

WESTMINSTER PARK

CHARLOTTE, NORTH CAROLINA

PREPARED FOR:

BARRINGER & SMITH
PROPERTIES, LLC
1133 METROPOLITAN AVENUE
SUITE 619
CHARLOTTE, NORTH CAROLINA
28204

PREPARED BY:

 **Wirth & Associates**
LANDSCAPE ARCHITECTS AND LAND PLANNERS
1230 W. Morehead St. Suite 212
Charlotte, NC 28208
Phone: 704-375-1588 Fax: 704-375-3844
Email: gwirth@wirthassociates.com

DRAWINGS ISSUED:

05.15.2014

DRAWINGS REVISED:

06.03.2014 PER SUBDIVISION REVIEW

DRAWING LIST

SHEET NO.	SHEET TITLE
SITE AND CIVIL PLANS	
EC1.0	EXISTING CONDITIONS PLAN
L1.0	DEMOLITION PLAN - 30 SCALE
L2.0	SITE PLAN - 30 SCALE
L2.1	PUBLIC STREET PLAN AND PROFILE
L2.2	SIGHT DISTANCE PLAN & PROFILE
L2.3	TRAFFIC CONTROL PLAN - 30 SCALE
L3.0	INITIAL EROSION CONTROL PLAN - 30 SCALE
L3.1	FINAL EROSION CONTROL PLAN - 30 SCALE
L4.0	GRADING PLAN - 30 SCALE
L5.0	PLANTING PLAN - 30 SCALE
L5.1	TREE SAVE PLAN - 50 SCALE
L5.2	PCO/NATURAL AREA PLAN
L6.0	SITE DETAILS
L6.1	SITE DETAILS
L6.2	SITE DETAILS
L6.3	SITE DETAILS



CHARLOTTE

<http://development.charmeck.org>

ENGINEERING

PCO / DETENTION / DRAINAGE PLAN

APPROVED

By Emily Chien at 12:50 pm, Jul 31, 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

URBAN FORESTRY

TREE ORDINANCE

APPROVED

Tim Porter

CDOT

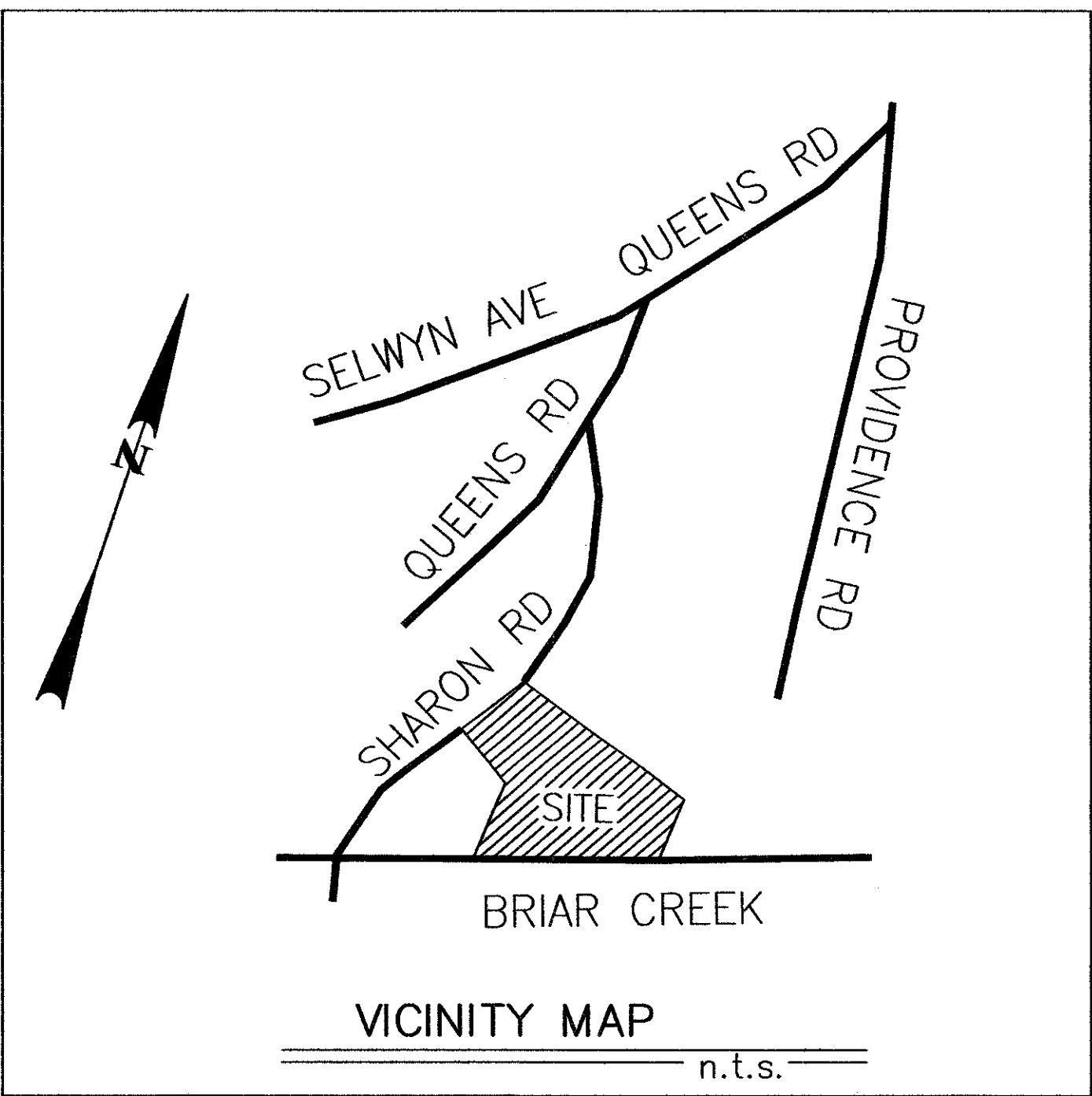
NOTE: THIS PLAN APPROVAL DOES NOT INCLUDE COMMERCIAL ZONING. ALL BUILDING PERMITS AND ZONING APPROVALS CAN BE OBTAINED AT MECKLENBURG COUNTY CODE ENFORCEMENT. PLEASE CALL CTAC AT 704-336-3829 FOR MORE INFORMATION.

APPROVED

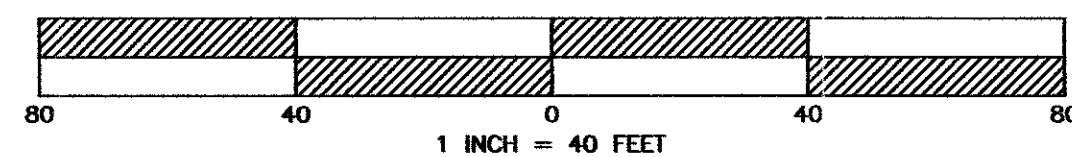
Candice Leonard

**APPROVED FOR
CONSTRUCTION**

CHARLOTTE-MECKLENBURG PLANNING DEPARTMENT
By: Joshua Weaver 7-31-2014



TOPOGRAPHICAL SURVEY PREPARED FOR
FRANK MARTIN
THE CITY OF CHARLOTTE, MECKLENBURG COUNTY, N.C.
REFERENCE: DB 18434-340, 22941-737 & 4607-205
REFERENCE: MB 230-263 & 332-344
PID: 153-105-14, 15, 16 & 94
DATE OF SURVEY: JANUARY 28, 2014

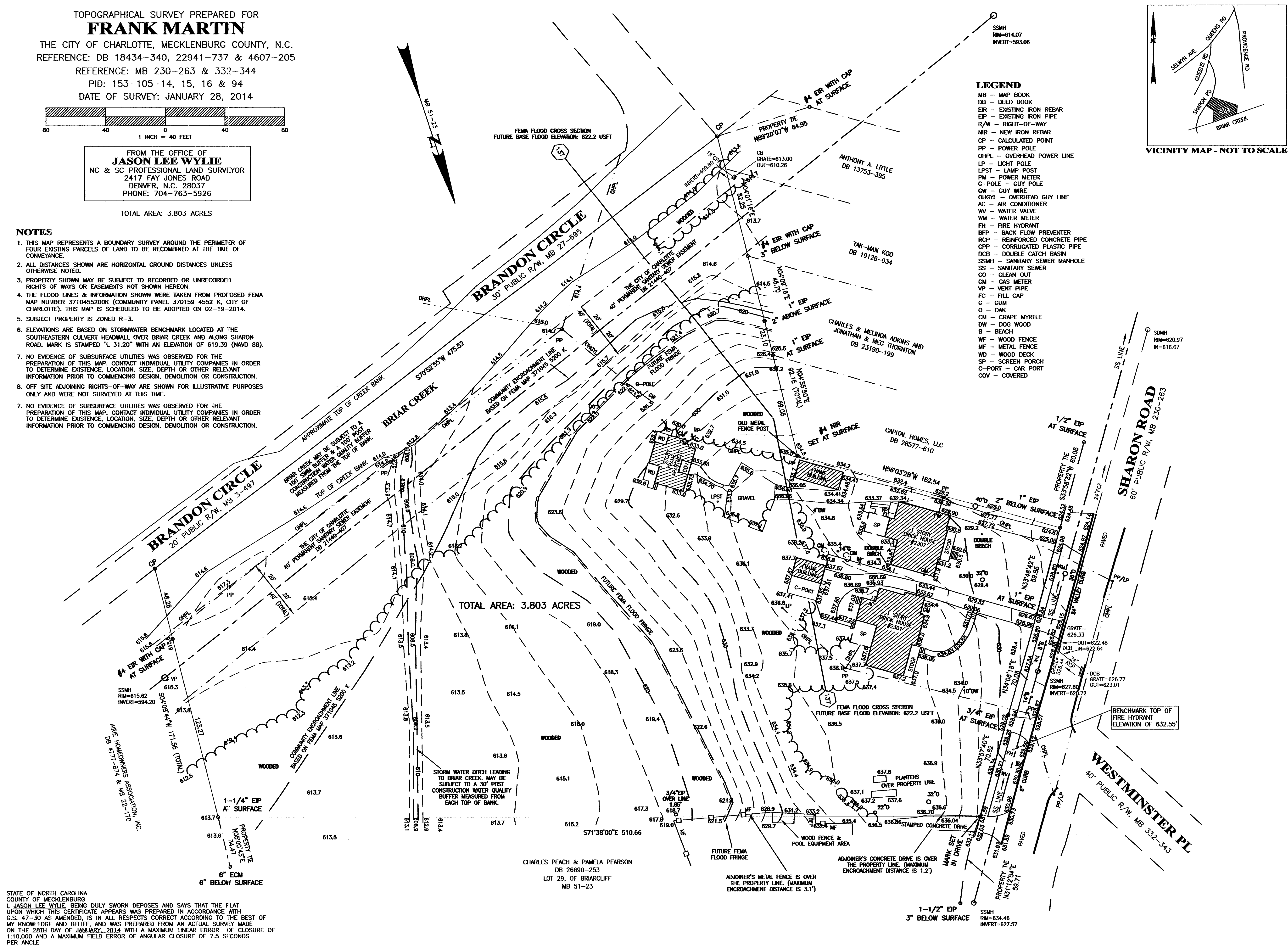


FROM THE OFFICE OF
JASON LEE WYLIE
NC & SC PROFESSIONAL LAND SURVEYOR
2417 FAY JONES ROAD
DENVER, N.C. 28037
PHONE: 704-763-5926

TOTAL AREA: 3.803 ACRES

NOTES

1. THIS MAP REPRESENTS A BOUNDARY SURVEY AROUND THE PERIMETER OF FOUR EXISTING PARCELS OF LAND TO BE RECOMBINED AT THE TIME OF CONVEYANCE.
2. ALL DISTANCES SHOWN ARE HORIZONTAL GROUND DISTANCES UNLESS OTHERWISE NOTED.
3. PROPERTY SHOWN MAY BE SUBJECT TO RECORDED OR UNRECORDED RIGHTS OF WAYS OR EASEMENTS NOT SHOWN HEREON.
4. THE FLOOD LINES & INFORMATION SHOWN WERE TAKEN FROM PROPOSED FEMA MAP NUMBER 3710455200K (COMMUNITY PANEL 370159 4552 K, CITY OF CHARLOTTE). THIS MAP IS SCHEDULED TO BE ADOPTED ON 02-19-2014.
5. SUBJECT PROPERTY IS ZONED R-3.
6. ELEVATIONS ARE BASED ON STORMWATER BENCHMARK LOCATED AT THE SOUTHEASTERN CULVERT HEADWALL OVER BRIAR CREEK AND ALONG SHARON ROAD. MARK IS STAMPED "L 31.20" WITH AN ELEVATION OF 619.39 (NAVD 88).
7. NO EVIDENCE OF SUBSURFACE UTILITIES WAS OBSERVED FOR THE PREPARATION OF THIS MAP. CONTACT INDIVIDUAL UTILITY COMPANIES IN ORDER TO DETERMINE EXISTENCE, LOCATION, SIZE, DEPTH OR OTHER RELEVANT INFORMATION PRIOR TO COMMENCING DESIGN, DEMOLITION OR CONSTRUCTION.
8. OFF SITE ADJOINING RIGHTS-OF-WAY ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY AND WERE NOT SURVEYED AT THIS TIME.
9. NO EVIDENCE OF SUBSURFACE UTILITIES WAS OBSERVED FOR THE PREPARATION OF THIS MAP. CONTACT INDIVIDUAL UTILITY COMPANIES IN ORDER TO DETERMINE EXISTENCE, LOCATION, SIZE, DEPTH OR OTHER RELEVANT INFORMATION PRIOR TO COMMENCING DESIGN, DEMOLITION OR CONSTRUCTION.



STATE OF NORTH CAROLINA
COUNTY OF MECKLENBURG
I, JASON LEE WYLIE, BEING DULY SWORN DEPOSES AND SAYS THAT THE PLAT
UPON WHICH THIS CERTIFICATE APPEARS WAS PREPARED IN ACCORDANCE WITH
G.S. 47-30 AS AMENDED, IS IN ALL RESPECTS CORRECT ACCORDING TO THE BEST OF
MY KNOWLEDGE AND BELIEF, AND WAS PREPARED FROM AN ACTUAL SURVEY MADE
ON THE 28TH DAY OF JANUARY, 2014 WITH A MAXIMUM LINEAR ERROR OF CLOSURE OF
1:10,000 AND A MAXIMUM FIELD ERROR OF ANGULAR CLOSURE OF 7.5 SECONDS
PER ANGLE

SIGNED
N.C. PROFESSIONAL LAND SURVEYOR, L-4366

THIS ELECTRONIC FILE IS CONSIDERED PRELIMINARY.
SEE DISCLAIMER PRIOR TO USE OF THIS ELECTRONIC FILE.

PREPARED FOR:

BARRINGER & SMITH
PROPERTIES, LLC
1133 METROPOLITAN AVE.
SUITE 619
CHARLOTTE, NC 28204

PROJECT:

WESTMINSTER
PARK
2301 SHARON ROAD, 28207

PREPARED BY:

Wirth & Associates
LANDSCAPE ARCHITECTS AND LAND PLANNERS
1230 W. Morehead St., Suite 212
Charlotte, NC 28208
Phone: 704-375-1588 Fax: 704-375-3844
Email: gwirth@wirthassociates.com

DRAWN BY:

CHECKED BY:

SCALE: AS SHOWN

DATE: 05.15.2014

REVISIONS:

NO: DATE: DESCRIPTION: BY:

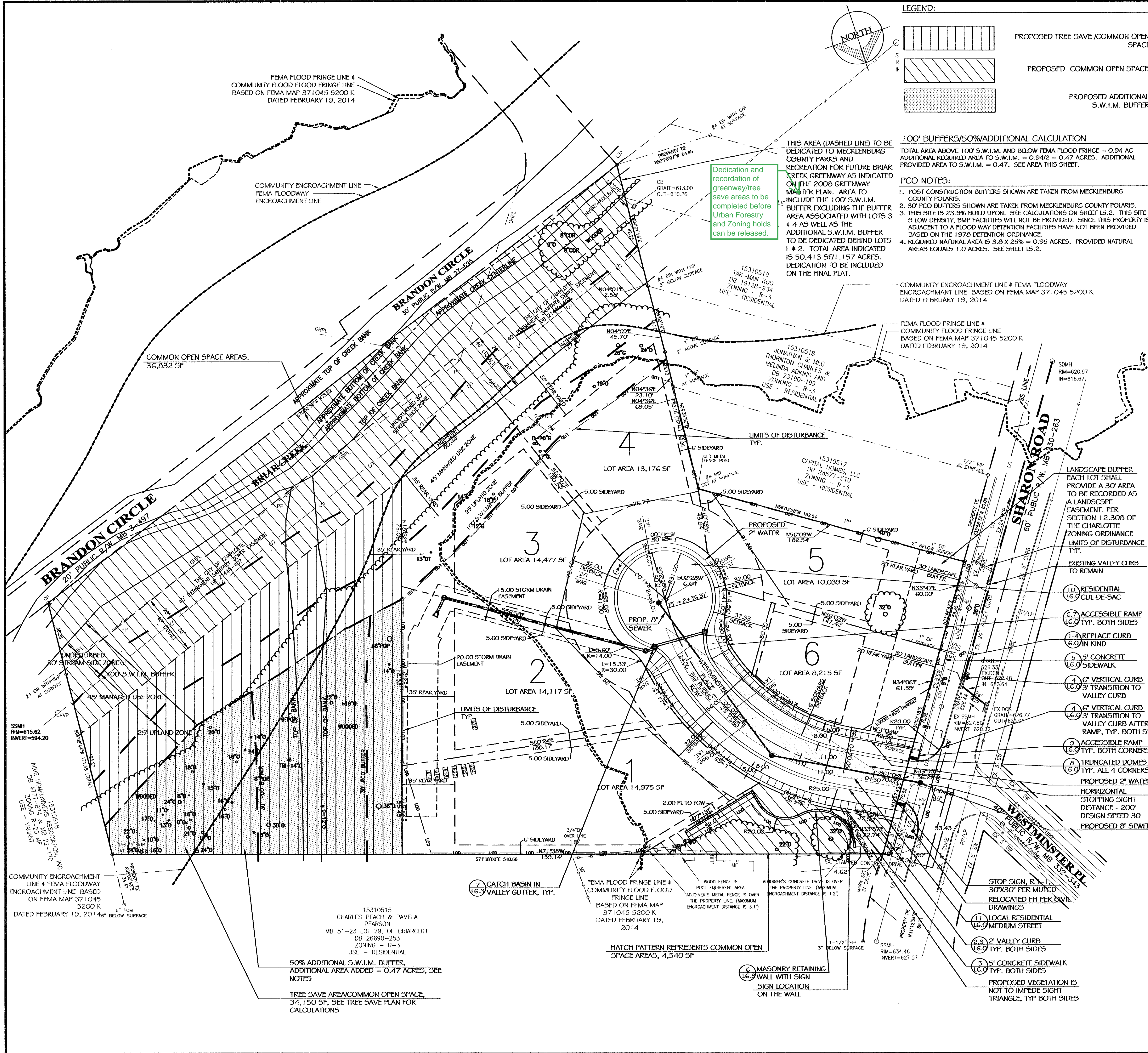
SHEET TITLE:

EXISTING
CONDITIONS PLAN

SHEET NO.:

EC1.0

PROJECT NO.: _____



LEGEND:

- PROPOSED TREE SAVE /COMMON OPEN SPACE
- PROPOSED COMMON OPEN SPACE
- PROPOSED ADDITIONAL 5.W.I.M. BUFFER

100' BUFFERS/50%ADDITIONAL CALCULATION

TOTAL AREA ABOVE 100' S.W.I.M. AND BELOW FEMA FLOOD FRINGE = 0.94 AC
ADDITIONAL REQUIRED AREA TO 5.W.I.M. = 0.94/2 = 0.47 ACRES. ADDITIONAL PROVIDED AREA TO 5.W.I.M. = 0.47. SEE AREA THIS SHEET.

PCO NOTES:

- POST CONSTRUCTION BUFFERS SHOWN ARE TAKEN FROM MECKLENBURG COUNTY POLARIS.
- 30' PCO BUFFERS SHOWN ARE TAKEN FROM MECKLENBURG COUNTY POLARIS.
- THIS SITE IS 23.9% BUILD UPON. SEE CALCULATIONS ON SHEET L5.2. THIS SITE IS 5 LOW DENSITY. BMP FACILITIES WILL NOT BE PROVIDED. SINCE THIS PROPERTY IS ADJACENT TO A FLOOD WAY DETENTION FACILITIES HAVE NOT BEEN PROVIDED BASED ON THE 1978 DETENTION ORDINANCE.
- REQUIRED NATURAL AREA IS 3.8 X 25% = 0.95 ACRES. PROVIDED NATURAL AREAS EQUALS 1.0 ACRES. SEE SHEET L5.2.

ZONING CODE SUMMARY:

PROJECT NAME: WESTMINSTER PARK
DEVELOPER: BARRINGER & SMITH PROPERTIES, LLC
ADDRESS: 1133 METROPOLITAN AVE., SUITE 610, CHARLOTTE NC 28204
PLANS PREPARED BY: WIRTH & ASSOCIATES PHONE: 704-375-1588

ZONING: R-3 (DEVELOPER WILL REQUEST A LOT SIZE REDUCTION INCENTIVE TO R-4 CLUSTER AS STATED IN THE TREE ORDINANCE, MIN 25% TREE SAVE PROVIDED)

JURISDICTION: CITY OF CHARLOTTE
PROPOSED USE: SINGLE FAMILY RESIDENTIAL
RIVER BASIN: CATAWBA RIVER
WATERSHED DISTRICT: BRIAR CREEK
TOTAL LOT SIZE: 3.80 ACRES
DEDICATED AREA: 1.64 ACRES
TOTAL INTERFERED AREA: 39,070 SF/0.90 ACRES (10,270 SF NEW ROAR AND SIDEWALK, 28,800 SF TOTAL ON LOTS (4900 SF MAX FOR LOTS 1 - 4 AND 4600 SF FOR LOTS 5 & 6))
DENSITY: 0.63 LOTS PER ACRE
COMMON OPEN SPACE: 1.74 ACRES (46% OF SITE). SEE AREAS THIS SHEET
REQUIRED TREE SAVE: 3.8 (0.44 SEWER EASEMENT, 0.096 BRIAR CREEK X .25=0.82 AC, TOTAL SITE MINUS BRIAR CREEK AND SEWER EASEMENT X .25)
PROVIDED TREE SAVE: 0.89 AC, SEE SHEET L5.1 FOR TREE SAVE PLAN
YARD REQUIREMENTS: BASED ON R-3
SETBACK: 32 FT. FROM BOC, SIDEYARD SETBACK 1 FT. FROM BOC
SIDE YARD SETBACK: 1 FT. FROM BOC
SIDE YARD: 5 FT. INTERIOR 6' AGAINST EXISTING R-3 ZONING
REAR YARD: 35 FT. - 20' AT 30' LANDSCAPE BUFFER
MIN. LOT AREA: 6,000 SF
MIN. LOT WIDTH: 50 FT.

GENERAL NOTES:

- THE CONTRACTOR SHALL FIELD VERIFY AND LOCATE ALL PROPERTY/ROW LINES AND PHYSICAL ELEMENTS PRIOR TO CONSTRUCTION TO ASSURE THAT ALL WORK IS CONDUCTED ON THE WESTMINSTER PARK PROPERTY AND IN ACCORDANCE WITH THESE CONSTRUCTION DOCUMENTS.
- THE OWNER SHALL BE GIVEN A MINIMUM 24 HOUR NOTICE PRIOR TO BEGINNING CONSTRUCTION. ALL WORK WITHIN STREET RIGHTS-OF-WAY SHALL BE COORDINATED WITH CDOT.
- ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF CHARLOTTE LAND DEVELOPMENT STANDARDS, SPECIFICATIONS AND SPECIAL PROVISIONS AND CDOT REQUIREMENTS WHEN WORKING IN THE ROW.
- ALL DIMENSIONS ARE TO THE BACK OF CURB AND EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES, BOTH OVERHEAD, AND UNDERGROUND PRIOR TO ANY DEMOLITION OR EARTH MOVING ACTIVITIES. UTILITIES SHOWN ON THESE PLANS MAY OR MAY NOT BE CORRECTLY LOCATED.
- BEFORE YOU DIG STOP. CALL THE NC ONE-CALL CENTER AT 1-800-632-4949. IT'S THE LAW.
- COORDINATE ALL CURB AND STREET GRADES IN INTERSECTION WITH INSPECTOR.
- ALL ROAD IMPROVEMENTS AT SHARON ROAD ARE TO BE COORDINATED WITH THE CITY OF CHARLOTTE ENGINEERING DEPARTMENT PRIOR TO CONSTRUCTION.
- SIGHT TRIANGLES SHOWN ARE THE MINIMUM REQUIRED.
- CURB AND GUTTER SHOWN ON PLANS ALONG WESTMINSTER PLACE MAY BE ADJUSTED BASED UPON FIELD STAKING BY CITY ENGINEERING.
- NON-STANDARD ITEMS (I.E., PAVES, IRRIGATION SYSTEM, ETC...) IN THE RIGHT-OF-WAY MUST BE REQUESTED BY THE INSPECTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RIGHT-OF-WAY AGREEMENT WITH THE (CHARLOTTE DEPARTMENT OF TRANSPORTATION/NORTH CAROLINA DEPARTMENT OF TRANSPORTATION) BEFORE INSTALLATION.
- DEVELOPER WILL INSTALL STREET SIGNS PER (CDSM #50.07, 50.08).
- DEVELOPER WILL INSTALL STOP SIGN (30" X 30") PER MUTCD STANDARDS.
- SUBSURFACE DRAINAGE FACILITIES MAY BE REQUIRED THE STREET RIGHT-OF-WAY WAY OF DEMAND NECESSARY BY THE INSPECTOR.
- PE SEALED SHOP DRAWINGS FOR RETAINING WALLS MUST BE SUBMITTED TO CITY ENGINEERING PRIOR TO CONSTRUCTION.
- AS-BUILT DRAWINGS AND PLANS FOR 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.
- PER SECTION 18-175(a) OF THE CITY CODE AND SECTION 10.0 OF THE CITY POST CONSTRUCTION CONTROLS ADMINISTRATIVE MANUAL, ALL REQUIRED NATURAL AREAS AND/OR POST CONSTRUCTION CONTROLS EASEMENTS (PCEs) MUST BE RECORDED PRIOR TO ISSUANCE OF THE CERTIFICATE OF OCCUPANCY.
- EXISTING TREES IN THE ROW OR SETBACKS ON SHARON ROAD SHALL BE PROTECTED WITH TREE PROTECTION FENCING AS SHOWN ON THE EROSION CONTROL PLAN.
- ALL NEW UTILITIES WILL BE UNDERGROUND.
- THE CONSTRUCTION TIMETABLE FOR THIS PROJECT WILL BE A START DATE OF APPROXIMATELY JULY 2014.
- SOLID WASTE WILL BE COLLECTED BY THE CITY.
- IN ORDER TO ENSURE PROPER DRAINAGE, KEEP A MINIMUM OF 0.5% SLOPE ON THE CURB.
- 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 BACK FILL BEING PLACED.
- BACK FILL MATERIAL MUST BE APPROVED BY THE CITY'S 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, JUNK AND OTHER ACCUMULATIONS.
- ALL OPENINGS (E.G. DOORS, WINDOWS, VENTS) IN STRUCTURES BUILT ON LOTS SHOULD BE LOCATED AT A MINIMUM OF 10 FEET FROM THE ADJACENT FINISHED GROUND SURFACE (APPLIED TO LOTS WHICH MAY EXPERIENCE SIGNIFICANT OVERLAND FLOW NOT CONSIDERED IN THE 100+1 FLOOD ANALYSIS).
- THE DEVELOPER SHALL CONTACT THE CHARLOTTE DEPARTMENT OF TRANSPORTATION (GUS JORDI, 704-336-7066) TO IDENTIFY ANY CONFLICTS WITH TRAFFIC SIGNALIZATION. ON EQUIPMENT, 60-90 DAYS WILL BE REQUIRED TO COORDINATE RELOCATION. DEVELOPER SHALL BE RESPONSIBLE FOR ALL RELATED RELOCATION COSTS 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 THE CHARLOTTE DEPARTMENT OF TRANSPORTATION (704-336-4025) OR VISIT <http://www.charmeck.org/departments/transportation/street-maintenance/home.htm>.

