2252A

MECKLENBURG COUNTY
GROUNDWATER & WASTEWATER SERVICES JAM 4/11

APPLICATION FOR A COMMERCIAL SITE IMPROVEMENT PERMIT/ CONSTRUCTION AUTHORIZATION FOR AN ON-SITE WASTEWATER SYSTEM, NEW WELL INSTALLATION, OR REPAIR OF EXISTING WELL

1. **SEPTIC / TYPE APPLICATION:** ☐ N/A ☐ NEW SYSTEM ☑ ALTERATION ☐ REPAIR ☐ MODIFIED PLOT PLAN

2. **WELL / TYPE APPLICATION:** ☐ N/A ☐ NEW WELL ☐ MAJOR REPAIR ☐ ABANDONMENT

3. **JOB LOCATION INFORMATION:**

TAX PARCEL NUMBER: 13910114
STREET ADDRESS: 9801 Arlington Church Road
CITY: Charlotte
STATE: NC ZIP: 28227
LOT #: LOT SIZE (acres): 24.214
TOWNSHIP:
☐ 0-MECKLENBURG ☐ 3-CORNELIUS ☐ 6-HUNTERSVILLE
☐ 1-CHARLOTTE ☐ 4-PINEVILLE ☑ 7-MINT HILL
☐ 2-DAVIDSON ☐ 5-MATTHEWS

4. **BUILDING INFORMATION:**

DESCRIBE TYPE OF BUSINESS: Church
☑ COMMERCIAL ☐ INDUSTRIAL
SQUARE FOOTAGE OF FACILITY:
NUMBER OF EMPLOYEES PER SHIFT:
NUMBER OF SHIFTS: _____ NUMBER OF SEATS:
TYPE OF WASTEWATER GENERATED:
☑ DOMESTIC SEWAGE ☐ INDUSTRIAL WASTEWATER
☐ OTHER _____

To be submitted by Thompson Environmental Consulting

5. ***IF PLANNING TO EXPAND OR ALTER THE EXISTING SEPTIC SYSTEM, INFORMATION DOCUMENTING THE INCREASED WASTEWATER FLOW AND/OR A JUSTIFICATION FOR SYSTEM ALTERATION IS REQUIRED.***

6. **WATER SUPPLY:** ☐ MUNICIPAL ☑ PRIVATE WELL ☐ PUBLIC WELL ☐ SHARED WELL ☐ OTHER _____

7. **PROPOSED USE OF WELL:** ☐ N/A ☐ IRRIGATION ☐ POTABLE (DRINKING WATER) ☐ OTHER _____

8. **PLEASE INDICATE AND RANK DESIRED SEPTIC SYSTEM TYPE(S) IN ORDER OF PREFERENCE** *(1-MOST DESIRED 5-LEAST DESIRED):*

☐ N/A ☐ ANY TYPE ☐ CONVENTIONAL ☐ ACCEPTED ☐ INNOVATIVE ☐ ALTERNATIVE ☒ OTHER To be Submitted by Thompson Environmental Consulting

8A. **RANK:** ____ ____ ____ ____ ____

9. **DO ANY OF THE FOLLOWING APPLY TO THE PROPERTY IN QUESTION? IF "YES" PLEASE ATTACH SUPPORTING DOCUMENTATION.**

BURIED CABLES, LANDFILLS, STUMPHOLES	☐ YES	☐ NO	GRADING/SOIL REMOVAL PERFORMED	☑ YES	☐ NO
EXISTING WASTEWATER (SEPTIC) SYSTEMS	☑ YES	☐ NO	JURISDICTIONAL WETLANDS	☐ YES	☐ NO
WELLS, SPRINGS, OR WATER LINES	☑ YES	☐ NO	APPROVAL REQUIRED BY ANY OTHER PUBLIC AGENCY	☐ YES	☑ NO
EASEMENTS OR RIGHT-OF-WAYS	☑ YES	☐ NO	WASTEWATER OTHER THAN DOMESTIC SEWAGE	☐ YES	☑ NO
CHEMICAL/PETROLEUM STORAGE TANKS	☐ YES	☑ NO	KNOWN UNDERGROUND CONTAMINATION	☐ YES	☑ NO
WASTE STORAGE	☐ YES	☐ NO	GROUNDWATER USE RESTRICTIONS/VARIANCES	☐ YES	☑ NO

10. **WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED?** _____ ☑ UNKNOWN

11. **WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY?** _____ ☐ N/A

12. **PROPERTY OWNER:**

NAME: Arlington Baptist Church
ADDRESS: 9801 Arlington Church Rd.
CITY: Charlotte
STATE: NC ZIP: 28227
HOME PHONE:
WORK PHONE: 704-545-4589
MOBILE PHONE:
FAX: 704-545-4573

13. **OWNER'S LEGAL REPRESENTATIVE, IF APPLICABLE:**

NAME: MCT General Contractors Inc.
ADDRESS: P.O. Box 337
CITY: Monroe
STATE: NC ZIP: 28111-0337
HOME PHONE:
WORK PHONE: 704-289-5699
MOBILE PHONE: 704-309-6745 Doug Helms, Proj. Mgr.
FAX: 704-289-5667

MECKLENBURG COUNTY – GROUNDWATER & WASTEWATER SERVICES
700 N. TRYON ST. SUITE 211 CHARLOTTE, NC 28202, OFFICE: 704-336-5103, FAX: 704-336-6894

Revised on: 7/1/08

14. SEPTIC SYSTEM PERMIT APPLICATION:

If the information in this application is falsified, changed, or the site is altered, then the Improvement Permit and Authorization to Construct shall become invalid. I have read this application and certify that the information provided herein is true, complete and correct. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliance with applicable laws and rules. I understand that I am solely responsible for the proper identification and labeling of all property lines and corners and making the site accessible so that a complete site evaluation can be performed. The permit is valid for either sixty (60) months or is non-expiring depending upon the documentation submitted: complete site plan = 60 months, complete plat = non-expiring.

DOH (Initial here for septic system applications)

15. WELL PERMIT APPLICATION:

If the information in this application is falsified, changed, or the site is altered, then the Well Permit shall become invalid. I have read this application and certify that the information provided herein is true, complete and correct. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliance with applicable laws and rules. I understand that I am solely responsible for the proper identification and labeling of all property lines and corners and making the site accessible so that a complete site evaluation can be performed. The permit is valid for a period of twelve (12) months from the date of issuance.

_____ (Initial here for well applications)

16. APPLICATION SIGNATURE SECTION:

ONLY COMPLETE APPLICATIONS WILL BE PROCESSED. A proper signature is required in order to process your application. Please review the application carefully and sign in the space provided below.

_____ 7/21/10

Property Owner's or Owner's Legal Representative Signature — Date

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OFFICE USE ONLY

☐ SURVEY PLAT TO SCALE SUBMITTED ☐ SCALED SITE PLAN SUBMITTED ☐ UN-SCALED SITE PLAN SUBMITTED

SEPTIC APPLICATION FEES RECEIVED: $ 200.00 CC 020559 DATE FEE RECEIVED: 7/20/10

WELL APPLICATION FEES RECEIVED: $ _____ DATE FEE RECEIVED: _____

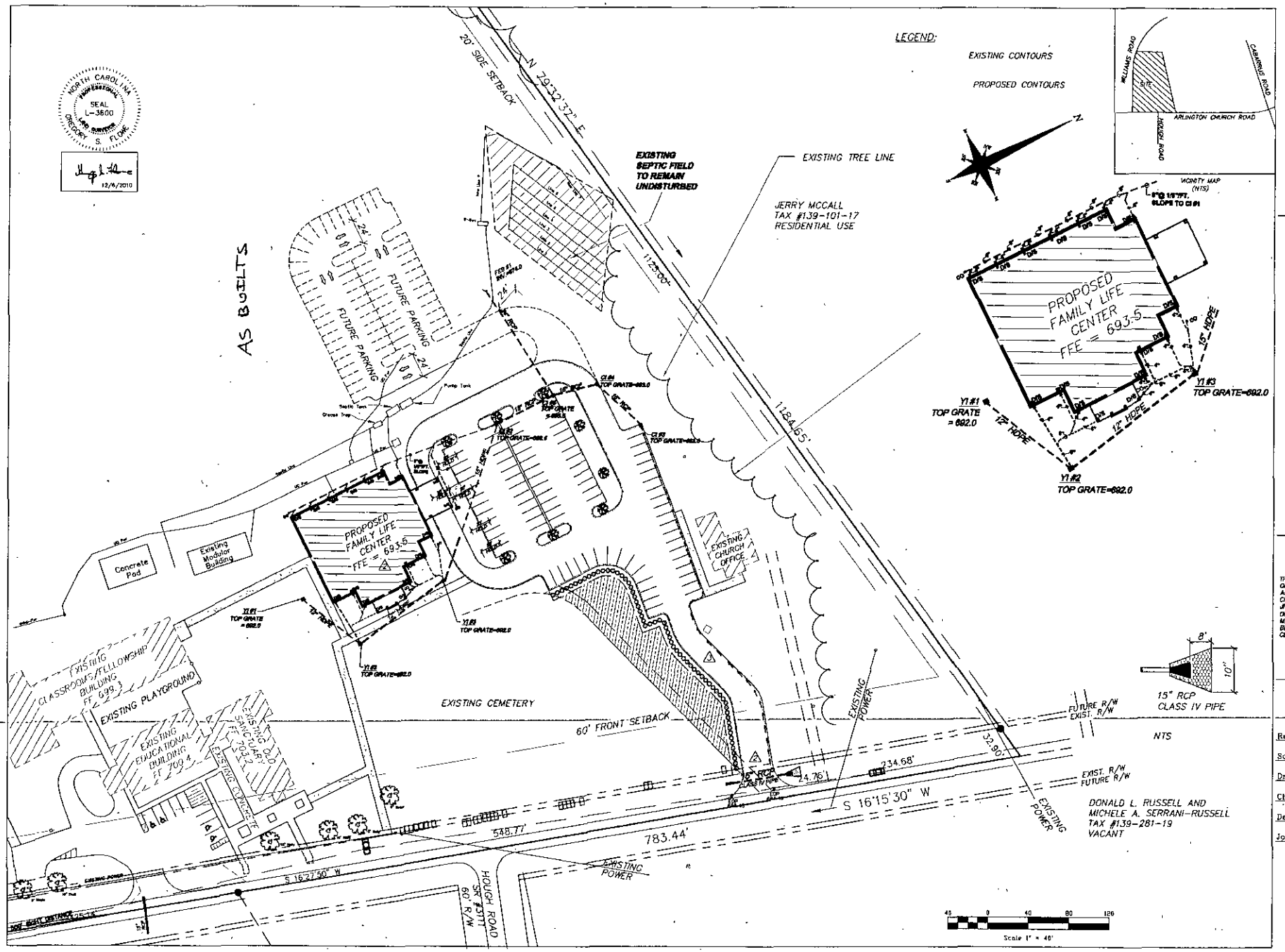
APPLICATION PROCESSED BY: gC

GWS FILE NUMBER ASSIGNED: 2252A

APPLICATION ID NUMBER ASSIGNED: 4711

COMMENTS:

MECKLENBURG COUNTY – GROUNDWATER & WASTEWATER SERVICES
700 N. TRYON ST. SUITE 211 CHARLOTTE, NC 28202, OFFICE: 704-336-5103, FAX: 704-336-6894



PROPOSED FAMILY LIFE CENTER

ARLINGTON BAPTIST CHURCH

9801 ARLINGTON CHURCH ROAD
MINT HILL, NORTH CAROLINA

THIS DOCUMENT WAS ORIGINALLY ISSUED AND SEALED BY CHRISTOPHER L. HOPE, JR., LICENSE #3044, ON 8/10/10. THIS MEDIUM SHALL NOT BE CONSIDERED A CERTIFIED DOCUMENT.

	8/10/10
	8/9/10
Rev.	5/27/10
Scale	NOTED
Drawn By	CLH
Checked By	CLH
Date	4/12/10
Job No.	12110

SW-2
OF 4

CHRIS HOPE/PROFESSIONAL ENGINEER/2617 ROLLING HILLS DRIVE/MONROE, NC 28110/(704) 882-1500

* OFFICE REVIEW
APPROVED ON 7/21/10
PENDING P.E. SEAL
TG

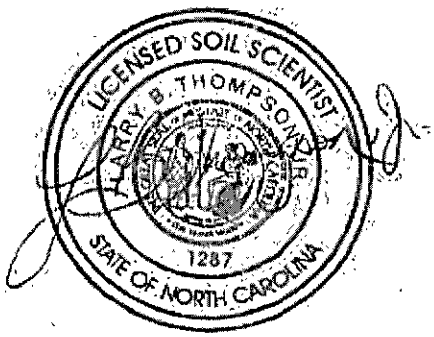
Commercial Flow Equalization
Wastewater Treatment and Disposal System Design

for

Arlington Baptist Church
Charlotte, North Carolina

FIELD REVIEW
APPROVED ON 08/02/2010
SAM
PROPERTY LINED MARKED
AND VERIFIED TO BE
10 FT + OFF DRAIN FIELD

Tax Parcel # 139-101-15
MCHD File No. 2252-A
July 20, 2010



Prepared for:

Arlington Baptist Church of Charlotte, Inc.
9801 Arlington Church Road
Charlotte, NC 28227

Prepared by:

Larry Thompson, REHS, PWS, LSS
Thompson Environmental Consulting, Inc.
114 Orchard Ridge Road
Locust, NC 28097
Phone: 704-301-4881
Fax: 704-888-1496
larry@thompsonenv.com



cc: Mr. Jeremy Michael, REHS
Mecklenburg County Environmental Health

Thompson Environmental Consulting, Inc.
114 Orchard Ridge Road
Locust, NC 28097-8748
704-301-4881

SHEET 1 OF 1

COUNTY: Mecklenburg
TAX ID: 139-101-15

OWNER: Arlington Baptist Church of Charlotte, Inc.
LOCATION: 9801 Arlington Church Road
Charlotte, NC 28227

DATE: July 18, 2010

PROFILES		SB-1	SB-2								
LANDSCAPE POSITION	.1940	ls	ls								
SLOPE (%)	.1940	4%	4%								
HORIZON 1 DEPTH	.1943	0-9	0-8								
TEXTURE	.1941 (a)(1)	scl	scl								
CONSISTENCE	.1941	fr	fr								
STRUCTURE	.1941 (a)(2)	gr	gr								
CLAY MINERALOGY	.1941 (a)(3)	se	se								
HORIZON 2 DEPTH	.1943	9-36+	8-48+								
TEXTURE	.1941 (a)(1)	c	c								
CONSISTENCE	.1941	fi	fi								
STRUCTURE	.1941 (a)(2)	sbk	sbk								
CLAY MINERALOGY	.1941 (a)(3)	se	se								
HORIZON 3 DEPTH	.1943										
TEXTURE	.1941 (a)(1)										
CONSISTENCE	.1941										
STRUCTURE	.1941 (a)(2)										
CLAY MINERALOGY	.1941 (a)(3)										
HORIZON 4 DEPTH	.1943										
TEXTURE	.1941 (a)(1)										
CONSISTENCE	.1941										
STRUCTURE	.1941 (a)(2)										
CLAY MINERALOGY	.1941 (a)(3)										
SOIL WETNESS	.1942										
RESTRICTIVE HORIZON	.1944										
SAPROLITE	.1943/.1956										
CLASSIFICATION	.1948	ps	s								
L.T.A.R. (gpd/ft^2)	.1955	0.3	0.3								

OTHER FACTORS (.1946):		**SITE LTAR (gpd/ft^2):**	**0.3**
AVAILABLE SPACE (.1945):	provisionally suitable		
SITE CLASSIFICATION (.1948):	provisionally suitable	SYSTEM TYPE:	flow equalization - 25% reduct.
EVALUATED BY:	Larry Thompson	OTHERS PRESENT:	
COMMENTS:	SB-1 feldspar at 36 inches (isolated)		

