

VICINITY MAP - NTS

SHEET SCHEDULE:

COVER SHEET	L-1
SITE PLAN	L-2
GRADING AND STORM DRAINAGE PLAN	L-3
EROSION CONTROL PLAN-INITIAL PHASE	L-4
EROSION CONTROL PLAN-FINAL PHASE	L-5
DRAINAGE AREA PLAN	L-6
ROAD PROFILES	L-7
SITE DETAILS	L-8
SITE DETAILS	L-9
SITE DETAILS	L-10

GENERAL NOTES:

- COORDINATE ALL CURB AND STREET GRADES IN INTERSECTION WITH INSPECTOR.
- ALL ROAD IMPROVEMENTS ARE TO BE COORDINATED WITH THE CITY OF CHARLOTTE ENGINEERING DEPARTMENT PRIOR TO CONSTRUCTION.
- DEVELOPER WILL PROVIDE STREET SIGNS PER CLDSM# 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 PAPER BIRCH ROAD 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.
- THE DEVELOPER SHALL MAINTAIN EACH STREAM, CREEK, OR BACKWASH CHANNEL IN AN UNOBSTRUCTED STATE AND SHALL REMOVE FROM THE CHANNEL AND BANKS OF THE STREAM ALL DEBRIS, LOGS, TIMBER, JUNK AND OTHER ACCUMULATIONS.
- PE SEALED 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.
- THERE ARE NO DEMOLITION LANDFILLS PROPOSED FOR THE SITE.

DEVELOPMENT DATA:

TOTAL SITE AREA:	± 20.90 AC
EXISTING ZONING:	MX-2 & R-3
DEVELOP AS:	MX-2
TAX PARCEL #:	109-06-197
PROPOSED DETACHED SINGLE-FAMILY LOTS:	91
MAXIMUM # UNITS ALLOWED BY MX-2 ZONING:	149
DENSITY:	4.74 DUA
OPEN SPACE REQUIRED:	1.86 AC
OPEN SPACE PROVIDED:	7.66± AC

MINIMUM STANDARDS:

SINGLE FAMILY DETACHED:

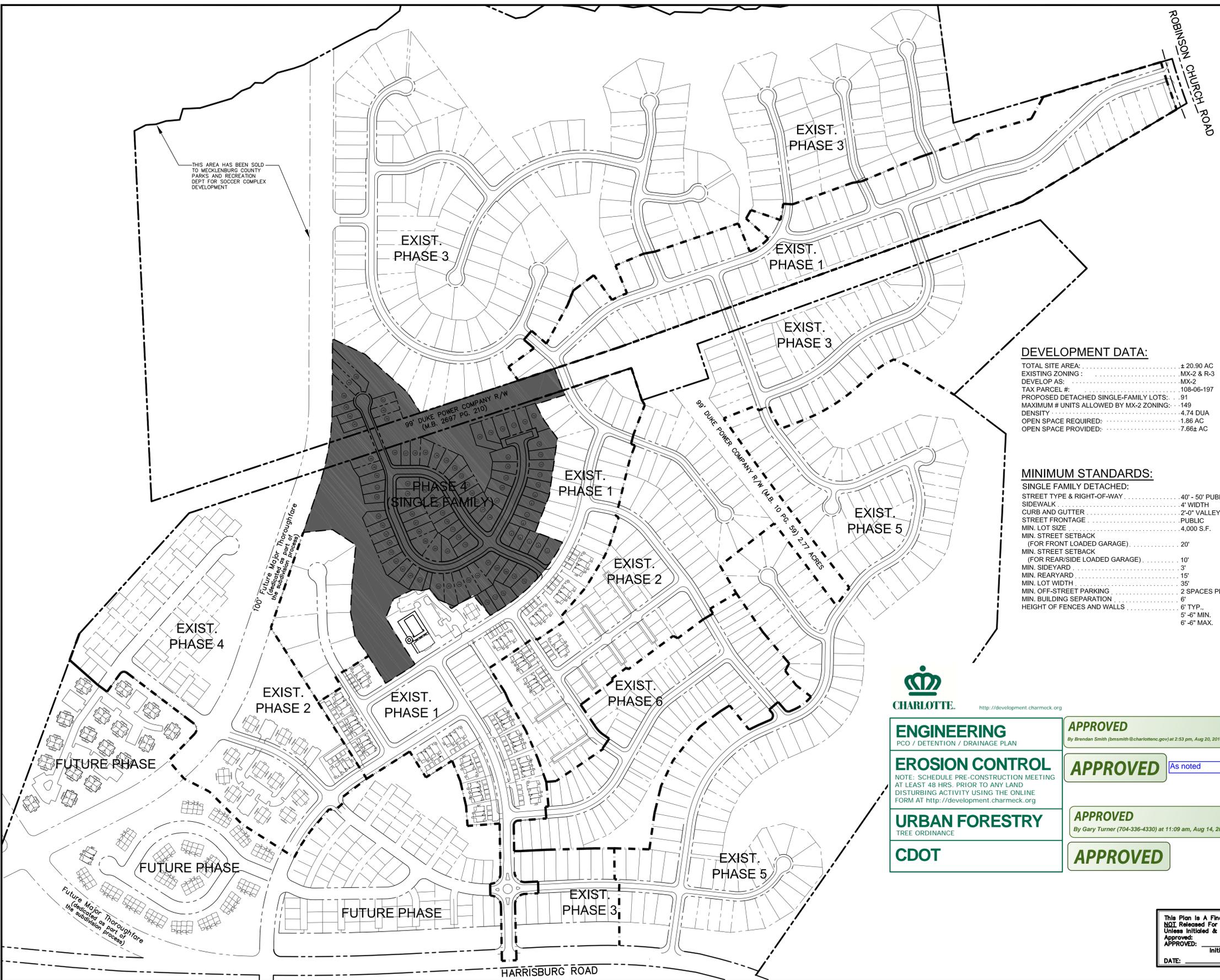
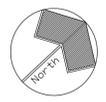
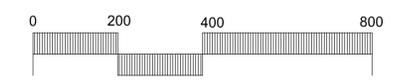
STREET TYPE & RIGHT-OF-WAY	40' - 50' PUBLIC R/W
SIDEWALK	4' WIDTH
CURB AND GUTTER	2'-0" VALLEY GUTTER
STREET FRONTAGE	PUBLIC
MIN. LOT SIZE	4,000 S.F.
MIN. STREET SETBACK (FOR FRONT LOADED GARAGE)	20'
MIN. STREET SETBACK (FOR REAR/SIDE LOADED GARAGE)	10'
MIN. SIDEYARD	3'
MIN. REARYARD	15'
MIN. LOT WIDTH	35'
MIN. OFF-STREET PARKING	2 SPACES PER UNIT
MIN. BUILDING SEPARATION	6'
HEIGHT OF FENCES AND WALLS	6" TYP. 5'-6" MIN. 6'-6" MAX.