- FLOODPLANE DEVELOPMENT NOTES:**
- 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.
 - ANY CONSTRUCTION OR USE WITHIN THE FUTURE CONDITIONS FLOOD FRINGE LINE IS SUBJECT TO THE RESTRICTIONS IMPOSED BY THE FLOOD WAY REGULATIONS OF THE CITY OF CHARLOTTE AND MECKLENBURG COUNTY.
 - THE FUTURE CONDITIONS FLOOD FRINGE ELEVATION IS 622.2. THE FLOOD PROTECTION ELEVATION FOR LOTS 1, 2, 3 AND 4 SHALL BE 623.2.
 - THE COMMUNITY ENCROACHMENT LINE SHALL BE CLEARLY MARKED ON THE SITE PRIOR TO ANY GRADING AND THE MARKED LINE MUST BE MAINTAINED ON THE SITE UNTIL FINAL GRADING IS COMPLETE.
 - CERTIFICATION OF FILL PLACEMENT IS REQUIRED AFTER CONSTRUCTION.
 - ELEVATION CERTIFICATION WILL BE REQUIRED PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY.
- S.W.I.M. BUFFER NOTES:**
- THE STREAM SIDE ZONE OF THE BUFFER MUST BE LEFT COMPLETELY UNDISTURBED. IN THE MANAGED USE ZONE, A LIMITED NUMBER OF TREES CAN BE REMOVED PROVIDED THAT THE TREE DENSITY REMAINING IS A MINIMUM OF 8 HEALTHY TREES OF A MINIMUM 6-INCH CALIPER PER 1,000 SQUARE FEET. REMOVAL OF EXISTING VEGETATION MUST BE PERFORMED IN SUCH A MANNER AS TO PREVENT DAMAGE TO THE ROOTS OF REMAINING TREES.
 - PLANS CLEARLY INDICATE THAT NO FILL MATERIAL IS TO BE BROUGHT INTO THE BUFFER AND THAT NO STRUCTURES ARE ALLOWED WITHIN ANY OF THE BUFFER AREAS (EXCEPT NON-COMMERCIAL OUT BUILDINGS NOT EXCEEDING 150 SQUARE FEET).
 - GRADING AND OTHER LAND DISTURBING ACTIVITIES ARE ALLOWED ONLY IN THE UPLAND ZONE; HOWEVER, THESE ACTIVITIES MUST BE PERFORMED IN SUCH A MANNER AS TO PREVENT DAMAGE TO ROOTS OF REMAINING TREES. GRASS OR OTHER SUITABLE GROUND COVER CAN BE APPLIED TO THE UPLAND ZONE.
 - THE OUTSIDE OF THE BUFFER MUST BE CLEARLY MARKED WITH ORANGE FABRIC FENCING PRIOR TO ANY LAND DISTURBING ACTIVITIES (GRADING, TREE CUTTING OR STUMP REMOVAL, ECT.) AT THE SITE AND THIS FENCING MUST BE CALLED OUT ON THE PLANS.

PREPARED FOR:

BARRINGER & SMITH PROPERTIES, LLC
1133 METROPOLITAN AVE.
SUITE 619
CHARLOTTE, NC 28204

PROJECT:

WESTMINSTER PARK

PREPARED BY:

Wirth & Associates
LANDSCAPE ARCHITECTS AND LAND PLANNERS
1230 W. Wendover St. Suite 212
Charlotte, NC 28208
Phone: 704-375-1588 Fax: 704-375-3844
Email: guth@wirthassociates.com

VICINITY MAP

1 INCH = 30 ft.

DRAWN BY: ECM

CHECKED BY: ECM

SCALE: 1"=30'

DATE: 05.15.2014

REVISIONS:

NO.	DATE	DESCRIPTION	BY:
1.	07.03.2014	PER SUBDIVISION COMMENTS	ECM

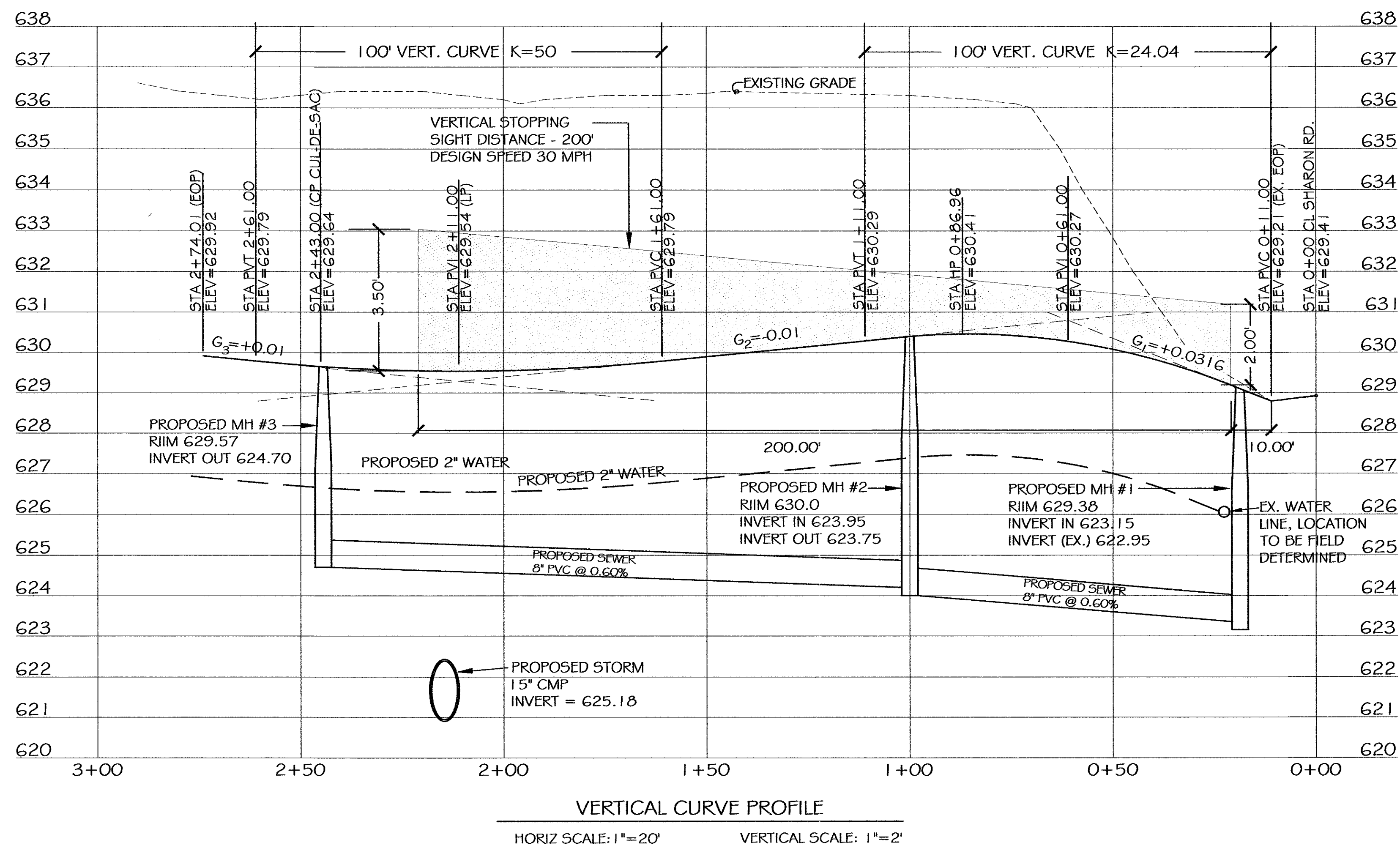
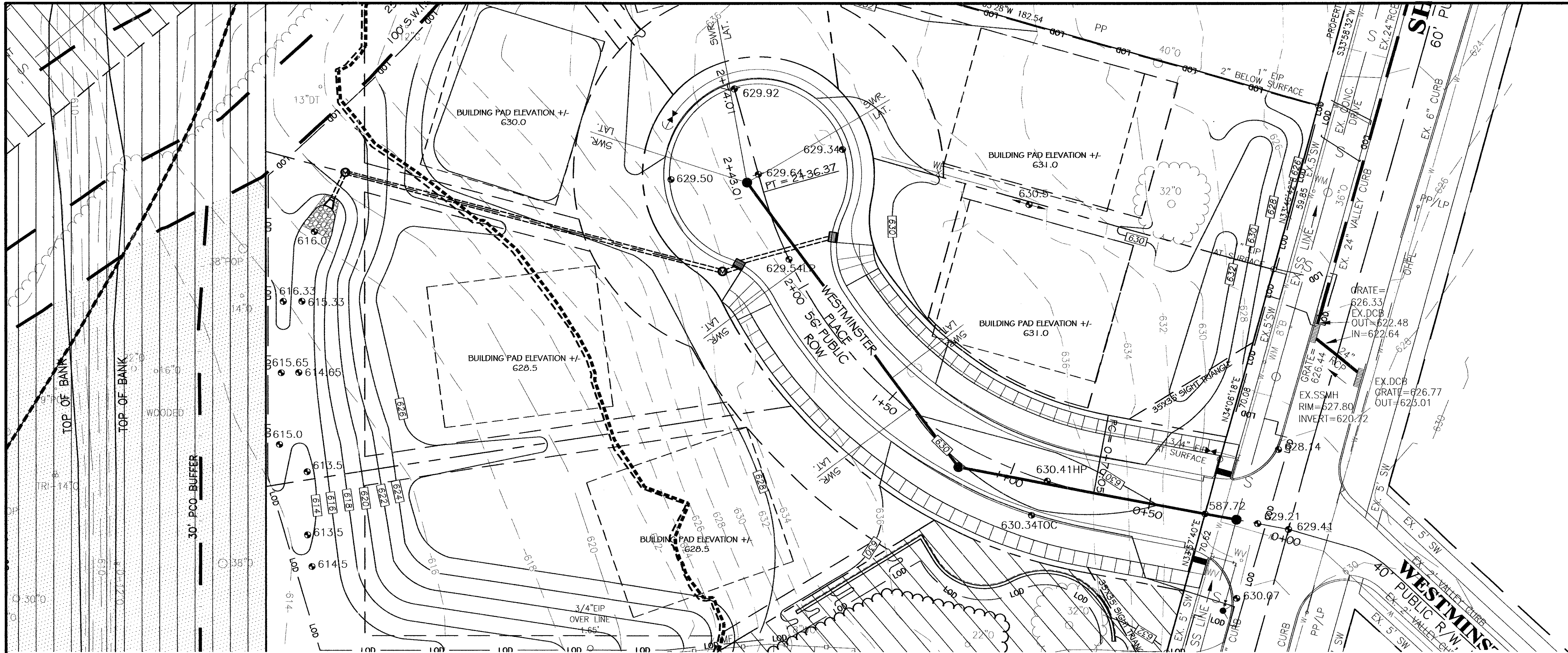
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SITE PLAN

SHEET NO.:

L2.0

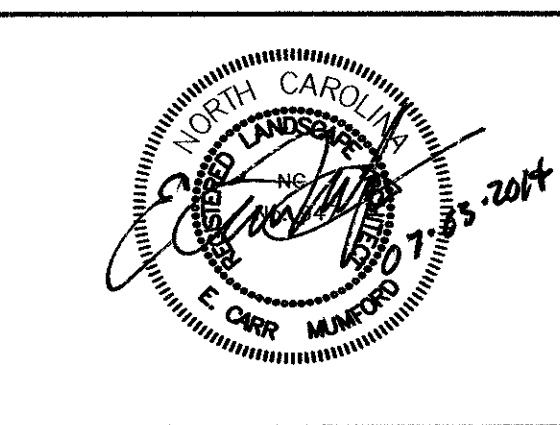
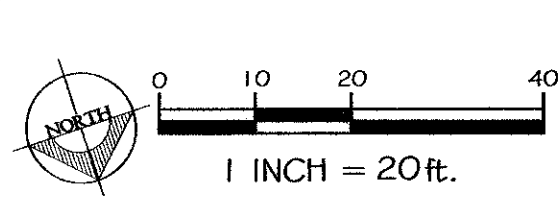
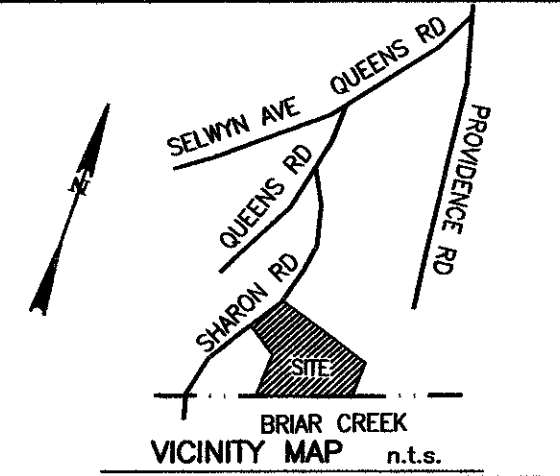
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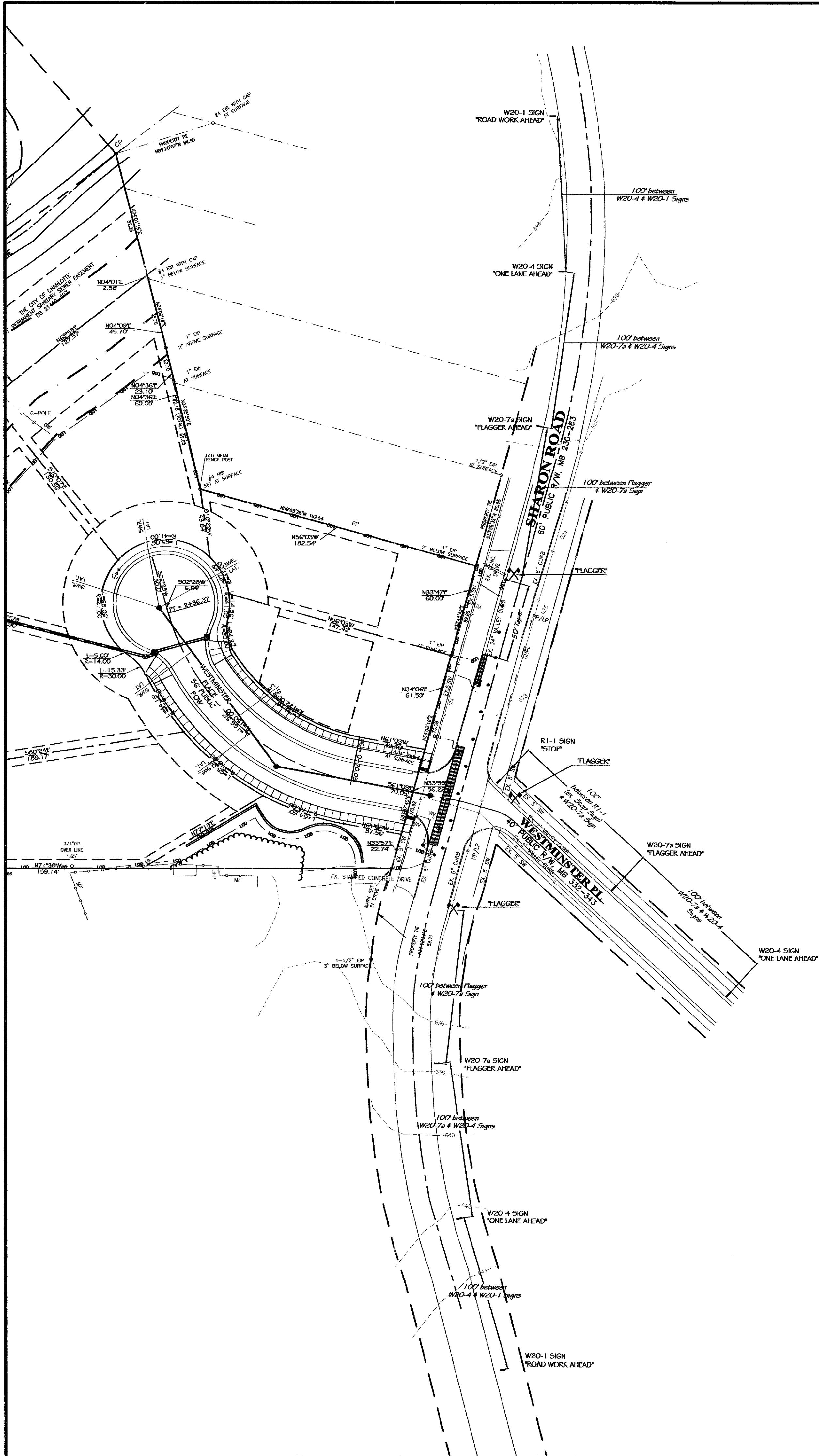


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CHECKED BY: ECM
SCALE: 1"=20'
DATE: 04.15.2014

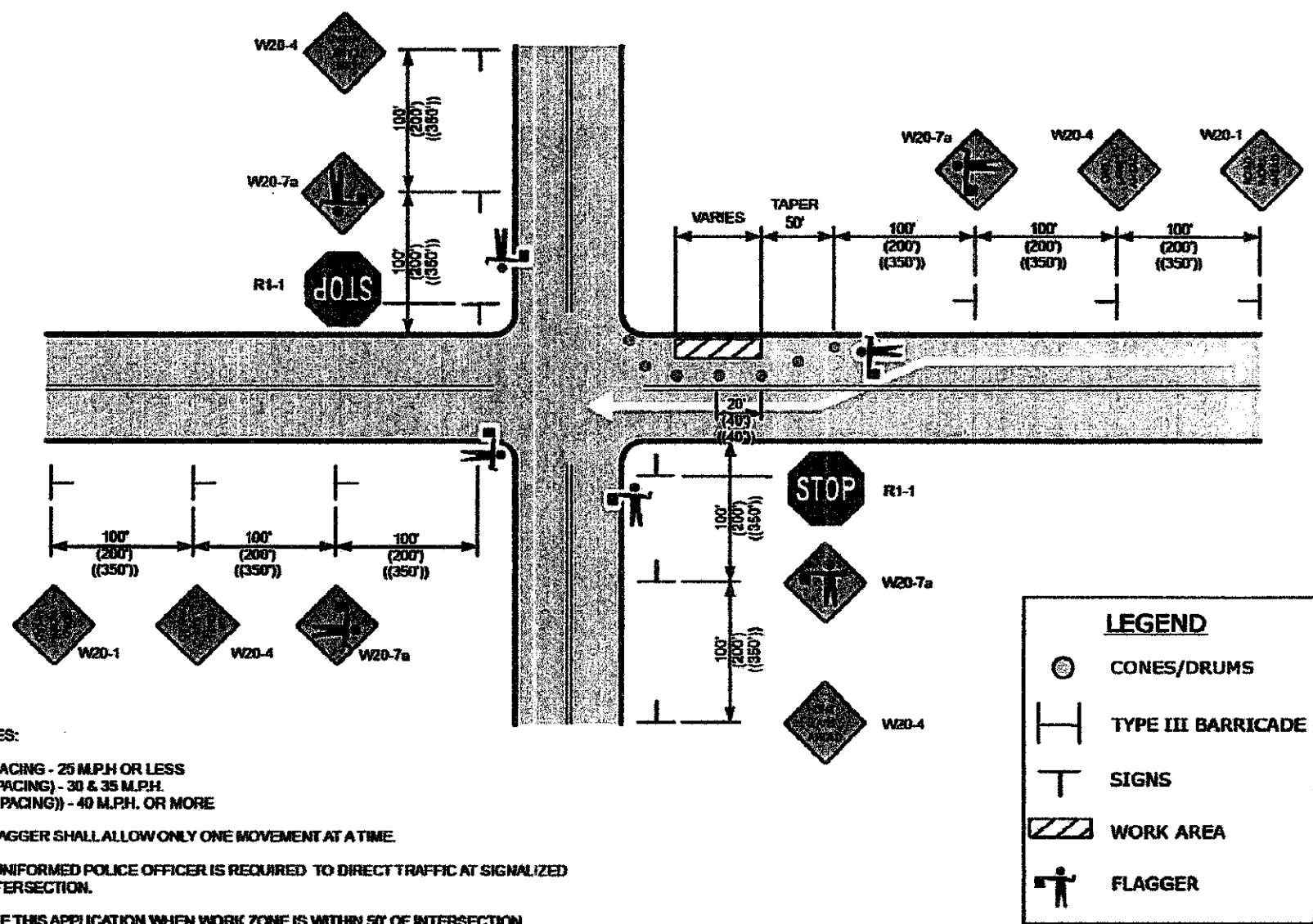
REVISIONS:
NO: DATE: DESCRIPTION: BY:
1. 07.03.2014 PER SUBDIVISION COMMENTS ECM

SHEET TITLE:
PUBLIC STREET
PLAN & PROFILE

SHEET NO.:
L2.1
PROJECT NO.:



**DIAGRAM 10
WORK AREA BEFORE AN INTERSECTION
(FLAGGER CONTROL)**



- NOTES:
1. SPACING - 25 MPH OR LESS (SPACING) - 30 & 35 MPH (SPACING) - 40 MPH OR MORE
 2. FLAGGER SHALL ALLOW ONLY ONE MOVEMENT AT A TIME.
 3. A UNIFORMED POLICE OFFICER IS REQUIRED TO DIRECT TRAFFIC AT SIGNALIZED INTERSECTION.
 4. USE THIS APPLICATION WHEN WORK ZONE IS WITHIN 50' OF INTERSECTION.
 5. ADDITIONAL SIGNAGE AND/OR TRAFFIC CONTROLS SUCH AS TURN PROHIBITIONS AND ADDITIONAL FLAGGER MAY BE REQUIRED.
 6. IF ONE LANE IS PRESENT THE PROPER CLOSURE IS REQUIRED USING SIGNS AND CONES REFER TO DIAGRAM 31.

Traffic Control Notes:

- A) Street space is at a minimum so no more space should be used for construction or maintenance work than is absolutely necessary. Through barricading and channelization, the remaining street space is to be used to carry the traffic around the work area in the best way possible under prevailing conditions.
- B) Traffic control devices shall be set up prior to the start of construction or maintenance operations, and shall be removed or relocated as the work is finished or work conditions change. The agency doing the work shall patrol the work site as required to ensure that all traffic control devices are in place and operating at all times.
- C) All traffic control signs for the work areas shall be reflectorized. The reflective materials used shall be equal to or better than the Type 1, Level A reflective sheeting requirements in Section 6.33 of the Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects (FP-74).
- D) At night, adequate barricades with reflectorized material and lights are required to call attention to and to indicate the actual location of obstructions and hazards.
- E) When not in use during work hours or construction inactivity, equipment shall be parked a minimum of 10' away from the travel lane in such a manner as to not create a sight distance problem for motorists.
- F) The minimum width for temporary travel lanes is 10'; however, a 12' lane is advisable and should be provided whenever possible.
- G) Whenever traffic must be routed across the centerline the two directions of traffic must be physically separated. Traffic cones can be effectively used for this purpose during daylight hours; reflectorized drums must be used at night.
- H) Traffic shall not be routed across centerline with cones or drums during non-working hours. Contractor must be on site or change pavement marking appropriately.
- I) Generally, the peak flow of traffic occurs in Charlotte between the hours of 7-9 a.m. and 4:30-6:30 p.m., (4-6 p.m. in the CBD) Monday through Friday. During these hours construction activity that involves a lane closure will not be allowed on thoroughfare streets except in emergency situations or with approval from the Charlotte Department of Transportation.
- J) The agency doing the work shall provide flaggers and/or Police control when required. Contractor may be also be required to provide a uniformed officer to control traffic when working in and around a signalized intersection.
- K) Every attempt shall be made to schedule and expedite the work to cause the least inconvenience to the traveling public.
- L) In situations not covered in this design, the protection of the travelling public and the protection of the workers on site will dictate the measures to be taken consistent with the City of Charlotte Work Area Traffic Control Handbook (WATCH).
- M) The contractor, utility company, or governmental agency involved in the work shall notify the Charlotte Department of Transportation (Jimmy Rhyne at 704-336-3905) of the construction start date and any major work where the number of travel lanes are reduced from normal conditions or the street is required to be closed. Except in emergencies, the following notification is required:
 - *Construction start date 5 working days in advance
 - *Closing 1 or more travel lanes during Peak Travel Times - 5 working days prior to the scheduled work
 - *Closing a street - 10 working days prior to the scheduled work.

