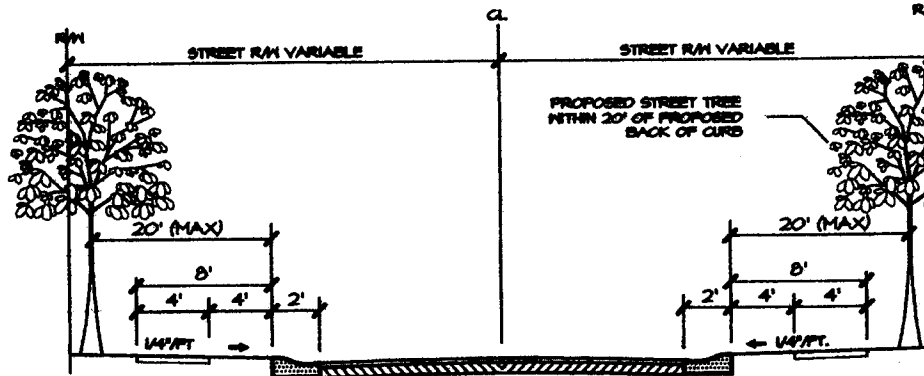


SHEET INDEX

| Sheet No. | Sheet Title |
|-----------|---|
| 1 | Preliminary Subdivision Site/Landscape Plan |
| 2 | Storm Drainage and Grading Plan |
| 3 | Erosion Control Plan (Pre) |
| 4 | Erosion Control Plan (Post) |
| 5 | Roadway & Storm Drainage Profiles & Site Construction Details |

CURVE TABLE

| CURVE | LENGTH | RADIUS | TANGENT | CHORD | BEARING | DELTA |
|-------|---------|---------|---------|---------|-------------|-----------|
| C-1 | 132.46' | 200.00' | 68.76' | 180.06' | S22°30'19"W | 37°56'12" |
| C-2 | 8.76' | 80.00' | 4.38' | 8.76' | N84°47'42"W | 92°30'50" |



TREE LOCATION DETAIL

SPECIMEN TREES

| TREE | TREE CANOPY | TREE CANOPY | TREE CANOPY | TREE CANOPY |
|-------|-------------|-------------|-------------|--------------|
| A | 24' OAK | 20' R. 1250 | 1250 | 620 |
| B | 24' OAK | 30' R. 2821 | 2048 | 1048 |
| C | 28' HAWK | 30' R. 2821 | 2852 | 1528 |
| D | 28' HAWK | 30' R. 2821 | 2821 | 1414 |
| TOTAL | | 4151 | 6005 | 4417 (6.408) |

