EROSION CONTROL SEQUENCE:

1. CLEAR SITE ONLY AS NECESSARY TO INSTALL INITIAL EROSION CONTROL MEASURES AS FOLLOWS:
   A.TEMPORARY CONSTRUCTION ENTRANCE/ EXIT (1)
   B.TEMPORARY SILT FENCING
   C.TEMPORARY SEDIMENT TRAP
   D.TEMPORARY DIVERSION BERMS
   SEED EMBANKMENTS, DISTURBED AREAS AND DIVERSION BERMS (INCLUDING "CLEAN" WATER DIVERSION) UPON COMPLETION OF CONSTRUCTION.
2. BEGIN CLEARING, GRUBBING AND STRIPPING SITE AS REQUIRED. STOCKPILE TOPSOIL ON-SITE WITHIN AREAS PROTECTED BY EROSION CONTROL MEASURES AS REQUIRED.
3. BEGIN SITE GRADING. MAINTAIN EROSION CONTROL DEVICES IN ACCORDANCE WITH MAINTENANCE PLAN ON THIS SHEET. INSTALL ASSITIONAL EROSION CONTROL MEASURES AS REQUIRED.
4. INSTALL STORM DRAINAGE SYSTEM AND UTILITIES. STORM PIPING SHALL BE INSTALLED TO THE POINT WHERE IT ENTERS EACH TRAP. COMPLETION OF PIPING WILL ONLY BE ALLOWED ONCE SITE HAS BEEN DEEMED STABLE BY THE EROSION CONTROL INSPECTOR. INSTALL PROTECTION AROUND ALL INLETS AS STORM DRAIN SYSTEM IS INSTALLED.
5. RESEED/STABILIZE DISTURBED AREAS IMMEDIATELY AFTER FINISHED GRADES HAVE BEEN ACHIEVED. TEMPORARY VEGETATION COVER SHALL BE PROVIDED OVER DISTURBED AREAS WHICH MAY NOT BE AT FINAL GRADE BUT WHICH WILL BE LEFT UNDISTURBED FOR AT LEAST 15 DAYS.
6. CONTINUE TO MAINTAIN EROSION CONTROL MEASURES UNTIL VEGETATIVE COVER HAS BEEN ESTABLISHED OVER ALL DISTURBED AREAS AND SITE HAS BEEN STABILIZED. REMOVE EROSION CONTROL MEASURES ONLY AFTER FINAL INSPECTION AND APPROVAL BY INSPECTOR.
7. INSPECT & REPAIR ALL EROSION AND SEDIMENT CONTROL DEVICES ON A WEEKLY BASIS AND INSPECT AND REPAIR IMMEDIATELY FOLLOWING ANY RAINFALL.
8. PERFORM ALL NECESSARY MAINTENANCE ON ALL EROSION & SEDIMENT CONTROL DEVICES IMMEDIATELY FOLLOWING ANY RAINFALL. REPAIR OR REPLACE ALL DETERIORATED MATERIALS.
9. ALL PARKING AREAS SHOULD BE STABILIZED WITH STONE IMMEDIATELY AFTER GRADING.
10. PERMANENT OR TEMPORARY STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS THAT MAY NOT BE AT FINL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN THIRTY (30) DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR. (1)
11. ONCE SITE IS STABILIZED, REMOVE CONSRTUCTION ENTRANCE AND MUCK-OUT TEMPORARY SEDIMENT TRAP. STABILIZE THESE AREAS WITH STONE AND PERMANENT GROUNDCOVER. COMPLETE CONSTRUCTION NEW DRIVEWAY AND CURB AND GUTTER. (1)
12. G.C. TO MUCK-OUT LOW AREAS IN PAVED AREAS PRIOR TO PLACING NEW PAVEMENT-TYPICAL.
13. CALL CITY OF ROANOKE FOR FINAL INSPECTION.
14. G.C. SHALL NOT REMOVE REMAINDER OF TEMPORARY EROSION AND SEDIMENTATION CONTROL DEVICES AND MEASURES UNTIL ENTIRE SITE IS PERMANENTLY STABLE.
15. THE PROPERTY OWNER IS RESPONSIBLE FOR MAINTENANCE OF PERMANENT EROSION AND SEDIMENT CONTROL MEASURES AFTER SITE DEVELOPMENT.

