City of Gainesville
Department of Doing
Planning Division

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CITY PLAN BOARD STAFF REPORT

PUBLIC HEARING DATE: April 26, 2018

ITEM NO: 4

PROJECT NAME AND NUMBER: Zion Evangelical Lutheran Church, PB-17-90 SUP

APPLICATION TYPE: Special Use Permit (SUP) with development plan review for a place of religious assembly. Quasi-Judicial

CITY PROJECT CONTACT: Bedez E. Massey, Planner

RECOMMENDATION: Approve

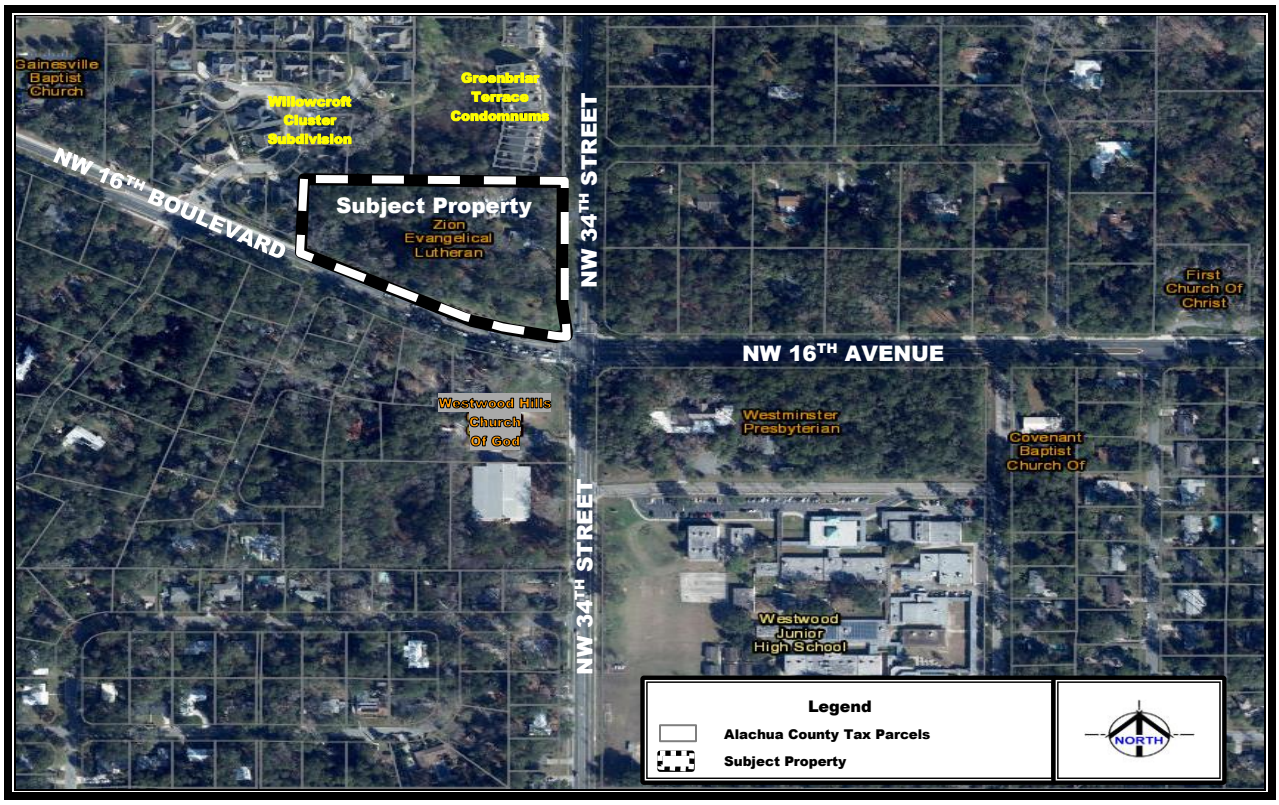


Figure 1: Location Map

APPLICATION INFORMATION:

Agent/Applicant: eda engineers – surveyors - planners, inc., Agent

Property Owner(s): Zion Evangelical Lutheran Church, Inc. of Gainesville, Florida

Related Petition(s): None

Legislative History: None

Neighborhood Workshop: Monday, April 17, 2017

SITE INFORMATION:

Address:	1700 NW 34th Street
Parcel Number(s):	06416-030-000
Acreage:	±5.0
Existing Use(s):	Zion Evangelical Lutheran Church (Place of Religious Assembly)
Land Use Designation(s):	Single Family (SF): up to 8 units per acre
Zoning Designation(s):	Single-Family (RSF-1)
Overlay District(s):	None
Transportation Mobility Program Area (TMPA):	Zone B
Census Tract:	11.00
Water Management District:	St. Johns River Water Management District
Special Feature(s):	None
Annexed:	1961
Code Violations:	There are no open cases.

PURPOSE AND DESCRIPTION:

This application is a request for a Special Use Permit (SUP) to allow a place of religious assembly as a permitted principal use on the subject property. It includes an associated development plan for the construction of a one-story, sanctuary building and other proposed improvements, such as stormwater facilities, lighting, landscape material, and pedestrian walkways. Accessory uses that are specially regulated, such as daycare centers, schools, food distribution centers for the needy and residences for destitute people, are not proposed.

According to the associated development plan in Appendix E, most of the existing trees, shrubs and groundcover on the subject property will be preserved. The existing church will also be maintained and converted into office, meeting and recreational space. The new sanctuary building will be constructed just south of the existing church. An existing aluminum shed will be kept at the rear of the subject property, so that it is less visible from the public right-of-way. The paved vehicular use area will be expanded to provide more parking spaces and a new driveway connection on NW 16th Boulevard.

The subject property is located on the northwest corner of the NW 34th Street and NW 16th Boulevard intersection, as shown in Figure 1. A single-family dwelling unit is located on the northeast corner of the intersection. Places of religious assembly are located on the southeast and southwest corners of the intersection. Lots with attached (condominiums) abut on the north. Lots with detached single-family dwelling units abut on the north and west. NW 16th Boulevard, a County-maintained arterial, abuts on the south. NW 34th Street, a State-maintained arterial, abuts on the east. Single-family residential development and places of religious assembly are the primary uses on adjacent properties. (See Table 1.)

ADJACENT PROPERTY CHARACTERISTICS:

Table 1. Existing Land Use and Zoning Designations

	EXISTING USE(S)	LAND USE DESIGNATION(S)	ZONING DESIGNATION(S)
North	Residential Condominiums Residential Dwellings	Planned Use District (PUD) Single Family (SF): up to 8 units per acre	Planned Development (PD) Single-Family (RSF-1)
South	NW 16th Blvd Right-of-Way Place of Religious Assembly / Residential Dwellings	N/A Single Family (SF): up to 8 units per acre	N/A Single-Family (RSF-1)
East	NW 34th Street Right-of-Way Residential Dwellings	N/A Single-Family (SF): up to 8 units per acre	N/A Single-Family (RSF-1)
West	Residential Dwellings	Single-Family (SF): up to 8 units per acre	Single-Family (RSF-1)

STAFF ANALYSIS AND RECOMMENDATION:

The following is an analysis of this application and a recommendation based on the review criteria provided in Section 30-3.24 of the City Land Development Code:

ANALYSIS

A. The proposed use or development is consistent with the Comprehensive Plan and the Land Development Code.

According to Future Land Use Element, Policy 4.1.1, the Single-Family (SF): up to 8 units per acre land use designation on the subject property allows community-level institutional facilities, such as places of religious assembly (see Exhibit A-1). The Single-Family (RSF-1) zoning district on the subject property allows places of religious assembly by Special Use Permit (SUP) in accordance with the use standards in Sec. 30-5.21 of the City Land Development Code (see Exhibit B-1). The applicant is requesting a Special Use Permit (SUP) for a place of

religious assembly, and the City's Technical Review Committee (TRC) finds the proposed use and development approvable, subject to compliance with all applicable regulations and the conditions recommended in Appendix C.

B. The proposed use or development is compatible with the existing land use pattern and future uses designated by the Comprehensive Plan. Factors by which the compatibility of the proposed use or development shall be reviewed include scale, height, mass and bulk, design, intensity, and character of activity.

Places of religious assembly are a part of the existing land use pattern that surrounds the subject property. According to Future Land Use Element, Policy 4.1.1, places of religious assembly are permitted on properties with a Single-Family (SF): up to 8 units per acre land use designation. Factors used to determine the compatibility of the proposed use and development that include scale, height, mass and bulk, design, intensity, and character of activity are within the Land Development Code. The City Technical Review Committee (TRC) has considered these factors in reviewing the proposed use and development and finds them approvable, subject to compliance with all applicable regulations and the conditions recommended in Appendix C.

C. The proposed use will not adversely affect the health, safety, and welfare of the public.

The proposed use is not expected to adversely affect the health, safety, and welfare of the public, given the applicant's written response to the City's General Performance Standards in Sec. 30-8.2 of the City Land Development Code (see Exhibit D-8). Future Land Use Element, Policy 4.1.1, identifies places of religious assembly as appropriate community-level institutional facilities on properties with a Single-Family (up to 8 units per acre) land use designation.

D. Ingress and egress to the property, proposed structures, and parking/loading/service areas is provided and allows for safe and convenient automobile, bicycle, and pedestrian mobility at the site and surrounding properties.

The City's Public Works Department, Traffic Studies Division, has approved the associated development plan (see Appendix C). The development plan calls for a two-directional driveway connection on NW 34th Street and NW 16th Boulevard. Parking spaces are proposed for vehicles and bikes along sidewalks and near building entrances. A covered walkway is proposed that will connect the existing church building to the new sanctuary and connect these buildings to the designated off-street parking area. Open sidewalks that connect to sidewalks in the adjoining public rights-of-way are also proposed. Sidewalk connections to private property are not proposed due to topography and the distance separating the development area from adjoining tax parcels.

E. Off-street parking, service, and loading areas, where required, will not adversely impact adjacent properties zoned for single-family residential use.

The City's Public Works Department, Traffic Studies Division, has approved the off-street parking, service, and loading areas illustrated on the associated development plan, as indicated in Appendix C. Therefore, these facilities are not expected to adversely impact adjacent properties zoned for single-family residential use.

F. Noise, glare, exterior lighting, or odor effects will not negatively impact surrounding properties.

The proposed use and development is not expected to negatively impact surrounding properties, in regard to noise, glare, exterior lighting, or odor effects, given staff's review and the applicant's written response to the City's General Performance Standards in Sec. 30-8.2 of the City Land Development Code (see Exhibit D-8). However, prior to receiving a final development order, the applicant must submit a photometric plan that is complete and shows compliance with all applicable requirements. (See Appendix C.)

G. There is adequate provision for refuse and service/loading areas, and these areas shall be reviewed for access, screening, location on the site, and pedestrian/bicycle mobility and safety. Outdoor storage or display areas, if included, will not adversely impact surrounding properties and shall be reviewed for screening and location on the site.

The City's Public Works Department, Solid Waste Division, has approved the associated development plan, in regard to the location and size of a new concrete pad that will be used to store solid waste disposal facilities on the subject property. The pad will be located in excess of 70 feet from adjoining single-family residential properties and the public right-of-way to reduce visibility. It will also be screened with an opaque enclosure at least 6 feet in height. The details of the screened enclosure are required on the associated development plan, prior to the issuance of a final development order. Outdoor storage is not proposed.

H. Necessary public utilities are available to the proposed site and have adequate capacity to service the proposed use or development.

The electric, gas, and water/wastewater divisions of Gainesville Regional Utilities (GRU) have approved this application, which indicates that necessary public utilities with adequate capacity are available to service the proposed use and development. The location and width of required utility easements must be illustrated on the associated development plan, prior to the issuance of a final development order. (See Appendix C.)

I. Screening and buffers are proposed of such type, dimension, and character to improve compatibility and harmony of the proposed use and structure with the uses and structures of adjacent and nearby properties.

The proposed use and structure will comply with the screening and buffer requirements of the Land Development Code, which are considered adequate for protecting adjacent and nearby properties. The screening and buffer requirements include street trees, perimeter and interior landscape material for vehicular use areas, and an opaque enclosure for solid waste disposal facilities. A compatibility buffer is not required between properties with a Single-Family (SF): up to 8 units per acre land use designation.

J. The hours of operation will not adversely impact adjacent properties zoned for single-family residential use.

Given the applicant's letter addressing the City's general performance standards in Appendix D, the hours of operation are not expected to adversely impact adjacent properties zoned for single-family residential use.

K. Any special requirements set forth in the Land Development Code for the particular use involved are met.

The proposed use and development are in compliance with the special requirements for places of religious assembly in Sec. 30-5.21, pending compliance with all applicable regulations and the conditions recommended in Appendix C.

RECOMMENDATION

Staff recommends approval of Petition PB-18-90 SUP, subject to compliance with all applicable regulations and the conditions recommended in Appendix C.

DRAFT MOTION FOR CONSIDERATION

I move to approve Petition PB-17-90 SUP, subject to compliance with all applicable regulations and the conditions recommended in Appendix C.

BACKGROUND:

According to data obtained from the Alachua County Property Appraiser's Office, the existing church building was constructed circa 1976. This petition was first submitted in 2017 under the former Land Development Code, which required a maximum building height of 35 feet for properties zoned RSF-1 (Single-family residential district). The applicant resubmitted revised drawings in 2018 to eliminate a bell tower and to comply with a maximum 3-story

building height in the current Land Development Code. The proposed sanctuary building is now shown on the associated development plan to be
54 feet - 6 inches.

POST- APPROVAL REQUIREMENTS:

The applicant must submit all required documents, meeting board-approved conditions, to the City Planning Division on a designated resubmittal date. Once it is determined that all submittal requirements and board-approved conditions have been met, the applicant can be issued a final development order in conjunction with the requested Special Use Permit (SUP).

LIST OF APPENDICES:

Appendix A **Comprehensive Plan Goals, Objectives and Policies**
Exhibit A-1: Future Land Use Element, Policy 4.4.1

Appendix B **Land Development Code**
Exhibit B-1: Section 30-3.24. Review Criteria.
Exhibit B-2: Section 30-5.21. Places of Religious Assembly.
Exhibit B-3: Section 30-8.2. General Environmental Performance Standards.

Appendix C **Technical Review Committee (TRC) Conditions**

Appendix D **Application Documents**
Exhibit D-1: Drainage Calculations
Exhibit D-2: Concurrency Application
Exhibit D-3: Concurrency Map
Exhibit D-4: Cover Letter
Exhibit D-5: ePlan Review Application w/ GRU Checklist
Exhibit D-6: Lighting Fixture Data
Exhibit D-7: Neighborhood Meeting Package
Exhibit D-8: General Performance Standards Letter
Exhibit D-9: Property Ownership Documents
Exhibit D-10: Rain Collection System
Exhibit D-11: Special Use Permit Application
Exhibit D-12: Special Use Permit Justification Report
Exhibit D-13: Sign Affidavit

Appendix E **Development Plan**

Appendix A

Comprehensive Plan Goals, Objectives and Policies

EXHIBIT
tabbies
A-1

Policy 3.6.2 Wherever possible, the natural terrain, drainage, and vegetation of the city should be preserved with superior examples contained within parks or greenbelts.

Policy 3.6.3 To the extent feasible, all development shall minimize alteration of the existing natural topography.

GOAL 4 **THE FUTURE LAND USE ELEMENT SHALL FOSTER THE UNIQUE CHARACTER OF THE CITY BY DIRECTING GROWTH AND REDEVELOPMENT IN A MANNER THAT: USES NEIGHBORHOOD CENTERS TO PROVIDE GOODS AND SERVICES TO CITY RESIDENTS; PROTECTS NEIGHBORHOODS; DISTRIBUTES GROWTH AND ECONOMIC ACTIVITY THROUGHOUT THE CITY IN KEEPING WITH THE DIRECTION OF THIS ELEMENT; PRESERVES QUALITY OPEN SPACE; AND PRESERVES THE TREE CANOPY OF THE CITY. THE FUTURE LAND USE ELEMENT SHALL PROMOTE STATEWIDE GOALS FOR COMPACT DEVELOPMENT AND EFFICIENT USE OF INFRASTRUCTURE.**

Objective 4.1 **The City shall establish land use categories that allow sufficient acreage for residential, commercial, mixed-use, office, industrial, education, agricultural, recreation, conservation, public facility, and institutional uses at appropriate locations to meet the needs of the projected population and that allow flexibility for the City to consider unique, innovative, and carefully construed proposals that are in keeping with the surrounding character and environmental conditions of specific sites. Land use categories associated with transect zones are intended to encourage a more efficient and sustainable urban from by allowing a range of housing, employment, shopping and recreation choices and opportunities in a compact area of the City.**

Policy 4.1.1 Land Use Categories on the Future Land Use Map shall be defined as follows:

Single-Family (SF): up to 8 units per acre

This land use category shall allow single-family detached dwellings at densities up to 8 dwelling units per acre. The Single-Family land use category identifies those areas within the City that, due to topography, soil conditions, surrounding land uses and development patterns, are appropriate for single-family development. Land development regulations shall determine the performance measures and gradations of density. Land development regulations shall specify criteria for the siting of low-intensity residential facilities to accommodate special need populations and appropriate community-level institutional facilities such as places of religious assembly, public and private schools other than institutions of higher learning, and libraries. Land development regulations shall allow home occupations in conjunction with single-family dwellings under certain limitations.

Appendix B

Land Development Code

DIVISION 5. SPECIAL USE PERMITS

Section 30-3.22. Purpose.

It is the intent of this division to recognize and permit certain uses and developments that require special review, and to provide the standards by which the applications for permits for uses and development shall be evaluated. It is further intended that Special Use Permits be required for developments that, because of their inherent nature, extent, and external effects, require special care in the control of their location, design, and methods of operation in order to ensure conformance with the Comprehensive Plan and this chapter.

Section 30-3.23. Required.

The applicable uses listed in Article IV may be established in that zoning district only after issuance and recordation of a Special Use Permit by the City Plan Board.

Section 30-3.24. Review Criteria.

No Special Use Permit shall be approved by the City Plan Board unless the following findings are made concerning the proposed special use. The burden of proof on the issue of whether the development, if completed as proposed, will comply with the requirements of this chapter remains at all times on the applicant.

A. The proposed use or development is consistent with the Comprehensive Plan and the Land Development Code.

B. The proposed use or development is compatible with the existing land use pattern and future uses designated by the Comprehensive Plan. Factors by which compatibility of the proposed use or development shall be reviewed include scale, height, mass and bulk, design, intensity, and character of activity.

C. The proposed use will not adversely affect the health, safety, and welfare of the public.

D. Ingress and egress to the property, proposed structures, and parking/loading/service areas is provided and allows for safe and convenient automobile, bicycle, and pedestrian mobility at the site and surrounding properties.

E. Off-street parking, service, and loading areas, where required, will not adversely impact adjacent properties zoned for single-family residential use.

F. Noise, glare, exterior lighting, or odor effects will not negatively impact surrounding properties.

G. There is adequate provision for refuse and service/loading areas, and these areas shall be reviewed for access, screening, location on the site, and pedestrian/bicycle mobility and safety. Outdoor storage or display areas, if included, will not adversely impact surrounding properties and shall be reviewed for screening and location on the site.

H. Necessary public utilities are available to the proposed site and have adequate capacity to service the proposed use or development.

I. Screening and buffers are proposed of such type, dimension, and character to improve compatibility and harmony of the proposed use and structure with the uses and structures of adjacent and nearby properties.

J. The hours of operation will not adversely impact adjacent properties zoned for single-family residential use.

K. Any special requirements set forth in the Land Development Code for the particular use involved are met.

Section 30-3.25. Review Procedures.

A. *Pre-application meeting.* A pre-application meeting is not required; however, the applicant is encouraged to attend a meeting with staff to review applicable procedural and regulatory requirements.

B. *Applications*. Each application shall be filed with the City Manager or designee on the form prescribed. Any incomplete applications will be returned to the applicant. The application shall include proof of having met the requirements of a neighborhood workshop as provided in this article.

C. *Staff meeting*. The applicant for a Special Use Permit shall meet with city staff to discuss the procedures and requirements and to consider the elements of the proposed use and site and the proposed site layout.

D. *Staff report*. The City Manager or designee shall submit to the City Plan Board a written report that includes analysis of the application and a recommendation based on the review criteria provided in this division.

E. *City Plan Board hearing*.

1. The City Plan Board shall consider the evidence presented in the public hearing and the written report submitted by the City Manager or designee and shall act on the application based on the review criteria provided in this division.

2. Action on the application shall be one of the following:

   a. Approval;

   b. Approval subject to conditions; or

   c. Denial, with a statement of the reasons for denial.

F. *Effect of denial or withdrawal*. No application for a Special Use Permit may be submitted within two years after the date of denial or withdrawal of a request for the same use for the same property. The City Plan Board may waive this time limitation by the affirmative vote of five members, provided 30 calendar days have elapsed and provided the City Plan Board deems such action necessary to prevent an injustice.

G. *Amended application*. Amendment of an application may be allowed at any time prior to or during the public hearing, provided that no such amendment shall be such as to make the case different from its description in the notice of public hearing. If the amendment is requested by the applicant after notice of the hearing has been given and such amendment is at variance with the information set forth in the notice, then the applicant shall pay an additional fee in the same amount as the original fee for amended public notice. If the amended notice can be mailed at least 10 calendar days prior to the hearing originally scheduled, the hearing on the amended petition may be held on that date; otherwise, the chairperson shall announce at the public hearing that the hearing will be continued to a future meeting with proper public notice.

1. Additional screening may be required to visually shield the use from the public right-of-way.
2. No merchandise, equipment, machinery, materials, motor vehicles or other items shall be stored above the height of the landscape buffer strip.

B. *Hazardous materials*. Compliance with the county hazardous materials code is required.

Section 30-5.20. Parking, Surface.

Surface parking lots as a temporary use are allowed in the U9 and DT districts subject to special use permit approval and the following requirements:

A. Surface parking shall be permitted only when the surface parking will be replaced with either a building or structured parking in accordance with an approved master plan.

B. Surface parking shall be paved.

C. Surface parking shall have either perimeter landscaping or perimeter garden walls in accordance with the landscape regulations as provided in this Land Development Code.

D. Surface parking shall be in compliance with all lighting and stormwater regulations in this Land Development Code.

E. Any special use permit approved pursuant to this section shall be valid for a period not to exceed 5 years. The City Plan Board may extend a special use permit approved under this section for an additional period not to exceed 5 years if the applicant demonstrates that development in accordance with the approved master plan has commenced.

Section 30-5.21. Places of Religious Assembly.

A. Within the RSF-1, RSF-2, RSF-3, RSF-4 and U1 districts, places of religious assembly are allowed upon the granting of a special use permit, subject to the following additional dimensional requirements:

1. Minimum lot area shall be one acre for each place of religious assembly with a building code capacity of 100 persons or less plus an additional one-half (½) acre for each additional 50 persons of building code capacity.
2. Minimum yard setbacks:
    a. Front: 25 feet.
    b. Side, interior: 50 feet, unless the proposed use is adjacent to a non-residential district, in which case the district setbacks shall apply.
    c. Side, street: 25 feet.
    d. Rear: 50 feet, unless the proposed use is adjacent to a non-residential district, in which case the district setbacks shall apply.

B. *Day care centers and schools as accessory uses*. Within the RSF-1, RSF-2, RSF-3, RSF-4 and U1 districts, day care centers and schools may be allowed as accessory uses to places of religious assembly upon the granting of a special use permit; within all other districts, day care centers and schools are permitted accessory uses to any lawful place of religious assembly provided, in all cases, that the requirements and limitations for day care centers and schools as listed in this article are met.

34. To encourage development and preservation of a network of greenway transportation corridors throughout the city and county;
35. To provide safe, convenient, scenic, historic and nonmotorized transportation linkages between land uses;
36. To provide wildlife corridors, and other forms of environmental conservation and environmental education;
37. To provide for recreation and access to recreation;
38. To provide greenway buffering to protect environmental features and neighborhoods from nearby land uses;
39. To preserve biological diversity and viable populations of special protection species dependent on upland, transitional and wetland ecological communities;
40. To ensure adequate, safe, economic, reliable and environmentally sound water and wastewater utility services for the public;
41. To promote economic development in a manner that will enhance the quality of life;
42. To diminish the severity and frequency of southern pine beetle outbreaks in Gainesville by reducing the density of loblolly pines in urban areas;
43. To preserve high quality heritage trees, especially where they occur within 20 feet of the public right-of-way; and
44. To favor replanting with native species of high quality shade trees, including requiring such trees to be planted in locations that will reintroduce seed sources to adjacent natural communities.

Section 30-8.2. General Environmental Performance Standards.

A. *Applicability*. All uses and activities permitted in any zoning district shall conform to the standards of performance described in this section.

B. *Showing of probable compliance*. Uses and activities required to comply with this section shall make a showing of probable compliance with the performance standards described in this section. This showing shall be in the form of a letter submitted with a zoning compliance permit or development plan, as applicable, prepared by a professional engineer licensed by the State of Florida, certifying that the use or activity complies with all performance standards described in this section.

1. *Fire and explosion hazards.* All activities and all storage of flammable and explosive materials or products at any place shall be provided with adequate safety devices against the hazards of fire and explosion, including adequate firefighting and fire suppression equipment, as prescribed by the fire prevention code adopted in Chapter 10 of the Code of Ordinances.
2. *Radiation.* All sources of ionizing radiation shall be registered or licensed by the Florida Department of Health. The handling of radioactive materials, the discharge of such materials into air or water, and the disposal of radioactive wastes shall be in conformance with applicable state and federal regulations.
3. *Electromagnetic radiation.* Electromagnetic radiation generated by activities shall not adversely affect any operation or equipment other than those of the creation of the radiation. Interference with radio and television reception is prohibited. Equipment or activities generating

electromagnetic radiation shall conform to the regulations of and, where appropriate, be licensed by the Federal Communications Commission.

4. *Waste disposal.* All waste disposal including discharge of any liquid or solid waste into any public or private sewage system, the ground, or any lake, creek, or wetland shall be in accordance with state, federal, and local law and applicable regulations of state, federal and local agencies.

5. *Vibration.* No use shall at any time create earth-born vibration which when measured at the boundary property line of the source operation exceeds the maximum allowable peak particle velocity set forth below. Ground vibration shall be measured as particle velocity using accelerometers. Particle velocity shall be recorded in three mutually perpendicular directions. The maximum allowable peak particle velocity shall apply to each of the three measurements.

Frequency (Cycles per Second)	Maximum Peak Particle Velocity (Inches Per Second)
0 to 10	0.05
10 to 19	0.50
20 to 29	1.00
30 to 39	1.50
40 and over	2.00

6. *Sound.* All uses and activities shall not exceed the sound pressure levels set forth in Chapter 15 of the Code of Ordinances.

7. *Heat, cold, dampness or movement of air.* Activities on any property which produce any adverse effect on the temperature, motion or humidity of the atmosphere beyond the lot lines are not permitted.

8. *Odor.* No use shall be operated in any zoning district in such a manner that the emission of odorous matter occurs in such quantity or volume as to produce a nuisance, source of discomfort, or hazard beyond the bounding property lines of such a use. For the purpose of this performance standard, the presence of such a described odor shall be determined by observation by a person or persons designated by the City Manager or designee. In any case, where the operator of an odor-emitting use may disagree with the enforcing officer where specific measurement of odor concentration is required, the method and procedures specified by the American Society for Testing and Materials (ASTM) E679 and E1432, entitled "Standard Practice for Determination of Odor and Taste Thresholds By a Forced-Choice Ascending Concentration Series Method of Limits" and "Standard Practice for Defining and Calculating Individual and Group Sensory Thresholds for Forced-Choice Data Sets of Intermediate Size," respectively. The operator and the city shall equally share the cost of conducting the more elaborate ASTM E679 Procedure.

9. *Air quality.* All development shall maintain air quality levels that comply with state and national ambient air quality standards.

10. *Air pollution emissions.* No industrial operation or use shall cause, create, or allow the emission of air contaminants which at the emission point or within the bounds of the property are in violation of the standards specified by the Florida Department of Environmental Protection, or

successor agency, or any governmental entity with regulatory jurisdiction, whichever standards are more stringent.

11. *Other air pollution.* Open storage and open processing operations, including on-site transportation movements, which are the source of windblown or airborne dust or other particulate matter; or which involve dust or other particulate air contaminant generating equipment including but not limited to paint spraying, grain or seed handling, sand or gravel processing or storage or sand blasting shall be conducted such that dust and other particulate matter so generated are not transported across the boundary property line or the tract on which the use is located in concentrations exceeding standards set by the Florida Department of Environmental Protection, or successor agency, or any governmental entity with regulatory jurisdiction, whichever standards are more stringent.

12. *Toxics.* No industrial operation or use shall emit toxic or noxious matter at a concentration exceeding ambient air quality standards for the State of Florida across the property line of the parcel on which the operation or use is located. Where toxic materials are not listed in the ambient air quality standards of the state, concentrations shall not exceed 1% of the threshold limit values (TLVs) adopted by the American Conference of Governmental Industrial Hygienists (ACGIH). If a toxic substance is not listed by the ACGIH, verification of safe levels of the proposed toxic material for public health, plant and animal life will be required.

C. *Utility service.* All utility services, including but not limited to those of franchised utilities, electric power and light, telephone, cable services, water, sewer and gas, shall be installed beneath the surface of the ground, unless the City Manager or designee determines that the soil, topography and other compelling condition makes it unreasonable or impractical. The subsurface mounting of incidental appurtenances, including but not limited to transformer boxes or pedestal-mounted boxes for the provision of utilities, electric meters, back flow preventers and fire hydrants, is not required.

DIVISION 2. TREES AND LANDSCAPE

Section 30-8.3. Elements of Compliance.

All property within the city shall be subject to the following regulations, except as exempted by Subsection B below. No parcel within the city may be cleared, grubbed, filled or excavated, nor shall any building be demolished, altered or reconstructed in a manner that negatively impacts regulated trees, changes the site plan, site use or increases the impervious surface area except in compliance with this article. Requirements of these sections do not exempt property owners from compliance with any other section of this chapter.

A. *Minimum requirements for landscaped areas*. All areas designed to meet the requirements of these sections shall comply with the following:

1. Street trees shall be provided a minimum rootzone volume of 700 cubic feet, except street trees that share a rootzone volume shall require a minimum of 550 cubic feet. All other required shade trees shall be provided a minimum of 420 cubic feet of rootzone volume. Where existing conditions preclude the provision of the minimum rootzone volume, the reviewing board or City Manager or designee may approve a lesser volume that meets the arboriculture needs of the tree within the existing conditions. Underground utility lines shall not be located within the rootzone volume, except for those lines that are four-inch diameter or less, and then only where

Appendix C

Technical Review Committee (TRC) Conditions

ProjectDox

Department Review Status Report

Project Name: Zion Evangelical Lutheran Church, PB-17-90 SUP

Application Type: Special Use Permit (SUP) with Development Plan Review for a Place of Religious Assembly

Public Hearing Date: 4/26/2018 0.00

Cycle	Department	Reviewer	Email	Status	Reviewer Comments	Applicant Comments
	Airport					
	Alachua County EPD	Gus Olmos	gus@alachuacounty.us	Approved		
	Building - Electrical	Eric Brunn	BrunnEk@cityofgainesville.org	No Review Required	This is a site plan application. No building electric review at this time.	
	Building - Fire Protection	Dan Starbuck	starbuckdl@cityofgainesville.org	No Review Required	Fire Department Site Plan Reviews are performed by Tom Burgett with Gainesville Fire Rescue.	
	Building - Mechanical	Linda Patrick	patrickln@cityofgainesville.org	Corrections Required	My review went under Mechanical - I changed my Changemarks to reflect bldg. coord. They need to show how they are meeting height criteria.	
	Building - Plumbing	Eric Brunn	BrunnEk@cityofgainesville.org	No Review Required	This is a site plan application. No building electric review at this time.	
	Building Coordinator	John Lake	lakeja@cityofgainesville.org	No Review Required		
	Code Enforcement	Chris Cooper	cooperce@cityofgainesville.org	No Review Required		
	Community Redevelopment Agency	Andrew Meeker	meekerag@cityofgainesville.org	No Review Required		
	Environmental	Mark Brown	brownmm@cityofgainesville.org	Approved		
	Gainesville Fire Rescue Department	Tom Burgett	burgettta@cityofgainesville.org	Corrections Required	See Comment on C 4.00	
	Gainesville Police Department					
	GRU New Services Department	Wendy Mercer	MercerWL@gru.com	Assign Only		
	Historic Preservation	Jason Simmons	simmonsja@cityofgainesville.org	No Review Required	Not in a historic district and no demolition of historic structures.	
	Planners	Bedez Massey	masseybe@cityofgainesville.org	Corrections Required		
	Public Works - Design	Rick Melzer	melzerra@cityofgainesville.org	Corrections Required	See comments	
	Public Works Constructability	Matt Williams	williamsrm@cityofgainesville.org	Corrections Required		
1	Public Works Review - Back Up	David Grice	GriceDR@cityofgainesville.org	Approved		
	Public Works Solid Waste	Steve Joplin	joplinsh@cityofgainesville.org	Approved		
	Public Works Stormwater	Mary Frieg	FriegMC@cityofgainesville.org	Corrections Required	comments in drainage design notes and sheets C0.00, C2.00, and C2.20	
	Public Works Survey	Pat Durbin	durbinpr@cityofgainesville.org	Approved	boundary/topo only reviewed	
	Public Works Traffic Studies	Debbie Leistner	leistnerdl@cityofgainesville.org	Approved		
	RTS	Jesus Gomez	gomezjm@cityofgainesville.org	Approved	Funds for improvements are near bus stop. (concrete pad, shelter)	
	SJRWMD					
	Transportation Mobility	Jason Simmons	simmonsja@cityofgainesville.org	Corrections Required		
	Urban Forestry	Earline Luhrman	luhrmanek@cityofgainesville.org	Corrections Required	Thanks, Earline	
	Electric West	Keith Wheeler	WheelerKM@gru.com	Corrections Required	No proposed Electric shown on plans. Provided electric layout under electric design folder. Please include this in the next submittal so it can be reviewed.	
	Gas	Rand Larsen	larsenrs@gru.com	Approved		
	GRUCom	Michael Chappell	chappellmr@gru.com	No Review Required	Curtis Spencer has completed this review for GRUCom	
	GRUCom	Curtis Spencer	spencercr@gru.com	Approved		
	GRUCom	Curtis Spencer	spencercr@gru.com	Approved		
	Real Estate	Ann Mullins	mullinsam@gru.com	Corrections Required		
	Right of Way Permit - GRU Real Estate	Jennifer Rushing	RushingJR@gru.com	Approved	Water and sewer connection on 34th Street are perpendicular to R/W and appear to impact less than 12LF of existing sidewalk. Per FDOT UAM, no joint R/W permit would be required.	
	Water-Waste Water	Christina DeStephens	destephencg@gru.com	Corrections Required		
	Water-Waste Water	Russ Ingram	ingramrd@gru.com	Corrections Required		

ProjectDox

Department Review Status Report

Project Name: Zion Evangelical Lutheran Church, PB-17-90 SUP

Application Type: Special Use Permit (SUP) with Development Plan Review for a Place of Religious Assembly

Public Hearing Date: 4/26/2018

Cycle	Department	Reviewer	Email	Status	Reviewer Comments	Applicant Comments
2	Alachua County EPD	Gus Olmos	gus@alachuacounty.us	Approved		
	Building - Mechanical	Linda Patrick	patricklr@cityofgainesville.org			
	Gainesville Fire Rescue Department	Tom Burgett	burgettta@cityofgainesville.org	Corrections Required	Request for remote FDC on the utility sheet.	
	Gainesville Police Department	Forrest Eddleton	eddletonfk@cityofgainesville.org	Corrections Required	Photometric reviews will be conducted through Planning for the remainder of the project.	
	GRU New Services Department	Wendy Mercer	MercerWL@gru.com	Assign Only		
	Electric West	Keith Wheeler	WheelerKM@gru.com	Approved		
	Gas	Rand Larsen	larsenrs@gru.com	Approved		
	Real Estate	Ann Mullins	mullinsam@gru.com	Corrections Required		
	Water-Waste Water	Russ Ingram	ingramrd@gru.com	Approved		
	Water-Waste Water	Barbara Misener	MISENERBJ@gru.com	Approved		
	Planners	Bedez Massey	masseybe@cityofgainesville.org	Corrections Required		
	Public Works - Design	Rick Melzer	melzerra@cityofgainesville.org	Approved		
	Public Works Constructability	Matt Williams	williamsrm@cityofgainesville.org	Approved		
	Public Works Stormwater	Mary Frieg	FriegMC@cityofgainesville.org	Corrections Required	Questions from calculations: Explain how the CN for the building is 39. Please delineate the post developed drainage areas (DA-1 and DA-2) in the calculations. Please answer my questions on sheet C2.00.	
	Transportation Mobility	Jason Simmons	simmonsja@cityofgainesville.org	Corrections Required		
	Water-Waste Water	Barbara Misener	MISENERBJ@gru.com	Approved		
	Urban Forestry	Erick Smith	SmithED@cityofgainesville.org	Corrections Required		

Appendix D

Application Documents

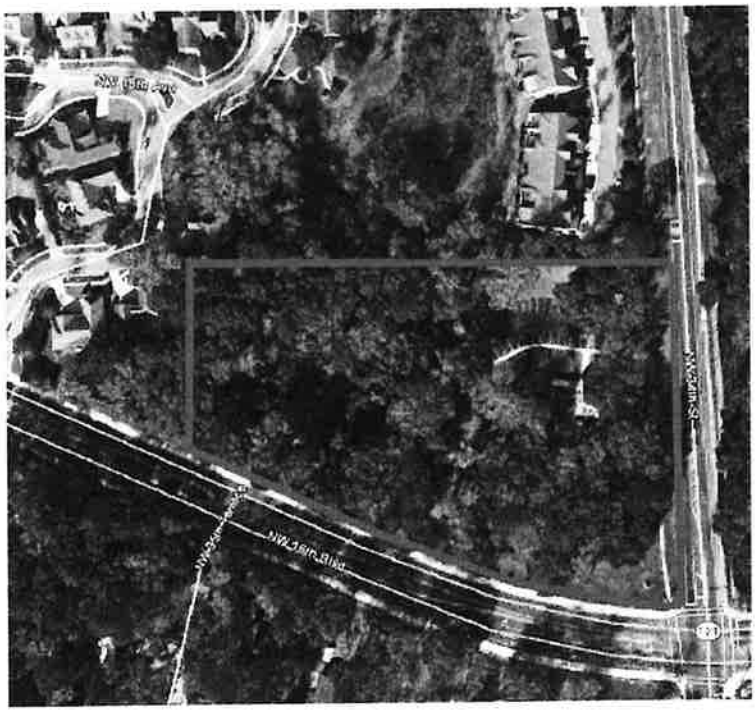
EXHIBIT
D-1
Pages 1-62

engineers • surveyors • planners

40 years

DRAINAGE DESIGN NOTES
ZION EVANGELICAL LUTHERAN CHURCH

1700 NW 34TH ST



Engineer of Record:
Sergio J. Reyes, P.E.
Cert No. 47311

Engineer Intern:
Meagan Dickey, E.I.

Submitted to:

City of Gainesville

Submitted: March 16, 2018

Prepaired By:
eda engineers surveyors planners, inc.
2404 NW 43rd St
Gainesville, FL 32606

eda engineers • surveyors • planners

DRAINAGE DESIGN NOTES

Zion Evangelical Lutheran Church

March 16, 2018

Professional Engineer of Record:	
SERGIO J. REYES STATE OF FLORIDA PROFESSIONAL ENGINEER No 47311	
	Date: 3/16/18
Sergio Reyes, P.E. Engineer	47311 Cert. No.

Table of Contents

H. DRAINAGE DESIGN

1) PRE DEVELOPMENT DRAINAGE AREA

DA-1	Area (sf)	Area (Acres)	Curve CN
Existing Impervious	4,703	0.11	98.0
Open - "A" Good Condition	77,432	1.78	39.0
TOTALS	**82,136**	**1.89**	**42.4**

2) POST DEVELOPMENT DRAINAGE AREAS

DA-1	Area (sf)	Area (Acres)	Curve CN
Impervious	6,626	0.15	98.0
Proposed Basin	7,987	0.18	100.0
Open - "A" Good Condition	57,270	1.31	39.0
TOTALS	**71,883**	**1.65**	**51.2**

DA-2	Area (sf)	Area (Acres)	Curve CN
Impervious	6,730	0.15	98.0
Grass Parking	1,639	0.04	70.0
Open - "A" Good Condition	0	0.00	39.0
TOTALS	**8,369**	**0.19**	**92.5**

Existing and Proposed Buildings	Area (sf)	Area (Acres)	Curve CN
Building Roof Area	**8,633**	**0.198**	**98.0**

3) BASIN STORAGE DATA

Basin-1

Stage (msl)	Area (sf)	Area (ac)	Volume (cf)	Volume (ac-ft)	
122.00	1,486.58	0.03	0	0.00	
123.00	3,062.19	0.07	2,274	0.05	
124.00	5,251.86	0.12	6,431	0.15	
124.10	5,559.12	0.13	6,972	0.16	*(Proposed Slot Elevation)*
124.89	7,986.54	0.18	12,322	0.28	*(Existing Inlet Elevation)*
125.00	8,324.54	0.19	13,220	0.30	
125.50	9,168.01	0.21	17,593	0.40	

Underground-2

Stage (msl)	Area (sf)	Void Area (sf)	Area (ac)	Volume (cf)	Volume (ac-ft)
125.51	1,336	1,269	0.029	0	0.00
127.90	1,336	1,269	0.029	3,030	0.07
128.33	1,336	1,269	0.029	3,580	0.08

Rain Cisterns (Designed By Others)

Size (cf)	Quantity (cisterns)	Volume (cf)
334.20	8	2,674

4) WATER QUALITY TREATMENT VOLUME

Basin 1 and Underground Basin 2 provides water quality treatment volume per SJRWMD criteria for dry retention basins. The design criteria includes two thresholds, whichever of the two is greater:

Volume V1 = 1.00 inches over the total area, or
Volume V2 = 1.25 inches over the impervious area plus
0.50 inches over the total area

	Volume V1 (cf)	Volume V2 (cf)	Treat. Vol Required (cf)	Treat. Vol Provided (cf)
DA-1	5,990	3,685	5,990	**6,972**
DA-2	697	1,050	1,050	**3,030**
Ex. And Pro. Buildings	719	1,259	1,259	-
		Total:	8,299	**10,002**

5) BASIN GEOMETRY & DETAILS

HD R-tank Units

Module	Width (ft)	Length (ft)	Height (ft)	Volume (cf)	Storage (cf)
Double Units	1.31	2.35	2.82	8.69	8.25

Basin	Basin Area (sf)	Tanks (#)	Tanks (type)
Underground Basin 2	1,336	434	*Double-HD*

6) BASIN DISCHARGE STRUCTURE DETAILS

Structure Type	Size	Elevation
Underground Basin 2 to Basin 1	4" Pipe @ 4.02%	127.90
Existing Inlet for Basin 1	Type C Inlet per FDOT	124.89
New Orifice in Ex. Inlet for Basin 1	4" Rectangular Slot	124.25

7) SUBSURFACE INVESTIGATION INFORMATION

Based on the Soils Report No. 1422777, dated February 8, 2017, prepared by Universal Engineering Sciences, Inc. the recommendations of the soil characteristics are summarized below:

Soil Report No. 1422777			
Soil Boring	B1/B2	B3/B4	B5/B6
Average Ground El.	128.00	125.50	130.00
Depth Confined layer (ft)	13.00	12.00	11.00
Depth of groundwater (ft)	12.00	11.00	11.50
Veritcal (ft/d)	2.00	4.00	1.50
Safety factor	2.00	2.00	2.00
Veritcal Infiltration rate (ft/d)	1.00	2.00	0.75
Horizontal (ft/d)	3.00	5.00	2.00
Safety factor	2.00	2.00	2.00
Horizontal (ft/d)	1.50	2.50	1.00
Fillable porosity (%)	20.00	20.00	20.00

8) RECOVERY OF TREATMENT VOLUME FOR DRY RETENTION SYSTEM

The criteria for the recovery of the system is the recovery of the required water quality volume within 72 hours following the critical storm event. Results are obtained from the 100 yr - 24 hr storm (highest volume storm).

WQTV Recovery	
DA 1 WQTV (cf):	5,990
Recovery Time (hrs):	6.76
DA 2 WQTV (cf):	1,050
Recovery Time (hrs):	21.26

9) STORM ROUTING RESULTS

The computer program ICPR was used to route the critical design storms (100 YR, 25YR-24HR, and Mean Annual), the input data and results can be seen in Attachment C.

Storm Event	Basin 1 Stage	Freeboard (ft)	Rates		Volumes	
			Pre (cfs)	Post (cfs)	Pre (ac-ft)	Post (ac-ft)
100Y 001H	123.33	2.17	0.65	0.00	0.029	0.000
100Y 002H	123.97	1.53	0.65	0.00	0.069	0.000
100Y 004H	124.65	0.85	1.20	0.26	0.143	0.057
100Y 008H	124.90	0.60	1.36	0.36	0.232	0.150
100Y 024H	124.94	0.56	0.66	0.64	0.498	0.400
025Y 024H	124.58	0.92	0.35	0.24	0.275	0.144
Mean Annual	122.54	2.96	0.03	0.00	0.023	0.000

Storm Event	Tanks 2 Stage	Freeboard (ft)
100Y 001H	127.90	2.10
100Y 002H	128.24	1.76
100Y 004H	128.29	1.71
100Y 008H	128.18	1.82
100Y 024H	128.09	1.91
025Y 024H	127.40	2.60
Mean Annual	126.77	3.23

Attachment A

Soil Borings

UNIVERSAL
ENGINEERING SCIENCES
Consultants in: Geotechnical Engineering • Environmental Engineering
Construction Materials Testing • Threshold Inspection • Private Provider Inspection

LOCATIONS:
Atlanta
Daytona Beach
Fort Myers
Fort Pierce
Gainesville
Jacksonville
Kissimmee
Leesburg
Miami
Ocala
Orlando (Headquarters)
Palm Coast
Panama City
Pensacola
Rockledge
Sarasota
Tampa
West Palm Beach

February 8, 2017

Zion Lutheran Church
1700 NW 34th Street
Gainesville, FL 32605

Attention: Mr. Christopher J. Borgert

Reference: **Addendum to Report of Geotechnical Consulting Services**
Zion Lutheran Church – Stormwater Management System
1700 NW 34th Street
Gainesville, Alachua County, Florida
Section 35, Township 9 South, Range 19 East
UES Project No. 0230.1600108.0000 UES Report No. 1422777

Dear Mr. Borgert:

Universal Engineering Sciences, Inc. (UES) has completed geotechnical engineering services for a new stormwater management system at the subject project in Gainesville, Florida, as authorized in Proposal 1418554, dated January 5, 2017. This report presents the results of our subsurface field exploration, laboratory soil testing programs, and recommendations for the new stormwater management facility.

Objectives

The objectives of our geotechnical consulting services on this portion of the project have been summarized as follows:

- Explore the subsurface conditions within the proposed new stormwater management facility system,
- Perform a series of laboratory tests on selected subsurface soil specimens to assist with engineering soil classifications and to establish the relevant soil composition and permeability characteristics,
- Recommend appropriate subsurface soil design parameter values for design of the on-site stormwater management system.

Project Information

The project parcel is located at 1700 NW 34th Street in Gainesville, Alachua County, Florida. Current site development plans include construction of a stormwater management system. Our office was provided with a concept plan, showing the proposed boring locations, to assist us in our report preparation.

Site Conditions

UES personnel visited the project parcel during the performance of the field portion of this geotechnical study. Our on-site observations have been summarized as follows. At the time of our

exploration the project parcel was developed with an existing church building and parking areas, and contained minor overhead vegetation (trees) in the area of interest.

Local Geology

The general geology of central Alachua County is characterized by a surface veneer of Pleistocene and Pliocene sands and sandy clays overlying the Miocene-age Hawthorn Group. The Hawthorn Group includes a highly variable mixture of interbedded quartz sands, clays, carbonates, pebbles and grains occurring with thicknesses of up to 150 feet. In the general area of the subject project, it is anticipated that the Hawthorn Group is laterally discontinuous and perforated.

The general hydrogeology of Alachua County consists of three aquifer systems; a surficial aquifer, an intermediate aquifer, and the Floridan aquifer system. The surficial aquifer exists as an unconfined water table situated over the impermeable Hawthorn Group and is usually a subdued reflection of surface topography. The intermediate aquifer system includes all rocks that collectively retard the exchange of water between the overlying surficial aquifer system and the underlying Floridan aquifer system. Water in this system is contained under confined conditions. The Floridan aquifer system is a thick, carbonate sequence that functions regionally as a water-yielding hydraulic unit. Water exists under confined conditions.

General Area Soils Information

The United States Department of Agriculture (USDA) *Soil Survey of Alachua County, Florida* describes the near-surface soil profile in the project parcel as Millhopper sands. Millhopper sand is characterized as being nearly level to sloping and moderately well drained, with a high groundwater level of 40 to 60 inches below ground level for 1 to 4 months, and at a depth of 60 to 72 inches for 2 to 4 months during most years. Relevant engineering index properties for Millhopper sands have been summarized below in Tables 1 and 2.

Table 1 - Relevant Engineering Index Properties of Millhopper Sand Soils, 0-5 % Slopes

Depth, Inches	Texture	Classification	% Passing #200 Sieve	Plasticity Index	Shrink-swell Potential	Permeability
0 – 58	Sand	SP-SM, SM	5 to 20	Non-plastic	Low	6.0 to 20 in/hr
58 – 64	Loamy sand, loamy fine sand	SM	15 to 22	Non-plastic	Low	2.0 to 6.0 in/hr
64 - 89	Sandy loam, fine sandy loam, sandy clay loam	SM, SM-SC, SC	18 to 40	Non-plastic to 10	Low	0.06 to 2.0 in/hr

Table 2 - Relevant Engineering Index Properties of Millhopper Sand Soils, 5-8 % Slopes

Depth, Inches	Texture	Classification	% Passing #200 Sieve	Plasticity Index	Shrink-swell Potential	Permeability
0 – 54	Sand	SP-SM, SM	5 to 20	Non-plastic	Low	6.0 to 20 in/hr
54 – 56	Loamy sand, loamy fine sand	SM	15 to 22	Non-plastic	Low	2.0 to 6.0 in/hr
56 - 80	Sandy loam, fine sandy loam, sandy clay loam	SM, SM-SC, SC	18 to 40	Non-plastic to 10	Low	0.06 to 2.0 in/hr

Subsurface Exploration

The field geotechnical testing activities were started and completed on January 30, 2017. Field tests for this portion of the geotechnical study included six (6) soil test borings performed at the locations shown on the attached Boring Location Plan. The actual test locations shown are approximate, and were staked in the field by UES personnel using existing landmarks and site features. The boreholes were backfilled to grade upon field work completion.

Standard Penetration Test Borings (SPT): Six (6) soil test borings were advanced for the proposed stormwater management areas to a depth of 15 feet. The penetration tests were performed in accordance with ASTM Procedure D-1586, Penetration Test and Split-Barrel Sampling of Soils. This test procedure generally involved driving a 1.4-inch I.D. split-tube sampler into the soil profile in six inch increments for a minimum distance of 18 inches using a 140-pound hammer free-falling 30 inches. The total number of blows required to drive the sampler the second and third 6-inch increments was an indication of in-place soil strength and consistency.

Representative portions of the soil samples recovered were transported to our laboratory. The soil samples were classified and stratified by a professional engineer. The results of the classification and stratification have been shown on the attached Boring Logs and summarized below. It should be noted that soil conditions might vary between the soil strata interfaces which are shown. The soil boring data reflects information from the specific test locations only.

By contract, our exploration was confined to the zone of soil likely to be stressed by the proposed construction. Our work did not address the potential for surface expression of deep geological conditions, such as sinkholes. This evaluation requires a more extensive range of field services than performed in this study. We will be pleased to conduct an exploration to evaluate the probable effect of the regional geology upon the proposed construction, if you desire. This Report has presented an evaluation of site conditions on the basis of traditional geotechnical procedures for site characterization. The recovered samples were not examined, either visually or analytically, for chemical composition or environmental hazards.

Subsurface Findings

The field exploration performed for this project disclosed subsurface conditions that are consistent with the local geology and general area soils information described above. The subsurface conditions found in the soil test borings have been summarized in the attached Boring Logs and described below.

The soil test borings generally encountered very loose to medium dense sand with silt to silty sand [SM] to depths of 11 to 15 feet followed by loose to medium dense clayey sand to stiff sandy clay [SC/CH] to maximum boring termination depths of 15 feet below the existing grade. The groundwater level was not encountered below the ground surface in the soil borings at the time of our field exploration. Fluctuations of the groundwater levels should be expected to occur seasonally as a result of rainfall, surface runoff, and nearby construction activities.

Laboratory Soil Tests

The soil samples recovered from the field exploration program were placed in containers and returned to our soils laboratory, where the Geotechnical Engineer visually classified the samples. Laboratory soil tests are performed to aid in the classification of the soils, and to help in the evaluation of engineering characteristics of the soils. Representative soil samples were selected for percent fines determination, moisture content and permeability tests. The test results have been presented on the attached Boring Logs and summarized in Table 3.

Percent Passing No. 200 Sieve: Certain recovered soil samples were selected to determine the percentage of fines. In these tests the soil samples were dried and washed over a No. 200 mesh sieve. The percent of soil by weight passing the sieve was the percentage of fines or portion of the sample in the silt and clay size range. This test was conducted in accordance with ASTM Procedure D-1140, Amount of Material in Soils Finer Than the #200 Sieve.

Permeability: Representative soil samples were selected to determine the permeability rate of the soil. Constant head permeability tests were performed on remolded representative samples of the near surface soils from the proposed stormwater management area. These tests were conducted following the concepts outlined in ASTM D-2434, Standard Test Method for Permeability of Granular Soils (Constant Head and Falling Head).

Moisture Content: Certain recovered soil samples were selected to determine their moisture content. The moisture content is the ratio expressed as a percentage of the weight of water in a given mass of soil to the weight of the solid particles. This test was conducted in accordance with ASTM Procedure D-2216, Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock.

Table 3 – Laboratory Soil Test Results

Test Location	Sample Depth	Type of Test	Results	Soil Description
B-1	1 foot	% Finer #200	15 %	Silty Sand
		Moisture Content	11 %	
		Permeability	3 feet/day	
B-2	2.5 feet	% Finer #200	18 %	Silty Sand
		Moisture Content	7 %	
B-3	4 feet	% Finer #200	10 %	Sand with silt
		Moisture Content	8 %	
		Permeability	10 feet/day	
B-4	2.5 feet	% Finer #200	15 %	Silty Sand
		Moisture Content	8 %	
B-5	8.5 feet	% Finer #200	18 %	Silty Sand
		Moisture Content	5 %	
		Permeability	1 feet/day	
B-6	2.5 feet	% Finer #200	21 %	Silty Sand
		Moisture Content	20 %	

Stormwater Management System

The laboratory test data indicates that the surficial sandy soils in the proposed stormwater management areas for this project generally have permeability rates of 1 to 10 feet per day at the boring locations. The clayey sands encountered directly underneath the surficial sands would behave as a confining layer in the stormwater management area. Based upon the above findings, we recommend that you consider the soil parameters presented in Table 4 for design of the stormwater management system on the subject project site. It should be noted that the below referenced values are measured values and do not incorporate factors of safety.

Table 4 – Stormwater Management System Soil Design Parameters [1]			
Corresponding Soil Boring Test Locations	B-1/B-2	B-3/B-4	B-5/B-6
Base of Effective Aquifer (Average Depth to Hydraulically Restrictive Layer), feet	13	12	11
Estimated Unsaturated Vertical Infiltration Rate, feet per day	1.5	3	1
Saturated Vertical Infiltration Rate, feet per day	2	4	1.5
Estimated Horizontal Hydraulic Conductivity, feet per day	3	5	2
Estimated Fillable Porosity, percentage	20	20	20
Estimated Depth of "Perched" Water Level, feet	12	11	11.5
Estimated Depth of Seasonal High Water Table feet	> 10	> 10	> 10

[1] Normal seasonal high water table (SHWT) will be the result of perched conditions.

Stormwater Management System Fill Suitability

The recovered soil samples were classified using visual and textural means, and limited laboratory testing. We offer the following ***preliminary guidelines*** for the use of on-site soils, such as those excavated from the proposed shallow retention areas, as fill material for the project.

Soil materials excavated and classified as fine sands to sand with silts and sand with clay (SP, SP-SM, SP-SC), with typically 12% fines or less (silt/clay fraction), may be considered suitable for use as utility trench backfill, as well as building pad and pavement subgrade structural fill, provided said materials are properly dried, placed, and compacted.

Soil materials excavated and classified as silty fine sands [SM], with typically 12% to 25% fines, may also be considered suitable for use as utility trench backfill, as well as building pad and pavement subgrade structural fill, after significant drying and some mixing with the fine sand material described above. Proper placement, proof rolling and compaction must also be performed.

Soil materials excavated and classified as clayey sand, silt or clay (SC, ML, MH, CL, and CH) and any organic-laden soils (5% or greater organics by weight) should not be reused as fill beneath buildings or pavement sections. These materials could be used in green areas, if applicable and in non-structural applications where excessive ground subsidence will not create functional or aesthetic problems. It should be noted that silt and clay materials will retain water and if used may become saturated and soft for a significant period of time following a rain event.

Soil borings for a typical geotechnical report are widely spaced and generally not sufficient for reliably detecting the presence of isolated, anomalous surface or subsurface conditions, or reliably estimating unsuitable or suitable material quantities. Accordingly, UES does not recommend relying on our boring information to negate presence of anomalous materials or for estimation of material quantities unless our contracted services ***specifically*** include sufficient exploration for such purpose(s) and within the report we so state that the level of exploration provided should be sufficient to detect such anomalous conditions or estimate such quantities. Therefore, UES will not be responsible for any extrapolation or use of our data by others beyond the purpose(s) for which it is applicable or intended.

Report Limitations

This Report has been prepared for the exclusive use of Zion Lutheran Church, and members of the Design/Construction Team for the specific project discussed in this Report. This Report has been prepared in accordance with generally accepted local geotechnical engineering practices; no other warranty is expressed or implied. If any changes in the design or location of the project elements as outlined in this Report are planned, the conclusions and recommendations contained in this Report shall not be considered valid unless the changes are reviewed and the conclusions modified or approved, in writing, by UES.

UES performs hydraulic conductivity tests, including the two most common, i.e., DRI and remolded laboratory permeability testing, using generally accepted practices of the local engineering community. These common tests are the quickest and most economical for stormwater management system design. However, the user of this information is cautioned that the potential variability of results and reproducibility associated with these types of tests can be significant. It is important to note that there are many factors influencing the permeability of a soil. These factors include, but are not limited to, soil grain size, soil particle arrangement and structure, dispersion of soil fines, density, and degree of saturation, soil heterogeneity, and soil anisotropy. Also, the permeability measured by such tests may not be representative of that of the total effective aquifer thickness. Factors of safety can compensate for part of the inherent test limitations but the Designer must exercise judgment regarding final selection and applicability of provided soil design input parameters. Should the modeling analysis indicate marginally acceptable compliance with Water Management District design criteria, it may be advisable to perform more extensive and representative in-situ permeability testing by collecting "undisturbed" horizontal and vertical soil samples and/or installing grouted piezometers or wells for slug testing. UES can perform these field tests if desired. Additionally, the actual exfiltration rates from the pond may be influenced by pond geometry, natural soil variability, in-situ depositional characteristics and soil density, retention volume, and groundwater mounding effects. Also, it is important to note that the upper in-situ soil zone is usually altered during the excavation and grading operations by heavy, vibrating earthwork equipment. Due to these numerous factors cited above, published literature suggests that the permeability of a soil can only be estimated to within an order of magnitude. Therefore, appropriate factors of safety should be incorporated into the design process.

Closure

We have enjoyed being a part of the engineering team on this project, and appreciate the opportunity to have assisted you towards its successful completion. Please contact our office if you have any questions or need further assistance.

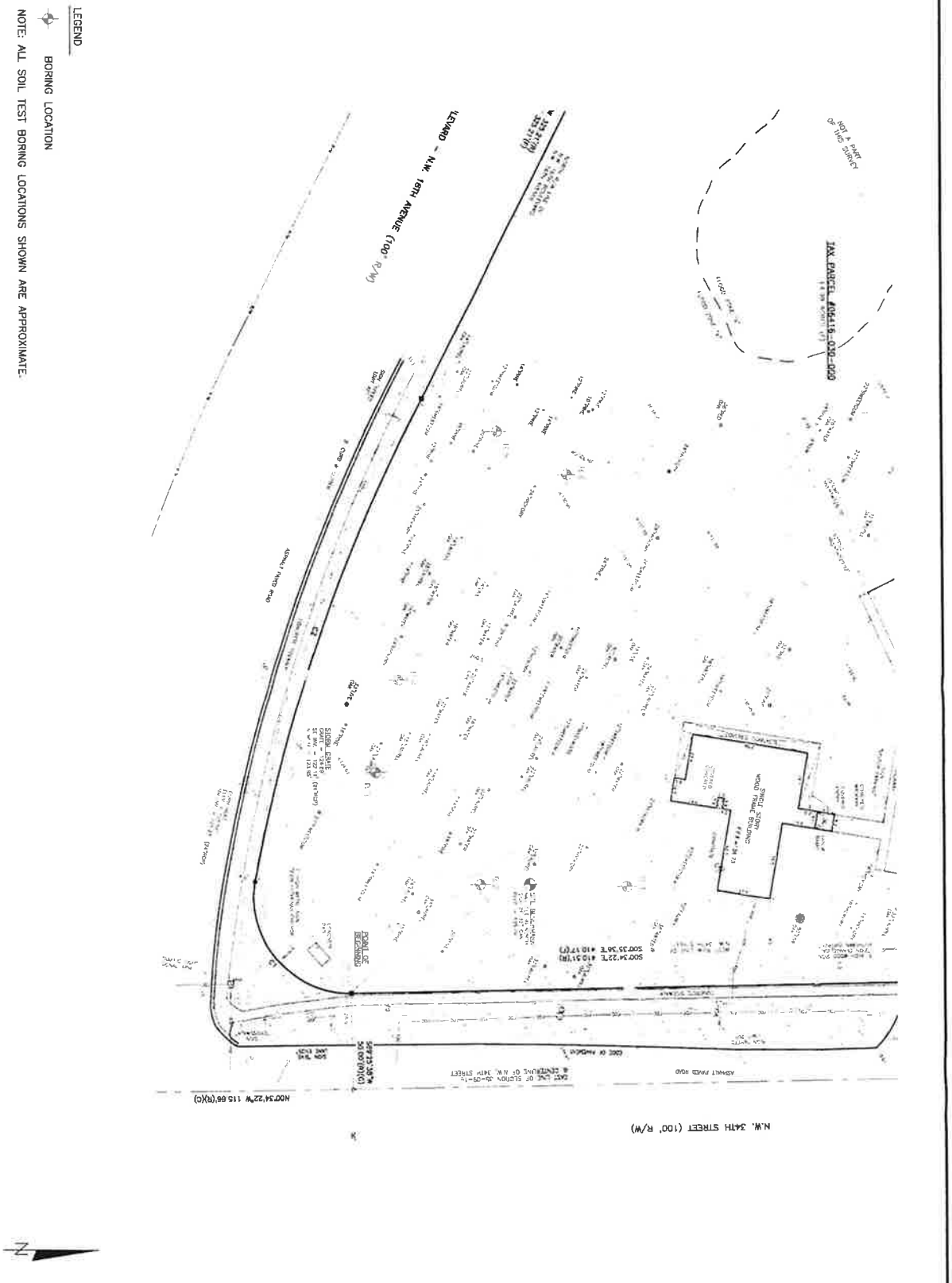
Respectfully submitted,
UNIVERSAL ENGINEERING SCIENCES, INC.
Certificate of Authorization Number 549

Timothy E. Kwiatkowski, EI
Staff Geotechnical Engineer

EDUARDO SUAREZ, P.E. LICENSE No. 60272 STATE OF FLORIDA PROFESSIONAL ENGINEER

Eduardo Suarez, P.E.
Senior Geotechnical Engineer
Florida P.E. No. 60272
Date: 2·8·17

Attachments: Boring Location Plan, Boring Logs, Key to Boring Log
cc: EDA engineers-surveyors-planners, Inc. (2)



PAGE NO: A - 1	UNIVERSAL ENGINEERING SCIENCES	ZION LUTHERAN CHURCH 1700 NW 34TH STREET GAINESVILLE, FLORIDA	CLIENT: ZION LUTHERAN CHURCH
			DRAWN BY: KD — DATE: 2/8/17
			CHECKED BY: ES — DATE: 2/8/17
		BORING LOCATION PLAN	SCALE: 1"=50' — ACADFILE: 0230 1600108-A
			PROJECT NO: 0230 1600108 0000 — REPORT NO.1422777

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT NO :	0230.1600108 0000
REPORT NO.:	1422777
PAGE	A-2

PROJECT: ZION LUTHERAN CHURCH
1700 NW 34TH STREET
GAINESVILLE, FLORIDA

CLIENT: ZION LUTHERAN CHURCH

LOCATION: SEE BORING LOCATION PLAN

REMARKS:

BORING NO: **B-1** SHEET: 1 of 1

SECTION: TOWNSHIP: RANGE:

GS ELEVATION(ft):

WATER TABLE (ft): NE

DATE OF READING: NA

EST. WSWT (ft):

DATE STARTED: 1/30/17

DATE FINISHED: 1/30/17

DRILLED BY: J. STILLSON

TYPE OF SAMPLING: ASTM D-1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N VALUE	WT	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT/ DAY)	ORG CONT (%)
0						Brown silty SAND [SM]						
1						Loose orange and tan silty SAND [SM]						
2		2-3-3	6				15	11			3	
3												
4		2-3-3	6									
5												
6		2-3-3	6									
7		3-3-4	7									
8												
9		2-3-3	6									
10		3-2-2	4									
11												
12												
13												
14												
15		2-2-3	5			Boring Terminated at 15'						

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT NO.:	0230.1600108.0000
REPORT NO :	1422777
PAGE	A-3

PROJECT: ZION LUTHERAN CHURCH
1700 NW 34TH STREET
GAINESVILLE, FLORIDA

CLIENT: ZION LUTHERAN CHURCH

LOCATION: SEE BORING LOCATION PLAN

REMARKS:

BORING NO: **B-2** SHEET: 1 of 1

SECTION: TOWNSHIP: RANGE:

GS ELEVATION(ft):

WATER TABLE (ft): NE

DATE OF READING: NA

EST WSWT (ft):

DATE STARTED: 1/30/17

DATE FINISHED: 1/30/17

DRILLED BY: J STILLSON

TYPE OF SAMPLING: ASTM D-1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N VALUE	W T	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT/ DAY)	ORG. CONT (%)
0						Loose dark brown silty SAND [SM]						
2		2-3-4	7			Loose to medium dense orange and gray silty SAND [SM]	18	7				
4		3-4-5	9									
5		3-4-6	10									
7		5-6-6	12									
8		5-6-6	12									
10		5-6-7	13									
12						Medium dense orange clayey SAND [SC]						
14						Stiff orange and gray sandy CLAY [CH]						
15		5-6-7	13			Boring Terminated at 15'						

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT NO.:	0230.1600108 0000
REPORT NO.:	1422777
PAGE:	A-4

PROJECT: ZION LUTHERAN CHURCH
1700 NW 34TH STREET
GAINESVILLE, FLORIDA

CLIENT: ZION LUTHERAN CHURCH

LOCATION: SEE BORING LOCATION PLAN

REMARKS:

BORING NO: **B-3** SHEET: 1 of 1

SECTION: TOWNSHIP: RANGE:

GS ELEVATION(ft):

WATER TABLE (ft): NE

DATE OF READING: NA

EST. WSWT (ft):

DATE STARTED: 1/30/17

DATE FINISHED: 1/30/17

DRILLED BY: J STILLSON

TYPE OF SAMPLING: ASTM D-1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N VALUE	WT	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT/ DAY)	ORG CONT (%)
0						Loose dark brown silty SAND [SM]						
1												
2		2-2-2	4			Loose brown SAND, with silt [SP-SM]						
3												
4		2-2-2	4				10	8			10	
5		2-2-2	4									
6						Medium dense brown silty SAND [SM]						
7		2-5-5	10									
8		5-5-6	11									
9												
10		6-7-7	14									
11						Medium dense brown silty clayey SAND [SM-SC]						
12												
13												
14												
15		7-8-9	17			Boring Terminated at 15'						

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT NO.:	0230.1600108.0000
REPORT NO.:	1422777
PAGE:	A-5

PROJECT: ZION LUTHERAN CHURCH
1700 NW 34TH STREET
GAINESVILLE, FLORIDA

CLIENT: ZION LUTHERAN CHURCH

LOCATION: SEE BORING LOCATION PLAN

REMARKS:

BORING NO: **B-4** SHEET: 1 of 1

SECTION: TOWNSHIP: RANGE:

GS ELEVATION(ft):

WATER TABLE (ft): NE

DATE OF READING: NA

EST WSWT (ft):

DATE STARTED: 1/30/17

DATE FINISHED: 1/30/17

DRILLED BY: J STILLSON

TYPE OF SAMPLING: ASTM D-1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N VALUE	WT	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT/ DAY)	ORG. CONT (%)
0						Very loose brown SAND, with silt [SP-SM]						
1												
2		2-1-2	3			Very loose to loose orange silty SAND [SM]	15	8				
3												
4		2-2-2	4									
5		2-2-3	5			Loose to medium dense dark brown silty SAND [SM]						
6												
7		3-3-4	7									
8		4-5-5	10									
9												
10		7-4-5	9									
11												
12						Medium dense brown silty clayey SAND [SM-SC]						
13												
14												
15		5-7-7	14			Boring Terminated at 15'						

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT NO.:	0230.1600108.0000
REPORT NO.:	1422777
PAGE:	A-6

PROJECT: ZION LUTHERAN CHURCH
1700 NW 34TH STREET
GAINESVILLE, FLORIDA

CLIENT: ZION LUTHERAN CHURCH

LOCATION: SEE BORING LOCATION PLAN

REMARKS:

BORING NO: **B-5** SHEET: 1 of 1

SECTION: TOWNSHIP: RANGE:

GS ELEVATION(ft):

WATER TABLE (ft): NE

DATE OF READING: NA

EST. WSWT (ft):

DATE STARTED: 1/30/17

DATE FINISHED: 1/30/17

DRILLED BY: J. STIILLSON

TYPE OF SAMPLING: ASTM D-1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N VALUE	WT	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT/ DAY)	ORG CONT (%)
0						Very loose brown fine silty SAND [SM]						
1												
2		1-1-1	2									
3												
4		1-1-1	2									
5						Very loose to loose tan and orange silty SAND [SM]						
6		1-1-1	2									
7		2-3-4	7									
8												
9		5-4-3	7									
10		3-3-3	6				18	5			1	
11												
12						Loose orange and gray clayey SAND [SC]						
13												
14												
15		2-3-4	7			Boring Terminated at 15'						

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT NO.:	0230.1600108.0000
REPORT NO.:	1422777
PAGE:	A-7

PROJECT: ZION LUTHERAN CHURCH
1700 NW 34TH STREET
GAINESVILLE, FLORIDA

CLIENT: ZION LUTHERAN CHURCH

LOCATION: SEE BORING LOCATION PLAN

REMARKS:

BORING NO: **B-6** SHEET: 1 of 1

SECTION: TOWNSHIP: RANGE:

GS ELEVATION(ft):

WATER TABLE (ft): NE

DATE OF READING: NA

EST. WSWT (ft):

DATE STARTED: 1/30/17

DATE FINISHED: 1/30/17

DRILLED BY:

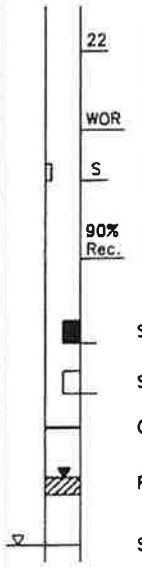
TYPE OF SAMPLING: ASTM D-1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N VALUE	WT	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT/ DAY)	ORG. CONT (%)
0						Loose dark brown silty SAND [SM]						
1												
2		1-2-3	5			Loose to medium dense tan, orange and gray silty SAND [SM]	21	20				
3												
4		3-3-3	6									
5		3-3-5	8									
6												
7		6-5-6	11									
8		4-6-7	13									
9												
10		4-7-7	14									
11						Medium dense orange and gray clayey SAND to sandy CLAY [SC/CH]						
12												
13												
14												
15		4-4-6	10			Boring Terminated at 15'						

UNIVERSAL
ENGINEERING SCIENCES

KEY TO BORING LOGS

SYMBOLS



22	Number of Blows of a 140–lb Weight Falling 30 in. Required to Drive Standard Spoon One Foot
WOR	Weight of Drill Rods
S	Thin–Wall Shelby Tube Undisturbed Sampler Used
90% Rec.	Percent Core Recovery from Rock Core–Drilling Operations
	Sample Taken at this Level
	Sample Not Taken at this Level
	Change in Soil Strata
	Free Ground Water Level
	Seasonal High Ground Water Level

RELATIVE DENSITY
(sand-silt)

Very loose – Less Than 4 Blows/Ft.
Loose – 4 to 10 Blows/Ft.
Medium Dense – 10 to 30 Blows/Ft.
Dense – 30 to 50 Blows/Ft.
Very Dense – More Than 50 Blows/Ft.