ENGINEERING PCO / DETENTION / DRAINAGE PLAN	APPROVED By Brendan Smith (bmsmith@charlottenc.gov) at 2:53 pm, Aug 20, 2014
EROSION CONTROL 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 As noted
URBAN FORESTRY TREE ORDINANCE	APPROVED By Gary Turner (704-336-4330) at 11:09 am, Aug 14, 2014
CDOT	APPROVED

REVISION **APPROVED FOR CONSTRUCTION**
CHARLOTTE-MECKLENBURG PLANNING DEPARTMENT
By: Joshua Weaver 8-21-2014

This Plan is A Final Design.
NOT Released For Construction Unless Initialed & Dated As Approved:
DATE: _____
INITIALS: _____



THIS AREA HAS BEEN SOLD TO MECKLENBURG COUNTY PARKS AND RECREATION DEPT FOR SOCCER COMPLEX DEVELOPMENT

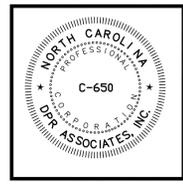
100' Future Major Thoroughfare (dedicated as part of subdivision process)

99' DUKE POWER COMPANY R/W (M.B. 2697 PGS. 210)
99' DUKE POWER COMPANY R/W (M.B. 10 PG. 59) 2.27 ACRES

REVISIONS:

No.	Date	By	Description
1	8-19-08	VB	REVISED PER CITY OF CHARLOTTE COMMENTS
2	11-10-08	RIT	REVISED PER CITY OF CHARLOTTE COMMENTS

Project Manager	HVN
Drawn By	VPB
Checked By	CG/HVN
Date	6/03/08
Project Number	07038.6



DPR DESIGN-PLANNING RESEARCH

DPR ASSOCIATES
Landscape Architects
Planners & Engineers
420 Hawthorne Lane
Charlotte, NC 28204
704/332-1204

COVER SHEET

KINGSTREE - PH 4
SINGLE FAMILY
MECKLENBURG COUNTY, NORTH CAROLINA

THE MULVANEY GROUP, LTD
PO BOX 836
LANCASTER, SC 29721
(309 N MAIN STREET)
LANCASTER, SC 29720
PHONE: 803-286-1134

Scale:	1" = 200'
Sheet Number	L-1
SHEET 1 OF 10 TOTAL	

LEGEND

- EXISTING PROPERTY LINE
- - - PROPOSED LOT LINE
- - - PROPOSED RIGHT OF WAY
- - - PROPOSED SETBACK LINE
- - - PROPOSED STORM DRAIN EASEMENT
- - - PROPOSED SANITARY SEWER EASEMENT
- PROPOSED STREET TREE
- 22 PROPOSED LOT #
- COS PROPOSED COMMON OPEN SPACE
- VEGETATED BUFFER HATCH

NOTES:

ANY WORK WITHIN THE CITY'S R/W THAT REQUIRES CLOSURE OF THE SIDEWALK OR TRAVEL LANE FOR LESS THAN 30 DAYS REQUIRES A R/W USE PERMITS. TRAFFIC CONTROL PLANS FOR ANY SIDEWALK OR TRAVEL LANE CLOSURES MUST BE SUBMITTED AS PART OF THE R/W USE PERMIT REQUEST. TRAFFIC CONTROL PLANS MUST BE IN ACCORDANCE WITH CDOT'S WORK AREA TRAFFIC CONTROL HANDBOOK (WATCH) AND MUST BE REVIEWED AND APPROVED. CONTRACTOR SHALL CONTACT CDOT AT 432-1562. CONSTRUCTION STAGING WITHIN CITY R/W LASTING MORE THAN 30 DAYS REQUIRES A R/W LEASE AGREEMENT. CONTRACTOR SHALL CONTACT CDOT AT (704) 336-2562.

