

Kendall County Agenda Briefing

Meeting Type: Other Committee

Meeting Date: 6/18/2024

Subject: Approval of Petition 24-15, Stormwater Ordinance Variance for Subat Forest

Preserve

Prepared by: Matthew H. Asselmeier, AICP, CFM

Department: Planning, Building and Zoning

Action Requested:

Approval of Petition 24-15, A Request from the Kendall County Forest Preserve District for a Variance to Section 203 of the Kendall County Stormwater Management Ordinance Regarding Applicability of Site Runoff Storage Requirements at the Subat Forest Preserve Located at 4845 Eldamain Road, Plano (PINs: 01-25-400-009, 01-36-200-022, and 01-36-200-025) in Little Rock Township

Previous Board/Committee Review:

N/A

Fiscal impact:

N/A

Background and Discussion:

The Petitioner requests a variance that allows exclusion of the impervious trail sections of the Subat Forest Preserve Nature Center Project in the calculation of total impervious improvements resulting in no stormwater detention requirement for the project. The Petitioner requests a variance from site runoff storage requirements to avoid unnecessary disturbance of restored prairie habitats and native trees that reside within Subat Forest Preserve.

Per the application, "the project has an impervious area of 36,850 sf. Under current project conditions, the Ordinance requires detention for developments resulting in an impervious area of greater than 32,000 sf. The trail section of the project constitutes 19,930 sf of impervious area or approximately 54% of the total impervious area of the project."

Greg Chismark, from WBK Engineering, reviewed the proposal and recommended approval. As of the date this memo, the four (4) outstanding items noted in Greg Chismark's letter that needed to be resolved in order to issue the stormwater permit remained unresolved.

Page: 2

The property previously obtained stormwater permits in 2003 for the installation of the parking lot, picnic shelter, and overlook platform and in 2005 for wetland restoration.

Based on the information provided by the Petitioner and WBK, Staff believes that the following findings of fact as required by Section 904.1 of the Kendall County Stormwater Management Ordinance have been met:

- 1. The variance will not increase the probability of flood damage or create an additional threat to the public health, safety or welfare.
- 2. The variance requested is the minimum relief necessary to accomplish the objectives of the development without compromising the objectives of Section 102 of the Kendall Stormwater Management Ordinance.
- 3. The variance will not result in a reduction of water quality benefits as compared to compliance with ordinance requirements.
- 4. The variance is not requested solely for the purpose of reducing site runoff storage requirements.
- 5. The variance shall not cause conveyance of stormwater from the project to increase peak discharges beyond design capacity of existing offsite conveyance facilities for any storm event from the 2-year to the 100-year recurrence frequency.
- 6. The variance shall seek to preserve valuable environmental and biological resources including but not limited to stands of native trees, existing wetlands and natural floodplain storage.

Staff Recommendation:

Approval with Conditions

Attachments:

Application Materials

WBK Comment Letter Dated May 30, 2024

Draft Ordinance

May 7, 2024

Kendall County Department of Planning, Building, & Zoning 111 West Fox Street Yorkville, Illinois, 60560

SUBJECT: Subat Nature Center

Kendall County Forest Preserve District

ERA Project #W23229.00

ERA is pleased to submit this stormwater permit application submittal for the renovation of Subat Nature Center. Enclosed you will find plans, exhibits, and a narrative describing the proposed work for this project.

All work has been completed by me or someone directly under my supervision, and this sheet signed and sealed will encompass all documents pertaining to the report.

I appreciate the opportunity for your review of this project.

Sincerely,

John Mayor D.E. CEM

John Mayer, P.E., CFM Project Manager

REGISTERED PROFESSIONAL PROPERTY OF CONTROL OF CONTROL

Expires: November 30, 2025

Existing Site Description

The project area is a nature preserve on three parcels owned by the Kendall County Forest Preserve District: 01-25-400-009, 01-36-200-022, and 01-36-200-025. Kendall County GIS indicates that the total property acreage is 67.27 acres. It is noted that disturbance of the property will be limited to approximately 1.63 acres.

The existing site includes a gravel parking lot, shelter, restroom building, and associated aggregate paths. Stormwater drainage directions vary across the property, with some areas draining south and west toward Rob Roy Creek, some areas draining toward on-site wetlands, and some areas draining south toward River Road.

There are no regulatory floodplain areas on the project site, as shown in Exhibit 5. ERA completed a wetland delineation of the project area on September 22, 2023 which identified on-site wetlands, as depicted in Exhibit 7. ERA is coordinating with the US Army Corps of Engineers to obtain a permit for minimal wetland impacts associated with installation of a boardwalk as part of this project. Additional exhibits are provided to include depictions of the site location, aerial imagery, soils, and USGS topography. It is noted that surveyed topography is provided in the plan set in areas where development is proposed, and that the project study area shown in these exhibits broadly depicts the location of the project and does not represent the disturbance area depicted in the provided plan set.

Existing site conditions are shown in Sheet L100 of the provided plan set.

Proposed Site Description

The proposed project includes expansion and upgrade of the existing parking lot with an additional entrance along Eldamain Road, installation of new asphalt and crushed limestone walking paths, installation of a boardwalk, and installation of a nature center facility on a concrete pad. Proposed site conditions are shown in the provided plan set.

Proposed Drainage Features

Proposed drainage features include stormwater culverts installed under the new parking lot entrance at the northeast corner of the project area and under the portion of trail that crosses the roadside ditch at the northwest corner of Eldamain Road and River Road. ERA obtained Kendall County LIDAR data to delineate the tributary areas of the proposed culverts. A depiction of the delineated tributary areas is provided as Exhibit 8 of this submittal. The existing tributary area of the culvert location at the new parking lot entrance was determined to be 0.145 acre. ERA determined that a 12-inch RCP culvert would provide adequate flow capacity for this small area. It is noted that geometry and grading of the existing parking lot entrance will remain the same, and there is no existing or proposed stormwater conveyance proposed below this entrance. The existing tributary area of the culvert at the corner of River Road and Eldamain Road was determined to be 1.067 acres. ERA conservatively recommended a 21-inch RCP culvert to ensure that adequate flow capacity would be provided in the roadside ditch.

Although not required by the Kendall County Stormwater Management Ordinance, the proposed nature center facility is designed with rain gardens equipped with 4" mitered drain outlets to facilitate stormwater drainage. Rain garden locations are shown in C302 and associated design details are shown in L500 of the provided plan set.

The Kendall County Forest Preserve District will be responsible for maintenance responsibilities associated with all proposed drainage features, including regular inspection of the proposed RCP culverts and any associated repairs.

Development Areas and Detention Variance Request

The total development area of the project is approximately 71,125 sf (1.63-ac). The cumulative impervious improvement area of the project is approximately 36,850 sf (0.85-ac). In accordance with the Kendall County Stormwater Management Ordinance, since the development area is less than 5 acres, the % Impervious to Unit Area Detention nomograph depicted in Table 203 of the Ordinance may be used to determine the runoff storage volume requirement. Approximately 52% of the development area is impervious, therefore, 0.3 acre-ft of storage per acre of detention basin tributary area would be required. Assuming that the entire development area (1.63-ac) would be managed by the detention basin, approximately 0.49 ac-ft of storage volume would be required.

The Kendall County Forest Preserve District is requesting a variance from the detention requirement of the Kendall County Stormwater Management Ordinance for this project. Linear improvements such as impervious trails and walkways do not significantly impact site runoff rates, and providing detention for linear improvements is difficult and costly. For these reasons, the surrounding collar counties have specified exceptions to the detention requirements of their stormwater ordinances for impervious paths and trails developed in open space. In this particular case, asphalt and crushed limestone paths account for more than half of the proposed impervious development area. Other proposed impervious facilities, including the parking lot, entrances, and nature center account for approximately 16,920 sf of impervious area, which is less than the 32,000-sf impervious area threshold for site runoff storage requirements in the Kendall County Stormwater Management Ordinance. Additionally, the intent of this project is to improve and provide community access to the Subat Forest Preserve without resulting in unnecessary disturbance of on-site prairie and wetland areas. Due to the location of on-site wetlands, it is likely that at least two detention basins would be necessary to manage stormwater runoff from northern and southern project areas, resulting in additional on-site disturbance.

Soil Erosion and Sediment Control

The stormwater pollution prevention plan provided as L101 of the plan set describes the erosion control measure that will be implemented prior to the start of construction. Silt fencing is provided at downstream edges of the project. A temporary concrete washout location is proposed southwest of the facility parking lot. Excavated soils that are not repurposed as backfill material will be kept on-site and graded to maintain the existing site drainage direction, with silt fencing installed at the downstream edge of the stockpile area. All disturbed areas will be stabilized with topsoil, seed, and erosion control blanket in accordance with the IEPA General NPDES Permit for Construction Activities.

Conclusion

ERA looks forward to the County's review of this stormwater management permit application submittal for the renovation of Subat Nature Center. Please contact me with any questions or concerns at 630 393-3060 or imayer@eraconsultants.com.

Respectfully submitted, Engineering Resource Associates, Inc.



John F. Mayer, PE, CFM Project Manager

Attachment 1 – Stormwater Management Permit Application Form

Attachment 2 – Exhibits Attachment 3 – Plan Set

STORMWATER MANAGEMENT PERMIT

PERMIT APPLICATION #

Conformance with all Federal, State, and County Regulations is required. Applicants are encouraged to the Countywide Stormwater Management Ordinance and consider a pre-application meeting with Department staff prior to submittal. See attached highlights of regulations.					
Property:	Name_Kendall County Forest Preserve District				
Owner	Address_110 W. Madison Street, Yorkville, IL 60560				
	Phone_630-553-4025				
Agent:	Name_Engineering Resource Asso	ciates, Inc.			
	Address_3s701 W Avenue, Suite 1	50, Warrenville, IL 60555			
	Phone_630-393-3060				
Site:	Address or Location Intersection o	f Eldamain Road and River Road, Plano, IL 60545			
	Tax Parcel # 01-25-400-009, 01-36	-200-022, and 01-36-200-025			
	Zoning/Land Use/Acres A1 Agricul	tural / Forest Preserve / 67.27 acres (1.63-ac disturbance)			
	· ·	nd walking paths at Subat Forest Preserve. Please see the ched permit application memo.			
Attachments:	Plat	Construction Plans_X			
	Soils	Landscaping			
	Grading X	Phasing			
	Other				
Fees	\$ Processing Fe	e (\$50.00)			
\$ Engineering Review Deposit (\$2,500.00 or 2% of estimated cost of the proposed improvements, whichever is greater. A \$3,500.00 Construction Inspection Services Fee and General Consultation Fee Might Be Required as the Project Progresses)					
TOTAL \$		out to the Kendall County Treasurer			
Staff will contact Applicant regarding schedule and reviews. I hereby certify that the information on this application, on the documents attached, and on other submittals made during the review process is true and correct; that I am authorized to file this application; and that I agree to conform to all requirements set forth by the County and all conditions of the County Stormwater Management Ordinance. I understand that by signing this form, that the property in question may be visited by County Staff and County Engineers throughout the permit and construction process. I also understand that I am responsible for all costs associated with this application. The applicant attests that they are free of debt or current on all debts owed to Kendall County as of the application date.					
Owner's Signature (Including Middle Initial) Efec. は、マールドリカ Agent's Signature (Including Middle Initial) Date					
Agent a aignatu	re (melading ivilidie initidi)	Date			

Kendall County Planning, Building, & Zoning Department 111 West Fox Street, Room 203 Yorkville, Illinois 60560

Phone: (630) 553-4139, Fax (630) 553-4179 www.kendallcountyil.gov



DEPARTMENT OF PLANNING, BUILDING & ZONING

111 West Fox Street • Yorkville, IL • 60560 (630) 553-4141 Fax (630) 553-4179

ENGINEERING CONSULTANT FEES

I, understand that Kendall County uses the services of a
consultant for engineering reviews and inspections and that I will be responsible for
payment of services on project. I authorize the consulting
services to proceed.
IF THIS IS <u>NOT</u> PART OF A BUILDING PERMIT APPLICATION, PLEASE CHECK THE BOX AND COMPLETE THIS SECTION:
I hereby submit a deposit of payable to the Kendall County Treasurer
to be used by Kendall County to reimburse consultant for charges invoiced for work
done in the review, approval and inspection of the proposed improvements.
I understand that if the deposit is depleted that I may be required to replenish the
deposit to have work proceed.
I further understand that Kendall County will not issue a Building Permit or a Certificate
of Occupancy as the case may be until I provide payment or proof of payment for the
engineering services.
Signature of Applicant: Date: Date:
Exec. Advisor. KCFPD

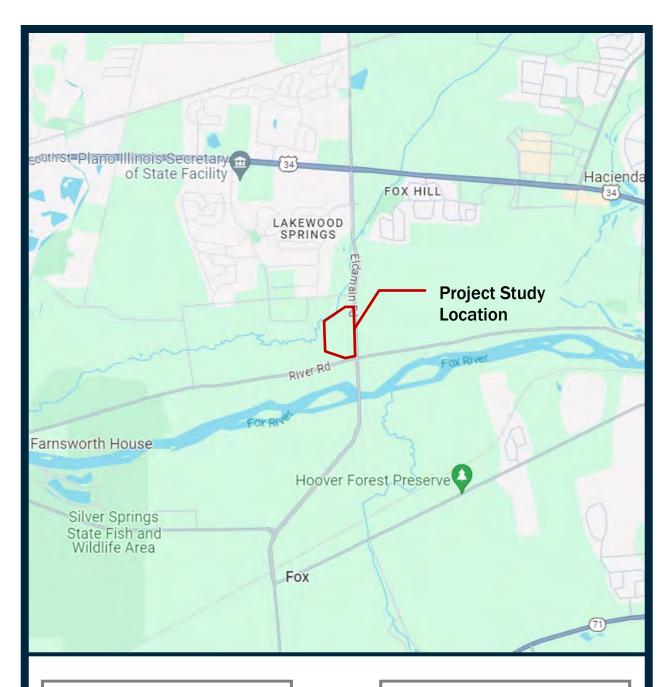


Exhibit 1 Location Map Lat/Long: 41.646062°, -88.489773°

Project Study Location



Client: Upland Design

Project Name: Subat Nature Preserve

ERA Project #: W23229.00 Source: Google Maps

Not to Scale



Engineering Resource Associates, Inc. 3S701 West Avenue, Suite 150 Warrenville, IL 60555 Phone: (630) 393-3060 FAX: (630) 393-2152

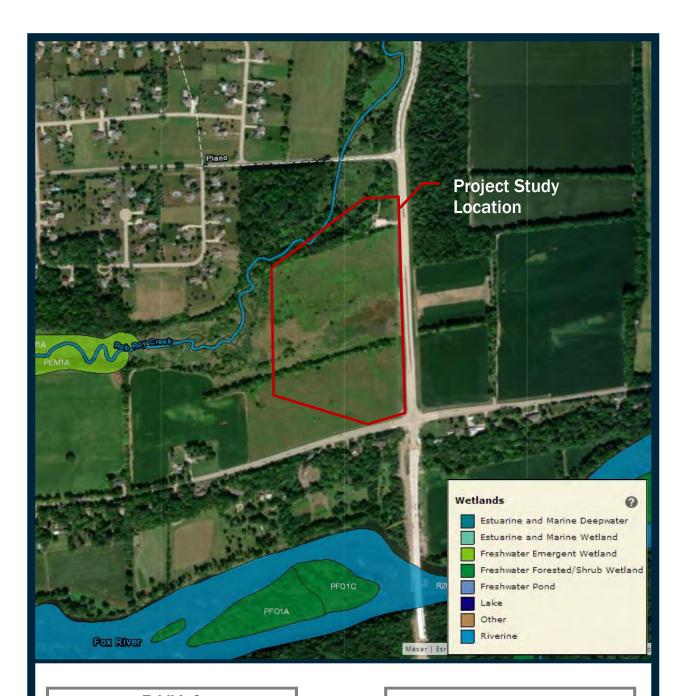


Exhibit 2 National Wetland Inventory Map Lat/Long: 41.646062°, -88.489773°

Project Study Location



Client: Upland Design
Project Name: Subat Nature Preserve

ERA Project #: W23229.00

Source: USFWS NWI Mapper

Not to Scale



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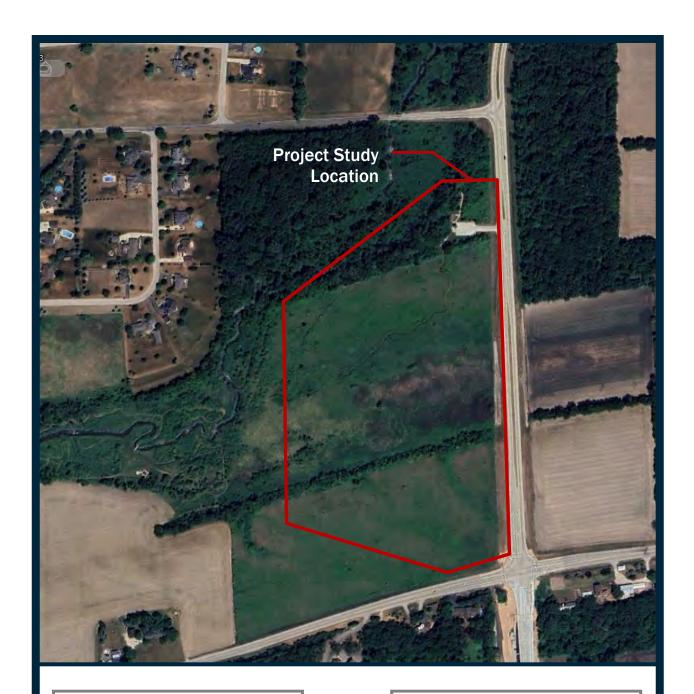


Exhibit 3 Aerial Photograph Lat/Long: 41.646062°, -88.489773°

Project Study Location



Client: Upland Design
Project Name: Subat Nature Preserve

ERA Project #: W23229.00 Source: Google Earth

Not to Scale



Engineering Resource Associates, Inc. 3S701 West Avenue, Suite 150 Warrenville, IL 60555 Phone: (630) 393-3060 FAX: (630) 393-2152

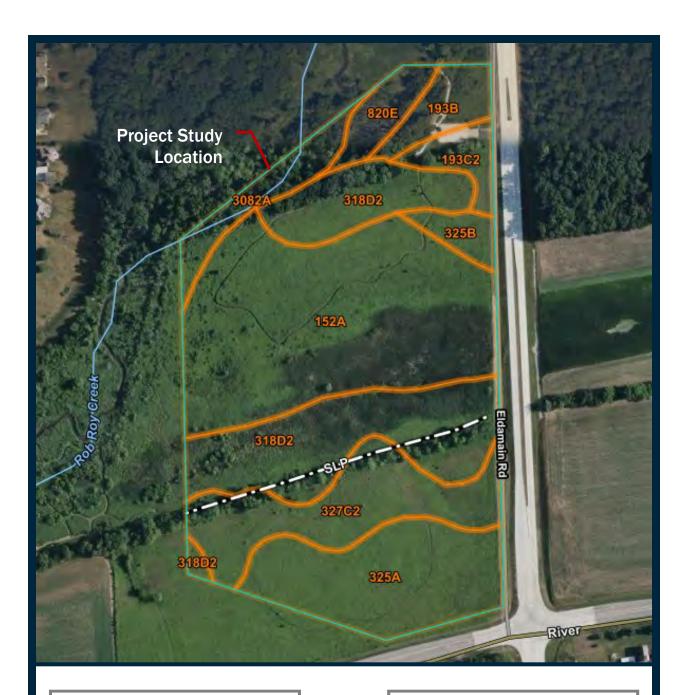


Exhibit 4.1 NRCS Soils Map Lat/Long: 41.646062°, -88.489773°

Project Study Location



Client: **Upland Design** Project Name: **Subat Nature Preserve**

ERA Project #: W23229.00

USDA Web Soil Survey Source:

Not to Scale



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Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
152A	Drummer silty clay loam, 0 to 2 percent slopes	12.5	33.4%
193B	Mayville silt loam, 2 to 5 percent slopes	1.4	3.7%
193C2	Mayville silt loam, 5 to 10 percent slopes, eroded	1.0	2.8%
318D2	Lorenzo loam, 6 to 12 percent slopes, eroded	8.6	23.1%
325A	Dresden silt loam, 0 to 2 percent slopes	5.5	14.7%
325B	Dresden silt loam, 2 to 4 percent slopes	0.8	2.1%
327C2	Fox silt loam, 4 to 6 percent slopes, eroded	4.8	12.9%
820E	Hennepin-Casco complex, 12 to 30 percent slopes	1.1	3.0%
3082A	Millington silt loam, 0 to 2 percent slopes, frequently flooded	1.6	4.3%
Totals for Area of Interest		37.3	100.0%

Exhibit 4.2 NRCS Soils Map

Lat/Long: 41.646062°, -88.489773°

Project Study Location



Client: Upland Design

Project Name: Subat Nature Preserve

ERA Project #: W23229.00

Source: USDA Web Soil Survey

Not to Scale



Engineering Resource Associates, Inc. 3S701 West Avenue, Suite 150 Warrenville, IL 60555 Phone: (630) 393-3060 FAX: (630) 393-2152



Exhibit 5

FEMA Flood Insurance Rate Map Lat/Long: 41.646062°, -88.489773°

Project Study Location



Client: Upland Design

Project Name: Subat Nature Preserve ERA Project #: W23229.00

ERA Project #: W23229.00 Source: FEMA FIRM Viewer

Not to Scale



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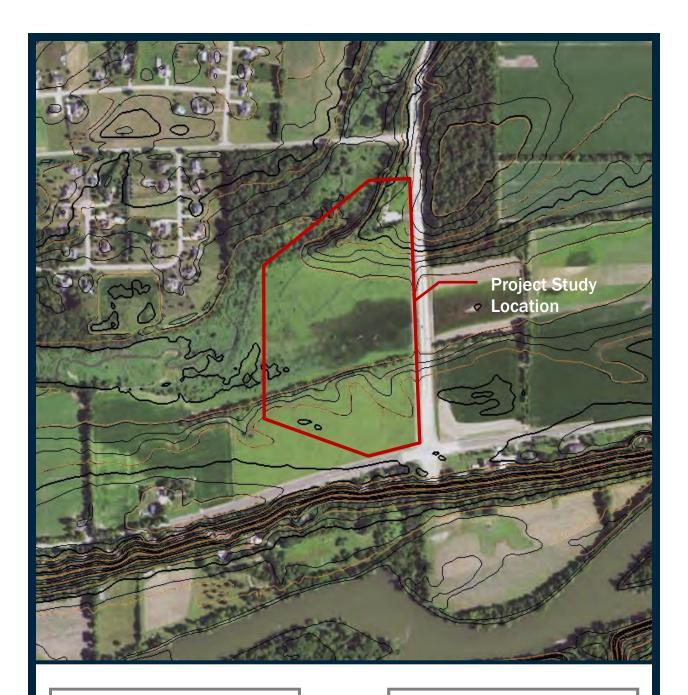


Exhibit 6 USGS Topographic Map Lat/Long: 41.646062°, -88.489773°

Project Study Location



Client: Upland Design
Project Name: Subat Nature Preserve

ERA Project #: W23229.00

Source: USGS National Map

Not to Scale



Engineering Resource Associates, Inc. 3S701 West Avenue, Suite 150 Warrenville, IL 60555 Phone: (630) 393-3060 FAX: (630) 393-2152



Exhibit 7 **Approximate Wetland Boundary**

Lat/Long: 41.646062°, -88.489773°

Approximate Wetland Boundary

Approximate Offsite Wetlands Boundary Project Study Location

Data Point



Client: **Upland Design** Project Name: **Subat Nature Preserve**

ERA Project #: W23229.00

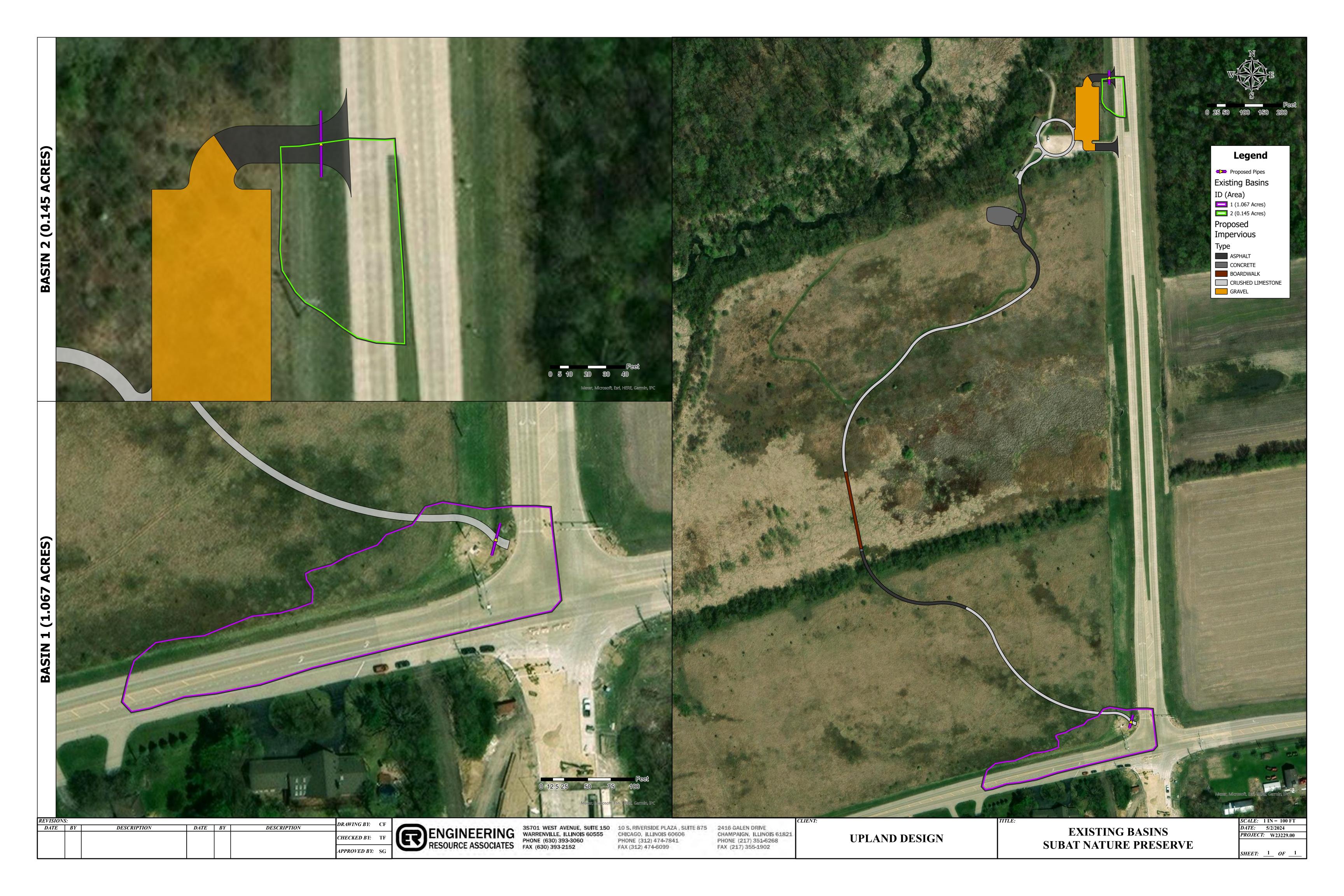
ESRI Source:

Not to Scale



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May 14, 2024

Kendall County Department of Planning, Building, & Zoning 111 West Fox Street Yorkville, Illinois, 60560

SUBJECT: Subat Nature Center

Kendall County Forest Preserve District

ERA Project #W23229.00

Comments Received May 8, 2024

ERA submits the following responses to the stormwater management permit application comments received via email on May 8, 2024.

- 1. <u>Comment</u>: Pursuant to Section 901.4 of the Kendall County Stormwater Management Ordinance, please submit the following materials:
 - a. The common address (if one exists) and legal description(s) of the property.
 - b. The names and addresses of all property owners within 250 feet (PBZ can provide these, but please confirm that the 3 parcel numbers listed are correct).
 - c. The specific provision from which a variance is sought (i.e. the section of the Stormwater Management Ordinance that would be varied).
 - d. A statement that the variance requested is the minimum necessary to permit development.
 - e. Please submit statements explaining how the variance satisfies the standards contained in Section 904.1 of the Kendall County Stormwater Management Ordinance.

Response:

- a. The common address of the forest preserve entrance and parking lot is 4845 Eldamain Road, Plano, IL 60545. A land title survey of the three parcels encompassing the project area is provided as an attachment to this response. Legal descriptions are included in the land title survey document.
- b. A list of names and addresses of all property owners within 250 feet is provided as Attachment 2 (3 pages) to this response.
- c. The applicant seeks a variance from the site runoff storage requirements of Section 203 of the Kendall County Stormwater Management Ordinance.
- d. The variance requested is the minimum necessary to permit the proposed development, as described further in the response to Comment 1.e., below.
- e. The following statements are submitted to address the standards contained in Section 904.1 of the Kendall County Stormwater Management Ordinance (Ordinance):

The project has an impervious area of 36,850 sf. Under current project conditions, the Ordinance requires detention for developments resulting in an impervious area of greater than 32,000 sf. The trail section of the project constitutes 19,930 sf of impervious area or approximately 54% of the total impervious area of the project. The Kendall County Forest Preserve District requests a variance that allows exclusion of the impervious trail sections of the project in the calculation of total impervious improvements, as described below, resulting in no stormwater detention requirement for the project. The Kendall County Forest Preserve District requests a variance from site runoff storage requirements to avoid unnecessary disturbance of restored prairie habitats and native trees that reside within Subat Forest Preserve, as described below.

The variance is not requested solely for the purpose of reducing site runoff storage requirements [904.1(d)]. The variance would preserve valuable environmental and biological resources, including restored prairie habitat, native trees, and existing wetlands [904.1(f)]. The intent of this project is to improve and provide community access to the Subat Forest Preserve without resulting in unnecessary disturbance of valuable on-site natural resources.

ERA looks forward to the County's review of these comment responses. Please contact me with any questions or concerns at 630 393-3060 or imayer@eraconsultants.com.

Respectfully submitted, Engineering Resource Associates, Inc.



John F. Mayer, PE, CFM Project Manager

Attachment 1 – ALTA/NSPS Land Title Survey
Attachment 2 – Properties Within 250' of the Project Area (3 pages)

ALTA/NSPS LAND TITLE SURVEY

SOUTHERLY PARCEL

THAT PART OF THE NORTHEAST QUARTER OF SECTION 36, TOWNSHIP 37 NORTH, RANGE 6 EAST OF THE THIRD PRINCIPAL MERIDIAN, BEING DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 36; THENCE SOUTH 00 DEGREES 00 MINUTES 19 SECONDS WEST ALONG THE EAST LINE OF SAID QUARTER SECTION, 699.00 FEET FOR THE POINT OF BEGINNING; THENCE NORTH 89 DEGREES 49 MINUTES 17 SECONDS WEST, 1279.78 FEET; THENCE SOUTH 00 DEGREES 37 MINUTES 43 SECONDS EAST, 610.73 FEET TO THE CENTERLINE OF RIVER ROAD; THENCE NORTH 75 DEGREES 28 MINUTES 49 SECONDS EAST ALONG SAID CENTERLINE, 1315.05 FEET TO SAID EAST LINE OF SECTION 36; THENCE NORTH 00 DEGREES 00 MINUTES 19 SECONDS EAST ALONG SAID EAST LINE, 277.00 FEET TO THE POINT OF BEGINNING ALL IN THE TOWNSHIP OF LITTLE ROCK, KENDALL COUNTY, ILLINOIS.

NORTHERLY PARCEL

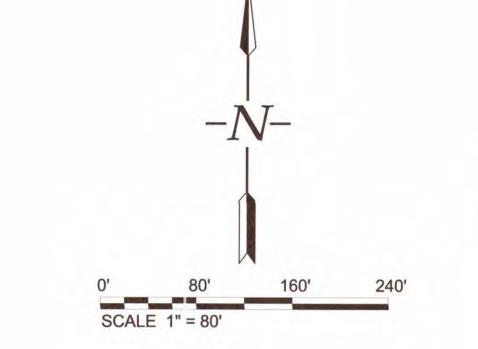
THAT PART OF THE SOUTHEAST QUARTER OF SECTION 25 AND PART OF THE NORTHEAST QUARTER OF SECTION 36, TOWNSHIP 37 NORTH, RANGE 6 EAST OF THE THIRD PRINCIPAL MERIDIAN BY BEING DESCRIBED BY BEGINNING AT THE SOUTHEAST CORNER OF SAID SECTION 25; THENCE NORTH 00 DEGREES 00 MINUTES 39.5 SECONDS WEST ALONG THE EAST LINE OF SAID QUARTER SECTION, 1212.83 FEET TO THE CENTERLINE OF SCHAEFER ROAD; THENCE SOUTH 88 DEGREES 03 MINUTES 05 SECONDS WEST ALONG SAID CENTERLINE, 1285.48 FEET TO THE WEST LINE OF SUB LOT 13 OF SAID SECTION 25 AS SHOWN ON PAGE 36 OF PLAT BOOK 4; THENCE SOUTH 00 DEGREES 02 MINUTES 47 SECONDS WEST ALONG SAID WEST LINE, 1301.73 FEET MORE OR LESS TO A POINT LYING 136.62 FEET SOUTH OF THE NORTH LINE OF SAID SECTION 36, SAID POINT BEING THE SOUTHEAST CORNER OF SUB LOT 2 OF SAID SECTION 36 AS SHOWN ON PAGE 36 OF PLAT BOOK 4; THENCE SOUTH 00 DEGREES 37 MINUTES 43 SECONDS EAST PARALLEL WITH THE EAST LINE OF SAID SUB LOT 3 OF SAID SECTION 36, 562.50 FEET; THENCE SOUTH 89 DEGREES 49 MINUTES 17 SECONDS EAST, 1279.78 FEET TO A PONT ON THE EAST LINE OF SAID SECTION 36; THENCE NORTH 00 DEGREES 00 MINUTES 19 SECONDS EAST ALONG SAID EAST LINE, 699.00 FEET TO THE POINT OF BEGINNING IN THE TOWNSHIP OF LITTLE ROCK, KENDALL COUNTY, ILLINOIS.

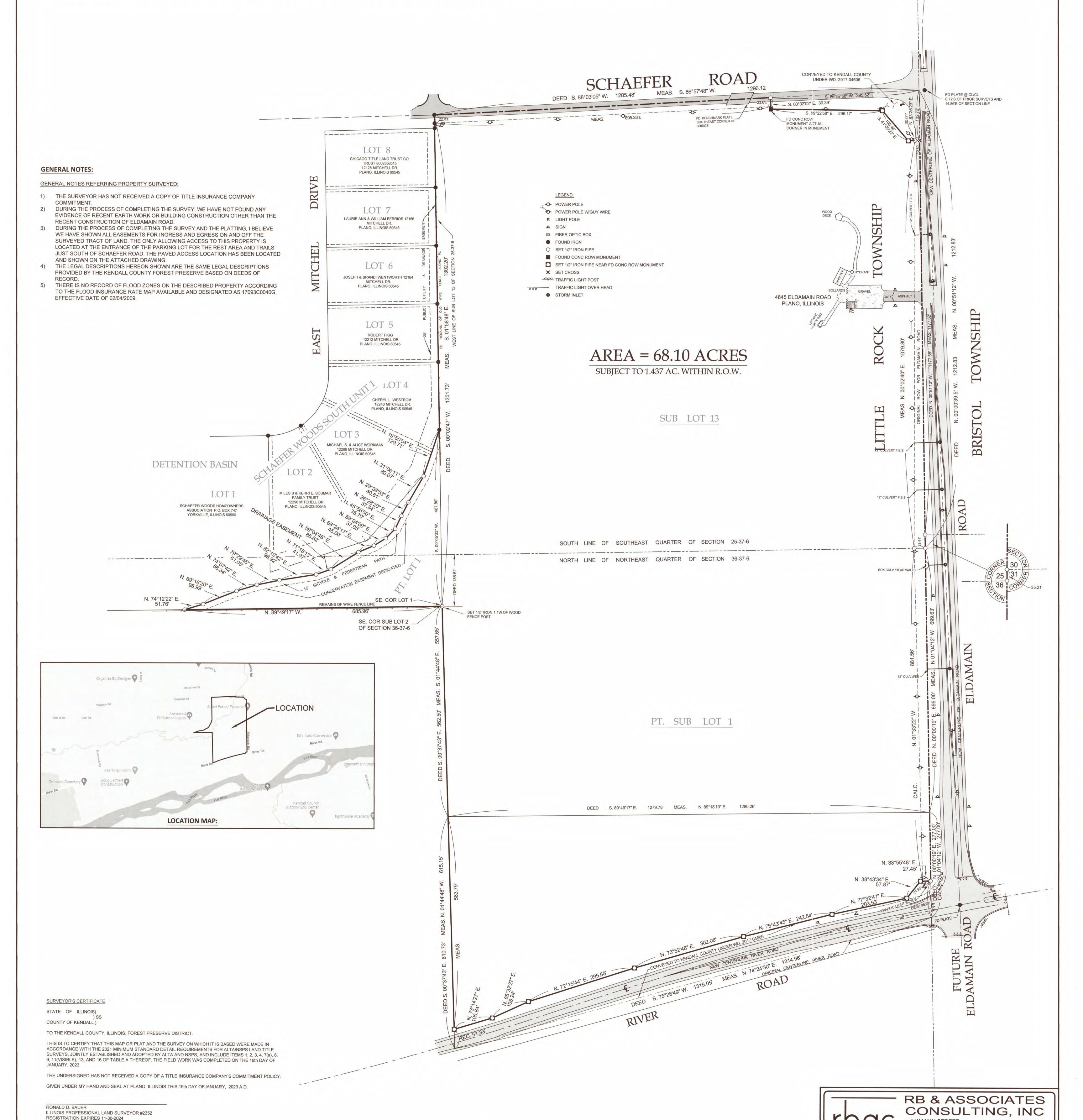
SCHAEFER ROAD DEDICATION:

THAT PART OF THE SOUTHEAST QUARTER OF SECTION 25, TOWNSHIP 37 NORTH, RANGE 6 EAST OF THE THIRD PRINCIPAL MERIDIAN IN KENDALL COUNTY, ILLINOIS, DESCRIBED AS FOLLOWS: COMMENCING AT A FOUND IRON ROD AT THE SOUTHEAST CORNER OF SAID SECTION 25 PER MONUMENT RECORD 200900016871; THENCE ON AN ASSUMED BEARING OF NORTH 01 DEGREES 15 MINUTES 34 SECONDS WEST, 35.21 FEET ALONG THE EAST LINE OF SAID SOUTHEAST QUARTER TO THE SOUTHWEST CORNER OF SECTION 30, TOWNSHIP 37 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN; THENCE NORTH 00 DEGREES 51 MINUTES 12 SECONDS WEST, 1,177.55 FEET ALONG SAID EAST LINE TO THE CENTERLINE OF SCHAEFER ROAD AND THE POINT OF BEGINNING; THENCE SOUTH 86 DEGREES 57 MINUTES 58 SECONDS WEST, 395.52 FEET ALONG SAID CENTERLINE AS MONUMENTED; THENCE SOUTH 03 DEGREES 02 MINUTES 02 SECONDS EAST, 30.39 FEET; THENCE SOUTH 89 DEGREES 22 MINUTES 58 SECONDS EAST, 296.17 FEET; THENCE SOUTH 41 DEGREES 00 MINUTES 22 SECONDS EAST, 105.46 FEET TO THE WESTERLY LINE OF ELDAMAIN ROAD; THENCE NORTH 87 DEGREES 25 MINUTES 23 SECONDS EAST, 30.01 FEET TO SAID EAST LINE OF THE SOUTHEAST QUARTER; THENCE NORTH 00 DEGREES 51 MINUTES 12 SECONDS WEST, 132.72 FEET ALONG SAID EAST LINE TO THE POINT OF BEGINNING.