- This lead-time is necessary for planning and notifying the public of expected changes in the normal traffic conditions.
- N) Where complete street closure is necessary, the Department of Transportation will coordinate closure of the street and, if necessary, fully sign a detour route.
 - O) The City Engineer or Director of the Department of Transportation or their representatives are authorized to stop any construction or maintenance activity which is not properly signed and barricaded as required by this standard, the WATCH, and/or the MUTCD until such requirements are met.
 - P) This design standard cannot be used for all roadway construction situations. It is intended only to be used as guideline. Specific situations may require engineering judgement in the placement of traffic control devices because of limited vertical and/or horizontal sight distance.
 - Q) When personnel and/or equipment are within 2' of the edge of an open travel lane, the contractor shall refer to the WATCH for proper lane closure.
 - R) Operational signs are generally mounted on portable supports. These are usually used for short-term operations to warn and guide traffic. Advanced warning signs (Construction Ahead) shall be mounted on stationary supports seven days prior to the beginning of construction of the roadway.
 - S) All drums shall be ballasted in such a manner that they will be stable under wind and vehicle action. Ballasting shall be done with sandbags or other yielding material situated in the base of the drums.
 - T) Construction work shall not be allowed on both sides of the road simultaneously within the same area, unless the roadway is median divided.
 - U) At the end of each work day the contractor shall backfill up the edge and elevation of the existing pavement areas within 2 feet of an open travel lane that include a drop off of more than 3 inches in accordance with the WATCH (see Detail).
 - V) Pavement markings are to be installed by the contractor. Pre-lines must be approved by CDOT prior to placement of the pavement markings. The contractor shall notify Jimmy Rhyne (704-336-3905) of CDOT 5 working days in advance of placing the pre-lines.
 - W) Traffic Signal work is to be performed by CDOT. The contractor shall notify Jimmy Rhyne (704-336-3905) of CDOT at least 60 days in advance of needed signal work. If a traffic signal uses steel poles and/or mast arms, at least 90 days advance notice is required.

BARRICADE WARNING LIGHTS			
Hours of Operation	Low Intensity Type A	High Intensity Type B	Steady Burn Type C
Minimum Beam Candle Power **	Dusk to Dawn	24 Hr/Day	Dusk to Dawn
Minimum Effective Intensity **	4.0 Candies	35 Candies	2 Candies
Flash Duration	10%	8%	Constant
Flash Rate/Minute ***	55 to 75	55 to 75	Constant
Least Directional Faces	1 or 2	1	1 or 2

** These values must be maintained within a full 9 degrees on each side of the vertical axis, and 5 degrees above and 5 degrees below the horizontal axis.

*** Length of time that instantaneous intensity is equal to or greater than effective intensity.

TYPE C STEADY BURN WARNING LIGHTS are most commonly mounted on separate portable supports or on Type I or Type II barricades and are intended to continuously warn the driver that he is approaching or adjacent to a hazardous area. Barricade warning lights are portable, lens directed, enclosed lights. The color of the light emitted shall be yellow.

Barricade warning lights shall be in accordance with the requirements of the Institute of Transportation Engineers' (ITE) Standard for Flashing and Steady Burn Barricade Warning Light (1971).

WATCH: General Responsibility

All persons or agencies doing work in the public streets, highways, or public rights-of-way, are responsible for obtaining all necessary permits, coordinating the work with all affected government agencies and utilities, and informing occupants of adjacent properties of access impacts due to the work.

Responsibility for the installation and maintenance of adequate safety devices for the protection of the public, the workers, and general protection of the work shall rest with the Contractor, Utility Company, or Public Agency doing the work.

All TTC devices and procedures shall conform to the requirements of this handbook, the current edition of the Manual on Uniform Traffic Control Devices (MUTCD), the current edition of the North Carolina Department of Transportation (NCDOT) Supplement to the Manual on Traffic Control Devices for Streets and Highways, the NCDOT Roadway Standard Drawings, and the current edition of the NCDOT Standard Specifications for Roads and Structures.

The City Engineer, or the Director of the Department of Transportation, or their representatives, are authorized to stop any construction or maintenance activity in the public right-of-way that has not been approved for construction or is not properly configured with TTC devices, as required by this handbook, until such requirements are met.

The advanced notification period required prior to the beginning of work is five working days, except for a Road Closure. The advanced notification period for a Road Closure is ten working days. These notification periods do not include the plan approval time when plan approval is necessary.

For major construction projects and emergency road closures, contact the Implementation Section at 704-336-7086. For all other projects and routine maintenance work, contact the Right-of-way Management Section at 704-432-1562.

In emergency situations, weekends, holidays, or after normal business hours, the Police Department should be contacted (911) while the contractor is securing the site. The Police Department will be responsible for notifying the appropriate CDOT staff.

All required agreements and permits from various City agencies must be in place before commencing work. These required documents may include encroachment agreements, road closure agreements, right-of-way use permits, building permits, driveway permits, and street cut permits amongst others.

Approval & Notification Requirement for Work in the Public Right-of-way

It is necessary for both public and private agencies to obtain approval from the Charlotte Department of Transportation (CDOT) before scheduling work that will have an impact on the flow of traffic in the City of Charlotte. This is necessary to ensure proper construction sequencing, adequate phasing of the TTC plan, and coordination between the many activities that take place in the right-of-way. Proper coordination is necessary to ensure the safety of pedestrians and motorists and provide the most efficient flow of traffic throughout the City.

The contractor, utility company, or public agency constructing a minor or major project, or conducting routine maintenance in the public right-of-way shall notify CDOT, prior to start of work, if the following impacts on the roadway facility are to occur:

- * Closing a travel lane on a thoroughfare during peak hours
- * Closing more than one lane in one direction on a thoroughfare
- * Closing all lanes in one direction on a thoroughfare
- * Closing more than one lane of a one-way street
- * Closing sidewalks on both sides of the street
- * Anytime work is performed in the Central Business District

Mobile operations (see Section 16) are generally exempt from the requirement to notify CDOT provided that the contractor coordinates with other users.

WATCH: Peak Flow Work Hours

The peak flows of traffic in Charlotte, outside the Central Business District (CBD), generally occur between the hours of 7:00 - 9:00 a.m. and 4:30 - 6:30 p.m. During these hours, construction or maintenance work, which involves closure of a lane of traffic, will not be allowed on thoroughfare streets except for emergency situations or with approval from CDOT. As a general rule, all multi-lane roads or two-lane roads which are separated by a marked double yellow centerline should be considered to be thoroughfare streets.

The peak flows of traffic in the CBD generally occur between the hours of 7:00 - 9:00 a.m., 11:30 a.m. - 1:30 p.m. and 4:00 - 6:00 p.m. During these hours, construction or maintenance work which involves closure of a lane of traffic or a sidewalk will not be allowed except for emergency situations or with prior approval from CDOT. The CBD is that area of the city which is bounded by I-77 and I-277.

WATCH: Roadway Closure Notifications

When a road closure has been approved (see Section 3), the agency requesting the closure is required to notify the following agencies at least 1 week prior to the expected closure:

- * 704-336-3237 Police Department
- * 704-336-2441 Fire Dispatch
- * 704-943-6200 Medic Dispatch
- * 980-343-5080 School Transportation
- * 704-336-4042 Charlotte Transit
- * 704-336-4119 CDOT Public Service (Press Releases)

Each of the above agencies shall also be contacted upon the reopening of the roadway.

Contractor shall contact CDOT at 704-432-1562 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.

PREPARED FOR:

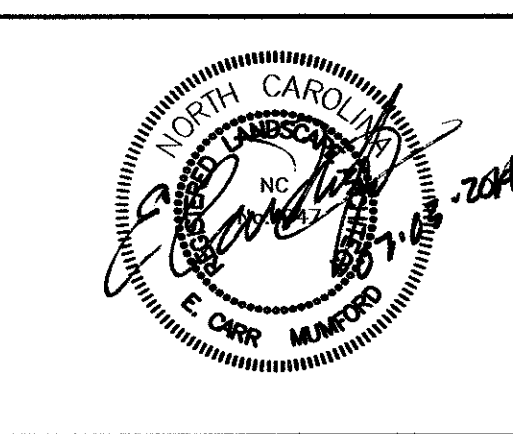
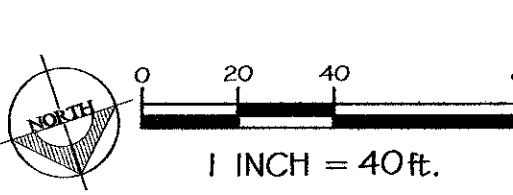
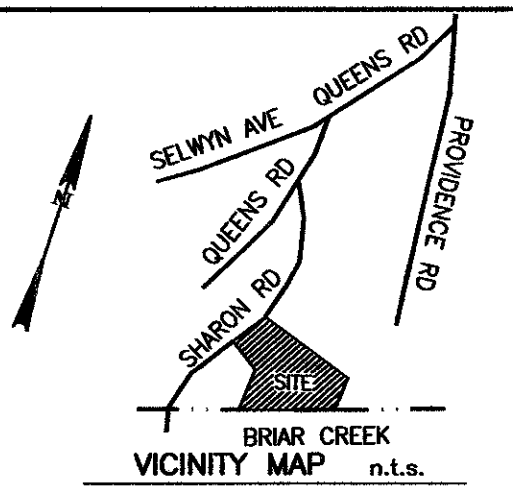
BARRINGER & SMITH
PROPERTIES, LLC
1133 METROPOLITAN AVE.
SUITE 619
CHARLOTTE, NC 28204

PROJECT:

WESTMINSTER
PARK

PREPARED BY:

Wirth & Associates
ARCHITECTS AND LAND PLANNERS
1230 W. Marshall St., Suite 212
Charlotte, NC 28208
Phone: 704-375-1588 Fax: 704-375-3844
Email: gwlth@wirthassociates.com



DRAWN BY: CG

CHECKED BY: ECM

SCALE: 1"=30'

DATE: 05.15.2014

REVISIONS:

NO: DATE: DESCRIPTION: BY:

1. 07.03.2014 PER SUBDIVISION COMMENTS ECM

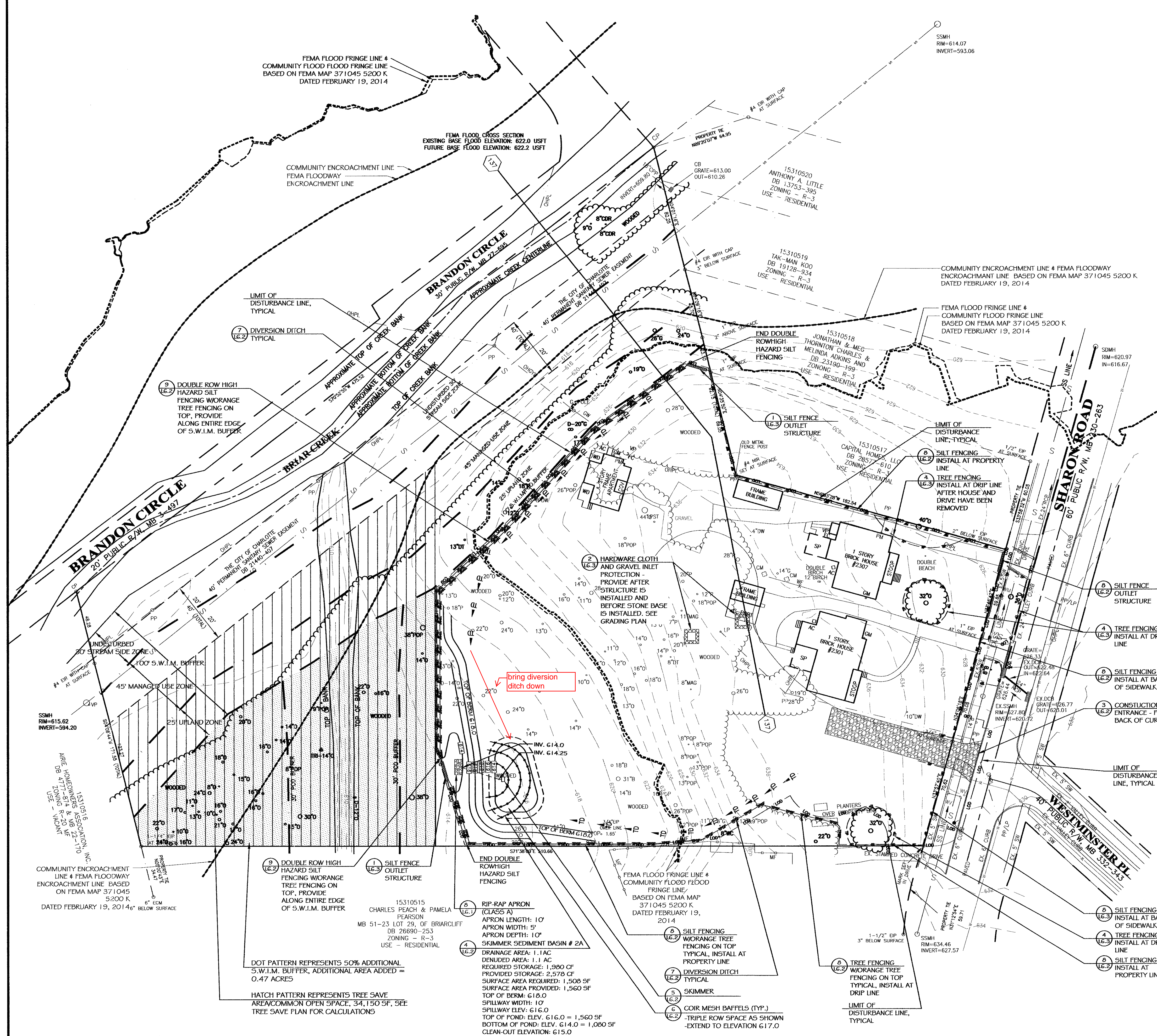
SHEET TITLE:

TRAFFIC CONTROL
PLAN

SHEET NO.:

L2.3

PROJECT NO.:



- ### EROSION NOTES:
1. THE CITY OF CHARLOTTE EROSION CONTROL INSPECTOR, OWNER AND OWNERS REPRESENTATIVE SHALL BE GIVEN 48 HOURS NOTICE PRIOR TO BEGINNING CONSTRUCTION.
 2. ON SITE BURIAL PITS WILL NOT BE ALLOWED.
 3. GRADING MORE THAN ONE ACRE WITHOUT AN APPROVED EROSION CONTROL PLAN IS A VIOLATION OF THE CITY/COUNTY EROSION CONTROL ORDINANCE AND IS SUBJECT TO A FINE.
 4. ADDITIONAL MEASURES TO CONTROL EROSION AND SEDIMENT MAY BE REQUIRED BY A REPRESENTATIVE OF THE CITY ENGINEERING DEPARTMENT.
 5. "STOP BEFORE YOU DIG". CALL NC ONE-CALL CENTER AT 1-800-632-4949. IT'S THE LAW.
 6. IF THE SAME PERSON CONDUCTS THE LAND-DISTURBING ACTIVITY & ANY RELATED BORROW OR WASTE ACTIVITY, THE RELATED BORROW OR WASTE ACTIVITY SHALL CONSTITUTE PART OF THE LAND-DISTURBING ACTIVITY UNLESS THE BORROW OR WASTE ACTIVITY IS REGULATED UNDER THE MINING ACT OF 1971, OR IS A LANDFILL REGULATED BY THE DIVISION OF WASTE MANAGEMENT. IF THE LAND-DISTURBING ACTIVITY AND ANY RELATED BORROW OR WASTE ACTIVITY ARE NOT CONDUCTED BY THE SAME PERSON, THEY SHALL BE CONSIDERED SEPARATE LAND-DISTURBING ACTIVITIES AND MUST BE PERMITTED EITHER THROUGH THE SEDIMENTATION POLLUTION CONTROL ACT AS A ONE-USE BORROW SITE OR THROUGH THE MINING ACT.
 7. ALL EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THESE DRAWINGS AND THE STATE OF NORTH CAROLINA EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL (LATEST EDITION).
 8. ANTICIPATED BEGINNING OF CONSTRUCTION - SUMMER 2014.
 9. ALL AREAS AND EXPOSED SLOPES SHALL BE TEMPORARILY OR PERMANENTLY STABILIZED WITH SEEDING, MULCH, ECT. WITHIN 7 DAYS FOLLOWING THE LAST LAND DISTURBING ACTIVITY. PROVIDE TEMPORARY OR PERMANENT GROUND COVER FOR ALL DISTURBED AREAS WITHIN 14 DAYS FOLLOWING THE LAST LAND DISTURBING ACTIVITY. REFER TO NC DENR EROSION CONTROL ORDINANCE FOR ADDITIONAL REQUIREMENTS.
 10. ANY GRADING BEYOND THE DENUDED LIMITS SHOWN ON THE PLAN IS A VIOLATION OF THE CITY/COUNTY EROSION CONTROL ORDINANCE AND IS SUBJECT TO A FINE.
 11. STABILIZATION IS THE BEST FORM OF EROSION CONTROL. TEMPORARY SEEDING IS NECESSARY TO ACHIEVE EROSION CONTROL ON LARGE DENUDED AREAS AND ESPECIALLY WHEN SPECIFICALLY REQUIRED AS PART OF THE CONSTRUCTION SEQUENCE SHOWN ON THE PLANS AND DETAILS.
 12. ADDITIONAL MEASURES TO CONTROL EROSION AND SEDIMENT MAY BE REQUIRED BY A REPRESENTATIVE OF NC DENR, CITY OF CHARLOTTE OR OWNER.
 13. SLOPES SHALL BE GRADED NO STEEPER THAN 2:1. SLOPES GREATER THAN 3:1 SHALL BE MATTED IN ACCORDANCE WITH DETAILS AND SPECIFICATIONS AND SHALL BE IMMEDIATELY STABILIZED UPON COMPLETION.
 14. SILT FENCE SHALL BE PLACED 10' OFF THE TOE OF FILL SLOPES. TO ALLOW FOR SEDIMENT STORAGE AND MAINTENANCE.
 15. 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 EFFECTED PROPERTY.
 16. PER FEMA FIRM PANEL 3710455400J, FLOOD WAY DISTRICTS ARE ASSOCIATED WITH THIS PROPERTY.
 17. THE CONTRACTOR SHALL TAKE ALL REASONABLE MEASURES TO PREVENT TRACKING OF MUD ONTO PUBLIC STREETS. ANY MUD OR SOIL TRACKED ONTO ACTIVE ROADS SHALL BE CLEANED AND OR SWEEPED DAILY.
 18. SEE DEMOLITION PLAN FOR DEMOLITION NOTES.
 19. SEE DESIGN CALCULATIONS FOR DRAINAGE AREA MAP.

TOTAL SITE AREA: 3.80
DENUDED AREA: 1.84 ACRES
SOIL TYPE: CUB, CUB, MO
RIVER BASIN: CATAWBA RIVER
RECEIVING WATERSHED: BRIAR CREEK

- ### CONSTRUCTION SEQUENCE
1. SET A ON-SITE PER-CONSTRUCTION MEETING WITH THE EROSION CONTROL INSPECTOR OF THE CITY ENGINEERING DEPARTMENT TO DISCUSS EROSION CONTROL MEASURES. FAILURE TO SCHEDULE SUCH CONFERENCE 48 HOURS PRIOR TO ANY LAND DISTURBING ACTIVITY IS A VIOLATION OF CHAPTER 17 OF THE CITY CODE AND IS SUBJECT TO A FINE.
 2. INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS CLEARING ONLY AS NECESSARY TO INSTALL THESE DEVICES.
 3. CALL FOR ON-SITE INSPECTION BY THE INSPECTOR. WHEN APPROVED, INSPECTOR WILL ISSUE THE GRADING PERMIT AND CLEARING AND GRUBBING CAN BEGIN.
 4. THE CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES DURING ALL PHASES OF CLEARING AND GRADING ACTIVITY.
 5. ADJUST AND REPAIR EROSION CONTROL DEVICES AS NEEDED DURING GRADING OPERATIONS.
 6. STABILIZE SITE WITH SEEDING AS AREAS ARE BROUGHT TO FINISH GRADE PER EROSION CONTROL NOTES.
 7. COORDINATE WITH EROSION CONTROL INSPECTOR PRIOR TO REMOVAL OF EROSION CONTROL MEASURES.
 8. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE N.C. EROSION CONTROL AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, U.S. DEPT. OF AGRICULTURE, CITY OF CHARLOTTE EROSION CONTROL ORDINANCE, AND THE CHARLOTTE LAND DEVELOPMENT STANDARDS.

FEMA FLOOD PLAIN DATA:

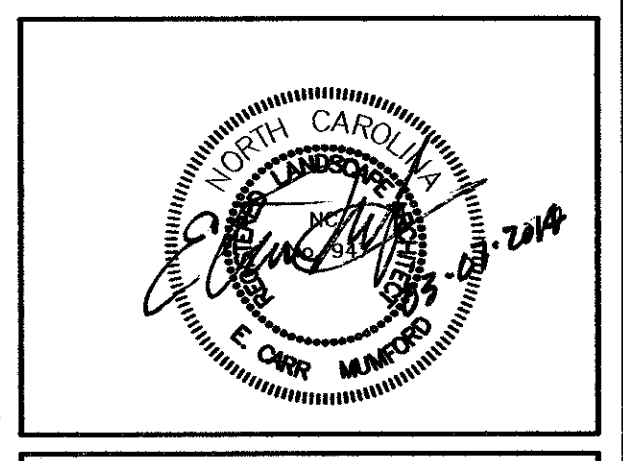
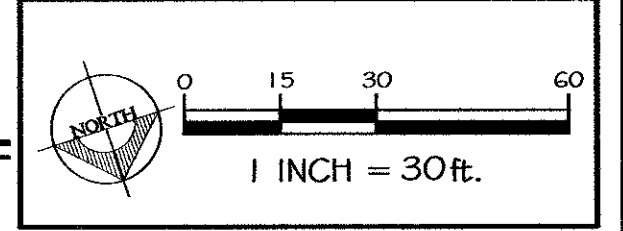
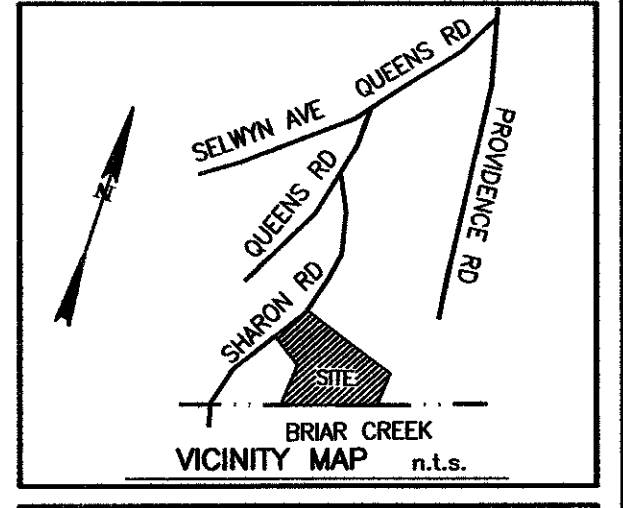
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FIRM PANEL NUMBER: 4552 K
FIRM EFFECTIVE DATE: FEBRUARY 19, 2014

- ### LEGEND
- | | |
|----------|-----------------------------------|
| × 622.85 | EXISTING SPOT ELEVATION |
| ● 622.0 | PROPOSED SPOT ELEVATION |
| 622 | EXISTING CONTOUR |
| 622 | PROPOSED CONTOUR |
| LOD | LIMIT OF DISTURBANCE LINE |
| SF | SILT FENCE |
| TP | TREE PROTECTION FENCE |
| TPSF | SILT FENCE WITH TREE FENCE |
| [Symbol] | SILT FENCE OUTLET STRUCTURE |
| [Symbol] | BLOCK AND GRAVEL INLET PROTECTION |
| [Symbol] | STORM DRAIN WITH RIP RAP OUTLET |

PREPARED FOR:
**BARRINGER & SMITH
PROPERTIES, LLC**
1133 METROPOLITAN AVE.
SUITE 619
CHARLOTTE, NC 28204

PROJECT:
**WESTMINSTER
PARK**

PREPARED BY:
Wirth & Associates
LANDSCAPE ARCHITECTS AND LAND PLANNERS
1230 W. Morehead St., Suite 212
Charlotte, NC 28203
Phone: 704-375-1588 Fax: 704-375-3844
Email: gerald@wirthassociates.com