EROSION SEDIMENT CONTROL NARRATIVE:

(As per VESCH Chapter 6) (1)

Project Description : This 0.988 acre land-disturbing activity involves the demolition of the existing McDonald's restaurant building and associated parking area; and construction of a new McDonald's restaurant building, new parking area and landscaping on site.

Existing site conditions : The existing 1.013 acre site is primarily impervious as existing building and pavement and slopes to the southeast portion of the site to an existing curb inlet and trench drain along the existing driveway cut to Rutherford Avenue.

Adjacent areas : The site is bounded by existing commercial property to the north and east and public streets to the south (Rutherford Avenue) and west (Williamson Road).

Soils: As Per the USDA Soil Survey, the soil type found of this lot is classified as Urban Land 53. This soil is predominantly impervious surface cover and accurate measures of soil type, hydrologic soil group, erodibility, and permeability can not be determined.

Critical areas There are no critical areas on this site.

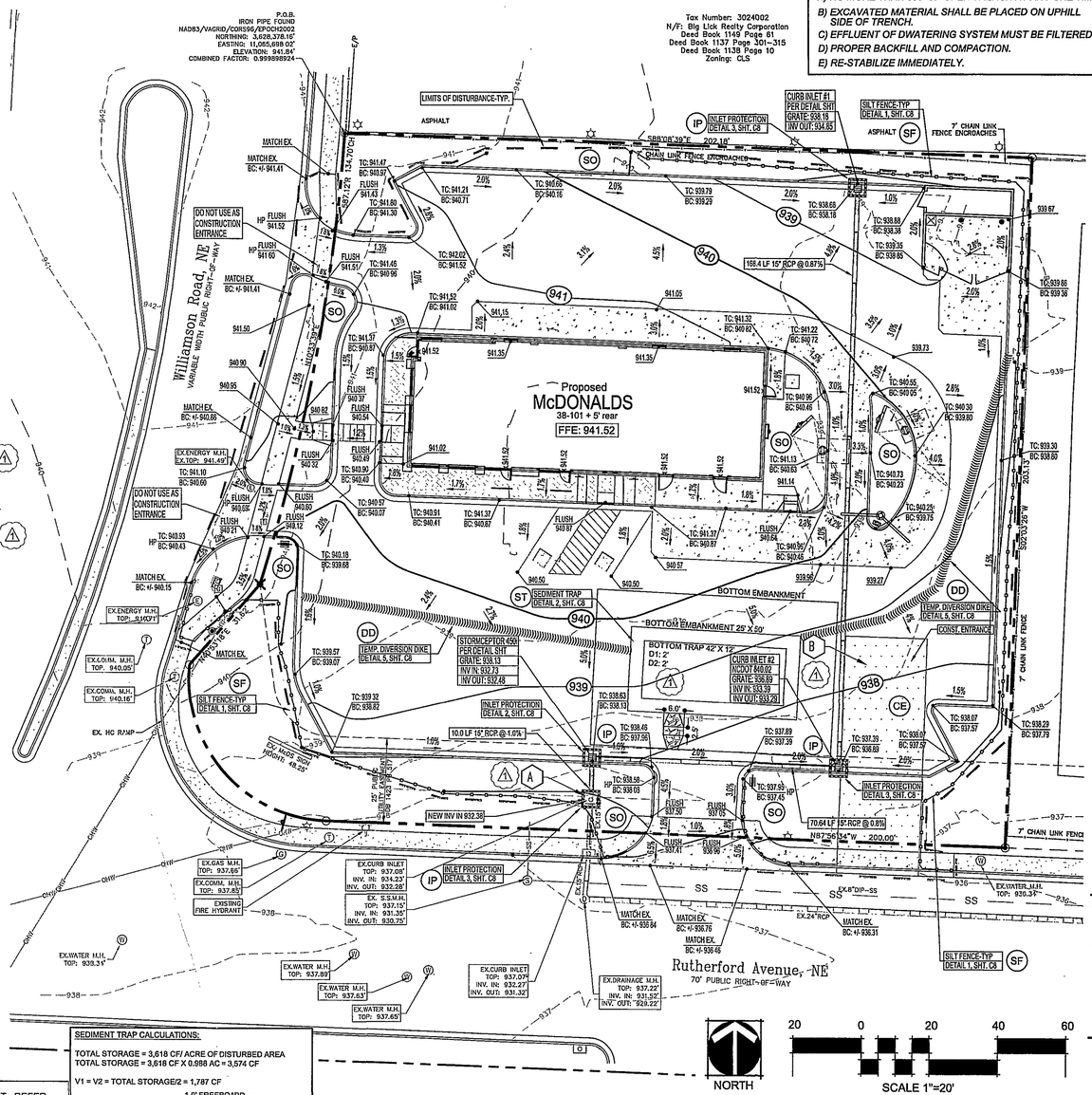
Erosion and sediment control measures The existing driveway entrance is to be used in lieu of a standard construction entrance along Rutherford Avenue to prevent tracking of sediment onto streets. Silt Fence is proposed along the perimeter of the site to capture and contain sediment. A sediment trap and diversion dikes will be constructed to capture and contain sediment. No construction traffic shall be allowed ingress or egress from Williamson Road. (1)