LANDSCAPE PLAN NOTES

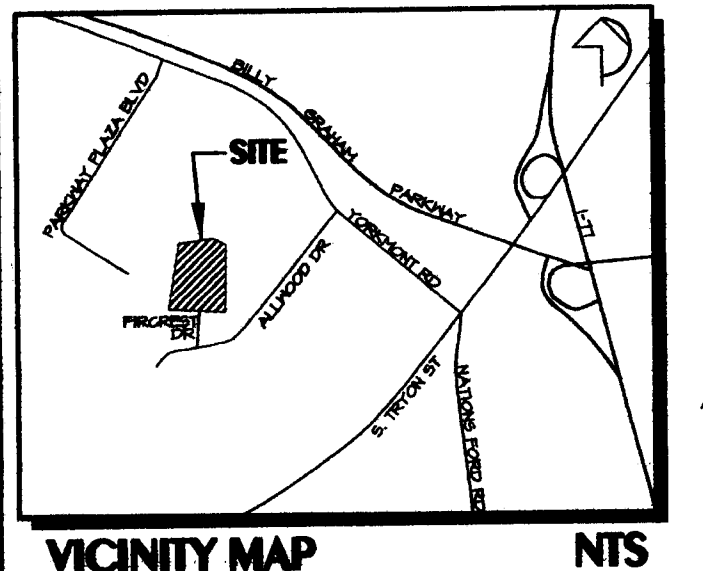
MINIMUM TREE SIZE AT PLANTING IS 2" CALIPER, 5' TALL. IF SINGLE STEM, MINIMUM 5' TALL AND 3 STEMS HANDBRUSH IF MULTI-STEM. MULCH IS REQUIRED. FOR NEW PLANTING AREAS, REMOVE ALL PAVEMENT, GRAVEL, SUB-BASE AND CONSTRUCTION DEBRIS. REMOVE COMPACTED SOIL AND ADD 24" NEW TOPSOIL OR UNCOMPACTED AND AMEND THE TOP 24" OF EXISTING SOIL TO MEET TOPSOIL PLANTING MIX STANDARDS FOR TREES WITHIN ENTIRE MINIMUM AREA OF 214 SQUARE FEET PER TREE. CALL 104-586-4824 FOR AN INSPECTION OF SOIL BEFORE PLANTING TREES. ALL STRAPPING AND 2/3 OF HIRE BASKET MUST BE CUT AWAY AND REMOVED FROM ROOT BALL PRIOR TO BACKFILLING PLANTING PIT. REMOVE TOP 12" OF THE BASKET FROM ROOT BALL. PLEASE CALL 104-586-4824 FOR FINAL INSPECTION OF TREES, 7 TO 10 DAYS BEFORE THE CERTIFICATE OF OCCUPANCY IS NEEDED. PREFERRED TREE SPACING IS 30' FOR SMALL MATURING TREES (20" MINIMUM IS NEEDED IN GROUPS) 40'-50' FOR LARGE MATURING TREES (20" MINIMUM IF PLANTED IN GROUPS). ADJUST TREE PLANTING LOCATIONS TO AVOID UNDERGROUND UTILITIES. PLACE 18" OF OFF-SIDE AND STORM DRAINAGE LINES 10'-15' OFF GAS, WATER, PHONE AND UNDERGROUND ELECTRICAL LINES. EXISTING HEALTHY TREES WITHIN 25 FEET OF THE RIGHT-OF-WAY LINE MAY HAVE LINE MAY BE CROPPED TOWARD THE FENCE REQUIREMENT IF SHOWN LANDSCAPE PLAN MAY BE PRESERVED HEALTHY. LARGE MATURING TREES MAY NOT BE PLANTED WHERE OVERHEAD DISTRIBUTION OR TRANSMISSION LINES EXIST. IF TREES COLLIDE WITH POWER LINES OR SENS, CALL URBAN FORESTER TO RESOLVE BEFORE PLANTING.

LEGEND

- 15' UPLAND ZONE
- 20' STREAMSIDE ZONE
- TOP OF BANK
- TREE PROTECTION SWIM BUFFER FENCE
- PROPOSED TREE SAVE AREA

TREE REQUIREMENTS

FRONTAGE 15' (2 SIDES) 30' SM TREES STREET NAME FIRCREST DR 3025 0" 0" MINIFIT RIDGE CT 1500 0 0 TOTAL SEE DEVELOPMENT DATA FOR BREAKDOWN ROAD FRONTAGE, 1500 LF STREET TREES REQUIRED, 1500 / 50 = 30 (LARGE MATURING) STREET TREES PROVIDED, 30 (LARGE) 0 SHALL USE EXISTING TREES THAT QUALIFY, WHERE ALLOWED (1) LARGE MATURING TREES SHALL BE FROM APPROVED URBAN FORESTRY SPECIES LIST. DIFFERENT SPECIES OF TREES SHALL BE USED ON DIFFERENT STREET NO HERITAGE TREES EXIST ON THIS PROPERTY



ALL TREES SHALL MEET AMERICAN STANDARD FOR NURSERY STOCK (ANSI, 1940, PART 1, "SHADE AND FLOWERING TREES") FOR EXAMPLE: CALIPER HEIGHT (INCHES) MAX HEIGHT MIN ROOT BALL DIA MIN ROOT BALL DEPTH