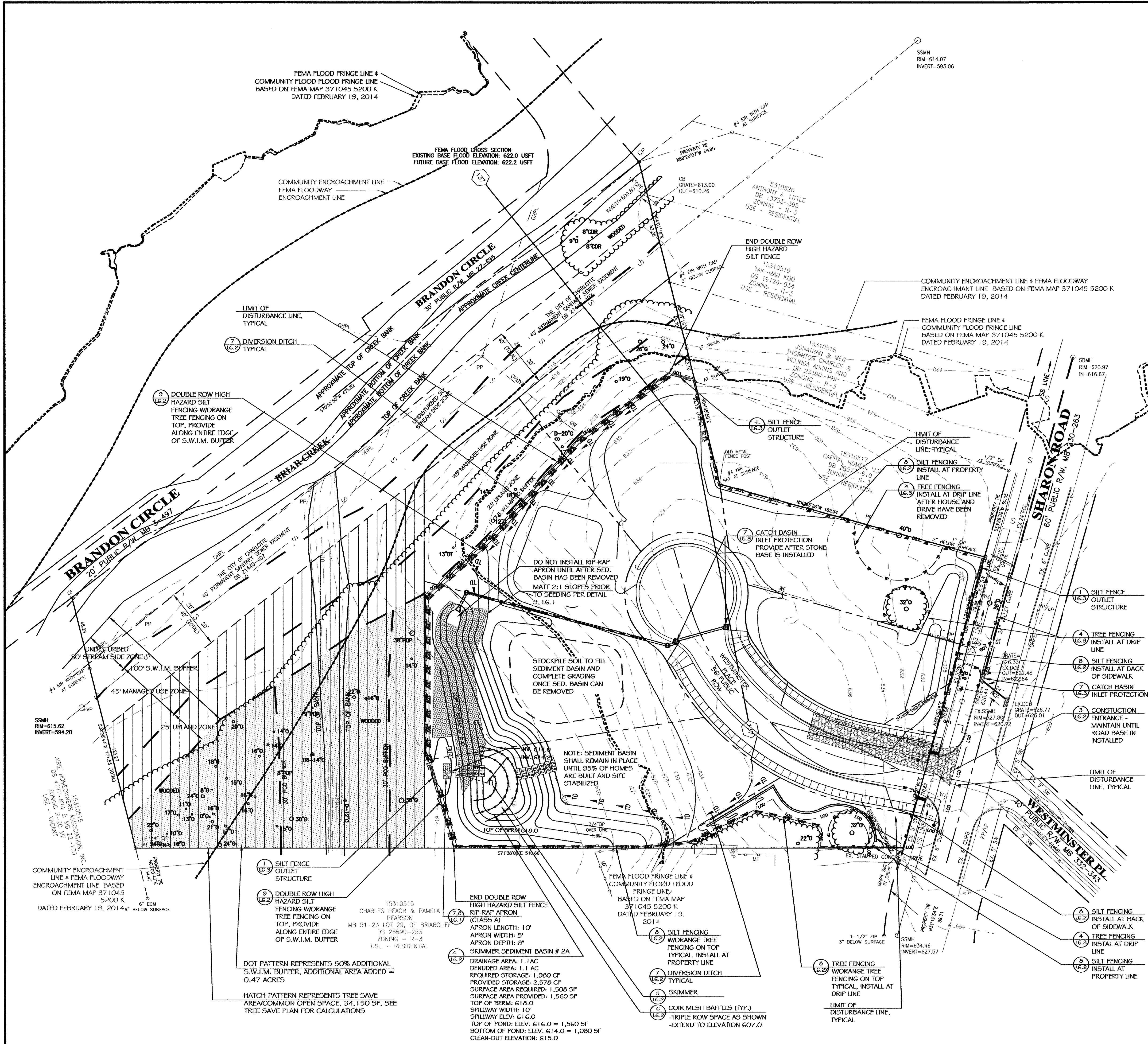
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DATE: 05.15.2014

REVISIONS:
NO: DATE: DESCRIPTION: BY:

- | | | | |
|----|----------|--------------------------|-----|
| 1. | 06.03.14 | FLOOD CROSS-SECTION | ECM |
| 2. | 07.03.14 | PER SUBDIVISION COMMENTS | ECM |

SHEET TITLE:
**INITIAL EROSION
CONTROL PLAN**

SHEET NO.:
L3.0
PROJECT NO.:



EROSION NOTES:

1. SEE SHEET L3.0 FOR EROSION CONTROL NOTES
2. SEE DESIGN CALCULATIONS FOR DRAINAGE AREA MAP

TOTAL SITE AREA: 3.80
DENUDE AREA: 1.84 ACRES
SOIL TYPE: CUB, CUB, MO
RIVER BASIN: CATAWBA RIVER
RECEIVING WATERSHED: BRIAR CREEK

CONSTRUCTION SEQUENCE

1. THE CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES DURING ALL PHASES OF CLEARING AND GRADING ACTIVITY.
2. ADJUST AND REPAIR EROSION CONTROL DEVICES AS NEEDED DURING GRADING OPERATIONS.
3. STABILIZE SITE WITH SEEDING AS AREAS ARE BROUGHT TO FINISH GRADE PER EROSION CONTROL NOTES.
4. COORDINATE WITH EROSION CONTROL INSPECTOR PRIOR TO REMOVAL OF EROSION CONTROL MEASURES.
5. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE N.C. EROSION CONTROL AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, U.S. DEPT. OF AGRICULTURE, CITY OF CHARLOTTE EROSION CONTROL ORDINANCE, AND THE CHARLOTTE LAND DEVELOPMENT STANDARDS.

FIMA FLOOD PLAIN DATA:

FIRM COMMUNITY NUMBER: 370159
FIRM PANEL NUMBER: 4552 K
FIRM EFFECTIVE DATE: FEBRUARY 19, 2014

LEGEND

- × 622.85
● 622.0
- EXISTING SPOT ELEVATION
PROPOSED SPOT ELEVATION
- EXISTING CONTOUR
PROPOSED CONTOUR
- LIMIT OF DISTURBANCE LINE
SILT FENCE
TREE PROTECTION FENCE
SILT FENCE WITH TREE FENCE
SILT FENCE OUTLET STRUCTURE
BLOCK AND GRAVEL INLET PROTECTION
STORM DRAIN WITH RIP RAP OUTLET
- LOD
SF
TP
TPSF
- 1 INCH = 30 FT.

PREPARED FOR:

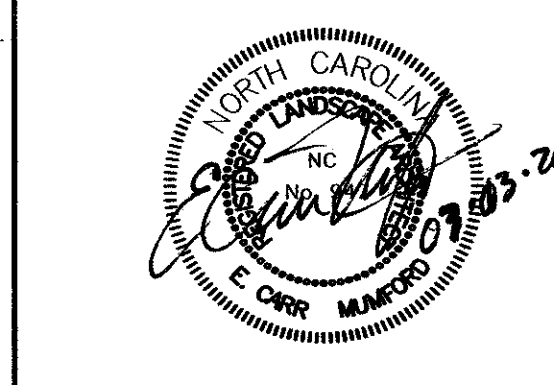
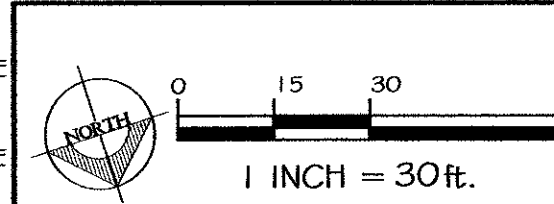
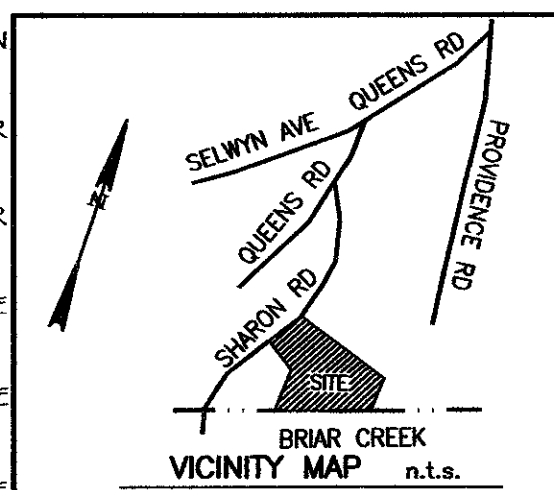
BARRINGER & SMITH
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PROJECT:

WESTMINSTER
PARK

PREPARED BY:

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Phone: 704-375-1588 Fax: 704-375-3844
Email: gwl@wirthassociates.com



DRAWN BY: ECM

CHECKED BY: ECM

SCALE: 1"=30'

DATE: 05.15.2014

REVISIONS:

NO.	DATE	DESCRIPTION	BY:
1.	06.03.14	FLOOD CROSS-SECTION ADDED	ECM
2.	07.03.14	PER SUBDIVISION COMMENTS	ECM

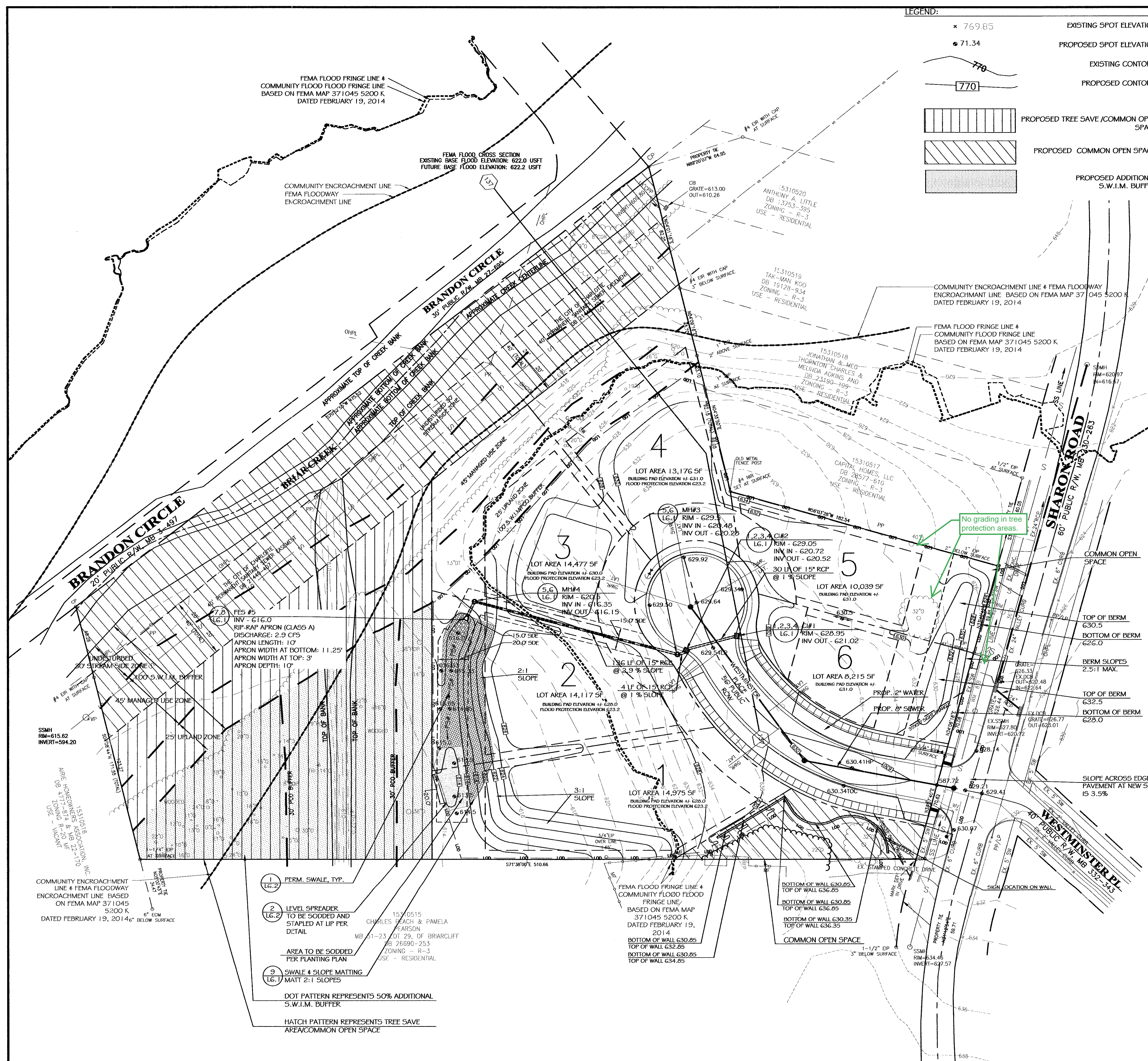
SHEET TITLE:

FINAL EROSION
CONTROL PLAN

SHEET NO.:

L3.1

PROJECT NO.:



LEGEND:

- EXISTING SPOT ELEVATION: 769.85
- PROPOSED SPOT ELEVATION: 71.34
- EXISTING CONTOUR: 770
- PROPOSED CONTOUR: 770
- PROPOSED TREE SAVE /COMMON OPEN SPACE
- PROPOSED COMMON OPEN SPACE
- PROPOSED ADDITIONAL S.W.I.M. BUFFER

SITE DATA:

TOTAL SITE AREA: 3.60
PROPOSED DEMOLISHED AREA: 1.84 ACRES
SOIL TYPE: Gb, Cb, M
EXISTING IMPERVIOUS AREA - 10, 609 SF
PROPOSED IMPERVIOUS - 39,070 SF (10,270 NEW STREET AND SIDEWALK, 28,800 SF LOTS - 4600 MAX. 5F PER LOTS 1 - 4 & 4600 MAX. 5F PER LOTS 5 & 6)
RIVER BASIN: CATAMBA RIVER
RECEIVING WATERSHED: BRIAR CREEK

GENERAL NOTES:

- NO ON-SITE LAND CLEARING AND INERT DEBRIS (LCID) LANDFILLS SHALL BE PERMITTED ON THIS SITE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES BOTH ABOVE AND BELOW GROUND PRIOR TO ANY EARTH MOVING ACTIVITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RELOCATION AND/OR REMOVAL OF ANY EXISTING UTILITY THAT IS IN THE WAY OF NEW CONSTRUCTION. THIS WORK SHALL INCLUDE THE COORDINATION WITH ALL EFFECTED UTILITY COMPANIES. UTILITIES AS SHOWN ON THESE PLANS MAY OR MAY NOT BE CORRECTLY LOCATED.
- TREES WITHIN THE STREET R.O.W ARE PROTECTED BY LAW. A PERMIT IS REQUIRED FOR REMOVAL BY THE CITY OF CHARLOTTE LANDSCAPE MANAGEMENT AT (704-336-4262). ALL TREES OVER 8" IN DIAMETER (4.5" ABOVE GROUND) IN THE SETBACK AREA ARE PROTECTED BY LAW. A PERMIT IS REQUIRED FOR REMOVAL BY CITY ENGINEERING.
- BEFORE YOU DIG STOP. CALL THE NC ONE-CALL CENTER AT 1-800-632-4949. IT'S THE LAW.
- IF THE SAME PERSON CONDUCTS THE LAND-DISTURBING ACTIVITY & ANY RELATED BORROW OR WASTE ACTIVITY, THE RELATED BORROW OR WASTE ACTIVITY SHALL CONSTITUTE PART OF THE LAND-DISTURBING ACTIVITY UNLESS THE BORROW OR WASTE ACTIVITY IS REGULATED UNDER THE MINING ACT OF 1971, OR IS A LANDFILL REGULATED BY THE DIVISION OF WASTE MANAGEMENT. IF THE LAND-DISTURBING ACTIVITY AND ANY RELATED BORROW OR WASTE ACTIVITY ARE NOT CONDUCTED BY THE SAME PERSON, THEY SHALL BE CONSIDERED SEPARATE LAND-DISTURBING ACTIVITIES AND MUST BE PERMITTED EITHER THRU THE SEDIMENTATION POLLUTION CONTROL ACT AS A ONE-USE BORROW SITE OR THROUGH THE MINING ACT.
- SEE DESIGN CALCULATIONS FOR DRAINAGE AREA MAP.

GRADING NOTES:

- 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.
- CROSS SLOPE SIDEWALKS 1/4" PER FOOT TOWARDS THE CURB TO ASSURE POSITIVE DRAINAGE.
- ALL WORK AND MATERIALS SHALL CONFORM TO THE LATEST EDITION OF THE CITY OF CHARLOTTE LAND DEVELOPMENT STANDARDS AND CDOT SPECIFICATIONS WHEN WORKING IN THE ROW.
- EXISTING CONTOURS SHOWN ARE TWO FOOT INTERVALS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER AND/OR OWNERS REPRESENTATIVE.
- ALL PROPOSED GRADES SHOWN ARE TO FINISH GRADE. ALL SPOT GRADES ARE TO FINISHED SURFACES, EDGE OF PAVEMENT, BACK OF CURB, AND FINISHED GROUND UNLESS OTHERWISE INDICATED.
- SUB-SURFACE DRAINAGE FACILITIES MAY BE REQUIRED IN THE STREET RIGHT-OF-WAY IF DEEMED NECESSARY BY THE INSPECTOR.
- RIGHT-OF-WAY IF DEEMED NECESSARY BY THE INSPECTOR.
- ALL ROAD IMPROVEMENTS ALONG SHARON ROAD ARE TO BE COORDINATED WITH THE CITY OF CHARLOTTE ENGINEERING DEPARTMENT PRIOR TO CONSTRUCTION.
- 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 BEFORE INSTALLATION.
- COORDINATE ALL CURB AND STREET GRADES ALONG SHARON ROAD WITH THE INSPECTOR PRIOR TO BEGINNING WORK IN THE ROW.
- IN ORDER TO ASSURE PROPER DRAINAGE, KEEP A MINIMUM SLOPE OF 0.5% SLOPE ON THE CURB.
- SURFACE DRAINAGE FACILITIES MAY BE REQUIRED IN THE STREET RIGHT-OF-WAY IF DEEMED NECESSARY BY THE INSPECTOR.
- SLOPES SHALL BE GRADED NO STEEPER THAN 2:1. FILL SLOPES GREATER THAN 1:1 REQUIRE ADEQUATE TERRACING (CDSM #30.1G).
- THE PURPOSE OF THE STORM DRAIN 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.

PCO NOTES:

- SEE SHEET L5.2 FOR PCO REQUIREMENTS, NATURAL AREAS AND PCO SUMMARY.

FLOODPLANE DEVELOPMENT NOTES:

- 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.
- ANY CONSTRUCTION OR USE WITHIN THE FUTURE CONDITIONS FLOOD FRINGE LINE IS SUBJECT TO THE RESTRICTIONS IMPOSED BY THE FLOOD WAY REGULATIONS OF THE CITY OF CHARLOTTE AND MECKLENBURG COUNTY.
- THE FUTURE CONDITIONS FLOOD FRINGE ELEVATION IS 622.2. THE FLOOD PROTECTION ELEVATION FOR LOTS 1, 2, 3 AND 4 SHALL BE 623.2.
- THE COMMUNITY ENCROACHMENT LINE SHALL BE CLEARLY MARKED ON THE SITE PRIOR TO ANY GRADING AND THE MARKED LINE MUST BE MAINTAINED ON THE SITE UNTIL FINAL GRADING IS COMPLETE.
- CERTIFICATION OF FILL PLACEMENT IS REQUIRED AFTER CONSTRUCTION.
- ELEVATION CERTIFICATION WILL BE REQUIRED PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY.

S.W.I.M BUFFER NOTES:

- THE STREAM SIDE ZONE OF THE BUFFER MUST BE LEFT COMPLETELY UNDISTURBED. IN THE MANAGED USE ZONE, A LIMITED NUMBER OF TREES CAN BE REMOVED PROVIDED THAT THE TREE DENSITY REMAINING IS A MINIMUM OF 8 HEALTHY TREES OF A MINIMUM 6-INCH CALIPER PER 1,000 SQUARE FEET. REMOVAL OF EXISTING VEGETATION MUST BE PERFORMED IN SUCH A MANNER AS TO PREVENT DAMAGE TO THE ROOTS OF REMAINING TREES.
- AREAS CLEARLY INDICATE THAT NO FILL MATERIAL IS TO BE BROUGHT INTO THE BUFFER AND THAT NO STRUCTURES ARE ALLOWED WITHIN ANY OF THE BUFFER AREAS (EXCEPT NON-COMMERCIAL OUT BUILDINGS NOT EXCEEDING 150 SQUARE FEET).
- GRADING AND OTHER LAND DISTURBING ACTIVITIES ARE ALLOWED ONLY IN THE UPLAND ZONE. HOWEVER, THESE ACTIVITIES MUST BE PERFORMED IN SUCH A MANNER AS TO PREVENT DAMAGE TO ROOTS OF REMAINING TREES. GRASS OR OTHER SUITABLE GROUND COVER CAN BE APPLIED TO THE UPLAND ZONE.
- THE OUTSIDE OF THE BUFFER MUST BE CLEARLY MARKED WITH ORANGE FABRIC FENCING PRIOR TO ANY LAND DISTURBING ACTIVITIES (GRADING, TREE CUTTING OR STUMP REMOVAL, ETC.) AT THE SITE AND THIS FENCING MUST BE CALLED OUT ON THE PLANS.
- SEE SHEET L2.0 FOR 50% ADDITIONAL S.W.I.M. BUFFER REQUIREMENTS.

FEMA FLOOD PLAIN DATA:

FIRM COMMUNITY NUMBER: 3701159
FIRM PANEL NUMBER: 4552 K
FIRM EFFECTIVE DATE: FEBRUARY 19, 2014

PREPARED FOR:
BARRINGER & SMITH
PROPERTIES, LLC
1133 METROPOLITAN AVE.
SUITE 619
CHARLOTTE, NC 28204

PROJECT:
WESTMINSTER PARK

PREPARED BY:
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ARCHITECTS AND LAND PLANNERS
1230 W. Marshall St. Suite 212
Charlotte, NC 28202
Phone: 704-375-1588 Fax: 704-375-3844
Email: gwl@wirthassociates.com

DRAWN BY: ECM
CHECKED BY: ECM
SCALE: 1"=30'
DATE: 04.15.2014

REVISIONS:

NO.	DATE	DESCRIPTION	BY:
1.	06.03.14	FLOOD CROSS-SECTION	ECM
2.	07.03.14	PER SUBDIVISION COMMENTS	ECM

SHEET TITLE:
GRADING PLAN

SHEET NO.:
L4.0

PROJECT NO.:



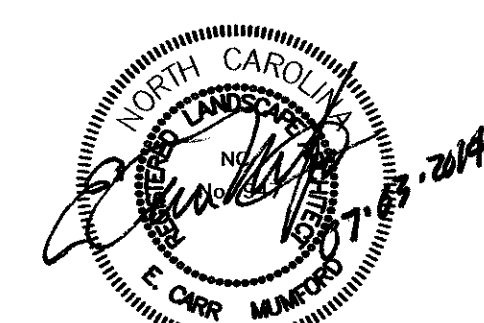
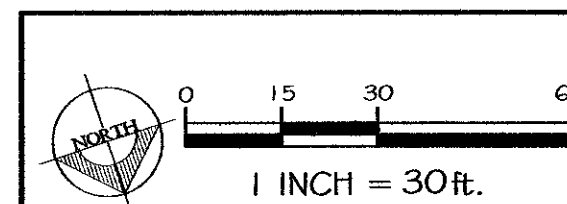
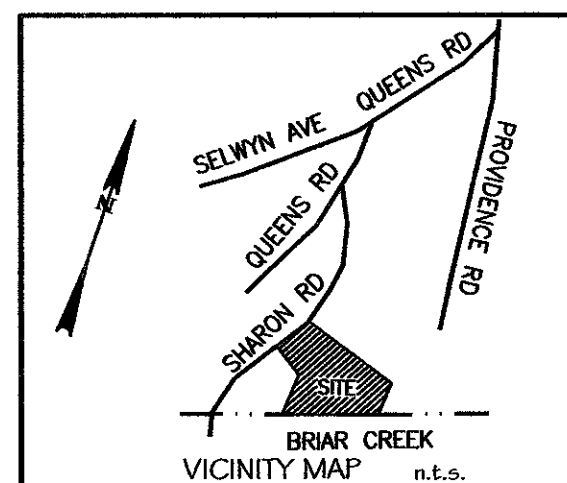
PERENNIALS:					
HS	504	Heimerocallis Stella de Oro'	Stella de Oro Davily	1 Gal.	12" O.C.

1. ALL PLANTS TO BE WELL FORMED SPECIMEN QUALITY WITH FULL, VIGOROUS GROWTH OF THE SIZE INDICATED. ALL TREES SHALL BE NURSERY GROWN AND MEET AMERICAN STANDARD FOR NURSERY STOCK (ANSI 1990, PART 1, "SHADE AND FLOWERING TREES").
2. APPLY ANTI-TRANSPARENT TO EVERGREEN STOCK AND ALL DECIDUOUS STOCK IN LEAF PRIOR TO DIGGING OR SHIPPING.
3. BACK FILL PLANTS WITH A PREPARED SOIL MIX PER SPECIFICATIONS.
4. FERTILIZE PER SPECIFICATIONS.
5. ALL PLANTS TO BE MULCHED WITH CLEAN SHREDDED HARDWOOD BARK MULCH TO A MINIMUM DEPTH OF 3". MULCH TREES TO 3'-0" BEYOND TRUNK MINIMUM.
6. EDGE ALL PLANTING BEDS 3" DEEP x MULCH 4" THICK. MULCH FROM FRONT OF PLANT BED TO BACK OF EDGE OF PAVEMENT WHERE MATERIAL IS AGAINST PAVEMENT.
7. ALL CONTRACTORS SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO EXCAVATION.
8. QUANTITIES SHOWN ARE FOR CONVENIENCE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MATERIALS AS SHOWN ON THE PLAN.
9. FOR NEW PLANTING AREAS, REMOVE ALL PAVEMENT, GRAVEL SUB-BASE AND CONSTRUCTION DEBRIS. REMOVE COMPACTED SOIL AND ADD 16" NEW TOPSOIL/PLANTING MIX OR LOOSE COMPACT AND AMEND TOP 8" OF EXISTING SOIL TO MEET TOPSOIL/PLANTING MIX.
10. ADJUST TREE PLANTING LOCATIONS TO AVOID UNDERGROUND UTILITIES.
11. ALL DISTURBED AREAS TO RECEIVE PERMANENT SEEDING PER SEEDING SCHEDULE.
12. THE LANDSCAPE BUFFER AREA AND THE COMMON OPEN SPACE AT THE ENTRY WILL BE LOCATED. EXCAVATION DESIGN AND LOCATION OF BACK FLOW ENCLOSURE IS UNDETERMINED AT THIS TIME. THE DEVELOPER SHALL SCREEN THE BACK FLOW ENCLOSURE FROM VIEW OF THE PUBLIC ROW. THE BACK FLOW ENCLOSURE SHALL NOT IMPEDE VISUAL SIGHT LINES IF PLACED WITHIN THE SIGHT TRIANGLE OR IT WILL BE PLACED OUTSIDE THE SIGHT TRIANGLE.

