

## **MEMORANDUM**

**TO:** Advisory Boards and Commissions

**FROM:** Gene Poveromo, Current Development Manager  
Judy Johnson, Senior Planner

**SUBJECT:** Application for Special Use Permit, New Life Fellowship Church, 510 Sage Road  
(Project # 12-110)

**DATE:** August 12, 2014      Environmental Stewardship Advisory Board  
August 14, 2014      Transportation and Connectivity Advisory Board  
August 19, 2014      Planning Board  
August 20, 2014      Community Design Commission

### **DESCRIPTION OF THE APPLICATION**

This memorandum describes the request for Special Use Permit for a proposed project, the New Life Fellowship Church, a place of worship, at 510 Sage Road. A total of 13,195 square feet of floor area and 97 parking spaces are proposed. A maximum of 14,000 square feet of floor area is allowable on the site.

### **RECOMMENDATION**

The Planning Commission is required, as part of the Land Use Management Plan, to make recommendation to the Council on the proposed Special Use Permit application; all other advisory boards are asked to make courtesy comments to the Council. A Public Hearing on this application is tentatively scheduled for September 15, 2014.

### **ATTACHMENTS**

1. Staff Report
2. Resolution A
3. Resolution B
4. Traffic Impact Exemption
5. Applicant's materials

## STAFF REPORT

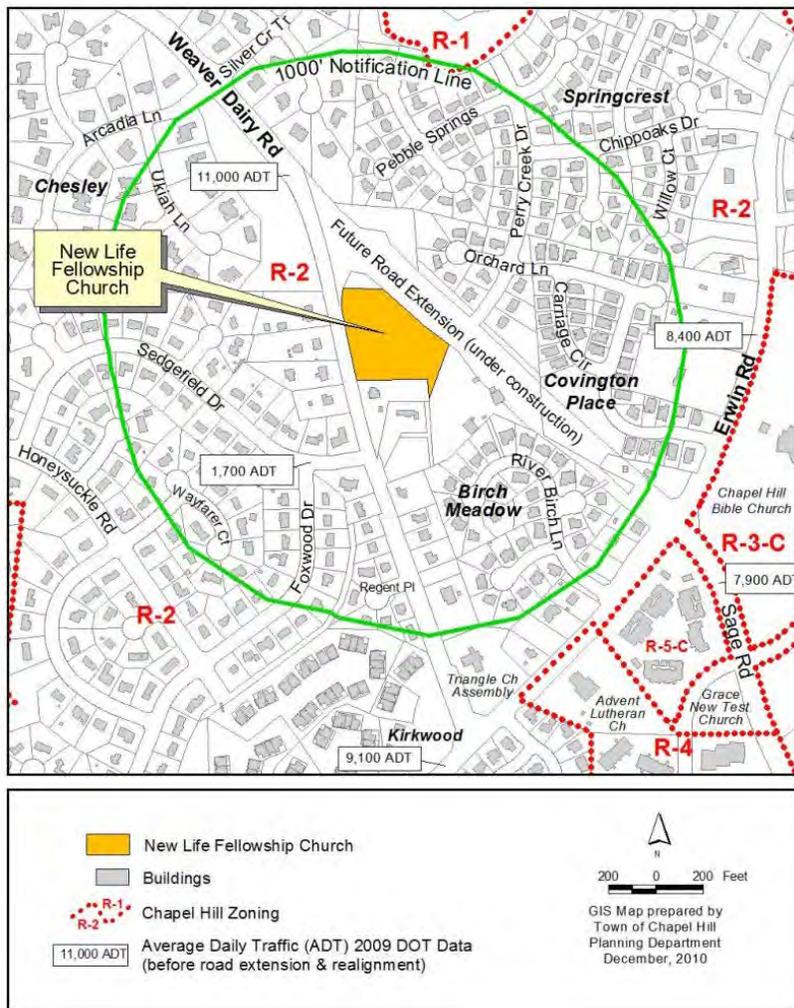
SUBJECT: Application for Special Use Permit – New Life Fellowship Church, 510 Sage Road (Project No. 12-110)

DATE: August 12, 2014

## INTRODUCTION

Attached for your consideration is a Special Use Permit application, submitted by Shaw Design Associates, P.A., which proposes to redevelop a 3.5-acre site, located at 510 Sage Road, between Weaver Dairy Road and Sage Road. The application proposes: Phase 1) Construction of a 6,185 square foot Fellowship Hall and Church Classroom Building (no day care or school) including 78 parking spaces; and Phase 2) construction of a 7,010 square foot Sanctuary and Lobby including 19 additional parking spaces.

This application is proposed to be considered at the Council's public hearing, tentatively scheduled for September 15, 2014.



## BACKGROUND

- 2006 Concept Plan application for construction of a place of worship reviewed by Community Design Commission and Town Council.
- December 15, 2010 Revised Concept Plan application for proposed place of worship reviewed by Community Design Commission.
- January 19, 2011 Concept Plan application reviewed by Town Council.
- December 12, 2012 Special Use Permit application submitted.

## EXISTING CONDITIONS / DEVELOPMENT PROPOSAL SUMMARY

The Special Use Permit application is proposing the following changes with details indicated in the table below.

Site Description				
Address	510 Sage Road, Chapel Hill			
Property Description	The 2 lot assemblage (153,668 square feet) is located on the southeast side of traffic circle at Weaver Dairy Road and Sage Road.			
Orange County Parcel Identifier Numbers	9890-32-7289 and 9890-32-9028			
Existing Site Conditions / Proposed Development Description				
Existing use and proposed Special Use Permit	Existing – single-family residential (and several out buildings). Proposed for demolition.			
	Proposed – Place of Worship: Phase 1 - 6,185 s.f.; Phase 2 - expansion of 7,010 s.f. A maximum of 14,291 s.f. allowed on-site.			
Height	Maximum Primary Height: 29 feet; Proposed: 22 feet Maximum Secondary Height: 50 feet; Proposed: 38 feet			
Vegetation	Existing: mix of mature hardwoods and pines.			
	Proposed: 40 percent tree canopy.			
Vehicular Parking		Minimum Required	Maximum Required	Proposed
	Phase 1	41	102	78
	Phase 2	60	150	97
Bicycle Parking	8 outdoor Class I bicycle parking spaces			
Vehicular and Pedestrian Access	Existing – two driveways on Weaver Dairy Road			
	Proposed– One vehicle access to Sage Road; no access to Weaver Dairy Road.			
Land Disturbance	Proposed: 106,679 s.f., 2.4 acres (69%).			
Impervious Surface	Existing – 8,514 s.f. (4.8%)			
	Proposed – 54,768 s.f. (35.6%)			

Resource Conservation District overlay zone	No Resource Conservation District on site.
Jordan Riparian Buffer overlay zone	No Jordan Riparian Buffer on site.
Steep Slopes	All slopes less than 10% slope.
Zoning	Existing and Proposed – Residential-2 (R-2)
<b>Surroundings</b>	
Development Pattern	Medium-density single-family development
North, South, East, West	Residential-2 (R-2) zoning, single-family dwellings.

### **STAFF ANALYSIS OF THE APPLICATION**

The Town staff has reviewed this application for compliance with the themes from the [2020 Comprehensive Plan](#), the standards of the [Land Use Management Ordinance](#), and the [Design Manual](#), and offers the following evaluation:

**Comprehensive Plan:** The following are themes from the 2020 Comprehensive Plan, adopted June 25, 2012:

Conforms	No.	2020 Comprehensive Plan Themes
√	1	A Place for Everyone
√	2	Community Prosperity and Engagement
√	3	Getting Around
√	4	Good Places, New Spaces
√	5	Nurturing Our Community
	6	Town and Gown Collaboration

We believe the New Life Fellowship Church proposal complies with five themes of the 2020 Comprehensive Plan. For information on how this proposed development addresses these themes and goals of the Comprehensive Plan, please refer to the attached applicant’s Statement of Justification.

**Land Use Plan:** The [2020 Land Use Plan](#), a component of the [2020 Comprehensive Plan](#) designates this site as low density residential. We believe the New Life Fellowship Church proposal complies with the land use plan, including the proposal’s compliance with themes in the 2020 Comprehensive Plan as indicated above.

### **Comparison of Concept Plan and Special Use Permit Proposals**

	2006 Concept Plan	2012 Concept Plan	Special Use Permit Application
	Residential-2	Residential-3 (proposed rezoning)	Residential-2
Floor Area Proposed	14,400	23,198 s.f.	13,195 s.f.

Impervious Surface Area	63,000	54,517 s.f.	52,596 s.f.
Buildings	1	2	1
Parking spaces	100	122	97
Vehicular Access	Weaver Dairy Road and Sage Road	Weaver Dairy Road and Sage Road	Sage Road

**Transportation**

**Traffic Impact:** A Traffic Impact Analysis Exemption was granted for this project. The proposed development is estimated to generate approximately 364 new trips per day and is below the 500 new vehicle trips threshold for an exemption.

**Access and Circulation**

**Access Easement:** Since the applicant’s first submittal in 2006, access to the site has been discussed. The concept plans, submitted prior to the completion of Sage Road, showed access from both Weaver Dairy Road and future Sage Road. Access to the site is now proposed from Sage Road. The Sage Road access is proposed to be located directly across from Perry Creek Drive. There is an existing cross-access easement between this property and the adjoining property to the southeast (Burchett).

The adjoining property to the southeast (Burchett) is underdeveloped and its access to both Sage Road and Weaver Dairy Road is limited. We recommend that the applicant’s proposed Sage Road access include a cross-access easement that will allow the adjoining property to the southeast full and unrestricted access to Sage Road. This has been included as a stipulation in Resolution A.

**Vehicular Parking:** The Land Use Management Ordinance requires for a place of worship at minimum of 1 parking space per 5 seats and a maximum of 1 parking space per 2 seats. This would require a minimum of 75 vehicular parking spaces and allows for a maximum of 120 spaces, based on the proposed 300 seats. The applicant is proposing 97 on-site parking spaces.

**Pedestrian Facilities:** There is a new sidewalk along Sage Road, constructed as part of the Sage Road/Weaver Dairy Road NCDOT improvement project. The newly constructed sidewalk extends along a portion of the site’s frontage on Weaver Dairy Road ending approximately 160 feet from the eastern edge of the site. The applicant is proposing to construct this missing piece of sidewalk on Weaver Dairy Road frontage of the site. We included a stipulation with detailed requirements in Resolution A.

**Transit Improvements:** The site is currently not served by Chapel Hill Transit (CHT) routes. The closest bus stop is location around the corner at Foxwood Drive and Sedgefield Drive. The stop is served by the G Route. The Transit staff believes the impact of this project on Chapel Hill Transit’s services will be minimal. Therefore, Resolution A does not stipulate any transit related improvements.

**Landscape and Architecture**

***Landscape Buffers:*** Following are the Land Use Management Ordinance standards for landscape bufferyards on this site, and the bufferyards proposed by the applicant:

<b>Location</b>	<b>Buffer Required</b>	<b>Proposed Buffer</b>
Southern Property Line (Weaver Dairy Road)	30 ft wide Type D	30 ft wide Type D
Northern Property Line (Sage Road)	30 ft wide Type D	30 ft wide Type D (Alternative Buffer)
Eastern/Southern Property Line (adjoining residential property)	20 ft wide Type C	20 ft wide Type C

A portion of the proposed stormwater facility, including the berm and discharge pipe, is encroaching into the 30 foot-wide type D buffer along Sage Road. We recommend that the applicant obtain approval for an alternate landscape bufferyard from the Community Design Commission or seek a modification from the buffer regulations from the Council. We have included a stipulation recommending an alternate bufferyard in Resolution A.

**Environment / Stormwater Management**

***Resource Conservation District:*** There is no Resource Conservation District area on the property.

***Stormwater Management:*** Existing impervious surface area on the proposed redevelopment site is 7,900 s.f. (5.7%) of impervious surface. After demolition, the applicant’s proposal totaling 52,596 s.f. (38%) of impervious surface. The development shall meet applicable performance standards regarding stormwater management in Section 3.6.4(g) of the Land Use Management Ordinance. The applicant is proposing to meet the performance standards for the post-development condition with wet detention pond. We have included a stipulation in Resolution A for the stormwater management.

***Jordan Lake Nutrient Loading Requirements:*** Redevelopment sites, disturbing one-half acre or more, must comply with Jordan Nutrient Loading requirements. We have included a stipulation with detailed requirements in Resolution A.

***Energy Management Plan:*** The Council encourages applicants to submit an Energy Management Plan as part of their Special Use Permit application.

The applicant has proposed an Energy Management Plan (EMP) with a number of potential conservation and efficiency elements. Please find the applicant’s EMP attached. We recommend that prior to issuance of a Zoning Compliance Permit, the applicant provide a more detailed plan that addresses the Town’s energy policy, which recommends that buildings be designed to a minimum of 20 percent more energy efficient than the American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE). We have included stipulations with detailed requirements encouraging the use of an Energy Management Plan in Resolution A.

**Miscellaneous**

**Additional Stipulations in Resolution A for Special Use Permit** (see Resolution A for detailed requirements)

<b><i>Accessibility Requirements</i></b>	Prior to issuance of a Certificate of Occupancy, the applicant shall provide the minimum required handicapped facilities and infrastructure required Americans with Disabilities codes and standards.
<b><i>Off-Site Construction Easements</i></b>	Prior to any land disturbing activities on adjacent properties associated with construction the applicant shall provide documentation of approval from property owners affected by off-site construction.
<b><i>Landscape Protection, Screening and Shading Plan</i></b>	We have included our standard stipulations for approval of landscape buffers, including tree protection fencing, screening of parking areas and buildings, as well as a maintenance schedule, canopy trees and shading plan.
<b><i>Building Elevation, Lighting, and Landscaping Plans</i></b>	Prior to the issuance of a Zoning Compliance Permit, we recommend that detailed building elevations, lighting plans, and landscape plans be approved by the Community Design Commission.
<b><i>Public Art</i></b>	We recommend that the applicant continue to work with the Public Arts Officer to finalize a public arts plan.
<b><i>Erosion Control</i></b>	Prior to final authorization to begin land-disturbing activities the applicant shall be required to provide a performance guarantee in accordance with Section 5-97.1 Bonds of the Town Code of Ordinances when one (1) acre or more is uncovered by land-disturbing activities.
<b><i>Lighting Plan</i></b>	The applicant shall submit site plans and other required documents to satisfy the lighting requirements of Section 5.11 of the Land Use Management Ordinance.
<b><i>Overhead Power Lines</i></b>	The applicant shall place all proposed or relocated utility lines underground, other then 3-phase electric power distribution lines.
<b><i>Fire</i></b>	The applicant shall obtain Fire Marshall approval for required fire safety features and infrastructure, such as fire hydrants and fire department connections, detailed fire access elements, fire protection devices, heavy-duty pavement and drive aisle design features.
<b><i>Refuse Management</i></b>	We recommend that during Phase 1, roll carts could be used. Prior to completion of Phase 2, we recommend the installation of a dumpster pad and enclosure.
<b><i>Solid Waste Management Plan</i></b>	The applicant shall obtain approval of a Solid Waste Management Plan (SWMP) from Orange County Solid Waste Department.
<b><i>Construction Management Plan</i></b>	The applicant shall provide a Construction Management Plan that details construction site management.

<i>Construction Phasing</i>	We recommend that the applicant submit a Phasing Plan, which shall detail which public improvements and stormwater management structures shall be completed and inspected as part of that phase prior to requesting a Certificate of Occupancy.
<i>Utilities</i>	Prior to the issuance of a Zoning Compliance Permit, the applicant provide final utility/lighting plans. The property owner will be responsible for assuring that these utilities are extended to serve the development.
<i>Traffic and Pedestrian Control Plan, Repairs in Public Right-Of-Way, and Street Closure Plan</i>	The applicant shall 1) provide a Work Zone Traffic Control Plan for movement of motorized and non-motorized vehicles on any public street that will be disrupted during construction, 2) provide a street closure plan, subject to Town Manager approval, for any work requiring street closures, and 3) repair all damage for work in the public right-of-way related to the construction of this project.

**SPECIAL USE PERMIT FINDINGS**

The applicant’s materials are included as attachments to this memorandum. All information submitted at the public hearing will be included in the record of the hearing. Based on the evidence that is submitted, the Council will consider whether or not it can make each of four required findings for the approval of the Special Use Permit for the New Life Fellowship Church. The four findings are:

Finding #1: That the use or development is located, designed, and proposed to be operated so as to maintain or promote the public health, safety, and general welfare;

Finding #2: That the use or development would comply with all required regulations and standards of the Land Use Management Ordinance;

Finding #3: That the use or development is located, designated, and proposed to be operated so as to maintain or enhance the value of contiguous property, or that the use or development is a public necessity; and

Finding #4: That the use or development conforms to the general plans for the physical development of the Town as embodied in the Land Use Plan and in the Comprehensive Plan.

Following the public hearing, we will prepare an evaluation of the evidence submitted in support of and in opposition to this application.

**RECOMMENDATION**

Staff Recommendation: We recommend that the advisory boards review the Special Use Permit application and make a recommendation to the Town Council. We recommend that the advisory

boards recommend that the Council adopt Special Use Permit Resolution A, approving the Special Use Permit for redevelopment of the New Life Fellowship Church site, with conditions.

### **ATTACHMENTS**

1. Checklists of Project Fact Sheet Requirements
2. Resolution A – Special Use Permit Resolution of Approval
3. Resolution B – Special Use Permit Resolution of Denial
4. Applicant's Materials
5. Traffic Impact Analysis Exemption
6. Area Map

**PROJECT FACT SHEET REQUIREMENTS**  
**Check List of Regulations and Standards**  
**Special Use Permit Application**

New Life Fellowship Church 510 Sage Road	STAFF EVALUATION BASED ON R-2 ZONING	
	COMPLIANCE	NONCOMPLIANCE
Use Permitted	√	
Gross Land Area – 3.5 acres	√	
Minimum Lot Width	√	
Maximum Floor Area	√	
Maximum # Dwelling Units	n/a	
Minimum Recreation Space	n/a	
Impervious Surface Limits	√	
Land Disturbance Minimized	√	
Minimum # Vehicular Parking Spaces	√	
Minimum # Bicycle Parking Spaces	√	
Minimum Setbacks	√	
Maximum Primary Height Limits	√	
Maximum Secondary Height Limits	√	
Minimum Landscape Bufferyards	√	
Maximum Land Disturbance in the Resource Conservation District	n/a	
Steep Slopes Compliance	n/a	
Stormwater Management (Including New Jordan Nutrient Loading Regs)	√ (with stipulations)	
Parking Lot Screening	√ (with stipulations)	
Public Water and Sewer	√	
Adequate Public Schools Facilities	n/a	

N/A = Not Applicable

*Prepared: August 12, 2014*

**RESOLUTION A**  
(Approving the Special Use Permit Application)

**A RESOLUTION APPROVING AN APPLICATION FOR SPECIAL USE PERMIT FOR THE NEW LIFE FELLOWSHIP CHURCH (PROJECT #12-110)**

BE IT RESOLVED by the Council of the Town of Chapel Hill that it finds that a Special Use Permit Application, proposed by Shaw Design Associates, LLC for the New Life Fellowship Church, located at 510 Sage Road, on property identified as Orange County Property Identifier Numbers 9890-32-7289 and 9890-32-9028, if developed according to the Site Plan dated February 18, 2011, April 8, 2011, September 20, 2011, October 21, 2011, November 15, 2011, June 14, 2012, January 23, 2013, June 10, 2013, November 19, 2013, and revised April 2, 2014, and the conditions listed below would:

1. Be located, designed, and proposed to be operated so as to maintain or promote the public health, safety, and general welfare;
2. Comply with all required regulations and standards of the Land Use Management Ordinance;
3. Be located, designed, and operated so as to maintain or enhance the value of contiguous property; and
4. Conform with the general plans for the physical development of the Town as embodied in the Land Use Management Ordinance and in the 2020 Comprehensive Plan.

BE IT FURTHER RESOLVED that the Town Council hereby approves the application for a Special Use Permit for the New Life Fellowship Church in accordance with the plans listed above and with the conditions listed below:

Stipulations Specific to the Development

1. Construction Deadline: That construction begin by \_\_\_\_\_ (2 years from the date of approval), to be completed by \_\_\_\_\_ (15 years from the date of approval).
2. Land Use Intensity: This Special Use Permit authorizes the following:

<b>Phase 1 Use: Church Classroom (No School) &amp; Fellowship</b>	
<b>Phase 2 : Sanctuary</b>	
Gross Land Area	153,668 s.f.
Floor Area (Phase 1)	6,185 s.f. +/-
Floor Area (Phase 2)	7,010 s.f. +/-
Maximum Allowed Total Floor area	14,291 s.f.
On-site Vehicular Parking Spaces	97
Bicycle Parking Spaces	8

### Access

3. Accessibility Requirements: That prior to issuance of a Certificate of Occupancy, the applicant shall provide the minimum required handicapped parking spaces and design all handicapped parking spaces, ramps, and crosswalks, and associated infrastructure according to Americans with Disabilities Act standards, North Carolina Building Code, American National Standards Institute (ANSI) Code, and Town standard.
4. Performance Bond: Prior to commencing construction activity for the improvements in the public right-of-way, a performance bond shall be provided to the Town Manager to insure the construction and installation of the improvements in accordance with the standards and provisions approved by the Town as part of the project.

### Transportation

5. Weaver Dairy Road: Prior to issuance of a Certificate of Occupancy, the applicant shall improve the Weaver Dairy Road frontage with standard curb and gutter, three foot utility strip, and a five foot concrete sidewalk constructed to Town standards.
6. Weaver Dairy Road Right-of-Way: That prior to issuance of a Certificate of Occupancy, the applicant shall dedicate half of a 55-foot public right-of-way along the Weaver Dairy Road frontage. If public dedication of the right-of-way has already been provided, a plat must be submitted to the Town prior to issuance of a Zoning Compliance Permit confirming the right-of-way dedication.
7. Parking Lot: Prior to issuance of a Certificate of Occupancy, the parking lot and drive aisles to be constructed to Town standards for dimensional and pavement standards.
8. Driveway Access: Prior to issuance of a Zoning Compliance Permit, detailed final plans must be submitted for approval by the Town Manager and the North Carolina Department of Transportation.
9. Three-Party Encroachment Agreement – Sidewalk Improvements / NCDOT Right-Of-Way: That prior to issuance of a Zoning Compliance Permit, a three party encroachment agreement between the applicant, NCDOT and Town shall be required for sidewalk improvements in the NCDOT right-of-way.
10. Cross-Access Agreement: Prior to issuance of a Zoning Compliance Permit, a cross access easement between the adjoining property to the east be recorded to allow for access across the driveway stem.
11. Repairs in Public Right-of-Way: Prior to a Certificate of Occupancy it will be necessary to repair all damage for work in the public right-of-way related to the construction of this project, which may include pavement milling and overlay. The design must be reviewed and approved by the Town Manager prior to a Zoning Compliance Permit.

- 12. Work Zone Traffic Control Plan: Prior to a Zoning Compliance Permit it will be necessary to provide a Work Zone Traffic Control Plan and a Construction Management Plan for approval by the Town Manager. The Work Zone Traffic Control Plan shall comply with the Manual on Uniform Traffic Control Devices. The Construction Management Plan shall provide staging, construction worker parking, construction vehicle routes, and hours of construction.
- 13. Bicycle Parking: That prior to the issuance of a Zoning Compliance Permit, the applicant shall provide dimensioned details for 8 bicycle parking spaces that comply with Town parking standards.

Landscaping and Elevations

<b>Location</b>	<b>Buffer</b>
Southern Property Line (Weaver Dairy Road)	30 ft. wide Type D
Northern Property Line (Sage Road)	30 ft. wide Type D (Alternative Buffer)
Eastern/Southern Property Line (adjoining residential property)	20 ft. wide Type C

- 14. Northern Buffer: That unless the applicant obtains alternate bufferyard approval from the Community Design Commission, a standard 30-foot wide Type D buffer be provided continuously along the northern property line. It will be necessary for the Community Design Commission to make the determination that any proposed alternative buffer shall provide the same degree of visual and noise obstruction as the required buffer.
- 15. Landscape Protection: Prior to issuance of a Zoning Compliance Permit, a detailed Landscape Protection Plan shall be approved. The plan shall include which trees will be removed and which will be preserved, critical root zones of all rare and specimen trees, and clearly indicate names and species.
- 16. Tree Protection Fencing Prior to Construction: Prior to issuance of a Zoning Compliance Permit the applicant shall provide a note on the Final Plans indicating that tree protection fencing will be installed prior to land-disturbing activity on the site. Tree protection fencing shall be provided around construction limits and indicated construction parking and materials staging/storage areas, and Town standard landscaping protection notes, subject to Town Manager approval.
- 17. Landscape Planting Plan: Prior to issuance of a Zoning Compliance Permit the applicant shall provide a detailed Landscape Planting Plan with a detailed planting list, subject to Town Manager approval. The Plan shall include canopy trees to shade surface parking areas.

18. Tree Canopy Coverage: That the applicant meets the minimum 40% tree canopy coverage requirement of the entire site prior to issuance of a Zoning Compliance Permit.
19. Landscape Screening and Shading: That the landscaping shall adhere to the standards for Section 5.9.6 (a-d) of the Land Use Management Ordinance.
20. Community Design Commission Approval: That the applicant obtain Community Design Commission approval of building elevations and lighting, landscape screening on the eastern and southern property lines, including the location and screening of all HVAC/Air Handling Units for this project, prior to issuance of a Zoning Compliance Permit. That prior to issuance of a Zoning Compliance Permit the Commission shall approve a lighting plan for this site and shall take additional care during review to ensure that the proposed lighting plan will minimize 1) upward light pollution and 2) offsite spillage of light.

#### Public Art

21. Public Art: That prior to issuance of a Zoning Compliance Permit the applicant is encouraged to develop a public arts plan and work with the Town Public Arts Officer.

#### Environment

22. Energy Management Plan: That prior to issuance of a Zoning Compliance Permit the applicant is encouraged to provide an Energy Management Plan (EMP) to be approved by the Town Manager. The plan should: a) consider utilizing sustainable energy, currently defined as solar, wind, geothermal, biofuels, hydroelectric power; b) consider purchase of carbon offset credits and green power production through coordination with the NC GreenPower program; c) provide for 20 percent more efficiency that also ensures indoor air quality and adequate access to natural lighting, and allows for the proposed utilization of sustainable energy in the project; and (d) that the property owner reports to the Town of Chapel Hill the actual energy performance of the plan, as implemented, during the period ending one year after occupancy.
23. Energy Efficiency: That the final plans should incorporate a “20 percent more energy efficient” feature relative to the 2004 energy efficiency standard of the American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE), as amended and in effect at the time of Special Use Permit issuance. Comparable standards generally recognized as applicable to building energy consumption, as amended and in effect at the time of building permit issuance, may be used by the applicant when incorporating the “20 percent more energy efficient” feature into the final plans. The developer’s implementation of energy management techniques shall include the use of high-efficiency HVAC system, and energy management systems and controls.

#### Stormwater Management

24. Stormwater Management Plan: That prior to the issuance of a Zoning Compliance Permit, the applicant shall submit a Stormwater Management Plan for review and approval by the Town

Manager. This project must comply with the stormwater management requirements of the Land Use Management Ordinance to provide for 85 percent total suspended solids removal from the increased impervious area, retention for 2-5 days of the increased volume of stormwater runoff from the 2-year, 24-hour storm, and control of the stormwater runoff rate for the 1-year, 2-year, and 25-year storms, if necessary. No stormwater management structures are permitted in the rights-of-way or building setbacks. This includes the outlet structure and stabilization, any underdrains, and the downgradient toe of french drains. Further, the discharge must be in a sheet flow condition, unless otherwise approved to discharge to the town's stormwater system.

25. Jordan Stormwater Management for New Development: That if the disturbed area exceeds one-half acre, this project must comply with the Jordan stormwater management regulations of the Land Use Management Ordinance to provide the required reductions in nitrogen and phosphorus loads for new development and redevelopment projects.
26. Jordan Surety: That if the total disturbed area exceeds one-half acre, prior to issuance of a Certificate of Occupancy, the owner shall post a maintenance bond or other surety instrument satisfactory to the Town Manager in an amount equal to one hundred twenty-five (125) percent of the construction cost of each stormwater management facility to assure maintenance, repair, or reconstruction necessary for adequate performance of the stormwater management facility, or establish a stormwater maintenance (sinking fund) budget and escrow account in accordance with the requirements of Section 5.19 of the Land Use Management Ordinance.
27. Jordan New Development Inspection Report: That if the total disturbed area exceeds one-half acre, an original inspection report shall be provided to the Town beginning one year from the date of the recorded inspection, operation, and maintenance plan and each year thereafter on or before the date recordation. The owner shall provide evidence of the renewal of the maintenance bond or surety or a certified statement of the escrow account.
28. Stormwater Facilities, Easements, and Operations and Maintenance Plans: All stormwater detention, treatment and conveyance facilities located on and below the ground shall be wholly contained within an easement entitled: "Reserved Stormwater Facility Easement Hereby Dedicated" and shall be reserved from any development which would obstruct or constrict the effective management, control, and conveyance of stormwater from or across the property, other than the approved design and operation functions. A copy of the final plat or easement exhibit, signed and sealed by a North Carolina-registered Land Surveyor and recorded by the County Register of Deeds, and containing the following notes shall be submitted prior to issuance of the Certificate of Occupancy.
  - a. All engineered stormwater management control, treatment, and conveyance structures on and below the ground shall be wholly located within an easement entitled: "Reserved Stormwater Facility Easement Hereby Dedicated" and shall be reserved from any development which would obstruct or constrict the effective management, control, and conveyance of stormwater from or across the property, other than the approved design

and operation functions. A suitable access (minimum 20' wide) to accommodate heavy equipment from the nearest public right-of-way to the Reserves Stormwater Facility Easement must be provided and shown on the plans.

- b. The "Reserved Stormwater Facility Easements" and the facilities it/they protect are considered to be private, with the sole responsibility of the owner to provide for all required maintenance and operations as approved by the Town.
- c. The Reserved Stormwater Facility Easement and the Operations and Maintenance Plan are binding on the owner, heirs, successors, and assigns.

- 29. Stormwater Operations and Maintenance Plan Recordation: Prior to use of the facility, a Stormwater Operations and Maintenance Plan, signed by the owner and recorded at the County Register of Deeds, shall be provided for the proposed stormwater management facilities and submitted to the Stormwater Management Engineer for approval. A schedule of inspection and maintenance tasks shall be included.
- 30. Erosion Control Bond: If one acre or more is uncovered by land-disturbing activities for this project, then a performance guarantee in accordance with Section 5-97.1 Bonds of the Town Code of Ordinances shall be required prior to final authorization to begin land-disturbing activities. This financial guarantee is intended to cover the costs of restoration of failed or failing soil erosion and sedimentation controls, and/or to remedy damages resulting from land-disturbing activities, should the responsible party or parties fail to provide prompt and effective remedies acceptable to the Town.
- 31. Erosion Control: The applicant shall provide a copy of the approved erosion and sediment control permit from Orange County Erosion Control Division prior to receiving a Zoning Compliance Permit. During the construction phase, additional erosion and sediment controls may be required if the proposed measures do not contain the sediment. Sediment leaving the property is a violation of the Town's Erosion and Sediment Control Ordinance.
- 32. Erosion Control Inspections: That, in addition to the requirement during construction for inspection after every rainfall, the applicant shall inspect the erosion and sediment control devices and offsite roadways daily, make any necessary repairs or adjustments to the devices, remove deposition of wet or dry silt on adjacent roadways and maintain inspection logs documenting the daily inspections and any necessary repairs.
- 33. Curb Inlets: The applicant shall provide pre-cast curb inlet hoods and covers stating, "Dump No Waste! Drains to Jordan Lake", in accordance with the specifications of the Town Standard Detail SD-5A, for all new curb inlets for private, Town and State rights-of-way.
- 34. Stormwater Design (Best Management Practices): That the applicant is encouraged to pursue innovative green BMP's throughout the site where possible.

35. Silt Control: That the applicant takes appropriate measures to prevent and remove the deposit of wet or dry silt on adjacent paved roadways.
36. Phasing Plan: Prior to issuance of a Zoning Compliance Permit, the applicant shall obtain approval of a Phasing Plan that provides details of which improvements are to be constructed during each phase. In addition, the phasing plan shall detail which public improvements and stormwater management structures shall be completed and inspected as part of that phase prior to requesting a Certificate of Occupancy. No construction for any phase shall begin until all public improvements required in previous phases are completed to a point adjacent to the new phase; and that a note to this effect shall be placed on the final plans and plats.
37. On-Site/Adjacent Stormwater Features: Prior to issuance of a Zoning Compliance Permit, existing site conditions and features shall be located on plans, including all on-site and adjacent stormwater drainage features. The final plans must provide proper inlet protection for the stormwater drainage inlets on or adjacent to the site to ensure the stormwater drainage system will not be obstructed with construction debris.
38. P.E. Certification: That prior to the issuance of a Certificate of Occupancy for any phase, the applicant shall provide a certification, signed and sealed by a North Carolina-licensed Professional Engineer, that the stormwater management facilities are constructed in accordance with the approved plans and specifications.

#### Water, Sewer, and Other Utilities

39. Utility/Lighting Plan Approval: That the final utility/lighting plan shall be approved by Orange Water and Sewer Authority, Duke Energy Company, and other local utility service providers, and the Town Manager before issuance of a Zoning Compliance Permit. The property owner shall be responsible for assuring that these utilities can continue to serve the development. In addition, detailed construction drawings shall be submitted to OWASA for review/approval prior to issuance of a Zoning Compliance Permit.
40. Lighting Plan: That prior to issuance of a Zoning Compliance Permit, the applicant shall submit site plans and other required documents to satisfy the lighting requirements of Section 5.11 of the Land Use Management Ordinance including submission of a lighting plan, demonstrating compliance with Town standards, sealed by a Professional Engineer, for Town Manager approval.
41. Relocation of Overhead Utilities Underground: Prior to a Certificate of Occupancy it will be necessary to provide for the underground installation of all public utilities that are currently located overhead on the site except for 3 phase or greater electric lines.
42. Water/Sewer Line Construction: That all public water and sewer plans be approved by OWASA and constructed according to their standards. Where sewer lines are located beneath drive aisles and parking areas construction methods approved by OWASA shall be employed, to ensure that sewer lines will not be damaged by heavy service vehicles. That

prior to issuance of a Zoning Compliance Permit, final plans shall be approved by OWASA and the Town Manager.

43. OWASA Approval: That prior to issuance of a Zoning Compliance Permit, easement plats and documentation as required by OWASA and the Town Manager, shall be recorded.

#### Fire Safety

44. Fire Sprinklers: Any required fire sprinklers shall be installed under the NCFC prior to a Certificate of Occupancy. Prior to issuance of a Zoning Compliance Permit, the plans shall show all proposed fire department connections to such systems.
45. Hydrants Active: The applicant shall provide active fire hydrant coverage, acceptable to the Fire Department, for any areas where combustible construction materials will be stored or installed, prior to having such materials delivered to the site. All required fire hydrants must be installed, active, and accessible for the Fire Department use prior to the arrival of combustible materials on site. That fire protection systems shall be installed according to Town Ordinance, the NC Fire Code, and NFPA 13.
46. Fire Hydrant and FDC Locations: That the Final Plans shall indicate the locations of existing and proposed fire hydrants and Fire Department Connections (FDC). Fire Department Connections shall be located on the street side of the building within 100 feet of a hydrant. Hydrant spacing shall comply with the Town Design Manual. Design shall be reviewed and approved by the Town Manager prior to issuance of a Zoning Compliance Permit.
47. Firefighting Access during Construction: That as required by NC Fire Code (Section 1410.1 Required Access), vehicle access for firefighting shall be provided to all construction or demolition sites including vehicle access to within 100 feet of temporary or permanent fire department connections and hydrants. Vehicle access shall be provided by either temporary or permanent roads capable of supporting vehicle loading under all weather conditions.
48. Fire Flow Report: That a Fire Flow Report shall be reviewed and approved by the Town Manager prior to issuance of a Zoning Compliance Permit. The Fire Flow Report shall confirm that the fire flow meets the Town standard. The report must be sealed by a professional engineer licensed in North Carolina and a current Orange Water and Sewer Authority flow test must be provided with the report.
49. Premise Identification: That approved building address numbers be placed in acceptable positions to the fire code official.
50. Fire Apparatus Access Road: Any fire apparatus access roads, (any public/private street, parking lot access, fire lanes and access roadways), used for fire department access shall be all weather and designed to carry the imposed load of fire apparatus weighing at least 75,000 lbs. Fire apparatus access roads shall have a minimum width of 20' with an overhead clearance of at least 13'-6" for structures not exceeding 30' in height and shall provide access

to within 150' of all exterior portions of the building. Structures exceeding 30' in height shall be provided with an aerial apparatus access road 26' in width in the immediate vicinity of the building or portion thereof and shall provide at least one of the required access roads to be located not less than 15' and not more than 30' from the structure parallel to one entire side of the structure.

51. Fire Lane: Prior to issuance of a Certificate of Occupancy, the fire lane must be marked and signed in accordance with Town standards, with the associated plans approved by the Town Manager prior to issuance of a Zoning Compliance Permit.
52. Fire Department Connections: That the installation of FDC meet all requirements of the North Carolina Fire Protection Code.

#### Solid Waste Management and Recycling

53. Solid Waste Management Plan: That prior to issuance of a Zoning Compliance Permit a detailed Solid Waste Management Plan, including a recycling plan and a plan for managing and minimizing construction debris, shall be approved by the Town Manager. The plan shall include dimensioned, scaled details of any proposed refuse/recycling collection areas, associated screening, and protective bollards, for Phase 2. Each bulk waste container shall be labeled as to type of material to be collected.
54. Construction Waste: By Orange County Ordinance, clean wood waste, scrap metal and corrugated cardboard, all present in construction waste, must be recycled. By Orange County Ordinance, all haulers of construction waste must be properly licensed. The developer shall provide the name of the permitted waste disposal facility to which any land clearing or demolition waste will be delivered.
55. Deconstruction/Demolition: The applicant shall hold a deconstruction assessment meeting with Orange County Solid Waste Management staff (919-968-2800) concerning the buildings to be removed from this site. We also recommend the following note be placed on the final plans: "Prior to any demolition or construction activity on the site the applicant will hold a deconstruction assessment conference with the County's Solid Waste staff concerning buildings to be removed from this site. Prior to issuance of a Demolition Permit, the developer shall provide a demolition waste management plan.
56. Refuse Collection: That during Phase 1 of the project, refuse collection using roll-carts is permitted. Prior to issuance of a Certificate of Occupancy for Phase 2, it will be necessary to install a dumpster pad and enclosure for refuse collection. Prior to issuance of a Building Permit for Phase 2, the owner is to present a new refuse collection plan which evaluates the performance of refuse collection via roll-carts. This evidence will be used to assess the need for requiring a dumpster for phase 2. The site plan must include the potential location of this dumpster.

### State and Federal Approvals

57. State or Federal Approvals: Prior to issuance of a Zoning Compliance Permit, any required State or federal permits or encroachment agreements (e.g., 401 water quality certification, 404 permit) shall be approved and copies provided to the Town of Chapel Hill.
58. North Carolina Department of Transportation Approvals: Prior to issuance of a Zoning Compliance Permit, plans for any improvements to State-maintained roads or in associated rights-of-way shall be approved by NCDOT prior to issuance of a Zoning Compliance Permit.

### Miscellaneous

59. Recombination Plat: That a recombination application combining the 2 lots shall be reviewed and approved by the Town Manager. The recombination plat shall be recorded prior to issuance of a Zoning Compliance Permit.
60. Engineering Construction Permit: Prior to any work in the public right-of-way, it will be necessary to apply to the Engineering and Design Services Division and receive an Engineering Construction Permit and obtain approval from the North Carolina Department of Transportation.
61. Temporary Construction Access Agreements: Prior to issuance of a Zoning Compliance Permit the applicant shall provide construction agreements with adjacent property owners, where necessary, subject to Town Manager approval. If the abutting property is to be used a part of construction access, provide documentation of permission from the owner of said property.
62. Construction Management Plan: That a Construction Management Plan, be approved by the Town Manager prior to issuance of a Zoning Compliance Permit. The construction management plan shall: 1) indicate how construction vehicle traffic will be managed, 2) identify parking areas for on-site construction workers including plans to prohibit parking in residential neighborhoods, 3) indicate construction staging and material storage areas, 4) identify construction trailers and other associated temporary construction management structures, and 5) indicate how the project construction will comply with the Town's Noise Ordinance.
63. Traffic and Pedestrian Control Plan: That the applicant shall provide a Work Zone Traffic Control Plan for movement of motorized and non-motorized vehicles on any public street that will be disrupted during construction. The plan must include a pedestrian management plan indicating how pedestrian movements will be safely maintained. The plan must be reviewed and approved by the Town Manager prior to the issuance of a Zoning Compliance Permit. At least 5 working days prior to any proposed lane or street closure the applicant must apply to the Town Manager for a lane or street closure permit.

64. Addressing: Prior to issuance of a Zoning Compliance Permit, it will be necessary to contact the Engineering and Design Services Division for assignment of address.
65. Construction Sign Required: That the applicant shall post a construction sign at the development site that lists the property owner's representative and telephone number, the contractor's representative and telephone number, and a telephone number for regulatory information at the time of issuance of a Building Permit, prior to the commencement of any land disturbing activities. The construction sign may have a maximum of 32 square feet of display area and maximum height of 8 feet. (§5.14.3(g) of LUMO). The sign shall be non-illuminated, and shall consist of light letters on a dark background. That prior to the issuance of a Zoning Compliance Permit a detail of the sign shall be reviewed and approved by the Town Manager.
66. Open Burning: That the open burning of trees, limbs, stumps, and construction debris associated with this development is prohibited.
67. Detailed Plans: That prior to the issuance of a Zoning Compliance Permit final detailed site plans, grading plans, utility/lighting plans, stormwater management plans (with hydrologic calculations), landscape plans, and landscape maintenance plans shall be approved by the Town Manager. Such plans shall conform to plans approved by this application and demonstrate compliance with all applicable regulations and the design standards of the Land Use Management Ordinance and the Design Manual.
68. Phasing Plan: Prior to issuance of a Zoning Compliance Permit, the applicant shall obtain approval of a Phasing Plan that provides details of which improvements are to be constructed during each phase. In addition, the phasing plan shall detail which public improvements and stormwater management structures shall be completed and inspected as part of that phase prior to requesting a Certificate of Occupancy. No construction for any phase shall begin until all public improvements required in previous phases are completed to a point adjacent to the new phase; and that a note to this effect shall be placed on the final plans and plats.
69. As-Built Plans: That prior to occupancy, the applicant shall provide certified as-built plans for building footprints, parking lots, street improvements, storm drainage systems and stormwater management structures, and all other impervious surfaces. The as-built plans should be in DXF binary format using State plane coordinates and NAVD 88. The applicant shall also contact the Town's Engineering and Design Services Division for address assignment of each unit.
70. Vested Right: This Special Use Permit constitutes a site specific development plan establishing a vested right as provided by N.C.G.S. Section 160A-385.1 and Appendix A of the Chapel Hill Land Use Management Ordinance.
71. Continued Validity: That continued validity and effectiveness of this approval shall be expressly conditioned on the continued compliance with the plans and conditions listed above.

72. Non-Severability: That if any of the above conditions is held to be invalid, approval in its entirety shall be void.

BE IT FURTHER RESOLVED that the Council hereby approves the application for a Special Use Permit for the New Life Fellowship Church, located at 510 Sage Road.

This the \_\_\_\_ day of \_\_\_\_\_, 2014.

**RESOLUTION B**  
(Denying the Special Use Permit Application)

**A RESOLUTION DENYING AN APPLICATION FOR SPECIAL USE PERMIT FOR THE NEW LIFE FELLOWSHIP CHURCH, 510 SAGE ROAD (PIN 9890-32-7289 AND 9890-32-9028, PROJECT #12-110)**

BE IT RESOLVED by the Council of the Town of Chapel Hill that it finds that a Special Use Permit proposed by Shaw Design Associates, P.A., for the New Life Fellowship Church at 510 Sage Road, on property identified as a portion of Orange County Property Identifier Numbers 9890-32-7289 and 9890-32-9028, if developed according to the Site Plan dated February 18, 2011, April 8, 2011, September 20, 2011, October 21, 2011, November 15, 2011, June 14, 2012, January 23, 2013, June 10, 2013, November 19, 2013, and revised April 2, 2014, and the conditions listed below would not:

1. Be located, designed, and proposed to be operated so as to maintain or promote the public health, safety, and general welfare;
2. Comply with all required regulations and standards of the Land Use Management Ordinance;
3. Be located, designed, and operated so as to maintain or enhance the value of contiguous property; and
4. Conform with the general plans for the physical development of the Town as embodied in the Land Use Management Ordinance and in the 2020 Comprehensive Plan.

BE IT FURTHER RESOLVED that the Town Council hereby denies the application for a Special Use Permit for the New Life Fellowship Church at 510 Sage Road.

This the \_\_\_\_\_ day of \_\_\_\_\_ 2014.

# SPECIAL USE PERMIT APPLICATION



**TOWN OF CHAPEL HILL**  
**Planning Department**  
405 Martin Luther King Jr. Blvd  
Chapel Hill, NC 27514  
phone (919) 968-2728 fax (919) 969-2014  
www.townofchapelhill.org

Parcel Identifier Number (PIN): 9890-32-9028 & 9890-32-7289

Date: 1-29-13

## Section A: Project Information

Project Name: New Life Fellowship Church

Property Address: 166 Weaver Dairy Road Zip Code: 27514

Use Groups (A, B, and/or C): B Existing Zoning District: R-2

Project Description: The phased construction of a sanctuary and fellowship hall and associated parking  
utilities, grading, stormwater, erosion control, etc.

## Section B: Applicant, Owner and/or Contract Purchaser Information

### Applicant Information (to whom correspondence will be mailed)

Name: Keith Shaw, Shaw Design Associates, P.A.

Address: 180 Providence Road. Suite #8

City: Chapel Hill State: NC Zip Code: 27514

Phone: 919-493-0528 Email: keith@shawdesign.us

The undersigned applicant hereby certifies that, to the best of his knowledge and belief, all information supplied with this application is true and accurate.

Signature: \_\_\_\_\_ Date: 1-29-13

### Owner/Contract Purchaser Information:

Owner

Contract Purchaser

Name: Carolina Conference Association

Address: 2701 E. WT Harris Blvd.

City: Charlotte State: NC Zip Code: 28213

Phone: 919-493-0528 Email: keith@shawdesign.us

The undersigned applicant hereby certifies that, to the best of his knowledge and belief, all information supplied with this application is true and accurate.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



**PROJECT FACT SHEET**  
 TOWN OF CHAPEL HILL  
 Planning Department

**Section A: Project Information**

Application type: Special Use Permit Application Date: 1-29-13  
 Project Name: New Life Fellowship Church

**Use Type:** (check/list all that apply)

Office/Institutional  Residential  Mixed-Use  Other: CHURCH

**Overlay District:** (check all those that apply)

Historic District  Neighborhood Conservation District  Airport Hazard Zone

**Section B: Land Area**

Net Land Area (NLA): Area within zoning lot boundaries <b>(proposed conditions after r/w dedication)</b>		NLA=	<b>139,698.86</b>	sq. ft.
Choose one, or both, of the following (a or b), not to exceed 10% of NLA	a) Credited Street Area (total adjacent frontage) x ½ width of public right-of-way	CSA=	<b>59,006.1</b>	sq. ft.
	b) Credited Permanent Open Space (total adjacent frontage) x ½ public or dedicated open space	COS=	<b>n/a</b>	sq. ft.
TOTAL: NLA + CSA and/or COS = Gross Land Area (not to exceed NLA + 10%)		GLA=	<b>153,668.75</b>	sq. ft.

**Section C: Special Protection Areas, Land Disturbance, and Impervious Area**

**Special Protection Areas:** (check all those that apply)

Jordan Buffer  Resource Conservation District  100 Year Floodplain  Watershed Protection District

Land Disturbance (Phase 2 info shown)	Total (sq ft)
Area of Land Disturbance <b>(Phase two build out disturbance numbers shown)</b> (Includes: Footprint of proposed activity plus work area envelope, staging area for materials, access/equipment paths, all grading, including off-site clearing)	<b>106,679.44</b>
Area of Land Disturbance within RCD	<b>0</b>
Area of Land Disturbance within Jordan Buffer	<b>0</b>

Impervious Areas (Phase 2 info shown)	Existing (sq ft)	Demolition (sq ft)	Proposed (sq ft)	Total (sq ft)
Impervious Surface Area (ISA)	<b>8,513.91</b>	<b>8,513.91</b>	<b>54,767.84</b>	<b>54,767.84</b>
Impervious Surface Ratio: Percent Impervious Surface Area of Gross Land Area (ISA/GLA) %	<b>4.8% *</b>	<b>4.8% *</b>	<b>35.6%</b>	<b>35.6%</b>
If located in Watershed Protection District, % of impervious surface on 7/1/1993	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>

**\*Existing % calculated using Existing GLA (shown on plans), before R/W dedication**



# PROJECT FACT SHEET

TOWN OF CHAPEL HILL  
Planning Department

## Section D: Dimensions

Dimensional Unit (sq ft)	Existing (sq ft)	Demolition (sq ft)	Proposed (sq ft)	Total (sq ft)
Number of Buildings	7	7	1	1
Number of Floors	1	1	1	1
Recreational Space				

Residential Space				
Dimensional Unit (sq ft)	Existing (sq ft)	Demolition (sq ft)	Proposed (sq ft)	Total (sq ft)
Floor Area (all floors – heated and unheated)	3,860.30	3,860.30		0
Total Square Footage of All Units	3,860.30	3,860.30		0
Total Square Footage of Affordable Units				
Total Residential Density	0.29 units/acre			0
Number of Dwelling Units	1	1		0
Number of Affordable Dwelling Units				
Number of Single Bedroom Units				
Number of Two Bedroom Units				
Number of Three Bedroom Units				

Non-Residential Space (Gross Floor Area in Square Feet)					
Use Type	Existing	Proposed	Uses	Existing	Proposed
Commercial					
Restaurant			# of Seats		
Government					
Institutional					
Medical					
Office					
Hotel			# of Rooms		
Industrial					
Place of Worship	0	13,195	# of Seats	0	300
Other					

Dimensional Requirements		Required by Ordinance	Existing	Proposed
Setbacks (minimum)	Street	26'	26'	26'
	Interior (neighboring property lines)	11'	11'	11'
	Solar (northern property line)	13'	13'	13'
Height (maximum)	Primary	29'		
	Secondary	50'		
Streets	Frontages	52'	939.52'	939.52'
	Widths		18' / 50'	18' / 50'



# PROJECT FACT SHEET

TOWN OF CHAPEL HILL  
Planning Department

## Section F: Adjoining or Connecting Streets and Sidewalks

(Note: For approval of proposed street names, contact the Engineering Department)

Street Name	Right-of-way Width	Pavement Width	Number of Lanes	Existing Sidewalk*	Existing curb/gutter
Weaver Dairy Road	60'	18'	2	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
Future Sage Road	150' / 160'	50'	4	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> Yes

List Proposed Points of Access (Ex: Number, Street Name): 1 off of Weaver Dairy Road

\*If existing sidewalks do not exist and the applicant is adding sidewalks, please provide the following information:

Sidewalk Information			
Street Names	Dimensions	Surface	Handicapped Ramps
Sidewalks to be constructed as part of			<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
ongoing NCDOT project.			<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A

## Section G: Parking Information

Parking Spaces	Minimum	Maximum	Proposed
Regular Spaces	72	115	91
Handicap Spaces	3	5	6
Total Spaces	75	120	97
Loading Spaces	0	0	0
Bicycle Spaces	8		8
Surface Type	2" S9.5B / 10" ABC (Std. Pavement Sec.)		

## Section H: Landscape Buffers

Location (North, South, Street, Etc.)	Minimum Width	Proposed Width	Alternate Buffer	Modify Buffer
Weaver Dairy Road	20'	20'	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
Sage Road	30'	30'	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
South Property Line	20'	20'	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
South/East Property Line	20'	20'	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes



# PROJECT FACT SHEET

TOWN OF CHAPEL HILL  
Planning Department

## Section I: Land Use Intensity

Existing Zoning District: R-2

Proposed Zoning Change (if any): N/A

Note: Refer to Table 3.8-1 (Dimensional Matrix) in the Land Use Management Ordinance for help completing this table.

Zoning – Area – Ratio			Impervious Surface Thresholds			Minimum and Maximum Limitations	
Zoning District(s)	Floor Area Ratio (FAR)	Recreation Space Ratio (RSR)	Low Density Residential (0.24)	High Density Residential (0.50)	Non-Residential (0.70)	Maximum Floor Area (MFA) = FAR x GLA	Minimum Recreation Space (MSR) = RSR x GLA
R-2	.093		36,880.50	76,834.38	107,568.13	14,291.19	
<b>TOTAL</b>	.093			76,834.38	107,568.13	14,291.19	
RCD Streamside		0.01					
RCD Managed		0.019					
RCD Upland							

## Section J: Utility Service

Check all that apply

<b>Water</b>	<input checked="" type="checkbox"/> OWASA	<input type="checkbox"/> Individual Well	<input type="checkbox"/> Community Well	<input type="checkbox"/> Other
<b>Sewer</b>	<input checked="" type="checkbox"/> OWASA	<input type="checkbox"/> Individual Septic Tank	<input type="checkbox"/> Community Package Plant	<input type="checkbox"/> Other
<b>Electrical</b>	<input checked="" type="checkbox"/> Underground	<input type="checkbox"/> Above Ground		
<b>Telephone</b>	<input checked="" type="checkbox"/> Underground	<input type="checkbox"/> Above Ground		
<b>Solid Waste</b>	<input checked="" type="checkbox"/> Town	<input type="checkbox"/> Private		



**SPECIAL USE PERMIT APPLICATION  
SUBMITTAL REQUIREMENTS  
TOWN OF CHAPEL HILL  
Planning Department**

The following must accompany your application. Failure to do so will result in your application being considered incomplete. For assistance with this application, please contact the Chapel Hill Planning Department (Planning) at (919)968-2728 or at [planning@townofchapelhill.org](mailto:planning@townofchapelhill.org). For detailed information, please refer to the Description of Detailed Information handout.

X	<b>Application fee</b> ( <a href="#">refer to fee schedule</a> )	Amount Paid \$	11,745.50
X	<b>Pre-application meeting</b> – with appropriate staff		
X	<b>Digital Files</b> - provide digital files of all plans and documents ( <b><u>VIA DROP BOX</u></b> )		
X	<b>Recorded Plat or Deed of Property</b>		
X	<b>Project Fact Sheet</b>		
Exmpt	<b>Traffic Impact Statement</b> – completed by Town’s consultant (or exemption)		
N/A	<b>Description of Public Art Proposal</b>		
X	<b>Statement of Justification</b>		
N/A	<b>Response to Community Design Commission and Town Council Concept Plan comments</b>		
N/A	<b>Affordable Housing Proposal, if applicable</b>		
N/A	<b>Provide existing Special Use Permit, if Modification</b>		
X	<b>Mailing list of owners of property within 1,000 feet perimeter of subject property</b> ( <a href="#">see GIS notification tool</a> )		
X	<b>Mailing fee for above mailing list</b>	Amount Paid \$	783.92
X	<b>Written Narrative describing the proposal</b>		
X	<b>Resource Conservation District, Floodplain, &amp; Jordan Buffers Determination</b> - necessary for all submittals		
N/A	<b>Jurisdictional Wetland Determination</b> – if applicable		
N/A	<b>Resource Conservation District Encroachment Exemption or Variance (determined by Planning)</b>		
N/A	<b>Jordan Buffer Authorization Certificate or Mitigation Plan Approval (determined by Planning)</b>		
X	<b>Reduced Site Plan Set (reduced to 8.5"x11")</b>		

**Stormwater Impact Statement (2 copies to be submitted)**

- a) Written narrative describing existing & proposed conditions, anticipated stormwater impacts and management structures and strategies to mitigate impacts
- b) Description of land uses and area (in square footage)
- c) Existing and proposed Impervious surface area in square feet for all subareas and project area
- d) Ground cover and uses information
- e) Soil information (classification, infiltration rates, depth to groundwater and bedrock)
- f) Time of concentration calculations and assumptions
- g) Topography (2-foot contours)
- h) Pertinent on-site and off-site drainage conditions
- i) Upstream and/or downstream volumes
- j) Discharges and velocities
- k) Backwater elevations and effects on existing drainage conveyance facilities
- l) Location of jurisdictional wetlands and regulatory FEMA Special Flood Hazard Areas



**SPECIAL USE PERMIT APPLICATION  
SUBMITTAL REQUIREMENTS  
TOWN OF CHAPEL HILL  
Planning Department**

- m) Water quality volume calculations
- n) Drainage areas and sub-areas delineated
- o) Peak discharge calculations and rates (1, 2, and 25-year storms)
- p) Hydrographs for pre- & post-development without mitigation, post-development with mitigation
- q) Volume calculations and documentation of retention for 2-year storm
- r) 85% TSS removal for post-development stormwater run-off
- s) Nutrient loading calculations
- t) BMP sizing calculations
- u) Pipe sizing calculations and schedule (include HGL & EGL calculations and profiles)

**Plan Sets (8 copies to be submitted no larger than 24"x36")**

Plans should be legible and clearly drawn. All plan sets sheets should include the following:

- Project Name
- Legend
- Labels
- North Arrow (North oriented toward top of page)
- Property Boundaries with bearing and distances
- Scale (Engineering), denoted graphically and numerically
- Setbacks
- Streams, RCD Boundary, Jordan Riparian Buffer Boundary, Floodplain, and Wetlands Boundary, where applicable
- Revision dates and professional seals and signatures, as applicable

**Cover Sheet**

- a) Include Project Name, Project fact information, PIN, Design team

**Area Map**

- a) Project name, applicant, contact information, location, PIN, & legend
- b) Dedicated open space, parks, greenways
- c) Overlay Districts, if applicable
- d) Property lines, zoning district boundaries, land uses, project names of site and surrounding properties, significant buildings, corporate limit lines
- e) Existing roads (public & private), rights-of-way, sidewalks, driveways, vehicular parking areas, bicycle parking, handicapped parking, street names.
- f) 1,000' notification boundary

**Existing Conditions Plan**

- a) Slopes, soils, environmental constraints, existing vegetation, and any existing land features
- b) Location of all existing structures and uses
- c) Existing property line and right-of-way lines



**SPECIAL USE PERMIT APPLICATION  
SUBMITTAL REQUIREMENTS  
TOWN OF CHAPEL HILL  
Planning Department**

- d) Existing utilities & easements including location & sizes of water, sewer, electrical, & drainage lines
- e) Nearest fire hydrants
- f) Nearest bus shelters and transit facilities
- g) Existing topography at minimum 2-foot intervals and finished grade
- h) Natural drainage features & water bodies, floodways, floodplain, RCD, Jordan Buffers & Watershed boundaries

### Detailed Site Plan

- a) Existing and proposed building locations
- b) Description & analysis of adjacent land uses, roads, topography, soils, drainage patterns, environmental constraints, features, existing vegetation, vistas (on & off-site)
- c) Location, arrangement, & dimension of vehicular parking, width of aisles and bays, angle of parking, number of spaces, handicapped parking, bicycle parking . Typical pavement sections & surface type
- d) Location of existing and proposed fire hydrants
- e) Location and dimension of all vehicle entrances, exits, and drives
- f) Dimensioned street cross-sections and rights-of-way widths
- g) Pavement and curb & gutter construction details
- h) Dimensioned sidewalk and tree lawn cross-sections
- i) Proposed transit improvements including bus pull-off and/or bus shelter
- j) Required landscape buffers (or proposed alternate/modified buffers)
- k) Required recreation area/space (including written statement of recreation plans)
- l) Refuse collection facilities (existing and proposed) or shared dumpster agreement
- m) Construction parking, staging, storage area, and construction trailer location
- n) Sight distance triangles at intersections
- o) Proposed location of street lights and underground utility lines and/or conduit lines to be installed
- p) Easements
- q) Clearing and construction limits
- r) Traffic Calming Plan – detailed construction designs of devices proposed & associated sign & marking plan

### Stormwater Management Plan

- a) Topography (2-foot contours)
- b) Existing drainage conditions
- c) RCD and Jordan Riparian Buffer delineation and boundary (perennial & intermittent streams, note ephemeral streams on site)
- d) Proposed drainage and stormwater conditions
- e) Drainage conveyance system (piping)
- f) Roof drains
- g) Easements
- h) BMP plans, dimensions, details, and cross-sections
- i) Planting and stabilization plans and specifications



### **Landscape Protection Plan**

- a) Rare, specimen, and significant tree survey within 50 feet of construction area
- b) Rare and specimen tree critical root zones
- c) Rare and specimen trees proposed to be removed
- d) Certified arborist tree evaluation, if applicable
- e) Significant tree stand survey
- f) Clearing limit line
- g) Proposed tree protection /silt fence location
- h) Pre-construction/demolition conference note
- j) Landscape protection supervisor note
- k) Existing and proposed tree canopy calculations, if applicable

### **Planting Plan**

- a) Dimensioned and labeled perimeter landscape bufferyard
- b) Off-site buffer
- c) Landscape buffer and parking lot planting plan (including planting strip between parking and building, entryway planting, and 35% shading requirement)

### **Steep Slope Plan**

- a) Classify and quantify slopes 0-10%, 10-15%, 15-25% and 25% and greater
- b) Show and quantify areas of disturbance in each slope category
- c) Provide/show specialized site design and construction techniques

### **Grading and Erosion Control Plan**

- a) Topography (2-foot contours)
- b) Limits of Disturbance
- c) Pertinent off-site drainage features
- d) Existing and proposed impervious surface tallies

### **Streetscape Plan, if applicable**

- a) Public right-of-way existing conditions plan
- b) Streetscape demolition plan
- c) Streetscape proposed improvement plan
- d) Streetscape proposed utility plan and details
- e) Streetscape proposed pavement/sidewalk details
- f) Streetscape proposed furnishing details
- g) Streetscape proposed lighting details



### **Solid Waste Plan**

- a) Preliminary Solid Waste Management Plan
- b) Existing and proposed dumpster pads
- c) Proposed dumpster pad layout design
- d) Proposed heavy duty pavement locations and pavement construction detail

### **Construction Management Plan**

- a) Construction trailer location
- b) Location of construction personnel parking and construction equipment parking
- c) Location and size of staging and materials storage area
- d) Description of emergency vehicle access to and around project site during construction
- e) Delivery truck routes shown or noted on plan sheets

### **Energy Management Plan**

- a) Description of how project will be 20% more energy efficient than ASHRAE Standards
- b) Description of utilization of sustainable forms of energy (Solar, Wind, Hydroelectric, and Biofuels)
- c) Participation in NC GreenPower program
- d) Description of how project will ensure indoor air quality, adequate access to natural lighting, and allow for proposed utilization of sustainable energy
- e) Description of how project will maintain commitment to energy efficiency and reduced carbon footprint over time
- f) Description of how the project's Transportation Management Plan will support efforts to reduce energy consumption as it affects the community

### **Detailed Exterior Elevations**

- a) Detailed exterior elevations showing materials, colors, fenestration, entrances, roof forms, architectural detailing such as lintels, cornices, brick bond, and appurtenant fixtures, such as lighting



SHAW DESIGN ASSOCIATES, P.A.

180 Providence Road, Suite 8  
Chapel Hill, North Carolina 27514  
919-493-0528

## STATEMENT OF JUSTIFICATION

New Life Fellowship Church  
166 Weaver Dairy Road, Chapel Hill, NC 27514  
April 14, 2014

### **Introduction**

New Life Fellowship SDA Church (NLF) requests a Special Use Permit (SUP) for the subject property to allow the development of both phases of the new church facility. The growing congregation of the New Life Fellowship Church currently worships in a rented facility. They wish to create a permanent home to be built in the following phases:

- Phase 1 – Fellowship Hall & Classroom Building, to serve initially as the main church facility and used for services until the sanctuary portion is constructed
- Phase 2 – Sanctuary (300 person capacity), suitable not only for worship services but for weddings and concerts

The subject property is situated at the new intersection of Sage Road and Weaver Dairy Road and was purchased in 2005 from the Davis family who spent the majority of their life at that location. NLF agreed to allow the Davis family to remain in their home until they no longer were in need of the home. Currently, the house is occupied by an individual in need of a home. No rental income is being received.

The property is currently zoned R-2 and is located amongst the residential communities found along Weaver Dairy Road. All proposed development is allowed within the zoning guidelines.

The applicant believes that the requested SUP modification is justified by all of the required findings prescribed in The Town of Chapel Hill Land Use Management Ordinance (LUMO) Section 4.5.



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**Finding #1: That the use and development is located, designed, and proposed to be operated so as to maintain or promote the public health, safety, and general welfare.**

**a. Traffic conditions in the vicinity, including the effect of additional traffic on streets, street intersections, and sight line at street intersections and driveways.**

The proposed development has one planned entry off of Sage Rd. A turning is already established at the site's access point. The majority of church use and therefore vehicular traffic will occur on weekends when typical traffic quantities are reduced. Since the project meets the TIA exemption guidelines for an exception and is expected to produce 364 new trips per day, an exemption was granted in October of 2012. Primary access will be via Sage Road. No sight lines will be impacted by the proposed building which is located away from proposed driveway entry.

**b. Provision for services and utilities, including sewer, water, electric, garbage collection, and fire protection.** Public utilities are located adjacent to the property. Sewer access is available through a manhole located on Perry Creek Road. Due to grading and drainage infrastructures installed during construction of Sage Road extension, the septic line could not be located in the established utilities easement. The proposed location of the septic connection was established through consultations with NCDOT and OWASA. Water and electrical services are available along Weaver Dairy Road. Two new fire hydrants are proposed for the property. Piping for these hydrants tap in to the water main on the South side of Weaver Dairy Road. Design of the sanctuary will not require the need for a Sprinkler system. A 12' x 4' concrete pad for roll-out trash bins is proposed along the Weaver Dairy sidewalk. There is not enough solid waste generated to warrant an unsightly dumpster. In April of 2014 a 1" water line and meter was installed and connected to the existing home. The well for the home was abandoned.

**c. Drainage plans.** In general, "clean" runoff from undisturbed areas are directed away from the bioretention area, while runoff from the impervious areas is directed to the bioretention area for treatment prior to exiting the development area and entering the ditch/pipe system installed by the NCDOT contractor during construction of the extension to Sage Rd. Offsite runoff



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entering the site continues to mimic its existing drainage pattern and is directed away from the treatment area.

**d. Relationship of the site to the Chapel Hill Floodway/Floodplain/Resource Conservation District.**

In July of 2010, the Town Public Works Department performed a stream determination on the referenced project and determined that the property does not contain any perennial, intermittent, or ephemeral streams. There are no Resource Conservation District areas on the referenced project's site.

**e. Other considerations relevant to the proposed use.**

Many of the existing stands of mature trees will be preserved and will serve as visual and sound buffers. Parking areas have been centrally located to minimize light spill and visual impact. Bicycle storage and park-and-ride opportunities will provide safe and convenient access to transit. The Department of Transportation has installed bicycle lanes along Sage Road and were not required to do so along the portion of Weaver Dairy they developed. New Life Fellowship is proposing adding the remaining sidewalk to the edge of property on Weaver Dairy during phase 2 of the project. This will promote pedestrian traffic for both of the affected streets. Mobile homes which were on the property when it was purchased have been removed and recycled. Old and dilapidated structures are scheduled for removal once the demolition permit process is finalized.

**Finding #2: That the use and development complies with all required regulations and standards of this chapter, including all applicable provisions of Article 3, 4, and 5 and the applicable specific standards contained in Sections 6, and with all other applicable regulations.**

**a. Compliance with Land Use Management Ordinance (LUMO) and land development regulations and standards, including street improvements, screening, and landscape buffer requirements, setbacks, height, parking and intensity regulations.**

Vehicular access to the site has been located on the Weaver Dairy Rd frontage, which will become a minor street once Sage Road Extension is completed. Landscape buffers along adjacent residential property are being provided according to the standards established by the Town of Chapel Hill. A dense tree stand will remain along the western and northeastern



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portions of the property. All setback and height restrictions have been addressed and are in conformance with the LUMO. At the completion of phase two, the proposed 97 parking spaces falls within the maximum and minimum allowed.

**b. Provision of recreation and open space.** A dedicated play space is centrally located and surrounded by the parking lot. In addition, there are multiple natural areas for children to play surrounding the facility.

**c. Other considerations relevant to the proposed use.** The church parking lots can service the nearby planned bus stop as well as serve as a park-and-ride lot during the work week. Bicycle parking areas will also encourage the use of the Chapel Hill transit system.

**Finding #3: That the use of development is located, designed, and proposed to be operated so as to maintain or enhance the value of contiguous property, or that the use or development is a public necessity.**

**a. Relationship of the proposed uses and the character of development to surrounding uses, including possible conflicts between uses and how conflicts will be handled.** Surrounding the subject site are multiple residential neighborhoods as well as two existing churches located within a half mile. No conflicts exist between the proposed usage and the surrounding neighborhood. The new facility will be made available for neighborhood meetings and can act as a central gathering place for the community.

**b. Conformance of the proposed use with the Zoning Atlas and the Comprehensive Plan for development of Chapel Hill and its environs.** The proposed use conforms to all zoning parameters set forth in LUMO Article 3.

**c. Effect on the value of surrounding properties.** If there is any impact on adjacent properties, it will be a positive. Site improvements include removing existing house trailers and dilapidated structures. The subtle architecture of the facility will incorporate natural materials and earth tone colors and blend into the surroundings.



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**d. If the use is a public necessity, state the reasons for this designation.** The proposed development is not deemed a public necessity.

**e. Other considerations relevant to the proposed use.** The proposed development entails demolishing several abandoned dilapidated structures.

**Finding #4: That the use or development conforms with the general plans for the physical development of the Town as embodied in this chapter and in the Comprehensive Plan.**

**a. Conformance of the proposed development with the Zoning Atlas and the Comprehensive Plan for development of Chapel Hill and its environs.** The proposed use conforms to all zoning parameters set forth in LUMO Article 3. The 2020 comprehensive plan places this development in Area 4: North 15-501. Key considerations in this area include, enhanced bicycle and pedestrian traffic, redevelopment opportunities, and access to the proposed light rail system. The congregation is open to allowing the church parking lot to be utilized as a park and ride facility if it is financially feasible. A new bus stop is being installed by NCDOT adjacent to the property for both east and west lanes of Sage road extension.

**b. Relationship of the site to the Chapel Hill Resource Conservation District, the Chapel Hill Thoroughfare Plan, the Greenways Plan, the Land Use Plan, and the Urban Services Area.** The subject property is located in the North/Dry Creek Trail system area. With Perry Creek road's connection to Sage Rd. Extension, access to the trail from the proposed parking lot is convenient and available to the community.

**c. Other considerations relevant to the proposed use.** Public art is proposed for both phases of the project. During Phase 1, children's artwork will be displayed in the hallways of the Fellowship Hall. In Phase 2, the art display areas will be expanded into the new Lobby and Sanctuary interior spaces. Congregation members, children, and local artisans will be encouraged to contribute artwork for these spaces.



## SHAW DESIGN ASSOCIATES, P.A.

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Chapel Hill, North Carolina 27514  
919-493-0528 / 919-401-1905 fax

### **Summary Statement**

The congregation of New Life Fellowship is anxious to have a place they can call home and open its doors to the community. For over 12 years, various facilities around the community have been rented for the purpose of having Saturday morning services. A new facility is needed for the growing congregation. Once established at Weaver Dairy Road, New Life will become an asset to the surrounding community by providing a place of worship, gathering spaces for community and family events, as well as services to help those in need.



## SHAW DESIGN ASSOCIATES, P.A.

180 Providence Road, Suite 8  
Chapel Hill, North Carolina 27514  
919-493-0528

# WRITTEN NARRATIVE

New Life Fellowship Church  
166 Weaver Dairy Road, Chapel Hill, NC 27514  
April 14, 2014

The growing congregation of the New Life Fellowship Church has been part of the Chapel Hill community for over 12 years. Currently, worship services are held at Farrington Road Baptist Church on Saturday mornings. It is the desire of the congregation to build a church facility located at 166 Weaver Dairy Rd, a 3.5 acre parcel of land which is zoned R-2. The project will be phased as described below.

- Phase 1 –Existing abandoned structures will be removed and materials recycled where possible. The existing home on the site will remain intact for Phase 1.

Construction of a 6,000 sq. ft. Fellowship Hall, Office & Classroom (church use only) building will serve initially as the main church facility until the sanctuary portion is constructed. The Phase 1 building will have an occupant load of 204 people, requiring 51 parking spaces. A parking lot with 78 parking spaces is planned.

- Phase 2 – The existing on-site home will be removed and materials recycled where possible. The Phase 1 parking lot will be expanded into the area where this home now stands, adding 19 additional spaces to accommodate for the increased occupant load of 87 that the new Phase 2 addition will add.

Construction of a 7,195 sq. ft. Entrance Lobby and dedicated 300-person Sanctuary will be added on to the Phase 1 Fellowship Hall, Office & Classroom building.

The Special Use Permit being applied for includes both phases of this development. Each phase will provide appropriate parking and will be in keeping with the LUMO regulations.

New Life Fellowship Church is anxious to have a place they can call home and open its doors to the community. Once established at Weaver Dairy Road, New Life Fellowship will become an asset to the surrounding community by providing a place of worship, gathering spaces for community and family events, as well as services to help those in need.



**EXEMPTION FORM  
ENGINEERING DEPARTMENT**

**Request for exemption received from:** Shaw Design Associates, 180 Providence Road,  
Suite #8; Chapel Hill, NC 27514; Telephone: (919)492-0528

**Date:** October 24, 2012

**Type of exemption requested:** TRAFFIC IMPACT ANALYSIS (TIA)

**Type of justification submitted:** a) Written Request with Trip Analysis  
b) Site Plan

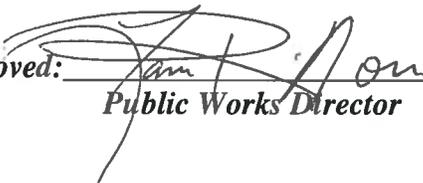
**Key reasons why we support this exemption:**

- a) The proposed expansion of the Church is expected to generate 364 new trips per day.
- b) Meets the Town TIA Guidelines for an Exemption.

**Based upon the attached request for exemption and supporting information, we recommend that the Town Manager approve an exemption for:**

New Life Fellowship SDA Church Expansion

Signed:  10/24/12  
Traffic Engineer Date

Approved:  10/24/12  
Public Works Director Date

**Attachment(s):** a) Written request from the Applicant/Developer  
b) Site Plan and Fee

**RETURN TO ENGINEERING DEPARTMENT WHEN SIGNED**

October 15, 2012

Keith R. Shaw, AIA  
Shaw Design Associates, P.A.  
180 Providence Road, Suite #8  
Chapel Hill, North Carolina 27514  
(919)-492-0528  
[keith@shawdesign.us](mailto:keith@shawdesign.us)

[Sent via email]

**Subject: New Life Fellowship SDA Church**  
Weaver Dairy Rd. / Sage Rd. Extension Intersection  
Chapel Hill, NC

Dear Mr. Shaw:

This letter presents the findings of a trip generation study prepared for the proposed New Life Fellowship SDA Church to determine whether a traffic impact analysis would be warranted. The New Life Fellowship SDA Church is to be located at the intersection of Weaver Dairy Road and Sage Road. At full build-out of the development, the church is expected to consist of a 300 seat sanctuary. The Town has indicated that a traffic impact analysis would be required if the development generates more than 500 vehicle trips per day.

### Trip Generation

The proposed development is expected to include a 300 seat sanctuary. The ITE Trip Generation Manual indicates that the peak traffic period for this land use occurs on a weekend.

An overall trip reduction of 20% was taken based on the following:

- 10% reduction based on bike and pedestrian trips. A transit stop is also located near the site, which is anticipated to carry some site traffic.
- 10% reduction based on the ride sharing program. The rideshare program is administered by church staff. The campus ministry leaders organize the ride sharing program for students attending church services. This program provides transportation to and from the church for many church members and reduces vehicle trips.

Average weekend daily and maximum weekend peak hour trips for the proposed development were estimated utilizing methodology contained within the ITE *Trip Generation* Manual, 8<sup>th</sup> Edition. Table 1 has a detailed summary of the trip generation potential for the site.

**Table 1  
Site Trip Generation**

Land Use	ITE Code	Size	Unit	24 Hour Volumes	Weekend Peak Hour Trips*	
					Enter	Exit
Church	560	300	Seats	555	93	90
Reduction (20%) for bikes, transit, pedestrian trips & ride sharing program				-111	-19	-18
Primary Trips for Proposed Site				444	74	72
Trips from Existing Church				-80	-40	-40
<b>Net Increase in New Trips</b>				<b>364</b>	<b>34</b>	<b>32</b>

\*Weekend Peak Hour Trips reference the higher trip generation values between Sat. and Sun. trips.

The proposed church is expected to generate a total of 444 trips per day when reductions for pedestrians, transit, bike, and the ride sharing program are taken into consideration. The site is expected to generate 146 peak hour trips (74 entering, 72 exiting) during the weekend peak hour.

It is our understanding that the Town will allow consideration of trips from the existing church facility that will be relocated to the proposed site. Based on our discussions, we understand the existing church generated approximately 80 trips (40 entering and 40 exiting) during the recent weekend service. These daily trips and peak hour trips were subtracted from the total new trip generation to determine the net increase in traffic on the roadway network.

Conclusions

Full build-out of the development is not expected to generate more than 500 daily vehicular trips; therefore, a Traffic Impact Analysis (TIA) report is not required for the development based on the Town code. With consideration for multi-modal transportation facilities, a rideshare program, and removing existing church trips, the site is expected to generate approximately 364 daily trips on a weekend, which is anticipated to be the highest traffic day of the week for this site.

The proposed church is located in an area that accommodates multiple modes of transportation which decreases the number of vehicular trips to/from the site. Sidewalks are provided on the surrounding roadways and bike racks are proposed on site. A transit stop is located near the site.

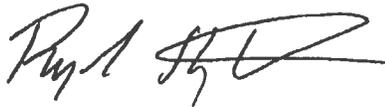
In addition to providing multiple transportation modes for the development, traffic on Weaver Dairy Road is expected to decrease in the future with completion of the Sage Road Extension project. Construction is

currently under way for the Sage Road Extension located to the east of the site. This project will also provide sidewalks and accommodate other modes of transportation which can be used by the church.

It should be noted that the adjacent roadways are designed based on the peak hour traffic for a typical weekday since the weekday traffic volumes are generally higher than the weekend traffic volumes.

If you have any questions relative to this letter, please do not hesitate to contact me.

Sincerely,  
*Ramey Kemp & Associates, Inc.*



Rynal Stephenson, P.E.  
Regional Manager



10-15-12

NC Corporate License # C-0910

Attachments – Site Plan  
Trip Generation Output

Summary of Multi-Use Trip Generation  
 Saturday and Sunday Driveway Volumes  
 October 05, 2012

Land Use	Size	Saturday			Sunday		
		24 Hr 2-Way Vol.	Peak Hour Enter	Peak Hour Exit	24 Hr 2-Way Vol.	Peak Hour Enter	Peak Hour Exit
Church	300 Seats	270	78	102	555	93	90
Total Driveway Volume		270	78	102	555	93	90
Total Peak Hour Pass-By Trips			0	0			
Total Pk Hr Vol Added to Adjacent Streets			78	102			

Note: A zero indicates no data available.

TRIP GENERATION BY MICROTRANS



**EarthCentric Engineering, Inc.**  
 204 W. Clay Street  
 Mebane, NC 27302  
 Phone: (919) 583-9041  
 Fax: (919) 584-3234  
 E-Mail: Phil.Koch@EarthCentric.com  
 Phil.Koch - NCPE #2284

**NEW LIFE FELLOWSHIP CHURCH**  
 CHAPEL HILL, NORTH CAROLINA  
 (PHASE 2)  
**SITE PLAN**

REV.	DATE	DESCRIPTION	BY
1	08/21/14	PRELIMINARY RESPONSE	PK
2	09/01/14	CHANGING SUBMITTAL	PK
3	09/01/14	CHANGING SUBMITTAL	PK
4	09/01/14	CHANGING SUBMITTAL	PK
5	09/01/14	CHANGING SUBMITTAL	PK
6	09/01/14	CHANGING SUBMITTAL	PK
7	09/01/14	CHANGING SUBMITTAL	PK
8	09/01/14	CHANGING SUBMITTAL	PK
9	09/01/14	CHANGING SUBMITTAL	PK
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48	09/01/14	CHANGING SUBMITTAL	PK
49	09/01/14	CHANGING SUBMITTAL	PK
50	09/01/14	CHANGING SUBMITTAL	PK

**C3.1**  
 SHEET NO.



NO.	DESCRIPTION	AREA
1	1.484' x 7' = 213 OCCUPANT LOAD	1,484' x 7' = 213
2	213' x 14' = 2,982 OCCUPANT LOAD	213' x 14' = 2,982
3	SHRIMP & LOBBY, CAPACITY 300	300
4	ST. ADRIAN'S OCCUPANT LOAD	300
5	300' x 4' = 75 RED. PARKING SPACES, 97 PROVIDED	300' x 4' = 75
6	TOTAL PROPOSED SQUARE FOOTAGE = 13,195 SF	13,195

- GENERAL NOTES:**
1. EXISTING BOUNDARY AND DIMENSIONS ARE SHOWN FROM SURVEY DATA SUPPLIED BY A. J. AND ASSOCIATES, INC. THE BOUNDARY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SURVEY DATA AND SHALL BE VERIFIED BY THE CONTRACTOR.
  2. ALL DIMENSIONS SHALL BE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
  3. ALL DIMENSIONS SHALL BE TO THE CENTERLINE UNLESS OTHERWISE NOTED.
  4. ALL DIMENSIONS SHALL BE TO THE FACE UNLESS OTHERWISE NOTED.
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**PHASING INFORMATION:**

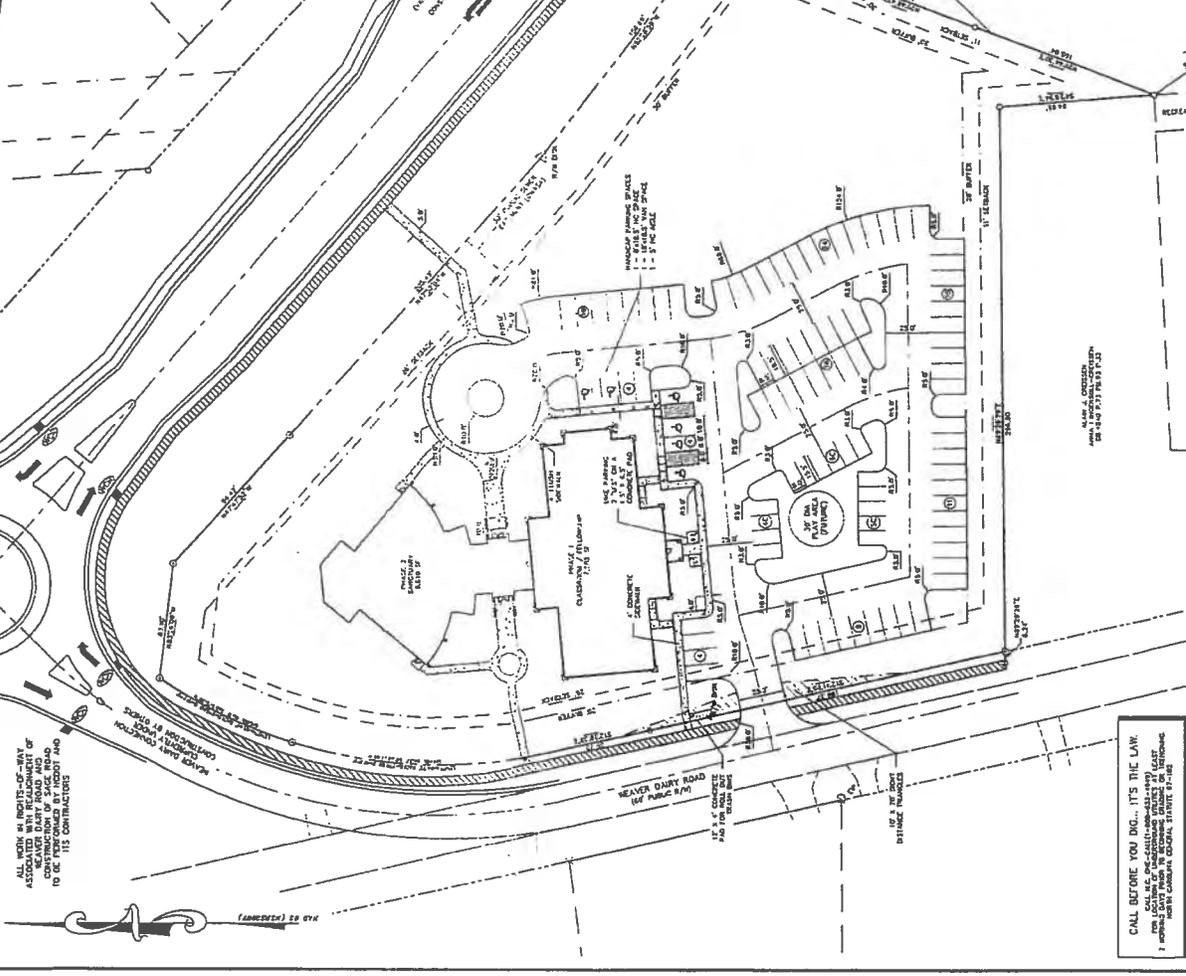
**PHASE 1:**

- 1.484' x 7' FELLOWSHIP HALL
- 1.484' x 7' = 213 OCCUPANT LOAD

**PHASE 2:**

- 213' x 14' = 2,982 OCCUPANT LOAD
- SHRIMP & LOBBY, CAPACITY 300
- ST. ADRIAN'S OCCUPANT LOAD
- 300' x 4' = 75 RED. PARKING SPACES, 97 PROVIDED

TOTAL PROPOSED SQUARE FOOTAGE = 13,195 SF



**CALL BEFORE YOU DIG... IT'S THE LAW!**  
 CALL 811 OR VISIT [www.nc811.com](http://www.nc811.com)  
 TO REPORT ANY POTENTIAL PROBLEMS WITH UTILITIES  
 BEFORE YOU BEGIN ANY EXCAVATION WORK.  
 NORTH CAROLINA, STATUTE 87-116

# NEW LIFE FELLOWSHIP SDA CHURCH

## 166 WEAVER DAIRY ROAD, CHAPEL HILL NC

**GENERAL NOTES**

- EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM SURVEY DATA SUPPLIED BY R. S. JONES AND ASSOCIATES, INC. SITE PLAN DESIGN BY SHAW DESIGN ASSOCIATES.
- WORK WITHIN PUBLIC RIGHT-OF-WAYS SHALL BE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REQUIREMENTS, NOTIFICATIONS, STANDARDS AND POLICIES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL MEASURES FOR ALL WORK W/IN PUBLIC R/W PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND THE N.C. SUPPLEMENT TO THE MUTCD, AND LOCAL CITY INSPECTORS DIRECTION.
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- CONTRACTOR IS FULLY RESPONSIBLE FOR CONTACTING ALL APPROPRIATE PARTIES AND ASSURING THAT UTILITIES ARE LOCATED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. CALL NC ONE CALL (PREVIOUSLY 811) AT 1-800-632-4949 FOR UTILITY LOCATING SERVICES 48 HOURS PRIOR TO COMMENCEMENT OF ANY WORK. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
- UNDERGROUND UTILITIES SHOWN USING BEST AVAILABLE INFORMATION. ALL LOCATIONS SHALL BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE MORE UNDERGROUND UTILITIES THAN ARE SHOWN HEREON. CONTRACTOR SHALL FIELD LOCATE ALL UTILITIES PRIOR TO ANY EXCAVATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES TO REMAIN DURING ALL DEMOLITION AND CONSTRUCTION ACTIVITIES.
- ALL CLEARING, GRUBBING AND UNSUITABLE FILL MATERIAL SHALL BE DISPOSED OF LEGALLY.
- ALL PAVEMENT, CURB, STORM DRAINAGE PIPE, AND STRUCTURES TO BE REMOVED SHALL BE HAULED OFFSITE AND DISPOSED OF LEGALLY.
- SIGNAGE SHALL BE LOCATED AS SHOWN. SIGNAGE SHALL BE CONSTRUCTED IN ACCORDANCE WITH LOCAL STANDARDS.
- SITE LIGHTING SHALL AS SHOWN, AND SHALL BE SUFFICIENT TO PROPERLY ILLUMINATE THE SITE IN ACCORDANCE WITH LOCAL STANDARDS.
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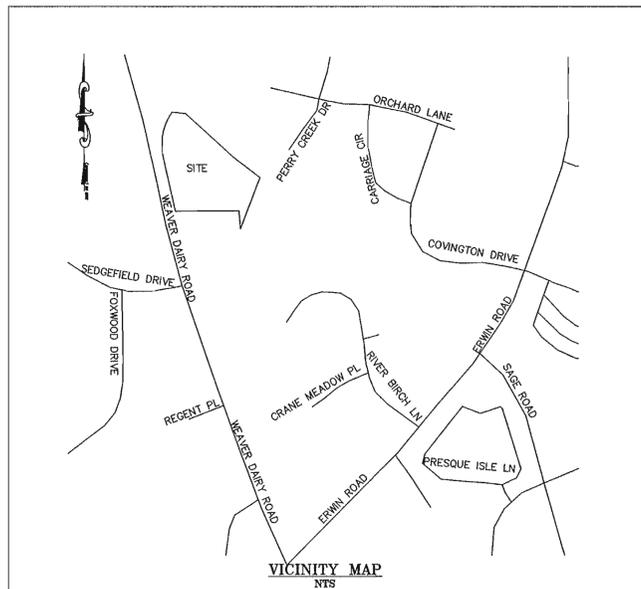
**CONTRACTOR SHALL NOT MAKE ANY MODIFICATIONS TO THE APPROVED DRAWINGS WITHOUT PRIOR APPROVAL OF BOTH THE DESIGN ENGINEER AND LOCAL INSPECTOR.**

**GRADING & STORM DRAINAGE NOTES:**

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LOCAL CONSTRUCTION STANDARDS, SPECIFICATIONS, AND PROCEDURES AND THE NCDENR'S SEDIMENTATION AND EROSION CONTROL STANDARDS, SPECS., AND PROCEDURES.
- CONTRACTOR SHALL VERIFY THAT ALL APPLICABLE STATE AND LOCAL PERMITS REQUIRED FOR THE COMMENCEMENT OF GRADING OPERATIONS HAVE BEEN OBTAINED PRIOR TO START OF GRADING.
- CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL EXISTING UTILITIES PRIOR TO THE BEGINNING OF DEMOLITION AND/OR CONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES TO REMAIN DURING ALL CONSTRUCTION ACTIVITIES.
- ALL STORMWATER MANAGEMENT FACILITIES SHALL BE DESIGNED AND CONSTRUCTED TO MEET ALL STATE AND LOCAL REQUIREMENTS, INCLUDING 2007 STATE STANDARDS FOR WATER QUALITY AND DETENTION FACILITIES.
- EROSION CONTROL MEASURES SHALL BE PROVIDED AS NEEDED TO PROTECT ADJACENT PROPERTIES.
- CONTRACTOR SHALL PROVIDE ALL STAKING, FLAGGING AND/OR FENCING NECESSARY TO PROVIDE PROPER PROTECTION OF THE STREAM BUFFER.

**ORANGE COUNTY SOLID WASTE MANAGEMENT NOTES:**

- BY ORANGE COUNTY ORDINANCE, CLEAN WOOD WASTE, SCRAP METAL AND CORRUGATED CARDBOARD, ALL PRESENT IN CONSTRUCTION WASTE, MUST BE RECYCLED.
- BY ORANGE COUNTY ORDINANCE, ALL HAULERS OF CONSTRUCTION WASTE MUST BE PROPERLY LICENSED.
- PRIOR TO ANY DEMOLITION OR CONSTRUCTION ACTIVITY ON THE SITE, THE APPLICANT WILL HOLD A PRE-DEMOLITION/PRE-CONSTRUCTION CONFERENCE WITH THE COUNTY'S SOLID WASTE STAFF. THIS MAY BE THE SAME MEETING HELD WITH OTHER DEVELOPMENT OFFICIALS.



**LEGEND**

	NEW	EXISTING
PROPERTY LINE	---	---
EASEMENT	---	---
SETBACK	---	---
RIGHT-OF-WAY	---	---
CENTERLINES	---	---
CURB & GUTTER	---	---
EDGE OF PAVEMENT	---	---
SIDEWALK	---	---
CREEK	---	---
STRUCTURE NO.	①	①
CATCH BASIN	■	□
YARD INLET	⊗	⊗
STORM DRAINAGE JUNCTION BOX	⊙	⊙
CURB INLET	⊞	⊞
SANITARY SEWER MANHOLE	⊙	⊙
SANITARY SEWER CLEANOUT	⊙	⊙
METER BOX	⊞	⊞
VALVE	⊙	⊙
FIRE HYDRANT	⊙	⊙
FIRE DEPARTMENT CONNECTION	⊙	⊙
LIGHT POLE	⊙	⊙
UTILITY POLE AND GUY WIRE	⊙	⊙
CABLE TV LINE	---	---
ELECTRIC	---	---
FIBER OPTIC CABLE	---	---
GAS LINE	---	---
OVERHEAD UTILITY LINE	---	---
SANITARY SEWER	---	---
STORM DRAIN PIPE	---	---
TELEPHONE	---	---
WATER LINE	---	---
GRADE CONTOUR	400	400
FINISHED GRADE SPOT ELEVATION	356.44	356.44
CLEARING LIMIT/TREE LINE	---	---
LIMITS OF DISTURBANCE	---	---
DITCH OR SWALE FLOWLINE	---	---
TREE PROTECTION FENCE	---	---
SILT FENCE	---	---
FENCE	---	---
RIP RAP APRON	---	---
CHECK DAM	---	---
SEDIMENT FENCE OUTLET	---	---
INLET PROTECTION	---	---
WHEELCHAIR RAMP	---	---
ELECTRICAL TRANSFORMER	---	---

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 CALL N.C. ONE-CALL(1-800-632-4949)  
 FOR LOCATION OF UNDERGROUND UTILITIES AT LEAST  
 2 WORKING DAYS PRIOR TO BEGINNING GRADING OR TRENCHING.  
 NORTH CAROLINA GENERAL STATUTE 87-102

PROJECT DATA	
PIN #	9890-32-9028 & 9890-32-7289
TMBL#	7.26.26 & 7.25.126
TRACT#	770652 & 777310
ADDRESS:	166 WEAVER DAIRY ROAD, CHAPEL HILL
DEED REF:	BOOK: 3660 PAGE: 116
PLAT REF:	#1 BIRCHETT & DAVIS P96/144
RCD:	THIS PARCEL IS NOT LOCATED WITHIN THE RESOURCE CONSERVATION DISTRICT AS DEFINED IN THE CHAPEL HILL DEVELOPMENT / LAND USE MANAGEMENT ORDINANCE
Basin/Watershed:	CAPE FEAR / JORDAN LAKE UNPROTECTED
SOILS:	EnC - ENON & CrB - CREEDMOOR
SLOPES:	ALL SLOPES < 10% / NO STEEP SLOPES ON SITE
EXISTING USE:	SINGLE FAMILY HOME W/ OUT-BUILDINGS
EXISTING SIZE:	3.50 ACRES (152,445.99 SF) 0.18 ACRES (7,916.28 SF)
ZONE / GROUP:	CHAPEL HILL - R-2 / USE GROUP B
PROPOSED USE:	CHURCH & FELLOWSHIP HALL (300 SEATS)
PROPOSED NLA:	3.21 ACRES (139,698.86 SF)
PROPOSED GLA:	3.53 ACRES (153,668.75 SF)
MAX. FAR:	153,669 * 0.093 = 14,291 SF
MAX. HEIGHT:	29' PRIMARY / 50' SECONDARY
MIN. PARKING:	1/4 SEATS = 300/4 = 75 (ASSEMBLY)
MAX. PARKING:	1/2.5 SEATS = 300/2.5 = 120 (ASSEMBLY)
MIN. BIKE PARK:	1/50 SEATS (MIN 8) = 300/50 ≈ 8 (ASSEMBLY)

**OWNER:**  
 CAROLINA CONFERENCE  
 ASSOCIATION OF SEVENTH DAY  
 ADVENTISTS INC.  
 2701 E WT HARRIS BLVD.  
 CHARLOTTE, NC 27213

**ENGINEER:**  
 CHARLES P. KOCH P.E.  
 EARTH CENTRIC ENGINEERING, INC.  
 204 WEST CLAY STREET  
 MEBANE, NC 27302  
 PHONE: (919) 563-9041  
 FAX: (919) 304-3234  
 PHIL.KOCH@EARTHCENTRIC.COM

**ARCHITECT / SITE DESIGN:**  
 KEITH SHAW  
 SHAW DESIGN ASSOCIATES, P.A.  
 180 PROVIDENCE ROAD  
 SUITE #8  
 CHAPEL HILL, NC 27514  
 PHONE: (919) 493-0528  
 FAX: (919) 401-1905  
 KEITH@SHAWDESIGN.US

**SURVEYOR:**  
 BOBBY JONES  
 R.S. JONES & ASSOCIATES, INC.  
 201 WEST CLAY STREET  
 MEBANE, NC 27302  
 PHONE: (919) 563-3623  
 FAX: (919) 563-0086  
 BOBBYJ@RSJONESANDASSOCIATES.COM

- INDEX OF DRAWINGS:**
- C-1 COVER SHEET
  - C-2 EXIST. COND. / DEMOLITION
  - C-3 SITE PLAN
  - C-4 GRADING & STORM DRAINAGE
  - C-5 EROSION CONTROL PLAN
  - C-6 UTILITY PLAN
  - P-1 SS PLAN & PROFILE
  - D-1 EROSION CONTROL DETAILS
  - D-2 STORMWATER DETAILS
  - D-3 UTILITY DETAILS
  - D-4 SITE & PAVING DETAILS



PHASING INFORMATION:	
PHASE 1:	FELLOWSHIP & CLASSROOM BLDG. 6,000 SF
	1,430 SF FELLOWSHIP HALL
	1,430 / 7 = 204 OCCUPANT LOAD
	204/4 (51) = REQ. PARKING SPACES, 78 PROVIDED
PHASE 2:	SANCTUARY & LOBBY, CAPACITY 300
	7,195 TOTAL SF
	87 ADDITIONAL OCCUPANT LOAD
	300/4 = 75 REQ. PARKING SPACES, 97 PROVIDED
TOTAL PROPOSED SQUARE FOOTAGE = 13,195 SF	

**APPROVAL STAMP**

**EarthCentric Engineering, Inc.**  
 LICENSE #C-2638  
 204 W. Clay Street  
 Mebane, NC 27302  
 Phone: (919) 563-9041  
 Fax: (919) 304-3234  
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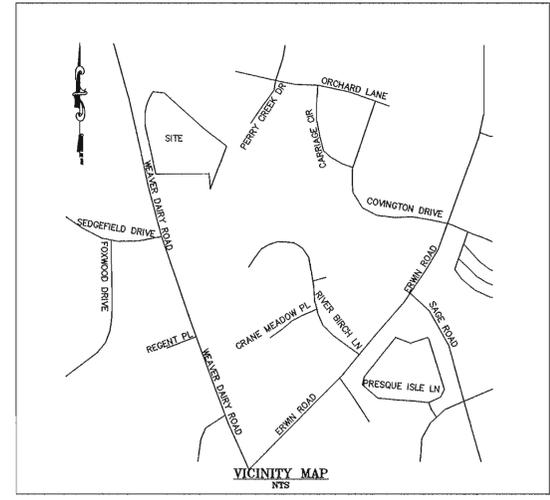
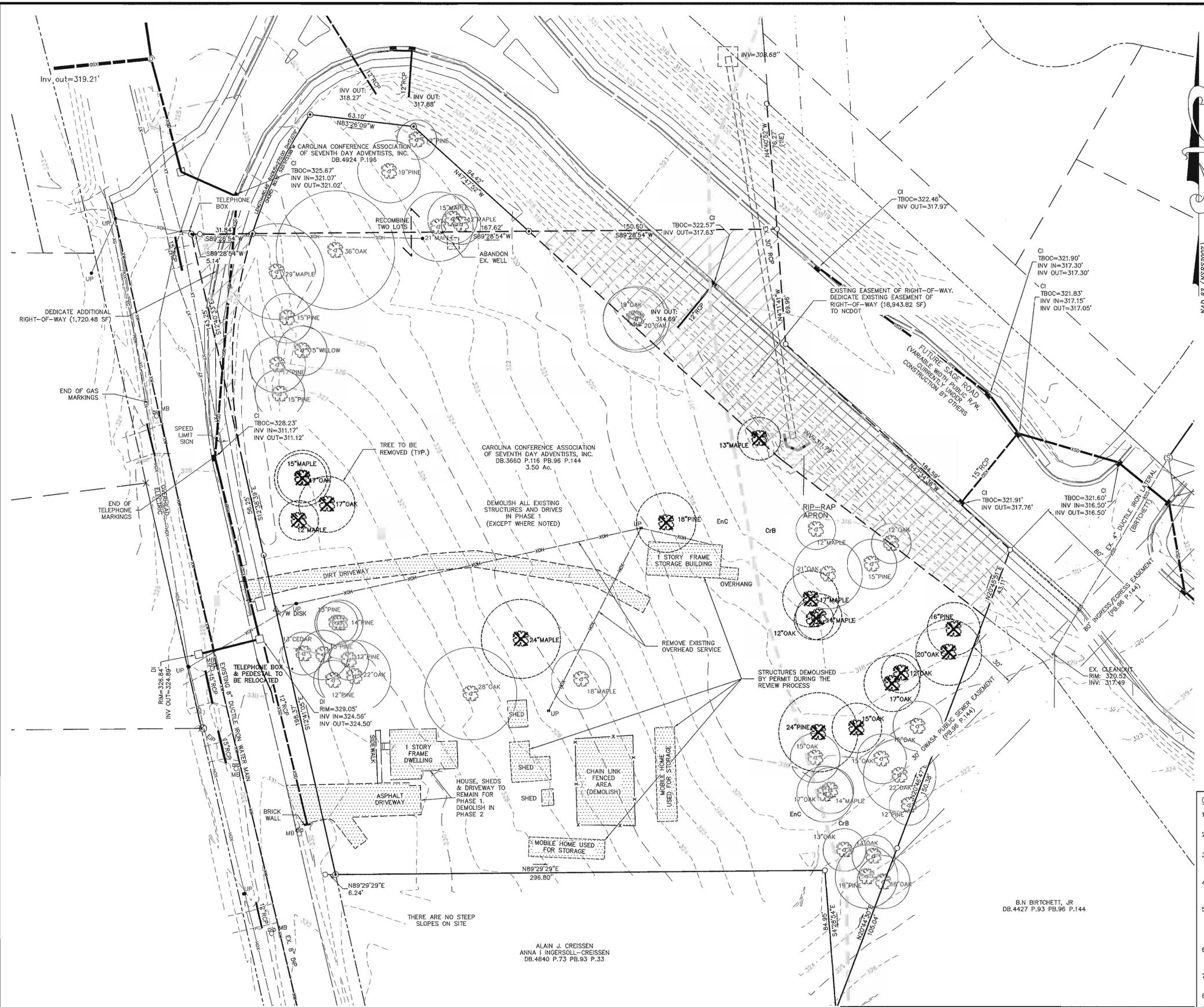
**NEW LIFE FELLOWSHIP CHURCH**  
 CHAPEL HILL, NORTH CAROLINA  
**COVER SHEET**

REV.	DATE	DESCRIPTION	BY
1	02/18/11	PRE-SUBMITTAL REVISIONS	CPK
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7	01/23/13	COVER SHEET CHANGE	SCS
8	06/10/13	DRIVE REL. PER CHANCOOT	CPK
9	11/19/13	RESUBMIT REVISED CONFIG.	CPK
10	04/02/14	CH PLANNING COMMENTS	CPK

DATE: NOVEMBER 16, 2010  
 HORIZONTAL SCALE: 1" = 30'  
 VERTICAL SCALE: N/A  
 PROJECT MANAGER: CPK  
 DRAWN BY: CPK  
 PROJECT NO: 10-013  
 DRAWING NAME: 10-013 PRELIM

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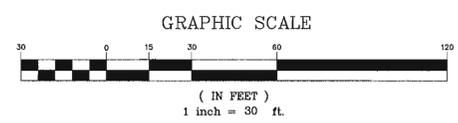
**SHEET NO.**  
**C1.0**  
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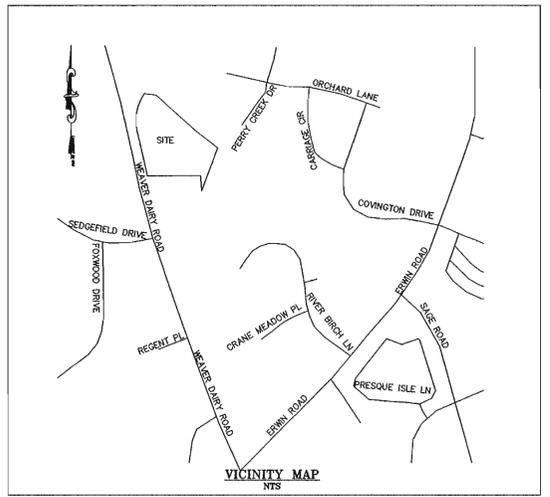
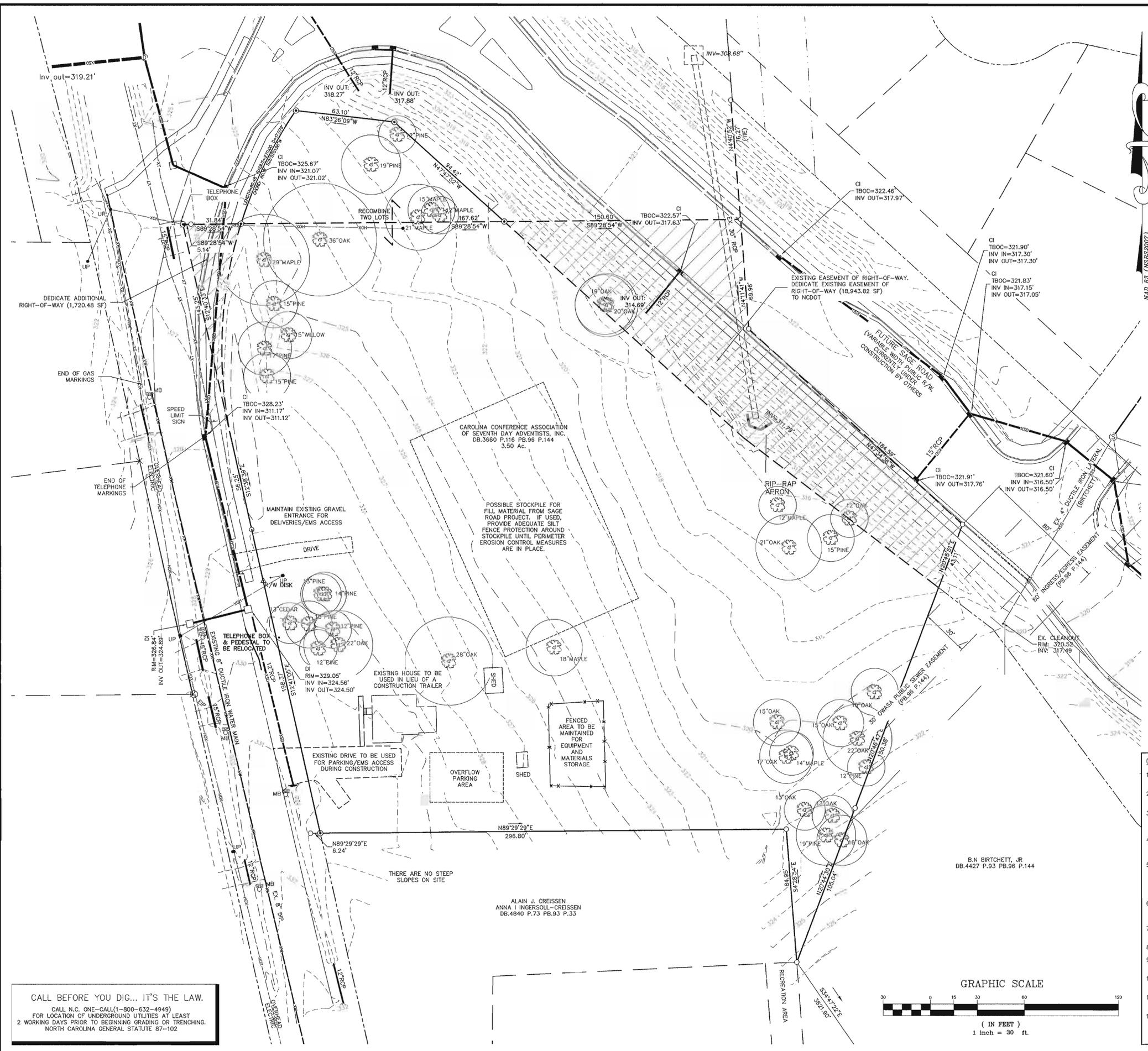


**NEW LIFE FELLOWSHIP CHURCH**  
 CHAPEL HILL, NORTH CAROLINA  
**EXISTING CONDITIONS & DEMOLITION PLAN**

REV.	DATE	DESCRIPTION
1	02/18/11	PRE-SUBMITTAL REVISIONS
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10	04/02/14	CH PLANNING COMMENTS

DATE: NOVEMBER 16, 2010  
 HORIZONTAL SCALE: 1" = 30'  
 VERTICAL SCALE: N/A  
 PROJECT MANAGER: CPK  
 DRAWN BY: CPK  
 PROJECT NO.: 10-013  
 DRAWING NAME: 10-013 PRELIM

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**SHEET NO. C2.0**  
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**NEW LIFE FELLOWSHIP CHURCH**  
 CHAPEL HILL, NORTH CAROLINA  
**CONSTRUCTION MANAGEMENT PLAN**

REV.	DATE	DESCRIPTION	BY
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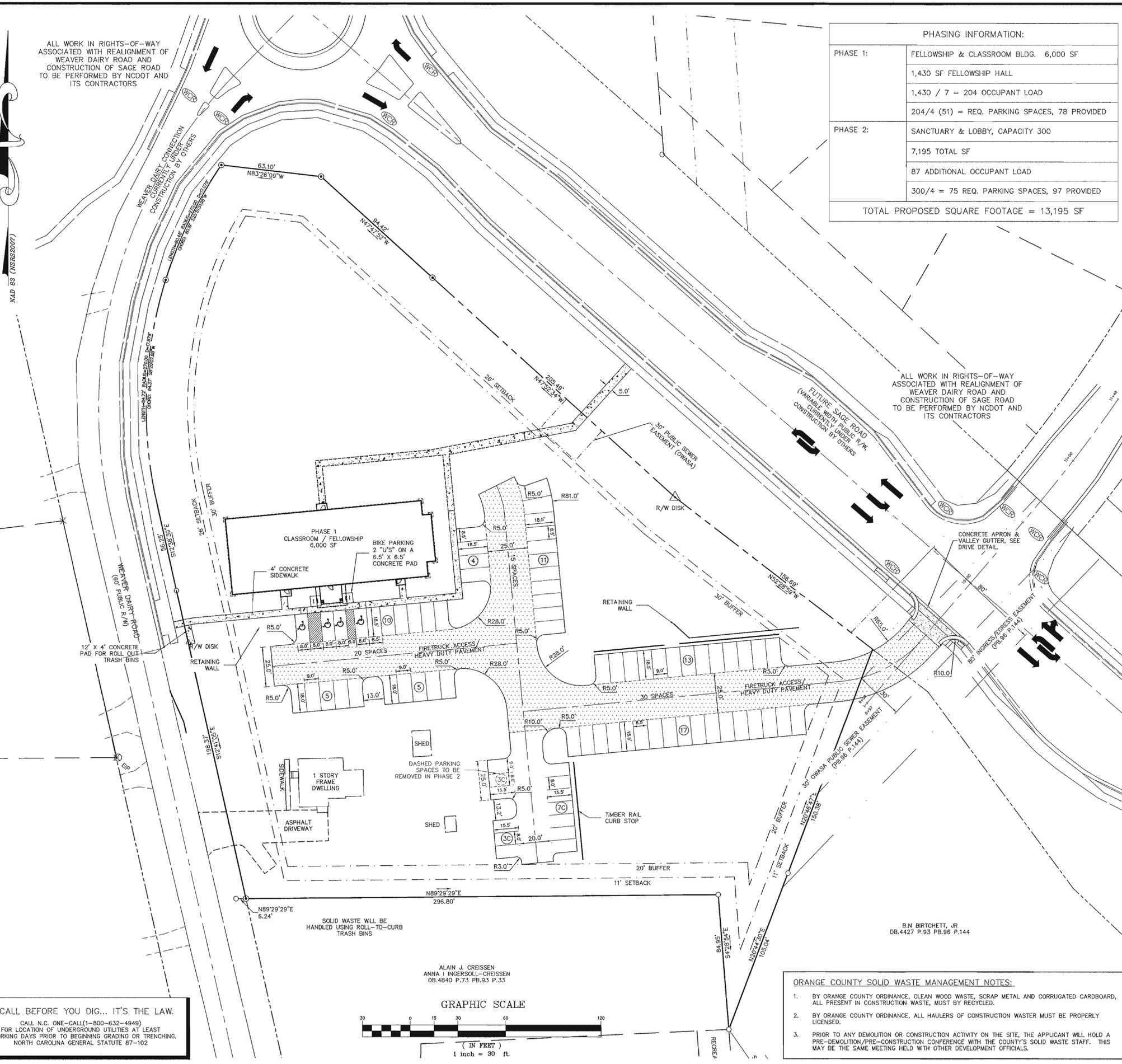
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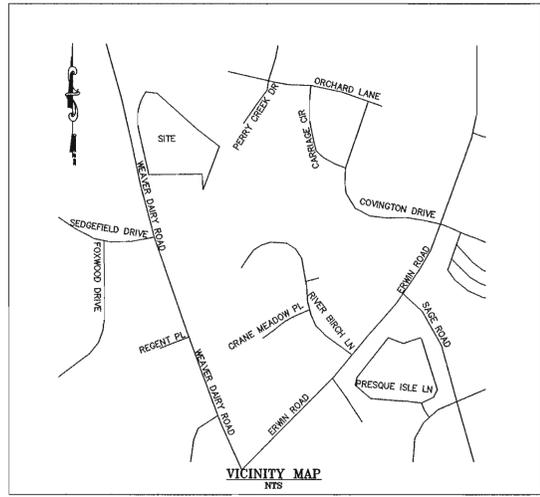
**SHEET NO.**  
**C2.1**  
 REVIEW

**CALL BEFORE YOU DIG... IT'S THE LAW.**  
 CALL N.C. ONE-CALL(1-800-632-4949)  
 FOR LOCATION OF UNDERGROUND UTILITIES AT LEAST  
 2 WORKING DAYS PRIOR TO BEGINNING GRADING OR TRENCHING.  
 NORTH CAROLINA GENERAL STATUTE 87-102

ALL WORK IN RIGHTS-OF-WAY ASSOCIATED WITH REALIGNMENT OF WEAVER DAIRY ROAD AND CONSTRUCTION OF SAGE ROAD TO BE PERFORMED BY NCDOT AND ITS CONTRACTORS



PHASING INFORMATION:	
PHASE 1:	FELLOWSHIP & CLASSROOM BLDG. 6,000 SF
	1,430 SF FELLOWSHIP HALL
	1,430 / 7 = 204 OCCUPANT LOAD
	204/4 (51) = REQ. PARKING SPACES, 78 PROVIDED
PHASE 2:	SANCTUARY & LOBBY, CAPACITY 300
	7,195 TOTAL SF
	87 ADDITIONAL OCCUPANT LOAD
	300/4 = 75 REQ. PARKING SPACES, 97 PROVIDED
TOTAL PROPOSED SQUARE FOOTAGE = 13,195 SF	



PROJECT DATA	
PIN #	9890-32-9028 & 9890-32-7289
TMBL#	7.26.26 & 7.25.12G
TRACT#	770652 & 777310
ADDRESS:	166 WEAVER DAIRY ROAD, CHAPEL HILL
DEED REF:	BOOK: 3660 PAGE: 116
PLAT REF:	#1 BIRCHETT & DAVIS P96/144
RCD:	THIS PARCEL IS NOT LOCATED WITHIN THE RESOURCE CONSERVATION DISTRICT AS DEFINED IN THE CHAPEL HILL DEVELOPMENT / LAND USE MANAGEMENT ORDINANCE
BASIN/WATERSHED:	CAPE FEAR / JORDAN LAKE UNPROTECTED
SOILS:	ENC - ENON & C/B - CREEDMOOR
SLOPES:	ALL SLOPES < 10% / NO STEEP SLOPES ON SITE
EXISTING USE:	SINGLE FAMILY HOME W/ OUT-BUILDINGS
EXISTING SIZE:	3.50 ACRES (152,445.99 SF) 0.18 ACRES (7,916.28 SF)
ZONE / GROUP:	CHAPEL HILL - R-2 / USE GROUP B
PROPOSED USE:	CHURCH & FELLOWSHIP HALL (300 SEATS)
PROPOSED NLA:	3.21 ACRES (139,898.86 SF)
PROPOSED GLA:	3.53 ACRES (153,668.75 SF)
MAX. FAR:	153,669 * 0.093 = 14,291 SF
MAX. HEIGHT:	29' PRIMARY / 50' SECONDARY
MIN. PARKING:	1/4 SEATS = 300/4 = 75 (ASSEMBLY)
MAX. PARKING:	1/2.5 SEATS = 300/2.5 = 120 (ASSEMBLY)
MIN. BIKE PARK:	1/50 SEATS (MIN 8) = 300/50 = 6 (ASSEMBLY)

**EarthCentric Engineering, Inc.**  
 LICENSE #C-2638  
 204 W. Clay Street  
 Mebane, NC 27302  
 Phone: (919) 563-9041  
 Fax: (919) 304-3234  
 E-Mail: Phil.Koch@EarthCentric.com

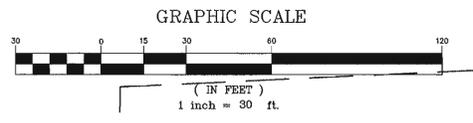


**NEW LIFE FELLOWSHIP CHURCH**  
 CHAPEL HILL, NORTH CAROLINA  
**SITE PLAN (PHASE 1)**

- GENERAL NOTES**
- EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM SURVEY DATA SUPPLIED BY R. S. JONES AND ASSOCIATES, INC. SITE PLAN DESIGN BY SHAW DESIGN ASSOCIATES.
  - WORK WITHIN PUBLIC RIGHT-OF-WAYS SHALL BE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REQUIREMENTS, NOTIFICATIONS, STANDARDS AND POLICIES.
  - CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL MEASURES FOR ALL WORK W/IN PUBLIC R/W PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND THE N.C. SUPPLEMENT TO THE MUTCD, AND LOCAL CITY INSPECTORS DIRECTION.
  - ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT PLANS AND/OR SPECIFICATIONS, LOCAL STANDARD DETAILS AND CONSTRUCTION STANDARDS, STATE CONSTRUCTION STANDARDS, AND OTHER APPLICABLE CONTRACT DOCUMENTS.
  - CONTRACTOR IS FULLY RESPONSIBLE FOR CONTACTING ALL APPROPRIATE PARTIES AND ASSURING THAT UTILITIES ARE LOCATED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. CALL NC ONE CALL (PREVIOUSLY 811) AT 1-800-632-4949 FOR UTILITY LOCATING SERVICES 48 HOURS PRIOR TO COMMENCEMENT OF ANY WORK. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
  - UNDERGROUND UTILITIES SHOWN USING BEST AVAILABLE INFORMATION. ALL LOCATIONS SHALL BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE MORE UNDERGROUND UTILITIES THAN ARE SHOWN HEREON. CONTRACTOR SHALL FIELD LOCATE ALL UTILITIES PRIOR TO ANY EXCAVATIONS.
  - CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES TO REMAIN DURING ALL DEMOLITION AND CONSTRUCTION ACTIVITIES.
  - ALL CLEARING, GRUBBING AND UNSUITABLE FILL MATERIAL SHALL BE DISPOSED OF LEGALLY.
  - ALL PAVEMENT, CURB, STORM DRAINAGE PIPE, AND STRUCTURES TO BE REMOVED SHALL BE HAULED OFFSITE AND DISPOSED OF LEGALLY.
  - SIGNAGE SHALL BE LOCATED AS SHOWN. SIGNAGE SHALL BE CONSTRUCTED IN ACCORDANCE WITH LOCAL STANDARDS.
  - SITE LIGHTING SHALL AS SHOWN, AND SHALL BE SUFFICIENT TO PROPERLY ILLUMINATE THE SITE IN ACCORDANCE WITH LOCAL STANDARDS.
  - LANDSCAPING SHALL BE INSTALLED IN THE PROVIDED YARDS, IN ACCORDANCE WITH LOCAL STANDARDS.
- CONTRACTOR SHALL NOT MAKE ANY MODIFICATIONS TO THE APPROVED DRAWINGS WITHOUT PRIOR APPROVAL OF BOTH THE DESIGN ENGINEER AND LOCAL INSPECTOR.**

- ORANGE COUNTY SOLID WASTE MANAGEMENT NOTES:**
- BY ORANGE COUNTY ORDINANCE, CLEAN WOOD WASTE, SCRAP METAL AND CORRUGATED CARDBOARD, ALL PRESENT IN CONSTRUCTION WASTE, MUST BY RECYCLED.
  - BY ORANGE COUNTY ORDINANCE, ALL HAULERS OF CONSTRUCTION WASTER MUST BE PROPERLY LICENSED.
  - PRIOR TO ANY DEMOLITION OR CONSTRUCTION ACTIVITY ON THE SITE, THE APPLICANT WILL HOLD A PRE-DEMOLITION/PRE-CONSTRUCTION CONFERENCE WITH THE COUNTY'S SOLID WASTE STAFF. THIS MAY BE THE SAME MEETING HELD WITH OTHER DEVELOPMENT OFFICIALS.

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 NORTH CAROLINA GENERAL STATUTE 87-102



ALAIN J. CREISSEN  
 ANNA I. INGERSOLL-CREISSEN  
 DB.4840 P.73 PB.93 P.33

B.N. BIRCHETT, JR.  
 DB.4427 P.33 PB.96 P.144

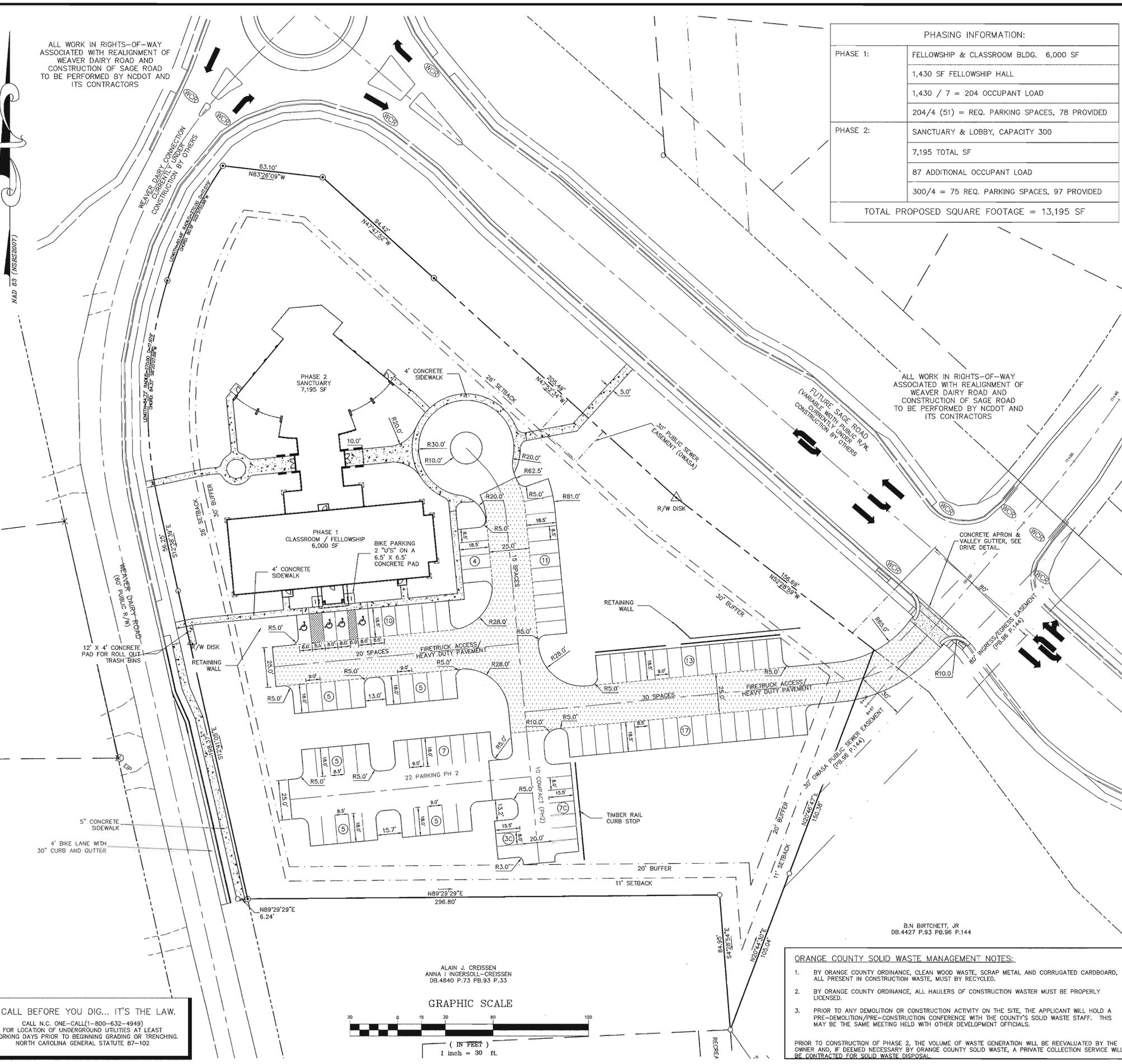
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2	04/08/11	SEWER EXTENSION
3	09/20/11	OWASA SUBMITTAL
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7	01/29/13	COVER SHEET CHANGE
8	06/10/13	DRIVE REL. PER CHANDOT
9	11/19/13	RESUBMIT REVISED CONFIG.
10	04/02/14	CH. PLANNING COMMENTS

DATE: NOVEMBER 16, 2010  
 HORIZONTAL SCALE: 1" = 30'  
 VERTICAL SCALE: N/A  
 PROJECT MANAGER: CPK  
 DRAWN BY: CPK  
 PROJECT NO.: 10-013  
 DRAWING NAME: 10-013 PRELIM

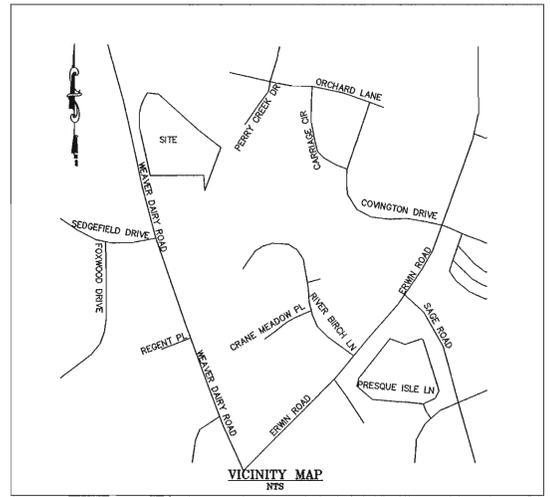
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PRINCIPAL ENGINEER  
 PHIL KOCH - NCPE #22634

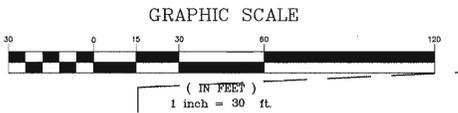
**NEW LIFE FELLOWSHIP CHURCH**  
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**SITE PLAN (PHASE 2)**

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- PRIOR TO CONSTRUCTION OF PHASE 2, THE VOLUME OF WASTE GENERATION WILL BE REEVALUATED BY THE OWNER AND, IF DEEMED NECESSARY BY ORANGE COUNTY SOLID WASTE, A PRIVATE COLLECTION SERVICE WILL BE CONTRACTED FOR SOLID WASTE DISPOSAL.

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 NORTH CAROLINA GENERAL STATUTE 87-102



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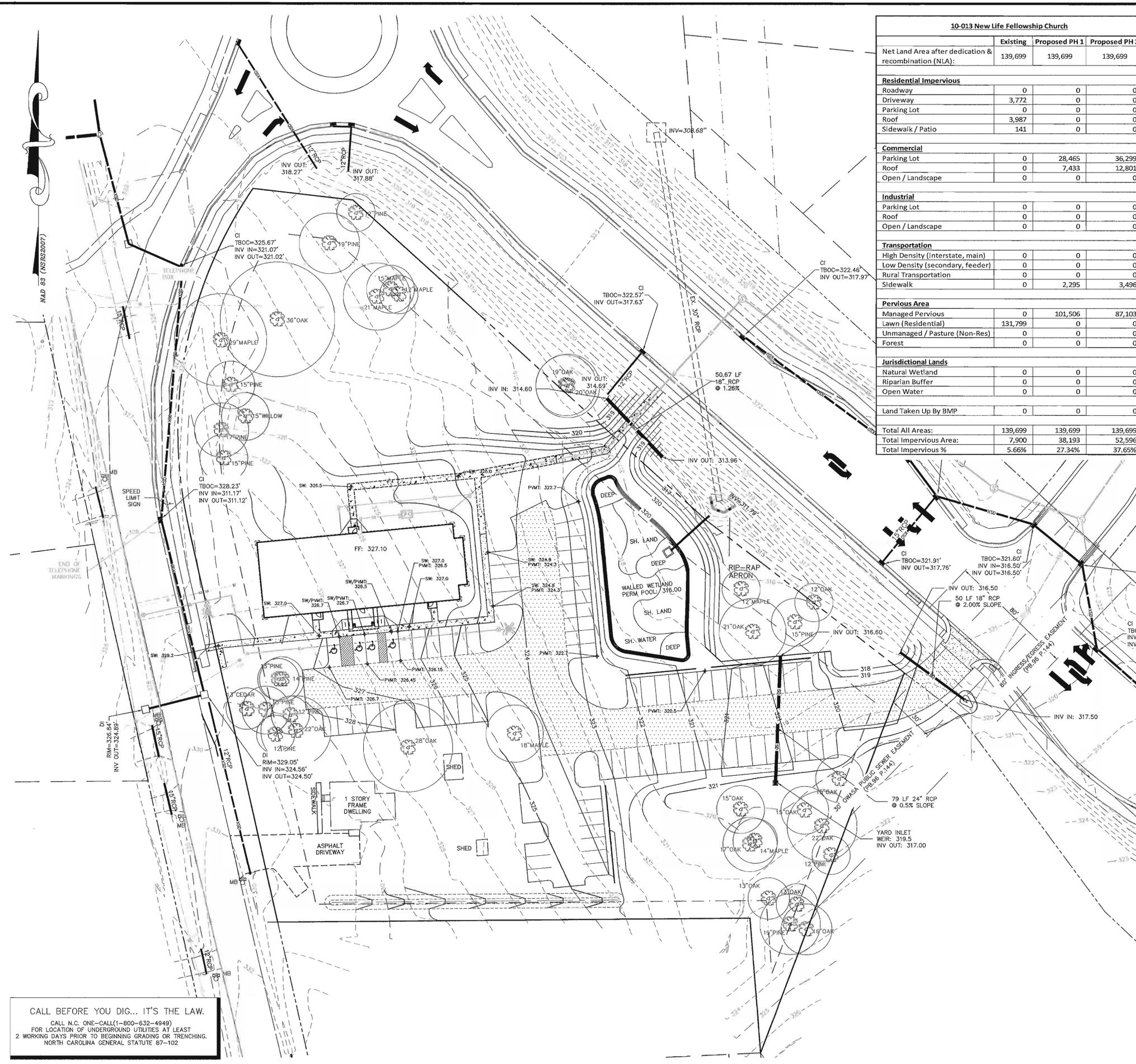
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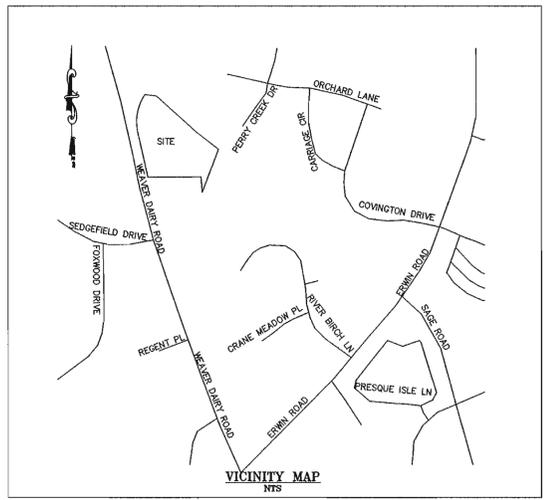
DATE: NOVEMBER 16, 2010  
 HORIZONTAL SCALE: 1" = 30'  
 VERTICAL SCALE: N/A  
 PROJECT MANAGER: CPK  
 DRAWN BY: CPK  
 PROJECT NO: 10-013  
 DRAWING NAME: 10-013 PRELIM

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SHEET NO.  
**C3.1**  
 REVIEW



10-013 New Life Fellowship Church			
	Existing	Proposed PH 1	Proposed PH 2
Net Land Area after dedication & recombination (NLA):	139,699	139,699	139,699
<b>Residential Impervious</b>			
Roadway	0	0	0
Driveway	3,772	0	0
Parking Lot	0	0	0
Roof	3,987	0	0
Sidewalk / Patio	141	0	0
<b>Commercial</b>			
Parking Lot	0	28,465	36,299
Roof	0	7,433	12,801
Open / Landscape	0	0	0
<b>Industrial</b>			
Parking Lot	0	0	0
Roof	0	0	0
Open / Landscape	0	0	0
<b>Transportation</b>			
High Density (interstate, main)	0	0	0
Low Density (secondary, feeder)	0	0	0
Rural Transportation	0	0	0
Sidewalk	0	2,295	3,496
<b>Pervious Area</b>			
Managed Pervious	0	101,506	87,103
Lawn (Residential)	131,799	0	0
Unmanaged / Pasture (Non-Res)	0	0	0
Forest	0	0	0
<b>Jurisdictional Lands</b>			
Natural Wetland	0	0	0
Riparian Buffer	0	0	0
Open Water	0	0	0
<b>Land Taken Up By BMP</b>			
	0	0	0
<b>Total All Areas:</b>	<b>139,699</b>	<b>139,699</b>	<b>139,699</b>
<b>Total Impervious Area:</b>	<b>7,900</b>	<b>38,193</b>	<b>52,596</b>
<b>Total Impervious %</b>	<b>5.66%</b>	<b>27.34%</b>	<b>37.65%</b>



- GENERAL NOTES**
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- CONTRACTOR SHALL NOT MAKE ANY MODIFICATIONS TO THE APPROVED DRAWINGS WITHOUT PRIOR APPROVAL OF BOTH THE DESIGN ENGINEER AND LOCAL INSPECTOR.**

- GRADING & STORM DRAINAGE NOTES:**
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LOCAL CONSTRUCTION STANDARDS, SPECIFICATIONS, AND PROCEDURES AND THE NCDENR'S SEDIMENTATION AND EROSION CONTROL STANDARDS, SPECS., AND PROCEDURES.
  - CONTRACTOR SHALL VERIFY THAT ALL APPLICABLE STATE AND LOCAL PERMITS REQUIRED FOR THE COMMENCEMENT OF GRADING OPERATIONS HAVE BEEN OBTAINED PRIOR TO START OF GRADING.
  - CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL EXISTING UTILITIES PRIOR TO THE BEGINNING OF DEMOLITION AND/OR CONSTRUCTION.
  - CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES TO REMAIN DURING ALL CONSTRUCTION ACTIVITIES.
  - ALL STORMWATER MANAGEMENT FACILITIES SHALL BE DESIGNED AND CONSTRUCTED TO MEET ALL STATE AND LOCAL REQUIREMENTS, INCLUDING 2007 STATE STANDARDS FOR WATER QUALITY AND DETENTION FACILITIES.
  - EROSION CONTROL MEASURES SHALL BE PROVIDED AS NEEDED TO PROTECT ADJACENT PROPERTIES.
  - CONTRACTOR SHALL PROVIDE ALL STAKING, FLAGGING AND/OR FENCING NECESSARY TO PROVIDE PROPER PROTECTION OF THE STREAM BUFFER.

ORANGE COUNTY SOLID WASTE MANAGEMENT NOTES:

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 LICENSE #C-2638  
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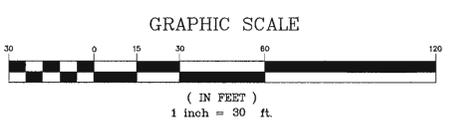


**NEW LIFE FELLOWSHIP CHURCH**  
 CHAPEL HILL, NORTH CAROLINA  
**GRADING & STORM DRAINAGE PLAN (PHASE 1)**

REV.	DATE	DESCRIPTION	BY
1	02/16/11	PRE-SUBMITTAL REVISIONS	CPK
2	04/08/11	SEWER EXTENSION	TKM
3	09/20/11	OWASA SUBMITTAL	CPK
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5	11/15/11	RESPONSE TO COMMENTS	CPK
6	06/14/12	REV. PER SPECIAL USE APP.	CPK
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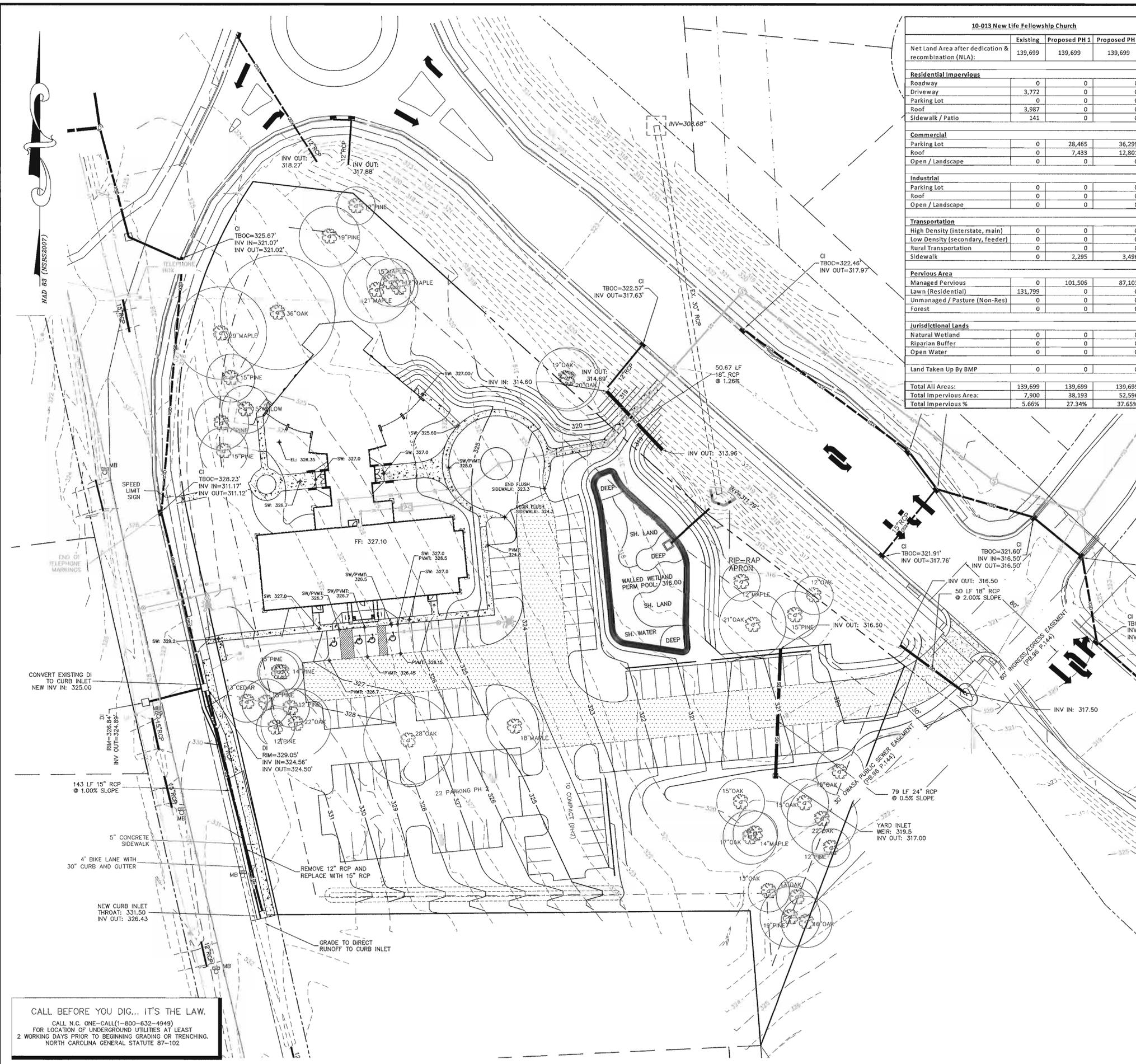
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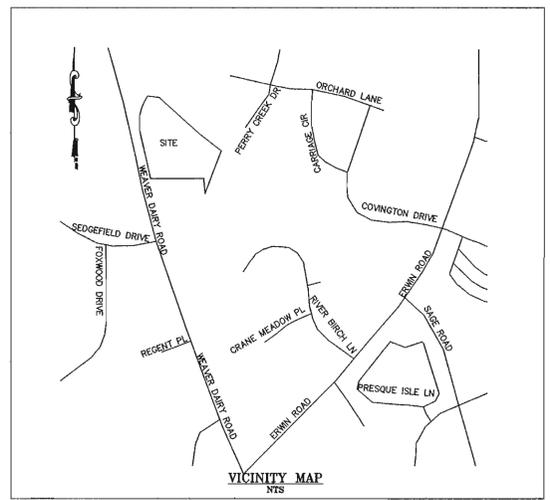


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Driveway	3,772	0	0
Parking Lot	0	0	0
Roof	3,987	0	0
Sidewalk / Patio	141	0	0
<b>Commercial</b>			
Parking Lot	0	28,465	36,299
Roof	0	7,433	12,801
Open / Landscape	0	0	0
<b>Industrial</b>			
Parking Lot	0	0	0
Roof	0	0	0
Open / Landscape	0	0	0
<b>Transportation</b>			
High Density (interstate, main)	0	0	0
Low Density (secondary, feeder)	0	0	0
Rural Transportation	0	0	0
Sidewalk	0	2,295	3,496
<b>Pervious Area</b>			
Managed Pervious	0	101,506	87,103
Lawn (Residential)	131,799	0	0
Unmanaged / Pasture (Non-Res)	0	0	0
Forest	0	0	0
<b>Jurisdictional Lands</b>			
Natural Wetland	0	0	0
Riparian Buffer	0	0	0
Open Water	0	0	0
<b>Land Taken Up By BMP</b>			
	0	0	0
<b>Total All Areas:</b>	<b>139,699</b>	<b>139,699</b>	<b>139,699</b>
<b>Total Impervious Area:</b>	<b>7,900</b>	<b>38,193</b>	<b>52,596</b>
<b>Total Impervious %:</b>	<b>5.66%</b>	<b>27.34%</b>	<b>37.65%</b>



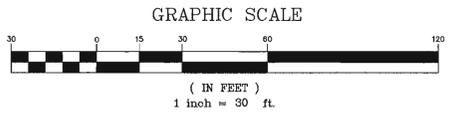
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**GRADING & STORM DRAINAGE NOTES:**

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**ORANGE COUNTY SOLID WASTE MANAGEMENT NOTES:**



**CALL BEFORE YOU DIG... IT'S THE LAW.**  
 CALL N.C. ONE-CALL(1-800-632-4949)  
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 NORTH CAROLINA GENERAL STATUTE 87-102

**EarthCentric Engineering, Inc.**  
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 204 W. Clay Street  
 Mebane, NC 27302  
 Phone: (919) 563-9041  
 Fax: (919) 304-3234  
 E-Mail: Phil.Koch@EarthCentric.com

**PHIL KOCH - NCPPE #22694**

**NEW LIFE FELLOWSHIP CHURCH**  
 CHAPEL HILL, NORTH CAROLINA

**GRADING & STORM DRAINAGE PLAN (PHASE 2)**

REV.	DATE	DESCRIPTION
1	02/18/11	PRE-SUBMITTAL REVISIONS
2	04/08/11	SEWER EXTENSION
3	09/20/11	OWASA SUBMITTAL
4	10/21/11	FULL SUBMITTAL
5	11/15/11	RESPONSE TO COMMENTS
6	08/14/12	REV PER SPECIAL USE APP.
7	01/23/13	COVER SHEET CHANGE
8	08/10/13	DRIVE BEL PER CHANCOOT
9	11/19/13	RESUBMIT REVISED CONFIG.
10	04/02/14	CH PLANNING COMMENTS

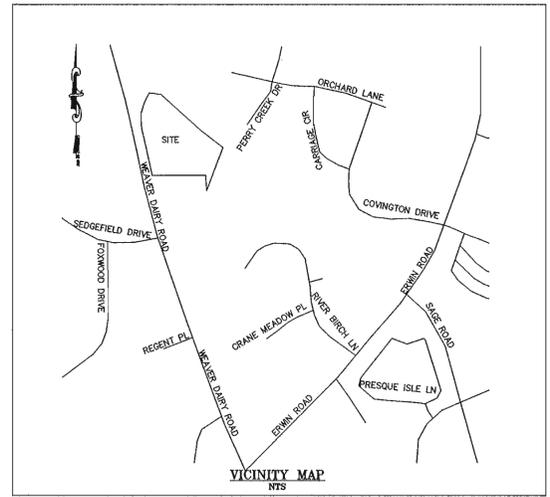
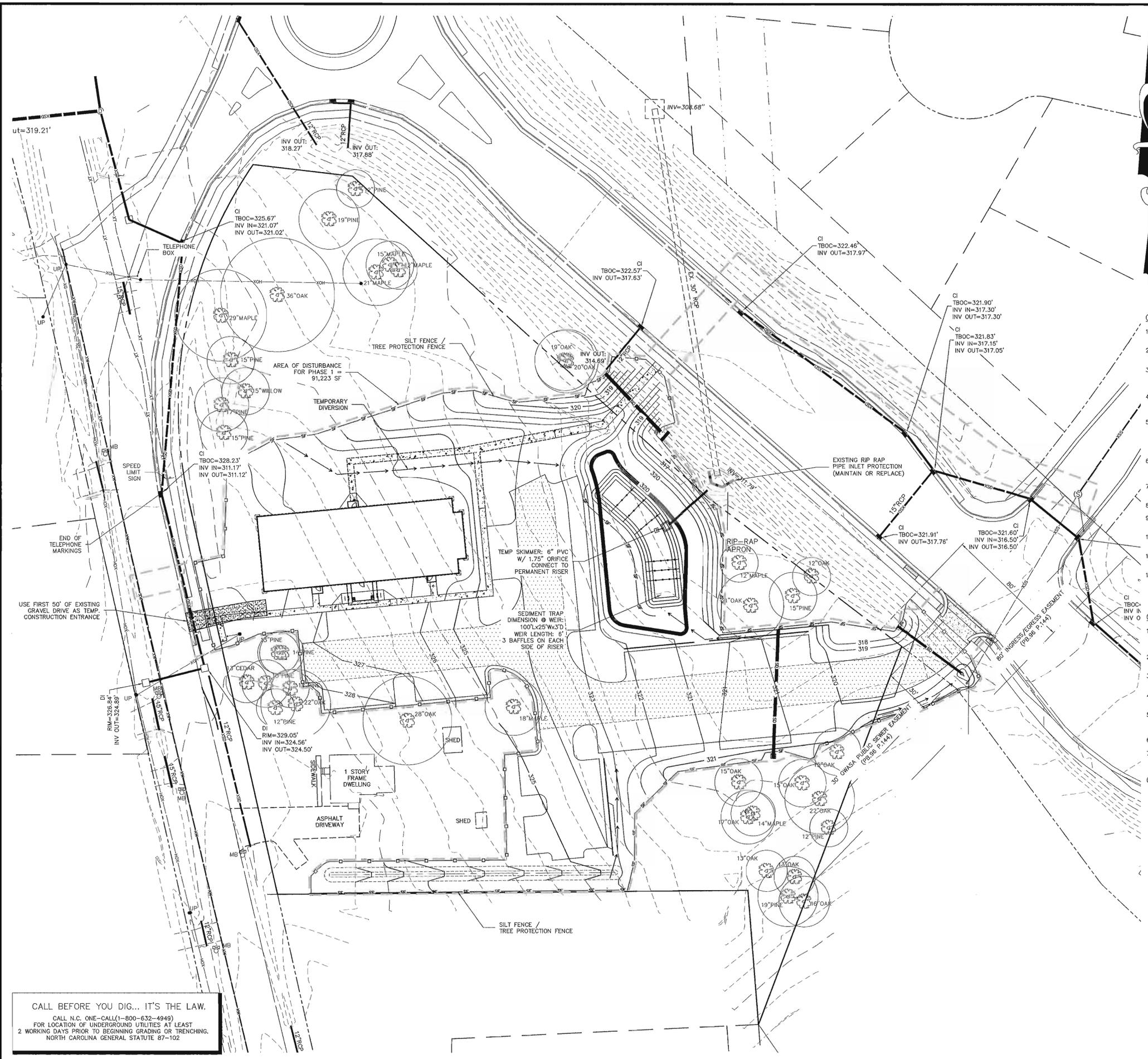
DATE: NOVEMBER 16, 2010  
 HORIZONTAL SCALE: 1" = 30'  
 VERTICAL SCALE: N/A  
 PROJECT MANAGER: CPK  
 DRAWN BY: CPK  
 PROJECT NO: 10-013  
 DRAWING NAME: 10-013 PRELIM

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**SHEET NO.**  
**C4.1**

REVIEW



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**ORANGE COUNTY SOLID WASTE MANAGEMENT NOTES:**

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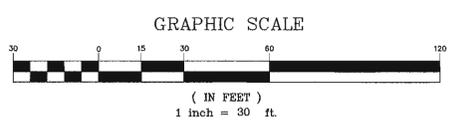
**NEW LIFE FELLOWSHIP CHURCH**  
 CHAPEL HILL, NORTH CAROLINA  
**EROSION CONTROL PLAN (PHASE 1)**

REV.	DATE	DESCRIPTION
1	02/18/11	PRE-SUBMITTAL REVISIONS
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3	09/20/11	OWASA SUBMITTAL
4	10/21/11	FULL SUBMITTAL
5	11/15/11	RESPONSE TO COMMENTS
6	08/14/12	REV PER SPECIAL USE APP.
7	01/23/13	COVER SHEET CHANGE
8	08/10/13	DRIVE REEL PER CHANGDOT
9	11/19/13	RESUBMIT REVISIONS/CONFIG
10	04/02/14	CH-PLANNING COMMENTS

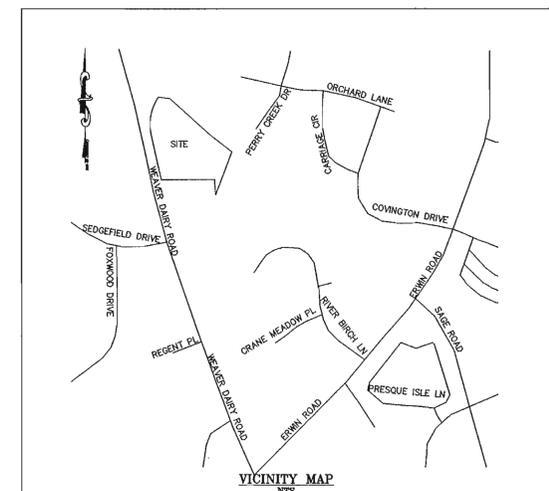
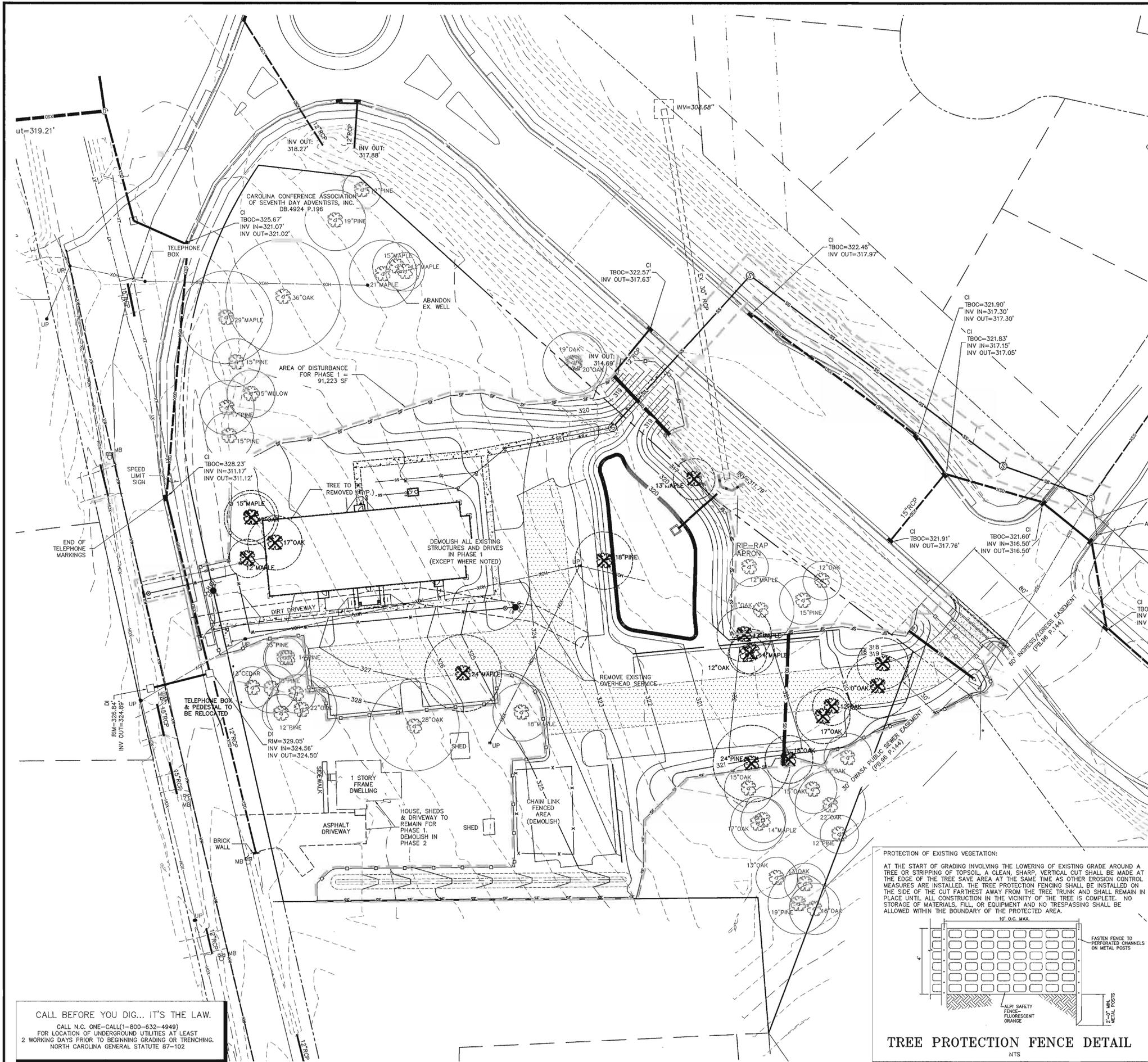
DATE: NOVEMBER 16, 2010  
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 PROJECT MANAGER: CPK  
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SHEET NO.  
**C5.0**  
 REVIEW



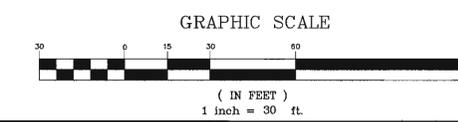
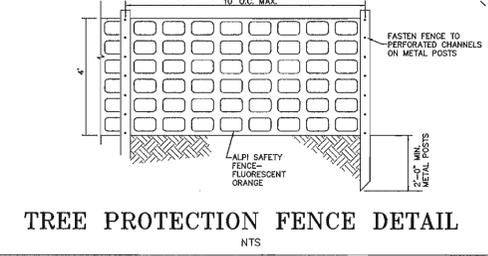
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- ORANGE COUNTY SOLID WASTE MANAGEMENT NOTES:**
- TOWN OF CHAPEL HILL STANDARD TREE PROTECTION NOTES**
- A PRE-CONSTRUCTION CONFERENCE WILL BE HELD WITH THE TOWN'S URBAN FORESTER PRIOR TO BEGINNING SITE WORK.
  - ANY TREE ROOTS EXPOSED BY CONSTRUCTION WILL BE SEVERED CLEANLY WITH AN APPROPRIATE PRUNING TOOL.
  - THE SOIL WITHIN THE CRITICAL ROOT ZONES OF EXISTING TREES WILL NOT BE DRIVEN ON OR OTHERWISE DISTURBED DURING THE INSTALLATION OF LANDSCAPING.
  - A LANDSCAPE PROTECTION SUPERVISOR WHO IS REGISTERED WITH THE TOWN OF CHAPEL HILL WILL BE PRESENT ON SITE AT ALL TIMES WHEN THE FOLLOWING ACTIVITIES ARE TAKING PLACE: CLEARING, GRUBBING, EXCAVATION, GRADING, TRENCHING, MOVING OF SOIL, INSTALLATION AND REMOVAL OF TREE PROTECTION FENCING, AND THE DELIVERY TRANSPORTING AND PLACEMENT OF CONSTRUCTION MATERIALS AND EQUIPMENT.

**PROTECTION OF EXISTING VEGETATION:**

AT THE START OF GRADING INVOLVING THE LOWERING OF EXISTING GRADE AROUND A TREE OR STRIPPING OF TOPSOIL, A CLEAN, SHARP, VERTICAL CUT SHALL BE MADE AT THE EDGE OF THE TREE SAVE AREA AT THE SAME TIME AS OTHER EROSION CONTROL MEASURES ARE INSTALLED. THE TREE PROTECTION FENCING SHALL BE INSTALLED ON THE SIDE OF THE CUT FARTHEST AWAY FROM THE TREE TRUNK AND SHALL REMAIN IN PLACE UNTIL ALL CONSTRUCTION IN THE VICINITY OF THE TREE IS COMPLETE. NO STORAGE OF MATERIALS, FILL, OR EQUIPMENT AND NO TRESPASSING SHALL BE ALLOWED WITHIN THE BOUNDARY OF THE PROTECTED AREA.



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 E-Mail: Phil.Koch@EarthCentric.com

**Phil Koch, P.E.**  
 PRINCIPAL ENGINEER  
 PHIL KOCH - NOPE #22834

**NEW LIFE FELLOWSHIP CHURCH**  
 CHAPEL HILL, NORTH CAROLINA

**LANDSCAPE PROTECTION PLAN (PHASE 1)**

REV.	DATE	DESCRIPTION	BY
1	02/18/11	PRE-SUBMITTAL REVISIONS	TKM
2	04/09/11	SEWER EXTENSION	TKM
3	09/20/11	OWASA SUBMITTAL	CPK
4	10/21/11	FULL SUBMITTAL	CPK
5	11/15/11	RESPONSE TO COMMENTS	CPK
6	06/14/12	REV. PER SPECIAL USE APP.	CPK
7	01/23/13	COVER SHEET CHANGE	SGS
8	06/10/13	DRIVE REL. PER CHANCOOT	CPK
9	11/19/13	RESUBMIT REVISED CONFIG.	CPK
10	04/02/14	CH PLANNING COMMENTS	CPK

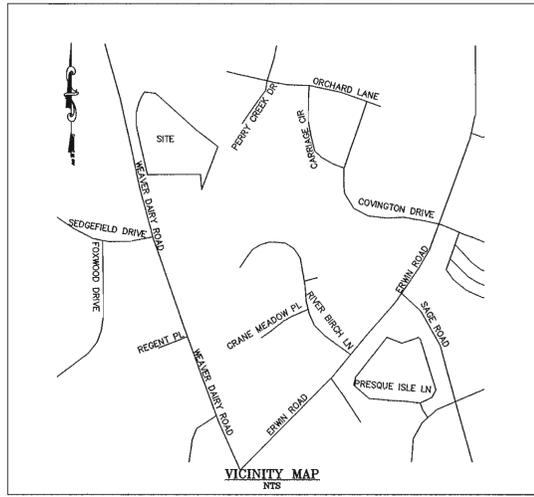
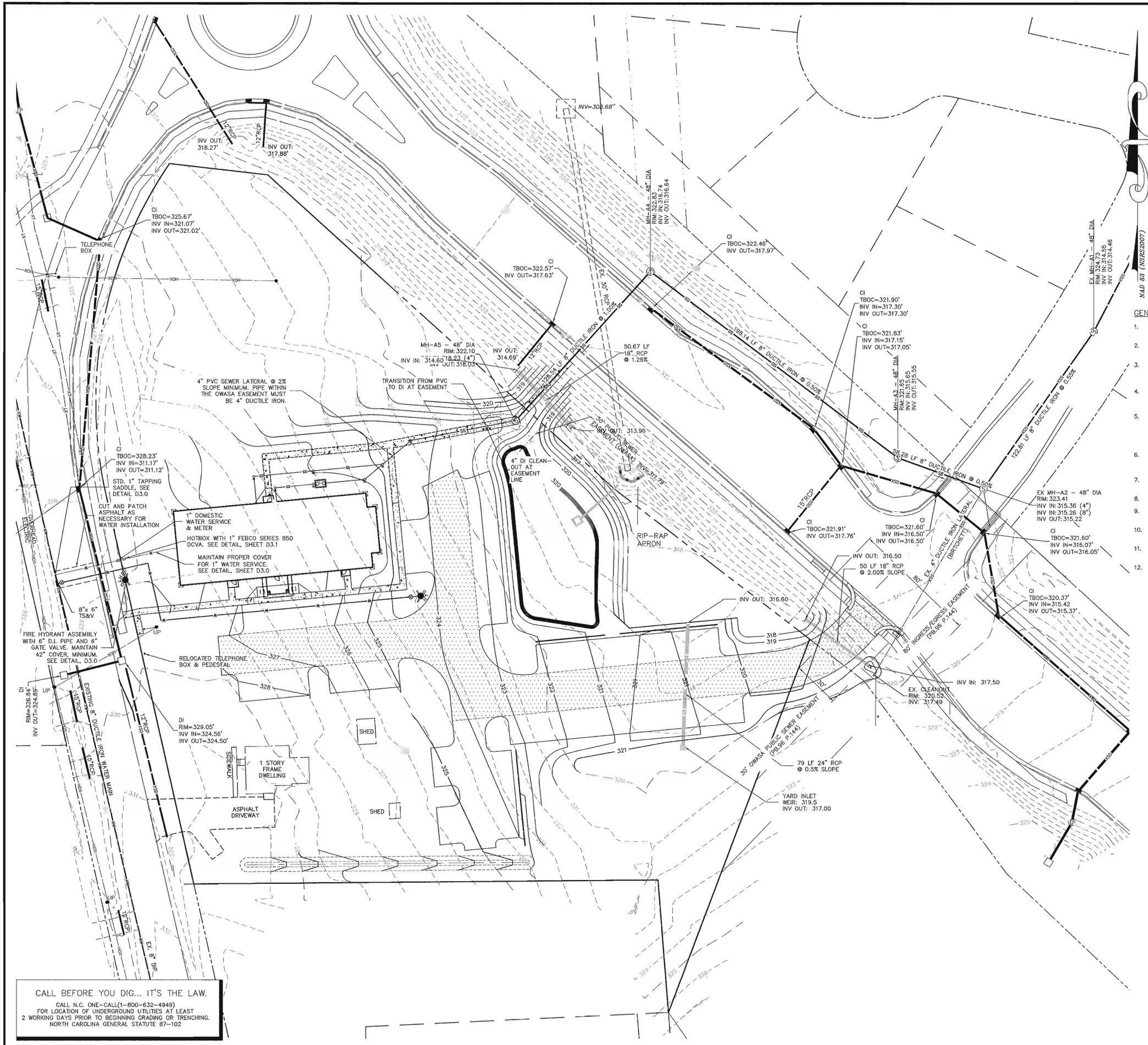
DATE: NOVEMBER 16, 2010  
 HORIZONTAL SCALE: 1" = 30'  
 VERTICAL SCALE: 1" = 4'  
 PROJECT MANAGER: CPK  
 DRAWN BY: CPK  
 PROJECT NO: 10-013  
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**EarthCentric Engineering, Inc.**  
 LICENCE #C-2638

**EarthCentric Engineering, Inc.**  
 INCORPORATED

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PHIL KOCH - NCPE #22834

**NEW LIFE FELLOWSHIP CHURCH**  
 CHAPEL HILL, NORTH CAROLINA

**UTILITY PLAN (PHASE 1)**

REV.	DATE	DESCRIPTION	BY
1	02/16/11	PRE-SUBMITTAL REVISIONS	CPK
2	04/08/11	SEWER EXTENSION	TMM
3	09/20/11	OWASA SUBMITTAL	CPK
4	10/21/11	FULL SUBMITTAL	CPK
5	11/15/11	RESPONSE TO COMMENTS	CPK
6	05/14/12	REV. PER SPECIAL USE APP.	SCS
7	01/23/13	COVER SHEET CHANGE	CPK
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 HORIZONTAL SCALE: 1" = 30'  
 VERTICAL SCALE: 1" = 10'  
 PROJECT MANAGER: CPK  
 DRAWN BY: CPK  
 PROJECT NO.: 10-013  
 DRAWING NAME: 10-013 PRELIM

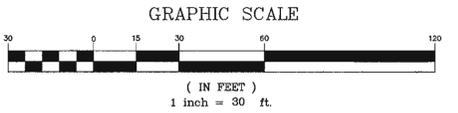
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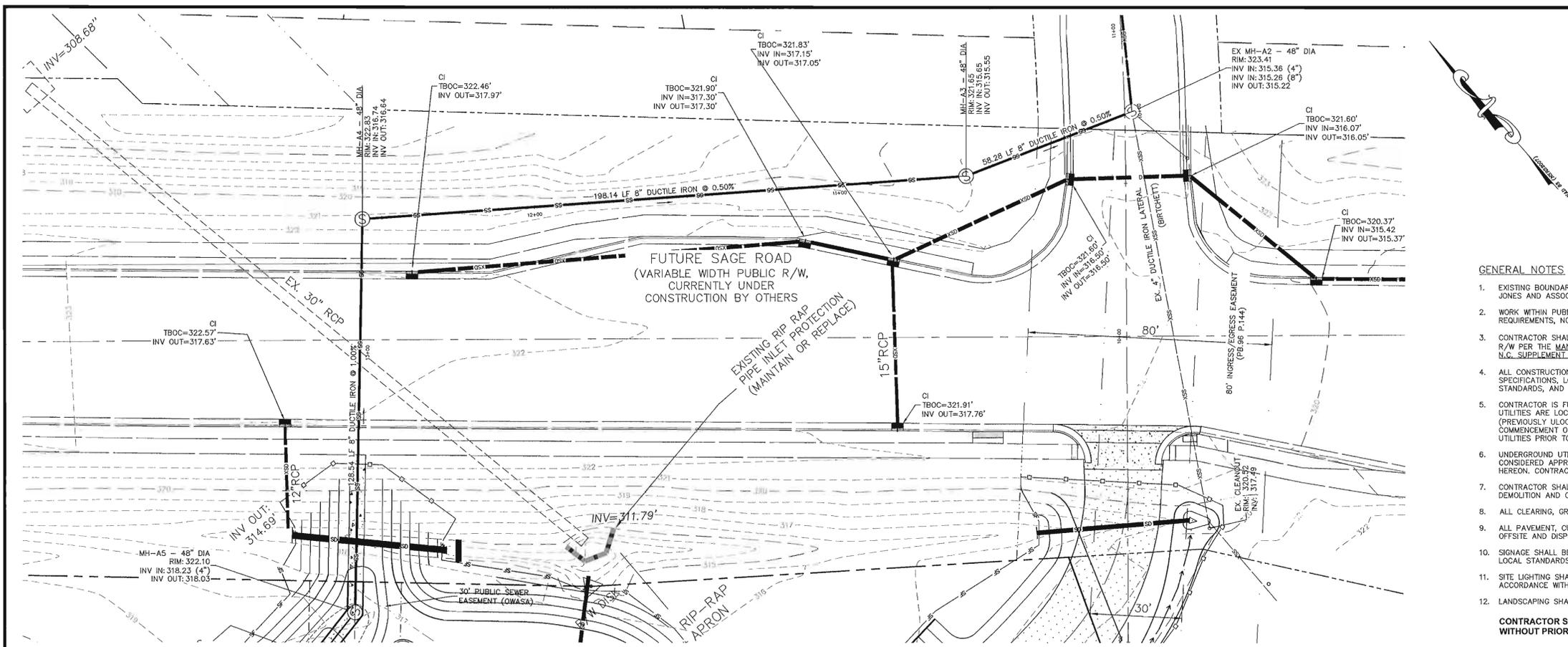
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**SHEET NO.**  
**C6.0**

REVIEW

**CALL BEFORE YOU DIG... IT'S THE LAW.**  
 CALL N.C. ONE-CALL(1-800-632-4949)  
 FOR LOCATION OF UNDERGROUND UTILITIES AT LEAST  
 2 WORKING DAYS PRIOR TO BEGINNING GRADING OR TRENCHING.  
 NORTH CAROLINA GENERAL STATUTE 87-102

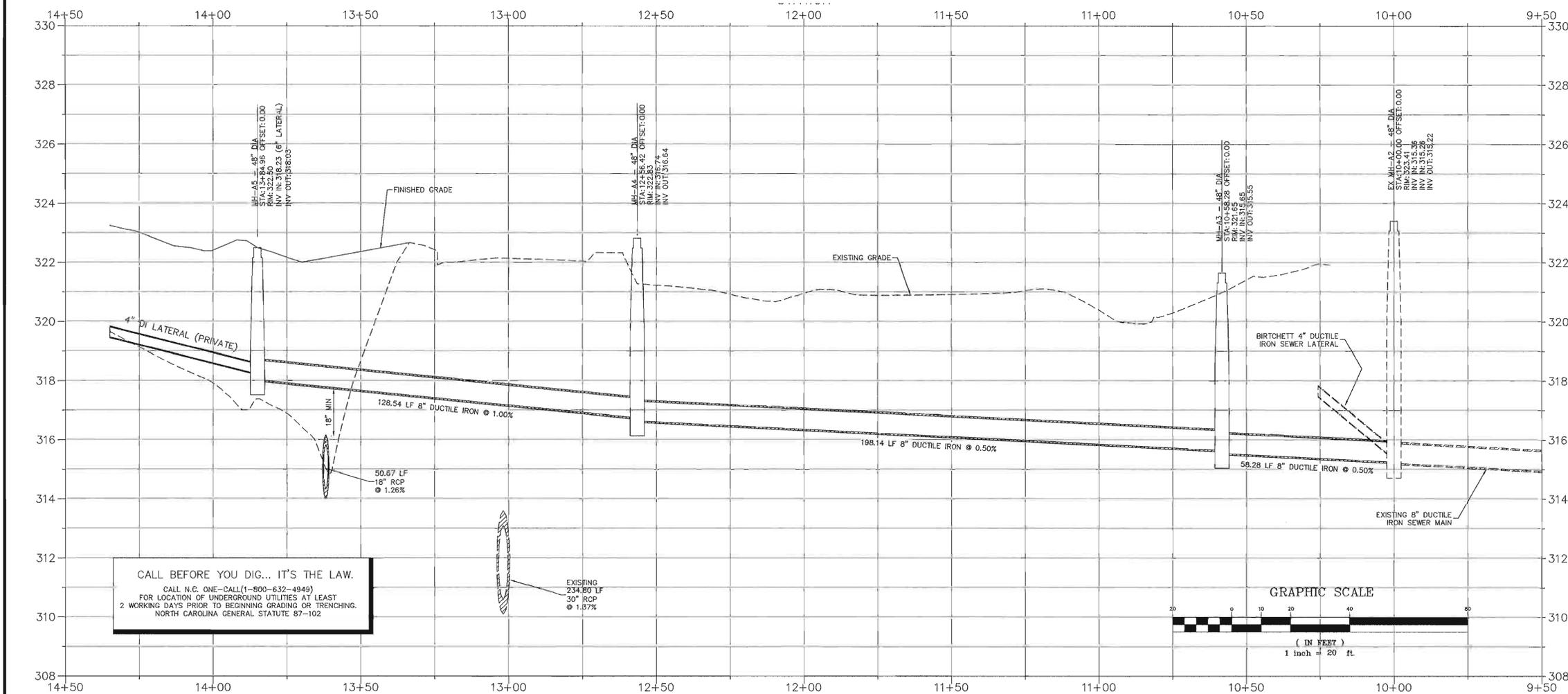




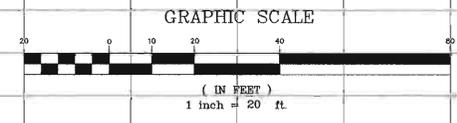
**GENERAL NOTES**

- EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM SURVEY DATA SUPPLIED BY R. S. JONES AND ASSOCIATES, INC. SITE PLAN DESIGN BY SHAW DESIGN ASSOCIATES.
- WORK WITHIN PUBLIC RIGHT-OF-WAYS SHALL BE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REQUIREMENTS, NOTIFICATIONS, STANDARDS AND POLICIES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL MEASURES FOR ALL WORK W/IN PUBLIC R/W PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND THE N.C. SUPPLEMENT TO THE MUTCD, AND LOCAL CITY INSPECTORS DIRECTION.
- ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT PLANS AND/OR SPECIFICATIONS, LOCAL STANDARD DETAILS AND CONSTRUCTION STANDARDS, STATE CONSTRUCTION STANDARDS, AND OTHER APPLICABLE CONTRACT DOCUMENTS.
- CONTRACTOR IS FULLY RESPONSIBLE FOR CONTACTING ALL APPROPRIATE PARTIES AND ASSURING THAT UTILITIES ARE LOCATED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. CALL NC ONE CALL (PREVIOUSLY ULOCO) AT 1-800-632-4949 FOR UTILITY LOCATING SERVICES 48 HOURS PRIOR TO COMMENCEMENT OF ANY WORK. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
- UNDERGROUND UTILITIES SHOWN USING BEST AVAILABLE INFORMATION. ALL LOCATIONS SHALL BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE MORE UNDERGROUND UTILITIES THAN ARE SHOWN HEREON. CONTRACTOR SHALL FIELD LOCATE ALL UTILITIES PRIOR TO ANY EXCAVATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES TO REMAIN DURING ALL DEMOLITION AND CONSTRUCTION ACTIVITIES.
- ALL CLEARING, GRUBBING AND UNSUITABLE FILL MATERIAL SHALL BE DISPOSED OF LEGALLY.
- ALL PAVEMENT, CURB, STORM DRAINAGE PIPE, AND STRUCTURES TO BE REMOVED SHALL BE HAULED OFFSITE AND DISPOSED OF LEGALLY.
- SIGNAGE SHALL BE LOCATED AS SHOWN. SIGNAGE SHALL BE CONSTRUCTED IN ACCORDANCE WITH LOCAL STANDARDS.
- SITE LIGHTING SHALL AS SHOWN, AND SHALL BE SUFFICIENT TO PROPERLY ILLUMINATE THE SITE IN ACCORDANCE WITH LOCAL STANDARDS.
- LANDSCAPING SHALL BE INSTALLED IN THE PROVIDED YARDS, IN ACCORDANCE WITH LOCAL STANDARDS.

**CONTRACTOR SHALL NOT MAKE ANY MODIFICATIONS TO THE APPROVED DRAWINGS WITHOUT PRIOR APPROVAL OF BOTH THE DESIGN ENGINEER AND LOCAL INSPECTOR.**



**CALL BEFORE YOU DIG... IT'S THE LAW.**  
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 2 WORKING DAYS PRIOR TO BEGINNING GRADING OR TRENCHING.  
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**NEW LIFE FELLOWSHIP CHURCH**  
 CHAPEL HILL, NORTH CAROLINA  
**SANITARY SEWER EXTENSION**  
 PLAN & PROFILE

REV.	DATE	DESCRIPTION
1	02/18/11	PRE-SUBMITTAL REVISIONS
2	04/08/11	SEWER EXTENSION
3	09/20/11	OWASA SUBMITTAL
4	10/21/11	FULL SUBMITTAL
5	11/15/11	RESPONSE TO COMMENTS
6	05/14/12	REV. PER SPECIAL USE APP.
7	01/23/13	COVER SHEET CHANGE
8	08/10/13	DRIVE REL. PER CHANGDOT
9	11/19/13	RESUBMIT REVISED CONFIG.
10	04/22/14	CH-PLANNING COMMENTS

DATE: NOVEMBER 16, 2010  
 HORIZONTAL SCALE: 1" = 20'  
 VERTICAL SCALE: 1" = 2'  
 PROJECT MANAGER: CPK  
 DRAWN BY: TMM  
 PROJECT NO.: 10-013  
 DRAWING NAME: 10-013 PRELIM

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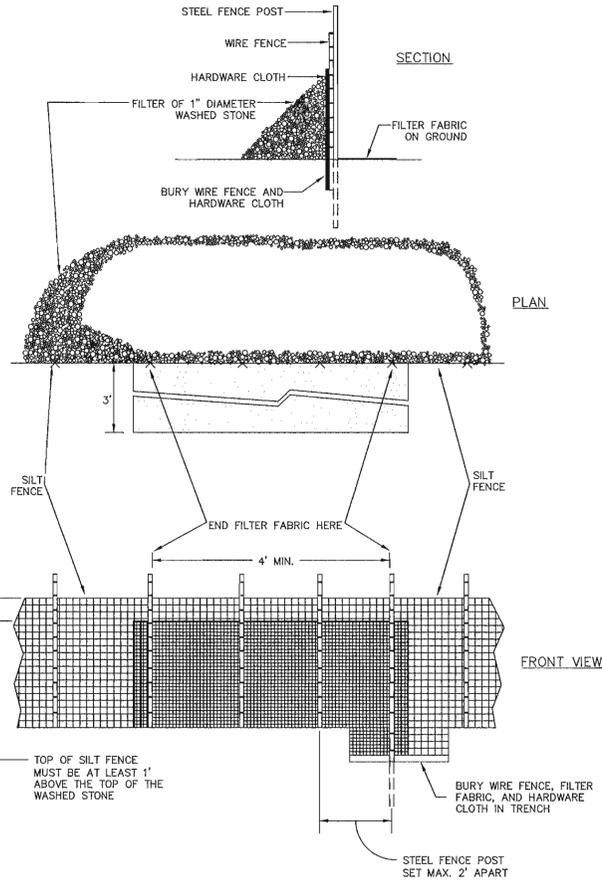
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SHEET NO.  
**P1.0**  
 REVIEW

### INSTRUCTIONS FOR SILT FENCE OUTLET

**INSTALLATION**

1. REFER TO THE PLANS FOR LOCATIONS AND SPECIFICATIONS. DURING INSTALLATION OF THE SILT BARRIER OR SILT FENCE, INSPECT THE INSTALLATION TO DETERMINE IF OUTLETS ARE NEEDED ACCORDING TO THE CRITERIA SET FORTH IN THE SPECIFICATIONS FOR THE BARRIER AND FENCE. IF THERE ARE QUESTIONS OR PROBLEMS WITH THE LOCATION, EXTENT, OR METHOD OF INSTALLATION, CONTACT THE ENGINEER, ARCHITECT, OR RESPONSIBLE PERSONNEL ON THE SITE FOR ASSISTANCE. EROSION CONTROL PERSONNEL HAVE COPIES OF INSTRUCTIONS AND MAY HAVE PHOTOGRAPHS OF PROPERLY INSTALLED OUTLETS AS AN AID TO INSTALLATION. IF THE SILT FENCE OUTLET IS NOT INSTALLED CORRECTLY THE FIRST TIME, IT WILL HAVE TO BE REBUILT.



**SILT FENCE OUTLET**

2. DETERMINE THE EXACT LOCATION OF THE OUTLET BEFORE COMPLETING INSTALLATION OF THE SILT BARRIER OR SILT FENCE, TAKING INTO CONSIDERATION:

- INSTALL THE OUTLET AT THE LOWEST POINT(S) IN THE BARRIER OR FENCE WHERE WATER WILL FLOW.
- INSTALL THE OUTLET WHERE IT IS ACCESSIBLE FOR INSTALLATION, MAINTENANCE, AND REMOVAL.
- ALLOW AT LEAST:
  - 15 FEET BETWEEN THE BARRIER OR FENCE AND SINGLE-STORY BUILDINGS.
  - 25 FEET FOR FORK LIFTS BETWEEN THE BARRIER OR FENCE AND MULTIPLE-STORY BUILDINGS.
  - 10 FEET BETWEEN THE BARRIER OR FENCE AND THE TOE OF FILL SLOPES.
- PLACE THE OUTLET SO THAT WATER FLOWING THROUGH IT WILL NOT CREATE AN EROSION HAZARD BELOW. AVOID STEEP SLOPES BELOW THE OUTLET AND AREAS WITHOUT PROTECTIVE VEGETATION. USE SLOPE DRAINS IF NECESSARY.

- DETERMINE THE LOCATION OF THE OUTLET: FOR A SILT BARRIER, WHEN THE TRENCH IS DUG TO BURY THE BOTTOM OF THE FABRIC BECAUSE THE BARRIER WILL BE OMITTED AT THE OUTLET; FOR A SILT FENCE, WHEN THE WIRE FENCE IS IN PLACE BECAUSE THE FILTER FABRIC WILL BE OMITTED AT THE OUTLET.

3. REFER TO THE ILLUSTRATIONS OF THE OUTLET IN THE PLAN.

4. CLEAR STUMPS AND ROOTS FROM THE LOCATION OF THE OUTLET. CLEAR ADEQUATE ACCESS FOR THE EQUIPMENT NEEDED FOR INSTALLATION, MAINTENANCE, AND REMOVAL.

5. CONSTRUCT OUTLET.

- JUST BELOW THE GAP IN THE BARRIER, PLACE A LAYER OF FILTER FABRIC ON THE GROUND TO PROTECT THE SOIL FROM EROSION BY OUTFLOW FROM THE OUTLET; PLACE 6 INCHES OF THE UPPER EDGE IN THE TRENCH. STAKE THE REMAINING EDGES OF THE FABRIC TO HOLD IT IN PLACE.

- ALONG THE GAP WHERE THE OUTLET WILL GO, PLACE STEEL FENCE POSTS FOR STRENGTH. THE POSTS MUST BE A MAXIMUM OF 2 FEET APART AND DRIVEN INTO SOLID GROUND AT LEAST 18 INCHES.

- PLACE HARDWARE CLOTH (WELDED GALVANIZED SCREEN WITH SQUARE 1/4 - 1/2 - INCH HOLES) ON THE UPHILL SIDE OF THE POSTS TO HOLD THE WASHED STONE IN PLACE. PUT 6 INCHES OF THE BOTTOM OF THE CLOTH IN THE TRENCH AND FASTEN IT TO THE POSTS WITH LENGTHS OF WIRE.

- BURY THE BOTTOM OF THE HARDWARE CLOTH AND THE UPPER EDGE OF THE FILTER FABRIC BELOW THE OUTLET IN THE TRENCH AND COMPACT THE FILL.

- PLACE A FILTER OF 1-INCH DIAMETER WASHED STONE ON THE UPHILL SIDE OF THE OUTLET. PILE THE STONE UP TO THE TOP OF THE HARDWARE CLOTH AND OVER THE JOINT BETWEEN THE OUTLET AND THE BARRIER.

**MAINTENANCE**  
MATERIALS, EQUIPMENT, AND PERSONNEL MUST BE AVAILABLE FOR MAINTENANCE AT ALL TIMES.

1. INSPECT THE SILT FENCE OUTLET:

- DURING CONSTRUCTION: TO DETERMINE IF MACHINERY, FALLING TREES, ETC. HAVE DAMAGED THE BARRIER, FENCE, OR OUTLET; IF DAMAGED, MAKE REPAIRS. TO SEE THAT FILL MATERIAL HAS NOT ACCUMULATED AGAINST THE OUTLET, BLOCKING OUTFLOW; IF IT HAS, REMOVE THE MATERIAL, REPAIR THE DAMAGE, AND MOVE THE FENCE OR FILL SO THAT IT DOES NOT HAPPEN AGAIN.

- AFTER EACH RAINFALL: TO DETERMINE IF RUNOFF FLOWING THROUGH THE OUTLET HAS CAUSED DAMAGE BY UNDERMINING THE FENCE OR OUTLET, OR IF ACCUMULATED WATER HAS COLLAPSED THE OUTLET; IF IT HAS, MAKE REPAIRS OR INSTALL A SEDIMENT TRAP IF NECESSARY TO PREVENT FUTURE FAILURES.

2. CLEAN OUT ACCUMULATED SEDIMENT WHEN IT REACHES A DEPTH OF ONE-HALF THE HEIGHT OF THE OUTLET. PLACE THE SEDIMENT IN A DISPOSAL AREA, OR MIX IT WITH DRY SOIL ON THE SITE IF APPROPRIATE.

DO NOT DISPOSE OF SEDIMENT IN A MANNER THAT WILL CREATE AN EROSION HAZARD.

3. WHEN THE STONE FILTER BECOMES CLOGGED, PREVENTING FLOW THROUGH THE FILTER, REMOVE THE CONTAMINATED STONE, DISPOSE OF IT PROPERLY, AND REPLACE IT WITH CLEAN WASHED STONE.

4. REPAIR THE OUTLET IF DAMAGED BY USE OR DURING MAINTENANCE. REBUILD IT TO THE ORIGINAL CONFIGURATION.

**REMOVAL**

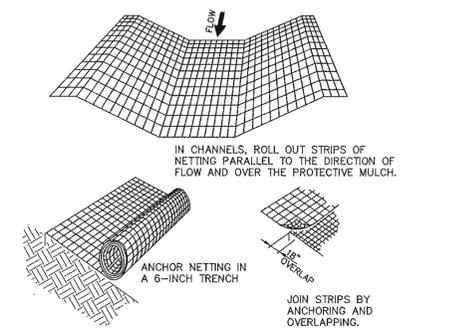
1. WHEN GRADING THE DRAINAGE AREA ABOVE THE OUTLET HAS BEEN COMPLETED AND THE DISTURBED AREA SUFFICIENTLY STABILIZED TO RESTRAIN EROSION, THE OUTLET MUST BE REMOVED.

2. CLEAN OUT ACCUMULATED SEDIMENT AND DISPOSE OF IT PROPERLY.

3. REMOVE POSTS, FENCE, FABRIC, WIRE, AND WASHED STONE; DISPOSE OF THEM PROPERLY.

4. GRADE THE LOCATION AS NECESSARY.

5. STABILIZE THE DISTURBED AREA WHERE THE OUTLET WAS LOCATED.



**INSTALLATION OF NETTING AND MATTING**

PRODUCTS DESIGNED TO CONTROL EROSION SHOULD BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

ANY MAT OR BLANKET-TYPE PRODUCT USED AS A PROTECTIVE MULCH SHOULD PROVIDE COVER OF AT LEAST 30% OF THE SURFACE WHERE IT IS APPLIED.

1. APPLY LIME, FERTILIZER AND SEED BEFORE LAYING THE NET OR MAT.
2. START LAYING THE NET FROM THE TOP OF THE CHANNEL OR SLOPE AND UNROLL IT DOWN THE GRADE. ALLOW NETTING TO LAY LOOSELY ON THE SOIL BUT WITHOUT WRINKLES - DO NOT STRETCH.
3. TO SECURE THE NET, BURY THE UPSLOPE END IN A SLOT OR TRENCH NO LESS THAN 6 INCHES DEEP, COVER WITH SOIL, AND TAMP FIRMLY. STAPLE THE NET EVERY 12 INCHES ACROSS THE TOP END AND EVERY 3 FEET ALONG THE EDGES AND BOTTOM. WHERE 2 STRIPS OF NET ARE LAID SIDE BY SIDE, THE ADJACENT EDGES SHOULD BE OVERLAPPED 3 INCHES AND STAPLED TOGETHER. EACH STRIP OF NETTING SHOULD ALSO BE STAPLED DOWN THE CENTER, EVERY 3 FEET. DO NOT STRETCH THE NET WHEN APPLYING STAPLES.
4. TO JOIN TWO STRIPS, CUT A TRENCH TO ANCHOR THE END OF THE NEW NET. OVERLAP THE END OF THE PREVIOUS ROLL 18 INCHES AND STAPLE EVERY 12 INCHES JUST BELOW THE ANCHOR SLOT.

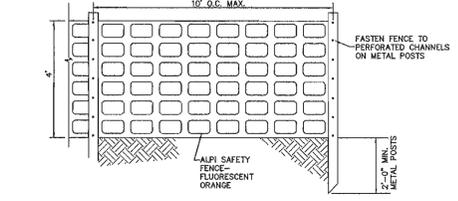
**MAINTENANCE**

INSPECT ALL MULCHES PERIODICALLY, AND AFTER RAINSTORMS TO CHECK FOR RILL EROSION, DISLOCATION, OR FAILURE. WHERE EROSION IS OBSERVED, APPLY ADDITIONAL MULCH. IF WASHOUT OCCURS, REPAIR THE SLOPE GRADE, RESEED, AND REINSTALL MULCH. CONTINUE INSPECTIONS UNTIL VEGETATION IS FIRMLY ESTABLISHED.

**NETS AND MATS**

**PROTECTION OF EXISTING VEGETATION:**

AT THE START OF GRADING INVOLVING THE LOWERING OF EXISTING GRADE AROUND A TREE OR STRIPPING OF TOPSOIL, A CLEAN, SHARP, VERTICAL CUT SHALL BE MADE AT THE EDGE OF THE TREE SAVE AREA AT THE SAME TIME AS OTHER EROSION CONTROL MEASURES ARE INSTALLED. THE TREE PROTECTION FENCE SHALL BE INSTALLED ON THE SIDE OF THE CUT FURTHEST AWAY FROM THE TREE TRUNK AND SHALL REMAIN IN PLACE UNTIL ALL CONSTRUCTION IN THE VICINITY OF THE TREE IS COMPLETE. NO STORAGE OF MATERIALS, FILL, OR EQUIPMENT AND NO TRESPASSING SHALL BE ALLOWED WITHIN THE BOUNDARY OF THE PROTECTED AREA.



**TREE PROTECTION FENCE DETAIL**

### CONSTRUCTION SEQUENCE

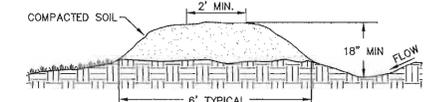
1. EROSION CONTROL MEASURES INCLUDE A GRAVEL CONSTRUCTION EXIT, SEDIMENT TRAPPING MEASURES, STABILIZATION AT PIPE OUTLETS, AND THE STABILIZATION OF DISTURBED AREAS WITHIN 15 WORKING DAYS AFTER COMPLETION OF ANY PHASE OF GRADING. STABILIZATION CONSISTS OF EITHER TEMPORARY MULCHING OR PERMANENT VEGETATION ON AREAS THAT ARE NOT PAVED.
2. OBTAIN ALL THE APPROVALS AND PERMITS NECESSARY TO BEGIN AND COMPLETE THE PROJECT. THESE APPROVALS AND PERMITS INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING: TRC SITE PLAN APPROVAL, EROSION CONTROL PLAN APPROVAL, AND DRIVEWAY PERMIT APPROVAL.
3. SCHEDULE AND HOLD A PRECONSTRUCTION CONFERENCE BEFORE STARTING ANY ADDITIONAL CLEARING, OR GRADING. ATTENDEES SHALL INCLUDE THE OWNER, THE CONTRACTOR(S) RESPONSIBLE FOR THE DISTURBANCE AND EROSION CONTROL, AND EROSION CONTROL PERSONNEL.
4. INSTALL THE GRAVEL FOR CONSTRUCTION EXIT. CLEAR AREAS AS NECESSARY TO GAIN ACCESS TO SEDIMENT BASIN LOCATIONS. INSTALL BASINS, DIVERSIONS AND FENCING. COMPLETE CLEARING AND GRUBBING.
5. BEGIN ROUGH GRADING.
6. BEGIN STORM DRAINAGE INSTALLATION AS GRADING PROCEEDS, PROTECTING PIPE OPENINGS AND UNCOVERED STRUCTURES USING METHODS DETAILED, AS APPROPRIATE.
7. COMPLETE ALL ROUGH GRADING AND SEED AND MULCH BACKSLOPES AS SOON AS POSSIBLE.
8. INSTALL RIP-RAP OUTLET AND INLET PROTECTION.
9. CONSTRUCT BUILDING FOUNDATIONS.
10. PLACE AND COMPACT STONE AND CONSTRUCT SIDEWALKS.
11. INSTALL UNDERGROUND UTILITIES.
12. PAVE PARKING FACILITY.
13. PROVIDE DISTURBED AREAS WITH GROUND COVER SUFFICIENT TO RESTRAIN EROSION WITHIN 15 WORKING DAYS AFTER COMPLETION OF ANY PHASE OF GRADING, WHETHER CLEARING OR ROUGH OR FINISHED GRADING.
14. INSPECT AND MAINTAIN THE EROSION CONTROL DEVICES SO THEY CONTINUE TO FUNCTION PROPERLY. REFER TO THE EROSION CONTROL PLAN FOR SPECIFIC INSTRUCTIONS FOR EACH DEVICE. THE PERSON RESPONSIBLE FOR EROSION CONTROL IS ALSO RESPONSIBLE FOR TAKING THE INITIATIVE IN INSPECTING AND MAINTAINING THESE DEVICES; DO NOT WAIT FOR THE EROSION CONTROL INSPECTOR TO POINT OUT THE NEED FOR MAINTENANCE AND REPAIRS.
15. KEEP MUD AND DEBRIS OFF THE PUBLIC STREET AT ALL TIMES. IF MUD OR DEBRIS IS TRACKED FROM THE SITE, USE A SHOVEL AND BROOM TO REMOVE IT IMMEDIATELY. IF MUD AND DEBRIS ARE NOT KEPT OFF THE STREET ENFORCEMENT ACTIONS (REVOKING THE GRADING PERMIT AND/OR A STOP WORK ORDER) MAY BE TAKEN!!
16. IF IT IS DETERMINED DURING THE COURSE OF CONSTRUCTION THAT SIGNIFICANT SEDIMENT IS LEAVING THE SITE DESPITE PROPER IMPLEMENTATION AND MAINTENANCE OF THE APPROVED EROSION CONTROL PLAN, THE PERSON RESPONSIBLE FOR THE LAND-DISTURBING ACTIVITY IS OBLIGATED TO TAKE ADDITIONAL PROTECTIVE ACTION.
17. PERMANENTLY STABILIZE ALL DISTURBED AREAS. REFER TO INSTRUCTIONS IN THE PLAN FOR THE TYPE(S) OF STABILIZATION TO BE USED ON THE SITE.
18. WHEN CONSTRUCTION IS COMPLETED, ALL TEMPORARY EROSION CONTROL DEVICES MUST BE REMOVED AFTER THE DRAINAGE AREA ABOVE HAS BEEN SUFFICIENTLY STABILIZED TO RESTRAIN EROSION. REMOVE AND PROPERLY DISPOSE OF ACCUMULATED SEDIMENT AND THE DEBRIS FROM THE DEVICES, AND STABILIZE THE LOCATIONS.
19. ARRANGE A FINAL INSPECTION WITH THE EROSION CONTROL INSPECTOR TO CONFIRM THAT ALL REQUIREMENTS OF THE APPROVED EROSION CONTROL PLAN HAVE BEEN COMPLETED.
20. WHEN ALL AREAS ARE STABILIZED, COORDINATE WITH ENGINEER, ORANGE COUNTY EROSION CONTROL OFFICER AND TOWN OF CHAPEL HILL STORMWATER TO CONVERT SEDIMENT BASIN TO BIORETENTION FACILITY. FACILITY MUST BE CONSTRUCTED AND AS-BUILTS MUST BE SUBMITTED PRIOR TO OBTAINING CERTIFICATE OF OCCUPANCY.

**CONSTRUCTION SPECIFICATIONS:**

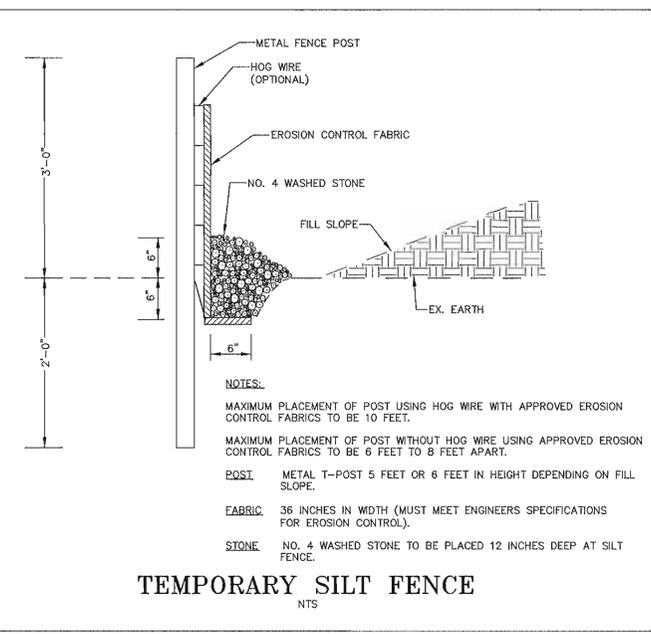
1. REMOVE AND PROPERLY DISPOSE OF ALL TREES, BRUSH, STUMPS, AND OTHER OBJECTIONABLE MATERIAL.
2. ENSURE THAT THE MINIMUM CONSTRUCTED CROSS SECTION MEETS ALL DESIGN REQUIREMENTS.
3. ENSURE THAT THE TOP OF THE DIKE IS NOT LOWER AT ANY POINT THAN THE DESIGN ELEVATION PLUS THE SPECIFIED SETTLEMENTS.
4. PROVIDE SUFFICIENT RAMP AROUND DIVERSIONS TO PERMIT MACHINE REGRADING AND CLEANOUT.
5. VEGETATE THE RIDGE IMMEDIATELY AFTER CONSTRUCTION, UNLESS IT WILL REMAIN IN PLACE LESS THAN 30 WORKING DAYS. INSPECT TEMPORARY DIVERSIONS ONCE A WEEK AND AFTER EVERY RAINFALL.

**MAINTENANCE:**

IMMEDIATELY REMOVE SEDIMENT FROM THE FLOW AREA AND REPAIR THE DIVERSION RIDGE. CAREFULLY CHECK OUTLETS AND MAKE TIMELY REPAIRS AS NEEDED. WHEN THE AREA PROTECTED IS PERMANENTLY STABILIZED, REMOVE THE RIDGE AND THE CHANNEL TO BLEND WITH THE NATURAL GROUND LEVEL AND APPROPRIATELY STABILIZE IT.



**TEMPORARY DIVERSION DITCH**



**TEMPORARY SILT FENCE**

### NPDES PERMIT REQUIREMENTS

THIS PROJECT IS SUBJECT TO THE REQUIREMENTS OF NPDES PERMIT FOR CONSTRUCTION ACTIVITIES (PERMIT NO. N00910000). THE ITEMS NOTED ARE SOME OF THE OBLIGATIONS ASSOCIATED WITH THE NPDES PERMIT PROCESS.

**CONTROLS FOR STORMWATER DISCHARGES**

1. THE PERMITTEE SHALL IMPLEMENT THE SOIL AND EROSION CONTROL PLAN, WHICH HAS BEEN APPROVED BY THE APPROVAL AUTHORITY. THE APPROVED PLAN IS CONSIDERED A REQUIREMENT OR CONDITION OF NPDES PERMIT. DEVIATION FROM THE APPROVED PLAN, OR APPROVED AMENDMENT TO THE PLAN, SHALL CONSTITUTE A VIOLATION OF THE TERMS AND CONDITIONS OF THIS GENERAL PERMIT EXCEPT THAT DEVIATION FROM THE APPROVED PLAN WILL BE ALLOWED TO CORRECT AN EMERGENCY SITUATION WHERE SEDIMENTS ARE BEING DISCHARGED OFF THE SITE, EVEN THOUGH THE APPROVED PLAN IS IN EFFECT. SUCH A DEVIATION FROM THE APPROVED PLAN SHALL BE NOTED ON THE APPROVED PLAN MAINTAINED AT THE JOB SITE. A SIGNED COPY OF THE APPROVED PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
2. EQUIPMENT UTILIZED DURING THE CONSTRUCTION ACTIVITY ON A SITE MUST BE OPERATED AND MAINTAINED IN SUCH A MANNER AS TO PREVENT THE POTENTIAL OR ACTUAL POLLUTION OF THE SURFACE OR GROUND WATERS OF THE STATE; FUELS, LUBRICANTS, COOLANTS, AND HYDRAULIC FLUIDS, OR ANY OTHER PETROLEUM PRODUCTS, SHALL NOT BE DISCHARGED ONTO THE GROUND OR INTO SURFACE WATERS. SPENT FLUIDS SHALL BE DISPOSED OF IN A MANNER SO AS NOT TO ENTER THE WATERS, SURFACE OR GROUND, OF THE STATE AND IN ACCORDANCE WITH APPLICABLE STATE AND FEDERAL DISPOSAL REGULATIONS. ANY SPILLED FLUIDS SHALL BE CLEANED UP TO THE EXTENT PRACTICABLE AND DISPOSED OF IN A MANNER SO AS NOT TO ALLOW THEIR ENTRY INTO THE WATERS, SURFACE OR GROUND, OF THE STATE.
3. HERBICIDE, PESTICIDE, AND FERTILIZER USAGE DURING THE CONSTRUCTION ACTIVITY SHALL BE RESTRICTED TO THOSE MATERIALS APPROVED BY EPA AND SHALL BE IN ACCORDANCE WITH LABEL RESTRICTIONS.
4. ALL WASTES COMPOSED OF BUILDING MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH NORTH CAROLINA GENERAL STATUTES.
5. THE PERMITTEE SHALL REPORT TO THE CENTRAL OFFICE OR THE APPROPRIATE REGIONAL OFFICE ANY NONCOMPLIANCE WHICH MAY ENDANGER HEALTH OR THE ENVIRONMENT. ANY INFORMATION SHALL BE PROVIDED ORALLY WITHIN 24 HOURS FROM THE TIME THE PERMITTEE BECAME AWARE OF THE CIRCUMSTANCES. A WRITTEN SUBMISSION SHALL ALSO BE PROVIDED WITHIN 5 DAYS OF THE TIME THE PERMITTEE BECAME AWARE OF THE CIRCUMSTANCES.

THE WRITTEN SUBMISSION SHALL CONTAIN A DESCRIPTION OF THE NONCOMPLIANCE, AND ITS CAUSES; THE PERIOD OF NONCOMPLIANCE, INCLUDING EXACT DATES AND TIMES, AND IF THE NONCOMPLIANCE HAS NOT BEEN CORRECTED, THE ANTICIPATED TIME IT IS EXPECTED TO CONTINUE; AND STEPS TAKEN OR PLANNED TO REMOVE, ELIMINATE, AND PREVENT REOCCURRENCE OF THE NONCOMPLIANCE (SEE SPECIFIC PERMIT REQUIREMENTS FOR REPORTING INFORMATION).

**MINIMUM MONITORING AND REPORTING REQUIREMENTS**

MINIMUM MONITORING AND REPORTING REQUIREMENTS ARE AS FOLLOWS UNLESS OTHERWISE APPROVED IN WRITING BY THE DIRECTOR OF THE DIVISION OF ENVIRONMENTAL MANAGEMENT.

1. ALL SEDIMENTATION AND EROSION CONTROL FACILITIES SHALL BE INSPECTED BY OR UNDER THE DIRECTION OF THE PERMITTEE AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT OF GREATER THAN 0.5 INCHES OF RAIN PER 24 HOUR PERIOD.
2. STORMWATER RUNOFF DISCHARGES SHALL BE INSPECTED BY OBSERVATION FOR STORMWATER DISCHARGE CHARACTERISTICS AS DEFINED BELOW AT THE ABOVE FREQUENCY TO EVALUATE THE EFFECTIVENESS OF THE POLLUTION CONTROL FACILITIES OR PRACTICES. IF ANY VISIBLE OFF-SITE SEDIMENTATION IS LEAVING THE SITE, CORRECTIVE ACTION SHALL BE TAKEN TO REDUCE THE DISCHARGE OF SEDIMENTS.

Stormwater Discharge Characteristics	Monitoring Type <sup>1</sup>	Monitoring Location <sup>2</sup>
Color	SDO	SDO
Odor	SDO	SDO
Clarity	SDO	SDO
Floating Solids	SDO	SDO
Suspended Solids	SDO	SDO
Foam	SDO	SDO
Oil Sheen	SDO	SDO
Other obvious indicators of stormwater pollution	SDO	SDO

**FOOTNOTES:**

1. MONITORING TYPE: THE MONITORING REQUIRES A QUALITATIVE OBSERVATION OF EACH STORMWATER OUTFALL. NO ANALYTICAL TESTING OR SAMPLING IS REQUIRED.
2. SAMPLE LOCATION: STORMWATER DISCHARGE OUTFALL (SDO)
3. THE OPERATOR SHALL KEEP A RECORD OF INSPECTIONS. VISIBLE SEDIMENTATION FOUND OFF THE SITE SHALL BE RECORDED WITH A BRIEF EXPLANATION AS TO THE MEASURES TAKEN TO PREVENT FUTURE RELEASES AS WELL AS ANY MEASURES TAKEN TO CLEAN UP THE SEDIMENT THAT HAS LEFT THE SITE. THIS RECORD SHALL BE MADE AVAILABLE TO DEM OR AUTHORIZED AGENT UPON REQUEST. REPORTS SHALL BE MAINTAINED ONSITE AT ALL TIMES.
4. PERMITTEE SHALL AT ALL TIMES PROVIDE THE OPERATION AND MAINTENANCE NECESSARY TO OPERATE THE PERMITTED STORMWATER CONTROLS AT OPTIMUM EFFICIENCY.

UPON COMPLETION AND ACCEPTANCE OF THE IMPROVEMENTS OUTLINED IN THE PHASING PROGRAM, THE ENTIRE AREA DISTURBED BY PROJECT CONSTRUCTION SHALL BE PROVIDED WITH A PERMANENT VEGETATIVE COVER. THE DISTURBED AREAS SHALL BE FINELY TILLED BY HARROWING. WHERE SOIL CONDITIONS ARE UNFAVORABLE FOR SUCCESSFUL ESTABLISHMENT OF COVER, AVAILABLE TOPSOIL SHALL BE SPREAD. DOLOMITIC LIMESTONE SHALL BE APPLIED AT THE RATE OF 4,000 LBS. PER ACRE AND A 10-10-10 COMMERCIAL FERTILIZER MIX SHALL BE APPLIED AT A RATE OF 1000 LBS. PER ACRE TO THE DISTURBED AREA. IT SHALL BE UNIFORMLY APPLIED TO DISTURBED AREAS ACCORDING TO THE FOLLOWING SCHEDULE BY BROADCASTING WITH A CYCLONE SEEDER OR CLOSE DRILL. SEED SHALL BE LIGHTLY COVERED AND SOIL SHALL BE FIRMED. STRAW MULCH SHALL BE APPLIED TO THE SEEDBED AREA AT THE RATE OF 1-1/2 BALES PER 1000 SQ. FT. AND TACKED.

DATES	RATE #/ACRE
JANUARY 1 - MAY 1	2000
LIMESTONE	750
FERTILIZER (10-10-10)	120
RYE (GRAIN)	4000
MULCH - STRAW & TACK	
MAY 1 - AUGUST 15	2000
LIMESTONE	750
FERTILIZER (10-10-10)	40
GERMAN MILLET	4000
MULCH - STRAW & TACK	
AUGUST 15 - JANUARY 1	2000
LIMESTONE	1000
FERTILIZER (10-10-10)	120
RYE (GRAIN)	4000
MULCH - STRAW & TACK	

**SCHEDULE FOR PROVIDING PERMANENT VEGETATIVE COVER**

DATES	RATE #/ACRE
NOVEMBER 1 - JANUARY 31	100
TALL FESCUE	50
RYE	
FEBRUARY 1 - APRIL 30	80
TALL FESCUE	60
BLUEGRASS	20
MAY 1 - JULY 31	70
TALL FESCUE	50
WEeping LOVEGRASS	20
AUGUST 1 - OCTOBER 31	100
TALL FESCUE	50
SUDAN HYBRID	50

**PERMANENT & TEMPORARY SEEDING SPECIFICATIONS**

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 204 W. Clay Street  
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**NEW LIFE CHURCH**  
 CHAPEL HILL, NORTH CAROLINA

**EROSION CONTROL**  
 DETAILS

REV.	DATE	DESCRIPTION	BY
1	02/18/11	PRE-SUBMITTAL REVISIONS	CPK
2	04/08/11	SEWER EXTENSION	THM
3	09/20/11	OWASA SUBMITTAL	CPK
4	10/27/11	FULL SUBMITTAL	CPK
5	11/15/11	RESPONSE TO COMMENTS	CPK
6	08/14/12	REV. PER SPECIAL USE APP.	CPK
7	01/23/13	COVER SHEET CHANGE	SSS
8	06/10/13	DRIVE REL. PER CHANGDOT	CPK
9	11/19/13	RESUBMIT REVISED CONFIG.	CPK
10	04/02/14	CH PLANNING COMMENTS	CPK

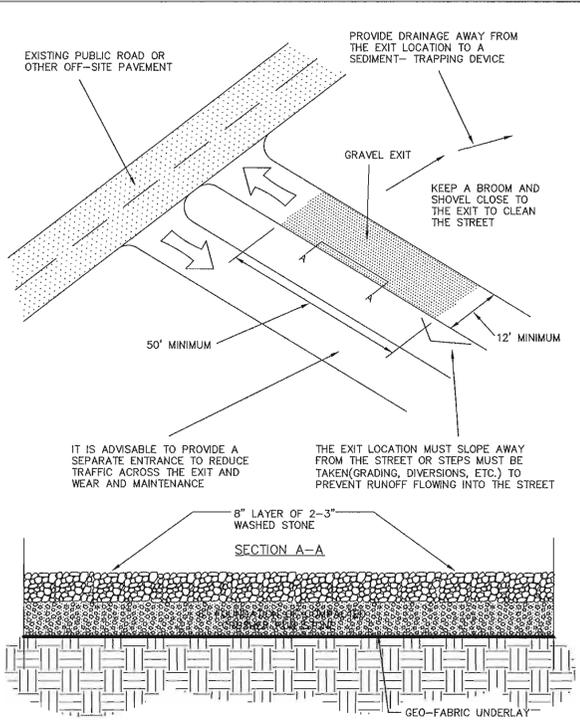
DATE: NOVEMBER 16, 2010  
 HORIZONTAL SCALE: N/A  
 VERTICAL SCALE: N/A  
 PROJECT MANAGER: CPK  
 DRAWN BY: SSS  
 PROJECT NO: 10-013  
 DRAWING NAME: 10-013 DETAILS

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SHEET NO. **D1.0**

PRELIMINARY



**CONSTRUCTION EXIT**  
NTS

INSTRUCTIONS FOR GRAVEL CONSTRUCTION EXIT

INSTALLATION

- REFER TO PLANS FOR LOCATION AND SPECIFICATIONS. IF THERE ARE QUESTIONS OR PROBLEMS WITH THE LOCATION OR METHODS OF INSTALLATION CONTACT THE ENGINEER, ARCHITECT, OR RESPONSIBLE PERSONNEL ON THE SITE FOR ASSISTANCE. EROSION CONTROL PERSONNEL HAVE COPIES OF INSTRUCTIONS AND PHOTOGRAPHS OF PROPERLY INSTALLED EXITS AS AN AID TO INSTALLATION. IF THE CONSTRUCTION EXIT IS NOT INSTALLED CORRECTLY THE FIRST TIME, IT WILL HAVE TO BE REBUILT.
- DETERMINE THE LOCATION ON THE GROUND, TAKING INTO CONSIDERATION:
  - THE CONSTRUCTION EXIT MUST BE IN PLACE DURING ALL PHASES OF CONSTRUCTION; IF THE LOCATION IS TO BE GRADED, THE EXIT MUST BE INSTALLED FOR THE INITIAL WORK, REMOVED TO ALLOW GRADING OF THE LOCATION, AND REPLACED IMMEDIATELY AFTER GRADING SO THAT IT IS IN PLACE AND FUNCTIONING AT ALL TIMES.
  - IF THE SITE WILL HAVE A LARGE NUMBER OF VEHICLES USING THE EXIT, IT IS ADVISABLE TO HAVE A DIVIDED ENTRANCE THAT DIRECTS ENTERING TRAFFIC THROUGH A SEPARATE TRAVELWAY PARALLEL TO THE GRAVEL CONSTRUCTION EXIT IN ORDER TO REDUCE THE NUMBER OF TRIPS OVER THE STONE, INCREASING THE LIFE TO THE GRAVEL, AND REDUCING MAINTENANCE. REFER TO THE ILLUSTRATION FOR DETAILS.
  - RUNOFF AND SEDIMENT FROM THE SITE MUST BE DIRECTED AWAY FROM THE EXIT SO THAT IT DOES NOT FLOW INTO THE STREET OR OTHER OFF-SITE AREA; CHOOSE A LOCATION FOR THE EXIT THAT WILL MAKE IT EASY TO DIVERT THE RUNOFF TO SEDIMENT-TRAPPING DEVICES.
  - IF THE GRAVEL CONSTRUCTION EXIT DOES NOT FUNCTION TO KEEP MUD AND DUST ON-SITE, THEN ANY SOIL OR DEBRIS TRACKED FROM THE SITE MUST BE PHYSICALLY REMOVED FROM THESE AREAS BY FIRST USING A SHOVEL AND BROOM AND THEN WASHING THE PAVEMENT.
  - IF THE PERSON RESPONSIBLE FOR THE DISTURBANCE FAILS TO TAKE INITIATIVE TO KEEP SOIL AND DEBRIS ON THE SITE ENFORCEMENT ACTION MAY BE TAKEN AGAINST THE SITE AND THE GRADING PERMIT REVOKED AND/OR A STOP WORK ORDER ISSUED.
- CLEAR THE LOCATION OF THE EXIT, REMOVING STUMPS, ROOTS, AND OTHER VEGETATION IN ORDER TO PROVIDE A FIRM FOUNDATION SO THAT THE STONE IS NOT PRESSED INTO SOFT GROUND. CLEAR ENOUGH WIDTH TO ALLOW PASSAGE OF LARGE VEHICLES, BUT CLEAR ONLY WHAT IS NECESSARY FOR THE EXIT. DO NOT CLEAR ADJACENT AREAS UNTIL THE REQUIRED EROSION CONTROL DEVICES ARE IN PLACE.
  - IF THE SOIL AT THE LOCATION IS SOFT IT IS ADVISABLE TO PLACE A 6 TO 8 INCH LAYER OF CRUSHER RUN STONE DOWN FIRST TO PROVIDE A FIRM FOUNDATION AND PREVENT THE WASHED STONE BEING PRESSED INTO THE GROUND.
- AT THE LOCATION OF THE EXIT, PLACE AN 8-INCH LAYER OF WASHED STONE 2 TO 3 INCHES IN DIAMETER AT LEAST 50 FEET LONG AND AS WIDE AS THE FULL WIDTH OF THE EXIT OR AT LEAST 10 FEET WIDE. FLARE THE END OF THE STONE WHERE IT MEETS THE PAVEMENT SO THAT THE WHEELS OF TURNING VEHICLES REMAIN ON STONE AND DO NOT TRAVEL OVER UNPROTECTED SOIL.
- A SQUARE-EDGED SHOVEL AND BROOM WITH STIFF BRISTLES MUST BE PROVIDED AT THE EXIT FOR REMOVING ANY MUD THAT MAY BE TRACKED INTO THE STREET.

**USE**

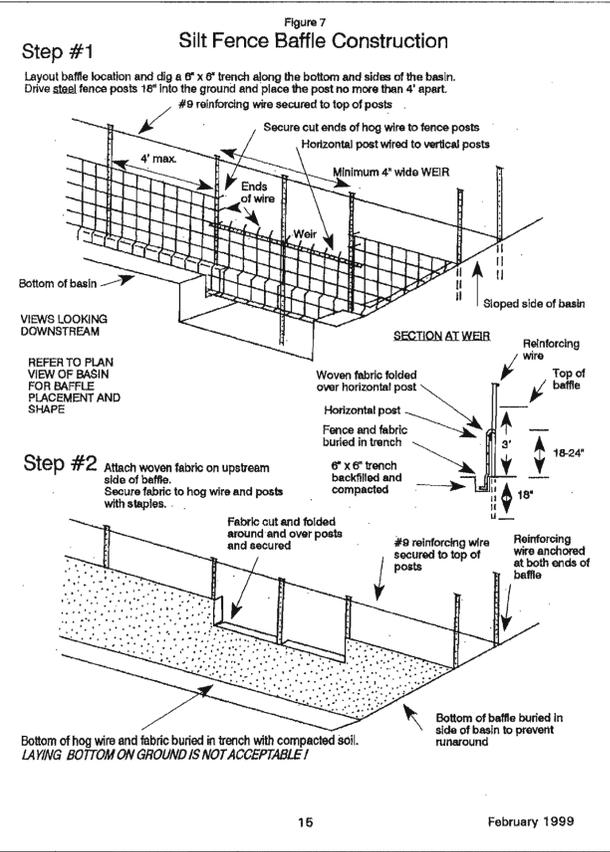
- AS VEHICLES LEAVE THE SITE DRIVE ACROSS THE WASHED STONE THE ABRASIVE ACTION OF THE WASHED STONE SHOULD REMOVE SEDIMENT FROM THE TIRES. IT MAY BE NECESSARY TO USE A SHOVEL TO REMOVE MUD TRAPPED BETWEEN TIRE TREADS.
- ANY SOIL TRACKED FROM THE SITE MUST BE REMOVED IMMEDIATELY. A SHOVEL AND BROOM MUST BE USED TO REMOVE AS MUCH SOIL AS POSSIBLE BEFORE WASHING THE PAVEMENT.

**MAINTENANCE**

- MATERIALS, EQUIPMENT, AND PERSONNEL MUST BE AVAILABLE FOR MAINTENANCE AT ALL TIMES.
- WHEN THE STONE IN THE EXIT BECOMES CONTAMINATED WITH SOIL AND ITS FUNCTION IS REDUCED TO WHERE SEDIMENT IS BEING TRACKED INTO THE STREET, A 4-INCH LAYER OF CLEAN STONE MUST BE ADDED.
  - DIVERSIONS USED TO DIRECT RUNOFF AWAY FROM THE EXIT TO SEDIMENT-TRAPPING DEVICES MUST BE MAINTAINED ACCORDING TO SPECIFICATIONS FOR THOSE DEVICES.
  - CONTINUAL MAINTENANCE AND/OR REFRESHING OF THE STONE WILL BE REQUIRED TO PREVENT SEDIMENT FROM BEING TRACKED OFF SITE. PROBLEMS MUST BE ANTICIPATED AND THE PROPER PREVENTIVE MAINTENANCE MUST BE PERFORMED.

**REMOVAL**

- WHEN THE GRAVEL CONSTRUCTION EXIT IS NO LONGER NEEDED, WHEN THE TRAVELWAYS HAVE BEEN STABILIZED AND THE POTENTIAL FOR TRACKING SOIL AND DEBRIS INTO THE STREET HAS BEEN REMOVED, THE GRAVEL CONSTRUCTION EXIT MAY BE REMOVED.
- THE STONE AND ANY SEDIMENT SHOULD BE REMOVED AND PROPERLY DISPOSED OF WHERE THEY WILL NOT CREATE AN EROSION HAZARD.



15 February 1999

**Practice Standards and Specifications**

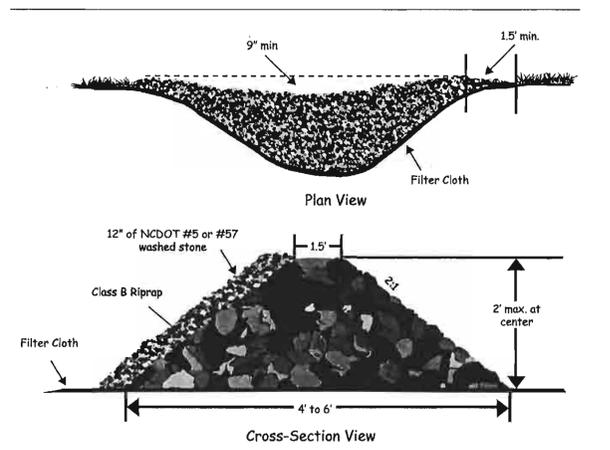


Figure 6.83b Stone check dam stone should be placed over the channel banks to keep water from cutting around the dam.

**Maintenance**

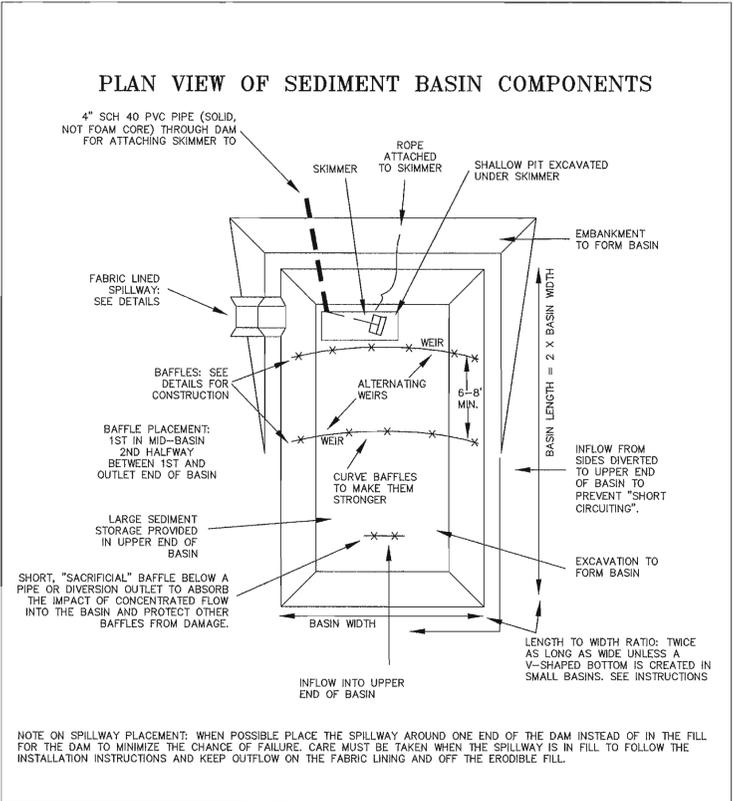
Inspect check dams and channels at least weekly and after each significant (1/2 inch or greater) rainfall event and repair immediately. Clean out sediment, straw, limbs, or other debris that could clog the channel when needed.

Anticipate submergence and deposition above the check dam and erosion from high flows around the edges of the dam. Correct all damage immediately. If significant erosion occurs between dams, additional measures can be taken such as, installing a protective riprap liner in that portion of the channel (Practice 6.31, Riprap-lined and Paved Channels).

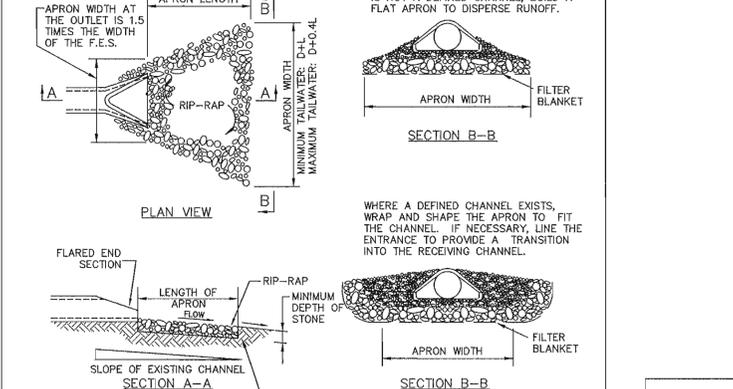
Remove sediment accumulated behind the dams as needed to prevent damage to channel vegetation, allow the channel to drain through the stone check dam, and prevent large flows from carrying sediment over the dam. Add stones to dams as needed to maintain design height and cross section.

**References**

- Runoff Conveyance Measures 6.30, Grass-lined Channels 6.31, Riprap-lined and Paved Channels
- North Carolina Department of Transportation Standard Specifications for Roads and Structures



NOTE ON SPILLWAY PLACEMENT: WHEN POSSIBLE PLACE THE SPILLWAY AROUND ONE END OF THE DAM INSTEAD OF IN THE FILL FOR THE DAM TO MINIMIZE THE CHANCE OF FAILURE. CARE MUST BE TAKEN WHEN THE SPILLWAY IS IN FILL TO FOLLOW THE INSTALLATION INSTRUCTIONS AND KEEP OUTFLOW ON THE FABRIC LINING AND OFF THE ERODIBLE FILL.



**RIP RAP APRON**  
NTS

INSTRUCTIONS FOR RIP RAP APRON / STONE APRON OUTLET PROTECTION

**INSTALLATION**

- REFER TO THE PLANS FOR LOCATION, EXTENT, AND SPECIFICATIONS. IF THERE ARE QUESTIONS OR PROBLEMS WITH THE LOCATION, EXTENT, OR METHOD OF INSTALLATION, CONTACT THE ENGINEER, ARCHITECT, OR RESPONSIBLE PERSONNEL ON THE SITE FOR ASSISTANCE. EROSION CONTROL PERSONNEL HAVE COPIES OF INSTRUCTIONS AND MAY HAVE PHOTOGRAPHS OR PROPERLY INSTALLED APRONS AS AN AID TO INSTALLATION.
- IF THE STONE APRON IS NOT INSTALLED CORRECTLY THE FIRST TIME, IT WILL HAVE TO BE REBUILT.
- DETERMINE THE LOCATION ON THE GROUND TAKING INTO CONSIDERATION:
  - DECIDE HOW EQUIPMENT AND MATERIAL WILL REACH THE LOCATION TO CONSTRUCT THE APRON. DO NOT "PAINT YOURSELF INTO A CORNER" AND PLACE FILL, STRUCTURES, ETC. THAT COULD BLOCK ACCESS.
  - THE LOCATION OF THE APRON MUST BE SOLID GROUND. IT MAY BE NECESSARY TO EXCAVATE THE LOCATION TO REMOVE MUD AND THEN BACKFILL WITH GOOD MATERIAL. THIS IS NECESSARY SO THE STONE DOES NOT DISAPPEAR INTO THE MUD, WHICH WOULD REQUIRE MUCH MORE STONE TO COMPLETE THE APRON AND MAKE INSTALLATION DIFFICULT.
- CLEAR THE LOCATION OF THE APRON. LEAVE AS MUCH OF THE EXISTING VEGETATION AS POSSIBLE AROUND THE LOCATION TO HOLD THE SOIL IN PLACE AND REDUCE THE AREA THAT WILL HAVE TO BE STABILIZED AFTERWARD.
- EXCAVATE THE BOTTOM TO THE REQUIRED DEPTH TO ACCEPT THE STONE AND THE FILTER BLANKET. WHEN FINISHED, THE BOTTOM OF THE APRON MUST BE LEVEL WITH THE BOTTOM OF THE CHANNEL; THERE CANNOT BE AN OVERFALL AT THE END OF THE APRON.
- PLACE THE FILTER BLANKET, AS SPECIFIED IN THE PLAN, OVER THE LOCATION AND UNDER THE LIP OF THE FLARED END SECTION.
- PLACE THE SPECIFIED STONE TO THE REQUIRED DIMENSIONS AND SHAPE IT TO THE CONFIGURATION SHOWN IN THE PLAN.
- STABILIZE THE AREA AROUND THE APRON THAT WAS DISTURBED DURING CONSTRUCTION. USE ADDITIONAL STONE OR VEGETATION, WHICHEVER IS APPROPRIATE FOR THE SITUATION.

**INSTRUCTIONS FOR SKIMMER SEDIMENT BASIN INSTALLATION**

- REFER TO THE PLANS FOR LOCATION, DIMENSIONS, AND SPECIFICATIONS. IF THERE ARE QUESTIONS OR PROBLEMS WITH THE LOCATION, EXTENT, OR METHODS OF INSTALLATION, CONTACT THE ENGINEER, ARCHITECT, OR RESPONSIBLE PERSONNEL ON THE SITE FOR ASSISTANCE. EROSION CONTROL PERSONNEL HAVE COPIES OF INSTRUCTIONS AND MAY HAVE PHOTOGRAPHS OF PROPERLY INSTALLED SEDIMENT BASINS AS AN AID TO INSTALLATION. REFER TO THE LATEST VERSION OF "A MANUAL FOR DESIGNING, INSTALLING, AND MAINTAINING SKIMMER SEDIMENT BASINS" AVAILABLE FROM EROSION CONTROL PERSONNEL IF THERE ARE ANY QUESTIONS OR PROBLEMS.

IF THE SEDIMENT BASIN IS NOT INSTALLED CORRECTLY THE FIRST TIME, IT WILL HAVE TO BE REBUILT.

- DETERMINE THE LOCATION ON THE GROUND, TAKING INTO CONSIDERATION:
  - ALLOW SUFFICIENT SPACE FOR THE PIT AND BERM TO BE BUILT TO THE SPECIFIED DIMENSIONS.
  - ALLOW ACCESS TO THE BASIN WHEN IT IS FINISHED TO MAINTAIN AND REMOVE IT, TAKING INTO ACCOUNT FINISHED GRADES, FILL SLOPES, BUILDINGS, UTILITIES, ETC.
  - ALLOW AT LEAST:
    - 15 FEET BETWEEN THE SEDIMENT BASIN AND SINGLE-STORY BUILDINGS.
    - 25 FEET FOR FORK LIFTS BETWEEN THE SEDIMENT BASIN AND MULTIPLE-STORY BUILDINGS.
    - 15 FEET BETWEEN THE SEDIMENT BASIN AND THE TOE OF FILL SLOPES.
  - MAKE SURE RUNOFF FROM THE DISTURBED AREAS ABOVE THE BASIN WILL FLOW INTO AND THROUGH THE SEDIMENT BASIN AND NOT BY-PASS IT. PLACE THE BASIN WHERE DIVERSIONS, SILT FENCE, ETC. CAN DIRECT RUNOFF TO THE BASIN LOCATION.

- CLEAR THE LOCATION OF THE BASIN, REMOVING TOP SOIL, STUMPS, ROOTS, LARGE ROCKS, AND OTHER OBJECTIONABLE MATERIAL.
- EXCAVATE THE PIT AS NECESSARY TO CREATE THE REQUIRED VOLUME. KEEP IN MIND:
  - POSITIVE DRAINAGE OUT OF THE PIT MUST BE MAINTAINED TO KEEP STANDING WATER TO A MINIMUM AND ALLOW ACCUMULATED SEDIMENT TO DRY OUT.
  - MAXIMUM 2.5:1 SLOPES ON CUT AND FILL SLOPES, EXCEPT THE OUTLET SIDE, WHICH MUST BE 3:1 OR FLATTER.

- WHERE THE BASIN IS BEING BUILT ON A SLOPE, FILL AND COMPACT THE EARTH BERM USING GOOD SOIL THAT IS FREE OF VEGETATION AND ROOTS.
  - DO NOT USE TOPSOIL, MUD, STUMPS, ETC. FROM THE EXCAVATION IN THE BERM.
- EXCAVATE A SMALL PIT BENEATH THE SKIMMER LOCATION AND AROUND ANY SKIMMER RISERS TO PERMIT SKIMMER TO DRAIN WATER FLUSH WITH THE BOTTOM OF THE BASIN.

- PROVIDE A ROPE ATTACHED TO THE SKIMMER AND SECURED ON THE BERM FOR RETRIEVAL OF THE SKIMMER WHEN NECESSARY.
- INSTALL THE BAFFLES AS SPECIFIED IN THE PLAN. REFER TO THE ILLUSTRATIONS AND INSTRUCTIONS FOR BAFFLES. INSTALL THE 4-INCH STAKE IN THE CENTER OF THE PIT SHOWING THE TOP OF THE SEDIMENT STORAGE VOLUME.

- SEED AND MULCH THE SEDIMENT BASIN AND DISTURBED AREAS AROUND IT DURING SPRING, SUMMER, AND FALL. IN WINTER, COVER THESE AREAS WITH A HEAVY LAYER OF STRAW MULCH.

**MAINTENANCE**

MATERIALS, EQUIPMENT, AND PERSONNEL MUST BE AVAILABLE FOR MAINTENANCE AT ALL TIMES.

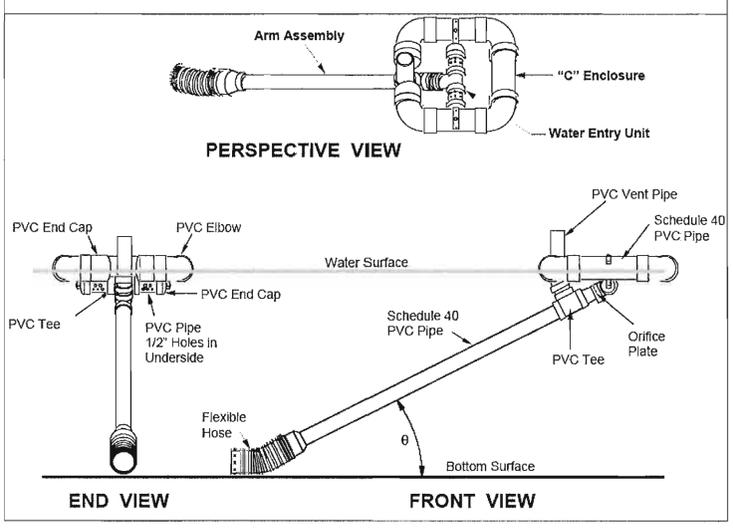
- INSPECT THE SEDIMENT BASIN:
  - DURING CONSTRUCTION: TO SEE IF THE BASIN HAS BEEN DAMAGED BY EQUIPMENT, GRADING ETC. OR PARTIALLY FILLED BY GRADING. IF DAMAGED, REPAIR IT. IF THE VOLUME IS REDUCED, REMOVE THE FILL.
  - AFTER EACH RAINFALL: TO SEE HOW MUCH SEDIMENT HAS ACCUMULATED, IF THE SKIMMER HAS BECOME COVERED OR CLOGGED WITH SEDIMENT, IF THE OUTLET IS BY-PASSING THE BASIN, IF THE OUTLET IS ERODED OR RUNOFF IS BY-PASSING THE BASIN, MAKE THE NECESSARY REPAIRS AND CHANGES. INSPECT THE BAFFLES AND REPAIR THEM IF DAMAGED.
- CLEAN OUT THE PIT WHEN SEDIMENT HAS ACCUMULATED TO THE TOP OF THE SEDIMENT STORAGE VOLUME AS INDICATED BY THE TOP OF THE 4-INCH STAKE IN THE MIDDLE OF THE BASIN. REMOVE THE SEDIMENT AND PLACE IT IN A DISPOSAL AREA OR, IF APPROPRIATE, MIX IT WITH DRY SOIL ON THE SITE. DO NOT DISPOSE OF SEDIMENT IN A MANNER THAT WILL CREATE AN EROSION HAZARD.

- MAINTAIN DRAINAGE TO THE SEDIMENT BASIN SO THAT RUNOFF DOES NOT BY-PASS IT. MAINTAIN ALL DIVERSIONS AND SILT FENCE DIRECTING RUNOFF TO THE BASIN ACCORDING TO REQUIREMENTS FOR THOSE PRACTICES.

**REMOVAL**

- WHEN THE PROJECT IS COMPLETE AND THE DRAINAGE AREA ABOVE THE BASIN IS STABILIZED, THE SEDIMENT BASIN MUST BE REMOVED.
- REMOVE THE ACCUMULATED SEDIMENT, EARTH BERMS, SKIMMER AND ANY RISERS, THEN GRADE THE AREA. DISPOSE OF THE SEDIMENT AND BASIN COMPONENTS PROPERLY. SALVAGE SKIMMER IF NOT DAMAGED.
- STABILIZE THE DISTURBED AREA WITH VEGETATION OR STONE, AS SPECIFIED IN THE PLAN.

**FAIRCLOTH SKIMMER ASSEMBLY**



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PRINCIPAL ENGINEER  
PHIL KOCH - NCEPE #22834

**NEW LIFE CHURCH**  
CHAPEL HILL, NORTH CAROLINA

**EROSION CONTROL**

REV.	DATE	DESCRIPTION	BY
1	02/18/11	PRE-SUBMITTAL REVISIONS	TMM
2	04/08/11	SEWER EXTENSION	TMM
3	09/20/11	OWASA SUBMITTAL	CPK
4	10/21/11	FULL SUBMITTAL	CPK
5	11/15/11	RESPONSE TO COMMENTS	CPK
6	05/14/12	REV. PER SPECIAL USE APP.	SCS
7	01/23/13	COVER SHEET CHANGE	CPK
8	08/10/13	DRIVE REL PER CHANGDOT	CPK
9	11/19/13	RESUBMIT REVISED CONFIG.	CPK
10	04/22/14	CF PLANNING COMMENTS	CPK

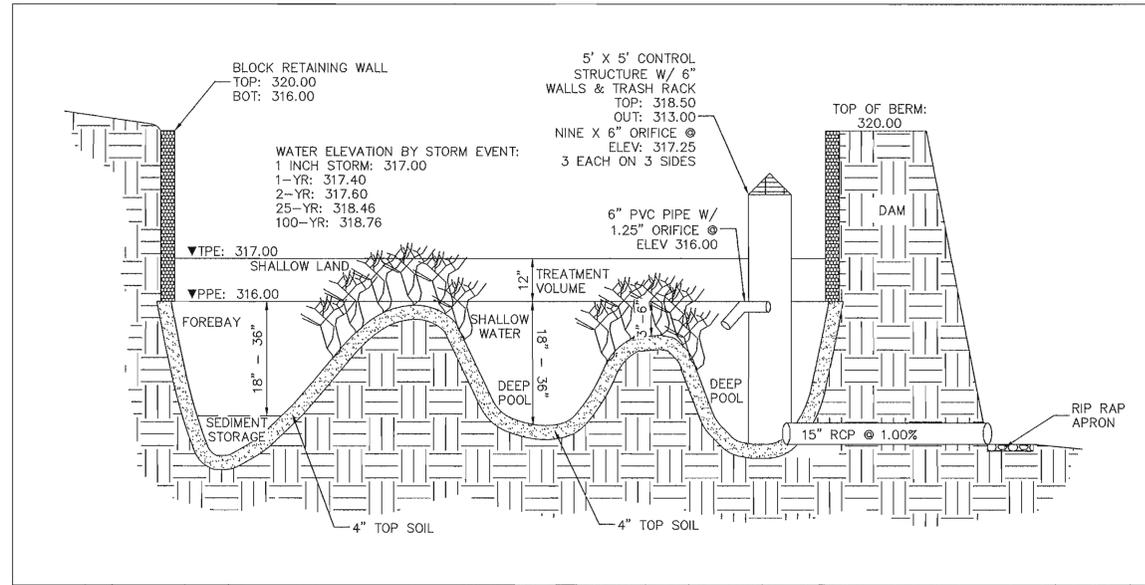
DATE: NOVEMBER 16, 2010

HORIZONTAL SCALE: N/A  
VERTICAL SCALE: N/A  
PROJECT MANAGER: CPK  
DRAWN BY: SCS  
PROJECT NO: 10-013  
DRAWING NAME: 10-013 DETAILS

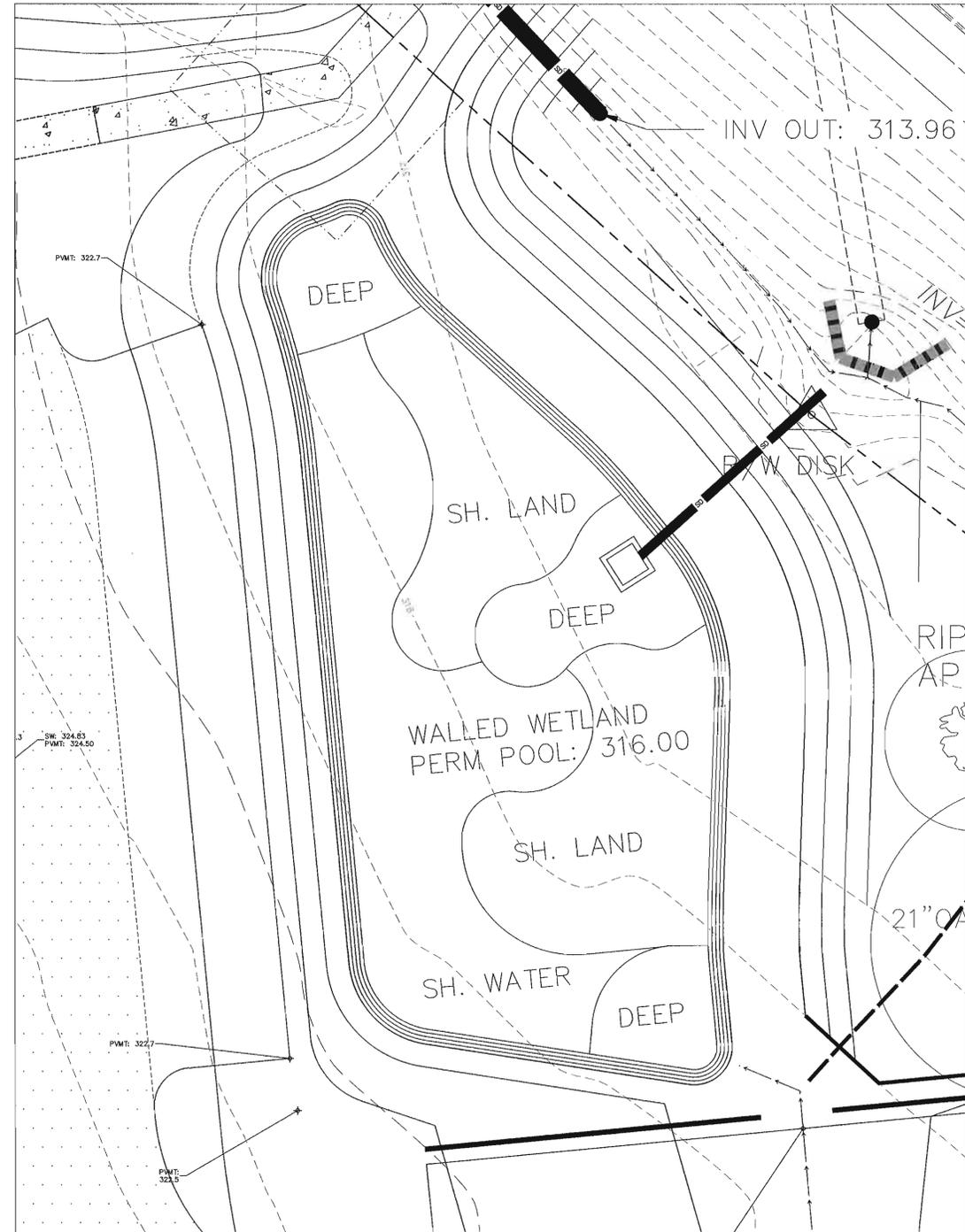
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SHEET NO.  
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WETLANDS CROSS SECTION  
NTS



WETLANDS PLAN VIEW  
SCALE 1" = 10'

**EarthCentric Engineering, Inc.**  
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**NEW LIFE CHURCH**  
 CHAPEL HILL, NORTH CAROLINA

**STORMWATER  
 DETAILS**

REV.	DATE	DESCRIPTION	BY
1	02/18/11	PRE-SUBMITTAL REVISIONS	CFK
2	04/08/11	SEWER EXTENSION	TMM
3	09/20/11	OWASA SUBMITTAL	CFK
4	10/21/11	FULL SUBMITTAL	CFK
5	11/15/11	RESPONSE TO COMMENTS	CFK
6	05/14/12	REV. PER SPECIAL USE APP.	CFK
7	01/23/13	COVER SHEET CHANGE	SGS
8	05/10/13	DRIVE REL. PER CHANGDOT	CFK
9	11/19/13	RESUBMIT REVISED CONFIG.	CFK
10	04/22/14	CH PLANNING COMMENTS	CFK

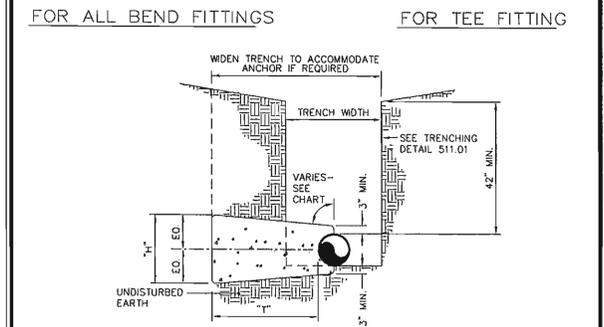
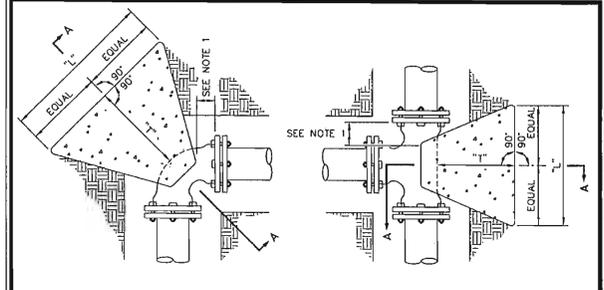
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 PROJECT NO: 10-013  
 DRAWING NAME: 10-013 DETAILS

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**D2.0**  
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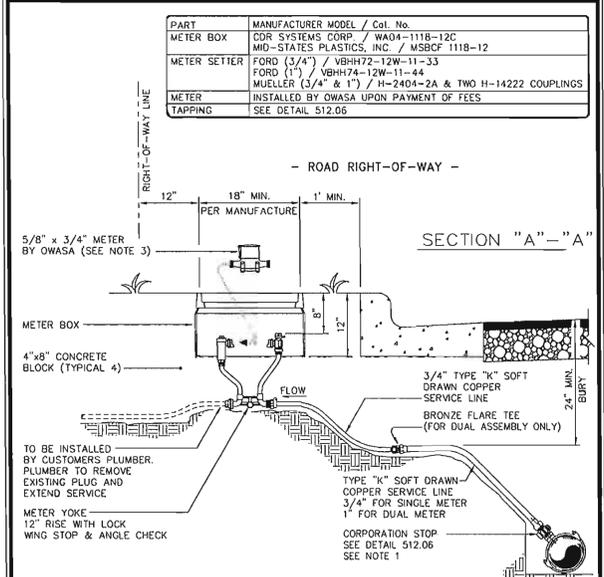
**NOTES:**  
 1. Concrete blocking is to be formed to ensure accessibility to fittings and poured against undisturbed earth.  
 2. Fittings are to be completely wrapped with plastic, prior to pouring concrete.  
 3. Concrete to be minimum 3,000 psi. @ 28 days.

**ORANGE WATER AND SEWER AUTHORITY**  
 400 Jones Ferry Road, PO Box 366, Carrboro, NC 27510-0366  
 Voice: (919) 968-4411, Fax: (919) 968-4464, www.owasa.org

**BLOCKING DETAIL for HORIZONTAL BENDS AND TEE**

SCALE: Not To Scale, DETAIL # 512.02, REVISION DATE: August 15, 2007, SHEET # 1 of 4

Details Provided by APPIAN Consulting Engineers - WWW.APPIANENGINEERS.COM 06/25/2007 - 11:18:51 AM



**NOTES:**  
 1. Bronze service saddles shall be used on all service connections. Direct taps shall be made only as directed by an OWASA representative. See topping detail 512.06.  
 2. Omitted.  
 3. If installation is for stub-out meter, meter should be purchased from OWASA. (At applicants expense)  
 4. Meter must be level across meter connections.  
 5. Substitution requires approval by OWASA's Director of Engineering.

**ORANGE WATER AND SEWER AUTHORITY**  
 400 Jones Ferry Road, PO Box 366, Carrboro, NC 27510-0366  
 Voice: (919) 968-4411, Fax: (919) 968-4464, www.owasa.org

**3/4" SINGLE & 1" DUAL SERVICE INSTALLATION**

SCALE: Not To Scale, DETAIL # 513.01, REVISION DATE: August 15, 2007, SHEET # 1 of 2

- Orange Water & Sewer Authority**  
 Utility Notes for (New Life Fellowship Church)
- Standards and Specifications - All construction shall be in accordance with OWASA Standards and Specifications dated August, 2003, latest revised version.
  - Please be advised that OWASA approval of this project is for compliance with OWASA Policies, Standards, and Specifications only. All other matters pertaining to this project are the responsibility of the Design Engineer. The issuance of this letter does not preclude the Developer, Project Engineer, Contractor, or other Agents or Parties acting on their behalf from full compliance with OWASA current Standards, Specifications, and Procedures or from complying with any and all statutes, rules, regulations, and ordinances which may be imposed by other government agencies (local, state, and federal) which may have jurisdiction. Violations will result in the OWASA Project approval being rescinded.
  - Preconstruction Conference - A preconstruction conference with the OWASA Construction Inspector is required before beginning any water or sewer utility construction.
  - Contact the National "Call Before You Dig" 811 to have OWASA facilities located before beginning any excavation.
  - Field Changes are not considered approved by OWASA unless revised plans have been submitted to OWASA for review and approval. Contractors that proceed with construction prior to this approval do so at their own risk.
  - Sewer Statement - Sewer lines under construction shall be plugged with a mechanical plug at the first manhole upstream from the point of connection. Plug shall be placed in the outlet connection and secured with steel cable. Plug shall remain in place until acceptance of lines by OWASA. Before any construction is to begin on the site, Contractor shall protect all existing OWASA Sewer Manholes with iron fence post and orange tree protection fencing. Water, stone, dirt, or any other debris shall not be allowed to enter the OWASA Sanitary Sewer System during flushing operations or at any other time. Construction taking place in the vicinity of any existing OWASA sewer lines or manholes shall not cause any inflow of surface water or debris to enter the OWASA Sanitary Sewer System. Existing OWASA manholes located in the vicinity of any new construction shall be protected by OWASA personnel at all times. The Owner and/or Contractor shall be responsible for any damages incurred to the OWASA Sanitary Sewer System and any fines imposed by the State of North Carolina Division of Water Quality due to sewer spills or overflows.
  - Water Valves - Existing valves shall be operated by OWASA personnel only. Valves that separate purity approved water and unapproved water are to remain closed at all times. Valves may be temporarily opened for loading and flushing by the OWASA Inspector only.
  - Protection of Existing OWASA Facilities - Before any construction is to begin on the site, Contractor shall protect all OWASA Meter Vaults, Fire Hydrants, Valve Boxes, and Manholes with iron fence post and orange tree protection fencing. All existing OWASA facilities are to be kept clear and accessible to OWASA personnel at all times.
  - Sewer Use Ordinance - Discharge from this project must be in compliance with the OWASA Sewer Use Ordinance. A grease interceptor shall be provided when in the opinion of OWASA it is necessary for the proper handling of wastewater containing excessive amounts of grease. All interception units must be of the type and capacity which is certified by the Project Engineer as meeting the requirements of OWASA.
  - Sewer Services - Each building connected to the sewer system shall be served by a separate building sewer of not less than 4" in diameter. Sewer services located within public right-of-ways or OWASA sewer easements must be constructed of ductile iron pipe from the tap up to and including the first clean-out. Except for dead end manholes, all 4" inch sewer services must be tapped into the sewer main. All 6" services must be connected to a manhole.
  - Existing Valves - Contractor responsible for verifying that existing valve at the point of connection to the OWASA system is adequate for performing and passing hydrostatic pressure and leakage test. Contractor, at his expense, may optionally replace valve or install a new valve for the purpose of performing a pressure test for new main installation. If Contractor elects to pressure test against existing valve, Contractor accepts responsibility for ensuring passing pressure test in accordance with OWASA requirements. In any case, no claim whatsoever shall be made against OWASA for failure of pressure test.
  - Dechlorination Requirements - The Contractor shall be responsible for neutralization of chlorinated water at the point of discharge from the main being tested. This shall occur following chlorination to disinfect a main or any other time when elevated levels of chlorine could potentially be discharged into the environment by the Contractor. At the time the disinfection and purity testing procedures are discussed with the OWASA Construction Inspector, the procedure for dechlorination will be covered. Absolutely no flushing, disinfection, or purity sampling is to take place without prior approval of a sampling plan by the OWASA Inspector.
  - Cross-Connection Control Ordinance - Backflow Prevention will be required in accordance with OWASA Cross-Connection Control Ordinance and Manual.
  - Fire Protection Systems - Pressure testing, chlorination, and purity testing shall be completed before the installation of the DCD/RRDA unit.
  - Remote Read-out Devices - DCD/RRDA and/or RPDA devices located inside buildings must be equipped with an AMR Meter to be purchased from OWASA and installed by the Contractor. Meter purchase will include an OWASA provided box that is to be mounted on the outside of the building (see OWASA Detail 515.03). The box contains an ERT (transmitter) and a remote read-out device.
  - Existing water and/or sewer lines encountered during construction must be supported in a manner acceptable to the OWASA Construction Inspector. The OWASA Construction Inspector under the direction of the OWASA Engineering Manager may require existing pipes to be replaced with new ductile iron pipe.
  - Water outages necessary for the connection of new construction to existing pipelines must be coordinated in advance with the OWASA Construction Inspector and the affected parties in accordance with OWASA Policy. A two week notice is required.

Date Issued: (10/21/2011)

**Orange Water and Sewer Authority**  
 Close-out Documentation Check-list  
 Project: (New Life Fellowship Church)

- In addition to a Final Inspection approved by the OWASA Construction Inspector, the following documents must be received and approved by OWASA before acceptance of the project and the setting of meters. The following shall be submitted as a complete package to the OWASA Engineering Associate for Third Party Review. Partial submittals are considered incomplete. All incomplete submittals will be returned.
- Engineer's Certification for DEH Public Water Supply Section permitted water extension - Submit original document to OWASA for submittal to NCDENR. Receipt of the DEH Public Water Supply Section Final Approval Letter is required before the permitted water system is placed into service. State requirement no exceptions.
  - Engineer's Certification for DWQ permitted sewer extension - Engineer must use the certification form attached to the sewer permit from NCDENR. Record Drawings are required to be submitted to NCDENR along with the Certification of Completion as a part of the supporting documentation. Both documents must be sealed by Engineers from the same Organization. Submit original document to OWASA along with the supporting documentation required by DWQ. The permitted sewer system shall not be placed into service until the Engineer's Certification and Supporting Documentation have been submitted by OWASA to DWQ. State requirement no exceptions.
  - Asset Letter - Submit original document on OWASA standard form.
  - Letter of Dedication - Submit original document on OWASA standard form.
  - Record Drawings - Construction drawings shall be modified to reflect actual field installations. All DEH Public Water Supply Section permitted extensions and DWQ permitted extensions shall be signed and sealed by a Licensed Professional Engineer in the State of North Carolina. Submit three copies of the record drawing for review by the OWASA Engineering Staff.
  - Digital Submissions - Water Feature Database (MS Access), Manhole Database (MS Access), and Record Drawing (AutoCAD .dwg format). Contact the OWASA Engineering Technicians for information concerning this submittal.
- Date issued: (10/21/2011)

**EarthCentric Engineering, Inc.**  
 204 W. Clay Street  
 Mebane, NC 27302  
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 Fax: (919) 304-3234  
 E-Mail: Phil.Kooh@EarthCentric.com

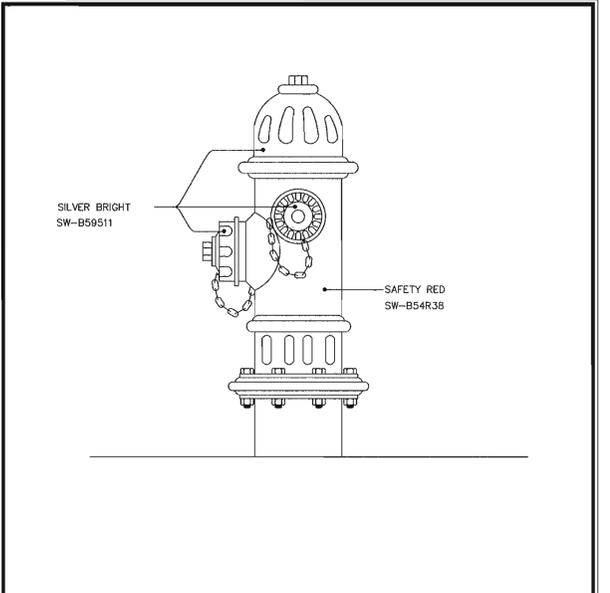
**INCORPORATED**

**PRINCIPAL ENGINEER**  
 PHIL KOOH - NCE #22584

**NEW LIFE CHURCH**  
 CHAPEL HILL, NORTH CAROLINA

**UTILITY DETAILS**  
 WATER

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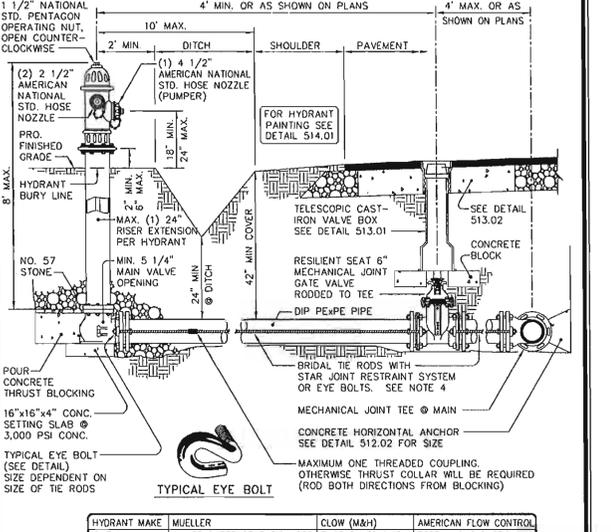
**NOTES:**  
 1. Use Sherwin-Williams Industrial enamel or equal.  
 2. Paint colors are applicable to the following locations:  
 a. Town of Carrboro  
 b. Town of Chapel Hill  
 c. Durham County  
 d. Orange County  
 e. University of North Carolina

**ORANGE WATER AND SEWER AUTHORITY**  
 400 Jones Ferry Road, PO Box 366, Carrboro, NC 27510-0366  
 Voice: (919) 968-4411, Fax: (919) 968-4464, www.owasa.org

**FIRE HYDRANT PAINTING SPECIFICATIONS**

SCALE: Not To Scale, DETAIL # 514.01, REVISION DATE: August 27, 2010, SHEET # 1 of 1

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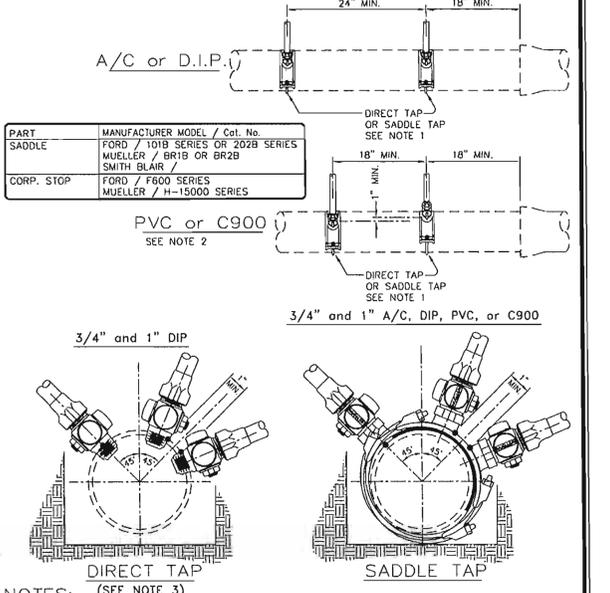
**NOTES:**  
 1. Wedge action restrainer gland joint restraints are preferred, and may be used with tie rods.  
 2. Hydrants to be placed with pumper nozzle facing the street or as otherwise directed by OWASA.  
 3. When valve box is placed outside of pavement, provide concrete stabilization pad. (detail 513.02)  
 4. Minimum of (2) 3/4" diameter rods w/standard coating.  
 5. Where hydrant is set behind guardrail, centerline of pumper nozzle to be a minimum of 12" and a maximum of 18" above top of guardrail.  
 6. Fire hydrant to be oiled & greased and cap to be sprayed (Non-petroleum - based) after installation.

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**TYPICAL FIRE HYDRANT STREETS with BAR DITCH**

SCALE: Not To Scale, DETAIL # 514.02, REVISION DATE: August 15, 2007, SHEET # 1 of 1

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**NOTES:**  
 1. All bronze saddle (Single or double strap for 3/4" and 1")  
 2. If 2 taps are made on each side of the main there shall be a minimum of 18" horizontal separation. Multiple taps on the same side shall have a minimum 18" horizontal separation and staggered a minimum of 1" vertically to prevent damage to the main.  
 3. Bronze service saddles shall be used on all service connections. Direct taps shall be made only as directed by an OWASA representative.

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 400 Jones Ferry Road, PO Box 366, Carrboro, NC 27510-0366  
 Voice: (919) 968-4411, Fax: (919) 968-4464, www.owasa.org

**STANDARD 3/4" and 1" WATER TAPPING DETAIL**

SCALE: Not To Scale, DETAIL # 512.06, REVISION DATE: April 11, 2007, SHEET # 1 of 1

REV.	DATE	DESCRIPTION	BY	CHK
1	02/08/11	PRE-SUBMITTAL REVISIONS	CPK	CPK
2	04/08/11	SEWER EXTENSION	THM	CPK
3	09/20/11	OWASA SUBMITTAL	CPK	CPK
4	10/21/11	FULL SUBMITTAL	CPK	CPK
5	11/25/11	RESPONSE TO COMMENTS	CPK	CPK
6	05/14/12	REV. PER SPECIAL USE APP.	SCS	CPK
7	01/23/13	COVER SHEET CHANGE	CPK	CPK
8	06/10/13	DRIVE REL. PER CHANDOT	CPK	CPK
9	11/19/13	RESUBMIT REVISED CONFIG.	CPK	CPK
10	04/02/14	CH-PLANNING COMMENTS	CPK	CPK

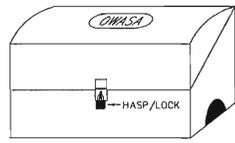
DATE: NOVEMBER 16, 2010  
 HORIZONTAL SCALE: N/A  
 VERTICAL SCALE: N/A  
 PROJECT MANAGER: CPK  
 DRAWN BY: SCS  
 PROJECT NO: 10-013  
 DRAWING NAME: 10-013 DETAILS

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SHEET NO.  
**D3.0**  
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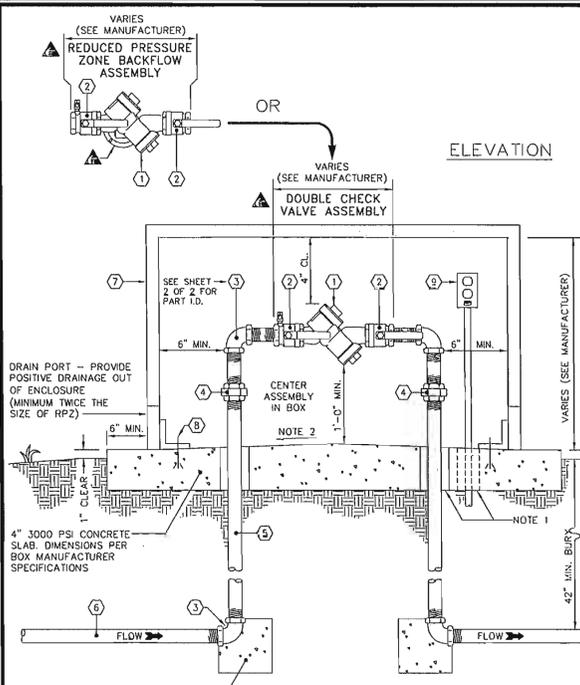
TYPICAL ENCLOSURE

① PART	MANUFACTURER MODEL / Cat. No.
1 BACKFLOW PREVENTION ASSEMBLY, AS APPLICABLE	SEE SPECS. 02510 - PRODUCTS
2 1/4" TURN FULL PORT BRONZE BALL SHUT-OFF VALVE	---
3 90° BRASS ELBOW	---
4 THREADED UNION	---
5 3/4" THRU 2 1/2" STAINLESS STEEL OR BRASS THREADED PIPE	---
6 3/4" THRU 2 1/2" STAINLESS STEEL OR BRASS THREADED PIPE	---
7 INSULATED ENCLOSURE WITH LOCKING ACCESS AND HEATER (120 V, 1 PHASE 60 HZ) VERIFY FITTINGS WILL FIT INSIDE BOX BEFORE ORDERING	HOTBOX / HB.75 - HB.3E (OR APPROVED EQUIVALENT)
8 STAINLESS STEEL ANCHOR BOLTS PER BOX MANUFACTURER RECOMMENDED SIZE AND SPACING	---
9 PROVIDE 120V RECEPTACLE ON GFCI NEAR PIPE RISER, SET MINIMUM 18" ABOVE FLOOR	UL STD. 943-NEMA 3R.

NOTES:  
 1. Provide minimum 1" annular clearance around all risers and electrical conduit.  
 2. Slope floor to drain to ports at both ends. Ensure positive surface grade away from enclosure.

OWASA 400 Jones Ferry Road PO Box 466 Charlotte, NC 27510-0466 Voice (919) 968-4421 FAX (919) 968-4664 www.owasa.org  
 ORANGE WATER AND SEWER AUTHORITY USE WITH THE OWASA STANDARD SPECIFICATIONS ONLY  
 3/4" to 2" DCV, RPZ ASSEMBLY (ABOVE GROUND) SCALE: Not To Scale DETAIL # 515.06 REVISION DATE: August 15, 2003 SHEET # 2 of 3

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ELEVATION

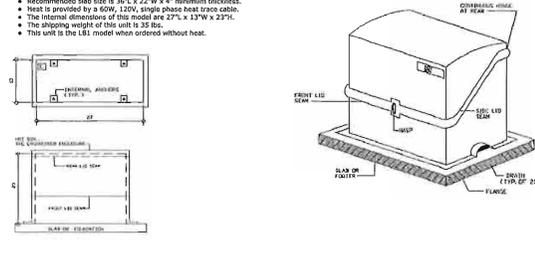
4" 3000 PSI CONCRETE SLAB DIMENSIONS PER BOX MANUFACTURER SPECIFICATIONS

PROVIDE BLOCKING FOR PIPES 2" AND LARGER

OWASA 400 Jones Ferry Road PO Box 466 Charlotte, NC 27510-0466 Voice (919) 968-4421 FAX (919) 968-4664 www.owasa.org  
 ORANGE WATER AND SEWER AUTHORITY USE WITH THE OWASA STANDARD SPECIFICATIONS ONLY  
 3/4" to 2" DCV, RPZ ASSEMBLY (ABOVE GROUND) SCALE: Not To Scale DETAIL # 515.06 REVISION DATE: August 15, 2003 SHEET # 1 of 3

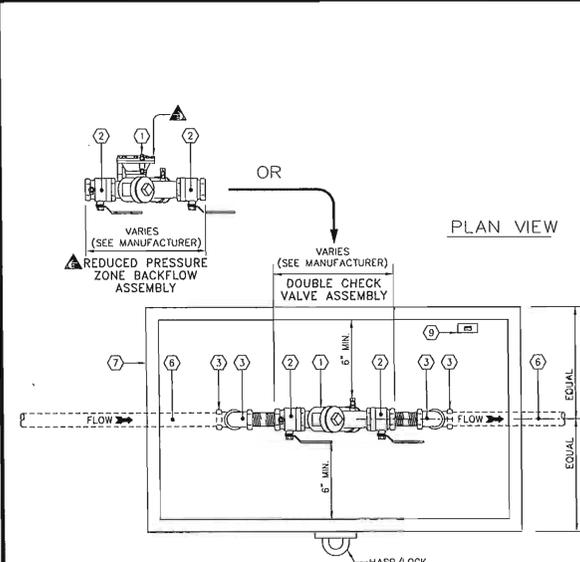
Hot Box® HB1 Enclosures Specifications

- Recommended slab size is 36" x 32" w/ 4" minimum thickness.
- Heat is provided by a 60W, 120V, single phase heat trace cable.
- The internal dimensions of this model are 27" x 12" w/ 23" H.
- The shipping weight of this unit is 25 lbs.
- This unit is the LB1 model when ordered without heat.



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PLAN VIEW

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 3/4" to 2" DCV, RPZ ASSEMBLY (ABOVE GROUND) SCALE: Not To Scale DETAIL # 515.06 REVISION DATE: August 15, 2003 SHEET # 2 of 3

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 Fax: (919) 304-3234  
 E-Mail: Phil.Koch@EarthCentric.com



**NEW LIFE CHURCH**  
 CHAPEL HILL, NORTH CAROLINA

**UTILITY DETAILS**  
 WATER

REV.	DATE	DESCRIPTION	BY
1	02/18/11	PRE-SUBMITTAL REVISIONS	CPK
2	04/08/11	SEWER EXTENSION	TAM
3	09/20/11	OWASA SUBMITTAL	CPK
4	10/21/11	FULL SUBMITTAL	CPK
5	11/15/11	RESPONSE TO COMMENTS	CPK
6	05/14/12	REV. PER SPECIAL USE APP.	CPK
7	01/22/13	COVER SHEET CHANGE	SCS
8	05/10/13	DRIVE REL PER CHANGDOT	CPK
9	11/19/13	RESUBMIT REVISED CONFIG.	CPK
10	04/22/14	CH-PLANNING COMMENTS	CPK

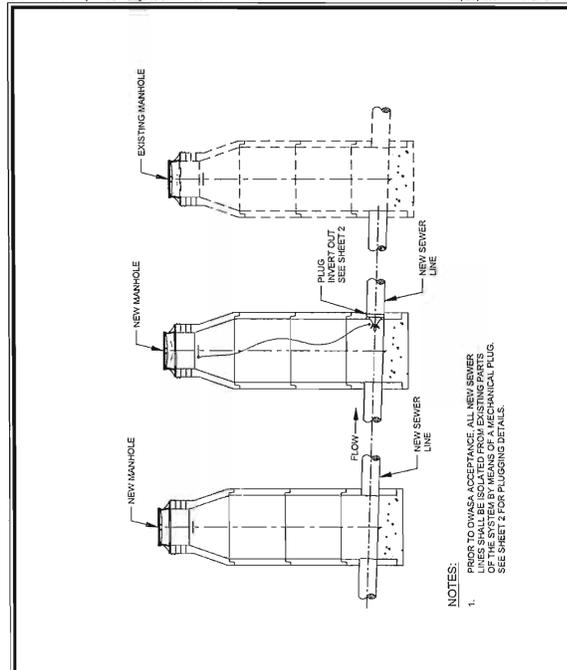
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 PROJECT MANAGER: CPK  
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 PROJECT NO: 10-013  
 DRAWING NAME: 10-013 DETAILS

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**D3.1**  
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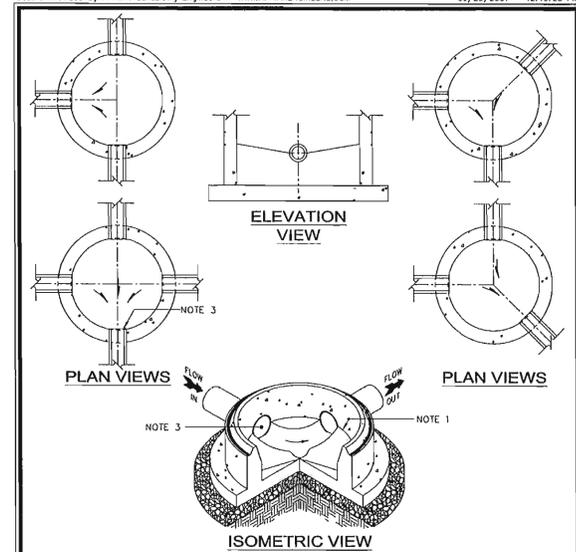


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400 Jones Ferry Road, PO Box 566, Charlotte, NC 27260-0566  
Voice: (919) 968-4423, Fax: (919) 968-4664, www.owasa.org

**SANITARY SEWER MANHOLE PLUGGING DETAIL**

SCALE: Not To Scale	SHEET # 2 OF 2
REVISION DATE: February 28, 2005	SHEET # 1 OF 2

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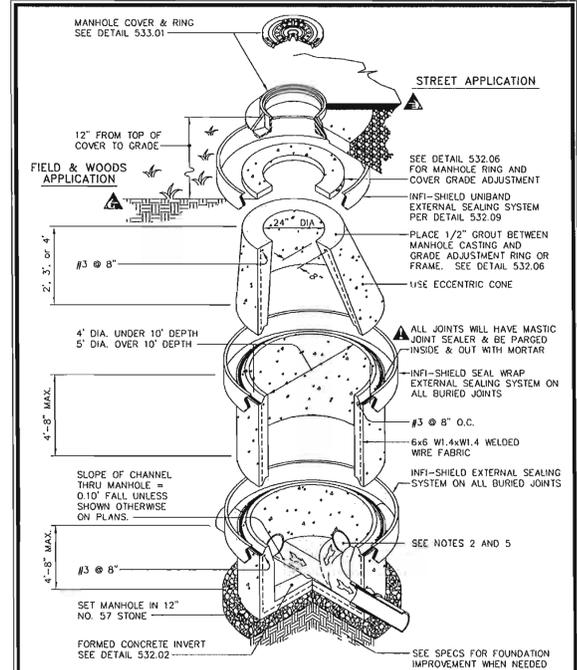


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**STANDARD SEWER INVERT PLANS FOR MANHOLE**

SCALE: Not To Scale	SHEET # 2 OF 2
REVISION DATE: March 11, 2005	SHEET # 1 OF 1

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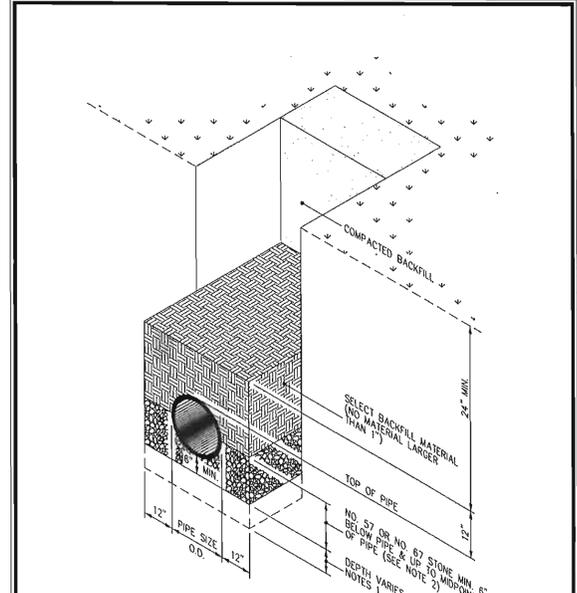


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Voice: (919) 968-4423, Fax: (919) 968-4664, www.owasa.org

**STANDARD ECCENTRIC MANHOLE DETAIL**

SCALE: Not To Scale	SHEET # 2 OF 2
REVISION DATE: April 13, 2007	SHEET # 1 OF 2

Details Provided by APPIAN Consulting Engineers - WWW.APPIANENGINEERS.COM 06/25/2007 - 12:12:38 PM

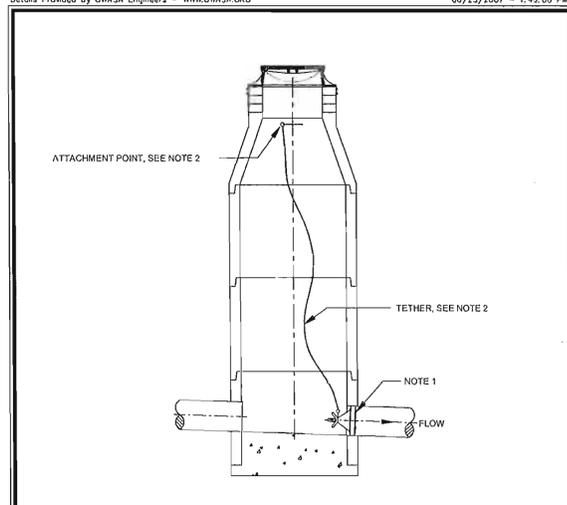


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**SANITARY SEWER BEDDING DETAIL**

SCALE: Not To Scale	SHEET # 2 OF 2
REVISION DATE: August 15, 2003	SHEET # 1 OF 1

Details Provided by OWASA Engineers - WWW.OWASA.ORG 06/25/2007 - 1:49:00 PM

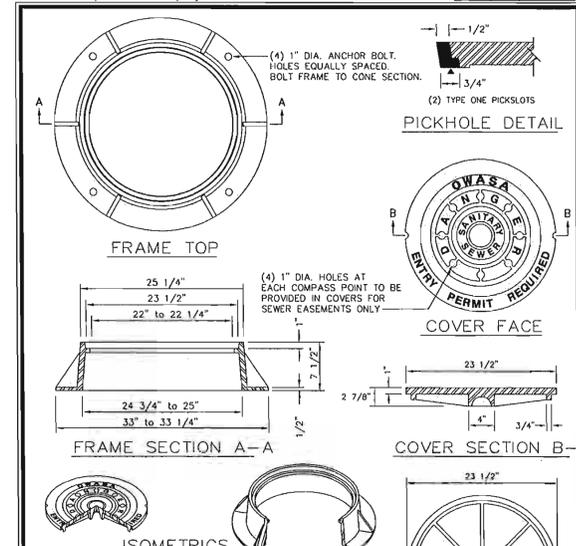


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**SANITARY SEWER MANHOLE PLUGGING DETAIL**

SCALE: Not To Scale	SHEET # 2 OF 2
REVISION DATE: February 28, 2005	SHEET # 1 OF 2

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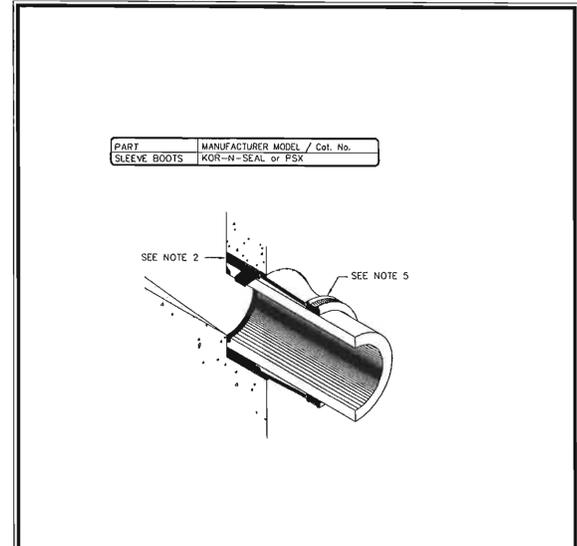


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Voice: (919) 968-4423, Fax: (919) 968-4664, www.owasa.org

**SANITARY SEWER MANHOLE FRAME AND COVER**

SCALE: Not To Scale	SHEET # 2 OF 2
REVISION DATE: April 13, 2007	SHEET # 1 OF 1

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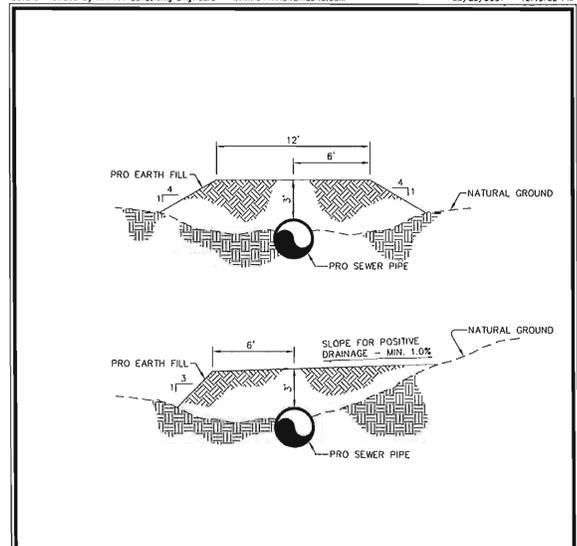


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**STANDARD ECCENTRIC MANHOLE DETAIL**

SCALE: Not To Scale	SHEET # 2 OF 2
REVISION DATE: April 13, 2007	SHEET # 2 OF 2

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**EARTH FILL OVER SEWER PIPE DETAIL**

SCALE: Not To Scale	SHEET # 2 OF 2
REVISION DATE: August 15, 2003	SHEET # 1 OF 1

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204 W. Clay Street  
Mebane, NC 27302  
Phone: (919) 568-9041  
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E-Mail: Phil.Koeh@EarthCentric.com

INCORPORATED  
PRINCIPAL ENGINEER  
PHIL KOEH - NCE #26634

**NEW LIFE CHURCH**  
CHAPEL HILL, NORTH CAROLINA

UTILITY DETAILS  
SANITARY SEWER

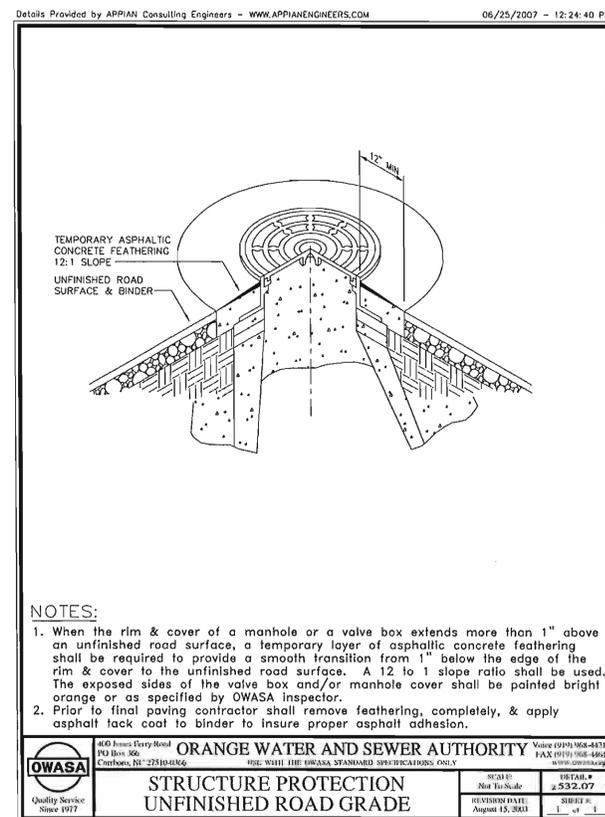
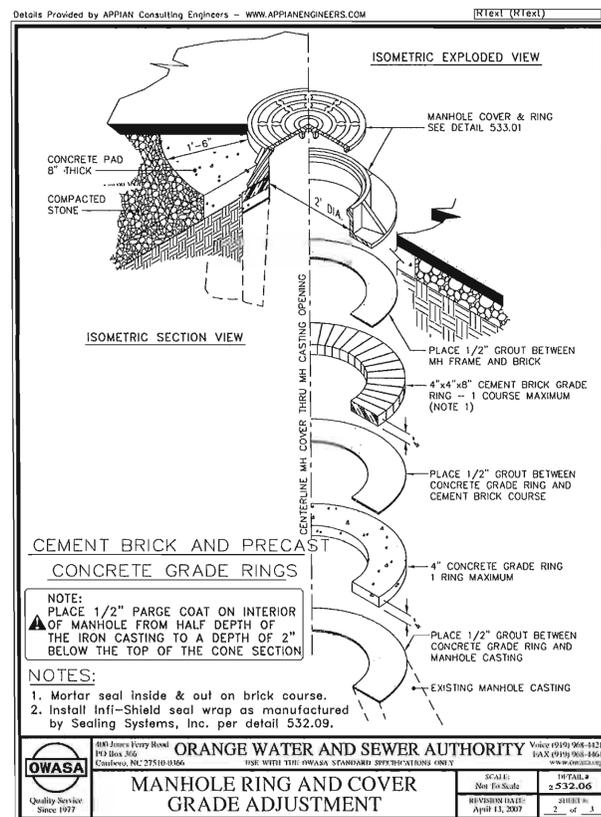
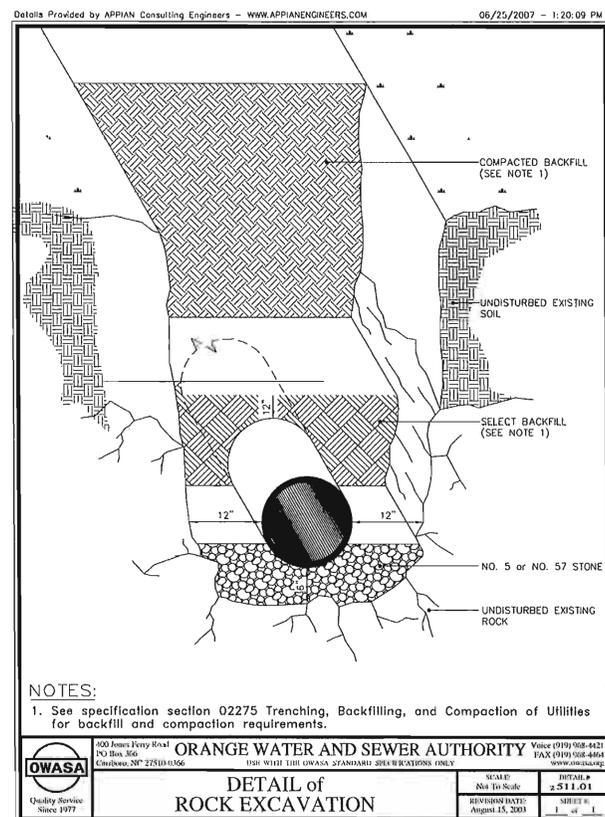
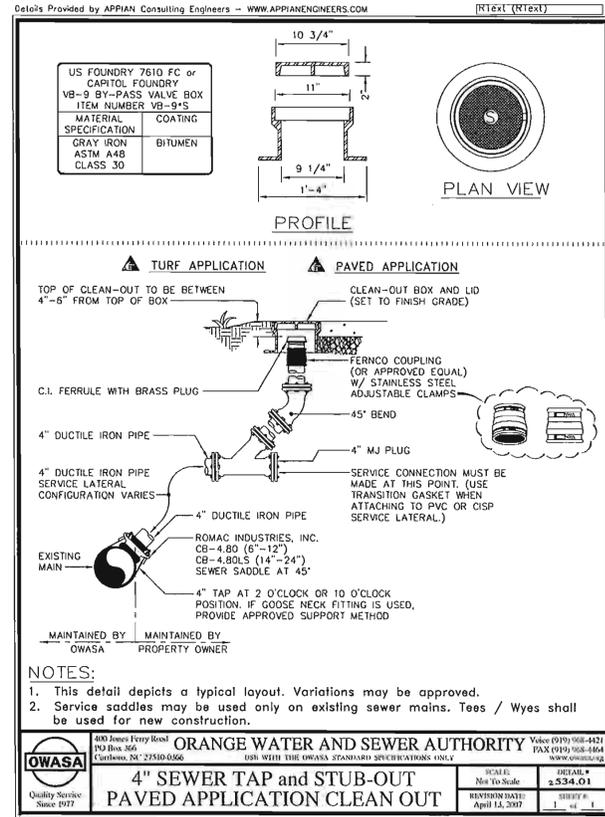
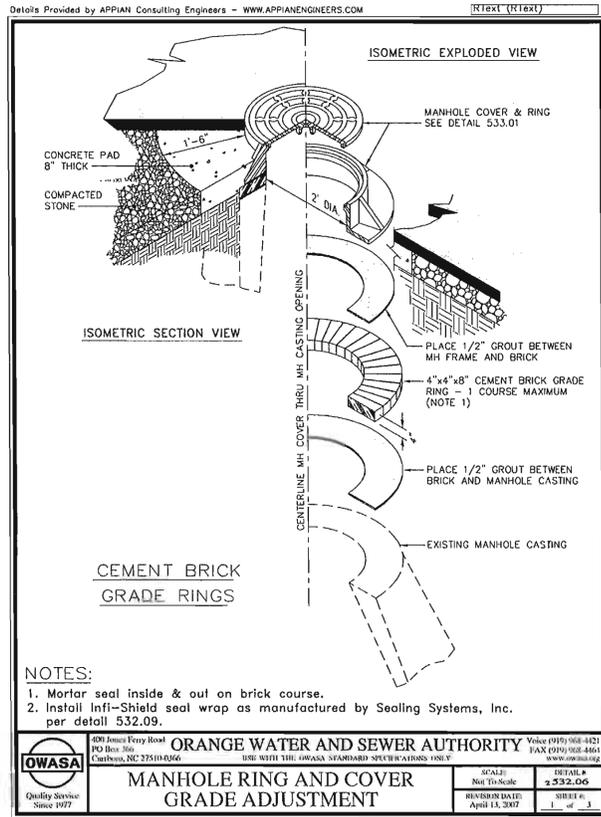
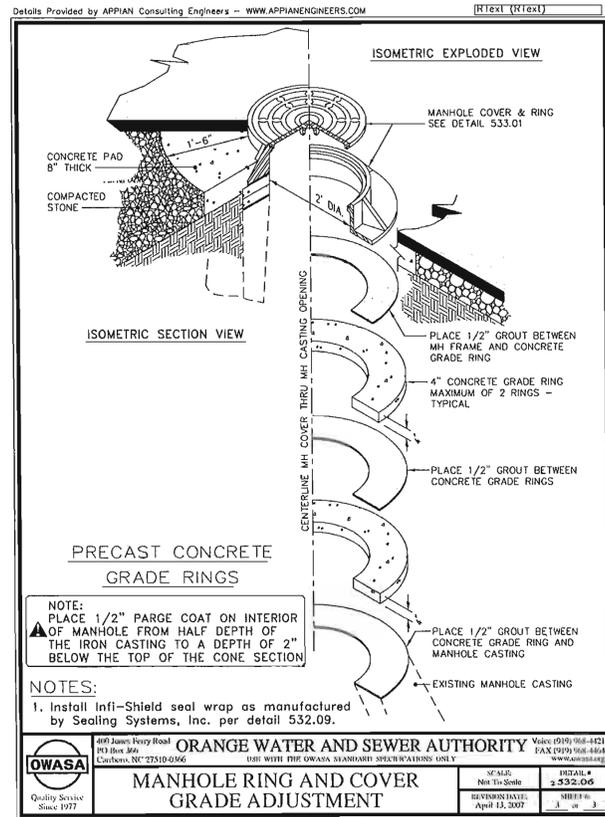
REV.	DATE	DESCRIPTION	BY
1	02/18/11	PRE-SUBMITTAL REVISIONS	CPK
2	04/08/11	SEWER EXTENSION	TMM
3	08/20/11	OWASA SUBMITTAL	CPK
4	10/21/11	FULL SUBMITTAL	CPK
5	11/15/11	RESPONSE TO COMMENTS	CPK
6	06/14/12	REV. PER SPECIAL USE APP.	CPK
7	06/14/12	COVER SHEET CHANGE	SCS
8	05/10/13	DRIVE REL. PER CHINDOT	CPK
9	11/15/13	RESUBMIT REVISED CONFIG.	CPK
10	04/02/14	CH PLANNING COMMENTS	CPK

DATE: NOVEMBER 16, 2010  
HORIZONTAL SCALE: N/A  
VERTICAL SCALE: N/A  
PROJECT MANAGER: CPK  
DRAWN BY: SCS  
PROJECT NO.: 10-013  
DRAWING NAME: 10-013 DETAILS

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SHEET NO.  
**D3.2**  
PRELIMINARY



**EarthCentric Engineering, Inc.**

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 E-Mail: Phil.Koch@EarthCentric.com

**INCORPORATED**

PHIL KOCH - NCE #22684  
 PRINCIPAL ENGINEER

**NEW LIFE CHURCH**  
 CHAPEL HILL, NORTH CAROLINA

**UTILITY DETAILS**  
 SANITARY SEWER

REV.	DATE	DESCRIPTION	BY
1	02/18/11	PRE SUBMITTAL REVISIONS	CPK
2	04/08/11	SEWER EXTENSION	THM
3	09/20/11	OWASA SUBMITTAL	CPK
4	10/21/11	FULL SUBMITTAL	CPK
5	11/15/11	RESPONSE TO COMMENTS	CPK
6	05/14/12	REV. PER SPECIAL USE APP.	CPK
7	01/23/13	COVER SHEET CHANGE	SGS
8	05/10/13	DRIVE REL. PER CHNCDOT	CPK
9	11/19/13	RESUBMIT REVISED CONFIG.	CPK
10	04/02/14	CH PLANNING COMMENTS	CPK

DATE: NOVEMBER 16, 2010  
 HORIZONTAL SCALE: N/A  
 VERTICAL SCALE: N/A  
 PROJECT MANAGER: CPK  
 DRAWN BY: SGS  
 PROJECT NO: 10-013  
 DRAWING NAME: 10-013 DETAILS

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SHEET NO.  
**D3.3**

PRELIMINARY





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NEW LIFE CHURCH
CHAPEL HILL, NORTH CAROLINA
SITE & PAVING
DETAILS

Table with columns: REV., DATE, DESCRIPTION, BY. Includes revision history for drawing 848.05.

DATE: NOVEMBER 16, 2010
HORIZONTAL SCALE: N/A
VERTICAL SCALE: N/A
PROJECT MANAGER: CPM
DRAWN BY: SCS
PROJECT NO: 10-013
DRAWING NAME: 10-013 DETAILS

SHEET NO.

D4.1

PRELIMINARY

Sheet 1 of 3: CURB RAMP AND GUTTER. Includes isometric view, section A-A, section B-B, and plan view. Notes describe detectable warning domes and ramp specifications.

Sheet 1 of 3: CURB RAMP AND GUTTER. Includes isometric view, section A-A, section B-B, and plan view. Notes describe detectable warning domes and ramp specifications.

Sheet 4 of 3: CURB RAMP AND GUTTER. Includes isometric view, section A-A, section B-B, and plan view. Notes describe detectable warning domes and ramp specifications.

Sheet 2 of 3: CURB RAMP AND GUTTER. Includes isometric view, section A-A, section B-B, and plan view. Notes describe detectable warning domes and ramp specifications.

Sheet 2 of 3: CURB RAMP AND GUTTER. Includes isometric view, section A-A, section B-B, and plan view. Notes describe detectable warning domes and ramp specifications.

Sheet 3 of 3: CURB RAMP AND GUTTER. Includes isometric view, section A-A, section B-B, and plan view. Notes describe detectable warning domes and ramp specifications.

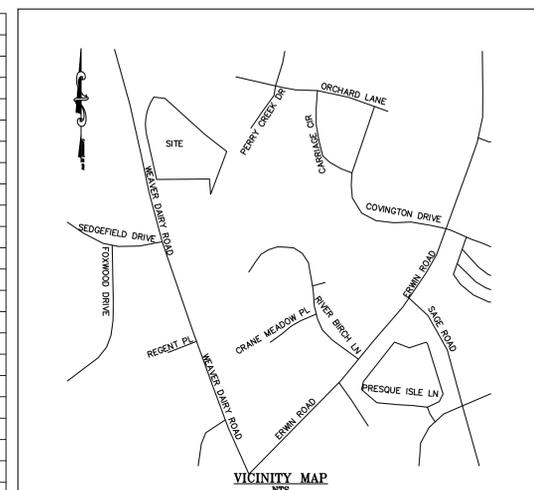
Sheet 3 of 3: CURB RAMP AND GUTTER. Includes isometric view, section A-A, section B-B, and plan view. Notes describe detectable warning domes and ramp specifications.

Sheet 3 of 3: CURB RAMP AND GUTTER. Includes isometric view, section A-A, section B-B, and plan view. Notes describe detectable warning domes and ramp specifications.

Sheet 4 of 3: CURB RAMP AND GUTTER. Includes isometric view, section A-A, section B-B, and plan view. Notes describe detectable warning domes and ramp specifications.

### PLANT SCHEDULE

Quantity	Scientific Name	Common Name	Planting Size
10	<i>Abelia grandiflora</i> 'Edward Goucher'	Edward Goucher Abelia	3-Gal CONT. (18" MIN.)
20	<i>Acer rubrum</i>	Red maple	2"-CAL
3	<i>Acer rubrum</i> 'October Glory'	October Glory Maple	2"-CAL
129	<i>Callicarpa americana</i>	Beautyberry	18" min. (height)
22	<i>Cercis canadensis</i>	Eastern redbud	5' MIN.
12	<i>Cercis canadensis</i> 'Oklahoma'	Oklahoma Redbud	5' MIN.
4	<i>Chionanthus retusus</i>	Chinese Fringe Tree	5' MIN.
48	<i>Chionanthus virginicus</i>	White fringe tree	5' MIN.
4	<i>Cornus florida</i>	Flowering dogwood	5' MIN.
1	<i>Cornus florida</i> Cloud 9	Cloud 9 Dogwood	5' MIN.
8	<i>Fraxinus pennsylvanica</i> 'Marshall'	Marshall seedless ash	2"-CAL
18	<i>Ilex cornuta</i> 'Carissa'	Carissa Holly	3 GAL CONT. (18" MIN)
194	<i>Ilex glabra</i>	Inkberry holly	18" min. (height)
25	<i>Ilex vomitoria</i> 'Bordeaux'	Bordeaux Yaupon Holly	3-Gal (18-21")
30	<i>Ilex vomitoria</i> 'Nana'	Dwarf yaupon	3-Gal (18-21")
164	<i>Itea virginica</i> 'Henry's Garnet'	Henry's Garnet Sweetspire	18" min. (height)
2	<i>Lagerstroemia indica</i> 'Carolina Beauty'	Carolina Beauty Crapeyrtle	2"-CAL
2	<i>Lagerstroemia indica</i> 'Tuscarora'	Tuscarora Crapeyrtle	2"-CAL
41	<i>Magnolia virginiana</i>	Sweetbay Magnolia	5' MIN.
14	<i>Myrica cerifera</i>	Southern wax-myrtle	5 GAL CONT. (24" MIN)
23	<i>Quercus phellos</i>	Willow oak	2"-CAL
4	<i>Quercus rubra</i>	Northern red oak	2"-CAL
6	<i>Taxodium distichum</i>	Bald cypress	2"-CAL



PROJECT DATA	
PIN #	9890-32-9028 & 9890-32-7289
TMBL#	7.26..26 & 7.25..12G
TRACT#	770652 & 777310
ADDRESS	166 WEAVER DAIRY ROAD, CHAPEL HILL
DEED REF:	BOOK: 3660 PAGE: 116
PLAT REF:	#1 BIRTCHETT & DAVIS P96/144
RCD:	THIS PARCEL IS NOT LOCATED WITHIN THE RESOURCE CONSERVATION DISTRICT AS DEFINED IN THE CHAPEL HILL DEVELOPMENT / LAND USE MANAGEMENT ORDINANCE
BASIN/WATERSHED:	CAPE FEAR / JORDAN LAKE UNPROTECTED
SOILS:	EnC - ENON & C/B - CREEDMOOR
SLOPES:	ALL SLOPES < 10% / NO STEEP SLOPES ON SITE
EXISTING USE:	SINGLE FAMILY HOME W/ OUT-BUILDINGS
EXISTING SIZE:	3.50 ACRES (152,445.99 SF) 0.18 ACRES (7,916.28 SF)
ZONE / GROUP:	CHAPEL HILL - R-2 / USE GROUP B
PROPOSED USE:	CHURCH & FELLOWSHIP HALL (300 SEATS)
PROPOSED NLA:	3.21 ACRES (139,698.86 SF)
PROPOSED GLA:	3.53 ACRES (153,668.75 SF)
MAX. FAR:	153,669 * 0.093 = 14,291 SF
MAX. HEIGHT:	29' PRIMARY / 50' SECONDARY
MIN. PARKING:	1/4 SEATS = 300/4 = 75 (ASSEMBLY)
MAX. PARKING:	1/2.5 SEATS = 300/2.5 = 120 (ASSEMBLY)
MIN. BIKE PARK:	1/50 SEATS (MIN 8) = 300/50 = 8 (ASSEMBLY)

**EarthCentric Engineering, Inc.**  
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 Fax: (919) 304-3234  
 E-Mail: Phil.Koch@EarthCentric.com

LANDSCAPE DESIGN BY:  
 DANA STAATS  
 STAATS DESIGN STUDIO  
 14 OAKWOOD DRIVE  
 CHAPEL HILL, NC  
 919-933-5025  
 919-265-3403  
 DANASTAATS@AOL.COM

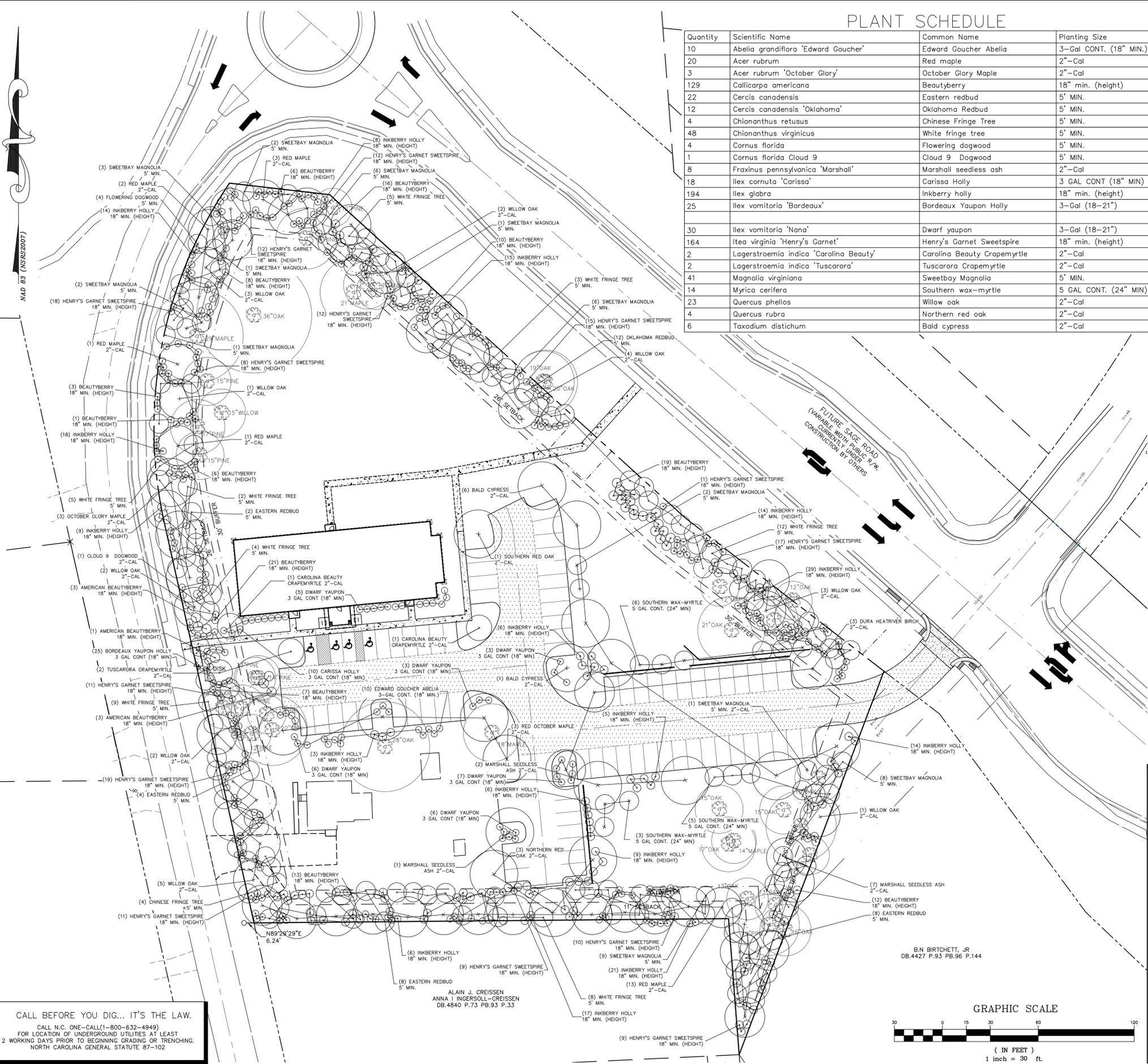
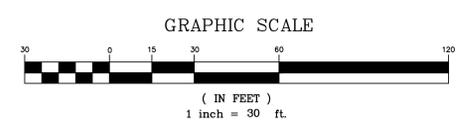
**NEW LIFE FELLOWSHIP CHURCH**  
 CHAPEL HILL, NORTH CAROLINA  
**PRELIMINARY LANDSCAPE PLAN**

REV.	DATE	DESCRIPTION	BY
1	02/18/11	PRE-SUBMITTAL REVISIONS	CPK
2	04/08/11	SEWER EXTENSION	TMM
3	09/20/11	OWASA SUBMITTAL	CPK
4	10/21/11	FULL SUBMITTAL	CPK
5	11/15/11	RESPONSE TO COMMENTS	CPK
6	06/14/12	REV PER SPECIAL USE APP.	CPK
7	07/23/13	COVER SHEET CHANGE	SCS
8	06/10/13	DRIVE REL. PER CHANGDOT	CPK
9	11/19/13	RESUBMIT REVISED CONFIG.	CPK
10	04/02/14	CH-PLANNING COMMENTS	CPK

DATE: NOVEMBER 16, 2010  
 HORIZONTAL SCALE: 1" = 30'  
 VERTICAL SCALE: N/A  
 PROJECT MANAGER: CPK  
 DRAWN BY: CPK  
 PROJECT NO.: 10-013  
 DRAWING NAME: 10-013 PRELIM

SHEET NO. **C7.0**  
 REVIEW

- GENERAL NOTES**
- EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM SURVEY DATA SUPPLIED BY R. S. JONES AND ASSOCIATES, INC. SITE PLAN DESIGN BY SHAW DESIGN ASSOCIATES.
  - WORK WITHIN PUBLIC RIGHT-OF-WAYS SHALL BE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REQUIREMENTS, NOTIFICATIONS, STANDARDS AND POLICIES.
  - CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL MEASURES FOR ALL WORK W/IN PUBLIC R/W PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND THE N.C. SUPPLEMENT TO THE MUTCD, AND LOCAL CITY INSPECTORS DIRECTION.
  - ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT PLANS AND/OR SPECIFICATIONS, LOCAL STANDARD DETAILS AND CONSTRUCTION STANDARDS, STATE CONSTRUCTION STANDARDS, AND OTHER APPLICABLE CONTRACT DOCUMENTS.
  - CONTRACTOR IS FULLY RESPONSIBLE FOR CONTACTING ALL APPROPRIATE PARTIES AND ASSURING THAT UTILITIES ARE LOCATED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. CALL NC ONE CALL (PREVIOUSLY ULOCO) AT 1-800-632-4949 FOR UTILITY LOCATING SERVICES 48 HOURS PRIOR TO COMMENCEMENT OF ANY WORK. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
  - UNDERGROUND UTILITIES SHOWN USING BEST AVAILABLE INFORMATION. ALL LOCATIONS SHALL BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE MORE UNDERGROUND UTILITIES THAN ARE SHOWN HEREON. CONTRACTOR SHALL FIELD LOCATE ALL UTILITIES PRIOR TO ANY EXCAVATIONS.
  - CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES TO REMAIN DURING ALL DEMOLITION AND CONSTRUCTION ACTIVITIES.
  - ALL CLEARING, GRUBBING AND UNSUITABLE FILL MATERIAL SHALL BE DISPOSED OF LEGALLY.
  - ALL PAVEMENT, CURB, STORM DRAINAGE PIPE, AND STRUCTURES TO BE REMOVED SHALL BE HAULED OFFSITE AND DISPOSED OF LEGALLY.
  - SIGNAGE SHALL BE LOCATED AS SHOWN. SIGNAGE SHALL BE CONSTRUCTED IN ACCORDANCE WITH LOCAL STANDARDS.
  - SITE LIGHTING SHALL AS SHOWN, AND SHALL BE SUFFICIENT TO PROPERLY ILLUMINATE THE SITE IN ACCORDANCE WITH LOCAL STANDARDS.
  - LANDSCAPING SHALL BE INSTALLED IN THE PROVIDED YARDS, IN ACCORDANCE WITH LOCAL STANDARDS.
- CONTRACTOR SHALL NOT MAKE ANY MODIFICATIONS TO THE APPROVED DRAWINGS WITHOUT PRIOR APPROVAL OF BOTH THE DESIGN ENGINEER AND LOCAL INSPECTOR.**



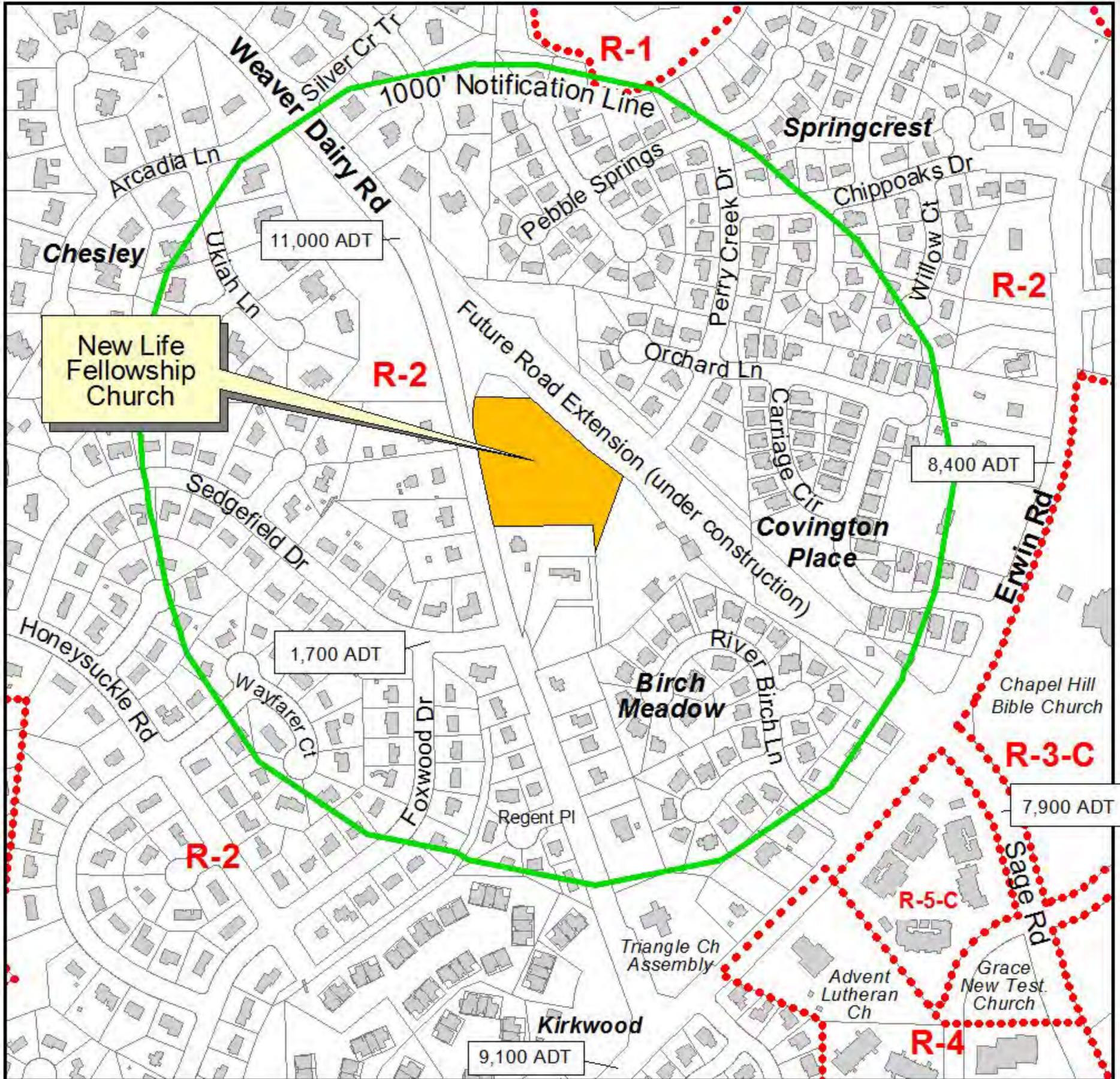
**CALL BEFORE YOU DIG... IT'S THE LAW.**  
 CALL N.C. ONE-CALL(1-800-632-4949)  
 FOR LOCATION OF UNDERGROUND UTILITIES AT LEAST 2 WORKING DAYS PRIOR TO BEGINNING GRADING OR TRENCHING.  
 NORTH CAROLINA GENERAL STATUTE 87-102

ALAIN J. CREISSEN  
 ANNA I. INGERSOLL-CREISSEN  
 DB.4840 P.73 PB.93 P.33

B.N. BIRTCHETT, JR.  
 DB.4427 P.93 PB.96 P.144



# Area Map New Life Fellowship Church



	New Life Fellowship Church		
	Buildings		
	Chapel Hill Zoning		
	Average Daily Traffic (ADT) 2009 DOT Data (before road extension & realignment)		

GIS Map prepared by  
Town of Chapel Hill  
Planning Department  
December, 2010