ARLINGTON BAPTIST CHURCH FLOW EQUALIZATION SYSTEM

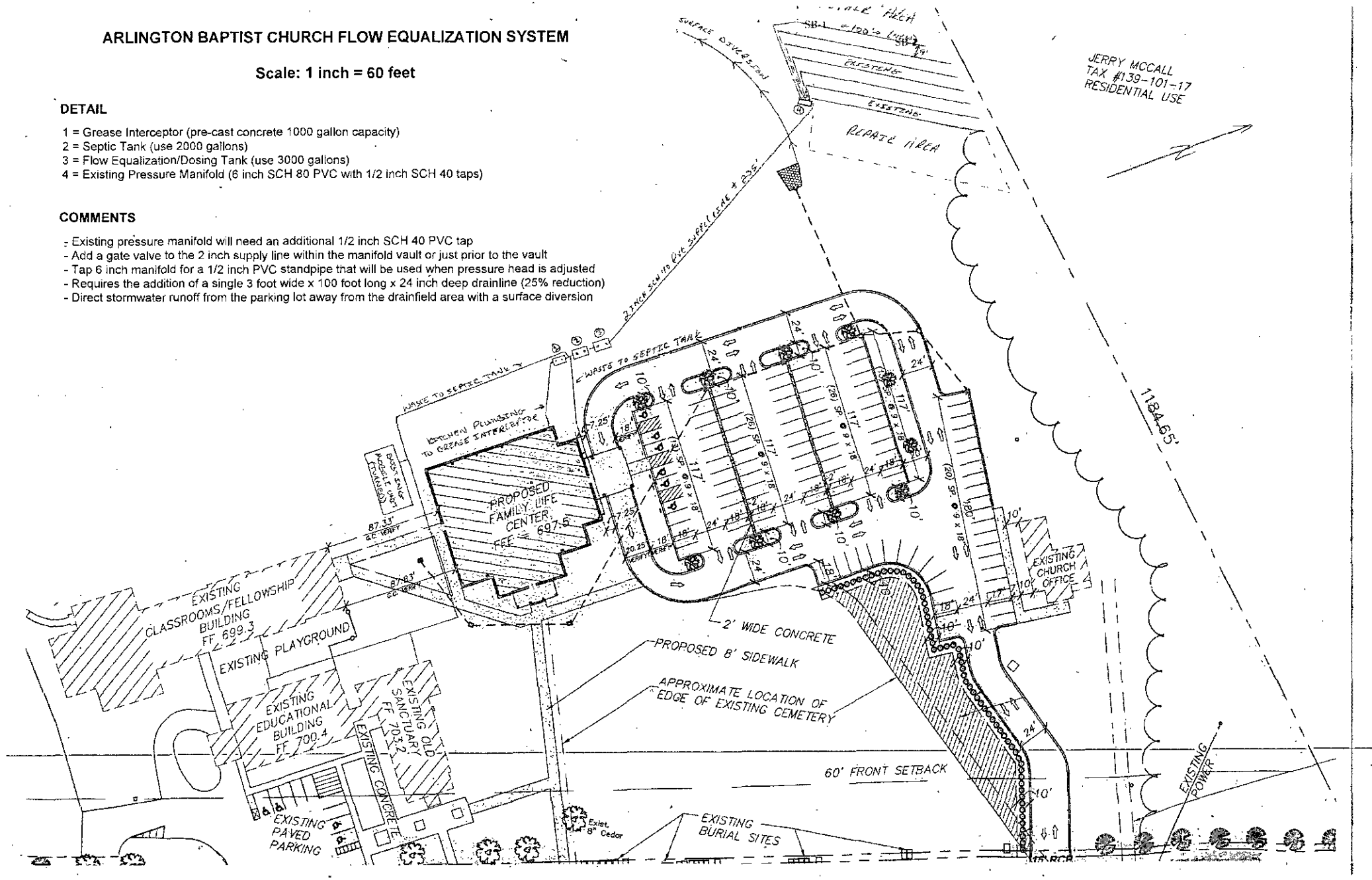
Scale: 1 inch = 60 feet

DETAIL

1 = Grease Interceptor (pre-cast concrete 1000 gallon capacity)
2 = Septic Tank (use 2000 gallons)
3 = Flow Equalization/Dosing Tank (use 3000 gallons)
4 = Existing Pressure Manifold (6 inch SCH 80 PVC with 1/2 inch SCH 40 taps)

COMMENTS

- Existing pressure manifold will need an additional 1/2 inch SCH 40 PVC tap
- Add a gate valve to the 2 inch supply line within the manifold vault or just prior to the vault
- Tap 6 inch manifold for a 1/2 inch PVC standpipe that will be used when pressure head is adjusted
- Requires the addition of a single 3 foot wide x 100 foot long x 24 inch deep drainline (25% reduction)
- Direct stormwater runoff from the parking lot away from the drainfield area with a surface diversion



Details

The following revised proposal for a flow equalization wastewater treatment and disposal system is being made on the behalf of Arlington Baptist Church of Charlotte, Inc. by Thompson Environmental Consulting, Inc. (TEC) for their current facility located at 9801 Arlington Church Road.

The existing wastewater system consists of a pump-to-conventional drainfield with 810 linear feet of drainline and was designed to accommodate approximately 729 gallons per day of wastewater flow. Recently Arlington Baptist Church submitted a request to the Mecklenburg County Groundwater and Wastewater Services section to consider granting use of their existing wastewater system for the construction of a new family life center. Mr. Jeremy Michael, NCREHS, was required to deny this request based upon the church's day school program which had heretofore not been considered as part of the church's design daily sewage flow. State regulations would require that the wastewater system for the church be designed to accommodate a daily waste flow of 2905 gallons when considering the day school.

Based upon an interview with Mr. Doug Helms of MCT General Contractors, TEC was able to determine that the church utilizes a public well (PWS ID No. NC0160515) and that monthly water usage records were available. Utilizing the well data and the formula outlined in 15A NCAC 18A .1949(c)(1), an adjusted daily flow of 1292 gallons is being used for the proposed wastewater system alteration (See Daily Design Flow Justification and Appendix).

The following information is being submitted to the Mecklenburg Groundwater and Wastewater Services section to assist in the issuance of an alteration permit for the church's proposed family life center.

Location

The subject property is located at 9801 Arlington Baptist Church Road in Charlotte, North Carolina. From the MCEH office, travel US 74 east approximately 3.7 miles, bearing left onto NC 27 east. Remain on NC 27 east approximately 9.1 miles, turning right onto Cabarrus Road. Continue on Cabarrus Road approximately 0.8 of a mile, turning right onto Arlington Church Road. Arlington Baptist Church will is located approximately 0.7 of a mile ahead on the right.

References

Laws and Rules for Sewage Treatment and Disposal Systems, 15A NCAC 18A, Section .1900, Department of Environment and Natural Resources, Division of Environmental Health, On-Site Wastewater Section, August 1, 2007.

Onsite Wastewater Treatment and Disposal Systems; EPA 625/R-00/008 Design Manual, February 2002.

Innovative Wastewater System Approval: IWWS-2004-1; North Carolina Department of Environment and Natural Resources, Division of Environmental Health, On-Site Wastewater Section, July 6, 2004.

Innovative Wastewater System Approval: IWWS-93-2-R11; North Carolina Department of Environment and Natural Resources, Division of Environmental Health, On-Site Wastewater Section, November 1, 2005.

Plans and Specifications

I. Grease Trap

a. All kitchen waste (no toilet waste) must be directed to a State approved grease trap prior to entering the septic tank.
b. The grease trap shall be watertight, structurally sound, and 1000 gallons in capacity.
c. It is the responsibility of the septic contractor to thoroughly inspect the grease trap prior to accepting delivery to assure that the tank has had time to properly cure and is free of cracks or other structural deficiencies.

II. Septic Tank

a. The septic tank shall be State approved (Section .1953 of 15A NCAC 18A), watertight, structurally sound, and a minimum of 1777.64 gallons in capacity (use a 2000 gallon septic tank).
b. The septic tank shall be demonstrated to be watertight by a 24-hour leak test or by pressure test.
c. The septic tank will be fitted with an approved commercial effluent filter that is appropriately sized and riser for easy access and periodic maintenance (Polylok PL-525 or equivalent - commercial grade).
d. It is the responsibility of the septic contractor to thoroughly inspect the septic tank prior to accepting delivery to assure that the tank has had time to properly cure and is free of cracks or other structural deficiencies.

III. Dosing/Equalization Tank

a. The dosing/equalization tank shall be State approved, watertight, structurally sound and a minimum of 2909 gallons in capacity (TEC has used Dellinger's PT-143 3000 gallon pump tank for demonstration purposes in our calculations). Again, it is the responsibility of the septic tank contractor to thoroughly inspect each pump tank prior to accepting delivery.
b. The dosing/equalization tank shall be demonstrated to be watertight by a 24-hour leak test or by pressure test.
c. The dosing/equalization tank shall have access risers that extend, at a minimum, 6 inches above finished grade.

d. Pump submergence is required. Effluent volume shall cover the pump and motor housing at all times and, in no case, shall be less than 12 inches of effluent remaining in the tank at all times.
e. Discharge pump: Goulds WE05H (cut sheet available in Appendix) or equivalent.
f. Discharge pump will be tethered with a nylon rope for removal purposes.
g. The control panel for this system must be an approved flow equalization panel that meets the additional requirements of:
   - High-water level alarm event counter
   - Timer over-ride counter
   - Pump event counter
   - Pump elapsed time meter
   - Magnetic motor contactor
   - HOA switch
   - Control circuit fuse
   - Alarm circuit fuse
   - Float switch terminal block
   - Programmable timer with variable controls for setting the on and off times for .05 seconds to 30 hours, or a repeat cycle timer that affords the amount of control needed for pump run time and off time.
   - Circuit breaker for the pump
   - Circuit breaker for the alarm/control circuit
   - NEMA 4X alarm strobe beacon
   - NEMA 4X Alarm Horn (83 decibels at 3 feet minimum) with auto reset
   - NEMA 4X Exterior Horn Test/Normal/Silence Switch
   - Ground lug
   - 2 Lockable Hasps or one lockable hasp and 2 captive screws opposite the hinges of the NEMA 4X enclosure
   - Pump run light
h. The pump and alarm control panel shall be mounted within 10 feet of the pump tank and at a height to allow the Operator in Responsible Charge (ORC) to easily adjust and observe the timer control device and other appurtenances of the control panel (e.g.: center of box to be 3 to 5 feet above finished grade).
i. It is paramount that the conduit is properly sealed to prevent the escape of flammable gases from the pump tank.
j. The alarm circuit shall be supplied separate from any pump overload and short circuit devices. The alarm shall be both audible and visible by the system users.
k. Controls shall require the pump enable float switch to be activated (minimum dose volume present) before the start of any pump cycle. Cycles shall be shut off by the run timer or the low-water cut-off float (not by deactivation of the enable float).
l. Float switch tie downs must be made of a corrosion resistant material (do not use electrical tape or metal hose clamps to secure these switches). Floats should be mounted on a separate "float tree" rather than the pump supply line (see pump tank detail).
m. The following floats shall be provided and shall meet the requirements of Rule .1952 (c)(5):

- A low-level/redundant-off switch shall prevent the pump from running in the event the level in the tank is below the pump intake.
- A timer-enabling switch shall be set at or above the pump submergence level and shall not allow for partial doses.
- A high-level alarm shall activate after the equalization volume is exceeded. If there is a controlled delay before the alarm activation, the delay shall be no more than 5 minutes. After being silenced, the alarm horn shall automatically reset and shall be audible with each high level event. The alarm event counter shall record each activation of the alarm.
- A timer override switch located at or above the alarm shall dose no more than a design dose event to the drain field. The alarm shall re-activate at each override event. The timer override float may be integral with the alarm float.

IV. Hydrostatic Tank Check (optional Pressure Test)

a. All tanks shall undergo a 24 hour hydrostatic check after installation and backfill. A water level change of 1/2 inch or more, within a 24" riser, over 24 hours, or visual observation of leakage shall be cause for failure of the water tightness test. Initial water level shall be to 2" above the riser/adapter seam.
b. Tanks may also be pressure tested in lieu of the hydrostatic test.

V. Pipe and Fittings

a. All discharge piping, supply lines, valves and disconnects should be made of PVC and pressure rated.
b. All joints must be properly "welded" utilizing the appropriate PVC cement for each application.
c. The supply line from the pump tank to the pressure manifold shall be 2 inch Schedule 40 PVC (approximate length of supply line is 235 feet).

VI. Pressure Manifold

a. There is an existing 6 inch SCH 80 PVC pressure manifold that will be retrofitted for use with this proposal (see Appendix).
b. A gate valve will need to be added at the Pressure Manifold box to allow for final pressure adjustment (2 foot of head pressure as per design - can be installed inside of the manifold vault or immediately prior to the vault if installed in a protective gate valve box).
c. A 1/2 inch tap with plug will need to be added to the top of the manifold at the distal end to allow for the addition of a 2 foot tall standpipe when pressure to the manifold is regulated.
d. There are six (6) 1/2 inch SCH 40 PVC taps in the existing pressure manifold. The manifold will need to be retrofitted with an additional 1/2 inch SCH 40 PVC tap (7 taps total) to feed one new drainline.

VII. Drain Field Installation

a. The existing drainfield is marked on the ground with wooden stakes that are numbered. There are six rows of stakes that identify the six 135 foot long drainlines that make up the current system.
b. The proposed addition has been marked below "Drainline 6" with blue and white metal stemmed flags. Once this area has been approved by the MCHD, the property owner/builder should mark this area and isolate it as much as possible from construction traffic (barrier fencing is highly recommended). Prior to the system installation, the septic contractor shall contact the MCHD for a pre-construction conference at which time the drain field area will be re-verified.
c. Under no circumstances shall any construction take place within the drain field area while the soil is in a wet condition. If the installer has doubts as to whether or not the drain field area is dry enough to begin construction, the MCHD should be contacted for permission to proceed with the installation.
d. The specified drainfield addition is specified as the **Infiltrator Chamber System** (other accepted systems with a 25% reduction in required drainline length may be substituted with prior approval by the MCHD).
e. This proposal will require that an additional 3 foot wide by 100 foot long drainline (25% reduction product) be installed.
f. The maximum trench depth for the new drainline shall be **24 inches**.
g. The trench is to be installed on contour with the land, keeping the individual trench bottom level from beginning to end.
h. Trench walls must be scoured before installing chambers or other innovative drain field material.
i. The trenches should be left open for the final inspection by the MCHD.

VIII. Proper Operation Check

a. After all components of the waste water disposal system have been installed and connected, the system shall be checked for proper operation.
b. A pump delivery rate shall be measured and the timer control device adjusted according to the measured delivery rate to achieve the equalized daily flow. The time dosing control panel manufacturer's recommendations shall be followed for system start-up.
c. The timer control panel device shall be setup per the system design specifications in accordance with the measured pump delivery rate by the ORC.
d. All floats, counters, meters, timers, and alarms shall be tested for functionality.

IX. Pressure Head Adjustment

a. A 2-foot section of pipe (standpipe) shall be threaded into the "pressure head check tap" and the pump activated once again. The gate valve should be adjusted so that the water exiting this 2-foot section of pipe is barely trickling out of it. Once the 2-feet of head pressure has been properly set, the pump can be turned off and the standpipe removed. A male threaded plug should be used to replace the standpipe.

b. Turn the pump on again and allow it to run through the remainder of the cycle. The pump float switch will automatically turn the pump off if it is operating properly. Make sure that the effluent pump is completely submerged in the remaining water, making adjustments to the float switch(es) as needed. This completes the checks for proper operation of the pump, alarm and float switches.

X. Final Landscaping

a. The drain field shall be shaped to shed rainwater and be free from low spots.
b. The entire area of the drain field should be planted with grass as soon as possible to prevent erosion. The soil should be properly tilled, limed (if necessary) and fertilized prior to planting. After applying grass seed, the area should be heavily mulched with straw or other suitable material.
c. Stormwater runoff from the adjacent parking lot must be diverted away from the drainfield area.

XI. Utility Conflicts

a. The builder and church must take special care in planning for water, power, gas, telephone and cable lines. These utilities shall be kept clear of all parts of the septic system and its proposed repair area. Improper planning for underground utilities can negatively impact the installation and, in some cases, cause irreparable damage.

Maintenance

XI. Operation and Maintenance

The designed system is classified as a Type Va wastewater treatment and disposal system and requires ongoing maintenance. State regulations require that a system of this type be managed by a person certified by the North Carolina Department of Environment and Natural Resources to operate subsurface wastewater systems (Section .1961 Maintenance of Sewage Systems). A "Maintenance Contract" between the system owner and a Certified Operator will be required by the MCHD prior to the issuance of a final system approval or Operation Permit.

a. The minimum inspection/maintenance and reporting frequency for a Type Va system is once every 6 months by the Certified Operator. The local health department is required to inspect the system once (1) a year.
b. At each inspection, the Operator-in-Responsible Charge (ORC) shall, at a minimum, observe, monitor, and record:
   - wastewater level in the tanks,
   - the effluent filter in the septic tank for clogging,
   - watertightness of tanks, risers and pipe connections at tanks,
   - operation of pumps, floats, valves, electrical controls and alarms,
   - pumping frequency from PLC in control panel
   - signs of any structural damage or accessibility,

- vegetative growth over the drain field, the drain field area for surfacing effluent
- and, the pump cycle and run time information from the PLC and any water meter readings

d. The ORC shall also conduct other additional observations, measurements, monitoring, and maintenance activities as specified in the Operation Permit.
e. It should be noted that the septic and dosing tanks may need to be pumped every 4 years (in some situations, the tank may need to be pumped more frequently). At a minimum the tanks should be pumped when the solids within the septic tank reach an elevation that is equivalent to 1/3 of the volume of the tank.
f. All piping and valves should be inspected semi-annually for damage and corrections/repairs made immediately.
g. The drain field area should be maintained to prevent over growth of vegetation. Any damp areas, leakages or malfunctions should be addressed immediately.

Design Specifics

Daily Design Flow:	1292 GPD
Flow Equalization Flow:	780 GPD
Grease Trap Size:	1000 gallons
Septic Tank Size:	1777.64 gallons - minimum (Use 2000 Gallon Septic Tank)
Dosing/Equalization Tank Size:	2909 gallons - minimum (Use 3000 Gallon Pump Tank)
Dosing/Equalization Tank Pump:	Goulds WE05H (or equiv.)
Effluent Loading Rate:	Design = 0.3 GPD per sq. ft.
Supply Length and Diameter: Pressure Manifold Size (exisiting):	+/- 235 feet of 2 inch SCH 40 6 inch SCH 80 PVC
Number and Size of Taps (existing):	(6) ½ inch (SCH 40 PVC)
Drain Lines (existing):	(6) 3' Wide x 135' Long
Pressure Manifold (new taps):	(1) ½ inch (SCH 40 PVC)
Pressure Manifold (new gate valve):	(1) Gate Valve (must be added within the existing vault or enclose within a separate gate valve box)

Drain Lines (new):	(1) 3' Wide x 100' Long (25% reduction product)
Dosing Volume:	390 gallons per dose
Flow Rate:	49.77 gallons per minute
Friction Loss:	11.45 feet
Pressure Head:	2 feet
Drain Field Pump Requirements:	51.77 GPM at 18.45 TDH (2 GPM added for Anti-Siphon Hole)
Depth of Water Pumped:	9.4 inches (assumes 41.67 gallons per inch Dellinger PT-143 3000 gallon pump tank)
Pump Run:	7.84 minutes
Pump Off:	11.87 hours
Check Valve:	Yes
Anti-Siphon Hole:	Yes

Daily Design Flow Justification

12 Month Gallons		Daily Readings - Normal/Above Normal Month May-10 Day	Gallons
14,291		1	0
15,190		2	898
15,938		3	0
16,612		4	0
13,095		5	898
13,243		6	0
16,910		7	898
13,245		8	0
14,142		9	898
14,143		10	898
9,053		11	898
21,244		12	0
177,106	Total	13	898
14,759	Average	14	972

15	0
16	898
17	0
18	898
19	898
20	0
21	823
22	0
23	898
24	0
25	823
26	0
27	898
28	898
29	0
30	0
31	898
	15,190

21,244
15,190
1.4
923 (898, 898, 972) * readings were taken prior to 6000 gallon pressure tank
1,292 GPD

DDF = 2,905 GPD

Daycare

	Students	Teachers	DDF	Daily Flow	Days/wk.	Weekly Flow
	112	15	15gal./person	1905	5	9,525

Church

	Seats	DDF	Daily Flow	Days/wk.	Weekly Flow
	180	5 gal./seat	900	2.5	2,250

Office	Employees	DDF	Daily Flow	Days/wk.	Weekly Flow
	4	25 gal./employee	100	5	500

	DDF	% DDF
Daycare	1,905	65.58%
Church	900	30.98%
Office	100	3.44%
	2,905	100.00%

DDF Adjusted = 1,292 GPD

	DDF	% DDF
Daycare	847.25	65.58%
Church	400.28	30.98%
Office	44.48	3.44%
	1292	100.00%

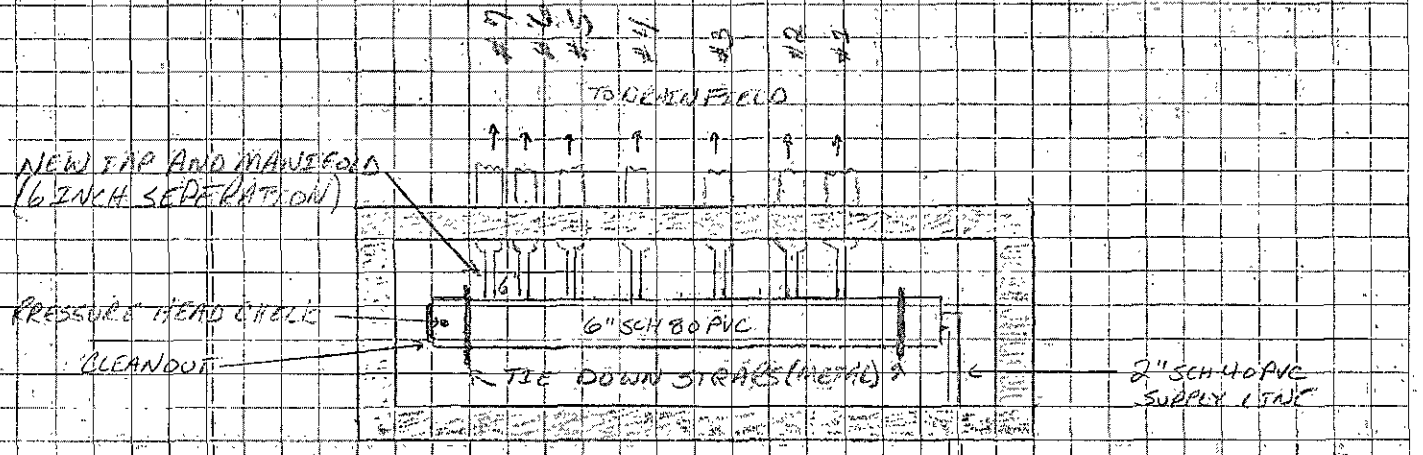
*See Appendix for the most recent twelve months of water usage records for Arlington Baptist Church.

APPENDIX

Thompson Environmental Consulting, Inc.
114 Orchard Ridge Road
Locust, NC 28097-8748

File Number: 2252-A
Location: 9801 Arlington Church Road
Date: July 20, 2010

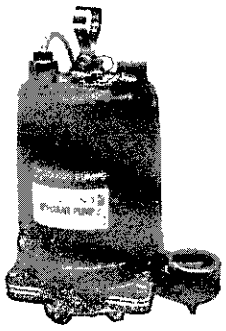
PRESSURE MANIFOLD DETAIL



* EXISTING 6" SCH 80 PVC MANIFOLD
* EXISTING TAPS ARE DIRECT THREAD
* MANIFOLD VAULT IS CONSTRUCTED OF BLOCK WITH A CONCRETE SLAB TOP

* NOT TO SCALE

GOULDS PUMPS



Submersible Effluent Pump

MODEL 3885

WE Series

PROSURANCE AVAILABLE FOR RESIDENTIAL APPLICATIONS.

APPLICATIONS

Specifically designed for the following uses:

- Homes
- Farms
- Trailer courts
- Motels
- Schools
- Hospitals
- Industry
- Effluent systems

SPECIFICATIONS

Pump

- Solids handling capabilities: ¾" maximum.
- Discharge size: 2" NPT.
- Capacities: up to 140 GPM.
- Total heads: up to 128 feet TDH.
- Temperature: 104°F (40°C) continuous 140°F (60°C) intermittent.
- See order numbers on reverse side for specific HP, voltage, phase and RPM's available.

FEATURES

■ **Impeller:** Cast iron, semi-open, non-clog with pump-out vanes for mechanical seal protection. Balanced for smooth operation. Silicon bronze impeller available as an option.

■ **Casing:** Cast iron volute type for maximum efficiency. 2" NPT discharge.

■ **Mechanical Seal: SILICON CARBIDE VS. SILICON CARBIDE** sealing faces. Stainless steel metal parts, BUNA-N elastomers.

■ **Shaft:** Corrosion-resistant, stainless steel. Threaded design. Locknut on all models to guard against component damage on accidental reverse rotation.

■ **Fasteners:** 300 series stainless steel.

■ Capable of running dry without damage to components.

■ Designed for continuous operation when fully submerged.

MOTORS

■ Fully submerged in high-grade turbine oil for lubrication and efficient heat transfer.

■ Class B insulation on ⅓-1½ HP models.

■ Class F insulation on 2 HP models.

Single phase (60 Hz):

- Capacitor start motors for maximum starting torque.
- Built-in overload with automatic reset.
- SJTOW or STOW severe duty oil and water resistant power cords.
- ⅓ and ½ HP models have NEMA three prong grounding plugs.
- ¾ HP and larger units have bare lead cord ends.

Three phase (60 Hz):

- Class 10 overload protection must be provided in separately ordered starter unit.
- STOW power cords all have bare lead cord ends.

■ **Designed for Continuous Operation:** Pump ratings are within the motor manufacturer's recommended working limits, can be operated continuously without damage when fully submerged.

■ **Bearings:** Upper and lower heavy duty ball bearing construction.

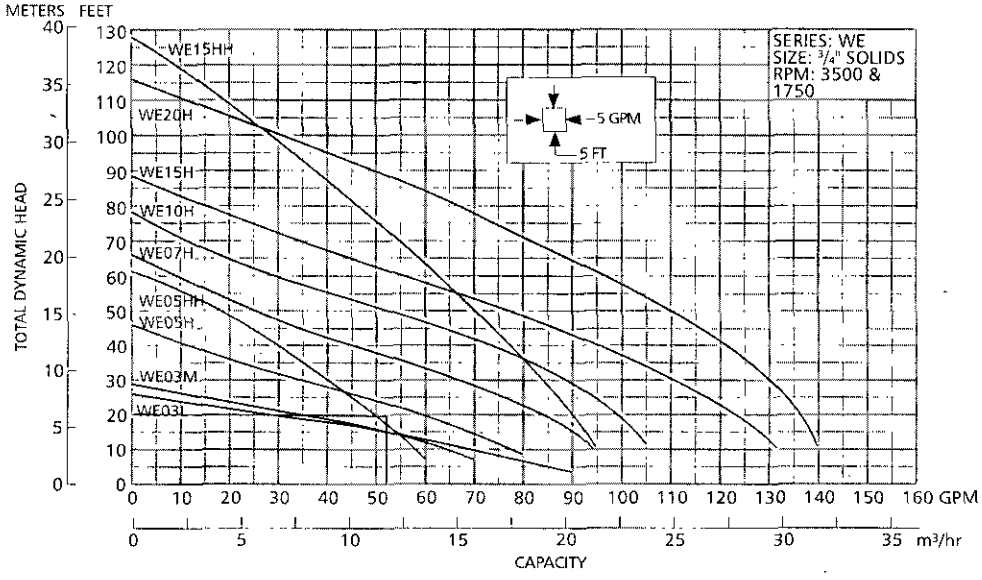
■ **Power Cable:** Severe duty rated, oil and water resistant. Epoxy seal on motor end provides secondary moisture barrier in case of outer jacket damage and to prevent oil wicking. Standard cord is 20'. Optional lengths are available.

■ **O-ring:** Assures positive sealing against contaminants and oil leakage.

AGENCY LISTINGS

Tested to UL 778 and CSA 22.2 108 Standards By Canadian Standards Association File #LR38549

Goulds Pumps is ISO 9001 Registered.



Goulds Pumps

ITT Industries

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Effective July, 2003
B3885

GOULDS PUMPS

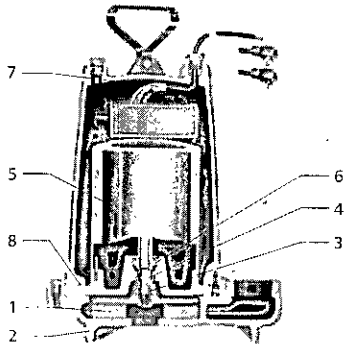
Submersible Effluent Pump

MODEL 3885

WE Series

COMPONENTS

Item No.	Description
1	Impeller
2	Casing
3	Mechanical Seal
4	Motor Shaft
5	Motor
6	Ball Bearings
7	Power Cable
8	Casing O-Ring



MODELS

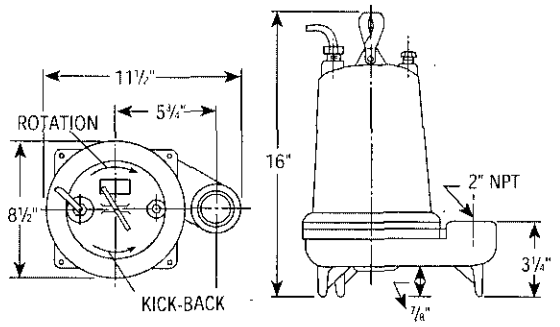
Order No.	HP	Volts	Phase	Max. Amp.	RPM	Solids	Wt. (lbs.)
WE0311L	⅓	115	1	10.7	1750	¾"	56
WE0318L		208		6.8			
WE0312L		230		4.9			
WE0311M		115		10.7			
WE0318M		208		6.8			
WE0312M		230		4.9			
WE0511H	½	115	1	14.5	1750	¾"	60
WE0518H		208		8.1			
WE0512H		230		7.3			
WE0538H		200	3	4.9			
WE0532H		230		3.3			
WE0534H		460		1.7			
WE0537H		575		1.4			
WE0511HH		115	1	14.5			
WE0518HH		208		8.1			
WE0512HH		230		7.3			
WE0538HH		200	3	4.9			
WE0532HH		230		3.6			
WE0534HH		460		1.8			
WE0537HH		575		1.5			
WE0718H	¾	208	1	11.0	1750	¾"	70
WE0712H		230		10.0			
WE0738H		200	3	6.2			
WE0732H		230		5.4			
WE0734H		460		2.7			
WE0737H		575		2.2			
WE1018H	1	208	1	14.0	3500	¾"	70
WE1012H		230		12.5			
WE1038H		200	3	8.1			
WE1032H		230		7.0			
WE1034H		460		3.5			
WE1037H		575		2.8			
WE1518H	1½	208	1	17.5	1750	¾"	80
WE1512H		230		15.7			
WE1538H		200	3	10.6			
WE1532H		230		9.2			
WE1534H		460		4.6			
WE1537H		575		3.7			
WE1518HH		208	1	17.5			
WE1512HH		230		15.7			
WE1538HH		200	3	10.6			
WE1532HH		230		9.2			
WE1534HH		460		4.6			
WE1537HH		575		3.7			
WE2012H	2	230	1	18.0	1750	¾"	83
WE2038H		200	3	12.0			
WE2032H		230		11.6			
WE2034H		460		5.8			
WE2037H		575		4.7			

PERFORMANCE RATINGS (gallons per minute)

Order No.		WE03L	WE03M	WE05H	WE07H	WE10H	WE15H	WE05HH	WE15HH	WE20H
Total Head Feet of Water	HP	⅓	⅓	½	¾	1	1½	½	1½	2
	RPM	1750	1750	3500	3500	3500	3500	3500	3500	3500
	5	86	–	–	–	–	–	–	–	–
	10	70	63	78	–	–	–	58	–	–
	15	52	50	70	90	–	–	53	–	–
	20	27	35	60	83	98	123	49	90	136
	25	–	–	48	76	94	117	45	87	133
	30	–	–	35	67	88	110	40	83	130
	35	–	–	20	57	82	103	35	80	126
	40	–	–	–	45	74	95	30	77	121
	45	–	–	–	35	64	86	25	74	116
	50	–	–	–	25	53	77	–	70	110
	55	–	–	–	–	40	67	–	66	103
	60	–	–	–	–	30	56	–	63	96
	65	–	–	–	–	20	45	–	58	89
	70	–	–	–	–	–	35	–	55	81
	75	–	–	–	–	–	25	–	51	74
	80	–	–	–	–	–	–	–	47	66
	90	–	–	–	–	–	–	–	37	49
	100	–	–	–	–	–	–	–	28	30

DIMENSIONS

(All dimensions are in inches. Do not use for construction purposes.)



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SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

Goulds Pumps

ITT Industries

C Harris

Month: June

Year: 2010

North Carolina Department of Environment and Natural Resources
Division of Environmental Health / Public Water Supply Section
1634 Mail Service Center, Raleigh, NC 27699-1634

REPORT OF OPERATION - WATER USAGE REPORT

Total # of Days Water Pumped: 30

Total # of Wells in System: 1

Total # of wells in Use: 1

# of This Well: 2

PUBLIC WATER SYSTEM NAME: Arlington Baptist Church

(PWS ID #: NC0160515

COUNTY NAME: Mecklenburg

WATER PURCHASED FROM: NA

(PWS ID #: NA

COUNTY NAME: Na

DAY	TOTAL WATER PURCHASED or PUMPED	MASTER METER READING	Cu. Ft. Pumped Today	Aqua Meg (Gallons)	AMOUNT OF CHLORINE APPLIED	CHLORINE RESIDUALS (mg/L)			
						▯ Free ▯ Combined		For Bact Smpl	SAMPLE LOCATION
	(gals.)	(Cu. Ft.)			(Gals.)	Plant	System		
(1)	(2)	(3)	(4)	(5)	(6)	-7	-8	(9)	10
1	0	231670	0	0	0	0.31	0.20		001
2	898	321790	120	0	0	0.33	0.22		002
3	0	231790	0	0	0	0.29	0.25		003
4	898	231910	120	0	0	0.34	0.21		004
5	0	231910	0	0	0	0.32	0.18		005
6	898	232030	120	0	0	0.35	0.24		001
7	0	232030	0	0	0	0.34	0.22		002
8	823	232140	110	0	0	0.32	0.26		003
9	898	232260	120	0	0	0.3	0.22		004
10	0	232260	0	0	0	0.31	0.19		005
11	898	232380	120	0	0	0.33	0.25		001
12	898	232500	120	0	0	0.36	0.26		002
13	0	232500	0	0	0	0.34	0.22		003
14	823	232610	110	0	0	0.35	0.23		004
15	972	232740	130	0	0	0.37	0.26		005
16	0	232740	0	0	0	0.34	0.22		001
17	972	232870	130	0	0	0.33	0.25		002
18	0	232870	0	0	0	0.35	0.26		003
19	898	232990	120	0	0	0.32	0.23		004
20	0	232990	0	0	0	0.36	0.21		005
21	898	233110	120	0	0	0.34	0.23		001
22	0	232110	0	0	0	0.38	0.24		002
23	0	232110	0	0	0	0.41	0.25		003
24	898	233230	120	0	0	0.42	0.22		004
25	0	233230	0	0	0	0.4	0.19		005
26	0	233230	0	0	0	0.38	0.20		001
27	823	233340	110	0	0	0.39	0.23		002
28	0	233340	0	0	0	0.37	0.25		003
29	898	233460	120	0	0	0.4	0.21		004
30	898	233580	120	0	0	0.42	0.20		005
31				0	0				001
TOTAL	14291		1910						
AVG	476		64						
MAX	972		130						
MIN	0		0						

Avg of any those residuals tested with bacteria samples (DP rule)

CHEMICAL SPECIFICATIONS:

Product Name: Water Guard Sodium Hyperchlorite Type of Chemical: Liquid Sodium Hypochlorite Strength: 12.5

Remarks: 19-Flushed Storage Tank and Exercised Generator.

ORC Name: Harry D White (Please Print) ORC Signature: Harry D White

Certification(s) Type/Grade: C-Well Cert. Number(s): 020366 Date: 7/1/10

DENR 3308 (Revised 3/92, 02 6-03) ORC's Telephone Number: 704-545-2989

Month: May

Year: 2010

North Carolina Department of Environment and Natural Resources
Division of Environmental Health / Public Water Supply Section
1634 Mail Service Center, Raleigh NC 27699-1634

REPORT OF OPERATION - WATER USAGE REPORT

Total # of Days Water Pumped: 31

Total # of Wells in System: 1

Total # of wells in Use: 1

# of This Well: 2

PUBLIC WATER SYSTEM NAME: Arlington Baptist Church

PWS ID # : NC0160515

COUNTY NAME: Mecklenburg

WATER PURCHASED FROM: NA

PWS ID # : NA

COUNTY NAME: Na

DAY	TOTAL WATER PURCHASED or PUMPED (gals.)	MASTER METER READING (Cu. Ft.)	Cu. Ft. Pumped Today	Acre-Mtg (Gallons)	AMOUNT OF CHLORINE APPLIED (Gals.)	CHLORINE RESIDUALS (mg/L) Free Combined: Plant	System	For Bact Smpl	SAMPLE LOCATION
(1)	(2)	(3)	(4)	(5)	(6)	-7-	-8-	(9)	-10-
1	0	229640	0	0	0	0.33	0.20		001
2	898	229760	120	0	0	0.35	0.21		002
3	0	229760	0	0	0	0.33	0.23		003
4	0	229760	0	0	0	0.31	0.22		004
5	898	229880	120	0	0	0.34	0.19		005
6	0	229880	0	0	0	0.36	0.19		001
7	898	230000	120	0	0	0.35	0.20		002
8	0	230000	0	0	0	0.32	0.22		003
9	898	230120	120	0	0	0.34	0.21		004
10	898	230240	120	0	0	0.34	0.18		005
11	898	230360	120	0	0	0.32	0.21		001
12	0	230360	0	0	0	0.31	0.22		002
13	898	230480	120	0	0	0.33	0.21		003
14	972	230610	130	0	0	0.31	0.22		004
15	0	230610	0	0	0	0.28	0.20		005
16	898	230730	120	0	0	0.31	0.19		001
17	0	230730	0	0	0	0.3	0.21		002
18	898	230850	120	0	0	0.32	0.22		003
19	898	230970	120	0	0	0.34	0.19		004
20	0	230970	0	0	0	0.31	0.17		005
21	623	231080	110	0	0	0.33	0.21		001
22	0	231080	0	0	0	0.3	0.24		002
23	898	231200	120	0	0	0.32	0.24		003
24	0	231200	0	0	0	0.31	0.22		004
25	823	231310	110	0	0	0.33	0.20		005
26	0	231310	0	0	0	0.3	0.23		001
27	898	231430	120	0	0	0.34	0.24		002
28	898	231550	120	0	0	0.33	0.26		003
29	0	231550	0	0	0	0.31	0.23		004
30	0	231550	0	0	0	0.32	0.19		005
31	898	231570	120	0	0	0.33	0.20		001
Total	15190		2030						
AVG	490		65						
MAX	972		130						
MIN	0		0						

Avg of only those residuals tested with bacteria samples (DP rule)

CHEMICAL SPECIFICATIONS:

Product Name: Water Guard Sodium Hyperchlorite Type of Chemical: Liquid Sodium Hypochlorite Strength: 12.5

Remarks: 19-Flushed Storage Tank and Exercised Generator.

ORC Name: Harry D. White (Please Print) ORC Signature: Harry D White

Certification(s) Type/Grade: C-Well Cert. Number(s): 020366 Date:

DENR 3396 (Revised 3/92, 7/02, 9/03) ORC's Telephone Number: 704-545-2989

Month: April

Year: 2010

North Carolina Department of Environment and Natural Resources
Division of Environmental Health / Public Water Supply Section
1634 Mail Service Center, Raleigh, NC 27699-1634

REPORT OF OPERATION - WATER USAGE REPORT

Total # of Days Water Pumped: 30

Total # of Wells in System: 1

Total # of wells in Use: 1

# of This Well: 2

PUBLIC WATER SYSTEM NAME: Arlington Baptist Church

(PWS ID #: NC0160515

COUNTY NAME: Mecklenburg

WATER PURCHASED FROM: NA

(PWS ID #: NA

COUNTY NAME: Na

DAY	TOTAL WATER PURCHASED or PUMPED (gals.)	MASTER METER READING (Cu. Ft.)	Cu. Ft. Pumped Today	Aqua Mag (Gallons)	AMOUNT OF CHLORINE APPLIED (Gals.)	CHLORINE RESIDUALS (mg/L) ☐ Free ☐ Combined Plant	System	For Bact Smpl	SAMPLE LOCATION
(1)	(2)	(3)	(4)	(5)	(6)	-7	-8	(9)	10
1	0	227510	0	0	0	0.28	20		001
2	0	227510	0	0	0	0.31	0.21		002
3	898	227630	120	0	0	0.32	0.23		003
4	0	227630	0	0	0	0.3	0.24		004
5	0	227630	0	0	0	0.29	0.19		005
6	823	227740	110	0	0	0.3	0.18		001
7	0	227740	0	0	0	0.26	0.22		002
8	898	227860	120	0	0	0.29	0.21		003
9	0	227860	0	0	0	0.27	0.22		004
10	823	227970	110	0	0	0.26	0.20		005
11	0	227970	0	0	0	0.26	0.17		001
12	0	227970	0	0	0	0.26	0.22		002
13	898	228090	120	0	0	0.29	0.21		003
14	898	228210	120	0	0	0.31	0.21		004
15	972	228340	130	0	0	0.32	0.23		005
16	898	228460	120	0	0	0.33	0.20		001
17	898	228580	120	0	0	0.34	0.23		002
18	898	228700	120	0	0	0.32	0.23		003
19	898	228820	120	0	0	0.34	0.19		004
20	898	228940	120	0	0	0.36	0.17		005
21	898	229060	0	0	1	0.37	0.29		001
22	0	229060	120	0	0	0.4	0.28	X	002
23	898	229180	120	0	0	0.39	0.26		003
24	0	229180	0	1	0	0.38	0.23		004
25	898	229300	120	0	0	0.41	0.20		005
26	823	229410	110	0	0	0.4	0.22		001
27	0	229410	0	0	0	0.39	0.24		002
28	898	229530	120	0	0	0.4	0.27		003
29	0	229530	0	0	0	0.32	0.22		004
30	823	229640	110	0	0	0.38	0.20		005
31				0	0				001
Total	15938		2130						
AVG	531		71						
MAX	972		130						
MIN	0		0						

0.28

Avg of only those residuals tested with bacteria samples (DP rule)

CHEMICAL SPECIFICATIONS:

Product Name: Water Guard Sodium Hyperchlorite Type of Chemical: Liquid Sodium Hypochlorite Strength: 12.5

Remarks: 14-Flushed water storage tank and exercised generator. 21-Added 1 gal. of Liquid Sodium Hypochlorite to 10 gals. water.

ORC Name: Harry D. White (Please Print) ORC Signature: Harry D White

Certification(s) Type/Grade: C-Well Cert. Number(s): 020366 Date: 4/30/2010

DENR 3385 (Revised 3-90, 7-00, 9-03)

ORC's Telephone Number: 704-545-2989

Month: March

Year: 2010

North Carolina Department of Environment and Natural Resources
Division of Environmental Health / Public Water Supply Section
1634 Mail Service Center, Raleigh, NC 27699-1634

REPORT OF OPERATION - WATER USAGE REPORT

Total # of Days Water Pumped: 31

Pumped

Total # of Wells in Stytem: 1

Total # of wells in Use: 1

# of This Well: 2

PUBLIC WATER SYSTEM NAME: Arlington Baptist Church

(PWS ID #: NC0160515

COUNTY NAME: Mecklenburg

WATER PURCHASED FROM: NA

(PWS ID #: NA

COUNTY NAME: Na

DAY	TOTAL WATER PURCHASED or PUMPED (gals.)	MASTER METER READING (Cu. Ft.)	Cu. Ft. Pumped Today	Addn Mag (Gallons)	AMOUNT OF CHLORINE APPLIED (Gals.)	CHLORINE RESIDUALS (mg/L) [] Free []Combined Plant	System	For Bact Smpl	SAMPLE LOCATION
(1)	(2)	(3)	(4)	(5)	(6)	-7	-8	(9)	10
1	0	225290	0	0	0	0.33	0.20		001
2	748	225390	100	0	0	0.34	0.22		002
3	898	225510	120	0	0	0.34	0.24		003
4	898	225630	120	0	0	0.36	0.21		004
5	898	225750	120	0	0	0.35	0.19		005
6	0	225750	0	0	0	0.32	0.21		001
7	898	225870	120	0	0	0.36	0.21		002
8	898	225990	120	0	0	0.36	0.23		003
9	0	225990	0	0	0	0.35	0.20		004
10	823	226100	110	0	0	0.39	0.18		005
11	0	226100	0	0	0	0.34	0.22		001
12	898	226220	120	0	0	0.36	0.24		002
13	0	226220	0	0	0	0.32	0.26		003
14	898	226340	120	0	0	0.36	0.21		004
15	0	226340	0	0	0	0.33	0.19		005
16	898	226460	120	0	0	0.35	0.22		001
17	0	226460	0	0	0	0.32	0.24		002
18	898	226580	120	0	0	0.33	0.21		003
19	0	226580	0	0	0	0.24	0.20		004
20	898	226700	120	0	0	0.35	0.18		005
21	0	226700	0	0	0	0.32	0.21		001
22	748	226800	100	0	0	0.33	0.23		002
23	823	226910	110	0	0	0.34	0.22		003
24	0	226910	0	0	0	0.32	0.21		004
25	898	227030	120	0	0	0.34	0.17		005
26	0	227030	0	0	0	0.31	0.20		001
27	898	227150	120	0	0	0.35	0.23		002
28	0	227150	0	0	0	0.33	0.22		003
29	898	227270	120	0	0	0.31	0.21		004
30	898	227390	120	0	1	0.33	0.16		005
31	898	227510	120	0	0	0.34	0.21		001
Total	16612		2220						
AVG	536		72						
MAX	898		120						
MIN	0		0						

Avg of only those residuals tested with bacteria samples. (DP rule)

CHEMICAL SPECIFICATIONS:

Product Name: Water Guard Sodium Hyperchlorite Type of Chemical: Liquid Sodium Hypochlorite Strength: 12.5

Remarks: 30-Added 1 gal. of Liquid Sodium Hypochlorite and 10 gals. of water to chlorine drum.

ORC Name: Harry D. White (Please Print) ORC Signature: Harry D. White

Certification(s) - Type/Grade: C-Well Cert. Number(s): 020356 Date: 04/02/2010

DENR 3395 (Revised 3-92, 7-02, 9-03) ORC's Telephone Number: 704-545-2989

C Church

Month: February

Year: 2010

North Carolina Department of Environment and Natural Resources
Division of Environmental Health / Public Water Supply Section
1634 Mail Service Center, Raleigh, NC 27699-1634

REPORT OF OPERATION - WATER USAGE REPORT

Total # of Days Water Pumped: 28
Pumped
Total # of Wells in System: 1
Total # of wells in Use: 1
# of This Well: 2

PUBLIC WATER SYSTEM NAME: Arlington Baptist Church

(PWS ID #: NC0160515

COUNTY NAME: Mecklenburg

WATER PURCHASED FROM: NA

(PWS ID #: NA

COUNTY NAME: Na

DAY	TOTAL WATER PURCHASED or PUMPED (gals.)	MASTER METER READING (Cu. Ft.)	Cu. Ft. Pumped Today	Aqua Mag (Gallons)	AMOUNT OF CHLORINE APPLIED (Lbs.)	CHLORINE RESIDUALS (mg/L) [] Free []Combined Plant -7	System -8	For Bact Smpl (9)	SAMPLE LOCATION 10
(1)	(2)	(3)	(4)	(5)	(6)				
1	0	223520	0	0	0	0.3	0.22		001
2	0	223520	0	0	0	0.29	0.24		002
3	898	223640	120	0	0	0.35	0.26		003
4	823	223750	110	0	0	0.3	0.23		004
5	0	223750	0	0	0	0.32	0.16		005
6	898	223870	120	0	0	0.38	0.23		001
7	0	223870	0	0	0	0.35	0.22		002
8	823	223980	110	0	0	0.36	0.24		003
9	0	223980	0	0	0	0.34	0.20		004
10	823	224090	110	0	0	0.35	0.18		005
11	0	224090	0	0	0	0.32	0.22		001
12	898	224210	120	0	0	0.38	0.23		002
13	0	224210	0	0	0	0.33	0.24		003
14	823	224330	120	0	0	0.37	0.21		004
15	898	224460	130	0	0	0.36	0.17		005
16	0	224460	0	0	0	0.33	0.20		001
17	898	224580	120	0	0	0.37	0.22		002
18	898	224700	120	0	0	0.36	0.25		003
19	0	224700	0	0	0	0.35	0.22		004
20	0	224700	0	0	0	0.33	0.18		005
21	898	224820	120	0	0	0.39	0.19		001
22	0	224820	0	0	0	0.36	0.21		002
23	898	224940	120	0	0	0.37	0.22		003
24	823	225060	110	0	0	0.39	0.19		004
25	898	225170	120	0	0	0.38	0.17		005
26	0	225170	0	0	0	0.32	0.20		001
27	898	225290	120	0	0	0.39	0.22		002
28	0	225290	0	0	0	0.36	0.21		003
29				0	0				004
30				0	0				005
31				0	0				001
Total	13095		1770						
AVG	468		63						
MAX	898		130						
MIN	0		0						

Avg of only those residuals tested with bacteria samples. (DP rule)

CHEMICAL SPECIFICATIONS:

Product Name: Water Guard Sodium Hyperchlorite Type of Chemical: Liquid Sodium Hypochlorite Strength: 12.5

Remarks: 20--Flushed water storage tank.

ORC Name: Harry D. White (Please Print) ORC Signature: Harry D White

Certification(s) - Type/Grade: C-Well Cert. Number(s): 020366 Date: 03/01/2010

DENR 3395 (Revised: 3/92; 7/02; 9/03) ORC's Telephone Number: 704-545-2989

Month : January

Year : 2010

North Carolina Department of Environment and Natural Resources
Division of Environmental Health / Public Water Supply Section
1634 Mail Service Center, Raleigh, NC 27699-1634

REPORT OF OPERATION - WATER USAGE REPORT

Total # of Days Water Pumped: 31

Total # of Wells in System Pumped 1

Total # of wells in Use: 1

# of This Well 2

PUBLIC WATER SYSTEM NAME: Arlington Baptist Church

(PWS ID # : NC0160515

COUNTY NAME : Mecklenburg

WATER PURCHASED FROM : NA

(PWS ID # : NA

COUNTY NAME : Na

DAY	TOTAL WATER PURCHASED or PUMPED	MASTER METER READING	Cu. Ft.	Aqua Mag	AMOUNT OF CHLORINE	CHLORINE RESIDUALS (mg/L)			
						[] Free []Combined		For Bact Samp	SAMPLE LOCATION
	(gals.)	(Cu. Ft.)	Pumped Today	(Gallons)	APPLIED (Gals.)	Plant	System		
(1)	(2)	(3)	(4)	(5)	(6)	-7	-8	(9)	10
1	0	221750	0	0	0	0.25	0.17		001
2	0	221750	0	0	0	0.25	0.15		002
3	0	221750	0	0	0	0.23	0.16		003
4	823	221860	110	0	0	0.28	0.15		004
5	0	221880	0	0	0	0.24	0.13		005
6	898	221980	120	0	0	0.28	0.17		001
7	0	221980	0	0	0	0.28	0.19		002
8	898	222100	120	0	0	0.31	0.21		003
9	823	222210	110	0	0	0.39	0.20		004
10	0	222210	0	0	0	0.38	0.18		005
11	823	222320	110	0	0	0.39	0.21		001
12	0	222320	0	0	0	0.34	0.23		002
13	823	222430	110	0	0	0.36	0.26	X	003
14	0	222430	0	0	0	0.33	0.21		004
15	972	222560	130	0	0	0.38	0.19		005
16	0	222560	0	0	0	0.36	0.23		001
17	898	222680	120	0	0	0.36	0.25		002
18	0	222680	0	0	0	0.35	0.27		003
19	0	222680	0	0	0	0.35	0.22		004
20	972	222810	130	0	0	0.31	0.18		005
21	898	222930	120	0	0	0.29	0.21		001
22	0	222930	0	0	0	0.26	0.22		002
23	898	223050	120	0	0.5	0.29	0.13		003
24	0	223050	0	0	0	0.26	0.14		004
25	0	223050	0	0	0	0.25	0.13		005
26	898	223170	120	0	0	0.37	0.20		001
27	0	223290	0	0	0	0.35	0.22		002
28	898	223410	120	0	0	0.31	0.24		003
29	898	223520	120	0	0	0.38	0.21		004
30	823	223520	110	0	0	0.33	0.19		005
31	0		0	0	0	0.29	0.20		001
Total	13243		1770						
AVG	427		57						
MAX	972		130						
MIN	0		0						

0.26

Avg of only those residuals tested with pacteria samples. (DP rule)

CHEMICAL SPECIFICATIONS:

Product Name : Water Guard Sodium Hyperchlorite Type of Chemical: Liquid Sodium Hypochlorite Strength : 12.5

Remarks : 23-Added 5 gal. Liquid Sodium Hyperchlorite to Chlorine drum. 27-Flushed storage tank and exercised generator.

ORC Name : Harry D. White (Please Print) ORC Signature Harry D White

Certification(s) - Type/Grade : C-Well Cert. Number(s) : 020366 Date: 2/1/10

DENR 3395 (Revised: 3/92; 7/02; 9/03) ORC's Telephone Number 704-545-2989

Church

Month : December

Year : 2009

North Carolina Department of Environment and Natural Resources
Division of Environmental Health / Public Water Supply Section
1634 Mail Service Center, Raleigh, NC 27699-1634

REPORT OF OPERATION - WATER USAGE REPORT

Total # of Days Water Pumped: 31

Total # of Wells in System 1

Total # of wells in Use: 1

# of This Well 2

PUBLIC WATER SYSTEM NAME: Arlington Baptist Church

(PWS ID # : NC0160515

COUNTY NAME : Mecklenburg

WATER PURCHASED FROM : NA

(PWS ID # : NA

COUNTY NAME : Na

DAY	TOTAL WATER PURCHASED or PUMPED (gals.)	MASTER METER READING (Cu. Ft.)	Cu. Ft. Pumped Today	Aqua Mag (Gallons)	AMOUNT OF CHLORINE APPLIED (Gals.)	CHLORINE RESIDUALS (mg/L) Free Combined Plant	System	For Bact. Smpl	SAMPLE LOCATION
(1)	(2)	(3)	(4)	(5)	(6)	-7	-8	(9)	10
1	898	219510	120	0	0	0.48	0.20		001
2	898	219630	120	0	0	0.51	0.22		002
3	0	219630	0	0	0	0.47	0.21		003
4	823	219740	110	0	0	0.55	0.18		004
5	0	219740	0	0	0	0.52	0.20		005
6	823	219850	110	0	0	0.54	0.22		001
7	898	219970	120	0.5	0.5	0.55	0.24		002
8	1945	220330	260	0	0	0.47	0.23		003
9	0	220330	0	0	0	0.45	0.21		004
10	898	220450	120	0	0	0.47	0.18		005
11	0	220450	0	0	0	0.44	0.20		001
12	898	220570	120	0	0	0.41	0.23		002
13	898	220690	120	0	0	0.39	0.26		003
14	898	220810	120	0	0	0.33	0.25		004
15	823	220920	110	0	0	0.32	0.18		005
16	0	220920	0	0	0	0.31	0.21		001
17	898	221040	120	0	0	0.34	0.24		002
18	898	221160	120	0	0	0.33	0.23		003
19	823	221270	110	0	0	0.34	0.20		004
20	898	221390	120	0	0	0.3	0.18		005
21	0	221390	0	0	0	0.33	0.22		001
22	0	221390	0	0	0	0.31	0.23		002
23	748	221490	100	0	0	0.32	0.26		003
24	0	221490	0	0	0	0.3	0.23		004
25	0	221490	0	0	0	0.27	0.18		005
26	0	221490	0	0	0	0.24	0.20		001
27	0	221490	0	0	0	0.25	0.21		002
28	898	221610	120	0	0.25	0.27	0.23		003
29	0	221610	0	0	0	0.26	0.21		004
30	0	221610	0	0	0	0.23	0.18		005
31	1047	221750	140	0	0	0.27	0.22		001
Total	16910		2260	0.5	0.75				
AVG	545		73						
MAX	1945		260						
MIN	0		0						

Avg of only those residuals tested with bacteria samples. (DP rule)

CHEMICAL SPECIFICATIONS:

Product Name : Water Guard Sodium Hyperchlorite Type of Chemical : Liquid Sodium Hypochlorite Strength 12.5

Remarks : 31–Flushed storage tank and exercised generator–52.8 hrs.

ORC Name : Harry D. White (Please Print) ORC Signature: Harry D White

Certification(s) - Type/Grade : C-Well Cert. Number(s) : 020366 Date: 12/31/09

DENR 3395 (Revised: 3/92; 7/02; 9/03) ORC's Telephone Number 704-545-2989

Month : November

Year : 2009

North Carolina Department of Environment and Natural Resources
Division of Environmental Health / Public Water Supply Section
1634 Mail Service Center, Raleigh, NC 27699-1634

REPORT OF OPERATION - WATER USAGE REPORT

Total # of Days Water Pumped: 30

Total # of Wells in System Pumped: 1

Total # of wells in Use: 1

# of This Well 2

PUBLIC WATER SYSTEM NAME: Arlington Baptist Church

(PWS ID # : NC0160515

COUNTY NAME : Mecklenburg

WATER PURCHASED FROM : NA

(PWS ID # : NA

COUNTY NAME : Na

DAY	TOTAL WATER PURCHASED or PUMPED (gals.)	MASTER METER READING (Cu. Ft.)	Cu. Ft. Pumped Today	Aqua Mag (Gallons)	AMOUNT OF CHLORINE APPLIED (Gals.)	CHLORINE RESIDUALS (mg/L) [] Free []Combined Plant	System	For Back Stop	SAMPLE LOCATION
(1)	(2)	(3)	(4)	(5)	(6)	-7	-8	(9)	10
1	0	217630	0	0	0	0.53	0.21		001
2	898	217750	120	0	0	0.56	0.23		002
3	0	217750	0	0	0	0.52	0.26		003
4	898	217870	120	0	0	0.52	0.24		004
5	898	217980	120	0	0	0.57	0.21		005
6	0	217890	0	0	0	0.54	0.25		001
7	823	218090	110	0	0	0.56	0.29		002
8	0	218090	0	0	0	0.53	0.31		003
9	0	218090	0	0	0	0.52	0.25		004
10	898	218210	120	0	0	0.57	0.19		005
11	0	218210	0	0	0	0.55	0.23		001
12	898	218330	120	0	0	0.56	0.26		002
13	898	218450	120	0	0	0.57	0.29		003
14	0	218450	0	0	0	0.52	0.23		004
15	0	218450	0	0	0	0.5	0.20		005
16	898	218570	120	0	0	0.5	0.25		001
17	0	218570	0	0	0	0.49	0.27		002
18	898	218690	120	0	0	0.51	0.30		003
19	898	218810	120	0	0	0.57	0.25		004
20	898	218930	120	0	0	0.62	0.21		005
21	0	218930	0	0	0	0.56	0.24		001
22	898	219050	120	0	0	0.57	0.26		002
23	0	219050	0	0	0	0.52	0.25		003
24	898	219170	120	0	0	0.55	0.27		004
25	823	219280	110	0	0	0.55	0.22		005
26	0	219280	0	0	0	0.53	0.25		001
27	0	219280	0	0	0	0.52	0.28		002
28	0	219280	0	0	0	0.49	0.26		003
29	823	219390	110	0	0	0.53	0.25		004
30	0	219390	0	0	0	0.51	0.20		005
31				0	0				001
Total	13245		1770						
AVG	442		59						
MAX	898		120						
MIN	0		0						

Avg of only those residuals tested with bacteria samples. (DP rule)

CHEMICAL SPECIFICATIONS:

Product Name : Water Guard Sodium Hyperchlorite Type of Chemical: Liquid Sodium Hypochlorite Strength 12.5

Remarks : 16-Flushed water storage tank and exercised generator.

ORC Name : Harry D. White (Please Print) ORC Signature Harry D. White

Certification(s) - Type/Grade : C-Well Cert. Number(s) : 020366 Date: 12/1/09

DENR 3395 (Revised: 3/92; 7/02, 9/03) ORC's Telephone Number 704-545-2989

CM
mailed 11/2/09

Month: October

Year: 2009

North Carolina Department of Environment and Natural Resources
Division of Environmental Health / Public Water Supply Section
1634 Mail Service Center, Raleigh, NC 27699-1634

REPORT OF OPERATION - WATER USAGE REPORT

Total # of Days Water Pumped: 31

Total # of Wells in System: 1

Total # of wells in Use: 1

# of This Well: 2

PUBLIC WATER SYSTEM NAME: Arlington Baptist Church

(PWS ID #: NC0160515

COUNTY NAME: Mecklenburg

WATER PURCHASED FROM: NA

(PWS ID #: NA

COUNTY NAME: Na

DAY	TOTAL WATER PURCHASED or PUMPED (gals.) (2)	MASTER METER READING (Cu. Ft.) (3)	Cu. Ft. Pumped Today (4)	Aqua Mag (Gallons) (5)	AMOUNT OF CHLORINE APPLIED (Gals.) (6)	CHLORINE RESIDUALS (mg/L) [] Free []Combined Plant -7	System -8	For Bact Smpl (9)	SAMPLE LOCATION 10
1	0	215740	0	0	0	0.54	0.22		001
2	898	215860	120	0	0	0.58	0.26		002
3	0	215860	0	0	0	0.55	0.29		003
4	823	215970	110	0	0	0.59	0.24		004
5	0	215970	0	0	0	0.56	0.21		005
6	898	216090	120	0	0	0.62	0.23		001
7	0	216090	0	0	0	0.57	0.28		002
8	898	216210	120	0	0	0.6	0.25		003
9	898	216330	120	0	0	0.61	0.22		004
10	0	216330	0	0	0	0.58	0.19		005
11	898	216450	120	0	0	0.66	0.25		001
12	0	216540	0	0	0	0.62	0.27		002
13	898	216570	120	0	0	0.59	0.30		003
14	0	216570	0	0	0	0.61	0.31	X	004
15	898	216690	120	0	0	0.56	0.26		005
16	898	216810	120	0	0	0.6	0.29		001
17	0	216810	0	0	0	0.56	0.31		002
18	0	216810	0	0	0	0.52	0.33		003
19	823	216920	110	0	0	0.59	0.31		004
20	898	217040	120	0	0	0.6	0.24		005
21	0	217040	0	0	0	0.57	0.29		001
22	823	217150	110	0	0	0.61	0.30		002
23	0	217150	0	0	0	0.58	0.32		003
24	972	217280	130	0	0	0.6	0.28		004
25	0	217280	0	0	0	0.59	0.22		005
26	898	217400	120	0	0	0.61	0.26		001
27	0	217400	0	0	0	0.58	0.28		002
28	898	217520	120	0	0	0.59	0.31		003
29	0	217520	0	0	0	0.55	0.23		004
30	0	217520	0	0	0	0.53	0.19		005
31	823	217630	110	0	0	0.55	0.22		001
Total	14142	###	1890						
AVG	456		61						
MAX	972		130						
MIN	0		0						

0.31

Avg of only those residuals tested with bacteria samples (DP rule)

CHEMICAL SPECIFICATIONS:

Product Name: Water Guard Sodium Hyperchlorite Type of Chemical: Liquid Sodium Hypochlorite Strength: 12.5

Remarks: 17-Flushed Storage Tank

ORC Name: Harry D. White (Please Print) ORC Signature: Harry D White

Certification(s) - Type/Grade: C-Well Cert. Number(s): 020366 Date: 10/31/09

DENR 3395 (Revised 3/92, 7/02, 9/03) ORC's Telephone Number: 704-545-2989

Church Mailed 9/30/09

Month: September

Year: 2009

North Carolina Department of Environment and Natural Resources
Division of Environmental Health / Public Water Supply Section
1634 Mail Service Center, Raleigh, NC 27699-1634

Total # of Days Water Pumped: 30

Total # of Wells in System Pumped: 1

Total # of wells in Use: 1

# of This Well: 2

REPORT OF OPERATION - WATER USAGE REPORT

PUBLIC WATER SYSTEM NAME: Arlington Baptist Church

(PWS ID #: NC0160515

COUNTY NAME: Mecklenburg

WATER PURCHASED FROM: NA

(PWS ID #: NA

COUNTY NAME: Na

DAY	TOTAL WATER PURCHASED or PUMPED (gals.)	MASTER METER READING (Cu. Ft.)	Cu Ft Pumped Today	Aqua Mag (Gallons)	AMOUNT OF CHLORINE APPLIED (Gals.)	CHLORINE RESIDUALS (mg/L) Free Plant	Free System	Combined For Bact Smpl	SAMPLE LOCATION
(1)	(2)	(3)	(4)	(5)	(6)	-7	-8	(9)	10
1	898	213970	120	0	0	0.47	0.21		001
2	0	213970	0	0	0	0.43	0.24		002
3	0	213970	0	0	0	0.4	0.26		003
4	1796	214210	240	0	0	0.55	0.27		004
5	0	214210	0	0	0	0.52	0.20		005
6	0	214210	0	0	0	0.49	0.22		001
7	898	214330	120	0	0	0.54	0.28		002
8	0	214330	0	0	0	0.49	0.26		003
9	898	214450	120	0	0	0.34	0.23		004
10	0	214450	0	0	0	0.5	0.21		005
11	898	214570	120	0	0	0.58	0.24		001
12	898	214690	120	0	0	0.61	0.29		002
13	0	214690	0	0	0	0.6	0.26		003
14	0	214690	0	0	0	0.57	0.21		004
15	823	214800	110	0	0	0.55	0.20		005
16	0	214800	0	0	0	0.51	0.20		001
17	898	214920	120	0	0	0.57	0.24		002
18	0	214920	0	0	0	0.54	0.26		003
19	898	215040	120	0	0	0.61	0.20		004
20	898	215160	120	0	0	0.58	0.19		005
21	0	215160	0	0	0	0.53	0.23		001
22	898	215280	120	0	0	0.6	0.26		002
23	898	215400	120	0	0	0.61	0.29		003
24	0	215400	0	0	0	0.56	0.26		004
25	0	215400	0	0	0	0.52	0.21		005
26	898	215520	120	0	0	0.58	0.24		001
27	0	215520	0	0	0	0.55	0.28		002
28	748	215620	100	0	0	0.58	0.31		003
29	0	215620	0	0	0	0.57	0.26		004
30	898	215740	120	0	0	0.58	0.22		005
31				0	0				001
Total	14143		1890						
AVG	471		63						
MAX	1796		240						
MIN	0		0						

Avg of only those residuals tested with bacteria samples (DP rule)

CHEMICAL SPECIFICATIONS:

Product Name: Sodium Hypochlorite Type of Chemical: Liquid Sodium Hypochlorite Strength: 12.5

Remarks: 21-Flushed Storage Tank and exercised generator--52.7 hrs.

ORC Name: Harry D. White (Please Print) ORC Signature: Harry D. White

Certification(s) - Type/Grade: C-Well Cert. Number(s): 020366 Date: 9/30/09

DENR 3395 (Revised 3/92, 7/02, 9/03) ORC's Telephone Number: 704-545-2989

Month : August

Year : 2009

North Carolina Department of Environment and Natural Resources
Division of Environmental Health / Public Water Supply Section
1634 Mail Service Center, Raleigh, NC 27699-1634

REPORT OF OPERATION - WATER USAGE REPORT

Total # of Days Water Pumped: 31

Pumped

Total # of Wells in Stytem 1

Total # of wells in Use: 1

# of This Well 2

PUBLIC WATER SYSTEM NAME: Arlington Baptist Church

(PWS ID # : NC0160515

COUNTY NAME : Mecklenburg

WATER PURCHASED FROM : NA

(PWS ID # : NA

COUNTY NAME : Na

DAY	TOTAL WATER PURCHASED or PUMPED	MASTER METER READING	Cu. Ft.	Aqua Mag	AMOUNT OF CHLORINE	CHLORINE RESIDUALS (mg/L)			
			Pumped Today	(Gallons)	APPLIED	[] Free []Combined		For Bact Smpl	SAMPLE LOCATION
	(gals.)	(Cu. Ft.)			(Gals.)	Plant	System		
(1)	(2)	(3)	(4)	(5)	(6)	-7	-8	(9)	10
1	898	212640	120	0	0	0.4	0.25		001
2	0	212640	0	0	0	0.36	0.23		002
3	0	212640	0	0	0	0.31	0.24		003
4	0	212640	0	0	0	0.28	0.19		004
5	972	212770	130	0	0	0.31	0.16		005
6	0	212770	0	0	0	0.3	0.21		001
7	898	212890	120	0	0	0.33	0.24		002
8	0	212890	0	0	0	0.31	0.23		003
9	0	213010	120	0	0	0.39	0.19		004
10	0	213010	0	0	0	0.37	0.16		005
11	0	213010	0	0	0	0.37	0.20		001
12	0	213010	0	0	0	0.33	0.22		002
13	896	213130	120	0	0	0.33	0.24		003
14	0	212130	0	0	0	0.31	0.21		004
15	898	213250	120	0	0	0.3	0.18		005
16	0	213250	0	0	0	0.28	0.19		001
17	898	213370	120	0	0	0.34	0.20		002
18	0	213370	0	0	0	0.32	0.22		003
19	0	213370	0	0	0	0.29	0.22		004
20	898	213490	120	0	0.5	0.24	0.16		005
21	0	213490	0	0	0	0.23	0.19		001
22	0	213490	0	0	0	0.22	0.20		002
23	898	213610	120	0	0	0.36	0.22		003
24	0	213610	0	0	0	0.34	0.19		004
25	0	213610	0	0	0	0.31	0.16		005
26	823	213720	110	0	0	0.4	0.18		001
27	0	213720	0	0	0	0.38	0.21		002
28	0	213720	0	0	0	0.37	0.23		003
29	972	213850	130	0	0	0.33	0.21		004
30	0	213850	0	0	0	0.28	0.18		005
31	0	213850	0	0	0	0.27	0.20		001
Total	9053		1330						
AVG	292		43						
MAX	972		130						
MIN	0		0						

Avg of only those residuals tested with bacteria samples. (DP rule)

CHEMICAL SPECIFICATIONS:

Product Name : _____ Type of Chemical: Liquid Sodium Hypochlorite Streng 12.5

Remarks : 20-Added 1/2 gallon of Liquid Sodium Hypochlorite to Chlorine drum.

ORC Name : Harry D. White (Please Print) ORC Signature Harry D White

Certification(s) - Type/Grade : C-Well Cert. Number(s) : 020366 Date:

DENR 3395 (Revised: 3/92; 7/02; 9/03) ORC's Telephone Number 704-545-2989

Month : July

Year : 2009

North Carolina Department of Environment and Natural Resources
Division of Environmental Health / Public Water Supply Section
1634 Mail Service Center, Raleigh, NC 27699-1634

REPORT OF OPERATION - WATER USAGE REPORT

Total # of Days Water Pumped: 31

Total # of Wells in System: 1

Total # of wells in Use: 1

# of This Well: 2

PUBLIC WATER SYSTEM NAME: Arlington Baptist Church

(PWS ID # : NC0160515

COUNTY NAME : Mecklenburg

WATER PURCHASED FROM : NA

(PWS ID # : NA

COUNTY NAME : NA

DAY	TOTAL WATER PURCHASED or PUMPED	MASTER METER READING	Cu. Ft. Pumped Today	Actual Meter (Gallons)	AMOUNT OF CHLORINE APPLIED	CHLORINE RESIDUALS (mg/L) [] Free []Combined		For Bact. Sampl	SAMPLE LOCATION
	(gals.)	(Cu. Ft.)			(Gals.)	Plant	System		
(1)	(2)	(3)	(4)	(5)	(6)	-7	-8	(9)	10
1	898	209600	120	0	0	0.47	0.23		001
2	972	209730	130	0	0	0.53	0.28		002
3	898	209850	120	0	0	0.52	0.31		003
4	0	209850	0	0	0	0.49	0.26		004
5	0	209850	0	0	0	0.48	0.20		005
6	898	209970	120	0	0	0.49	0.22		001
7	0	209970	0	0	0	0.45	0.25		002
8	0	209970	0	0	0	0.42	0.27		003
9	698	210090	120	0	0	0.52	0.21		004
10	0	210090	0	0	0	0.49	0.18		005
11	0	210090	0	0	0	0.45	0.19		001
12	898	210210	120	0	0	0.48	0.26		002
13	0	210210	0	0	0	0.46	0.27		003
14	0	210210	0	0	0	0.41	0.29	X	004
15	2543	210750	340	0	0	0.63	0.20		005
16	2842	211130	380	0	0	0.6	0.36		001
17	2842	211510	380	0	0	0.62	0.43		002
18	0	211510	0	0	0	0.58	0.44		003
19	898	211630	120	0	0	0.55	0.30		004
20	0	211630	0	0	0	0.52	0.21		005
21	972	211760	130	0	0	0.47	0.31		001
22	972	211890	130	0	0	0.52	0.33		002
23	1047	212030	140	0	0	0.23	0.35		003
24	972	212160	130	0	0	0.51	0.29		004
25	0	212160	0	0	0	0.46	0.22		005
26	0	212160	0	0	0	0.43	0.24		001
27	898	212280	120	0	0	0.43	0.29		002
28	0	212280	0	0	0	0.41	0.31		003
29	898	212400	120	0	0	0.45	0.34		004
30	898	212520	120	0	0	0.48	0.20		005
31	0	212520	0	0	0	0.44	0.23		001
Total	21244		2840						
AVG	685		92						
MAX	2842		380						
MIN	0		0						

0.29

Avg of only those residuals tested with bactena samples (DP rule)

CHEMICAL SPECIFICATIONS:

Product Name : Type of Chemical: Liquid Sodium Hypochlorite Streng: 12.5

Remarks : 15-Flushed Storage Tank, Exercised Generator-52-5 hrs.

ORC Name: Harry D. White (Please Print) ORC Signature: Harry D White

Certifications(s) - Type/Grade: C-Well Cert. Number(s) : 020366 Date: 8/1/09

DENR 3395 (Revised. 3-92, 7-02, 9-03) ORC's Telephone Number: 704-545-2989

AQUAWORX CONTROL PANEL SET-UP FOR ARLINGTON BAPTIST CHURCH FLOW EQUALIZATION

1. 3,000 GAL PUMP TANK
2. System DOSE VOLUME = 390 GAL/DOSE
3. System FLOW RATE = 51.77 GPM (2GPM ADDED FOR ANTI-SIPHON HOLE
4. PUMP RUNTIME PER DOSE = 390 GAL/51.77 GPM = 7.5 MINUTES
5. DOSING TANK DRAWDOWN PER DOSE = 390 GAL / 41.67 gal/in = 9.4 INCHES
6. SYSTEM DOSE VOLUME PER DAY = 780 GPD
   780 gal / 390 gal/dose = 2 doses per day (dose every 12 hours or 720 minutes

---

PRESSURE BELL DATA:

1. Distance between bottom of pump tank to bottom of bell = 16"
2. Distance between top of pump and bottom of pump tank = 12"

PUMP "A" SETTINGS

1. PUMP ON TIME = 7.5 MINUTES (Pump Run time per dose = 390 gal/51.77 gpm = 7.5)
2. Pump OFF TIME = 712.5 MINUTES
   - system dose volume per day = 780 GPD
   - 780 g / 390 gal/dose = (2 doses per day (dose every 12 hours or 720 min)
   - subtract 7.5 min run time from 720 min = 712.5 minutes
3. VETO ON TIME = 7.5 minutes
4. VETO OFF TIME = 240 MINUTES
   - 4 HOURS USED TO PREVENT SYSTEM HYDRAULIC OVERLOAD IN OVERRIDE SITUATION.
5. START LEVEL = 7.4 INCHES
   - SYSTEM WILL DOSE AS LONG AS THERE IS AT LEAST 7.4 INCHES OF WATER ABOVE the bottom of PRESSURE BELL.

6. VETO LEVEL = ~~31~~ 38.5 BECAUSE UNLIKELY TO GET THIS HIGH UNLES THERE IS PROBLE INCHES (16 + 38.5 = 54.5 INCHES TOTAL)

- Highest residual volume retained in pump tank = 1,292 gal
- 1,292 gal. / 41.67 gal/in = 31 inches
- NORMAL OPERATING LIQUID LEVEL IN PUMP TANK WILL RANGE UP TO (54.4 INCHES) 54.5 - 16 = 38.5 VETO LEVEL

↑

31" MAX RESIDUAL + 16" bottom of bell + 7.4" start level

7. HIGH LEVEL ALARM = 38.5 INCHES

LIQUID LEVEL IN DOSING TANK WHEN ALARM GOES OFF 54.5 inch

LEAVES YOU WITH 734 GALLONS OF STORAGE AFTER ALARM GOES OFF & IF PUMP IS NOT WORKING

(54.4

CONDITIONS OF IMPROVEMENT PERMIT for an ALTERATION TO AN EXISTING ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

Permit Number: 2252A App # 4711 Tax Number: 139-101-14

- The IMPROVEMENT PERMIT is subject to revocation if site plans or the intended use change. There is to be NO grading, filling, or disturbance of the soil in the area of the septic tank system or repair area.
- CONSTRUCTION AUTHORIZATION must be obtained prior to receiving a Building Permit. The Construction Authorization is NOT transferable. Do not clear, grade, fill or disturb soil prior to obtaining a Construction Authorization.
- Domestic-type wastewater only. No industrial process wastewater may be discharged into the system.

Basement: ☐ Yes ☒ No ☐ Partial Basement

Primary Wastewater System

Type: ☐ I ☐ II ☐ III ☐ IV ☒ V ☐ VI

☐ Conventional
☐ Prefabricated, permeable block panel system
☐ Shallow Placed Conventional
☐ Low Pressure Pipe
☐ Large Diameter Pipe
☐ Fill
☐ Other Flow Equalization
☒ Innovative or Experimental:

0.3 Long-term acceptance rate (GPD/ft^2)	1292 Max gallons/day wastewater flow	300 Absorption Area (ft^2)	9 Trench spacing (min. on centers) (ft)
Serviced by private well: ☒ Yes ☐ No	2000 Gallon septic tank	100 Total trench length (ft)	24 ~~36~~ Maximum trench depth (in) (At least 12" of provisionally suitable soil must remain between trench bottom and unsuitable soil conditions.)
n Bedrooms in residence	3000 Gallon pump tank	12 Depth of media (in)	

Any surface water present: no Type: Minimum separation distance (ft):

Additional conditions: **Install system per plot plan and design by Thompson Environmental Consulting, Inc. Certified operator contract needs to be on file prior to the operation permit being issued. System is designed for 1292 GPD. A healthy grass cover should be maintained over the drainfield to prevent soil erosion and be frequently mowed.**

Repair Area System

Type: ☐ I ☐ II ☐ III ☐ IV ☒ V ☐ VI

☐ Conventional
☐ Prefabricated, permeable block panel system
☐ Shallow Placed Conventional
☐ Low Pressure Pipe
☐ Large Diameter Pipe
☐ Fill
☐ Other 25% reduction flow equal.
☒ Innovative or Experimental:

2124 Absorption Area (ft^2) 708 Total trench length (ft)	12 Depth of media (in)	9 Trench spacing (min. on centers) (ft)	36 Maximum trench depth (in)

The undersigned, an authorized agent of the MECKLENBURG COUNTY HEALTH DEPARTMENT, certifies that the Department has approved the Request for the Job Location contained in this document. The approval is granted in accordance with the provisions of Laws and Rules For *Sewage Treatment, and* Disposal Systems in effect at the time of issuance of the permit and is subject to the following provisions:

*** No work shall be conducted on the septic tank system until an Installation Approval is granted by this Department.

*** This Improvement permit is transferable.

Jeremy Michael 08/02/2010
DENR Authorized Agent Date

Owner/Agent Signature 8/12/10
Date

MECKLENBURG COUNTY
GROUNDWATER & WASTEWATER SERVICES
700 N. TRYON ST., SUITE 211
CHARLOTTE, NC 28202
PHONE: (704) 336-5103
FAX: (704) 336-6894

NC DENR
DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

Mecklenburg County Groundwater & Wastewater Services
700 N. Tryon St., Suite 211 Charlotte, NC 28202
Phone: (704) 336-5103 Fax: (704) 336-6894

NC DENR
Division of Environmental Health
On-Site Wastewater Section

INSTALLATION APPROVAL for an ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

File #: 2252A Permit #: _____ Tax Parcel #: 139-101-14

Property Owner: Arlington Baptist Church

Job Location Address: 9801 Arlington Church Rd.

City: Charlotte State: NC Zip Code: 28227

Installation Approval Issuance Date: 11-23-2010

Permission is hereby given to ☐ install ☑ alter ☐ repair an on-site wastewater treatment & and disposal system, with subsurface soil absorption and effluent discharge, as specified herein at the described location. This approval is granted based upon the application information submitted to our office. All work shall be completed on or before _____, after which date this approval shall be null and void. The system shall meet all of the construction requirements of 15A NCAC 18A. 1900 which are in effect on the date of granting this approval. An **Operation Permit** must be obtained from the Mecklenburg County Health Department before any system can be covered up or placed into service. The issuance of this permit does not in any way guarantee that the system anticipated to be constructed will operate properly, or relieve any person now of hereafter owning, controlling or using such system from any liability resulting from the failure of the system to operate properly.

***NOTICE: This system shall not be installed while soils are in a wet condition.**

Permitted Design Flow: 1292 GPD

Site LTAR: 0.3 GPD/ft² (For new installations only.)

Liquid Capacity of Septic Tank: 2000 gallons

Liquid Capacity of Dosing Tank: 3000 gallons

Drainfield Design ☐ N/A

Trench Depth: 24 inches

Trench Width: 3 feet

Line Spacing: 9 feet (O.C.)

Total line length: 100 feet

# of Lines: 1 @ 100 feet

Depth of Media: 12 inches (Type) 25% Reduction

Distribution Device: Pressure Manifold.

Bed Design *(For Repair Installations ONLY.)* ☒ N/A

Bed Depth: _____ inches

Bed Width: _____ feet

Total line length: _____ feet

# of Lines: _____ @ _____ feet

Depth of Media: _____ inches (Type) _____

Distribution Device: _____

Water Supply Source

☐ Municipal ☒ Private Well ☐ Community Well

☐ Other _____

Minimum System Setbacks

Distance from Building Foundation: 10+ feet

Distance from Property Line: 10+ feet

Distance from Water Supply Source: 100+ feet

SKETCH OF SYSTEM LAYOUT
(Proposed Layout)

Install according to plan submitted by engineer and consultant on File with Mecklenburg County.

Comments: System Classification & Type: V

DENR Authorized Agent: Jeremy Michael Signature: Jeremy Michael

THOMPSON ENVIRONMENTAL CONSULTING, INC.
WATER ♦ WASTEWATER ♦ WETLANDS

January 12, 2011

Mr. Jeremy Michael, RS
Mecklenburg County Groundwater and Wastewater Services
700 N. Tryon Street, Suite 211
Charlotte, NC 28202

Subject: Arlington Baptist Church Final Inspection

Dear Mr. Michael,

The purpose of this letter is to inform you that I have performed an inspection of the wastewater treatment and disposal system installed for Arlington Baptist Church, 9801 Arlington Baptist Church Road, Charlotte, NC 28227 (Mecklenburg County File No. 2252A).

I am satisfied that the system was installed in accordance with the *Laws and Rules for Sewage Treatment, and Disposal Systems* 15A NCAC 18A .1900 (North Carolina Department of Environment and Natural Resources, Division of Environmental Health, On-Site Wastewater Section) and meets the intent of the original septic proposal submitted to your office in July, 2010.

Please feel free to call on me if you have any questions or concerns regarding this project.

Sincerely,

Larry B. Thompson, Jr.

114 ORCHARD RIDGE ROAD• LOCUST, NC • 28097-8748
PHONE: 704-301-4881 • FAX: 704-888-1496
E-MAIL: LARRY@THOMPSONENV.COM
WEB: WWW.THOMPSONENV.COM

CHRIS L. HOPE, P.E.
ENGINEERING SERVICES

January 28, 2011

Mr. Jeremy Michael, RS
Mecklenburg County Groundwater and Wastewater Services
700 N. Tryon Street, Suite 211
Charlotte, NC 28202

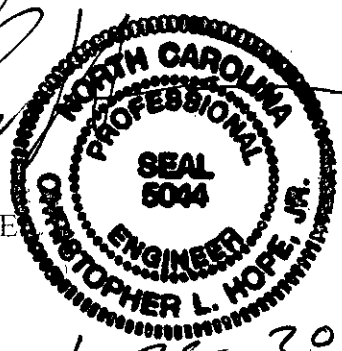
Re: Arlington Baptist Church
Wastewater Treatment and Disposal System
9801 Arlington Church Road
Mint Hill, North Carolina 28227

Mr. Michael,

I have reviewed the installation of the above system per our drawings U-1, U-2, and U-3, job number 12110, dated July 26, 2010. It is my opinion that the system was installed per the drawings and it is operating as designed per the *Laws and Rules for Sewage Treatment and Disposal Systems* 15A NCAC 18A .1900 (North Carolina Department of Environment and Natural Resources, Division of Environmental Health, On-Site Wastewater Section).

If you have any questions please feel free to contact me at your convenience.

Sincerely,



Chris L. Hope, P.E.

1-28-2011

2617 ROLLING HILLS DRIVE • MONROE, NORTH CAROLINA 28110 • 704-882-1500

Mecklenburg County Groundwater & Wastewater Services
700 N. Tryon St., Suite 211 Charlotte, NC 28202
Phone: (704) 336-5103 | Fax: (704) 336-6894

NC DENR
Division of Environmental Health
On-Site Wastewater Section

OPERATION PERMIT for an ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

File #: 2252A Permit #: _____ Tax Parcel #: 139-101-14

Property Owner: Arlington Baptist Church

Job Location Address: 9801 Arlington Church Rd.

City: Charlotte State: NC Zip Code: 28227

Operation Permit Issuance Date: 03/10/2011 Contractor Name: Stevens Septic

Permitted Design Flow: 1292 GPD

Liquid Capacity of Septic Tank: 2000 gallons 1000 Gallon Grease Trap

Liquid Capacity of Dosing Tank: 3000 gallons

Effluent Pump Model: PER DESIGN

Drainfield Installation ☐ N/A

Trench Depth: 24 inches

Trench Width: 3 feet

Line Spacing: 9 feet (O.C.)

Total line length: 100 feet

# of Lines: 1 @ 100 feet ADDED TO ORIGANAL

Depth of Media: 12 inches (Type) CHAMBER

Depth of Cover: 12 inches

Distribution Device: Pressure Manifold

Bed Installation *(For Repair Installations ONLY.)* ☒ N/A

Bed Depth: _____ inches

Bed Width: _____ feet

Total line length: _____ feet

# of Lines: _____ @ _____ feet

Depth of Media: _____ inches (Type) _____

Depth of Cover: _____ inches

Distribution Device: _____

Water Supply Source

☐ Municipal ☑ Private Well ☐ Community Well

☐ Other _____

System Installation Setbacks

Distance from Building Foundation: 10 feet

Distance from Property Line: 10 feet

Distance from Water Supply Source: 100+ feet

Inspection Dates

Tank(s) Inspected: (24 HR WATER TESTED) 11/29/2010

Excavation Inspected: 11/15/2010

Pump & Controls Inspected: 12/7/2010

SKETCH OF SYSTEM INSTALLATION
(As-Built Drawing)

System installed according to Plans on file.

The undersigned has inspected the Septic Tank System described above, and certifies it has been ☒ installed ☐ altered ☐ repaired ☐ as detailed in the plot above ☒ in accordance with the permit issued and meets the provisions of 15A NCAC 18A. 1900, "Laws and Rules for Sewage Treatment and Disposal Systems" in effect on the date of issuance of the permit. The issuance of this Operation Permit does not in any way guarantee that the system will operate properly or relieve any person now or hereafter owning, controlling, or using such system from any liability resulting from the failure of the system to operate properly. This document is issued subject to those restrictions and conditions shown on the permit(s) and the provisions of 15A NCAC 18A. 1900 in addition to those listed below under "Comments." This document shall be null and void if any information contained in the application is untrue or if any additions are made to the property which would increase the requirements for said system.

Notice: Disturbance of the designated repair area may result in the Suspension or Revocation of this permit.

Comments: System Classification & Type: GTR, P, NA, NA Type V Flow Equalization

DENR Authorized Agent: Jeremy Michael Signature: Jeremy Michael

Mecklenburg County Groundwater & Wastewater Services
700 N. Tryon St., Suite 211 Charlotte, NC 28202
Phone: (704) 336-5103 Fax: (704) 336-6894

NC DENR
Division of Environmental Health
On-Site Wastewater Section

OPERATION PERMIT for an
ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

File #: 2252A Permit #: _____ Tax Parcel #: 139-101-14

Property Owner: Arlington Baptist Church

Job Location Address: 9801 Arlington Church Rd.

City: Charlotte State: NC Zip Code: 28227

OPERATION PERMIT CONDITIONS:

I. Performance: System shall perform in accordance with 15A NCAC 18A .1961.

II. Monitoring: System shall be monitored as required by 15A NCAC 18A .1961.

III. Maintenance: Ground absorption sewage treatment and disposal systems shall be checked, and the contents of the septic tank removed, periodically from all compartments, to ensure proper operation of the system. The contents shall be pumped whenever the solids level is found to be more than 1/3 of the liquid depth in any compartment.

IV. Operation: System shall be operated in accordance with 15A NCAC 18A .1961.

System Classification: V

*Operation Permits for Type V and VI systems expire five (5) years from the date of issuance (in accordance with Table V(a)). The system owner must contact GWS six (6) months prior to expiration for permit renewal.

Subsurface system operator required: Yes ☑ No ☐

☑ This type of system requires the system owner to maintain a contract with a certified operator to perform system inspection, maintenance, and reporting as required in 15A NCAC 18A .1961. and Table V(a). The system owner is responsible for all fees associated with these services.

☐ System does not require inspection by GWS on a routine frequency.

☐ System requires inspection by GWS once every five (5) years. The system owner is responsible for all fees associated with the inspection.

☐ System requires inspection by GWS once every three (3) years. The system owner is responsible for all fees associated with the inspection.

☑ System requires inspection by GWS once every twelve (12) months. The system owner is responsible for all fees associated with the inspection.

☐ System requires inspection by GWS once every six (6) months. The system owner is responsible for all fees associated with the inspection.

V. Other:

_____

_____

_____

_____

DENR Authorized Agent: Jeremy Michael Date: 03/10/2011

Signature: Jeremy Michael

INSPECTION AND MAINTENANCE AGREEMENT

STATE OF NORTH CAROLINA

COUNTY OF MECKLENBURG

This agreement is made and entered into this 12th day of February, 2011, by and between **Arlington Baptist Church of Charlotte, Inc.** (hereinafter referred to as the "Owner") and **Larry Thompson, Certified Operator No. 22199** (hereinafter referred to as the "Contractor").

WITNESSETH

WHEREAS, the Owner owns or controls the property upon which a Type V wastewater treatment and disposal system for 2,905 gallon per day facility (hereinafter "system") is installed, and said system requires periodic operation, maintenance and testing;

NOW THEREFORE, in consideration of the premises and of the mutual covenants and promises contained in this Agreement, it is hereby agreed by and between the Owner and the Contractor as stipulated below:

1. The Contractor's Obligations. The Contractor shall perform the following services on the Owner's system located at **9801 Arlington Baptist Church Road, Charlotte, NC 28227**:

   - Inspect system components for proper operation, at the state required intervals to include:

   - Maintain a log of all malfunction incidences/notifications, observations, maintenance activities, and meter readings and high-level alarm events at each visit.

   - Perform visual observation of drainfield, measure pump delivery rate, flush orifices, reset head pressure at the system manifold, check and record solid levels in the tanks.

   a) If an inspection indicates the need for any system or component repairs, the Contractor shall notify the Owner within 48 hours of the inspection.

   b) The Contractor shall respond to a request for a nonscheduled service or maintenance call within 24 hours after receipt of such request.

2. The Owner's Obligations.

   a) The Owner shall pay to the Contractor the sum of **$300.00 per** year. The Owner shall pay to the Contractor his normal and customary fees for any work performed on the system as a result of nonscheduled service or maintenance calls. All fees are due and payable within thirty (30) days of billing. Payments due to the Contractor and unpaid by the Owner after thirty (30) days shall accrue interest from the due date until paid at a rate of 1.5 percent per month.

   b) The Owner shall maintain a record of all well meter readings. These records shall be made available to the Groundwater and Wastewater Section upon request.

   c) Within 15 days of receipt of notice of needed repairs pursuant to paragraph 1.c. above, the Owner shall request the Contractor to complete needed repairs or shall provide to the Contractor evidence that the needed repairs were satisfactorily completed by another entity.

   d) The Owner shall provide the Contractor with such access to the system as is reasonably necessary for the Contractor to comply with the terms of this Agreement.

3. Term. This Agreement shall remain in effect until terminated.

a) Automatic Termination..
This agreement shall automatically terminate if the General Permit for the system is revoked and all appeals of the revocation are exhausted or the time for taking an appeal has passed.

b) Termination by Mutual Consent.
The Parties may mutually agree to terminate this Agreement by giving written notice of termination by mutual consent to the local health department thirty (30) days in advance of the date of termination.

c) Termination by the Owner.
The Owner may terminate this Agreement by giving notice to the Contractor and to the local health department thirty (30) days in advance of the date of termination.

d) Termination by the Contractor.

1) The Contractor may terminate this Agreement for cause by giving written notice of intent to terminate this Agreement to the Owner and to the local health department thirty (30) days in advance of the date of termination. Cause shall be defined as:

a) failure to remit payment for any bill for services performed under and in accordance with this Agreement if said bill is not paid within thirty (30) days of receipt by the Owner of the bill. If said bill is paid after notice of termination of this Agreement, the Agreement shall continue in effect; or

b) failure of the Owner to provide to the Contractor authorization to complete needed repairs or satisfactory evidence that needed repairs to the system were completed by another entity within 15 days of receipt of notice of needed repairs pursuant to paragraph 1.e. above. If said authorization to complete needed repairs or evidence of completion of said repairs is provided after notice of termination is given but prior to the date of termination of this Agreement, this Agreement shall continue in effect; or

c) failure of the Owner to allow the Contractor such access to the system as is reasonably necessary in order for the Contractor to comply with the terms of this Agreement.

2) The Contractor may not terminate this Agreement without cause, but may assign its rights and duties under this Agreement as provided in paragraph 4, below.

4. Assignment.

a) Assignment by the Owner.
The Owner shall notify the Contractor of the name and address of any purchaser of the property on which the system is located. The Owner shall also notify any purchaser of the property on which the system is located of the existence of this Agreement and shall assign all rights and duties under this Agreement to said purchaser.

b) Assignment by the Contractor.
The Contractor may assign its rights and duties under this Agreement to another management entity, which is qualified to manage said system upon thirty (30) days written notice to the

Owner and to the local health department.

5. Use of Subcontractors. The Contractor may subcontract with such manufacturers, suppliers and contractors as it deems desirable to perform any of the Contractor's duties under this Agreement. The Contractor shall at all times remain responsible for the performance of and payment for all work performed by all subcontractors.

6. Representations. The Parties represent to each other that each has the power, authority and legal right to enter into and perform its obligations as set forth in this Agreement.

7. No Implied Waiver. The waiver by either Party, of the default or a breach by the other Party of any provision of this Agreement shall not operate or be construed to operate as a waiver of any subsequent default or breach. The failure at any time of either Party to enforce any provision of this Agreement (a) shall not be construed to be a waiver of such provisions, or of any other provision; and (b) shall not in any way affect the validity of this Agreement, or any part of this Agreement, or the right of either Party thereafter to enforce each and every provision of this Agreement.

8. Notice. Every notice required under this Agreement shall be in writing and shall be deemed sufficiently given if delivered in person or sent by certified or registered mail, return receipt requested, postage prepaid to the Party to be notified and addressed as follows:

To the Owner: Arlington Baptist Church of Charlotte, Inc.
9801 Arlington Baptist Church Road
Charlotte, NC 28227

To the Contractor: Larry Thompson
114 Orchard Ridge Road
Locust, NC 28097

To the Local Health Department: Mecklenburg County Groundwater and Wastewater
700 N. Tryon Street, Suite 211
Charlotte, NC 28202

The date of any Notice shall be the date of personal delivery or the date shown on the return receipt as the date of delivery or attempted deliver, as the case may be. Changes in the respective addresses to which notice may be directed may be made from time to time by either Party by notice to the other party.

9. Place of Agreement. This Agreement and any questions concerning its validity, the system construction or performance shall be governed by the laws of the State of North Carolina. notwithstanding the place of execution, or the order in which the signatures of the Parties are affixed.

10. Entire Agreement and Amendment. This Agreement supersedes all prior negotiations, agreements and understandings between the Parties with respect to the subject matter hereof and constitutes the entire Agreement between the Parties with respect to the subject matter hereof. To be effective, any amendment or modification to this Agreement must be in writing and must be signed by the Parties.

11. Severability. In the event that any provision of this Agreement shall, for any reason, be determined to be invalid, illegal or unenforceable in any respect, the Parties shall negotiate in good faith and agree to such amendments, modifications or supplements of or to this Agreement or such other appropriate actions as shall, to the maximum practicable in light of such determination, implement and give effect to the intentions of the Parties as reflected in this Agreement, and the other provisions of this Agreement shall, as so amended, modified, supplemented or otherwise affected by such actions, remain in full force and effect.

IN TESTIMONY WHEREOF, the Parties hereto have executed this Agreement in duplicate originals, one of which is retained by each of the Parties, the day and year first above written.

(Owner)

(Contractor)

FEE: 100.00 CC 028075
DATE: 6/29/10 gc
CRT I 1

APPLICATION FOR APPROVAL TO USE AN EXISTING ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

MECKLENBURG COUNTY - GROUNDWATER & WASTEWATER SERVICES
700 N. Tryon St., Suite 211 Charlotte, NC 28202
Phone: (704) 336-5103 Fax: (704) 336-6894

GWS – UES.APP 06/07

FILE #: 2252A

JAM 4687

TYPE APPLCATION:

- ☐ ADDITION - INCREASE ROOMS/OCCUPANCY/MOBILE HOME SIZE (A / M)
- ☐ ADDITION - RENOVATION OR GARAGE WITH NO MAJOR CHANGES (X)
- ☐ EXCHANGE MOBILE HOME - SAME # BEDROOMS (Y)
- ☑ COMMERCIAL OR INDUSTRIAL (N)

PERSON FILING APPLICATION:

NAME: Doug Helms (MCT General Cont., Inc)
ADDRESS: P.O. Box 337
CITY: Monroe
STATE: NC ZIP: 28111
PHONE: 704-289-5699
ALTERNATE PHONE: 704-309-6745

PROPERTY OWNER:

NAME: Arlington Baptist Church
ADDRESS: 9801 Arlington Church Rd.
CITY: Charlotte
STATE: NC ZIP: 28227
PHONE: 704-545-4589
ALTERNATE PHONE:

JOB LOCATION INFORMATION

TAX/PARCEL #: 13910114
STREET ADDRESS: 9801 Arlington Church Rd.
CITY: Charlotte
STATE: NC ZIP: 28227
SUBDIVISION OR MOBILE HOME PARK NAME:
LOT #:

TOWNSHIP:

- ☐ 0-MECKLENBURG
- ☐ 1-CHARLOTTE
- ☐ 2-DAVIDSON
- ☐ 3-CORNELIUS
- ☐ 4-PINEVILLE
- ☐ 5-MATTHEWS
- ☐ 6-HUNTERSVILLE
- ☑ 7-MINT HILL

WATER SUPPLY:

☐ MUNICIPAL (M) ☐ COMMUNITY (C) ☑ PRIVATE WELL (P) ☐ SHARED WELL (S) ☐ OTHER 'SPRINGS' (O)

RESIDENTIAL PROPERTY TYPE:

☐ HOUSE (H) ☐ MODULAR HOME (M) ☐ MULTIPLE FAMILY (U)
☐ SINGLE MOBILE HOME (S) ☐ DOUBLE WIDE (D)
☐ OTHER (O)

OCCUPANCY (both fields are required):

NUMBER OF BEDROOMS:
NUMBER OF OCCUPANTS:

COMMERCIAL / INDUSTRIAL PROPERTY TYPE:

TYPE OF BUSINESS: Church
EMPLOYEES PER SHIFT:
OF SHIFTS:

INDUSTRIAL WASTES? ☐ YES ☑ NO
UNDERGROUND STORAGE TANKS? ☐ YES ☐ NO

ADDITION TYPE ATTACHED TO EXISTING STRUCTURE:

☐ BEDROOM ☐ BATHROOM ☐ KITCHEN ☐ DINING ROOM ☐ LIVING ROOM ☐ DEN
☐ GARAGE ☐ SUNROOM ☐ PORCH ☐ DECK ☐ OTHER

ADDITION TYPE DETACHED FROM EXISTING STRUCTURE:

☐ DETACHED GARAGE ☐ DETACHED GARAGE WITH PLUMBING ☐ POOL HOUSE ☐ SHOP ☐ BARN
☐ STORAGE SHED ☐ DETACHED PORCH / DECK ☑ OTHER Family Life Center

*The undersigned, owner, or legal agent for the owner, of the property described above as the "Job Location" has read the foregoing application, acknowledges that the contents of same are true, and authorizes the Mecklenburg County Health Department to enter onto the property for the purpose of processing this request.

Owner's/Agent's Signature — Date: 6/28/10

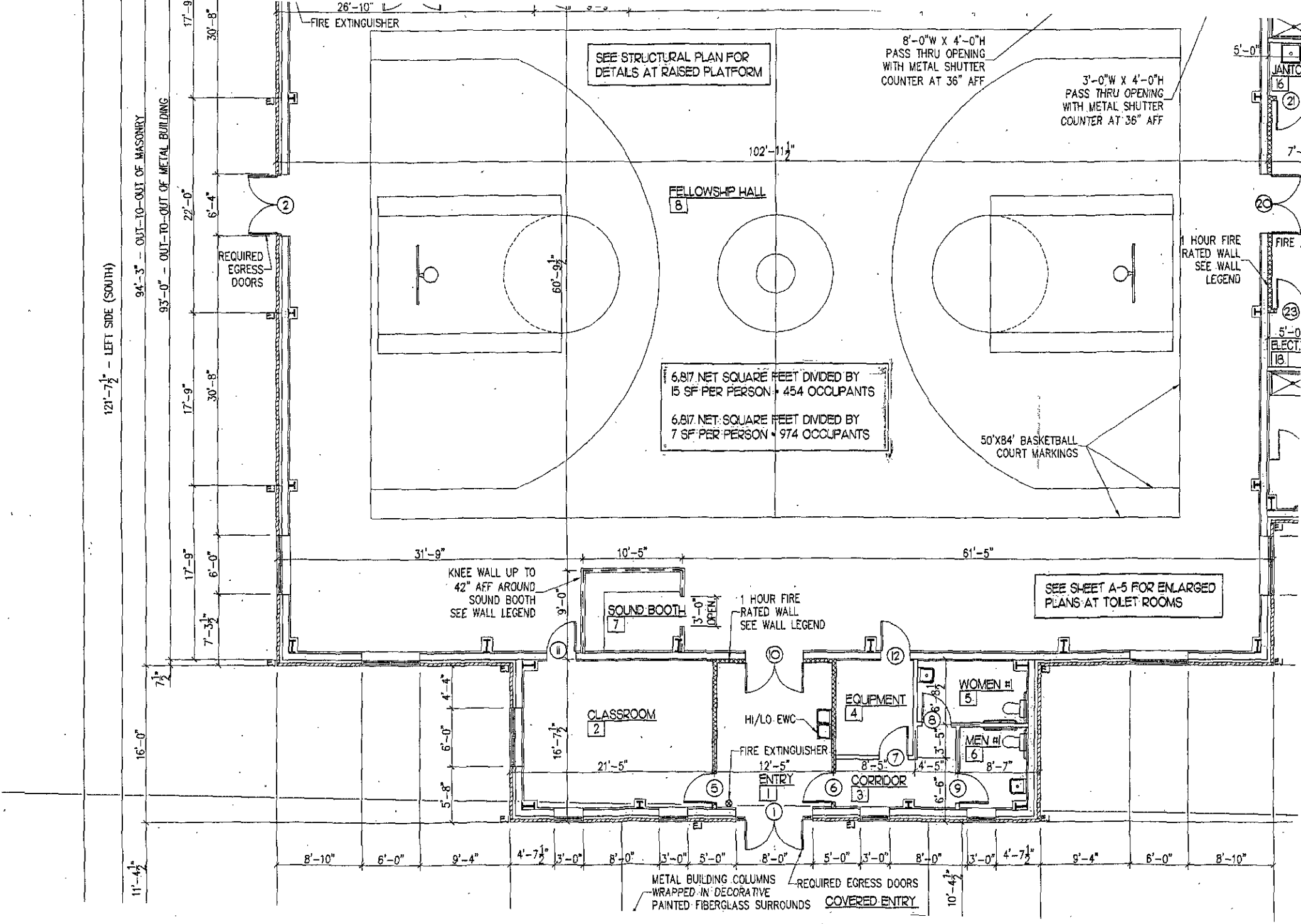
*The undersigned, an authorized agent of the Mecklenburg County Health Department, certifies that the Department has approved the Request for the Job Location contained in this document. This approval is granted in accordance with the provisions of Laws and Rules for Sanitary Sewage Collection, Treatment and Disposal in effect at the time of issuance of the permit and is subject to the following provisions:

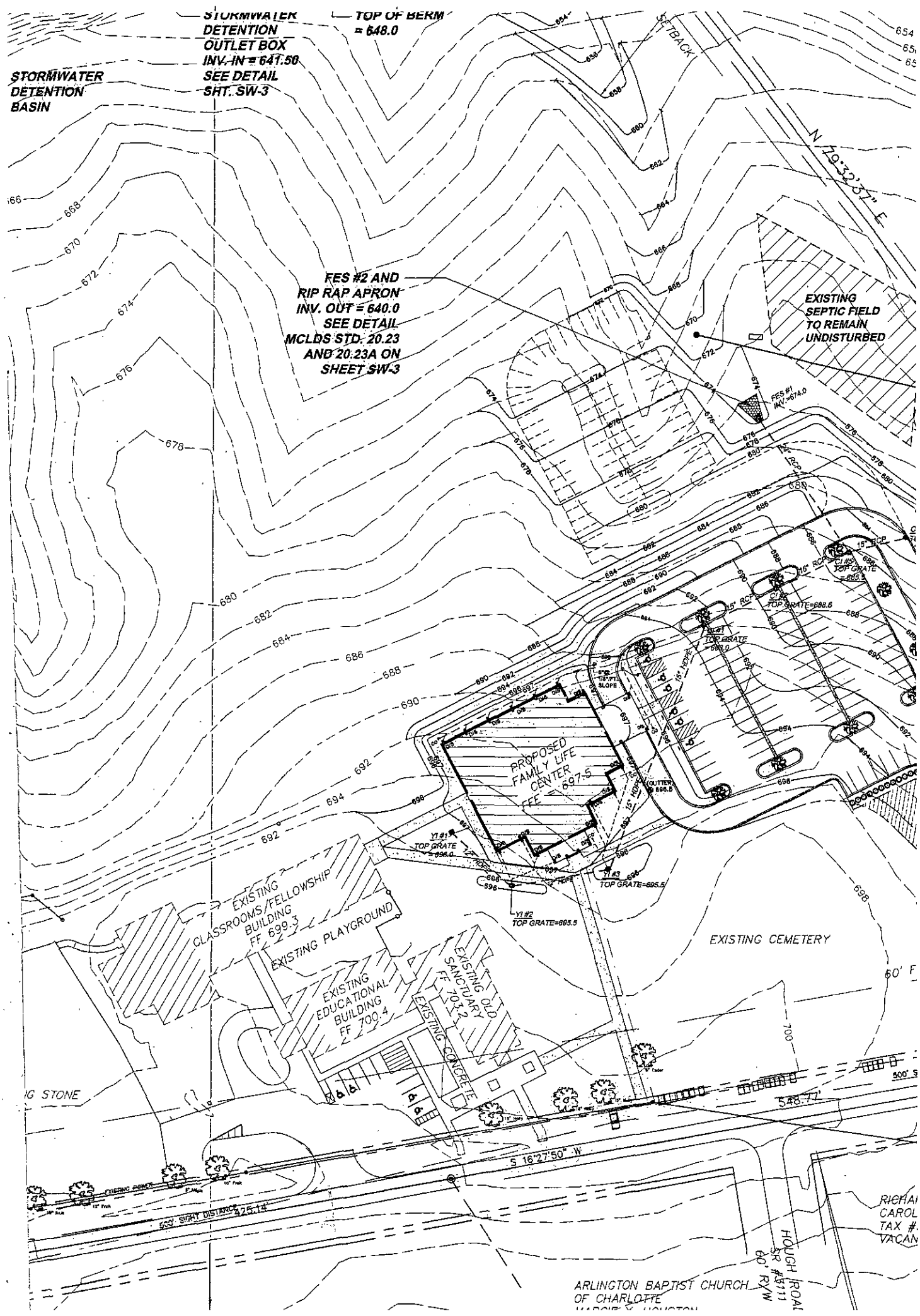
- No work shall be conducted on the septic tank system until an installation, construction, alteration and/or repair approval is granted y this Department.
- This permit is not transferable.

☐ ADDITION / RENOVATION APPROVAL - VALID 1 YEAR FROM ISSUANCE
☐ MOBILE HOME EXCHANGE APPROVAL - VALID 6 MONTHS FROM ISSUANCE

Use Existing Denied. Flow is more than proposed

EHS Signature — Date: 06-30-2010


121'-7½" - LEFT SIDE (SOUTH)
94'-3" - OUT-TO-OUT OF MASONRY
93'-0" - OUT-TO-OUT OF METAL BUILDING
26'-10"
FIRE EXTINGUISHER
SEE STRUCTURAL PLAN FOR DETAILS AT RAISED PLATFORM
8'-0"W X 4'-0"H PASS THRU OPENING WITH METAL SHUTTER COUNTER AT 36" AFF
3'-0"W X 4'-0"H PASS THRU OPENING WITH METAL SHUTTER COUNTER AT 36" AFF
102'-11½"
FELLOWSHIP HALL
8
60'-9½"
REQUIRED EGRESS DOORS
1 HOUR FIRE RATED WALL SEE WALL LEGEND
6,817 NET SQUARE FEET DIVIDED BY 15 SF PER PERSON = 454 OCCUPANTS
6,817 NET SQUARE FEET DIVIDED BY 7 SF PER PERSON = 974 OCCUPANTS
50'X84' BASKETBALL COURT MARKINGS
JANITOR 16
ELECT. 18
FIRE
31'-9"
10'-5"
61'-5"
KNEE WALL UP TO 42" AFF AROUND SOUND BOOTH SEE WALL LEGEND
SOUND BOOTH
7
3'-0" OPEN
1 HOUR FIRE RATED WALL SEE WALL LEGEND
SEE SHEET A-5 FOR ENLARGED PLANS AT TOILET ROOMS
CLASSROOM
2
HI/LO EWC
EQUIPMENT
4
WOMEN #1
5
MEN #1
6
FIRE EXTINGUISHER
ENTRY
1
CORRIDOR
3
21'-5"
12'-5"
8'-5"
4'-5"
8'-7"
METAL BUILDING COLUMNS WRAPPED IN DECORATIVE PAINTED FIBERGLASS SURROUNDS
REQUIRED EGRESS DOORS
COVERED ENTRY
8'-10"
6'-0"
9'-4"
4'-7½"
3'-0"
8'-0"
5'-0"
16'-0"
11'-4½"
10'-4½"


STORMWATER DETENTION OUTLET BOX INV. IN = 641.50 SEE DETAIL SHT. SW-3
TOP OF BERM = 648.0
STORMWATER DETENTION BASIN
FES #2 AND RIP RAP APRON INV. OUT = 640.0 SEE DETAIL MCLDS STD. 20.23 AND 20.23A ON SHEET SW-3
EXISTING SEPTIC FIELD TO REMAIN UNDISTURBED
N 19°32'37" E
FES #1 INV.=674.0
PROPOSED FAMILY LIFE CENTER FFE = 697.5
CI #1 TOP GRATE = 688.0
CI #2 TOP GRATE=688.6
CI #3 TOP GRATE = 695.0
YI #1 TOP GRATE = 696.0
YI #2 TOP GRATE=695.5
YI #3 TOP GRATE=695.5
GUTTER @ 696.5
EXISTING CLASSROOMS/FELLOWSHIP BUILDING FF 699.3
EXISTING PLAYGROUND
EXISTING EDUCATIONAL BUILDING FF 700.4
EXISTING OLD SANCTUARY FF 703.2
EXISTING CONCRETE
EXISTING CEMETERY
S 16°27'50" W
548.77'
500' SIGHT DISTANCE
325.14'
ARLINGTON BAPTIST CHURCH OF CHARLOTTE
HOUGH ROAD SR #5711
60' R/W

MECKLENBURG COUNTY

Land Use & Environmental Services Agency
Groundwater & Wastewater Services

June 30, 2010

DOUG HELMS(MCT GENERAL CONT INC)
P O BOX 337
MONROE, NC 28111

Re: Application for approval to use an existing on-site wastewater treatment & disposal system.
Property Location: 9801 ARLINGTON CHURCH RD
Health Department file number: **2252A**

Dear Property Owner or Owner's Agent:

On June 30, 2010 the Mecklenburg County Health Department, Groundwater & Wastewater Services Section, evaluated the above-referenced property to determine if approval to use an existing on-site wastewater treatment & disposal system could be granted for your proposed project. This evaluation was done in accordance with the laws and rules governing wastewater systems in North Carolina General Statute 130A-333 and related statutes, Title 15A, Subchapter 18A, of the North Carolina Administrative Code, Rule .1900 and related rules, and the Mecklenburg County Groundwater Well Regulations.

Based on the information provided in the application, dated June 29, 2010, and findings from the site evaluation conducted by our office, your request for approval to use an existing on-site wastewater treatment & disposal system is **not** being granted. This decision is based on the following conditions that were identified during the site visit:

- ☐ The existing on-site wastewater treatment & disposal system was not functioning properly at the time the site evaluation was conducted.
- ☐ The proposed plans do not meet the required setbacks for the on-site wastewater treatment & disposal system serving the property.
- ☐ The proposed plans do not meet the required setbacks for the reserved repair area for an on-site wastewater treatment & disposal system.
- ☐ The proposed plans do not meet the required setbacks for water supply wells.
- ☒ The proposed project will exceed the permitted daily design flow for the existing on-site wastewater treatment & disposal system. System alteration will be required in order to accommodate your proposed project.

If you need any additional information or assistance please contact our office at (704) 336-5103.

Sincerely,

Jeremy Michael

Jeremy Michael
Environmental Specialist

Encl: (1) Application