RIVER ROAD DEDICATION

MERIDIAN IN KENDALL COUNTY, ILLINOIS, DESCRIBED AS FOLLOWS: COMMENCING AT A FOUND IRON ROD AT THE NORTHEAST CORNER OF SAID SECTION 36 PER MONUMENT RECORD 200900016871; THENCE ON AN ASSUMED BEARING OF SOUTH 01 DEGREES 04 MINUTES 12 SECONDS EAST, 976.63 FEET ALONG THE EAST LINE OF SAID NORTHEAST QUARTER TO THE CENTERLINE OF RIVER ROAD AND TO THE POINT OF BEGINNING; THENCE SOUTH 74 DEGREES 24 MINUTES 30 SECONDS WEST, 1314.98 FEET (1,315.05 FEET) ALONG SAID CENTERLINE AS MONUMENTED; THENCE NORTH 01 DEGREES 45 MINUTES 49 SECONDS WEST, 51.33 FEET ALONG THE GRANTOR'S WESTERLY PROPERTY LINE; THENCE NORTH 73 DEGREES 14 MINUTES 27 SECONDS EAST, 105.84 FEET; THENCE NORTH 65 DEGREES 32 MINUTES 27 SECONDS EAST, 105.24 FEET; THENCE NORTH 72 DEGREES 15 MINUTES 44 SECONDS EAST, 295.68 FEET; THENCE NORTH 73 DEGREES 52 MINUTES 48 SECONDS EAST, 302.06 FEET; THENCE NORTH 75 DEGREES 43 MINUTES 45 SECONDS EAST, 242.54 FEET; THENCE NORTH 77 DEGREES 32 MINUTES 47 SECONDS EAST, 203.53 FEET; THENCE NORTH 38 DEGREES 43 MINUTES 34 SECONDS EAST, 57.87 FEET TO THE WESTERLY LINE OF ELDAMAIN ROAD; THENCE NORTH 88 DEGREES 55 MINUTES 48 SECONDS EAST, 27.45 FEET TO SAID EAST LINE OF THE NORTHEAST QUARTER; THENCE SOUTH 01 DEGREES 04 MINUTES 12 SECONDS EAST, 95.29 FEET ALONG SAID EAST LINE TO THE POINT OF BEGINNING.





DESIGN FIRM # 184-004475

www.rb-associates.net

(630) 552-7452



May 30, 2024

Mr. Matt Asselmeier Kendall County Planning, Building, & Zoning 111 West Fox Street Yorkville, IL 60560-1498

Subject: Subat Nature Center- WBK Project 19-102.CB

Dear Mr. Asselmeier:

We have received and reviewed the following information for the subject project:

- Subat Nature Center Construction Documents prepared by Kluber, Upland and ERA dated April 11, 2024 ad received May 15, 2024.
- Kendall County Comment Response Letter prepared by ERA dated May 14, 2024 and received May 15, 2024.
- Drainage Exhibits prepared by ERA not dated and received May 15, 2024.
- Stormwater Permit Cover Letter, Stormwater Permit and variance support documentation prepared by ERA dated May 7, 2024 and received May 15, 2024.

We have no objection to the issuance of a stormwater variance for this project based on the information submitted. We find the conditions to approve the variance have been met and the project has unique conditions warranting approval of the variance.

Furthermore, we find the stormwater report construction documents submitted to be in general conformance with the County stormwater ordinance. The stormwater permit and construction documents are approved conditioned on resolution of the following comments.

- Stormwater report The boardwalk spans a significant drainageway with an upstream area that appears to exceed one square mile. While this is not floodplain please verify the boardwalk will not have an adverse impact on Eldamain Road. (See attached Streamstats Rreport)
- 2. We have no objections to access to Eldamain Road. Please verify Kendall County Highway Department concurrence.
- 3. L401 Verify adequate cover over the 12 "RCP at the northernmost access to Eldamain, Revise as necessary.
- 4. L501 The Boardwalk detail depicts the 100 year flood elevation. We concur with the concept presented in the detail. Provide the 100 flow elevation as well as the basis for determining that elevation at the boardwalk.

The applicant's design professionals are responsible for performing and checking all design computations, dimensions, details, and specifications in accordance with all applicable codes and regulations, and obtaining all permits necessary to complete this work. In no way does this review relieve applicant's design professionals of their duties to comply with the law and any applicable codes and regulations, nor does it relieve the Contractors in any way from their sole responsibility for the quality and workmanship of the work and for strict compliance with the permitted plans and specifications. If you have any questions or comments, please contact us at (630) 443-7755.

Sincere

Greg Chismark PE

WBK Engineering, LLC

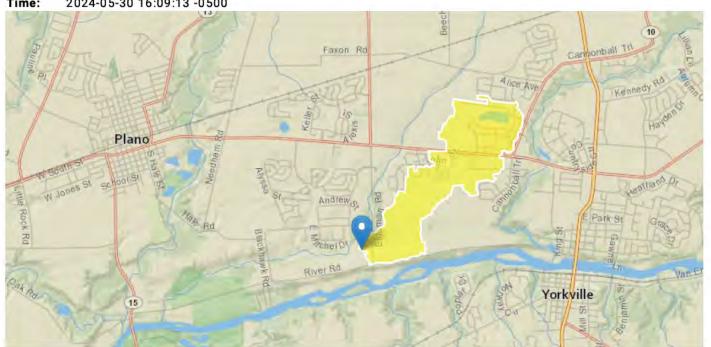
StreamStats Report

Region ID:

Workspace ID: IL20240530210850045000

Clicked Point (Latitude, Longitude): 41.64580, -88.48983

2024-05-30 16:09:13 -0500 Time:



Collapse All

> Basin Characteristics

Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	1.129	square miles
FLC16DVLMH	Fraction of drainage area that is in low to high developed land use classes 22-24 from NLCD 2016	0.3	decimal fraction
FSSURGDC78	Fraction of land area that is in very poorly drained and unknown likely water drainage classes 7 and 8 from SSURGO	0.003	decimal fraction
RELRELF	Basin relief divided by basin perimeter	5.54	feet per mi

Peak-Flow Statistics

Peak-Flow Statistics Parameters [IL Peakflow Region 2 ICT-23-014]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	1.129	square miles	0.07031	1352
FLC16DVLMH	Frac_Lo_Med_Hi_Developed_from_NLCD2016	0.3	decimal fraction	0.002045	0.9692
FSSURGDC78	Fraction_SSURGO_Drainage_Classes_7_and_8	0.003	decimal fraction	0	0.2506
RELRELF	Relative Relief	5.54	feet per mi	0.8122	35.97

Peak-Flow Statistics Flow Report [IL Peakflow Region 2 ICT-23-014]

PIL: Lower 90% Prediction Interval, PIU: Upper 90% Prediction Interval, ASEp: Average Standard Error of Prediction, SE: Standard Error (other -- see report)

Statistic	Value	Unit	PIL	PIU	ASEp
50-percent AEP flood	77.4	ft^3/s	36.3	165	46.9
20-percent AEP flood	127	ft^3/s	58.7	275	47.9
10-percent AEP flood	164	ft^3/s	73.6	365	49.9
4-percent AEP flood	214	ft^3/s	92.1	497	52.8
2-percent AEP flood	253	ft^3/s	105	611	55.6
1-percent AEP flood	294	ft^3/s	118	734	58
0.5-percent AEP flood	335	ft^3/s	129	867	60.5
0.2-percent AEP flood	392	ft^3/s	146	1050	63.4

Peak-Flow Statistics Citations

Over, T.M., Marti, M.K., O'Shea, P.S., Sharpe, J.B.2023, Estimating peak-flow quantiles for selected annual exceedance probabilities in Illinois (Report No. FHWA-ICT-23-014). Illinois Center for Transportation. (https://doi.org/10.36501/0197-9191/23-019)

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Application Version: 4.20.1

StreamStats Services Version: 1.2.22

NSS Services Version: 2.2.1

ORDINANCE NUMBER 2024 - ____

GRANTING A VARIANCE TO THE KEDALL COUNTY

STORMWATER MANAGEMENT ORDINANCE FOR THE PROPERTY IDENTIFIED BY PARCEL IDENTIFICATION NUMBERS 01-25-400-009, 01-36-200-022, AND 01-36-200-025, LOCATED AT 4845 ELDAMAIN ROAD IN LITTLE ROCK TOWNSHIP AND OWNED BY THE KENDALL COUNTY FOREST PRESERVE DISTRICT AND ALSO KNOWN AS THE SUBAT FOREST PRESERVE

<u>WHEREAS</u>, Section 900 of the Kendall County Stormwater Management Ordinance allows the County to grant variances from strict compliance with specific provisions of said Ordinance when such compliance is impossible or impracticable; and

<u>WHEREAS</u>, Section 906 of the Kendall County Stormwater Management Ordinance allows the County to impose conditions or limitations on the granting of a variance; and

<u>WHEREAS</u>, on or about May 17, 2024, the Kendall County Forest Preserve District submitted an application for a variance to Section 203 of the Kendall County Stormwater Management Ordinance regarding applicability of site runoff storage requirements; and

<u>WHEREAS</u>, the property impacted by the variance, hereinafter referred to as "the subject property" is identified by parcel identification numbers 01-25-400-009, 01-36-200-022, and 01-36-200-025 and is located at 4845 Eldamain Road in Little Rock Township, and is also known as the Subat Forest Preserve; the legal description of the property is attached hereto as Exhibit A; and

<u>WHEREAS</u>, the property is owned by the Kendall County Forest Preserve District and shall hereinafter be referred to as "the Petitioner"; and

<u>WHEREAS</u>, the Petitioner desires to create trail that will create new impervious surface totaling 19,930 square feet which they would like not included in the total development area of 36,850 square feet at the subject property; and

<u>WHEREAS</u>, the proposed development is for public use and the development of the forest preserve is planned, funded and facilitated as a public forest preserve by the Petitioner; and

<u>WHEREAS</u>, the Petitioner desires to protect avoid unnecessary disturbance of restored prairie habitats and native trees that reside within the subject property; and

<u>WHEREAS</u>, following due and proper notice by publication in the Kendall County Record on May 23, 2024, due and proper notification of the United City of Yorkville on May 20, 2024, due and proper notification to the City of Plano on May 20, 2024, due and proper notification to the Village of Sugar Grove on May 20, 2024, and due and proper notification to all of the property owners of record owning property within two hundred fifty feet of the subject property on May 20, 2024, the Kendall County Stormwater Management Oversight Committee conducted a public hearing on June 18, 2024, at 9:00 a.m., in the County Office Building at 111 W. Fox Street in Yorkville, at which the Petitioner's representatives presented evidence, testimony, and exhibits in support of the requested variance and zero

member of the public testified in favor of the request and **zero** members of the public testified in opposition to the request; and

<u>WHEREAS</u>, based on the evidence, testimony, and exhibits, the Kendall County Stormwater Management Oversight Committee has made their Findings of Fact and recommended **approval** of the variance with **conditions** as set forth in the Findings of Fact and Recommendation of the Kendall County Stormwater Management Oversight Committee, dated June 18, 2024, a true and correct copy of which is attached hereto as Exhibit B; and

<u>WHEREAS</u>, this variance shall be treated as a covenant running with the land and is binding on the successors, heirs, and assigns as to the same special use conducted on the property; and

<u>WHEREAS</u>, the Kendall County Board has considered the standards and finds that said petition is in conformance with the provisions and intent of the Kendall County Stormwater Management Ordinance.

NOW, THEREFORE, BE IT ORDAINED, BY THE COUNTY BOARD OF KENDALL COUNTY, ILLINOIS, as follows:

- 1. The Findings of Fact and Recommendation of the Kendall County Stormwater Management Oversight Committee attached hereto as Exhibit B is hereby accepted and the Findings of Fact set forth therein are hereby adopted as the Findings of Fact and Conclusions of this Kendall County Board.
- 2. The Kendall County Board hereby grants approval of the Petitioner's petition for a variance to Section 203 of the Kendall County Stormwater Management Ordinance regarding applicability of site runoff storage requirements subject to the following conditions:
 - A. The site shall be developed substantially in accordance with the attached site plan, attached hereto as Exhibit C.
 - B. The property owner shall follow all applicable Federal, State, and Local laws related to the development of this property as a forest preserve.
 - C. Failure to comply with one or more of the above conditions or restrictions could result in the amendment or revocation of this variance
 - D. If one or more of the above conditions is declared invalid by a court of competent jurisdiction, the remaining conditions shall remain valid.

<u>IN WITNESS OF</u>, this Ordinance has been enacted by majority vote of the Kendall County Board this 18th day of June, 2024.

State of Illinois		Petition 24-15
County of Kendall		
Attest:		
Debbie Gillette	Matt Kellogg	_
Kendall County Clerk	Kendall County Board Chairman	

EXHIBIT A: SUBAT FOREST PRESERVE LEGAL DESCRIPTION KENDALL COUNTY FOREST PRESRVE DISTRICT, KENDALL COUNTY, ILLINOIS

SOUTHERLY PARCEL

THAT PART OF THE NORTHEAST QUARTER OF SECTION 36, TOWNSHIP 37 NORTH, RANGE 6 EAST OF THE THIRD PRINCIPAL MERIDIAN, BEING DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 36; THENCE SOUTH 00 DEGREES 00 MINUTES 19 SECONDS WEST ALONG THE EAST LINE OF SAID QUARTER SECTION, 699.00 FEET FOR THE POINT OF BEGINNING; THENCE NORTH 89 DEGREES 49 MINUTES 17 SECONDS WEST, 1279.78 FEET; THENCE SOUTH 00 DEGREES 37 MINUTES 43 SECONDS EAST, 610.73 FEET TO THE CENTERLINE OF RIVER ROAD; THENCE NORTH 75 DEGREES 28 MINUTES 49 SECONDS EAST ALONG SAID CENTERLINE, 1315.05 FEET TO SAID EAST LINE OF SECTION 36; THENCE NORTH 00 DEGREES 00 MINUTES 19 SECONDS EAST ALONG SAID EAST LINE, 277.00 FEET TO THE POINT OF BEGINNING ALL IN THE TOWNSHIP OF LITTLE ROCK, KENDALL COUNTY, ILLINOIS.

NORTHERLY PARCEL

THAT PART OF THE SOUTHEAST QUARTER OF SECTION 25 AND PART OF THE NORTHEAST QUARTER OF SECTION 36, TOWNSHIP 37 NORTH, RANGE 6 EAST OF THE THIRD PRINCIPAL MERIDIAN BY BEING DESCRIBED BY BEGINNING AT THE SOUTHEAST CORNER OF SAID SECTION 25; THENCE NORTH 00 DEGREES 00 MINUTES 39.5 SECONDS WEST ALONG THE EAST LINE OF SAID QUARTER SECTION, 1212.83 FEET TO THE CENTERLINE OF SCHAEFER ROAD; THENCE SOUTH 88 DEGREES 03 MINUTES 05 SECONDS WEST ALONG SAID CENTERLINE, 1285.48 FEET TO THE WEST LINE OF SUB LOT 13 OF SAID SECTION 25 AS SHOWN ON PAGE 36 OF PLAT BOOK 4; THENCE SOUTH 00 DEGREES 02 MINUTES 47 SECONDS WEST ALONG SAID WEST LINE, 1301.73 FEET MORE OR LESS TO A POINT LYING 136.62 FEET SOUTH OF THE NORTH LINE OF SAID SECTION 36, SAID POINT BEING THE SOUTHEAST CORNER OF SUB LOT 2 OF SAID SECTION 36 AS SHOWN ON PAGE 36 OF PLAT BOOK 4; THENCE SOUTH 00 DEGREES 37 MINUTES 43 SECONDS EAST PARALLEL WITH THE EAST LINE OF SAID SUB LOT 3 OF SAID SECTION 36, 562.50 FEET; THENCE SOUTH 89 DEGREES 49 MINUTES 17 SECONDS EAST, 1279.78 FEET TO A PONT ON THE EAST LINE OF SAID SECTION 36; THENCE NORTH 00 DEGREES 00 MINUTES 19 SECONDS EAST ALONG SAID EAST LINE, 699.00 FEET TO THE POINT OF BEGINNING IN THE TOWNSHIP OF LITTLE ROCK, KENDALL COUNTY, ILLINOIS.

Exhibit B

The Kendall Stormwater Management Planning Committee approved the following Findings of Fact and Recommendation at their meeting on June 18, 2024, by a vote of ten (10) in favor and zero (0) in opposition.

FINDINGS OF FACT

The variance will not increase the probability of flood damage or create an additional threat to the public health, safety or welfare.

The variance requested is the minimum relief necessary to accomplish the objectives of the development without compromising the objectives of Section 102 of the Kendall Stormwater Management Ordinance.

The variance will not result in a reduction of water quality benefits as compared to compliance with ordinance requirements.

The variance is not requested solely for the purpose of reducing site runoff storage requirements.

The variance shall not cause conveyance of stormwater from the project to increase peak discharges beyond design capacity of existing offsite conveyance facilities for any storm event from the 2-year to the 100-year recurrence frequency.

RECOMMENDATION

Approval with the following conditions and restrictions:

- 1. The site shall be developed substantially in accordance with the submitted site plan.
- 2. The property owner shall follow all applicable Federal, State, and Local laws related to the development of this property as a forest preserve.
- 3. Failure to comply with one or more of the above conditions or restrictions could result in the amendment or revocation of this variance.
- 4. If one or more of the above conditions is declared invalid by a court of competent jurisdiction, the remaining conditions shall remain valid.