BARRINGER & SMITH
PROPERTIES, LLC
1133 METROPOLITAN AVE.
SUITE 619
CHARLOTTE, NC 28204

PROJECT:
WESTMINSTER
PARK

 **Wirth & Associates**
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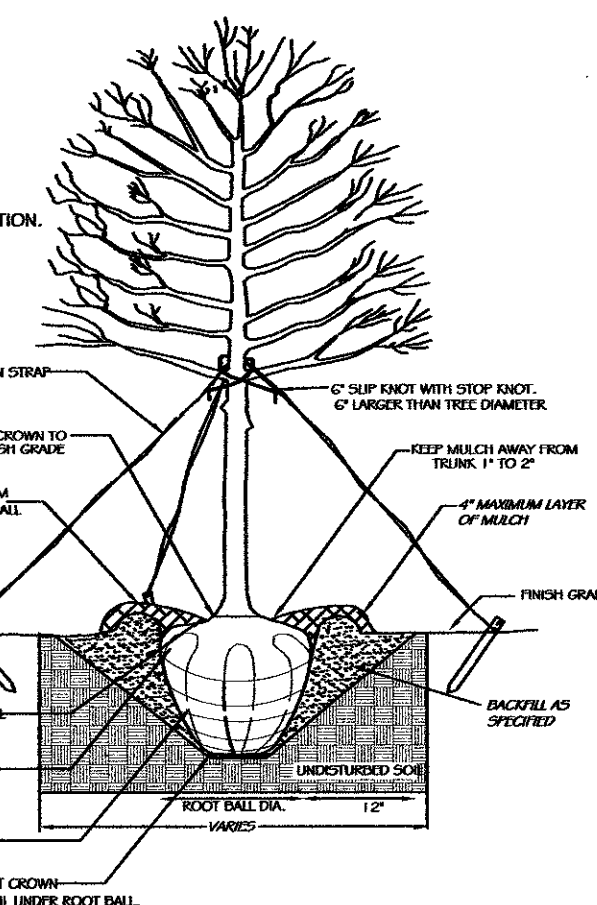


SHARON ROAD (144 LF) - 4 LARGE MATURING TREES REQUIRED
2 EXISTING LARGE MATURING TREES/1 LARGE MATURING TREE PROVIDED
1 EXISTING LARGE MATURING TREE (14" BIRCH) HAS BEEN REMOVED DUE TO
CDOT SIGHT LINE CONCERNS AND WILL NOT BE REPLACED DUE TO LIMITED
SPACE WITHIN THE PLANTING STRIP THAT IS OUTSIDE OF THE SIGHT LINE.

30' LANDSCAPE BUFFER REQUIREMENTS:

REQUIRES SHRUBS (124 LF) - 25 TREES (MIN. 7 EVERGREEN,
PROVIDED SHRUBS - 38 (30 EVERGREEN)

1. REMOVE WIRE AND NYLON TWINE FROM BALL AND CANOPY.
2. SOAK ROOT BALL AND PLANT PIT IMMEDIATELY AFTER INST.
3. *STAKING IS REQUIRED FOR ALL TREES.*
4. REMOVE EXCESS SOIL FROM SITE AND DISPOSE OF IN A LEGAL MANNER.
5. RESEED UNMULCHED, DISTURBED AREAS.



ALL TREES SHALL MEET AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-2004)					
FOR EXAMPLE:	CALIPER	HEIGHT (RANGE)	MAX. HEIGHT	MIN. ROOT BALL DIA.	MIN. ROOT BALL DEPTH
	2"	12-14'	16'	24"	16"

PLANTING DETAIL - SINGLE STEM TREES

PLANTING PLAN

L5.0

PROJECT NO.:



Tree save ration is
36 trees per acre.
Only voids/open
spaces that will not
be filled by existing
canopy will require
tree planting.

GENERAL NOTES:

1. TREE SAVE AREA WILL BE PROTECTED WITH 24 STREET FENCING AS SHOWN ON THE DESIGN CONTROL PLAN.
2. TREE SAVE AREAS SHALL BE FREE OF INVASIVE PLANT SPECIES UNLESS APPROVED OTHERWISE BY THE CITY.
3. TREE REMOVAL IN A TREE SAVE AREA WILL REQUIRE A PERMIT FROM THE CITY PURSUANT TO SECTION 21.04 AND MAY REQUIRE AN ORDINANCE. INVASIVE PLANT SPECIES AND NONINDIGENOUS TREES MAY BE REMOVED WITHOUT CITY APPROVAL.
4. NO STRUCTURES SHALL BE ALLOWED WITHIN TEN FEET OF THE TREE SAVE AREA.
5. TREE SAVE AREAS SHALL BE CUSTODIED AS COMMON OPEN SPACE.
6. ALL EXISTING TREES OF CALIPER AND GREATER HAVE BEEN SURVEYED AND ARE SHOWN.
7. IMMEDIATELY AFTER THE TREE SAVE AREA WILL BE REMOVED TO THE SATISFACTION OF THE URBAN FORESTRY, REMOVAL WILL BE DONE WITH EXTREME CAUTION WHEN WORKING WITHIN EXISTING TREES DROP LINE. ALL MEASURES SHALL BE TAKEN TO MAINTAIN THE CANOPY TO THE BEST OF THE EXISTING TREES.
8. LANDSCAPE SHALL BE PLACED IN THE OPEN LOCATIONS THAT WILL REQUIRE THE AREA TO MAINTAIN THE COMPARISON OF THE REMOVED FROM THE TREE SAVE AREA. TREE LANDSCAPE WILL BE SUBJECT TO APPROVAL OF THE URBAN FORESTRY.
9. ONCE REMOVAL HAS BEEN REMOVED FROM THE TREE SAVE AREA, THE REMAINING CANOPY WILL BE EVALUATED BY THE URBAN FORESTRY. ADDITIONAL TREES WILL BE ADDED AS NEEDED TO MEET CANOPY REQUIREMENTS PER SECTION 21.04 OF THE TREE ORDINANCE. TREES SHALL BE PLANTED AT A RATE OF 18 TREES PER ACRE TO ACHIEVE F-PROTECTOR CANOPY. NEW TREES PLANTED SHALL BE IN ACCORDANCE SECTION 21.04 OF THE TREE ORDINANCE.

TREE SAVE REQUIREMENTS:

DEVELOPER WILL PROVIDE A MIN. OF 25% TREE SAVE AREA TO ACHIEVE A REDUCED LOT SIZE INCENTIVE AS STIPULATED IN THE ORDINANCE, CHAPTER 21.04.

TREE SAVE CALCULATIONS:

NET AREA = 3.26 ACRES (TOTAL SITE IS 8 ACRES MINUS DENSITY EXEMPT - 0.44 ACRES AND DRIVE CREEK - 0.50 ACRES)
REQUIRED TREE SAVE: 3.26 X 25% = .815 (RND 0.82) ACRES
PROVIDED TREE SAVE:
TOTAL AREA = 34,130 SQ. FT. 388 ACRES
SPECIMEN TREES:
TOTAL AREA = 1,120 SQ. FT. 34 ACRES 0.0119 ACRES
TOTAL AREA = 41,040 SQ. FT. 34 ACRES 0.0119 ACRES
TOTAL AREA = 2,100 SQ. FT. 34 ACRES 0.0058 ACRES
TOTAL PROVIDED TREE SAVE AREA = 0.839 ACRES - 27%

LEGEND:

- PROPOSED TREE SAVE COMMON OPEN SPACE
- PROPOSED COMMON OPEN SPACE
- PROPOSED REMOVED TREE CANOPY AREA

PREPARED FOR:
BARRINGER & SMITH
PROPERTIES, LLC
1133 METROPOLITAN AVE.
SUITE C19
CHARLOTTE, NC 28204

PROJECT:
WESTMINSTER
PARK

PREPARED BY:
Wirth & Associates
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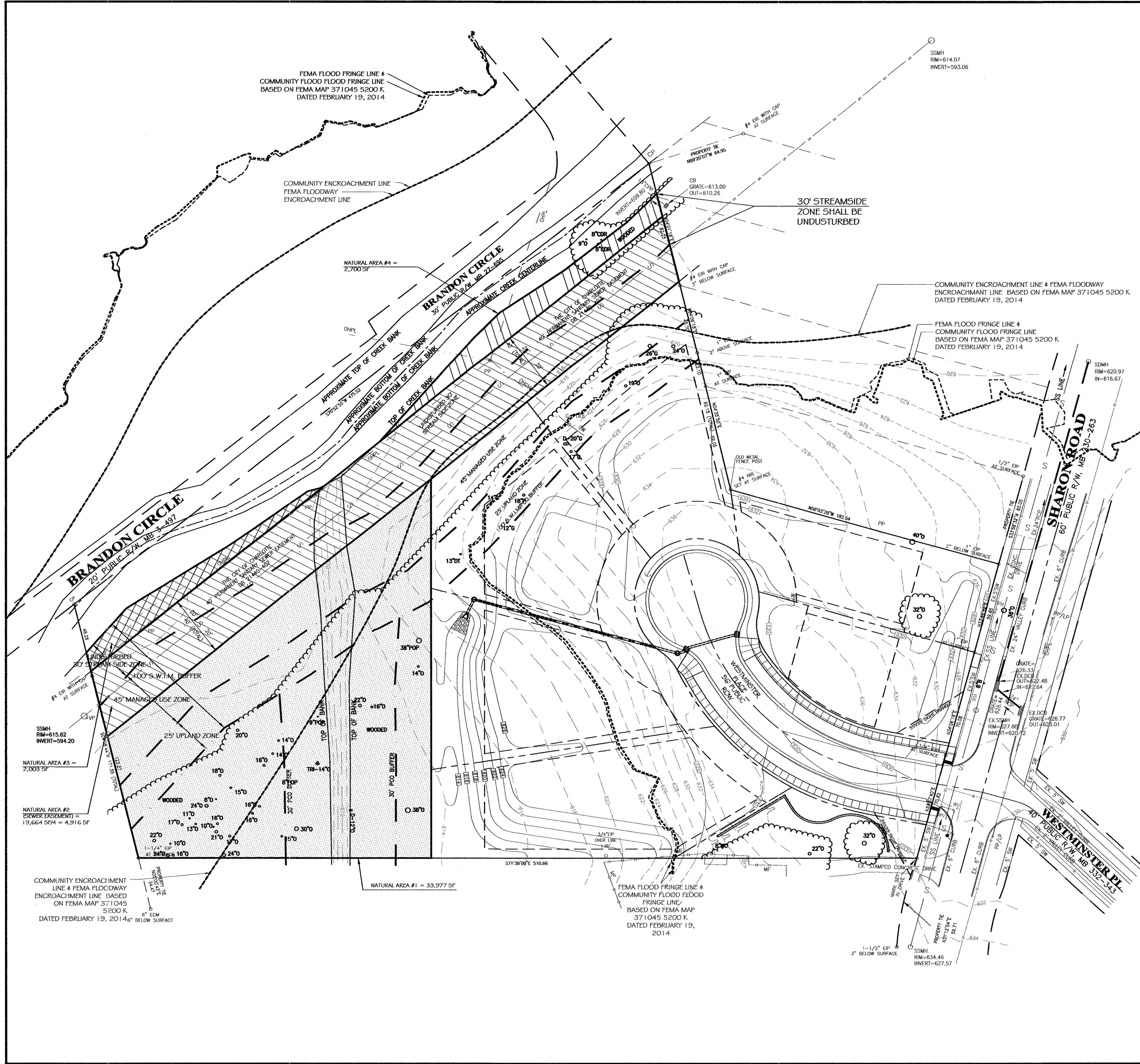
1 INCH = 30 FEET



DRAWN BY: EOD
CHECKED BY: EOD
SCALE: 1"=30'
DATE: 05.15.2014
REVISIONS:
NO. DATE: DESCRIPTION: BY:
1 07.02.2014 PER SUBMITTAL COMMENTS EOD

SHEET TITLE:
TREE SAVE PLAN

SHEET NO.:
L5.1
PROJECT NO.:



- PCO NOTES:**
1. POST CONSTRUCTION BUFFERS SHOWN ARE TAKEN FROM MECKLENBURG COUNTY POLARIS.
 2. 30' PCO BUFFERS SHOWN ARE TAKEN FROM MECKLENBURG COUNTY POLARIS.
 3. THIS SITE IS 23.9% BUILD UPON. SEE CALCULATIONS THIS SHEET. THIS SITE IS LOW DENSITY. BMP FACILITIES WILL NOT BE PROVIDED. SINCE THIS PROPERTY IS ADJACENT TO A FLOODWAY DETENTION FACILITIES HAVE NOT BEEN PROVIDED BASED ON THE 1975 DETENTION ORDINANCE.
 4. REQUIRED NATURAL AREA IS 3.8 X 25% = 0.95 ACRES. PROVIDED NATURAL AREA EQUALS 1.0 ACRES. SEE CALCULATIONS THIS SHEET.

BUA AREA CALCULATION:

TOTAL SITE = 3.8 ACRES

IMPERVIOUS AREA:
PUBLIC STREET & SIDEWALK = 10,270 SF
LOTS, MAX. 4800 SF PER LOTS 1 - 4 AND 4600 SF PER LOTS 5 & 6 = 28,800 SF

TOTAL IMPERVIOUS AREA = 39,070 SF / 0.89 ACERS

BUA = 0.89 / 3.8 = 0.234 = 23.4%

NATURAL AREA REQUIREMENTS:

LOW DENSITY REQUIRES 25% NATURAL AREA = 3.8 X .25 = 0.95 ACRES

NATURAL AREA PROVIDED:

AREA #1 = 33,977 SF / 0.78 ACRES
AREA #2 = 19,664 SF / 0.44 ACRES W/ UTILITY EASEMENT
0.44 / 4 = 0.11 ACRES
AREA #3 = 2003 SF / 0.046 ACRES
AREA #4 = 2700 SF / 0.062 ACRES

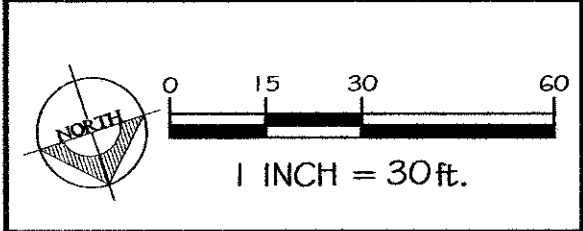
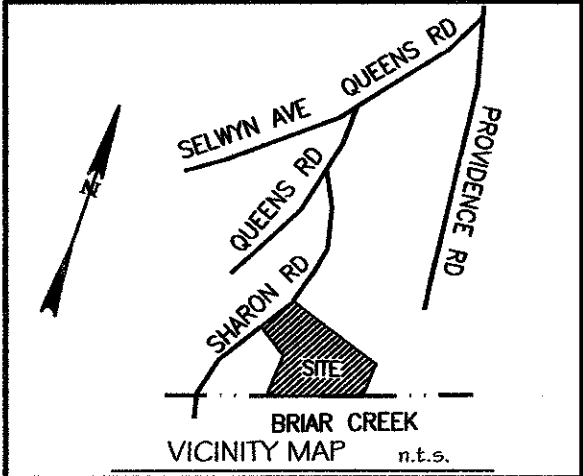
TOTAL NATURAL AREA PROVIDED = 43,591 SF / 1 ACRE

PCCO SUMMARY		
Original Parcel ID Number(s):	15310514, 1530415, 1530516,	
Development Type:	Single-Family	
Subject to PCCO? Y/N	No	
If NO, why?	Below BUA/Disturbance Thresholds	
Watershed:	Central Catawba	
Disturbed Area (ac):	1.84	
Site Area (ac):	3.8	
	DA#1	DA#2
Total on-site Drainage Area (ac):	3.8	
Existing Built-upon-area (SF):	10,608	
Existing BUA to be removed (SF):	10,608	
Existing BUA to remain (SF):	0	
Proposed New BUA (SF):	39,070	
Proposed % BUA:	23.40%	
Density (High / Low)	Low	
Total Post-Project BUA for site:	39,070	
Development or Redevelopment?	Development	
Natural Area Required (ac):	0.95	
Natural Area Provided (ac):	1	
Total stream buffer protected on-site (ac):	1.88	
Transit Station Area? Y/N	N	
Distressed Business District? Y/N	N	
Mitigation Type (if applicable)	N/A	
Natural Area mitigation? Y/N	N	
Buffer Mitigation? Y/N	N	
Total Phosphorous Mitigation? Y/N	N	

PREPARED FOR:
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SUITE 619
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PROJECT:
WESTMINSTER
PARK

PREPARED BY:
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Phone: 704-375-1288 Fax: 704-375-3844
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DRAWN BY: ECM
CHECKED BY: ECM
SCALE: 1"=30'
DATE: 05.15.2014

REVISIONS:
NO: DATE: DESCRIPTION: BY:
1. 07.03.2014 PER SUBDIVISION COMMENTS ECM

SHEET TITLE:
PCO/NATURAL AREA
PLAN

SHEET NO.:
L5.2
PROJECT NO.:

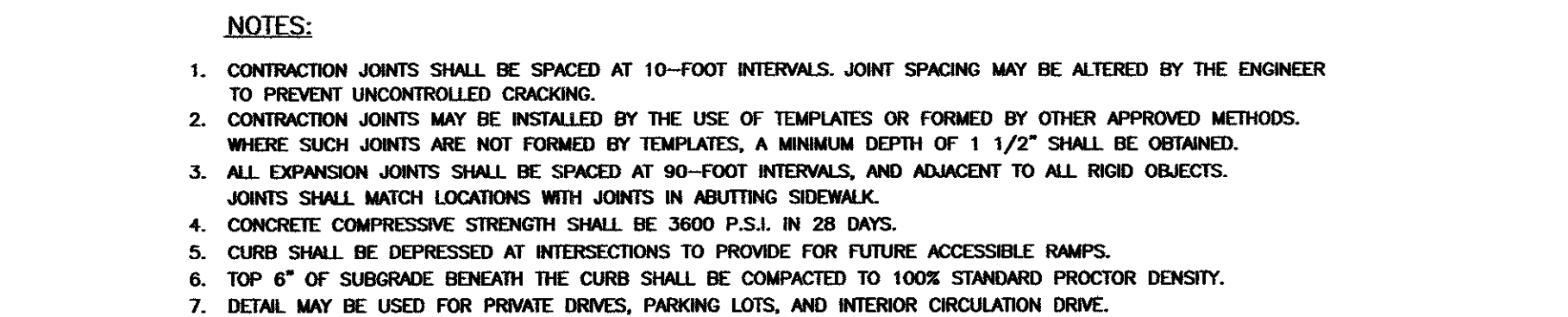
**BARRINGER & SMITH
PROPERTIES, LLC
1133 METROPOLITAN AVE.
SUITE 619
CHARLOTTE, NC 28204**

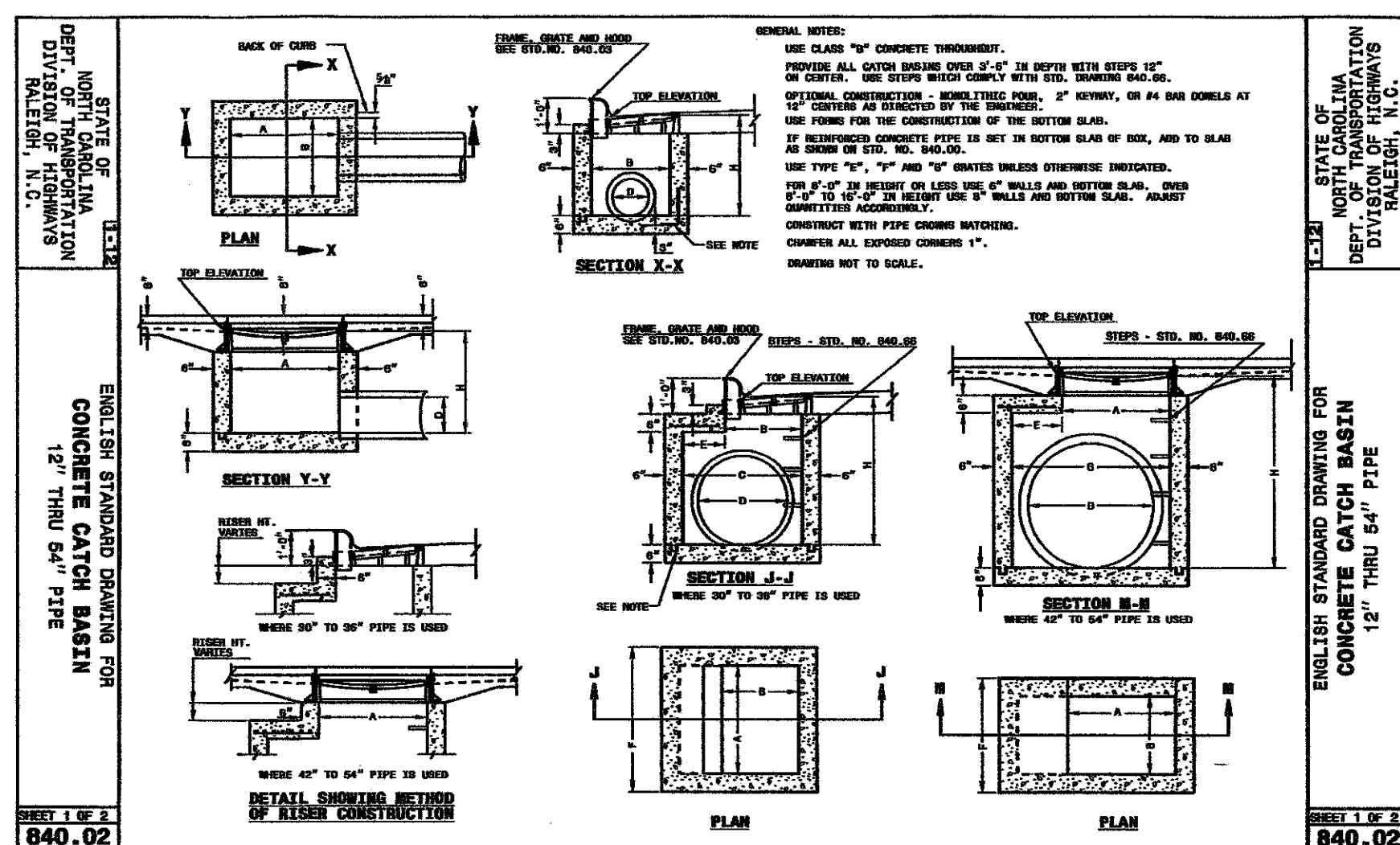
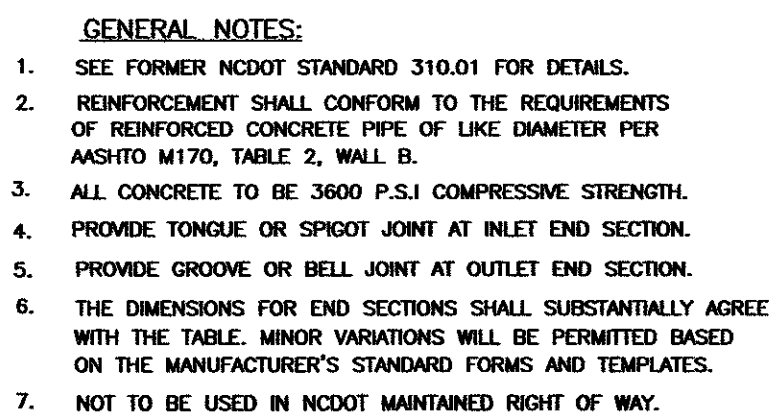
PREPARED BY:

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1230 W. Morehead St. Suite 212
Charlotte, NC 28208
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Email: gwirth@wirthassociates.com