PLANTING DETAIL - SINGLE/MULTI-STEM TREE

10' SCALE

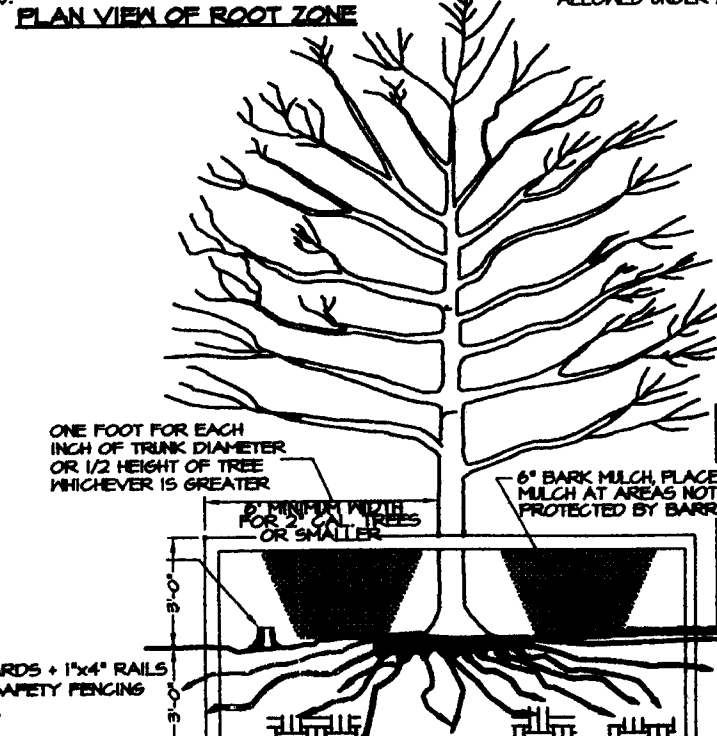
TREE PROTECTION NOTES

NOTE: NO SOIL DISTURBANCE OR CONSTRUCTION MATERIALS TRAFFIC BURIAL PITS, TREES OR OTHER LAND DISTURBING ACTIVITY ALLOWED IN THE TREE PROTECTION ZONE. TREE BARRICADES MUST BE INSTALLED BEFORE ANY DEMOLITION/CLEARING/GRADING/CONSTRUCTION AND NOT REMOVED UNTIL AFTER FINAL INSPECTION BY URBAN FORESTER. TREE PROTECTION BARRICADES MUST MEET OR EXCEED TREE ORDNANCE STANDARDS (IN CITY OF CHARLOTTE TREE ORDNANCE GUIDELINES APPENDIX). BEFORE GRADING/CONSTRUCTION BEGINS, CALL 104-586-4824 FOR AN INSPECTION OF TREE PROTECTION BARRICADES BY URBAN FORESTER. VIOLATIONS OF TREE PROTECTION REQUIREMENTS ARE SUBJECT TO FINES AND/OR IMMEDIATE CORRECTIVE ACTION/ATTENTION.

1. REMOVE HERE OR NYLON TREE FROM BALL 2. SOAK ROOT BALL AND PLANT PIT IMMEDIATELY AFTER INSTALLATION 3. SEE ATTACHED LANDSCAPE CONSTRUCTION STOPS FOR OTHER PLANTING REQUIREMENTS 4. STAKING REQUIRED FOR PLANTING TREES OR AS SPECIFIED BY CONTRACTOR. SEE GENERAL NOTES, SEC. 04000 - TREE PLANTING PART 3 PAR. 1B.