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH BY IBC 2018 EDITION AND SHALL CONFORM TO ALL OTHER APPLICABLE MUNICIPAL, STATE, AND FEDERAL REGULATIONS INCLUDING THE ILLINOIS ACCESSIBILITY CODE (2018) AND THE AMERICANS WITH DISABILITIES ACT.

A. GENERAL NOTES

- ALL CONTRACTORS ARE REQUIRED TO VISIT THE SITE AND BE KNOWLEDGEABLE REGARDING EXISTING CONDITIONS AND THEIR EFFECT ON THE PROPOSED WORK. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR, ANY CONDITIONS REQUIRING MODIFICATION BEFORE PROCEEDING WITH THE PROJECT.
- 2. NOTIFY THE OWNER'S REPRESENTATIVE A MINIMUM OF 72 HOURS PRIOR TO THE INTERRUPTION OF ANY UTILITY. 3. PROTECT AND KEEP IN SERVICE ACTIVE UNDERGROUND UTILITIES, PIPES, OR CONDUITS, WHETHER INDICATED ON THE DRAWINGS OR NOT, UNLESS SPECIFICALLY CALLED FOR TO BE REMOVED, RELOCATED, OR DISCONNECTED AND
- 4. CONTRACTORS AND SUBCONTRACTORS SHALL COORDINATE THEIR WORK WITH THAT OF OTHER TRADES.
- 5. NO WORK WILL BE PERMITTED TO BE INSTALLED WITHOUT RECEIPT AND SUBSEQUENT REVIEW OF FULL AND COMPLETE SUBMITTALS BY THE ARCHITECT/ENGINEER.
- 6. DO NOT SCALE DRAWINGS, DIMENSIONS INDICATED TAKE PRECEDENCE OVER SCALE.
- VERIFY ALL DIMENSIONS AND ELEVATIONS IN THE FIELD. WHERE DISCREPANCIES ARE FOUND BETWEEN DIMENSIONS OR ELEVATIONS SHOWN AND ACTUAL FIELD CONDITIONS, NOTIFY ARCHITECT/ENGINEER.
- 8. WHERE CONFLICTS MAY EXIST BETWEEN THE REQUIREMENTS OF PORTIONS OF THE CONTRACT DOCUMENTS, THE GREATER QUANTITY. HIGHER QUALITY OR MORE STRINGENT REQUIREMENT SHALL GOVERN. THEREFORE, BY EXECUTING A CONTRACT FOR CONSTRUCTION, THE CONTRACTOR AGREES THAT, IF IT RAISED NO QUESTIONS REGARDING SUCH CONFLICTS DURING THE BIDDING PROCESS, AND IN THE ABSENCE OF A CLARIFYING ADDENDUM ISSUED DURING THE BIDDING PROCESS, IT HAS VOLUNTEERED TO COMPLY WITH THE MORE EXPENSIVE REQUIREMENT AS PART OF ITS BAS BID AND IS NOT ENTITLED TO ANY ADDITIONAL COMPENSATION TO RESOLVE THE CONFLICT.
- 9. THE CONTRACT DOCUMENTS REQUIRE THE CONTRACTOR TO FURNISH AND INSTALL COMPLETE PRODUCTS. SYSTEMS AND SERVICES. BY EXECUTING A CONTRACT FOR CONSTRUCTION, THE CONTRACTOR AGREES THAT THE DRAWINGS SET FORTH THE DESIGN INTENT AND, THEREFORE, MAY NOT EXPRESSLY DEPICT EVERY LENGTH, SEGMENT, PIECE, PART, COMPONENT OR UNIT OF A PRODUCT, SYSTEM OR SERVICE. THE CONTRACTOR FURTHER AGREES THAT, AS PART O ITS BID, IT MUST FURNISH AND INSTALL EVERY LENGTH, SEGMENT, PIECE, PART, COMPONENT OR UNIT OF A PRODUCT, SYSTEM OR SERVICE AND, CONSEQUENTLY, THE CONTRACTOR IS NOT ENTITLED TO ANY ADDITIONAL COMPENSATION FOR ANY LENGTH, SEGMENT, PIECE, PART COMPONENT OR UNIT OF A PRODUCT, SYSTEM OR SERVICE BECAUSE IT IS NOT EXPRESSLY DEPICTED HEREIN.
- 10. THE CONTRACT DOCUMENTS REQUIRE THE CONTRACTOR TO INSTALL A CONTINUOUS AIR BARRIER THROUGHOUT THE BUILDING ENVELOPE, IN COMPLIANCE WITH THE 2018 INTERNATIONAL ENERGY CONSERVATION CODE (IECC), SECTION C402.5 - AIR LEAKAGE. CONTRACTOR AND ITS SUBCONTRACTORS AGREE TO BE JOINTLY AND SEPARATELY RESPONSIBLE FOR COORDINATING AND VERIFYING THAT ALL SOURCES OF AIR LEAKAGE IN THE BUILDING THERMAL ENVELOPE ARE CAULKED, GASKETED, WEATHER STRIPPED, OR OTHERWISE APPROPRIATELY SEALED AIR-TIGHT USING CODE- COMPLIANT ALTERNATIVES AS APPROPRIATE FOR EACH MATERIAL AND CONDITION/LOCATION. PROVIDE AIR BARRIER MATERIALS HAVING AN AIR PERMEABILITY NO GREATER THAN 0.004 cfm/ft2 (L/sm2) UNDER PRESSURE DIFFERENTIAL OF 0.3 INCHES WATER GAUGE (75 Pa) WHEN TESTED IN ACCORDANCE WITH ASTM E2178, AND COMPLY WITH IECC 2018 SECTION C402.5.1.2.1 - MATERIALS.

GENERAL NOTES

STANDARD ABBREVIATIONS						
0	AT	EWH	ELECTRIC WATER HEATER	PTN	PARTITION	
A B	ANCHOR BOLT	EXIST	EXISTING	PVMT	PAVEMENT	
ABR	ABRASIVE	EXP CONST	EXPANSION EXPOSED CONSTRUCTION	PC	PIECE	
ACP ACT	ACOUSTICAL CEILING PANEL ACOUSTICAL CEILING TILE	EXP CONST FD	EXPOSED CONSTRUCTION FLOOR DRAIN	PL PLAM	PLATE PLASTIC LAMINATE(D)	
AFF	ABOVE FINISH FLOOR	FDN	FOUNDATION	PL	PLASTER	
AFG	ABOVE FINISH GRADE	FNDN	FOUNDATION	PLB'G	PLUMBING	
ACOU	ACOUSTIC	FE	FIRE EXTINGUISHER	PLB'G CONTR	PLUMBING CONTRACTOR	
ADD'N	ADDITION ADDITIONAL	FEC FHC	FIRE EXTINGUISHER CABINET FIRE HOSE CABINET	PLYWD	PLYWOOD	
ADD'L ADJ	ADJACENT OR ADJUSTABLE	FIN	FINISH	PNT PO	PAINT PRECAST (CONCRETE) OPENING	
AL	ALUMINUM	FLR	FLOOR	PVC	POLYVINYL CHLORIDE	
ALT	ALTERNATE	FRT SUN'S	FIRE RETARDANT TREATED	PL-(1)	GYPSUM PLASTER (TYPE)	
ANCHR AP	ANCHOR ACCESS PANEL	FUR CHN'L FTG	FURRING CHANNEL FOOTING	R	RISER	
APPROX	APPROXIMATE	GA	GAUGE	R OR RAD RD	RADIUS ROOF DRAIN	
ASPH	ASPHALT	GALV	GALVANIZED	RO	ROUGH OPENING	
AUTO	AUTOMATIC	GEN CONTR GC	GENERAL CONTRACTOR GENERAL CONTRACTOR	RF (1)	RUBBER FLOORING (TYPE)	
AVG BSMT	AVERAGE BASEMENT	GL	GLASS	RH	RIGHT HAND	
B/	BOTTOM OF	GYP BD-(1)	GYPSUM WALL BOARD (TYPE)	REF	REFERENCE	
BD	BOARD	GYP PL-(1)	GYPSUM PLASTER (TYPE)	REINF REQ'D	REINFORCE/REINFORCING/REINFORCED REQUIRED	
BET	BETWEEN	H	HIGH	RM	ROOM	
BIT BLDG	BITUMINOUS BUILDING	HD HDNR	HEAVY DUTY OR HARD HARDENER	SF	SQUARE FOOT	
BLKG	BLOCKING (WOOD)	HD WD-(1)	HARD WOOD (TYPE)	SI	SQUARE INCH	
ВМ	BEAM	HDWR	HARDWARE	SK SS	SINK STAINLESS STEEL	
B.M.	BENCH MARK	HT	HEIGHT	SSK	SERVICE SINK	
BRG BRKT	BEARING BRACKET	HM HP	HOLLOW METAL HIGH POINT	SQ	SQUARE	
BRK	BRICK	HORIZ	HORIZONTAL	SCHED	SCHEDULE	
BT STL PL	BENT STEEL PLATE	HTG	HEATING	SEAL/HDNR SEC	SEALER/HARDENER SECTION	
CJ	CONSTRUCTION OR CONTRACTION JOINT	HVAC	HEATING/VENTILATING/AIR CONDITIONING	SHT	SHEET	
CAB CEM PL-(1)	CABINET CEMENT PLASTER (TYPE)	IN ID	INCH INSIDE DIAMETER	SIM	SIMILAR	
CT PAV-(1)	CERAMIC PAVER TILE (TYPE)	INCL	INCLUDE/INCLUDING/INCLUDED	SOG	SLAB ON GRADE	
CIP	CAST-IN-PLACE	INSUL	INSULATION/INSULATING/INSULATED	SPEC(S)	SPECIFICATION(S)	
CLG	CEILING	JT	JOINT	SPC'G SPK'R	SPACING SPEAKER	
CLR C.O.	CLEAR CLEAN-OUT	KD	KNOCK DOWN	STD	STANDARD	
CMU	CONCRETE MASONRY UNIT	LAM	LONG LAMINATE/LAMINATING/LAMINATED	STD WT	STANDARD WEIGHT	
COL	COLUMN	LAV	LAVATORY	STL STRUCT	STEEL	
COMB	COMBINATION	LH	LEFT HAND	SUSP	STRUCTURE OR STRUCTURAL SUSPEND(ED)	
COMP CONC	COMPRESSIBLE OR COMPACTED CONCRETE	LP LT WT	LOW POINT LIGHTWEIGHT	SYM	SYMMETRICAL	
CONC OPNG	CONCRETE OPENING	LI WI	LIVE LOAD	T	TREAD	
COND	CONDITION	LLH	LONG LEG HORIZONTAL	T&G	TONGUE AND GROOVE	
CONT	CONTINUOUS	LLV	LONG LEG VERTICAL	T/BEAM T/BEAM	TOP OF TOP OF BEAM	
CONTR CPT-(1)	CONTRACT(OR) CARPET (TYPE)	LVR MO	LOUVER MASONRY OPENING	T/C	TOP OF BLAM TOP OF CURB	
CT-(1)	CERAMIC TILE (TYPE)	MT	METAL THRESHOLD	T/FNDN	TOP OF FOUNDATION	
CTR	COUNTER	MAS	MASONRY	T/STL	TOP OF STEEL	
CTR SK	COUNTER SINK	MATL	MATERIAL	T/WALL	TOP OF WALL	
CTRS	CENTER(S)	MAX MB (16)	MAXIMUM MARKERBOARD (LENGTH IN FEET)	TB (4)	TACKBOARD (LENGTH IN FEET)	
CUH CUV	CABINET UNIT HEATER CABINET UNIT VENTILATOR	MECH	MECHANICAL	T/MAS TYP	TOP OF MASONRY	
DIA	DIAMETER	MECH CONTR	MECHANICAL CONTRACTOR	UD	TYPICAL (WINDOW) UNIT DIMENSION	
DIM	DIMENSION	MFR	MANUFACTURER	UNO	UNLESS NOTED OTHERWISE	
DN DO	DOWN DOOR OPENING	MIN MISC	MINIMUM OR MINUTE(S) MISCELLANEOUS	VBC	VINYL BASE COVED	
DR DR	DOOR	MSB	MOP SERVICE BASIN (SINK)	VBS VCT	VINYL BASE STRAIGHT	
DWGS	DRAWINGS	MT(D)	MOUNT(ED)	VEN PL (1)	VINYL COMPOSITION TILE VENEER PLASTER (TYPE)	
DTL	DETAIL	MTL	METAL	VERT	VERTICAL	
DWL'S EA	DOWELS EACH	NIC NOM	NOT IN CONTRACT	W	WIDE OR WIDTH	
EJ EJ	EXPANSION JOINT	NOM NTS	NOMINAL NOT TO SCALE	W/	WITH	
EL	ELEVATION	NO	NUMBER	W/O WCG	WITHOUT WALL CORNER GUARD	
ELEC	ELECTRIC/ELECTRICAL	OA	OVERALL OR OUTSIDE AIR	WCG WD	WOOD	
ELEC CONTR ELEV	ELECTRICAL CONTRACTOR ELEVATOR OR ELEVATION	OC OD	ON CENTER OUTSIDE DIAMETER	WDW	WINDOW	
EMBED	EMBEDMENT	OF	OUTSIDE DIAMETER OUTSIDE FACE OR OPPOSITE FACE	WT WD	WEIGHT	
EMER	EMERGENCY	OPNG	OPENING	WP WWF	WATER PROOF WELDED WIRE FABRIC	
EP FO	EPOXY FOUAL	OPP PSF	OPPOSITE OR OPPOSITE HAND POUNDS PER SQUARE FOOT	WSB	WALL SERVICE BASIN	

EXTERIOR ELEVATION ELEVATION NUMBER-─\A719 / DRAWING NUMBER -**INTERIOR ELEVATION** ELEVATION NUMBER -DRAWING NUMBER -SECTION REFERENCE SECTION NUMBER -DRAWING NUMBER — **26** COLUMN NO KENDALL COUNTY FOREST PRESERVE DISTRICT REFERENCE LINE NO. LOCATION 100'-0" ELEVATION ROOM 204 NUMBER

PROJECT SUBAT NATURE CENTER **ELDAMAIN RD. PLANO, IL 60545**

KENDALL COUNTY FOREST OWNER **PRESERVE** 110 W MADISON ST YORKVILLE, IL 60560

ARCHITECT/ **ENGINEER**

DETAIL CALLOUT

DETAIL NUMBER-

DRAWING NUMBER -

DOOR NO. NEW

DOOR NO. EXISTING

NOMINAL THICKNESS -

CONSTRUCTION TYPE -

SPECIAL CONDITION

KEYNOTE

IDENTIFICATION

WINDOW TYPE

IDENTIFICATION

IDENTIFICATION

ELEVATION

FIRE-RATING

2-HOUR

CONCRETE

CONCRETE MASONRY IN PLAN (RUNNING BOND)

BRICK MASONRY IN

MASONRY IN PLAN (STACK BOND)

STONE MASONRY IN

RAKED JOINT IN

CTRL./EXP. JOINT

BRICK MASONRY IN

SECTION DETAIL

CONCRETE

MASONRY IN

SECTION DETAIL

STONE MASONRY IN SECTION DETAIL

STEEL IN SECTION

DISCONTINUOUS ROUGH WOOD

BLOCKING IN

CONTINUOUS

IN SECTION

RIGID BOARD INSULATION

RIGID BOARD INSULATION (ROOFING)

BATT INSULATION

GYPSUM BOARD

ACOUSTICAL

BITUMINOUS

in Section

AGGREGATE

SECTION

UNDISTURBED

EARTH BACKFILL

(ASPHALT) PAVING

BALLAST, FILL OR BACKFILL IN

CONCRETE

CEILING PANEL

FINISHED WOOD IN SECTION DETAIL

ROUGH WOOD FRAMING/BLOCKING

TOILET ACCESSORY

A1224

203.2

203.1X

7.531

KLUBER ARCHITECTS + ENGINEERS 41 W BENTON STREET **AURORA, ILLINOIS 60506** TEL (630) 406-1213 FAX (630) 406-9472 www.kluberinc.com

L501 CONSTRUCTION DETAILS

A330 ROOF PLAN BUILDING SECTIONS

A700 EXTERIOR BUILDING ELEVATIONS EXTERIOR BUILDING ELEVATIONS A800 DOOR, FRAME & HARDWARE SCHEDULES A1200 SECTION DETAILS

SO10 GENERAL NOTES CODE & LOADING, TESTING &

FOUNDATION & SLAB PLAN, SECTIONS AND DETAILS S311 GEOMETRIC SLAB PLAN & FOUNDATION SECTIONS AND

REQUIRED CODE COMPLIANCE INFORMATION

REQUIRED PLAN COVER SHEET INFORMATION FOR REVIEW UNDER 2018 INTERNATIONAL CODES, STATE OF ILLINOIS ACCESSIBILITY CODE, AND THE STATE OF ILLINOIS PLUMBING CODE

CODE REVIEW DATA

GENERAL STATEMENT OF OVERALL PROJECT SCOPE AND INTENT:

PROJECT CONSISTS OF AN OUTDOOR NATURE CENTER WITH TWO SMALL SHEDS AND NO HABITABLE INTERIOR SPACES. THE PROJECT SHALL BE CONSIDERED USE GROUP U.

- A. USE AND OCCUPANCY GROUP(S) CLASSIFICATION: U.
- B. TYPE OF CONSTRUCTION: VB
- C. SQUARE FOOTAGE OF BUILDING: 1,583 SF* INCLUDING UNDER CANOPY AND SHEDS.
- ALLOWABLE SQUARE FOOTAGE: 5,500 SF.
- D. OCCUPANT LOAD BASED ON INTERNATIONAL BUILDING CODE: 83 ASSEMBLY AND ACCESSORY STORAGE OCCUPANCY.
- E. OCCUPANT LOAD BASED ON ILLINOIS PLUMBING CODE: NOT APPLICABLE.
- F. DESIGNED LIVE LOADS: 20 PSF.
- G. THE DESIGN PROFESSIONALS IN RESPONSIBLE CHARGE ARE IDENTIFIED IN THE SEALS AND CERTIFICATES AREA, BELOW.

