

MALLARD CREEK ROAD C-STORE

MALLARD CREEK ROAD, CHARLOTTE NC



FINAL
APPROVAL

<http://development.charmeck.org>

ENGINEERING
PCO / DETENTION / DRAINAGE PLAN

APPROVED

EROSION CONTROL

APPROVED

NOTE: SCHEDULE PRE-CONSTRUCTION MEETING
AT LEAST 48 HRS. PRIOR TO ANY LAND
DISTURBING ACTIVITY USING THE ONLINE
FORM AT <http://development.charmeck.org>

URBAN FORESTRY
TREE ORDINANCE

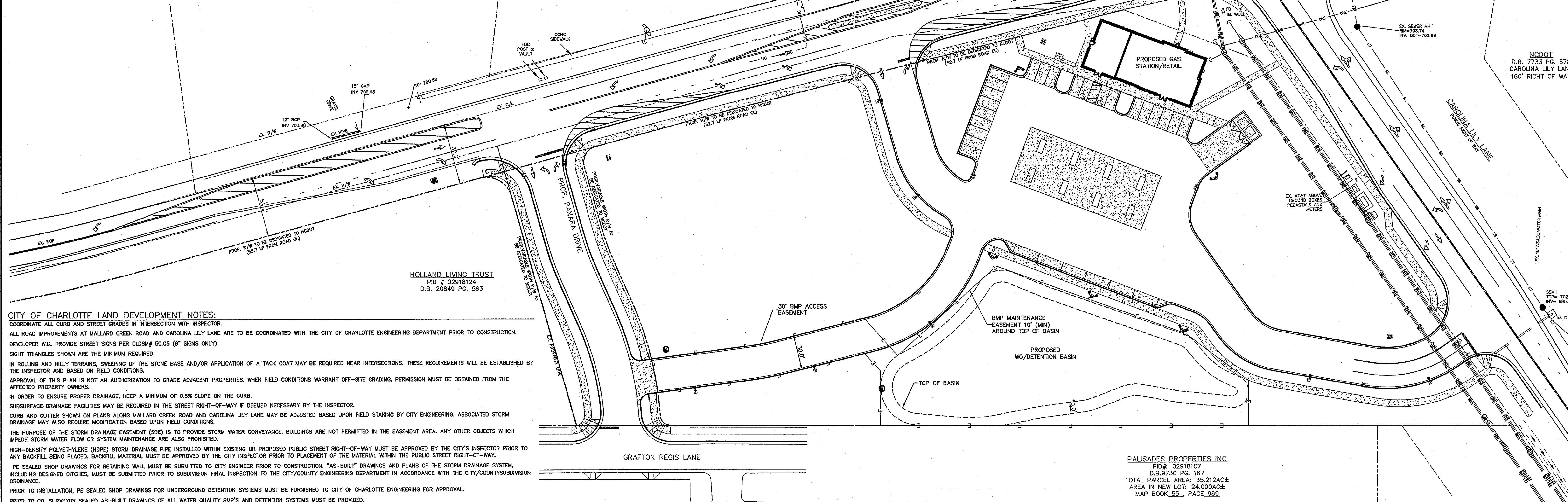
APPROVED

CDOT

APPROVED

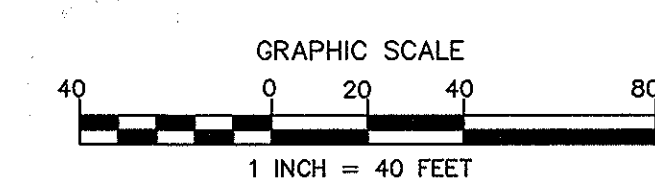
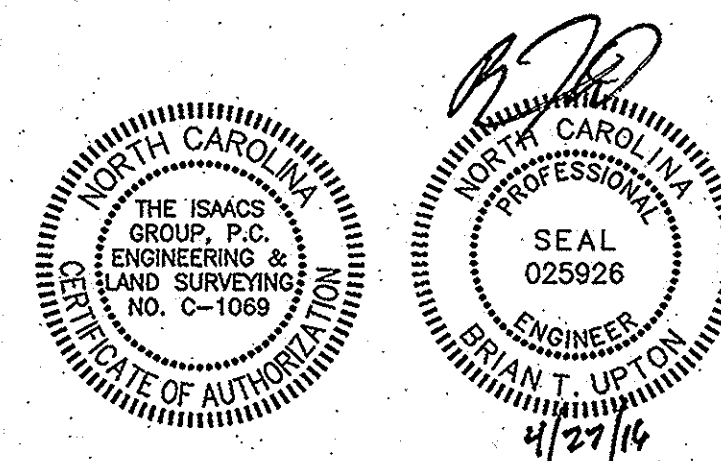
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- CM4.0 - CONCORD MILLS BLVD TRAFFIC CONTROL PLAN (NOT PART OF CITY OF CHARLOTTE APPROVAL)