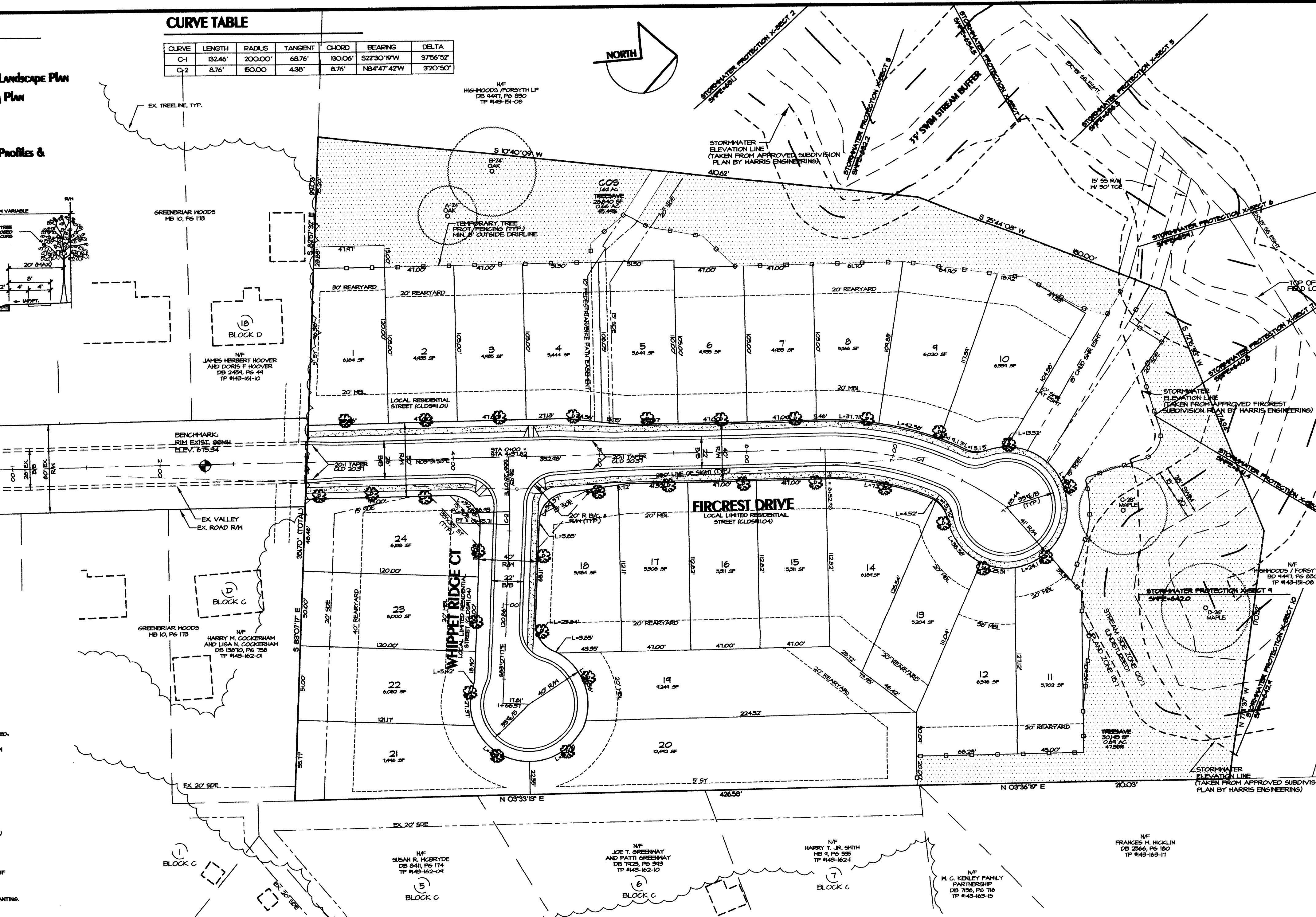
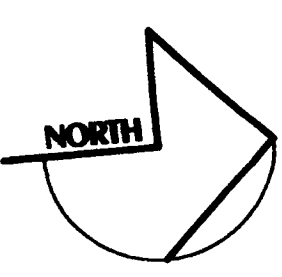
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TREE PROTECTION DETAIL