APPLICABLE CODES

2018 INTERNATIONAL BUILDING CODE 2018 INTERNATIONAL MECHANICAL CODE 2018 INTERNATIONAL FUEL AND GAS CODE 2006 INTERNATIONAL FIRE CODE 2017 NATIONAL ELECTRICAL CODE LOCAL AMENDMENTS TO THE ABOVE CODES

2014 ILLINOIS PLUMBING CODE 2021 ILLINOIS ENERGY CONSERVATION CODE (2021 INTERNATIONAL ENERGY CONSERVATION CODE W/STATE AMENDMENTS)

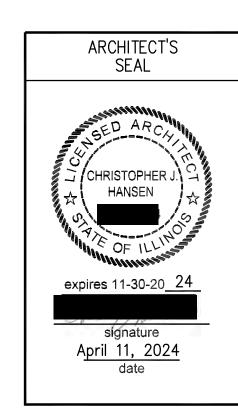
2018 ILLINOIS ACCESSIBILITY CODE

SEALS & CERTIFICATIONS

CIVIL ENGINEER'S SEAL

I HAVE PREPARED. OR CAUSED TO BE PREPARED UNDER MY DIRECT SUPERVISION, THE ATTACHED PLANS AND SPECIFICATIONS AND STATE THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND TO THE EXTENT OF MY CONTRACTUAL OBLIGATION, THEY ARE IN COMPLIANCE WITH IBC 2018 EDITION, THE ENVIRONMENTAL BARRIERS ACT AND THE ILLINOIS ACCESSIBILITY

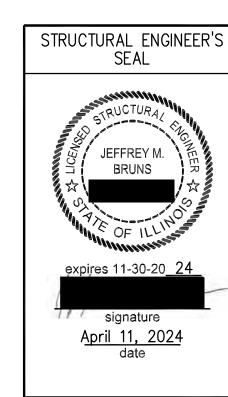
KLUBER, INC. ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE #184-001284



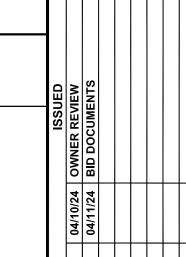
"G" SERIES, "A" SERIES

* PROFESSIONAL * ENGINEER THOUSE OF ILLING EXP. 11/30/25 April 11, 2024

"G" SERIES, "L" SERIES



"G" SERIES, "S" SERIES



JOB NO. 23-429-1495 DRAWN CHECKED APPROVED SHEET TITLE

COVER SHEET, **GENERAL NOTES,** SYMBOLS AND DRAWING INDEX

SHEET NUMBER

THE MATERIALS, ABBREVIATIONS, AND DRAFTING SYMBOLS LEGEND ARE EACH AN ALL INCLUSIVE MASTER LIST USED BY THIS FIRM. THE INCLUSION OF THESE LEGENDS INTO THESE DOCUMENTS DOES NOT IMPLY THAT ALL THE SYMBOLS OR MATERIALS INCLUDED IN THESE LEGENDS ARE INCORPORATED INTO THIS PROJECT. ABBREVIATIONS MAY APPEAR WITH PERIODS OR OTHER PUNCTUATION SEPARATING CHARACTERS ON THE DRAWINGS; THE MEANING REMAINS THE SAME.

POUNDS PER SQUARE FOOT

POUNDS PER SQUARE INCH

PRESSURE TREATED OR PAINT

PSF

ΕW

EWC

EACH WAY

ELECTRIC WATER COOLER

NOTE: SCALES DEPICTED ON THIS DRAWING ARE NOT CORRECT UNLESS PLOTTED SHEET SIZE IS 30 X 42 INCHES.

G100 COVER SHEET, GENERAL NOTES, SYMBOLS, & DRAWING INDEX

ACCESSIBILITY REQUIREMENTS

EXISTING CONDITONS & REMOVAL PLANS STORMWATER POLLUTION PREVENTION PLAN

LAYOUT PLAN - OVERALL L201 LAYOUT, DIMENSION, & GRADING PLAN - NORTH

LAYOUT, DIMENSION, & GRADING PLAN — SOUTH

LAYOUT PLAN — PARKING LOT ENLARGEMENT

LAYOUT PLAN - NATURE CENTER ENLARGEMENT

DIMENSION PLAN - PARKING LOT ENLARGEMENT DIMENSION PLAN — NATURE CENTER ENLARGEMENT GRADING PLAN — PARKING LOT ENLARGEMENT

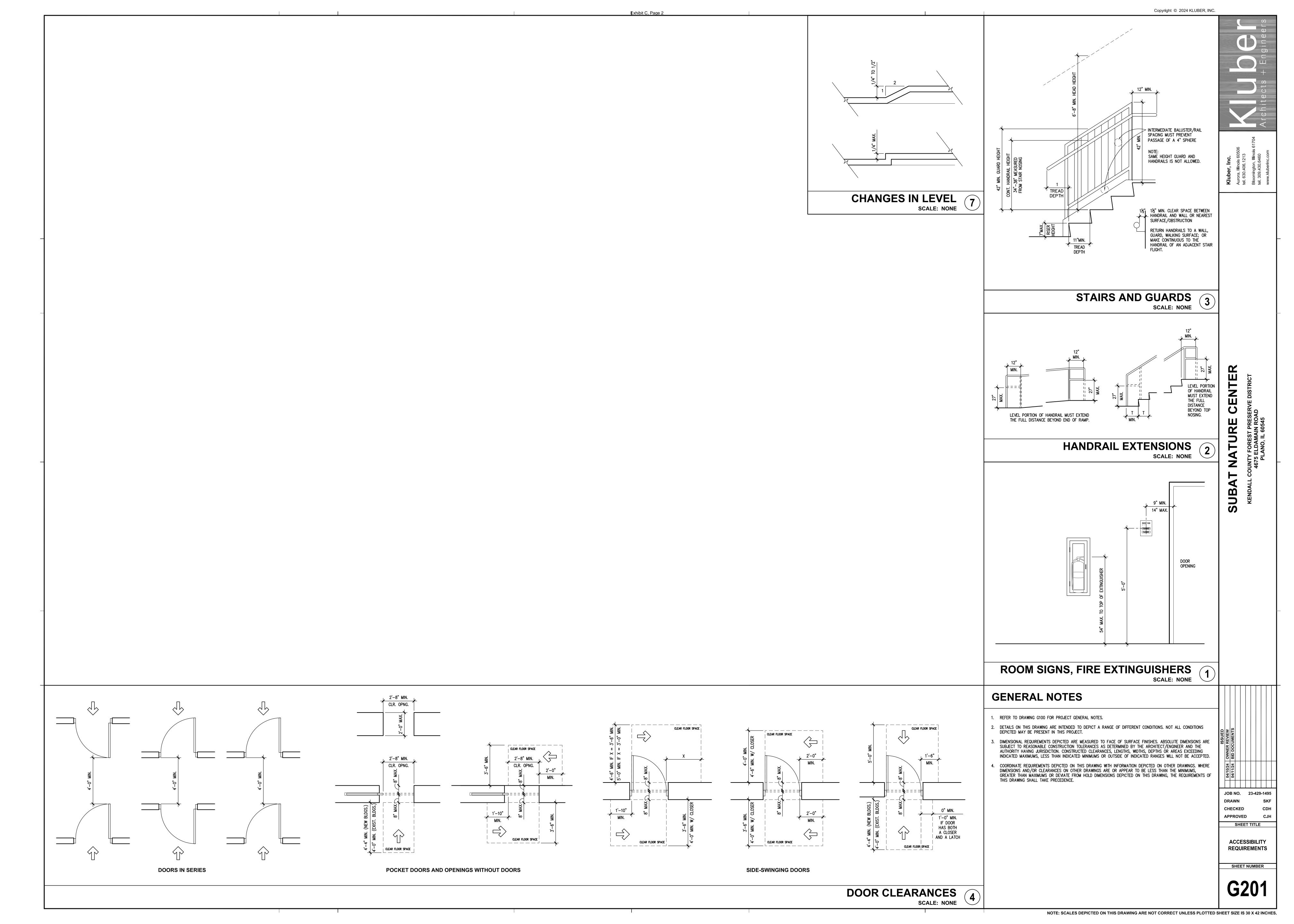
GRADING PLAN - NATURE CENTER ENLARGEMENT L500 CONSTRUCTION DETAILS

A010 ARCHITECTURAL SITE PLAN

ARCHITECTURAL FIRST FLOOR PLAN

S320 ROOF FRAMING PLANS, SECTIONS AND DETAILS

S800 SCHEDULES, SECTIONS & DETAILS



Chitects + Engineer

Aurora, Illinois 60506 tel. 630.406.1213 Bloomington, Illinois 61 tel. 309.430.6460 www.kluberinc.com

Auron Auron Auron Auron Auron Chicago, Illinois 60608
, Plainfield, Illinois 60544
,ww.uplandDesign.com

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Landscape Architectur Landscape Architectur 1250 W 18th St, Chica 24042 Lockport St, Plair 815-254-0091 www.u

NDALL CO FOREST PRESERVE
ELDAMAIN RD
PLANO, IL 60545

KENDALL CO FORES ELDAMAIN PLANO, IL 60

CIVIL ENGINEER
Engineering Resource Associates
3s701 West Avenue, Suite 150
Warrenville, Illinois 60555
IL License 184-001186

JOB NO. 23-429-1495
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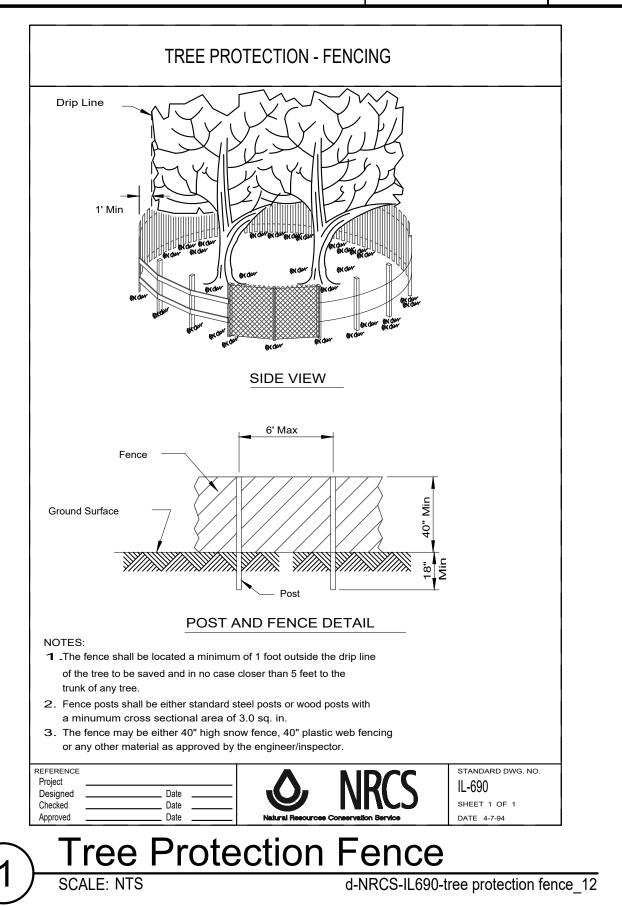
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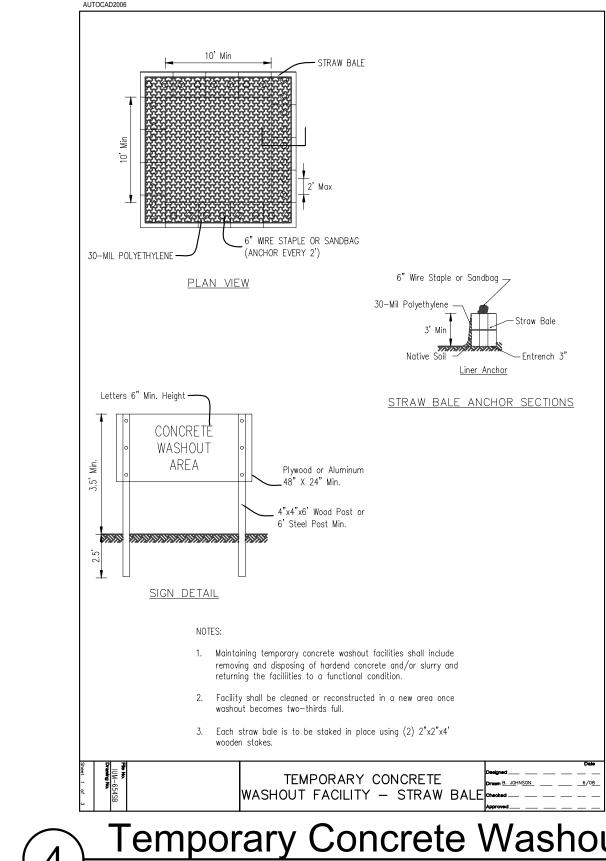
EXISTING CONDITIONS