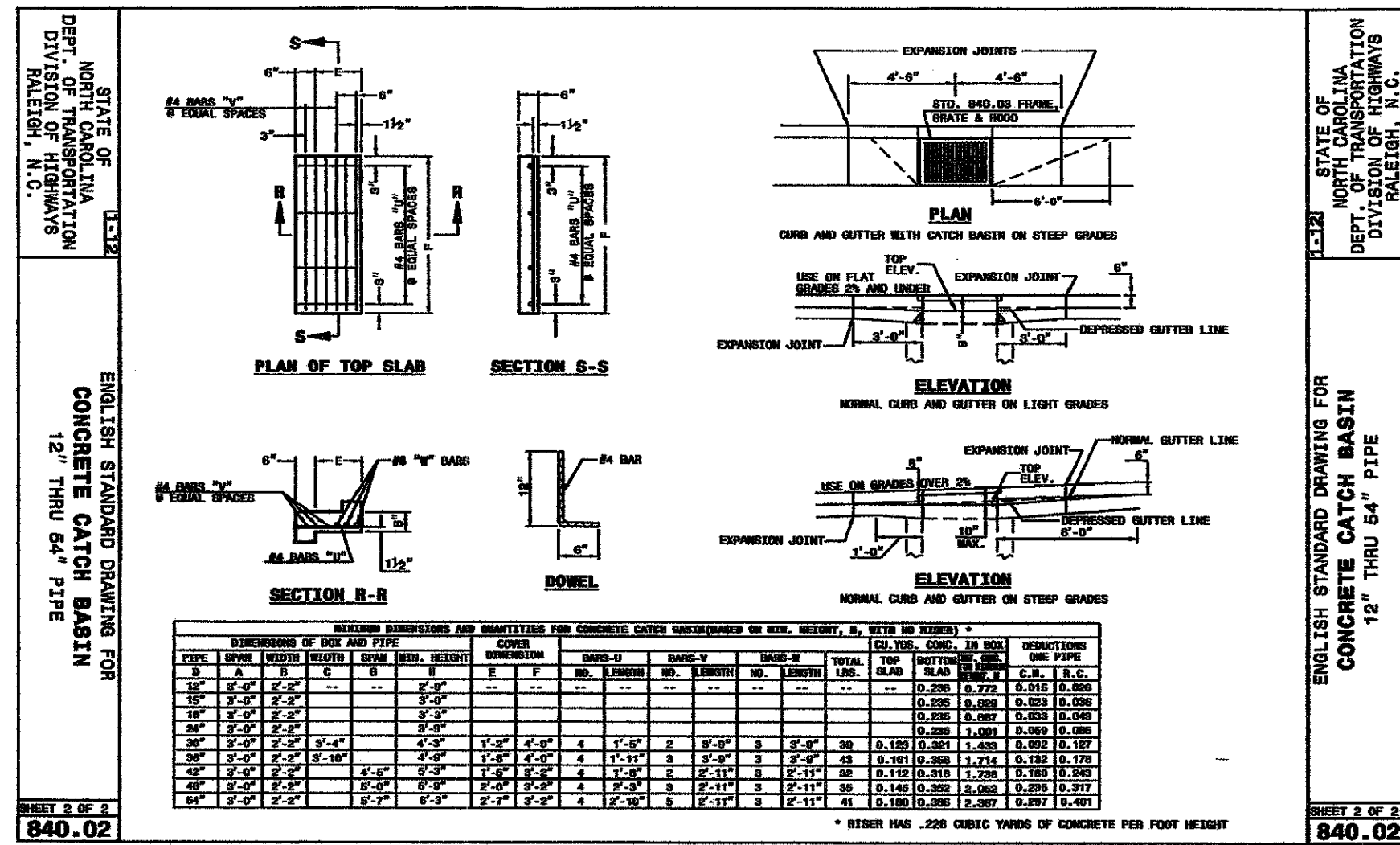
NO:	DATE:	DESCRIPTION:	BY:
1.	07.03.2014	PER SUBDIVISION COMMENTS	ECN

SHEET NO.:
L6.0
PROJECT NO.:

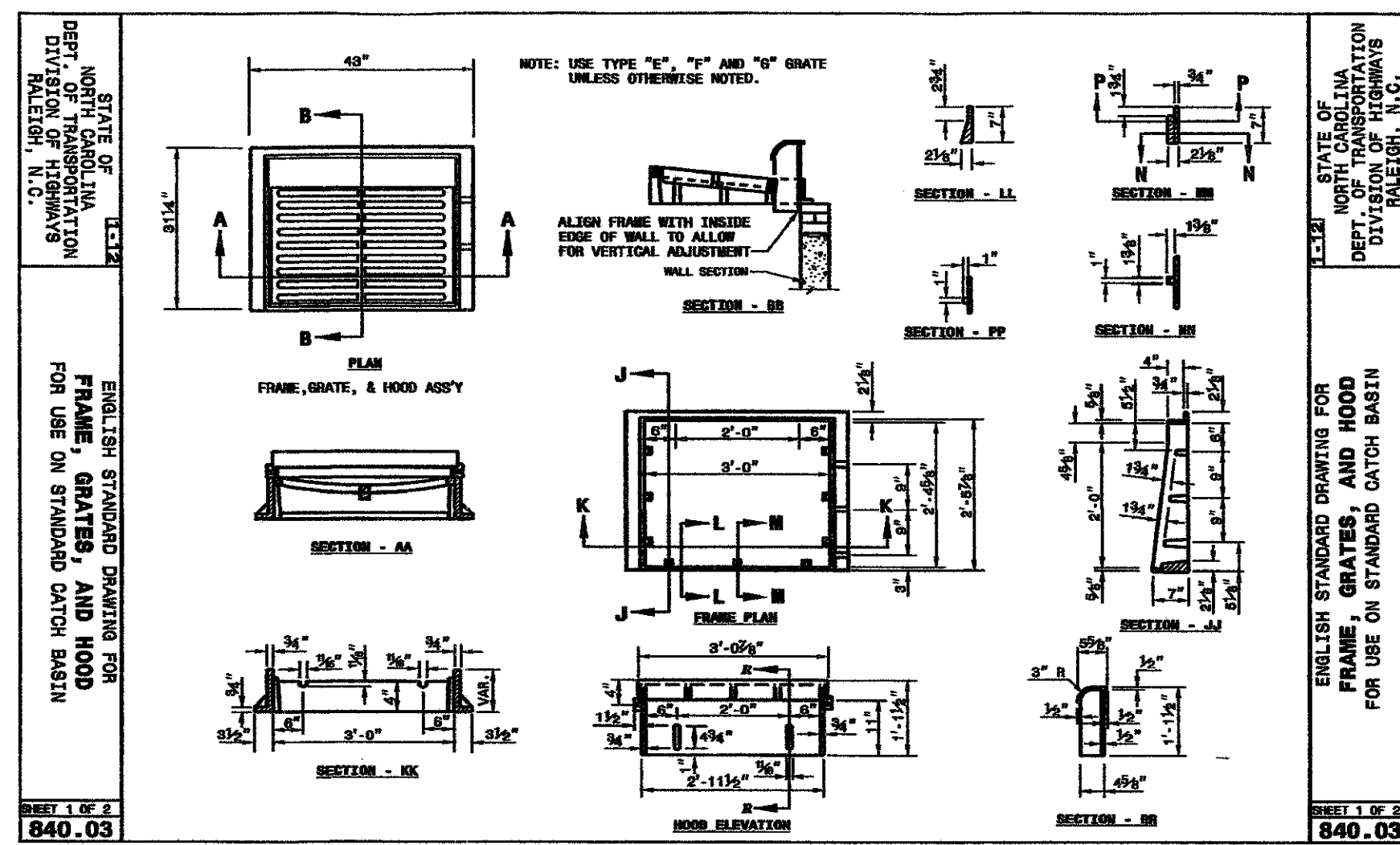




1 CONCRETE CATCH BASIN
NTS



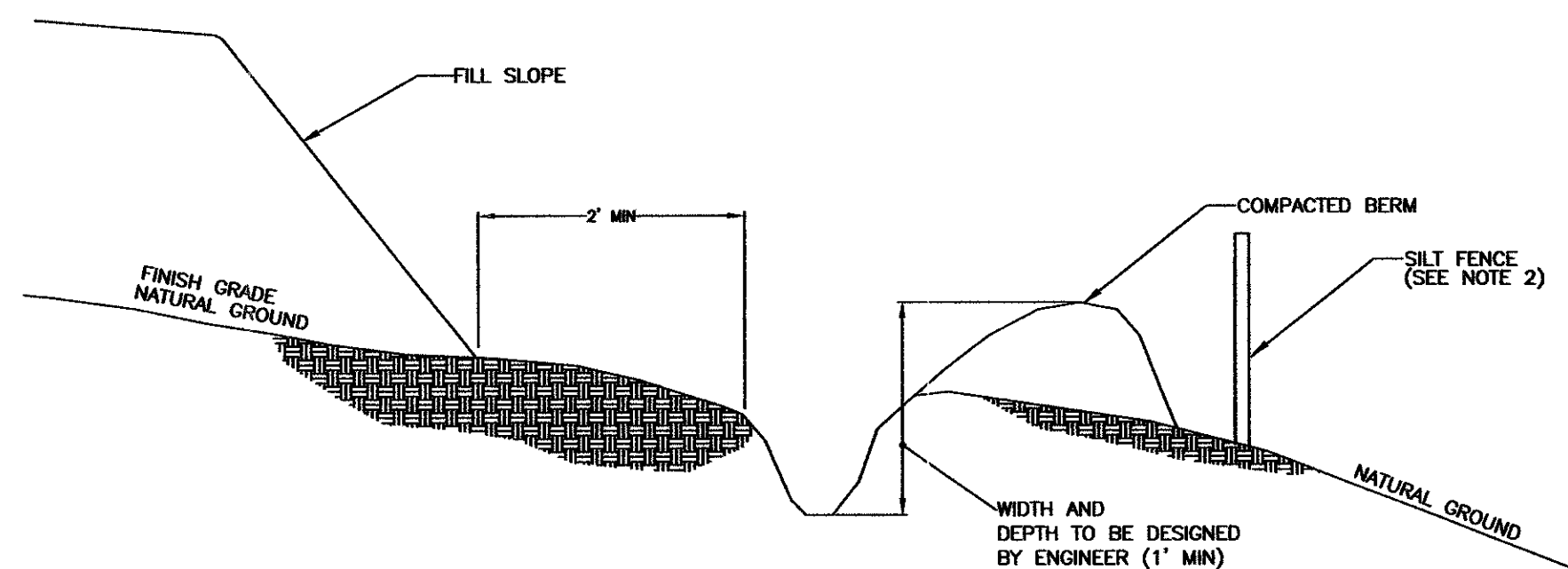
2 CONCRETE CATCH BASIN
NTS



3 FRAME, GRATES, AND HOOD CATCH BASIN
NTS

L6.

PROJECT NO.: _____

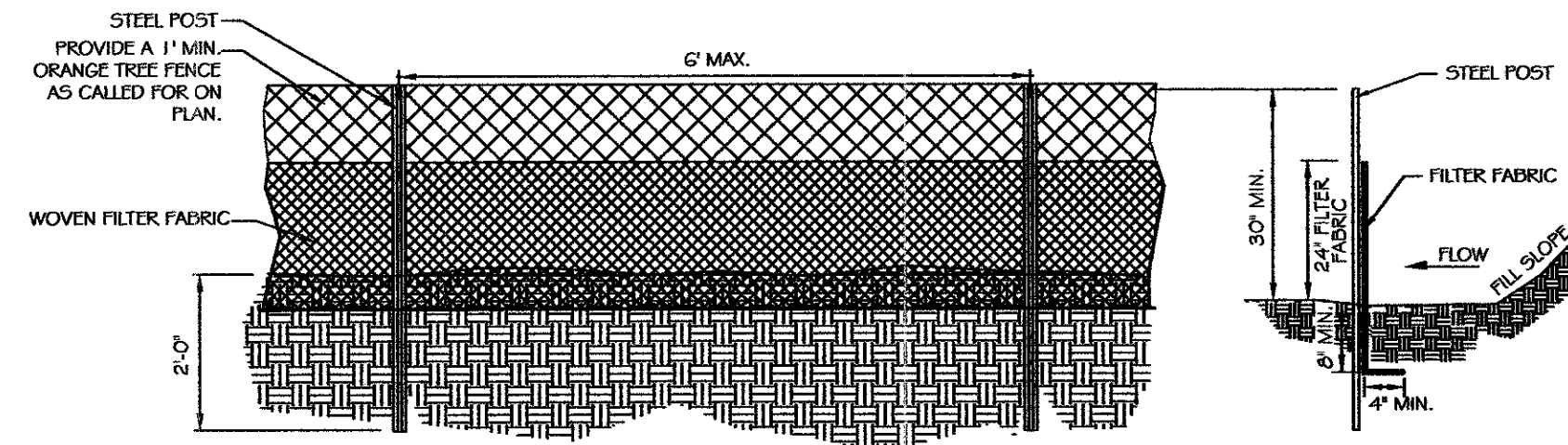


NOTE:

1. DITCH SHOULD HAVE LONGITUDINAL SLOPE OF 1%.
2. SILT FENCE MAY BE REQUIRED BEHIND BERM

7 TEMPORARY SILT DITCH

NTS



GENERAL NOTES:

1. WOVEN FILTER FABRIC BE USED WHERE SILT FENCE IS TO REMAIN FOR A PERIOD OF MORE THAN 30 DAYS.
2. STEEL POSTS SHALL BE 5'-0" IN HEIGHT AND BE OF THE SELF-FASTENER ANGLE STEEL TYPE.
3. TURN SILT FENCE UP SLOPE AT ENDS.
4. ORANGE SAFETY FENCE IS REQUIRED AT BACK OF SILT FENCE WHEN GRADING IS ADJACENT TO STREAMS OR WETLANDS AND WOODLANDS. THE COLOR ORANGE IS RESERVED FOR VISUAL IDENTIFICATION OF ENVIRONMENTALLY SENSITIVE AREAS.
5. DRAINAGE AREA CAN NOT BE GREATER THAN 1/4 ACRE PER 100 FT OF FENCE.
6. SLOPE LENGTHS CAN NOT EXCEED CRITERIA SHOWN IN TABLE 6.62A NORTH CAROLINA EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.
7. DO NOT INSTALL SEDIMENT FENCE ACROSS STREAMS, DITCHES, WATERWAYS OR OTHER AREAS OF CONCENTRATED FLOW.

MAINTENANCE NOTES:

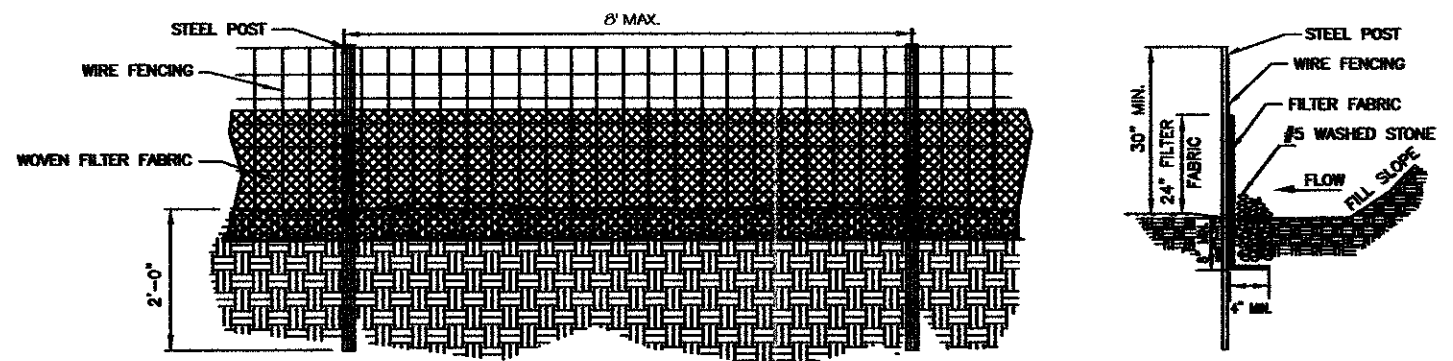
1. FILTER BARRIERS SHALL BE INSPECTED BY THE FINANCIALLY RESPONSIBLE PARTY OR HIS AGENT IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS NEEDED SHALL BE MADE IMMEDIATELY.
2. SHOULD THE FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL IS NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN DEPOSITS REACH APPROX. HALF THE HEIGHT OF THE BARRIER. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS REMOVED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

NOTE: SEE PLANS FOR TREE FENCE LOCATIONS.

8 TEMPORARY SILT FENCE W/TREE PROTECTION FENCE

NTS

PROVIDE A 1" MIN. ORANGE TREE FENCE ON TOP OF SILT FENCE AS CALLED FOR ON PLAN.



GENERAL NOTES:

1. WIRE FENCING SHALL BE A MINIMUM OF 32" IN WIDTH AND SHALL HAVE A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
2. WOVEN FILTER FABRIC BE USED WHERE SILT FENCE IS TO REMAIN FOR A PERIOD OF MORE THAN 30 DAYS.
3. STEEL POSTS SHALL BE 5'-0" IN HEIGHT AND BE OF THE SELF-FASTENER ANGLE STEEL TYPE.
4. WIRE FENCING SHALL BE AT LEAST #10 GAGE WITH A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
5. TURN SILT FENCE UP SLOPE AT ENDS.
6. WIRE MESH SHALL BE MIN. 13 GAGE WITH MAXIMUM 12" OPENINGS.
7. WIRE AND WASHED STONE IS REQUIRED TO BE SHOWN ON PLANS AT THE TOE OF SLOPES GREATER THAN 10 FEET VERTICAL (2:1 SLOPE).
8. ORANGE SAFETY FENCE IS REQUIRED AT BACK OF SILT FENCE WHEN GRADING IS ADJACENT TO STREAMS, DITCHES, WATERWAYS OR OTHER AREAS OF CONCENTRATED FLOW.
9. DRAINAGE AREA CAN NOT BE GREATER THAN 1/4 ACRE PER 100 FT OF FENCE.
10. SLOPE LENGTHS CAN NOT EXCEED CRITERIA SHOWN IN TABLE 6.62A NORTH CAROLINA EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.
11. DO NOT INSTALL SEDIMENT FENCE ACROSS STREAMS, DITCHES, WATERWAYS OR OTHER AREAS OF CONCENTRATED FLOW.

MAINTENANCE NOTES:

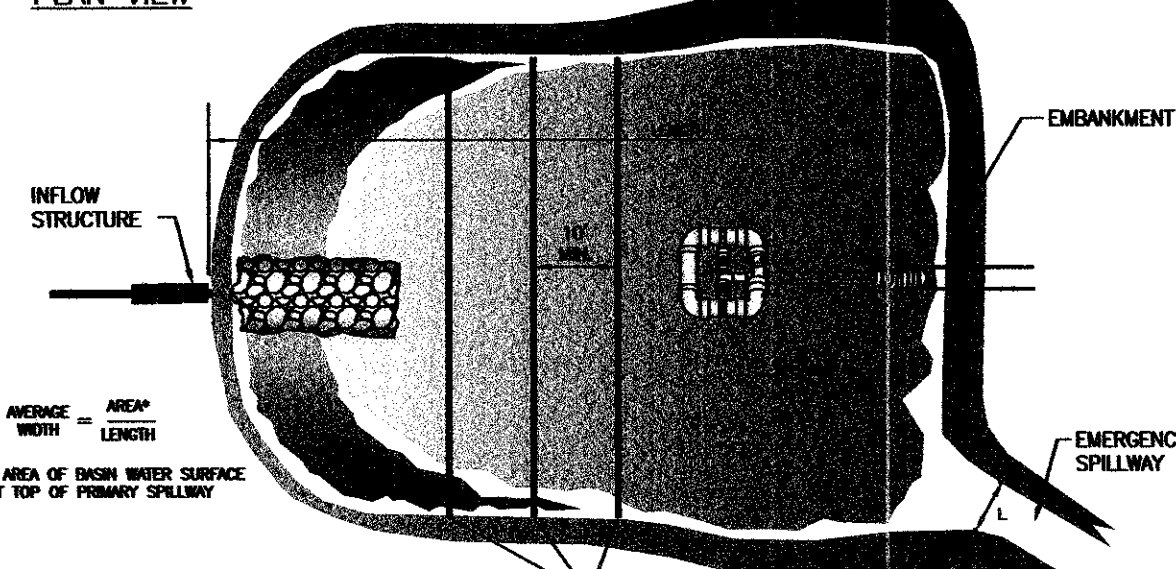
1. FILTER BARRIERS SHALL BE INSPECTED BY THE FINANCIALLY RESPONSIBLE PARTY OR HIS AGENT IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS NEEDED SHALL BE MADE IMMEDIATELY.
2. SHOULD THE FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL IS NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN DEPOSITS REACH HALF THE HEIGHT OF THE BARRIER. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS REMOVED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

9 HIGH HAZARD TEMPORARY SILT FENCE W/TREE PROTECTION FENCE

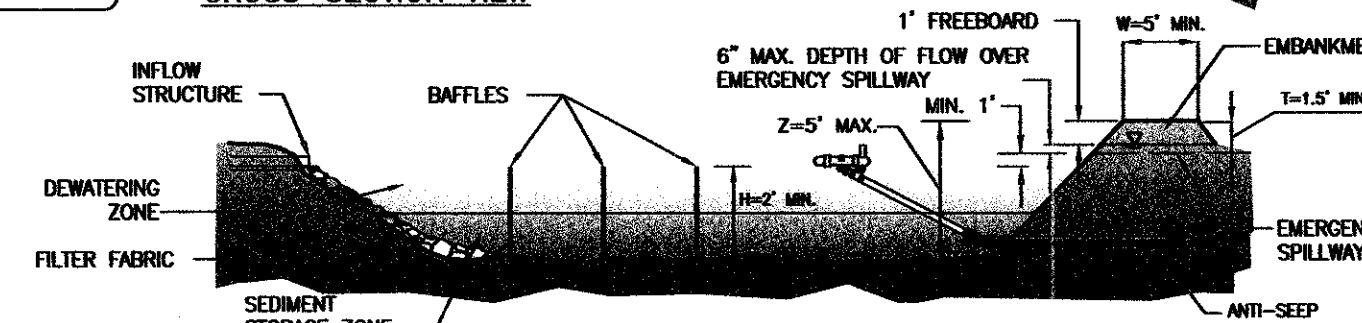
NTS

SKIMMER SEDIMENT BASIN DESIGN CRITERIA	
DRAINAGE AREA (ACRES)	< 10 AC.
MIN. LENGTH TO WIDTH RATIO	2:1
MAX. LENGTH TO WIDTH RATIO	6:1
MIN. VOLUME REQUIRED (CU. FT. PER AC. DISTURBED)	1800
SURFACE AREA REQUIRED (SQ. FT. PER CFS Q10)	325

PLAN VIEW



CROSS-SECTION VIEW

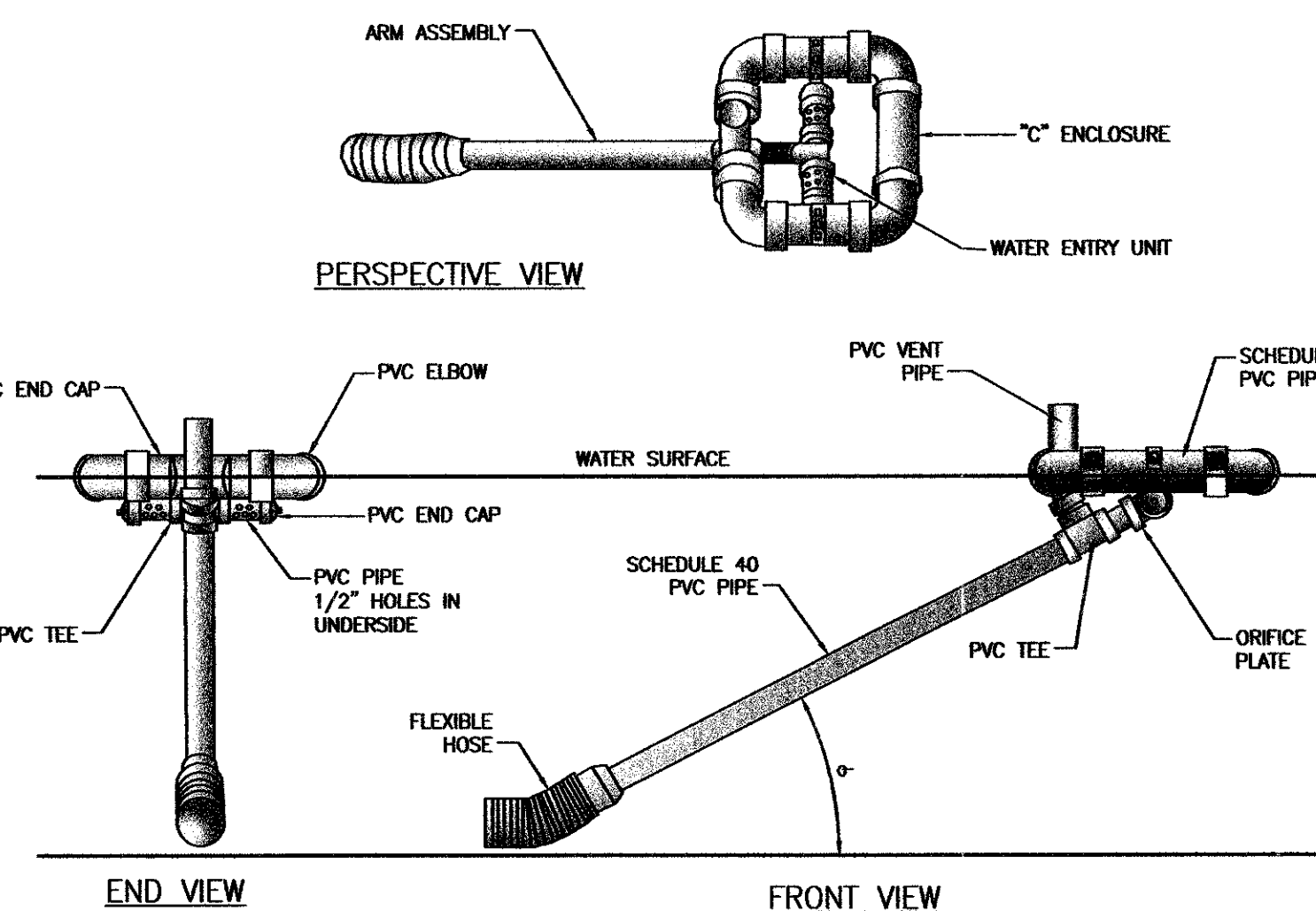


DATA BLOCK

BASIN	DRAINAGE AREA (ACRES)	DEVELOPED AREA (ACRES)	Q ₁₀	BASIN VOLUME REQUIRED (CU. FT.)		BASIN SURFACE AREA REQUIRED (SQ. FT.)		CLEANOUT DEPTH (FT.)	H (FEET)	Z (FEET)	L (FEET)	T (FEET)	W (FEET)	SKIMMER ORIFICE DIAMETER	SKIMMER ORIFICE DIAMETER
#1 A+B	1.10	1.10	4.64	1800	2570	1500	1540	615	2	3.5	10	1.5	5	2"	1"

4 SKIMMER SEDIMENT BASIN

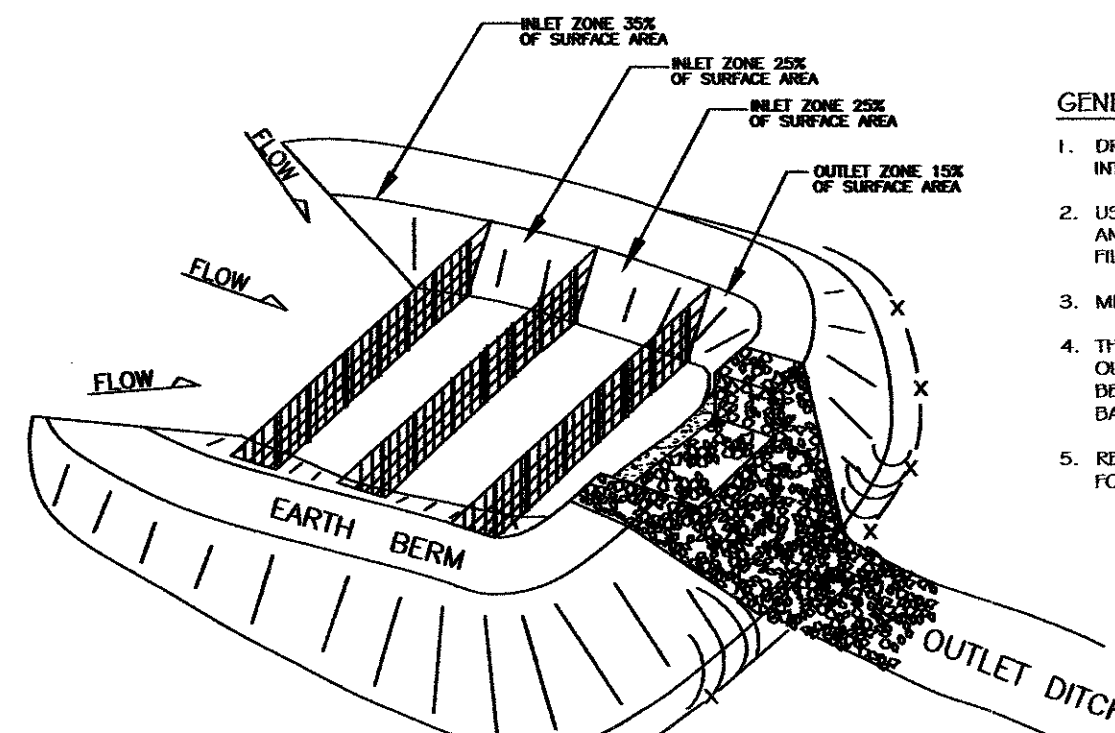
NTS



SCHEMATIC OF SKIMMER TAKEN FROM PENNSYLVANIA EROSION AND SEDIMENT POLLUTION CONTROL MANUAL, MARCH 2000.