10' SCALE



GENERAL NOTES

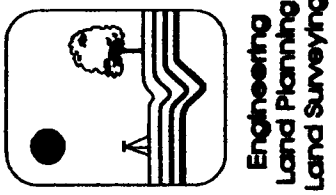
- THIS PRELIMINARY SUBDIVISION PLAN IS SUBMITTED, AND SHALL BE CONSTRUCTED, IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF CHARLOTTE ZONING AND SUBDIVISION ORDINANCES AND THE CHARLOTTE LAND DEVELOPMENT STANDARDS MANUAL.
- BOUNDARY SURVEY INFORMATION PER SURVEY PREPARED BY CONTROL POINT SURVEYING.
- TOPOGRAPHIC INFORMATION TAKEN FROM MAPS PROVIDED BY HARRIS ENGINEERS.
- CHIEF SUBDIVISION INSPECTOR SHALL BE GIVEN 48 HOURS ADVANCE NOTICE PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- LOT DIMENSIONS ARE APPROXIMATE, REFERENCE RECORD PLAT FOR EXACT LOT DIMENSIONS.
- ALL STORM DRAINAGE PIPE SHALL BE CLASS 3 REINFORCED CONCRETE PIPE (RCP) UNLESS OTHERWISE NOTED. PIPE LENGTHS INDICATED ON THE PLANS ARE APPROXIMATE AND ARE SUBJECT TO CHANGE DUE TO FIELD CONDITIONS.
- SUBSURFACE DRAINAGE FACILITIES MAY BE REQUIRED IN THE STREET RIGHT-OF-WAY AS DEEMED NECESSARY BY THE INSPECTOR.
- REFERENCE SHEET 5 FOR EROSION CONTROL DETAILS.
- CONSTRUCTION OF ALL DEVELOPMENT IMPROVEMENTS SHALL BE IN ACCORDANCE WITH THE CHARLOTTE LAND DEVELOPMENT STANDARDS MANUAL. REFERENCE SHEET 5 FOR SITE DETAILS. THE FOLLOWING ADDITIONAL DETAILS ARE INCLUDED BY REFERENCE:

| ITEM | CLINDEST. STD. NO. |
|-------------------------|--------------------|
| CURB AND GUTTER | 10.17 |
| CATCH BASIN LOCATION | 10.21 & 10.30 |
| (C) BRICK CATCH BASIN | 840.01 & 840.02 |
| (DC) DOUBLE CATCH BASIN | 20.03 & 20.04 |
| STREET NAME SIGN | 50.05 |
| CONCRETE MONUMENT | 50.03 |
| SIDEWALK | 10.22 |
| BARRICADE | 50.07 & 50.08 |
- APPROXIMATE COMPLETION TIME IS SPRING 2008.
- WATER AND SANITARY SEWER SERVICE SHALL BE PROVIDED BY EXTENSION OF THE EXISTING CHARLOTTE-MECKLENBURG UTILITY SYSTEM.
- SIDEWALK NOTE: THE CONTRACTOR SHALL COORDINATE WITH THE SUBDIVISION INSPECTOR FOR LATEST REVISION OF HANDICAP RAMP DETAILS PRIOR TO PLACEMENT OF ANY H/C RAMPS AND/OR SIDEWALK.
- DURING CONSTRUCTION OF THE IMPROVEMENTS SPECIFIED BY THESE PLANS, THE DEVELOPER SHALL MAINTAIN THE STREAMEAD OF ALL STREAMS, CREEKS, AND CHANNELS IN AN UNDISTURBED STATE, AND SHALL REMOVE FROM THE CHANNEL AND/OR ITS BANKS, DEBRIS, LOGS OR OTHER ACCUMULATIONS AS REQUIRED TO FACILITATE PROPER DRAINAGE.
- DRAINAGE EASEMENTS INDICATED AS SDE (STORM DRAINAGE EASEMENT) ARE EASEMENTS WHICH ARE THE RESPONSIBILITY OF THE INDIVIDUAL PROPERTY OWNER.
- THE DEVELOPER SHALL PROVIDE STREET SIGNS (1" SIGNS ALL) PER CHARLOTTE-MECKLENBURG LAND DEVELOPMENT STANDARD NO. 50.05.
- COORDINATE ALL CURB AND STREET GRADES IN INTERSECTIONS WITH THE CITY INSPECTOR.
- NON-STANDARD ITEMS (E. PAVERS, IRRIGATION SYSTEMS, ETC.) IN THE RIGHT OF WAY MAY REQUIRE A RIGHT OF WAY ENCROACHMENT AGREEMENT WITH THE CHARLOTTE DEPARTMENT OF TRANSPORTATION BEFORE INSTALLING.
- AS-BUILT DRAWINGS AND PLANS OF THE STORM DRAINAGE SYSTEM, INCLUDING DESIGN DETAIL, MUST BE SUBMITTED PRIOR TO SUBDIVISION FINAL INSPECTION TO THE CITY OF CHARLOTTE ENGINEERING DEPARTMENT IN ACCORDANCE WITH THE CITY OF CHARLOTTE SUBDIVISION ORDINANCE.
- TO INSURE PROPER DRAINAGE, MINIMUM CURB AND GUTTER GRADE SHALL BE 0.50%.
- IN ROLLING AND HILLY TERRAINS, SHEEPING OF THE STONE BASE AND/OR APPLICATION OF TACK COAT MAY BE REQUIRED NEAR INTERSECTIONS, AS REQUESTED BY THE INSPECTOR.
- APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED FROM THE AFFECTED PROPERTY OWNER.
- SITE BENCHMARK FOR PROJECT IS THE RIM OF AN EXISTING SAN. MH IN FIRCREST DR R/W, ELEV. = 675.34 (NAD 83) USED FOR FLOOD STUDY.
- CURB AND GUTTER SHOWN ON THE PLANS MAY BE ADJUSTED BASED UPON FIELD STAKING BY CITY OF CHARLOTTE.
- COMMON OPEN SPACE TO BE CONVEYED TO THE HOMEOWNERS ASSOCIATION IN ACCORDANCE WITH THE CHARLOTTE ZONING ORD. 4.209
- TREE PROTECTION BARRICADES MUST MEET OR EXCEED TREE ORD. GUIDELINES STD.
- TREE BARRICADES MUST BE INSTALLED BEFORE ANY DEMOLITION/GRADING/CONSTRUCTION AND NOT REMOVED UNTIL AFTER FINAL INSPECTION BY URBAN FORESTRY STAFF.
- NO SOIL DISTURBANCE OR CONSTRUCTION, TRAFFIC, BURIAL PITS, TREES, OR OTHER LAND DISTURBING ACTIVITIES ALLOWED IN TREE SAVE AREA.
- VIOLATIONS OF THE TREE PROTECTION REQUIREMENTS ARE SUBJECT TO FINES, AND/OR IMMEDIATE CORRECTIVE ACTION/ATTENTION.
- NO DEMOLITION LANDFILLS WILL BE LOCATED ON THIS SITE.
- THE DEVELOPER SHALL CONTACT THE CHARLOTTE DEPARTMENT OF TRANSPORTATION (645 JORDI, 336-1006) TO IDENTIFY ANY CONFLICTS WITH TRAFFIC SIGNALIZATION EQUIPMENT. 60-90 DAYS WILL BE REQUIRED TO COORDINATE RELOCATION. DEVELOPER SHALL BE RESPONSIBLE FOR ALL RELATED COSTS AND/OR ANY REPAIR COSTS CAUSED BY THE CONTRACTOR/DEVELOPER.
- COMMON OPEN SPACE/ TREESAVE AREA TO REMAIN IN A NATURAL STATE. AREAS TO BE CLEARED OF TRASH AND DEBRIS.
- THE PURPOSE OF THE STORM DRAINAGE EMT IS TO PROVIDE STORM WATER CONVEYANCE AND ANY STRUCTURES AND/OR OBSTRUCTIONS TO STORM WATER FLOW IS PROHIBITED.
- PE SEALED SHOP DRAWINGS FOR RETAINING WALLS MUST BE SUBMITTED TO CITY ENGINEER PRIOR TO CONSTRUCTION.
- THE CITY OF CHARLOTTE WILL NEITHER BE RESPONSIBLE FOR THE GROUNDS WITHIN THE PERMANENT STORM DRAINAGE EASEMENT NOR REMOVAL OF ANY OBSTRUCTIONS IN THAT AREA.
- SIGHT TRIANGLES SHOWN ARE MINIMUM.
- ANY BUILDINGS WITHIN THE 100' STORMWATER ELEVATION LINE IS SUBJECT TO THE RESTRICTIONS OF THE CITY OF CHARLOTTE SUBDIVISION ORD., SECT. 1.200.8.
- 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 A BACKFILL BEING PLACED. BACKFILL MATERIAL MUST BE APPROVED BY THE CITY INSPECTOR PRIOR TO PLACEMENT OF THE MATERIAL IN THE PUBLIC STREET R/W.

