

ST. NICHOLAS
ORTHODOX CHRISTIAN ACADEMY

R E N O • N E V A D A

SPECIAL USE PERMIT

Prepared by:



October 10, 2022

ST. NICHOLAS

ORTHODOX CHRISTIAN ACADEMY

Special Use Permit

Prepared for:

St. Nicholas Orthodox Academy
16255 South Virginia Street
Reno, Nevada 89521

Prepared by:

Christy Corporation, Ltd.
1000 Kiley Parkway
Sparks, Nevada 89436
(775) 502-8552

October 10, 2022



Table of Contents

Introduction	1
Project Location	1
Existing Conditions	2
Project Background	6
Request Summary	6
Special Use Permit Findings	10

List of Figures:

Figure 1 – Vicinity Map.....	1
Figure 2 – Aerial View	2
Figure 3 – Existing Conditions	3
Figure 4 – Existing Conditions	4
Figure 5 – Zoning.....	5
Figure 6 – Preliminary Site Plan	7
Figure 7 – Building Elevations	9

Appendices:

- Washoe County Development Application
- Owner Affidavit
- Special Use Permit Application
- Property Tax Verification

Attachments:

- Engineering Plans and Reports



Introduction

This application includes the following request:

- A **Special Use Permit** to allow for the establishment of a private school within the High Density Rural (HDR) regulatory zone and to allow for Major Grading per the standards of Section 110.438.35 of the Washoe County Development Code.

Project Location

The project site (APN # 045-210-01) includes 13.96± acres located at 16255 South Virginia Street (Old US 395). Specifically, the subject property is located on the west side of Virginia Street, south of Rhodes Road and north of Cheyenne Drive. Figure 1 (below) depicts the project location.



Figure 1 – Vicinity Map

Existing Conditions

The property is currently developed with a single family residence, a commercial building and several smaller outbuildings that front Virginia Street. The Virginia Street structure has functioned as a residence, stagecoach stop, “divorce cottages” during the 1930’s to 1960’s, a church, and most recently a private school.

Surrounding uses include commercial (mini-storage) to the north, single family to the south, vacant land to the west, and a mix of vacant and commercial parcels to the east. Property to the west includes steep slopes extending up to the Interstate 580 right-of-way.

Figure 2 (below) provides an aerial view of the property and depicts existing onsite improvements while Figures 3 and 4 (following pages) provide photographs of the existing site conditions.

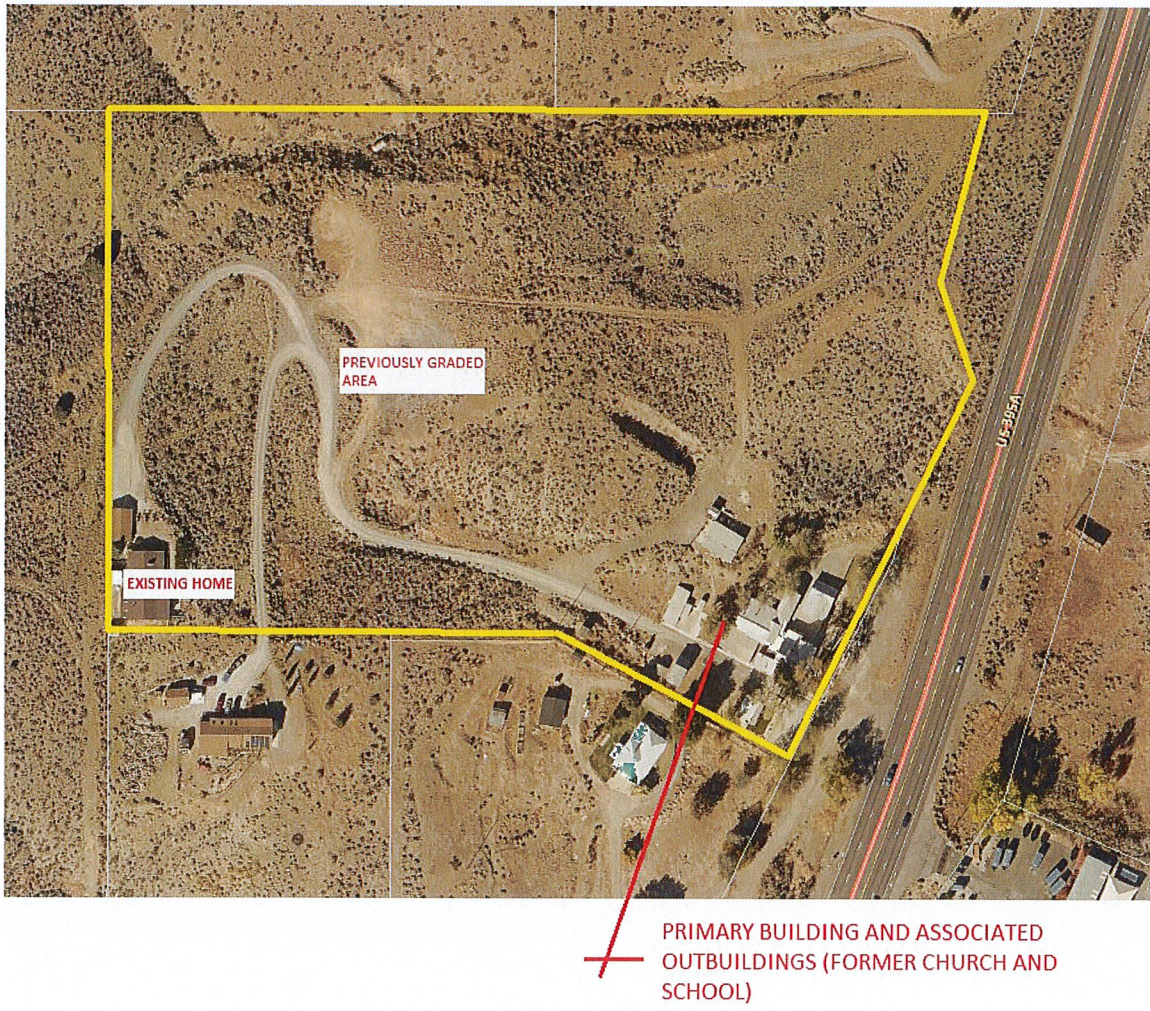
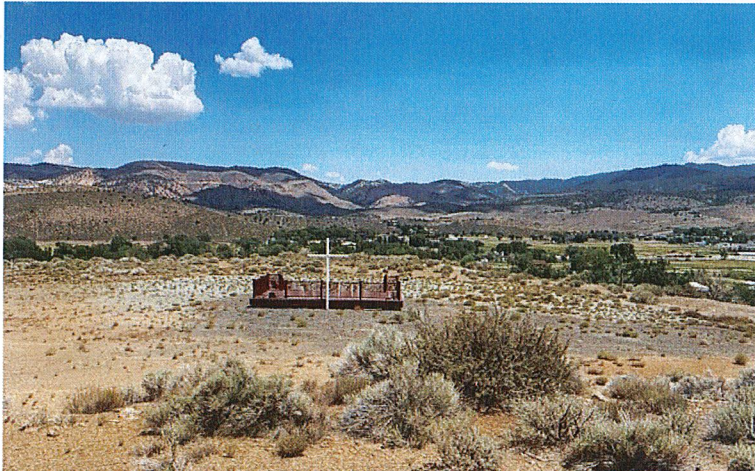
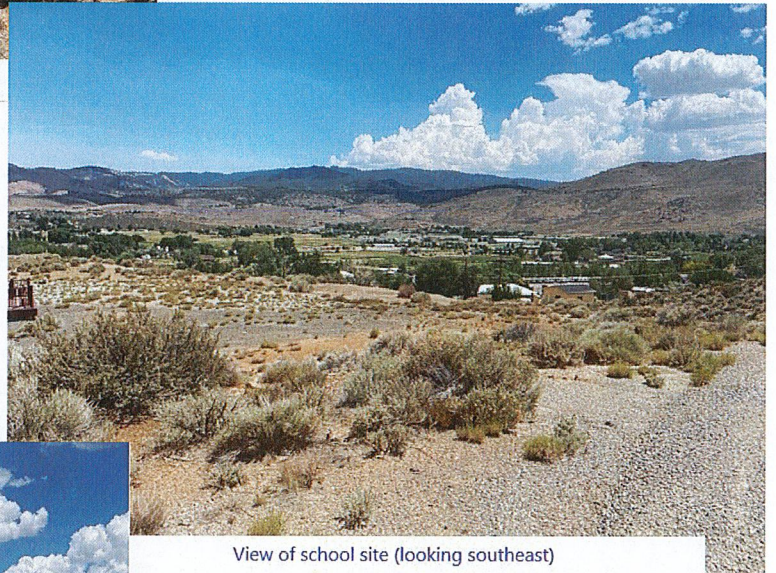


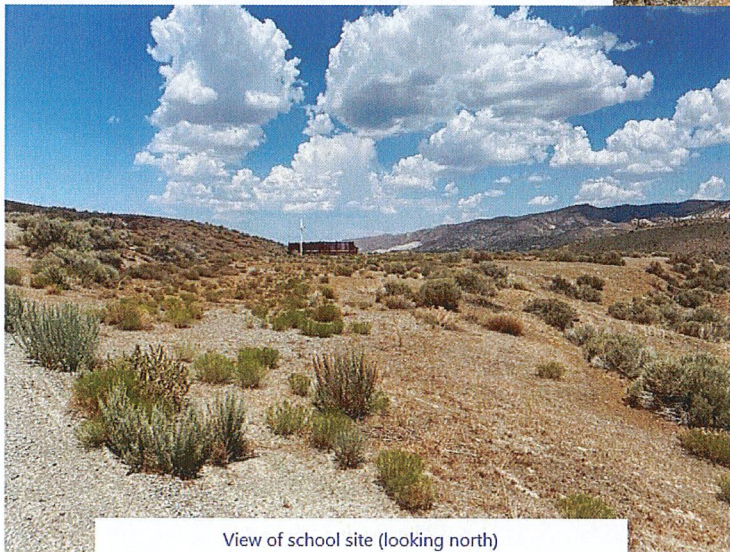
Figure 2 – Aerial View



View of school site (looking east)



View of school site (looking southeast)

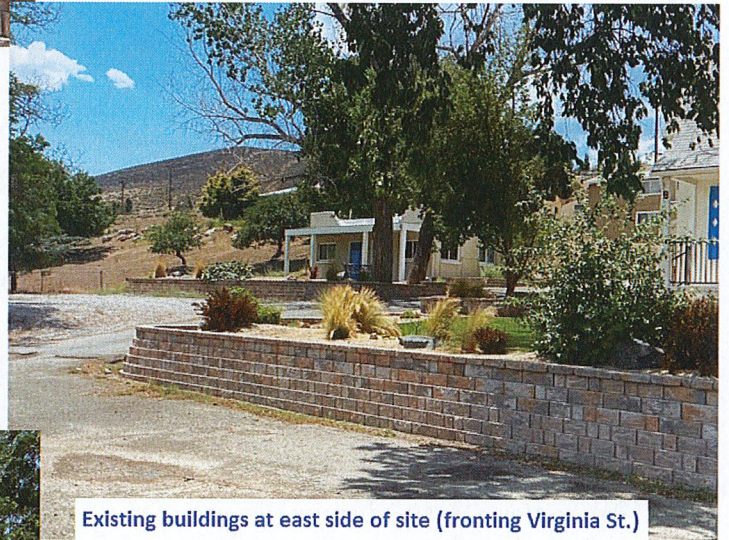


View of school site (looking north)

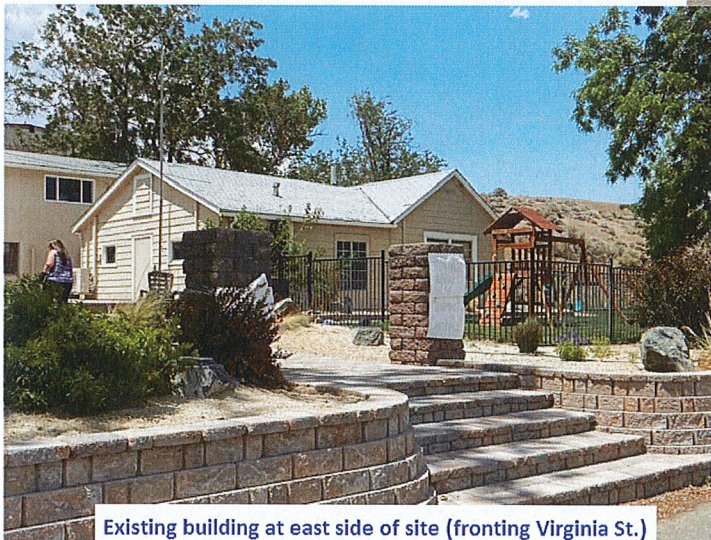
Figure 3 – Existing Conditions



Existing "commercial" building at east side of site



Existing buildings at east side of site (fronting Virginia St.)



Existing building at east side of site (fronting Virginia St.)

Figure 4 – Existing Conditions

The 13.96± acre parcel is zoned High Density Rural (HDR). The area includes an eclectic mix of zoning including Neighborhood Commercial (NC) to the north and east, General Rural (GR) to the west, and Low Density Suburban (LDS) to the south. Figure 5 (below) depicts the existing zoning patterns in the area.

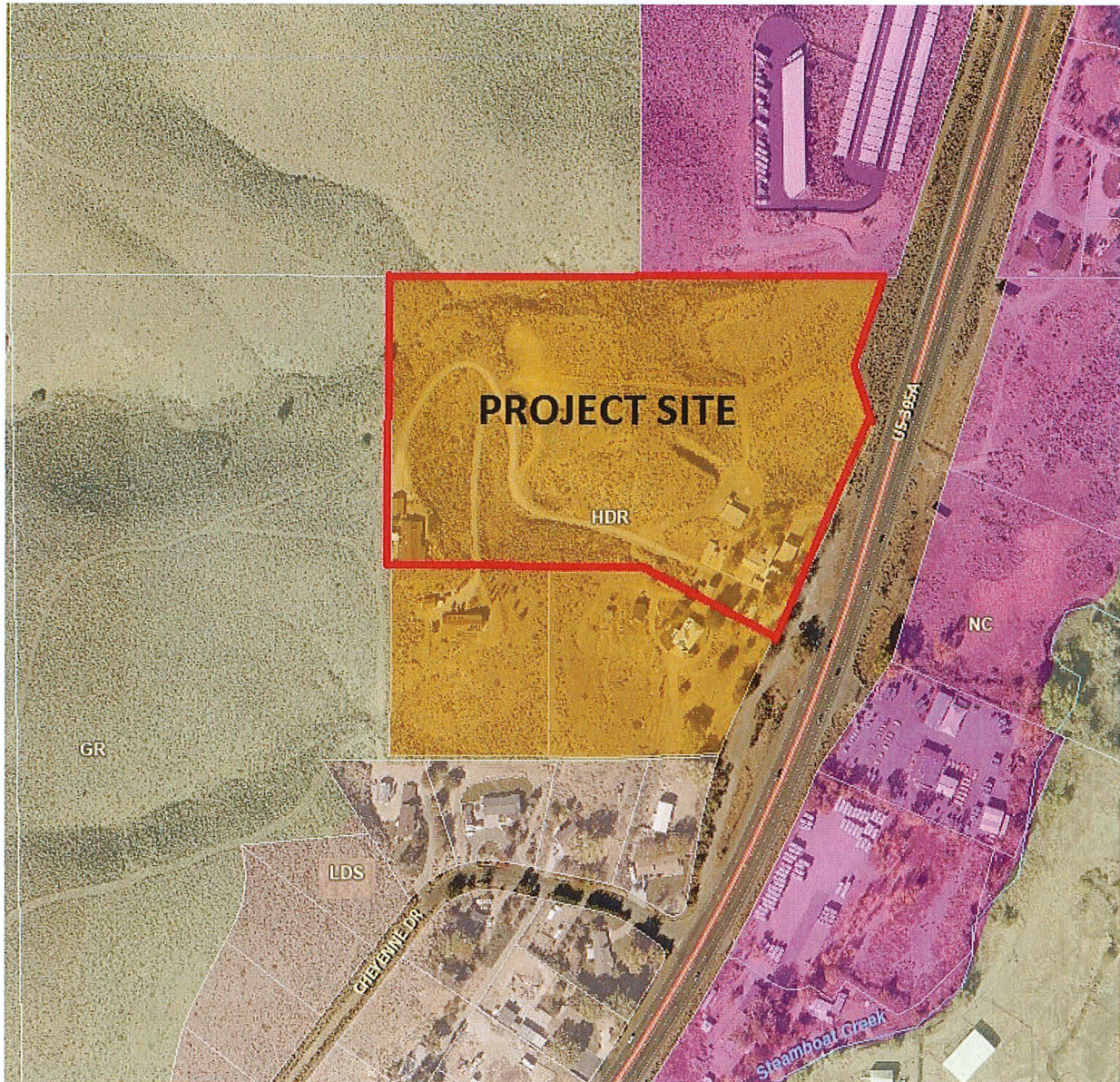


Figure 5 - Zoning

Project Background

As noted previously, the project site has an eclectic history in terms of land use. Although the Assessor's office shows the primary building as being constructed in 1933, this is reflective of additions to the structure. The primary building (originally developed as a home) was built in the late 1800's and even served as a stagecoach stop between Reno and Carson City at one time. Cottages (existing outbuildings) were constructed in the 1930's and were rented to individuals seeking to establish Nevada residency in order to receive an expedited divorce.

The Glory Temple Church occupied the buildings for many years and operated a church and parochial school under a Special Use Permit (SUP) issued by Washoe County. In 2017, the church sold the property to the current property owners and the St. Nicholas Orthodox Christian Academy (St. Nicholas) was established. The school operated at the site until the end of the 2021 school year.

St. Nicholas operated with the assumption that the Glory Temple Church SUP ran with the land and was valid. However, in the process of completing improvements at the site in 2020, it was discovered that Glory Temple Church failed to maintain the validity of the SUP. Thus, no current SUP was in place to allow for St. Nicholas to operate. Therefore, this SUP request is needed to reestablish a private school use at the project site and to allow for major grading.

The existing buildings along the Virginia Street frontage are slated for demolition. A recent structural inspection indicated that the buildings were structurally unsound and could not be rehabilitated. Permits have been issued by Washoe County to demolish the buildings.

Request Summary

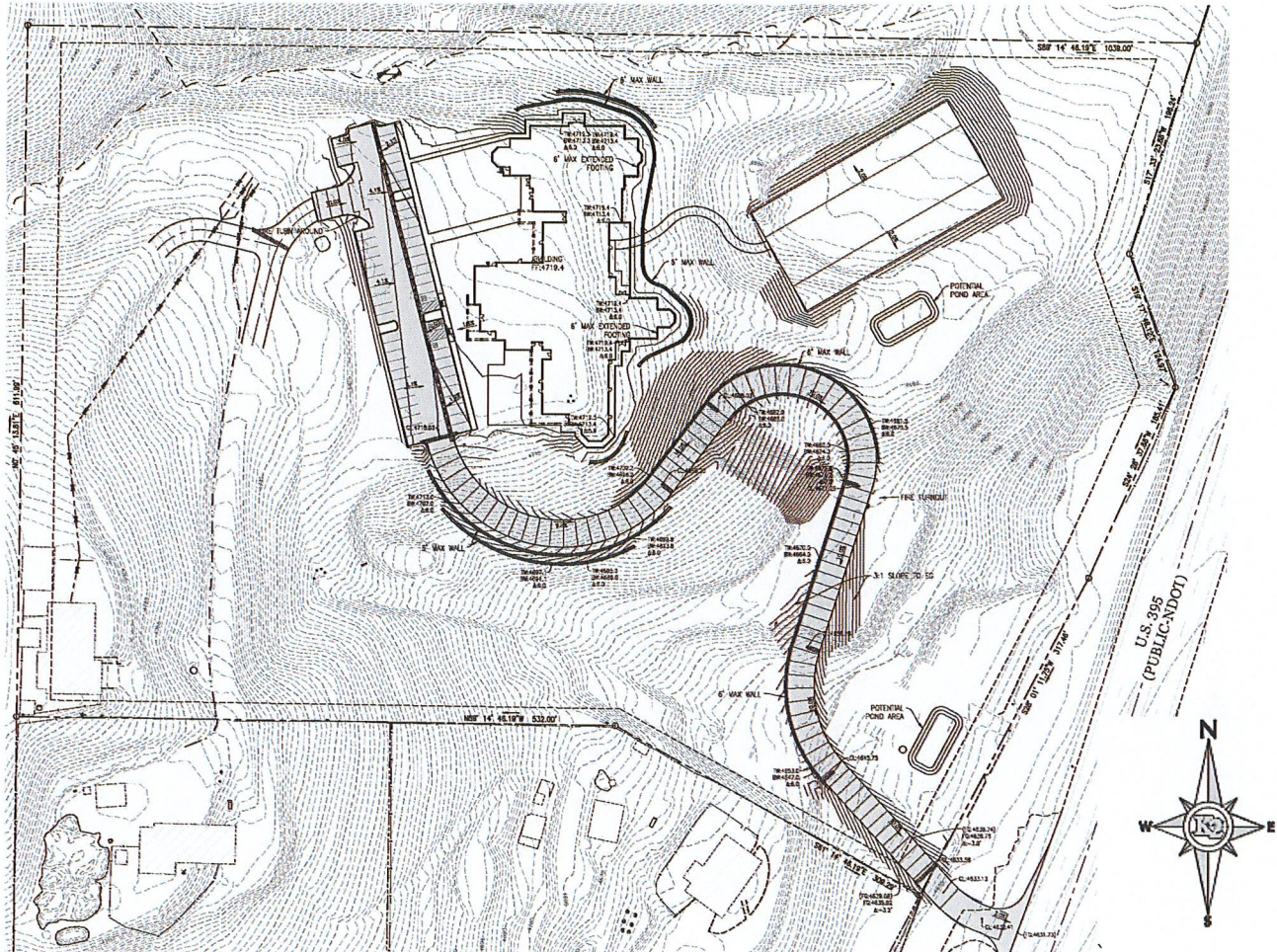
The first component of this Special Use Permit (SUP) is to allow for a private school use to be established at the site. St. Nicholas received a SUP in September of 2021 to permit the school to use three temporary modular buildings (6 classrooms) that were to be utilized while plans for the new facility were under development. The Washoe County Development Code requires this supplemental SUP based on the existing HDR zoning and the previously issued SUP.

Originally, St. Nicholas planned to refurbish the existing onsite buildings for use as classrooms. However, during a structural analysis of the buildings, they were deemed structurally unsound. A temporary solution was found at another site in Reno while plans contained herein were developed. It is now planned to construct new buildings at the upper portion of the site and as a result, the temporary classrooms were not installed. The primary school building is proposed to be 24,944± square feet in area and will include an athletic field to the east of the building. The athletic field will be constructed downslope from the building and takes advantage of another flat portion of the site.

The school will accommodate kindergarten through 12th grade and is envisioned to have a maximum of 150 students: 75 elementary, 30 middle school and 45 high school students. The school will be located at the north central portion of the site.



This SUP calls for the school building to be located in the north central position of the project site. Figure 6 (below) depicts a preliminary site plan.



Note: Refer to attached full-size site plan.

Figure 6 – Preliminary Site Plan

As depicted in Figure 6, the school building is situated in a north-south orientation in the central portion of the site. The parking area and most of the building are situated in the previously graded area that is accessed via the existing driveway. This driveway also serves the home located at the southwest corner of the parcel as well as a home located on the parcel to the south. The driveway connects to the primary access along South Virginia Street. The circular drive will ensure circulation for emergency vehicles and will also allow parents to circulate in and out of the site during drop-off and pick-up hours.



Parking for teachers and students as well as student drop-off will be located adjacent to and west of the school building. The parking includes 54± spaces, well over the code required 29 spaces. Internal circulation for student drop-off and pick-up will consist of a counterclockwise circular driveway. This provides for safe and efficient school access.

Based on trip generation data provided by the Institute of Transportation Engineers (ITE) for land use code 536 (Private School K-12), St. Nicholas is expected to generate 372 average daily trips (ADT) with 122 am peak trips and 26 pm peak trips. The peak hour trip generation rates are supported given the school's 9:00 am to 3:00 pm operating schedule. A full traffic analysis will be generated concurrently with an NDOT encroachment permit. At that time, NDOT and Washoe County can require any needed mitigation measures. Given existing levels of service on this stretch of Virginia Street, traffic generated by the school can easily be accommodated without negative impacts to the surrounding area.

The area proposed for development includes areas previously disturbed by existing operations. However, with the grading proposed (and described in the following section), the grading will extend beyond previously graded areas. Retaining walls will have a maximum 6-foot height and will be required along the north and eastern side of the proposed building as well as along the improved driveway access.

Stormwater detention will be provided at the eastern and southeastern side of the site, ensuring that flows off the property are equal to or less than those in the pre-development condition. Steeper slopes that exist surrounding the proposed disturbed areas will continue to remain undisturbed. Overall, it is proposed to disturb 3.8± acres (26%) of the site.

The second component of this SUP request is to allow for Major Grading, as defined in Section 110.438.35 of the Washoe County Development Code. Specifically, the Major Grading Permit Thresholds triggered by this application include those outlined in Section 110.438.35(a)(2)(i) and (ii).

The Development Code sections noted above refer to grading on slopes greater than 15%. Per 110.438.35(2)(i), a SUP is triggered for grading of an area more than 2 acres in size. As proposed, 3.8± acres will be graded with the project. The second SUP "trigger" is to allow for the excavation or importation of 1,000 cubic yards or more at the site per 110.438.35(2)(ii). As proposed, the St. Nicholas project will include approximately 9,930 cubic yards of cut and 14,090 cubic yards of fill.

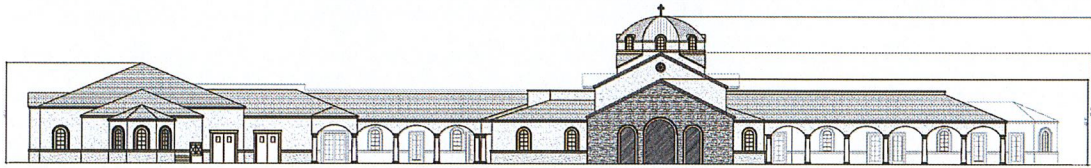
Grading proposed is consistent with a site of this scale and density. The grading will not result in slopes greater than three horizontal to one vertical (3:1). The project is consistent with other surrounding uses and in character with the grading and slopes in this area.

A detailed grading and drainage plan, prepared by K2 Engineering, is included as an attachment to this report.

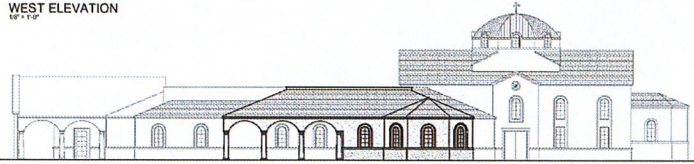
Full size building elevations and floorplans are include as an attachment to this report. Figure 7 (next page) provides a rendering of the building, depicting the architectural character of the proposed structure.



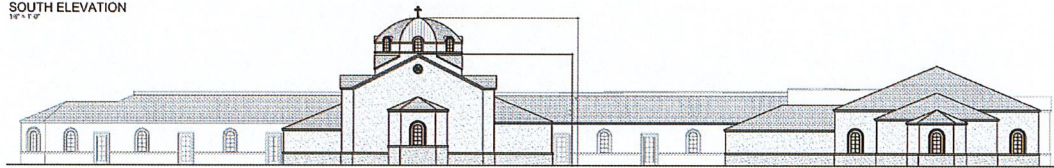
ST. NICHOLAS
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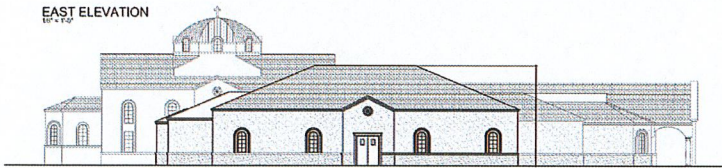
WEST ELEVATION
10' x 10'



SOUTH ELEVATION
10' x 10'



EAST ELEVATION
10' x 10'



NORTH ELEVATION
10' x 10'



Figure 7 – Building Elevations



Special Use Permit Findings

In order to approve a Special Use Permit, the following findings must be made. Responses are provided in **bold face** type.

1. Consistency. The granting of the special use permit is consistent with the policies and maps of the Comprehensive Plan Elements and the Area Plan in which the property is located.

The requested private school use is consistent with Division Three of the Washoe County Development Code and does not conflict with policies contained within the South Valleys Area Plan. The project is a low impact use and similar operations have proven to operate successfully at the site for several years.

2. Adequate Public Facilities. Adequate utilities, roadway improvements, sanitation, water supply, drainage, and other necessary facilities must exist or will be provided.

As detailed on the attached engineering plans and reports, all infrastructure and services needed to serve the project are in place or will be extended/improved with development of the new school building, per Washoe County standards.

3. Site Suitability. The site must be physically suitable for the proposed use and for the intensity of development.

A portion of the area proposed for the building has been previously graded and is well suited for the intensity of the proposed use. The athletic field is also situated on a flatter portion of the site in order to reduce the amount of site grading required.

4. Issuance Not Detrimental. Issuance of the permit may not be significantly detrimental to the public health, safety or welfare; have a detrimental impact on adjacent properties; or be detrimental to the character of the surrounding area.

No negative impacts are anticipated with the granting of this SUP request. The private school and is a low intensity use. In fact, St. Nicholas has operated at the site since 2017 without incident.

APPENDICES

Washoe County Development Application

Your entire application is a public record. If you have a concern about releasing personal information, please contact Planning and Building staff at 775.328.6100.

Project Information		Staff Assigned Case No.: _____	
Project Name: St. Nicholas Orthodox Academy			
Project Description: A SUP to allow for the establishment of a private school in the HDR zone and allow for major grading. Refer to attached report for additional details.			
Project Address: 16255 South Virginia Street, Reno, NV 89521			
Project Area (acres or square feet): 13.96 acres			
Project Location (with point of reference to major cross streets AND area locator): The site is located on the west side of South Virginia Street (Old US 395), south of Rhodes Road, north of Cheyenne Drive.			
Assessor's Parcel No.(s):	Parcel Acreage:	Assessor's Parcel No.(s):	Parcel Acreage:
045-210-01	13.96		
Indicate any previous Washoe County approvals associated with this application: Case No.(s).			
Applicant Information (attach additional sheets if necessary)			
Property Owner:		Professional Consultant:	
Name: JLC Realty, LLC		Name: Christy Corporation, Ltd.	
Address: 4781 Caughlin Pkwy.		Address: 1000 Kiley Parkway	
Reno, NV	Zip: 89519	Sparks, NV	Zip: 89436
Phone: (775) 848-3677	Fax:	Phone: (775) 502-8552	Fax:
Email: drjanetcummings@me.com		Email: mike@christynv.com	
Cell: (775) 848-3677	Other:	Cell: (775) 250-3455	Other:
Contact Person:		Contact Person: Mike Railey	
Applicant/Developer:		Other Persons to be Contacted:	
Name: St. Nicholas Orthodox Academy		Name: K2 Engineering and Structural Design	
Address: 16255 S. Virginia St.		Address: 860 Maestro Dr., Suite A	
Reno, NV	Zip: 89521	Reno, NV	Zip: 89511
Phone: (775) 544-5565	Fax:	Phone: (775) 355-0505	Fax:
Email: drjanetcummings@me.com		Email: brandt@k2eng.net	
Cell: (775) 848-3677	Other:	Cell: (775) 560-8189	Other:
Contact Person: Janet Cummings		Contact Person: Brandt Kennedy, P.E.	
For Office Use Only			
Date Received:	Initial:	Planning Area:	
County Commission District:		Master Plan Designation(s):	
CAB(s):		Regulatory Zoning(s):	

Special Use Permit Application Supplemental Information

(All required information may be separately attached)

1. What is the project being requested?

A SUP to allow for the establishment of a private school in the HDR zone and allow for major grading. Refer to attached report for additional details.

2. Provide a site plan with all existing and proposed structures (e.g. new structures, roadway improvements, utilities, sanitation, water supply, drainage, parking, signs, etc.)

Refer to attached plan.

3. What is the intended phasing schedule for the construction and completion of the project?

Refer to attached report for a detailed description.

4. What physical characteristics of your location and/or premises are especially suited to deal with the impacts and the intensity of your proposed use?

Refer to attached report for a detailed analysis.

5. What are the anticipated beneficial aspects or affects your project will have on adjacent properties and the community?

The project will provide for a schooling alternative for area youth and will ultimately include improvements to the existing site. Refer to attached report for additional details.

6. What are the anticipated negative impacts or affect your project will have on adjacent properties? How will you mitigate these impacts?

The project is a low impact use that is not expected to generate any negative impacts to surrounding properties. Refer to attached report for a detailed analysis.

7. Provide specific information on landscaping, parking, type of signs and lighting, and all other code requirements pertinent to the type of use being purposed. Show and indicate these requirements on submitted drawings with the application.

Approximately 9,930 cubic yards of cut and 14,090 cubic yards of fill. Refer to attached report.

8. Are there any restrictive covenants, recorded conditions, or deed restrictions (CC&Rs) that apply to the area subject to the special use permit request? (If so, please attach a copy.)

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
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9. Utilities:

a. Sewer Service	Septic
b. Electrical Service	NV Energy
c. Telephone Service	AT&T or Charter Communications
d. LPG or Natural Gas Service	NV Energy
e. Solid Waste Disposal Service	Waste Management
f. Cable Television Service	AT&T or Charter Communications
g. Water Service	Well (existing)

For most uses, Washoe County Code, Chapter 110, Article 422, Water and Sewer Resource Requirements, requires the dedication of water rights to Washoe County. Please indicate the type and quantity of water rights you have available should dedication be required.

h. Permit #		acre-feet per year	
i. Certificate #		acre-feet per year	
j. Surface Claim #		acre-feet per year	
k. Other #		acre-feet per year	

Title of those rights (as filed with the State Engineer in the Division of Water Resources of the Department of Conservation and Natural Resources).

Native revegetation and landscaping will be provided for visual mitigation. Please refer to the attached report.
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10. Community Services (provided and nearest facility):

a. Fire Station	TMFPD - Pleasant Valley Volunteer/Foothill Drive Stations
b. Health Care Facility	Renown Regional Medical Center
c. Elementary School	St. Nicholas Orthodox Academy/Pleasant Valley Elementary
d. Middle School	St. Nicholas Orthodox Academy/Herz Middle School
e. High School	St. Nicholas Orthodox Academy/Galena High School
f. Parks	Galena Creek Regional Park/Davis Creek Park
g. Library	Washoe County - South Valleys Branch
h. Citifare Bus Stop	Not applicable

**Special Use Permit Application
for Grading
Supplemental Information**
(All required information may be separately attached)

1. What is the purpose of the grading?

Grading will be used to create a building pad for the new school building, parking, driveways and athletic field.

2. How many cubic yards of material are you proposing to excavate on site?

Approximately 9,930 cubic yards of cut and 14,090 cubic yards of fill. Refer to attached report.

3. How many square feet of surface of the property are you disturbing?

A total of 4.09 acres will be disturbed.

4. How many cubic yards of material are you exporting or importing? If none, how are you managing to balance the work on-site?

Approximately 9,930 cubic yards of cut and 14,090 cubic yards of fill. Refer to attached report.

5. Is it possible to develop your property without surpassing the grading thresholds requiring a Special Use Permit? (Explain fully your answer.)

Given the size of the site and existing disturbance that has already occurred, it is not possible to grade below the established SUP thresholds.

6. Has any portion of the grading shown on the plan been done previously? (If yes, explain the circumstances, the year the work was done, and who completed the work.)

The area proposed to be graded is mostly disturbed. The grading proposed allows for redevelopment of the property, as described in the attached report.

7. Have you shown all areas on your site plan that are proposed to be disturbed by grading? (If no, explain your answer.)

Yes.

8. Can the disturbed area be seen from off-site? If yes, from which directions and which properties or roadways?

Yes, the disturbed area can be seen from the east, from South Virginia. Refer to attached report for additional details.

9. Could neighboring properties also be served by the proposed access/grading requested (i.e. if you are creating a driveway, would it be used for access to additional neighboring properties)?

Neighboring properties to the southwest will continue to be served by the existing access easement.

10. What is the slope (horizontal/vertical) of the cut and fill areas proposed to be? What methods will be used to prevent erosion until the revegetation is established?

The slopes are proposed to be 3:1. Native revegetation will be used to stabilize slopes.

11. Are you planning any berms?

Yes	No <input checked="" type="checkbox"/>	If yes, how tall is the berm at its highest?
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12. If your property slopes and you are leveling a pad for a building, are retaining walls going to be required? If so, how high will the walls be and what is their construction (i.e. rockery, concrete, timber, manufactured block)?

Yes, max. height of 6 feet. The construction will be determined at final design/permit.

13. What are you proposing for visual mitigation of the work?

Native revegetation and landscaping will be provided for visual mitigation. Please refer to the attached report.

14. Will the grading proposed require removal of any trees? If so, what species, how many and of what size?

No.

15. What type of revegetation seed mix are you planning to use and how many pounds per acre do you intend to broadcast? Will you use mulch and, if so, what type?

Areas to be revegetated will include a native seed mix to the approval of the WSCD.

16. How are you providing temporary irrigation to the disturbed area?

If deemed necessary, temporary irrigation will be provided at revegetation locations.

17. Have you reviewed the revegetation plan with the Washoe Storey Conservation District? If yes, have you incorporated their suggestions?

Revegetation (as necessary) will include a WSCD approved seed mix.

18. Are there any restrictive covenants, recorded conditions, or deed restrictions (CC&Rs) that may prohibit the requested grading?

Yes	No X	If yes, please attach a copy.
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ATTACHMENTS

PRELIMINARY ONSITE DRAINAGE REPORT

FOR

St. Nicholas Orthodox Academy

Prepared For:

JLC Realty LLC
Attn: Brett Sabatini
4781 Caughlin Parkway
Reno, NV 89519

Prepared By:



860 Maestro Drive, Suite A
Reno, NV 89511
Ph. 775-355-0505
Fax 775-355-0566

October 2022

22-315

Table of Contents

- Preliminary Onsite Drainage Report
- Preliminary Onsite Drainage Calculations – Rational Method
- Vicinity Map
- Site Plan (C-1)
- Appendix
 - FEMA FIRM Map
 - NOAA Atlas 14 Point Precipitation Frequency Estimates
 - TMRDM Rational Method Runoff Coefficients (Table 701)

References

- Truckee Meadows Regional Drainage Manual (TMRDM)

Onsite Drainage Report

Project: St. Nicholas Orthodox Academy

Date: October 2022

Description: The project will consist of a school with associated driveway, parking lot, sports field, landscaping, utilities, and drainage improvements.

Location: 16255 South Virginia Street

APN: 045-210-01

Site Area: 14.4 ac

Developed Area: 2.4 ac

Disturbance: 4.1 ac

Flood Zone: X (Unshaded)

Firm: 32031C3351G

Restrictions: None

Pre-Development Discussion

Existing Development & Drainage Facilities:

The site was previously developed near S. Virginia Street (US 395A), however, the majority of onsite improvements have been demolished. The remaining development consists of an existing residence and unpaved driveways. The site slopes predominantly from the west to the east at slopes that range between 1-75%. The majority of vegetation consists of native grasses and brush. The majority of onsite flow generated by the site travels east until it is discharged into an existing drainage swale along US 395A. The remainder of onsite flow travels to an existing drainage swale that runs along the northern property line to the east. This existing drainage swale discharges near the northeastern corner of the site and eventually contributes to the existing swale along US 395A. Onsite flow ultimately contributes to Steamboat Creek and subsequently the Truckee River.

Surrounding Properties:

- North: Developed commercial and undeveloped residential
- South: Developed residential
- East: US 395A
- West: Undeveloped residential

Offsite Contributing Flow: N/A

Previous Analysis: N/A

Post-Development Discussion

Proposed Drainage Improvements:

The developed site will maintain existing drainage patterns. The site will be graded to direct storm flows away from the proposed building. A portion of these storm flows will be directed to the proposed parking lot while remainder of flow will be directed to the east. The parking lot has been graded to direct storm flows to a longitudinal valley gutter that conveys storm flows south towards the proposed driveway. It is the intent to utilize overland flow to capture and direct the majority of stormwater flows, however, with the final design, some underground storm drain may need to be introduced. The driveway will convey a majority of storm flows generated by the proposed improvements east to a bio-retention pond. This pond has been sized to accommodate the 100-year 10-minute event. In event of large storm events, excess flow will discharge to the east into the existing drainage swale along US 395A. Onsite flow ultimately contributes to Steamboat Creek.

Low Impact Development Features:

This site will utilize a bio-retention pond (TC-30) to promote sedimentation and infiltration addressing LID requirements.

Conclusions:

The proposed development will be constructed in accordance with Washoe County Design Standards. Peak flow from the site will be limited to pre-development conditions and the proposed bio-retention basin will address the post construction stormwater quality requirements.

Preliminary Onsite Drainage Calculations - Rational Method

Project: St. Nicholas Orthodox Academy

Hydrology Methodology

Rational Method Analysis is used for all calculations in this report. Peak runoff is determined using equation 708 of the TMRDM:

$$Q = CiA$$

Q = Peak Flow (cfs)
C = Runoff Coefficient

The runoff coefficient is determined by land use type and surface type. For typical surfaces standard runoff coefficients can be determined utilizing Table 701 of the TMRDM. For this analysis, a composite runoff coefficient can be determined utilizing weighted averaging of the individual surface runoff coefficients.

i = Rainfall Intensity (in/hr)

Rainfall intensity is determined utilizing the NOAA Atlas Point Precipitation Frequency Estimates which give rainfall intensities based on average recurrence intervals and duration. The duration of a storm is also known as the time of concentration. For small urbanized paved areas shall be 5 minutes & 10 minutes for vegetated landscape areas.

A = Basin Area (acres)

Site Runoff Coefficients & Rainfall Intensities

5-Year	$C_{\text{Undeveloped}} = 0.2$	$C_{\text{Impervious}} = 0.88$	$C_{\text{Landscape}} = 0.2$
100-Year	$C_{\text{Undeveloped}} = 0.5$	$C_{\text{Impervious}} = 0.93$	$C_{\text{Landscape}} = 0.5$
5-min	$i_2 = 1.476$	$i_5 = 1.968$	$i_{100} = 4.812$
10 min	$i_2 = 1.122$	$i_5 = 1.506$	$i_{100} = 3.66$
24 hr	$i_{100}(24 \text{ hr}) = 0.130$		

Pre-Development Condition

1.1 Composite Runoff Coefficient

Basin	Area (s.f.)	Impervious Area (s.f.)	Undeveloped Area (s.f.)	C_5	C_{100}
X1	625997	5301	620696	0.21	0.50
Totals	625997	5301	620696	0.21	0.50

1.2 Rational Flow Calculations

Basin	Area (ac)	i_2 (in/hr)	i_5 (in/hr)	i_{100} (in/hr)	Q_2 (cfs)	Q_5 (cfs)	Q_{100} (cfs)	$Q_{100}(24\text{hr})$ (cfs)	Target
X1	14.37	1.122	1.506	3.66	3.318	4.453	26.490	0.944	Offsite
Totals	14.37				3.318	4.453	26.490	0.944	

Post-Development Condition

2.1 Composite Runoff Coefficient

Basin	Area (s.f.)	Impervious Area (s.f.)	Landscape Area (s.f.)	C_5	C_{100}
1	625997	101081	524916	0.31	0.57
Totals	625997	101081	524916	0.31	0.57

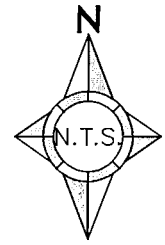
2.2 Rational Flow Calculations

Basin	Area (ac)	i_2 (in/hr)	i_5 (in/hr)	i_{100} (in/hr)	Q_2 (cfs)	Q_5 (cfs)	Q_{100} (cfs)	$Q_{100}(24\text{hr})$ (cfs)	Target
1	14.37	1.122	1.506	3.66	4.995	6.705	29.951	1.067	Pond
Totals	14.37				4.995	6.705	29.951	1.067	

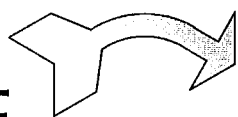
2.3 Detention/Retention Calculations

Event	Pre-Dev Q_{100} (cfs)	Post-Dev Q_{100} (cfs)	Required Detention (cfs)	Required Detention (ft ³)
10 Min	26.49	29.95	3.46	2076

Pond	Area (ft ²)	Depth (ft)	Volume (ft ³)	Volume Capacity (cfs)	Factor of Safety
1	1714	2	2520	4.20	1.2



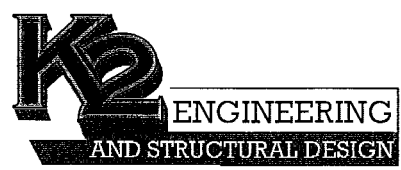
SITE



U. S. 395

RHODES RD

CHEYENNE DR

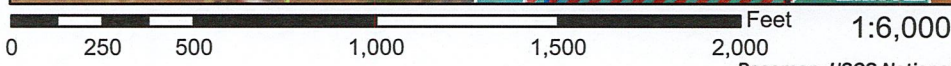
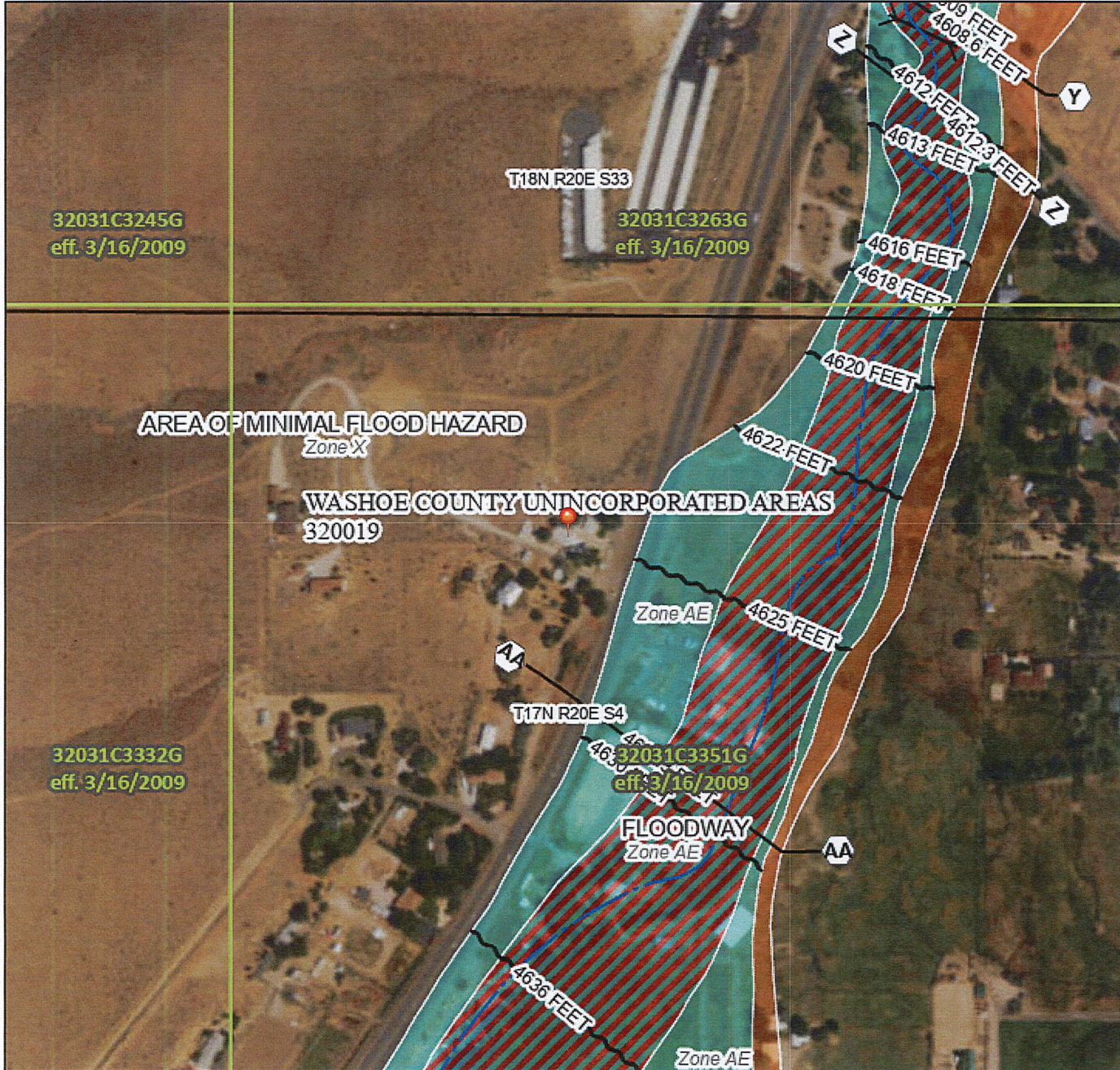
St. Nicholas Orthodox Academy	<h1>Vicinity Map</h1>	 860 Maestro Dr., Ste. A, Reno, NV 89511 P: (775) 355-0505, F: (775) 355-0566 www.K2eng.net
16255 S. Virginia St.		
APN: 045-210-01		
22-315		

Appendix

National Flood Hazard Layer FIRMette



119°45'8"W 39°22'38"N



Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

- | | | |
|-----------------------------|--|---|
| SPECIAL FLOOD HAZARD AREAS | | Without Base Flood Elevation (BFE)
Zone A, V, A99 |
| | | With BFE or Depth Zone AE, AO, AH, VE, AR |
| | | Regulatory Floodway |
| OTHER AREAS OF FLOOD HAZARD | | 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X |
| | | Future Conditions 1% Annual Chance Flood Hazard Zone X |
| | | Area with Reduced Flood Risk due to Levee. See Notes. Zone X |
| | | Area with Flood Risk due to Levee Zone D |
| OTHER AREAS | | NO SCREEN Area of Minimal Flood Hazard Zone X |
| | | Effective LOMRs |
| GENERAL STRUCTURES | | Area of Undetermined Flood Hazard Zone D |
| | | Channel, Culvert, or Storm Sewer |
| | | Levee, Dike, or Floodwall |
| OTHER FEATURES | | Cross Sections with 1% Annual Chance Water Surface Elevation |
| | | Water Surface Elevation |
| | | Coastal Transect |
| | | Base Flood Elevation Line (BFE) |
| | | Limit of Study |
| MAP PANELS | | Digital Data Available |
| | | No Digital Data Available |
| | | Unmapped |
| | | The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location. |

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/22/2022 at 8:21 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



NOAA Atlas 14, Volume 1, Version 5
Location name: Reno, Nevada, USA*
Latitude: 39.3733°, Longitude: -119.7469°
Elevation: m/ft**
 * source: ESRI Maps
 ** source: USGS



POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

[PF_tabular](#) | [PF_graphical](#) | [Maps_&_aerials](#)

PF tabular

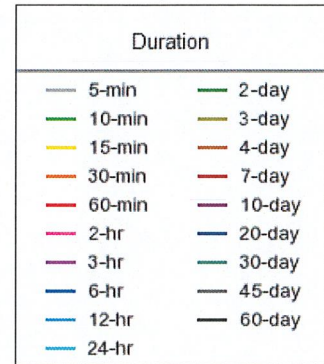
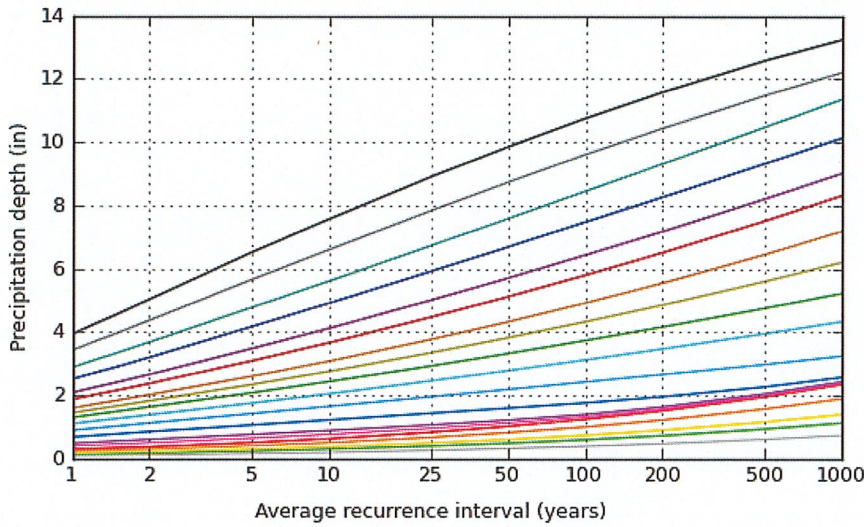
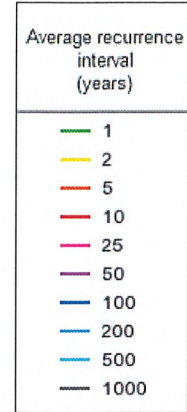
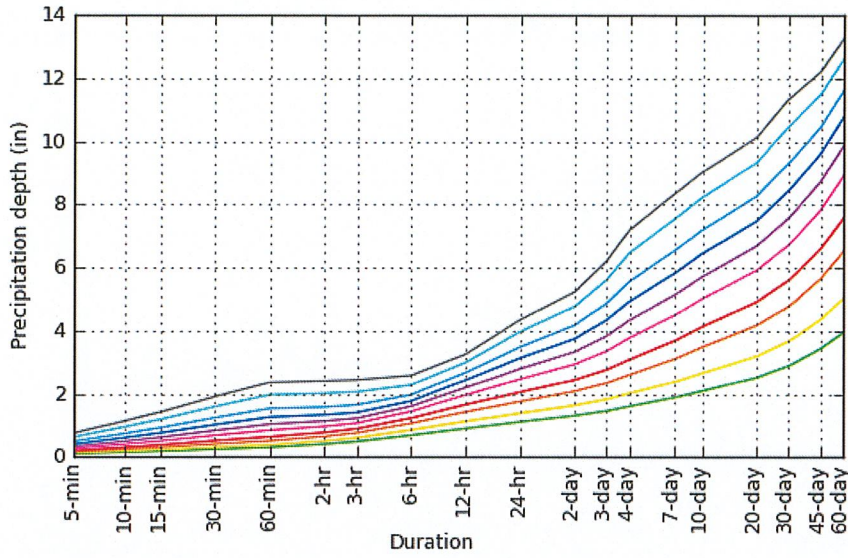
PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.099 (0.085-0.117)	0.123 (0.106-0.146)	0.164 (0.140-0.195)	0.204 (0.173-0.242)	0.270 (0.222-0.322)	0.330 (0.262-0.399)	0.401 (0.308-0.491)	0.487 (0.360-0.610)	0.625 (0.435-0.806)	0.751 (0.497-0.990)
10-min	0.150 (0.129-0.177)	0.187 (0.161-0.222)	0.251 (0.213-0.298)	0.311 (0.262-0.369)	0.410 (0.337-0.491)	0.501 (0.400-0.607)	0.610 (0.469-0.748)	0.741 (0.548-0.929)	0.951 (0.661-1.23)	1.14 (0.757-1.51)
15-min	0.186 (0.159-0.220)	0.232 (0.199-0.275)	0.310 (0.265-0.368)	0.385 (0.326-0.457)	0.509 (0.418-0.608)	0.622 (0.495-0.752)	0.756 (0.582-0.927)	0.919 (0.679-1.15)	1.18 (0.820-1.52)	1.42 (0.938-1.87)
30-min	0.251 (0.215-0.296)	0.312 (0.268-0.370)	0.418 (0.356-0.496)	0.518 (0.439-0.615)	0.685 (0.563-0.819)	0.837 (0.667-1.01)	1.02 (0.783-1.25)	1.24 (0.914-1.55)	1.59 (1.10-2.05)	1.91 (1.26-2.52)
60-min	0.310 (0.266-0.366)	0.386 (0.332-0.458)	0.517 (0.441-0.614)	0.641 (0.543-0.761)	0.848 (0.697-1.01)	1.04 (0.825-1.25)	1.26 (0.969-1.55)	1.53 (1.13-1.92)	1.97 (1.37-2.54)	2.36 (1.56-3.11)
2-hr	0.412 (0.364-0.475)	0.512 (0.452-0.590)	0.656 (0.573-0.756)	0.779 (0.673-0.898)	0.969 (0.814-1.12)	1.14 (0.932-1.34)	1.33 (1.06-1.59)	1.58 (1.22-1.94)	2.01 (1.48-2.56)	2.41 (1.71-3.14)
3-hr	0.494 (0.440-0.561)	0.616 (0.553-0.702)	0.772 (0.685-0.877)	0.898 (0.791-1.02)	1.08 (0.931-1.23)	1.23 (1.04-1.42)	1.41 (1.17-1.64)	1.65 (1.34-1.96)	2.06 (1.63-2.59)	2.44 (1.88-3.18)
6-hr	0.690 (0.614-0.777)	0.863 (0.769-0.976)	1.07 (0.949-1.21)	1.23 (1.08-1.39)	1.44 (1.25-1.64)	1.61 (1.37-1.84)	1.77 (1.49-2.05)	1.97 (1.62-2.31)	2.28 (1.83-2.72)	2.58 (2.04-3.21)
12-hr	0.903 (0.803-1.02)	1.13 (1.01-1.28)	1.43 (1.27-1.61)	1.66 (1.46-1.87)	1.96 (1.70-2.23)	2.19 (1.88-2.52)	2.43 (2.05-2.82)	2.67 (2.21-3.14)	2.99 (2.40-3.59)	3.25 (2.56-3.97)
24-hr	1.11 (1.00-1.25)	1.39 (1.26-1.56)	1.76 (1.59-1.96)	2.05 (1.85-2.29)	2.46 (2.19-2.76)	2.79 (2.46-3.12)	3.13 (2.74-3.53)	3.47 (3.01-3.96)	3.96 (3.37-4.55)	4.34 (3.63-5.05)
2-day	1.31 (1.17-1.48)	1.64 (1.47-1.86)	2.09 (1.86-2.36)	2.44 (2.17-2.77)	2.94 (2.58-3.34)	3.33 (2.90-3.81)	3.74 (3.22-4.31)	4.17 (3.55-4.85)	4.76 (3.97-5.62)	5.23 (4.28-6.28)
3-day	1.46 (1.31-1.64)	1.84 (1.65-2.07)	2.35 (2.10-2.65)	2.77 (2.47-3.12)	3.36 (2.97-3.79)	3.83 (3.36-4.34)	4.34 (3.75-4.95)	4.87 (4.16-5.59)	5.61 (4.69-6.55)	6.22 (5.11-7.35)
4-day	1.61 (1.45-1.80)	2.03 (1.82-2.28)	2.61 (2.35-2.93)	3.09 (2.77-3.47)	3.78 (3.35-4.24)	4.33 (3.81-4.88)	4.93 (4.28-5.58)	5.56 (4.76-6.33)	6.47 (5.42-7.47)	7.20 (5.93-8.41)
7-day	1.88 (1.68-2.12)	2.38 (2.12-2.69)	3.10 (2.76-3.50)	3.68 (3.26-4.15)	4.48 (3.95-5.07)	5.13 (4.47-5.81)	5.81 (5.02-6.62)	6.52 (5.58-7.49)	7.53 (6.32-8.76)	8.33 (6.89-9.79)
10-day	2.09 (1.86-2.37)	2.67 (2.37-3.02)	3.49 (3.09-3.94)	4.13 (3.65-4.67)	5.01 (4.40-5.68)	5.71 (4.98-6.48)	6.44 (5.57-7.34)	7.19 (6.15-8.25)	8.22 (6.92-9.55)	9.02 (7.51-10.6)
20-day	2.52 (2.25-2.84)	3.21 (2.86-3.61)	4.18 (3.73-4.70)	4.92 (4.38-5.53)	5.92 (5.25-6.66)	6.69 (5.89-7.56)	7.48 (6.52-8.49)	8.27 (7.15-9.45)	9.33 (7.96-10.8)	10.1 (8.55-11.8)
30-day	2.89 (2.59-3.26)	3.69 (3.30-4.16)	4.78 (4.27-5.39)	5.62 (5.00-6.32)	6.74 (5.96-7.59)	7.59 (6.67-8.57)	8.45 (7.38-9.61)	9.32 (8.07-10.7)	10.5 (8.95-12.1)	11.4 (9.60-13.3)
45-day	3.43 (3.08-3.82)	4.38 (3.92-4.87)	5.67 (5.07-6.28)	6.61 (5.91-7.33)	7.84 (6.98-8.70)	8.74 (7.75-9.72)	9.61 (8.48-10.7)	10.4 (9.18-11.7)	11.5 (10.0-13.0)	12.2 (10.6-13.9)
60-day	3.94 (3.51-4.41)	5.04 (4.49-5.63)	6.53 (5.81-7.27)	7.58 (6.74-8.42)	8.91 (7.91-9.91)	9.86 (8.71-11.0)	10.8 (9.47-12.0)	11.6 (10.2-13.0)	12.6 (11.0-14.2)	13.2 (11.5-15.1)

¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS). Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values. Please refer to NOAA Atlas 14 document for more information.

[Back to Top](#)

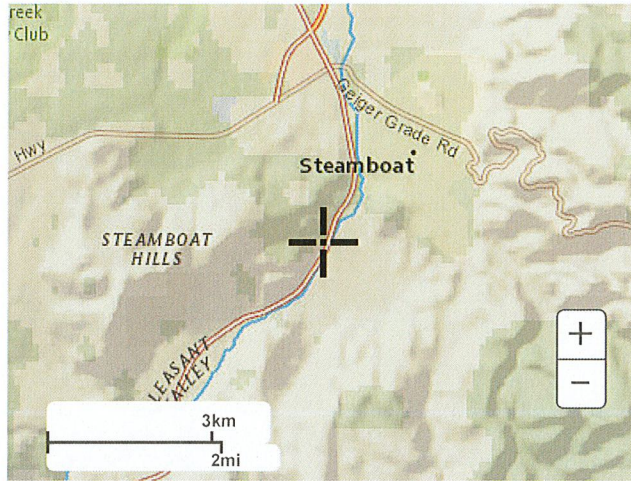
PF graphical

PDS-based depth-duration-frequency (DDF) curves
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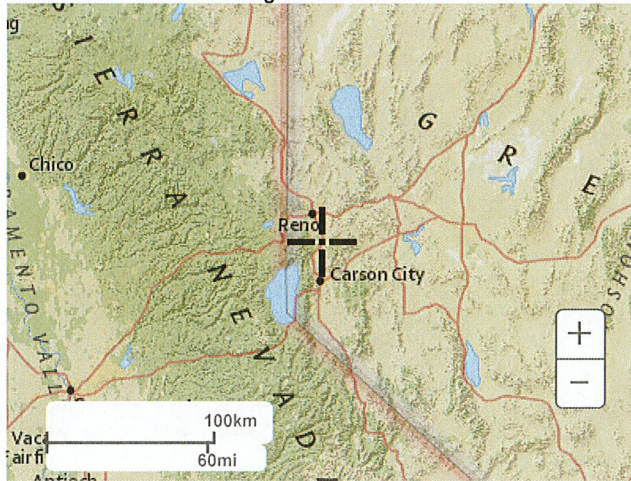


Maps & aerials

Small scale terrain



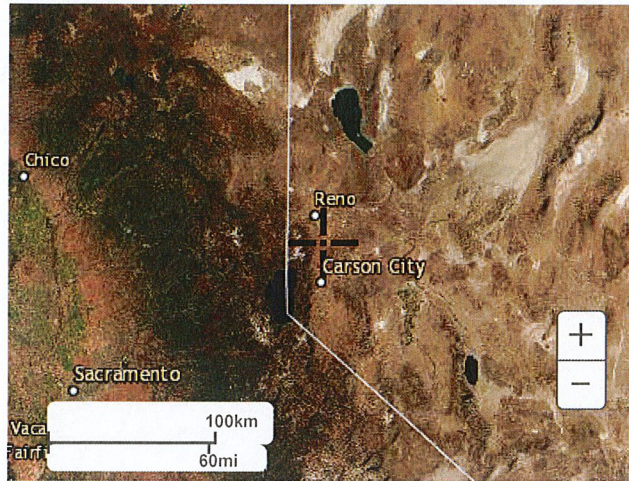
Large scale terrain



Large scale map



Large scale aerial



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[National Water Center](#)
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

[Disclaimer](#)

**RATIONAL FORMULA METHOD
RUNOFF COEFFICIENTS**

Land Use or Surface Characteristics	Aver. % Impervious Area	Runoff Coefficients	
		5-Year (C _g)	100-Year (C ₁₀₀)
<u>Business/Commercial:</u>			
Downtown Areas	85	.82	.85
Neighborhood Areas	70	.65	.80
<u>Residential:</u> (Average Lot Size)			
1/8 Acre or Less (Multi-Unit)	65	.60	.78
1/4 Acre	38	.50	.65
1/8 Acre	30	.45	.60
1/2 Acre	25	.40	.55
1 Acre	20	.35	.50
<u>Industrial:</u>	72	.68	.82
<u>Open Space:</u> (Lawns, Parks, Golf Courses)	5	.05	.30
<u>Undeveloped Areas:</u>			
Range	0	.20	.50
Forest	0	.05	.30
<u>Streets/Roads:</u>			
Paved	100	.88	.93
Gravel	20	.25	.50
<u>Drives/Walks:</u>	95	.87	.90
<u>Roof:</u>	90	.85	.87

Notes:

1. Composite runoff coefficients shown for Residential, Industrial, and Business/Commercial Areas assume irrigated grass landscaping for all pervious areas. For development with landscaping other than irrigated grass, the designer must develop project specific composite runoff coefficients from the surface characteristics presented in this table.

VERSION: April 30, 2009

REFERENCE:

USDCM, DROCOG, 1969
(with modifications)

TABLE
701

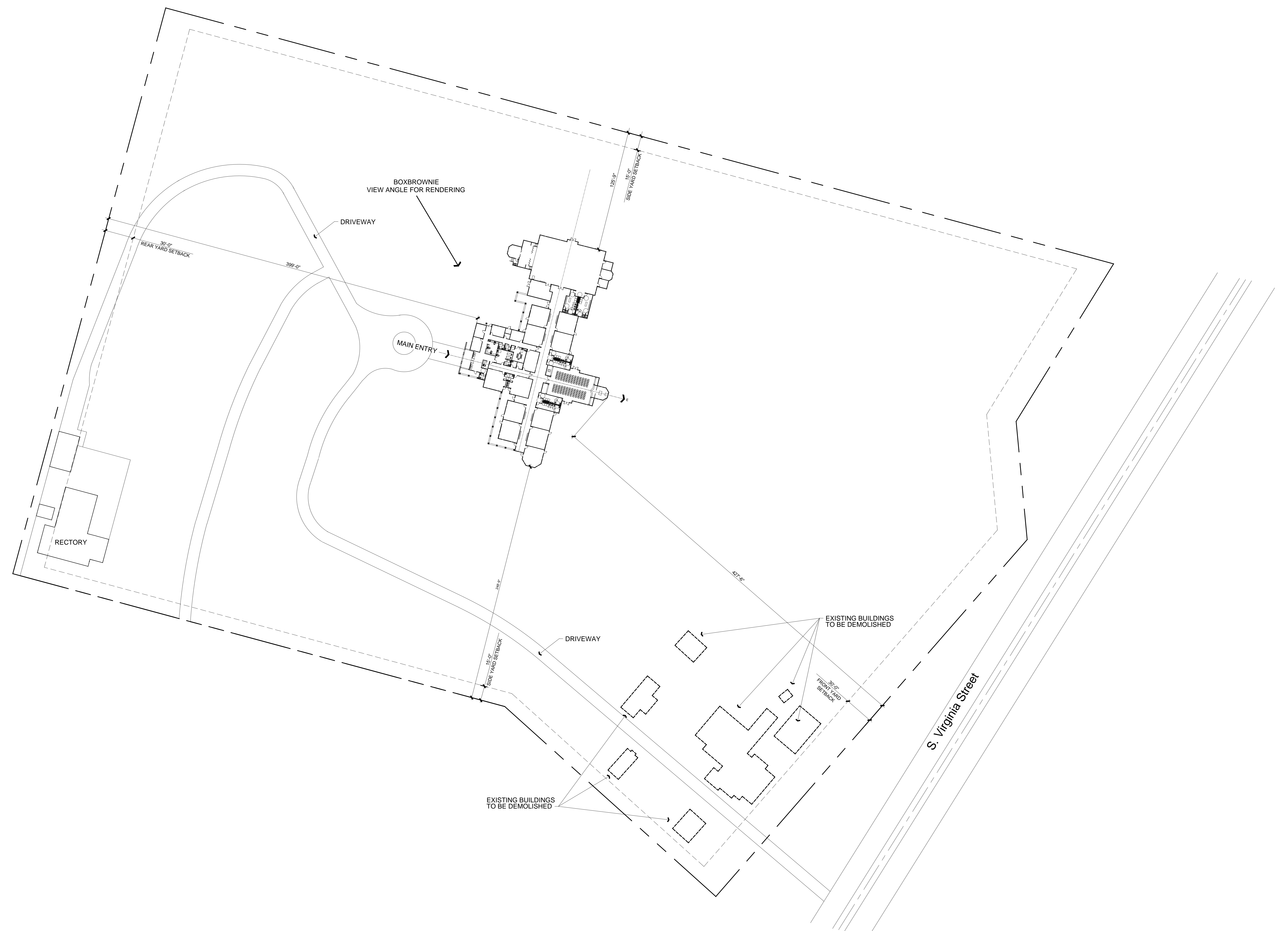
WRC ENGINEERING, INC.

Brandt T. Kennedy, P.E.
 Jared A. Krupa, P.E.

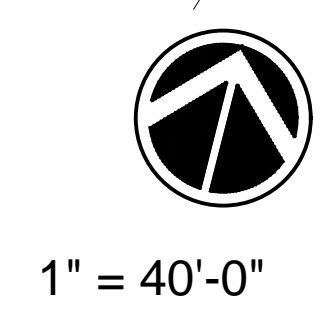
Revisions

Date	10/10/22
Drawn	JGT
Checked	BTK
Project No.	22-270

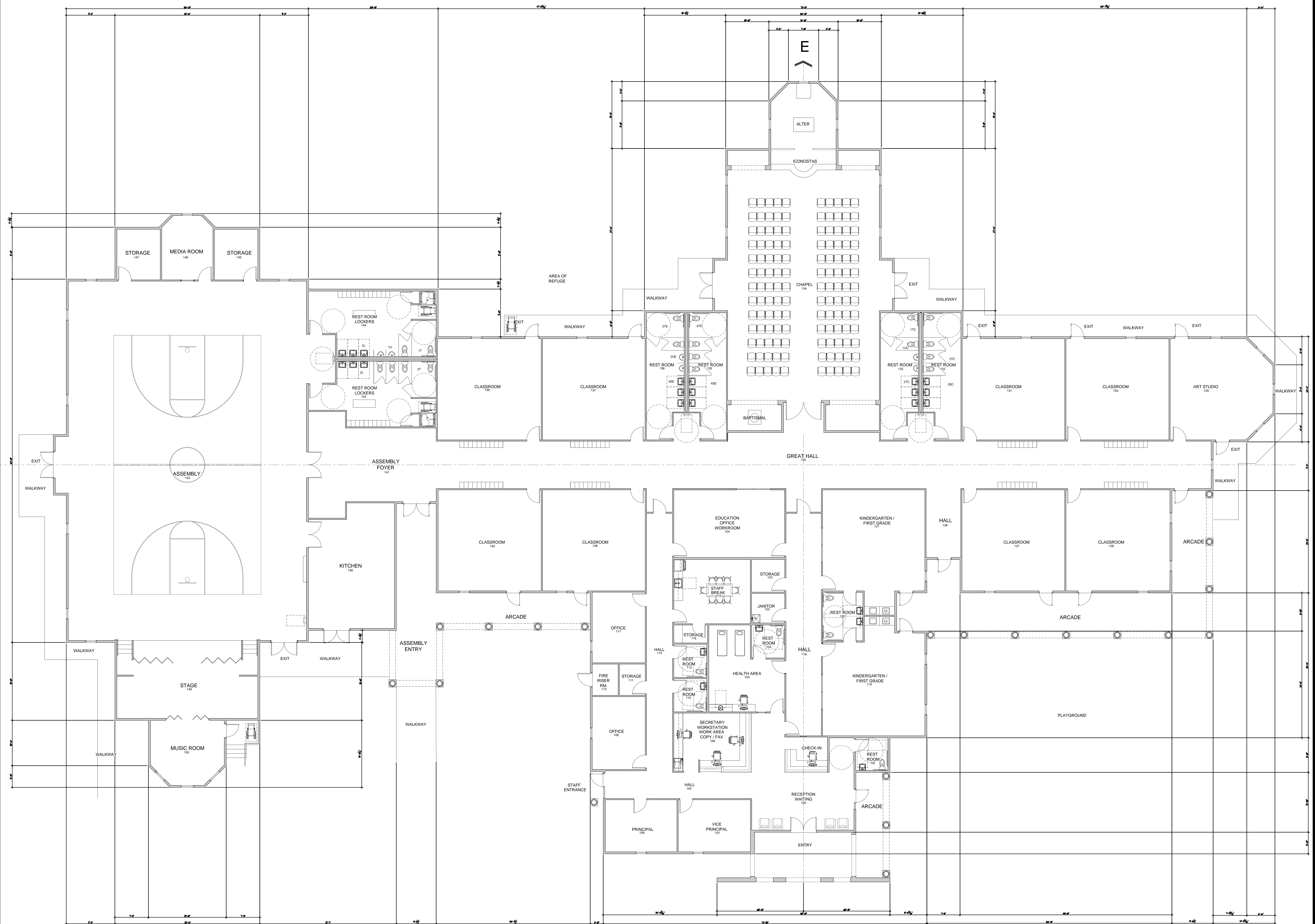
Preliminary
 Site Plan



St. Nicholas Christian Academy
 24,925 S.F. BUILDING AREA



Revisions	
Date	10/10/22
Drawn	JGT
Checked	BTK
Project No.	22-270

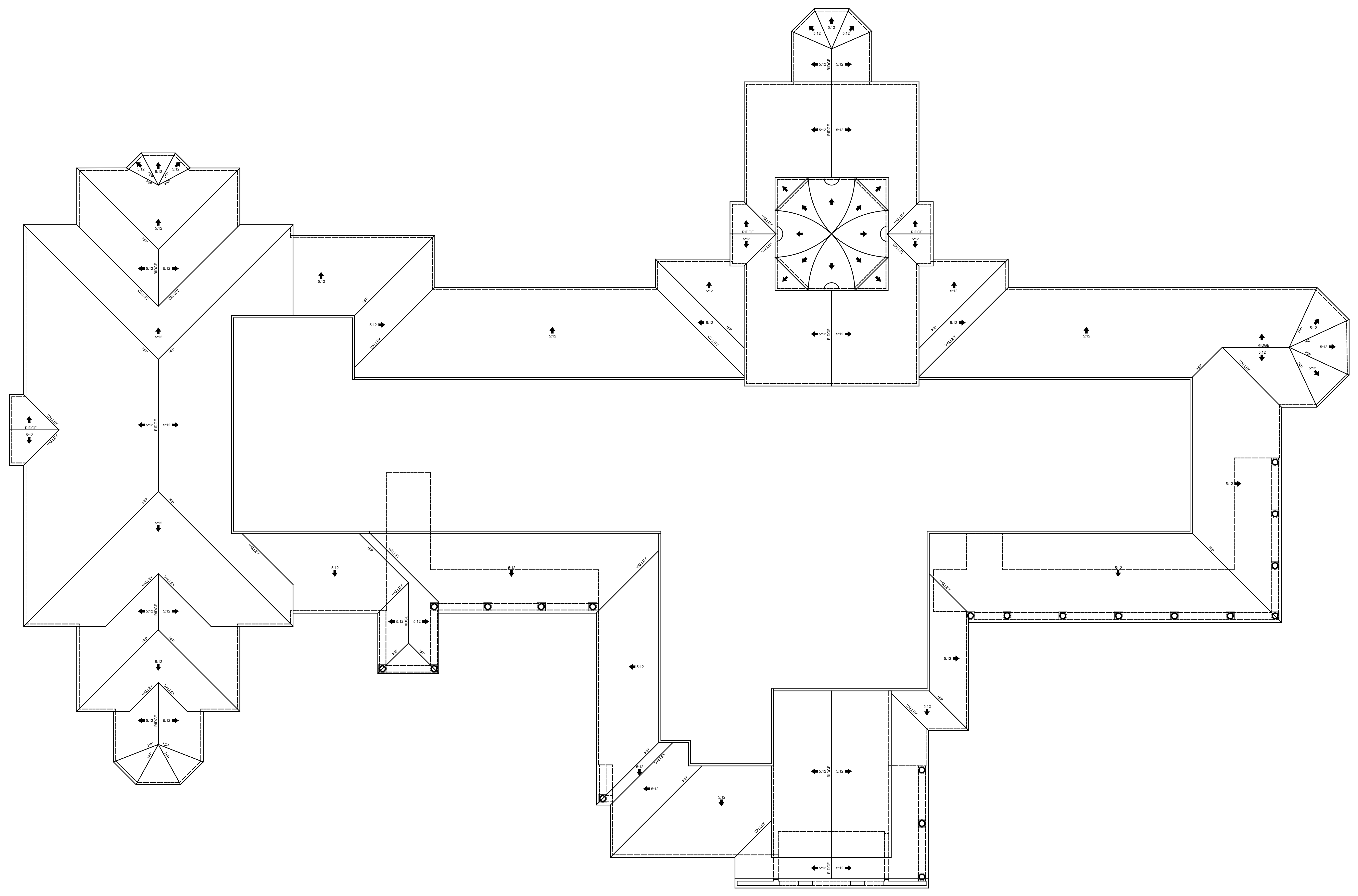


FLOOR PLAN 24,925 S.F. BUILDING AREA
 1/8" = 1'-0"

Brandt T. Kennedy, P.E.
 Jared A. Krupa, P.E.

Revisions	
Date	10/10/22
Drawn	JGT
Checked	BTK
Project No.	22-270

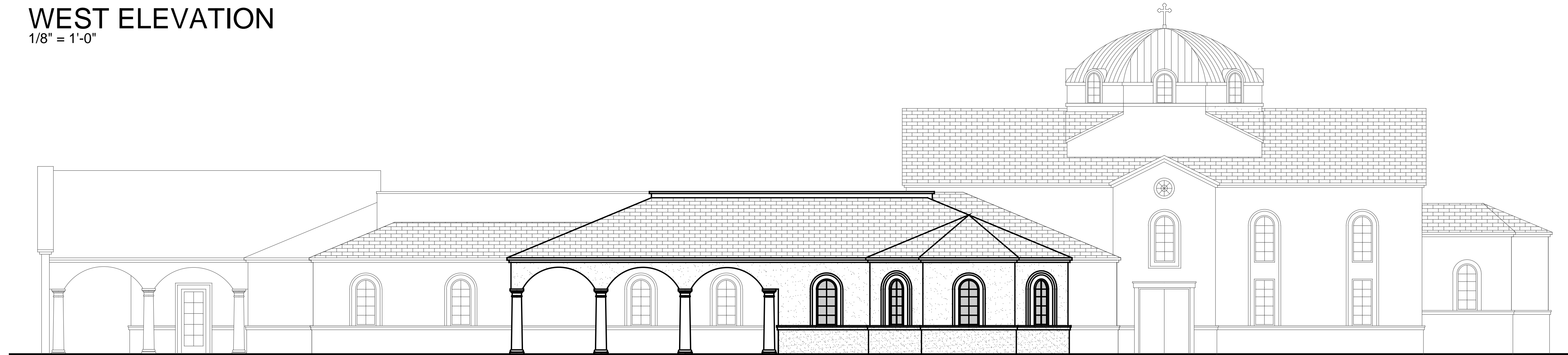
Roof Plan



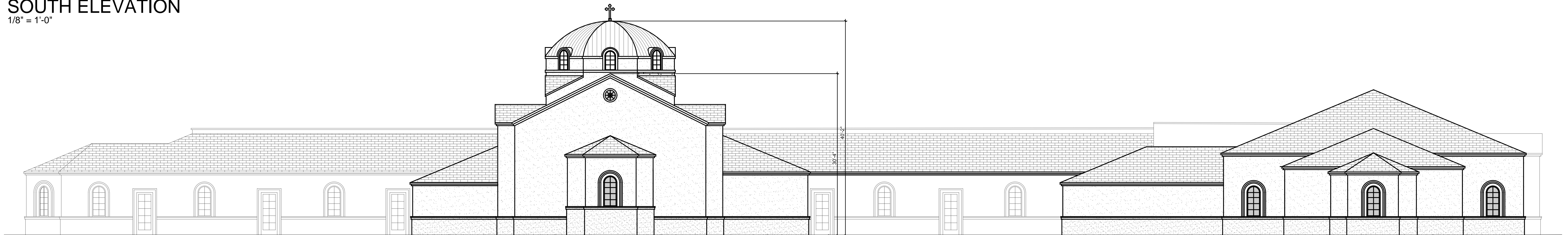
ROOF PLAN
 1/8" = 1'-0"



WEST ELEVATION
1/8" = 1'-0"



SOUTH ELEVATION
1/8" = 1'-0"



EAST ELEVATION
1/8" = 1'-0"



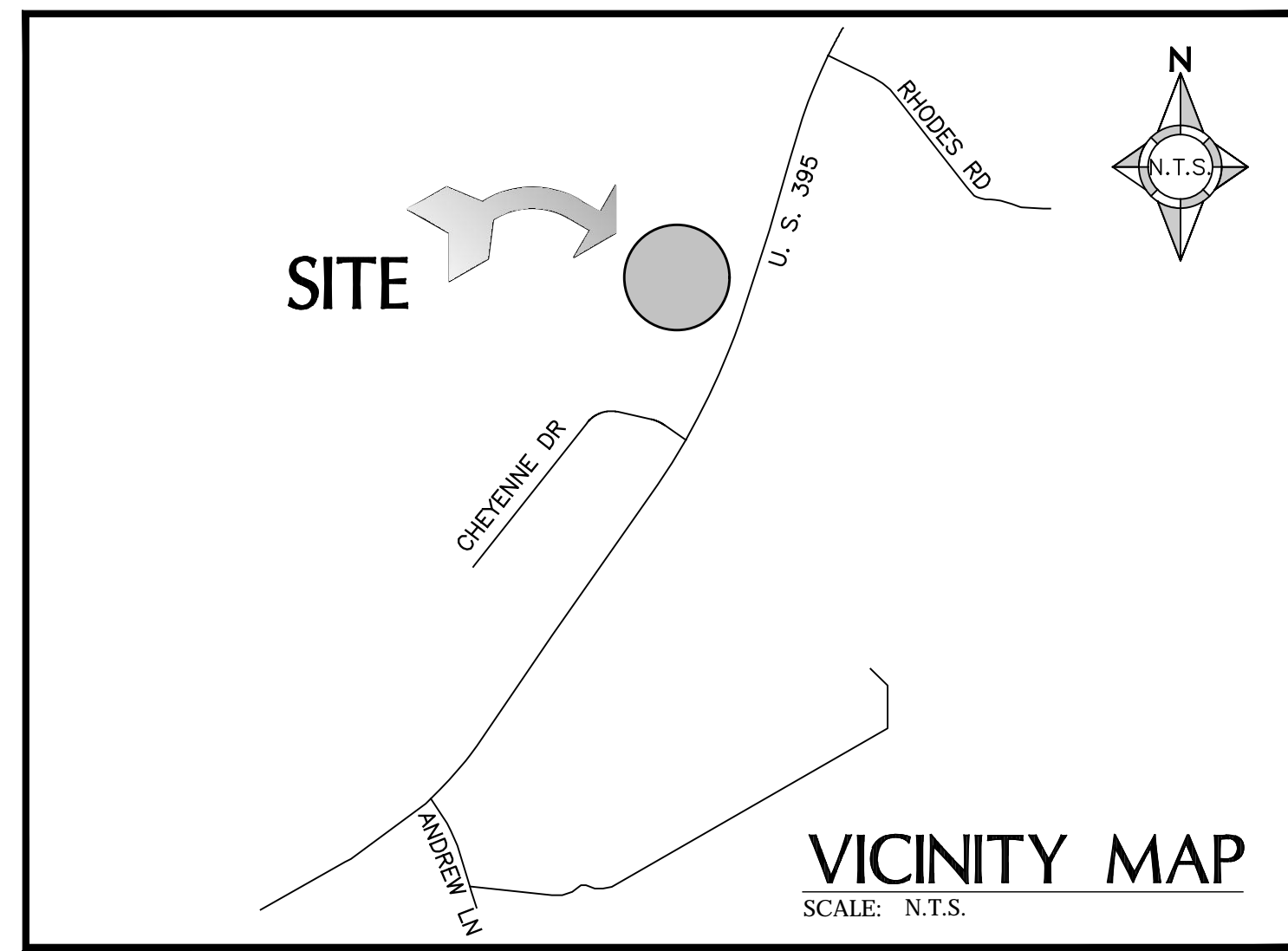
NORTH ELEVATION
1/8" = 1'-0"

Revisions

Date 10/10/22
Drawn JGT
Checked BTK
Project No. 22-270

SITE & GRADING LEGEND

- A.C. PAVEMENT AREA
- CONCRETE AREA
- ACCESSIBLE PARKING SPACE W. SIGN & PAVEMENT MARKINGS
- PEDESTRIAN ACCESS RAMP
- ACCESSIBLE ROUTE
- PARKING SPACE COUNT
- KEYNOTE (REF. CORRESPONDING LEGEND)
- UTILITY (PROPOSED) UTILITY LINE W. DESCRIPTION
- UTILITY (EXISTING) UTILITY LINE W. DESCRIPTION
- MANHOLE W. DESCRIPTION (EXISTING/PROPOSED)
- CLEANOUT (EXISTING/PROPOSED)
- CATCH BASIN/DROP INLET
- YARD DRAIN
- DIRECTIONAL FLOW LINE
- GRADE BREAK
- 4900 PROPOSED CONTOUR LINE
- 4900 EXISTING CONTOUR LINE
- SPOT ELEVATION (EXISTING) ~ PROPOSED



PARKING ANALYSIS

USE	AREA (F ²)	CRITERIA	REQUIRED SPACES
ELEMENTARY/SECONDARY EDUCATION	24 EMPLOYEES	1/EMPLOYEE	24.0
	20 STUDENTS	0.25/STUDENT	5.0
TOTAL VEHICLE REQUIREMENT	SPACES PROVIDED	ADA SPACES	VAN ACCESSIBLE
	29	54	3 2

NOTES:
 1. ALL BUILDING INFORMATION PROVIDED BY THE ARCHITECT.
 2. REQUIREMENTS DETERMINED USING WASHOE COUNTY DEVELOPMENT CODE TABLE 110.410.10.2.
 3. STUDENT OF DRIVING AGE.

FLOOD ZONE
 THIS SITE LIES IN FEMA FLOOD ZONE X (UNSHADED) (32031C33516). ZONE X (UNSHADED) IS DEFINED AS AN AREA OF MINIMAL FLOOD HAZARD, WHICH ARE THE AREAS OUTSIDE THE 0.2-PERCENT-ANNUAL-CHANCE FLOODPLAIN.

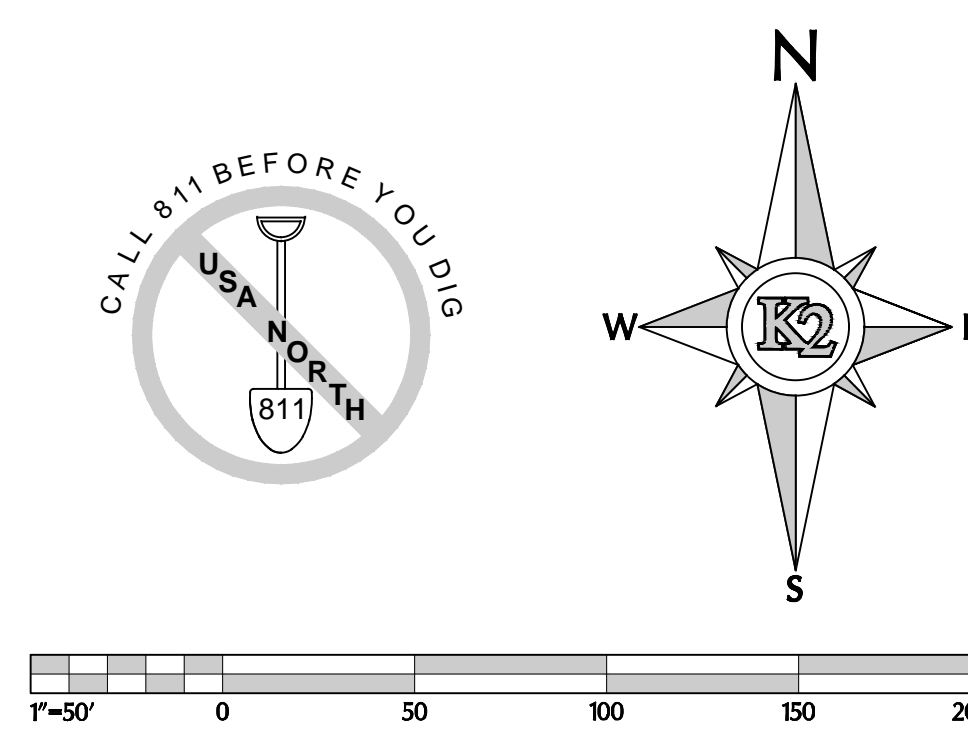
EARTHWORK ANALYSIS

SITE AREA	14.4 AC	EX. SLOPE IN DISTURBED AREA	20%
SITE DISTURBANCE	PROPOSED CUT	PROPOSED FILL	EARTHWORK
TOTAL	178,206 F ²	9,930 YD ³	14,090 YD ³ 4,160 YD ³ FILL
BUILDING	24,944 F ²	630 YD ³	2,750 YD ³ 2,120 YD ³ FILL
DRIVEWAY & WALKWAYS	58,049 F ²	6,310 YD ³	1,230 YD ³ 5,080 YD ³ CUT
SPORTS FIELD	20,000 F ²	150 YD ³	5,020 YD ³ 4,870 YD ³ FILL
REMAINDER/LANDSCAPING	75,213 F ²	2,840 YD ³	5,090 YD ³ 2,250 YD ³ FILL

THESE QUANTITIES ARE FOR PERMITTING PURPOSES ONLY AND DO NOT ACCOUNT FOR ANY OVER EXCAVATION, SHRINKAGE OR EXPANSION OF MATERIALS. THE CONTRACTOR SHALL REVIEW THE GEOTECHNICAL INVESTIGATION AND PERFORM AN INDEPENDENT EARTHWORK ANALYSIS FOR CONSTRUCTION PURPOSES.

PER SECTION 110.438.35 OF THE WASHOE COUNTY DEVELOPMENT CODE, ANY GRADING ASSOCIATED WITH THE FOLLOWING DOES NOT COUNT TOWARDS THE THRESHOLDS ASSOCIATED WITH A MAJOR GRADING PERMIT: BUILDING FOOTPRINT, DRIVEWAY, PAVED AREA OR AREAS LANDSCAPED IN ACCORDANCE WITH THE COMMERCIAL LANDSCAPE STANDARDS ESTABLISHED IN ARTICLE 412 OF THE WASHOE COUNTY DEVELOPMENT CODE.

THIS PLAN IS INTENDED FOR
SPECIAL USE PERMIT REVIEW ONLY
 NOT FOR CONSTRUCTION

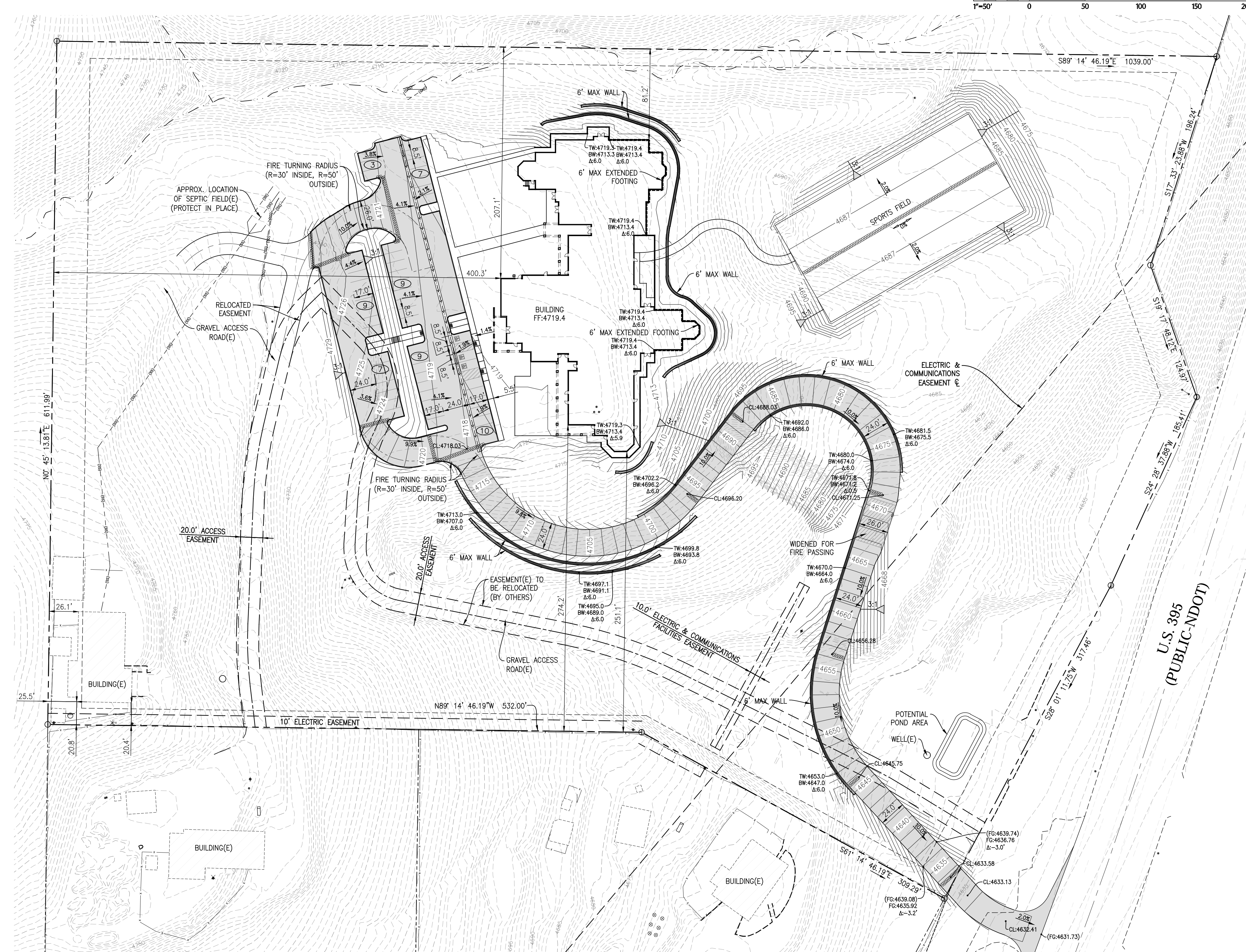


GENERAL NOTES

- THESE PLANS ARE FOR SPECIAL USE PERMIT PURPOSES ONLY AND ARE NOT FOR CONSTRUCTION.
- THE FIELD SURVEY PREPARED BY SYNERGY MAPPING, INC. IS THE BASIS OF THIS DESIGN. K2 TAKES NO RESPONSIBILITY FOR THE ACCURACY OF THE SURVEY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL REQUIRED PERMITTING IS OBTAINED PRIOR TO COMMENCEMENT OF CONSTRUCTION, INCLUDING, BUT NOT LIMITED TO, DEMOLITION, ENCROACHMENT, BUILDING, GRADING, AND TRAFFIC CONTROL PERMITS.
- UNLESS SPECIFICALLY PERMITTED OTHERWISE, CONSTRUCTION HOURS SHALL BE LIMITED TO BETWEEN THE HOURS OF 7:00 AM AND 6:00 PM MONDAY THROUGH FRIDAY AND BETWEEN THE HOURS OF 8:00 AM AND 6:00 PM ON SATURDAY. THERE SHALL BE NO CONSTRUCTION ON SUNDAY EXCLUDING DUST CONTROL AND STORM WATER POLLUTION PREVENTION PLAN MEASURES.
- ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPWC) AND THE STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION (SDPWC), AS ADOPTED BY WASHOE COUNTY, NDOT, AND SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER. ALL SPECIFICATIONS REFERENCED HEREIN REFER TO THE SSPWC UNLESS INDICATED OTHERWISE.
- ALL QUANTITIES INDICATED IN THESE PLANS ARE APPROXIMATE AND INTENDED FOR PERMITTING & BIDDING PURPOSES ONLY. THE CONTRACTOR SHALL PREPARE AN INDEPENDENT ESTIMATE FOR BIDDING & CONSTRUCTION PURPOSES.
- AN ENCROACHMENT & EXCAVATION PERMIT IS REQUIRED FOR ALL WORK WITHIN THE WASHOE COUNTY/NDOT RIGHT-OF-WAY.
- ALL WORK WITHIN THE WASHOE COUNTY/NDOT RIGHT-OF-WAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST CODES, STANDARD SPECIFICATIONS & DETAILS.
- REFERENCE ARCHITECTURAL PLANS FOR ALL BUILDING DIMENSIONS.
- ALL DIMENSIONS ARE TO FRONT FACE OF CURB, FACE OF BUILDING, FACE OF WALL, CENTER OF PIPE, CENTER OF MANHOLE OR PROPERTY LINE UNLESS OTHERWISE NOTED.
- ALL PERMANENT STRIPING, SIGNAGE & TRAFFIC CONTROL IMPROVEMENTS SHALL BE INSTALLED IN ACCORDANCE WITH CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) REQUIREMENTS.
- ALL NEW PEDESTRIAN INSTALLATIONS TO MEET CURRENT ADA REQUIREMENTS (ICC A117.1-2009 & PROWAG GUIDELINES).
- THE ACCESSIBLE ROUTE SHALL NOT HAVE A RUNNING SLOPE EXCEEDING 5% (1:20) OR A CROSS SLOPE EXCEEDING 2% (1:48).
- THE ACCESSIBLE ROUTE MAY CONTAIN RAMPS WITH A RUNNING SLOPE BETWEEN 5% (1:20) - 8.33% (1:12). RAMPS SHALL HAVE A LANDING WITH A MAXIMUM SLOPE IN ANY DIRECTION OF 2% (1:48) AT THE TOP AND BOTTOM WITH A MAXIMUM VERTICAL RISE OF 30". RAMPS WITH A VERTICAL RISE GREATER THAN 6" SHALL HAVE A HANDRAIL.
- ACCESSIBLE PARKING SPACES SHALL HAVE A MAXIMUM SLOPE OF 2% (1:48) IN ANY DIRECTION.
- PROVIDE DETECTABLE WARNING (TRUNCATED DOMES) AT ALL LOCATIONS WHERE AN ACCESSIBLE PEDESTRIAN ROUTE ENTERS A VEHICULAR ROUTE. DETECTABLE WARNINGS SHALL EXTEND THE FULL WIDTH OF THE CURB RAMP (EXCLUSIVE OF FLARED SIDES).
- REFERENCE ARCHITECTURAL PLANS FOR ALL ACCESSIBLE TRANSITIONS FROM THE SITE IMPROVEMENTS TO THE INTERIOR OF THE PROPOSED STRUCTURE.
- UTILITIES MAY EXIST THAT ARE NOT SHOWN ON THE PLANS. THE LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE ONLY AND ARE BASED ON THE BEST AVAILABLE INFORMATION AT THE TIME OF DESIGN. THE INFORMATION IS NOT TO BE RELIED UPON AS EXACT OR COMPLETE. SPECIFICALLY, THE CONTRACTOR SHALL POT HOLE TO EXPOSE ANY UTILITY TIE IN PRIOR TO CONSTRUCTION TO VERIFY ACTUAL LOCATIONS AND ELEVATIONS OF UTILITIES PRIOR TO CONSTRUCTION. SHOULD THE CONTRACTOR DISCOVER ANY DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND THE INFORMATION SHOWN ON THESE DRAWINGS, THEY SHALL NOTIFY THE ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION.
- UTILITY CONNECTIONS MAY REQUIRE REMOVAL, RELOCATION, REPAIR AND/OR REPLACEMENT OF EXISTING IMPROVEMENTS. THIS INCLUDES THE ADJUSTMENT/RELOCATION OF ALL EXISTING UTILITY VAULTS, MANHOLE LIDS & VALVE LIDS AS REQUIRED TO ACCOMMODATE THE PROPOSED FINISHED GRADES. THE CONTRACTOR SHALL OBTAIN ANY NECESSARY UTILITY COMPANY APPROVAL AND ENCROACHMENT OR EXCAVATION PERMIT PRIOR TO ANY CONSTRUCTION WITHIN THE WASHOE COUNTY/NDOT RIGHT-OF-WAY.
- UNLESS SPECIFIED OTHERWISE, ALL PROPOSED UTILITY SEWER AND STORM DRAIN IMPROVEMENTS ARE PRIVATE AND SHALL BE MAINTAINED BY THE OWNER.
- ALL SANITARY SEWER FACILITIES ARE INTENDED TO GRAVITY FLOW. SANITARY SEWER LATERALS SHALL MAINTAIN 3.0' MINIMUM COVER WITHIN THE RIGHT-OF-WAY, BE 4" PVC SDR 35 AND HAVE A MINIMUM SLOPE OF 2% UNLESS OTHERWISE NOTED.
- MAINTAIN 3.0' MINIMUM COVER OVER ALL WATER MAINS AND SERVICE LINES.
- MAINTAIN 3.0' MINIMUM HORIZONTAL CLEARANCE AROUND ALL FIRE HYDRANTS.
- MAINTAIN 10' HORIZONTAL CLEARANCE BETWEEN DOMESTIC WATER AND SANITARY SEWER LINES. WHERE CROSSINGS ARE REQUIRED, DOMESTIC WATER SHALL MAINTAIN 18" MINIMUM CLEARANCE OVER SANITARY SEWER. FULL STICKS OF PIPE SHALL BE CENTERED ON THE CROSSING WHERE POSSIBLE. IF THESE CLEARANCES ARE NOT POSSIBLE, SPECIAL CONSTRUCTION IS REQUIRED (IF NOT SPECIFIED, CONTRACTOR SHALL NOTIFY K2 PRIOR TO PROCEEDING WITH CONSTRUCTION).
- ALL PIPE SHALL BE CONSTRUCTED IN ACCORDANCE WITH PERTINENT REGULATIONS AND MANUFACTURERS RECOMMENDATIONS.
- ANY LOCATION FOR GAS, ELECTRICAL, TELEPHONE, CABLE TV, COMMUNICATION OR ANY OTHER LOW VOLTAGE IMPROVEMENT SHOWN IS SCHEMATIC ONLY (REF. DESIGN & DETAIL BY OTHERS).
- ALL GRADING SHALL BE IN ACCORDANCE WITH A GEOTECHNICAL REPORT.
- ALL ELEVATIONS IDENTIFIED ARE TO FINAL SURFACE FINISH GRADE UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL ADJUST GRADING TO ACCOMMODATE THE DEPTH OF ANY RAMP PROTECTION, LANDSCAPE SURFACE TREATMENTS OR THE LIKE TO ENSURE THE IDENTIFIED GRADES ARE ESTABLISHED WITH COMPLETE SITE STABILIZATION.
- ANY RETAINED HEIGHTS INDICATED ARE FROM SURFACE TO SURFACE UNLESS OTHERWISE NOTED.
- BACKFILL ESTABLISHING SEPARATION AS REQUIRED BY ARCHITECTURAL AND STRUCTURAL DESIGN BETWEEN FINISH GRADE AND SIDING (8" MIN SEPARATION TYP.).
- UNLESS SPECIFIED OTHERWISE, ALL DRAINAGE IMPROVEMENTS ARE PRIVATE AND SHALL BE MAINTAINED BY THE PROPERTY OWNER.
- ADD 4600' TO ALL ELEVATIONS.

ABBREVIATIONS

- | | | |
|----------------------------------|----------------------------------|---|
| AC - ASPHALT CONCRETE | GB - GRADE BREAK | PUE - PUBLIC UTILITY EASEMENT |
| AGG - AGGREGATE | GF - GARAGE FLOOR ELEVATION | PVC - POLYVINYL CHLORIDE |
| BC - BEGIN CURVE | GV - GATE VALVE | PVI - POINT OF VERTICAL INTERSECTION |
| BFC - BACK FACE OF CURB | HC - HANDICAPPED | Q ₅ - FIVE YEAR FLOW RATE |
| BVC - BEGIN VERTICAL CURVE | HP - HIGH POINT | Q ₁₀₀ - ONE HUNDRED YEAR FLOW RATE |
| BW - BOTTOM OF WALL | IE - INVERT ELEVATION | Q _{cap} - CAPACITY FLOW RATE |
| CL _c - CENTERLINE | IN - INCH | R - RADIUS |
| CB - CATCH BASIN | INT - INTERSECTION | REF - REFERENCE |
| CFS - CUBIC FEET PER SECOND | IRR - IRRIGATION | RJ - RESTRAINED JOINT |
| CO - CLEAN OUT | L - LENGTH | RP - RADIUS POINT |
| CONC - CONCRETE | LAT - LATERAL | RT - RIGHT |
| CONST - CONSTRUCT | LF - LINEAR FEET | RW - RIGHT-OF-WAY |
| COORD - COORDINATE | LP - LOW POINT | S - SLOPE |
| DET - DETAIL | LT - LEFT | SCH - SCHEDULE |
| DI - DROP INLET | MAX - MAXIMUM | SD - STORM DRAIN |
| DIP - DUCTILE IRON PIPE | MDD - MAXIMUM DRY DENSITY | SF - SQUARE FOOT |
| DOM - DOMESTIC | MH - MANHOLE | SS - SANITARY SEWER |
| E - EXISTING | MIN - MINIMUM | STA - STATION |
| EC - END CURVE | MISC - MISCELLANEOUS | STD - STANDARD |
| EG - EXISTING GRADE | NPWL - NON POTABLE WATER LINE | SW - SIDEWALK |
| ELEV - ELEVATION | NTS - NOT TO SCALE | T - TANGENT |
| EVC - END VERTICAL CURVE | OD - OUTSIDE DIAMETER | TB - THRUST BLOCK |
| FDC - FIRE DEPARTMENT CONNECTION | OP - PROPOSED | TC - TOP OF CURB |
| FF - FINISHED FLOOR ELEVATION | PAD - PAD GRADE | TOE - TOE OF SLOPE |
| FFC - FRONT FACE OF CURB | PCC - PORTLAND CEMENT CONCRETE | TOP - TOP OF SLOPE |
| FG - FINISHED GRADE | PI - POINT OF INTERSECTION | TW - TOP OF WALL |
| FH - FIRE HYDRANT | PIV - POST INDICATOR VALVE | TV - TYPICAL |
| FL _c - FLOW LINE | PL _c - PROPERTY LINE | V - VELOCITY |
| FLG - FLANGE | PO - PUSH ON | W - WATER |
| FT - FOOT | PRC - POINT OF REVERSE CURVATURE | YD - YARD DRAIN |



K2 ENGINEERING AND STRUCTURAL DESIGN
 860 Maestro Dr., Ste. A
 Reno, NV 89511
 P: (775) 355-0505
 F: (775) 355-0566
 www.k2eng.net

St. Nicholas Orthodox Academy
 Reno, NV
 16255 S. Virginia St.
 A.P.N.: 045-210-01

Brandt T. Kennedy, P.E.
 Jared A. Krupa, P.E.

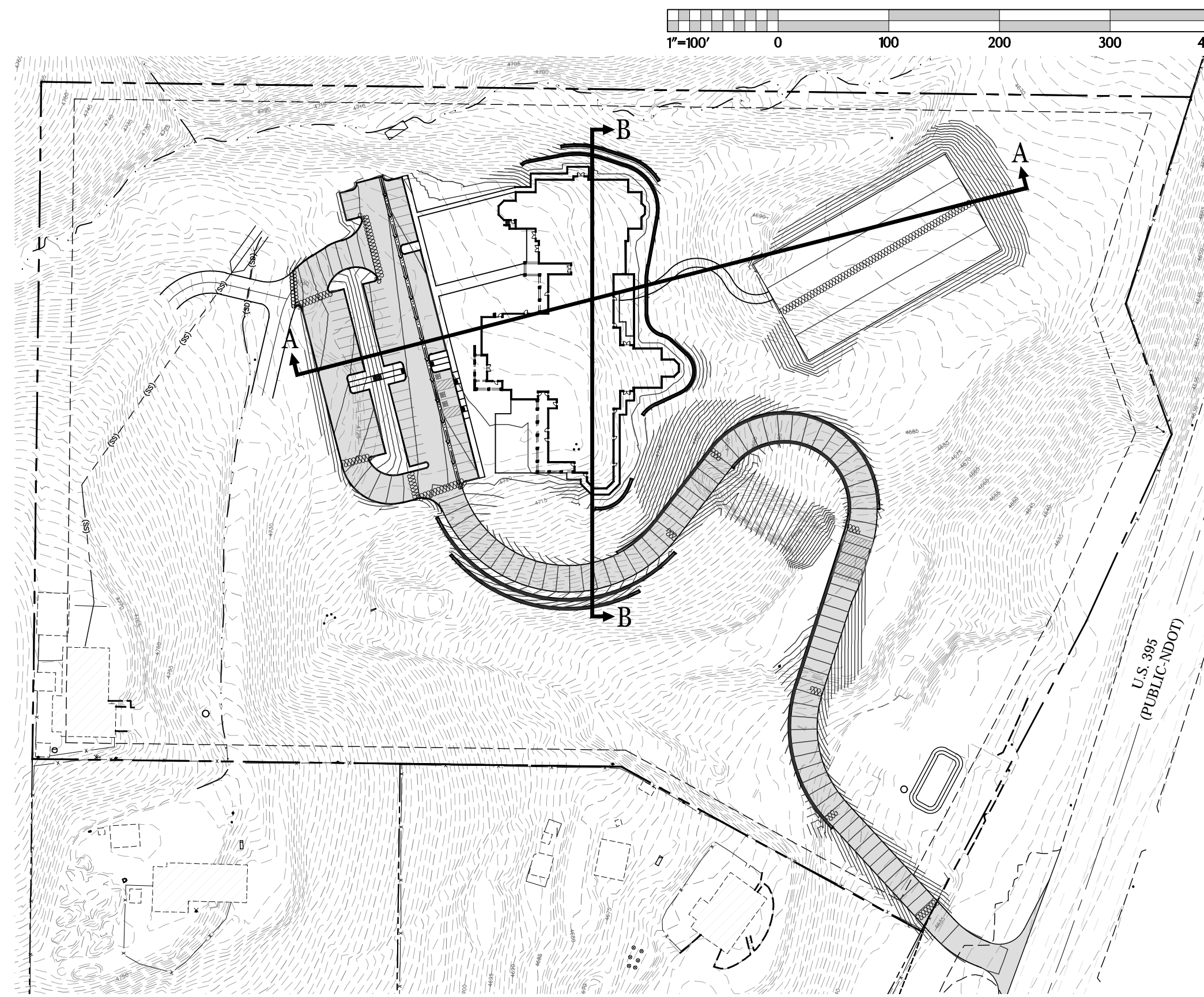
Revisions

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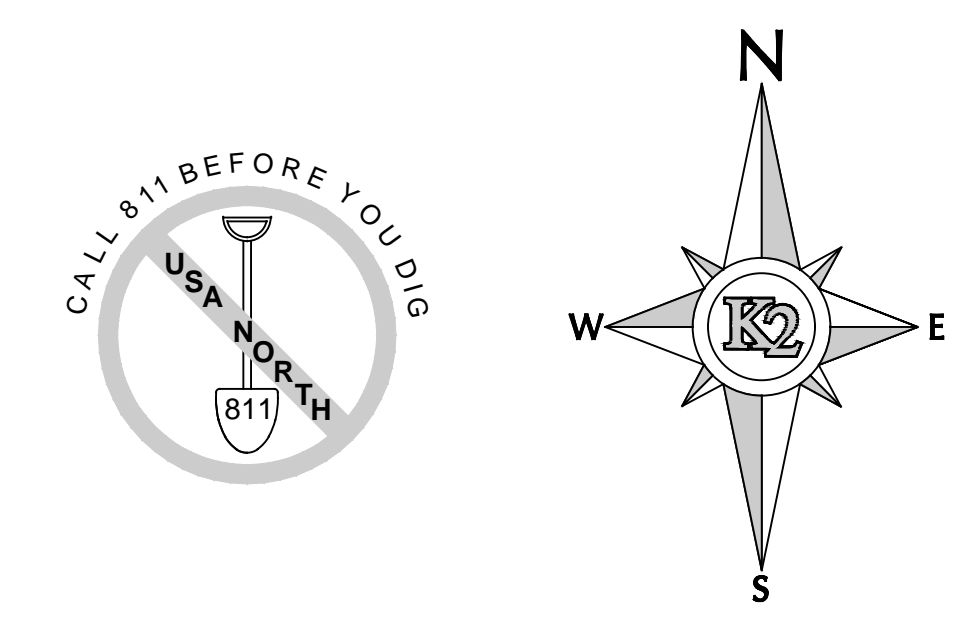
Date 10/10/2022
 Drawn K2
 Checked BTK
 Project No. 22-315

Site Plan

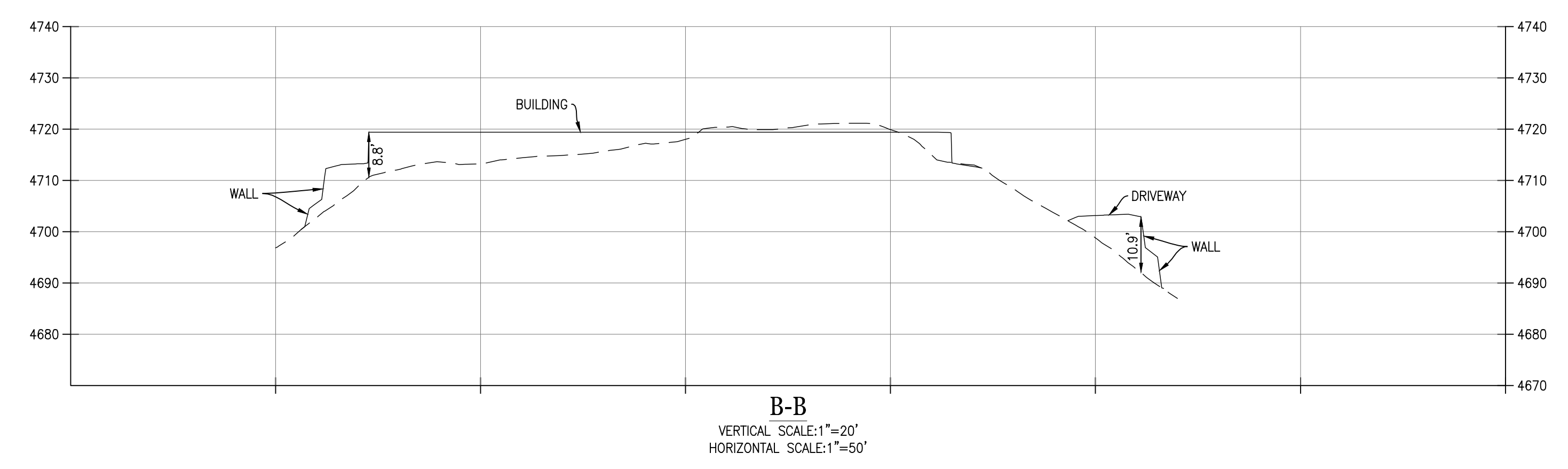
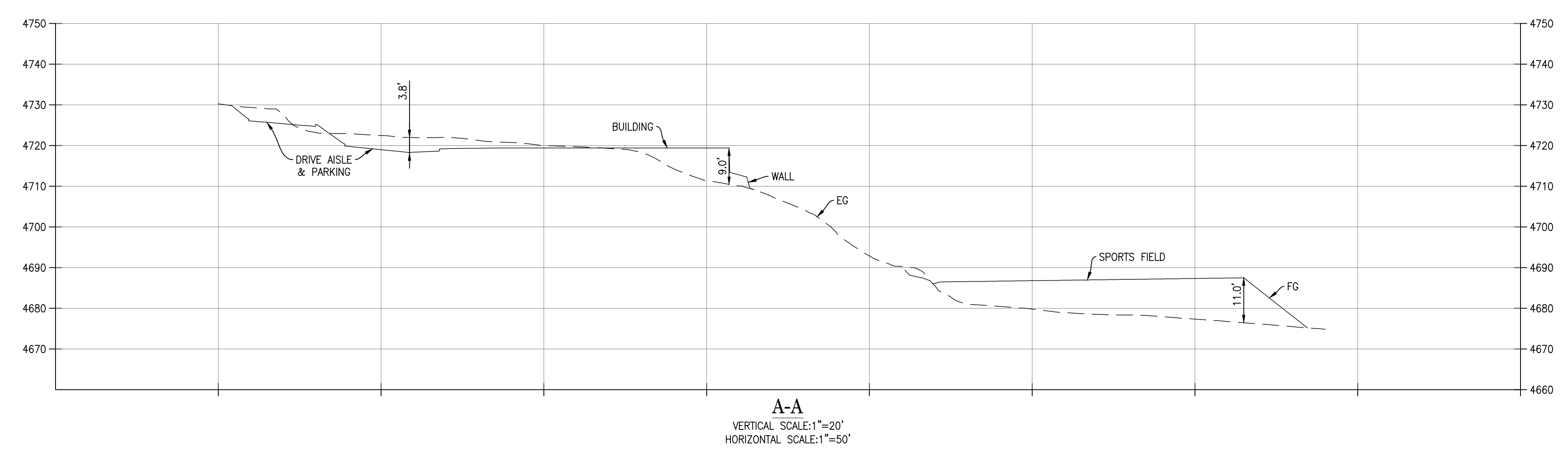
C-1



THIS PLAN IS INTENDED FOR
SPECIAL USE PERMIT REVIEW ONLY
NOT FOR CONSTRUCTION



OVERALL SITE PLAN
SCALE: 1"=100'


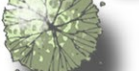
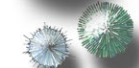

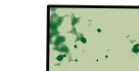



Revisions

Date 10/10/2022
Drawn K2
Checked BTK
Project No. 22-315

Cross Sections

PLANT LEGEND

-  ORNAMENTAL TREES
-  DECIDUOUS SHADE TREES
-  EVERGREEN TREES
-  EXISTING TREES ON SITE
-  LANDSCAPE AREA
-  RE-VEGETATION AREAS

LANDSCAPE DATA

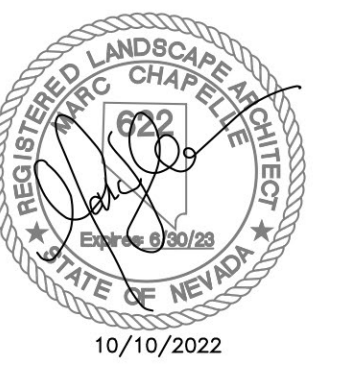
- SITE AREA: 605,484 SQ FT (13.96 ACRES)
 NET DISTURBED AREA: 230,200 SQ FT (5.28 AC)
 JURISDICTION: WASHOE COUNTY
 ZONING: HIGH DENSITY RURAL (HDR)
- REQUIRED LANDSCAPE AREA = 46,040 SQ FT
 • (20% OF NET DISTURBED AREA)
- PROVIDED LANDSCAPE AREA = 46,040 SQ FT MIN.
- REQUIRED TREES = 182 MIN.
- ONE TREE PER 300 SQ FT OF REQUIRED LANDSCAPE AREA = 176
 - ONE TREE PER 10 PARKING SPACES = 6
 - INCLUDES ONE TREE PER 50 LN FT OF STREET FRONTAGE = 17
- REQUIRED SHRUBS = 1,092 MIN.
 • (6 SHRUBS PER REQUIRED TREE)

GENERAL NOTES

- 1) ALL PLANTING AND IRRIGATION SHALL BE INSTALLED PER LOCAL GOVERNING CODES.
- 2) TREES
 - DECIDUOUS TREES SHALL HAVE A MINIMUM CALIPER OF 2 INCHES.
 - EVERGREEN TREES SHALL HAVE A MINIMUM HEIGHT OF 7 FEET.
 - ADDITIONAL TREES, BEYOND THOSE REQUIRED BY CODE, MAY BE REDUCED IN SIZE AT INSTALLATION.
- 3) FINAL PLANT SELECTION AND LAYOUT WILL BE BASED ON SOUND HORTICULTURAL PRACTICES RELATING TO MICRO-CLIMATE, SOIL, AND WATER REGIMES. ALL TREES WILL BE STAKED SO AS TO REMAIN UPRIGHT AND PLUMB FOLLOWING INSTALLATION. PLANT SIZE AND QUALITY AT TIME OF PLANTING WILL BE PER THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-1990).
- 4) ALL SHRUB BEDS WILL RECEIVE 4" DEPTH MULCH WITH WEED CONTROL.
- 5) ALL LANDSCAPING WILL BE AUTOMATICALLY IRRIGATED. CONTAINER PLANTINGS WILL BE DRIP IRRIGATED BASED ON THE SPECIFIC HORTICULTURAL REQUIREMENTS OF EACH SPECIES. A REDUCED-PRESSURE-TYPE BACKFLOW PREVENTER WILL BE PROVIDED ON THE IRRIGATION SYSTEM AS REQUIRED PER CODE.
- 6) PLAN IS CONCEPTUAL. PLANT QUANTITIES INDICATED ARE PER WASHOE CO. CODE REQUIREMENTS. PLANT LOCATIONS, FINAL SPECIES SELECTION, AND SIZE AT PLANTING SHALL BE DETERMINED DURING DEVELOPMENT OF THE FINAL CONSTRUCTION DOCUMENTS.



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L.A. Studio Nevada
 the landscape architecture studio
 1552 C Street Sparks, NV 89431 (775) 323-2223 NV RLA #440
 www.la.studionevada.com



Preliminary Landscape Plan
ST. NICHOLAS ORTHODOX ACADEMY
 Westex Consulting Engineers
 Nevada
 Washoe Co.

No.	Revision Date

LA No:	782-504-04-22
Designed:	DRJ
Drawn:	DRJ
Checked:	MC
Date:	10/10/2022