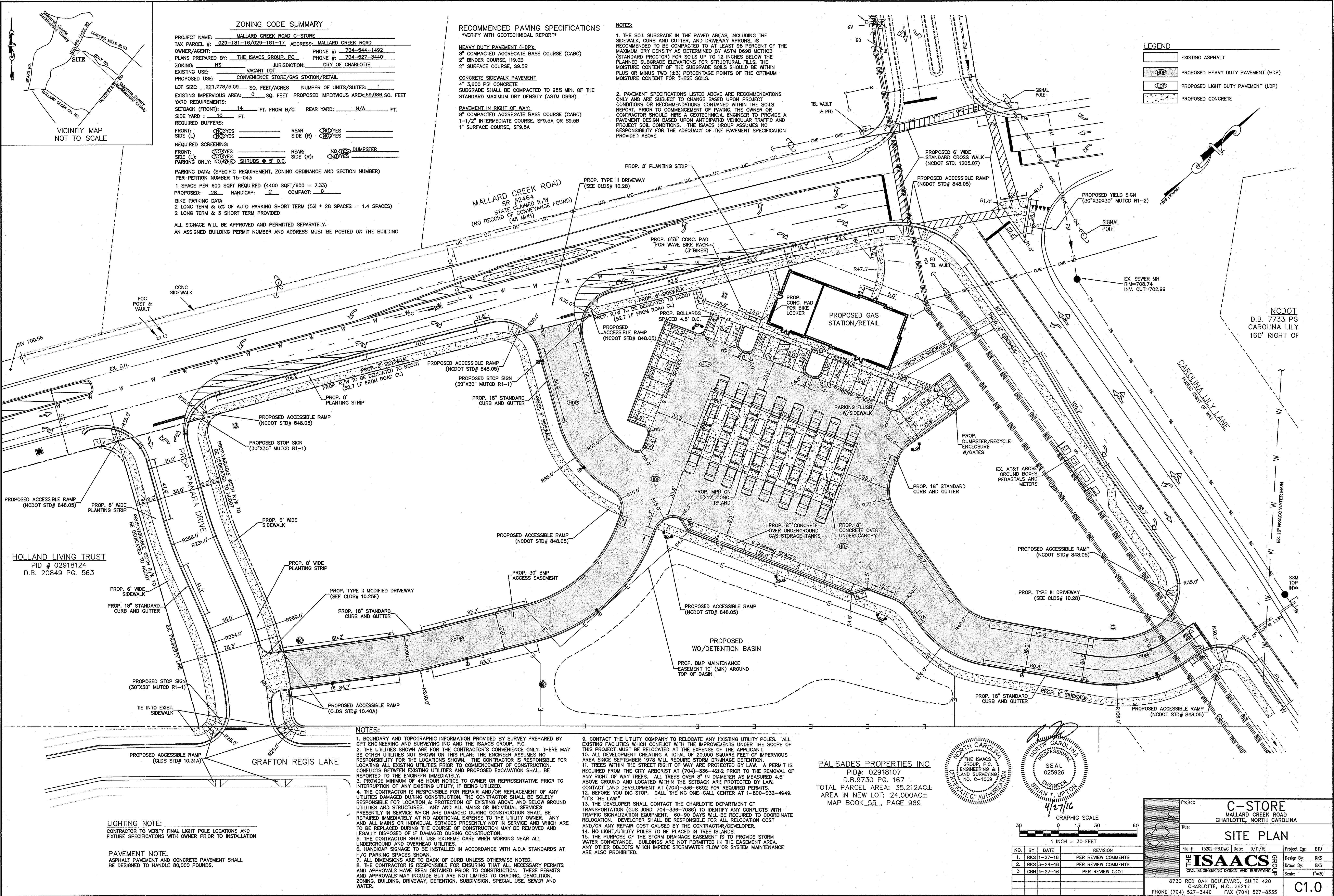
CITY OF CHARLOTTE LAND DEVELOPMENT NOTES:

COORDINATE ALL CURB AND STREET GRADES IN INTERSECTION WITH INSPECTOR.
ALL ROAD IMPROVEMENTS AT MALLARD CREEK ROAD AND CAROLINA LILY LANE 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 MALLARD CREEK ROAD AND CAROLINA LILY LANE 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.
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.
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 SYSTEMS MUST BE PROVIDED.
PRIOR TO PLAT RECORDATION, OFFSITE R/W AND/OR CONSTRUCTION EASEMENTS ARE REQUIRED TO BE OBTAINED ACCORDING TO THE GUIDELINES OF THE "OFFSITE R/W ACQUISITION PROCESS". THESE NEEDED R/W AND CONSTRUCTION LIMITS ARE CLEARLY SHOWN ON THE ROADWAY IMPROVEMENT PLAN.
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 (PCEES) MUST BE RECORDED PRIOR TO THE ISSUANCE OF THE CERTIFICATE OF OCCUPANCY.
THE DEVELOPER SHALL CONTACT THE CHARLOTTE DEPARTMENT OF TRANSPORTATION (GUS JORDI, 704-336-7086) TO IDENTIFY ANY CONFLICTS WITH TRAFFIC SIGNALIZATION EQUIPMENT. 60- 90 DAYS WILL BE REQUIRED TO COORDINATE RELOCATION. DEVELOPER SHALL BE RESPONSIBLE FOR ALL RELATED RELOCATION COST AND/OR ANY REPAIR COST CAUSED BY THE CONTRACTOR/DEVELOPER.
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>.
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 PAGE 12 OF 12 REVISED 04/2015 TRANSPORTATION BEFORE INSTALLATION. FOR CITY OF CHARLOTTE MAINTAINED STREETS, CONTACT CDOT AT (704) 336-3886.
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 PERMIT. 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 LEAST 5 BUSINESS DAYS IN ADVANCE OF BEGINNING OF WORK AT (704) 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.
RIGHT-OF-WAY CLOSURES LONGER THAN 30 DAYS REQUIRE A R/W LEASE AGREEMENT WHICH WILL INCLUDE THE SUBMITTAL OF A TRAFFIC CONTROL PLAN. TRAFFIC CONTROL PLANS REQUIRED THROUGH A LEASE AGREEMENT MAY BE DIFFERENT FROM THE ONE REQUIRED DURING THE LAND DEVELOPMENT PLAN REVIEW AND ARE SUBJECT TO REVISIONS. THE REVISED TRAFFIC CONTROL PLANS MUST BE SUBMITTED AS PART OF THE LEASE AGREEMENT PROCESS FOR APPROVAL PRIOR TO START OF R/W CLOSURES. CONTRACTOR SHALL CONTACT CDOT AT (704) 336-2562.



NO.	BY	DATE	REVISION
1.	RKS	1-27-16	PER REVIEW COMMENTS
2.	RKS	3-24-16	PER REVIEW COMMENTS
3.	RKS	3-30-16	PER REVIEW COMMENTS
4.	RKS	4-27-16	PER REVIEW COMMENTS

Project:	C-STORE MALLARD CREEK ROAD, CHARLOTTE NC		
Title:	COVER SHEET		
File #:	15002-PB.DWG	Date:	9/11/15
Project Egr:	BTU	Design By:	RKS
Drawn By:	RKS	Scale:	1"=40'
ISAACS GROUP CIVIL ENGINEERING DESIGN AND SURVEYING 8720 RED OAK BOULEVARD, SUITE 420 CHARLOTTE, NC 28217 PHONE (704) 527-3440 FAX (704) 527-8335			
C0.0			



ZONING CODE SUMMARY

PROJECT NAME: MALLARD CREEK ROAD C-STORE
TAX PARCEL #: 029-181-16/029-181-17 ADDRESS: MALLARD CREEK ROAD
OWNER/AGENT: THE ISAACS GROUP, P.C. PHONE #: 704-544-1492
PLANS PREPARED BY: THE ISAACS GROUP, P.C. PHONE #: 704-527-3440
ZONING: NS JURISDICTION: CITY OF CHARLOTTE
EXISTING USE: VACANT LOT
PROPOSED USE: CONVENIENCE STORE/GAS STATION/RETAIL
LOT SIZE: 221,778/5.09 SQ. FEET/ACRES NUMBER OF UNITS/SUITS: 1
EXISTING IMPERVIOUS AREA: 0 SQ. FEET PROPOSED IMPERVIOUS AREA: 69,986 SQ. FEET
YARD REQUIREMENTS:
SETBACK (FRONT): 14 FT. FROM B/C REAR YARD: N/A FT.
SIDE YARD: 10 FT.
REQUIRED BUFFERS:
FRONT: NO YES SIDE (L) NO YES REAR: NO YES SIDE (R) NO YES
REQUIRED SCREENING:
FRONT: NO YES SIDE (L) NO YES REAR: NO YES DUMPSTER
SIDE (L) NO YES SIDE (R) NO YES
PARKING ONLY: NO YES SHRUBS @ 5' O.C.
PARKING DATA: (SPECIFIC REQUIREMENT, ZONING ORDINANCE AND SECTION NUMBER)
PER PETITION NUMBER 15-043
1 SPACE PER 600 SQFT REQUIRED (4400 SQFT/600 = 7.33)
PROPOSED: 28 HANDICAP: 2 COMPACT: 0
BIKE PARKING DATA
2 LONG TERM & 5% OF AUTO PARKING SHORT TERM (5% * 28 SPACES = 1.4 SPACES)
2 LONG TERM & 3 SHORT TERM PROVIDED
ALL SIGNAGE WILL BE APPROVED AND PERMITTED SEPARATELY.
AN ASSIGNED BUILDING PERMIT NUMBER AND ADDRESS MUST BE POSTED ON THE BUILDING