Permanent stabilization : A combination of sodding, landscaping and permanent seeding is proposed to permanently stabilize all non-impervious areas of the site. See Landscape Plan (Sheets L1) for details and specifications.

Stormwater runoff considerations : The proposed site development will cause a decrease in peak runoff rates due to the slight 0.02 acre decrease in impervious surface. The design firm has taken special considerations to improve the current design by vastly increasing the amount of vegetation and sodded areas on-site as well as provide additional onsite drainage structures to what currently exists to take the storm water underground sooner and minimize the amount of sheet drainage which currently run toward Rutherford Avenue.

(A) CONVERT EXISTING CURB INLET TO VDOT STANDARD YARD INLET. REFER TO GRADING PLAN (THIS SHEET) FOR INCORPORATION OF NEW ON-SITE STORM DRAINAGE INTO EXISTING UNDERGROUND STORM SYSTEM AND REFER TO SITE LAYOUT PLAN (C-3)FOR ALL NEW CURBING LOCATIONS. NEW INVERT IN TO BE 932.38 (CI#3) (1)

(B) EXISTING DRIVEWAY TO BE USED AS CONSTRUCTION ENTRANCE. ENTIRE PARKING LOT MUST BE STABILIZED WITH STONE BEFORE THIS DRIVEWAY MAY BE REMOVED.



SEDIMENT TRAP CALCULATIONS:

TOTAL STORAGE = 3,618 CF/ ACRE OF DISTURBED AREA
TOTAL STORAGE = 3,618 CF X 0.988 AC = 3,574 CF

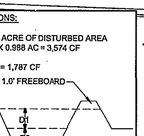
V1 = V2 = TOTAL STORAGE/2 = 1,787 CF

(A1 = 25' X 50' = 1,250 SF)

V1 = 0.85 X A1 X D1
1,787 = 0.85 X 1250 X D1
1.68' = D1 (USE 2)

(A2 = 17' X 42' = 714 SF)

V2 = ((A1 + A2)/2) X D2
1,787 = ((1,250+714)/2) X D2
1.92' = D2 (USE 2')



PLEASE REFER TO DETAIL ON SHEET C-8 FOR SPECIFIC DESIGN INFO

SITE INFORMATION

SITE ADDRESS:	701 WILLIAMSON ROAD
FINANCIALLY RESPONSIBLE CONTACT:	SCOTT THOMPSON c/o McDONALDS USA, LLC 4601 SIX FORKS ROAD - SUITE 200 RALEIGH, N.C. 27609 TELEPHONE: (919) 326-4246
ZONING:	CG (COMMERCIAL-GENERAL DISTRICT)
EXISTING USE:	RESTAURANT WITH DRIVE-THRU
PROPOSED USE:	RESTAURANT WITH DRIVE-THRU

MAP REFERENCE INFO:	TAX # 3025003 DB 1402, PG 174 LOT 5A DB 1402, PG 182
DESIGNER:	STIMMEL ASSOCIATES, PA 601 N. TRADE STREET SUITE 200 WINSTON-SALEM, NC 27101 Phone: 336-723-1067 Fax: 336-723-1069

SUBJECT PROPERTY IS NOT LOCATED WITHIN A SPECIAL FLOOD HAZARD ZONE AS DEFINED BY F.E.M.A. MAP PANEL NUMBER 51161C0046D 0130.