CONSISTANCY
(clay)

Very Soft – Less Than 2 Blows/Ft.
Soft – 2 to 4 Blows/Ft.
Firm – 4 to 8 Blows/Ft.
Stiff – 8 to 15 Blows/Ft.
Very Stiff – 15 to 30 Blows/Ft.
Hard – More Than 30 Blows/Ft.

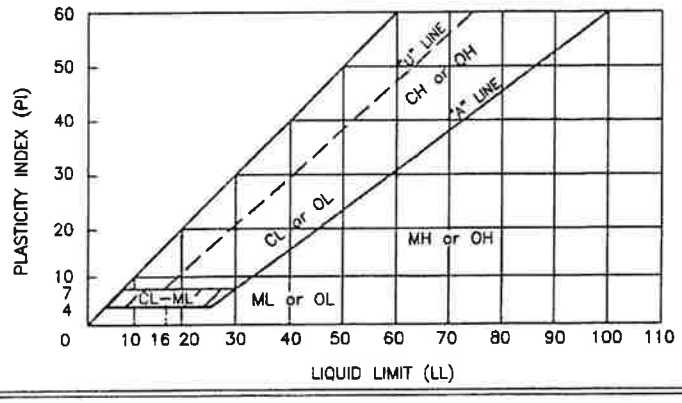
Based on Safety Hammer N–Values

UNIFIED CLASSIFICATION SYSTEM

MAJOR DIVISIONS			GROUP SYMBOLS	TYPICAL NAMES
COARSE-GRAINED SOILS More than 50% retained on No. 200 sieve*	GRAVELS 50% or more of coarse fraction retained on No. 200 sieve	CLEAN GRAVELS	GW	Well–graded gravels and gravel–sand mixtures, little or no fines
			GP	Poorly graded gravels and gravel–sand mixtures, little or no fines
		GRAVELS WITH FINES	GM	Silty gravels, gravel–sand–silt mixtures
			GC	Clayey gravels, gravel–sand–clay mixtures
	SANDS More than 50% of coarse fraction passes No. 4 sieve	CLEAN SANDS	SW	Well–graded sands and gravelly sands, little or no fines
			SP	Poorly graded sands and gravelly sands, little or no fines
		SANDS WITH FINES	SM	Silty sands, sand–silt mixtures
			SC	Clayey sands, sand–clay mixtures
FINE-GRAINED SOILS 50% or more passes No. 200 sieve*	SILTS AND CLAYS Liquid limit 50% or less		ML	Inorganic silts, very fine sands, rock flour, silty or clayey fine sands
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays silty clays, lean clays
			OL	Organic silts and organic silty clays of low plasticity
	SILTS AND CLAYS Liquid limit greater than 50%		MH	Inorganic silts, micaceous or diatomacaceous fine sands or silts, elastic silts
			CH	Inorganic clays or high plasticity, fat clays
			OH	Organic clays of medium to high plasticity
Highly organic Soils			PT	Peat, muck and other highly organic soils

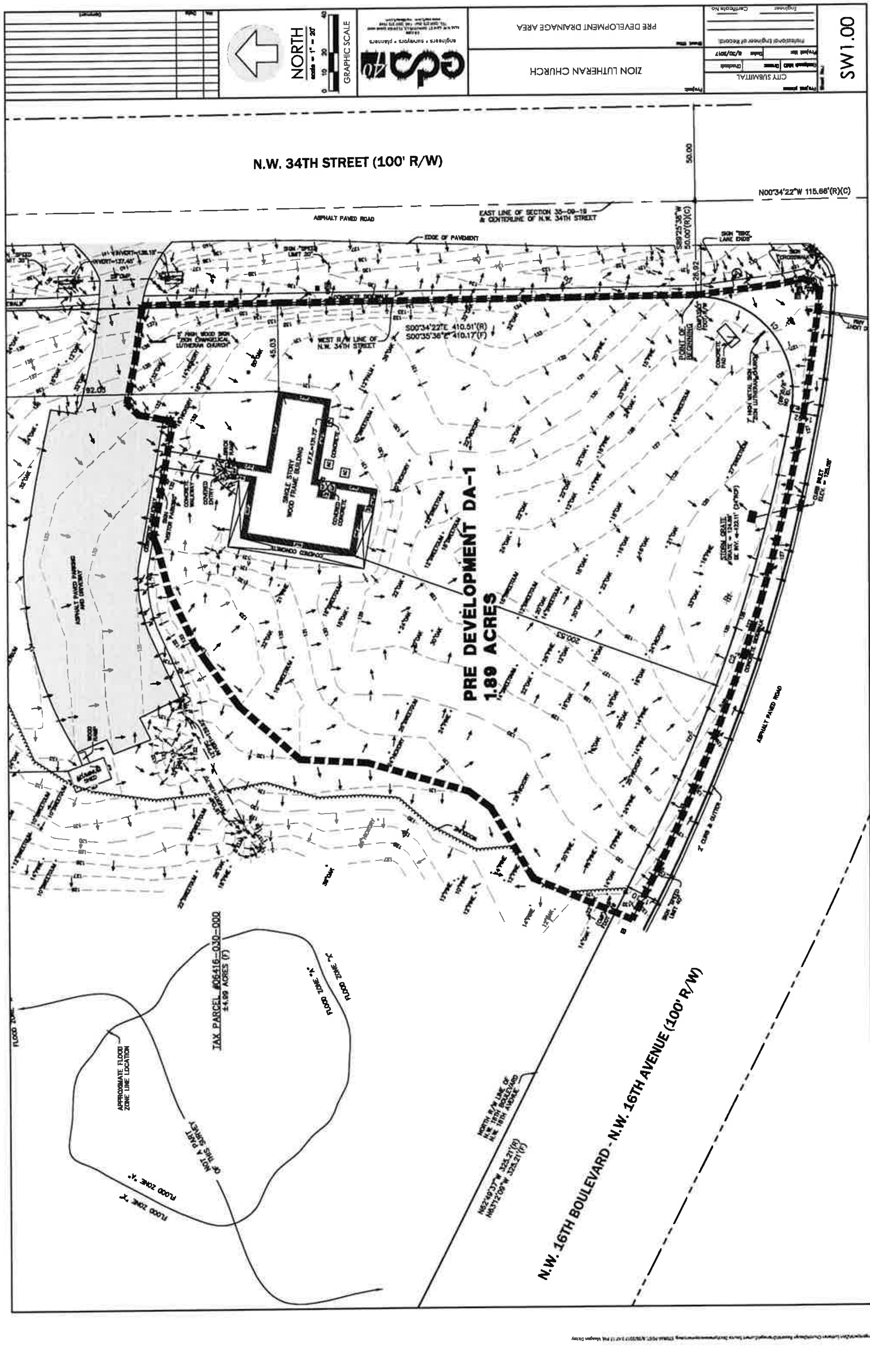
* Based on the material passing the 3–in. (75mm) sieve.

PLASTICITY CHART



Attachment B

Pre and Post-Development Drainage Map



ZION LUTHERAN CHURCH
PRE DEVELOPMENT DRAINAGE AREA
CITY SUBMITTAL
SW1.00
NORTH
GRAPHIC SCALE
engineers • surveyors • planners
N.W. 34TH STREET (100' R/W)
N00°34'22"W 115.66'(R)(C)
EAST LINE OF SECTION 35-09-19
& CENTERLINE OF N.W. 34TH STREET
ASPHALT PAVED ROAD
EDGE OF PAVEMENT
S89°25'38"W
50.00'(R)(C)
50.00
WEST R/W LINE OF
N.W. 34TH STREET
S00°34'22"E 410.51'(R)
S00°35'36"E 410.17'(F)
POINT OF BEGINNING
SINGLE STORY
WOOD FRAME BUILDING
ASPHALT PAVED PARKING
AND DRIVEWAY
PRE DEVELOPMENT DA-1
1.89 ACRES
STORM GRATE
CURB INLET
2' CURB & GUTTER
TAX PARCEL #06416-030-000
±4.99 ACRES (F)
FLOOD ZONE "X"
APPROXIMATE FLOOD
ZONE LINE LOCATION
NOT A PART
OF THIS SURVEY
NORTH R/W LINE OF
N.W. 16TH BOULEVARD
N.W. 16TH AVENUE
N.W. 16TH BOULEVARD - N.W. 16TH AVENUE (100' R/W)

ZION EVANGELICAL LUTHERAN CHURCH
CITY OF GAINESVILLE, FLORIDA

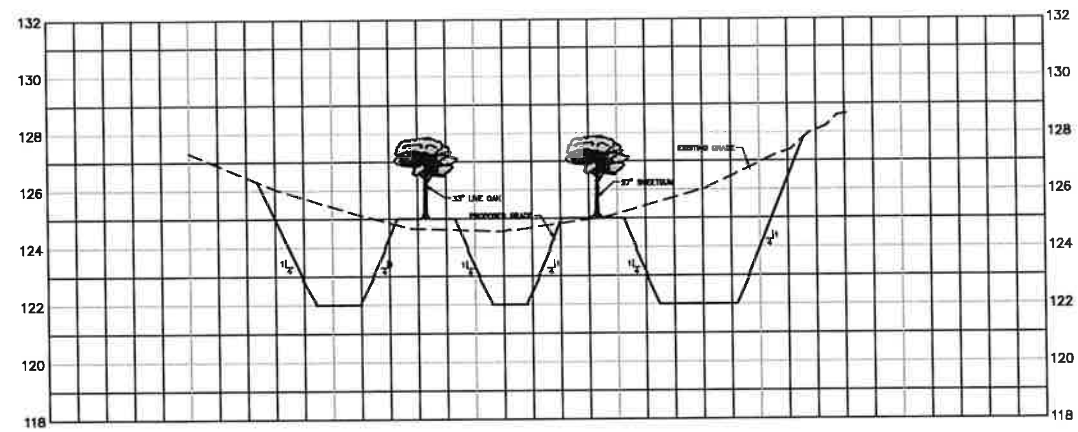
PAVING, GRADING, AND DRAINAGE PLAN

CITY/GRU RESUBMITTAL

NORTH
SCALE: 1" = 20'
GRAPHIC SCALE

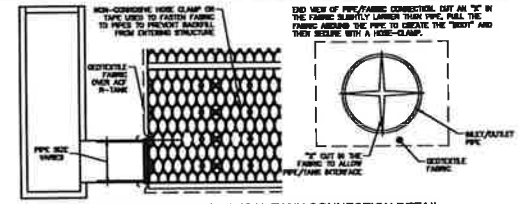
engineers • surveyors • planners

C2.00

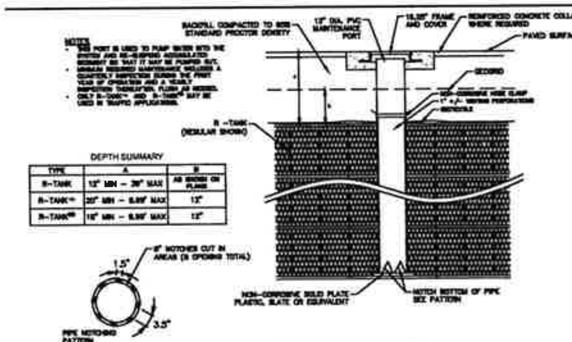


BASIN SECTION A-A

N.T.S.



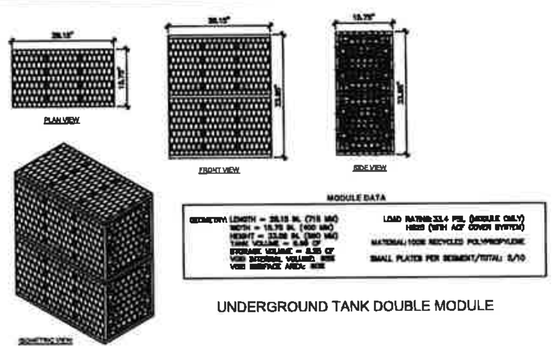
UNDERGROUND TANK TYPICAL TANK CONNECTION DETAIL



DEPTH SUMMARY

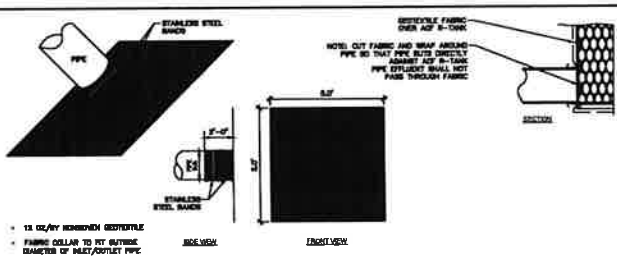
TYPE	A	B
R-TANK	12" MIN - 30" MAX	AS SHOWN ON PLANS
R-TANK	20" MIN - 6.69' MAX	12"
R-TANK	18" MIN - 6.99' MAX	12"

MAINTENANCE PORT
FOR UNDERGROUND TANK

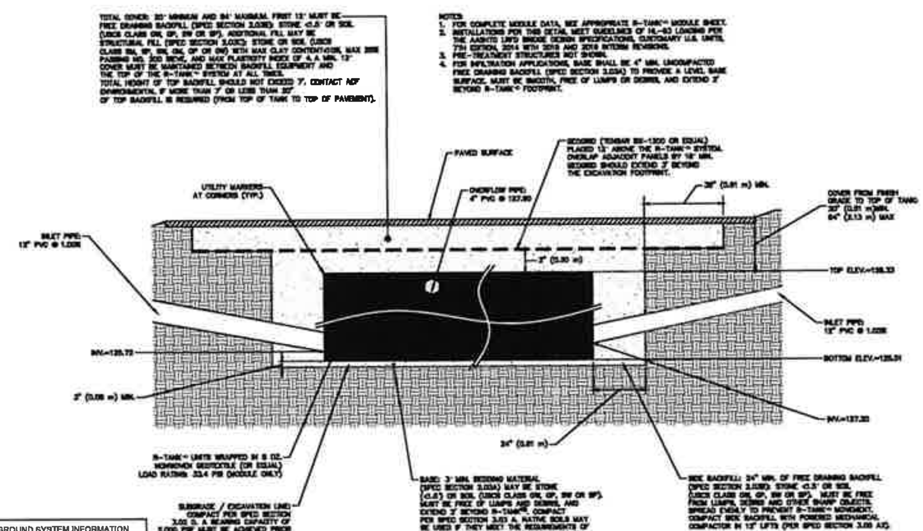


MODULE DATA

UNDERGROUND TANK DOUBLE MODULE



FABRIC PIPE BOOT FOR UNDERGROUND TANK



UNDERGROUND SYSTEM INFORMATION	
REQUIRED VOLUME	3,771 C.F.
REQUIRED MIN. AREA	1,338 C.F.
R-TANK HD DOUBLE TANKS REQUIRED	434

HD R-TANK CROSS SECTION
(MAY BE SUBSTITUTED FOR EQUIVALENT SYSTEM)

engineers • surveyors • planners

SCALE: AS SHOWN

ZION EVANGELICAL LUTHERAN CHURCH
CITY OF GAINESVILLE, FLORIDA

UNDERGROUND STORMWATER SYSTEM DETAILS

CITY/GRU RESUBMITTAL

C2.20

Attachment C

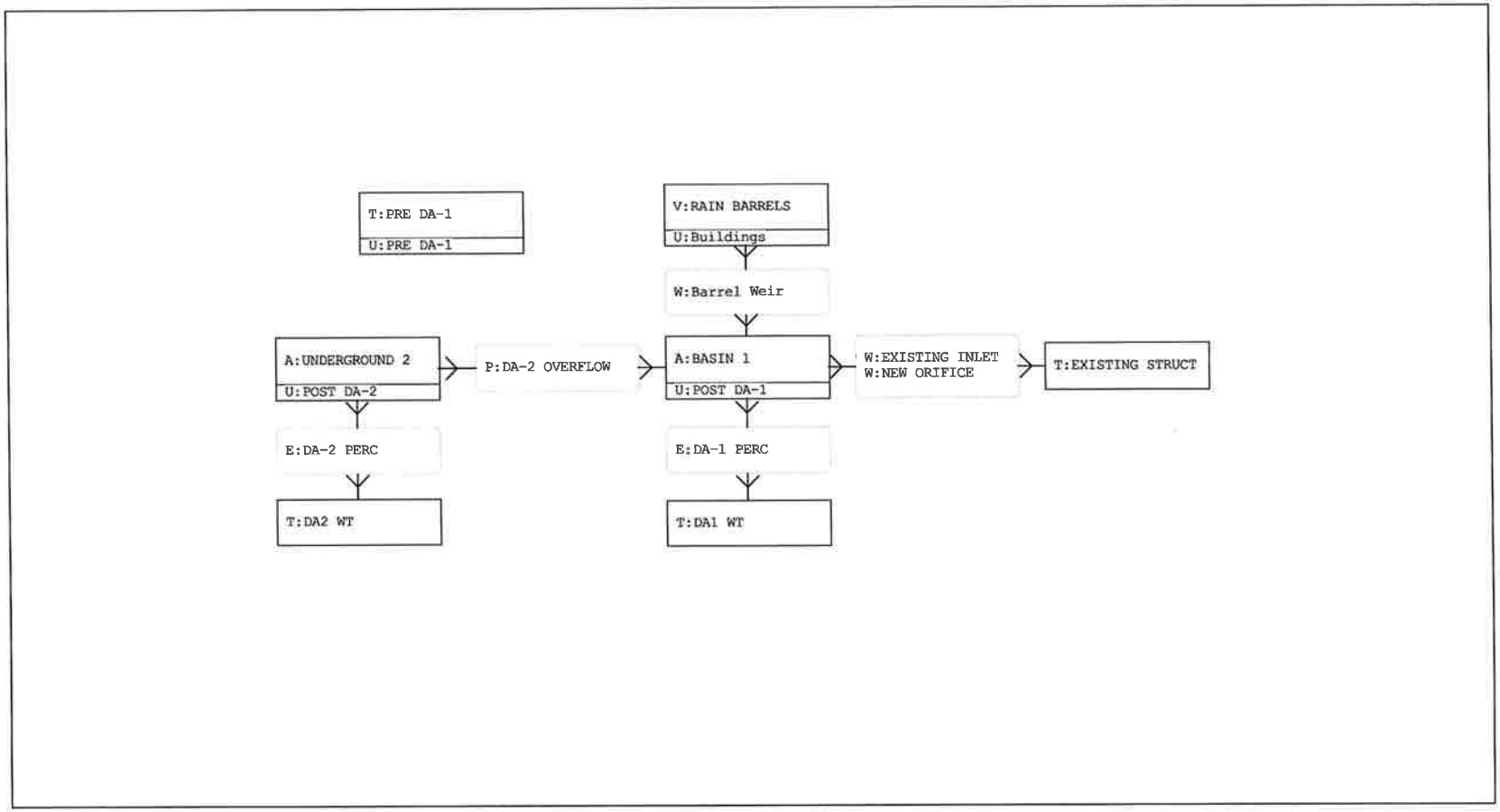
Pre and Post-Development Conditions
ICPR Model

Zion Lutheran Church
8/30/17

Nodes
A Stage/Area
V Stage/Volume
T Time/Stage
M Manhole

Basins
O Overland Flow
U SCS Unit CN
S SBUH CN
Y SCS Unit GA
Z SBUH GA

Links
P Pipe
W Weir
C Channel
D Drop Structure
B Bridge
R Rating Curve
H Breach
E Percolation
F Filter
X Exfil Trench



Node Diagram

Basins

Name: Buildings
Group: BASE
Node: RAIN BARRELS
Type: SCS Unit Hydrograph CN
Status: Onsite

Unit Hydrograph: Uh484
Rainfall File:
Rainfall Amount(in): 0.000
Area(ac): 0.198
Curve Number: 39.00
DCIA(%): 100.00
Peaking Factor: 484.0
Storm Duration(hrs): 0.00
Time of Conc(min): 10.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

Name: POST DA-1
Group: BASE
Node: BASIN 1
Type: SCS Unit Hydrograph CN
Status: Onsite

Unit Hydrograph: Uh323
Rainfall File:
Rainfall Amount(in): 0.000
Area(ac): 1.650
Curve Number: 51.20
DCIA(%): 0.00
Peaking Factor: 323.0
Storm Duration(hrs): 0.00
Time of Conc(min): 13.50
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

Name: POST DA-2
Group: BASE
Node: UNDERGROUND 2
Type: SCS Unit Hydrograph CN
Status: Onsite

Unit Hydrograph: Uh484
Rainfall File:
Rainfall Amount(in): 0.000
Area(ac): 0.190
Curve Number: 92.30
DCIA(%): 0.00
Peaking Factor: 484.0
Storm Duration(hrs): 0.00
Time of Conc(min): 10.00
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

Name: PRE DA-1
Group: BASE
Node: PRE DA-1
Type: SCS Unit Hydrograph CN
Status: Onsite

Unit Hydrograph: Uh323
Rainfall File:
Rainfall Amount(in): 0.000
Area(ac): 1.890
Curve Number: 42.40
DCIA(%): 0.00
Peaking Factor: 323.0
Storm Duration(hrs): 0.00
Time of Conc(min): 18.95
Time Shift(hrs): 0.00
Max Allowable Q(cfs): 999999.000

Nodes

Name: BASIN 1
Group: BASE
Type: Stage/Area
Base Flow(cfs): 0.000
Init Stage(ft): 122.000
Warn Stage(ft): 125.000

Stage(ft)	Area(ac)
122.000	0.0300
123.000	0.0700
124.000	0.1200
124.330	0.1400
124.890	0.1800
125.000	0.1900
125.500	0.2100

Name: DA1 WT
Group: BASE
Type: Time/Stage
Base Flow(cfs): 0.000
Init Stage(ft): 115.000
Warn Stage(ft): 115.000

Time(hrs)	Stage(ft)
0.00	115.000
300.00	115.000

INPUT VALUES

Name: DA2 WT | Base Flow(cfs): 0.000 | Init Stage(ft): 120.000 | Warn Stage(ft): 120.000
Group: BASE
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	120.000
300.00	120.000

Name: EXISTING STRUCT | Base Flow(cfs): 0.000 | Init Stage(ft): 122.110 | Warn Stage(ft): 122.110
Group: BASE
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	122.110
300.00	122.110

Name: PRE DA-1 | Base Flow(cfs): 0.000 | Init Stage(ft): 125.000 | Warn Stage(ft): 125.000
Group: BASE
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	125.000
300.00	125.000

Name: RAIN BARRELS | Base Flow(cfs): 0.000 | Init Stage(ft): 117.000 | Warn Stage(ft): 125.000
Group: BASE
Type: Stage/Volume

Stage(ft)	Volume(af)
117.000	0.0000
125.000	0.0614

Name: UNDERGROUND 2 | Base Flow(cfs): 0.000 | Init Stage(ft): 125.510 | Warn Stage(ft): 128.330
Group: BASE
Type: Stage/Area

Stage(ft)	Area(ac)
125.510	0.0290
128.330	0.0290

Pipes

Name: DA-2 OVERFLOW | From Node: UNDERGROUND 2 | Length(ft): 85.00
Group: BASE | To Node: BASIN 1 | Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	4.00	4.00
Rise(in):	4.00	4.00
Invert(ft):	127.900	124.000
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Friction Equation: Automatic
Solution Algorithm: Most Restrictive
Flow: Both
Entrance Loss Coef: 0.00
Exit Loss Coef: 1.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dc
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular: Smooth tapered inlet throat

Downstream FHWA Inlet Edge Description:
Circular: Smooth tapered inlet throat

==== Weirs ====

Name: Barrel Weir
Group: BASE
Flow: Positive
Type: Vertical: Mavis
From Node: RAIN BARRELS
To Node: BASIN 1
Count: 8
Geometry: Circular

Span(in): 4.00
Rise(in): 4.00
Invert(ft): 124.660
Control Elevation(ft): 124.660
TABLE
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Discharge Coef: 3.200
Orifice Discharge Coef: 0.600

Name: EXISTING INLET
Group: BASE
Flow: Positive
Type: Horizontal
From Node: BASIN 1
To Node: EXISTING STRUCT
Count: 1
Geometry: Rectangular

Span(in): 36.00
Rise(in): 24.00
Invert(ft): 124.890
Control Elevation(ft): 124.890
TABLE
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Discharge Coef: 2.600
Orifice Discharge Coef: 0.600

Name: NEW ORIFICE
Group: BASE
Flow: Both
Type: Vertical: Mavis
From Node: BASIN 1
To Node: EXISTING STRUCT
Count: 1
Geometry: Circular

Span(in): 4.00
Rise(in): 4.00
Invert(ft): 124.100
Control Elevation(ft): 124.100
TABLE
Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Discharge Coef: 3.200
Orifice Discharge Coef: 0.600

==== Percolation Links ====

Name: DA-1 PERC
Group: BASE
From Node: BASIN 1
To Node: DA1 WT
Flow: Both
Count: 1

Surface Area Option: Vary based on Stage/Area Table
Vertical Flow Termination: Horizontal Flow Algorithm
Aquifer Base Elev(ft): 113.000
Water Table Elev(ft): 115.000
Ann Recharge Rate(in/year): 0.000
Horiz Conductivity(ft/day): 2.500
Vert Conductivity(ft/day): 2.000
Effective Porosity(dec): 0.200
Suction Head(in): 4.170
Layer Thickness(ft): 7.000
Perimeter 1(ft): 428.019
Perimeter 2(ft): 549.184
Perimeter 3(ft): 1260.128
Distance 1 to 2(ft): 20.000
Distance 2 to 3(ft): 100.000
Num Cells 1 to 2: 20
Num Cells 2 to 3: 20

Name: DA-2 PERC
Group: BASE
From Node: UNDERGROUND 2
To Node: DA2 WT
Flow: Positive
Count: 1

Surface Area Option: Vary based on Stage/Area Table
Vertical Flow Termination: Horizontal Flow Algorithm
Aquifer Base Elev(ft): 119.000
Water Table Elev(ft): 120.000
Ann Recharge Rate(in/year): 0.000
Perimeter 1(ft): 181.180
Perimeter 2(ft): 341.183
Perimeter 3(ft): 1141.183

```
  Horiz Conductivity(ft/day): 1.000          Distance 1 to 2(ft): 20.000
   Vert Conductivity(ft/day): 0.750          Distance 2 to 3(ft): 100.000
     Effective Porosity(dec): 0.200             Num Cells 1 to 2: 20
           Suction Head(in): 4.170              Num Cells 2 to 3: 20
       Layer Thickness(ft): 5.510
```

Hydrology Simulations

```
        Name: 100 yr - 01 hr
    Filename: \\Server3\engprojects\Zion Lutheran Church\Design Reports\Drainage\Current Source Docs\100 yr - 01 hr.R32

     Override Defaults: Yes
   Storm Duration(hrs): 1.00
         Rainfall File: Fdot-1
   Rainfall Amount(in): 4.40

Time(hrs)        Print Inc(min)
---------------- ---------------
73.000           5.00
```

```
        Name: 100 yr - 02 hr
    Filename: \\Server3\engprojects\Zion Lutheran Church\Design Reports\Drainage\Current Source Docs\100 yr - 02 hr.R32

     Override Defaults: Yes
   Storm Duration(hrs): 2.00
         Rainfall File: Fdot-2
   Rainfall Amount(in): 5.40

Time(hrs)        Print Inc(min)
---------------- ---------------
74.000           5.00
```

```
        Name: 100 yr - 04 hr
    Filename: \\Server3\engprojects\Zion Lutheran Church\Design Reports\Drainage\Current Source Docs\100 y r- 04 hr.R32

     Override Defaults: Yes
   Storm Duration(hrs): 4.00
         Rainfall File: Fdot-4
   Rainfall Amount(in): 6.72

Time(hrs)        Print Inc(min)
---------------- ---------------
76.000           5.00
```

```
        Name: 100 yr - 08 hr
    Filename: \\Server3\engprojects\Zion Lutheran Church\Design Reports\Drainage\Current Source Docs\100 yr - 08 hr .R32

     Override Defaults: Yes
   Storm Duration(hrs): 8.00
         Rainfall File: Fdot-8
   Rainfall Amount(in): 8.00

Time(hrs)        Print Inc(min)
---------------- ---------------
80.000           5.00
```

```
        Name: 100 yr - 24 hr
    Filename: \\Server3\engprojects\Zion Lutheran Church\Design Reports\Drainage\Current Source Docs\100 yr - 24 hr.R32

     Override Defaults: Yes
   Storm Duration(hrs): 24.00
         Rainfall File: Fdot-24
   Rainfall Amount(in): 11.04

Time(hrs)        Print Inc(min)
---------------- ---------------
96.000           5.00
```

```
        Name: 25 yr - 24 hr
    Filename: \\SERVER3\ENGPROJECTS\ZION LUTHERAN CHURCH\DESIGN REPORTS\DRAINAGE\CURRENT SOURCE DOCS\25 yr - 24 hr.R32

     Override Defaults: Yes
   Storm Duration(hrs): 24.00
         Rainfall File: Fdot-24
   Rainfall Amount(in): 8.54

Time(hrs)        Print Inc(min)
```

96.000	5.00

Name: Mean Annual
Filename: \\Server3\engprojects\Zion Lutheran Church\Design Reports\Drainage\Current Source Docs\Mean Annual.R32

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Flmod
Rainfall Amount(in): 4.20

Time(hrs)	Print Inc(min)
96.000	5.00

Routing Simulations

Name: 100 yr - 01 hr Hydrology Sim: 100 yr - 01 hr
Filename: \\SERVER3\ENGPROJECTS\ZION LUTHERAN CHURCH\DESIGN REPORTS\DRAINAGE\CURRENT SOURCE DOCS\100 yr - 01 hr.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 73.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	15.000

Group	Run
BASE	Yes

Name: 100 yr - 02 hr Hydrology Sim: 100 yr - 02 hr
Filename: \\SERVER3\ENGPROJECTS\ZION LUTHERAN CHURCH\DESIGN REPORTS\DRAINAGE\CURRENT SOURCE DOCS\100 yr - 02 hr.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 74.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	15.000

Group	Run
BASE	Yes

Name: 100 yr - 04 hr Hydrology Sim: 100 yr - 04 hr
Filename: \\SERVER3\ENGPROJECTS\ZION LUTHERAN CHURCH\DESIGN REPORTS\DRAINAGE\CURRENT SOURCE DOCS\100 yr - 04 hr.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 76.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	15.000

Group	Run

BASE	Yes

Name: 100 yr - 08 hr Hydrology Sim: 100 yr - 08 hr
Filename: \\SERVER3\ENGPROJECTS\ZION LUTHERAN CHURCH\DESIGN REPORTS\DRAINAGE\CURRENT SOURCE DOCS\100 yr - 08 hr.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 80.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	15.000

Group	Run
BASE	Yes

Name: 100 yr - 24 hr Hydrology Sim: 100 yr - 24 hr
Filename: \\SERVER3\ENGPROJECTS\ZION LUTHERAN CHURCH\DESIGN REPORTS\DRAINAGE\CURRENT SOURCE DOCS\100 yr - 24 hr.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 96.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	15.000

Group	Run
BASE	Yes

Name: 25 yr - 24 hr Hydrology Sim: 25 yr - 24 hr
Filename: \\SERVER3\ENGPROJECTS\ZION LUTHERAN CHURCH\DESIGN REPORTS\DRAINAGE\CURRENT SOURCE DOCS\25 yr - 24 hr.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 96.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	15.000

Group	Run
BASE	Yes

Name: Mean Annual Hydrology Sim: Mean Annual
Filename: \\SERVER3\ENGPROJECTS\ZION LUTHERAN CHURCH\DESIGN REPORTS\DRAINAGE\CURRENT SOURCE DOCS\Mean Annual.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 96.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000

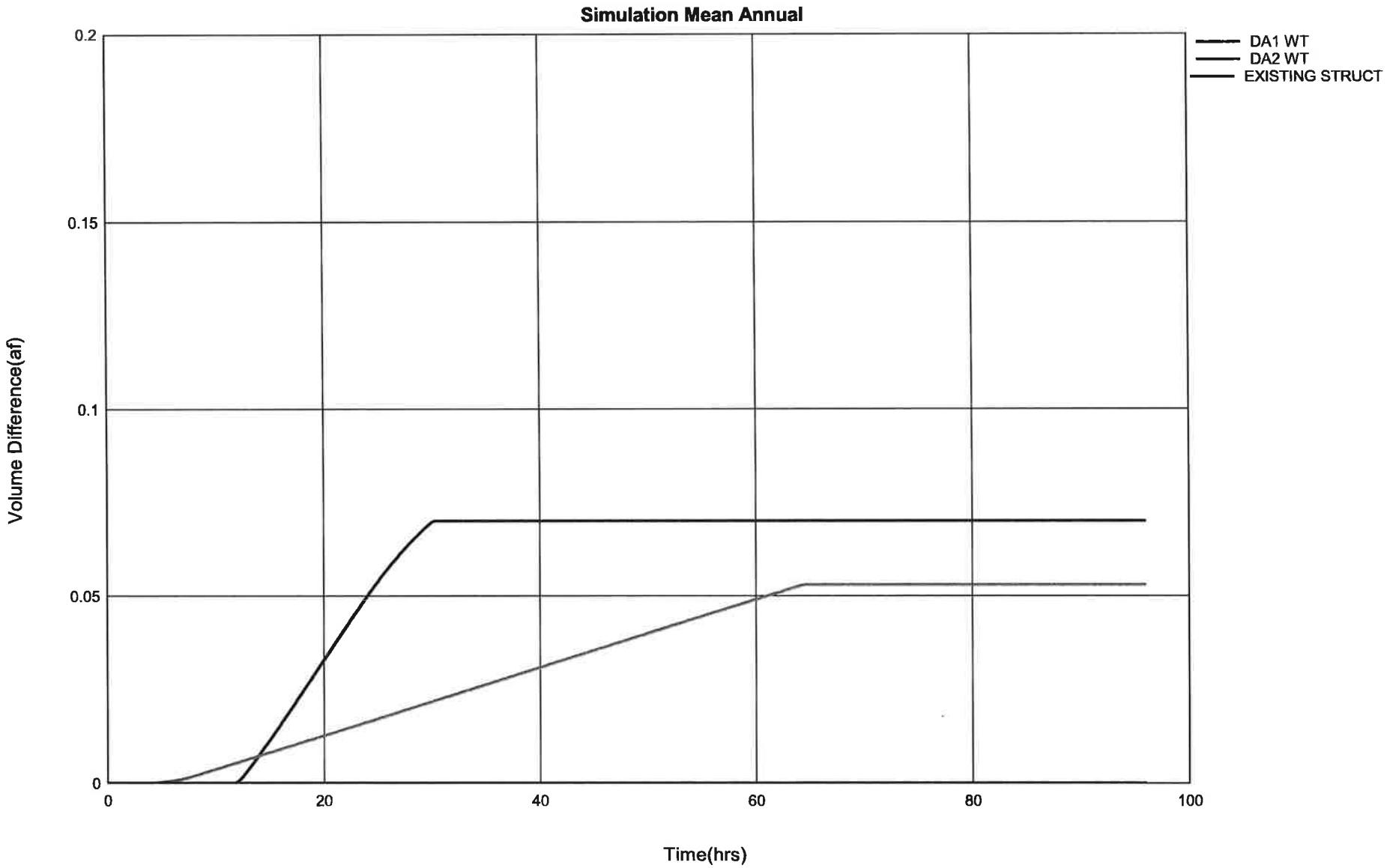
INPUT VALUES

Boundary Stages:

Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	15.000

Group	Run
BASE	Yes



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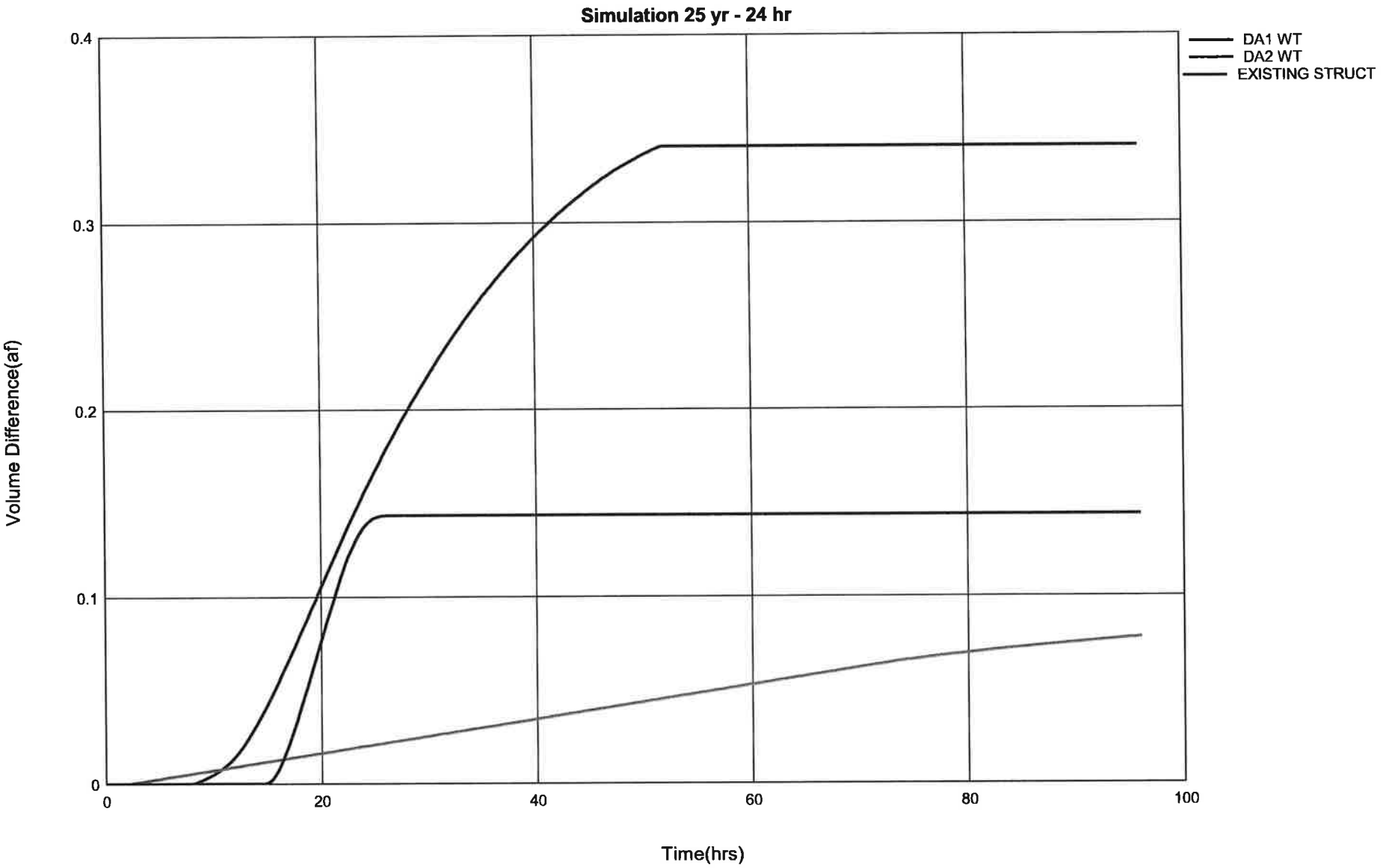

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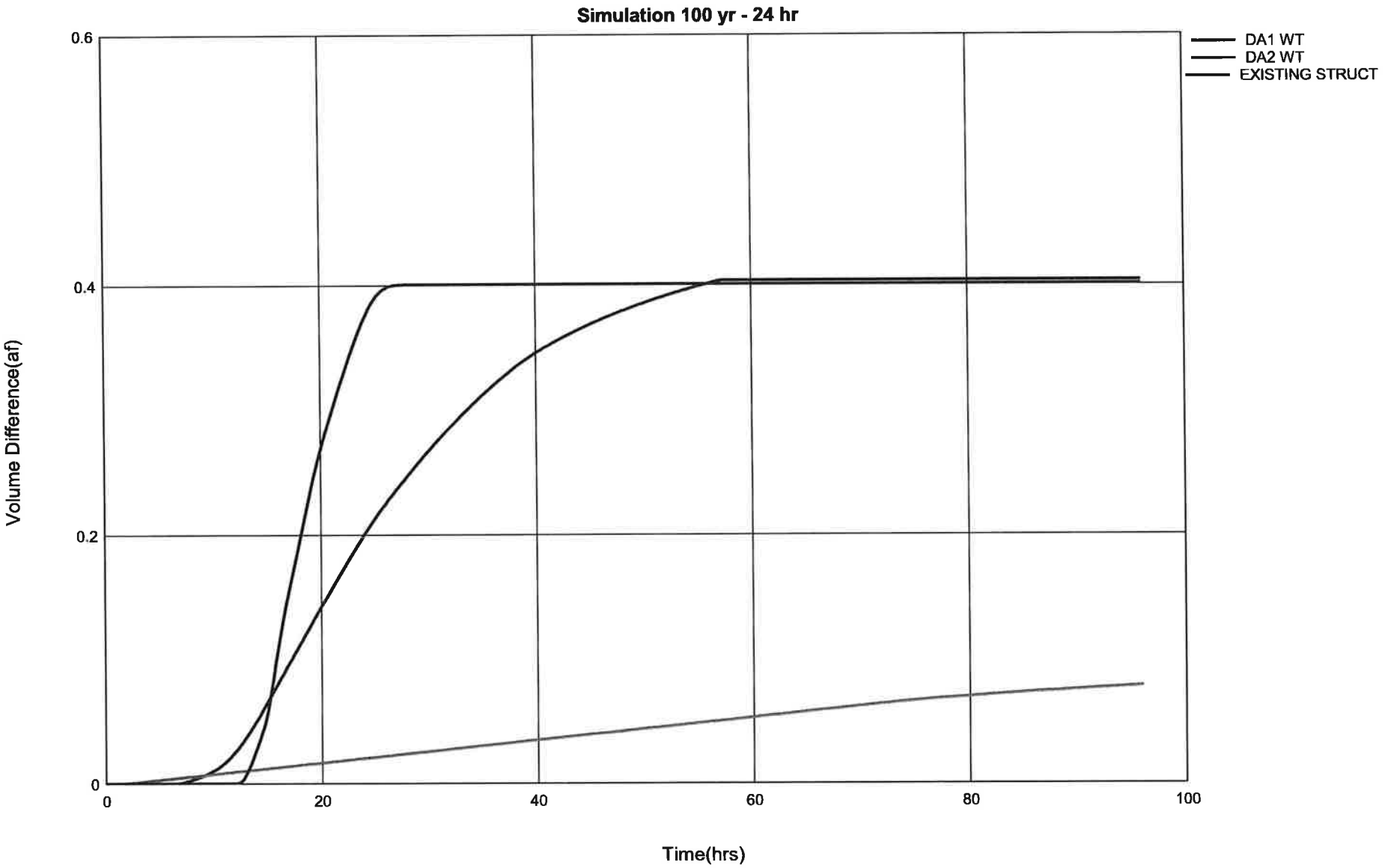

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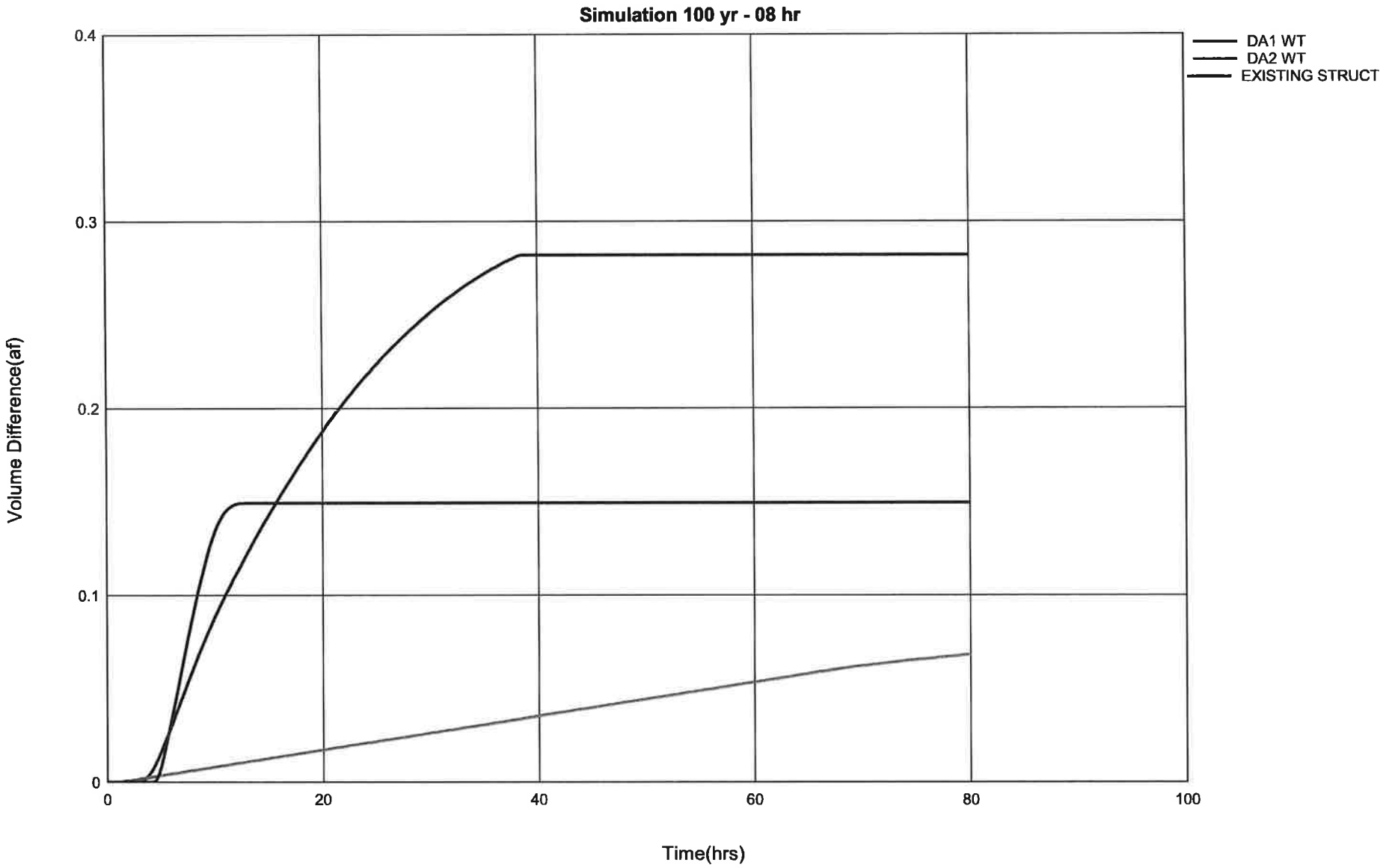

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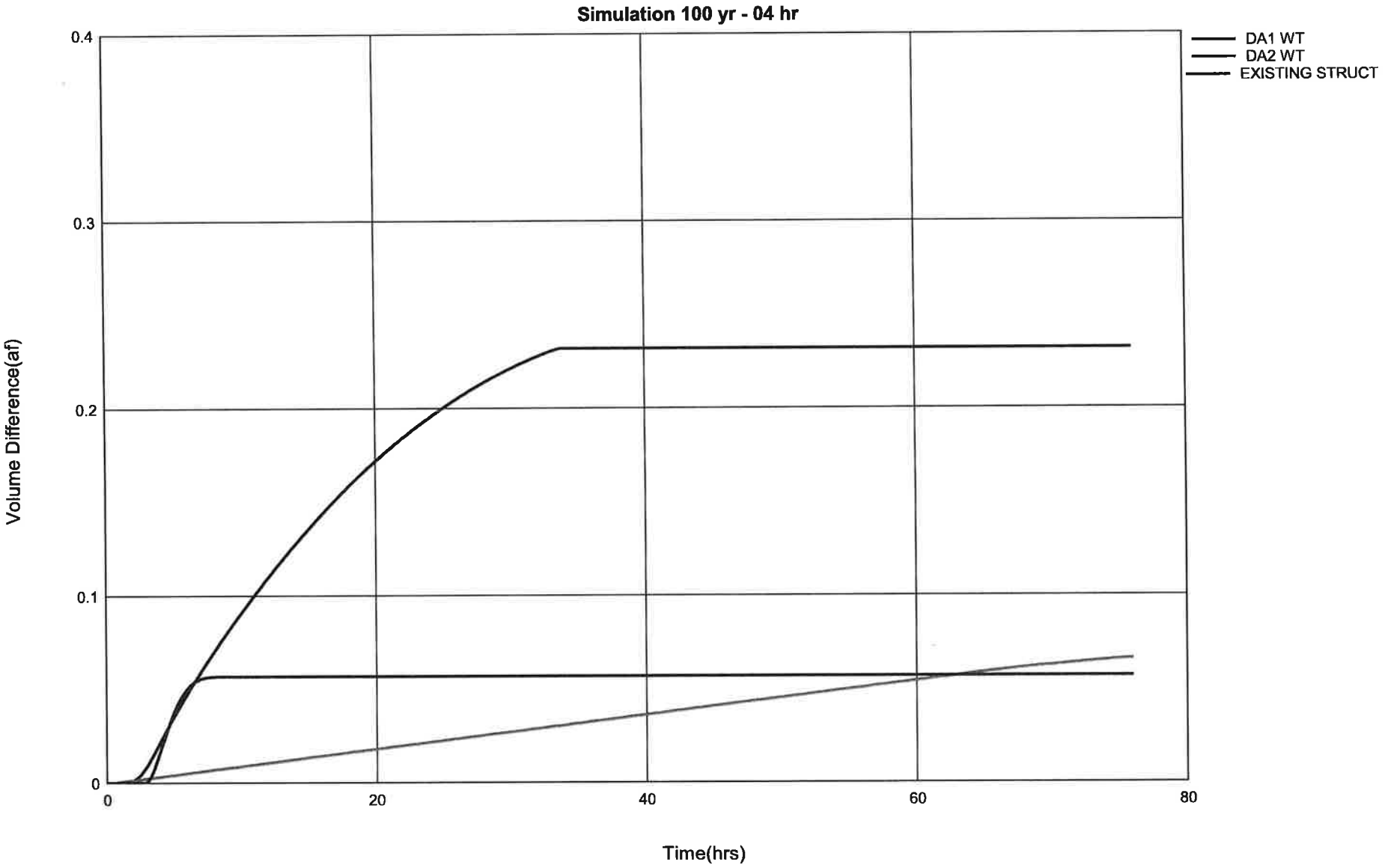

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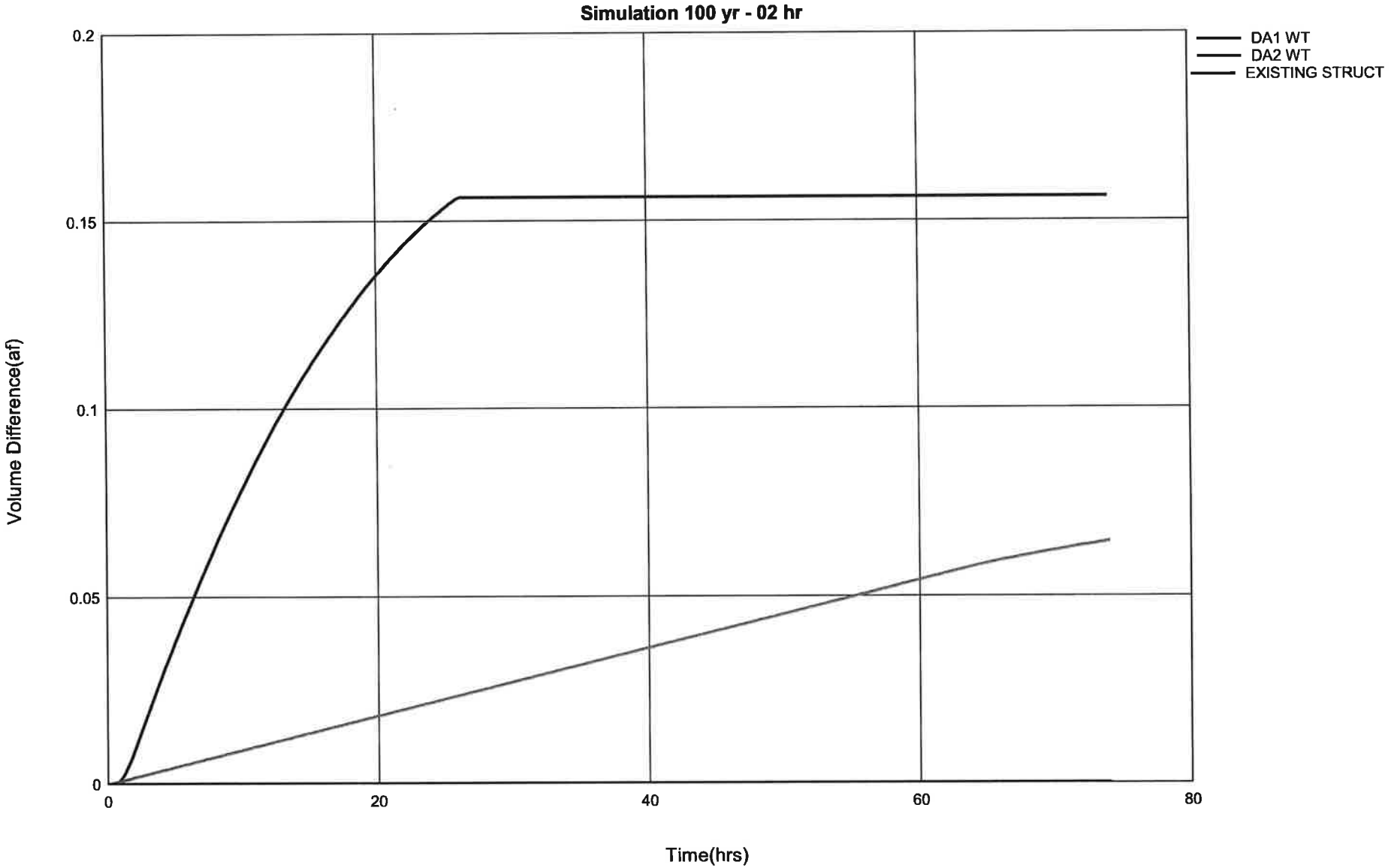

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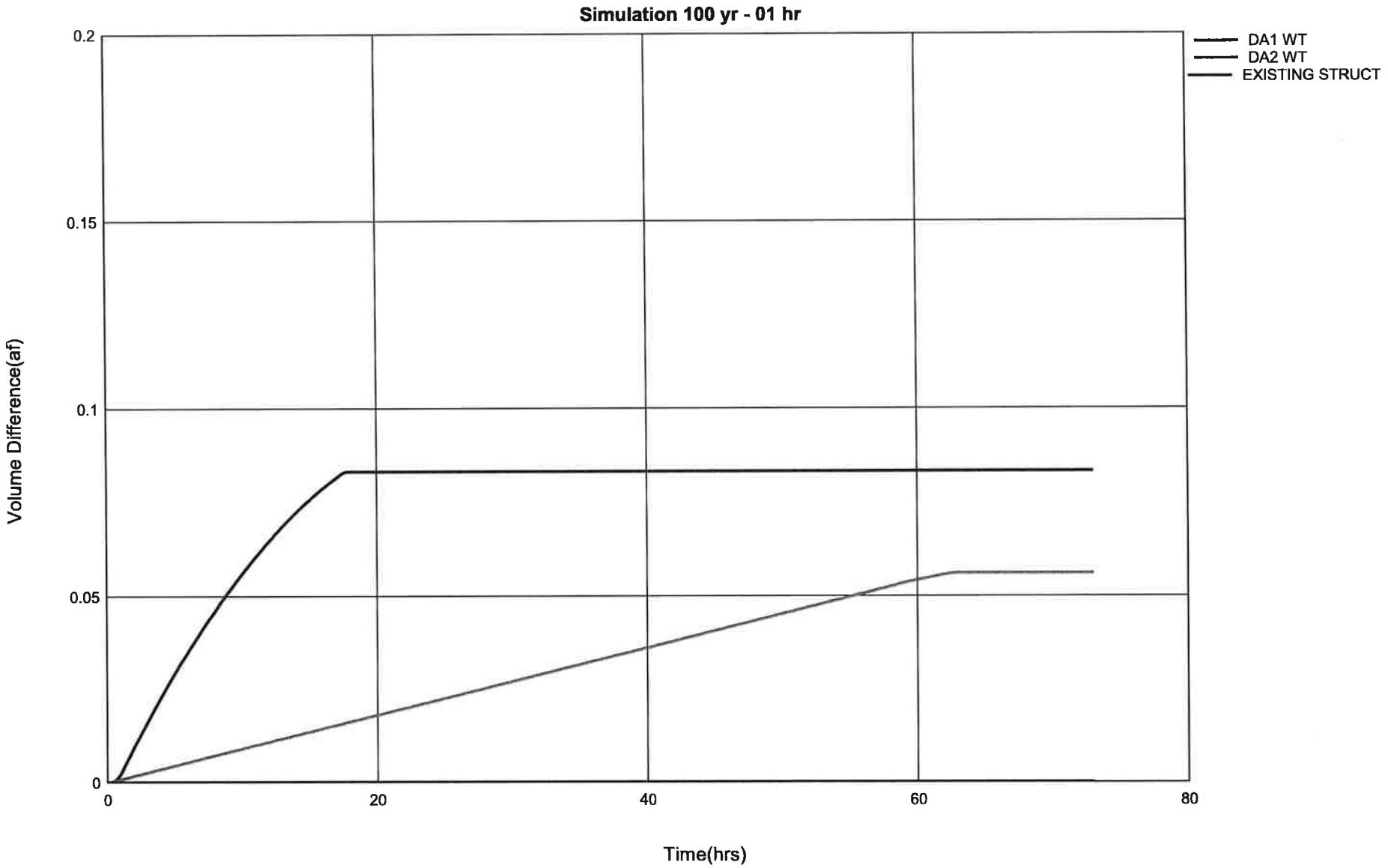


VOLUME 100YR -01HR

Name	Group	Simulation	Max Time Flow hrs	Max Flow cfs	Max Delta Q cfs	Max Time US Stage hrs	Max US Stage ft	Max Time DS Stage hrs	Max DS Stage ft
Barrel Weir	BASE	100 yr - 01 hr	0.83	0.82	0.012	0.83	124.91	1.57	123.33
Barrel Weir	BASE	100 yr - 02 hr	0.99	0.68	0.011	0.99	124.88	2.39	123.97
Barrel Weir	BASE	100 yr - 04 hr	2.15	0.61	0.010	2.15	124.87	4.02	124.65
Barrel Weir	BASE	100 yr - 08 hr	3.92	0.67	0.010	7.02	124.90	7.05	124.90
Barrel Weir	BASE	100 yr - 24 hr	11.91	0.22	0.006	15.38	124.95	15.37	124.94
Barrel Weir	BASE	25 yr - 24 hr	11.92	0.17	0.005	11.92	124.77	19.31	124.58
Barrel Weir	BASE	Mean Annual	16.65	0.02	0.001	16.65	124.70	19.71	122.54
DA-1 PERC	BASE	100 yr - 01 hr	1.57	0.09	-0.030	1.57	123.33	0.00	115.00
DA-1 PERC	BASE	100 yr - 02 hr	2.39	0.12	-0.030	2.39	123.97	0.00	115.00
DA-1 PERC	BASE	100 yr - 04 hr	4.02	0.16	-0.030	4.02	124.65	0.00	115.00
DA-1 PERC	BASE	100 yr - 08 hr	7.05	0.18	-0.030	7.05	124.90	0.00	115.00
DA-1 PERC	BASE	100 yr - 24 hr	15.37	0.19	-0.020	15.37	124.94	0.00	115.00
DA-1 PERC	BASE	25 yr - 24 hr	19.31	0.16	-0.030	19.31	124.58	0.00	115.00
DA-1 PERC	BASE	Mean Annual	19.71	0.05	-0.030	19.71	122.54	0.00	115.00
DA-2 OVERFLOW	BASE	100 yr - 01 hr	0.00	0.00	0.000	1.21	127.40	1.57	123.33
DA-2 OVERFLOW	BASE	100 yr - 02 hr	2.23	0.00	0.000	2.23	127.90	2.23	124.00
DA-2 OVERFLOW	BASE	100 yr - 04 hr	3.40	0.16	0.024	3.23	128.24	7.26	124.20
DA-2 OVERFLOW	BASE	100 yr - 08 hr	5.08	0.19	-0.023	5.08	128.29	10.93	124.33
DA-2 OVERFLOW	BASE	100 yr - 24 hr	15.00	0.11	0.001	15.00	128.18	26.20	124.27
DA-2 OVERFLOW	BASE	25 yr - 24 hr	16.27	0.05	0.001	16.27	128.09	14.69	124.15
DA-2 OVERFLOW	BASE	Mean Annual	0.00	0.00	0.000	20.28	126.77	19.71	122.54
DA-2 PERC	BASE	100 yr - 01 hr	0.18	0.01	-0.006	1.21	127.40	0.00	120.00
DA-2 PERC	BASE	100 yr - 02 hr	0.11	0.01	0.003	2.23	127.90	0.00	120.00
DA-2 PERC	BASE	100 yr - 04 hr	0.51	0.01	0.002	3.23	128.24	0.00	120.00
DA-2 PERC	BASE	100 yr - 08 hr	1.15	0.01	0.001	5.08	128.29	0.00	120.00
DA-2 PERC	BASE	100 yr - 24 hr	2.00	0.01	0.000	15.00	128.18	0.00	120.00
DA-2 PERC	BASE	25 yr - 24 hr	2.24	0.01	0.000	16.27	128.09	0.00	120.00
DA-2 PERC	BASE	Mean Annual	8.12	0.01	-0.010	20.28	126.77	0.00	120.00
EXISTING INLET	BASE	100 yr - 01 hr	0.00	0.00	0.000	1.57	123.33	0.00	122.11
EXISTING INLET	BASE	100 yr - 02 hr	0.00	0.00	0.000	2.39	123.97	0.00	122.11
EXISTING INLET	BASE	100 yr - 04 hr	0.00	0.00	0.000	4.02	124.65	0.00	122.11
EXISTING INLET	BASE	100 yr - 08 hr	7.05	0.03	-0.002	7.05	124.90	0.00	122.11
EXISTING INLET	BASE	100 yr - 24 hr	15.37	0.30	0.014	15.37	124.94	0.00	122.11
EXISTING INLET	BASE	25 yr - 24 hr	0.00	0.00	0.000	19.31	124.58	0.00	122.11
EXISTING INLET	BASE	Mean Annual	0.00	0.00	0.000	19.71	122.54	0.00	122.11
NEW ORIFICE	BASE	100 yr - 01 hr	0.00	0.00	0.000	1.57	123.33	0.00	122.11
NEW ORIFICE	BASE	100 yr - 02 hr	0.00	0.00	0.000	2.39	123.97	0.00	122.11
NEW ORIFICE	BASE	100 yr - 04 hr	4.02	0.26	-0.002	4.02	124.65	0.00	122.11
NEW ORIFICE	BASE	100 yr - 08 hr	7.05	0.33	-0.002	7.05	124.90	0.00	122.11
NEW ORIFICE	BASE	100 yr - 24 hr	15.37	0.34	-0.002	15.37	124.94	0.00	122.11
NEW ORIFICE	BASE	25 yr - 24 hr	19.31	0.24	0.002	19.31	124.58	0.00	122.11
NEW ORIFICE	BASE	Mean Annual	0.00	0.00	0.000	19.71	122.54	0.00	122.11

LINK MAX

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
BASIN 1	BASE	100 yr - 01 hr	1.57	123.33	125.00	0.0030	3773	0.83	2.55	1.57	0.09
BASIN 1	BASE	100 yr - 02 hr	2.39	123.97	125.00	0.0030	5169	0.99	2.21	2.39	0.12
BASIN 1	BASE	100 yr - 04 hr	4.02	124.65	125.00	0.0031	7112	2.52	2.37	4.02	0.42
BASIN 1	BASE	100 yr - 08 hr	7.05	124.90	125.00	-0.0035	7896	4.00	2.86	7.05	0.55
BASIN 1	BASE	100 yr - 24 hr	15.37	124.94	125.00	0.0038	8054	12.00	1.11	15.37	0.83
BASIN 1	BASE	25 yr - 24 hr	19.31	124.58	125.00	0.0031	6893	12.00	0.69	19.31	0.39
BASIN 1	BASE	Mean Annual	19.71	122.54	125.00	-0.0014	2254	12.33	0.28	19.71	0.05
DA1 WT	BASE	100 yr - 01 hr	0.00	115.00	115.00	0.0000	0	1.57	0.09	0.00	0.00
DA1 WT	BASE	100 yr - 02 hr	0.00	115.00	115.00	0.0000	0	2.39	0.12	0.00	0.00
DA1 WT	BASE	100 yr - 04 hr	0.00	115.00	115.00	0.0000	0	4.02	0.16	0.00	0.00
DA1 WT	BASE	100 yr - 08 hr	0.00	115.00	115.00	0.0000	0	7.05	0.18	0.00	0.00
DA1 WT	BASE	100 yr - 24 hr	0.00	115.00	115.00	0.0000	0	15.37	0.19	0.00	0.00
DA1 WT	BASE	25 yr - 24 hr	0.00	115.00	115.00	0.0000	0	19.31	0.16	0.00	0.00
DA1 WT	BASE	Mean Annual	0.00	115.00	115.00	0.0000	0	19.71	0.05	0.00	0.00
DA2 WT	BASE	100 yr - 01 hr	0.00	120.00	120.00	0.0000	0	0.18	0.01	0.00	0.00
DA2 WT	BASE	100 yr - 02 hr	0.00	120.00	120.00	0.0000	0	0.11	0.01	0.00	0.00
DA2 WT	BASE	100 yr - 04 hr	0.00	120.00	120.00	0.0000	0	0.51	0.01	0.00	0.00
DA2 WT	BASE	100 yr - 08 hr	0.00	120.00	120.00	0.0000	0	1.15	0.01	0.00	0.00
DA2 WT	BASE	100 yr - 24 hr	0.00	120.00	120.00	0.0000	0	2.00	0.01	0.00	0.00
DA2 WT	BASE	25 yr - 24 hr	0.00	120.00	120.00	0.0000	0	2.24	0.01	0.00	0.00
DA2 WT	BASE	Mean Annual	0.00	120.00	120.00	0.0000	0	8.12	0.01	0.00	0.00
EXISTING STRUCT	BASE	100 yr - 01 hr	0.00	122.11	122.11	0.0000	0	0.00	0.00	0.00	0.00
EXISTING STRUCT	BASE	100 yr - 02 hr	0.00	122.11	122.11	0.0000	0	0.00	0.00	0.00	0.00
EXISTING STRUCT	BASE	100 yr - 04 hr	0.00	122.11	122.11	0.0000	0	4.02	0.26	0.00	0.00
EXISTING STRUCT	BASE	100 yr - 08 hr	0.00	122.11	122.11	0.0000	0	7.05	0.36	0.00	0.00
EXISTING STRUCT	BASE	100 yr - 24 hr	0.00	122.11	122.11	0.0000	0	15.37	0.64	0.00	0.00
EXISTING STRUCT	BASE	25 yr - 24 hr	0.00	122.11	122.11	0.0000	0	19.31	0.24	0.00	0.00
EXISTING STRUCT	BASE	Mean Annual	0.00	122.11	122.11	0.0000	0	0.00	0.00	0.00	0.00
PRE DA-1	BASE	100 yr - 01 hr	0.00	125.00	125.00	0.0000	0	0.92	0.65	0.00	0.00
PRE DA-1	BASE	100 yr - 02 hr	0.00	125.00	125.00	0.0000	0	1.33	0.65	0.00	0.00
PRE DA-1	BASE	100 yr - 04 hr	0.00	125.00	125.00	0.0000	0	3.00	1.19	0.00	0.00
PRE DA-1	BASE	100 yr - 08 hr	0.00	125.00	125.00	0.0000	0	4.08	1.36	0.00	0.00
PRE DA-1	BASE	100 yr - 24 hr	0.00	125.00	125.00	0.0000	0	12.08	0.66	0.00	0.00
PRE DA-1	BASE	25 yr - 24 hr	0.00	125.00	125.00	0.0000	0	15.08	0.35	0.00	0.00
PRE DA-1	BASE	Mean Annual	0.00	125.00	125.00	0.0000	0	13.58	0.03	0.00	0.00
RAIN BARRELS	BASE	100 yr - 01 hr	0.83	124.91	125.00	0.0050	334	0.58	1.76	0.83	0.82
RAIN BARRELS	BASE	100 yr - 02 hr	0.99	124.88	125.00	0.0050	334	0.83	1.29	0.99	0.68
RAIN BARRELS	BASE	100 yr - 04 hr	2.15	124.87	125.00	0.0050	334	2.00	0.70	2.15	0.61
RAIN BARRELS	BASE	100 yr - 08 hr	7.02	124.90	125.00	0.0050	334	3.58	0.67	3.92	0.67
RAIN BARRELS	BASE	100 yr - 24 hr	15.38	124.95	125.00	0.0050	334	11.50	0.22	11.91	0.22
RAIN BARRELS	BASE	25 yr - 24 hr	11.92	124.77	125.00	0.0050	334	11.50	0.17	11.92	0.17
RAIN BARRELS	BASE	Mean Annual	16.65	124.70	125.00	0.0050	334	12.00	0.61	16.65	0.02
UNDERGROUND 2	BASE	100 yr - 01 hr	1.21	127.40	128.33	0.0018	1264	0.58	1.53	0.18	0.01
UNDERGROUND 2	BASE	100 yr - 02 hr	2.23	127.90	128.33	0.0020	1264	0.83	1.17	2.23	0.01
UNDERGROUND 2	BASE	100 yr - 04 hr	3.23	128.24	128.33	-0.0032	1267	2.00	0.64	3.40	0.17
UNDERGROUND 2	BASE	100 yr - 08 hr	5.08	128.29	128.33	0.0024	1267	4.00	0.63	5.08	0.20
UNDERGROUND 2	BASE	100 yr - 24 hr	15.00	128.18	128.33	0.0031	1274	12.00	0.21	15.00	0.13
UNDERGROUND 2	BASE	25 yr - 24 hr	16.27	128.09	128.33	0.0026	1277	12.00	0.16	16.27	0.07
UNDERGROUND 2	BASE	Mean Annual	20.28	126.77	128.33	0.0011	1264	12.00	0.53	8.12	0.01