& REMOVALS PLAN

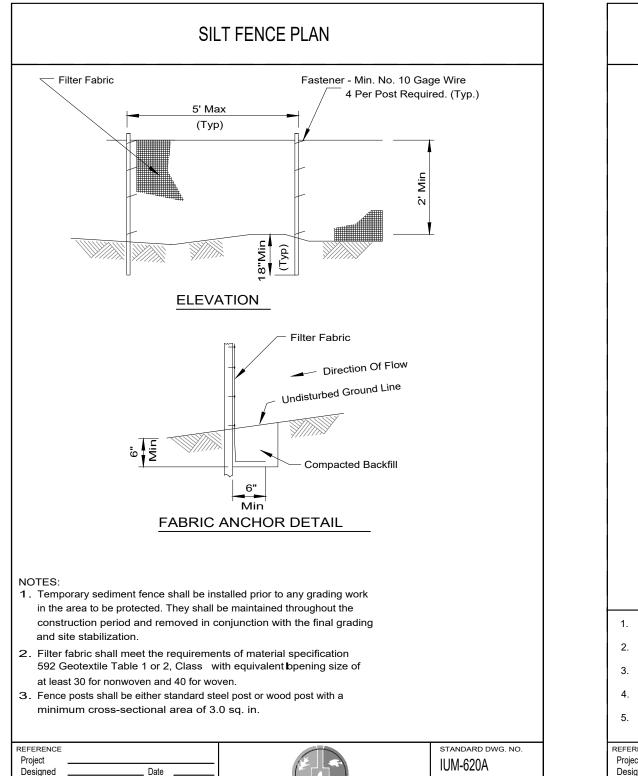
SHEET NUMBER

L100



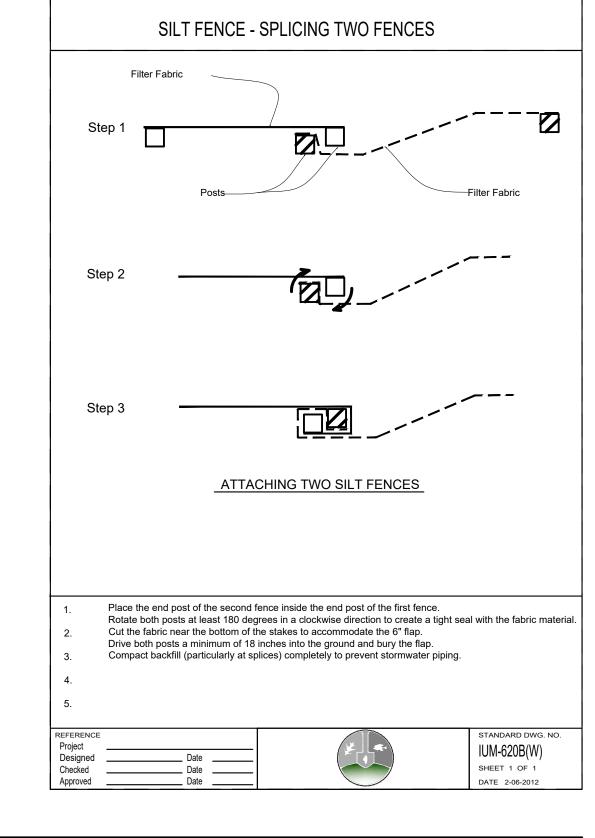


Temporary Concrete Washout d-IUM-654SB-concrete washout

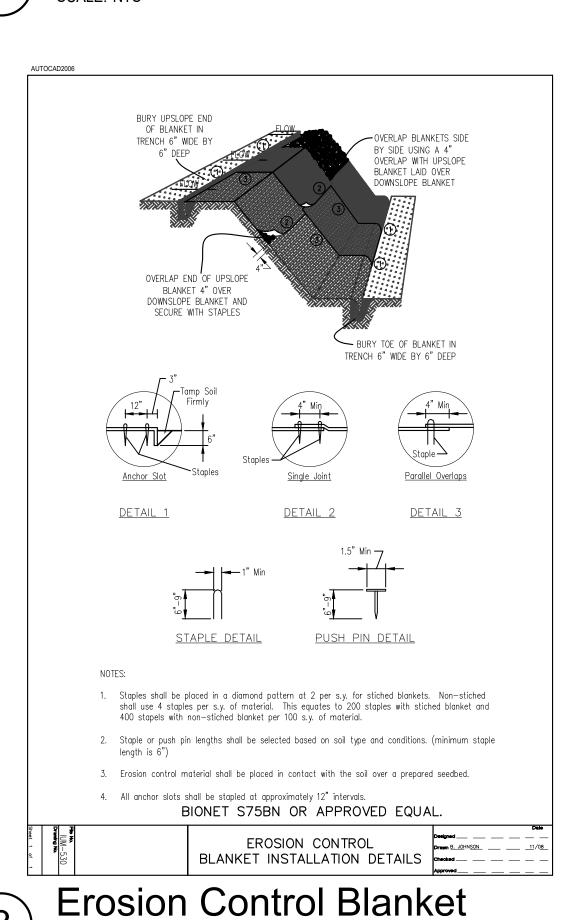


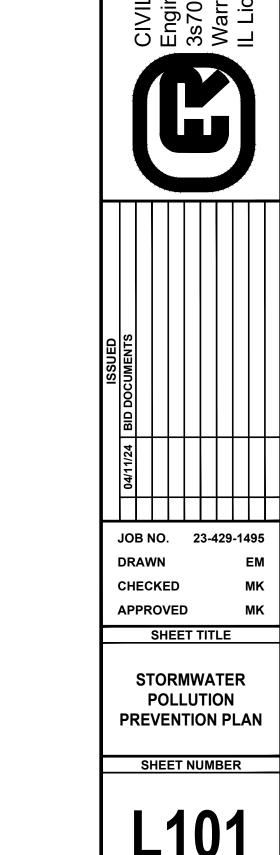
SHEET 1 OF 2

d-IUM-530-erosion control blanket 1



d-IUM 620B-silt fence 12





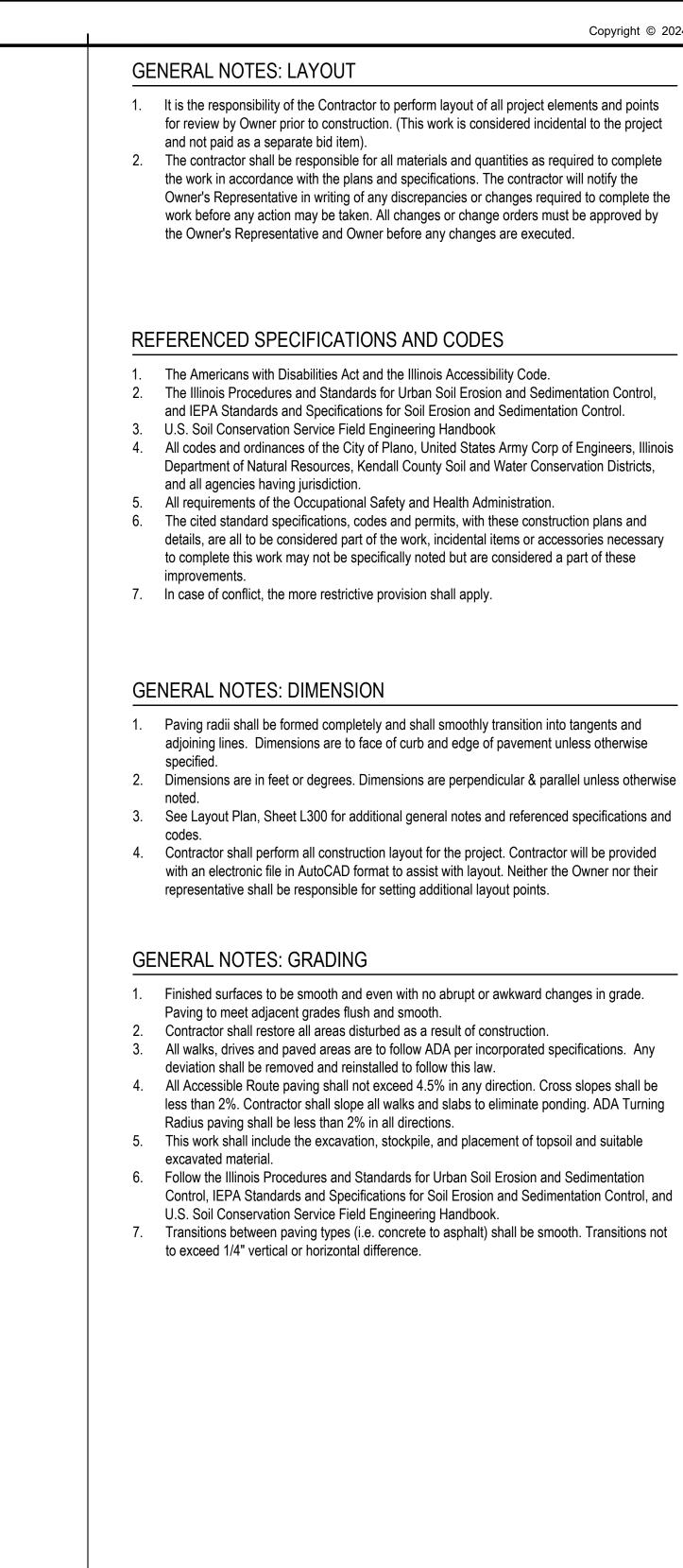
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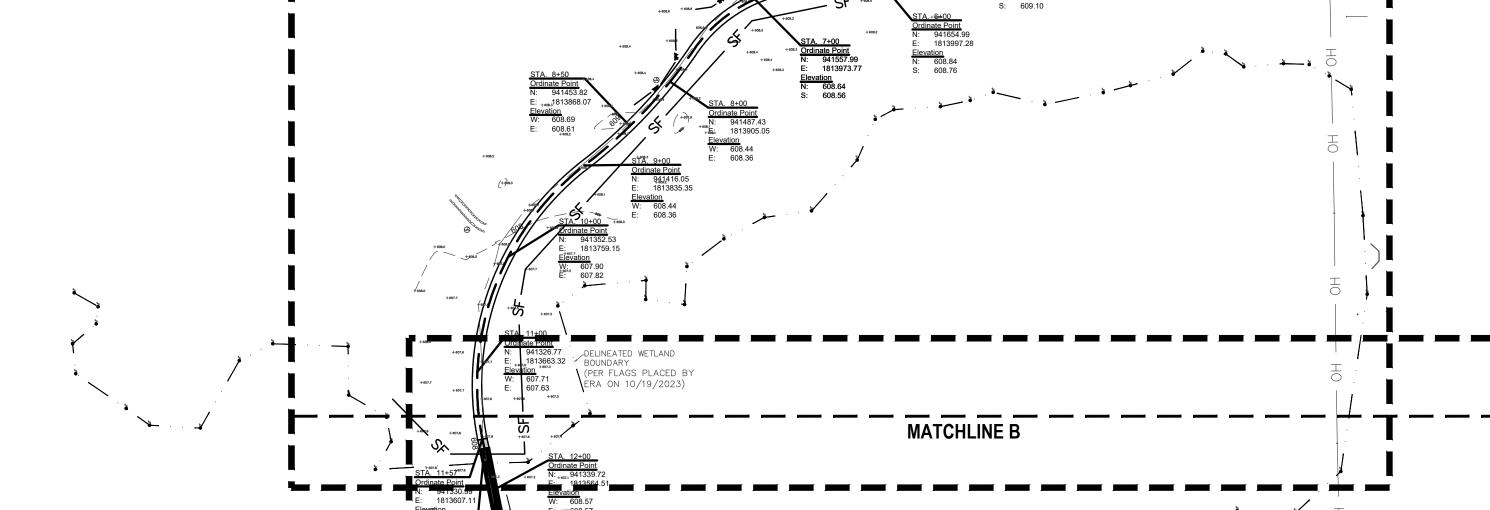
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LAYOUT PLAN - OVERALL

SHEET TITLE

SHEET NUMBER **L200**





MATCHLINE A

Nature Center

Enlargement

North Trail

Enlargement - L201

South Trail

Enlargement - L202

Parking Lot

Enlargement

- L203, L301, L401

2. The Illinois Procedures and Standards for Urban Soil Erosion and Sedimentation Control,

4. All codes and ordinances of the City of Plano, United States Army Corp of Engineers, Illinois Department of Natural Resources, Kendall County Soil and Water Conservation Districts,

6. The cited standard specifications, codes and permits, with these construction plans and details, are all to be considered part of the work, incidental items or accessories necessary to complete this work may not be specifically noted but are considered a part of these

1. Paving radii shall be formed completely and shall smoothly transition into tangents and adjoining lines. Dimensions are to face of curb and edge of pavement unless otherwise

3. See Layout Plan, Sheet L300 for additional general notes and referenced specifications and

4. Contractor shall perform all construction layout for the project. Contractor will be provided with an electronic file in AutoCAD format to assist with layout. Neither the Owner nor their representative shall be responsible for setting additional layout points.

3. All walks, drives and paved areas are to follow ADA per incorporated specifications. Any

4. All Accessible Route paving shall not exceed 4.5% in any direction. Cross slopes shall be less than 2%. Contractor shall slope all walks and slabs to eliminate ponding. ADA Turning

6. Follow the Illinois Procedures and Standards for Urban Soil Erosion and Sedimentation

7. Transitions between paving types (i.e. concrete to asphalt) shall be smooth. Transitions not

Asphalt Paving Concrete Paving

Crushed Limestone Surfacing

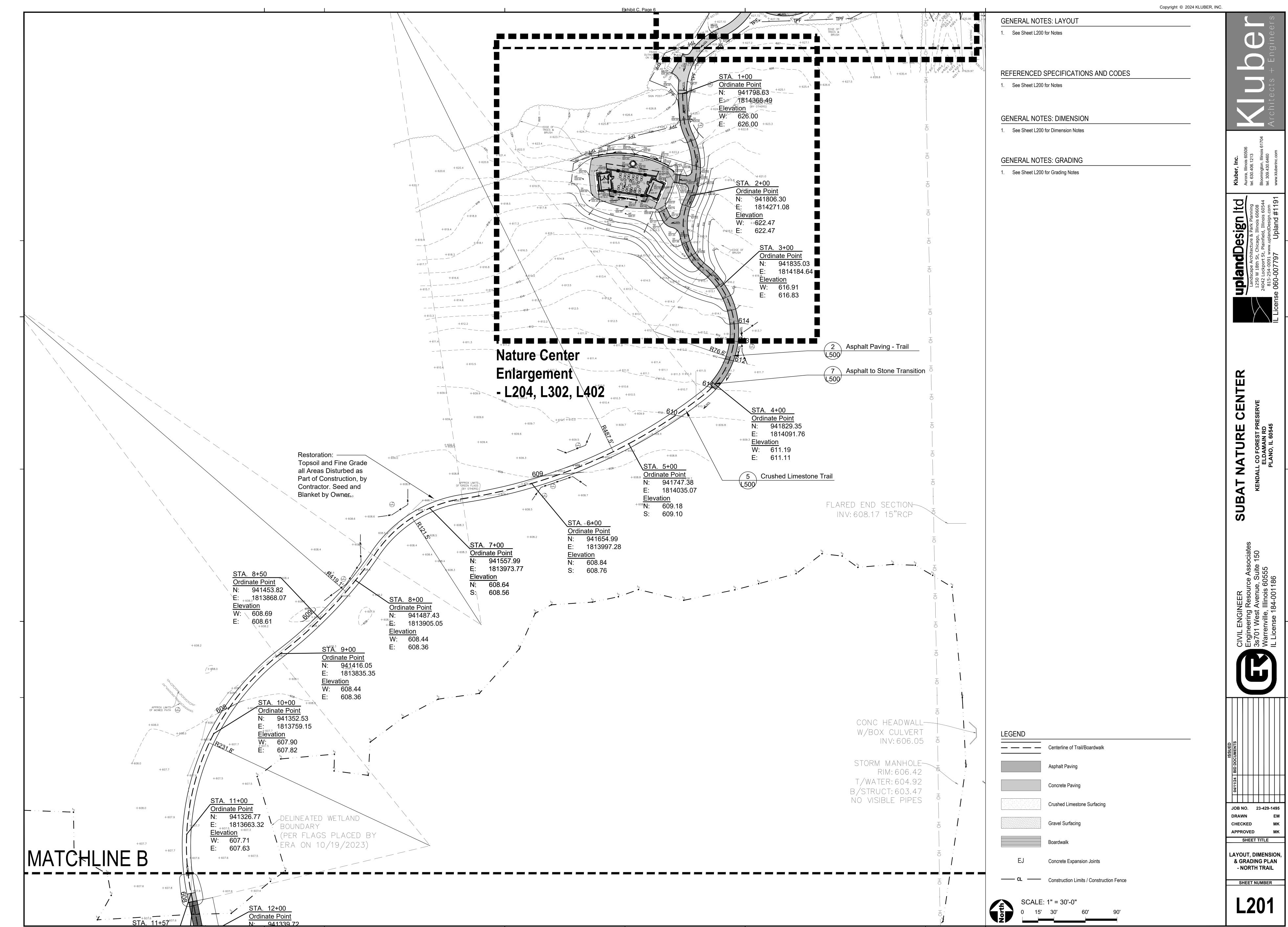
Boardwalk

Gravel Surfacing

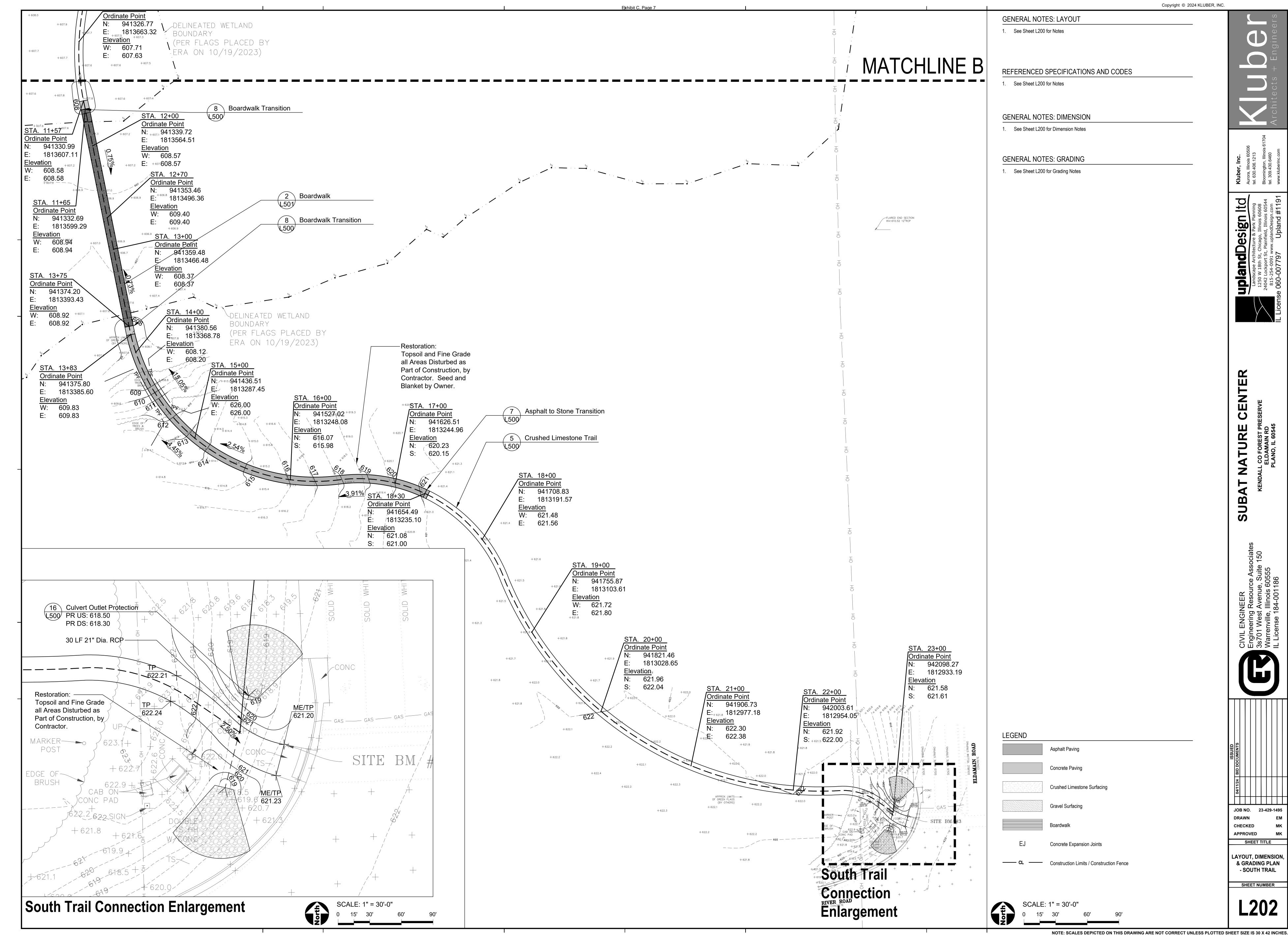
— CL — Construction Limits / Construction Fence

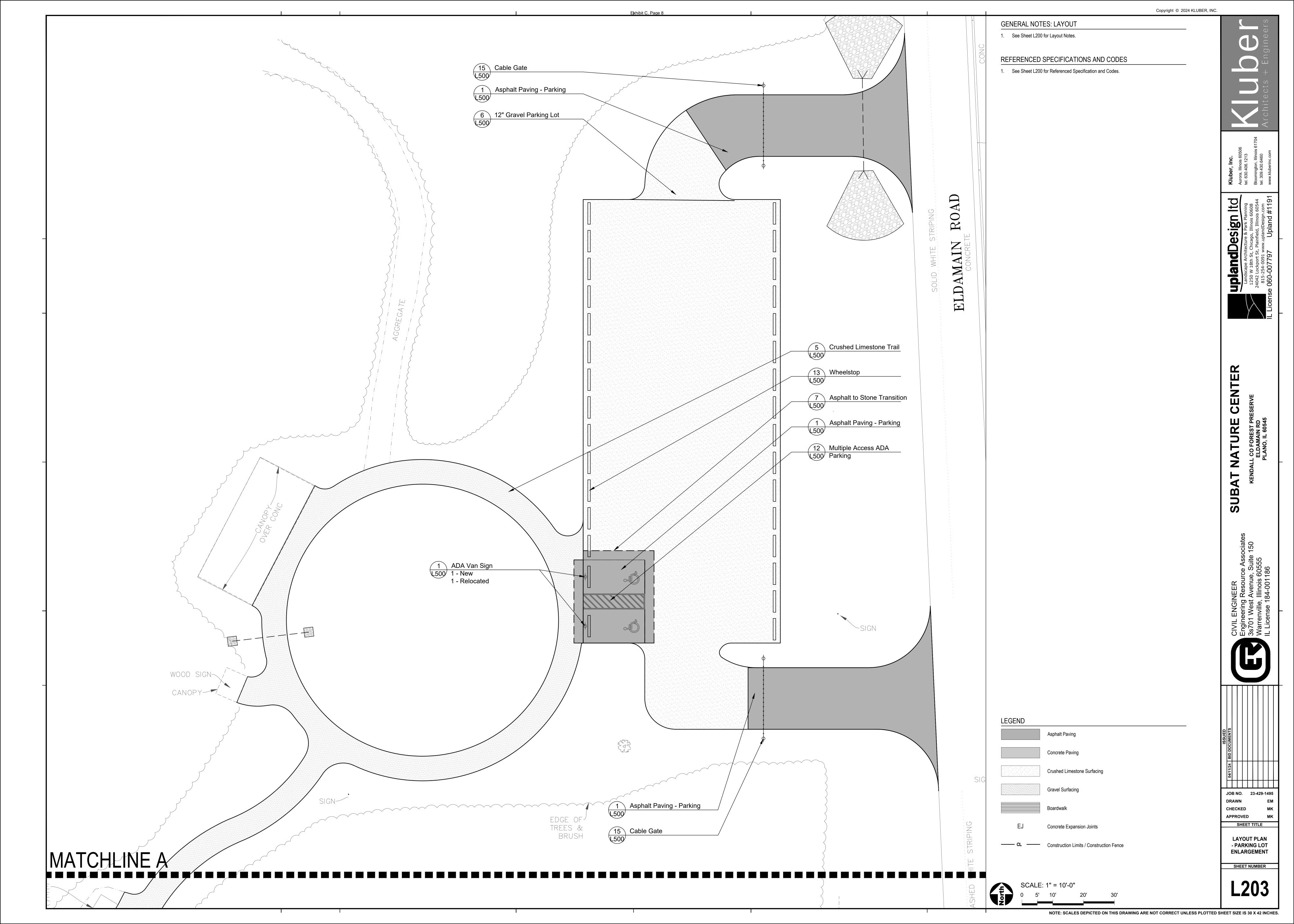
Concrete Expansion Joints

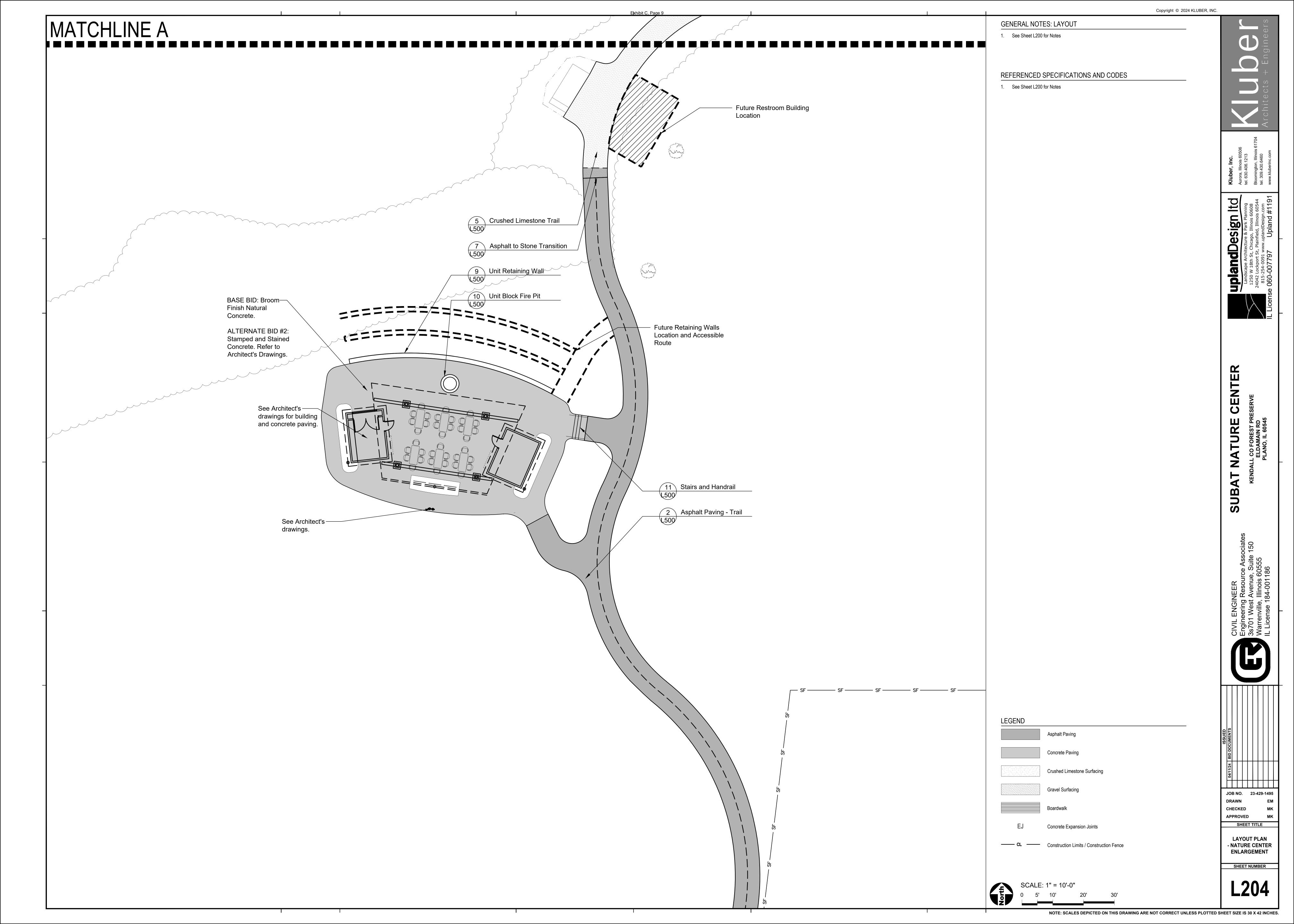
SCALE: 1" = 80'-0"