GRADING/EROSION CONTROL LEGEND:

- TC:939.90 / BC:939.00 — PROPOSED SPOT ELEVATION (TOP OF CURB ELEVATION) (BOTTOM OF CURB ELEVATION)
- 940 — PROPOSED CONTOUR
- 3.0% — DRAINAGE SLOPE ARROW
- (CE) TEMP. CONSTRUCTION ENTRANCE — REFER TO DETAIL ON SHEET C-8
- (SF) SILT FENCE — REFER TO DETAIL ON SHEET C-8
- (IP) TEMPORARY INLET PROTECTION — REFER TO DETAIL ON SHEET C-8
- TREE PROTECTION FENCING — REFER TO DETAIL ON SHEET C-8
- (ST) TEMPORARY SEDIMENT TRAP — REFER TO DETAIL ON SHEET C-8
- (DD) TEMPORARY DIVERSION DIKE — REFER TO DETAIL ON SHEET C-8
- LIMITS OF DISTURBANCE (DENUDED LIMITS)
- (SO) PERMANENT SODDED AREA — SEE SPECS ON THIS SHEET

*EXISTING IMPERVIOUS CALCULATIONS:

BUILDING:	0.079 ac.	7.80 %
PAVEMENT:	0.722 ac.	71.27 %
OPEN SPACE:	0.212 ac.	20.93 %
TOTAL SITE:	1.013 ac.	100 %
TOTAL IMPERVIOUS:	0.801 ac.	- 79.07 %

*PROPOSED IMPERVIOUS CALCULATIONS:

BUILDING:	0.089 ac.	8.79 %
PAVEMENT:	0.689 ac.	68.02 %
OPEN SPACE:	0.235 ac.	23.20 %
TOTAL SITE:	1.013 ac.	100 %
TOTAL IMPERVIOUS:	0.778 ac.	- 76.80%

NET DECREASE OF IMPERVIOUS: 0.023 AC - 2.27%

STORM DRAINAGE DESIGN DATA: (2)

STORM FREQUENCY: 10 YEAR

From	To	Line Length (ft)	Incr. Area (Ac)	Total Area (Ac)	Runoff Coeff.	Inlet Time (min)	Total Flow (cfs)	Velocity Avg. (ft/s)	Capac. Full (cfs)	Velocity Full (ft/s)	Pipe Size (in)	Pipe Slope (%)
CI 1	CI 2	168.4	0.28	0.28	0.86	5	1.14	2.74	6.01	4.90	15	0.87
CI 2	CI 3	70.6	0.27	0.55	0.94	5	2.25	3.02	5.79	4.72	15	0.80
CI 3	CI EX.	10.0	0.38	0.93	0.89	5	3.73	4.67	6.47	5.27	15	1.00

STORM FREQUENCY: 2 YEAR

From	To	Total Flow (cfs)	Velocity Avg. (ft/s)
CI 1	CI 2	0.86	2.10
CI 2	CI 3	1.68	2.80
CI 3	CI EX.	2.79	3.83

STORMCEPTOR MAINTENANCE SCHEDULE: (2)

The Landowner, its successors and assigns, are responsible for performing the necessary inspections, inspection documentation, and maintenance for the Stormceptor®. Inspect and maintain the Inlet Stormceptor® from the surface, without entry into the unit. Perform maintenance once the stored sediment volume reaches 15 percent of the Stormceptor® capacity (6" Depth in 450i Model), or immediately in the event of a spill. The inlet drop pipe has a tapered insert connected to a handle. After removing the handle, remove oil and sediment from the 12-inch diameter inlet drop pipe by a professional familiar with waste disposal.

Maintenance intervals vary depending on the application. We recommend quarterly inspections during the first year of installation to accurately establish a maintenance schedule. The inspection schedule shall remain quarterly unless the City allows a less frequent inspection schedule based on inspection documentation. At no point shall the system reach a sediment volume of 8" or greater.

Requirements for the disposal from Stormceptor® are similar to that of any other best management practice. Consult local guidelines or Rinker Stormceptor before disposing of the separator contents. If you need assistance for cleaning a Stormceptor unit, contact your local Rinker Materials Representative, or the Stormceptor Information Line at (800) 909-7763.

UTILITY INSTALLATION NOTES:

A) NO MORE THAN 500' OF OPEN TRENCH AT ANY ONE TIME.
B) EXCAVATED MATERIAL SHALL BE PLACED ON UPHILL SIDE OF TRENCH.
C) EFFLUENT OF DWATERING SYSTEM MUST BE FILTERED.
D) PROPER BACKFILL AND COMPACTION.
E) RE-STABILIZE IMMEDIATELY.