NODE MAX

Simulation	Basin	Group	Time Max hrs	Flow Max cfs	Volume in	Volume ft3
100 yr - 01 hr	Buildings	BASE	0.56	1.78	4.294	3086
100 yr - 02 hr	Buildings	BASE	0.80	1.30	5.293	3804
100 yr - 04 hr	Buildings	BASE	2.00	0.70	6.611	4752
100 yr - 08 hr	Buildings	BASE	3.78	0.67	7.889	5670
100 yr - 24 hr	Buildings	BASE	11.71	0.22	10.925	7853
25 yr - 24 hr	Buildings	BASE	11.62	0.17	8.429	6058
Mean Annual	Buildings	BASE	12.00	0.61	4.095	2943
100 yr - 01 hr	POST DA-1	BASE	0.81	1.75	0.517	3094
100 yr - 02 hr	POST DA-1	BASE	0.93	1.56	0.933	5585
100 yr - 04 hr	POST DA-1	BASE	2.55	1.85	1.615	9670
100 yr - 08 hr	POST DA-1	BASE	4.05	2.23	2.375	14222
100 yr - 24 hr	POST DA-1	BASE	12.03	0.89	4.472	26782
25 yr - 24 hr	POST DA-1	BASE	12.03	0.53	2.723	16312
Mean Annual	POST DA-1	BASE	12.30	0.28	0.445	2666
100 yr - 01 hr	POST DA-2	BASE	0.58	1.53	3.532	2436
100 yr - 02 hr	POST DA-2	BASE	0.82	1.19	4.508	3109
100 yr - 04 hr	POST DA-2	BASE	2.00	0.64	5.805	4004
100 yr - 08 hr	POST DA-2	BASE	4.00	0.63	7.070	4876
100 yr - 24 hr	POST DA-2	BASE	12.00	0.21	10.085	6956
25 yr - 24 hr	POST DA-2	BASE	12.00	0.16	7.604	5245
Mean Annual	POST DA-2	BASE	12.02	0.53	3.337	2302
100 yr - 01 hr	PRE DA-1	BASE	0.88	0.65	0.184	1263
100 yr - 02 hr	PRE DA-1	BASE	1.31	0.65	0.439	3014
100 yr - 04 hr	PRE DA-1	BASE	3.03	1.20	0.907	6222
100 yr - 08 hr	PRE DA-1	BASE	4.08	1.36	1.475	10120
100 yr - 24 hr	PRE DA-1	BASE	12.09	0.66	3.161	21685
25 yr - 24 hr	PRE DA-1	BASE	15.03	0.35	1.746	11980
Mean Annual	PRE DA-1	BASE	13.60	0.03	0.146	1000

Simulation	Basin	Group	Time Max hrs	Flow Max cfs	Volume in	Volume ft3
100 yr - 01 hr	Buildings	BASE	0.56	1.78	4.294	3086
100 yr - 02 hr	Buildings	BASE	0.80	1.30	5.293	3804
100 yr - 04 hr	Buildings	BASE	2.00	0.70	6.611	4752
100 yr - 08 hr	Buildings	BASE	3.78	0.67	7.889	5670
100 yr - 24 hr	Buildings	BASE	11.71	0.22	10.925	7853
25 yr - 24 hr	Buildings	BASE	11.62	0.17	8.429	6058
Mean Annual	Buildings	BASE	12.00	0.61	4.095	2943
100 yr - 01 hr	POST DA-1	BASE	0.81	1.75	0.517	3094
100 yr - 02 hr	POST DA-1	BASE	0.93	1.56	0.933	5585
100 yr - 04 hr	POST DA-1	BASE	2.55	1.85	1.615	9670
100 yr - 08 hr	POST DA-1	BASE	4.05	2.23	2.375	14222
100 yr - 24 hr	POST DA-1	BASE	12.03	0.89	4.472	26782
25 yr - 24 hr	POST DA-1	BASE	12.03	0.53	2.723	16312
Mean Annual	POST DA-1	BASE	12.30	0.28	0.445	2666
100 yr - 01 hr	POST DA-2	BASE	0.58	1.53	3.532	2436
100 yr - 02 hr	POST DA-2	BASE	0.82	1.19	4.508	3109
100 yr - 04 hr	POST DA-2	BASE	2.00	0.64	5.805	4004
100 yr - 08 hr	POST DA-2	BASE	4.00	0.63	7.070	4876
100 yr - 24 hr	POST DA-2	BASE	12.00	0.21	10.085	6956
25 yr - 24 hr	POST DA-2	BASE	12.00	0.16	7.604	5245
Mean Annual	POST DA-2	BASE	12.02	0.53	3.337	2302
100 yr - 01 hr	PRE DA-1	BASE	0.88	0.65	0.184	1263
100 yr - 02 hr	PRE DA-1	BASE	1.31	0.65	0.439	3014
100 yr - 04 hr	PRE DA-1	BASE	3.03	1.20	0.907	6222
100 yr - 08 hr	PRE DA-1	BASE	4.08	1.36	1.475	10120
100 yr - 24 hr	PRE DA-1	BASE	12.09	0.66	3.161	21685
25 yr - 24 hr	PRE DA-1	BASE	15.03	0.35	1.746	11980
Mean Annual	PRE DA-1	BASE	13.60	0.03	0.146	1000

Attachment D

Recovery Analysis

Simulation	Node	Group	Time hrs	Stage ft	Warning Stage ft	Surface Area ft2	Total Inflow cfs	Total Outflow cfs	Total Vol In af	Total Vol Out af
100 yr - 24 hr	BASIN 1	BASE	0.00	122.00	125.00	1308	0.00	0.00	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	0.26	122.00	125.00	1308	0.00	0.00	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	0.50	122.00	125.00	1308	0.00	0.00	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	0.77	122.00	125.00	1308	0.00	0.00	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	1.02	122.00	125.00	1308	0.00	0.00	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	1.25	122.00	125.00	1308	0.00	0.00	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	1.51	122.00	125.00	1308	0.00	0.00	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	1.75	122.00	125.00	1308	0.00	0.00	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	2.00	122.00	125.00	1308	0.00	0.00	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	2.25	122.00	125.00	1308	0.00	0.00	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	2.50	122.00	125.00	1308	0.00	0.00	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	2.76	122.00	125.00	1308	0.00	0.00	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	3.00	122.00	125.00	1308	0.00	0.00	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	3.25	122.00	125.00	1308	0.00	0.00	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	3.51	122.00	125.00	1308	0.00	0.00	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	3.75	122.00	125.00	1308	0.00	0.00	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	4.00	122.00	125.00	1308	0.00	0.00	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	4.25	122.00	125.00	1308	0.00	0.00	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	4.50	122.00	125.00	1308	0.00	0.00	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	4.76	122.00	125.00	1308	0.00	0.00	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	5.00	122.00	125.00	1308	0.00	0.00	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	5.25	122.00	125.00	1308	0.00	0.00	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	5.50	122.00	125.00	1308	0.00	0.00	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	5.75	122.00	125.00	1308	0.00	0.00	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	6.00	122.00	125.00	1308	0.00	0.00	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	6.25	122.00	125.00	1308	0.00	0.00	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	6.50	122.00	125.00	1308	0.00	0.00	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	6.75	122.00	125.00	1308	0.01	0.01	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	7.00	122.00	125.00	1308	0.03	0.03	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	7.25	122.00	125.00	1314	0.04	0.03	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	7.50	122.02	125.00	1337	0.06	0.03	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	7.75	122.04	125.00	1377	0.07	0.03	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	8.00	122.07	125.00	1430	0.09	0.03	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	8.25	122.12	125.00	1509	0.13	0.03	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	8.50	122.18	125.00	1629	0.17	0.04	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	8.75	122.26	125.00	1768	0.21	0.04	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	9.00	122.35	125.00	1921	0.24	0.04	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	9.25	122.44	125.00	2079	0.26	0.05	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	9.50	122.54	125.00	2243	0.29	0.05	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	9.75	122.64	125.00	2416	0.41	0.06	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	10.00	122.77	125.00	2657	0.47	0.06	0.0	0.0
100 yr - 24 hr	BASIN 1	BASE	10.25	122.92	125.00	2917	0.60	0.07	0.1	0.0
100 yr - 24 hr	BASIN 1	BASE	10.50	123.09	125.00	3248	0.67	0.08	0.1	0.0
100 yr - 24 hr	BASIN 1	BASE	10.75	123.25	125.00	3603	0.72	0.08	0.1	0.0
100 yr - 24 hr	BASIN 1	BASE	11.01	123.41	125.00	3943	0.76	0.09	0.1	0.0
100 yr - 24 hr	BASIN 1	BASE	11.25	123.57	125.00	4286	0.92	0.10	0.1	0.0
100 yr - 24 hr	BASIN 1	BASE	11.50	123.74	125.00	4666	1.01	0.11	0.1	0.0
100 yr - 24 hr	BASIN 1	BASE	11.75	123.91	125.00	5041	1.06	0.12	0.2	0.0
100 yr - 24 hr	BASIN 1	BASE	12.00	124.08	125.00	5451	1.11	0.13	0.2	0.0
100 yr - 24 hr	BASIN 1	BASE	12.25	124.22	125.00	5823	0.94	0.16	0.2	0.0
100 yr - 24 hr	BASIN 1	BASE	12.50	124.33	125.00	6114	0.90	0.23	0.2	0.0
100 yr - 24 hr	BASIN 1	BASE	12.76	124.43	125.00	6407	0.92	0.30	0.2	0.0
100 yr - 24 hr	BASIN 1	BASE	13.00	124.51	125.00	6665	0.95	0.36	0.3	0.0
100 yr - 24 hr	BASIN 1	BASE	13.26	124.58	125.00	6896	0.90	0.40	0.3	0.1
100 yr - 24 hr	BASIN 1	BASE	13.50	124.64	125.00	7085	0.88	0.42	0.3	0.1
100 yr - 24 hr	BASIN 1	BASE	13.75	124.70	125.00	7259	0.88	0.44	0.3	0.1
100 yr - 24 hr	BASIN 1	BASE	14.01	124.75	125.00	7425	0.88	0.46	0.3	0.1
100 yr - 24 hr	BASIN 1	BASE	14.26	124.80	125.00	7580	0.89	0.48	0.4	0.1
100 yr - 24 hr	BASIN 1	BASE	14.51	124.85	125.00	7729	0.90	0.50	0.4	0.1
100 yr - 24 hr	BASIN 1	BASE	14.77	124.90	125.00	7877	0.91	0.53	0.4	0.1
100 yr - 24 hr	BASIN 1	BASE	15.02	124.93	125.00	8008	0.92	0.73	0.4	0.1
100 yr - 24 hr	BASIN 1	BASE	15.27	124.94	125.00	8052	0.84	0.82	0.4	0.1
100 yr - 24 hr	BASIN 1	BASE	15.52	124.94	125.00	8052	0.81	0.82	0.4	0.2
100 yr - 24 hr	BASIN 1	BASE	15.77	124.94	125.00	8048	0.80	0.81	0.5	0.2
100 yr - 24 hr	BASIN 1	BASE	16.02	124.94	125.00	8045	0.80	0.81	0.5	0.2
100 yr - 24 hr	BASIN 1	BASE	16.27	124.93	125.00	8030	0.71	0.77	0.5	0.2
100 yr - 24 hr	BASIN 1	BASE	16.52	124.93	125.00	8005	0.68	0.72	0.5	0.2
100 yr - 24 hr	BASIN 1	BASE	16.77	124.92	125.00	7989	0.66	0.69	0.5	0.2
100 yr - 24 hr	BASIN 1	BASE	17.02	124.92	125.00	7980	0.66	0.67	0.5	0.3
100 yr - 24 hr	BASIN 1	BASE	17.27	124.92	125.00	7976	0.66	0.67	0.5	0.3
100 yr - 24 hr	BASIN 1	BASE	17.52	124.92	125.00	7974	0.66	0.66	0.6	0.3
100 yr - 24 hr	BASIN 1	BASE	17.77	124.92	125.00	7974	0.66	0.66	0.6	0.3
100 yr - 24 hr	BASIN 1	BASE	18.02	124.92	125.00	7975	0.67	0.66	0.6	0.3
100 yr - 24 hr	BASIN 1	BASE	18.27	124.92	125.00	7976	0.67	0.67	0.6	0.3
100 yr - 24 hr	BASIN 1	BASE	18.52	124.92	125.00	7977	0.67	0.67	0.6	0.3
100 yr - 24 hr	BASIN 1	BASE	18.77	124.92	125.00	7979	0.67	0.67	0.6	0.3
100 yr - 24 hr	BASIN 1	BASE	19.02	124.92	125.00	7980	0.67	0.67	0.6	0.4
100 yr - 24 hr	BASIN 1	BASE	19.27	124.92	125.00	7965	0.58	0.65	0.7	0.4
100 yr - 24 hr	BASIN 1	BASE	19.52	124.91	125.00	7936	0.54	0.60	0.7	0.4
100 yr - 24 hr	BASIN 1	BASE	19.77	124.91	125.00	7913	0.52	0.57	0.7	0.4
100 yr - 24 hr	BASIN 1	BASE	20.02	124.90	125.00	7897	0.52	0.55	0.7	0.4
100 yr - 24 hr	BASIN 1	BASE	20.27	124.90	125.00	7887	0.52	0.54	0.7	0.4
100 yr - 24 hr	BASIN 1	BASE	20.52	124.90	125.00	7880	0.52	0.53	0.7	0.4
100 yr - 24 hr	BASIN 1	BASE	20.77	124.90	125.00	7875	0.52	0.53	0.7	0.4

100 YR 24 HR TIME SERIES (FOR RECOVERY)

Simulation	Node	Group	Time hrs	Stage ft	Warning Stage ft	Surface Area ft2	Total Inflow cfs	Total Outflow cfs	Total Vol In af	Total Vol Out af
100 yr - 24 hr	BASIN 1	BASE	21.02	124.89	125.00	7872	0.51	0.52	0.7	0.5
100 yr - 24 hr	BASIN 1	BASE	21.27	124.89	125.00	7851	0.42	0.51	0.7	0.5
100 yr - 24 hr	BASIN 1	BASE	21.52	124.88	125.00	7809	0.38	0.51	0.8	0.5
100 yr - 24 hr	BASIN 1	BASE	21.77	124.86	125.00	7760	0.36	0.50	0.8	0.5
100 yr - 24 hr	BASIN 1	BASE	22.02	124.84	125.00	7709	0.35	0.50	0.8	0.5
100 yr - 24 hr	BASIN 1	BASE	22.27	124.82	125.00	7641	0.26	0.49	0.8	0.5
100 yr - 24 hr	BASIN 1	BASE	22.52	124.79	125.00	7547	0.21	0.48	0.8	0.5
100 yr - 24 hr	BASIN 1	BASE	22.77	124.76	125.00	7446	0.20	0.47	0.8	0.5
100 yr - 24 hr	BASIN 1	BASE	23.02	124.73	125.00	7344	0.19	0.45	0.8	0.5
100 yr - 24 hr	BASIN 1	BASE	23.27	124.69	125.00	7243	0.18	0.44	0.8	0.5
100 yr - 24 hr	BASIN 1	BASE	23.52	124.66	125.00	7142	0.17	0.43	0.8	0.6
100 yr - 24 hr	BASIN 1	BASE	23.77	124.63	125.00	7044	0.17	0.42	0.8	0.6
100 yr - 24 hr	BASIN 1	BASE	24.02	124.60	125.00	6949	0.17	0.40	0.8	0.6
100 yr - 24 hr	BASIN 1	BASE	24.27	124.56	125.00	6839	0.07	0.39	0.8	0.6
100 yr - 24 hr	BASIN 1	BASE	24.52	124.52	125.00	6701	0.03	0.37	0.8	0.6
100 yr - 24 hr	BASIN 1	BASE	24.77	124.48	125.00	6559	0.01	0.34	0.8	0.6
100 yr - 24 hr	BASIN 1	BASE	25.02	124.43	125.00	6423	0.00	0.30	0.8	0.6
100 yr - 24 hr	BASIN 1	BASE	25.27	124.39	125.00	6296	0.00	0.28	0.8	0.6
100 yr - 24 hr	BASIN 1	BASE	25.52	124.35	125.00	6178	0.00	0.25	0.8	0.6
100 yr - 24 hr	BASIN 1	BASE	25.77	124.32	125.00	6074	0.00	0.22	0.8	0.6
100 yr - 24 hr	BASIN 1	BASE	26.02	124.29	125.00	5988	0.00	0.20	0.8	0.6
100 yr - 24 hr	BASIN 1	BASE	26.27	124.26	125.00	5918	0.00	0.18	0.8	0.6
100 yr - 24 hr	BASIN 1	BASE	26.52	124.23	125.00	5848	0.00	0.17	0.8	0.6
100 yr - 24 hr	BASIN 1	BASE	26.77	124.21	125.00	5782	0.00	0.16	0.8	0.6
100 yr - 24 hr	BASIN 1	BASE	27.02	124.18	125.00	5720	0.00	0.15	0.8	0.6
100 yr - 24 hr	BASIN 1	BASE	27.27	124.16	125.00	5661	0.00	0.14	0.8	0.6
100 yr - 24 hr	BASIN 1	BASE	27.52	124.14	125.00	5604	0.00	0.13	0.8	0.6
100 yr - 24 hr	BASIN 1	BASE	27.77	124.12	125.00	5548	0.00	0.13	0.8	0.6
100 yr - 24 hr	BASIN 1	BASE	28.02	124.10	125.00	5493	0.00	0.13	0.8	0.6
100 yr - 24 hr	BASIN 1	BASE	28.27	124.08	125.00	5437	0.00	0.13	0.8	0.6
100 yr - 24 hr	BASIN 1	BASE	28.52	124.06	125.00	5381	0.00	0.12	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	28.77	124.03	125.00	5325	0.00	0.12	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	29.02	124.01	125.00	5268	0.00	0.12	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	29.27	123.99	125.00	5212	0.00	0.12	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	29.52	123.97	125.00	5167	0.00	0.12	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	29.77	123.95	125.00	5122	0.00	0.12	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	30.02	123.93	125.00	5076	0.00	0.12	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	30.27	123.91	125.00	5031	0.00	0.12	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	30.52	123.89	125.00	4986	0.00	0.12	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	30.77	123.87	125.00	4940	0.00	0.11	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	31.02	123.85	125.00	4895	0.00	0.11	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	31.27	123.83	125.00	4849	0.00	0.11	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	31.52	123.81	125.00	4804	0.00	0.11	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	31.77	123.78	125.00	4759	0.00	0.11	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	32.02	123.76	125.00	4713	0.00	0.11	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	32.27	123.74	125.00	4668	0.00	0.11	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	32.52	123.72	125.00	4623	0.00	0.11	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	32.77	123.70	125.00	4577	0.00	0.11	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	33.02	123.68	125.00	4532	0.00	0.10	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	33.27	123.66	125.00	4487	0.00	0.10	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	33.52	123.64	125.00	4441	0.00	0.10	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	33.77	123.62	125.00	4396	0.00	0.10	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	34.02	123.60	125.00	4350	0.00	0.10	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	34.27	123.58	125.00	4305	0.00	0.10	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	34.52	123.56	125.00	4260	0.00	0.10	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	34.77	123.53	125.00	4214	0.00	0.10	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	35.02	123.51	125.00	4169	0.00	0.10	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	35.27	123.49	125.00	4124	0.00	0.10	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	35.52	123.47	125.00	4078	0.00	0.09	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	35.77	123.45	125.00	4033	0.00	0.09	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	36.02	123.43	125.00	3987	0.00	0.09	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	36.27	123.41	125.00	3942	0.00	0.09	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	36.52	123.39	125.00	3897	0.00	0.09	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	36.77	123.37	125.00	3851	0.00	0.09	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	37.02	123.35	125.00	3806	0.00	0.09	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	37.27	123.33	125.00	3761	0.00	0.09	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	37.52	123.31	125.00	3715	0.00	0.09	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	37.77	123.28	125.00	3670	0.00	0.08	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	38.02	123.26	125.00	3625	0.00	0.08	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	38.27	123.24	125.00	3580	0.00	0.08	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	38.52	123.22	125.00	3538	0.00	0.08	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	38.77	123.20	125.00	3496	0.00	0.07	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	39.02	123.19	125.00	3455	0.00	0.07	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	39.27	123.17	125.00	3415	0.00	0.07	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	39.52	123.15	125.00	3375	0.00	0.07	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	39.77	123.13	125.00	3336	0.00	0.07	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	40.02	123.11	125.00	3297	0.00	0.07	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	40.27	123.10	125.00	3258	0.00	0.06	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	40.52	123.08	125.00	3220	0.00	0.06	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	40.77	123.06	125.00	3182	0.00	0.06	0.8	0.7
100 yr - 24 hr	BASIN 1	BASE	41.02	123.04	125.00	3144	0.00	0.06	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	41.27	123.03	125.00	3107	0.00	0.06	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	41.52	123.01	125.00	3070	0.00	0.06	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	41.77	122.99	125.00	3036	0.00	0.06	0.8	0.8

100 YR 24 HR TIME SERIES (FOR RECOVERY)

Simulation	Node	Group	Time hrs	Stage ft	Warning Stage ft	Surface Area ft2	Total Inflow cfs	Total Outflow cfs	Total Vol In af	Total Vol Out af
100 yr - 24 hr	BASIN 1	BASE	42.02	122.98	125.00	3006	0.00	0.06	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	42.27	122.96	125.00	2977	0.00	0.06	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	42.52	122.94	125.00	2948	0.00	0.05	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	42.77	122.92	125.00	2919	0.00	0.05	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	43.02	122.91	125.00	2890	0.00	0.05	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	43.27	122.89	125.00	2862	0.00	0.05	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	43.52	122.88	125.00	2833	0.00	0.05	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	43.77	122.86	125.00	2805	0.00	0.05	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	44.02	122.84	125.00	2777	0.00	0.05	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	44.27	122.83	125.00	2749	0.00	0.05	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	44.52	122.81	125.00	2721	0.00	0.05	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	44.77	122.79	125.00	2693	0.00	0.05	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	45.02	122.78	125.00	2665	0.00	0.05	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	45.27	122.76	125.00	2637	0.00	0.05	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	45.52	122.75	125.00	2610	0.00	0.05	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	45.77	122.73	125.00	2582	0.00	0.05	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	46.02	122.72	125.00	2555	0.00	0.04	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	46.27	122.70	125.00	2527	0.00	0.04	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	46.52	122.68	125.00	2500	0.00	0.04	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	46.77	122.67	125.00	2472	0.00	0.04	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	47.02	122.65	125.00	2445	0.00	0.04	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	47.27	122.64	125.00	2418	0.00	0.04	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	47.52	122.62	125.00	2391	0.00	0.04	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	47.77	122.61	125.00	2364	0.00	0.04	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	48.02	122.59	125.00	2337	0.00	0.04	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	48.27	122.58	125.00	2310	0.00	0.04	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	48.52	122.56	125.00	2282	0.00	0.04	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	48.77	122.54	125.00	2255	0.00	0.04	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	49.02	122.53	125.00	2228	0.00	0.04	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	49.27	122.51	125.00	2201	0.00	0.04	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	49.52	122.50	125.00	2174	0.00	0.04	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	49.77	122.48	125.00	2147	0.00	0.04	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	50.02	122.47	125.00	2120	0.00	0.04	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	50.27	122.45	125.00	2093	0.00	0.04	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	50.52	122.44	125.00	2066	0.00	0.04	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	50.77	122.42	125.00	2039	0.00	0.04	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	51.02	122.40	125.00	2011	0.00	0.03	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	51.27	122.39	125.00	1984	0.00	0.03	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	51.52	122.37	125.00	1957	0.00	0.03	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	51.77	122.36	125.00	1930	0.00	0.03	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	52.02	122.34	125.00	1902	0.00	0.03	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	52.27	122.33	125.00	1875	0.00	0.03	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	52.52	122.31	125.00	1847	0.00	0.03	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	52.77	122.29	125.00	1820	0.00	0.03	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	53.02	122.28	125.00	1792	0.00	0.03	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	53.27	122.26	125.00	1764	0.00	0.03	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	53.52	122.25	125.00	1736	0.00	0.03	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	53.77	122.23	125.00	1708	0.00	0.03	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	54.02	122.21	125.00	1680	0.00	0.03	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	54.27	122.20	125.00	1652	0.00	0.03	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	54.52	122.18	125.00	1623	0.00	0.03	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	54.77	122.16	125.00	1595	0.00	0.03	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	55.02	122.15	125.00	1566	0.00	0.03	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	55.27	122.13	125.00	1537	0.00	0.03	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	55.52	122.12	125.00	1508	0.00	0.03	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	55.77	122.10	125.00	1479	0.00	0.03	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	56.02	122.08	125.00	1450	0.00	0.03	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	56.27	122.06	125.00	1420	0.00	0.03	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	56.52	122.05	125.00	1390	0.00	0.03	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	56.77	122.03	125.00	1360	0.00	0.03	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	57.02	122.01	125.00	1330	0.00	0.03	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	57.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	57.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	57.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	58.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	58.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	58.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	58.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	59.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	59.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	59.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	59.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	60.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	60.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	60.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	60.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	61.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	61.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	61.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	61.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	62.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	62.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	62.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	62.77	122.00	125.00	1308	0.00	0.00	0.8	0.8

100 YR 24 HR TIME SERIES (FOR RECOVERY)

Simulation	Node	Group	Time hrs	Stage ft	Warning Stage ft	Surface Area ft2	Total Inflow cfs	Total Outflow cfs	Total Vol In af	Total Vol Out af
100 yr - 24 hr	BASIN 1	BASE	63.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	63.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	63.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	63.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	64.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	64.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	64.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	64.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	65.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	65.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	65.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	65.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	66.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	66.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	66.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	66.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	67.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	67.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	67.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	67.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	68.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	68.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	68.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	68.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	69.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	69.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	69.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	69.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	70.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	70.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	70.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	70.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	71.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	71.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	71.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	71.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	72.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	72.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	72.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	72.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	73.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	73.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	73.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	73.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	74.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	74.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	74.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	74.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	75.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	75.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	75.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	75.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	76.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	76.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	76.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	76.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	77.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	77.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	77.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	77.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	78.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	78.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	78.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	78.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	79.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	79.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	79.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	79.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	80.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	80.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	80.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	80.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	81.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	81.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	81.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	81.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	82.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	82.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	82.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	82.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	83.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	83.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	83.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	83.77	122.00	125.00	1308	0.00	0.00	0.8	0.8

100 YR 24 HR TIME SERIES (FOR RECOVERY)

Simulation	Node	Group	Time hrs	Stage ft	Warning Stage ft	Surface Area ft2	Total Inflow cfs	Total Outflow cfs	Total Vol In af	Total Vol Out af
100 yr - 24 hr	BASIN 1	BASE	84.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	84.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	84.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	84.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	85.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	85.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	85.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	85.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	86.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	86.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	86.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	86.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	87.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	87.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	87.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	87.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	88.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	88.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	88.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	88.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	89.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	89.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	89.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	89.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	90.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	90.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	90.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	90.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	91.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	91.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	91.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	91.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	92.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	92.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	92.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	92.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	93.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	93.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	93.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	93.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	94.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	94.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	94.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	94.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	95.02	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	95.27	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	95.52	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	95.77	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	BASIN 1	BASE	96.01	122.00	125.00	1308	0.00	0.00	0.8	0.8
100 yr - 24 hr	UNDERGROUND 2	BASE	0.00	125.51	128.33	1264	0.00	0.00	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	0.26	125.51	128.33	1264	0.00	0.00	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	0.50	125.51	128.33	1264	0.00	0.00	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	0.77	125.51	128.33	1264	0.00	0.00	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	1.02	125.51	128.33	1264	0.00	0.00	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	1.25	125.51	128.33	1264	0.00	0.00	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	1.51	125.51	128.33	1264	0.00	0.00	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	1.75	125.51	128.33	1264	0.01	0.01	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	2.00	125.51	128.33	1264	0.01	0.01	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	2.25	125.51	128.33	1264	0.02	0.01	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	2.50	125.52	128.33	1264	0.03	0.01	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	2.76	125.54	128.33	1264	0.03	0.01	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	3.00	125.56	128.33	1264	0.04	0.01	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	3.25	125.57	128.33	1264	0.04	0.01	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	3.51	125.60	128.33	1264	0.04	0.01	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	3.75	125.62	128.33	1264	0.04	0.01	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	4.00	125.64	128.33	1264	0.05	0.01	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	4.25	125.67	128.33	1264	0.05	0.01	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	4.50	125.70	128.33	1264	0.05	0.01	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	4.76	125.73	128.33	1264	0.05	0.01	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	5.00	125.75	128.33	1264	0.05	0.01	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	5.25	125.79	128.33	1264	0.07	0.01	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	5.50	125.83	128.33	1264	0.07	0.01	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	5.75	125.88	128.33	1264	0.07	0.01	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	6.00	125.92	128.33	1264	0.07	0.01	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	6.25	125.97	128.33	1264	0.07	0.01	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	6.50	126.01	128.33	1264	0.08	0.01	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	6.75	126.06	128.33	1264	0.08	0.01	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	7.00	126.10	128.33	1264	0.08	0.01	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	7.25	126.15	128.33	1264	0.08	0.01	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	7.50	126.20	128.33	1264	0.08	0.01	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	7.75	126.25	128.33	1264	0.08	0.01	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	8.00	126.30	128.33	1264	0.08	0.01	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	8.25	126.36	128.33	1264	0.12	0.01	0.0	0.0

100 YR 24 HR TIME SERIES (FOR RECOVERY)

Simulation	Node	Group	Time hrs	Stage ft	Warning Stage ft	Surface Area ft2	Total Inflow cfs	Total Outflow cfs	Total Vol In af	Total Vol Out af
100 yr - 24 hr	UNDERGROUND 2	BASE	8.50	126.44	128.33	1264	0.12	0.01	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	8.75	126.51	128.33	1264	0.12	0.01	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	9.00	126.59	128.33	1264	0.12	0.01	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	9.25	126.67	128.33	1264	0.12	0.01	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	9.50	126.75	128.33	1264	0.12	0.01	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	9.75	126.83	128.33	1264	0.12	0.01	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	10.00	126.91	128.33	1264	0.12	0.01	0.0	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	10.25	127.00	128.33	1264	0.16	0.01	0.1	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	10.50	127.11	128.33	1264	0.16	0.01	0.1	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	10.75	127.22	128.33	1264	0.16	0.01	0.1	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	11.01	127.33	128.33	1264	0.17	0.01	0.1	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	11.25	127.45	128.33	1264	0.20	0.01	0.1	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	11.50	127.59	128.33	1264	0.21	0.01	0.1	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	11.75	127.73	128.33	1264	0.21	0.01	0.1	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	12.00	127.87	128.33	1267	0.21	0.01	0.1	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	12.25	127.98	128.33	1275	0.15	0.02	0.1	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	12.50	128.06	128.33	1277	0.15	0.05	0.1	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	12.76	128.12	128.33	1277	0.15	0.08	0.1	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	13.00	128.15	128.33	1276	0.15	0.11	0.1	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	13.26	128.17	128.33	1275	0.13	0.12	0.1	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	13.50	128.17	128.33	1275	0.13	0.12	0.1	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	13.75	128.18	128.33	1275	0.13	0.12	0.1	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	14.01	128.18	128.33	1274	0.13	0.12	0.1	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	14.26	128.18	128.33	1274	0.13	0.12	0.1	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	14.51	128.18	128.33	1274	0.13	0.12	0.1	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	14.77	128.18	128.33	1274	0.13	0.13	0.1	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	15.02	128.18	128.33	1274	0.12	0.13	0.1	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	15.27	128.17	128.33	1275	0.11	0.12	0.1	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	15.52	128.17	128.33	1275	0.10	0.11	0.1	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	15.77	128.16	128.33	1275	0.10	0.11	0.1	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	16.02	128.16	128.33	1275	0.10	0.11	0.1	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	16.27	128.15	128.33	1276	0.09	0.10	0.1	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	16.52	128.14	128.33	1276	0.08	0.10	0.1	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	16.77	128.13	128.33	1276	0.08	0.09	0.1	0.0
100 yr - 24 hr	UNDERGROUND 2	BASE	17.02	128.13	128.33	1276	0.08	0.09	0.1	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	17.27	128.12	128.33	1276	0.08	0.09	0.1	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	17.52	128.12	128.33	1276	0.08	0.09	0.1	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	17.77	128.12	128.33	1276	0.08	0.09	0.1	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	18.02	128.12	128.33	1276	0.08	0.08	0.1	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	18.27	128.12	128.33	1276	0.08	0.08	0.1	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	18.52	128.12	128.33	1276	0.08	0.08	0.1	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	18.77	128.12	128.33	1276	0.08	0.08	0.1	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	19.02	128.12	128.33	1276	0.08	0.08	0.1	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	19.27	128.11	128.33	1277	0.06	0.08	0.1	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	19.52	128.10	128.33	1277	0.06	0.07	0.1	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	19.77	128.10	128.33	1277	0.06	0.07	0.1	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	20.02	128.09	128.33	1277	0.06	0.07	0.1	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	20.27	128.09	128.33	1277	0.06	0.07	0.1	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	20.52	128.09	128.33	1277	0.06	0.07	0.1	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	20.77	128.08	128.33	1277	0.06	0.06	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	21.02	128.08	128.33	1277	0.06	0.06	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	21.27	128.08	128.33	1277	0.04	0.06	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	21.52	128.06	128.33	1277	0.04	0.05	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	21.77	128.06	128.33	1277	0.04	0.05	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	22.02	128.05	128.33	1277	0.04	0.05	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	22.27	128.04	128.33	1276	0.02	0.04	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	22.52	128.03	128.33	1276	0.02	0.04	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	22.77	128.02	128.33	1276	0.02	0.03	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	23.02	128.01	128.33	1276	0.02	0.03	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	23.27	128.00	128.33	1275	0.02	0.03	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	23.52	128.00	128.33	1275	0.02	0.03	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	23.77	127.99	128.33	1275	0.02	0.03	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	24.02	127.99	128.33	1275	0.02	0.03	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	24.27	127.98	128.33	1274	0.00	0.02	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	24.52	127.96	128.33	1274	0.00	0.02	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	24.77	127.95	128.33	1273	0.00	0.02	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	25.02	127.94	128.33	1272	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	25.27	127.93	128.33	1271	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	25.52	127.92	128.33	1270	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	25.77	127.91	128.33	1269	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	26.02	127.91	128.33	1267	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	26.27	127.90	128.33	1267	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	26.52	127.89	128.33	1267	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	26.77	127.88	128.33	1267	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	27.02	127.87	128.33	1267	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	27.27	127.87	128.33	1267	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	27.52	127.86	128.33	1267	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	27.77	127.85	128.33	1267	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	28.02	127.84	128.33	1267	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	28.27	127.84	128.33	1267	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	28.52	127.83	128.33	1266	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	28.77	127.82	128.33	1266	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	29.02	127.81	128.33	1265	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	29.27	127.80	128.33	1264	0.00	0.01	0.2	0.1

100 YR 24 HR TIME SERIES (FOR RECOVERY)

Simulation	Node	Group	Time hrs	Stage ft	Warning Stage ft	Surface Area ft2	Total Inflow cfs	Total Outflow cfs	Total Vol In af	Total Vol Out af
100 yr - 24 hr	UNDERGROUND 2	BASE	29.52	127.80	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	29.77	127.79	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	30.02	127.78	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	30.27	127.77	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	30.52	127.77	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	30.77	127.76	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	31.02	127.75	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	31.27	127.74	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	31.52	127.73	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	31.77	127.73	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	32.02	127.72	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	32.27	127.71	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	32.52	127.70	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	32.77	127.69	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	33.02	127.69	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	33.27	127.68	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	33.52	127.67	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	33.77	127.66	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	34.02	127.66	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	34.27	127.65	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	34.52	127.64	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	34.77	127.63	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	35.02	127.62	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	35.27	127.62	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	35.52	127.61	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	35.77	127.60	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	36.02	127.59	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	36.27	127.59	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	36.52	127.58	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	36.77	127.57	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	37.02	127.56	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	37.27	127.55	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	37.52	127.55	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	37.77	127.54	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	38.02	127.53	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	38.27	127.52	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	38.52	127.52	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	38.77	127.51	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	39.02	127.50	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	39.27	127.49	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	39.52	127.48	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	39.77	127.48	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	40.02	127.47	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	40.27	127.46	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	40.52	127.45	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	40.77	127.44	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	41.02	127.44	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	41.27	127.43	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	41.52	127.42	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	41.77	127.41	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	42.02	127.41	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	42.27	127.40	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	42.52	127.39	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	42.77	127.38	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	43.02	127.37	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	43.27	127.37	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	43.52	127.36	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	43.77	127.35	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	44.02	127.34	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	44.27	127.34	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	44.52	127.33	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	44.77	127.32	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	45.02	127.31	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	45.27	127.30	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	45.52	127.30	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	45.77	127.29	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	46.02	127.28	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	46.27	127.27	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	46.52	127.27	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	46.77	127.26	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	47.02	127.25	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	47.27	127.24	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	47.52	127.23	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	47.77	127.23	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	48.02	127.22	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	48.27	127.21	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	48.52	127.20	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	48.77	127.20	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	49.02	127.19	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	49.27	127.18	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	49.52	127.17	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	49.77	127.16	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	50.02	127.16	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	50.27	127.15	128.33	1264	0.00	0.01	0.2	0.1

100 YR 24 HR TIME SERIES (FOR RECOVERY)

Simulation	Node	Group	Time hrs	Stage ft	Warning Stage ft	Surface Area ft2	Total Inflow cfs	Total Outflow cfs	Total Vol In af	Total Vol Out af
100 yr - 24 hr	UNDERGROUND 2	BASE	50.52	127.14	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	50.77	127.13	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	51.02	127.12	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	51.27	127.12	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	51.52	127.11	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	51.77	127.10	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	52.02	127.09	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	52.27	127.09	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	52.52	127.08	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	52.77	127.07	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	53.02	127.06	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	53.27	127.05	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	53.52	127.05	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	53.77	127.04	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	54.02	127.03	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	54.27	127.02	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	54.52	127.02	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	54.77	127.01	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	55.02	127.00	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	55.27	126.99	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	55.52	126.98	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	55.77	126.98	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	56.02	126.97	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	56.27	126.96	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	56.52	126.95	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	56.77	126.95	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	57.02	126.94	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	57.27	126.93	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	57.52	126.92	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	57.77	126.91	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	58.02	126.91	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	58.27	126.90	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	58.52	126.89	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	58.77	126.88	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	59.02	126.87	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	59.27	126.87	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	59.52	126.86	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	59.77	126.85	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	60.02	126.84	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	60.27	126.84	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	60.52	126.83	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	60.77	126.82	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	61.02	126.81	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	61.27	126.80	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	61.52	126.80	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	61.77	126.79	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	62.02	126.78	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	62.27	126.77	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	62.52	126.77	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	62.77	126.76	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	63.02	126.75	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	63.27	126.74	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	63.52	126.73	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	63.77	126.73	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	64.02	126.72	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	64.27	126.71	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	64.52	126.70	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	64.77	126.70	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	65.02	126.69	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	65.27	126.68	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	65.52	126.67	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	65.77	126.66	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	66.02	126.66	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	66.27	126.65	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	66.52	126.64	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	66.77	126.63	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	67.02	126.63	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	67.27	126.62	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	67.52	126.61	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	67.77	126.60	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	68.02	126.59	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	68.27	126.59	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	68.52	126.58	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	68.77	126.57	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	69.02	126.56	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	69.27	126.55	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	69.52	126.55	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	69.77	126.54	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	70.02	126.53	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	70.27	126.52	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	70.52	126.52	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	70.77	126.51	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	71.02	126.50	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	71.27	126.49	128.33	1264	0.00	0.01	0.2	0.1

100 YR 24 HR TIME SERIES (FOR RECOVERY)

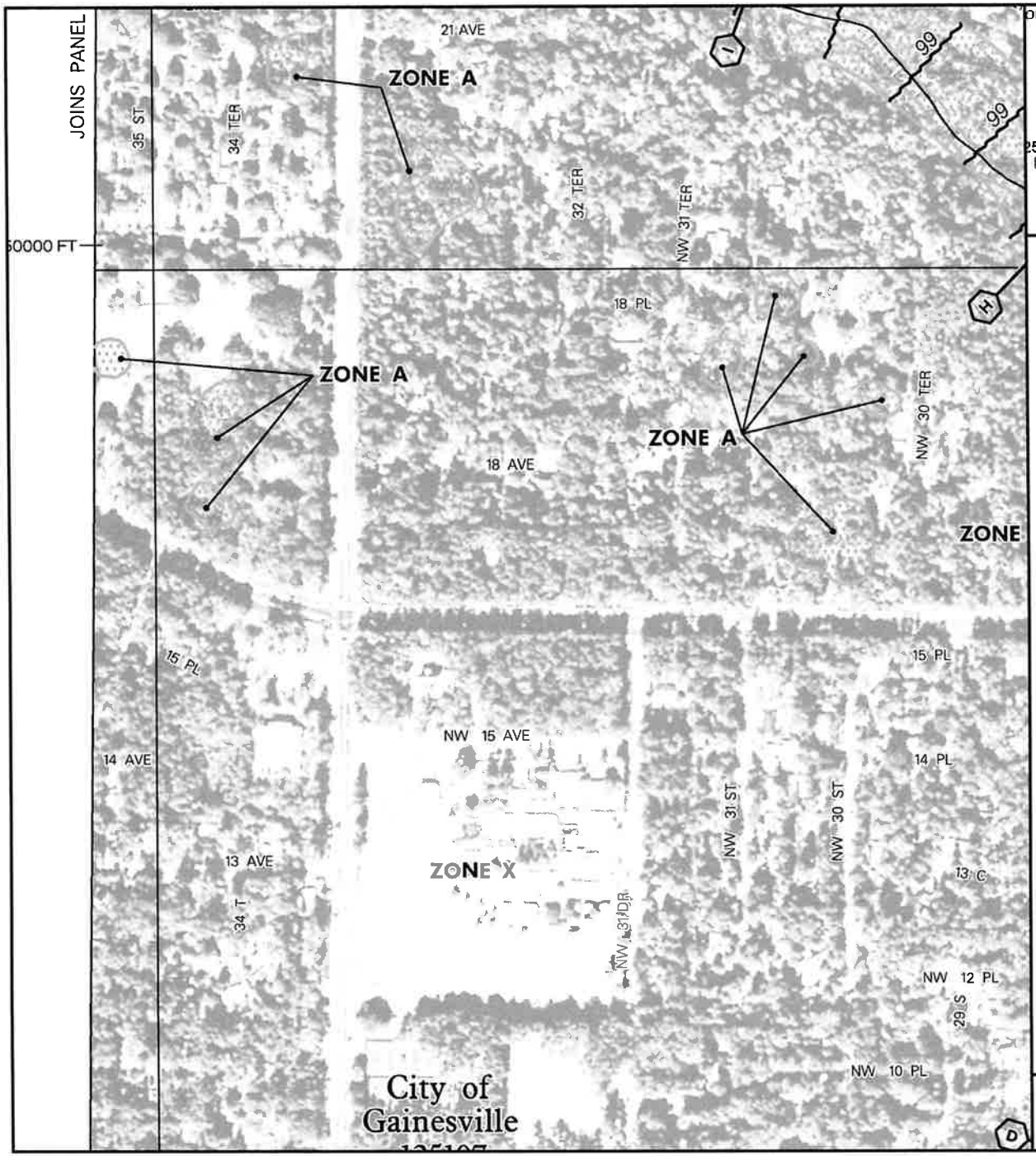
Simulation	Node	Group	Time hrs	Stage ft	Warning Stage ft	Surface Area ft2	Total Inflow cfs	Total Outflow cfs	Total Vol In af	Total Vol Out af
100 yr - 24 hr	UNDERGROUND 2	BASE	71.52	126.48	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	71.77	126.48	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	72.02	126.47	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	72.27	126.46	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	72.52	126.45	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	72.77	126.45	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	73.02	126.44	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	73.27	126.43	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	73.52	126.42	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	73.77	126.42	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	74.02	126.41	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	74.27	126.40	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	74.52	126.40	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	74.77	126.39	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	75.02	126.38	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	75.27	126.38	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	75.52	126.37	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	75.77	126.37	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	76.02	126.36	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	76.27	126.35	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	76.52	126.35	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	76.77	126.34	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	77.02	126.34	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	77.27	126.33	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	77.52	126.32	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	77.77	126.32	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	78.02	126.31	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	78.27	126.31	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	78.52	126.30	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	78.77	126.30	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	79.02	126.29	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	79.27	126.29	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	79.52	126.28	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	79.77	126.27	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	80.02	126.27	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	80.27	126.26	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	80.52	126.26	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	80.77	126.25	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	81.02	126.25	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	81.27	126.24	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	81.52	126.24	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	81.77	126.23	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	82.02	126.23	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	82.27	126.22	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	82.52	126.22	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	82.77	126.21	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	83.02	126.21	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	83.27	126.20	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	83.52	126.20	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	83.77	126.19	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	84.02	126.19	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	84.27	126.18	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	84.52	126.18	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	84.77	126.17	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	85.02	126.17	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	85.27	126.16	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	85.52	126.16	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	85.77	126.15	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	86.02	126.15	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	86.27	126.15	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	86.52	126.14	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	86.77	126.14	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	87.02	126.13	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	87.27	126.13	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	87.52	126.12	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	87.77	126.12	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	88.02	126.11	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	88.27	126.11	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	88.52	126.10	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	88.77	126.10	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	89.02	126.10	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	89.27	126.09	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	89.52	126.09	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	89.77	126.08	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	90.02	126.08	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	90.27	126.07	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	90.52	126.07	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	90.77	126.07	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	91.02	126.06	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	91.27	126.06	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	91.52	126.05	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	91.77	126.05	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	92.02	126.05	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	92.27	126.04	128.33	1264	0.00	0.01	0.2	0.1

100 YR 24 HR TIME SERIES (FOR RECOVERY)

Simulation	Node	Group	Time hrs	Stage ft	Warning Stage ft	Surface Area ft2	Total Inflow cfs	Total Outflow cfs	Total Vol In af	Total Vol Out af
100 yr - 24 hr	UNDERGROUND 2	BASE	92.52	126.04	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	92.77	126.03	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	93.02	126.03	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	93.27	126.02	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	93.52	126.02	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	93.77	126.02	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	94.02	126.01	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	94.27	126.01	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	94.52	126.00	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	94.77	126.00	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	95.02	126.00	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	95.27	125.99	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	95.52	125.99	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	95.77	125.99	128.33	1264	0.00	0.01	0.2	0.1
100 yr - 24 hr	UNDERGROUND 2	BASE	96.01	125.98	128.33	1264	0.00	0.01	0.2	0.1

Attachment E

FEMA and Soil Maps



onal Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 500'

250 0 500 1000 FEET

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0311D

FIRM

FLOOD INSURANCE RATE MAP

ALACHUA COUNTY, FLORIDA AND INCORPORATED AREAS

PANEL 311 OF 640

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
GAINESVILLE, CITY OF	125107	0311	D

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
12001C0311D

EFFECTIVE DATE
JUNE 16, 2006

Federal Emergency Management Agency

Map Scale: 1:2,610 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 35 70 140 210

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Alachua County, Florida
Survey Area Data: Version 17, Sep 20, 2016

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 28, 2013—Nov 8, 2013

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Hydrologic Soil Group— Summary by Map Unit — Alachua County, Florida (FL001)				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
3	Arredondo fine sand, 0 to 5 percent slopes	A	4.5	17.3%
4	Arredondo-Urban land complex, 0 to 5 percent slopes	A	0.1	0.4%
8	Millhopper sand, 0 to 5 percent slopes	A	7.8	29.7%
13	Pelham sand	B/D	2.7	10.5%
30	Kendrick sand, 2 to 5 percent slopes	B	1.0	4.0%
71	Millhopper sand, 5 to 8 percent slopes	A	10.0	38.2%
Totals for Area of Interest			**26.1**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

CITY OF GAINESVILLE
every path starts with passion
FLORIDA

APPLICATION FOR CONCURRENCY CERTIFICATION & TMPA REVIEW
DEPARTMENT OF PLANNING & DEVELOPMENT SERVICES

LONG FORM
(352) 334-5022

EXHIBIT
tabbies
D-2
Pages 1-6

OFFICE USE ONLY

Petition No. _____ TMPA Zone [ ] A [ ] B [ ] C [ ] D [ ] E [ ] M

TYPE OF CERTIFICATION REQUESTED:
[ ] Concurrency Determination (non-binding)
[ ] Certificate of Preliminary Concurrency
[X] Certificate of Final Concurrency
[ ] Certificate of Conditional Concurrency Reservation

Owner Name(s) (please print)
Name(s): Zion Evangelical Lutheran Church
Mailing Address:
1700 NW 34th Street
Gainesville, FL 32605
E-Mail Address: cjborgert@apt-pharmatox.com
Phone: 352-376-9940 Fax:
(If additional owners, please include on separate sheet)

Agent(s) Name (please print)
Name: eda engineers-surveyors-planners, inc.
Mailing Address:
2404 NW 43rd Street
Gainesville, FL 32606
E-Mail Address: sreyes@edafl.com
Phone: 352-373-3541 Fax: 352-373-7249
(Attach notarized authorization for agent to act on owner's behalf.)

PROJECT INFORMATION
Project Name: Zion Lutheran Church Phase:
Location of Project (attach an 8 ½" x 11" map showing location) see attached
1. Street address: 1700 NW 34th Street, Gainesville, FL 32605
2. Legal description (may be attached): THAT PART OF E 650 FT OF S 526.17 FT OF NE1/4 LYING N OF 16TH BLVD LESS R/W 34TH ST OR 971/411
3. Tax parcel number(s): 06416-030-000 4. Map number(s): 35 - 09 - 19
Existing Land Use Category: Single-Family Residential RSF-1 Existing Zoning: RSF-1

Is there a proposal to change the zoning and/or land use associated with this project? [ ] Yes [X] No
If yes, indicate petition number(s) associated with change:

PHASING			
Is this project (phase) part of a larger project? [ ] Yes [X] No			
If yes, enumerate each phase, number of units or square footage in each phase and beginning/ completion date.			
Total Project: Residential units	SF	SFA	MF
Non-residential (square footage)			
Mixed-use (describe mix)			
(If this is a single phase project, name it Phase I – Total)			

RESIDENTIAL DATA					
Type	**Phase**	**Number of units**	**Acres**	**Expected beginning date**	**Expected completion date**
Single-family, detached					
Single-family, attached					
Multi-family					
Rooming houses or dormitories (beds)					
Other (specify)					

NON-RESIDENTIAL DATA					
Type(s) specify	**Phase**	**Square footage**	**Acres**	**Expected beginning date**	**Expected completion date**
Sanctuary	1	5,228	4.99	08/2018	06/2019

STOP HERE AND SIGN CERTIFICATION ON PAGE 3 IF YOU ARE REQUESTING ONLY A CONCURRENCY DETERMINATION

Required Information for Certificates of Preliminary, Final, and Conditional Concurrency Reservation &TMPA Review (Attach sheets to application.)

1. Attach a sheet with the average daily, and peak hour, peak direction trip generation for the project based on the latest edition of the ITE Trip Generation Manual. ***(NOTE: The trip generation information MUST be attached to this application and shown on the development plan.)*** In cases where the City and the applicant show differences in projected trips, the applicant's calculations must be signed and sealed by the professional engineer registered in the State of Florida.

2. Is the proposed project within the Transportation Mobility Program Area (TMPA) (see attached map)? If yes, please be aware that special criteria apply in this area. [X] Yes [ ] No
   Zone A [ ] Zone B [X] Zone C [ ] Zone D [ ] Zone E [ ] Zone M [ ]

3. Indicate whether the proposed project will be eliminating any existing recreation facilities. If yes, detail the number and type being eliminated. [ ] Yes [X] No

4. Submit a complete stormwater management plan for water quantity and water quality review by the City's Public Works Department. (Do not submit with this application, submit with the development plan.)

5. Does this application involve demolition or re-use of any structure(s)? [ ] Yes [X] No

   If yes, what is the size of the structure(s) to be demolished or re-used? _____ (unit(s) or square footage)

   What is the current use of the structure to be demolished or re-used?

   _____

   Are you claiming trip credits for the demolition or re-use of a structure(s) at the site?
   [ ] Yes [X] No

   If yes, provide estimates of credits for each previous use at the site. (Attach sheet with calculations.)

□ □ □ □ □

Certification

The undersigned has read the above application and is familiar with the information submitted herewith. It is agreed and understood that the undersigned will be held responsible for its accuracy. The undersigned hereby attests to the fact that the parcel number(s) and legal description(s) shown in questions 2 and 3 is/are the true and proper identification of the area for which the concurrency application is being submitted. Signatures of all owners or their agent are required on this form.
NOTE: The undersigned agrees that signing this application grants Planning staff the right to amend, for the sake of consistency, the square footage or number of units shown herein based on changes made to the development plan, subdivision, special use permit, or planned development during the review process.

Owner/Agent Signature

3/16/18
Date

STATE OF FLORIDA
COUNTY OF Alachua
Sworn to and subscribed before me this 16 day of March 2018.

AUDRA BURRELL
MY COMMISSION # FF 940216
EXPIRES: December 1, 2019
Bonded Thru Notary Public Underwriters

Audra Burrell
Signature - Notary Public

Personally Known ✓ OR Produced Identification _____

TRANSPORTATION MOBILITY ELEMENT
Transportation Mobility Program Area
Legend
Transportation Mobility Program Area Sub-Zones
Zone A
Zone B
Zone C
Zone D
Zone E
Zone M
Gainesville City Limits
City of Gainesville
Gainesville, Florida
Prepared by Planning and Development Services
November 2012
0
1
2 Miles

STAFF USE ONLY

Estimated demand:

Potable water (_____ units x 2.25) x 200 = _____ peak gallons per day (resid. only)

Water Supply _____ (see GRU)

Wastewater (_____ units x 2.25) x 113 = _____ average gallons per day (resid. only)

Solid Waste (_____ units x 2.25) x 3.6 = _____ pounds per day (resid. only)

Trip Generation _____ ADT; _____ added p.m. peak hour, peak direction trips

Stormwater	(See the Public Works Comment Sheet.)	Does the project meet water quality and water quantity LOS Standards, according to the Public Works Department?
Recreation	_____	Does the project degrade the City's adopted LOS Standards for recreation?
Mass Transit	_____	Does the project impact any of the City's adopted LOS Standards for mass transit?

Estimated credits for demolition/redevelopment/re-use:

Potable water (_____ units x 2.25) x 200 = _____ peak gallons per day (resid. only)

Water Supply _____ (see GRU)

Wastewater (_____ units x 2.25) x 113 = _____ average gallons per day (resid. only)

Solid Waste (_____ units x 2.25) x 3.6 = _____ pounds per day (resid. only)

Trip Generation _____ ADT; _____ peak p.m. hour, peak direction trips

Note: 2.25 = 2010 Census persons/household in Gainesville, FL

STAFF USE ONLY

This development meets all relevant Planning and Development Services Department LOS standards for concurrency and TMPA Review. Please see the Public Works comment sheet for information about Stormwater Management concurrency.

Signed _____

Date _____

tabbies

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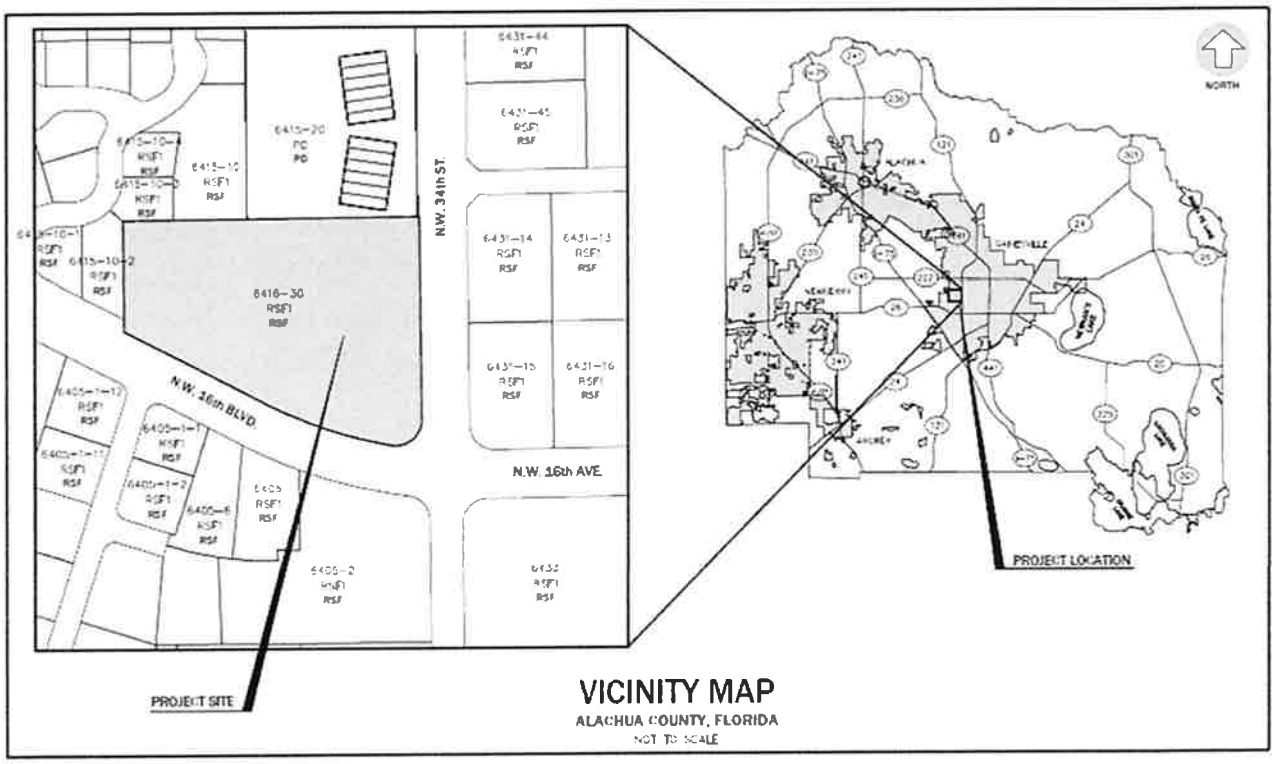
Pages 1-3

engineers • surveyors • planners

LOCATION MAP



VICINITY MAP
ALACHUA COUNTY, FLORIDA
NOT TO SCALE

LEGEND:

ZONING
PD – PLANNED USE DISTRICT
RSF1 – SINGLE-FAMILY RESIDENTIAL

FUTURE LAND USE
PD – PLANNED USE DISTRICT
RSF – SINGLE FAMILY RESIDENTIAL

LEGAL DESCRIPTION

(OFFICIAL RECORDS BOOK 971, PAGE 411)
COMMENCE AT THE SE CORNER OF THE NE 1/4 OF SECTION 35–T9S–R19E AND RUN N 0°34'22" W ALONG THE EAST LINE OF SAID SECTION AND THE CENTERLINE OF NW 34TH STREET 115.66 FEET, THENCE RUN S 89°25'38" WEST 50 FEET TO THE WEST R/W OF NW 34TH STREET AND THE POINT OF BEGINNING, SAID POINT BEING THE P.C. OF A CURVE CONCAVE TO THE NORTHWEST AND HAVING A RADIUS OF 50 FEET, THENCE RUN SOUTHWESTERLY ALONG THE ARC OF SAID R/W CURVE 87.9 FEET TO THE P.T. OF SAID CURVE, BEING ON THE NORTH R/W OF NW 16TH AVENUE, AND BEING THE P.C. OF A CURVE CONCAVE TO THE NORTHEAST, AND HAVING A RADIUS OF 904.93 FEET, THENCE RUN NORTHWESTERLY ALONG THE ARC OF SAID R/W 268.70 FEET TO THE P.T. OF SAID CURVE, THENCE RUN N 62°49'37" W ALONG SAID R/W 325.21 FEET, THENCE RUN N 0°34'22" WEST 220 FEET, THENCE RUN N 89°25'38" EAST 600 FEET TO THE WEST R/W OF NW 34TH STREET, THENCE RUN S 0°34'22" EAST ALONG SAID R/W 410.51 FEET TO THE POINT OF BEGINNING. BEING AND LYING IN THE NE 1/4 OF SECTION 35–T9S–R19E., GAINESVILLE, ALACHUA COUNTY, FLORIDA.

TRIP GENERATION

ITE LAND USE 560:

PROPOSED CHURCH:
5,228 G.S.F.
1700 NW 34TH STREET

CHURCH (PER 1000 SF)				TRIP DISTRIBUTION		PROJECT TRIPS	
PERIOD	RATE	SF	TRIPS	ENTER	EXIT	IN	OUT
AM	0.56	5.23	3	62%	38%	2	1
PM	0.55	5.23	3	48%	52%	1	2
WEEKDAY	9.11	5.23	48	50%	50%	24	24
SUNDAY	36.63	5.23	192	50%	50%	96	96

SOURCE: ITE TRIP GENERATION, 9TH EDITION, PAGES 1090–1092

EXHIBIT
tabbies
D-4

engineers • surveyors • planners
40 years

August 30, 2017 – revised March 13, 2018

City of Gainesville
302 NE 6th Avenue
Gainesville, FL 32601

Re: Zion Evangelical Lutheran Church
Intermediate Development Plan Review and Special Use Permit Application

Attached is a Development Plan and Special Use Permit application package submittal for a proposed new sanctuary building and associated site improvements, including parking lot additions and a new stormwater area for Zion Evangelical Lutheran Church. This is a proposed 5,069 SF sanctuary building with associated infrastructure improvements on the property. The project is located at 1700 NW 34th Street in Gainesville on Tax Parcel No. 06416-030-000. The project site is located on approximately 5 (+/-) acres and contains an existing church building and associated parking. This site is surrounded by residential uses.

A Site Plan is required to permit the proposed site improvements, including a new building, parking lot additions, and a new stormwater area. In addition, a Special Use Permit (SUP) application is required because the City of Gainesville Land Development Code Sec. 30-91 requires that places of religious assembly located in the RSF-1, RSF-2 RSF-3 and RSF-4 zoning districts receive Special Use Permit approval from the City Plan Board.

If you have any questions, please feel free to contact our office at any time.

Sincerely,

Sergio Reyes, P.E.
President

2404 NW 43rd Street, Gainesville, FL 32606 • Phone: (352) 373-3541 • Fax: (352) 373-7249 • www.edafl.com

EXHIBIT
tabbies
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PLAN REVIEW APPLICATION

OVERVIEW:

Project Name: Zion Evengelical Lutheran Church	**Tax Parcel Number:** 06416-030-000
Property Address: 1700 NW 34th Street, Gainesville, FL 32605-3727	
First Step Meeting Date: 04/10/17	**GRU Project Meeting Date:** 03/29/17

Proposed Uses/Type of Development (Check all that apply)

☐ **Residential**	**Density**	■ **Non-residential**	
☐ Multi-family	Units/acre:	☐ Commercial	☐ Office
Total Units:	Total bedrooms:	☐ Industrial	■ Other Church
		Gross floor area: 4,521 SF	

PROJECT MANAGEMENT:

Owner(s) of Record (please print)		
Name: Zion Evangelical Lutheran Church, Inc. of Gainesville, Florida		
Mailing Address: 1700 NW 34th Street, Gainesville, FL 32605		
Phone: 352-376-9940	**Fax:**	**E-Mail:** cjborgert@apt-pharmatox.com

Applicant/Engineer of Record/Project Coordinator (please print)		
Name: eda engineers-surveyors-planners, inc.		
Mailing Address: 2404 NW 43rd Street, Gainesville, FL 32606		
Phone: 352-373-3541	**Fax:** 352-373-7249	**E-Mail:** sreyes@edafl.com

Project Coordinator Name: Stephanie Sutton - ssutton@edafl.com and permitting@edafl.com

FEES:

Level of Review (check one) **Special Use Permit** ✓			**Enterprize Zone** ☐	
MINOR	**INTERMEDIATE**	**MAJOR**	**CONCEPT**	**MASTER**
☐	✓	☐	☐	☐

Fees are determined at First Step Meeting or GRU Project Meeting and are based on level of review and EZ Zone. More information about EZ Zones can be found at http://cityofgainesville.org/Portals/0/plan/2015%20Web%20Docs/landdevfees151001.pdf
Plan Review Fee: $ 5,137.75 (= Intermediate Review 4,051.75 and SUP 1,086.00)
GRU Fee: $ **GRU Business Acct No.:** 2000-2238-3426
Plan review fee will be paid by: Zion Evangelical Lutheran Church, Inc.
Name: Christopher J. Borgert **E-Mail:** cjborgert@apt-pharmatox.com **Phone:** (352) 335-8334

Applicant Signature: Steve Reed **Date:** 8/29/17

THIS SECTION FOR OFFICE USE ONLY
Petition Number:

SUFFICIENCY CHECKLIST BELOW. PLEASE FILL OUT

SUFFICIENCY CHECKLIST: PLEASE FILL OUT

Reviewer Comment	Met Y/N/NA	Sheet #
PLANNING: Wellfield exemption and protection permit provided	N/A	
PLANNING: Property owner authorization provided	Y	
PLANNING: Neighborhood workshop information provided	N/A	
PLANNING: First Step Meeting held	Y	4/10/17
PLANNING: Stormwater Management Plan provided	Y	C3.00
PLANNING: Signed Concurrency Exemption or Long Form provided	Y	
PLANNING: Fire Flow Calculations provided	Y	Attached
PLANNING: Environmental mitigation plan for impacted environmental areas provided	Y	C0.30
PLANNING: Photometric plan/ lighting plan provided	Y	See E series
PLANNING: Landscape plan provided	Y	See Landscape Plans
PLANNING: Construction staging plan provided	Y	C0.20
PLANNING: Boundary survey with a legal description provided	Y	
PLANNING: Utility Plan provided	Y	C4.00
PLANNING: Building elevations with basic floorplans provided	Y	
PLANNING: Trip generation study provided	Y	
PLANNING: Traffic study provided	N/A	
PLANNING: [Insert Comments]	N/A	
GRU GENERAL - Is this plan review 2 or greater? If yes, were all previous comments addressed?	N	
GRU GENERAL - Did you coordinate with Electric Engineer or tech and provide a layout on plan? If yes, provide name	Y	Sent to Tracy Wohl
Include contact information, Owners name, project name, address and phase(s)	Y	C0.00
GRU GENERAL - Clear and legible plans on 24" x 36" sheets	Y	All
GRU GENERAL - GRU Energy Delivery Electric System Design reflecting proposed W/WW utility design. Note on cover page/plans as ôElectric Design Provided by GRU Energy Deliveryö.	Y	C0.00
GRU GENERAL - ALL GRU standard utility notes must be shown on utility plans (see Section 1. III.C.21 of the GRU Water/Wastewater Design Standards)	Y	C4.00
GRU GENERAL - Project location map with North Arrow	Y	C0.00
GRU GENERAL - On utility master site plan show and label all existing & proposed utilities (note 'end of GRU maintenance')	Y	C4.00
GRU GENERAL - Existing and proposed easements	Y	C4.00
GRU GENERAL - Right-of-way lines	Y	C4.00
GRU GENERAL - Parcels and/or lot numbers of site location and adjacent property	Y	C0.00
GRU GENERAL - Street names	Y	All
GRU GENERAL - Proposed structures (i.e. buildings, walls fences, signs)	Y	All
GRU GENERAL - Proposed subdivision plat, if project is a subdivision	N/A	
GRU GENERAL - Signed & sealed boundary survey, including legal description and parcel number(s)	Y	

GRU GENERAL - Proposed off-site utility extensions to the point of availability, showing the affected offsite parcels/properties/proposed easements	Y	C4.00
GRU GENERAL - Landscape Plan reflecting all proposed Utility locations	Y	See Landscape Plan
GRU GENERAL - Building minimum finished floor elevations	Y	C2.00
GRU GENERAL -Building footprints (for commercial projects), labeled building setback lines and build-to lines, decorative masonry walls, fences, signs and landscaped buffer areas	Y	C2.00
GRU GENERAL Utility Space Allocation cross sections for each different road section, alleys and PUEs including street and locations if roads or alleys are included in project	N	
GRU GENERAL Identify lot numbers and street names in some fashion (names may change prior to permit issuance)	Y	All
GRU W-WW - Application by engineer that W/WW/RCW system design is in accordance with GRU Design Standards. (note: Final plans shows valid P.E. license and reads ôProfessional Engineerö	Y	C0.00
GRU W-WW - Potable and wastewater demand calculations	Y	Attached
GRU W-WW - AutoCAD Drawing file of Water and Wastewater Utilities with pipe sizes, fittings, and valves clearly labeled (this file will be used by GRU Strategic Planning to model the proposed water system)	Y	
GRU W-WW - In all cases, signed and sealed NFPA 1 and ISO fire flow calculations See Appendix E of Water/Wastewater Standards for a copy of ISO 2008	Y	Attached
GRU W-WW - Copy of Development Master Plan including Phasing Schedule, unless plans include all potential future development	N/A	
GRU W-WW - Show temporary construction water source with reduced pressure back flow preventer (RPBFP)	Y	C4.00
GRU W-WW - Indicate and label source of irrigation water if there is landscaping	Y	C4.00
GRU W-WW - If water/wastewater infrastructure is illegible on Master Plan, provide on multiple sheets	Y	C4.00
GRU W-WW - If WW service is provided, then plan and profile views are required for gravity sewer and force mains. All WW system plan and profile sheets at 1" = 30' max horizontal scale and 1" = 5' max vertical scale. (Exceptions accepted at GRU discretion	N	
"GRU W-WW - All materials clearly labeled (pipe including diameter, material and slope, valves, fire hydrants, fire sprinkler lines, water meters, RPBFP, fittings, manholes including elevations, services, clean outs with top and invert elevations, sizes, types, slopes and associated appurtenances"	Y	C4.00

"GRU W-WW - Show and label connections to existing utilities. Label existing facilities which cross or are adjacent to the property as well as elevations (manhole tops and inverts), pipe diameter and material of all existing W/WW, Electric, Gas, GruCom and Stormwater facilities which cross and/or are adjacent to the property"	Y	C4.00
GRU W-WW - Existing and proposed site contours must be shown on utility plan	Y	C4.00
"GRU W-WW - Master paving and drainage plan reflecting all stormwater facilities, retention or detention ponds with elevations (clearly indicate design high water level and 100 year flood elevations)"	Y	C2.00
"GRU W-WW Standard WW Pump Station design drawings for GRU O&M stations (Private O&M WW pump stations shall include signed and sealed design calculations, i.e. system head curve, pump curve/specs, If lift station is included in project)"	N/A	
GRU ELECTRIC: All Proposed electric infrastructure shown to scale per EDSG	Y	C4.00
GRU ELECTRIC Proposed meter/service delivery point shown	Y	C4.00
"GRU ELECTRIC If using GRU Rental Lights, GRU will provide conduit layout. Owner to provide photometric plan. (Note: provide copy of waiver application that is submitted to the City)"	N/A	
"GRU ELECTRIC - All electric equipment, cable/conduits must be contained within a PUE û coordinate with GRU Real Estate "	Y	C4.00
GRU ELECTRIC - Provide proper clearances around all electric structures and equipment as per EDSG	Y	C4.00
GRU ELECTRIC - Provide required voltage (single phase or three phase)and any load information that you have	Y	Attached
GRU GAS - Gas shown on plans	N/A	
GRU GAS - Gas usage statement: include notes on items contractor will provide to mitigate aid in construction costs and whether there will be natural gas generator on-site	N/A	
GRU GAS - Gas meter location	N/A	
GRU GAS - Acceptable service delivery point	N/A	
"GRU GAS - Include gas department notification statements, one week for demolition services, 72 hours prior to casing installations, one week for gas main installations and 72 hours for meter se"	N/A	
GRU GRUCom - Are you considering GRUCom services	N/A	

LEOTEK
LITE-ON GROUP

EXHIBIT
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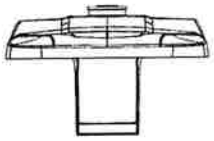
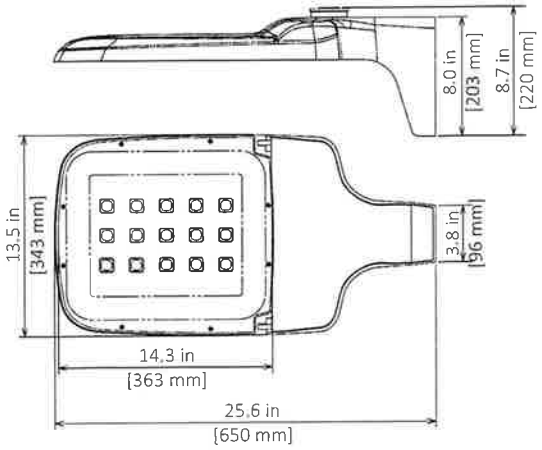
Project
Type
Catalog No.
ZION LUTHERAN CHURCH
TYPE PL

ARIETA™13 Architectural LED Area Luminaire
AR13 M2 Series Specification Data Sheet

Luminaire Data

Weight 15.4 lbs [7 kg]
EPA 0.47 ft²





Ordering Information

Sample Catalog No. AR13 6M2 MV NW 5 BK 700 MSL3

Product	LED Code	Voltage	Nominal Color Temperature	Distribution	Finish[1]	Drive Current Code [2]	Options
AR13	**4M2**	**MV** 120-277V	**WW** 3000K	**2** Type 2	**BK** Black	**350**	**HSS**[3] House Side Shield (Factory Installed)
	6M2	**HV** 347-480V	**NW** 4000K	**3** Type 3	**DB** Dark Bronze	**530**	**FDC**[4] Fixed Drive Current
	10M2		**CW** 5000K	**4** Type 4	**WH** White	**700**	**FFA**[5] Full Field Adjustability
	15M2			**5** Type 5	**GY** Gray		**PCR**[6] NEMA Photocontrol Receptacle
	18M2				**NA** Natural Aluminum		**PCR7**[6] ANSI 7-wire Photocontrol Receptacle
	20M2						**PCR7-CR**[7] Control Ready 7-wire Photocontrol Receptacle
							MSL7[8] Motion Sensor with L7 Lens
							MSL3[8] Motion Sensor with L3 Lens
							PND1[9] Part-Night Dimming
							PND2[9] Part-Night Dimming
							PND3[9] Part-Night Dimming
							ORR Optics Rotated Right
							ORL Optics Rotated Left
							WL Utility Wattage Label

Notes:
1 Black, Dark Bronze, White, Gray, or Natural Aluminum standard. Consult factory for other finishes.
2 Specified drive current code is the factory set maximum drive current. Field adjustable current selector enables standard dimming to lower wattage drive currents only. Consult factory if wattage limits require a special drive current.
3 Flush mounted shield factory installed, also available for field installion. House Side Shield cuts light off at 1/2 mounting height behind luminaire.
4 Non-field adjustable drive current. Specify 350mA, 530mA or 700mA setting.
5 The FFA option enables full field adjustability from the specified drive current code to all drive currents available. This option is not DLC qualified.
6 Field adjustable current selector included to enable standard dimming to lower wattage drive currents only. Field changeable connectors included to enable connection to PCR7 (wireless node dimming is disabled by default).
7 Control-ready wired at factory for wireless node dimming. Supplied at maximum drive current. If lower drive current is required, consult factory.
8 Motion Sensor available with MV. See L7 or L3 Lens coverage details on page 5. Consult factory for MS specified with ANSI 7-wire Photocontrol Receptacle. PCR option is required for On/Off control using light detection.
9 For PND profile options see page 6. Only available with MV (120-277V).
10 Specify Color (GY, DB, BK, WH, NA)
11 Specify MV (120-277V) or HV (347V or 480V)

Accessories*

HSSAR13[8,10]	House Side Shield
RPA[10]	Round Pole Adapter
PTF1[10]	Square Pole Top Fitter Single
PTF2[10]	Square Pole Top Fitter Twin at 180°
PTF4[10]	Square Pole Top Fitter Quad
WM[10]	Wall Mount
BSK	Bird Deterrent Spider Kit
PC[11]	Twist Lock Photocontrol
LLPC[11]	Long-Life Twist Lock Photocontrol
SC	Twist Lock Shorting Cap
FSIR100	Motion Sensor Configuration Tool

*Accessories are ordered separately and not to be included in the catalog number

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ZION LUTHERAN CHURCH
TYPE PL

ARIETA™13 Architectural LED Area Luminaire
AR13 M2 Series Specification Data Sheet

Luminaire Specifications

Housing
Die cast aluminum housing with universal mounting design allows for attachment to existing pole without redrilling for retrofit applications. Aluminum housing provides passive heat-sinking of the LEDs and has upper surfaces that shed precipitation. Mounting provisions meet 3G vibration per ANSI C136.31-2010 Normal Application, Bridge & Overpass. Electrical components are accessed without tools and are mounted on removable power door.

Light Emitting Diodes
Hi-flux/Hi-power white LEDs produce a minimum of 90% of initial intensity at 100,000 hours of life based on IES TM-21. LEDs are tested in accordance with IES LM-80 testing procedures. LEDs have correlated color temperature of 3000K (WW), 4000K (NW), or 5000K (CW) and 70 CRI minimum. LEDs are 100% mercury and lead free.

Field Adjustability
LED drive current can be changed in the field to adjust light output for local conditions (not available with PCR7-CR option). The specified drive current code will be the factory set maximum drive current and field adjustments can only be made to available lower wattage drive currents. Select the FFA option if full field adjustability to all available drive currents (700mA max) is desired. The FFA option is not DLC qualified.

Quality Control
Every luminaire is performance tested before and after a 2-hour burn-in period. Assembled in the USA.

Optical Systems
Micro-lens optical systems produce IESNA Type 2, Type 3, Type 4 or Type 5 distributions and are fully sealed to maintain an IP66 rating. Luminaire produces 0% total lumens above 90° (BUG Rating, U=0). Optional house side shield (HSS) cuts light off at 1/2 mounting height behind luminaire. Optics may be rotated right or left with options ORR/ORL, respectively.

Electrical
Rated life of electrical components is 100,000 hours. Uses isolated power supply that is 1-10V dimmable. Power supply is wired with quick-disconnect terminals. Power supply features a minimum power factor of .90 and <20% Total Harmonic Distortion (THD). EMC meets or exceeds FCC CFR Part 15. Terminal block accommodates 6 to 14 gauge wire. Surge protection complies with IEEE/ANSI C62.41 Category C High, 20kV/10kA and ANSI C136.2-2015, 20kV/10kA.

Controls
3-Wire photocontrol receptacle (PCR) is available. ANSI C136.41 7-wire (PCR7) photocontrol receptacles are available. All photocontrol receptacles have tool-less rotatable bases. Wireless control module is provided by others.

Finish
Housing receives a fade and abrasion resistant polyester powder coat finish with 3.0 mil nominal thickness. Finish tested to withstand 5000 hours in salt spray exposure per ASTM B117. Finish meets scribe creepage rating 8 per ASTM D1654. Finish tested 500 hours in UV exposure per ASTM G154 and meets ASTM D523 gloss retention.

Listings/Ratings/Labels
Luminaires are UL listed for use in wet locations in the United States and Canada. DesignLights Consortium™ qualified product. Consult DLC QPL for Standard and Premium Classification Listings. International Dark Sky Association listed. Luminaire is qualified to operate at ambient temperatures of -40°C to 40°C.

Photometry
Luminaires photometrics are tested by certified independent testing laboratories in accordance with IES LM-79 testing procedures.

Warranty
10-year limited warranty is standard on luminaire and components. 5-year limited warranty on luminaires and components with a motion sensor.

Standards
Luminaire complies with:

ANSI: C136.2, C136.3, C136.10, C136.13, C136.15, C136.22, C136.31, C136.35, C136.37, C136.41, C62.41, C78.377, C82.77

Other: FCC 47 CFR, IEC 60598, ROHS II, UL 1449, UL 1598

ZION LUTHERAN CHURCH
TYPE PL

ARIETA™13 Architectural LED Area Luminaire
AR13 M2 Series Specification Data Sheet

Performance Data 3000K (WW)

All data nominal. IES files are available at leotek.com.

			Type 2, 3, 4		Type 5	
LED Code	**Current Code**	**System Wattage (W)**	**Delivered Lumens (Lm)[1]**	**Efficacy (Lm/W)**	**Delivered Lumens (Lm) [1]**	**Efficacy (Lm/W)**
4M2	350	20	2000	100	1930	96
	530	28	2720	97	2630	94
	700	36	3410	94	3300	91
6M2	350	29	2930	101	2750	95
	530	41	4110	99	3860	93
	700	54	5040	94	4950	92
10M2	350	41	4600	112	4500	109
	530	63	6700	106	6600	104
	700	87	8500	97	8400	96
15M2	350	63	7400	117	7300	116
	530	90	9600	107	9500	106
	700	124	12900	104	12700	102
18M2	350	81	9000	111	9100	112
	530	122	12800	105	13000	107
	700	160	16400	103	16700	104
20M2	350	84	10700	127	10800	129
	530	132	15300	116	15500	117
	700	172	18200	106	18500	108

Notes:
1 Normal tolerance ± 10% due to factors including distribution type, LED bin variance, driver variance, and ambient temperatures.

Performance Data 4000K (NW) & 5000K (CW)

All data nominal. IES files are available at leotek.com.

			Type 2, 3, 4		Type 5	
LED Code	**Current Code**	**System Wattage (W)**	**Delivered Lumens (Lm) [1]**	**Efficacy (Lm/W)**	**Delivered Lumens (Lm) [1]**	**Efficacy (Lm/W)**
4M2	350	20	2330	116	2290	114
	530	28	3170	113	3110	111
	700	36	3990	111	3920	109
6M2	350	29	3490	120	3480	120
	530	41	4810	116	4850	117
	700	54	5980	111	5880	109
10M2	350	41	5400	132	5300	129
	530	63	7800	124	7700	122
	700	87	10000	115	9800	113
15M2	350	63	8400	133	8300	132
	530	90	11500	128	11300	126
	700	124	15000	121	14700	119
18M2	350	81	9600	119	9700	120
	530	122	13700	112	13900	114
	700	160	17500	109	17800	111
20M2	350	84	10600	126	10800	129
	530	132	15200	115	15500	117
	700	172	19500	114	19800	115

Notes:
1 Normal tolerance ± 10% due to factors including distribution type, LED bin variance, driver variance, and ambient temperatures.

ARIETA™13 Architectural LED Area Luminaire
AR13 M2 Series Specification Data Sheet

BUG Ratings: 3000K (WW)

All data nominal. IES files for all CCTs are available at leotek.com.

LED Code	Current Code	Type 2	Type 3	Type 4	Type 5
4M2	350	B1 U0 G1	B1 U0 G1	B1 U0 G0	B1 U0 G0
	530	B1 U0 G1	B1 U0 G1	B1 U0 G1	B2 U0 G0
	700	B1 U0 G1	B1 U0 G1	B1 U0 G1	B2 U0 G1
6M2	350	B1 U0 G1	B1 U0 G1	B1 U0 G1	B2 U0 G0
	530	B1 U0 G1	B1 U0 G1	B1 U0 G1	B2 U0 G1
	700	B1 U0 G1	B1 U0 G1	B1 U0 G1	B3 U0 G1
10M2	350	B1 U0 G1	B1 U0 G1	B1 U0 G1	B2 U0 G1
	530	B1 U0 G1	B1 U0 G1	B2 U0 G1	B3 U0 G1
	700	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G1
15M2	350	B1 U0 G1	B1 U0 G2	B2 U0 G2	B3 U0 G1
	530	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G2
	700	B2 U0 G2	B2 U0 G2	B3 U0 G2	B4 U0 G2
18M2	350	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G2
	530	B2 U0 G2	B2 U0 G2	B3 U0 G2	B4 U0 G2
	700	B2 U0 G2	B2 U0 G2	B3 U0 G2	B4 U0 G2
20M2	350	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G2
	530	B3 U0 G3	B2 U0 G2	B3 U0 G2	B4 U0 G2
	700	B3 U0 G3	B3 U0 G3	B3 U0 G2	B4 U0 G2

BUG Ratings: 4000K (NW) & 5000K (CW)

All data nominal. IES files for all CCTs are available at leotek.com.

LED Code	Current Code	Type 2	Type 3	Type 4	Type 5
4M2	350	B1 U0 G1	B1 U0 G1	B1 U0 G0	B1 U0 G0
	530	B1 U0 G1	B1 U0 G1	B1 U0 G1	B2 U0 G0
	700	B1 U0 G1	B1 U0 G1	B1 U0 G1	B2 U0 G1
6M2	350	B1 U0 G1	B1 U0 G1	B1 U0 G1	B2 U0 G1
	530	B1 U0 G1	B1 U0 G1	B1 U0 G1	B3 U0 G1
	700	B1 U0 G1	B1 U0 G1	B1 U0 G1	B3 U0 G1
10M2	350	B1 U0 G1	B1 U0 G1	B1 U0 G1	B3 U0 G1
	530	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G1
	700	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G2
15M2	350	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G1
	530	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G2
	700	B2 U0 G2*	B2 U0 G2	B3 U0 G2	B4 U0 G2
18M2	350	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G2
	530	B2 U0 G2	B2 U0 G2	B3 U0 G2	B4 U0 G2
	700	B3 U0 G3	B3 U0 G2*	B3 U0 G2	B4 U0 G2
20M2	350	B2 U0 G2	B2 U0 G2	B2 U0 G2	B3 U0 G2
	530	B2 U0 G2*	B2 U0 G2	B3 U0 G2	B4 U0 G2
	700	B3 U0 G3	B3 U0 G3	B3 U0 G3	B4 U0 G2

* These BUG ratings are slightly different for 5000K (CW). Refer to IES files for actual CW rating.

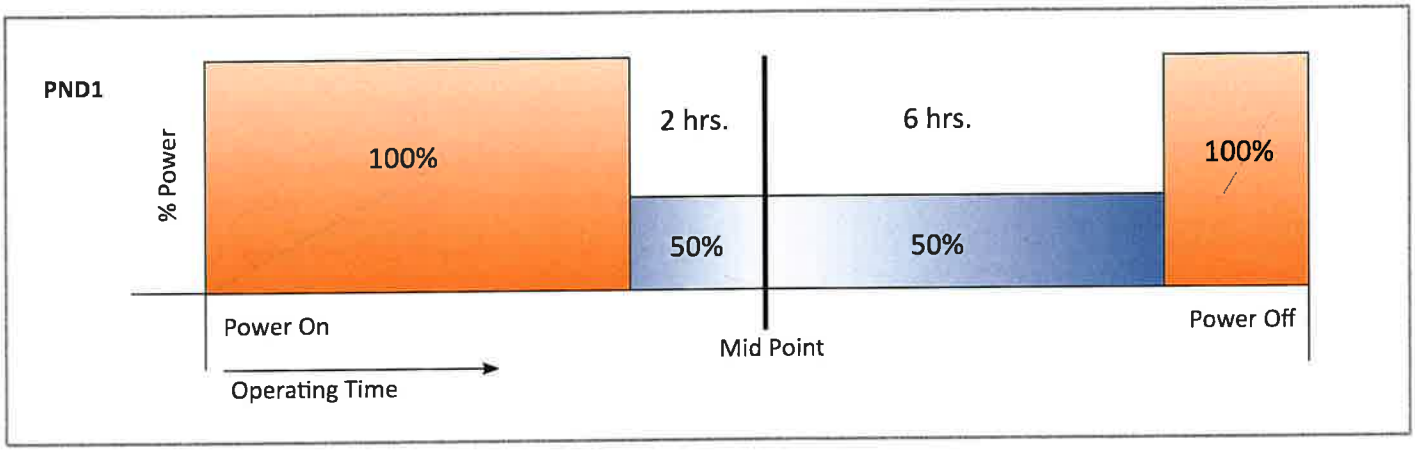
Part-Night Dimming Specifications

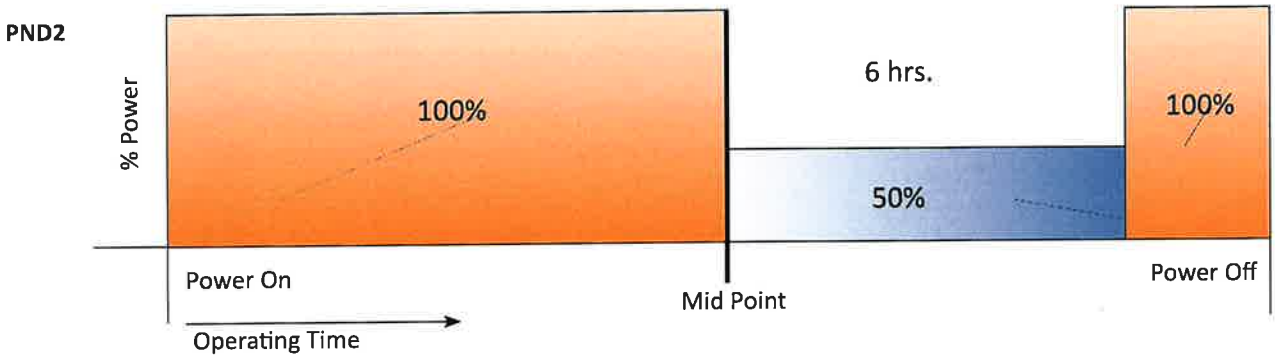
Description

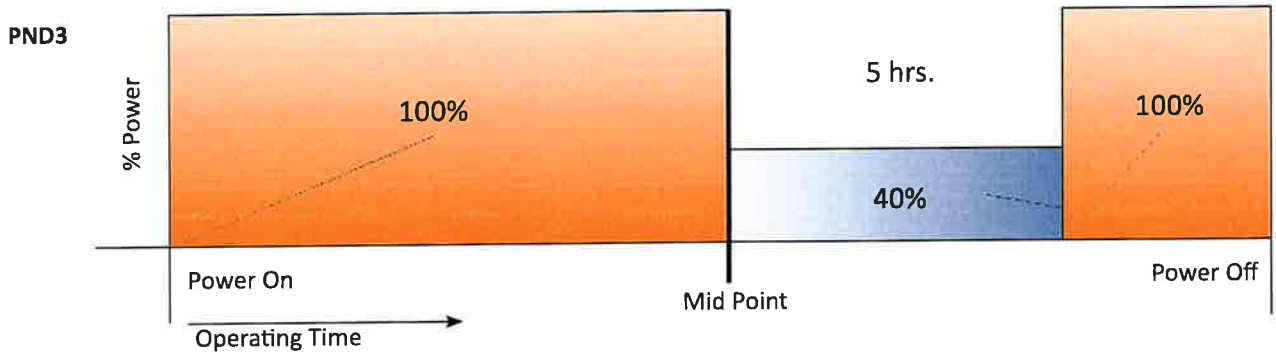
Arieta's Part-Night Dimming (PND) option enables significant energy savings by automatically dimming the luminaire during early morning hours when infrequent use is expected. Factory programmed dimming profiles automatically take into account seasonal changes based on geographical location by continuously monitoring the nighttime midpoint. This option is fully compatible with photocells and time clock devices, but is not field adjustable.

Operation

Based on the PND profile that is selected, the luminaire dims to the corresponding % power for the corresponding length of time (based on the nighttime mid-point) as shown below. Mid-point is continuously recalculated in the luminaire by monitoring the average length of time between when the light turns on (power on) and turns off (power off) over the previous two days. In effect, this functionality will take two days to initialize after installation before any dimming will occur. Power interruptions are ignored and do not affect the determination of mid-point. A motion sensor (MSL3 or MSL7) can be used with PND to temporarily override the dimming profile when motion is detected. Three factory programmed PND profiles are available for selection:







ZION LUTHERAN CHURCH
TYPE PL

HUNTER DESIGN & CONSULTING
735 ARLINGTON AVE N, STE 308
ST PETERSBURG, FL 33701
PH. 352-238-6366
www.hdceng.com

IES ROAD REPORT
PHOTOMETRIC FILENAME : ARXX-15M2-MV-NW-3-XX-700 S.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] 1266196
[TESTLAB] UL Verification Services Inc.
[MANUFAC] Leotek Electronics USA LLC., 1955 Lundy Ave., San Jose, CA 95131
[LUMCAT] ARXX-15M2-MV-NW-3-XX-700 S
[LUMINAIRE] Leotek Electronics - Pole arm mount roadway luminaire. Product ID: ARXX-15M2-MV-NW-3-XX-700 S
[MORE] This IES file was scaled from AR13-6M2-MV-NW-3-XX-700.
[DATE] This file created: 8-9-2016
[ISSUEDATE] 8-9-2016

CHARACTERISTICS

IES Classification	Type III
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	14955
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	121
Total Luminaire Watts	124
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	9427.693
Maximum Candela Angle	55H 63V
Maximum Candela (<90 Degrees Vertical)	9427.693
Maximum Candela Angle (<90 Degrees Vertical)	55H 63V
Maximum Candela At 90 Degrees Vertical	0 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	541.277 (3.6% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

ZION LUTHERAN
CHURCH
TYPE PL

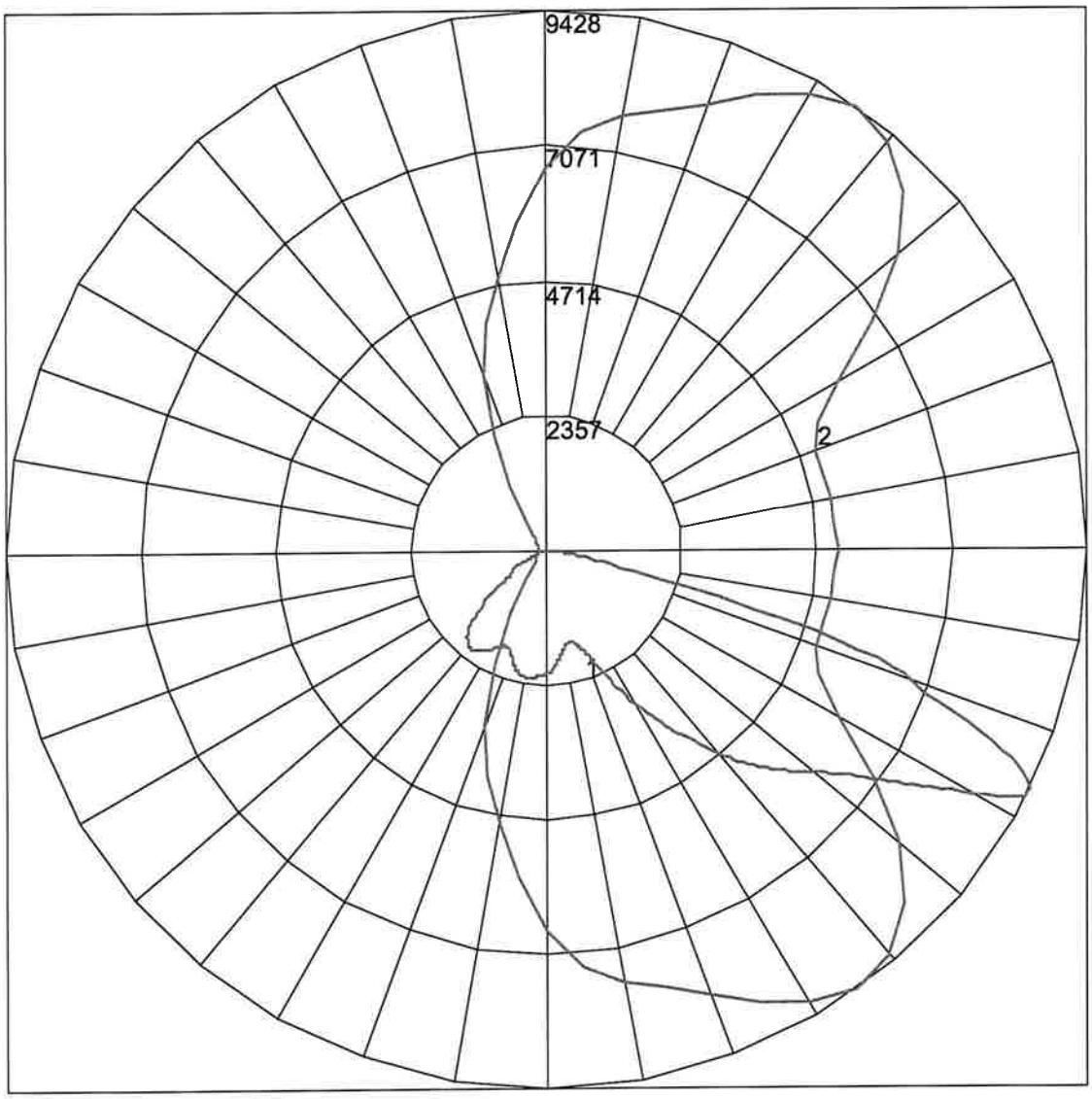
IES ROAD REPORT
PHOTOMETRIC FILENAME : ARXX-15M2-MV-NW-3-XX-700 S.IES

LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	886.5	N.A.	5.9
FM - Front-Medium (30-60)	6044.7	N.A.	40.4
FH - Front-High (60-80)	4232.4	N.A.	28.3
FVH - Front-Very High (80-90)	75.5	N.A.	0.5
BL - Back-Low (0-30)	883.1	N.A.	5.9
BM - Back-Medium (30-60)	1988.4	N.A.	13.3
BH - Back-High (60-80)	834.8	N.A.	5.6
BVH - Back-Very High (80-90)	9.9	N.A.	0.1
UL - Uplight-Low (90-100)	0.0	N.A.	0.0
UH - Uplight-High (100-180)	0.0	N.A.	0.0
Total	14955.3	N.A.	100.0
BUG Rating	B2-U0-G2		

IES ROAD REPORT
PHOTOMETRIC FILENAME : ARXX-15M2-MV-NW-3-XX-700 S.IES

POLAR GRAPH

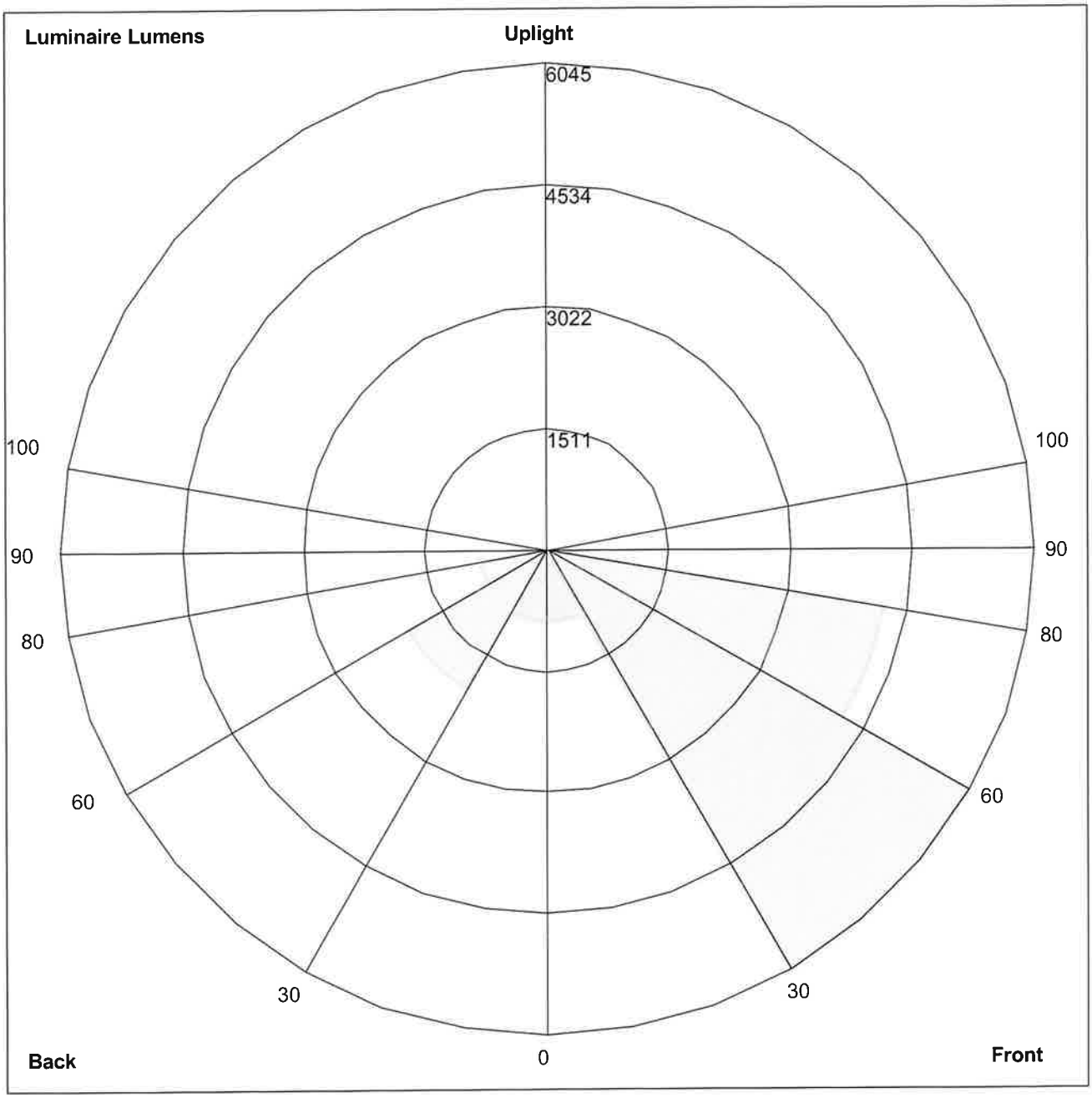


Maximum Candela = 9427.693 Located At Horizontal Angle = 55, Vertical Angle = 63
1 - Vertical Plane Through Horizontal Angles (55 - 235) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (63) (Through Max. Cd.)

ZION LUTHERAN
CHURCH
TYPE PL

IES ROAD REPORT
PHOTOMETRIC FILENAME : ARXX-15M2-MV-NW-3-XX-700 S.IES

LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=886.5, Medium=6044.7, High=4232.4, Very High=75.5
Back: Low=883.1, Medium=1988.4, High=834.8, Very High=9.9
Uplight: Low=0.0, High=0.0

BUG Rating : B2-U0-G2

EXHIBIT
tabbies
D-7
Pages 1-14

eda engineers • surveyors • planners, inc.

Memorandum

TO: Krystal Williams/Ken Blake **DATE:** 03/29/17

FROM: Rosa Trautz

SUBJECT: Neighborhood Meeting – Zion Lutheran Church

PUBLIC NOTICE

A neighborhood workshop will be held to discuss a proposed Special Use Permit and Site Plan for a new church building and associated infrastructure on tax parcel number 06416-030-000 located at 1700 NW 34th Street in Gainesville. This is not a public hearing. The purpose of this meeting is to inform neighboring property owners of the proposed development and to seek their comments. The meeting will be held on April 17, 2017 at 6:00 p.m. at Zion Lutheran Church located at 1700 NW 34th Street, Gainesville, FL 32605.

eda engineers • surveyors • planners 40 years

Contact: Sergio Reyes, PE
eda engineers – surveyors – planners, inc.
(352) 373-3541

TODAY IN HISTORY

In 1789, the U.S. House of Representatives held its first full meeting in New York;.

In 1924, Adolf Hitler was sentenced to five years in prison for his role in the Beer Hall Putsch in Munich. (Hitler was released in Dec. 1924; during his time behind bars, he wrote his autobiographical screed, "Mein Kampf.")

In 1933, Nazi Germany staged a daylong national boycott of Jewish-owned businesses.

In 1954, the United States Air Force Academy was established by President Dwight D. Eisenhower.

In 1972, the first Major League Baseball players' strike began; it lasted 12 days.

In 1984, recording star Marvin Gaye was shot to death by his father, Marvin Gay (cq), Sr. in Los Angeles, the day before his 45th birthday. (The elder Gay pleaded guilty to voluntary manslaughter, and received probation.)

In 1987, in his first speech on the AIDS epidemic, President Ronald Reagan told the Philadelphia College of Physicians, "We've declared AIDS public health enemy no. 1."

BIRTHDAYS

Actress **Ali MacGraw** is 78. Supreme Court Justice **Samuel Alito** is 67. Movie director **Barry Sonnenfeld** is 64. Singer **Susan Boyle** is 56. Political commentator **Rachel Maddow** is 44. Actor **David Oyelowo** (oh-YEHLOH'-oh) is 41. Actor **Asa Butterfield** is 20.

LOTTERY

Friday, March 31

Pick 2
Early drawing: 7-6
Night drawing: 8-4

Pick 3
Early drawing: 9-0-0
Night drawing: 8-6-0

Pick 4
Early drawing: 5-2-6-5
Night drawing: 5-7-6-9

Pick 5
Early drawing: 7-0-8-9-5
Night drawing: 5-2-4-9-8

Fantasy 5
2-8-9-18-23

Lucky Money
6-12-42-43 LB: 10

MEGA MILLIONS
17-24-27-32-58 PB: 10

PREVIOUS RESULTS

Fantasy 5 – Thursday
1-2-11-16-29

Match...Payoff...Winners
5-of-5...$200,623.32...1
4-of-5...$115.50......279
3-of-5...$9.50.......9,365

SUPREME COURT NOMINEE

Dem opposition to Trump pick grows

Blumenthal, Schatz, McCaskill are the latest senators to disapprove of Neil Gorsuch

By Mary Clare Jalonick and Erica Werner
The Associated Press

Sen. Claire McCaskill, D-Mo. speaks Jan. 28, 2016, on Capitol Hill in Washington. McCaskill is warning her party it could be politically dangerous to block President Donald Trump's Supreme Court nominee. [ASSOCIATED PRESS FILE PHOTO]

WASHINGTON – Senate Democratic opposition to President Donald Trump's Supreme Court nominee swelled Friday as Democrats neared the numbers needed for a filibuster, setting up a showdown with Republicans who have the votes to confirm Neil Gorsuch.

Sens. Claire McCaskill of Missouri, Richard Blumenthal of Connecticut and Brian Schatz of Hawaii became the latest Democratic senators to announce their opposition to Gorsuch, a 49-year-old federal appeals court judge in Denver whose conservative rulings make him an intellectual heir to the justice he would replace, the late Antonin Scalia.

McCaskill's decision came a day after she said she was torn over the decision. She said she's opposing the federal appeals court judge because his opinions favor corporations over workers and he's shown "a stunning lack of humanity" in some of those decisions.

She also criticized Trump in her statement announcing her opposition, saying "the president who promised working people he would lift them up has nominated a judge who can't even see them."

Senate Minority Leader Chuck Schumer of New York warned Republicans against changing Senate rules, which could prove momentous for the chamber and would allow all future Supreme Court nominees to get on the court regardless of opposition from the minority party. He says President Donald Trump should just pick a new nominee if Gorsuch is blocked.

Blumenthal, a Senate Judiciary Committee member who questioned Gorsuch on judicial independence and other topics in last week's hearings, complained that the judge didn't give straightforward responses.

"We must assume that Judge Gorsuch has passed the Trump litmus test – a pro-life, pro-gun, conservative judge," Blumenthal said in a statement.

There are now at least 36 Senate Democrats who oppose Gorsuch and have pledged to block him with a filibuster, just five shy of the number that would be required to mount a successful filibuster. All of the Senate's 52 Republicans are expected to support him. The vote is expected next week.

Republicans are furious at the Democrats' plans, arguing that filibusters of Supreme Court justices have been exceedingly rare, and accusing Democrats of responding to political pressures from a liberal base that still hasn't accepted Trump's election win. Senate Majority Leader Mitch McConnell, R-Ky., is expected to respond to a Democratic filibuster by unilaterally changing Senate rules to lower the threshold for Supreme Court justices from 60 votes to a simple majority in the 100-member Senate.

Although such a change might seem procedural or obscure, it is known on Capitol Hill as the "nuclear option" because it would amount to a dramatic departure from Senate norms of bipartisanship and collegiality.

Changing Senate rules would not be unprecedented. In 2013, Democrats were in the majority and upset about appellate court nominees getting blocked. They pushed through a rules change lowering the vote threshold on all nominees except for the Supreme Court from 60 to a simple majority.

Schumer warned against the rules change in an interview with The Associated Press on Thursday, arguing that Republicans would be the ones to blame if it does occur.

"Senate Republicans are acting like if Gorsuch doesn't get 60 votes they have no choice but to change the rules," Schumer said. "That is bunk."

Schumer's comments came after Sens. Joe Manchin of West Virginia and Heidi Heitkamp of North Dakota became the first two Democrats to announce their support for Gorsuch, and the only ones so far. Manchin said in a statement, "I hold no illusions that I will agree with every decision Judge Gorsuch may issue in the future, but I have not found any reasons why this jurist should not be a Supreme Court Justice."

IMMIGRATION

Empty jails hope to cash in on crackdown on illegals

By Claudia Lauer
The Associated Press

Signs attached to the inside of the prison yard near the tent facilities read: "THE END IS NEAR" and "STILL HERE!!" at the Willacy County Correctional Center on Feb. 26, 2015, in Raymondville, Texas. Management and Training Corp. recently purchased the detention center that was shuttered after a 2015 inmate riot left it uninhabitable. [DAVID PIKE/VALLEY MORNING STAR VIA THE ASSOCIATED PRESS, FILE]

DALLAS – Several Texas counties that are struggling with debt because their jails have few or no prisoners hope to refill those cellblocks with a different kind of inmate: immigrants who have entered the country illegally.

The debt dates back to the 1990s and the first decade of the 2000s, when some rural counties were losing employment prospects and population.

To bring jobs and money, they built correctional centers with hundreds and sometimes more than a thousand beds that could be used to house inmates from other counties as well as prisoners for the state and federal governments.

In some cases, the strategy worked, at least for a while. But a decline in crime and an increase in alternative sentencing reduced the Texas prisoner population and created a glut of jail space.

Now the debts, utility bills and maintenance are becoming so burdensome that counties are confronting a difficult choice. They can seek a federal contract to house some of the immigrants expected to be detained in President Donald Trump's immigration crackdown. Or they can sell the vacant detention centers to private prison companies that aim to do the same.

Jails and private prisons across the country are weighing their options after the Department of Homeland Security announced in January that it was shopping for more jail space as part of its efforts to secure the border.

In some places, the situation is the reverse of Texas, with public prisons full and states paying for extra beds. A private prison operator that had been housing 250 inmates for Vermont recently dropped the state as a client because the federal government will probably offer more for the same space.

"Anyone with vacant beds is hoping the federal government will lease them at a much higher rate," Lisa Menard, acting commissioner of the Vermont Department of Corrections told lawmakers in February. "Immigrations and customs enforcement are looking to lease beds everywhere."

Three vacant Texas detention centers have been sold to private prison companies in the last few weeks, according to county officials and records filed with the national Municipal Securities Rulemaking Board.

Some of the jails require updating to meet U.S. Immigration and Customs Enforcement standards, but the existing facilities could put Texas at an advantage compared with other states where the companies would have to spend months building detention space.

Meanwhile, the traditional inmate-holding business is still declining. A proposed budget from the Texas Senate would end state contracts with four facilities, including three that are privately run, making it more important for those companies to get immigrant contracts to stay profitable.

ICE would not discuss how many beds the agency might need or its timetable for obtaining them. Agency spokesman Carl Rusnok declined to discuss any negotiations, citing the confidentiality of the federal contracting process.

At least one advocacy group is wary of the secretive process and of putting more detainees in privately run facilities after complaints and violations of inmate-care standards.

"If this is the plan to expand to the bottom of the barrel in detention centers, that should raise huge red flags for people concerned about immigrants' well-being and rights," said Bob Libal, executive director of Austin-based Grassroots Leadership, which seeks immigration and detention reform.

Management and Training Corp. recently purchased a South Texas detention center that was shuttered after a 2015 inmate riot left it uninhabitable. The Willacy County

NEIGHBORHOOD WORKSHOP NOTICE

For a proposed Special Use Permit and Site Plan for a new church building and associated infrastructure.

Date: April 17, 2017

Time: 6:00 p.m.

Place: Zion Lutheran Church
1700 NW 34th Street, Gainesville, FL 32605

Contact: eda engineers–surveyors–planners, inc. at (352) 373-3541

A neighborhood workshop will be held to discuss a proposed Special Use Permit and Site Plan for a new church building and associated infrastructure on tax parcel number 06416-030-000 located at 1700 NW 34th Street in Gainesville. This is not a public hearing. The purpose of this meeting is to inform neighboring property owners of the proposed development and to seek their comments.

Neighborhood Workshop Notice
06415-010-003 Zion Lutheran
ADAMS & SINDELAR
1729 NW 35TH WAY
GAINESVILLE, FL 32606

Neighborhood Workshop Notice
06415-020-009 Zion Lutheran
BARK ROBERT L
1786 NW 34TH ST
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
06415-020-017 Zion Lutheran
BRASINGTON-CRAPPS & CRAPPS
1826 NW 34TH ST
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
06415-020-015 Zion Lutheran
BUSTAMANTE VICTOR
1818 NW 34TH ST
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
06406-002-000 Zion Lutheran
CARTER & MAZZARELLA
5932 NW 27TH TER
GAINESVILLE, FL 32653-1927

Neighborhood Workshop Notice
06415-010-030 Zion Lutheran
COTTLER MATTHEW R & LINDA B
3519 NW 18TH AVE
GAINESVILLE, FL 32605-3671

Neighborhood Workshop Notice
06415-020-022 Zion Lutheran
FLOYD, ERNISTINE & S WAYNE
4350 NW 107TH ST
GAINESVILLE, FL 32606

Neighborhood Workshop Notice
06431-015-000 Zion Lutheran
FOUR ACRES MOL LLC
220 NORTH MAIN ST
GAINESVILLE, FL 32601

Neighborhood Workshop Notice
06415-020-004 Zion Lutheran
GIRIMONT TRINA MARIE
1768 NW 34TH ST #4
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
06415-010-023 Zion Lutheran
HERMAN THOMAS S TRUSTEE
2911 W HAWTHORNE RD
TAMPA, FL 33611

Neighborhood Workshop Notice
06415-010-002 Zion Lutheran
ARENS MATTHEW H & MARGARET M
1717 NW 35TH WAY
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
06415-010-024 Zion Lutheran
BAUMSTARCK, ADAM J & JOAN E
133 STREAM VALLEY BLVD
FRANKLIN, TN 37064-6901

Neighborhood Workshop Notice
06415-020-023 Zion Lutheran
BRAZZEL RICHARD
1848 NW 34TH ST #23
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
06405-001-012 Zion Lutheran
BYNUM, BARBARA & JOHN
PO BOX 733
FORT WHITE, FL 32038

Neighborhood Workshop Notice
06415-010-021 Zion Lutheran
CHRISTOU, EVANGELOS & DEMETRA
3517 NW 18TH PL
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
06415-020-014 Zion Lutheran
EDMISTON, MARK LIFE ESTATE
3031 NW 9TH PL
GAINESVILLE, FL 32605-5055

Neighborhood Workshop Notice
06415-020-002 Zion Lutheran
FLOYD, S WAYNE
4350 NW 107TH ST
GAINESVILLE, FL 32606

Neighborhood Workshop Notice
06415-020-006 Zion Lutheran
FOWLER MARK
1776 NW 34TH ST
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
06415-020-025 Zion Lutheran
GREENBRIAR TERRACE II LLC
4350 NW 107TH ST
GAINESVILLE, FL 32606

Neighborhood Workshop Notice
06415-010-019 Zion Lutheran
HGUYEN HUY
3527 NW 18TH PL
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
06431-045-000 Zion Lutheran
ARLEN SHELLEY A LIFE ESTATE
3328 NW 18TH AVE
GAINESVILLE, FL 32605-3706

Neighborhood Workshop Notice
06415-010-028 Zion Lutheran
BHARGAVA, VEENA & ANIL KISHORE
3526 NW 18TH AVE
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
06415-010-033 Zion Lutheran
BROWN DAWSON & JEAN W
1702 NW 35TH WAY
GAINESVILLE, FL 32605-3666

Neighborhood Workshop Notice
06406-004-000 Zion Lutheran
CAPEHART BARNEY & LYNNE LIFE ESTATE
1601 NW 35TH WAY
GAINESVILLE, FL 32605-4846

Neighborhood Workshop Notice
06415-010-001 Zion Lutheran
CLENDENIN & FISHER
1705 NW 35TH WAY
GAINESVILLE, FL 32605-3667

Neighborhood Workshop Notice
06415-002-046 Zion Lutheran
FLOYD M W & MARY
3540 NW 16TH BLVD
GAINESVILLE, FL 32605-3603

Neighborhood Workshop Notice
06415-020-019 Zion Lutheran
FONTNEAU, FRANCIS G IIIKATHARI
1834 NW 34TH ST
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
06405-001-002 Zion Lutheran
GADD & QUINN
1511 NW 35TH TER
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
06405-001-010 Zion Lutheran
HEIPP & MACADAMS-HEIPP H/W
1500 NW 35TH TER
GAINESVILLE, FL 32605-4832

Neighborhood Workshop Notice
06415-020-016 Zion Lutheran
HIRSHIK LIFE ESTATE & HIRSHIK
2511 NW 36TH DR
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
06405-003-000 Zion Lutheran
HOMEWOOD & HOMEWOOD TRUSTEES
3424 NW 15TH PL
GAINESVILLE, FL 32605-4825

Neighborhood Workshop Notice
06415-020-011 Zion Lutheran
JOHANNES & JOHANNES
1794 NW 34TH ST
GAINESVILLE, FL 32605-3727

Neighborhood Workshop Notice
06431-046-000 Zion Lutheran
KIRKLIN & RAY W/H
3300 NW 18TH AVE
GAINESVILLE, FL 32605-3706

Neighborhood Workshop Notice
06415-010-020 Zion Lutheran
MAZZEO GEORGE C & ROBERTA J
3523 NW 18TH PL
GAINESVILLE, FL 32605-3673

Neighborhood Workshop Notice
06405-001-001 Zion Lutheran
MCKENNA MICHAEL L
1521 NW 35TH TER
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
06405-001-003 Zion Lutheran
OSTER & RILEY H/W
1425 NW 35TH TER
GAINESVILLE, FL 32605-4829

Neighborhood Workshop Notice
06415-020-024 Zion Lutheran
PROIA, RICHARD R
1852 NW 34TH ST
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
06415-010-031 Zion Lutheran
ROOKS & SPOSETTI H/W
1726 NW 35TH WAY
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
06415-020-013 Zion Lutheran
RYDEN & RYDEN
1841 NW 35TH WAY
GAINESVILLE, FL 32605-3669

Neighborhood Workshop Notice
06415-020-026 Zion Lutheran
SMITH STANLEY K RITA J LIFE ESTATE
2707 NW 22ND AVE
GAINESVILLE, FL 32605-3823

Neighborhood Workshop Notice
06415-010-027 Zion Lutheran
HOWELL J ANDREAS & CATHERINE J
3522 NW 18TH AVE
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
06415-010-025 Zion Lutheran
JOHNSON KEVIN & COURTNEY
3508 NW 18TH AVE
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
06415-020-003 Zion Lutheran
LOTTENBERG & NIXON
1766 NW 34TH ST
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
06415-020-007 Zion Lutheran
MCCARTY PHYLLIS R
1780 NW 34TH ST UNIT # 7
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
06415-020-001 Zion Lutheran
MOHAMMED & VERMA
1760 NW 34TH ST UNIT 1
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
06415-010-032 Zion Lutheran
PAGE WILLIAM H & JUDITH W
1714 NW 35TH WAY
GAINESVILLE, FL 32605-3666

Neighborhood Workshop Notice
06406-003-000 Zion Lutheran
RICHTNER ULLA
1602 NW 35TH WAY
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
06415-010-026 Zion Lutheran
ROSS CAROL FELDT
3514 NW 18TH AVE
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
06405-006-000 Zion Lutheran
SALEM RAMI
3440 NW 15TH PL
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
06415-010-005 Zion Lutheran
STEIN GERALD H SARA E MORTON
LIFE ESTATE
1813 NW 35TH WAY
GAINESVILLE, FL 32605-3669

Neighborhood Workshop Notice
06415-020-012 Zion Lutheran
JAMES CECILE BURNETT
PO BOX 358747
GAINESVILLE, FL 32635

Neighborhood Workshop Notice
06431-013-000 Zion Lutheran
JOHNSTON JOHN J & PATRICIA G
3311 NW 18TH AVE
GAINESVILLE, FL 32605-3705

Neighborhood Workshop Notice
06415-020-020 Zion Lutheran
MALLOCH & MALLOCH
235 TREMONT LANE
SARASOTA, FL 34236

Neighborhood Workshop Notice
06415-010-029 Zion Lutheran
MCDANIEL ROBERT A & ANNA M
3525 NW 18TH AVE
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
06431-014-000 Zion Lutheran
NEW & SPEARS-NEW H/W
3321 NW 18TH AVE
GAINESVILLE, FL 32605-3705

Neighborhood Workshop Notice
06415-010-022 Zion Lutheran
PENNELL MARY N
3511 NW 18TH PL
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
06431-044-000 Zion Lutheran
RIVERA LUIS A
PO BOX 357113
GAINESVILLE, FL 32635-7113

Neighborhood Workshop Notice
06415-020-010 Zion Lutheran
ROSS MARY ANN VYDRA TRUSTEE
1790 NW 34TH ST UNIT 10
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
06415-010-006 Zion Lutheran
SISLER RAYMOND K & SUSAN K
PO BOX 358598
GAINESVILLE, FL 32635-8598

Neighborhood Workshop Notice
06415-020-018 Zion Lutheran
THOMPSON, CHRISTOPHER LSUSAN S
8515 CONGRESSIONAL DR
TALLAHASSEE, FL 32312

Neighborhood Workshop Notice
06405-001-011 Zion Lutheran
WAGNER W A & PATRICIA
1510 NW 35TH TER
GAINESVILLE, FL 32605-4832

Neighborhood Workshop Notice
06433-000-000 Zion Lutheran
WESTMINSTER PRESBYTERIAN CHURCH
1521 NW 34TH ST
GAINESVILLE, FL 32605-5033

Neighborhood Workshop Notice
06405-000-000 Zion Lutheran
WESTSIDE CHURCH OF GOD
1520 NW 34TH ST
GAINESVILLE, FL 32605-5040

Neighborhood Workshop Notice
06405-002-000 Zion Lutheran
WESTWOOD HILLS CHURCH OF GOD
TRUSTEES
GAINESVILLE, FL 32605-5040

Neighborhood Workshop Notice
06415-010-000 Zion Lutheran
WILLOWCROFT OWNERS ASSOCIATION
PO BOX 310
ALACHUA, FL 32616-0310

Neighborhood Workshop Notice
06415-020-008 Zion Lutheran
WITHERS RICHARD I
1782 NW 34TH ST UNIT 8
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
06415-010-004 Zion Lutheran
WYANT, DENNIS R TRUSTEE
1731 NW 35TH WAY
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
06415-020-021 Zion Lutheran
YOUNG, ROBERT GREGORY
1840 NW 34TH ST UNIT 21
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
06416-030-000 Zion Lutheran
ZION EVANGELICAL LUTHERAN CHURCH
1700 NW 34TH ST
GAINESVILLE, FL 32605-3727

Neighborhood Workshop Notice
5th Avenue
ROBERTA PARKS
616 NW 8 ST
GAINESVILLE, FL 32602

Neighborhood Workshop Notice
Azalea Trails
MARIE SMALL
1265 SE 12 AVE
GAINESVILLE, FL 32601

Neighborhood Workshop Notice
Carol Estates South
BECKY RUNNESTRAND
1816 NE 16 TER
GAINESVILLE, FL 32609

Neighborhood Workshop Notice
Debra Heights
SARAH POLL
PO BOX 14198
GAINESVILLE, FL 32604

Neighborhood Workshop Notice
Edgewood Hills
BONNIE O'BRIAN
2329 NW 30 AVE
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
Golfview
CHRIS MONAHAN
222 SW 27 ST
GAINESVILLE, FL 32607

Neighborhood Workshop Notice
Hazel Heights
ALLAN MOYNIHAN
PO BOX 357412
GAINESVILLE, FL 32635

Neighborhood Workshop Notice
Highland Court Manor
DAVID SOUTHWORTH
3142 NE 13 ST
GAINESVILLE, FL 32609

Neighborhood Workshop Notice
Kingswood Court
JOHN ORTON
5350 NW 8 AVE
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
Landmark Woods
JACK OSGARD
4332 NW 12 PL
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
CITY OF GAINESVILLE
ATTN: MIKE HOGE
PO BOX 490 MS 11
GAINESVILLE, FL 32627

Neighborhood Workshop Notice
REGINA HILLMAN
506 NW 30 STREET
GAINESVILLE, FL 32607

Neighborhood Workshop Notice
Cedar Grove II
HELEN HARRIS
1237 NE 21 ST
GAINESVILLE, FL 32641

Neighborhood Workshop Notice
Northwood at Possum Creek
WES WHEELER
4728 NW 37 WAY
GAINESVILLE, FL 32601

Neighborhood Workshop Notice
LEE NELSON
DIRECTOR OF REAL ESTATE – UF
204 TIGERT HALL
PO BOX 113100
GAINESVILLE, FL 32611-3100

Neighborhood Workshop Notice
Greater Northeast Community
MIRIAM CINTRON
915 NE 7 AVE
GAINESVILLE, FL 32601

Neighborhood Workshop Notice
Hibiscus Park
CAROL BISHOP
2616 NW 2 AVE
GAINESVILLE, FL 32607

Neighborhood Workshop Notice
Ironwood
NANCY TESTA
4207 NE 17 TER
GAINESVILLE, FL 32609

Neighborhood Workshop Notice
Kirkwood
JANE BURMAN-HOLTON
701 SW 23 PL
GAINESVILLE, FL 32601

Neighborhood Workshop Notice
Las Pampas
PETER JANOSZ
3418 NW 37 AVE
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
Ashton
ROXANNE WATKINS
4415 NW 58 AVE
GAINESVILLE, FL 32653

Neighborhood Workshop Notice
Capri
JOHN DOLES
4539 NW 37 TER
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
Creekwood
HELEN SCONYERS
2056 NW 55 BLVD.
GAINESVILLE, FL 32653

Neighborhood Workshop Notice
Duval
GILBERT S MEANS, SR
2153 SE HAWTHORNE RD, #111
PO BOX 7
GAINESVILLE, FL 32641

Neighborhood Workshop Notice
Gateway Park
HAROLD SAIVE
1716 NW 10 TER
GAINESVILLE, FL 32609

Neighborhood Workshop Notice
Grove Street
MARIA HUFF-EDWARDS
1102 NW 4 ST
GAINESVILLE, FL 32601

Neighborhood Workshop Notice
Hidden Lake
GEORGE KASNIC
2116 NW 74 PL
GAINESVILLE, FL 32653

Neighborhood Workshop Notice
Kensington Park
MAXINE HINGE
5040 NW 50 TER
GAINESVILLE, FL 32606

Neighborhood Workshop Notice
Lamplighter
LARRY NICHOLSON (PROP MGR)
5200 NE 50 DR
GAINESVILLE, FL 32609

Neighborhood Workshop Notice
Woodland Terrace
PETER PRUGH
207 NW 35 ST
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
Lincoln Estates
DORIS EDWARDS
1040 SE 20 ST
GAINESVILLE, FL 32601

Neighborhood Workshop Notice
Northwood
SUSAN W. WILLIAMS
PO BOX 357492
GAINESVILLE, FL 32653

Neighborhood Workshop Notice
Oakview
DEBRA BRUNER
914 NW 14 AVE
GAINESVILLE, FL 32601

Neighborhood Workshop Notice
Pine Park
DELORES BUFFINGTON
721 NW 20 AVE
GAINESVILLE, FL 32609

Neighborhood Workshop Notice
Porters Community
GIGI SIMMONS
712 SW 5 ST
GAINESVILLE, FL 32601

Neighborhood Workshop Notice
Raintree
RONALD BERN
1301 NW 23 TER
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
Royal Gardens
DOUGLAS BURTON
2720 NW 27 PL
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
Southeast Evergreen Trails
MAUREEN RESCHLY
1208 SE 22 AVE
GAINESVILLE, FL 32641

Neighborhood Workshop Notice
Stephen Foster
ROBERT PEARCE
714 NW 36 AVE
GAINESVILLE, FL 32609

Neighborhood Workshop Notice
Sugarhill
CYNTHIA COOPER
1441 SE 2 TER
GAINESVILLE, FL 32601

Neighborhood Workshop Notice
Mason Manor
JOANNA LEATHERS
2550 NW 13 AVE
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
Northeast Neighbors
SHARON BAUER
1011 NE 1 AVE
GAINESVILLE, FL 32601

Neighborhood Workshop Notice
Kirkwood
KATHY ZIMMERMAN
1127 SW 21 AVE
GAINESVILLE, FL 32601

Neighborhood Workshop Notice
Rainbows East
JOE THOMAS
5014 NW 24 TER
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
Ridgeview
ROB GARREN
1805 NW 34 PL
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
Shadow Lawn Estates
CONNIE SPITZNAGEL
3521 NW 35 PL
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
Springhill/Mount Olive
VIVIAN FILER
1636 SE 14 AVE
GAINESVILLE, FL 32641

Neighborhood Workshop Notice
Suburban Heights
BETH GRAETZ
4321 NW 19 AVE
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
Sutters Landing
PETER REBMAN
3656 NW 68 LN
GAINESVILLE, FL 32653

Neighborhood Workshop Notice
North Lincoln Heights
ANDREW LOVETTE SR.
430 SE 14 ST
GAINESVILLE, FL 32601

Neighborhood Workshop Notice
Northwest Estates
VERN HOWE
3710 NW 17 LN
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
Appletree
JUDITH MORROW
3616 NW 54 LANE
GAINESVILLE, FL 32653

Neighborhood Workshop Notice
Pleasant Street
DOTTY FAIBISY
505 NW 3 ST
GAINESVILLE, FL 32601

Neighborhood Workshop Notice
Rainbows End
SYLVIA MAGGIO
4612 NW 21 DR
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
Ridgewood
KERRI CHANCEY
1310 NW 30 ST
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
South Black Acres
DEANNA MONAHAN
14 SW 32 ST
GAINESVILLE, FL 32607

Neighborhood Workshop Notice
Springtree
KATHY MEISS
2705 NW 47 PL
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
Sugarfoot Community/Anglewood
HEATHER REILLY
426 SW 40 TERRACE
GAINESVILLE, FL 32607

Neighborhood Workshop Notice
Turkey Creek Forest Owners Assn
ATTN: RITA SMITH
8620 NW 13 ST, #210 CLUBHOUSE OFFICE
GAINESVILLE, FL 32653

Neighborhood Workshop Notice
University Park
JIMMY HARNSBERGER
402 NW 24 ST
GAINESVILLE, FL 32604

Neighborhood Workshop Notice
University Village
BRUCE DELANEY
1710 NW 23 ST
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
Forest Ridge/Henderson Heights
JUANITA CASAGRANDE
1911 NW 22 DRIVE
GAINESVILLE, FL 32605-3953

Neighborhood Workshop Notice
Appletree
CHRIS GARCIA
5451 NW 35 DR
GAINESVILLE, FL 32653

Neighborhood Workshop Notice
Ashton
ASHTON HOMEOWNERS ASSOC
5200 NW 43 ST STE 102
GAINESVILLE, FL 32606

Neighborhood Workshop Notice
Duckpond
STEVE NADEAU
2821 NW 23 DR
GAINESVILLE, FL 32605

Neighborhood Workshop Notice
Duckpond
MELANIE BARR
216 NE 5 ST
GAINESVILLE, FL 32601

Neighborhood Workshop Notice
Front Porch Florida, Duval
JUANITA MILES HAMILTON
2419 NE 8 AVE
GAINESVILLE, FL 32641

Neighborhood Workshop Notice
Porters
RUBY WILLIAMS
237 SW 6 ST
GAINESVILLE, FL 32601

Neighborhood Workshop Notice
Porters
INA HINES
320 SW 5 AVE
GAINESVILLE, FL 32601

Neighborhood Workshop Notice
School Board
VICK McGRATH
3700 NE 53 AVE
GAINESVILLE, FL 32609

Neighborhood Workshop Notice
University of Florida
LINDA DIXON
PO BOX 115050
GAINESVILLE, FL 32611

Neighborhood Workshop Notice
University Park
MEL LUCAS
620 E UNIVERSITY AVE
GAINESVILLE, FL 32601

Neighborhood Workshop Notice
Millennium Bank
DANNY GILLILAND
4340 NEWBERRY RD
GAINESVILLE, FL 32607

Neighborhood Workshop Notice
Florida Bank
LAUDE ARNALDI
13840 W NEWBERRY RD
NEWBERRY, FL 32669

Neighborhood Workshop Notice
LARRY SCHNELL
2048 NW 7 LN
GAINESVILLE, FL 32603

Neighborhood Workshop Notice
MAC McEACHERN
1020 SW 11 TER
GAINESVILLE, FL 32601

Neighborhood Workshop Notice
Stephen Foster Neighborhood Assoc, Inc
MARIA PARSONS
439 NW 37 AVENUE
GAINESVILLE, FL 32609

Neighborhood Workshop Notice
BOBBIE DUNNELL
3118 NE 11 TER
GAINESVILLE, FL 32609

Neighborhood Workshop Notice
JAMES WOODLAND
225 SE 14 PL
GAINESVILLE, FL 32601

Neighborhood Workshop Notice
Bivens North Association
PENNY WHEAT
2530 SW 14 DR
GAINESVILLE, FL 32608

Neighborhood Workshop Notice
STEWART WELLS
6744 NW 36 DR
GAINESVILLE, FL 32653

Neighborhood Workshop Notice
BELLINGTON'S CUSTOM SERVICE
% BRAXTON LINTON
1907 SE HAWTHORNE RD
GAINESVILLE, FL 32641

Neighborhood Workshop Notice
KAREN BILLINGS
2123 NW 72 PL
GAINESVILLE, FL 32653

engineers • surveyors • planners, inc
2404 NW 43rd Street
Gainesville, FL 32606

Neighborhood Workshop Notice
University Park
JIMMY HARNSBERGER
402 NW 24 ST
GAINESVILLE, FL 32604

NIXIE 322 SE 1 0004/06/17
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 32606660204 *1638-06477-31-40

engineers • surveyors • planners, inc
2404 NW 43rd Street
Gainesville, FL 32606

Neighborhood Workshop Notice
06415-010-000 Zion Lutheran
WILLOWCROFT OWNERS ASSOCIATION
~~PO BOX 316~~
~~ALACHUA, FL 32616-0316~~

NIXIE 322 SE 1 0004/06/17
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 32606660204 *1638-05814-31-40

Neighborhood Workshop Notice
Springtree
KATHY MEISS
2705 NW 47 PL
GAINESVILLE, FL 32605

32605-121705

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2404 NW 43rd Street
Gainesville, FL 32606

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Neighborhood Workshop Notice
Creekwood
HELEN SCONYERS
2036 NW 55 BLVD
GAINESVILLE, FL 32653

NIXIE 322 SE 1 0004/06/17
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 32606660204 *1638-06564-31-40

32653-21745

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2404 NW 43rd Street
Gainesville, FL 32606

UNITED STATES POSTAGE
PITNEY BOWES
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0000255201 MAR 31 2017
MAILED FROM ZIP CODE 32606

Neighborhood Workshop Notice
Turkey Creek Forest Owners Assn
ATTN: RITA SMITH
8620 NW 13 ST #210 CLUBHOUSE OFFICE
GAINESVILLE, FL 32653

NIXIE 322 SE 1 0004/06/17
RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
BC: 32606660204 *1638-05875-31-40

32653-78803

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Neighborhood Meeting - Sign-in-Sheet

Project: Proposed Special Use Permit and Site Plan for a new church building and associated infrastructure.

Date & Time: April 17, 2017 @ 6:00pm

Location: Zion Lutheran Church
1700 NW 34th Street, Gainesville, FL 32605

NAME	ADDRESS	PHONE	EMAIL
John [illegible]	5225 S.W. 64th St	373-9466	[illegible]
Chris Borgert	2250 NW 24th Ave	371-6407	cborgert@ufl.edu
Mike Johannes	1794 NW 34th St	256 426 2482	LTCMAJ443@GMAIL.com
GREG MEYER	7776 SW 88TH ST	8135971228	gmeyer[illegible]@gmail.com
Stephen New	3321 NW 18 Ave	376-3693	DRSLNEW@BellSouth.net
Matt + Margaret [illegible]	1717 NW 35th Way	443-1078	matthew.[illegible]@hotmail.com
Rusty [illegible]	20609 SW 83 Ave [illegible]	352-318-6090	Quality [illegible] INC
[illegible]	2249 NW 43rd St	352-318-1462	[illegible]@gmail.com
MARK FOWLER	1716 NW 34th St, GNV	352.359.3577	MR.KRAMOI@GMAIL.COM

eda engineers • surveyors • planners, inc.

Neighborhood Meeting Minutes

Project: Proposed Special Use Permit and Site Plan for a new church building and associated infrastructure.

Meeting Date & Time: April 17, 2017 @ 6:00pm

Location: Zion Lutheran Church
1700 NW 34th Street, Gainesville, FL 32605

Community Participants: See sign-in sheet

Attendees: As listed on attached Sign-in-Sheet

Project Representatives:

Civil Engineer:	Sergio Reyes, PE, eda engineers–surveyors-planners, inc Stephanie Sutton, eda engineers–surveyors-planners, inc.
Owner:	Chris Borgert, Chairman of Congregation
Contractor:	Rusty and Diana Kinnard.

Meeting Minutes:

Sergio Reyes, PE introduced the project and explained the purpose of the meeting. The church is proposing a New Sanctuary building for the church, about 200 seats- will be a unique building located close to intersection at 45° angle. Trying to save as many trees as possible on site and add minimal paving/impervious area.

FDOT is planning 34th St. improvements, limiting church entrance on 34th Street to right in/right out. Th site plan for this project will include entrance/exit for church on 16th Blvd. Existing building will remain and be connected by walkway/boardwalk to new building.

This meeting is the first step in process for City approval. We are here to gather feedback, submit to City, have public hearing at Plan Board, and then start construction.

Chris Borgert introduced himself as the Chairman of the Congregation at Zion. The church been here for 40+ years, and the existing building was meant to be temporary for about 10 years. The church has always had plans for an additional sanctuary. Architect, John Zona, built Baughman Center and Chapel in Live Oak-A1A top buildings in Florida. Hope to break ground this year. He introduced Rusty and Diana Kinnard who will be the contractors for the project. Goal is to have construction complete for Christmas services in 2018.

Sergio Reyes opened the meeting up for questions from attendees:

Question- Can you tell us more about 34th St. access? Is the road being widened?

Answer- FDOT extending left turn lane and adding hard median. Road isn't being widened- they are trying to improve safety without many improvements. Existing road width and available ROW limits the options.

Question-What will the entrance on 16th be like? Will it cross median?
Answer- No-will have median remain on 16th and entrance will be right in/right out only. People won't be able to make a left in or out. Will have to pass intersection and turn around. Will be an important to have new access on 16th.

Question-Were there other options proposed to DOT?
Answer- Yes-we proposed leaving the church entrance as-is, but they have a plan for safety improvements that go from University Ave to 39th Ave on 34th St.

Question-What is the timeline for FDOT improvements?
Answer- They may start construction this year, but more likely next year. As far as the church entrance, 50-60% of congregation comes from south and will be able turn left on 16th, then right into church. The church doesn't expect increased traffic-church activities will remain as-is, they have outgrown current building.

Question-How high is the front elevation of the building?
Answer- It's 55', below the tree line- the building is designed to blend into site.

Meeting was concluded at 6:20pm.

EXHIBIT
tabbies
D-8
Pages 1-2

engineers • surveyors • planners

40 years

August 30, 2017 – revised March 13, 2018

City of Gainesville
P.O. Box 490
Gainesville, Florida 32602

Re: Zion Evangelical Lutheran Church
General Performance Standards

To Whom It May Concern:

In accordance with Section 30-345 of the City of Gainesville Land Development Code (LDC), the following letter indicates how this project meets the general standards as follow:

1. *Fire and explosion hazards*: No storage of flammable or explosive materials is proposed at the site. All the uses proposed will be in accordance with the RSF-1 zoning category.

2. *Radiation*: No sources of ionizing radiation will be handled on-site.

3. *Electromagnetic radiation*: No sources of electromagnetic radiation will be handled on-site.

4. *Waste disposal*: The waste from the site will be handled by the central sewer system of Gainesville Regional Utilities. The waste from the site including stormwater will meet state, federal, and local agency guidelines.

5. *Vibration*: There will be no heavy equipment in use or located on the site. Therefore, there will be no on-site earth-born vibration that will exceed the limits as set forth in this section.

6. *Sound*: There will be no heavy equipment in use or located on the site and no manufacturing. Therefore, sounds on-site will not exceed the limits set forth in Chapter 15.

7. *Heat, cold, dampness or movement of air*: No activities will take place on-site that will produce adverse effects on the temperature, motion or humidity of the atmosphere beyond the lot lines.

8. *Lighting*: Lighting shall comply with requirements of this section for internal and external lighting as well as meet the height requirement for fixtures.

9. *Light pollution*: The external lights on the site shall be full cut-off, not allowing upward light distribution.

2404 NW 43rd Street, Gainesville, FL 32606 • Phone: (352) 373-3541 • Fax: (352) 373-7249 • www.edafl.com

10. *Odor*: There will be no adverse odors produced on-site. No manufacturing or chemical operations will occur on the site. The development will consist of use allowed by the RSF-1 zoning only.

11. *Air pollution emissions*: No manufacturing or chemical operations will occur on the site. No air pollution emissions will be produced on-site.

12. *Other air pollution*: There will not be an excess amount of dust or airborne particulate matter generated on this site. No air pollution will be created associated with the development of this site that will exceed the standards set by the Florida Department of Environmental Protection, or successor agency, or any governmental entity with regulatory jurisdiction, whichever standards are more stringent.

13. *Toxics*: There will be no emissions of toxic or noxious matter on this site. No manufacturing or chemical operations will occur on the site

14. *Utility service*: Utility service on-site shall comply with the requirements of this provision and be installed underground.

Sincerely,

Sergio Reyes, P. E.
Project Engineer

EXHIBIT
tabbies
D-9
Pages 1-7

PROPERTY OWNER AFFIDAVIT

Owner Name: Zion Lutheran Church			
Address: 1700 NW 34th Street Gainesville, FL 32605-3727	Phone: 352-376-9940		
Agent Name: eda engineers-surveyors-planners, inc.			
Address: 2404 NW 43rd Street Gainesville, FL 32606	Phone: 352-373-3541		
Parcel No.: 06416-030-000			
Acreage: 5.0	S: 35	T: 09	R: 19
Requested Action:			

I hereby certify that: I am the owner of the subject property or a person having a legal or equitable interest therein. I authorize the above listed agent to act on my behalf for the purposes of this application.

Property owner signature: Christopher J Borgert

Printed name: Christopher J. Borgert

Date: July 11, 2017

The foregoing affidavit is acknowledged before me this 11th day of July, 2017, by Audra Burrell, who is/are personally known to me, or who has/have produced Florida License Drivers as identification.

Audra Burrell
NOTARY SEAL

AUDRA BURRELL
MY COMMISSION # FF 940216
EXPIRES: December 1, 2019
Bonded Thru Notary Public Underwriters

Signature of Notary Public, State of Florida

Parcel: 06416-030-000

Search Date: 12/23/2016 at 1:47:35 PM

Taxpayer:	ZION EVANGELICAL LUTHERAN, CHU
Mailing:	1700 NW 34TH ST GAINESVILLE, FL 32605-3727
Location:	1700 NW 34TH ST GAINESVILLE
Sec-Twn-Rng:	35-09-19
Property Use:	07100 - Churches
Tax Jurisdiction:	Gainesville - 3600
Area:	Sec 1-36 OF 9-19
Subdivision:	PlaceHolder

Legal: THAT PART OF E 650 FT OF S 526.17 FT OF NE1/4 LYING N OF 16TH BLVD LESS R/W 34TH ST OR 971/411

	Property	Land	Land	Building	Misc	Total	Deferred	County	School	County	School	County	School	Total
YeaR	Use	Assessed Value	Just Value	Value	Value	Just Value	Value	Assessed	Assessed	Exempt	Exempt	Taxable	Taxable	Taxes
2016	Churches	175000	175000	179500	12300	366800	0	366800	366800	366800	366800	0	0	0
2015	Churches	175000	175000	181900	12400	369300	0	369300	369300	369300	369300	0	0	0
2014	Churches	175000	175000	184000	12400	371400	0	371400	371400	371400	371400	0	0	0
2013	Churches	175000	175000	186400	12500	373900	0	373900	373900	373900	373900	0	0	0
2012	Churches	175000	175000	188700	12600	376300	0	376300	376300	376300	376300	0	0	0
2011	Churches	175000	175000	193100	12700	380800	0	380800	380800	380800	380800	0	0	0
2010	Churches	175000	175000	195400	12700	383100	0	383100	383100	383100	383100	0	0	0
2009	Churches	175000	175000	197800	12800	385600	0	385600	385600	385600	385600	0	0	0
2008	Churches	175000	175000	200100	12900	388000	0	388000	0	388000	0	0	0	0
2007	Churches	175000	175000	187500	12900	375400	0	375400	0	375400	0	0	0	0
2006	Churches	175000	175000	164900	13000	352900	0	352900	0	352900	0	0	0	0

Land

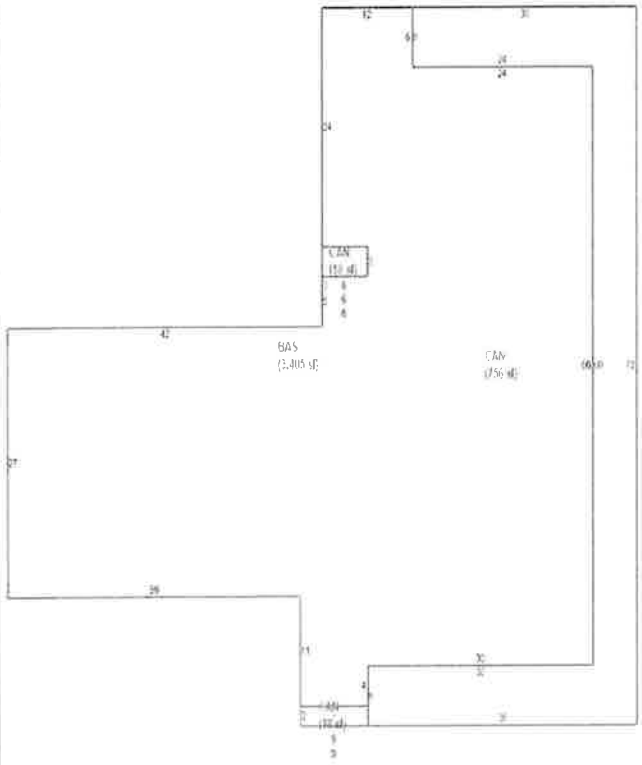
Use	Zoning Type	Zoning Desc	Unit Type	Units
Church	RSF1		Acre	5
			2016 Certified Land Just Value: 175000	**2016 Certified Land Assessed Value: 175000**

Building

Actual Year Built	1976
Effective Year Built	1986
Building Quality	Average
Building Style	Commercial
Building Use	Church
Bedrooms:	
Baths:	
Stories:	1.0
Exterior Wall 1:	Average
Exterior Wall 2:	N/A
Interior Wall 1:	Panel
Interior Wall 2:	Drywall
Floor Cover 1:	Carpet
Floor Cover 2:	N/A
Roof Cover:	Minimum
Roof Structure:	Mansard
AC:	Roof Top Air
Heating Type:	Forced Air
Heating System:	Electric
Total Square Feet:	4197

Footprint_file = 46933_46933.jpg

Heated Square Feet:	3405
Area Type	**Square Footage**
BAS (BASE AREA)	3405
CAN (Canopy (No Sides))	792



2016 Certified Building Value: 179500

Miscellaneous

Description	Unit Type	Units
4680 - Paving 1	SF	20000
5221 - Stg 1	SF	240
3800 - Drive/Walk	UNITS	375
4420 - Lights	UNITS	3
		2016 Certified Miscellaneous Value: 12300

Permit

County Permit information is supplied by the Alachua County Office of Codes Enforcement. The Alachua County Office of Codes Enforcement and the Property Appraiser's Office assume no liability whatsoever associated with the use or misuse of this public information data and will not be held liable as to the validity, correctness, accuracy, completeness, and / or reliability of this data.

Permit Number	Permit Type	Issue Date	Final Date	Appraisal Date	Comment
11-01375	BN	03/25/2011		01/24/2012	R/L
11-04877	RR	09/21/2011		01/24/2012	ROOF
05-01540	BN	03/30/2005	05/04/2005	01/11/2006	REMODEL

John Power TAX COLLECTOR
Serving Alachua County

2016 Roll Details — Real Estate Account At 1700 NW 34TH ST

Print this page

Real Estate Account #06416 030 000 | Parcel details | Latest bill | Full bill history

2016	2015	2014	2013	...	2002
NO TAXES DUE	NO TAXES DUE	PAID	PAID		NO TAXES DUE

Get Bills by Email

No taxes due

Owner: ZION EVANGELICAL LUTHERAN, CHU
1700 NW 34TH ST
GAINESVILLE, FL 32605-3727
Situs: 1700 NW 34TH ST

Account number: 06416 030 000
Alternate Key: 1046386
Millage code: 3600
Millage rate: 23.0735

Assessed value: 366,800
School assessed value: 366,800
Unimproved land value: 175,000

Exemptions

CHURCH: 366,800

Property Appraiser
Location is not guaranteed to be accurate.

2016 Annual bill View

Ad valorem: $0.00
Non-ad valorem: $0.00
Total Discountable: 0.00
No Discount NAVA: 0.00
Total tax:

Legal description

THAT PART OF E 650 FT OF S 526.17 FT OF NE1/4 LYING N OF 16TH BLVD LESS R/W 34TH ST OR 971/411

Location

Book, page, Item: –
Geo number: 35-09-19-06416030000
Range: 19
Township: 09
Section: 35
Neighborhood: 114300.99
Use code: 07100
Total acres: 5.000

VISA MasterCard American Express Cards DISCOVER

DIVISION OF CORPORATIONS

Detail by Entity Name

Florida Not For Profit Corporation
ZION EVANGELICAL LUTHERAN CHURCH, INC. OF GAINESVILLE, FLORIDA

Filing Information

Document Number	729956
FEI/EIN Number	59-2282003
Date Filed	06/18/1974
State	FL
Status	ACTIVE

Principal Address

1700 N.W. 34TH STREET
GAINESVILLE, FL 32605

Mailing Address

1700 N.W. 34TH STREET
GAINESVILLE, FL 32605

Registered Agent Name & Address

Brueggemann, John R
5225 SW 64th Street
Gainesville, FL 32508

Name Changed: 01/11/2014

Address Changed: 01/11/2014

Officer/Director Detail

Name & Address

Title Secretary

BRUEGGEMANN, JOHN R
5225 SW 64TH STREET
GAINESVILLE, FL 32608-4525

Title Treasurer

Marks, Steve
4527 NW 35th Terrace
Gainesville, FL 32605

Title President

BORGERT, CHRISTOPHER
2250 NW 24TH AVE
GAINESVILLE, FL 32605

Title VP

STAHMANN, ROBERT J
3756 SW 6TH PLACE
GAINESVILLE, FL 32607

Annual Reports

Report Year	Filed Date
2015	02/21/2015
2016	03/07/2016
2017	01/24/2017

2500 GALLON POLY-MART BLACK RAINWATER COLLECTION TANK

also called water storage container, water cistern, rainwater tank, water tank

Images may be inaccurate. See specs table below to ensure accuracy.

Quick Summary	
PART#	MPN: PM2500RHB / Store ID: X9458421
DIMENSIONS	96" Diameter x 95" Height
LIQUID ACCESS	3 Outlets, 1 Manway / Lid
WEIGHT / SHIP CLASS	360 lbs. / Ship Class 400
SHIPS FROM	TX
DRAWING	Poly-Mart PM2500RHB Drawing

- Complies with FDA standards 21 CFR 177.1520 (1) 3.1 and 3.2
- UV Stablized Resin to prolong the life of your tank
- BPA Free Polyethylene Resin
- 5 Year manufacturer warranty
- Features 16" Screened Inlet, 3/4" Brass Spigot, 2" Outlet, & 4" Overflow

OTHER COLOR OPTIONS

- Dark Brown - Rainwater Tank
- Dark Green - Rainwater Tank
- Dark Grey - Rainwater Tank
- Light Blue - Rainwater Tank

▾ Show More ▾

~~$1,499.00~~ **$1,079.95**

On Sale! Save 28% Guaranteed for 10 hours only

Qty: 1 ADD TO CART

ADD-ONS

Check items to add to the cart or select all

$29.99

Tank Gauge

$28.99

4" Round Leaf Eater Advanced Rain Head

▾ Show More ▾

EXHIBIT

tabbies

D-11

Pages 1-2

CITY OF GAINESVILLE
every path starts with passion
FLORIDA

APPLICATION FOR SPECIAL USE PERMIT

Planning & Development Services

OFFICE USE ONLY	
Petition No. _____	Fee: $_____
1st Step Mtg Date: _____	EZ Fee: $_____
Tax Map No. _____	Receipt No. _____
Account No. 001-670-6710-3401 [ ]	
Account No. 001-670-6710-1124 (Enterprise Zone) [ ]	
Account No. 001-670-6710-1125 (Enterprise Zone Credit [ ]	

Application for a special use permit will be accepted for review only after a pre-application conference (First Step Meeting). Application to be completed by applicant. Application must include a preliminary development plan. Incomplete applications will be returned to the applicant.

Name of Owner(s) (please print)
Name: Zion Evangelical Lutheran Church
Address:
1700 NW 34th Street
Gainesville, FL 32605
Phone: 352-376-9940 Fax:
Owner's Signature: affidavit provided
(If additional owners, please include on back)

Applicant(s)/Agent(s), if different
Name: eda engineers-surveyors-planners, inc.
Address:
2404 NW 43rd Street
Gainesville, FL 32606
Phone: 352-373-3541 Fax: 352-373-7249
sreyes@edafl.com

PROPERTY INFORMATION: (Information below applies to property for which a Special Use Permit is being requested.)
Street address: 1700 NW 34th Street, Gainesville, FL 32605
Tax parcel no(s): 06416-030-000
Legal description (use separate sheet, if needed): see attached

I hereby attest to the fact that the above supplied parcel number(s) and legal description(s) is (are) the true and proper identification of the area for which the permit is being requested.

Signature of applicant: Sue Lee Date: 8/29/17

Certified Cashier's Receipt:

A Special Use Permit is requested pursuant to Section 30, Subsection 91, Paragraph _____, of the Land Development Code, City of Gainesville, to allow the following use:

A preliminary site plan is/(is not) required and is/(is not) attached.

Existing zoning classification: RSF-1 Existing land use designation: RSF

Existing use of property: Religious Facility

SURROUNDING PROPERTY INFORMATION: (List all uses surrounding the subject property under "Existing use." Staff is available to supply zoning and land use information.)			
	Zoning	**Land Use**	**Existing Use**
North	PD	PD	Residential
South	RSF-1	RSF	Residential
East	RSF-1	RSF	Residential
West	RSF-1	RSF	Residential

TO THE APPLICANT: (Please sign the bottom of this application after you have read the following.)

- The City of Gainesville will notify owners of property within 400 feet of the subject property of this application.
- No application for a Special Use Permit shall be entertained within 2 years after the denial or withdrawal of a request for the same use for the same property.
- The City Plan Board's decision concerning a Special Use Permit may be appealed by the applicant to a hearing officer within 15 days of the date notification of the decision is sent by certified mail to the applicant.

Signature: _____ Date: 8/29/17

Name of Owner (please print)
Name: Zion Evangelical Lutheran Church
Address:
1700 NW 34th Street
Gainesville, FL 32605
Phone: 352-376-9940 Fax:
Owner's Signature: affidavit provided
(If additional owners, please list on separate sheet)

Name of Owner (please print)
Name:
Address:
Phone: Fax:
Owner's Signature:

Reference: Chapter 30, Land Development Code
City Code of Ordinances, Article VII, Division 5

EXHIBIT
D-12
Pages 1-7

engineers • surveyors • planners

40 years

Special Use Permit Application

Project Request: **A Special Use Permit application to permit construction of a new sanctuary building for the Zion Evangelical Lutheran Church.**

Project Location: **1700 NW 34th Street (tax parcel 06416-030-000)**

Project Owner: **Zion Evangelical Lutheran Church**

Submittal Date: **August 24, 2017**

Prepared By: **eda engineers – surveyors – planners, inc.**

2404 NW 43rd Street
Gainesville, FL 32606

www.edafl.com

Phone (352) 373-3541
Fax (352) 373-7249

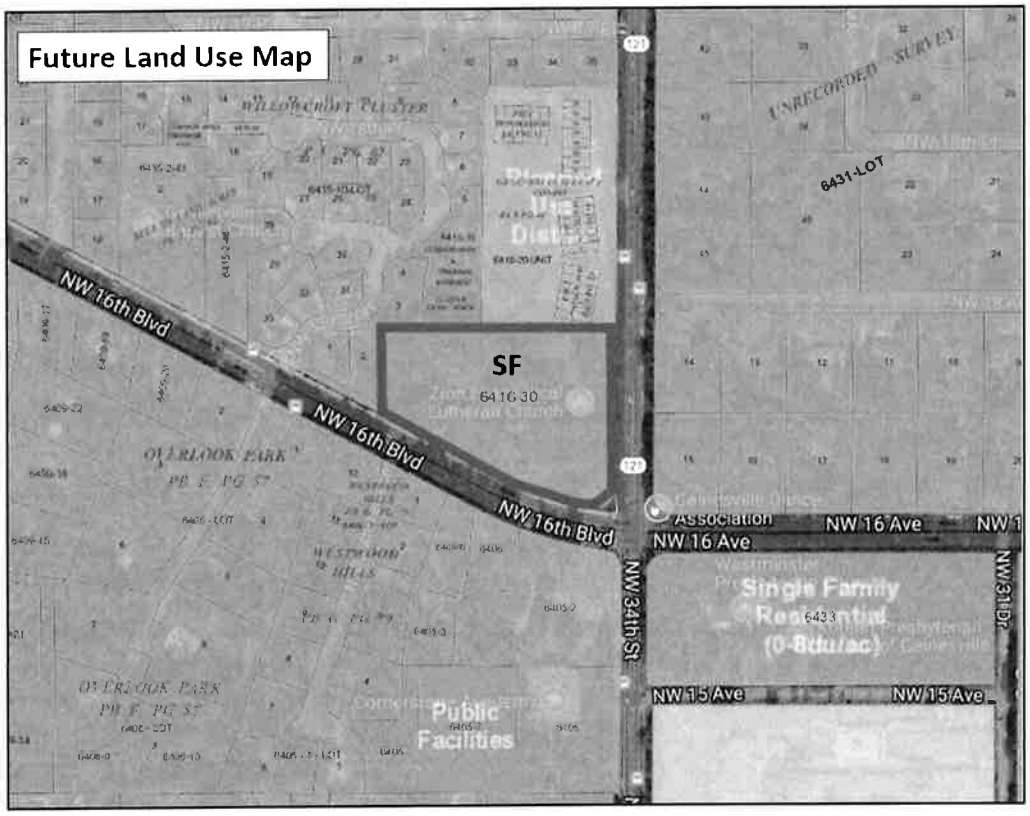
Project Background & Request

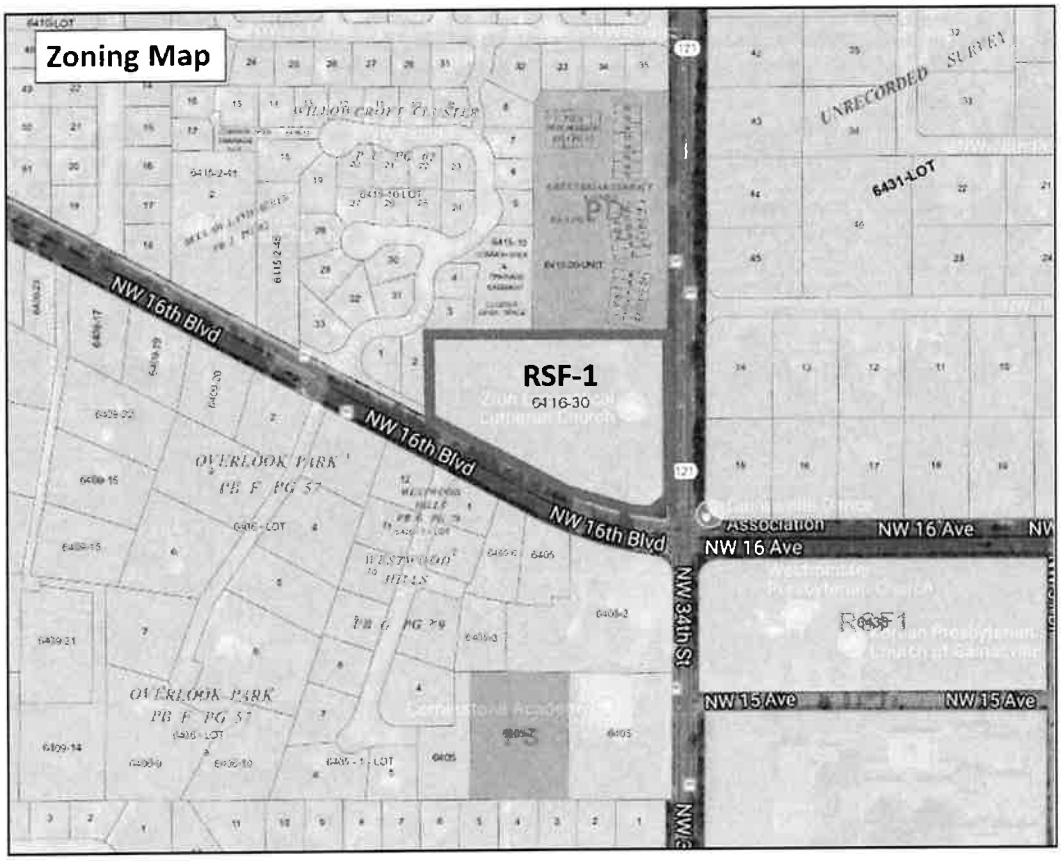
The owners of the subject property wish to construct a new sanctuary building with associated infrastructure improvements at 1700 NW 34th Street. The project site is located on approximately 5 (+/-) acres and has been the home of the existing Zion Evangelical Lutheran Church for decades. The proposed improvements will allow the church to expand its facilities in order to better serve the existing congregation.

A Site Plan is required to permit the proposed site improvements, including a new building, parking lot additions and a new stormwater area. In addition, a Special Use Permit (SUP) application is required because the City of Gainesville Land Development Code Sec. 30-91 requires that places of religious assembly located in the RSF-1, RSF-2 RSF-3 and RSF-4 zoning districts receive Special Use Permit approval from the City Plan Board. The proposed Site Plan / Special Use Permit is designed in compliance with the applicable criteria outlined in the LDC as described in this report and application.

Future Land Use Designation and Zoning District

The subject property currently has a Single Family Residential Future Land Use map designation and is within the RSF-1 zoning district, as shown on the following maps:





Surrounding Property Characteristics

	Future Land Use	Zoning	Existing Use
North	Single Family Residential, Planned Use District	RSF-1 PD	Single Family Residential Townhouses
South	Single Family Residential Single Family Residential	RSF-1 RSF-1	Private School Single Family Residential
East	Single Family Residential	RSF-1	Single Family Residential
West	Single Family Residential	RSF-1	Single Family Residential

Consistency with Comprehensive Plan

The subject property has a Single Family Future Land Use designation. Policy 4.1.1 of the Future Land Use Element defines the Single Family future land use category as:

The Single Family future land use category shall allow single-family detached dwelling at density of up to 8 dwelling units per acre. The Single-Family land use classification identifies those areas within the City that, due to topography, soil conditions, surrounding land uses and development patterns, are appropriate for single-family development. Land development regulations shall specify criteria for the siting of appropriate

community-level institutional facilities ***such as places of religious assembly,*** *public and private schools other than institutions of higher learning and libraries.*

As stated in the policy above, the Single Family future land use designation states that places of religious assembly are appropriate when proposed at a modest scale and designed to integrate into the surrounding community. The proposed addition to the existing Zion Evangelical Lutheran Church complies with these standards as it provides setbacks and landscape buffers from adjacent residential areas and is designed to focus activity toward the public streets and is therefore consistent with the intent of the Single Family future land use designation.

In addition, the subject property has Single Family 1 (RSF-1) zoning designation that implement the Single Family Future Land Use designation. Policy 4.7.1 includes a table which identifies the corresponding/implementing zoning district for each future land use category. This table indicates that the corresponding zoning districts for the Single Family future land use category are RSF-1, RSF-2, RSF-3, RSF-4, RSF-R, CON, PD and PS.

Consistency with Land Development Code

As stated, the subject property has a RSF-1 zoning district designation. Places of religious assembly are specifically listed as a permitted use by Special Use Permit in Sec. 30-51(c)(2) of the Land Development Code. Specifically, Sec. 30-51(a) of the LDC states that *the single family districts are established for the purpose of providing areas for low density single-family residential development with full urban services at locations convenient to urban facilities, neighborhood convenience centers, neighborhood shopping centers and activity centers. These districts are characterized by single-family residential structures designed and located so as to protect the character of single-family residential neighborhoods.* Further, Sec. 30-51(b) indicates that these zoning districts are designed to protect essential characteristics of existing development and neighborhoods, encourage development on vacant land where characteristics are suitable for development and develop in areas served by urban services and facilities.

The proposed sanctuary building will help serve the existing Zion Evangelical Lutheran Church that has been a fixture in the neighborhood for decades. The property is currently developed with a church facility and appropriate urban public facilities are available to serve the proposed church expansion. This Site Plan that proposes the church expansion has been prepared sensitively in relation to the abutting neighborhood, thus meeting the intent of these residential zoning districts. Specifically, the proposed sanctuary building has been placed oriented toward the intersection of NW 16th Blvd and NW 34th Street and is at least 50 feet from all abutting residential lots.

Special Use Permit Criteria

The proposed improvements to the existing church facility are consistent with the criteria outlined in Sec. 30-91 and Sec. 30-233. These code citations are cited below, followed by the applicant's response to each requirement:

Sec. 30-91 – Places of Religious Assembly

(a) Within the RSF-1, RSF-2, RSF-3 and RSF-4 districts, places of religious assembly are allowed upon the granting of a special use permit, subject to the following additional dimensional requirements:

(1) Minimum lot area shall be one acre for each place of religious assembly with a building code capacity of 100 persons or less plus an additional one-half for each additional 50 persons of building code capacity.

Response: Based on the size of the parcel, a place of religious assembly building with up to 500 seats is allowed. The proposed building is approximately 200 seats.

(2) Minimum yard setbacks:

a. Front: 25 feet
b. Side, interior: 50 feet and 45% angle of light
c. Side, street: 25 feet
d. Rear: 50 feet and 45% angle of light

Response: The proposed site plan meets each of the above referenced building setbacks. The proposed building is in compliance with the setbacks required above.

Sec. 30-233 – Criteria for issuance

No special use permit shall be approved by the city plan board unless the following findings are made concerning the proposed special use:

(1) That the use or development complies with all required regulations and standards of this chapter and all other applicable regulations.

Response: As indicated in this report, the proposed sanctuary building and related uses are consistent with the underlying Single Family Residential future land use designation and RSF-1 zoning district and complies with all associated regulations. Specifically, the proposed site plan is consistent with the use-specific regulations outlined in Sec. 30-91. In addition, the project is located in an area with adequate urban public facilities and services to serve the proposed development.

(2) That the proposed use or development will have general compatibility and harmony with the uses and structures on adjacent and nearby properties.

Response: **The subject property has historically operated as a church facility and is compatible with the existing land use pattern of adjacent properties, including single family residential homes. In addition, the proposed site plan has been designed to orient the activity toward the street and the new building is placed away from the adjacent residences.**

(3) That necessary public utilities are available to the proposed site and have adequate capacity to service the proposed use and development.

Response: **Electric, gas, water and sanitary sewer are available to serve the site at an adequate level of service.**

(4) That the use or development is serviced by streets of adequate capacity to accommodate the traffic impacts of the proposed use.

Response: **The proposed building will not result in an increased impact that will exceed the approved level of service standards for the local road network. The project is located in Zone B of the Transportation Mobility Program Area (TMPA), which encourages infill development.**

(5) That screening and buffers are proposed of such type, dimension and character to improve compatibility and harmony of the proposed use and structure with the uses and structures of adjacent and nearby properties.

Response: **As part of the Site Plan submittal, a landscape plan prepared by a registered Landscape Architect is included to bring the site into code compliance for on-site landscaping.**

(6) That the use or development conforms with the general plans of the city as embodied in the city comprehensive plan.

Response: **The Single Family Residential Future Land Use category identifies those areas within the City that allow for residential development. In addition, the category also allows 'appropriate community-level institutional facilities such as places of religious assembly, public and private schools other than institutions of higher learning, and libraries.' The proposed sanctuary building will serve the existing church facility that has been woven into the fabric of the area for years.**

In addition, the proposed church expansion is consistent with FLUE Polity 1.1.1, which states that 'all planning shall be in the form of complete and integrated communities containing housing, shops, work places, schools, parks and civic facilities essential to the daily life of residents.' The Zion Evangelical Lutheran Church is a civic facility that has served the local community for many years and the proposed improvements will allow the church to continue their ministry.

(7) That the proposed use or development meets the level of service standards adopted in the comprehensive plan and conforms with the concurrency management requirements of this chapter as specified in article III, division 2.

Response: **All required public facilities are readily available to serve the site and the proposed development associated with the proposed Special Use Permit application will not result in an increase beyond the approved level of service standards for the applicable public facilities serving the site and therefore, is in conformance with the level of service standards and concurrency management requirements in the Comprehensive Plan.**

EXHIBIT
tabbies
D-13
Pages 1-3

CITY OF GAINESVILLE
every path starts with passion
FLORIDA

PLANNING AND DEVELOPMENT SERVICES DEPARTMENT
PLANNING DIVISION
PO Box 490, Station 12
Gainesville, FL 32627-0490
P: (352) 334-5023
F: (352) 334-3259

PUBLIC NOTICE SIGNAGE AFFIDAVIT

Petition Name _____

Applicant (Owner or Agent) eda engineers. surveyors. planners, inc

Tax parcel(s) 6416-30

Being duly sworn, I depose and say the following:

1. That I am the owner or authorized agent representing the application of the owner and the record title holder(s) of the property described by the tax parcel(s) listed above;
2. That this property constitutes the property for which the above noted petition is being made to the City Of Gainesville;
3. That this affidavit has been executed to serve as posting of the "Notice of Proposed Land Use Action" sign(s) which describes the nature of the development request, the name of the project, the anticipated hearing date, and the telephone number(s) where additional information can be obtained. In addition, the applicant has securely posted the sign(s) on the property along each street frontage, at intervals of not more than four hundred (400) feet, and set back no more than ten (10) feet from the street and visible from the street. If the property does not abut a public right-of-way, signs have been placed at the nearest public right-of-way with an indication of the location of the subject property.
4. That the applicant has posted the sign(s) at least fifteen (15) days prior to the scheduled public hearing date; or for Historic Preservation Certificate of Appropriateness applications, at least ten (10) days prior to the scheduled public hearing date.
5. That the applicant shall maintain the signs(s) as provided above until the conclusion of the development review and approval process and that the signs shall be removed within ten (10) days after the final action has been taken on the development application.
6. That I (we), the undersigned authority, hereby certify that the foregoing statements are true and correct.
7. _____
8. Melissa Watson — Applicant (signature)

Melissa Watson
Applicant (print name)

STATE OF FLORIDA,
COUNTY OF ALACHUA
Before me the undersigned, an officer duly commissioned by the laws of the State of Florida, on this 11th day of April, 2018, personally appeared who having been first duly sworn deposes and says that he/she fully understands the contents of the affidavit that he/she signed.
Debbie Wallen Notary Public
My Commission expires: 7-22-18

RECORDING SPACE

DEBBIE WALLEN
Notary Public - State of Florida
My Comm. Expires Jul 22, 2018
Commission # FF 127615

Form revised on March 11, 2014. Form location: http://www.cityofgainesville.org/PlanningDepartment.aspx

FOR OFFICE USE ONLY
Petition Number _____ Planner _____


CITY OF GAINESVILLE
NOTICE
OF PROPOSED
LAND USE ACTION
A PUBLIC HEARING IS SCHEDULED TO CONSIDER A REQUEST FOR:
A REQUEST FOR A SPECIAL USE PERMIT FOR A PLACE
OF RELIGIOUS ASSEMBLY ON PARCEL 6416-30 ZONED RSF-1
AND A DEVELOPMENT PLAN FOR A NEW SANCTUARY BUILDING
LOCATED AT 1100 NW 34th Street.
WHEN: APRIL 26, 2018 @ 6:30pm
WHERE: CITY HALL AUDITORIUM
200 E. UNIVERSITY AVE
FOR MORE INFORMATION CONTACT THE PLANNING DEPARTMENT AT 334-5023
Additional details will be posted on our website prior to the meeting.
Please visit us at www.cityofgainesville.org/planningdepartment


CITY OF GAINESVILLE
NOTICE
OF PROPOSED
LAND USE ACTION
A PUBLIC HEARING IS SCHEDULED TO CONSIDER A REQUEST FOR:
A REQUEST FOR A SPECIAL USE PERMIT FOR A PLACE OF RELIGIOUS ASSEMBLY ON PARCEL 6416-30, ZONED RSF-1, AND A DEVELOPMENT PLAN FOR A NEW SANCTUARY BUILDING LOCATED AT 1700 NW 31ST STREET.
WHEN: APRIL 26, 2018 @ 6:30 PM
WHERE: CITY HALL AUDITORIUM 200 E UNIVERSITY AVE
FOR MORE INFORMATION CONTACT THE PLANNING DEPARTMENT AT 334-5023
Additional details will be posted on our website prior to the meeting.
Please visit us at www.cityofgainesville.org/planningdepartment

Appendix E

Development Plan

1 BASEMENT PLAN
SCALE: 3/16" = 1'-0"

ZONArchitecture
Distinctive Architecture, Planning & Design
2200 BELFORT ROAD JACKSONVILLE, FL 32216
Tel: (904)997-1799 Email: jz@zonarchitecture.com FAX: 997-1999

ZION LUTHERAN SANCTUARY
1700 NW 34th St, Gainesville, FL 32605 - #Site City, #Site State #Site Postcode

JOSEPH ZONA III
ARCHITECT - FL
9089

DATE	ISSUE / REVISION
3.31.14	PRICING ISSUE

BASEMENT PLAN

A302

1 FLOOR PLAN
SCALE: 3/16" = 1'-0"

ZONArchitecture
Distinctive Architecture, Planning & Design
2560 BELFORT ROAD JACKSONVILLE, FL 32216
Tel: (904)737-3790 Email: jz@zona-associates.com AR: 9089

ZION LUTHERAN SANCTUARY

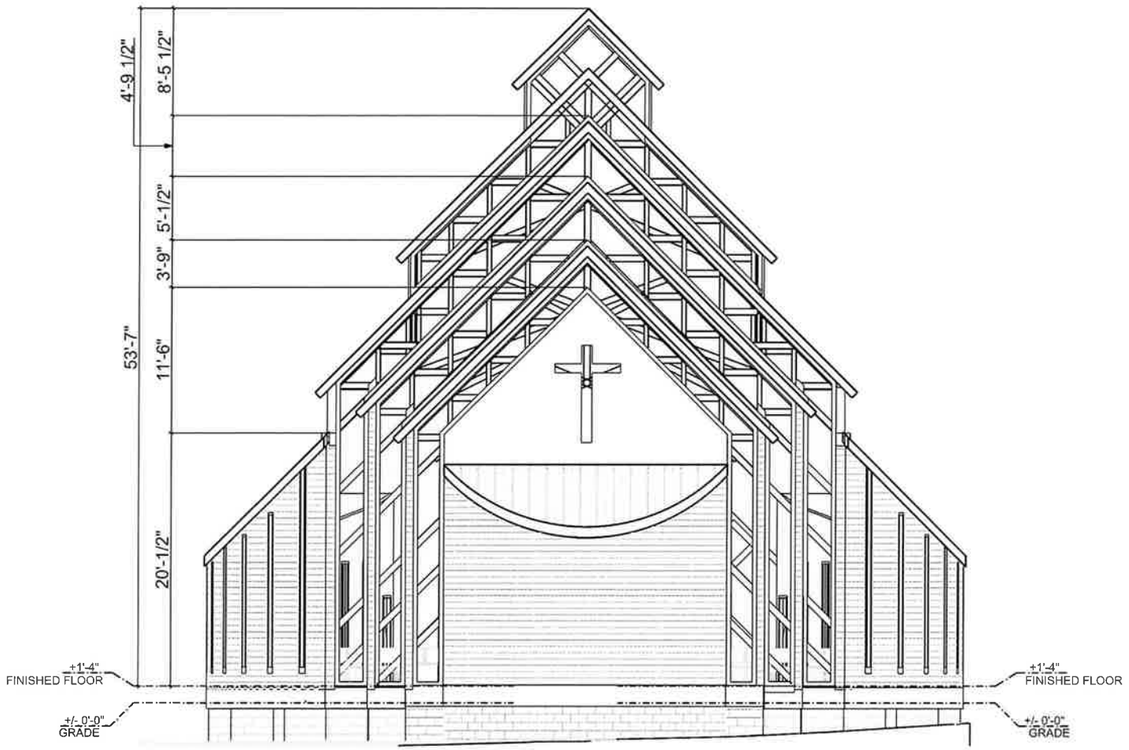
1700 NW 34th St, Gainesville, FL 32605 - #Site City, #Site State #Site Postcode

JOHN ZONA III
ARCHITECT, FL
9089

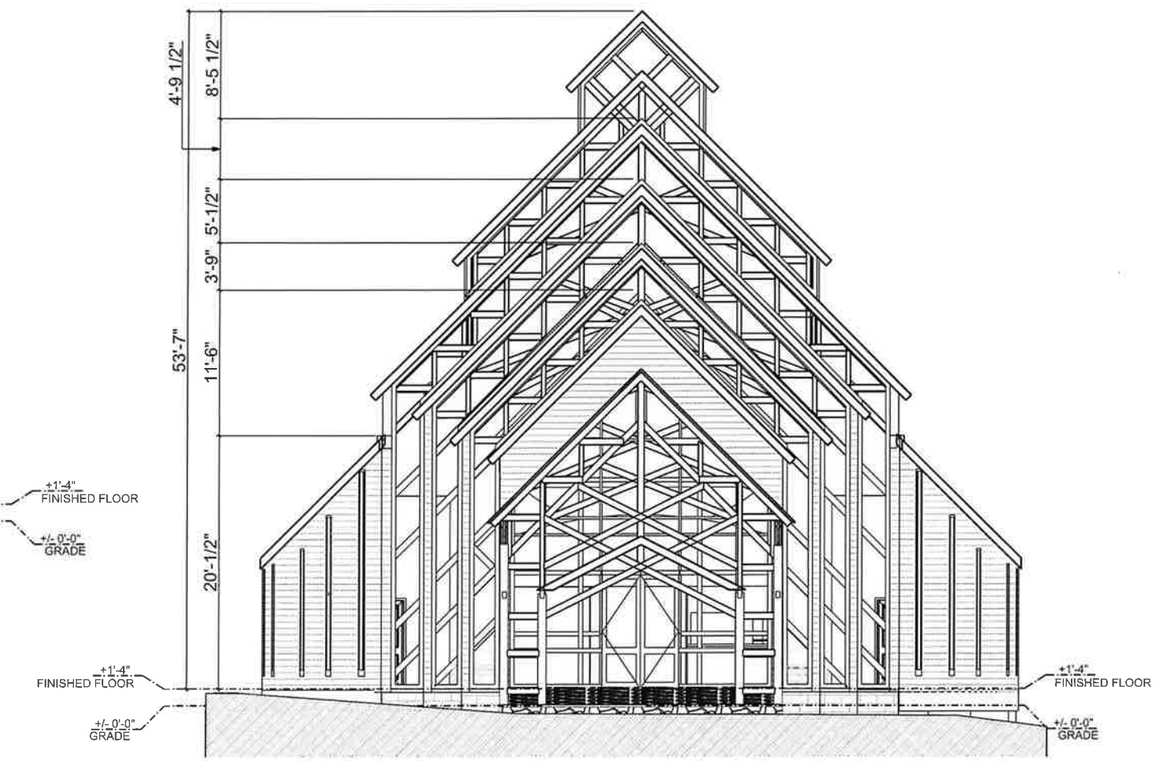
DATE	ISSUE / REVISION
3.31.14	PRICING ISSUE

FLOOR PLAN

A305



1 EAST ELEVATION
SCALE: 3/16" = 1'-0"



2 WEST ELEVATION
SCALE: 3/16" = 1'-0"

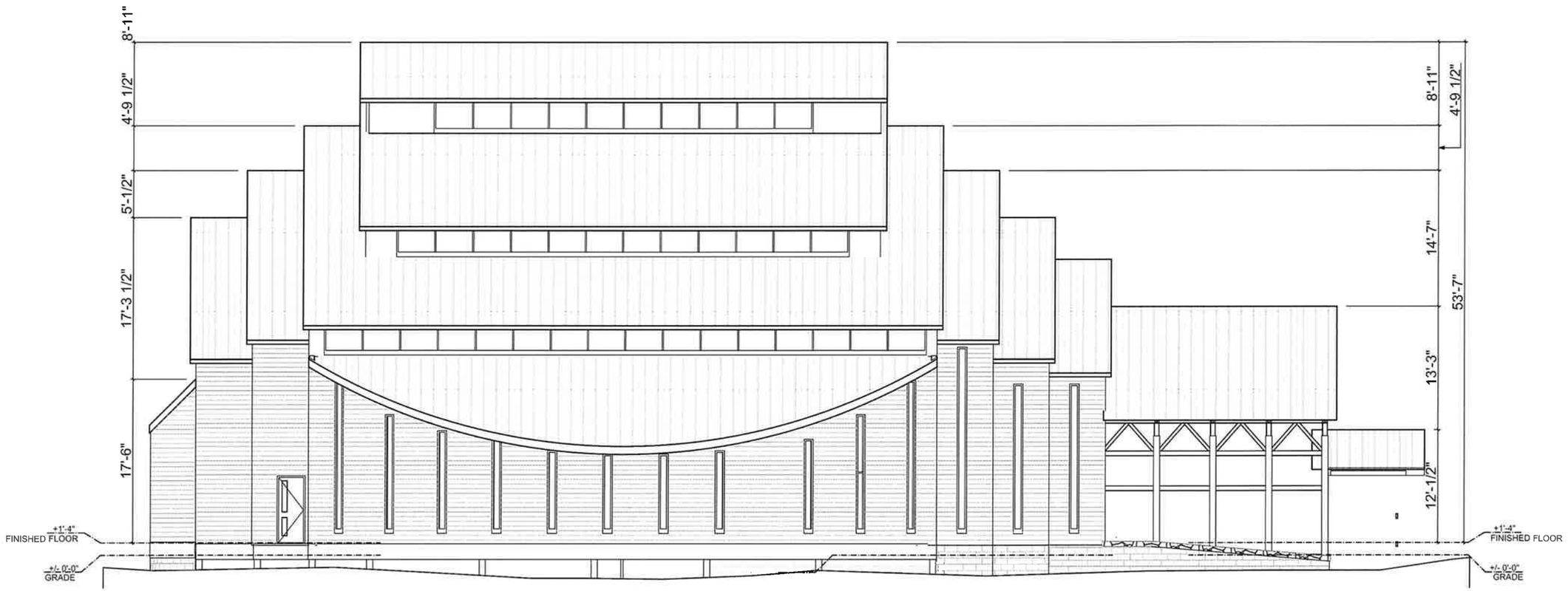
ZONAArchitecture
Distinctive Architecture, Planning & Design

ZION LUTHERAN SANCTUARY
1700 NW 34th St, Gainesville, FL 32605 - #Site City, #Site State #Site Postcode

DATE	ISSUE / REVISION
3.31.14	PRICING ISSUE

ELEVATIONS

A312



1 NORTH ELEVATION
SCALE: 3/16" = 1'-0"

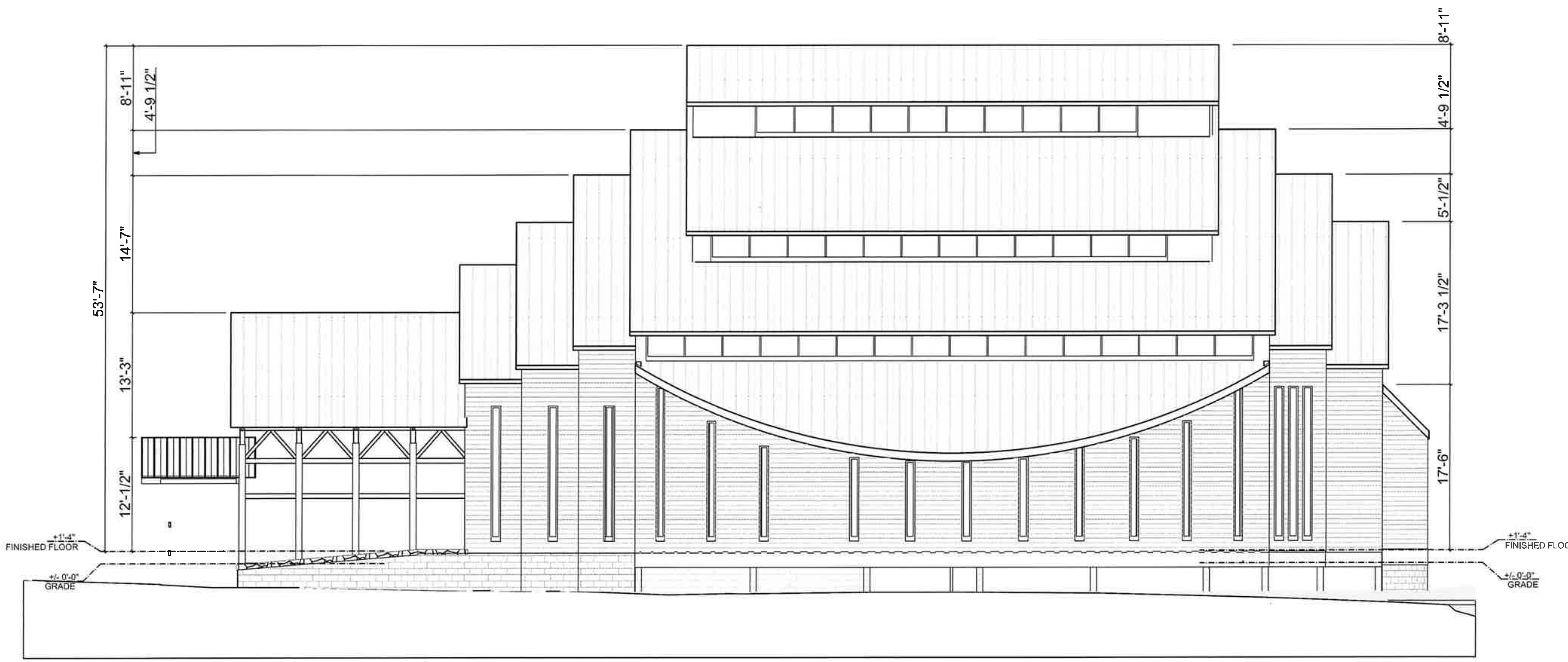
ZONAarchitecture
Distinctive Architecture, Planning & Design

ZION LUTHERAN SANCTUARY
1700 NW 34th St, Gainesville, FL 32605 - #Site City, #Site State #Site Postcode

DATE	ISSUE / REVISION
3.31.14	PRICING ISSUE

ELEVATIONS

A313



1 SOUTH ELEVATION
SCALE 3/16" = 1'-0"

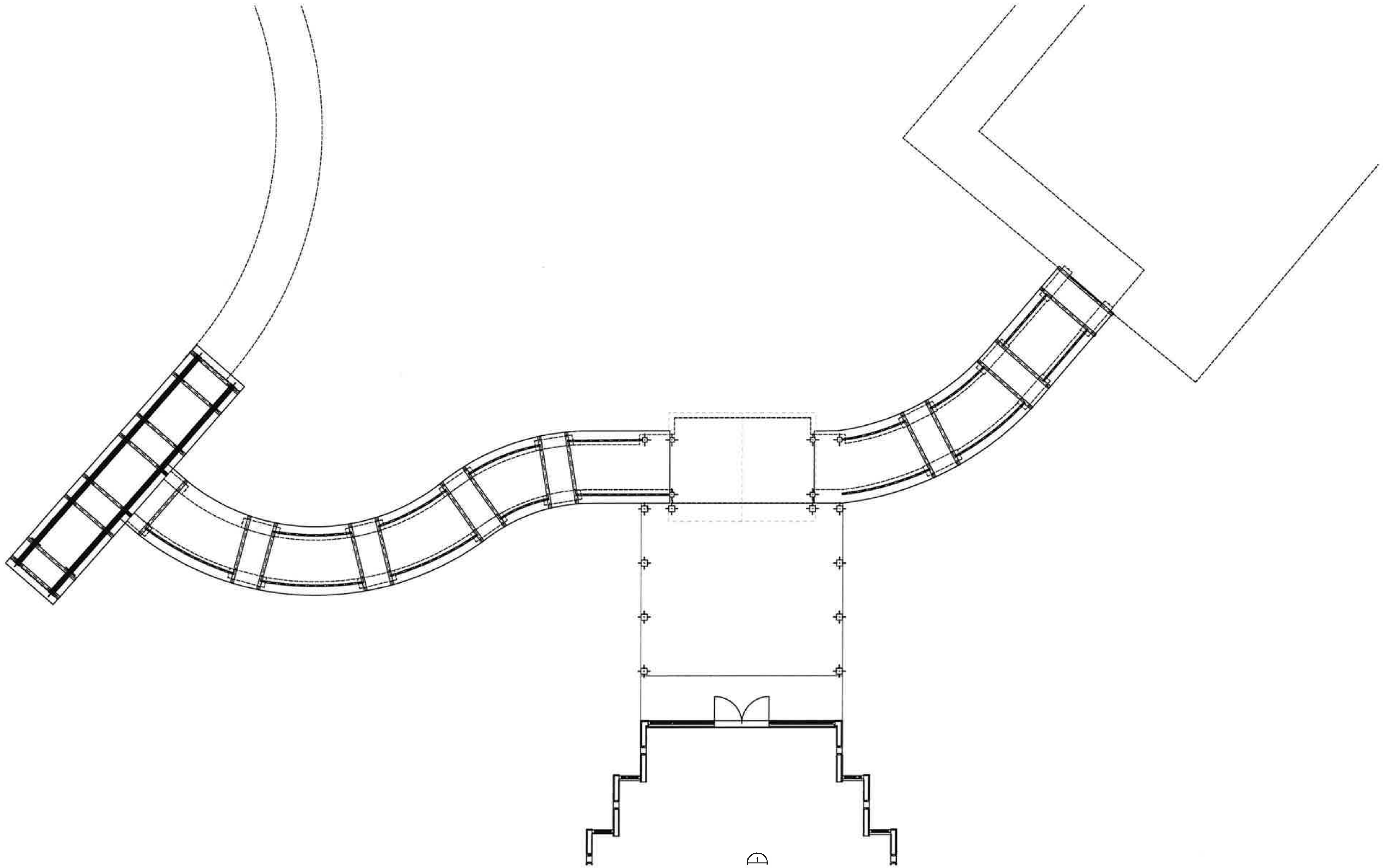
ZON Architecture
Distinctive Architecture, Planning & Design

ZION LUTHERAN SANCTUARY
1700 NW 34th St, Gainesville, FL 32605 - #Site City, #Site State #Site Postcode

DATE	ISSUE / REVISION
3.31.14	PRICING ISSUE

ELEVATIONS

A314



1 COVERED WALKING PATH
SCALE: 3/16" = 1'-0"

ZONA Architecture
Distinctive Architecture, Planning & Design
2600 BELFORT ROAD JACKSONVILLE, FL 32216
Tel.: (904)371-2790 · Email: jz3@zona-associates.com · AR: 9089

ZION LUTHERAN SANCTUARY
1700 NW 34th St, Gainesville, FL 32605 - #Site City, #Site State #Site Postcode

JOHN ZONA III
ARCHITECT - FL
9089

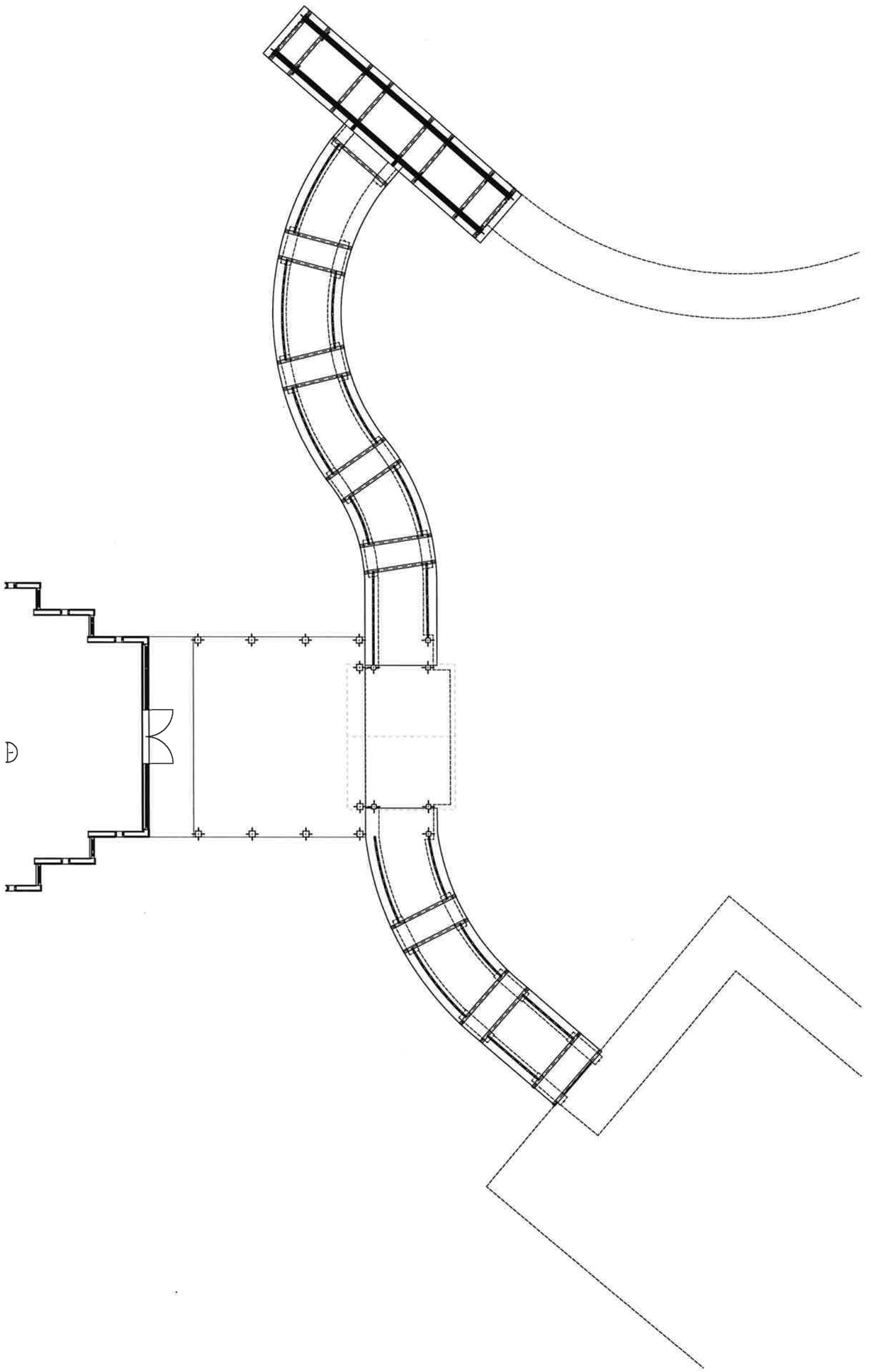
DATE	ISSUE / REVISION	DATE	ISSUE / REVISION
3.31.14	PRICING ISSUE		

COVERED WALIKNG PATH

A316

1 COVERED WALKING PATH

SCALE: 3/16" = 1'-0"



A316	COVERED WALKING PATH

DATE	ISSUE / REVISION	DATE	ISSUE / REVISION
3.31.14	PRICING ISSUE		

JOHN ZONA III
ARCHITECT - FL
9089

ZION LUTHERAN SANCTUARY

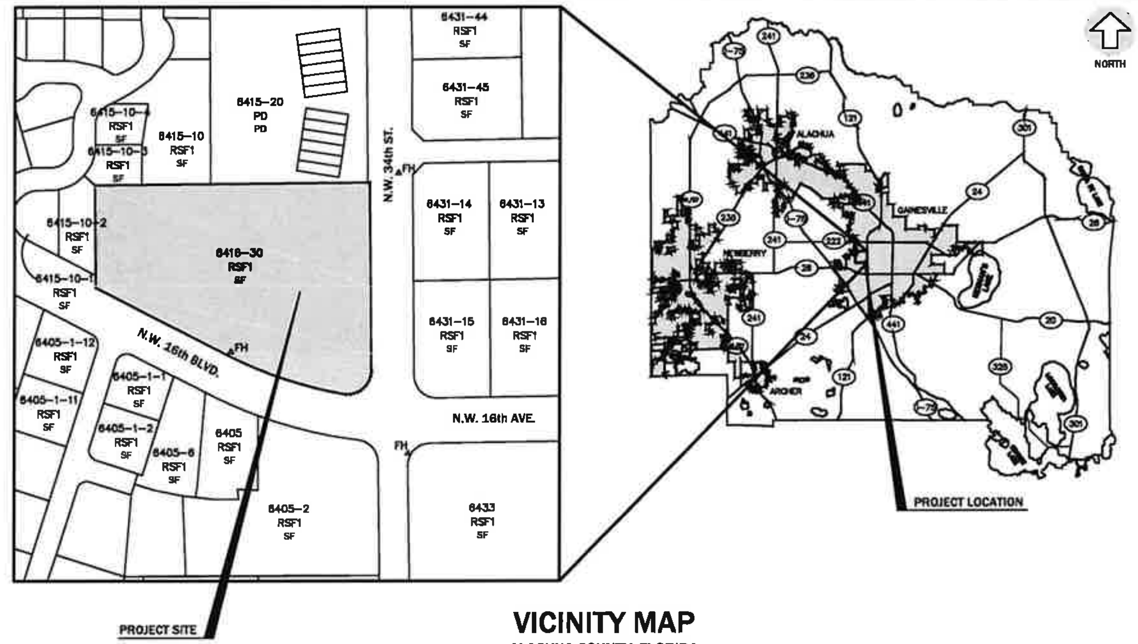
1700 NW 34th St, Gainesville, FL 32605 - #Site City, #Site State #Site Postcode

ZONA Architecture
Distinctive Architecture, Planning & Design
2600 BELFORT ROAD JACKSONVILLE, FL 32216
Tel.: (904)371-2790 Email: jz@zona-associates.com · AR: 9089

ZION EVANGELICAL LUTHERAN CHURCH

CITY OF GAINESVILLE, FLORIDA

DEVELOPMENT INFORMATION		
1.	PROJECT OWNER:	ZION EVANGELICAL LUTHERAN CHURCH 1700 N.W. 34TH STREET GAINESVILLE, FL 32605
2.	NAME OF PROJECT:	ZION EVANGELICAL LUTHERAN CHURCH
3.	PROJECT DESCRIPTION:	A PROPOSED SANCTUARY WITH ASSOCIATED PAVING, GRADING AND UTILITY IMPROVEMENTS. THE EXISTING BUILDING WILL BE UTILIZED FOR OFFICE, MEETING, AND RECREATIONAL USES.
4.	PROJECT ADDRESS:	1700 N.W. 34TH STREET GAINESVILLE, FL 32605
5.	TAX PARCEL NUMBER:	06416-030-000
6.	SECTION/TOWNSHIP/RANGE:	SECTION 35, TOWNSHIP 9 SOUTH, RANGE 19 EAST
7.	ZONING:	SINGLE FAMILY RESIDENTIAL (RSF1)
8.	FUTURE LAND DESIGNATION:	SINGLE FAMILY RESIDENTIAL (SF)
9.	A FLOOD PLAIN IS LOCATED ON SITE BUT NOT CONTAINED IN THE PROJECT AREA.	
10.	IRRIGATION SYSTEM IS PROVIDED FOR LANDSCAPED AREAS. A RAIN COLLECTION SYSTEM WILL BE UTILIZED FOR IRRIGATION.	
11.	THE STORMWATER SYSTEM WILL BE PERMITTED WITH THE ST. JOHN'S RIVER WATER MANAGEMENT DISTRICT.	
12.	THIS PROJECT IS NOT AFFECTED BY THE GATEWAY, GREENWAY, SURFACE WATER, WELL FIELD, HISTORIC OR NATURE PARK DISTRICTS.	
13.	THIS SITE IS LOCATED IN ZONE B OF THE TRANSPORTATION MOBILITY PROGRAM AREA (TMPA) AND COMPLIES WITH POLICY 10.1.15 TRANSPORTATION MOBILITY ELEMENT.	
14.	SIGNAGE SHALL BE PERMITTED UNDER A SEPARATE COVER.	
15.	NO SPECIAL FIRE PROTECTION CONCERNS ARE PROPOSED FOR THIS BUILDING. THE BUILDING SHALL COMPLY WITH THE FLORIDA FIRE PREVENTION CODE.	
16.	THE PROJECT SITE WILL MEET ALL NPDES CRITERIA DURING AND AFTER CONSTRUCTION.	
17.	TRASH AND RECYCLING FACILITIES ARE EXISTING AND WILL BE LOCATED ON SITE.	
18.	FIRE HYDRANTS AND STABILIZED SURFACES MUST BE IN SERVICE PRIOR TO THE ACCUMULATION OF COMBUSTIBLES ON SITE. SEE VICINITY MAP (THIS SHEET) FOR FIRE HYDRANT LOCATIONS.	
19.	IN-BUILDING PUBLIC SAFETY RADIO ENHANCEMENT SYSTEMS SHALL BE PROVIDED IN ALL BUILDINGS WHERE MINIMUM RADIO SIGNAL STRENGTH FOR FIRE DEPARTMENT COMMUNICATIONS IN NOT ACHIEVED AT A LEVEL DETERMINED BY THE AHJ.	
20.	THE OWNER OR THE OWNER'S AUTHORIZED AGENT SHALL DEVELOP A FIRE SAFETY PROGRAM TO ADDRESS ALL ESSENTIAL FIRE AND LIFE SAFETY REQUIREMENTS FOR THE DURATION OF DEMOLITION, ALTERATION AND CONSTRUCTION PER GAINESVILLE FIRE PREVENTION AND PROTECTION CODE SECTION 10-9 (NFPA 1-16).	
21.	THE PROPOSED BUILDING SHALL COMPLY WITH THE CURRENT EDITION OF THE FLORIDA BUILDING CODE.	



VICINITY MAP

ALACHUA COUNTY, FLORIDA
NOT TO SCALE

LEGEND:

ZONING:
PD – PLANNED USE DISTRICT
RSF1 – SINGLE-FAMILY RESIDENTIAL

FUTURE LAND USE:
PD – PLANNED USE DISTRICT
SF – SINGLE FAMILY RESIDENTIAL

LEGAL DESCRIPTION

(OFFICIAL RECORDS BOOK 971, PAGE 411)
COMMENCE AT THE SE CORNER OF THE NE 1/4 OF SECTION 35-T9S-R19E AND RUN N 0°34'22" W ALONG THE EAST LINE OF SAID SECTION AND THE CENTERLINE OF NW 34TH STREET 115.66 FEET, THENCE RUN S 89°25'38" WEST 50 FEET TO THE WEST R/W OF NW 34TH STREET AND THE POINT OF BEGINNING, SAID POINT BEING THE P.C. OF A CURVE CONCAVE TO THE NORTHWEST AND HAVING A RADIUS OF 50 FEET, THENCE RUN SOUTHWESTERLY ALONG THE ARC OF SAID R/W CURVE 87.9 FEET TO THE P.T. OF SAID CURVE, BEING ON THE NORTH R/W OF NW 16TH AVENUE, AND BEING THE P.C. OF A CURVE CONCAVE TO THE NORTHEAST, AND HAVING A RADIUS OF 904.93 FEET, THENCE RUN NORTHWESTERLY ALONG THE ARC OF SAID R/W 268.70 FEET TO THE P.T. OF SAID CURVE, THENCE RUN N 62°49'37" W ALONG SAID R/W 325.21 FEET, THENCE RUN N 0°34'22" WEST 220 FEET, THENCE RUN N 89°25'38" EAST 600 FEET TO THE WEST R/W OF NW 34TH STREET, THENCE RUN S 0°34'22" EAST ALONG SAID R/W 410.51 FEET TO THE POINT OF BEGINNING. BEING AND LYING IN THE NE 1/4 OF SECTION 35-T9S-R19E., GAINESVILLE, ALACHUA COUNTY, FLORIDA.

CITY OF GAINESVILLE
STORMWATER MANAGEMENT
SUMMARY SHEET

I. GENERAL

A. TAX PARCEL No. 6416-030-000
B. PROJECT NAME: ZION EVANGELICAL LUTHERAN CHURCH
C. ADDRESS: 1700 NW 34TH STREET
GAINESVILLE, FL

II. SITE INFORMATION

A. TOTAL IMPERVIOUS AREA ON SITE: 35,073 s.f.
B. STORMWATER MANAGEMENT BASIN DATA

Basin ID.	Retention Volume (cf)	Retention Volume Surface Water Area (sf)	Elevation At Which Surface Water Discharge Begins from Basin (ft-msl)
BASIN-1	6,992	5,559	124.10
UNDERGROUND-2	3,030	1,336	127.90
TOTAL	10,002	6,895	

PREPARED BY: SERGIO REYES
PETITIONER'S ENGINEER
DATE: 03/08/18

IMPERVIOUS AREA CALCULATIONS				
#	DESCRIPTION	SQUARE FOOTAGE (S.F.)	ACREAGE (AC.)	PERCENTAGE (%)
1.	TOTAL SITE AREA:	217,164 S.F.	4.99 AC.	100%
2.	EXISTING BUILDING COVERAGE	3,504 S.F.	0.08 AC.	1.61%
3.	EXISTING IMPERVIOUS AREA	13,329 S.F.	0.31 AC.	6.13%
4.	PROPOSED BUILDING COVERAGE	4,551 S.F.	0.10 AC.	2.10%
5.	PROPOSED PAVEMENT AND SIDEWALK AREA:	13,689 S.F.	0.31 AC.	6.3%
6.	TOTAL IMPERVIOUS AREA IN PROJECT AREA:	35,073 S.F.	0.81 AC.	16.15%
7.	PROPOSED GRASS PARKING AREA:	2,660 S.F.	0.06 AC.	1.22%
8.	OPEN AREA IN PROJECT AREA:	182,091 S.F.	4.18 AC.	83.85%

BUILDING INFORMATION	
BUILDING HEIGHT:	54'-6"
SPRINKLERED:	YES
OCCUPANCY CLASS:	A-4
CONSTRUCTION TYPE:	TYPE VB
NUMBER OF STORIES:	1 STORY PLUS PARTIAL SERVICE BASEMENT
BUILDING AREA UNDER ROOF:	5,069 S.F.
BASEMENT:	707 S.F.
1ST FLOOR:	4,521 S.F.
GROSS FLOOR AREA:	5,228 S.F.
BUILDING CODE CAPACITY:	100 PERSONS/ACRE PERMITTED 4.99 ACRES = 499 PERSONS ALLOWED

TRIP GENERATION

ITE LAND USE 560:

PROPOSED CHURCH:
5,228 G.S.F.
1700 NW 34TH STREET

CHURCH (PER 1000 SF)				TRIP DISTRIBUTION		PROJECT TRIPS	
PERIOD	RATE	SF	TRIPS	ENTER	EXIT	IN	OUT
AM	0.56	5.23	3	62%	38%	2	1
PM	0.55	5.23	3	48%	52%	1	2
WEEKDAY	9.11	5.23	48	50%	50%	24	24
SUNDAY	36.63	5.23	192	50%	50%	96	96

SOURCE: ITE TRIP GENERATION, 9TH EDITION, PAGES 1090-1092

PARKING CALCULATIONS				
#	DESCRIPTION	CRITERIA	REQUIRED	PROVIDED
1.	VEHICULAR PARKING	1 PARKING SPACE PER 4 SEATS OF MAXIMUM SEATING CAPACITY IN PRINCIPLE AREA OF ASSEMBLY	1 SPACE / 4 SEATS x 200 SEATS = 50 SPACES	32 EXISTING SPACES INCLUDING 2 HANDICAP SPACES, 16 PROPOSED GRASS SPACES, 2 PROPOSED HANDICAP SPACES = 50
2.	BICYCLE PARKING	10% OF REQUIRED NUMBER OF VEHICLE PARKING	50 SPACES X .10 = 5 SPACES	6 SPACES, 3 RACKS

FOR REVIEW ONLY

GRU NOTES

1. CERTIFICATION BY ENGINEER-OF-RECORD THAT WATER, WASTEWATER, AND RECLAIMED WATER SYSTEMS ARE IN ACCORDANCE WITH GRU DESIGN STANDARDS.
2. ELECTRIC DESIGN PROVIDED BY GRU ENERGY DELIVERY.
3. NOTIFY GRU WASTEWATER ENGINEERING 48 HOURS PRIOR TO CONSTRUCTION AT 352-393-1633 IF PROPER NOTIFICATION IS NOT MADE CONTRACTOR SUBJECT TO BE SHUT DOWN.
4. NOTIFY GRU ELECTRIC INSPECTIONS 48 HOURS PRIOR TO CONSTRUCTION AT 352-339-0340 IF PROPER NOTIFICATION IS NOT MADE CONTRACTOR SUBJECT TO BE SHUT DOWN.

DRAWING INDEX	
SHEET NUMBER	SHEET TITLE
C0.00	COVER SHEET
C0.10	LEGEND, SYMBOLS, & ABBREVIATIONS
C0.20	SITE PLAN
C0.30	DEMOLITION PLAN
C1.00	DIMENSION PLAN
C2.00	PAVING, GRADING, AND DRAINAGE PLAN
C2.10	PAVING, GRADING, AND DRAINAGE DETAILS
C2.20	UDERGROUND STORMWATER SYSTEM DETAILS
C3.00	STORMWATER POLLUTION PREVENTION PLAN
C4.00	UTILITY PLAN
WORK WITHIN THE COUNTY RIGHT OF WAY	
C5.00	MAINTENANCE OF TRAFFIC PLAN
C5.10	DEMOLITION, DIMENSION, AND GRADING PLAN
PLANS BY OTHERS	
S	BOUNDARY AND TOPOGRAPHIC SURVEY
L	LANDSCAPE PLAN
A	ARCHITECTURAL PLAN
E-1	PHOTOMETRIC PLAN

Comment | Date | No.

eda
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TEL (352) 373-3541 FAX (352) 373-7249
www.edafl.com mail@edafl.com

Project: ZION EVANGELICAL LUTHERAN CHURCH
CITY OF GAINESVILLE, FLORIDA

Sheet title: COVER SHEET

Project phase: CITY/GRU RESUBMITTAL
Designed: SJR Drawn: AC/MAB Checked: TAR
Project No: 15-152 Date: 03/15/18
Professional Engineer of Record:
Sergio J. Reyes, P.E. 47311
Engineer Certificate No.

Sheet No.: C0.00

EXISTING SYMBOLS & ABBREVIATIONS

C/L	CENTERLINE
cmp	CORRUGATED METAL PIPE
CONC	CONCRETE
COR	CORNER
D	DELTA (CENTRAL) ANGLE
R	RADIUS
A	ARC
T	TANGENT
CB	CHORD BEARING
CD	CHORD DISTANCE
dip	DUCTILE IRON PIPE
ELEV	ELEVATION
ecmp	ELLIPTICAL CORRUGATED METAL PIPE
ercp	ELLIPTICAL REINFORCED CONCRETE PIPE
ID.	IDENTIFICATION
inv	INVERT
F.D.O.T.	FLORIDA DEPARTMENT OF TRANSPORTATION
F.F.	FINISHED FLOOR
M.E.S.	MITERED END SECTION
No.	NUMBER
O.R.	OFFICIAL RECORDS BOOK
PGS.	PAGES
PVC	POLY-VINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
R/W	RIGHT OF WAY
SEC 28-9-19	SECTION 28, TOWNSHIP 9 SOUTH, RANGE 19 EAST
TRAN	ELECTRICAL TRANSFORMER PAD
w/	WITH
ANCH ←—	GUY ANCHOR
○ BO	WATER BLOW OFF
○ CO	SANITARY CLEAN-OUT
▣	FOUND CONCRETE MONUMENT (size, ID)
▣	FOUND DRILL HOLE
●	FOUND IRON PIPE (size, ID)
●	FOUND NAIL & DISK (ID)
●	FOUND REBAR & CAP (size, ID)
▲	FOUND SPIKE
⊞ GM	GAS METER
⋈ GV	GAS VALVE
○ GP	GUY POLE
⊕	ELECTRICAL HANDHOLE
FH	FIRE HYDRANT
⋈ IRRG VLV	IRRIGATION VALVE
LT PL	LIGHT POLE
MBOX	MAIL BOX
○	MANHOLE
○ PP	POWER POLE
○	SET 5/8" REBAR & CAP (LB 2389)
□	SET CONCRETE MONUMENT (PRM LB 2389)
✱	SET NAIL & DISC (PRM LB 2389)
△	SET SPIKE
○	SHRUB
	SIGN
TELBOX	TELEPHONE RISER
TVBOX	CABLE TELEVISION RISER
⊞ WM	WATER METER
⋈ WV	WATER VALVE
—80—	ELEVATION CONTOUR LINE
—x—x—	FENCE LINE
—OHGW—	OVERHEAD GUY WIRE
—OHPL—	OVERHEAD POWER LINE
—OHTL—	OVERHEAD TELEPHONE LINE
—OHTV—	OVERHEAD TELEVISION LINE
—SS—	SANITARY SEWER LINE
—UGE—	UNDERGROUND ELECTRIC LINE
—GAS—	UNDERGROUND GAS LINE
—UGT—	UNDERGROUND TELEPHONE LINE
—UGTV—	UNDERGROUND CABLE TELEVISION LINE
—WL—	UNDERGROUND WATER LINE
×80.00	SPOT ELEVATION

TREE LEGEND

THE ONLY TREES LOCATED FOR THIS SURVEY WERE HARDWOODS 8" AND GREATER AND PINES 12" AND GREATER (DIAMETER MEASURED AT BREAST HEIGHT)

LOCATION / SPECIES / DIAMETER AT BREAST HEIGHT IN INCHES		SIZE/COMMON NAME
ba10.	-	10" BAY
cb11.	-	11" CHINABERRY
ce11.	-	11" CEDAR
ch12.	-	12" CHERRY
cht10.	-	10" CHINESE TALLOW
hi11.	-	11" HICKORY
lao12.	-	12" LAUREL OAK
lo15.	-	15" LIVE OAK
mb12.	-	12" MULBERRY
mg18.	-	18" MAGNOLIA
pa18.	-	18" PALM
pi14.	-	14" PINE
po8.	-	8" POST OAK
sb11.	-	11" SUGARBERRY
sg17.	-	17" SWEETGUM
tko11.	-	11" TURKEY OAK
tree18.	-	18" UNIDENTIFIED TREE
wo14.	-	14" WATER OAK

LEGEND

—●—●—●—	TREE BARRICADE
—//—//—	SILT FENCE
(TBR)	EXISTING FEATURES TO BE REMOVED (TBR)
▨	LIMITS OF EXISTING ASPHALT PAVEMENT, CONCRETE AND/OR BUILDING TO BE REMOVED
▒	LIMITS OF ASPHALT PAVEMENT
□	LIMITS OF GRASS PARKING
⁘	LIMITS OF CONCRETE PAVEMENT AND SIDEWALKS
▦	PEDESTRIAN WALKWAY (SEE SHEET C2.10 FOR DETAILS, MATERIAL AND INSTALLATION)
pl20	EXISTING TREE TO REMAIN
✕ pl20	EXISTING TREE TO BE REMOVED
×180.00	EXISTING SPOT ELEVATION
180.00	PROPOSED SPOT ELEVATION
—183.25—	PROPOSED CONTOUR ELEVATION
—183—	EXISTING CONTOUR ELEVATION

PROPOSED UTILITY SYMBOLS

—WM—	WATER MAIN, PROPOSED
—WM—	WATER MAIN, EXISTING
—WW—	WASTEWATER GRAVITY MAIN, PROPOSED
	PLUG END AND CAP
	BLOW-OFF ASSEMBLY
	GATE VALVE & BOX
	BUTTERFLY VALVE
	PLUG VALVE
	SWING CHECK VALVE
	BACK FLOW PREVENTER
RP	REDUCED PRESSURE ZONE BFP
DC	DOUBLE CHECK BFP
	DUAL CHECK VALVE
ARV	AIR RELEASE VALVE
	REDUCER FITTING
(R)	PRESSURE REGULATOR
	POST INDICATOR VALVE
	CLEAN OUT OR ROOF DRAIN LATERAL
	FITTING W/ THRUST BLOCK
	FIRE HYDRANT W/ THRUST BLOCK
	FIRE HYDRANT ASSEMBLY
■	POTABLE WATER METER
	SINGLE SERVICE WATER METER
	DUAL SERVICE WATER METER
	GANG WATER METER ASSEMBLY
TX	ELECTRIC TRANSFORMER
◆	RECLAIMED WATER METER ASSEMBLY
—RCW—	RECLAIMED WATER MAIN, PROPOSED
—RCW—	PLUG END AND CAP
—RCW—	BLOW-OFF ASSEMBLY
—RCW—	GATE VALVE & BOX
—RCW—	REDUCER FITTING
—FM—	WASTEWATER (PRESSURE) MAIN, PROPOSED
—SS—	SANITARY SEWER MAIN, PROPOSED
—SS—	SANITARY SEWER MAIN, EXISTING
●—SS—	SANITARY SEWER MANHOLE, PROPOSED
○—SS—	SANITARY SEWER MANHOLE, EXISTING
	SANITARY SEWER PLUG
	PLUG VALVE
	SEWER LATERAL, SINGLE SERVICE
	GATE VALVE
	CHECK VALVE
A. R.	AIR RELEASE VALVE

GENERAL NOTES

1. LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS, AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES, AFFECTING THIS WORK, PRIOR TO CONSTRUCTION.

2. PRIOR TO THE INITIATION OF SITE CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ANY EXISTING UTILITIES INCLUDING GAS, WATER, ELECTRIC, CABLE TV, COMMUNICATIONS, SANITARY SEWERS AND STORM DRAINAGE SYSTEMS, ON AND/OR ADJACENT TO THE SITE. REMOVE OR CAP AS NECESSARY. CONTACT ENGINEER OF RECORD IMMEDIATELY WITH ANY DISCREPANCIES.

3. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES, ABOVE OR BELOW GROUND, THAT MAY OCCUR AS A RESULT OF THE WORK PERFORMED, BY THE CONTRACTOR OR SUB-CONTRACTORS, AS CALLED FOR IN THESE CONTRACT DOCUMENTS.

4. CONTRACTOR TO COORDINATE WITH UTILITY COMPANIES FOR THE RELOCATION OF EXISTING UTILITIES. UTILITIES NEEDING TO BE REMOVED OR RELOCATED SHALL BE COORDINATED WITH THE AFFECTED UTILITY COMPANY. ADEQUATE TIME SHALL BE PROVIDED FOR RELOCATION, AND CLOSE COORDINATION WITH THE UTILITY COMPANY IS NECESSARY TO PROVIDE A SMOOTH TRANSITION IN UTILITY SERVICE. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY CONCERNING PORTIONS OF THE WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANY'S FORCES AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR PAYING ALL FEES AND CHARGES.

5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BECOME FAMILIAR WITH THE PERMIT AND INSPECTION REQUIREMENTS SPECIFIED BY THE VARIOUS GOVERNMENTAL AGENCIES AND THE ENGINEER. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION, AND SCHEDULE INSPECTIONS ACCORDING TO AGENCY INSTRUCTION/REQUIREMENTS.

6. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, ON ALL PRECAST AND MANUFACTURED ITEMS, TO THE OWNER'S ENGINEER FOR REVIEW. FAILURE TO OBTAIN APPROVAL BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.

7. SAFETY:
   - A. DURING THE CONSTRUCTION AND/OR MAINTENANCE OF THIS PROJECT, ALL SAFETY REGULATIONS ARE TO BE ENFORCED. THE CONTRACTOR OR HIS REPRESENTATIVE SHALL BE RESPONSIBLE FOR THE CONTROL AND SAFETY OF THE TRAVELING PUBLIC AND THE SAFETY OF HIS/HER PERSONNEL.
   - B. LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET FORTH BY OSHA.
   - C. THE MINIMUM STANDARDS AS SET FORTH IN THE CURRENT EDITION OF "THE STATE OF FLORIDA, MANUAL ON TRAFFIC CONTROL AND SAFE PRACTICES FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS" SHALL BE FOLLOWED IN THE DESIGN, APPLICATION, INSTALLATION, MAINTENANCE AND REMOVAL OF ALL TRAFFIC CONTROL DEVICES, WARNING DEVICES AND BARRIERS NECESSARY TO PROTECT THE PUBLIC AND CONSTRUCTION PERSONNEL FROM HAZARDS WITHIN THE PROJECT LIMITS.
   - D. ALL TRAFFIC CONTROL MARKINGS AND DEVICES SHALL CONFORM TO THE PROVISIONS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES PREPARED BY THE U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION.
   - E. ALL SUBSURFACE CONSTRUCTION SHALL COMPLY WITH THE "TRENCH SAFETY ACT". THE CONTRACTOR SHALL INSURE THAT THE METHOD OF TRENCH PROTECTION AND CONSTRUCTION IS IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS.
   - F. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY AND ENFORCE ALL APPLICABLE SAFETY REGULATIONS. THE ABOVE INFORMATION HAS BEEN PROVIDED FOR THE CONTRACTOR'S INFORMATION ONLY AND DOES NOT IMPLY THAT THE OWNER OR ENGINEER WILL INSPECT AND/OR ENFORCE SAFETY REGULATIONS.

8. ALL UNDERGROUND UTILITIES MUST BE IN-PLACE, TESTED AND INSPECTED PRIOR TO BASE AND SURFACE CONSTRUCTION.

9. CONTRACTOR IS REQUIRED TO SECURE A FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) "NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM" (NPDES) PERMIT BEFORE BEGINNING CONSTRUCTION.

10. A COMPLETE SET OF PERMITTED DRAWINGS AND SPECIFICATIONS MUST BE MAINTAINED ON SITE AT ALL TIMES THAT THE CONTRACTOR IS PERFORMING WORK. THESE DRAWINGS SHALL BE MADE AVAILABLE UPON REQUEST.

11. ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE CONSTRUCTED SIMULTANEOUSLY WITH THE DISTURBANCE OF THE LAND AND SHALL REMAIN FUNCTIONAL UNTIL THE CONTRIBUTING DISTURBED AREAS ARE STABILIZED. SILT BARRIERS WILL BE INSTALLED AS NECESSARY TO PREVENT EXCESSIVE SEDIMENTATION OF DOWNSTREAM AREAS.

12. ALL WORK WITHIN OR ON CITY OWNED AND MAINTAINED FACILITIES, ROW OR EASEMENTS WILL REQUIRE AS-BUILT PLANS. AS-BUILT PLANS SHOULD SHOW THE CONSTRUCTED CONDITIONS OF THE CITY OWNED OR MAINTAINED AREA AND BE PERFORMED BY A FLORIDA LICENSED PROFESSIONAL SURVEYOR AND MAPPER. THE COORDINATE SYSTEM SHALL BE FLORIDA STATE PLANE COORDINATES, NAD 83 ZONE NORTH US SURVEY FEET. VERTICAL COORDINATES SHALL BE REFERENCED TO THE NAVD 88 DATUM WITH ELEVATIONS GIVEN IN US SURVEY FEET.

    AS-BUILT PLANS SHALL BE SUBMITTED TO THE PUBLIC WORKS DEPARTMENT AS SIGNED AND SEALED PLANS AND AN ELECTRONIC DRAWING FILE. GUIDANCE ON PREPARATION OF AS-BUILT PLANS CAN BE FOUND IN CHAPTER 4 OF THE FDOT OFFICE OF CONSTRUCTION, PREPARATION AND DOCUMENTATION MANUAL. AS-BUILT PLANS FOR DRIVEWAY PERMITS MAY BE REQUIRED ON A CASE BY CASE BASIS.

    THE ENGINEER OF RECORD SHALL FILE AS-BUILT PLANS OR RECORD DRAWINGS WITH THE PUBLIC WORKS DEPARTMENT UPON COMPLETION OF ANY IMPROVEMENTS FOR WHICH CHANGES HAVE BEEN APPROVED DURING THE CONSTRUCTION PROCESS. THE REQUIREMENT FOR AN AS-BUILT PLAN OR RECORD DRAWING WILL BE DETERMINED ON A CASE BY CASE BASIS, DEPENDING ON THE SCOPE OF THE CHANGES.

    RECORD DRAWINGS SHALL BE LEGIBLY MARKED TO DOCUMENT ACTUAL CONSTRUCTION. ALL CHANGES TO FINAL UTILITY LOCATIONS INCLUDING HORIZONTAL AND VERTICAL LOCATIONS SHALL BE CLEARLY SHOWN AND REFERENCED TO PERMANENT SURFACE IMPROVEMENTS AND INCLUDE ALL MANHOLES, HYDRANTS, VALVES, VALVE BOXES, AND STRUCTURES. RECORD DRAWINGS SHALL ALSO DOCUMENT ACTUAL INSTALLED PIPE MATERIALS. RECORD DRAWINGS SHALL CLEARLY SHOW AND DOCUMENT ALL FIELD CHANGES OF DIMENSION AND DETAIL. RECORD DRAWINGS SHALL INCLUDE ALL DETAILS NOT ON THE ORIGINAL DRAWINGS, BUT CONSTRUCTED.

13. THE CONTRACTOR SHALL CONSTRUCT GRAVITY SEWER LATERALS, MANHOLES GRAVITY SEWER LINES AND DOMESTIC WATER AND FIRE PROTECTION SYSTEM AS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL FURNISH ALL NECESSARY MATERIALS, EQUIPMENT, MACHINERY, TOOLS, MEANS OF TRANSPORTATION AND LABOR NECESSARY TO COMPLETE THE WORK IN FULL AND COMPLETE ACCORDANCE WITH THE SHOWN, DESCRIBED AND REASONABLY INTENDED REQUIREMENTS OF THE CONTRACT DOCUMENTS AND JURISDICTIONAL AGENCY REQUIREMENTS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.

CONSTRUCTION NOTES

1. SIGNS AND BARRICADES SHALL BE IN ACCORDANCE WITH THE U.S. DEPARTMENT OF TRANSPORTATION'S 'MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES', AND THE FLORIDA DEPARTMENT OF TRANSPORTATION'S 'ROADWAY AND TRAFFIC DESIGN STANDARDS' INDEXES 600 THROUGH 665 (LATEST EDITIONS).

2. SAFE PEDESTRIAN TRAFFIC IS TO BE MAINTAINED AT ALL TIMES.

3. ANY SIDEWALK WHICH BECOMES UNDERMINED MUST BE REMOVED AND REPLACED. SIDEWALKS ARE TO BE RECONSTRUCTED WITHIN THREE (3) DAYS AFTER REMOVAL. WHEN EXISTING SIDEWALK IS REMOVED, IT IS TO BE REMOVED TO THE NEAREST JOINT.

4. DISTURBED AREA WITHIN THE R-O-W WILL BE COMPACTED TO 98% OF MAXIMUM DENSITY AND SODDED.

5. STOCKPILING OF MATERIAL IS NOT ALLOWED ON ROADWAYS OR SIDEWALKS. ALL DIRT AND DEBRIS WILL BE REMOVED FROM JOB SITE DAILY. ROADS AND SIDEWALKS ARE TO BE SWEPT DAILY AS PART OF DAILY CLEANUP.

6. ANY PORTION OF ROADWAYS OR SIDEWALKS THAT SUSTAIN EXCESSIVE CONSTRUCTION RELATED DAMAGE, IN THE OPINION OF APPLICABLE AGENCIES, SHALL BE REPAIRED AT CONTRACTOR EXPENSE IN A MANNER SPECIFIED BY THAT PARTICULAR AGENCY.

7. CONSTRUCTION MUST BE PER THE APPROVED SITE PLAN OF THE DRC (OR EQUIVALENT). DEVIATIONS IN ROADWAY, UTILITY OR DRAINAGE CONSTRUCTION WILL REQUIRE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER OR THE DIRECTOR OF PUBLIC SERVICES (OR EQUIVALENT). NOTE: SIGNIFICANT CHANGES FROM THE DRC APPROVED PLAN MAY REQUIRE THE OWNER/DEVELOPER TO SUBMIT A REVISED SITE PLAN FOR REVIEW THROUGH THE DRC AND MAY CAUSE PROJECT DELAYS.

8. OFF-SITE OR ROADWAY R-O-W CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL CONDITIONS OF THE APPROVED R-O-W PERMIT(S). A COPY OF THE APPROVED R-O-W PERMIT MUST BE KEPT ON-SITE AND READILY AVAILABLE DURING ALL CONSTRUCTION ACTIVITIES WITHIN THE R-O-W.

9. DURING THE CONSTRUCTION AND/OR MAINTENANCE OF THIS PROJECT, ALL SAFETY REGULATIONS ARE TO BE ENFORCED. THE CONTRACTOR OR HIS REPRESENTATIVE SHALL BE RESPONSIBLE FOR THE CONTROL AND SAFETY OF THE TRAVELING PUBLIC AND THE SAFETY OF HIS/HER PERSONNEL.

10. ALL CONSTRUCTION, MATERIALS AND WORKMANSHIP ARE TO BE IN ACCORDANCE WITH FLORIDA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS AND STANDARDS.

11. CONTRACTOR IS RESPONSIBLE FOR CHECKING ACTUAL SITE CONDITIONS BEFORE STARTING CONSTRUCTION.

12. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE COMMENCING WORK.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED CONSTRUCTION PERMITS AND BONDS IF REQUIRED PRIOR TO CONSTRUCTION.

14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING TO THE ENGINEER A CERTIFIED RECORD SURVEY SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA DEPICTING THE ACTUAL FIELD LOCATION OF ALL CONSTRUCTED IMPROVEMENTS THAT ARE REQUIRED BY THE JURISDICTIONAL AGENCIES FOR THE CERTIFICATION PROCESS. ALL SURVEY COSTS WILL BE THE CONTRACTORS RESPONSIBILITY. BOTH PAPER AND AUTOCAD FILES SHALL BE PROVIDED.

15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING AND MAINTAINING AS-BUILT INFORMATION WHICH SHALL BE RECORDED AS CONSTRUCTION PROGRESSES OR AT THE COMPLETION OF APPROPRIATE CONSTRUCTION INTERVALS AND SHALL BE RESPONSIBLE FOR PROVIDING AS-BUILT DRAWINGS TO THE OWNER FOR THE PURPOSE OF CERTIFICATION TO JURISDICTIONAL AGENCIES AS REQUIRED. BOTH PAPER AND AUTOCAD SHALL BE PROVIDED.

EROSION CONTROL NOTES

1. THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS COMPRISED OF THE EROSION CONTROL PLAN, THE STANDARD DETAILS, THE PLAN NARRATIVE, ATTACHMENTS REFERENCED BY THE SWPPP, PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.

2. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE OF FLORIDA NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.

3. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST TO THE OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.

4. PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.

5. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.

6. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL ON SITE. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.

8. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORM WATER RUNOFF.

9. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THE PLAN SHALL BE INITIATED AS SOON AS PRACTICABLE.

10. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 7 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRED IN THESE AREAS.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM DRAINS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.

12. ON-SITE & OFF SITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE EROSION CONTROL PLAN BY THE CONTRACTOR AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (SILT FENCES, STABILIZATION, SEDIMENT BASINS, ETC.) AS NEEDED FOR EACH STAGE OF SITE WORK / GRADING.

14. NO GRADING, CUTTING, OR FILLING SHALL COMMENCE UNTIL SUCH TIME AS APPROPRIATE EROSION AND SEDIMENTATION CONTROL DEVICES HAVE BEEN INSTALLED BETWEEN ALL DISTURBED AREAS AND WATER BODIES, WATERCOURSES OR WETLANDS AND ANY CONVEYANCES SUCH AS DRAINAGE DITCHES, STORM DRAINS, AND INLETS.

15. ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED PRECEEDING ANY DISTURBANCE OF THE LAND AND SHALL REMAIN FUNCTIONAL UNTIL THE CONTRIBUTING DISTURBED AREAS ARE STABILIZED. THE CONTRACTOR SHALL INSTALL ALL EROSION AND PREVENTION STRUCTURES SHOWN ON THE PLANS AT A MINIMUM AND IN FULL CONFORMANCE WITH ALL APPLICABLE WATER MANAGEMENT DISTRICT PERMITS AND REGULATIONS.

16. ALL CONTROL STRUCTURE AND OUTFALL CULVERT INSTALLATIONS SHALL BE PROTECTED WITH SEDIMENT BARRIERS AT A MINIMUM.

17. ALL DISTURBED AREAS (ABOVE NORMAL WATER LEVELS) UNLESS OTHERWISE NOTED HEREIN, SHALL BE SEEDED AND MULCHED WITHIN 7 DAYS OF FINAL GRADING. UNLESS OTHERWISE NOTED, ALL SLOPES STEEPER THAN 4:1 SHALL BE SODDED.

PAVING, GRADING, AND DRAINAGE NOTES

1. TRAFFIC CONTROL ON ALL FDOT, LOCAL AND COUNTY RIGHTS-OF-WAY SHALL MEET THE REQUIREMENTS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (U.S. DOT/FHA) AND THE REQUIREMENTS OF THE STATE AND ANY LOCAL AGENCY HAVING JURISDICTION. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.

2. ALL OPEN AREAS WITHIN THE PROJECT SITE SHALL BE SODDED UNLESS INDICATED OTHERWISE ON THE LANDSCAPE PLAN.

3. THE CONTRACTOR SHALL INSTALL FILTER FABRIC OVER ALL DRAINAGE STRUCTURES FOR THE DURATION OF CONSTRUCTION AND UNTIL ACCEPTANCE OF THE PROJECT BY THE OWNER. ALL DRAINAGE STRUCTURES SHALL BE CLEANED OF DEBRIS AS REQUIRED DURING AND AT THE END OF CONSTRUCTION TO PROVIDE POSITIVE DRAINAGE FLOWS.

4. IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL OBTAIN ANY APPLICABLE REQUIRED PERMITS. THE CONTRACTOR IS TO COORDINATE WITH THE OWNER AND THE DESIGN ENGINEER PRIOR TO ANY EXCAVATION.

5. THE CONTRACTOR MUST REVIEW AND MAINTAIN A COPY OF THE ENVIRONMENTAL RESOURCE PERMIT COMPLETE WITH ALL CONDITIONS, ATTACHMENTS, EXHIBITS, AND PERMIT MODIFICATIONS IN GOOD CONDITION AT THE CONSTRUCTION SITE. THE COMPLETE PERMIT MUST BE AVAILABLE FOR REVIEW UPON REQUEST BY WATER MANAGEMENT DISTRICT REPRESENTATIVES.

6. THE CONTRACTOR SHALL ENSURE THAT ISLAND PLANTING AREAS AND OTHER PLANTING AREAS ARE NOT COMPACTED AND DO NOT CONTAIN ROAD BASE MATERIALS. THE CONTRACTOR SHALL ALSO EXCAVATE AND REMOVE ALL UNDESIRABLE MATERIAL FROM ALL AREAS ON THE SITE TO BE PLANTED AND PROPERLY DISPOSED OF IN A LEGAL MANNER.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXCAVATIONS AGAINST COLLAPSE AND WILL PROVIDE BRACING, SHEETING OR SHORING AS NECESSARY. DE-WATERING METHODS SHALL BE USED AS REQUIRED TO KEEP TRENCHES DRY WHILE PIPE AND APPURTENANCES ARE BEING PLACED.

8. THE CONTRACTOR WILL STABILIZE BY SEED AND MULCH, SOD, OR OTHER APPROVED MATERIALS ANY DISTURBED AREAS WITHIN ONE WEEK FOLLOWING CONSTRUCTION OF THE UTILITY SYSTEMS AND PAVEMENT AREAS. CONTRACTOR SHALL MAINTAIN SUCH AREAS UNTIL FINAL ACCEPTANCE BY OWNER. CONTRACTOR TO COORDINATE WITH OWNER REGARDING TYPE OF MATERIAL, LANDSCAPING AND IRRIGATION IMPROVEMENTS TO FOLLOW.

9. SITE GRADING, PAVING AND DRAINAGE MATERIALS AND CONSTRUCTION SHALL CONFORM TO FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

10. IMMEDIATELY AT ONSET OF CONSTRUCTION, CONTRACTOR SHALL FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES CRITICAL TO COMPLETING THE PROJECT (INCLUDING WATER, SEWER, POWER, TELEPHONE, GAS, AND CABLE TV) AND SHALL EVALUATE POTENTIAL CONFLICTS. ALL SUCH CONFLICTS SHALL BE REPORTED TO ENGINEER/OWNER IMMEDIATELY UPON DISCOVERY.

11. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL FIELD STAKE AND ROPE OFF CONSERVATION AREA LINES. OWNER RESERVES THE RIGHTS TO CHECK THE STAKING AND ROPING AND REQUIRE IT TO BE RELOCATED IF NECESSARY. IT SHALL REMAIN IN PLACE UNTIL ADJACENT CONSTRUCTION IS COMPLETE.

12. CONTRACTOR SHALL BE EXTREMELY CAUTIOUS WHEN WORKING NEAR TREES WHICH ARE TO BE SAVED, WHETHER SHOWN IN THE PLANS OR DESIGNATED IN THE FIELD.

13. ALL SIGNAGE, PAVEMENT MARKING AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH FDOT 'ROADWAY AND TRAFFIC DESIGN STANDARDS' AND FHWA 'MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES'.

14. REGULATORY SIGNS (STOP, ETC.) SHALL BE PAID FOR BY THE CONTRACTOR AND IN PLACE PRIOR TO FINAL INSPECTION OF PAVING AND DRAINAGE IMPROVEMENTS.

15. BLUE REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED OPPOSITE FIRE HYDRANTS IN THE CENTER OF THE NEAREST TRAVELED LANE TO MARK THEIR LOCATIONS.

16. CONTRACTOR IS RESPONSIBLE FOR GRADING ALL PAVEMENTS TO DRAIN POSITIVELY. INTERSECTIONS SHALL BE TRANSITIONED TO PROVIDE SMOOTH DRIVING SURFACE WHILE MAINTAINING POSITIVE DRAINAGE. SHOULD AREAS OF POOR DRAINAGE BE OBSERVED, CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO PLACEMENT OF CURBS OR PAVEMENT COURSES, SO THAT RECOMMENDATIONS FOR CORRECTION MAY BE MADE.

17. PROPOSED AND EXISTING SIDEWALKS SHALL BE RAMPED FLUSH WITH PAVEMENT. RAMPS SHALL NOT EXCEED SLOPES OF 14 HORIZONTAL TO 1 VERTICAL.

18. FINISHED FLOOR ELEVATIONS ARE MINIMUM ELEVATIONS REQUIRED TO SATISFY DRAINAGE AND/OR 100-FLOODPLAIN REQUIREMENTS. PAD ELEVATIONS, IMMEDIATELY OUTSIDE OF BUILDING WALLS, SHALL BE NO MORE THAN 8 INCHES BELOW THE FINISHED FLOOR ELEVATIONS SHOWN.

19. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND DISPOSING ALL WASTE MATERIALS CONSISTENT WITH ALL RULES AND REGULATIONS APPLICABLE TO THE SPECIFIC MATERIAL FOUND. ALL DELETERIOUS SUBSURFACE MATERIAL (I.E. MUCK, PEAT, BURIED DEBRIS, ETC.) IS TO BE EXCAVATED AND REPLACED WITH SUITABLE/COMPACTED SOILS, AS DIRECTED BY THE OWNER, THE OWNERS ENGINEERS, OR OWNERS SOILS TESTING COMPANY. DELETERIOUS MATERIAL IS TO BE STOCKPILED OR REMOVED FROM THE SITE AS DIRECTED BY THE OWNER. EXCAVATED AREAS ARE TO BE BACKFILLED WITH APPROVED MATERIALS AND COMPACTED AS SHOWN ON THESE PLANS. CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING DELETERIOUS MATERIAL FROM THE SITE.

20. ALL NECESSARY FILL AND EMBANKMENT THAT IS PLACED DURING CONSTRUCTION SHALL CONSIST OF MATERIAL SPECIFIED BY THE OWNER'S SOILS TESTING COMPANY OR ENGINEER AND BE PLACED AND COMPACTED ACCORDING TO THESE PLANS.

21. PROPOSED SPOT ELEVATIONS REPRESENT FINISHED PAVEMENT, SIDEWALK, OR GROUND SURFACE GRADES, UNLESS OTHERWISE NOTED.

22. CURBING SHALL BE PLACED AT THE EDGES OF ALL PAVEMENT, UNLESS OTHERWISE NOTED. REFER TO THE LATEST EDITION OF F.D.O.T. "ROADWAY AND TRAFFIC DESIGN STANDARDS" FOR DETAILS AND SPECIFICATIONS OF ALL FDOT TYPE CURB AND GUTTERS CALLED FOR IN THESE PLANS.

23. THE CONTRACTOR SHALL RESTORE OFF-SITE CONSTRUCTION AREAS TO EQUAL AND/OR BETTER CONDITION THAN EXISTING PRIOR TO START OF CONSTRUCTION.

24. UNLESS OTHERWISE NOTED, GRADE TO MEET EXISTING ELEVATION AT PROPERTY LINES.

25. SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, SHALL BE REPLACED UPON COMPLETION OF WORK BY A REGISTERED LAND SURVEYOR. ALL SURVEY COSTS WILL BE CONTRACTORS RESPONSIBILITY.

26. FINAL GRADES SHOWN INCLUDE SOD HEIGHT. ALL AREAS SHALL BE GRADED TO DRAIN AWAY FROM THE BUILDINGS.

27. IF WORK IS SUSPENDED OR DELAYED FOR 14 DAYS, THE CONTRACTOR SHALL TEMPORARILY STABILIZE THE DISTURBED AREAS AT NO ADDITIONAL COST TO THE OWNER.

28. STORM DRAINS SHALL BE REINFORCED CONCRETE PIPE, PER ASTM C-76 CLASS III, UNLESS OTHERWISE SPECIFIED. LIFTING HOLES ARE PROHIBITED.

29. ALL STORM STRUCTURES SHALL CONFORM WITH FDOT STANDARD INDEX DRAWINGS AND SPECIFICATIONS EXCEPT THAT DITCH BOTTOM INLETS IN PAVED AREAS SHALL HAVE TRAVERSABLE, TRAFFIC BEARING, GRATES SUPPORTED BY STEEL ANGLE SEATS OR SUPPORTED ON FOUR SIDES. GRATES SHALL BE CAST IRON UNLESS OTHERWISE SPECIFIED OR APPROVED.

30. ALL CONCRETE CURBS, SIDEWALKS, INLET TOPS, ETC. SHALL BE 3000 PSI MINIMUM, UNLESS OTHERWISE SPECIFIED.

31. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING APPLICABLE TESTING WITH THE SOILS ENGINEER. TESTS WILL BE REQUIRED PURSUANT WITH THE SOILS REPORT. UPON COMPLETION OF WORK THE SOILS ENGINEER WILL SUBMIT CERTIFICATIONS TO THE OWNER AND OWNER'S ENGINEER STATING THAT ALL REQUIREMENTS HAVE BEEN MET.

32. A QUALIFIED TESTING LABORATORY SHALL PERFORM ALL TESTING NECESSARY TO ASSURE COMPLIANCE OF THE IN-PLACE MATERIALS AS REQUIRED BY THESE PLANS, THE VARIOUS AGENCIES AND PERMIT CONDITIONS. SHOULD ANY RETESTING BE REQUIRED DUE TO THE FAILURE OF ANY TESTS TO MEET THE REQUIREMENTS, THE CONTRACTOR WILL BEAR ALL COSTS OF SAID RETESTING

33. THE STORM DRAINAGE PIPING SYSTEM SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE OWNER'S ENGINEER PRIOR TO THE PLACEMENT OF BACKFILL. CONTRACTOR TO NOTIFY THE ENGINEER 48 HOURS IN ADVANCE TO SCHEDULE INSPECTION.

34. THE CONTRACTOR SHALL MAINTAIN AND PROTECT FROM MUD, DIRT, DEBRIS, ETC. THE STORM DRAINAGE SYSTEM UNTIL FINAL ACCEPTANCE OF THE PROJECT. THE STORM SYSTEM WILL BE RE-INSPECTED BY THE OWNER'S ENGINEER PRIOR TO APPROVAL FOR CERTIFICATE OF OCCUPANCY PURPOSES. THE CONTRACTOR MAY BE REQUIRED TO RE-CLEAN PIPES AND INLETS FOR THESE PURPOSES.

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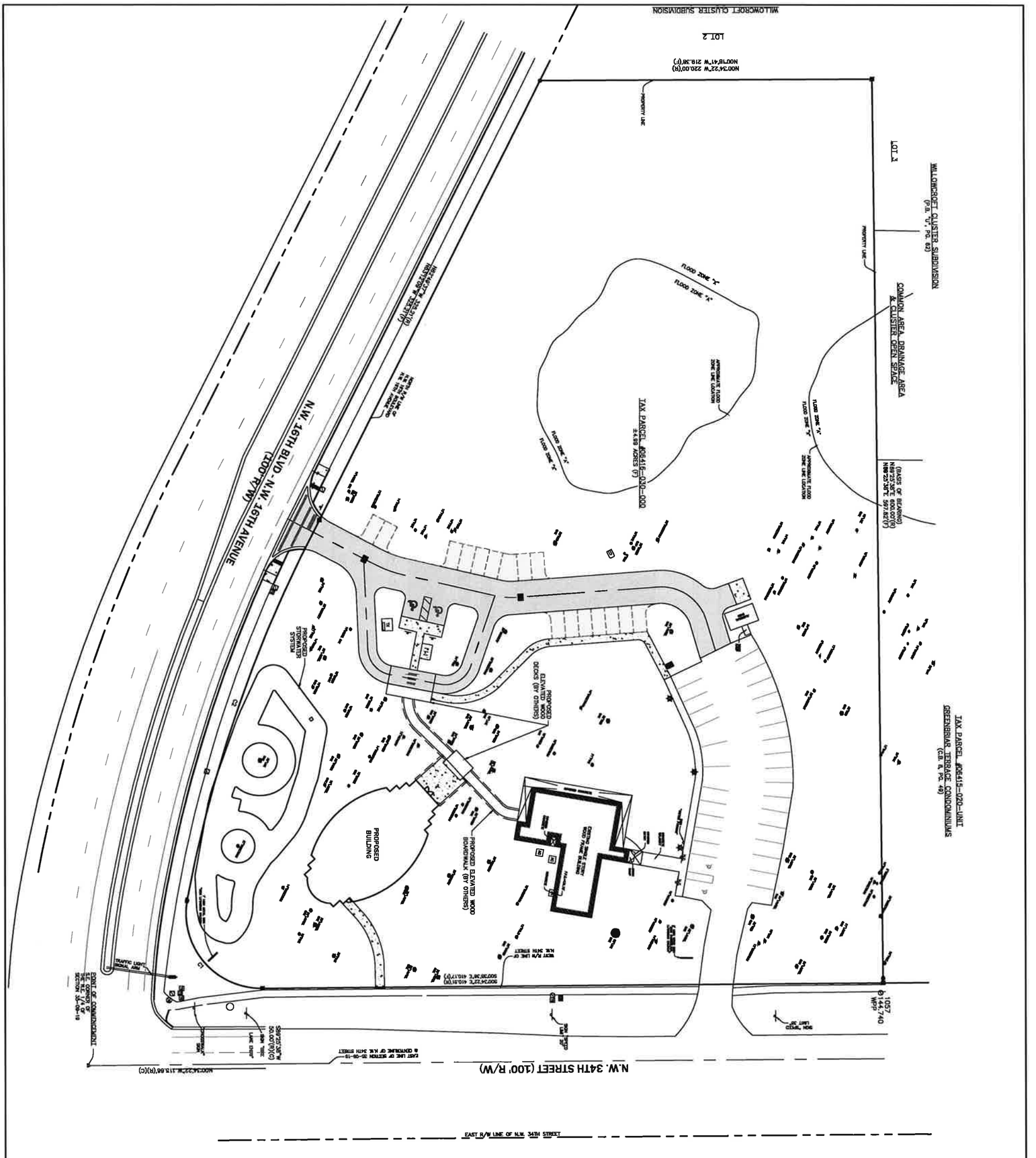
Project:
ZION EVANGELICAL LUTHERAN CHURCH
CITY OF GAINESVILLE, FLORIDA

Sheet title:
LEGEND, SYMBOLS, & ABBREVIATIONS

Project phase: CITY/GRU RESUBMITTAL
Designed: S.R. Drawn: AJC/MAB Checked: TAR
Project No: 16-152 Date: 03/15/18
Professional Engineer of Record:
Sergio J. Reyes, P.E. 47311
Engineer Certificate No.

Sheet No.:
C0.10



LEGEND

- LIMITS OF PROPOSED GRASS PAVING
- LIMITS OF PROPOSED CONCRETE
- LIMITS OF PROPOSED ASPHALT PAVEMENT

Sheet No.: C0.20

Project phase: CITY/GRU RESUBMITTAL

Designed: SJB | Drawn: JC/MAB | Checked: TAR

Project No.: 16-152 | Date: 03/15/18

Professional Engineer of Record: Sergio J. Reyes, P.E.

Engineer | 47311 Certificate No.

Project: ZION EVANGELICAL LUTHERAN CHURCH
CITY OF GAINESVILLE, FLORIDA

Sheet title: OVERALL SITE PLAN

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NORTH SCALE: 1" = 30'

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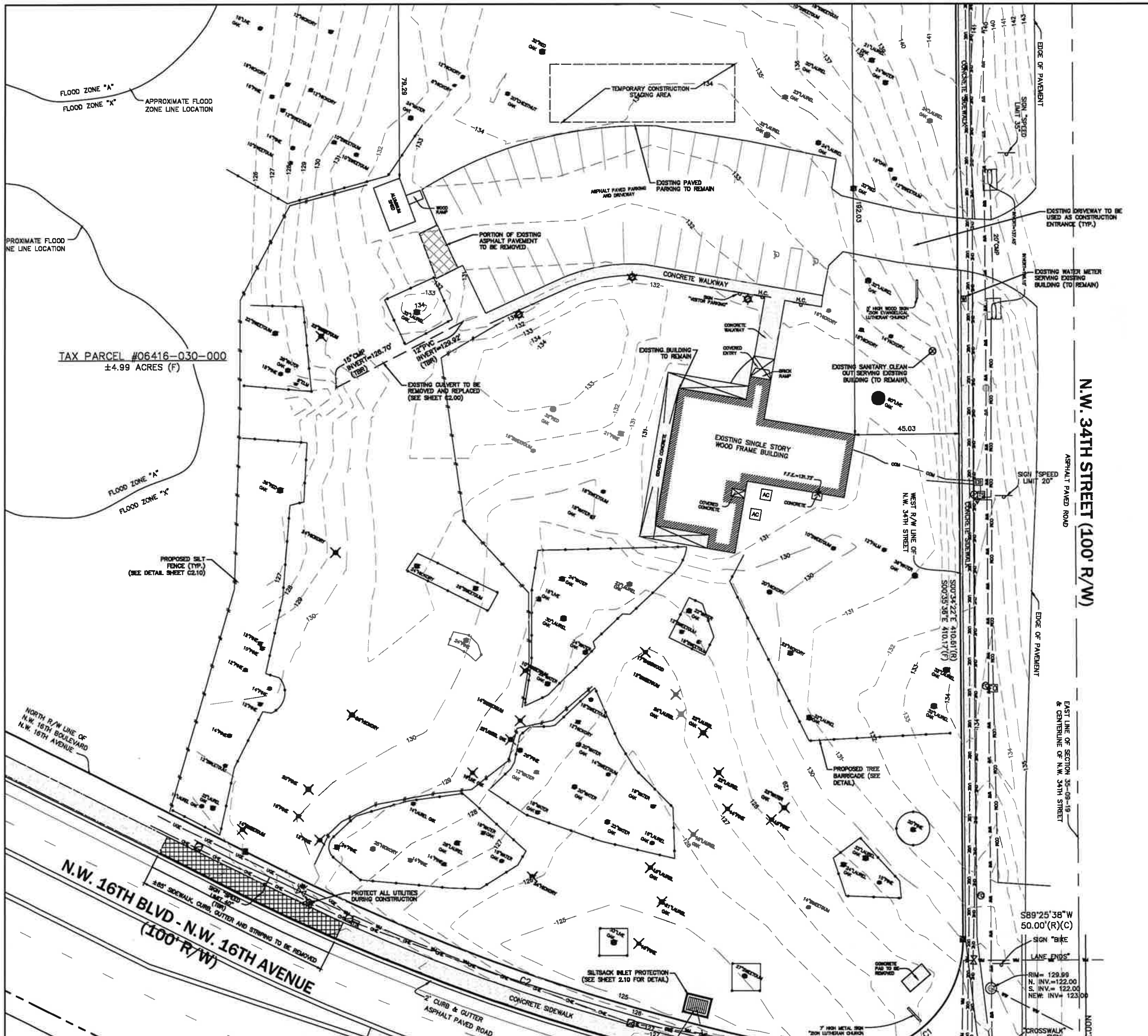
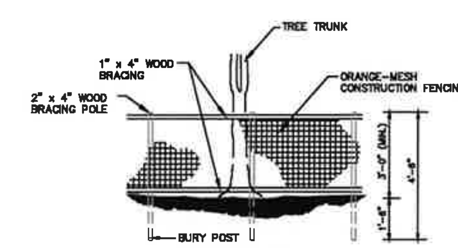


DEMOLITION NOTES

1. ALL MATERIAL REMOVED FROM THIS SITE BY THE CONTRACTOR SHALL BE DISPOSED OF BY THE CONTRACTOR IN A LEGAL MANNER.
2. REFER TO THE TOPOGRAPHIC SURVEY FOR ADDITIONAL DETAILS OF EXISTING STRUCTURES, ETC., LOCATED WITHIN THE PROJECT SITE. UNLESS OTHERWISE NOTED, ALL EXISTING BUILDINGS, STRUCTURES, SLABS, CONCRETE, ASPHALT, DEBRIS PILES, SIGNS, AND ALL APPURTENANCES ARE TO BE REMOVED FROM THE SITE BY THE CONTRACTOR AND PROPERLY DISPOSED OF IN A LEGAL MANNER AS PART OF THIS CONTRACT. SOME ITEMS TO BE REMOVED MAY NOT BE DEPICTED ON THE TOPOGRAPHIC SURVEY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE AND DETERMINE THE FULL EXTENT OF ITEMS TO BE REMOVED. IF ANY ITEMS ARE IN QUESTION, THE CONTRACTOR SHALL CONTACT THE OWNER PRIOR TO REMOVAL OF SAID ITEMS.
3. THE CONTRACTOR SHALL REFER TO THE DEMOLITION PLAN FOR DEMOLITION / PRESERVATION OF EXISTING TREES. ALL TREES NOT SPECIFICALLY SHOWN TO BE PRESERVED OR RELOCATED SHALL BE REMOVED AS A PART OF THIS CONTRACT. TREE PROTECTION FENCING SHALL BE INSTALLED PRIOR TO ANY DEMOLITION.
4. CONTRACTOR SHALL SUBMIT DEMOLITION SCHEDULE TO OWNER PRIOR TO PROCEEDING WITH DEMOLITION ACTIVITIES.
5. CONDUCT SITE DEMOLITION OPERATIONS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS, OR OTHER OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM AUTHORITIES HAVING JURISDICTION. CLOSURE OF THESE FACILITIES MAY REQUIRE A MAINTENANCE OF TRAFFIC PLAN PREPARED BY A REGISTERED PROFESSIONAL AT THE CONTRACTORS EXPENSE.
6. PROVIDE PROTECTION AS NECESSARY TO PREVENT DAMAGE TO EXISTING IMPROVEMENTS SHOWN IN THE PLANS TO REMAIN.
7. LOCATE EXISTING ABOVE GROUND AND UNDERGROUND UTILITIES IN AREAS OF WORK. IF UTILITIES ARE TO REMAIN IN PLACE, PROVIDE ADEQUATE MEANS OF SUPPORT AND PROTECTION DURING DEMOLITION AND CONSTRUCTION OPERATIONS.
8. CONTRACTOR SHALL COORDINATE WITH APPLICABLE UTILITY COMPANIES FOR THE TERMINATION, CAPPING-OFF AND REMOVAL OF ALL EXISTING UNDERGROUND AND ABOVE GROUND UTILITY SERVICES UNLESS DIRECTED TO OTHERWISE.
9. EROSION CONTROLS ARE TO BE INSTALLED AND INSPECTED PRIOR TO BEGINNING DEMOLITION WORK.
10. IN AREAS WHERE PROPOSED CURBING IS TO BE PLACED, THE ASPHALT PAVEMENT SHALL BE REMOVED TO THE FACE OF CURB TO ALLOW PLACEMENT OF 6" STANDARD CONCRETE CURBING.
11. IN AREAS OF PROPOSED LANDSCAPE AREA THE PAVEMENT, LIMEROCK BASE, AND 12" OF THE STABILIZED SUBGRADE SHALL BE REMOVED. COORDINATE WITH LANDSCAPE ARCHITECT TO DETERMINE IF ADDITIONAL REMOVAL IS REQUIRED TO MAKE AREA SUITABLE FOR LANDSCAPE PURPOSES. THE REMOVED LIMEROCK BASE SHALL NOT BE USED IN THE BASE FOR THE NEW PAVEMENT (PER FDOT SECTION 200), BUT THE REMOVED BASE CAN BE USED IN THE STABILIZATION OF SUBGRADE. SEE GRADING PLAN FOR BACKFILL REQUIREMENTS.
12. ALL CONSTRUCTION DEBRIS, LIMEROCK, EXCESS OF BUILDER'S SAND, CONCRETE AND MORTAR DEBRIS, EXISTING WEEDS AND GRASSES, ALL FOREIGN MATERIALS IN THE PLANTING BED AND SOD AREAS SHALL BE REMOVED AND 36" OF CLEAN FILL OF PH 5.5 – 6.5 SHALL BE INSTALLED PRIOR TO ANY INSTALLATION OF PLANTS OR TREES.
13. SEE DIMENSION PLAN FOR DIMENSIONING OF PROPOSED LANDSCAPE AREAS.
14. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF EXISTING UTILITIES TO REMAIN AS SHOWN IN THE UTILITY PLAN. ANY EXISTING UTILITIES TO BE REMOVED SHALL BE COORDINATED WITH THE ASSOCIATED UTILITY COMPANY, AND PERFORMED IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.
15. SEE ELECTRICAL AND IRRIGATION PLANS FOR COORDINATION OF PAVEMENT CUTS FOR ASSOCIATED CONDUITS.
16. A SEPARATE DEMOLITION PERMIT IS REQUIRED FOR REMOVAL OF BUILDING. CONTACT CITY OF GAINESVILLE BUILDING DEPARTMENT AT 334-5050.
17. CALL NATURE OPERATIONS AT (352) 393-8171 FOR A BARRICADE INSPECTION BEFORE CLEARING AND GRUBBING WORK BEGINS.

LEGEND

- SILT FENCE
- TREE BARRICADE
- (TBR) EXISTING FEATURES TO BE REMOVED (TBR)
- LIMITS OF EXISTING ASPHALT PAVEMENT, CONCRETE AND/OR BUILDING TO BE REMOVED
- EXISTING TREE TO BE REMOVED



ELEVATION

NOTES:

1. TREE BARRICADES WILL BE BUILT BEFORE ANY SITE WORK IS UNDERTAKEN AND WILL REMAIN IN PLACE UNTIL THE LANDSCAPING IS PLANTED.
2. EACH BARRICADE MUST BE AT LEAST 3 FEET TALL, WITH CORNER POSTS OF 2" X 4" WOOD INSERTED AT LEAST ONE AND A HALF (1-1/2) FEET DEEP. THE TWO ROWS OF SIDE SLATS MUST BE 1" X 4" AND BE MARKED WITH PLASTIC RIBBONS OR MESH FENCING FOR VISIBILITY.
3. NO GRADING WITHIN FENCING. ANY ROOTS GREATER THAN 1" IN DIAMETER THAT ARE DAMAGED OR EXPOSED SHALL BE CLEANLY CUT AND COVERED OVER WITH SOIL.
4. NO CONSTRUCTION MATERIALS OR EQUIPMENT SHALL BE PERMITTED WITHIN CONSTRUCTION FENCING OR BEYOND THE CONSTRUCTION LIMITS.
5. THE AREA ENCLOSED MUST BE AT OR OUTSIDE THE DRIPLINE FOR ALL HERITAGE AND CHAMPION TREES AND ALL REGULATED PINE AND PALM TREES, OR EQUAL TO 2/3 OF THE DRIPLINE OF THE TREE CANOPY FOR ALL OTHER REGULATED SPECIES, OR AT THE TREE ROOT PLATE WHERE ALLOWED BY CONSTRUCTION LIMITS.

TREE BARRICADE FENCING DETAIL

N.T.S.

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SCALE: 1" = 20'

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Project: ZION EVANGELICAL LUTHERAN CHURCH
CITY OF GAINESVILLE, FLORIDA

Sheet title: DEMOLITION PLAN

Project phase: CITY/GRU RESUBMITTAL

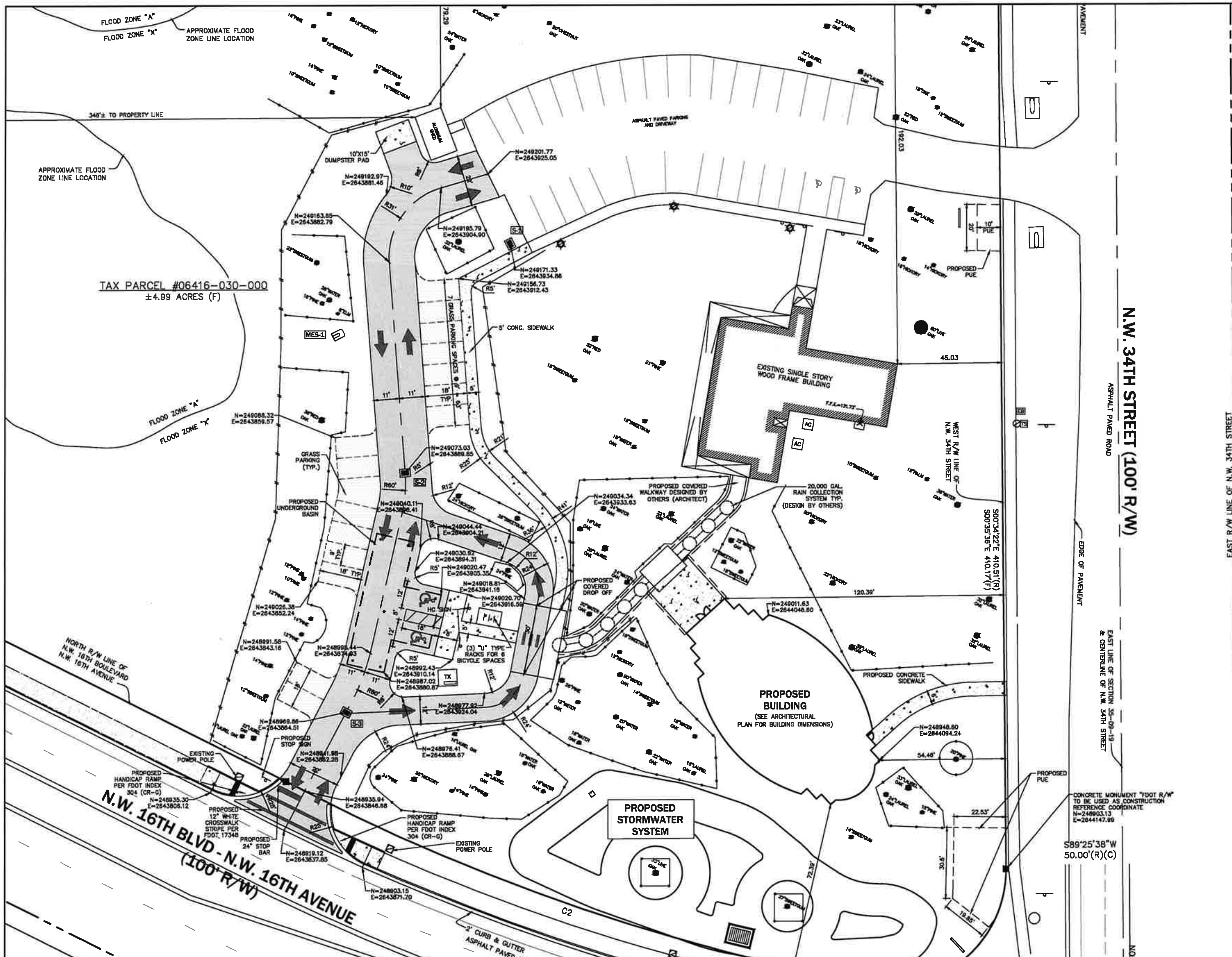
Designed: SJR | Drawn: JC/MAB | Checked: TAR

Project No: 16-152 | Date: 03/15/18

Professional Engineer of Record:

Sergio J. Reyes, P.E. 47311
Engineer Certificate No.

Sheet No.: C0.30



GENERAL NOTES

1. ALL PARKING LOT DIMENSIONS AND RADII SHOWN ARE MEASURED FROM FACE OF CURB AND/OR THE EDGE OF PAVEMENT IF THERE IS NOT CURB PROPOSED. ALL RADIAL PARKING IS 9' MIN. WIDTH AT NARROWEST POINT.
2. CONTRACTOR IS RESPONSIBLE FOR VERTIFICATION OF LOCATION OF ALL EXISTING UTILITIES AND PROTECTION OF SAME DURING CONSTRUCTION.
3. ELECTRIC SERVICE TO BE COORDINATED WITH G.R.U. ELECTRIC ENGINEERING DEPARTMENT.
4. SIDEWALKS WILL BE CONNECTED TO BUILDING ENTRANCE. COORDINATE LOCATIONS WITH ARCHITECT.

CURVE TABLE

CURVE #	LENGTH	RADIUS	DELTA	TANGENT	CHORD BEARING AND DISTANCE
C1	87.9'(R) 87.35'(F)	50.00'(R) 50.00'(F)	100°05'48"(F)	59.69'(F)	S49°38'08"W 76.66'(F)
C2	268.70'(R) 267.97'(F)	904.93'(R) 904.93'(F)	16°57'59"(F)	134.97'(F)	N70°47'56"W 266.99'(F)

NORTH
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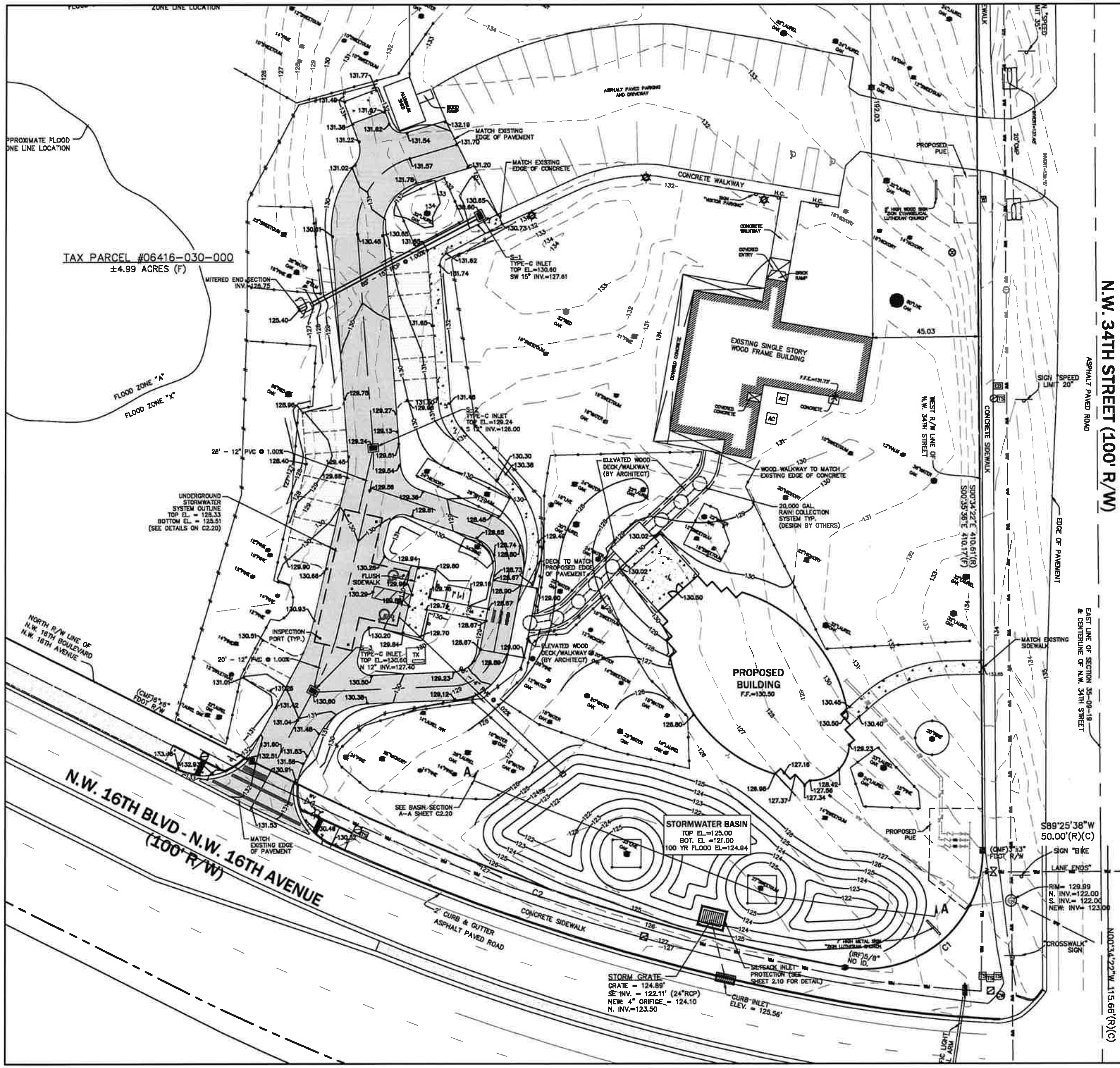
Project: ZION EVANGELICAL LUTHERAN CHURCH
CITY OF GAINESVILLE, FLORIDA

Sheet title: DIMENSION PLAN

Project phase: CITY/GRU RESUBMITTAL
Designed: SJS Drawn: JC/AJB Checked: TAR
Project No. 15-152 Date: 03/15/18
Professional Engineer of Record:
Sergio J. [illegible]
Engineer [illegible] Certificate No.

Sheet No.: C1.00



MAINTENANCE NOTES

1. MAINTENANCE RESPONSIBILITY:

   ZION CHURCH WILL BE THE ENTITY RESPONSIBLE FOR THE MAINTENANCE OF THE EXISTING STORMWATER MANAGEMENT SYSTEM.

2. MAINTENANCE PLAN:

   A. BASINS SHALL BE MOWED REGULARLY TO AVOID EXCESSIVE VEGETATIVE GROWTH. MOWING SCHEDULE SHOULD BE MONTHLY DURING WINTER MONTHS AND MORE FREQUENTLY (BIWEEKLY) DURING SUMMER MONTHS.

   B. BASIN SHALL BE CLEANED OUT ANNUALLY OF ANY ACCUMULATED SEDIMENTATION BUILDUP. IF THE BASINS ARE SHOWING EXCESSIVE SEDIMENTATION ACCUMULATION AT THE BASIN BOTTOM, THE BASIN BOTTOM SHALL BE SCRAPED CLEAN MORE OFTEN AS THE CONDITION DICTATES.

   C. BASIN SIDE SLOPES SHALL BE MAINTAINED WITH A GOOD STAND OF GRASS. SEASONAL GRASSES SHALL BE PLANTED TO AVOID EROSION (WINTER RYE, SUMMER MILLET).

   D. BASIN THAT DO NOT DRAWDOWN PROPERLY AND MAINTAIN STANDING WATER FOR AN EXTENDED PERIOD OF TIME MAY REQUIRE REMEDIAL ACTION. THE ENGINEER SHALL BE NOTIFIED TO HELP COORDINATE REMEDIAL ACTION IN THE EVENT THIS OCCURS.

   E. THE REQUIRED LANDSCAPING SHALL BE MAINTAINED IN A SOUND CONDITION AT ALL TIMES. ANY DEAD LANDSCAPING MATERIALS SHALL BE REPLACED IMMEDIATELY TO ASSURE PUBLIC SAFETY.

STORMWATER STRUCTURE SCHEDULE

STRUCTURE	STRUCTURE DATA	FDOT INDEX
S-1 TYPE-C INLET	TOP EL.=130.60 SW 15" INV.=127.61	232
S-2 TYPE-C INLET	TOP EL.=129.24 S 12" INV.=128.00	232
S-3 TYPE-C INLET	TOP EL.=130.60 N 12" INV.=127.40	232

MITERED END SECTION SCHEDULE

MES	PIPE INVERT	FDOT INDEX
MES-1	15" INV.=126.75	272

NORTH

SCALE: 1" = 20'

0 10 20 40

GRAPHIC SCALE

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Project: ZION EVANGELICAL LUTHERAN CHURCH
CITY OF GAINESVILLE, FLORIDA

Sheet title: PAVING, GRADING, AND DRAINAGE PLAN

Project phase: CITY/GRU RESUBMITTAL

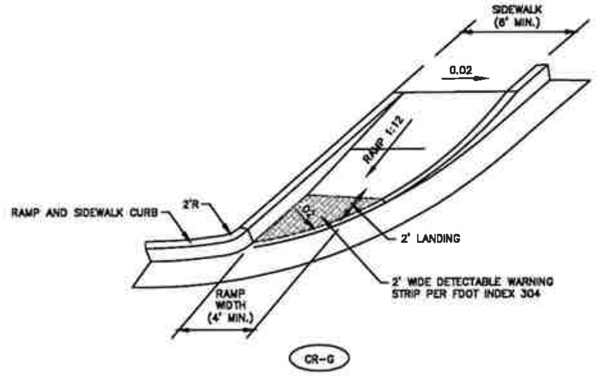
Designed: SJR Drawn: LC/AMB Checked: TAR

Project No: 16-152 Date: 03/15/18

Professional Engineer of Record:

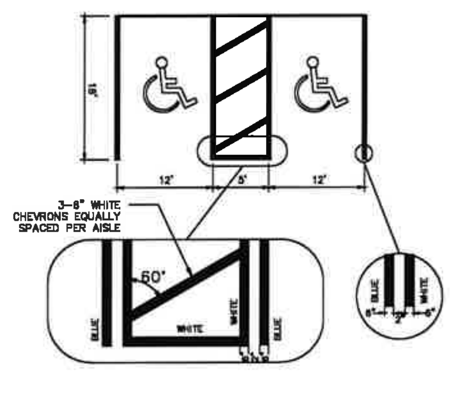
Sergio J. Reyes, P.E. 47311
Engineer Certificate No.

Sheet No.: C2.00



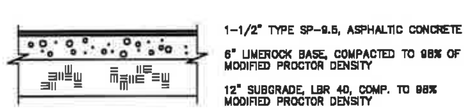
SIDEWALK CURB RAMPS-FDOT INDEX 304

N.T.S.



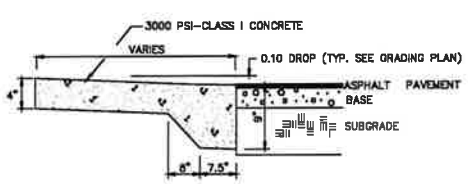
HANDICAP STRIPING DETAIL

N.T.S.



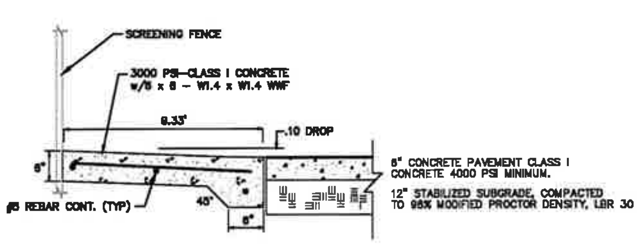
TYPICAL ASPHALT PAVEMENT DETAIL

N.T.S.



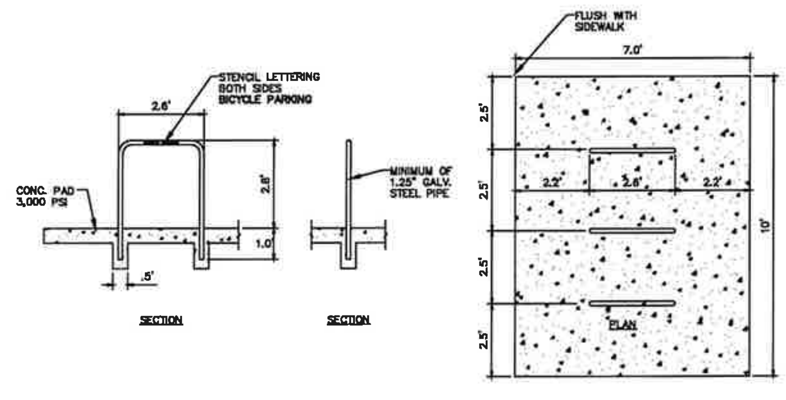
TYPICAL FLUSH SIDEWALK DETAIL

N.T.S.



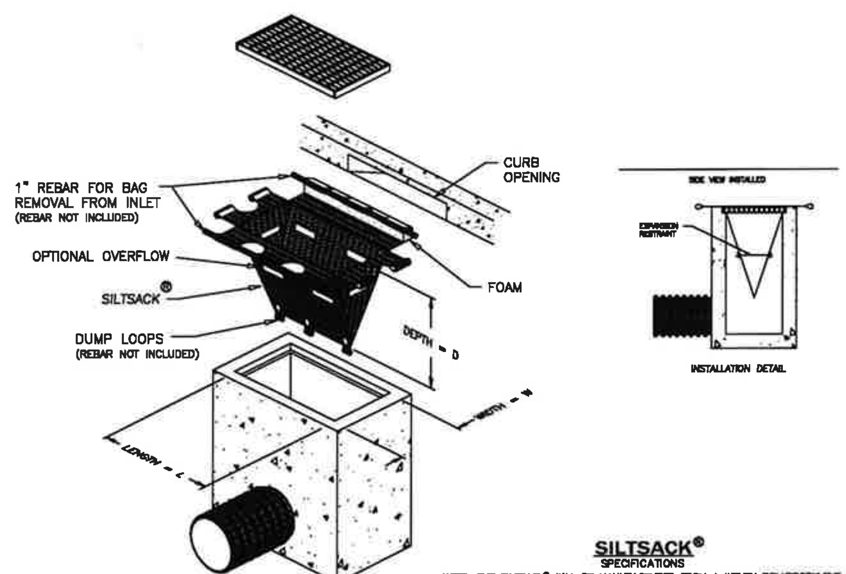
CONCRETE DUMPSTER PAD DETAIL

N.T.S.



BIKE RACK DETAIL

N.T.S.



SILTSACK®

SPECIFICATIONS

NOTE: THE SILTSACK® WILL BE MANUFACTURED FROM A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS.

REGULAR FLOW SILTSACK●

(FOR AREAS OF LOW TO MODERATE PRECIPITATION AND RUN-OFF)

PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	300 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	120 LBS
MULLEN BURST	ASTM D-3786	800 PSI
TRAPEZOID TEAR	ASTM D-4533	120 LBS
UV RESISTANCE	ASTM D-4355	80 %
APPARENT OPENING SIZE	ASTM D-4751	40 US SIEVE
FLOW RATE	ASTM D-4491	40 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	0.55 SEC -1

HI-FLOW SILTSACK●

(FOR AREAS OF MODERATE TO HEAVY PRECIPITATION AND RUN-OFF)

PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	135 LBS
MULLEN BURST	ASTM D-3786	420 PSI
TRAPEZOID TEAR	ASTM D-4533	45 LBS
UV RESISTANCE	ASTM D-4355	90 %
APPARENT OPENING SIZE	ASTM D-4751	20 US SIEVE
FLOW RATE	ASTM D-4491	200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	1.5 SEC -1

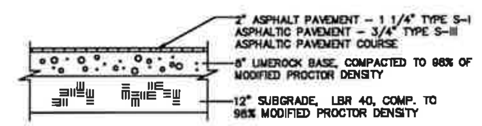
OIL-ABSORBANT SILTSACK●

(FOR AREAS WHERE THERE IS A CONCERN FOR OIL RUN-OFF OR SPILLS)

DEPENDING ON YOUR PARTICULAR APPLICATION, THE SILTSACK CAN BE MADE FROM EITHER ONE OF THE ABOVE FABRICS WITH AN OIL-ABSORBANT PILLOW INSERT OR, MADE COMPLETELY FROM AN OIL-ABSORBANT SILTSACK®, WITH A WOVEN PILLOW INSERT.

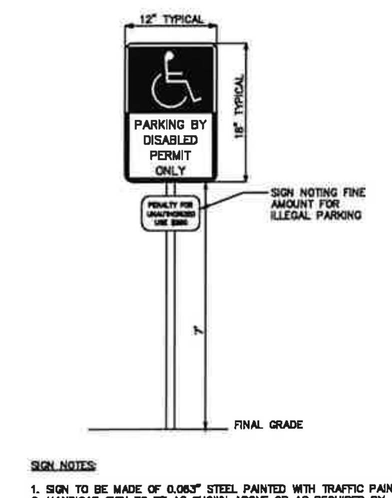
DETAIL OF INLET SEDIMENT CONTROL DEVICE WITH CURB DEFLECTOR

N.T.S.



TYPICAL PAVEMENT CROSS DETAIL WITHIN COUNTY RIGHT OF WAY

N.T.S.

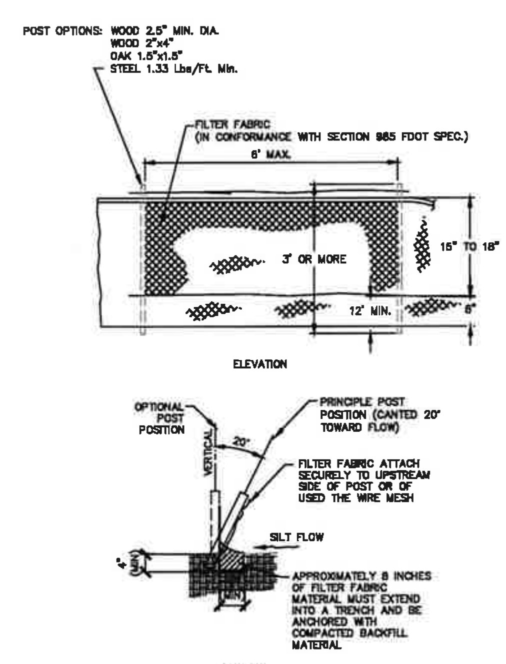


SIGN NOTES:

1. SIGN TO BE MADE OF 0.063" STEEL PAINTED WITH TRAFFIC PAINT
2. HANDICAP SIGN TO BE AS SHOWN ABOVE OR AS REQUIRED BY LOCAL CODE PAINT SIGN BLUE AND WHITE

HANDICAP PARKING SIGN DETAIL

N.T.S.



TYPE III SILT FENCE DETAIL

N.T.S.

PAVING, GRADING AND DRAINAGE SPECIFICATIONS

1. GENERAL: ALL ROADWAY AND DRAINAGE CONSTRUCTION, INCLUDING MATERIALS, CONSTRUCTION TECHNIQUES, AND TECHNICAL STANDARDS, SHALL BE IN ACCORDANCE WITH THE LATEST F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE LATEST F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS.
2. ALL AREAS OF NEW CONSTRUCTION SHALL BE PREPARED AFTER SITE DEMOLITION. TOP SOIL REMAINING ONSITE MAY BE STOCKPILED FOR FINE GRADING IN LANDSCAPED AREAS, IF SUITABLE. THE CONTRACTOR SHALL FURNISH ALL FILL REQUIRED AND DISPOSE OF ALL EXCESS OR UNSUITABLE MATERIAL OFFSITE IN ACCORDANCE WITH ALL REGULATORY REQUIREMENTS.
3. ALL NEW ASPHALT PAVEMENT CONSTRUCTION SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS:
   A. A. EARTHWORK: FILL MATERIALS SHALL CONFORM TO AASHTO SOIL GROUPS A-1, A-3, OR A-2-4 AND SHALL BE PLACED IN 6"-12" LOOSE LIFTS AND COMPACTED TO 98% DENSITY USING MODIFIED PROCTOR METHOD (AASHTO T-180).
   B. B. SUBSOIL EXCAVATION: WHERE SUBSOIL EXCAVATION IS REQUIRED, UNSUITABLE MATERIALS SHALL BE REMOVED TO A DEPTH OF 18" BELOW THE LIMEROCK BASE AND BACKFILLED WITH CLEAN FILL.
   C. C. STABILIZED SUBGRADE: ALL STABILIZED MATERIAL SHALL BE TYPE 'B' CONFORMING TO SECTION 914-3 AND PLACED ACCORDING TO SECTION 160 IN ONE 12" MINIMUM COMPACTED LIFT. SUBGRADE SHALL BE STABILIZED TO A MINIMUM LBR VALUES AND DENSITIES AS SHOWN IN THE TYPICAL SECTIONS.
   D. D. BASE COURSE: ALL MATERIAL SHALL BE LIMEROCK CONFORMING TO SECTION 911 AND PLACED ACCORDING TO SECTION 200 IN ONE 6" MINIMUM COMPACTED LIFT OR DOUBLE COMPACTED LIFT. ALL BASE MATERIAL SHALL BE COMPACTED TO 98% DENSITY BY MODIFIED PROCTOR METHOD (AASHTO T-180). THE PRIME COAT SHALL CONFORM TO SECTION 300.
   E. E. ASPHALTIC CONCRETE: ALL ASPHALTIC CONCRETE MATERIAL SHALL BE AS PER DESIGN SECTIONS AND SHALL CONFORM TO SECTION 334. ALL ASPHALTIC CONCRETE CONSTRUCTION SHALL CONFORM TO SECTION 330. ASPHALT PAVEMENT SHALL BE SUPERPAVE SP-PG 67-22 ASPHALT BINDER.
4. ALL CONCRETE USED FOR CONSTRUCTION OF DRAINAGE STRUCTURES, SIDEWALKS, AND CURBING SHALL BE CLASS I CONFORMING TO SECTION 346.
5. REINFORCED CONCRETE PIPE SHALL CONFORM TO SECTION 430.
6. ALL PAVEMENT MARKINGS REQUIRED IN THE R/W SHALL BE THERMOPLASTIC AND INCLUDE RAISED PAVEMENT MARKERS, WHERE REQUIRED CONFORMING TO SECTION 711.
7. ALL PAVEMENT MARKING, SYMBOLS AND STRIPING WITHIN THE SITE SHALL MEET THE LATEST FLORIDA HANDICAP ACCESSIBILITY CODE. PAVEMENT MARKING SHALL BE 4" BLUE/WHITE (HANDICAP) OR WHITE (REGULAR) AND SHALL CONFORM TO THE LATEST F.D.O.T. AND M.U.T.C.D. STANDARDS.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A GEOTECHNICAL CONSULTANT TO PROVIDE A FIELD INVESTIGATION REPORT DELINEATING RECOMMENDATIONS FOR UNDERCUTTING AND/OR UNDERDRAINS. A COPY OF THIS REPORT SHALL BE FORWARDED TO THE OWNER AND ENGINEER FOR REVIEW AND APPROVAL PRIOR TO UNDERCUTTING OR INSTALLING UNDERDRAIN. UNIT PRICES SHALL BE PROVIDED FOR UNDERDRAIN AND UNDERCUTTING. THE CONTRACTOR SHALL NOT CONSTRUCT BASE COURSE UNTIL THE REPORT IS REVIEWED AND APPROVED BY THE OWNER AND THE ENGINEER.
9. SOIL TESTING RESULTS SHALL BE PROVIDED FOR THE PAVEMENT CONSTRUCTION. TESTING RESULTS SHALL BE SUBMITTED FOR THE SUBGRADE AND BASE COURSE, IN ACCORDANCE WITH THE DESIGN SECTION. A MINIMUM OF 5 TEST LOCATIONS SHALL BE PROVIDED ONSITE. THE TESTING REPORT SHALL DENOTE THE TEST LOCATIONS. THE CONTRACTOR SHALL NOT PROCEED TO THE SUBSEQUENT PAVEMENT SECTION UNTIL TESTING -RESULTS ARE APPROVED FOR PREVIOUS SECTION. ALL TESTING REQUIRED WITHIN THE COUNTY R/W SHALL BE COORDINATED WITH THE COUNTY INSPECTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TESTING COST.
10. LANDSCAPING: FINAL GRADING IN OPEN AREAS AND LANDSCAPE ISLANDS SHALL BE COORDINATED WITH THE LANDSCAPE CONTRACTOR AND THE OWNER. THE CONTRACTOR SHALL ALSO COORDINATE THE PLACEMENT OF ANY IRRIGATION AND ELECTRICAL CONDUIT SLEEVES DURING CONSTRUCTION.
11. ROOF RUNOFF WILL BE DIRECTED TO THE STORMWATER SYSTEM IF A GUTTER COLLECTION SYSTEM IS NOT SHOWN IN THE PLANS. RUNOFF COLLECTION SHALL BE COORDINATED WITH THE ARCHITECT.
12. REMOVAL OF ALL CONSTRUCTION DEBRIS, LIMEROCK, EXCESS OF BUILDERS SAND, CONCRETE AND MORTAR DEBRIS, EXISTING WEEDS AND GRASSES, AND ALL FOREIGN MATERIALS IN THE PLANTING BED AND SOD AREAS IS THE RESPONSIBILITY OF THE SITE WORK CONTRACTOR. SOIL IN AREAS TO BE LANDSCAPED SHALL BE UNCOMPACTED, SUITABLE FOR ROOT GROWTH WITH APPROPRIATE AMOUNTS OF ORGANIC MATTER, AND OF pH 5.5-6.5.
13. TREE BARRICADES MUST REMAIN IN PLACE AND IN THE DIMENSIONS SHOWN ON THE PLAN UNTIL LANDSCAPING BEGINS. SEE NOTE ON SHEET C0.20 AND THE DETAIL ON THE LANDSCAPE PLAN.
14. CITY RIGHT-OF-WAY:
   A. THE METHOD AND MANNER OF PERFORMING THE WORK AND THE QUALITIES OF MATERIAL FOR CONSTRUCTION WITHIN THE ROW SHALL CONFORM TO THE REQUIREMENT SPECIFIED BY THE PUBLIC WORKS DEPARTMENT.
   B. NO WORK SHALL BE DONE NOR MATERIALS USED IN THE ROW, WITHOUT INSPECTION BY THE PUBLIC WORKS DEPARTMENT (334-5070), AND THE CONTRACTOR/DEVELOPER SHALL FURNISH THE DEPARTMENT WITH EVERY REASONABLE FACILITY FOR ASCERTAINING WHETHER THE WORK PERFORMED AND MATERIALS USED ARE IN ACCORDANCE WITH THE REQUIREMENTS AND INTENT OF THE PLANS AND SPECIFICATIONS.
   C. THE PUBLIC WORKS DEPARTMENT RESERVES THE RIGHT TO MODIFY THE PROPOSED WORK WITHIN THE ROW TO ENSURE COMPATIBILITY WITH EXISTING IMPROVEMENTS. SUCH MODIFICATION COSTS SHALL BE BORNE BY THE DEVELOPER."
15. COUNTY RIGHT-OF-WAY
   A. THE METHOD AND MANNER OF PERFORMING THE WORK AND THE QUALITIES OF MATERIAL FOR CONSTRUCTION WITHIN THE COUNTY ROW SHALL CONFORM TO THE REQUIREMENTS SPECIFIED BY THE ALACHUA COUNTY PUBLIC WORKS DEPARTMENT.
   B. NO WORK SHALL BE DONE NOR MATERIALS USED IN THE ROW, WITHOUT INSPECTION BY THE ALACHUA COUNTY PUBLIC WORKS DEPARTMENT (462-2147), AND THE CONTRACTOR/DEVELOPER SHALL FURNISH THE DEPARTMENT WITH EVERY REASONABLE FACILITY FOR ASCERTAINING WHETHER THE WORK PERFORMED AND MATERIALS USED ARE IN ACCORDANCE WITH THE REQUIREMENTS AND INTENT OF THE PLANS AND SPECIFICATIONS.
16. STATE RIGHT-OF-WAY
   A. THE METHOD AND MANNER OF PERFORMING THE WORK AND THE QUALITIES OF MATERIAL FOR CONSTRUCTION WITHIN THE ROW SHALL CONFORM TO THE REQUIREMENTS SPECIFIED BY THE PUBLIC WORKS DEPARTMENT AND THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT).
   B. NO WORK SHALL BE DONE NOR MATERIALS USED IN THE CITY AND STATE ROW, WITHOUT INSPECTION BY THE PUBLIC WORKS DEPARTMENT (334-5070), AND FDOT RESPECTIVELY, AND THE CONTRACTOR/DEVELOPER SHALL FURNISH EACH DEPARTMENT WITH EVERY REASONABLE FACILITY FOR ASCERTAINING WHETHER THE WORK PERFORMED AND MATERIALS USED ARE IN ACCORDANCE WITH THE REQUIREMENTS AND INTENT OF THE PLANS AND SPECIFICATIONS.

No. | Date | Comment

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Project: ZION EVANGELICAL LUTHERAN CHURCH
CITY OF GAINESVILLE, FLORIDA

Sheet title: PAVING, GRADING, AND DRAINAGE DETAILS

Project phase: CITY/GRU RESUBMITTAL

Designed: SJB | Drawn: JJC/ANJ | Checked: TAR

Project No.: 15-152 | Date: 03/5/18

Professional Engineer of Record:

Sergio J. Reyes, P.E. | 47311
Engineer | Certificate No.

Sheet No.: C2.10

THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) MAY BE MODIFIED AND UPDATED DURING CONSTRUCTION AS A RESULT OF WEATHER, UNPREDICTABLE EVENTS AND SITE INSPECTIONS.

THIS DOCUMENT WAS PREPARED IN ORDER TO BE IN COMPLIANCE WITH CHAPTER 62-621.300 (4) OF THE FLORIDA ADMINISTRATIVE CODE, WHICH PERTAINS TO THE GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES. THE ADMINISTRATIVE CODE GRANTS THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) THE AUTHORITY TO REGULATE POINT SOURCE DISCHARGES OF STORM-WATER FROM CONSTRUCTION SITES. THIS DOCUMENT ESTABLISHES A STORMWATER POLLUTION PREVENTION PLAN FOR THE SITE AND IS ORGANIZED TO CORRESPOND TO PART V OF DEP DOCUMENT No. 62-621.300 (4) (A) FDEP FORM 62-281.300 (4) (B) IS TO BE SUBMITTED IN CONJUNCTION WITH THIS DOCUMENT.

I. PROJECT INFORMATION:

PROJECT: ZION EVANGELICAL LUTHERAN CHURCH
COUNTY: FLORIDA
SECTION/TOWNSHIP/RANGE: S 35 , T 9 SOUTH, R 19 EAST
COUNTY PARCEL NO.: 06416-030-000
LATITUDE AND LONGITUDE:
STREET ADDRESS: 1700 NW 34TH ST
PROJECT AREA: 4.99 AC
APPROXIMATE AREA TO BE DISTURBED BY CONSTRUCTION:
2.14 Ac.

II. SITE DESCRIPTION:

1. THE PROPOSED DEVELOPMENT WILL CONSIST OF THE CONSTRUCTION OF A CHURCH WITH ASSOCIATED PAVING, DRAINAGE AND UTILITY IMPROVEMENTS.
2. THE SOIL CONDITIONS WERE INVESTIGATED AND SUMMARIZED IN THE SOILS REPORT PREPARED BY UNIVERSAL ENGINEERING SCIENCES. THE PROPOSED DRAINAGE PLAN WILL CONSIST OF 2 DRAINAGE AREAS. AREA 1: 1.65 ACRES OF RUNOFF WILL BE DIRECTED TO THE ABOVE GROUND BASIN WHICH DISCHARGES TO AN EXISTING INLET CONNECTED TO THE STREET SYSTEM. AREA 2: 0.19 ACRES WILL BE DIRECTED TO UNDERGROUND BASIN WHICH OVERFLOWS TO THE ABOVE GROUND BASIN. THE EXISTING AND PROPOSED BUILDINGS WILL BE CONNECTED TO A RAINWATER COLLECTION SYSTEM. THE RUNOFF FROM THE BUILDINGS WILL BE USED FOR IRRIGATION. IF THE RAIN COLLECTION REACHES CAPACITY, THE PROPOSED ABOVE GROUND BASIN HAS BEEN SIZED TO HANDLE THE OVERFLOW.
3. EXISTING AND FUTURE DRAINAGE PATTERNS ARE SHOWN IN THE DRAINAGE DESIGN NOTES FOR PRE-DEVELOPMENT CONDITIONS AND POST-DEVELOPMENT CONDITIONS. OUTFALLS, AND STORMWATER BASINS ARE SHOWN IN THE DRAINAGE PLAN AND THE DETAIL PLAN.
4. SEQUENCE OF CONSTRUCTION:
   A. PRIOR TO CONSTRUCTION, SILT FENCING AND TREE PROTECTION BARRICADES SHALL BE INSTALLED AND ALL EXISTING DRAINAGE STRUCTURES SHALL BE PROTECTED IN ACCORDANCE WITH THE FDOT FLORIDA EROSION AND SEDIMENTATION CONTROL MANUAL.
   B. THE CONSTRUCTION ENTRANCE(S) WILL BE STABILIZED TO MINIMIZE THE CREATION OF DUST AND OFF SITE TRACKING OF SEDIMENTS.
   C. THE SITE SHALL BE CLEARED AND GRUBBED OF UNDESIRABLE VEGETATION.
   D. THE UNDERGROUND UTILITIES AND STORMWATER PIPING WILL BE INSTALLED AND CONNECTED TO EXISTING STRUCTURES.
   E. THE SITE WILL BE ROUGHLY GRADED. IF SUITABLE, THE EXCAVATED MATERIAL MAY BE USED AS FILL FOR ON-SITE GRADING. THE ROADWAYS SHALL BE GRADED. (THE BASIN AREA SHALL BE STABILIZED AS SPECIFIED IN THE PLANS.)
   F. ROADWAYS AND PARKING LOTS WILL BE COMPACTED AND A LIMEROCK BASE WILL BE ESTABLISHED FOLLOWED BY AN OVERLAY OF ASPHALTIC CONCRETE. BUILDINGS SHALL BE CONSTRUCTED.
   G. UPON SIGNIFICANT COMPLETION OF CONSTRUCTION, THE STORMWATER SYSTEM SHALL BE FLUSHED OUT TO REMOVE ACCUMULATED DEBRIS AND SEDIMENT.
   H. (EXISTING) STORMWATER BASIN(S) WILL BE SCRAPED CLEAN OF ACCUMULATED SEDIMENT.
   I. ALL DISTURBED AREAS WITHIN THE CONSTRUCTION AREA SHALL BE COMPLETELY GRASSED AND/OR LANDSCAPED. EVIDENCE OF GROWTH MUST BE PRESENT PRIOR TO REMOVAL OF SILT FENCING AND OTHER EROSION CONTROL APPLICATIONS.

III. CONTROLS:

THE CONTROLS SHALL BE IMPLEMENTED AND MAINTAINED DURING THE ENTIRE CONSTRUCTION OF THE PROJECT. IF SITE CONDITIONS ARE SUCH THAT ADDITIONAL CONTROL MEASURES ARE REQUIRED THAN WHAT IS SPECIFIED IN THE EROSION AND SEDIMENTATION CONTROL PLAN, THEN THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL BEST MANAGEMENT PRACTICES NECESSARY.

1. THE CONSTRUCTION ACCESS SHALL BE STABILIZED WITH GRAVEL AND TEMPORARY VEGETATION TO PREVENT SILT LEAVING THE SITE.
2. TREE BARRICADES SHALL BE IMPLEMENTED BEFORE CLEARING AND GRUBBING OF ANY OF THE WORK AREAS.
3. BEFORE CLEARING, SILT FENCES SHALL BE INSTALLED AROUND THE PERIMETER OF THE CONSTRUCTION AND AROUND THE WETLAND(S) AND/OR BASIN(S) AS SHOWN IN THE PLANS. ALL EXISTING STORM DRAINAGE SWALES AND INLETS SHALL BE PROTECTED PER THE FDOT FLORIDA EROSION AND SEDIMENTATION CONTROL MANUAL.
4. AFTER CLEARING BUT BEFORE EXCAVATION AND GRADING, TEMPORARY BERMS AND SWALES SHALL BE CONSTRUCTED AS REQUIRED TO DIVERT THE FLOW INTO THE CORRESPONDING STORMWATER BASIN.
5. THE BASIN (ALL BASIN) AREA(S) SHALL BE PROTECTED AS INDICATED ON THE PLANS.
6. THE STORMWATER BASIN(S) SHALL BE ROUGH GRADED TO WITHIN 6" OF THE DESIGNED BASIN BOTTOM. THE BASIN SIDE SLOPES SHALL BE STABILIZED AS SHOWN IN THE PLANS BY SEEDING, MULCHING AND/OR SODDING TO PREVENT EXCESSIVE EROSION.
7. DURING CONSTRUCTION OF PAVING AND BUILDINGS, EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED AS REQUIRED.
8. ALL DISTURBED AREAS WITHIN THE CONSTRUCTION SITE SHALL BE COMPLETELY LANDSCAPED AND/OR GRASSED. FINAL STABILIZATION (INCLUDING SEEDING, MULCHING, SODDING OR RIPRAP) SHALL BE INSTALLED AS REQUIRED. GRASS SEEDING RATES AND MIXTURES SHALL BE PER FDOT INDEX 104. EVIDENCE OF GROWTH MUST BE PRESENT PRIOR TO REMOVAL OF SILT FENCING AND OTHER EROSION CONTROL APPLICATIONS AND PRIOR TO FINAL RELEASE.

IV. EROSION AND SEDIMENTATION CONTROLS:

STABILIZATION PRACTICES

1. ALL ENTRANCES TO THE SITE SHALL BE STABILIZED BEFORE CONSTRUCTION AND FURTHER DISTURBANCE BEGINS. GRAVEL PAD SHALL PROVIDE STABILIZATION AND MINIMIZE THE AMOUNT OF SEDIMENT LEAVING THE SITE. MAINTENANCE OF THE ENTRANCE SHALL INCLUDE SWEEPING OF THE AREA ADJACENT TO THE ENTRANCE. STONE AND GRAVEL MIGHT NEED TO BE PERIODICALLY ADDED TO MAINTAIN THE EFFECTIVENESS OF THE ENTRANCE(S).
2. TREE BARRICADES SHALL BE INSTALLED AROUND THE TREES AS SHOWN IN THE DETAIL PLAN TO PROTECT THE EXISTING VEGETATION.
3. MULCH SHALL BE PLACED IN THE AREAS REQUIRED TO PREVENT EROSION FROM STORMWATER RUNOFF AND THE AREAS SHOWN ON THE PLANS. MULCH SHALL BE ANCHORED TO RESIST WIND DISPLACEMENT AND SHALL BE INSPECTED AFTER EVERY RAINSTORM TO IDENTIFY AREAS WHERE MULCH HAS BEEN WASHED OUT OR LOOSENED. THESE AREAS SHALL HAVE MULCH COVER REPLACEMENT.
4. SEEDING SHALL BE STARTED AFTER GRADING HAS BEEN FINISHED ON THE AREAS SHOWN IN THE PLANS. SEEDED AREAS SHOULD BE INSPECTED FOR FAILURE TO ESTABLISH, AND NECESSARY REPAIRS AND RESEEDING SHOULD BE MADE AS SOON AS POSSIBLE. ADDITIONAL SEEDING AND MULCH MAY BE REQUIRED AS NECESSARY TO PREVENT EROSION DURING OR AFTER CONSTRUCTION HAS FINISHED.
5. SOD SHALL BE INSTALLED IN THE AREAS SHOWN IN THE PLANS. SOD SHALL BE PEGGED IF INSTALLED ON SLOPES GREATER THAN 3:1. SODDED AREAS SHALL BE MAINTAINED AND INSPECTED TO ENSURE SUCCESSFUL ESTABLISHMENT.

SEDIMENTATION PRACTICES

1. SILT FENCES SHALL BE INSTALLED IN THE AREAS SHOWN IN THE PLANS AND AS REQUIRED TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION AREA. SILT FENCES SHALL BE INSPECTED AFTER EACH RAINFALL EVENT TO ENSURE THAT THERE ARE NO GAPS OR TEARS. IF GAPS OR TEARS ARE FOUND THE FABRIC SHOULD BE REPAIRED OR REPLACED. SEDIMENT REMOVAL SHALL BE PART OF THE REGULAR MAINTENANCE. SILT FENCES SHALL REMAIN IN PLACE UNTIL CONSTRUCTION HAS FINISHED AND DISTURBED AREAS ARE PERMANENTLY STABILIZED.
2. DIVERSION SWALES, IF REQUIRED, SHALL BE CONSTRUCTED BEFORE MAJOR LAND DISTURBANCE OF THE RECEIVING BASIN. DIVERSION SWALES SHALL BE STABILIZED AFTER CONSTRUCTION TO MAINTAIN ITS EFFICIENCY.
3. INLETS SHOULD BE TEMPORARILY PROTECTED TO PREVENT SEDIMENT ENTERING THE INLET. BARRIERS WILL CATCH SOIL, DEBRIS AND SEDIMENT AT THE ENTRANCE OF THE INLET.
4. OUTFALL STRUCTURES SHALL HAVE SILT FENCES TO PREVENT SILT FROM ENTERING THE STORMWATER BASINS AND SHALL BE STABILIZED AS REQUIRED TO PREVENT EROSION FROM WASHOUTS.

V. STORMWATER MANAGEMENT:

1. THE PROPOSED PROJECT OBTAINED AN ENVIRONMENTAL RESOURCE PERMIT FROM ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (SJRWMD) FOR THE CONSTRUCTION AND OPERATION OF A STORMWATER TREATMENT SYSTEM AND CONTROLS. THE PROPOSED SYSTEM (AS SHOWN ON THE PLANS) INCLUDED THE USE OF THE BEST MANAGEMENT PRACTICES (BMP) CONSISTENT WITH THE APPLICABLE REQUIREMENTS OF RULE 40C-42 OF THE DISTRICT. THE OWNER AND/OR THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF THE STORMWATER TREATMENT SYSTEM AND CONTROLS UNTIL CONSTRUCTION ACTIVITIES ARE COMPLETED AND FINAL STABILIZATION HAS BEEN ACCOMPLISHED. HOWEVER, THE OWNER AND/OR AN ENTITY SIMILAR TO A HOMEOWNERS ASSOCIATION SHALL BE RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF THE STORMWATER SYSTEM IN PERPETUITY, IN ACCORDANCE WITH THE REQUIREMENTS OF THE ENVIRONMENTAL RESOURCE PERMIT.
2. TO TREAT AND CONTROL THE STORMWATER PRODUCED BY THE PROPOSED DEVELOPMENT, THE PROJECT REQUIRES THE INSTALLATION AND CONSTRUCTION OF THE FOLLOWING BMP'S: ONE DRY RETENTION BASIN THAT DISCHARGES TO AN EXISTING INLET TO THE CITY SYSTEM, ONE UNDERGROUND RETENTION BASIN THAT OVERFLOWS TO THE ABOVE GROUND BASIN, AND A RAINWATER COLLECTION SYSTEM FOR THE EXISTING AND PROPOSED BUILDING. THE BASIN SYSTEM HAS BEEN DESIGNED TO CONTAIN AND ATTENUATE THE STORMS AND DISCHARGE AT PRE-DEVELOPMENT CONDITIONS, WHILE PROVIDING TREATMENT TO THE RUNOFF AS REQUIRED BY THE DISTRICT AND STATE RULES USING THE GUIDELINES CONTAINED IN THE SJRWMD HANDBOOK.

VI. CONTROLS FOR OTHER POTENTIAL POLLUTANTS:

1. WASTE DISPOSAL: NO SOLID MATERIALS, INCLUDING CONSTRUCTION MATERIALS, SHALL BE DISCHARGED TO SURFACE WATERS AND ARE NOT AUTHORIZED UNDER THE ISSUED ENVIRONMENTAL RESOURCE PERMIT.
2. THE USE OF GRAVEL AND CONTINUING SWEEPING ACTIVITIES AT THE ENTRANCE OF THE SITE WILL CONTROL THE TRACKING OF SEDIMENT AND DUST LEAVING THE SITE.
3. THE PROPOSED DEVELOPMENT WILL PROVIDE WATER AND SEWER SYSTEM BY CONNECTING INTO THE CENTRAL MUNICIPAL SYSTEM OF GAINESVILLE REGIONAL UTILITIES.
4. ANY APPLICATION OF FERTILIZERS AND PESTICIDES NECESSARY TO ESTABLISH AND MAINTENANCE OF VEGETATION DURING CONSTRUCTION AND THROUGH PERPETUITY MAINTENANCE SHALL FOLLOW THE MANUFACTURERS RECOMMENDATIONS AND THE APPLICABLE RULES OF THE STATE OF FLORIDA.
5. ANY TOXIC MATERIALS REQUIRED DURING CONSTRUCTION SHALL BE PROPERLY STORED, DISPOSED OF AND CONTRACTOR AND/OR OWNER SHALL PROVIDE THE APPROPRIATE PERMITS FROM THE LOCAL OR STATE AGENCIES.

VII. APPROVED STATE OR LOCAL PLANS:

1. ALL THE SEDIMENT AND EROSION CONTROLS THAT ARE LISTED IN THE SITE PLAN AS APPROVED BY THE SJRWMD ARE INCLUDED IN THIS STORMWATER POLLUTION PREVENTION PLAN (SEE ITEM III AND IV).
2. THIS STORMWATER POLLUTION PREVENTION PLAN SHALL BE AMENDED IF REQUIRED BY ANY LOCAL OR STATE AGENCY OR AS REQUIRED BY UNFORESEEABLE CONDITIONS AND THE OWNER SHALL SUBMIT A RE-CERTIFICATION TO THE NPDES STATE OFFICE THAT THE PLAN HAS BEEN AMENDED TO ADDRESS THOSE CHANGES.

VIII. MAINTENANCE:

THE CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE, INSPECTION SCHEDULE, AND REPAIRS OUTLINED IN THIS PLAN. MAINTENANCE SHALL CONTINUE THROUGHOUT THE PROJECT UNTIL WORK IS COMPLETE. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER CONSTRUCTION IS COMPLETE.

IN ADDITION TO THE ITEMS MENTIONED IN THE PREVIOUS SECTIONS, THE CONTRACTOR SHALL INITIATE ANY REPAIRS WITHIN 24 HOURS OF BEING REPORTED. IN THE EVENT THAT THE BASINS DO NOT PERFORM PROPERLY OR IF A SINKHOLE DEVELOPS, THE PROJECT ENGINEER SHALL BE NOTIFIED TO ASSIST IN COORDINATING REMEDIAL ACTION.

1. MAINTENANCE WOULD BE DIVIDED IN ROUTINE MAINTENANCE AND REPAIR MAINTENANCE. ALL STORMWATER BMP'S SHOULD BE INSPECTED FOR CONTINUED EFFECTIVENESS AND STRUCTURAL INTEGRITY ON A REGULAR BASIS. THE SYSTEMS SHOULD BE CHECKED AFTER EACH STORM EVENT IN ADDITION TO REGULARLY SCHEDULED INSPECTIONS.
2. ROUTINE MAINTENANCE REQUIREMENTS SHOULD BE INCLUDED IN THE INSPECTOR CHECKLIST TO AID THE INSPECTOR IN DETERMINING WHETHER A BMP'S MAINTENANCE IS ADEQUATE OR NEEDS A REVISION. INSPECTORS SHALL KEEP RECORD OF MAINTENANCE, ROUTINE OR REPAIR, TO PROVIDE EVIDENCE OF AN EFFICIENT INSPECTION AND MAINTENANCE.
3. SIDE ENTRANCES: MAINTENANCE SHALL INCLUDE REPLACEMENT OF GRAVEL AND CLEANING THE SOIL THAT IS TRACKED OFFSITE FOR PROPER DISPOSAL.
4. TREE BARRICADES: MAINTENANCE SHALL INCLUDE INSPECTION OF MESH AND POSTS AND REPAIR OR REPLACEMENT OF DAMAGED VEGETATION.
5. SILT FENCES: MAINTENANCE SHALL INCLUDE SEDIMENT REMOVAL AND INSPECTION TO ENSURE PROPER ANCHORING AND THAT NO TEARING OR GAPS HAVE OCCURRED. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF SILT FENCE.
6. DIVERSION SWALES: MAINTENANCE SHALL INCLUDE INSPECTION AFTER EVERY RAINFALL EVENT AND ONCE EVERY TWO WEEKS BEFORE FINAL STABILIZATION. THEY SHOULD BE CLEARED OF SEDIMENT AND MAINTAIN VEGETATIVE COVER.
7. TEMPORARY BERMS: MAINTENANCE SHALL INCLUDE REMOVAL OF DEBRIS, TRASH SEDIMENT AND LEAVES. SIDES OF THE BERM SHALL BE INSPECTED FOR EROSION AFTER EACH STORM EVENT.
8. MULCHING: ROUTINE MAINTENANCE SHALL INCLUDE REPLACEMENT PERIODICALLY.
9. SEEDING: ROUTINE MAINTENANCE SHALL INCLUDE RESEEDING OF AREAS THAT FAILED TO ESTABLISH.
10. SODDING: ROUTINE MAINTENANCE SHALL INCLUDE WATERING AND MOWING. REPLACEMENT OF GRASS MAY BE NECESSARY IF COVER IS NOT FULLY ESTABLISHED.
11. INLETS: ROUTINE MAINTENANCE SHALL INCLUDE INSPECTION AFTER EVERY STORM EVENT AND MIGHT INCLUDE REMOVAL OF ACCUMULATED SEDIMENT.
12. OUTFALL STRUCTURES: ROUTINE MAINTENANCE SHALL INCLUDE INSPECTION AFTER EVERY STORM EVENT TO ASSURE NO EROSION OR SCOUR HAS OCCURRED.
13. DRY RETENTION BASINS: ROUTINE MAINTENANCE SHALL INCLUDE MONITORING FOR SEDIMENT ACCUMULATION, CLEAN AND REMOVE DEBRIS FROM INLETS AND OUTLETS, MOW SIDE SLOPES AND INSPECT FOR DAMAGE OF BERMS AND REPAIR UNDERCUT OR ERODED AREAS AS NECESSARY.
14. WET DETENTION BASINS: ROUTINE MAINTENANCE SHALL INCLUDE MONITORING FOR SEDIMENT ACCUMULATION, CLEAN AND REMOVE DEBRIS FROM INLETS AND OUTLETS, MOW SIDE SLOPES AND INSPECT FOR DAMAGE OF BERMS AND REPAIR UNDERCUT OR ERODED AREAS AS NECESSARY.

IX. INSPECTIONS:

1. THE OWNER AND /OR CONTRACTOR SHALL PROVIDE QUALIFIED PERSONNEL TO INSPECT ALL POINTS OF POTENTIAL DISCHARGE FROM THE PROJECT SITE FOR DISTURBED AREAS, THE EROSION AND SEDIMENTATION CONTROLS AND BMP'S AS LISTED IN THIS PLAN. THE INSPECTION SHALL BE PERFORMED DURING CONSTRUCTION AND BEFORE FINAL STABILIZATION, ONCE EVERY SEVEN-CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS GREATER THAN 0.50 INCHES. AFTER FINAL STABILIZATION AND BEFORE FINISH OF CONSTRUCTION THE INSPECTION SHALL BE CONDUCTED ONCE EVERY MONTH.
2. THE CONTRACTOR SHALL INSTALL A RAIN GAUGE AT THE SITE TO MONITOR AND DOCUMENT RAINFALL EVENTS IN EXCESS OF 0.50 INCHES.
3. ALL DISTURBED AREAS AND AREAS USED FOR MATERIALS STORAGE SHALL BE INSPECTED FOR POLLUTANTS ENTERING THE STORMWATER SYSTEM. THE STORMWATER MANAGEMENT SYSTEM AND EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE INSPECTED TO ENSURE THEY ARE OPERATING CORRECTLY. LOCATIONS WHERE VEHICLES ENTER AND LEAVE THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFFSITE SEDIMENT TRACKING.
4. REPAIR OR MAINTENANCE NEEDED TO ASSURE PROPER OPERATION OF THE STORMWATER POLLUTION PREVENTION PLAN SHALL BE DONE IN A TIMELY MANNER BUT NO LATER THAN 7 CALENDAR DAYS FOLLOWING THE INSPECTION.
5. A REPORT SHALL BE KEPT OF EACH INSPECTION FOR THREE YEARS AFTER FINAL STABILIZATION AND SHALL INCLUDE THE DATES OF EACH INSPECTION, THE SCOPE OF THE INSPECTION, MAJOR OBSERVATIONS, ANY REPAIR AND/OR MAINTENANCE REQUIRED AND ANY INCIDENT OF NON-COMPLIANCE. IF THE REPORT DOES NOT CONTAIN ANY INCIDENTS OF NON-COMPLIANCE, THE REPORT SHALL CONTAIN A CERTIFICATION THAT THE FACILITY HAS BEEN IN COMPLIANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN AND THE NPDES PERMIT. THE REPORT SHALL INCLUDE THE NAME AND QUALIFICATIONS OF THE INSPECTOR AND SHALL BE SIGNED IN ACCORDANCE TO FDEP RULE 62-621.300, PART VII.C. A COPY OF THE CONSTRUCTION INSPECTION FORM IS INCLUDED ON THIS STORMWATER POLLUTION PREVENTION PLAN SHEET. A COPY SHALL BE RETAINED AT THE CONSTRUCTION SITE FROM THE DATE OF PROJECT INITIATION TO THE DATE OF FINAL STABILIZATION.

X. NON-STORMWATER DISCHARGES:

1. THE FOLLOWING NON-STORMWATER DISCHARGES MIGHT BE COMBINED WITH STORMWATER AND WOULD BE AUTHORIZED AS PART OF THIS PERMIT: FIRE HYDRANT FLUSHING, CONTROL OF DUST, POTABLE WATER FLUSHING AND IRRIGATION DRAINAGE. BECAUSE OF THE NATURE OF THESE DISCHARGES, THE EROSION, STABILIZATION AND TREATMENT SYSTEMS TO BE IMPLEMENTED, AS PART OF THIS PLAN WOULD BE APPROPRIATE TO PREVENT AND TREAT ANY POLLUTION RELATED TO THESE NON-STORMWATER DISCHARGES.
2. DISCHARGES FROM DEWATERING ACTIVITIES ASSOCIATED WITH SITE CONSTRUCTION ARE NOT AUTHORIZED AND REQUIRED CONSTRUCTION OF TEMPORARY SEDIMENTATION BASINS AND USE OF APPROPRIATE FLOCCULATING AGENTS TO ENHANCE PARTICLE SEGREGATION AND SPEED UP SETTLING OF PARTICLES.

XI. CONTRACTORS:

1. ALL CONTRACTORS AND/OR SUBCONTRACTORS RESPONSIBLE FOR IMPLEMENTING THE PLAN SHALL SIGN THE CERTIFICATION STATEMENT BEFORE STARTING CONSTRUCTION ACTIVITIES OF THE PROJECT. THE CERTIFICATION MUST INCLUDE THE NAME AND TITLE OF THE PERSON PROVIDING THE SIGNATURE, THE NAME, ADDRESS AND TELEPHONE NUMBER OF THE CONTRACTING FIRM, THE ADDRESS OF THE SITE AND THE DATE THE CERTIFICATION IS MADE. THE OWNER SHALL KEEP THESE CERTIFICATIONS AS PART OF THIS POLLUTION PLAN. MULTIPLE COPIES OF THE CERTIFICATION STATEMENT MAY BE NECESSARY DEPENDING UPON THE NUMBER OF SUBCONTRACTORS ASSOCIATED WITH THE PROJECT.

CERTIFICATION STATEMENT

"I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND AND SHALL COMPLY WITH THE TERMS AND CONDITIONS OF THE STATE OF FLORIDA GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES AND THIS STORMWATER POLLUTION PREVENTION PLAN PREPARED THEREUNDER."

CONTRACTING FIRM: ______
ADDRESS: ______
CITY, STATE, ZIP CODE: ______
TELEPHONE: ______
FAX: ______
PROJECT NAME: ZION EVANGELICAL LUTHERAN CHURCH
PROJECT ADDRESS: 1700 N.W. 34TH STREET
GAINESVILLE, FLORIDA 32605

NAME: SERGIO REYES SIGNATURE: ______
DATE: ______

STORMWATER POLLUTION PREVENTION PLAN INSPECTION REPORT FORM

Inspections must occur at least once a week and within 24 hours of the end of a storm event that is 0.50 inches or greater.

PROJECT NAME: ZION EVANGELICAL LUTHERAN CHURCH FDEP NPDES STORMWATER IDENTIFICATION NO.: FLR10 ______
OWNER: ZION EVANGELICAL LUTHERAN CHURCH CONTRACTOR: ______
CONSTRUCTION MANAGER: ______

Date of Inspection	Location	Rain data	Type of control (see below)	Date installed / modified	Current Condition (see below)	Observations or Corrective Action / Other Remarks	Inspected By

CONDITION CODE: G = Good; C = Needs to be cleaned; M = Marginal, needs maintenance or replacement soon; P = Poor, needs immediate maintenance or replacement; O = Other

CONTROL TYPE CODES

1. Silt Fence	10. Storm drain inlet protection	19. Reinforced soil retaining system	28. Tree protection
2. Earth dikes	11. Vegetative buffer strip	20. Gabion	29. Detention pond
3. Structural diversion	12. Vegetative preservation area	21. Sediment Basin	30. Retention pond
4. Swale	13. Retention Pond	22. Temporary seed / sod	31. Waste disposal / housekeeping
5. Sediment Trap	14. Construction entrance stabilization	23. Permanent seed / sod	32. Dam
6. Check dam	15. Perimeter ditch	24. Mulch	33. Sand Bag
7. Subsurface drain	16. Curb and gutter	25. Hay Bales	34. Other
8. Pipe slope drain	17. Paved road surface	26. Geotextile	
9. Level spreaders	18. Rock outlet protection	27. Rip-rap	

INSPECTOR INFORMATION:

Name ______ Qualification ______ Date ______

The above signature also shall certify that this facility is in compliance with the Stormwater Pollution Prevention Plan and the State of Florida Generic Permit for Stormwater Discharge from Large and Small Construction Activities if there are not any incidents of non compliance identified above.

* * * * * *

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

No. | Date | Comment

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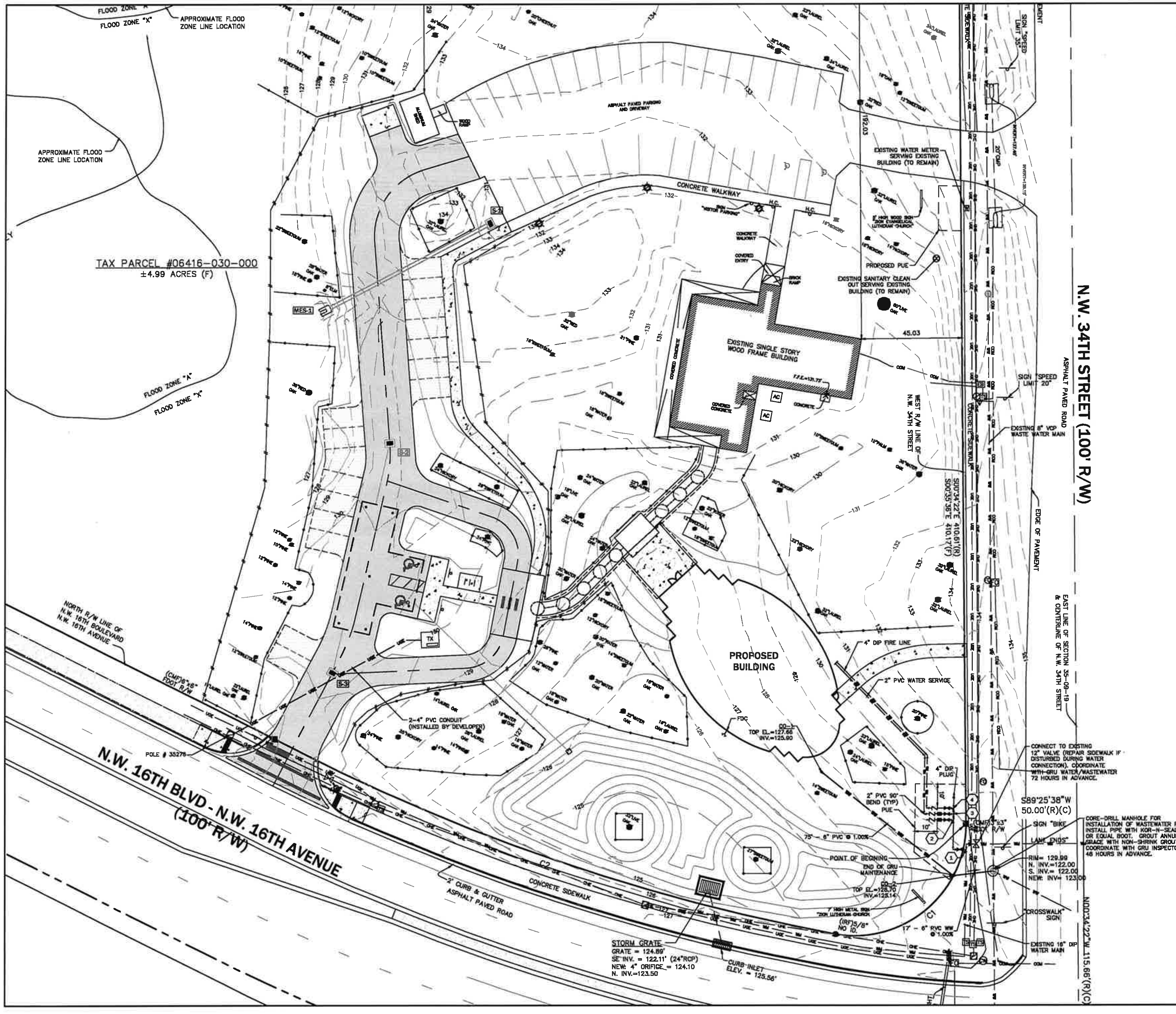
Project: ZION EVANGELICAL LUTHERAN CHURCH
CITY OF GAINESVILLE, FLORIDA

Sheet title: STORMWATER POLLUTION PREVENTION PLAN

Project phase: CITY/GRU RESUBMITTAL
Designed: S.P. Drawn: JC/AIAD Checked: TAR
Project No: 15-152 Date: 03/15/18
Professional Engineer of Record:
Sergio J. Reyes, P.E. 47311
Engineer Certificate No.

Sheet No.: C3.00



GRU UTILITY NOTES

1. A SEPARATE UTILITY PERMIT WILL BE REQUIRED FOR THE EXTENSION OF THE PROPOSED UTILITIES (WATER & WASTEWATER).
2. THE UTILITY PLAN AND PLAT SHOWS ALL PUBLIC UTILITY EASEMENTS (PUE'S) IN A METES AND BOUNDS FORMAT. UPON GRU'S APPROVAL OF PLANS FOR DEVELOPMENTS NOT BEING PLATTED, OWNER MAY CHOOSE TO GRANT THE METES AND BOUNDS EASEMENTS AS SHOWN, OR GRANT A BLANKET EASEMENT OVER THE ENTIRE PROPERTY, PROVIDED FACILITIES ARE INSTALLED WITHIN THE PRESCRIBED DISTANCES AS SHOWN ON THE UTILITY PLANS AND IN ACCORDANCE WITH THE UTILITY SEPARATION REQUIREMENTS TABLE IN APPENDIX C OF THE GRU W/WW/RCW DESIGN STANDARDS.
3. ALL CONSTRUCTION MATERIALS AND METHODS FOR POTABLE WATER, WASTEWATER AND RECLAIMED WATER SYSTEMS SHALL CONFORM TO GRU'S MOST RECENT POTABLE WATER, WASTEWATER, AND RECLAIMED WATER SYSTEM DESIGN STANDARDS AND APPROVED MATERIALS MANUAL.
4. POTABLE WATER AND WASTEWATER MAINS SHALL MAINTAIN A MINIMUM 10 FEET HORIZONTAL AND 1.5 FOOT VERTICAL SEPARATION.
5. A MINIMUM HORIZONTAL SEPARATION OF 10 FEET FOR POTABLE WATER MAINS, WASTEWATER FORCE MAINS, AND RECLAIMED WATER MAINS, AND 15 FEET FOR GRAVITY WASTEWATER MAINS SHALL BE PROVIDED AND MAINTAINED FROM BUILDINGS, TRANSFORMERS AND ALL PERMANENT STRUCTURES. SERVICE LATERALS REQUIRE 5 FEET LESS CLEARANCE FOR EACH OF THE UTILITIES; NOTE THAT WATER SERVICE LATERALS SHALL BE INSTALLED WITHIN 3" SLEEVES. (SEE APPENDIX C OF GRU'S DESIGN STANDARDS AND CONSTRUCTION DETAILS FOR POTABLE WATER, WASTEWATER, AND RECLAIMED WATER – HORIZONTAL SEPARATION DISTANCES FOR PARALLEL AND PERPENDICULAR CLEARANCE FROM OTHER OBJECTS TABLE.)
6. POTABLE WATER SERVICES, REQUIRING A SEPARATE WATER METER, SHALL BE PROVIDED TO EACH LOT, BUILDING OR PARCEL. EFFECTIVE OCTOBER 1, 2007, FOR COMMERCIAL, MULTIFAMILY, AND INSTITUTIONAL DEVELOPMENTS, THE DEVELOPER SHALL BE RESPONSIBLE FOR INSTALLING POTABLE WATER SERVICES AND YOKE ASSEMBLY PACKAGE UP TO AND INCLUDING THE METER YOKE, BOX (INSTALLED AT FINAL GRADE) AND ASSOCIATED APPURTENANCES, FOR METERS 1" AND SMALLER (SEE GRU W/WW/RCW CONSTRUCTION DETAIL W-8.0), WITH A ONE-YEAR WARRANTY.
7. 2" VALVES LOCATED IN PAVED AREAS, INCLUDING SIDEWALKS, SHALL BE GRU APPROVED CAST IRON, RESILIENT SEAT GATE VALVES WITH STANDARD 2" OPERATING NUT, THREADED WITH BRASS NIPPLE BETWEEN THE VALVES AND TAPPING SADDLE OR TAPPED TEE.
8. WATER MAINS 4" IN DIAMETER AND GREATER, PLACED UNDER ROADWAYS, SHALL BE CEMENT LINED DUCTILE IRON PIPE (CLDIP) EXTENDING 5 FEET PAST THE BACK OF CURB (3 FEET WITHIN CITY OF GAINESVILLE LIMITS) TRACER WIRE INSTALLED ON PVC WATER MAINS SHALL CONTINUE ACROSS THE CLDIP SECTIONS.
9. 1" OR 2" WATER SERVICE CROSSINGS LOCATED UNDER ROADWAYS SHALL BE ENCASED IN 3" SCH 40 PVC EXTENDING 5' PAST THE BACK OF CURB (3' INSIDE CTY OF GAINESVILLE LIMITS).
10. ANCHORING TEES, COUPLINGS, AND BENDS SHALL BE USED ON ALL FIRE HYDRANT ASSEMBLIES.
11. ALL PRESSURIZED MAIN FITTINGS SHALL BE MECHANICAL JOINT WITH RESTRAINED JOINT GLANDS; A SUFFICIENT LENGTH OF THE PIPE CONNECTED TO THE FITTINGS SHALL BE MECHANICALLY RESTRAINED TO PROVIDE REACTION AS SPECIFIED ON THE RESTRAINED JOINT STANDARD IN THE CONSTRUCTION DETAILS OF THE GRU STANDARDS (W-2.8 & 2.9, RCW-2.8 & 2.9, AND WW-2.4 & 2.5). CALCULATIONS FOR REQUIRED RESTRAINT LENGTH MUST BE PROVIDED IF THE SPECIFIED RESTRAINT LENGTH, DUE TO SOIL TYPE OR DEPTH OF COVER, DIFFERS FROM THOSE PROVIDED ON THESE DETAILS.
12. ALL SANITARY WASTEWATER SERVICE LATERALS SHALL BE MIN. 4" DIAMETER PVC (SDR 35) AT 1.00% MIN. SLOPE UNLESS OTHERWISE LABELED.
13. WASTEWATER CLEANOUT COVERS LOCATED WITHIN PAVEMENT AND SIDEWALKS ADJACENT TO PAVED AREAS SHALL BE RATED FOR TRAFFIC LOAD BEARING. WASTEWATER CLEANOUT COVERS IN OTHER SIDEWALKS/WALKWAYS SHALL BE BRASS WITH A SQUARE RECESS.
14. MANHOLES WHICH ARE NOT INSTALLED UNDER PAVEMENT SHALL HAVE A RIM ELEVATION AT LEAST 6" ABOVE FINISHED GRADE, AND A 10:1 SLOPE TO FINISHED GRADE.
15. UNLESS OTHERWISE NOTED ON THE PLANS, THE FINISHED FLOOR ELEVATIONS OF BUILDINGS SHALL BE A MINIMUM OF 6" ABOVE THE LOWEST UPSTREAM MANHOLE TOP. IF THIS IS INFEASIBLE, A WASTEWATER SERVICE LATERAL BACKWATER VALVE (BWV) IS REQUIRED ON THE CUSTOMER SIDE OF CLEANOUT.
16. WHEN A POTABLE OR RECLAIMED WATER MAIN, OR A WASTEWATER FORCE MAIN IS ROUTED WITHIN 10 FT. OF AN ELECTRIC TRANSFORMER, A 20 FT. LENGTH OF DIP SHALL BE CENTERED ON THE TRANSFORMER WITH MECHANICAL RESTRAINT AT EACH END. NO FITTINGS OR VALVES SHALL OCCUR WITHIN 10 FT. OF THE NEAREST EDGE OF THE TRANSFORMER. A MINIMUM CLEARANCE OF 3' SHALL BE MAINTAINED BETWEEN THE MAIN AND THE TRANSFORMER.
17. A/C CONDENSATE SHALL NOT FLOW INTO WASTEWATER SYSTEM.
18. CONTACT GRUCOM NOC AT (352) 334-2894 IF GRUCOM FACILITIES ARE DAMAGED DURING CONSTRUCTION.

NORTH
SCALE: 1" = 20'
0 10 20 40
GRAPHIC SCALE

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WATER FITTING SCHEDULE

KEY	ASSEMBLY
1	1-16"x8" TAPPING SADDLE* 1-8" MEGALUG 1-8"x4" THREADED CAP 1-90° DI-4" BEND 1-4"x8" LONG LOW LEAD BRASS NIPPLE 1-4" PVC WATER SERVICE
2	1-4"X2" PVC TEE 1-2" VALVE 1-5/8" IRRIGATION METER (END OF GRU MAINTENANCE) 1-5/8" RPZBFP
3	1-4"X2" PVC TEE 1-2" VALVE 1-5/8" WATER METER (END OF GRU MAINTENANCE) 1-5/8" RPZBFP 1-2" PVC POTABLE WATER SERVICE
4	1-4" DIP TEE 1-4" VALVE AND BOX (END OF GRU MAINTENANCE) 1-4" RPZBFP WITH OS & Y VALVE

*EXCAVATION AND BACKFILL BY CONTRACTOR.
CONTACT GRU WATER INSPECTOR 7 DAYS IN ADVANCE.

Project: ZION EVANGELICAL LUTHERAN CHURCH
CITY OF GAINESVILLE, FLORIDA

Sheet title: UTILITY PLAN

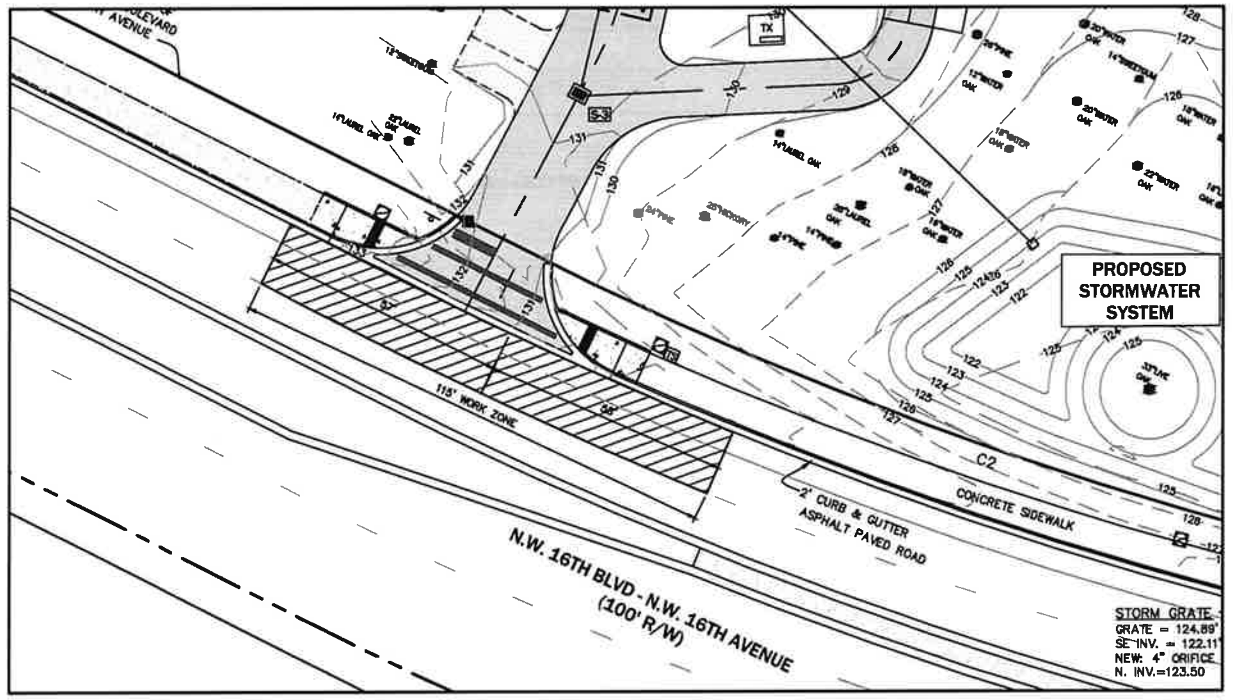
Project phase: CITY/GRU RESUBMITTAL

Designed: SJP | Drawn: JC/MR | Checked: TAR

Project No.: 15-152 | Date: 03/15/18

Professional Engineer of Record:
Sergio J. Reyes, P.E. 47311
Engineer Certificate No.

Sheet No.: C4.00



NOTE:

1. THE POSTED SPEED LIMIT IN THE WORK AREA IS 40 MPH.

MAINTENANCE OF TRAFFIC GENERAL NOTES

14-96.008 CONSTRUCTION AND MAINTENANCE OF TRAFFIC REQUIREMENTS

ALL CONSTRUCTION AND MAINTENANCE ON DEPARTMENT RIGHT OF WAY SHALL CONFORM TO THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), INCORPORATED BY REFERENCE UNDER RULE 14-15.010, F.A.C. ALL CONSTRUCTION AND MAINTENANCE ON DEPARTMENT RIGHT OF WAY SHALL ALSO CONFORM TO THE DEPARTMENT'S DESIGN STANDARDS, JANUARY 2002, TOPIC #625-010-003; THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2003 EDITION, THE DEPARTMENT'S PLANS PREPARATION MANUAL, JANUARY 2003, OR OTHER GENERALLY ACCEPTED PROFESSIONAL PRACTICES. WITH THE EXCEPTION OF THE MUTCD, WHICH ALREADY IS INCORPORATED BY REFERENCE UNDER RULE 14-15.010, F.A.C, THE MANUALS AND STANDARDS SPECIFICALLY LISTED IN THIS SECTION ARE HEREBY INCORPORATED BY REFERENCE AND MADE PART OF THE RULES OF THE DEPARTMENT OF TRANSPORTATION.

1. DISRUPTION OF TRAFFIC. FOR SAFETY AND OPERATIONAL PURPOSES, THE DEPARTMENT MAY REQUIRE OR RESTRICT HOURS OF CONSTRUCTION TO MINIMIZE DISRUPTION OF TRAFFIC ON THE STATE HIGHWAY SYSTEM. WHEN CONSTRUCTION ACTIVITY ON A CONNECTION CAUSES UNDUE DISRUPTION OF TRAFFIC OR CREATES SAFETY HAZARDS ON A STATE HIGHWAY, THE DISTRICT SECRETARY OR DESIGNEE SHALL ADVISE THE PERMITTEE OF THE NEED FOR IMMEDIATE CORRECTIVE ACTION BY A SPECIFIED TIME, AND MAY ISSUE A STOP WORK ORDER IF DEEMED NECESSARY.
2. CONNECTION COMPLETION TIME LIMIT. CONSTRUCTION SHALL BE COMPLETED WITHIN ONE YEAR OF THE DATE OF ISSUANCE OF THE PERMIT. FAILURE TO COMPLY WITH THE ONE YEAR TIME LIMIT SHALL RESULT IN AN AUTOMATIC EXPIRATION OF THE PERMIT UNLESS EXTENDED BY THE DEPARTMENT AS DESCRIBED IN SECTION 335.185(2), FLORIDA STATUTES. A STOP WORK ORDER MAY BE ISSUED BY THE DEPARTMENT IF WORK EXCEEDS THE IMPOSED TIME RESTRICTIONS. FOR ANY PERMIT WHICH EXPIRES FOR FAILURE TO CONSTRUCT THE CONNECTION WITHIN THE ONE YEAR LIMIT, THE APPLICANT SHALL SUBMIT A NEW APPLICATION, INCLUDING THE PAYMENT OF THE REQUIRED APPLICATION FEE PRIOR TO THE INITIATION OR CONTINUATION OF ANY CONSTRUCTION.

LANE CLOSURE RESTRICTIONS

1. LANE CLOSURES SHALL ONLY OCCUR BETWEEN 9:00 AM TO 4:00 PM. THE STATE ACCESS PERMITTED LIMITS CAN BE CLOSED DOWN UNTIL SUCH TIME AS THE PERMITTEE HAS BROUGHT THE PROJECT BACK INTO COMPLIANCE WITH THE PERMIT REQUIREMENTS AND TO FDOT SATISFACTION.
2. ALL LANES MUST BE OPENED FOR TRAFFIC DURING AN EVACUATION NOTICE OF A HURRICANE OR OTHER CATASTROPHIC EVENT AND SHALL REMAIN OPEN FOR THE DURATION OF THE EVACUATION EVENT.