RECOMMENDED PAVING SPECIFICATIONS

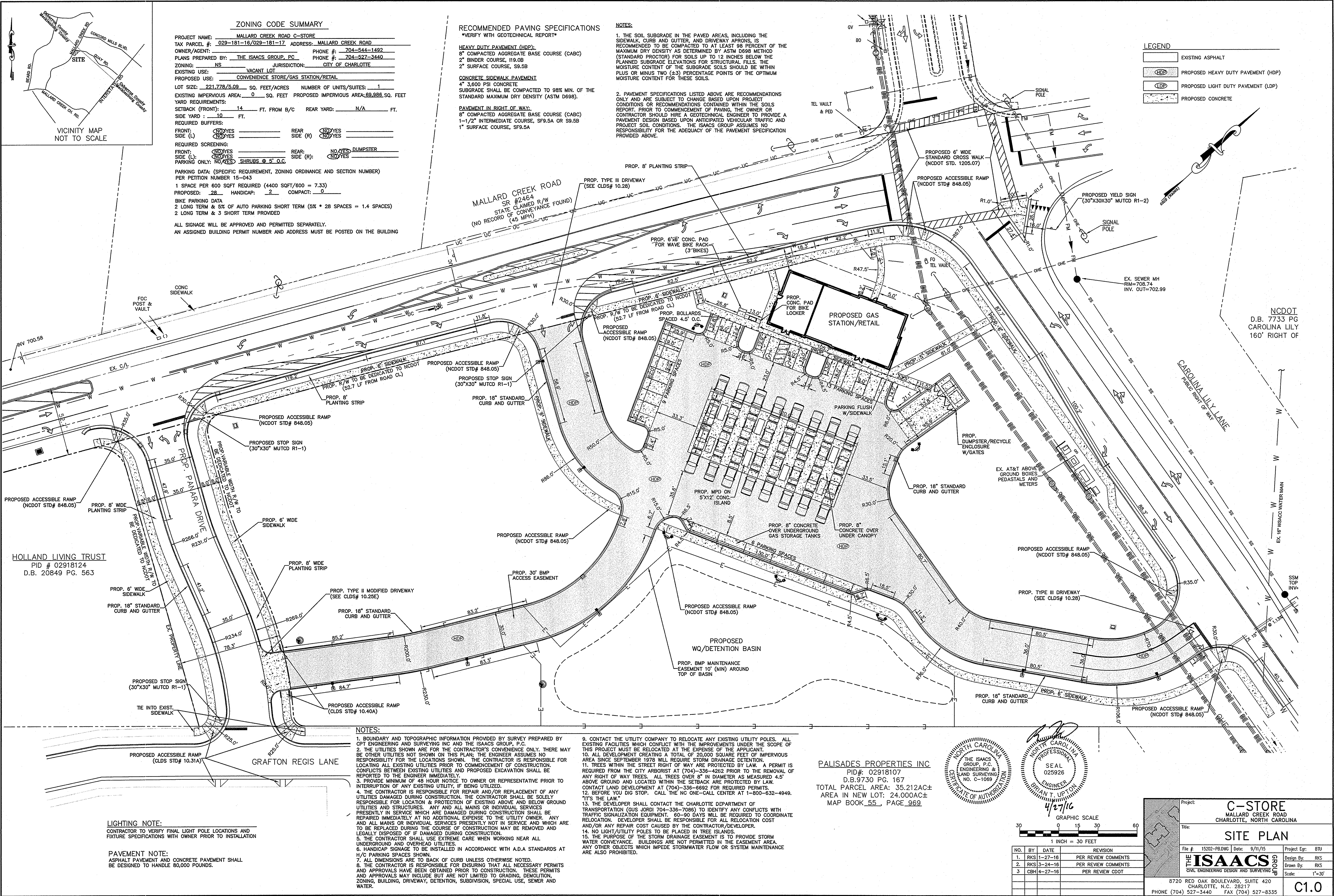
VERIFY WITH GEOTECHNICAL REPORT
HEAVY DUTY PAVEMENT (HDP):
8" COMPACTED AGGREGATE BASE COURSE (CABC)
2" BINDER COURSE, 119.08
2" SURFACE COURSE, 59.58
CONCRETE SIDEWALK PAVEMENT
4" 3,600 PSI CONCRETE
SUBGRADE SHALL BE COMPACTED TO 98% MIN. OF THE
STANDARD MAXIMUM DRY DENSITY (ASTM D698).
PAVEMENT IN RIGHT OF WAY:
8" COMPACTED AGGREGATE BASE COURSE (CABC)
1-1/2" INTERMEDIATE COURSE, SF9.5A OR SF9.5B
1" SURFACE COURSE, SF9.5A

NOTES:

1. THE SOIL SUBGRADE IN THE PAVED AREAS, INCLUDING THE
SIDEWALK, CURB AND GUTTER, AND DRIVEWAY APRONS, IS
RECOMMENDED TO BE COMPACTED TO AT LEAST 98 PERCENT OF THE
MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698 METHOD
(STANDARD PROCTOR) FOR SOILS UP TO 12 INCHES BELOW THE
PLANNED SUBGRADE ELEVATIONS FOR STRUCTURAL FILLS. THE
MOISTURE CONTENT OF THE SUBGRADE SOILS SHOULD BE WITHIN
PLUS OR MINUS TWO (±2) PERCENTAGE POINTS OF THE OPTIMUM
MOISTURE CONTENT FOR THESE SOILS.
2. PAVEMENT SPECIFICATIONS LISTED ABOVE ARE RECOMMENDATIONS
ONLY AND ARE SUBJECT TO CHANGE BASED UPON PROJECT
CONDITIONS OR RECOMMENDATIONS CONTAINED WITHIN THE SOILS
REPORT. PRIOR TO COMMENCEMENT OF PAVING, THE OWNER OR
CONTRACTOR SHOULD HIRE A GEOTECHNICAL ENGINEER TO PROVIDE A
PAVEMENT DESIGN BASED UPON ANTICIPATED VEHICULAR TRAFFIC AND
PROJECT SOIL CONDITIONS. THE ISAACS GROUP ASSUMES NO
RESPONSIBILITY FOR THE ADEQUACY OF THE PAVEMENT SPECIFICATION
PROVIDED ABOVE.

LEGEND

- EXISTING ASPHALT
- PROPOSED HEAVY DUTY PAVEMENT (HDP)
- PROPOSED LIGHT DUTY PAVEMENT (LDP)
- PROPOSED CONCRETE

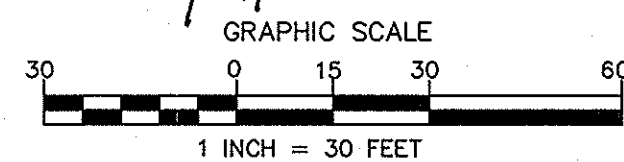
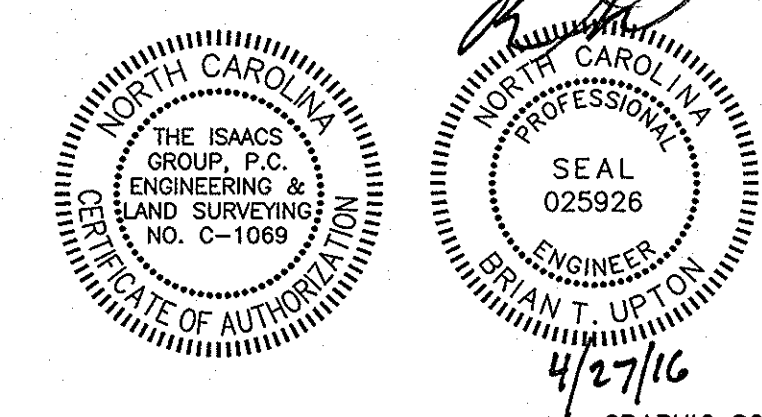


NOTES:

1. BOUNDARY AND TOPOGRAPHIC INFORMATION PROVIDED BY SURVEY PREPARED BY
CPT ENGINEERING AND SURVEYING INC AND THE ISAACS GROUP, P.C.
2. THE UTILITIES SHOWN ARE FOR THE CONTRACTOR'S CONVENIENCE ONLY. THERE MAY
BE OTHER UTILITIES NOT SHOWN ON THIS PLAN; THE ENGINEER ASSUMES NO
RESPONSIBILITY FOR THE LOCATIONS SHOWN. THE CONTRACTOR IS RESPONSIBLE FOR
LOCATING ALL EXISTING UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION.
CONFLICTS BETWEEN EXISTING UTILITIES AND PROPOSED EXCAVATION SHALL BE
REPORTED TO THE ENGINEER IMMEDIATELY.
3. PROVIDE MINIMUM OF 48 HOUR NOTICE TO OWNER OR REPRESENTATIVE PRIOR TO
INTERUPTION OF ANY EXISTING UTILITY, IF BEING UTILIZED.
4. THE CONTRACTOR IS RESPONSIBLE FOR REPAIR AND/OR REPLACEMENT OF ANY
UTILITIES DAMAGED DURING CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY
RESPONSIBLE FOR LOCATION & PROTECTION OF EXISTING ABOVE AND BELOW GROUND
UTILITIES AND STRUCTURES. ANY AND ALL MAINS OR INDIVIDUAL SERVICES
PRESENTLY IN SERVICE WHICH ARE DAMAGED DURING CONSTRUCTION SHALL BE
REPAIRED IMMEDIATELY AT NO ADDITIONAL EXPENSE TO THE UTILITY OWNER. ANY
AND ALL MAINS OR INDIVIDUAL SERVICES PRESENTLY NOT IN SERVICE AND WHICH ARE
TO BE REPLACED DURING THE COURSE OF CONSTRUCTION MAY BE REMOVED AND
LEGALLY DISPOSED OF IF DAMAGED DURING CONSTRUCTION.
5. THE CONTRACTOR SHALL USE EXTREME CARE WHEN WORKING NEAR ALL
UNDERGROUND AND OVERHEAD UTILITIES.
6. HANDICAP SIGNAGE TO BE INSTALLED IN ACCORDANCE WITH A.D.A STANDARDS AT
H/C PARKING SPACES SHOWN.
7. ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.
8. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL NECESSARY PERMITS
AND APPROVALS HAVE BEEN OBTAINED PRIOR TO CONSTRUCTION. THESE PERMITS
AND APPROVALS MAY INCLUDE BUT ARE NOT LIMITED TO GRADING, DEMOLITION,
ZONING, BUILDING, DRIVEWAY, DETENTION, SUBDIVISION, SPECIAL USE, SEWER AND
WATER.