GENERAL EROSION AND SEDIMENT CONTROL NOTES:

ES-1: Unless otherwise indicated, all vegetative and structural erosion and sediment control practices will be constructed and maintained according to minimum standards and specifications of the Virginia Erosion and Sediment Control Handbook and Virginia Regulations 4VAC50-30 Erosion and Sediment Control Regulations.
ES-2: The plan approving authority must be notified one week prior to the pre-construction conference, one week prior to the commencement of land disturbing activity, and one week prior to the final inspection.
ES-3: All erosion and sediment control measures are to be placed prior to or as the first step in clearing.
ES-4: A copy of the approved erosion and sediment control plan shall be maintained on the site at all times.
ES-5: Prior to commencing land disturbing activities in areas other than indicated on these plans (including but not limited to, off-site borrow or waste areas), the contractor shall submit a supplementary erosion control plan to the owner for review and approval by the approving authority.
ES-6: The contractor is responsible for installation of any additional erosion control measures necessary to prevent erosion and sedimentation as determined by the plan approving authority.
ES-7: All disturbed areas are to drain to approved sediment control measures at all times during land disturbing activities and during site development until final stabilization is achieved.
ES-8: During dewatering operations, water will be pumped into an approved filtering device.
ES-9: The contractor shall inspect all erosion control measures periodically and after each runoff-producing rainfall event. Any necessary repairs or cleanup to maintain the effectiveness of the erosion control devices shall be made immediately.

EROSION SEDIMENT CONTROL MINIMUM STANDARDS:

The following Minimum Standards must be met (VESCH Chapter 6)

MS-1: Temporary and permanent stabilization of denuded areas (Permanent within 7 days for areas at final grade, Temporary for areas not to final for 30 days).
a) Are practices shown on the plan? *Both temporary and permanent stabilization methods and limits (denuded areas) are shown on the grading plan (Sheet C-5).*
b) Are the limits of clearing and grading shown on the plan? *It is shown on the Grading Plan (Sheet C-5) and labeled as "Limits of Disturbance-typ".*
c) Seed Specifications? *Temporary and Permanent seeding specifications are found on Sheet L-1 - the permanent groundcover will be Sod and those specifications can be found on Sheet L-1 (Landscape Plan).*
MS-2: Protection or stabilization of on-site and off-site stockpiles and borrow areas. *This has been addressed as "off-site fill or borrow notes" on Sheet C-5*
MS-3: Permanent Stabilization of denuded areas not otherwise stabilized. *Temporary and permanent seeding specifications are on Sheet C-5 /L-1 and final permanent groundcover of Sod is specified on Sheet L-1 (Landscape Plan).*
MS-4: Install E&S Measures as first step in land-disturbing activity. *This has been called for as note # 1 in the "Erosion Control Sequence" on Sheet C-5*
MS-5: Earthen controls and structures stabilized immediately upon installation. *This is not applicable to this site.*
MS-6: Sediment Traps (less than 3 acres drainage) and basins (greater than 3 acres of drainage). *This is not applicable to this site.*
MS-7: Design and construction of cut and fill slopes to minimize erosion. *Cut&Fill slopes have been designed to minimize erosion by means of seeding/permanent Sod and no slopes on-site exceed 2:1.*
MS-8: Concentrated flow down cut and fill must be in adequate channel, flume, or slope drain. *This is not applicable to this site.*
MS-9: Slopes protected from seepage. *This is not applicable to this site.*
MS-10: Storm sewer inlets must have adequate inlet protection, as required.
MS-11: Outlet protection and channel lining is required prior to operation storm sewer system. *This is not applicable to this site.*
MS-12: Minimize impacts when working in and around live watercourse. *This is not applicable to this site.*
MS-13: Temporary vehicular stream crossings for more than 2 trips in 6 months. *This is not applicable to this site.*
MS-14: Other federal, state and local regulations must be met when working in live watercourses. *This is not applicable to this site.*
MS-15: The bed and banks of disturbed watercourses must be stabilized immediately. *This is not applicable to this site.*
MS-16: Utility Installations. *The required Utility Installation notes (a thru e) have been added to both the Grading/Erosion Control Plan (Sheet C-5) and the Site Utility Plan (Sheet C-6).*
MS-17: Keep paved or public areas clean (Construction Entrances). *Paved and/or public areas shall be kept clean through the utilization of Stone Construction Entrance per detail found on Sheet C-8.*
MS-18: Temporary measures should be removed with 30 when no longer needed. a) Schedule for maintenance. *Notes concerning the removal of temporary measures and a maintenance schedule (including designating inspection and repair on a weekly basis and/or immediately following any rainfall) are part of the "Erosion Control Sequence" found on Sheet C-5.*
MS-19: The proposed site plan yields a slight decrease in the amount of impervious surface area by 0.02 acres.*
The limits of clearing and grading must be shown. *The limits are shown on Sheet C-5 and labeled as "Limits of Disturbance-typical".*
* Existing and proposed contours must be shown. *Both existing and proposed contours are shown at one foot (1') intervals on Sheet C-5.*
* Existing vegetation (trees, grassed areas, or unique vegetation) must be shown. *All required vegetation is shown on the plans.*
* Location of all erosion control practices. *All required erosion control practices are shown (located) and labeled (specified) on Sheet C-5.*
* The ECS plan should cover all phases of construction. *Only one (1) phase of construction is scheduled and the general contractor shall follow the "Erosion Control Sequence" on Sheet C-5 during construction.*
* A maintenance schedule for the erosion controls measures must be set forth. *Please refer to Sheet C-8 EROSION CONTROL DETAIL SHEET for specific Maintenance for erosion control devices.*

SOD PREPARATION:

1. REMOVE ANY UNDESIRABLE GROUND COVERS INCLUDING ANY TEMPORARY SEEDING.
2. RIP THE AREA TO BE SODDED TO A MIN. DEPTH OF 4 - 6".
3. REMOVE ALL LOOSE ROCKS, ROOTS, ETC. LEAVING SURFACE SMOOTH & UNIFORM.
4. PREPARE SOD BASE AS PER A.A.N. STANDARDS.
5. APPLY SOD & IMMEDIATELY STAKE/FLAG OFF ALL NEW LAWN AREAS FROM PEDESTRIAN & VEHICLES FOR A PERIOD OF 3 WEEKS.
6. IRRIGATE SODDED AREAS FOR THE 3 WEEK PERIOD.

PERMANENT SOD:

ALL UNPAVED DISTURBED AREAS (OR LAWN TO BE RE-ESTABLISHED) OUTSIDE PLANT BED TO BE SODDED W/ AN EVEN MIXTURE OF KENTUCY 31, OR APPROVED EQUAL FOR REGION, SO AS TO PRODUCE A THICK, FIRM STAND OF GRASS. DO NOT FERTILIZE SOD AREAS. ALL AREAS TO BE SODDED TO HAVE APPROPRIATE SOIL PREPERATIONS, SEE SPECIFICATIONS. SOD SHALL BE OF GOOD & HEALTHY COLOR WHEN DELIVERED. SOD SHALL BE HARVESTED & DELIVERED WIN A PERIOD OF 36 HOURS OR PRECAUTIONS MUST BE TAKEN TO PREVENT SOD FROM DRYING OUT WHILE IN TRANSIT.

GRADING/EROSION CONTROL NOTES:

1) THE APPROXIMATE AREA OF THE LIMITS OF CLEARING, GRADING AND CONSTRUCTION (LIMITS OF DISTURBANCE) IS +/- 0.988 ACRES.

2) THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES. THE LOCATION OF ALL EXISTING UTILITIES ARE NOT NECESSARILY SHOWN ON THE PLANS AND WHERE SHOWN ARE ONLY APPROXIMATE. THE CONTRACTOR SHALL ON HIS INITIATIVE AND AT NO EXTRA COSTS HAVE LOCATED ALL UNDERGROUND LINES AND STRUCTURES AS NECESSARY. NO CLAIMS FOR DAMAGES OR EXTRA COMPENSATION SHALL ACCRUE TO THE CONTRACTOR FROM THE PRESENCE OF SUCH PIPE, OTHER OBSTRUCTIONS OR FROM ANY DELAY DUE TO REMOVAL OR REARRANGEMENT OF THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UNDERGROUND STRUCTURES. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL NON-SUBSCRIBING UTILITIES. THE CONTRACTOR(S) SHALL CONTACT MISS UTILITY OF VIRGINIA AT 1-800-552-7001 FOR ASSISTANCE IN LOCATING EXISTING UTILITIES. CALL AT LEAST 48 HOURS PRIOR TO ANY DIGGING.

3) SUBJECT PROPERTY IS NOT LOCATED WITHIN A SPECIAL FLOOD HAZARD ZONE AS DEFINED BY HUD F.I.R.M. COMMUNITY PANEL NUMBER 51161C0046D 0130.

4) ALL GRADING AND BACKFILLING, EXCAVATING, ETC., SHALL BE IN ACCORDANCE WITH THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL INVESTIGATION REPORTS. REFER TO THESE REPORTS FOR ADDITIONAL INFORMATION NOT TRANSFERRED TO THESE PLANS.

5) THE EROSION CONTROL MEASURES ARE TO BE IN PLACE PRIOR TO ANY EARTHWORK.

6) ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED.

7) ALL EROSION CONTROL FACILITIES SHALL BE INSPECTED AND REPAIRED AT A MINIMUM OF WEEKLY BASIS AND AFTER EVERY RAIN EVENT.

8) ALL PAVED AREAS SHALL BE KEPT CLEAR OF EARTH MATERIALS AND DEBRIS. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT-LADEN RUNOFF TO ANY STORM DRAINAGE SYSTEM.

9) ALL CONSTRUCTION TRAFFIC SHALL ENTER AND EXIT THE SITE VIA THE CONSTRUCTION ENTRANCES.

(1) 10) PERMANENT OR TEMPORARY STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS THAT MAY NOT BE AT FINL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN THIRTY (30) DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.

ALL CUT AND FILL SLOPES AND CHANNEL SIDESLOPES WHICH ARE NOT TO BE PAVED, SHALL BE SEEDED UNTIL A GOOD STAND OF GRASS IS OBTAINED IN ACCORDANCE WITH:
A. 100 LBS PER 1,000 SQUARE FOOT GROUND LIMESTONE OR EQUIVALENT. NO SOIL TEST REQUIRED FOR INITIAL ESTABLISHMENT.
B. 20 LBS OF 10-10-10 FERTILIZER OR EQUIVALENT PER 1,000 SQUARE FOOT.
C. VARIETIES TO BE SEEDED:
1. SPRING SEEDING: MARCH 1 - APRIL 30; SPRING OATS 2.5 LBS PER 1,000 SQUARE FOOT.
2. SUMMER SEEDING: MAY 1 - AUGUST 15; WEEPING LOVEGRASS AT 2 OZ.PER SQUARE FOOT MIXED WITH 1 BUSHEL OF SAWDUST FOR UNIFORM SEEDING.
3. ASPHALT MULCH 6 GALLONS PER 1,000 S.F. ALL SEEDING WILL BE MULCHED.

11) ALL ELEVATIONS SHOWN ARE IN REFERENCE TO THE BENCHMARK AND MUST BE VERIFIED BY THE GENERAL CONTRACTOR AT GROUNDBREAK.

12) PRIOR TO CONSTRUCTION, G.C. TO VERIFY THAT ALL ENCROACHMENT, BUILDING, GRADING, UTILITY AND EROSION CONTROL PERMITS ARE ON FILE WITH ALL APPROPRIATE AGENCIES AND PERMITS ARE AVAILBLE ON-SITE.

13) G.C. TO VERIFY PROPER COVER OVER ALL EXISTING UTILITIES WITH PROPOSED GRADES. PROVIDE SLEEVING FOR ANY UTILITIES IN PAVED AREAS.

(1) 14) ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH LOCAL JURISDICTION STANDARD SPECIFICATIONS AND STANDARD DETAILS OF VIRGINIA DEPARTMENT OF CONSERVATION AND RECREATION DESIGN MANUAL. CONFLICTS BETWEEN THESE PLANS AND STANDARDS NOTED ABOVE WILL BE RESOLVED BY APPLYING THE MOST STRINGENT REQUIREMENT AS DETERMINED BY THE ENGINEER.

15) ALL BORROW WILL COME FROM A SITE OR SPOIL WILL BE PLACED ON A SITE PERMITTED BY THE STATE OR LOCAL JURISDICTION. BORROW FROM OR SPOIL TO AN UNPERMITTED SITE BECOMES THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR MUST HAVE APPROVAL OF THE OWNER AND LOCAL EROSION CONTROL INSPECTOR BEFORE UTILIZING ANY UNPERMITTED SITES FOR BORROW OR SPOIL.