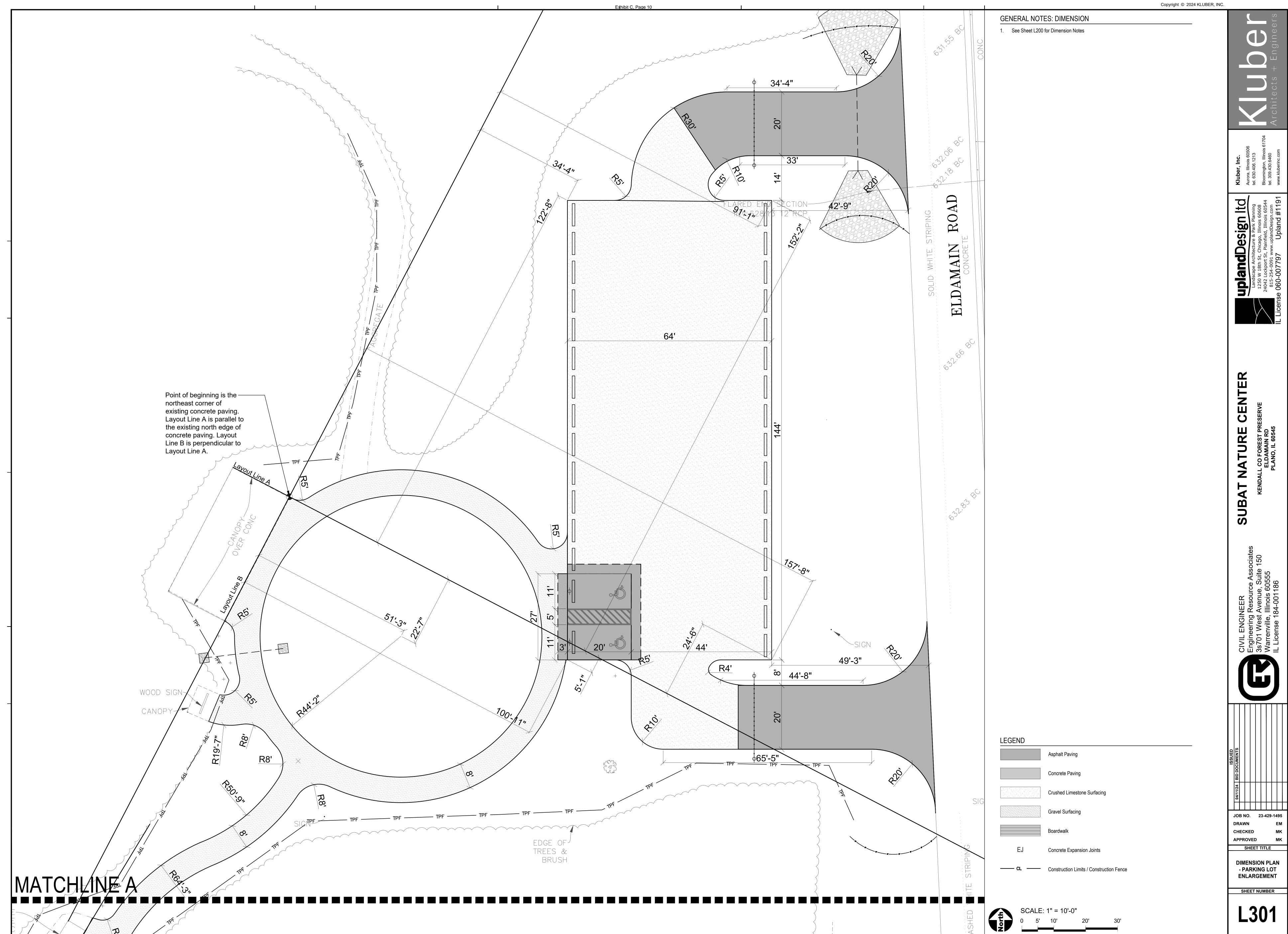


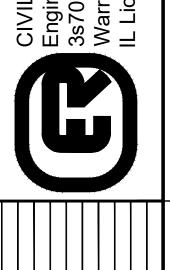
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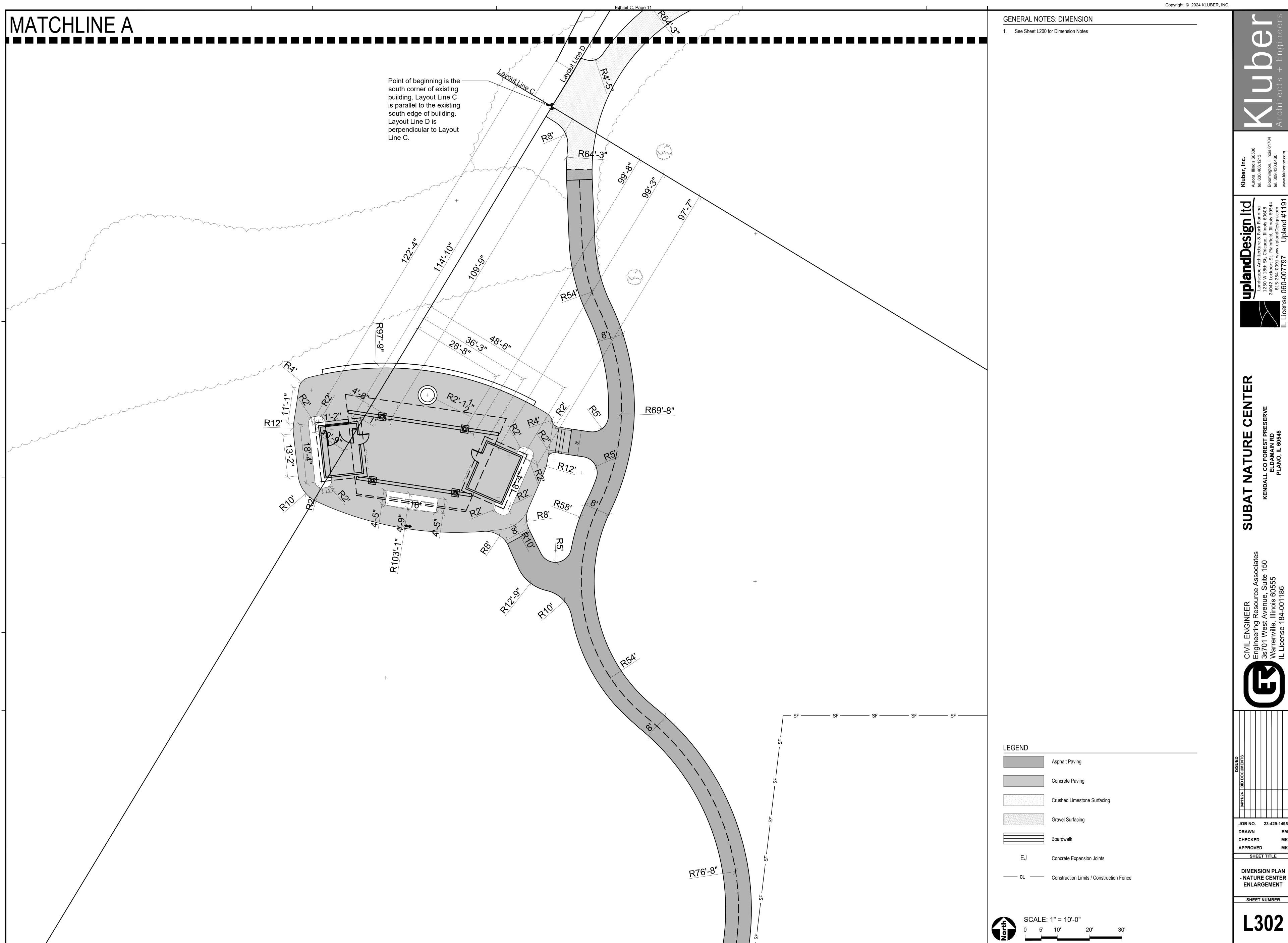




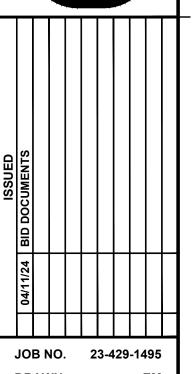






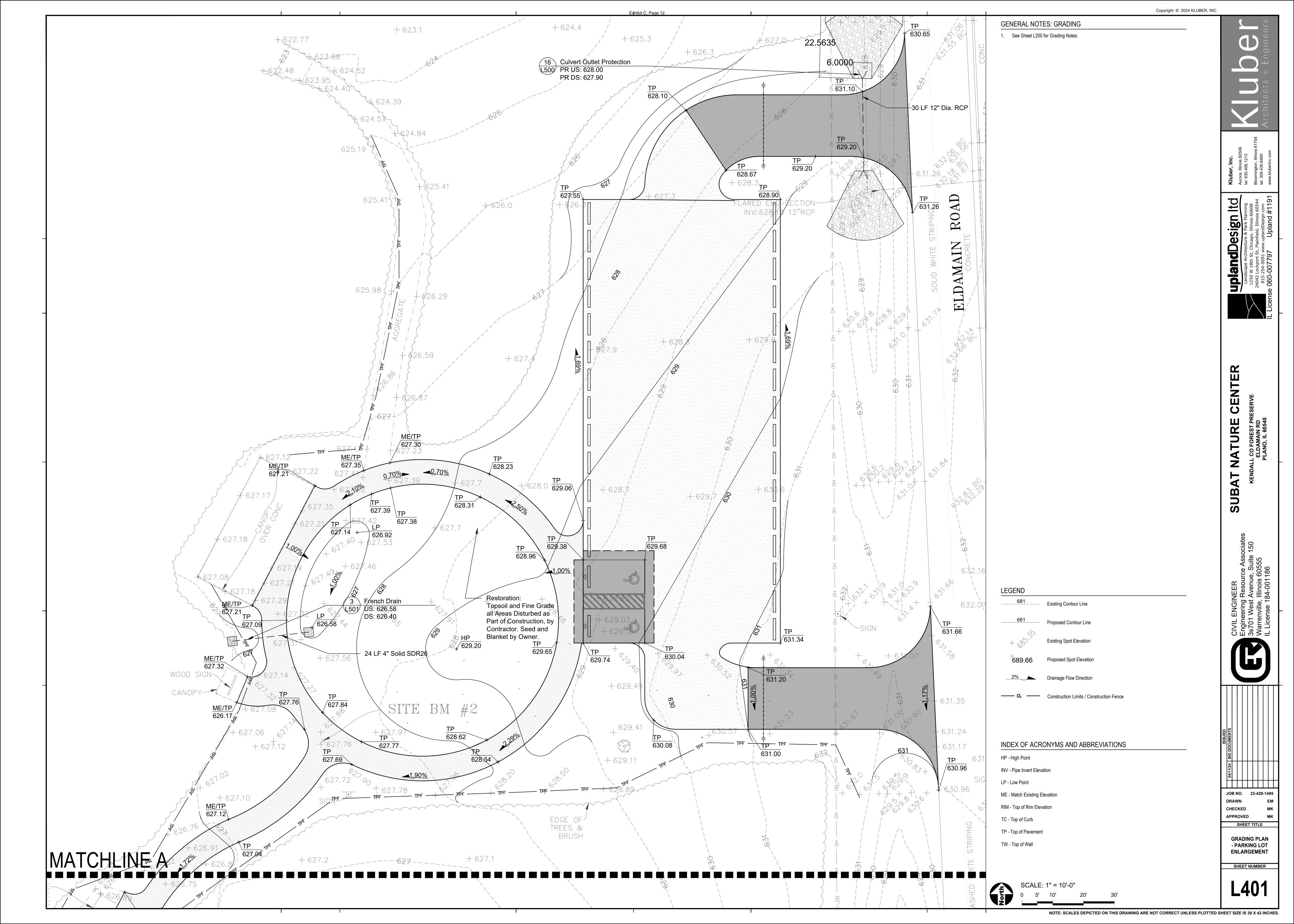


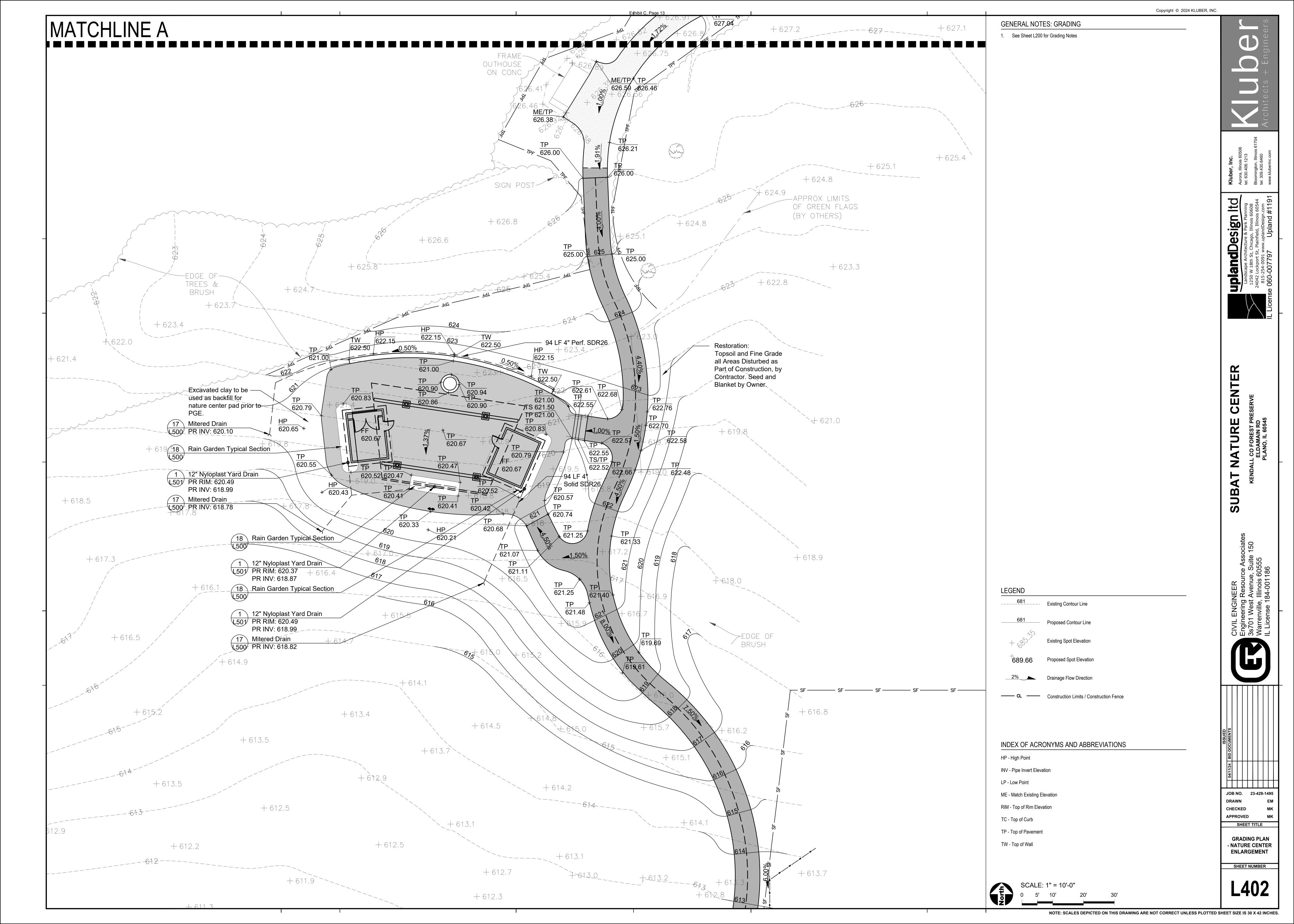




DIMENSION PLAN - NATURE CENTER **ENLARGEMENT**

SHEET NUMBER





KIChitects + Engineers

Aurora, Illinois 60506
tel. 630.406.1213
Bloomington, Illinois 61704
tel. 309.430.6460
A

Aurora, Illinois 6
k Planning
tel. 630.406.121
lois 60608
llinois 60544
esign.com
tel. 309.430.646
www.kluberinc.c

Landscape Architecture & Park Plannin 1250 w 18th St, Chicago, Illinois 60608 24042 Lockport St, Plainfield, Illinois 605 815-254-0091 www.uplandDesign.con

Landscap 1250 W 1 24042 Loc 815-254

T NATURE CENTE

KENDALL CO FOREST PRESERVE

ELDAMAIN RD

S

CIVIL ENGINEER
Engineering Resource Associates
3s701 West Avenue, Suite 150
Warrenville, Illinois 60555
IL License 184-001186