9. CONTACT THE UTILITY COMPANY TO RELOCATE ANY EXISTING UTILITY POLES. ALL
EXISTING FACILITIES WHICH CONFLICT WITH THE IMPROVEMENTS UNDER THE SCOPE OF
THIS PROJECT MUST BE RELOCATED AT THE EXPENSE OF THE APPLICANT.
10. ALL DEVELOPMENT CREATING A TOTAL OF 20,000 SQUARE FEET OF IMPERVIOUS
AREA SINCE SEPTEMBER 1978 WILL REQUIRE STORM DRAINAGE DETENTION.
11. TREES WITHIN THE STREET RIGHT OF WAY ARE PROTECTED BY LAW. A PERMIT IS
REQUIRED FROM THE CITY ARBORIST AT (704)-336-4262 PRIOR TO THE REMOVAL OF
ANY RIGHT OF WAY TREES. ALL TREES OVER 8" IN DIAMETER AS MEASURED 4.5'
ABOVE GROUND AND LOCATED WITHIN THE SETBACK ARE PROTECTED BY LAW.
CONTACT LAND DEVELOPMENT AT (704)-336-6692 FOR REQUIRED PERMITS.
12. BEFORE YOU DIG STOP. CALL THE NC ONE-CALL CENTER AT 1-800-632-4949.
11'S THE LAW.
13. THE DEVELOPER SHALL CONTACT THE CHARLOTTE DEPARTMENT OF
TRANSPORTATION (GUS JORDI 704-336-7086) TO IDENTIFY ANY CONFLICTS WITH
TRAFFIC SIGNALIZATION EQUIPMENT. 60-90 DAYS WILL BE REQUIRED TO COORDINATE
RELOCATION. DEVELOPER SHALL BE RESPONSIBLE FOR ALL RELOCATION COST
AND/OR ANY REPAIR COST CAUSED BY THE CONTRACTOR/DEVELOPER.
14. NO LIGHT/UTILITY POLES TO BE PLACED IN TREE ISLANDS.
15. THE PURPOSE OF THE STORM DRAINAGE EASEMENT IS TO PROVIDE STORM
WATER CONVEYANCE. BUILDINGS ARE NOT PERMITTED IN THE EASEMENT AREA.
ANY OTHER OBJECTS WHICH IMPEDE STORMWATER FLOW OR SYSTEM MAINTENANCE
ARE ALSO PROHIBITED.

PALISADES PROPERTIES INC
PID#: 02918107
D.B. 9730 PG. 167
TOTAL PARCEL AREA: 35.212AC±
AREA IN NEW LOT: 24.000AC±
MAP BOOK 55, PAGE 969



NO.	BY	DATE	REVISION
1.	RKS	1-27-16	PER REVIEW COMMENTS
2.	RKS	3-24-16	PER REVIEW COMMENTS
3.	CBH	4-27-16	PER REVIEW CDOT

LIGHTING NOTE:
CONTRACTOR TO VERIFY FINAL LIGHT POLE LOCATIONS AND
FIXTURE SPECIFICATIONS WITH OWNER PRIOR TO INSTALLATION

PAVEMENT NOTE:
ASPHALT PAVEMENT AND CONCRETE PAVEMENT SHALL
BE DESIGNED TO HANDLE 80,000 POUNDS.

Project: C-STORE
MALLARD CREEK ROAD
CHARLOTTE, NORTH CAROLINA
Title: SITE PLAN
File #: 15202-RB.DWG | Date: 9/11/15 | Project Egr: BTU
The ISAACS GROUP
CIVIL ENGINEERING DESIGN AND SURVEYING
8720 RED OAK BOULEVARD, SUITE 420
CHARLOTTE, N.C. 28217
PHONE (704) 527-3440 FAX (704) 527-8335
Scale: 1"=30'
C1.0