SITE NOTES:

1. TOPOGRAPHIC INFORMATION TAKEN FROM SURVEY PREPARED BY SUMMIT LAND SERVICES, P.C. (704) 506-0554, AND DATED 12/13/07.
2. BOUNDARY INFORMATION PREPARED BY R. B. PHARR & ASSOCIATES, P.A. (704)821-4029, AND DATED 5/20/08.
3. APPROXIMATE CONSTRUCTION START DATE: AUG 1, 2014
4. APPROXIMATE CONSTRUCTION END DATE: SEPT 30, 2014
5. ALL DIMENSIONS ARE TO EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
6. ALL IMPROVEMENTS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH STATE AND LOCAL STANDARDS.
7. ANY DISCREPANCIES FOUND IN THE FIELD SHALL BE CALLED TO THE ATTENTION OF THE OWNER OR ENGINEER PRIOR TO PROCEEDING WITH WORK.
8. PRIOR TO BEGINNING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL VERIFY THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED FROM ALL REGULATORY AUTHORITIES.
9. THE GENERAL CONTRACTOR SHALL CONTACT ALL OWNERS OF EASEMENTS, UTILITIES, AND RIGHT-OF-WAYS, PUBLIC AND PRIVATE, PRIOR TO WORKING IN THESE AREAS.
10. GENERAL CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKMEN AND PUBLIC SHALL BE PROTECTED FROM INJURY.
11. DO NOT SCALE DRAWING FOR ACTUAL DIMENSIONS, AS IT IS A REPRODUCTION AND SUBJECT TO DISTORTION.
12. CONTRACTOR SHALL COORDINATE INSTALLATION OF ALL SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES WITH OTHER CONTRACTORS ON THE SITE.
13. DIRECT VEHICULAR ACCESS TO EXIST. PAPER BIRCH DR. FROM LOTS 1 AND 71 IS PROHIBITED.
14. DEVELOPER WILL PROVIDE STREET SIGNS PER CLDS# 50.05 (9" SIGNS ONLY).
15. SIGHT TRIANGLES SHOWN ARE THE MINIMUM REQUIRED.
16. 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.
17. 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.
18. 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 (704-336-4025) OR VISIT [HTTP://WWW.CHARMECK.ORG/DEPARTMENTS/TRANSPORTATION/STREET-MAINTENANCE/HOME.HTM](http://www.charmeck.org/departments/transportation/street-maintenance/home.htm)

LANDSCAPE NOTES:

1. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF QUANTITIES IN THE PLANT LIST. ANY DISCREPANCIES BETWEEN QUANTITIES ON PLAN AND PLANT LIST SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT AND ANY FIELD ADJUSTMENTS OR QUANTITY ADJUSTMENTS MUST BE AUTHORIZED PRIOR TO PLANTING.
2. ALL TREES, SHRUBS AND PLANTS SHALL CONFORM TO ACCEPTED STANDARDS ESTABLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
3. ALL SAUCERS SHALL BE SOAKED WITH WATER AND MULCHED IMMEDIATELY FOLLOWING PLANTING.
4. ATTENTION LANDSCAPER: NOTIFY URBAN FORESTER OF ANY SIGN, POWER LINE, OR OTHER CONFLICTS BEFORE PLANTING NEW TREES. CALL 704-517-4834.
5. ALL ROOT BALLS REMOVED FROM CONTAINERS SHALL BE SCARIFIED PRIOR TO BACKFILLING.
6. NO SOIL DISTURBANCE OR COMPACTION, CONSTRUCTION MATERIALS, TRAFFIC OR BURIAL PITS ARE ALLOWED IN THE TREE PROTECTION ZONE OF EXISTING TREES.
7. SEE SHEETS L-4 AND L-5, EROSION CONTROL PLANS, FOR ADDITIONAL EXISTING TREE PRESERVATION REQUIREMENTS.
8. TREE PROTECTION BARRICADES MUST MEET OR EXCEED CITY STD. 40.02 OF THE CHARLOTTE-MECKLENBURG LAND DEVELOPMENT STANDARDS MANUAL.
9. LANDSCAPE CONTRACTOR SHALL VERIFY LOCATION OF EXISTING UNDERGROUND UTILITIES PRIOR TO PLANT INSTALLATION AND SHALL BE RESPONSIBLE FOR DAMAGES DUE TO LANDSCAPE OPERATIONS.
10. TOPSOIL MIXTURE SHALL BE PROVIDED BY LANDSCAPE CONTRACTOR AND USED FOR BACKFILLING ALL PITS FOR PLANTS. AVERAGE TOPSOIL MIXTURE SHALL CONSIST OF 3 PARTS TOPSOIL, 1/2 PART PEAT MOSS, 1/2 PART MANURE OR BONE MEAL, AND ONE POUND LIME PER CUBIC FOOT.
11. ALL PLANTS SHALL BE GUARANTEED TO BE IN HEALTHY CONDITION FOR ONE (1) YEAR AFTER ACCEPTANCE BY OWNER OF ALL PLANT MATERIAL.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING TREES THAT WILL MEET BOTH MINIMUM SIZE AND SPACING FOR TREE ORDINANCE COMPLIANCE. FAILURE TO INSTALL PLANT MATERIAL PER THIS PLAN WILL JEOPARDIZE ISSUANCE OF FINAL CERTIFICATE OF OCCUPANCY. CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING INSPECTIONS OF PLANT MATERIAL AS FOLLOWS:
- URBAN FORESTRY STAFF (TREE ORDINANCE) TEL. #704-517-4834.
13. ALL PLANT MATERIAL SHALL BE MULCHED WITH A MINIMUM 3" LAYER OF PINE NEEDLE MULCH (UNLESS OTHERWISE SPECIFIED).
14. ADJUST TREE PLANTING LOCATIONS TO AVOID UNDERGROUND UTILITIES -- PLANT 10' OFF SEWER AND STORM DRAINAGE LINES; 8' OFF GAS, WATER, PHONE, AND UNDERGROUND ELECTRICAL LINES, UNLESS APPROVED OTHERWISE BY CITY OF CHARLOTTE URBAN FORESTER.