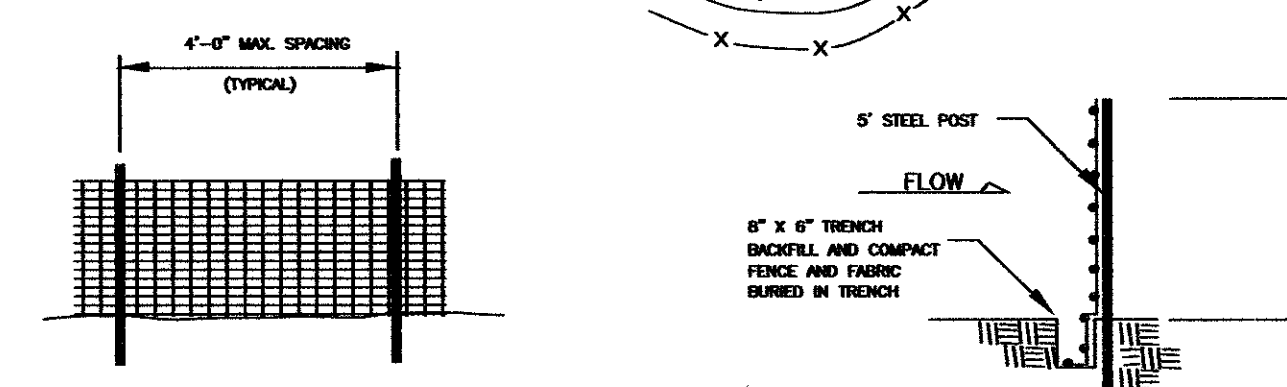
5 SKIMMER

NTS



GENERAL NOTES:

1. DRIVE 5" STEEL POST AT LEAST 24" INTO SOLID GROUND.
2. USE STAPLES 1" APART HORIZONTALLY AND VERTICALLY TO ATTACH THE FILTER FABRIC TO THE WIRE FENCE.
3. MINIMUM BAFFLE SPACING IS 10'.
4. THE FLOOR OF THE BASIN IN THE OUTLET ZONE AND BERMS SHOULD BE SEEDED IMMEDIATELY AFTER THE BASIN IS CONSTRUCTED.
5. REFER TO NOTES/FORM SECTION AG.65 FOR ADDITIONAL SPECIFICATIONS.

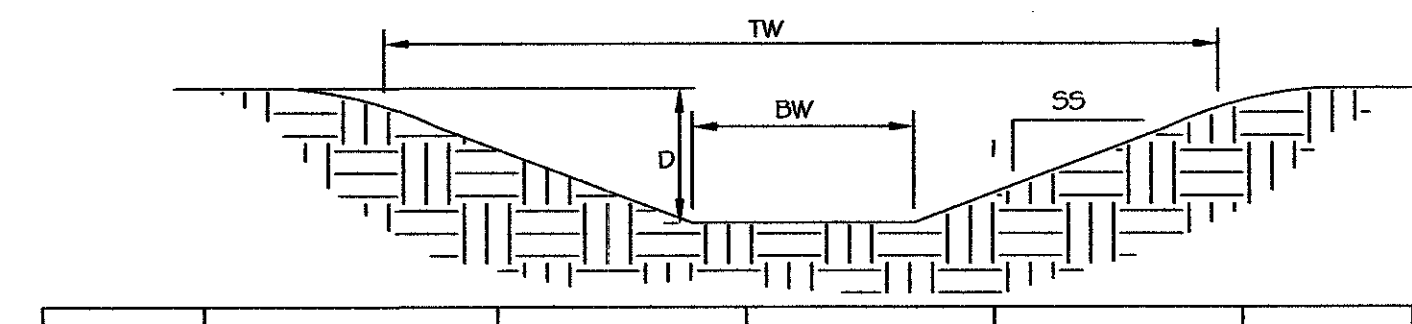


6 BAFFLE INSTALLATION

NTS

NOTES:

1. REFER TO NOTES/FORM SECTION AG.64 FOR ADDITIONAL DESIGN SPECIFICATIONS REGARDING SKIMMER SEDIMENT BASINS.
2. REFER TO STD. #30.19 FOR BAFFLE SPACING AND INSTALLATION.



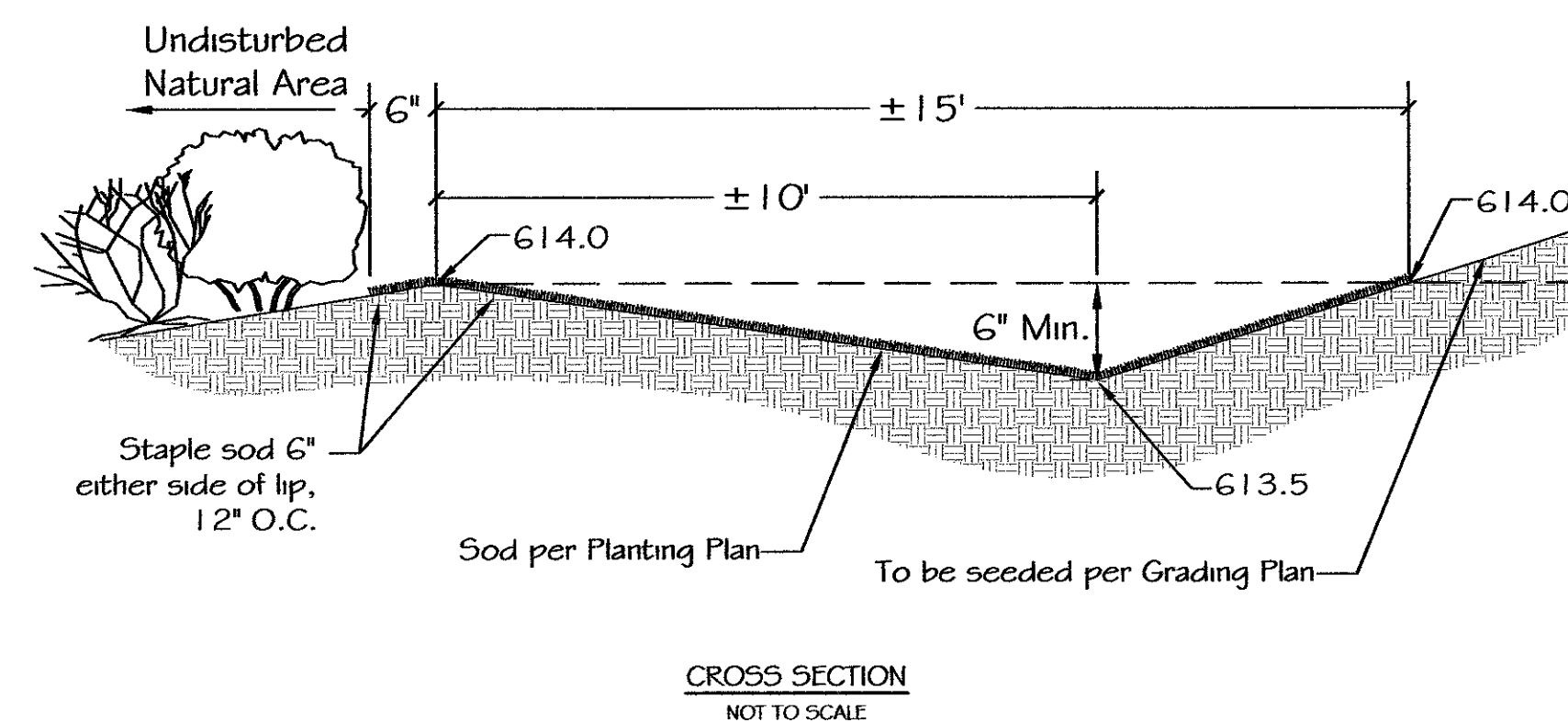
SWALE	BOTTOM WIDTH	TOP WIDTH	SIDE SLOPE	BOTT. SLOPE	DEPTH	LINING
PS#1	3'-0"	9'-0"	3:1	2.3%	1'-0"	1

1. Lining shall be North American Green 575BN or approved equal. Apply during rough grading on temp. swale.
2. Lining shall be North American Green P300 or approved equal. Apply after final grading on permanent swale.

NOTE: PERMANENT SEED ALL SWALES PER SEEDING NOTES ON SHEET L6.4.

1 PERMANENT SWALE

NTS



NOTES:

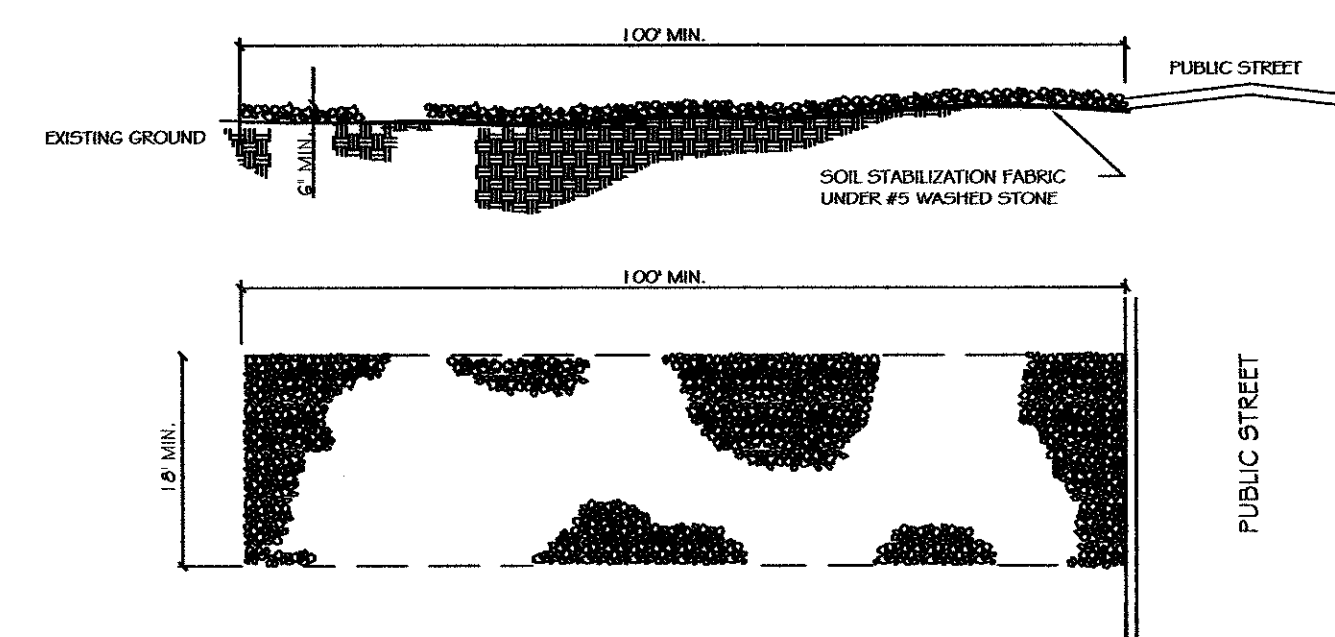
1. ENSURE THAT THE SPREADER IS LEVEL FOR UNIFORM SPREADING OF STORM RUNOFF.
2. CONSTRUCT THE LEVEL SPREADER ON UNDISTURBED SOIL (NOT ON FILL).
3. CONSTRUCT A 20-FOOT TRANSITION SECTION FROM THE DIVERSION CHANNEL TO BLEND SMOOTHLY TO THE WIDTH AND DEPTH OF THE SPREADER.
4. DISPERSE RUNOFF FROM THE SPREADER ACROSS A PROPERLY STABILIZED SLOPE NOT TO EXCEED 10%. MAKE SURE THE SLOPE IS SUFFICIENTLY SMOOTH TO KEEP FLOW FROM CONCENTRATING.
5. IMMEDIATELY AFTER ITS CONSTRUCTION, APPROPRIATELY SEED AND MULCH THE ENTIRE DISTURBED AREA OF THE SPREADER.

2 LEVEL SPREADER

NTS

NOTES:

1. A STABILIZED ENTRANCE PAD OF #5 WASHED STONE OR RAIL ROAD BALLAST SHALL BE LOCATED WHERE TRAFFIC WILL ENTER OR LEAVE THE CONSTRUCTION SITE ONTO A PUBLIC STREET.
2. FILTER FABRIC OR COMPACTED CRUSHER RUN STONE SHALL BE USED AS A BASE FOR THE CONSTRUCTION ENTRANCE.
3. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC STREETS OR EXISTING PAVEMENT. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS WARRANT AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
4. ANY SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC STREETS MUST BE REMOVED IMMEDIATELY.
5. WHEN APPROPRIATE, WHITEIS MUST BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTERING A PUBLIC STREET. WHEN WASHING IS REQUIRED, IT SHALL BE DONE IN AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT BASIN SEE STD. NO. 30.11B.
6. CDOT MAY REQUIRE A STANDARD COMMERCIAL DRIVEWAY (STD. 10.24 & 10.25) TO ACCESS THE CONSTRUCTION SITE IF THE DRIVEWAY IS ON A THOROUGHFARE.



3 STABILIZED CONSTRUCTION ENTRANCE

NTS

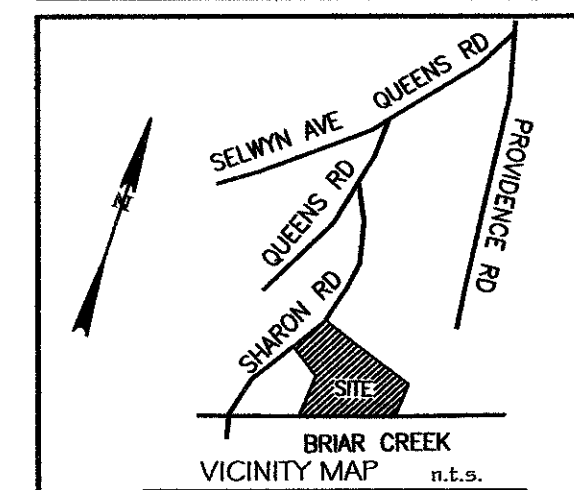
PREPARED FOR:

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PROJECT:
WESTMINSTER
PARK

PREPARED BY:

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DRAWN BY: ECM

CHECKED BY: ECM

SCALE: N.T.S.

DATE: 05.15.2014

REVISIONS:

NO: DATE: DESCRIPTION: BY:

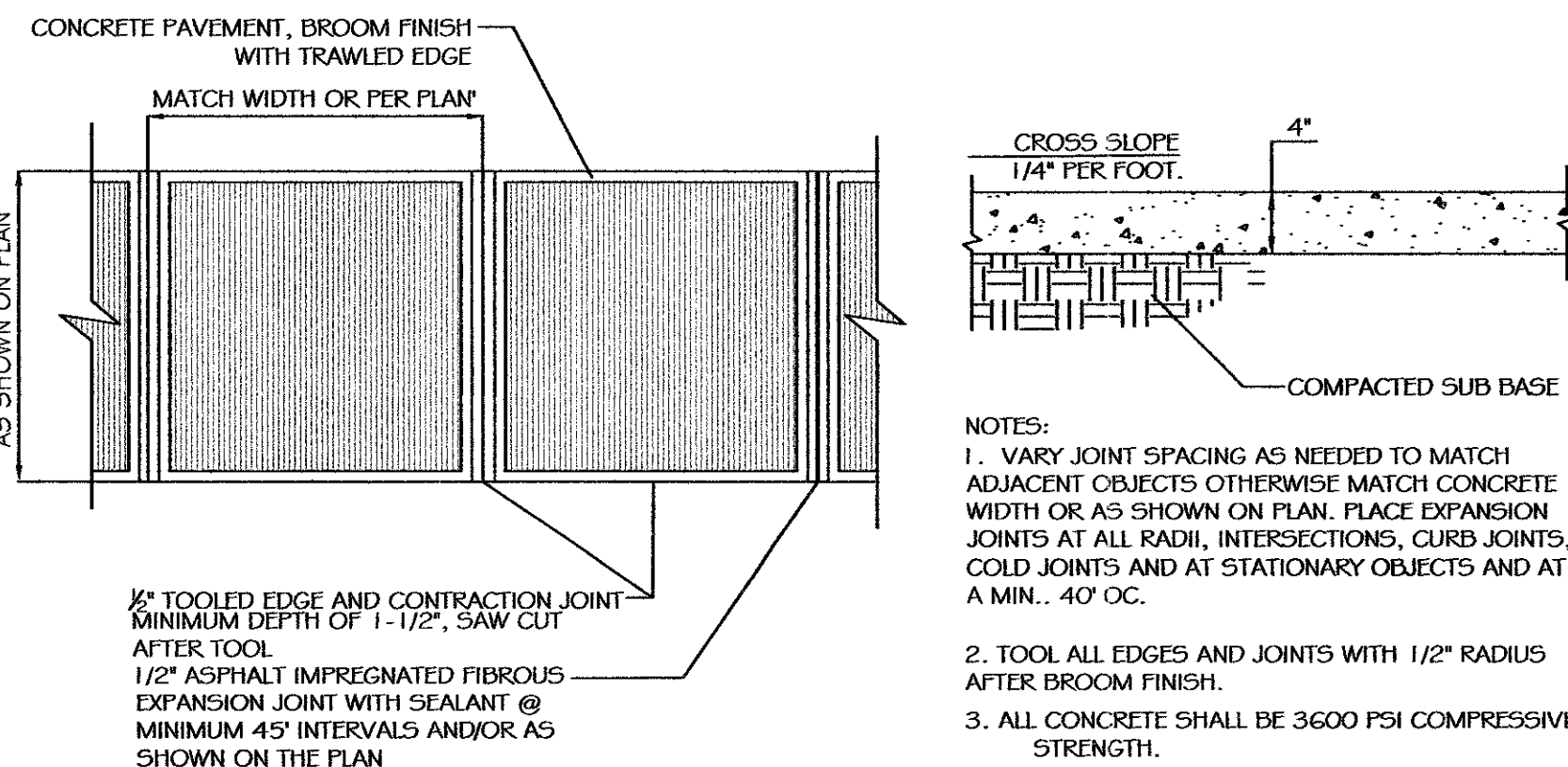
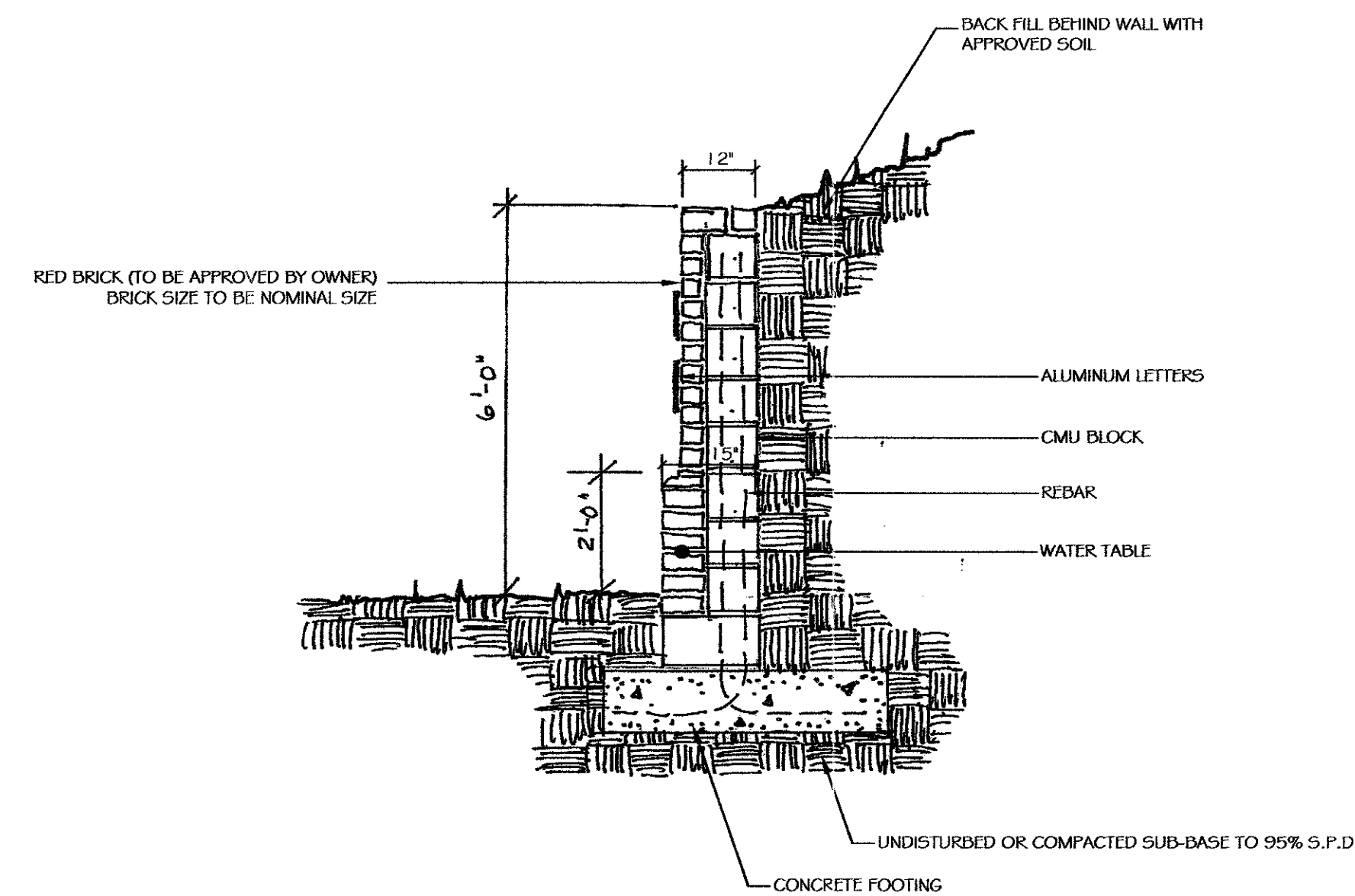
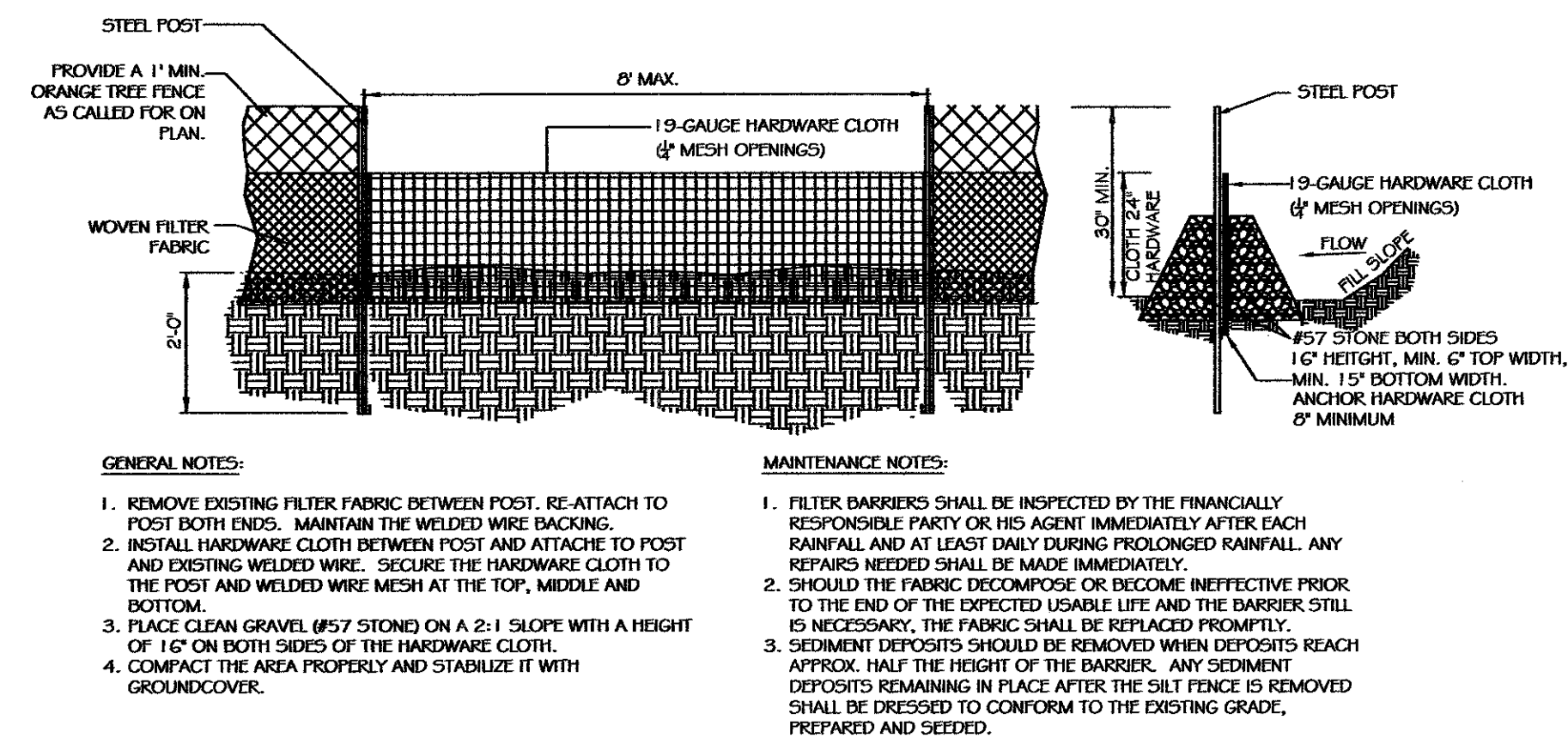
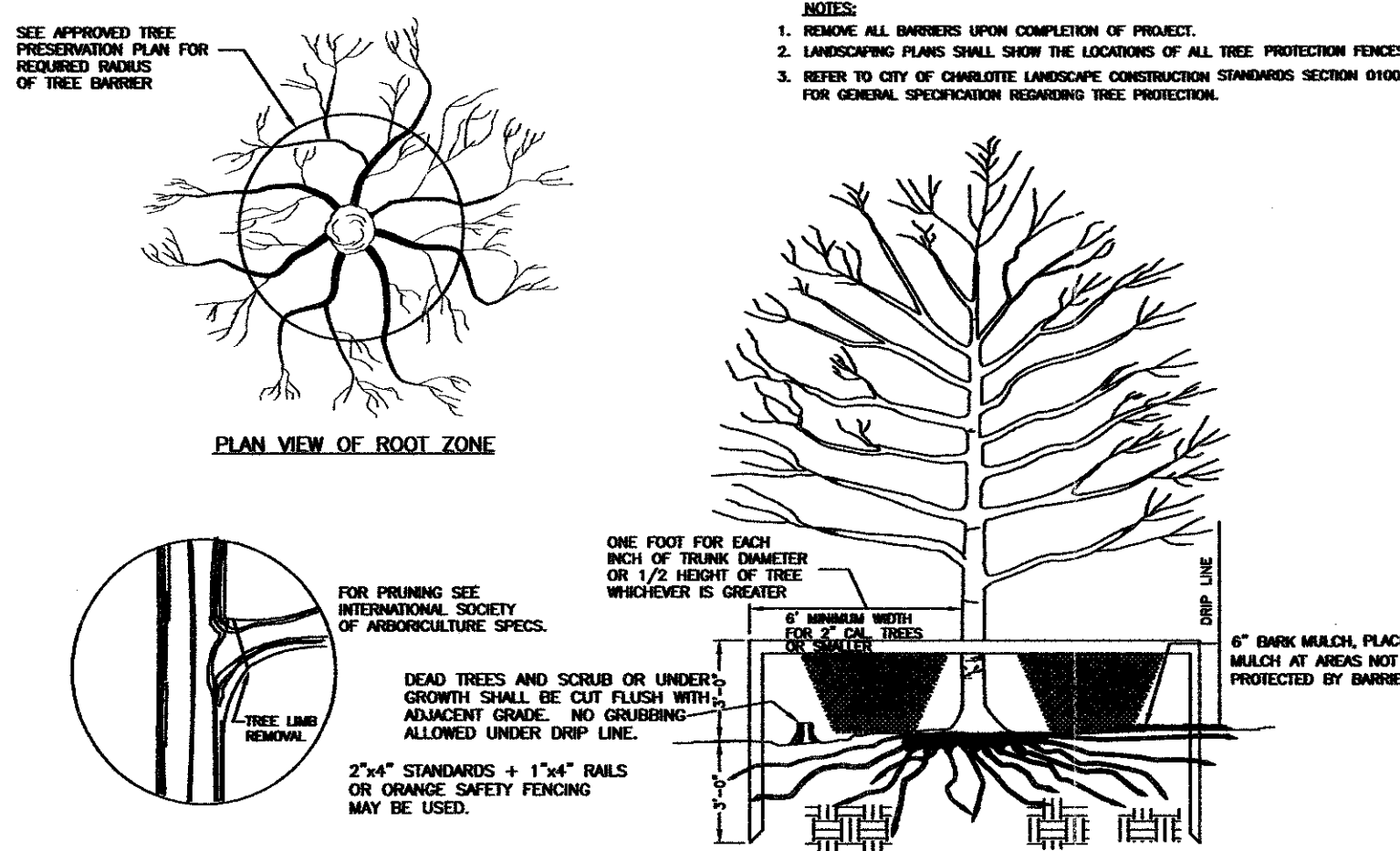
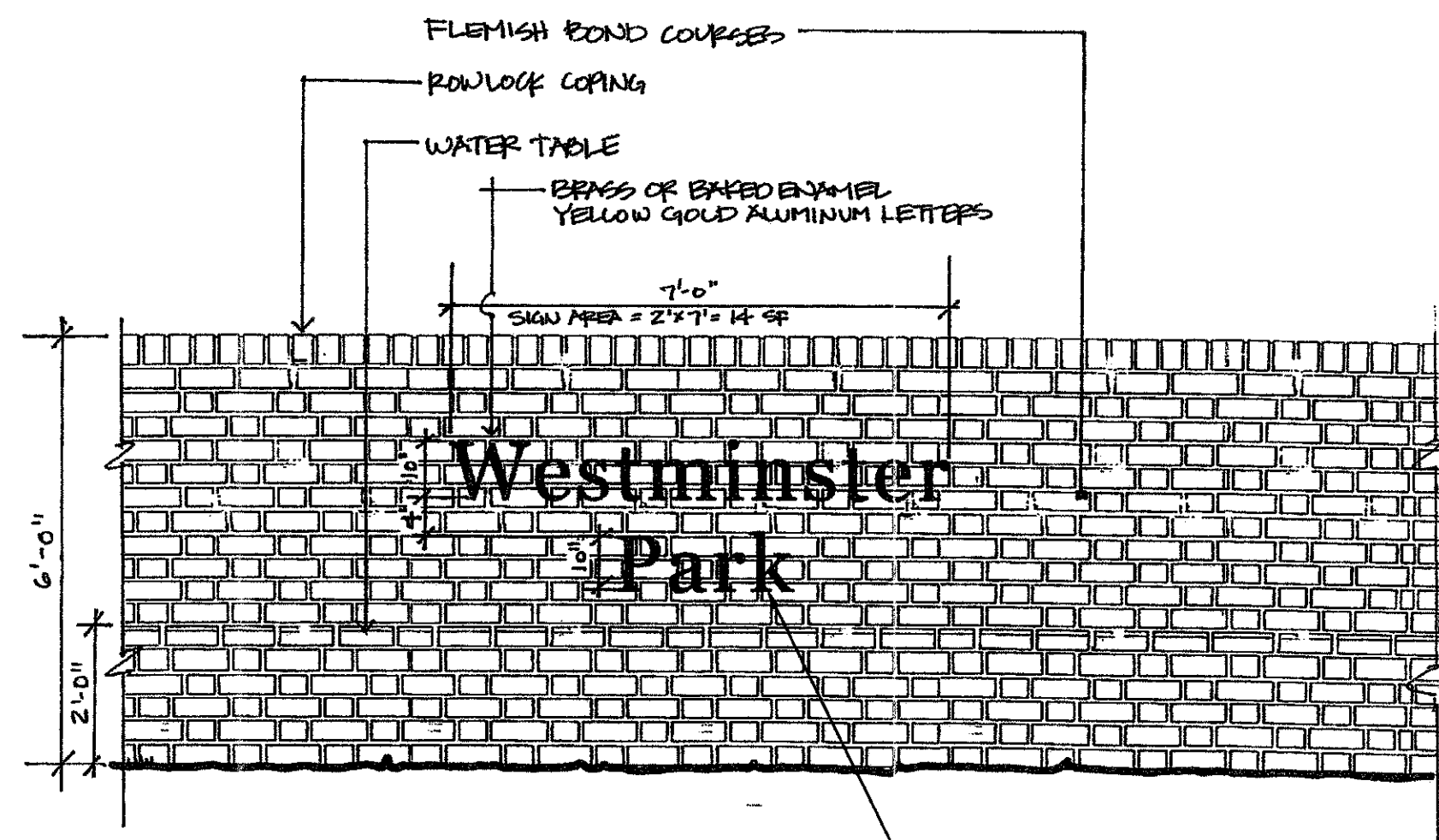
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SITE DETAILS