LEGEND

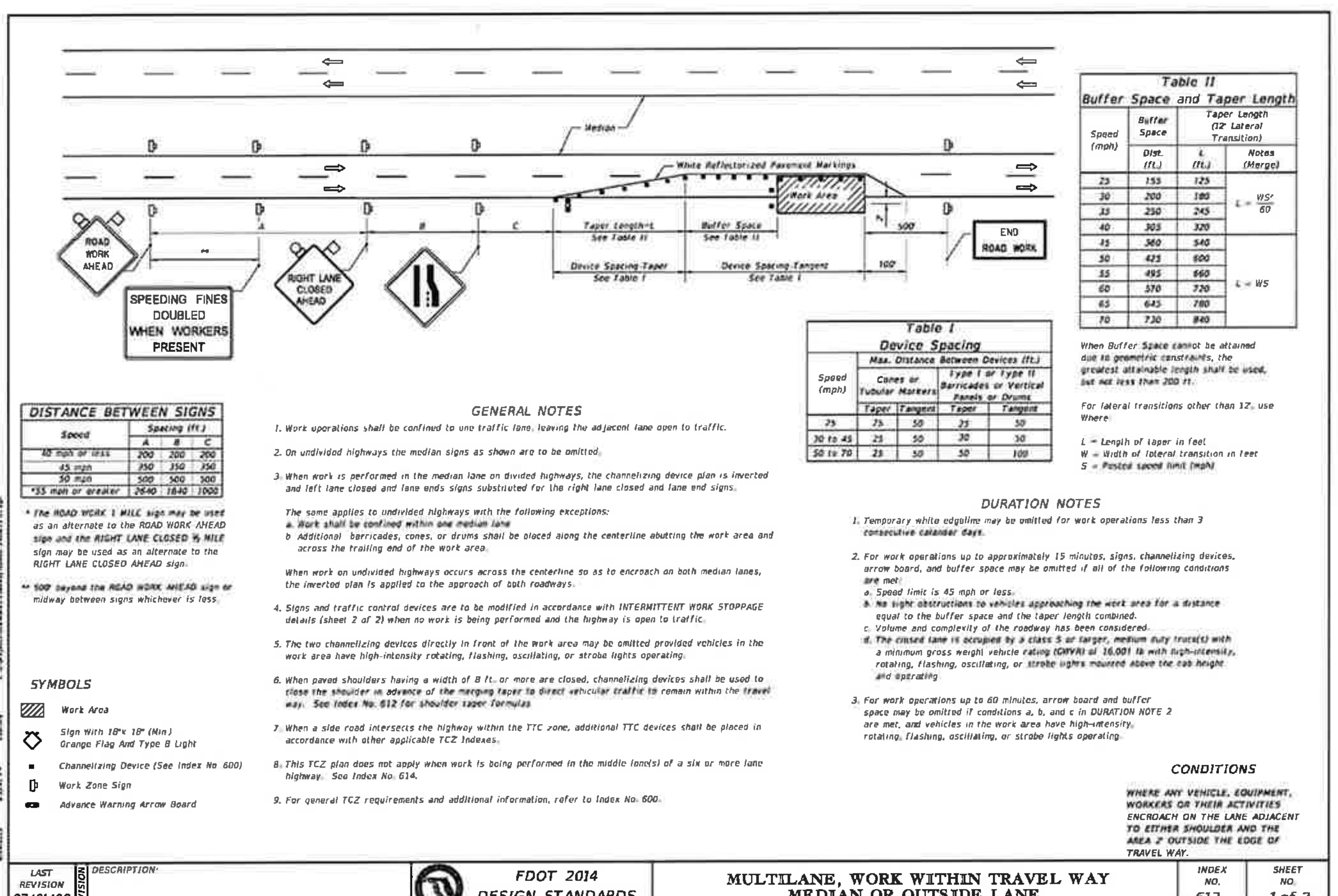
Symbol	Description
(hatched area)	LIMITS OF LANE CLOSURE PER FDOT INDEX 613
ROAD WORK XX XX	SIGN WITH 18" x 18" (MIN.) ORANGE FLAG AND TYPE B LIGHT
(barricade)	TYPE I OR TYPE II BARRICADE OR VERTICAL PANEL OR DRUM (WITH STEADY BURNING LIGHT AT NIGHT ONLY)
(sign)	WORK ZONE SIGN
(arrow panel)	ADVANCE WARNING ARROW PANEL
(barricade with light)	TYPE I, TYPE II OR TYPE III BARRICADE OR VERTICAL PANEL OR DRUM (WITH FLASHING LIGHT)

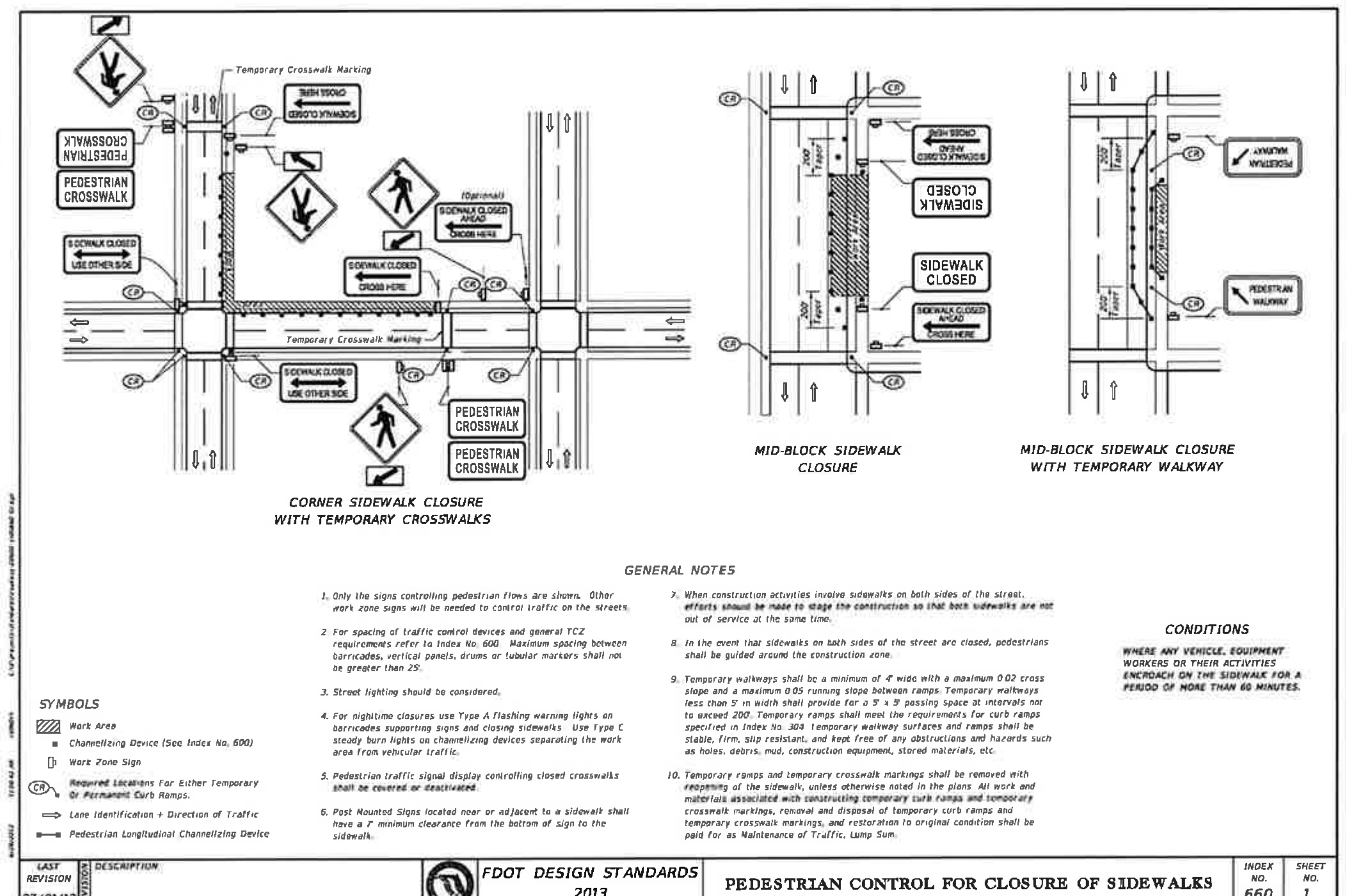
NORTH

SCALE: 1" = 20'

0 10 20 40

GRAPHIC SCALE





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Project: ZION EVANGELICAL LUTHERAN CHURCH
CITY OF GAINESVILLE, FLORIDA

Sheet title: WORK WITHIN THE COUNTY RIGHT OF WAY
MAINTENANCE OF TRAFFIC PLAN

Project phase: CITY/GRU RESUBMITTAL

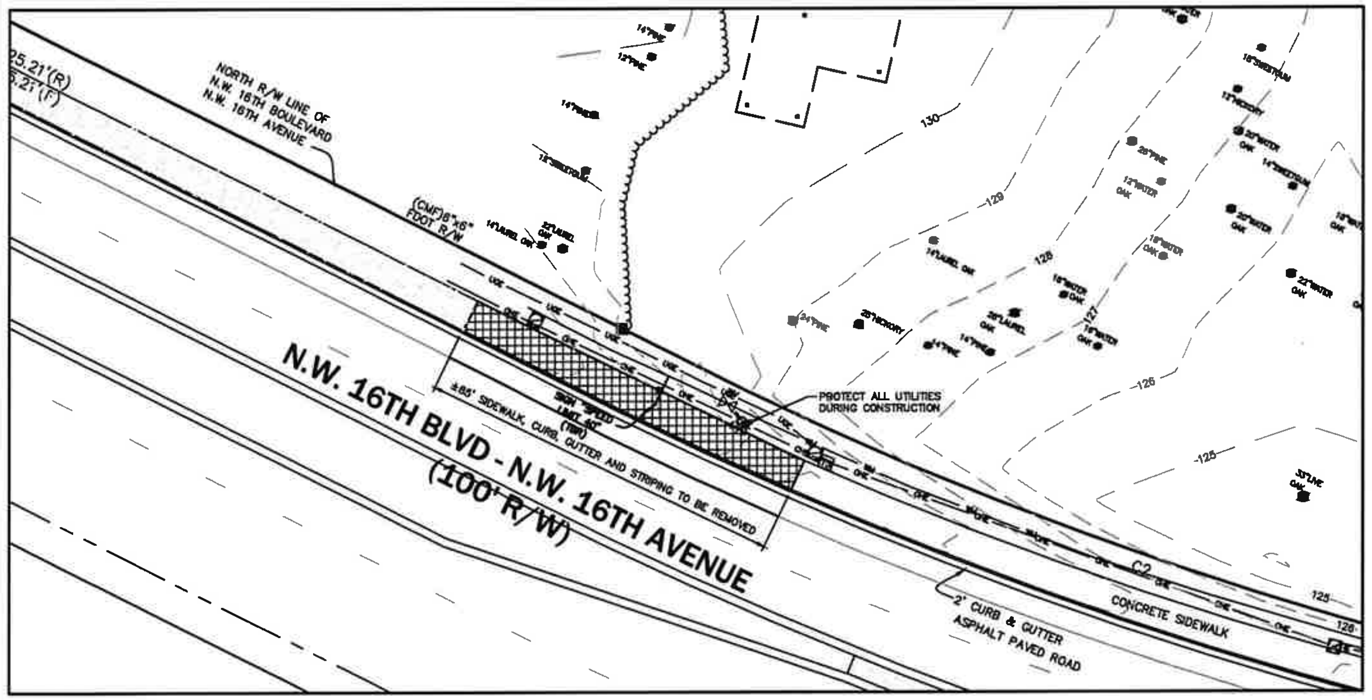
Designed: SJP | Drawn: JC/AMD | Checked: TAR

Project No.: 15-182 | Date: 03/15/18

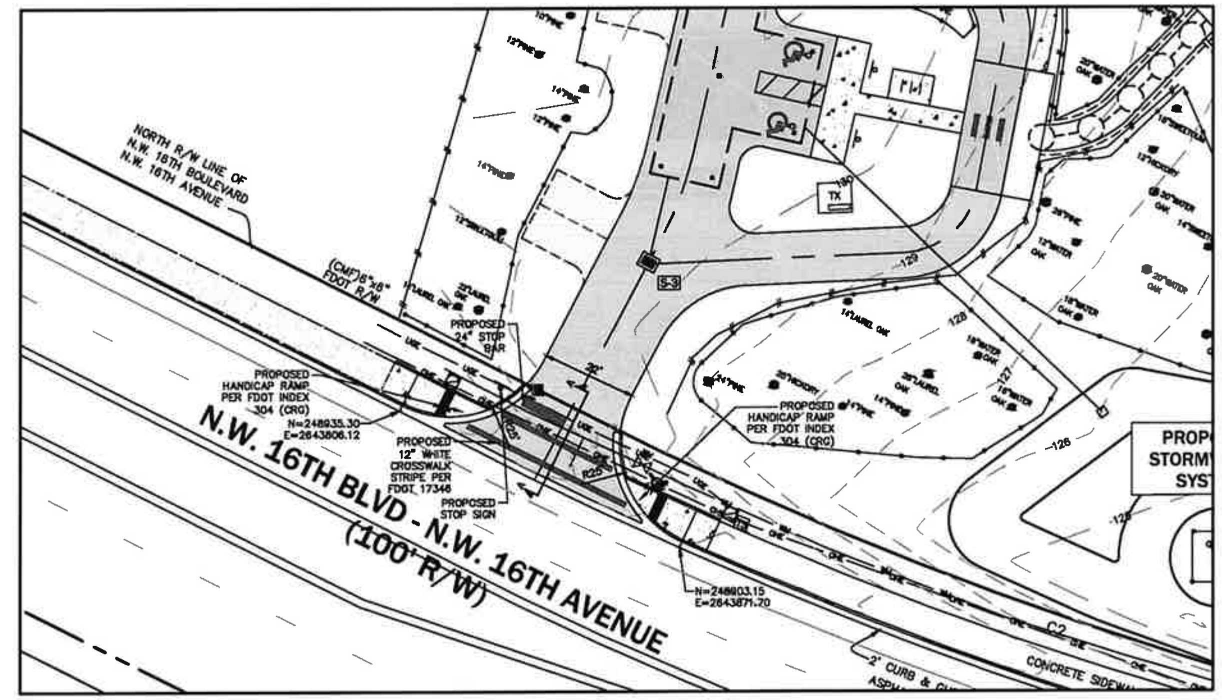
Professional Engineer of Record:

Sergio J. Reyes, P.E. 47311
Engineer Certificate No.

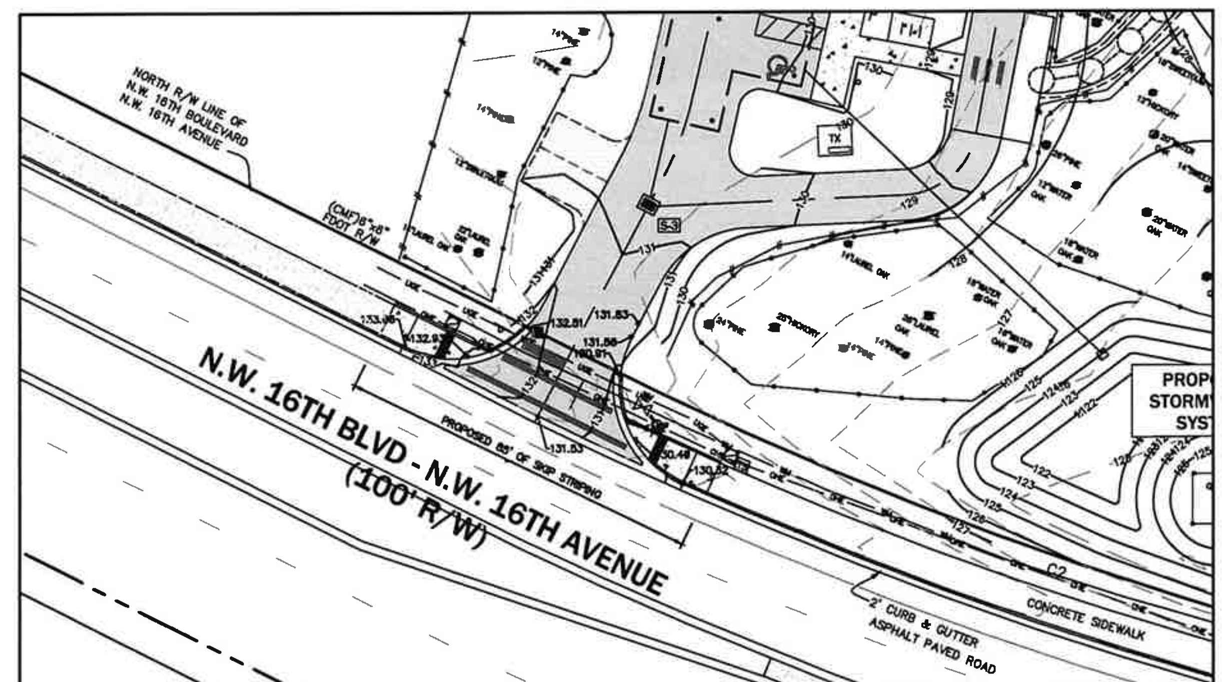
Sheet No.: C5.00



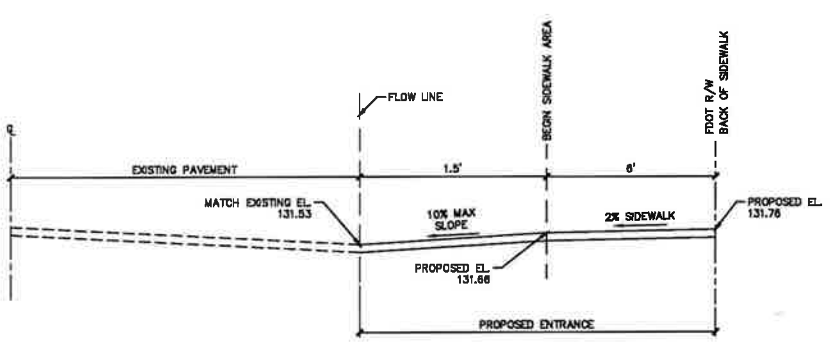
DEMOLITION PLAN



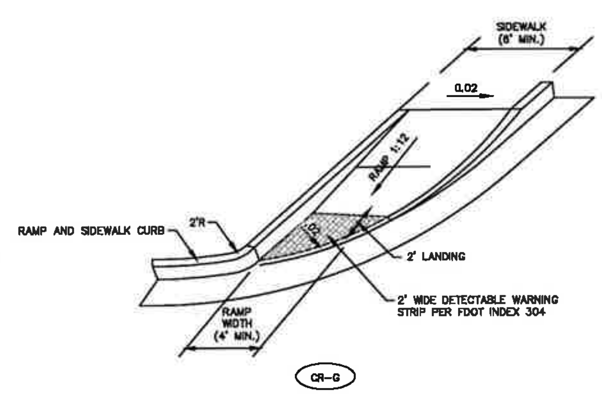
DIMENSION PLAN



GRADING PLAN

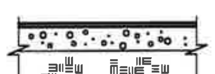


DRIVEWAY CONNECTION PROFILE SECTION A-A
N.T.S.



SIDEWALK CURB RAMPS-FDOT INDEX 304
N.T.S.

TYPICAL ASPHALT PAVEMENT DETAIL (ALACHUA COUNTY R/W)
N.T.S.



TYPICAL ASPHALT PAVEMENT DETAIL
N.T.S.

DEMOLITION NOTES

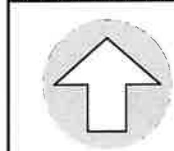
1. IN AREAS WHERE PROPOSED CURB IS TO BE PLACED, THE ASPHALT PAVEMENT SHALL BE REMOVED TO THE FACE OF CURB TO ALLOW PLACEMENT OF 6" STANDARD CONCRETE CURB.
2. IN AREAS OF PROPOSED LANDSCAPE, THE PAVEMENT, LIMEROCK BASE, AND 12" OF THE STABILIZED SUBGRADE SHALL BE REMOVED. COORDINATE WITH LANDSCAPE ARCHITECT TO DETERMINE IF ADDITIONAL REMOVAL IS REQUIRED TO MAKE AREA SUITABLE FOR LANDSCAPE PURPOSES. THE REMOVED LIMEROCK BASE SHALL NOT BE USED IN THE BASE FOR THE NEW PAVEMENT (PER FDOT SECTION 200), BUT THE REMOVED BASE CAN BE USED IN THE STABILIZATION OF SUBGRADE. ALL DISTURBED OPEN AREAS SHALL BE SODDED.
3. SEE DIMENSION PLAN FOR DIMENSIONS OF PROPOSED LANDSCAPE AREAS.
4. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF EXISTING UTILITIES TO REMAIN, AS SHOWN IN THE UTILITY PLAN. ANY EXISTING UTILITIES TO BE REMOVED SHALL BE COORDINATED WITH THE ASSOCIATED UTILITY COMPANY, AND PERFORMED IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.
5. ALL CURB, GUTTER AND SIDEWALK WILL BE REMOVED AND REPLACED JOINT TO JOINT.
6. ALL BROKEN/CRACKED DRIVEWAYS MUST BE FULLY REMOVED AND REPLACED.
7. ALL DISTURBED AREAS WITHIN THE DEPARTMENT'S RIGHT-OF-WAY WILL BE RESTORED TO ORIGINAL OR BETTER CONDITION BY GRADING AND SODDING THE AREA DISTURBED (BERMUDA IN RURAL, CENTIPEDE IN UTILITY STRIPS.)
8. BURNING ANY MATERIAL OR DEBRIS IS PROHIBITED IN ALACHUA COUNTY RIGHT-OF-WAY.

GENERAL NOTES

1. ALL TRAFFIC STRIPING AND MARKINGS SHALL BE LEAD-FREE, NON-SOLVENT BASED THERMOPLASTIC.
2. EXISTING STRIPING SHALL BE REMOVED USING THE "HYDRO-BLAST" METHOD. IF THIS PROCESS DAMAGES/SCARS PAVEMENT, PAVEMENT SHALL BE MILLED AND RESURFACED PER FDOT STANDARDS.
3. ALL DIRECTIONAL ARROWS SHALL BE PLACED AS ONE SEGMENT.
4. ALIGNMENT PROPOSED PAVEMENT MARKING ALAIGNMENTS SHALL MATCH EXISTING PAVEMENT MARKINGS AT PAVEMENT MARKING LIMITS OF CONSTRUCTION.
5. ALL SIGNS SHALL CONFORM TO FDOT INDEX 11860 STANDARDS.
6. ALL ABOVE GROUND REQUIRED SIGNAGE SHALL CONSTRUCTED TO FDOT SPECIFICATIONS.

LEGEND

EXISTING CURB TO BE REMOVED
ASPHALT PAVEMENT
EXISTING ASPHALT PAVEMENT OR CONCRETE SIDEWALK TO BE REMOVED
CONCRETE PAVEMENT AND SIDEWALKS
TREE BARRICADE
EXISTING TREE TO REMAIN
EXISTING TREE TO BE REMOVED



SCALE: 1" = 20'
0 10 20 40
GRAPHIC SCALE

edа 40
engineers • surveyors • planners
EB 2389
2404 N.W. 43rd ST, GAINESVILLE, FLORIDA 32606-6602
TEL (352) 373-3541 FAX (352) 373-7249
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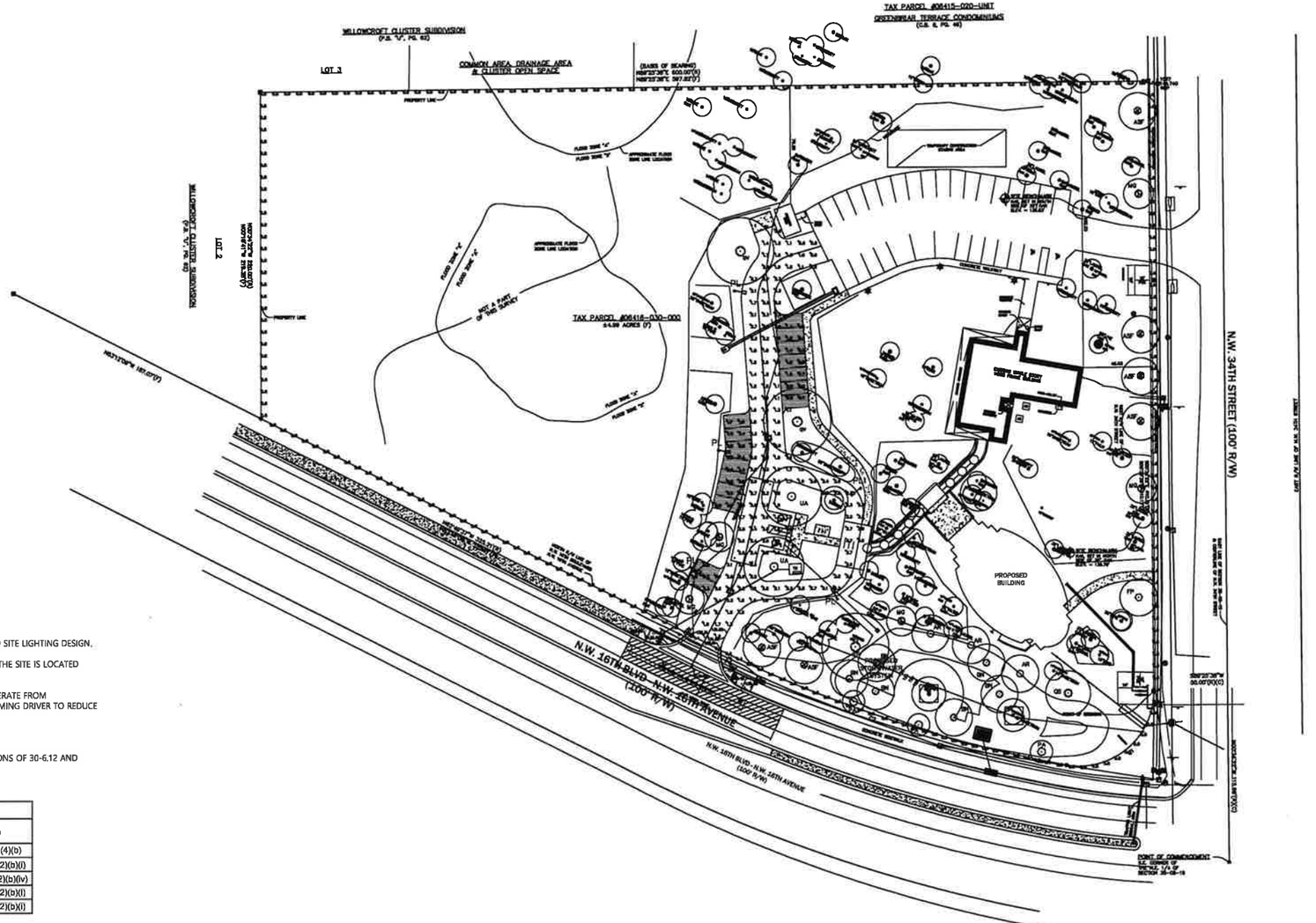
Project: ZION EVANGELICAL LUTHERAN CHURCH
CITY OF GAINESVILLE, FLORIDA

Sheet title: WORK WITHIN THE COUNTY RIGHT OF WAY
DEMOLITION, DIMENSION, AND GRADING PLAN

Project phase: CITY/GRU RESUBMITTAL
Designed: SJS | Drawn: JC/ANB | Checked: TAR
Project No.: 15-152 | Date: 03/15/18
Professional Engineer of Record:
Sergio J. Reyes, P.E. 47311
Engineer Certificate No.

Sheet No.: C5.10



PHOTOMETRIC NARRATIVE

THE FOLLOWING IS INTENDED TO SERVE AS A DESIGN NARRATIVE FOR THE PHOTOMETRIC ANALYSIS AND SITE LIGHTING DESIGN.

THIS DESIGN ENCOMPASSES LIGHTING FOR ADDITIONAL PARKING FACILITIES FOR AN EXISTING CHURCH. THE SITE IS LOCATED WEST OF NW 34TH ST AND NORTH OF NW 16TH AVE.

PROPOSED SITE LIGHTING IS ACCOMPLISHED WITH POLE MOUNTED LED FIXTURE. THE FIXTURES WILL OPERATE FROM DUSK-TO-DAWN IN ACCORDANCE WITH 30-6.12(D)(1)(g), BUT WILL BE PROVIDED WITH AN INTEGRAL DIMMING DRIVER TO REDUCE OUTPUT TO 50% DURING LATE NIGHT HOURS.

LIGHT TRESPASS VALUES ARE WITHIN REQUIRED LIMITATIONS AT ALL POINTS.

OVERALL, THIS DESIGN PROVIDES SAFE LIGHTING FOR PATRONS WHILE CONFORMING WITH THE PROVISIONS OF 30-6.12 AND MINIMIZING IMPACT ON NEIGHBORING PROPERTIES.

Photometric Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min	Code
PARKING LOT	+	2.0 fc	3.9 fc	0.5 fc	7.8:1	4.0:1	30-6.12(E)(4)(b)
NORTH PROPERTY LINE	+	0.0 fc	0.0 fc	0.0 fc	N/A	N/A	30-6.12(D)(2)(b)(i)
SOUTH PROPERTY LINE	+	0.1 fc	1.5 fc	0.0 fc	N/A	N/A	30-6.12(D)(2)(b)(iv)
EAST PROPERTY LINE	+	0.0 fc	0.0 fc	0.0 fc	N/A	N/A	30-6.12(D)(2)(b)(i)
WEST PROPERTY LINE	+	0.0 fc	0.0 fc	0.0 fc	N/A	N/A	30-6.12(D)(2)(b)(i)

Luminaire Schedule for Photometrics

Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Filename	Lumens Per Lamp	Light Loss Factor	Wattage	Mounting Height
⊏—o	PL	5	Lectek Electronics	ARXX-15M2-MV-NW-3-XX-700 S	Lectek Electronics - Pole arm mount roadway luminaire.	LED	ARXX-15M2-MV-NW-3-XX-700S.ies	14855	0.81	124	25

FIXTURE SCHEDULE NOTES.

1. FIXTURE TYPE 'PL' IS A FULL CUT-OFF, POLE MT, LOW-PROFLE TYPE LED FIXTURE BY GRU. THE FIXTURE SHALL BE INSTALLED ON A 25FT POLE AND CONCRET POLE BASE.
2. DUE TO THE FULL CUT-OFF NATURE OF ALL PROPOSED FIXTURES, THE LIGHT LEVELS AT 5FT ABOVE THE FIXTURE ARE 0.0FC BY DEFINITION IN ACCORDANCE WITH 30-6.12(D)(1)(b).

N

SITE PHOTOMETRIC PLAN

SCALE: 1" = 40'-0"

GRAPHIC SCALE
0 20 40 80

GENERAL NOTES

1. HIGHLIGHTED POINTS REPRESENT MAXIMUM/MINIMUM VALUE FOR EACH AREA.
2. FIXTURES WILL BE CONTROLLED WITH PHOTOCELL AND OPERATE DUSK-TO-DAWN.

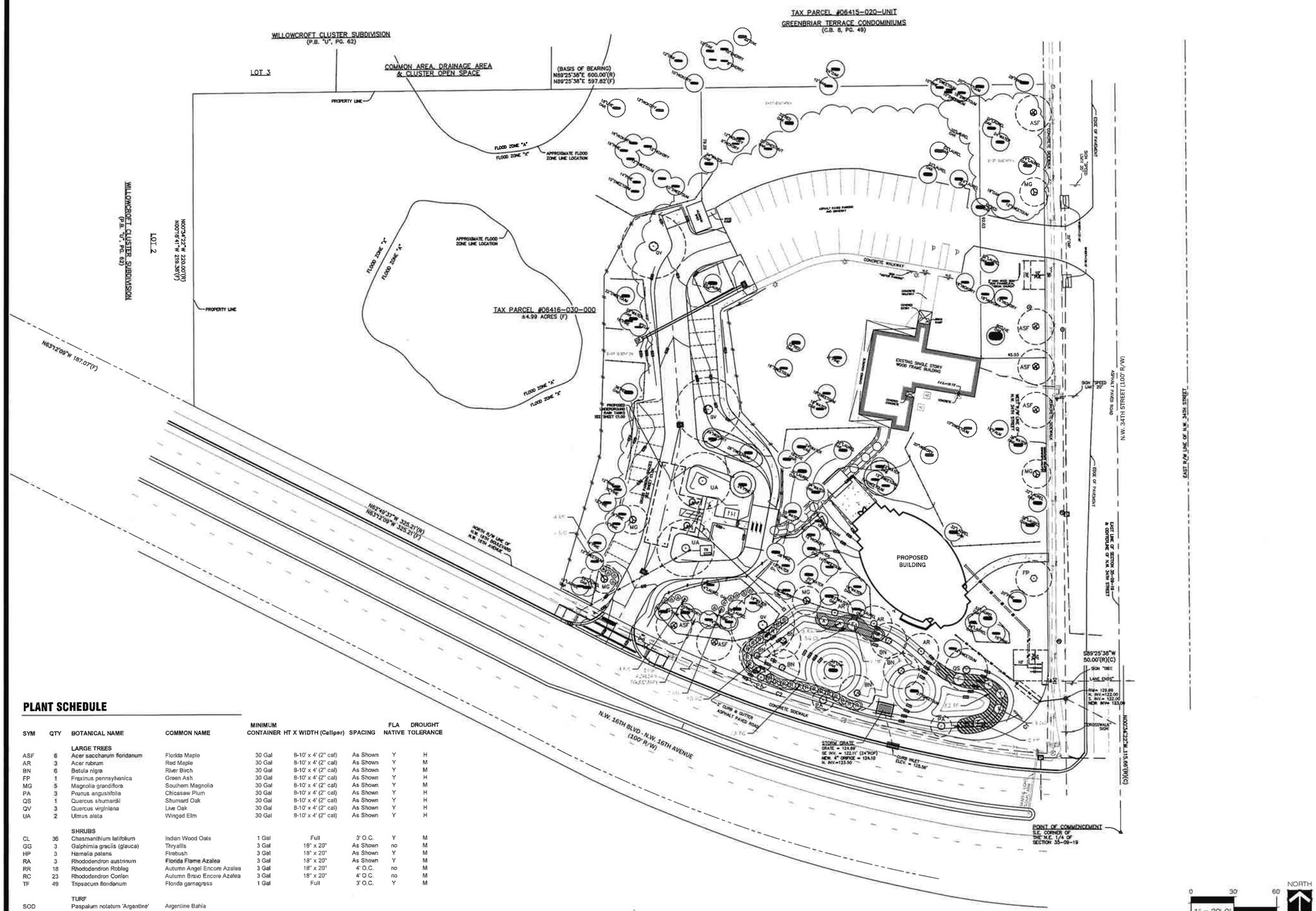
HUNTER DESIGN AND CONSULTING, INC.
735 ARLINGTON AVE N, STE 308
ST PETERSBURG, FL 33701
352-238-6366
FLORIDA CA #31946, PE #76961

ZION LUTHERAN CHURCH
ADDITIONAL PARKING
GAINESVILLE, FLORIDA
SITE PHOTOMETRIC PLAN

PROJECT INFORMATION	
PROJECT NUMBER:	17038
DRAFTED:	K. HUNTER
DESIGNED:	K. HUNTER
REVIEWED:	K. HUNTER
ISSUE DATE:	3/16/18
REVISIONS	

SHEET NUMBER

E-1



PLANT SCHEDULE

SYM	QTY	BOTANICAL NAME	COMMON NAME	MINIMUM CONTAINER	HT X WIDTH (Caliper)	SPACING	FLA NATIVE	DROUGHT TOLERANCE
		LARGE TREES						
ASF	6	Acer saccharum floridanum	Florida Maple	30 Gal	8-10' x 4' (2" cal)	As Shown	Y	H
AR	3	Acer rubrum	Red Maple	30 Gal	8-10' x 4' (2" cal)	As Shown	Y	M
BN	6	Betula nigra	River Birch	30 Gal	8-10' x 4' (2" cal)	As Shown	Y	M
FP	1	Fraxinus pennsylvanica	Green Ash	30 Gal	8-10' x 4' (2" cal)	As Shown	Y	H
MG	5	Magnolia grandiflora	Southern Magnolia	30 Gal	8-10' x 4' (2" cal)	As Shown	Y	M
PA	3	Prunus angustifolia	Chicasaw Plum	30 Gal	8-10' x 4' (2" cal)	As Shown	Y	H
QS	1	Quercus shumardii	Shumard Oak	30 Gal	8-10' x 4' (2" cal)	As Shown	Y	H
QV	3	Quercus virginiana	Live Oak	30 Gal	8-10' x 4' (2" cal)	As Shown	Y	H
UA	2	Ulmus alata	Winged Elm	30 Gal	8-10' x 4' (2" cal)	As Shown	Y	H
		SHRUBS						
CL	36	Chasmanthium latifolium	Indian Wood Oats	1 Gal	Full	3' O.C.	Y	M
GG	3	Galphimia gracilis (glauca)	Thryallis	3 Gal	18" x 20"	As Shown	no	M
HP	3	Hamelia patens	Firebush	3 Gal	18" x 20"	As Shown	Y	M
RA	3	Rhododendron austrinum	Florida Flame Azalea	3 Gal	18" x 20"	As Shown	Y	M
RR	18	Rhododendron Robleg	Autumn Angel Encore Azalea	3 Gal	18" x 20"	4' O.C.	no	M
RC	23	Rhododendron Conlon	Autumn Bravo Encore Azalea	3 Gal	18" x 20"	4' O.C.	no	M
TF	49	Tripsacum floridanum	Florida gamagrass	1 Gal	Full	3' O.C.	Y	M
		TURF						
SOD		Paspalum notatum 'Argentine'	Argentine Bahia					

PREPARED BY:

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Landscape Architecture

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Gainesville, Florida 32605
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LC 26000252

PREPARED FOR:

ZION EVANGELICAL LUTHERAN CHURCH

PROJECT:

ZION EVANGELICAL LUTHERAN CHURCH

GAINESVILLE, FLORIDA

SHEET TITLE:

LANDSCAPE PLAN

PROJECT PHASE:

CITY / GRU RESUBMITTAL

ISSUE DATE:

MARCH 08, 2018

REVISIONS

NO.	DATE	COMMENTS

PROFESSIONAL SEAL:

LAWRENCE E. TEAGUE
FLORIDA: LA0001582

PROJECT NUMBER:

17015.1

DRAWN BY:	CHECKED BY:
ALZ	LET

SHEET NUMBER:

L2.01

TREE MITIGATION CALCULATIONS

EXISTING TREES

HERITAGE TREES

THE FOLLOWING IS A LIST OF HERITAGE TREES TO REMAIN ON THE SITE

QTY	BOTANICAL NAME	SPECIES	CALIPER
1	CARYA GLABRA	HICKORY	20"
1	CARYA GLABRA	HICKORY	24"
1	CARYA GLABRA	HICKORY	25"
3	QUERCUS FALCATA	RED OAK	32"
1	QUERCUS FALCATA	RED OAK	36"
1	QUERCUS LAURIFOLIA	LAUREL OAK	30"
5	QUERCUS LAURIFOLIA	LAUREL OAK	32"
1	QUERCUS LAURIFOLIA	LAUREL OAK	33"
1	QUERCUS NIGRA	WATER OAK	36"
1	QUINCUS PRINUS	CHESTNUT OAK	20"
1	QUERCUS VIRGINIANA	LIVE OAK	33"
1	QUERCUS VIRGINIANA	LIVE OAK	80"

REGULATED TREES

THE FOLLOWING IS A LIST OF REGULATED TREES TO REMAIN ON THE SITE.

QTY	BOTANICAL NAME	SPECIES	CALIPER
1	CARYA GLABRA	HICKORY	8"
4	CARYA GLABRA	HICKORY	12"
1	CARYA GLABRA	HICKORY	14"
1	CARYA GLABRA	HICKORY	16"
2	CARYA GLABRA	HICKORY	18"
1	LIQUIDAMBAR STYRACIFLUA	SWEETGUM	8"
5	LIQUIDAMBAR STYRACIFLUA	SWEETGUM	10"
4	LIQUIDAMBAR STYRACIFLUA	SWEETGUM	12"
2	LIQUIDAMBAR STYRACIFLUA	SWEETGUM	14"
1	LIQUIDAMBAR STYRACIFLUA	SWEETGUM	16"
4	LIQUIDAMBAR STYRACIFLUA	SWEETGUM	18"
1	LIQUIDAMBAR STYRACIFLUA	SWEETGUM	20"
1	LIQUIDAMBAR STYRACIFLUA	SWEETGUM	22"
1	LIQUIDAMBAR STYRACIFLUA	SWEETGUM	26"
1	LIQUIDAMBAR STYRACIFLUA	SWEETGUM	27"
1	SABAL PALMETTO	PALM	12"
2	PINUS TAEDA	LOBLOLLY PINE	10"
3	PINUS TAEDA	LOBLOLLY PINE	12"
5	PINUS TAEDA	LOBLOLLY PINE	14"
1	PINUS TAEDA	LOBLOLLY PINE	15"
1	PINUS TAEDA	LOBLOLLY PINE	16"
1	PINUS TAEDA	LOBLOLLY PINE	18"
1	PINUS TAEDA	LOBLOLLY PINE	20"
1	PINUS TAEDA	LOBLOLLY PINE	21"
2	PINUS TAEDA	LOBLOLLY PINE	24"
1	PINUS TAEDA	LOBLOLLY PINE	26"
2	QUERCUS LAURIFOLIA	LAUREL OAK	14"
1	QUERCUS LAURIFOLIA	LAUREL OAK	16"
1	QUERCUS LAURIFOLIA	LAUREL OAK	20"
1	QUERCUS LAURIFOLIA	LAUREL OAK	21"
2	QUERCUS LAURIFOLIA	LAUREL OAK	22"
1	QUERCUS LAURIFOLIA	LAUREL OAK	23"
3	QUERCUS LAURIFOLIA	LAUREL OAK	24"
1	QUERCUS LAURIFOLIA	LAUREL OAK	28"
1	QUERCUS NIGRA	WATER OAK	12"
1	QUERCUS NIGRA	WATER OAK	16"
4	QUERCUS NIGRA	WATER OAK	18"
3	QUERCUS NIGRA	WATER OAK	20"
2	QUERCUS NIGRA	WATER OAK	22"
4	QUERCUS NIGRA	WATER OAK	24"
1	QUERCUS NIGRA	WATER OAK	28"
2	QUERCUS VIRGINIANA	LIVE OAK	18"
1	ULMAS TAEDA	ELM	8"
60	REGULATED TREES TO REMAIN		

TREE REMOVAL MITIGATION CALCULATIONS

HERITAGE TREES

THE FOLLOWING ARE THE HERITAGE TREES TO BE REMOVED
THE MITIGATION STATED FOR EACH TREE IS FOR THE REQUEST OF THE URBAN FORESTRY INSPECTOR DURING THE SITE VISIT.

QTY	BOTANICAL NAME	SPECIES	CALIPER	MITIGATION
1	CARYA GLABRA	HICKORY	22"	NONE (DEAD TREE)
1	CARYA GLABRA	HICKORY	24"	NONE (DEAD TREE)
1	CARYA GLABRA	HICKORY	24"	2 TREES
1	CARYA GLABRA	HICKORY	26"	APPRAISAL VALUE

HERITAGE TREE MITIGATION

TREE MITIGATION IS CALCULATED AS FOLLOWS PER SECTION 30-8 7(D) OF THE CITY OF GAINESVILLE LAND DEVELOPMENT CODE.

HERITAGE TREE APPRAISAL VALUES

TREE APPRAISAL VALUE IS CALCULATED AS FOLLOWS PER DEFINITION IN SEC. 30-30-2.1 OF THE CITY OF GAINESVILLE LAND DEVELOPMENT CODE.

TRUNK AREA x UNIT FACTOR FOR SQUARE INCH PRICE OF $40.00 x 55% DIMINUTION RATING

QTY	BOTANICAL NAME	SPECIES	TRUNK DIAMETER	TREE APPRAISAL VALUE
1	CARYA GLABRA	HICKORY	26"	$11,674.52

TOTAL TREE APPRAISAL COST $11,674.52

HERITAGE TREE TWO FOR ONE MITIGATION

MITIGATION IS TWO TREES PER ONE TREE REMOVED FOR THE FOLLOWING HERITAGE TREES.

QTY	BOTANICAL NAME	SPECIES	CALIPER	QTY TO BE MITIGATED
1	CARYA GLABRA (TOPPED)	HICKORY	24"	2 TREES

TOTAL TREES 2 TREES

REGULATED TREES TWO FOR ONE MITIGATION

MITIGATION IS TWO TREES PER ONE TREE REMOVED FOR THE FOLLOWING REGULATED TREES.

QTY	BOTANICAL NAME	SPECIES	CALIPER	QTY TO BE MITIGATED
1	LIQUIDAMBAR	SWEETGUM	10"	2 TREES
1	LIQUIDAMBAR	SWEETGUM	12"	2 TREES
2	LIQUIDAMBAR	SWEETGUM	14"	4 TREES
1	LIQUIDAMBAR	SWEETGUM	22"	2 TREES
1	PINUS TAEDA	LOBLOLLY PINE	12"	2 TREES
1	PINUS TAEDA	LOBLOLLY PINE	14"	2 TREES
2	PINUS TAEDA	LOBLOLLY PINE	16"	4 TREES
1	PINUS TAEDA	LOBLOLLY PINE	18"	2 TREES
1	PINUS TAEDA	LOBLOLLY PINE	20"	2 TREES
1	TILIA CAROLINIANA	BASSWOOD	17"	2 TREES
1	QUERCUS LAURIFOLIA	LAUREL OAK	16"	2 TREES
1	QUERCUS LAURIFOLIA	LAUREL OAK	18"	2 TREES
1	QUERCUS LAURIFOLIA	LAUREL OAK	21"	2 TREES
3	QUERCUS LAURIFOLIA	LAUREL OAK	22"	6 TREES
1	QUERCUS LAURIFOLIA	LAUREL OAK	24"	2 TREES
1	QUERCUS NIGRA	WATER OAK	22"	2 TREES
1	QUERCUS VIRGINIANA	LIVE OAK	15"	2 TREES
21	TOTAL TREES REQUIRED FOR MITIGATION			42 TREES

TOTAL MITIGATION TREES

HERITAGE TREES INCH-FOR-INCH	NO TREES
HERITAGE TREES TWO FOR ONE	2 TREES
REGULATED TREES TWO FOR ONE	42 TREES
TOTAL MITIGATION TREES REQUIRED	44 TREES

TREES FOR MITIGATION BANK

TOTAL MITIGATION REQUIRED	44 TREES
LESS TOTAL TREES PROPOSED	30 TREES
NUMBER OF TREES FOR MITIGATION BANK	14 TREES

MITIGATION COST SUMMARY

TOTAL TREE APPRAISAL COST	$ 11,674.52
TOTAL TREE DEFICIT COST (14 TREES x $100.00)	$ 1,400.00
TOTAL TREE MITIGATION COSTS	$ 13,074.52

PROPOSED TREES

STREET TREES:
NW 34TH STREET:
TOTAL LINEAR FT 387 LF
REQUIREMENT: AVERAGE 1 TREE PER 40 LF 10 TREES

PROVIDED:
EXISTING REGULATED SHADE TREES 3
PROPOSED CANOPY TREES 7
TOTAL STREET TREES PROVIDED 10

NW 18TH AVENUE:
TOTAL LINEAR FT 268 LF
REQUIREMENT: AVERAGE 1 TREE PER 40 LF 7 TREES

PROVIDED:
EXISTING REGULATED SHADE TREES 2
PROPOSED CANOPY TREES 6
TOTAL STREET TREES PROVIDED 8

VEHICULAR AREA:

EXISTING PARKING TO REMAIN

PROPOSED GRASS PARKING WITH PAVED DRIVEWAY

PERIMETER:
EXISTING TREES 16
PROPOSED TREES 6
TOTAL TREES PROVIDED 22

BASIN TREES:
TOTAL LINEAR FT (TOP CONTOUR) 428 LF
REQUIREMENT: 1 TREE PER 35 LF 13 TREES

PROVIDED:
EXISTING TREES 3
PROPOSED TREES 11
TOTAL TREES PROVIDED 14

SUMMARY:

	REQ	EXIST	PROPOSED
STREET TREES	17	5	13
VEHICULAR AREA	22	16	6
BASIN TREES	13	3	11
TOTAL TREES	52	24	30

LANDSCAPE NOTES

GENERAL

MULCH ALL LANDSCAPE AREAS WITH A THREE (3) INCH MINIMUM LAYER OF PINE BARK MULCH EXCEPT IN THE RETENTION AREAS WHERE PINE STRAW IS REQUIRED.

CMD, CONCRETE, MORTAR), EXISTING WEEDS AND GRASSES, AND ANY OTHER FOREIGN MATERIALS SHALL BE REMOVED FROM PLANTING AREAS TO A DEPTH OF THREE (3) FEET.

REQUIRED FILL FOR PLANTING AREAS SHALL BE FLORIDA SOURCED, FREE OF WEED SEEDS, AND WITH A pH OF 5.5 – 6.5.

CONTRACTOR RESPONSIBLE FOR THE SURVIVAL OF ALL PLANTING MATERIAL FOR ONE (1) YEAR AFTER ISSUANCE OF CERTIFICATE OF OCCUPANCY.

TREE INSTALLATION

ALL PROPOSED TREES TO BE A MINIMUM SEVEN (7) FT IN HEIGHT AND TWO (2) INCH CALIPER UNLESS SPECIFIED BY THE LANDSCAPE ARCHITECT.

ALL PROPOSED TREES TO MAINTAIN GRU MANDATED OFFSETS FROM UNDERGROUND UTILITY LINES.

ALL TREES IN SOD AREAS TO BE PROTECTED FROM MOWERS AND STRING TRIMMERS BY:
a. A FOUR (4) FOOT MINIMUM DIAMETER MULCH RING AROUND THE TRUNK BASE.
b. A TEN (10) INCH PLASTIC PROTECTOR (CORRUGATED DRAIN PIPE) AROUND THE TRUNK BASE.

TREES SHALL BE PLANTED SO THAT THE TRUNK FLARE IS EXPOSED; THE TOPMOST ROOT SHOULD BE 1 TO 2 INCHES ABOVE THE SURROUNDING GRADE.

TREES TO BE STAKED IF DEEMED NECESSARY. IF STAKED, GUYING TO BE A BIO-DEGRADEBLE MATERIAL. STAKING TO BE REMOVED WITHIN ONE YEAR OF INSTALLATION.

INVASIVE EXOTIC PLANT MATERIAL

ALL INVASIVE EXOTIC SPECIES TO BE REMOVED FROM SITE PRIOR TO ISSUANCE OF THE CERTIFICATE OF OCCUPANCY.

GRASSING

ALL DISTURBED UNPAVED AREAS SHALL BE GRASSED, MULCHED OR PLANTED. AREAS TO BE TURF GRASS SHALL BE GRADED SMOOTH AND EITHER GRASSED WITH SOD THAT IS CERTIFIED FREE OF NOXIOUS WEEDS OR SEEDED BY A HYDRO-SEED PROCESS OR SEEDED WITH A STRAW MULCH COVER.

PLANT MATERIAL

ALL PLANT MATERIAL TO BE FLORIDA NO. 1 OR BETTER, GRADED IN ACCORDANCE WITH FLORIDA DIVISION OF PLANT INSUSTRY'S GRADES AND STANDARDS FOR NURSERY PLANTS.

IRRIGATION NOTES

LANDSCAPE IRRIGATION TO BE PROVIDED BY AN AUTOMATIC IRRIGATION SYSTEM.

THE IRRIGATION SYSTEM SHALL PROMOTE WATER CONSERVATION BY UTILIZING METHODS SUCH AS DRIP IRRIGATION, EFFICIENT SPRINKLER ZONING, AND REDUCED RUN TIMES AS PLANTS BECOME MORE ESTABLISHED.

BUBBLERS TO BE PROVIDED FOR EACH PROPOSED TREE TO INSURE THE ENTIRE ROOT BALL IS IRRIGATED.

TREE PROTECTION NOTES

PLACE A TREE PROTECTION BARRIER AROUND ALL REGULATED TREES TO REMAIN THAT ARE WITHIN FIFTY (50) FEET OF ANY CONSTRUCTION ACTIVITY OR CONSTRUCTION STORAGE AREA.

TREE BARRIERS SHALL BE PLAINLY VISIBLE AND SHALL CREATE A CONTINUOUS BOUNDARY TO PROTECT AGAINST THE ENCROACHMENT OF MACHINERY, MATERIALS AND VEHICLES. NO EQUIPMENT, MATERIALS, SUPPLIES, FUELS OR CHEMICALS SHALL BE STORED WITHIN THE TREE BARRICADE AREA AT ANY TIME.

TREE BARRIERS TO BE PLACED AT OR OUTSIDE THE DRIPLINE OF HERITAGE AND CHAMPION TREES, REGULATED PINE AND PALM TREES. FOR ALL OTHER REGULATED TREES TO REMAIN, THE BARRIER SHALL BE PLACED AT TWO-THIRDS OF THE DRIPLINE OR AT A MINIMUM AT THE ROOT PLATE WITH CITY URBAN FORESTER APPROVAL.

NO GRADE CHANGE SHALL BE MADE WITHIN THE BARRIER ZONE WITHOUT PRIOR APPROVAL OF THE CITY MANAGER OR DESIGNEE.

TREE BARRIERS SHALL REMAIN IN PLACE UNTIL MAJOR CONSTRUCTION ACTIVITIES ARE COMPLETED AND LANDSCAPE INSTALLATION BEGINS. LANDSCAPE PREPARATION WITHIN THE PROTECTION ZONE IS LIMITED TO SHALLOW DISKING (NO DEEPER THAN FOUR (4) INCHES) UNLESS OTHERWISE APPROVED BY CITY MANAGER.

PLACE AN EIGHT (8) INCH THICK LAYER OF MULCH WITHIN THE TREE BARRIER AREA.

TREE ROOTS IN EXCESS OF ONE (1) INCH THAT ARE DAMAGED OR EXPOSED SHALL BE CUT BE CUT CLEANLY AND RECOVERED WITH SOIL WITHIN ONE HOUR OF THE DAMAGE.

SEE THE STANDARD TREE PROTECTION BARRIER FOR REGULATED TREES AND NON-HIGH QUALITY HERITAGE TREES AT DETAIL 4 / SHEET L3.01. BARRIER TO BE A MINIMUM THREE (3) FEET TALL AND CONSTRUCTED WITH:
a. 2x4 CORNERS AND TWO (2) COURSES OF 1x4 WOOD SLATS WITH COLORED FLAGGING OR COLORED PLASTIC MESH FENCING ATTACHED OR
b. ANGLE IRON CORNER POSTS WITH COLORED MESH CONSTRUCTION FENCING ATTACHED.

SEE THE HIGH QUALITY HERITAGE TREE PROTECTION BARRIER AT DETAIL 3 / SHEET L3.01. FURTHER BARRIER DETAILS . . .

CALL PLANNING SERVICES AT (352) 393-8188 (EARLINE LUMPKIN) TO SCHEDULE A BARRICADE INSPECTION BEFORE CLEARING AND GRUBBING WORK COMMENCES.

LEGEND

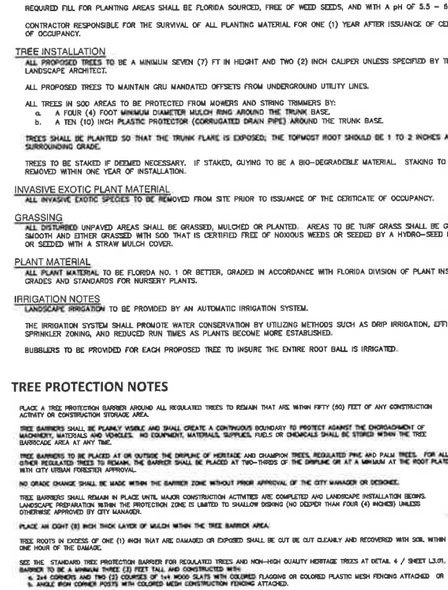
EXISTING TREES TO REMAIN

PROPOSED SHADE TREE

PROPOSED SHRUB MASSING

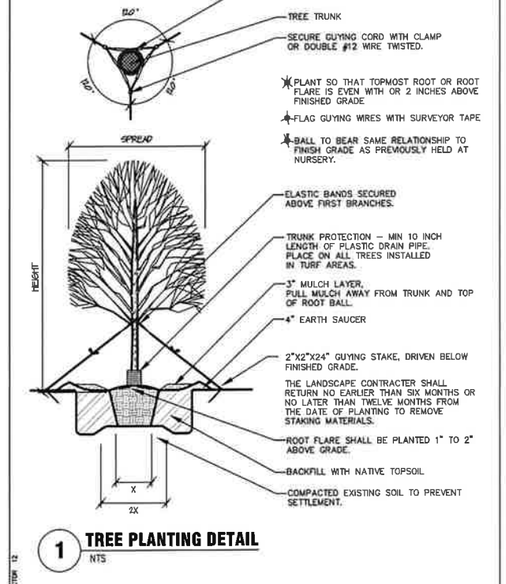
TREES TO BE REMOVED

H HERITAGE TREE



SCALE FACTOR 48

3 TREE BARRICADE DETAIL - CHAIN LINK FOR HERITAGE TREES
SCALE: 1/4"=1'

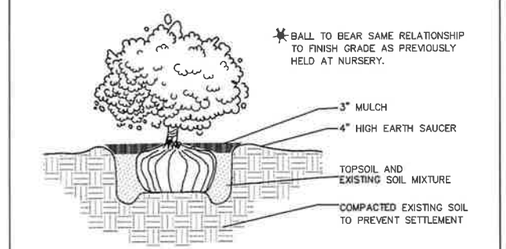


SCALE FACTOR 48

4 TREE BARRICADE DETAIL
SCALE: 1/4"=1'

SCALE FACTOR 12

1 TREE PLANTING DETAIL
NTS



SCALE FACTOR 12

2 SHRUB PLANTING DETAIL
SCALE: NTS

PREPARED BY:
ZAMIA DESIGN
Landscape Architecture
3459 NW 13th Avenue
Gainesville, Florida 32605
Ph. 352-373-8220 Fax 866-845-7717
LC 26000252

PREPARED FOR:

ZION EVANGELICAL LUTHERAN CHURCH

PROJECT:

ZION EVANGELICAL LUTHERAN CHURCH
GAINESVILLE, FLORIDA

SHEET TITLE:

NOTES, DETAILS & LANDSCAPE CALCULATIONS

PROJECT PHASE:

CITY / GRU RESUBMITTAL

ISSUE DATE:
MARCH 08, 2018

REVISIONS

NO.	DATE	COMMENTS

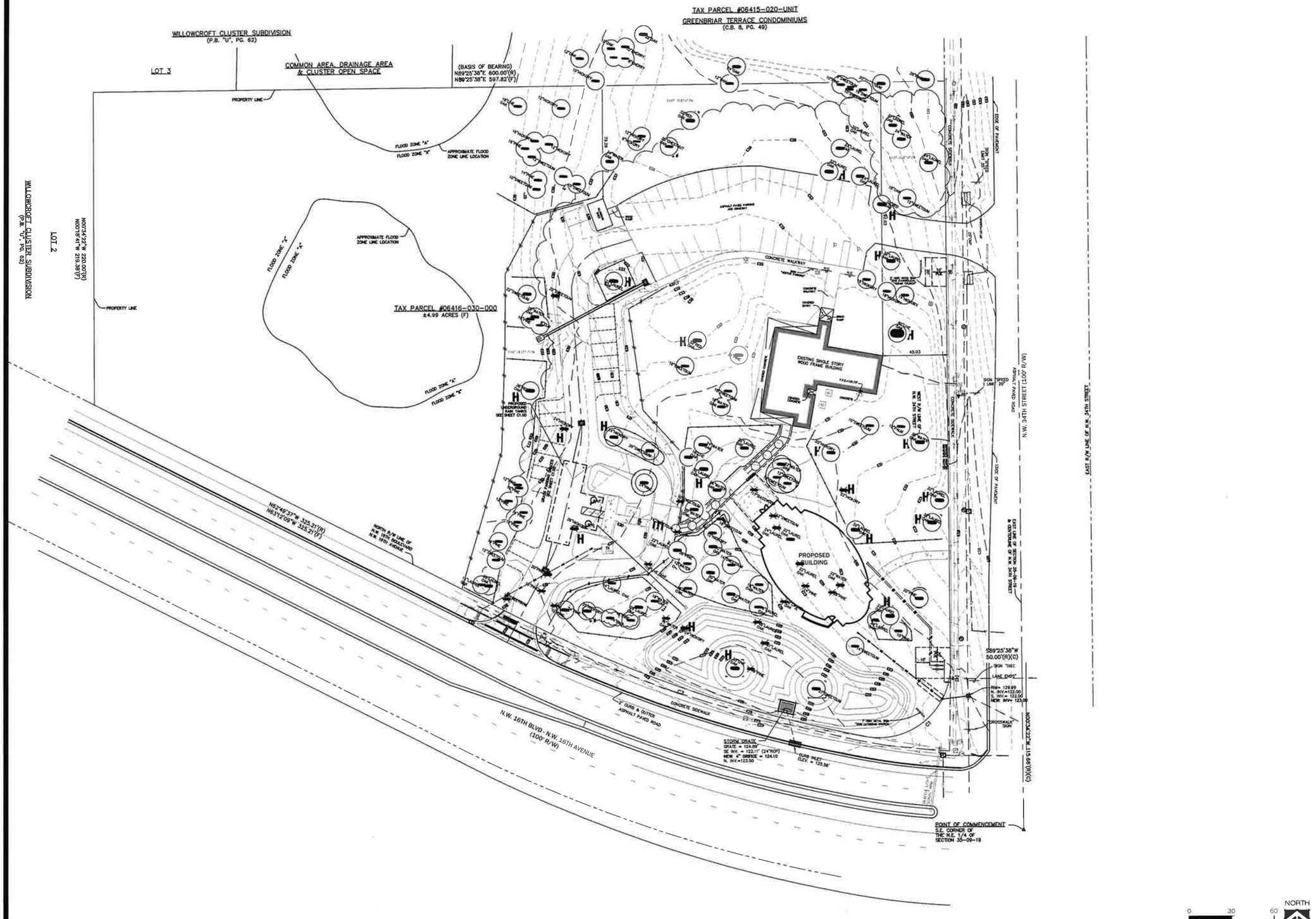
PROFESSIONAL SEAL:

LAWRENCE E. TEAGUE
FLORIDA: LA0001582

PROJECT NUMBER:
17015.1

DRAWN BY:	CHECKED BY:
ALZ	LET

SHEET NUMBER:
L3.01



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PREPARED FOR:

ZION EVANGELICAL LUTHERAN CHURCH

PROJECT:

ZION EVANGELICAL LUTHERAN CHURCH

GAINESVILLE, FLORIDA

SHEET TITLE:

TREE MITIGATION

PROJECT PHASE:

CITY / GRU RESUBMITTAL

ISSUE DATE:

MARCH 08, 2018

REVISIONS

NO.	DATE	COMMENTS

PROFESSIONAL SEAL:

LAWRENCE E. TEAGUE
FLORIDA: LA0001582

PROJECT NUMBER:

17015.1

DRAWN BY:	CHECKED BY:
ALZ	LET

SHEET NUMBER:

L1.01

BOUNDARY AND PARTIAL TOPOGRAPHIC SURVEY

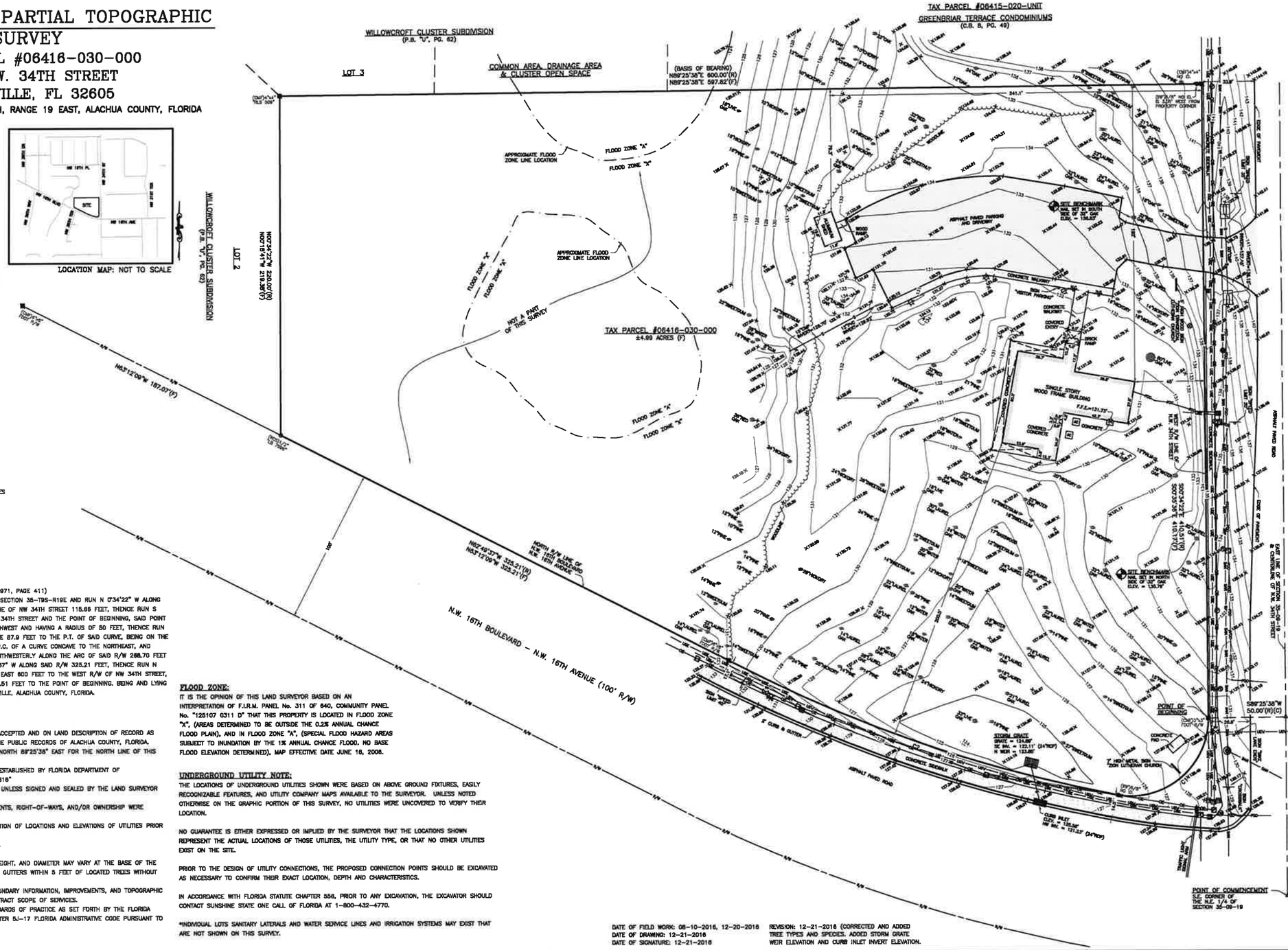
TAX PARCEL #06416-030-000
1700 N.W. 34TH STREET
GAINESVILLE, FL 32605

SECTION 35, TOWNSHIP 09 SOUTH, RANGE 19 EAST, ALACHUA COUNTY, FLORIDA

LEGEND:

- (R) RECORD MEASUREMENT
- (F) FIELD MEASUREMENT
- (C) CALCULATED CORNER
- ID. IDENTIFICATION
- R/W RIGHT-OF-WAY
- O.R.B. OFFICIAL RECORDS BOOK
- P.B. PLAT BOOK
- C.B. CONDOMINIUM BOOK
- PG. PAGE
- F.F.E. FINISHED FLOOR ELEVATION
- INV. INVERT ELEVATION
- PVC POLYVINYL CHLORIDE PIPE
- CMP CORRUGATED METAL PIPE
- RCP REINFORCED CONCRETE PIPE
- ○ (RCS) REBAR & CAP SET
- ◒ (RCF) REBAR & CAP FOUND
- ◒ (IRF) IRON ROD FOUND
- ■ (CMF) CONCRETE MONUMENT FOUND
- AC AIR CONDITIONER
- WOOD POWER POLE
- WATER METER
- CURB INLET
- ELECTRIC BOX
- SANITARY CLEAN-OUT
- CONCRETE POWER POLE
- SANITARY SEWER MANHOLE
- TELEPHONE PEDESTAL
- FIRE HYDRANT
- CROSSWALK POLE
- ELECTRIC METER
- FIBER-OPTIC CABLE BOX
- FIBER-OPTIC CABLE MARKER
- MITERED END SECTION
- STORM GRATE
- SIGN
- HANDICAP SIGN
- TRAFFIC SIGNAL BOX
- TRAFFIC SIGNAL POLE
- WOOD LIGHT POLE
- WATER VALVE
- OHE — OHE — OVERHEAD ELECTRIC LINES
- UGE — UGE — UNDERGROUND ELECTRIC LINES
- UGW — UGW — UNDERGROUND WATER LINES
- SAN — SAN — UNDERGROUND SANITARY SEWER LINES
- STM — STM — UNDERGROUND STORM WATER LINES
- FOO — FOO — UNDERGROUND FIBER-OPTIC LINES

LOCATION MAP: NOT TO SCALE



LAND DESCRIPTION: (OFFICIAL RECORDS BOOK 971, PAGE 411)

COMMENCE AT THE SE CORNER OF THE NE 1/4 OF SECTION 35-T9S-R19E AND RUN N 0°34'22" W ALONG THE EAST LINE OF SAID SECTION AND THE CENTERLINE OF NW 34TH STREET 115.66 FEET, THENCE RUN S 89°25'38" WEST 50 FEET TO THE WEST R/W OF NW 34TH STREET AND THE POINT OF BEGINNING, SAID POINT BEING THE P.C. OF A CURVE CONCAVE TO THE NORTHWEST AND HAVING A RADIUS OF 50 FEET, THENCE RUN SOUTHWESTERLY ALONG THE ARC OF SAID R/W CURVE 87.9 FEET TO THE P.T. OF SAID CURVE, BEING ON THE NORTH R/W OF NW 18TH AVENUE, AND BEING THE P.C. OF A CURVE CONCAVE TO THE NORTHEAST, AND HAVING A RADIUS OF 604.93 FEET, THENCE RUN NORTHWESTERLY ALONG THE ARC OF SAID R/W 268.70 FEET TO THE P.T. OF SAID CURVE, THENCE RUN N 62°49'37" W ALONG SAID R/W 325.21 FEET, THENCE RUN N 0°34'22" WEST 220 FEET, THENCE RUN N 89°25'38" EAST 600 FEET TO THE WEST R/W OF NW 34TH STREET, THENCE RUN S 0°34'22" EAST ALONG SAID R/W 410.51 FEET TO THE POINT OF BEGINNING. BEING AND LYING IN THE NE 1/4 OF SECTION 35-T9S-R19E, GAINESVILLE, ALACHUA COUNTY, FLORIDA.

SURVEYOR'S NOTES:

1. SURVEY BASED ON MONUMENTATION FOUND AND ACCEPTED AND ON LAND DESCRIPTION OF RECORD AS PER OFFICIAL RECORDS BOOK 971, PAGE 411 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA.
2. BEARINGS ARE BASED ON A RECORDED CALL OF NORTH 89°25'38" EAST FOR THE NORTH LINE OF THIS PROPERTY.
3. VERTICAL DATUM IS BASED ON N.A.V.D. 1988 AS ESTABLISHED BY FLORIDA DEPARTMENT OF TRANSPORTATION VERTICAL CONTROL POINT "775 73 B16"
4. REPRODUCTIONS OF THIS SURVEY ARE NOT VALID UNLESS SIGNED AND SEALED BY THE LAND SURVEYOR IN RESPONSIBLE CHARGE.
5. NO INSTRUMENTS OF RECORD REFLECTING EASEMENTS, RIGHT-OF-WAYS, AND/OR OWNERSHIP WERE FURNISHED TO THIS SURVEYOR EXCEPT AS SHOWN.
6. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF LOCATIONS AND ELEVATIONS OF UTILITIES PRIOR TO EXCAVATION OR TIE-IN CONSTRUCTION.
7. NORTH ARROW IS BASED ON BEARING STRUCTURE.
8. CERTIFICATION IS NOT TRANSFERABLE.
9. TREE TRUNK DIAMETERS WERE SIZED AT CHEST HEIGHT, AND DIAMETER MAY VARY AT THE BASE OF THE TRUNKS. DO NOT DESIGN STRUCTURES, CURBS AND GUTTERS WITHIN 5 FEET OF LOCATED TREES WITHOUT FIRST CONTACTING THIS SURVEYOR.
10. THE PURPOSE OF THIS SURVEY IS TO SHOW BOUNDARY INFORMATION, IMPROVEMENTS, AND TOPOGRAPHIC INFORMATION IN THE DESIGNATED AREA AS PER CONTRACT SCOPE OF SERVICES.
11. THIS SURVEY COMPLIES WITH THE FLORIDA STANDARDS OF PRACTICE AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL LAND SURVEYORS IN CHAPTER 5J-17 FLORIDA ADMINISTRATIVE CODE PURSUANT TO SECTION 472.027 FLORIDA STATUTES.

FLOOD ZONE:

IT IS THE OPINION OF THIS LAND SURVEYOR BASED ON AN INTERPRETATION OF F.I.R.M. PANEL No. 311 OF 640, COMMUNITY PANEL No. "125107 0311 D" THAT THIS PROPERTY IS LOCATED IN FLOOD ZONE "X", (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN), AND IN FLOOD ZONE "A", (SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD. NO BASE FLOOD ELEVATION DETERMINED), MAP EFFECTIVE DATE JUNE 16, 2006.

UNDERGROUND UTILITY NOTE:

THE LOCATIONS OF UNDERGROUND UTILITIES SHOWN WERE BASED ON ABOVE GROUND FIXTURES, EASILY RECOGNIZABLE FEATURES, AND UTILITY COMPANY MAPS AVAILABLE TO THE SURVEYOR. UNLESS NOTED OTHERWISE ON THE GRAPHIC PORTION OF THIS SURVEY, NO UTILITIES WERE UNCOVERED TO VERIFY THEIR LOCATION.

NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED BY THE SURVEYOR THAT THE LOCATIONS SHOWN REPRESENT THE ACTUAL LOCATIONS OF THOSE UTILITIES, THE UTILITY TYPE, OR THAT NO OTHER UTILITIES EXIST ON THE SITE.

PRIOR TO THE DESIGN OF UTILITY CONNECTIONS, THE PROPOSED CONNECTION POINTS SHOULD BE EXCAVATED AS NECESSARY TO CONFIRM THEIR EXACT LOCATION, DEPTH AND CHARACTERISTICS.

IN ACCORDANCE WITH FLORIDA STATUTE CHAPTER 556, PRIOR TO ANY EXCAVATION, THE EXCAVATOR SHOULD CONTACT SUNSHINE STATE ONE CALL OF FLORIDA AT 1-800-432-4770.

*INDIVIDUAL LOTS SANITARY LATERALS AND WATER SERVICE LINES AND IRRIGATION SYSTEMS MAY EXIST THAT ARE NOT SHOWN ON THIS SURVEY.

DATE OF FIELD WORK: 08-10-2016, 12-20-2016
DATE OF DRAWING: 12-21-2016
DATE OF SIGNATURE: 12-21-2016

REVISION: 12-21-2016 (CORRECTED AND ADDED TREE TYPES AND SPECIES, ADDED STORM GRATE, WEIR ELEVATION AND CURB INLET INVERT ELEVATION.

CURVE TABLE					
CURVE #	LENGTH	RADIUS	DELTA	TANGENT	CHORD BEARING AND DISTANCE
C1	87.9'(R) 87.35'(F)	50.00'(R) 50.00'(F)	100°05'48"(F)	59.69'(F)	S49°39'08"W 76.68'(F)
C2	268.70'(R) 267.97'(F)	904.93'(R) 904.93'(F)	16°57'59"(F)	134.97'(F)	N70°47'58"W 268.99'(F)

CERTIFY SURVEY TO:
JOHN ZONA, III
ZION EVANGELICAL LUTHERAN CHURCH, INC.

SCALE: 1" = 30'	PAGE 1 OF 1
BAR IS ONE INCH ON ORIGINAL DRAWING 0 1" IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	DATE: 12-20-2016 DRAWN BY: GUY FIELD BOOK: 320/50-52; 332/10; 338/8
	COPYRIGHT © DEREN LAND SURVEYING, LLC. LB No. 7995

SURVEY BY: _____
PROFESSIONAL SURVEYOR & MAPPER FLA.CERT. 5339

JOB No. 16518 | ACAD FILE: 16518-1

KRIS ANN GATH P.S.M.
4605 N.W. 6TH STREET, SUITE H
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