TREE LOCATION AND SELECTION NOTES:

1. ACTUAL STREET TREE LOCATIONS MAY VARY SLIGHTLY DEPENDING UPON DRIVEWAY LOCATIONS. CONTRACTOR SHALL VERIFY DESIRED TREE LOCATIONS WITH OWNER PRIOR TO INSTALLATION. STREET TREES SHALL TYPICALLY BE LOCATED WITHIN 10 FEET OF A SIDE LOT LINE.
2. PROPOSED INTERNAL STREET TREE LOCATIONS SHALL BE LOCATED OUTSIDE OF STREET R/W, AND WITHIN 20' OF BACK OF CURB. TYPICAL LOCATION SHALL BE 3 FEET TO 6 FEET BEHIND STREET R/W.
3. INTERNAL STREET TREE SPACING SHALL BE NO LESS THAN 25' O.C., OR NO MORE THAN 60' O.C. SPACING WILL AVERAGE 40' TO 50' O.C. FOR LARGE MATURING SHADE TREES. WHERE SINGLE-FAMILY IS DIRECTLY ACROSS FROM MULTIFAMILY, THE SPACING BETWEEN TREES WILL AVERAGE 40'.
4. EACH BLOCK SHALL HAVE THE SAME STREET SPECIES PLANTED, FROM THE APPROVED SPECIES LISTED IN THE PLANT LIST BELOW.
5. OTHER SPECIES MAY BE USED FROM THE "APPROVED SPECIES LIST" IN THE CHARLOTTE TREE ORDINANCE, SUBJECT TO APPROVAL BY THE LANDSCAPE ARCHITECT.
6. SEE CMLDS #40.01 ON SHEET L-9 FOR TYPICAL TREE PLANTING DETAIL.

TREE PLANTING NOTES:

1. ALL STRAPPING AND TOP 2/3 OF WIRE BASKET MUST BE CUT AWAY AND REMOVED FROM THE ROOT BALL PRIOR TO BACKFILLING PLANTING PIT. REMOVE THE TOP 1/3 OF THE BURLAP FROM ROOT BALL.
2. LARGE MATURING TREES MAY NOT BE PLANTED WHERE OVERHEAD DISTRIBUTION OR TRANSMISSION LINES EXIST. IF TREES CONFLICT WITH POWER LINES OR SIGNS, CALL THE URBAN FORESTER TO RESOLVE BEFORE PLANTING.
3. ADJUST TREE-PLANTING LOCATIONS TO AVOID UNDERGROUND UTILITIES.
4. NEW TREES SHALL BE A MINIMUM 2" CALIPER FOR STREET TREE REQUIREMENTS.
5. SEE TREE PRESERVATION NOTES ON GRADING AND EROSION CONTROL SHEETS

STREET TREE CALCULATIONS:

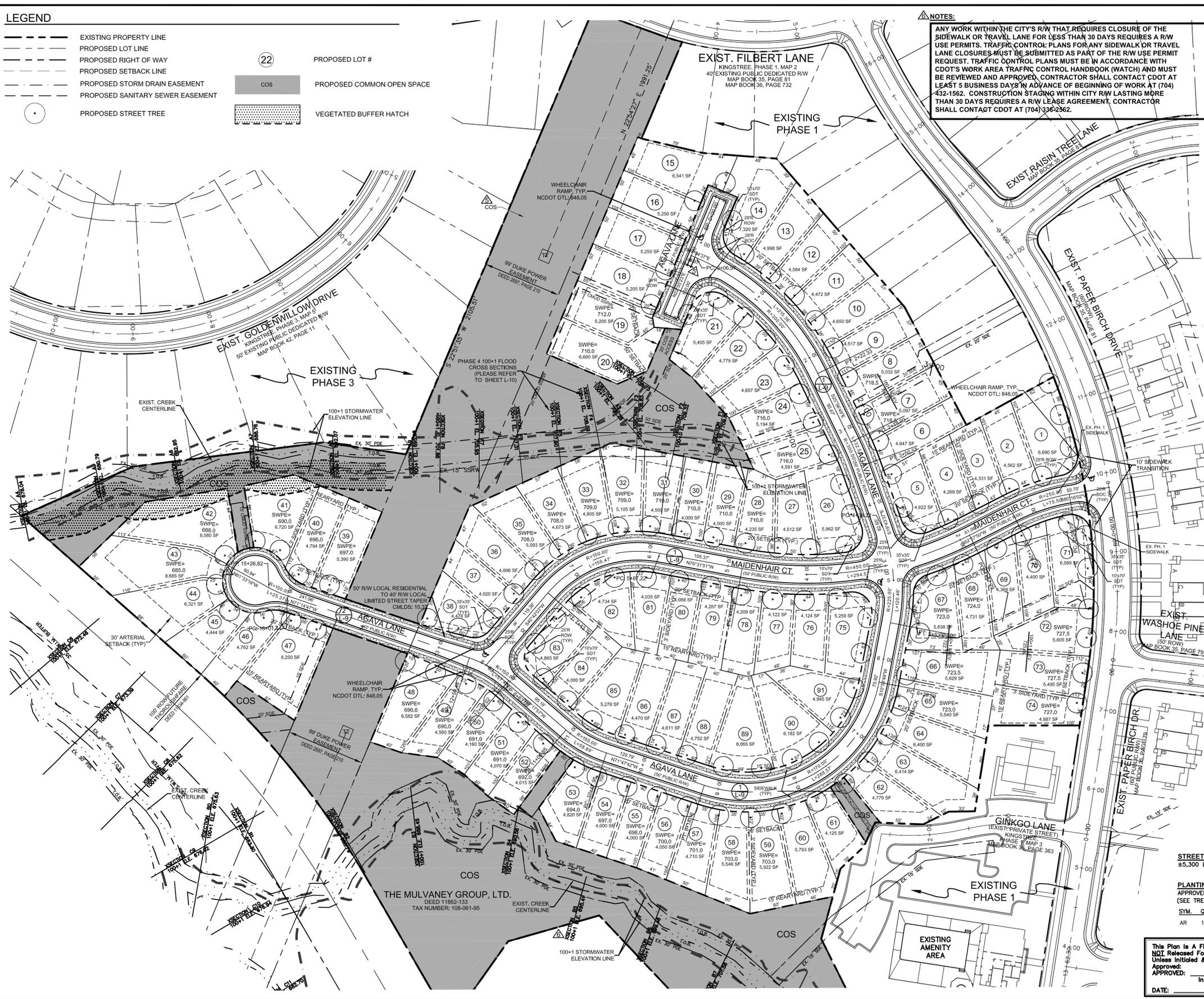
±5,300 LF OF STREET (ADJUSTED FOR INTERSECTIONS) / 46' (AVG. LG. MATURING TREE SPACING) = 115 TOTAL TREES REQUIRED
115 TOTAL TREES PROVIDED

PLANTING LIST:

APPROVED TREES FOR TREE ORDINANCE STREET TREES (SEE TREE LOCATION AND SELECTION NOTES #4 ABOVE)

SYM.	QTY.	BOTANICAL NAME	COMMON NAME	ROOT	CAL.	MIN. HEIGHT	NOTES
AR 115		Acer rubrum 'October Glory' or 'Red Sunset'	October Glory or Red Sunset Red Maple	B&B	2" min.	10'	

This Plan is A Final Design.
NOT Released For Construction
Unless Initialed & Dated As
Approved:
DATE: _____
Initials: _____



REVISIONS:

No.	Date	By	Description
1	8-19-08	VB	REVISED PER CITY OF CHARLOTTE COMMENTS
2	11-10-08	RIT	REVISED PER CITY OF CHARLOTTE COMMENTS
3	12-08-08	MPB	REVISED PER CITY OF CHARLOTTE COMMENTS
4	04-08-14	RC	REVISED LOT SETBACKS
5	06-09-14	RC	OWNER COMMENTS
6	07-22-14	RC	REVISED PER CITY OF CHARLOTTE COMMENTS



DPR ASSOCIATES
Landscape Architects
Planners & Engineers
420 Hawthorne Lane
Charlotte, NC 28204
704/332-1204

SITE PLAN

KINGSTREE - PH 4
SINGLE FAMILY
MECKLENBURG COUNTY, NORTH CAROLINA

Scale: 1" = 60'