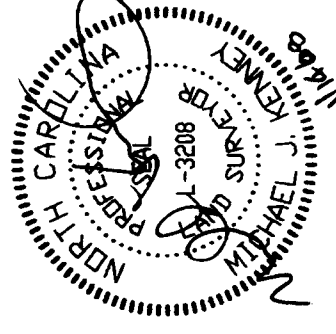
DEVELOPMENT DATA

TAX PARCEL NO. 143-151-01
ZONING CLASSIFICATION: R-4 (DEVELOPED AS R-5 CLUSTER)* (METRIC #142-342)
ZONING JURISDICTION: CITY OF CHARLOTTE
SITE ACREAGE: 5.81 AC
NO. OF UNITS ALLOWED BY ZONING: 5.81 x 4 = 23.2
AREA IN EASEMENTS/R/W: 0.0 AC
NET TOTAL SITE AREA: 5.81 AC
TREESAVE REQUIRED/PROVIDED: 108 x 5.81 AC = 0.58 AC/1.45 AC
ADDL. LOTS FOR 25% TREE INCENTIVE IN COS: 1.46 (25.05%) AC x 4 = 5.8 LOTS
NO. OF UNITS ALLOWED/PROPOSED: 23.2 + 5.8 = 29.0
R-4 CLUSTER LOT DATA:
LOTS 121-241
MIN. LOT SIZE = 6,000 SF
MIN. LOT WIDTH = 50'
MIN. SETBACK = 20'
MIN. SIDE YARD = 5' EXTERNAL, 3' INTERNAL
MIN. REAR YARD = 40' EXTERNAL, 30' INTERNAL
R-5 CLUSTER LOT DATA:
MIN. LOT SIZE = 4,500 SF
MIN. LOT WIDTH = 40'
MIN. SETBACK = 20'
MIN. SIDE YARD = 3' INTERNAL
MIN. REAR YARD = 30' INTERNAL
* TREESAVE INCENTIVE IV SPECIMEN TREES

KENNEY DESIGN GROUP, PA



REVISIONS: 1. UNREVISED PER CADC & CDD DESIGN COMMENTS



| Scale: | Date: | Drawn By: | Designed By: | Job No.: |
|--------|----------|-----------|--------------|----------|
| 1"=40' | 10/22/07 | MJK | MJK | 2607 |

Preliminary Subdivision Site/Landscape Plan

Fircrest Subdivision

City of Charlotte, Mecklenburg County, North Carolina
Carland Development, LLC 61 50 Harris Technology Blvd., Charlotte, N.C. 28269

Sheet No.

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