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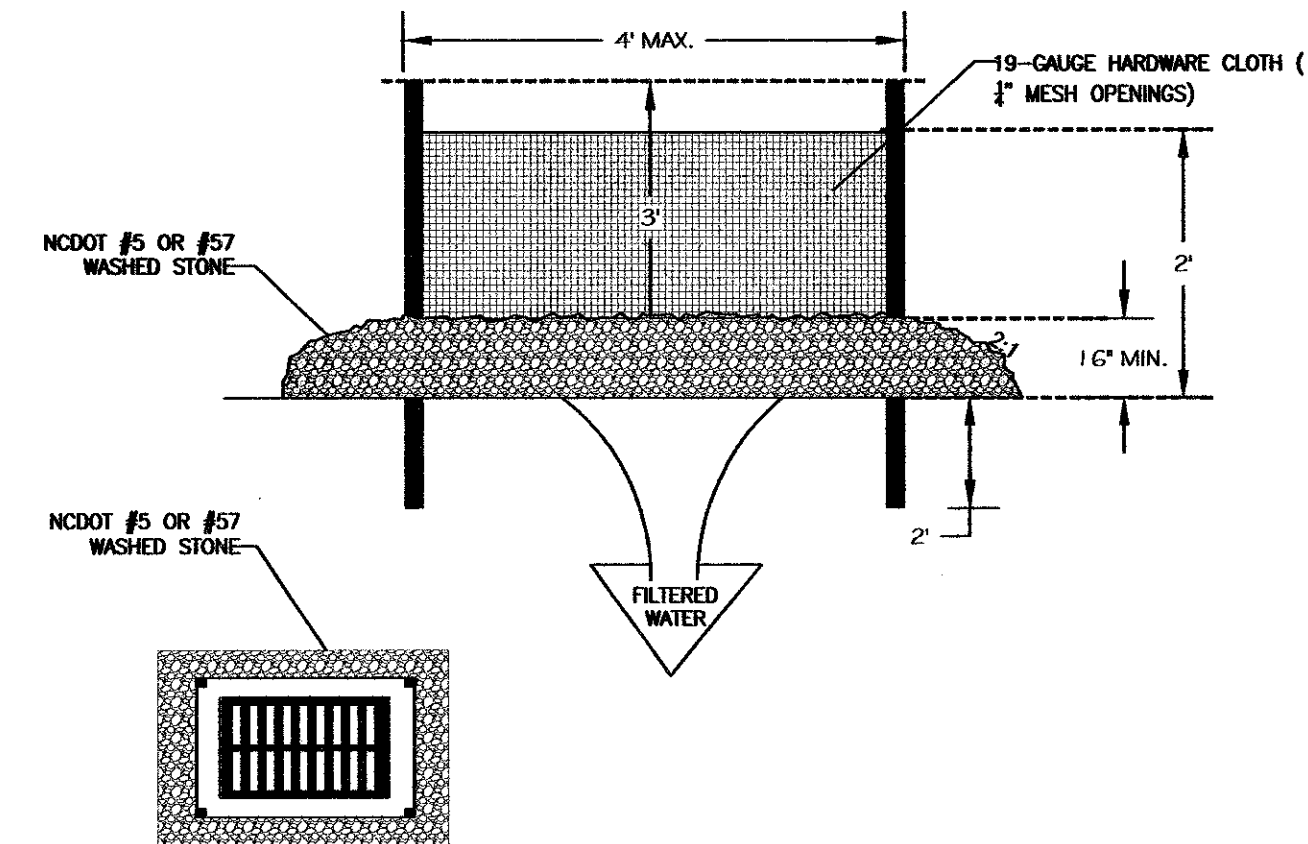
L6.2

PROJECT NO.:



1 SILT FENCE OUTLET STRUCTURE

- GENERAL NOTES:
- UNIFORMLY GRADE A SHALLOW DEPRESSION APPROACHING THE INLET.
 - DRIVE 5-FOOT STEEL POSTS 2 FEET INTO THE GROUND SURROUNDING THE INLET. SPACE POSTS EVENLY AROUND THE PERIMETER OF THE INLET, A MAXIMUM OF 4 FEET APART.
 - SURROUND THE POSTS WITH WIRE MESH HARDWARE CLOTH. SECURE THE WIRE MESH TO THE STEEL POSTS AT THE TOP, MIDDLE, AND BOTTOM. PLACING A 2-FOOT FLAT OF THE WIRE MESH UNDER THE GRAVEL FOR ANCHORING IS RECOMMENDED.
 - PLACE CLEAN GRAVEL (NO DOT #5 OR #57 STONE) ON A 2:1 SLOPE WITH A HEIGHT OF 16 INCHES AROUND THE WIRE, AND SMOOTH TO AN EVEN GRADE.
 - ONCE THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE ACCUMULATED SEDIMENT, AND ESTABLISH FINAL GRADING ELEVATIONS.
 - COMPACT THE AREA PROPERLY AND STABILIZE IT WITH GROUND COVER.



2 HARDWARE CLOTH AND GRAVEL INLET PROTECTION

<p>FOR LATE WINTER AND EARLY SPRING:</p> <p>SEEDING MIXTURE: RYE (GRAM) - 120 LB/ACRE ANNUAL LESPEDEZA (KODS) - 50 LB/ACRE (OMIT ANNUAL LESPEDEZA WHEN DURATION OF TEMPORARY COVER IS NOT TO EXCEED BEYOND JUNE)</p> <p>SEEDING DATES: JAN. 1 - MAY 1</p>	<p>SOIL AMENDMENTS: FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER</p> <p>MULCH: APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.</p> <p>MAINTENANCE: REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, FERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.</p>
<p>FOR SUMMER:</p> <p>SEEDING MIXTURE: GERMAN MILLET - 40 LB/ACRE (A SMALL-STEMMED SUBGRASS MAY BE SUBSTITUTED AT A RATE OF 50 LB/ACRE)</p> <p>SEEDING DATES: MAY 1 - AUG. 15</p>	<p>SOIL AMENDMENTS: FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER</p> <p>MULCH: APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.</p> <p>MAINTENANCE: REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, FERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.</p>
<p>FOR FALL:</p> <p>SEEDING MIXTURE: RYE (GRAM) - 120 LB/ACRE</p> <p>SEEDING DATES: AUG. 15 - DEC. 30</p>	<p>SOIL AMENDMENTS: FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 1,000 LB/ACRE 10-10-10 FERTILIZER</p> <p>MULCH: APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.</p> <p>MAINTENANCE: REPAIR AND REFERTILIZE DAMAGED AREAS IMMEDIATELY. TOPDRESS WITH 50 LB/ACRE OF NITROGEN IN MARCH. IF IT IS NECESSARY TO EXTEND TEMPORARY COVER BEYOND JUNE 15, OVERSEED WITH 50 LB/ACRE KODS LESPEDEZA IN LATE FEBRUARY OR EARLY MARCH.</p>

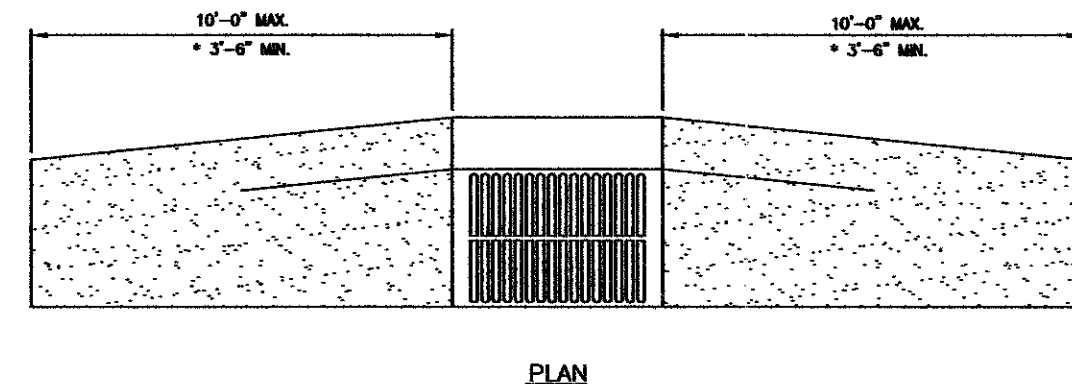
FOR ADDITIONAL INFORMATION, REFER TO NCDENR EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL (ESCPDM), SECTION 6.10. FOR PERMANENT SEEDING SPECIFICATIONS, INCLUDING SEED BED PREP, SEASONAL LIMITATIONS FOR SEEDING OPERATIONS, THE KINDS OF GRADES OF FERTILIZERS, THE KINDS OF SEED, AND THE RATES OF APPLICATION OF LIMESTONE, FERTILIZER, AND SEED, REFER TO NCDENR ESCPDM SECTION 6.11 AND THE CHARLOTTE LANDSCAPE CONSTRUCTION STANDARDS SECTION 04200 SEEDING AND SOODING OF TURFGRASS.

6 MASONRY RETAINING WALL

RETAINING WALL NOTE:
-DETAILS ARE PROVIDED FOR DESIGN INTENT PURPOSES ONLY. WALL LENGTH AND HEIGHT SHALL BE PER THE GRADING PLANS. DESIGN OF ALL RETAINING WALLS IS TO BE PER NC BUILDING CODE SECTION 1610.3
-DETAILED RETAINING WALL DESIGN DRAWINGS, SEALED BY A NC LICENSED ENGINEER, WILL BE SUBMITTED TO THE LOCAL AUTHORITY FOR REVIEW AND PERMITTING PRIOR TO CONSTRUCTION.
-AN NC LICENSED ENGINEER MUST PERFORM CONSTRUCTION OBSERVATION, VERIFYING IN A SEALED LETTER TO THE LOCAL AUTHORITY THAT RETAINING WALLS ARE CONSTRUCTED PER THE ENGINEERED DRAWINGS, IN COMPLIANCE WITH SECTION 1610.3 OF THE NC BUILDING CODE. THIS LETTER OF VERIFICATION SHALL BE GIVEN TO THE LAND DEVELOPMENT INSPECTOR.

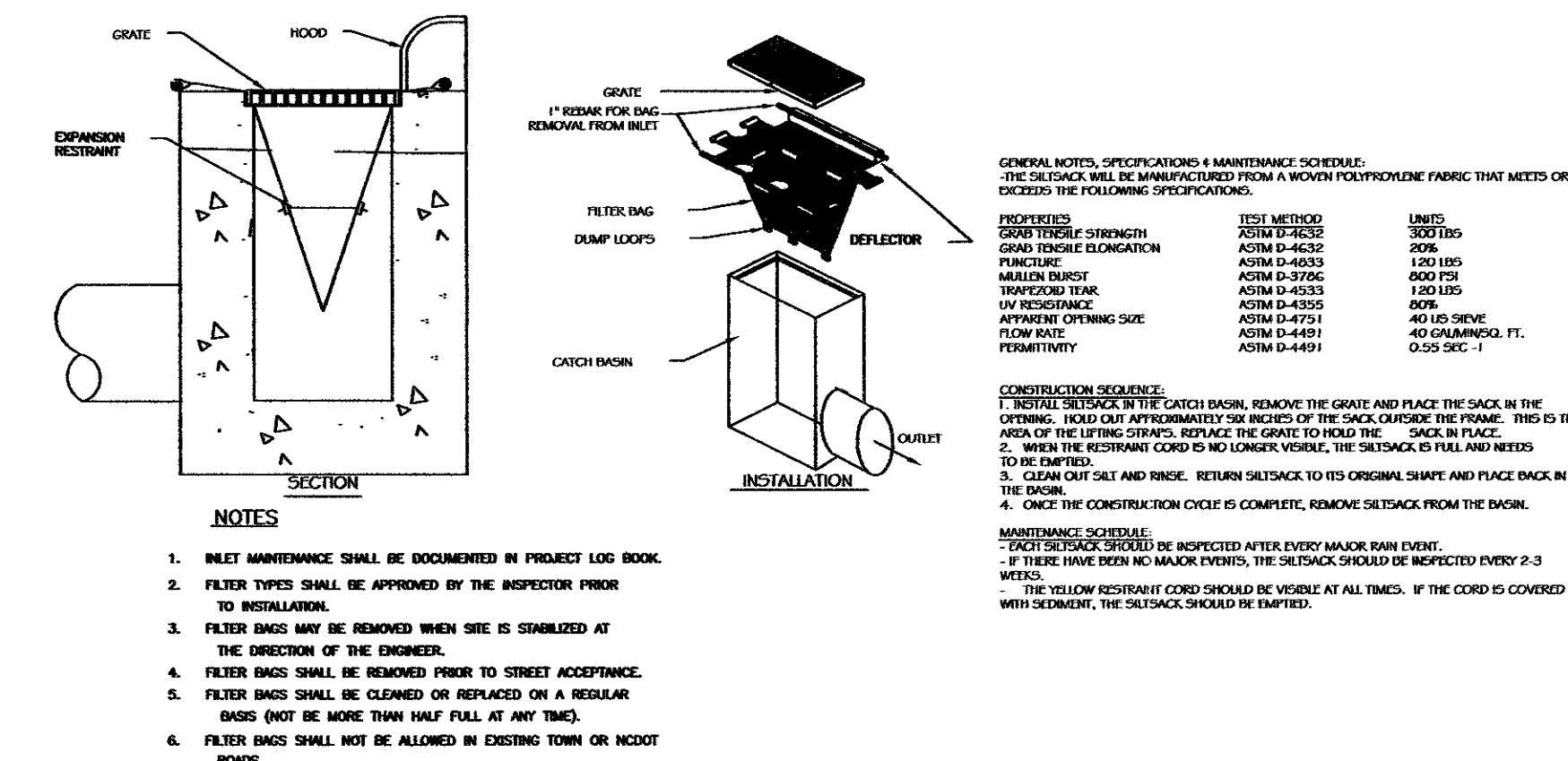
DISCLAIMER:
NEITHER THE CITY OF CHARLOTTE NOR ITS EMPLOYEES ASSUME ANY LIABILITY FOR INJURIES OR DAMAGES ARISING OUT OF, OR IN ANY WAY CONNECTED WITH THE DESIGN, CONSTRUCTION OR USE OF THE RETAINING WALLS DESCRIBED IN THESE PLANS AND SPECIFICATIONS. NEITHER THE CITY OF CHARLOTTE NOR ITS EMPLOYEES ARE RESPONSIBLE FOR THE DESIGN OR STRUCTURAL CAPABILITY OF THE RETAINING WALLS DESCRIBED HEREIN.

THERE ARE NO PROPOSED RETAINING WALLS OR STRUCTURAL GEOGRID WITHIN THE PUBLIC ROW.



NOTE:
* TRANSITION FROM 2'-6" STANDARD CURB TO VALLEY CURB AT A DRAINAGE INLET ONLY.
SEE STANDARD 10.19 FOR CROSS SECTION GEOMETRY.

5 4" CONCRETE PAVEMENT - PRIVATE



7 SILTSACK INLET CONTROL DEVICE

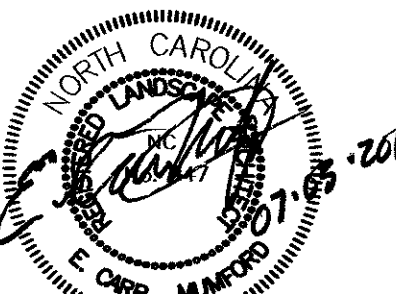
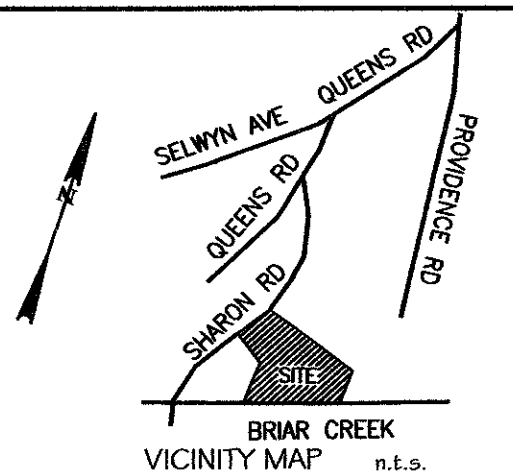
7 CATCH BASIN FRAME IN VALLEY GUTTER

3 TEMPORARY SEEDING SCHEDULE

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DRAWN BY: ECM
CHECKED BY: ECM
SCALE: N.T.S.
DATE: 05.15.2014
REVISIONS:
NO. DATE DESCRIPTION BY:
1. 07.03.2014 PER SUBDIVISION COMMENTS ECM

SHEET TITLE:
SITE DETAILS

SHEET NO.:
L6.3
PROJECT NO.: