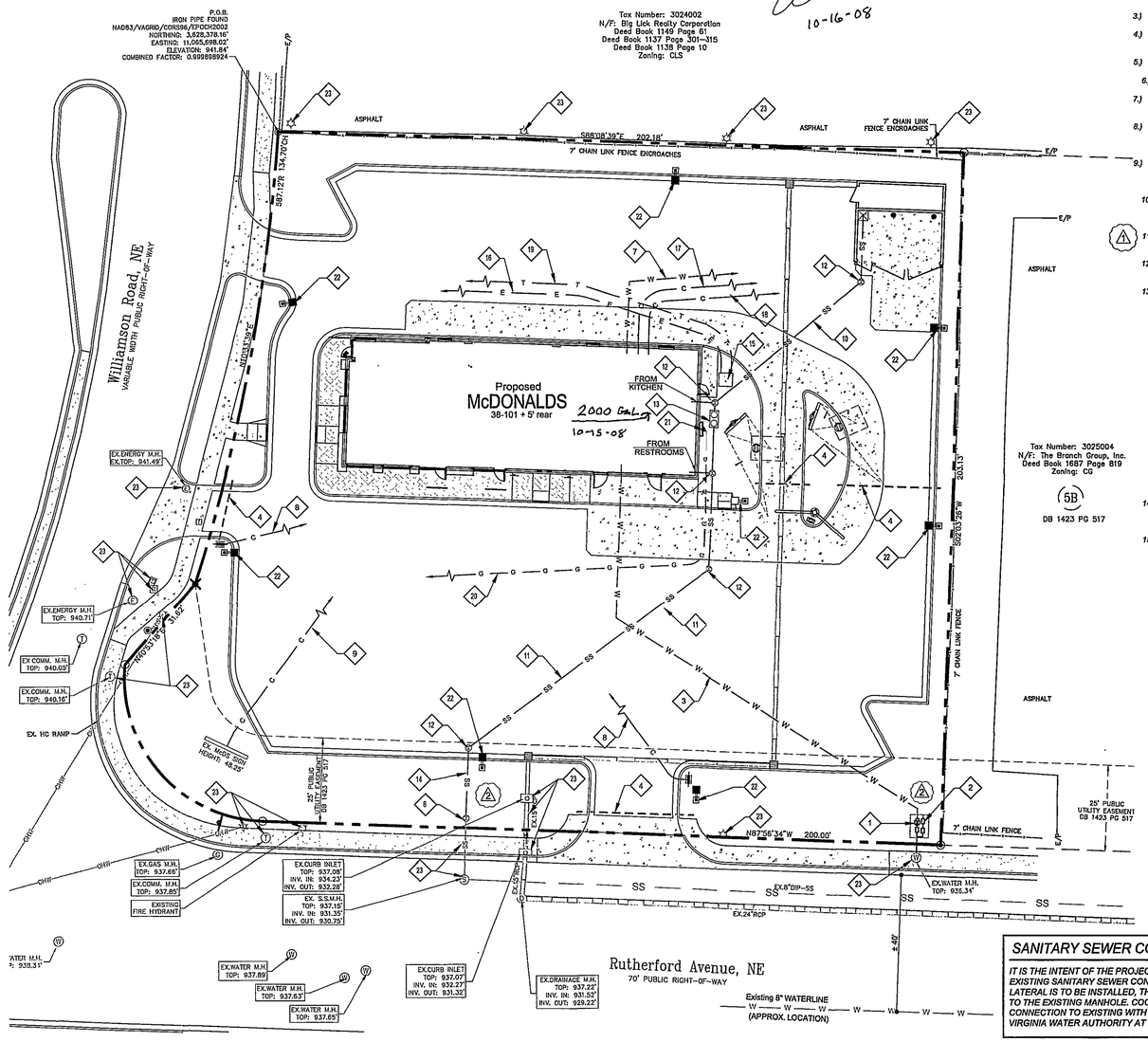
UTILITY KEYNOTES:

NOTE: G.C. TO CONTACT DAVID BARNHART WITH THE WESTERN VA WATER AUTHORITY, Tel.#: 504-853-1588, FOR VAULT APPROVAL, BACKFLOW PREVENTER TYPE, EXACT LOCATION, AND INSPECTION REQUIREMENTS PRIOR TO INSTALLATION. A CITY OF GASTONIA INSPECTOR SHALL BE PRESENT WHEN MAKING OR TERMINATING WATER AND SEWER CONNECTIONS INTO NEW OR EXISTING WATER AND SEWER LINES. ALL CONSTRUCTION, MATERIALS, AND SANITATION PROCEDURES SHALL MEET OR EXCEED THE REQUIREMENTS OF THE NORTH CAROLINA PLUMBING CODE AND THE CITY OF RPANOKE STANDARDS, SPECIFICATIONS AND DETAILS.

1. G.C. TO CONTACT DAVID BARNHART WITH THE WESTERN VA WATER AUTHORITY, Tel.#: 504-853-1588, FOR RE-USE OF EXISTING 1-1/2" WATER METER FOR NEW DOMESTIC WATER SERVICE AND FOR NEW REQUIRED REDUCED PRESSURE BACKFLOW DEVICE (RPZ) TO CITY OF ROANOKE STANDARDS FOR NEW DOMESTIC WATER SERVICE. CONTACT CITY OF ROANOKE FOR DETAIL AND TO VERIFY TYPE OF BACKFLOW REQUIRED. (SEE DETAIL ON SHT. C-9). IF McDONALDS ELECTS TO HAVE A NEW METER SET - G.C. TO CONTACT DAVID BARNHART FOR SCHEDULING PLACEMENT OF NEW 1-1/2"" WATER METER
2. G.C. TO CONTACT DAVID BARNHART WITH THE WESTERN VA WATER AUTHORITY, Tel.#: 504-853-1588, FOR SCHEDULING PLACEMENT OF NEW 1" WATER METER AND REQUIRED REDUCED PRESSURE BACKFLOW DEVICE (RPZ) TO CITY OF ROANOKE STANDARDS FOR NEW IRRIGATION WATER SERVICE. CONTACT CITY OF ROANOKE FOR DETAIL AND TO VERIFY TYPE OF BACKFLOW REQUIRED. (SEE DETAIL ON SHT. C-9)
3. 2" DOMESTIC TYPE "K" COPPER WATER SERVICE, CONTRACTOR SHALL COORDINATE WITH WESTERN VA WATER AUTHORITY, ALL WATER LINES SHALL HAVE A FINAL COVER DEPTH OF 3'-0" IN NON-TRAFFIC AREAS AND 4'-0" IN TRAFFIC AREAS UNLESS OTHERWISE NOTED.
4. COORDINATE IRRIGATION CONNECTION AND SLEEVE SIZE WITH IRRIGATION CONTRACTOR AND McDONALDS CONSTRUCTION MANAGER.
5. NOT USED
6. PROPOSED 6" SANITARY SEWER CLEAN-OUT TO CITY OF ROANOKE STANDARDS TO BE PLACED AT PROPERTY LINE AS SHOWN ON PLANS.
7. HOT WATER TO CAN WASH DUMPSTER AREA (SEE PLUMBING PLANS).
8. G.C. TO CONNECT ALL DIRECTIONAL SIGNAGE TO NEW BUILDING AS REQUIRED. COORDINATE WITH McDONALDS CONSTRUCTION MANAGER.
9. 1" CONDUIT WITH #8 WIRE TO EXISTING McDONALDS ROADWAY SIGN. FIELD VERIFY FINAL LOCATION WITH McDONALDS CONSTRUCTION MANAGER PRIOR TO LAYING LINE.
10. PROPOSED SANITARY SEWER CONNECTION TO CAN-WASH AT TRASH CORRAL. G.C. TO VERIFY ELEVATIONS ON-SITE AND COORDINATE THIS WORK WITH McDONALDS CONSTRUCTION MANAGER.
11. 4" PVC SANITARY SEWER LINE (SERVICES SHALL BE PVC SDR 35 WITHIN R/W, THEN PVC SCHEDULE 40 TO BUILDING),(BEDDING AND COVER PER SUPPLIER SPECIFICATIONS). NOTE: 1/4"/FT MIMINUM SLOPE FOR 4" LINES AND 1/8"/FT MINIMUM SLOPE FOR 6" LINES. ALL SEWER LINES SHALL HAVE A FINAL COVER DEPTH OF 4'-0" IN NON-TRAFFIC AREAS AND 5'-0" IN TRAFFIC AREAS UNLESS OTHERWISE NOTED.
12. PROPOSED 4" SANITARY SEWER TRAFFIC BEARING CLEAN-OUT AT MAXIMUM SPACING OF 80 FEET, TO BE MOUNTED FLUSH WIT HFINAL GRADE. REFER TO DETAIL 1 ON THIS SHEET. NOTE - TRAFFIC BEARING CLEAN-OUTS ARE REQUIRED IN ALL PAVED AREAS - USE JOSAM MODEL NUMBER 56044 OR APPROVED EQUAL FOR TRAFFIC BEARING COVER - TYPICAL.
13. 4500 2,000 GALLON GREASE TRAP, PER ARCHITECTURAL PLANS.
14. PROPOSED SANITARY SEWER CONNECTION TO EXISTING SERVICE LATERAL TO REMAIN FOR RE-USE. G.C. TO VERIFY PROPER WORKING ELEVATIONS AND WORKING CONDITION OF EXISTING CLEANOUT FOR USE. SEWER MAIN CONNECTIONS SHALL BE SERVICE WEIGHT CAST IRON SOIL PIPE OR DUCTILE IRON PIPE WITH 4" CLEANOUT TO MEET THE CITY OF ROANOKE STANDARDS.
15. TRANSFORMER PAD LOCATION. COORDINATE EXACT LOCATION AND SIZE WITH LOCAL POWER SERVICE PROVIDER REPRESENTATIVE AND McDONALDS A.C.M.
16. UNDERGROUND ELECTRIC SERVICE, CONTRACTOR SHALL COORDINATE WITH LOCAL POWER SERVICE PROVIDER REPRESENTATIVE AND McDONALDS A.C.M.
17. INSTALL ONE - 1" PVC ELECTRICAL CONDUIT FOR ELECTRICAL SERVICE TO TRASH CORRAL. COORDINATE WITH McDONALDS CONSTRUCTION MANAGER.
18. CONDUIT TO SHED. COORDINATE w/ McDONALDS CONSTRUCTION MANAGER FOR SPECIFICATIONS. SHED TO HAVE TWO (2) 4.0' FLORESCENT LIGHTS WITH DUPLEX GFIC OUTLETS. PROVIDE 2 TUBES AND 2 FIXTURES WITH 1 SWITCH.
19. UNDERGROUND TELEPHONE SERVICE, CONTRACTOR SHALL COORDINATE WITH LOCAL TELEPHONE SERVICE PROVIDER REPRESENTATIVE.
20. PROPOSED NATURAL GAS SERVICE. COORDINATE WITH PUBLIC SERVICE OF NC GAS COMPANY REPRESENTATIVE AND McDONALDS CONSTRUCTION MANAGER FOR CONNECTION TO EXISTING NATURAL GAS SERVICE.
21. NEW GAS METER AND SERVICE PRESSURE REGULATOR. COORDINATE WITH PUBLIC SERVICE OF NC NATURAL GAS COMPANY REPRESENTATIVE.
22. POLE MOUNTED AREA LIGHT, SEE LIGHTING PLAN (SHEET L2). ALL LOT LIGHT WIRES TO BE CONTINUOUS RUN FROM PANELS TO LOT LIGHTS WITH NO SPLICES, CONTRACTOR TO COODINATE.
23. PROTECT EXISTING UTILITIES TO REMAIN - TYPICAL. G.C. TO CONTACT ALL UTILITY COMPANIES TO INSURE THE EXISTING UTILITY SERVICES ARE PROPERTLY SHUT-DOWN PRIOR TO THE BEGINNING OF ANY SITE AND/OR DEMOLITION ACTIVITIES.



UTILITY NOTES:

1. THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES.(CONTACTS LISTED ON SHEET C-1) 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.
2. UTILITY INFORMATION SHOWN HEREON WAS OBTAINED FROM THE BEST AVAILABLE SOURCE AND MAY OR MAY NOT BE EITHER ACCURATE OR COMPLETE. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXACT LOCATIONS OF EXISTING UTILITIES AND IS RESPONSIBLE FOR ANY DAMAGE TO ANY UTILITIES, EITHER PUBLIC OR PRIVATE, SHOWN HEREON OR NOT SHOWN HEREON. ANY REPAIRS SHALL BE DONE TO THE SATISFACTION OF THE APPROPRIATE UTILITY COMPANY.
3. THE GENERAL CONTRACTOR SHALL CONFIRM ALL NEW UTILITY TAP LOCATIONS WITH THE UTILITY OWNERS (CONTACT LIST ON SHEET C-1).
4. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO VERIFY THE ACTUAL LOCATION AND AVAILABILITY OF ALL EXISTING AND PROPOSED UTILITIES IN THE FIELD PRIOR TO GROUND BREAKING.
5. MINIMUM COVER FOR CONDUITS SHALL BE 36 INCHES UNLESS OTHERWISE SHOWN OR NOTED ON THESE PLANS.
6. ALL MANHOLES, VALVES AND MONUMENT FRAMES SHALL BE SET TO FINISH GRADE AFTER PAVING.
7. THE CONTRACTOR SHALL COMPLY WITH THE RULES AND REGULATIONS OF THE STATE CONSTRUCTION SAFETY ORDERS. TRENCHES SHALL BE SHORED IN ACCORDANCE WITH OSHA.
8. OCCUPATIONAL HEALTH AND SAFETY ADMINISTRATION (OSHA) STANDARDS FOR EXCAVATIONS; FINAL RULE 29CFR PART 1926, SUBPART "P" APPLIES TO ALL EXCAVATIONS EXCEEDING 5 FEET IN DEPTH. EXCAVATION EXCEEDING TWENTY (20) FEET IN DEPTH REQUIRES THE DESIGN OF A TRENCH SAFETY SYSTEM BY A REGISTERED PROFESSIONAL ENGINEER.
9. EQUIPMENT AND PRODUCTS OTHER THAN THOSE SPECIFIED MAY BE USED PROVIDED PRIOR APPROVAL HAS BEEN OBTAINED FROM THE OWNER IN WRITING PRIOR TO ORDERING OR INSTALLATION. THE CONSTRUCTION SHALL WAIVE ANY CLAIM FOR ADDITIONAL COST RELATED TO THE SUBSTITUTION OF ALTERNATE EQUIPMENT.
10. CONTRACTOR SHALL MAINTAIN AN "AS-BUILT" SET OF DRAWINGS TO RECORD THE EXACT LOCATION OF ALL PIPING PRIOR TO CONCEALMENT. DRAWINGS SHALL BE GIVEN TO THE OWNER UPON COMPLETION OF THE PROJECT WITH A COPY OF THE TRANSMITTAL LETTER TO THE ENGINEER.
11. ALL UTILITY CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF ROANOKE PUBLIC UTILITIES AND CROSS CONNECTION CONTROL REGULATIONS AND STANDARDS.
12. SITE UTILITY CONTRACTOR TO PROVIDE WATER, SANITARY SEWER, AND ROOF DRAIN LEADERS TO WITHIN 5 FEET OF THE BUILDING. CONTRACTOR SHALL COORDINATE SITE PLAN CONNECTIONS WITH THE ARCHITECTURAL BUILDING PLANS.
13. RELATION OF WATER MAINS TO SEWERS:
    A. LATERAL SEPARATION OF SEWER AND WATER MAINS: WATER MAINS SHALL BE LAID AT LEAST 10 FEET LATERALLY FROM EXISTING OR PROPOSED SEWERS UNLESS LOCAL CONDITIONS OR BARRIERS PREVENT A 10 FOOT LATERAL SEPARATION, IN WHICH CASE:
    1. THE WATER MAIN IS LAID IN A SEPARATE TRENCH, WITH THE ELEVATION OF THE BOTTOM OF THE WATER MAIN AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER, OR
    2. THE WATER MAIN IS LAID IN THE SAME TRENCH AS THE SEWER LINE WITH THE WATER MAIN LOCATED AT ONE SIDE ON A BENCH OF UNDISTURBED EARTH, AND ABOVE THE TOP OF THE SEWER.
    B. CROSSING A WATER MAIN OVER A SEWER MAIN:
    WHENEVER IT IS NECESSARY FOR A WATER MAIN TO CROSS OVER A SEWER THE WATER MAIN SHALL BE LAID AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER MAIN, UNLESS LOCAL CONDITIONS OR BARRIERS PREVENT AN 18 INCH VERTICAL SEPARATION - IN WHICH CASE BOTH THE WATER MAIN AND SEWER MAIN SHALL BE CONSTRUCTED OF FERROUS MATERIALS AND WITH JOINTS THAT ARE EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE POINT OF CROSSING.
    C. CROSSING AA WATER MAIN UNDER A SEWER MAIN:
    WHENEVER IT IS NECESSARY FOR A WATER MAIN TO CROSS UNDER A SEWER MAIN BOTH THE WATER MAIN AND SEWER MAIN SHALL BE CONSTRUCTED OF FERROUS MATERIALS AND WITH JOINTS EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE POINT OF CROSSING.
    D. CROSSING AA SEWER LINE OVER OR UNDER A STORM DRAIN:
    WHENEVER IT IS NECESSARY FOR A SEWER LINE TO CROSS A STORM DRAIN PIPE, THE SEWER LINES SHALL BE LAID AT SUCH AN ELEVATION THAT THE OUTSIDE OF THE SEWER LINE NEAREST TO THE OUTSIDE OF THE STORM DRAIN PIPE SHALL MAINTAIN A 12 INCH CLEAR SEPARATION DISTANCES, OR ENCASED IN EITHER CONCRETE OR DUCTILE IRON PIPE FOR AT LEAST 5 FEET ON EITHER SIDE OF THE CROSSING.
14. UNDERGROUND CONDUITS TO SIGNS, LOT LIGHTS, ETC., SHALL BE PLACED IN GRASS OR LANDSCAPE AREAS WHENEVER POSSIBLE. THE LOCATION OF THE CONDUIT AS SHOWN ON THESE PLANS SHALL BE CONSIDERED TO BE SCHEMATIC WITH ACTUAL LOCATION TO BE VERIFIED BY THE GENERAL CONTRACTOR, PVC SHC. 40 SLEEVES SHALL BE INSTALLED FOR ALL CONDUIT CROSSING UNDER PAVED AREAS.
15. THE CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES TO DETERMINE EXACT POINT OF SERVICE CONNECTION AT EXISTING UTILITY. (CONTACT LIST ON SHEET C-1) REFER TO THE BUILDING ELECTRICAL AND PLUMBING DRAWINGS FOR UTILITY SERVICE ENTRANCE LOCATIONS, SIZES AND CIRCUITING.

UTILITY CONTACTS

TELEPHONE:
MIKE SLUSHER
VERIZON
4843 OAKLAND BLVD.
ROANOKE, VA. 24012
540-265-7578

NATURAL GAS:
BRETT BENNETT
ROANOKE GAS
P.O. BOX 13007
ROANOKE, VA. 24030
540-777-3970

ELECTRIC:
MARTIN McGEE
AMERICAN ELECTRIC POWER
802 RIVER AVE.
ROANOKE, VA. 24013
540-427-3564

WATER AND SANITARY SEWER:
DAVID BARNHART
WESTERN VA WATER AUTHORITY
601 JEFFERSON STREET
ROANOKE, VA 24011
540-853-1588

STORM SEWER:
DANIELLE BISHOP
DEVELOPMENT REVIEW COORDINATOR
215 CHURCH AVE. SW ROOM 170
ROANOKE, VA 24011
540-853-1325

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.
8642 W. MARKET ST. SUITE 100
GREENSBORO, NC 27409
336-665-8155
DATE OF SURVEY:9-20-07

SANITARY SEWER CONNECTION:

IT IS THE INTENT OF THE PROJECT RE-DEVELOPMENT TO UTILIZE THE EXISTING SANITARY SEWER CONNECTION TO THE SITE. IF A NEW SEWER LATERAL IS TO BE INSTALLED, THE CONNECTION MUST BE 90 DEGREES TO THE EXISTING MANHOLE. COORDINATE SANITARY SEWER CONNECTION TO EXISTING WITH DAVID BARNHART WITH THE WESTERN VIRGINIA WATER AUTHORITY AT Tel.#: 540-853-1588.

UNDERGROUND UTILITY NOTES:

1. ALL PROPOSED UTILITY SERVICE CONNECTIONS SHALL BE INSTALLED UNDERGROUND - TYPICAL.

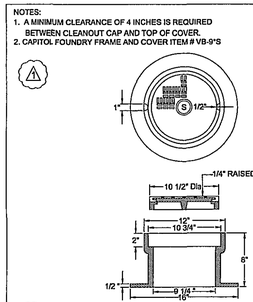
UTILITY INSTALLATION NOTES:

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.

SITE INFORMATION

SITE ADDRESS:	701 WILLIAMSON ROAD	MAP REFERENCE INFO:	TAX # 3025003 DB 1402, PG 174 LOT 5A DB 1402, PG 182
DEVELOPER CONTACT:	SCOTT THOMPSON c/o McDONALDS USA, LLC 4601 SIX FORKS ROAD - SUITE 200 RALEIGH, N.C. 27609 TELEPHONE: (919) 326-4246	DESIGNER:	STIMMEL ASSOCIATES, PA 601 N. TRADE STREET SUITE 200 WINSTON-SALEM, NC 27101 Phone: 336-723-1067 Fax: 336-723-1069
ZONING:	CG (COMMERCIAL-GENERAL DISTRICT)		
EXISTING USE:	RESTAURANT WITH DRIVE-THRU		
PROPOSED USE:	RESTAURANT WITH DRIVE-THRU		
			SUBJECT PROPERTY IS NOT LOCATED WITHIN A SPECIAL FLOOD HAZARD ZONE AS DEFINED BY F.E.M.A. MAP PANEL NUMBER 51161C0046D 0130.

NOTES:
1. A MINIMUM CLEARANCE OF 4 INCHES IS REQUIRED BETWEEN CLEANOUT CAP AND TOP OF COVER.
2. CAPITOL FOUNDRY FRAME AND COVER ITEM # VB-9"S



1 / C6 SANITARY SEWER CLEANOUT DETAIL
SCALE: N.T.S. CLEANOUT TO BE TRAFFIC BEARING TYPE (TYP.)
WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS S-13

NORTH

SAPA PROJECT # 07-240

20 0 20 40 60
SCALE 1"=20'

CITY: ROANOKE	STATE: VIRGINIA
COUNTY: -	
STREET ADDRESS: 701 WILLIAMSON ROAD	
TAX PIN NUMBER: 3025003	LOCATION CODE NUMBER: 45-0174
STIMMEL FILENAME: 07-240BASE.DWG	

REV	DATE	DESCRIPTION	BY	ISSUED?
1	06-05-08	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. 0548

PLAN APPROVAL
SIGNATURE (2 REQUIRED) — DATE
REGIONAL MGR.
REGIONAL DEV. DIRECTOR
REGIONAL CONSTRUCTION MGR.
REGIONAL REAL ESTATE MGR.

CO-SIGN SIGNATURES
AREA CONSTRUCTION MGR.
CONTRACTOR

McDonald's®
THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF McDONALD'S USA, LLC AND SHALL NOT BE REPRODUCED WITHOUT THEIR WRITTEN PERMISSION.

OFFICE: RALEIGH REGION
ADDRESS: 4601 SIX FORKS ROAD - SUITE 200 - RALEIGH, N.C. 27609

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

C-6
UTILITY PLAN