16) ALL STOCKPILE AREAS ARE INTENDED TO DRAIN TO AN APPROVED SEDIMENT TRAPPING DEVICE AND BE WITHIN THE LIMITS OF THE DISTURBED AREAS SHOWN.

17) G.C. RESPONSIBLE FOR ALL EROSION CONTROL PRACTICES REQUIRED TO MINIMIZE EFFECTS ON ADJACENT PROPERTIES DURING CONSTRUCTION.

18) ALL DISTURBED AREAS NOT OTHERWISE DELINEATED FOR BUILDING, PAVING, SOD, OR RIP-RAP SHALL BE PERMANENTLY SEEDED IN ACCORDANCE WITH SPECS.

19) THE DISPOSAL OF DEBRIS IS NOT ALLOWED ON SITE.

20) ALL AREAS TO RECEIVE PAVEMENT SHALL BE GRAVELED IMMEDIATELY UPON COMPLETION OF GRADING.

21) CROSS SLOPES ON ALL WALKS SHALL NOT EXCEED 1.8% (UNLESS OTHERWISE NOTED) AND G.C. TO INSURE NO PONDING IS TO OCCUR ON ANY PAVED SURFACE.

22) ALL AREAS WITH 2:1 SLOPES OR ERODABLE SLOPES SHALL BE COVERED WITH EXCELSIOR MATTING OR APPROVED EQUAL. INSTALL PER MANUFACTURERS SPECS.

PARKING INFORMATION

TOTAL SPACES						
40	2	HANDICAP SPACES	8.0'	X 21.0'	@ 60 °
	32	SPACES	9.0'	X 21.0'	@ 60 °
	3	SPACES	9.0'	X 21.0'	@ 90 °
	3	SPACES	9.0'	X 19.0'	@ 90 °

UTILITY INFORMATION

	SIZE TYPE LOCATION
SANITARY SEWER	8" DIP IN RUTHERFORD AVE.
WATER	12" LINE - WILLIAMSON ROAD
STORM SEWER	EXISTING SYSTEM TIES IN TO MANHOLE. 24" RCP IN RUTHERFORD AVE.
ELECTRIC	OVERHEAD AT SOUTHEAST CORNER OF PROPERTY
GAS	ALONG WILLIAMSON ROAD

SURVEY INFORMATION

PREPARED BY: REGIONAL LAND SURVEYORS, INC.
8542 W. MARKET ST. SUITE 100
GREENSBORO, NC 27409
336-665-8155
DATE OF SURVEY:8-20-07

PLAN SCALE: 1" = 20'

STREET ADDRESS
701 WILLIAMSON ROAD

CITY	STATE
ROANOKE	VIRGINIA

COUNTY
-

TAX PIN NUMBER	LOCATION CODE NUMBER
3025003	45-0174

STIMMEL FILENAME: 07-240BASE.DWG

REV	DATE	DESCRIPTION	BY	ISSUED/REF
1	05-05-08	SITE DEVELOPMENT REVIEW COMMENTS	KB	
2	06-02-08	DEVELOPMENT REVIEW COMMENTS Round 2	JAL	

Stimmel

Stimmel Associates, PA
Landscape Architecture
Civil Engineering
Land Planning
601 N. Trade Street Suite 200
Winston Salem, NC 27101-2916
P: 336.723.1067 F: 336.723.1069

COMMONWEALTH OF VIRGINIA
DOUGLAS W. STIMMEL
Cert. No. 5481

PLAN APPROVAL

SIGNATURE (2 REQUIRED)	DATE	CO-SIGN SIGNATURES	OFFICE
REGIONAL MGR.			-
REGIONAL DEV. DIRECTOR			-
REGIONAL CONSTRUCTION MGR.			-
REGIONAL REAL ESTATE MGR.		AREA CONSTRUCTION MGR.	-
		CONTRACTOR	-

McDonald's
RALEIGH REGION
4601 SIX FORKS ROAD - SUITE 200 - RALEIGH, N.C. 27609
THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF MCDONALD'S USA, LLC AND SHALL NOT BE REPRODUCED WITHOUT THEIR WRITTEN PERMISSION.

STATUS	DATE	BY
FINAL	03/06/08	KB.
PLAN CHECKED	03/06/08	JL.
AS-BUILT	-	-

C-5
GRADING/EROSION CONTROL PLAN