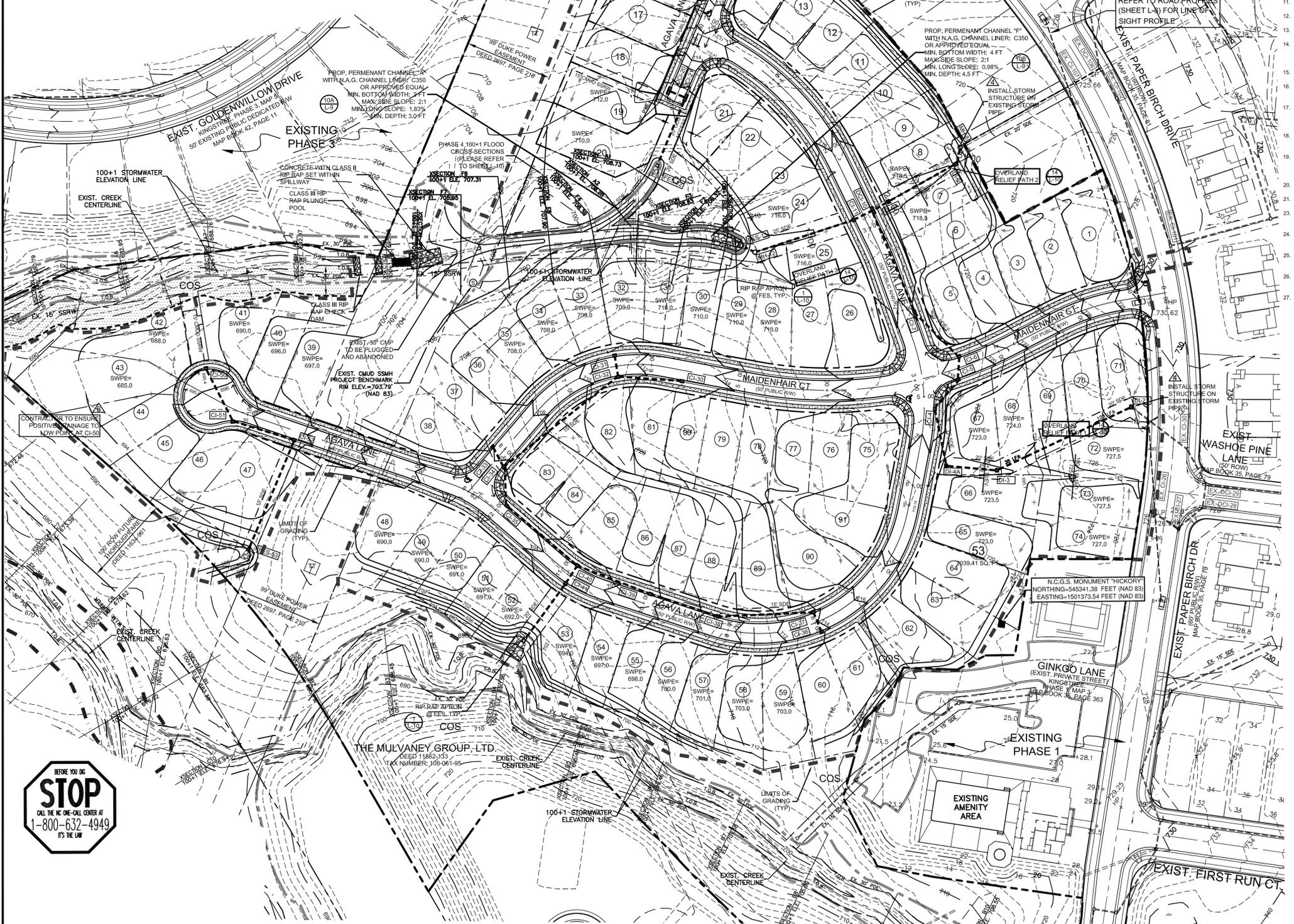
Sheet Number
L-2
SHEET 2 OF 10 TOTAL

THE MULVANEY GROUP, LTD
PO BOX 836
LANCASTER, SC 29721
(309 N MAIN STREET)
LANCASTER, SC 29720
PHONE: 803-286-1134

KINGSTREE - PH 4 / 07038.6
Y:\2007\Projects\07038\2014_KT4_Revision\CAD\CDS\07038-SITE.dwg

LEGEND

	EXISTING PROPERTY LINE		EXISTING STORM DRAINAGE PIPE
	PROPOSED LOT LINE		PROPOSED STORM DRAINAGE PIPE
	PROPOSED RIGHT OF WAY		PROPOSED CURB INLET
	EXISTING CONTOUR		PROPOSED DOUBLE CURB INLET
	PROPOSED CONTOUR		PROPOSED DROP INLET
	PROPOSED STORM DRAIN EASEMENT		PROPOSED FLARED END SECTION
	PROPOSED SANITARY SEWER EASEMENT		LOT DRAINAGE PATTERN
	PROPOSED TREE PROTECTION FENCE		PROPOSED RIP RAP APRON
	PROPOSED LOT NUMBER		STORM WATER PROTECTION MIN. ELEV.
	GRADING LIMIT		100+1 STORM WATER ELEVATION LINE
	EXISTING SSRW		VEGETATIVE BUFFER
	PROPOSED SSRW		



- GRADING & STORM DRAINAGE NOTES:**
- ALL CONTOURS AND SPOT ELEVATIONS REFLECT FINISHED GRADES.
 - ALL ELEVATIONS ARE IN REFERENCE TO THE BENCHMARK, AND THIS MUST BE VERIFIED BY THE GENERAL CONTRACTOR PRIOR TO GROUND BREAKING.
 - THE CONTRACTOR SHALL IMMEDIATELY REPORT TO OWNER ANY DISCREPANCIES FOUND BETWEEN ACTUAL FIELD CONDITIONS AND CONSTRUCTION DOCUMENTS AND SHALL WAIT FOR INSTRUCTION PRIOR TO PROCEEDING.
 - CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES IN THE FIELD BEFORE BEGINNING CONSTRUCTION.
 - CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY TO TRANSITION BACK TO EXISTING GRADE.
 - ALL FILL TO BE COMPACTED TO 95% A.A.S.H.T.O. STANDARD COMPACTION.
 - LIMITS OF CLEARING SHOWN ON GRADING PLAN ARE BASED UPON THE APPROXIMATE CUT AND FILL LIMITS, OR OTHER GRADING REQUIREMENTS.
 - THE PROPOSED CONTOURS SHOWN IN DRIVES AND PARKING LOTS AND SIDEWALKS ARE TO FINISHED ELEVATIONS (TOP OF PAVEMENT). REFER TO PAVEMENT CROSS SECTION DATA TO ESTABLISH CORRECT SUBBASE OR AGGREGATE BASE COURSE ELEVATIONS TO BE COMPLETED UNDER THIS CONTRACT.
 - CONTRACTOR SHALL INSURE POSITIVE DRAINAGE SO THAT RUNOFF WILL DRAIN BY GRAVITY FLOW AWAY FROM BUILDING(S) AND ACROSS NEW PAVEMENT AND/OR LANDSCAPE AREAS TO NEW OR EXISTING STORM DRAIN INLETS, DRAINAGE SWALES, OR OVERLAND SHEET FLOW.
 - ALL "C.D.S.M. STD." NUMBERS REFER TO THE LATEST EDITION OF THE CHARLOTTE LAND DEVELOPMENT STANDARDS MANUAL. ALL "N.C.DOT STD." NUMBERS REFER TO THE LATEST EDITION OF THE N.C. ROADWAY STANDARD DRAWINGS MANUAL.
 - ON-SITE BURIAL PITS REQUIRE AN "ON-SITE DEMOLITION LANDFILL PERMIT" FROM THE ZONING ADMINISTRATOR.
 - ANY GRADING, BEYOND THE LIMITS OF CONSTRUCTION AS SHOWN ON THE GRADING PLAN, IS SUBJECT TO A FINE.
 - GRADING MORE THAN ONE ACRE WITHOUT AN APPROVED EROSION CONTROL PLAN IS SUBJECT TO A FINE.
 - STABILIZATION IS THE BEST FORM OF EROSION CONTROL. TEMPORARY SEEDING IS NECESSARY TO ACHIEVE EROSION CONTROL ON DENUDED AREAS AND ESPECIALLY WHEN THE CONSTRUCTION SEQUENCE REQUIRES IT. ALL GRADDED SLOPES ARE TO BE SEEDDED OR LANDSCAPED WITHIN 21 DAYS OF COMPLETION OF GRADING. ALL REMAINING AREAS ARE TO BE SEEDDED WITHIN 21 DAYS.
 - IN ORDER TO ENSURE PROPER DRAINAGE, KEEP A MINIMUM OF 0.5% SLOPE ON THE CURB.
 - CURBS AND GUTTERS SHOWN ON THE PLANS MAY BE ADJUSTED, BASED UPON FIELD STAKING, BY CITY ENGINEERING. ASSOCIATED STORM DRAINAGE MAY ALSO REQUIRE MODIFICATION BASED UPON FIELD CONDITIONS.
 - COORDINATE ALL CURB AND STREET GRADES IN INTERSECTION WITH INSPECTOR. "AS-BUILT" DRAWINGS AND PLANS OF THE STORM DRAINAGE SYSTEM, INCLUDING DESIGNED DITCHES (WITH ONE OR MORE ACRES OF DRAINAGE AREA), MUST BE SUBMITTED PRIOR TO SUBDIVISION FILING INSPECTION TO THE CITY ENGINEERING DEPARTMENT IN ACCORDANCE WITH THE CITY SUBDIVISION ORDINANCE.
 - SLOPES SHOWN ON THE STORM DRAINAGE SCHEDULE ARE FOR CONTRACTOR'S REFERENCE ONLY. CONTRACTOR TO BUILD STORM DRAINAGE SYSTEM TO THE ELEVATIONS SHOWN ON THE SCHEDULE.
 - 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.
 - SUBSURFACE DRAINAGE FACILITIES MAY BE REQUIRED IN THE STREET RIGHT-OF-WAY IF DEEMED NECESSARY BY THE INSPECTOR.
 - FLOOD STUDY CROSS SECTIONS WERE PART OF PREVIOUSLY APPROVED PHASE 4 SUBDIVISION PLANS.
 - APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED FROM AFFECTED PROPERTY OWNERS.
 - 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.
 - THE DEVELOPER SHALL MAINTAIN EACH STREAM, CREEK, OR BACKWASH CHANNEL IN AN UNOBSTRUCTED STATE AND SHALL REMOVE FROM THE CHANNEL AND BANKS OF THE STREAM ALL DEBRIS, LOGS, TIMBER, JUNK, AND OTHER ACCUMULATIONS.
 - ANY BUILDING WITHIN THE 100+1 STORM WATER ELEVATION LINE IS SUBJECT TO THE RESTRICTIONS OF THE (CITY OF CHARLOTTE/MECKLENBURG COUNTY) SUBDIVISION ORDINANCE, SECTION 7.200.8.
 - PER SEALED SHOP DRAWINGS FOR RETAINING WALL MUST BE SUBMITTED TO CITY ENGINEER PRIOR TO CONSTRUCTION.

STORM SCHEDULE: Elevations Are Measured at Center Lip at Edge of Pavement

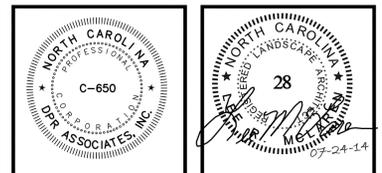
FROM STRUCTURE	NCDOT/ CMLDS #	**RIM	INV IN	INV OUT	PIPE	TO STRUCTURE	Remarks
EX CI-30	---	Ex. 726.60	---	Ex. 717.08	Ex. 77 LFOF 36 in @ 0.860%	DI-2	Ex. 36" RCP to Remain (Phase 1)
DI-2	840.17	728.30	716.40	716.20	163 LFOF 36 in @ 0.92%	DI-3	RCP
DI-3	840.17	721.50	714.70	714.50	54 LFOF 36 in @ 1.67%	DI-4A	OVERLAND
DI-4A	840.17	719.30	713.60	713.50	61 LFOF 36 in @ 1.31%	CI-4	100-YR OVERLAND, RCP
CI-4	840.01	716.90	712.70	712.50	45 LFOF 36 in @ 1.11%	CI-5	RCP, CLASS IV
CI-5	840.01	718.10	712.00	711.80	25 LFOF 36 in @ 1.2%	CI-6	RCP
CI-6	840.01	718.44	711.50	711.30	69 LFOF 36 in @ 1.45%	CI-7	RCP
CI-7	840.01	715.91	710.30	710.10	119 LFOF 36 in @ 1.34%	DCI-10	RCP
EX CI-107	---	Ex. 724.70	---	Ex. 717.17	Ex. 147 LFOF 36 in @ 0.8%	MH-8	Ex. 36" RCP to Remain (Phase 1)
MH-8	840.32	720.50	715.99	713.50	16 LFOF 36 in @ 9.38%	DI-9	RCP, remove ex. FES and construct MH
DI-9	840.04	717.50	712.00	710.80	84 LFOF 36 in @ 2.14%	DI-9A	RCP
DI-9A	840.17	714.50	709.00	708.80	16 LFOF 36 in @ 1.87%	DCI-10	100-YR OVERLAND, RCP
DCI-10	20.03	714.70	708.50	708.30	23 LFOF 48 in @ 1.3%	CI-11	RCP
CI-11	840.01	714.70	708.00	707.80	115 LFOF 48 in @ 1.3%	MH-12	RCP
MH-12	20.23	713.72	706.30	706.10	15 LFOF 54 in @ 0.67%	FES-13	
FES-13	20.23	---	---	706.00			
* Q Overland (cfs) has been multiplied by Cf=1.25 for 100 year storm event.							
DCI-20	20.03	711.24	---	707.40	19 LFOF 15 in @ 1.59%	DCI-21	RCP
DCI-21	20.03	711.24	707.10	706.90	73 LFOF 18 in @ 0.55%	FES-22	RCP
FES-22	20.23	---	---	706.50			
CI-30	840.01	713.07	---	708.80	70 LFOF 15 in @ 2.71%	CI-32	RCP
CI-31	840.01	710.96	---	707.40	23 LFOF 15 in @ 2.17%	CI-32	RCP
CI-32	840.01	710.96	706.90	706.70	161 LFOF 15 in @ 3.17%	CI-34	RCP
CI-33	840.01	706.00	---	702.20	14 LFOF 15 in @ 4.23%	CI-34	RCP
CI-34	840.01	705.84	701.60	701.40	43 LFOF 15 in @ 1.63%	CI-35	RCP
CI-35	840.01	704.84	700.70	700.50	102 LFOF 15 in @ 2.06%	CI-40	RCP
CI-36	840.01	713.71	---	710.10	23 LFOF 15 in @ 2.17%	CI-37	RCP
CI-37	840.01	713.71	709.60	709.40	106 LFOF 15 in @ 4.25%	CI-38	RCP
CI-38	840.01	708.65	704.90	704.70	78 LFOF 15 in @ 4.49%	CI-39	RCP
CI-39	840.01	705.28	701.20	701.00	86 LFOF 15 in @ 3.02%	CI-40	RCP
CI-40	840.01	703.26	698.40	698.20	23 LFOF 24 in @ 1.74%	CI-41	RCP
CI-41	840.01	703.26	697.80	694.80	75 LFOF 30 in @ 0.53%	FES-42	RCP
FES-42	20.23	---	---	694.40			
CI-50	840.01	695.40	---	691.10	65 LFOF 15 in @ 0.8%	CI-51	RCP
CI-51	840.01	697.15	690.58	690.38	69 LFOF 15 in @ 0.81%	CI-52	RCP
CI-52	840.01	699.35	689.82	689.62	130 LFOF 15 in @ 1%	FES-53	RCP
FES-53	20.23	---	---	688.32			

This Plan is a Final Design. NOT Released For Construction Unless Initialed & Dotted As Approved. APPROVED: [Signature] DATE: []

REVISIONS:

No.	Date	By	Description
1	8-19-08	RIT	REVISED PER CITY OF CHARLOTTE COMMENTS
2	11-10-08	RIT	REVISED PER CITY OF CHARLOTTE COMMENTS
3	12-08-08	MPB	REVISED PER CITY OF CHARLOTTE COMMENTS
4	04-08-14	RC	REVISED BASIN #1 AND #2
5	06-09-14	RC	OWNER COMMENTS
6	07-22-14	RC	REVISED PER CITY OF CHARLOTTE COMMENTS

Project Manager: HVN
 Drawn By: VPB
 Checked By: CG/HVN
 Date: 6/03/08
 Project Number: 07038.6



DPR ASSOCIATES
 Landscape Architects
 Planners & Engineers
 420 Hawthorne Lane
 Charlotte, NC 28204
 704/332-1204

GRADING AND STORM DRAINAGE PLAN

KINGSTREE - PH 4
 SINGLE FAMILY
 MECKLENBURG COUNTY, NORTH CAROLINA

THE MULVANEY GROUP, LTD
 PO BOX 836
 LANCASTER, SC 29721
 (309 MAIN STREET)
 LANCASTER, SC 29720
 PHONE: 803-286-1134

Scale: 1" = 60'

Sheet Number: **L-3**

SHEET 3 OF 10 TOTAL