CIVIL Engine 3s701 Warrer IL Licel

JOB NO. 23-429-1495

DRAWN EM
CHECKED MK
APPROVED MK
SHEET TITLE

CONSTRUCTION DETAILS

SHEET NUMBER

L500

- COMPOSITE CURB

TIMBER STRINGER

COMPOSITE CURB BLOCK

- STRUCTURAL COMPOSITE DECK

SECTION- REPETITIVE BENT

SCALE: NTS

THE PREMIER TIMBER BRIDGE COMPANY
2423 BRUNELLO TRACE LUTZ, FL 33558
WWW.YBC.COM 800.226.4178

ZEYN UZMAN, PE 5 CHARLESTON GREENE MALVERN, PA 19355

ENGINEER OF RECORD

AT FOREST
REST

REV# DATE

PAGE NAME

SUBMISSION INDEX

DRAWN BY: V.FALZONE DATE: 4/16/2024

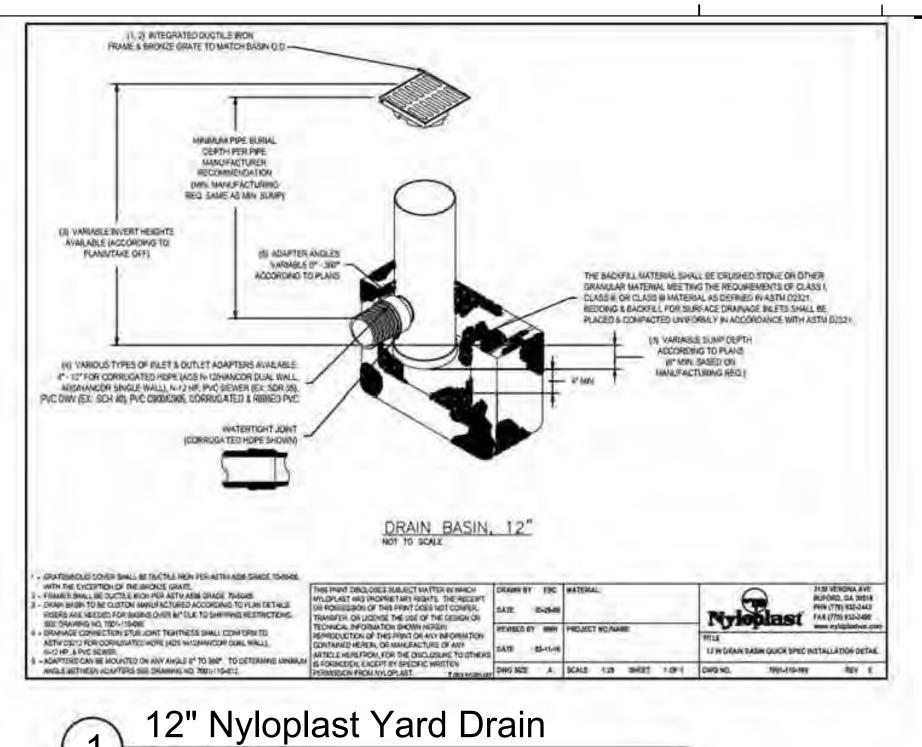
REPETITIVE BENT

JOB NO. 23-429-1495 DRAWN CHECKED **APPROVED**

SHEET TITLE CONSTRUCTION **DETAILS**

det-detail name

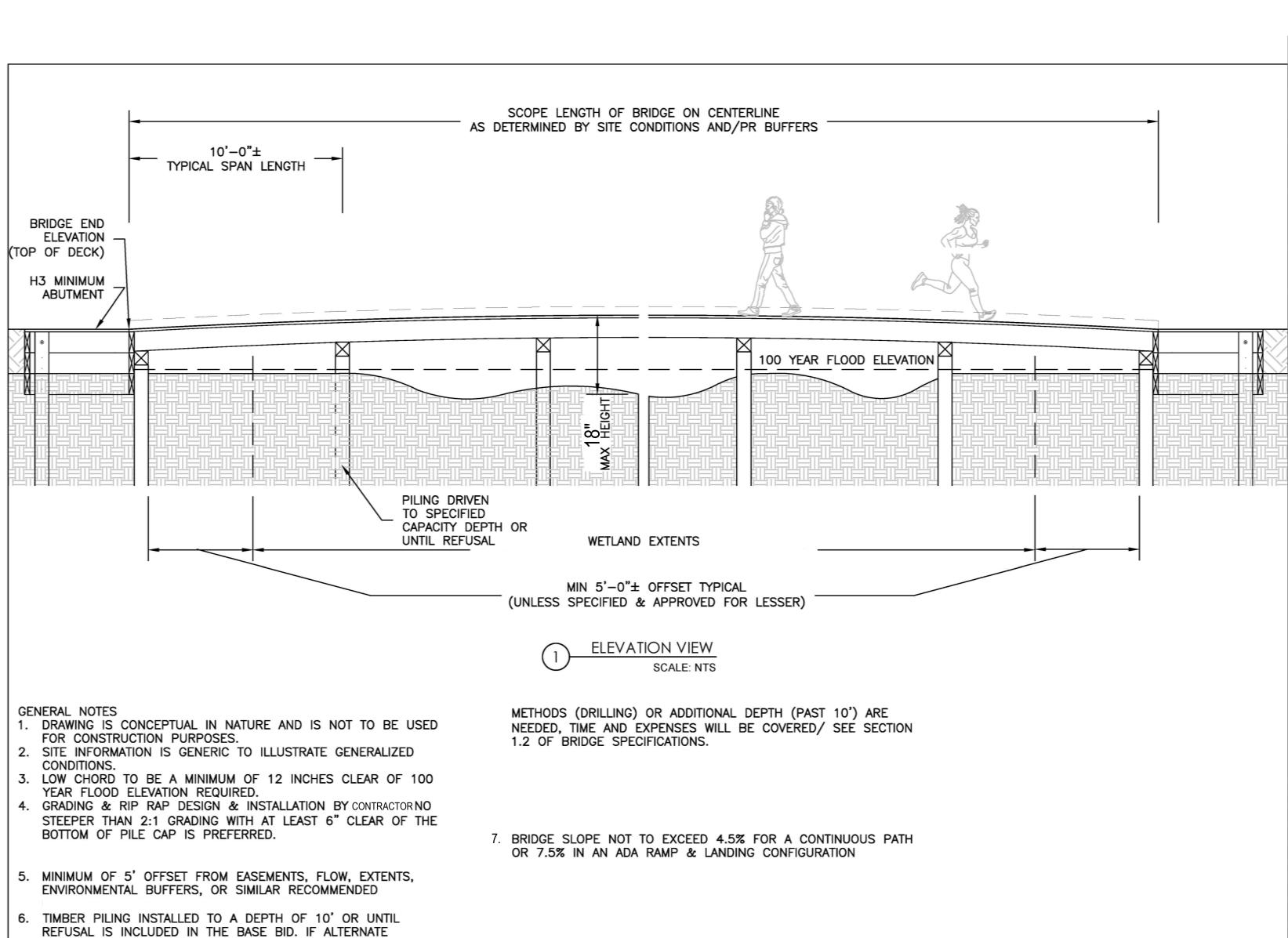
SHEET NUMBER

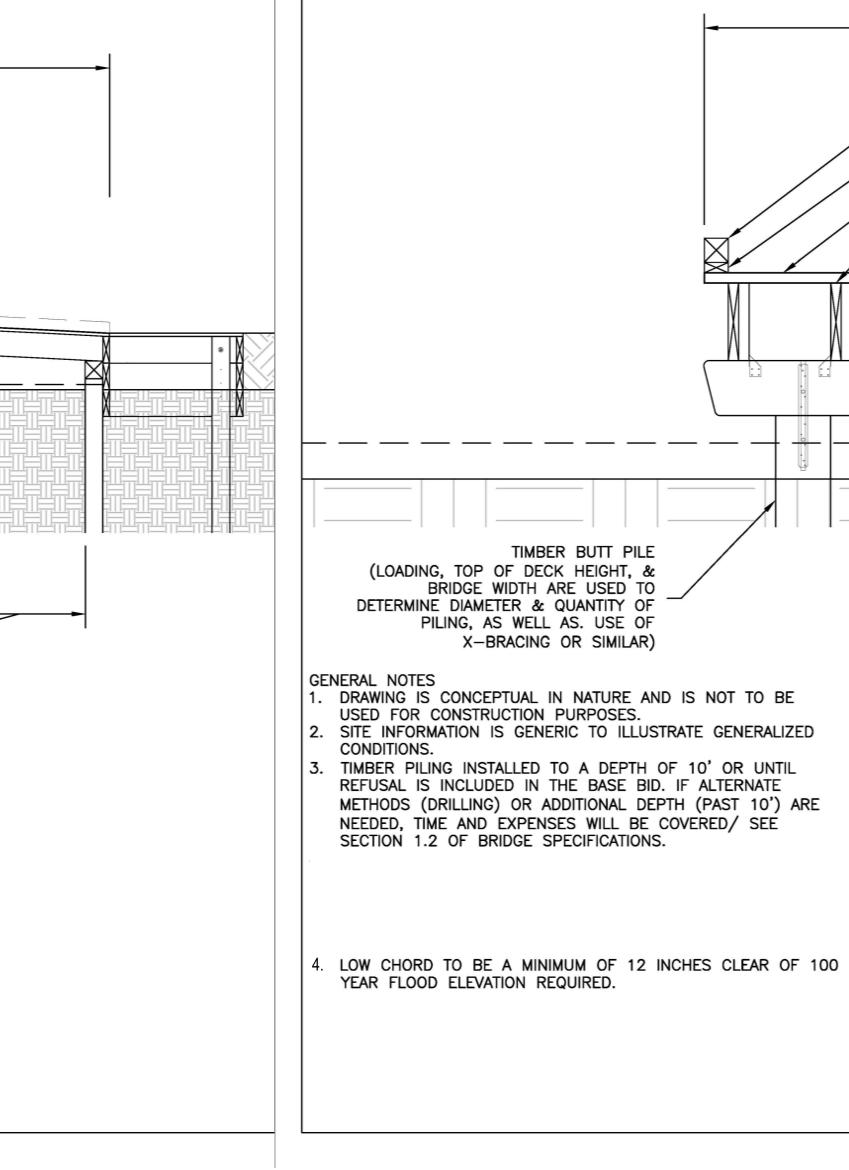


-MEET EXISTING ELEVATIONS, PROVIDE MINIMUM 6" OF TOPSOIL -6 OZ NON-WOVEN GEOTEXTILE FABRIC, OVERLAP EDGES 12" MIN. -PERFORATED PIPE, SDR 35, 2 ROWS OF PERFORATIONS; 1% MIN SLOPE -DRAINAGE AGGREGATE -UNDISTURBED SUBGRADE

French Drain

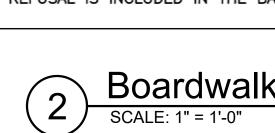
d-util_french drain_12.dwg





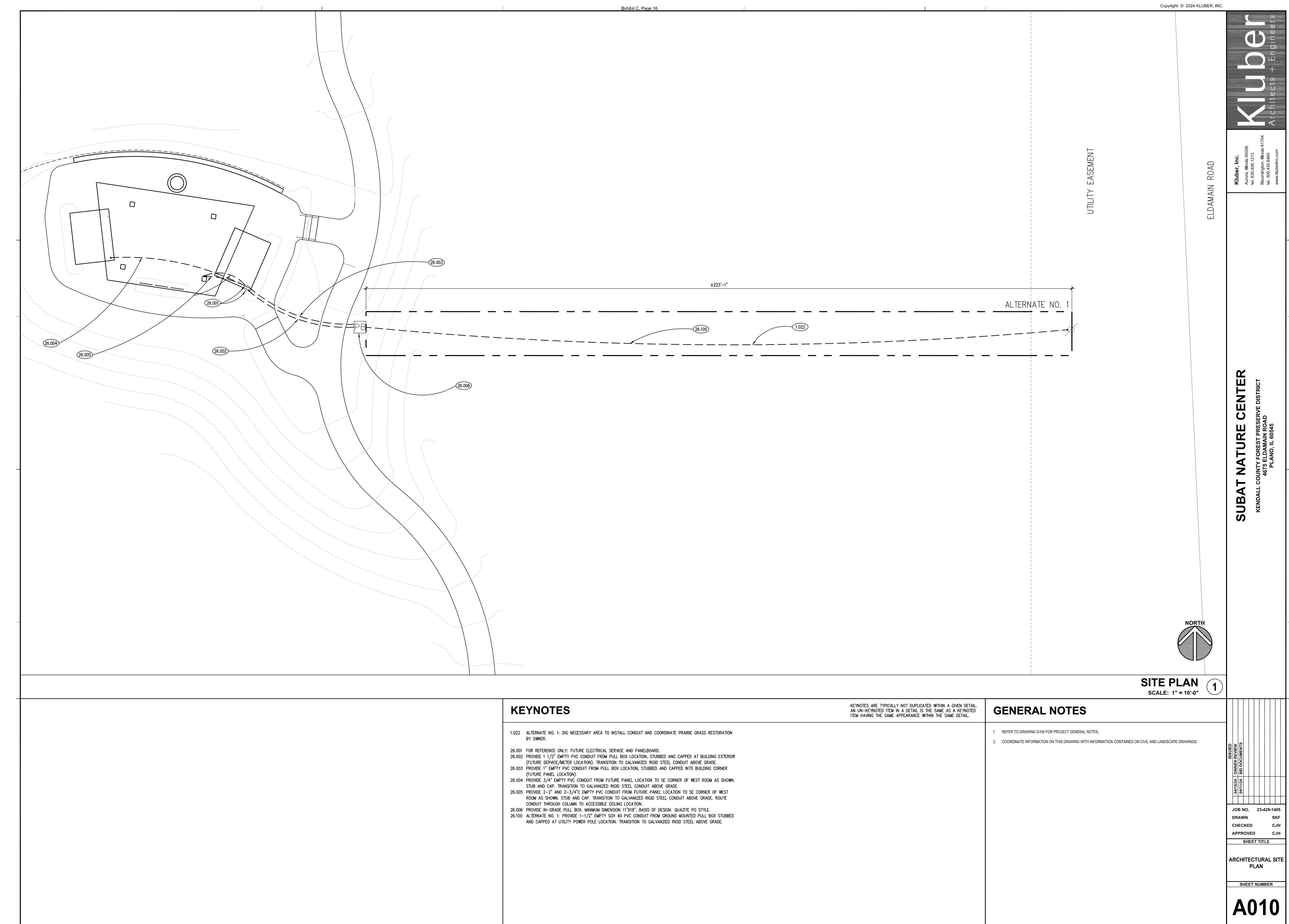
TIMBER BUTT PILE

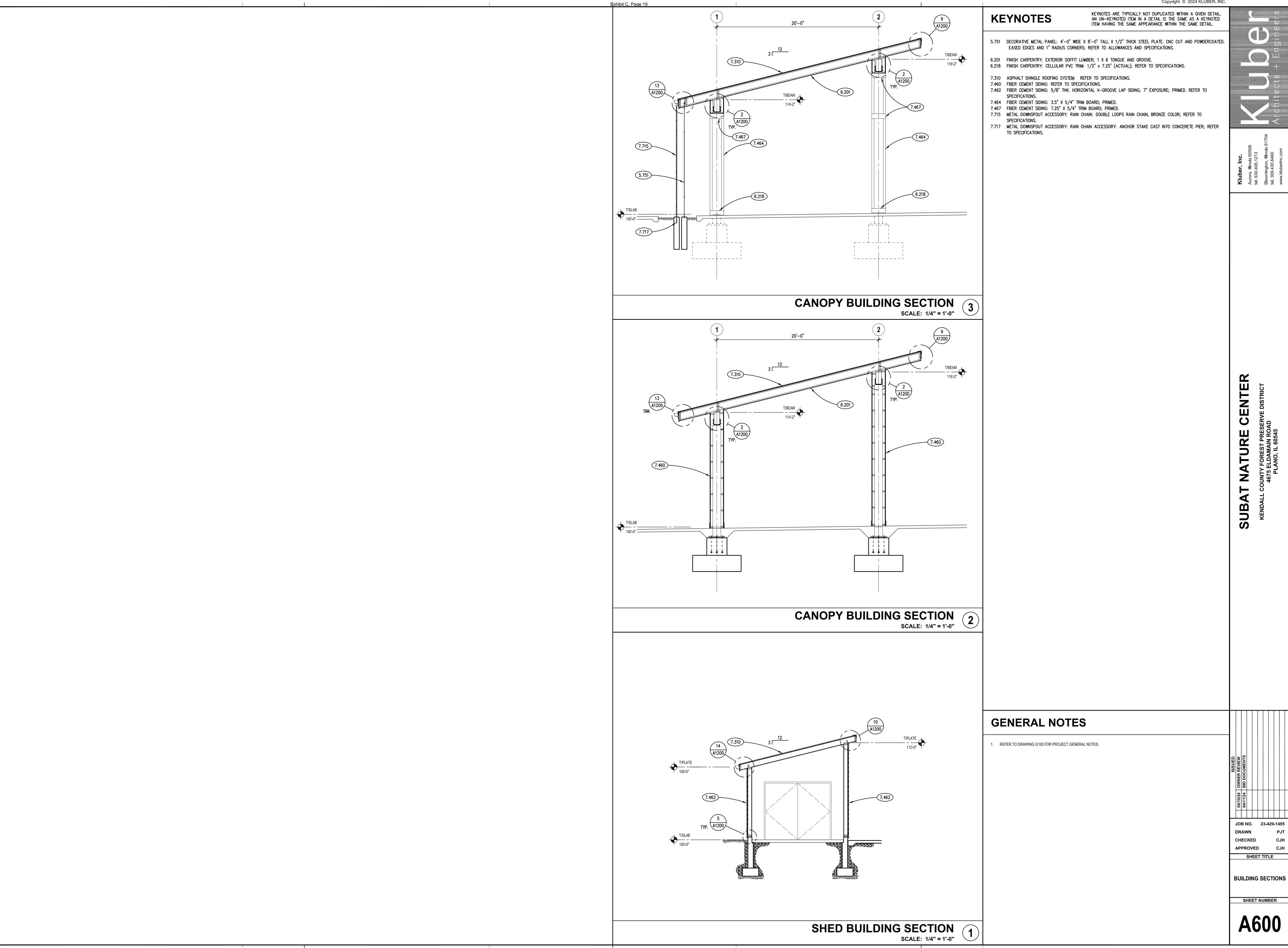
PILING, AS WELL AS. USE OF X-BRACING OR SIMILAR)



└─ 100 YEAR FLOOD LEVEL

TIMBER PILE CAP





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EXTERIOR BUILDING ELEVATIONS

GENERAL NOTES

. THE CONTRACTOR SHALL FIELD VERIFY THE DIMENSIONS, ELEVATIONS, ETC. NECESSARY FOR THE PROPER CONSTRUCTION AND ALIGNMENT OF THE NEW PORTIONS OF THE WORK TO THE EXISTING WORK. THE CONTRACTOR SHALL MAKE ALL MEASUREMENTS NECESSARY FOR FABRICATION AND ERECTION OF STRUCTURAL MEMBERS. ANY DISCREPANCY SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER.

2. CONTRACTOR SHALL PROVIDE PROTECTION FOR ALL SUBGRADES. FOUNDATIONS AND SLABS FROM FROST EFFECTS DURING INCLEMENT WEATHER.

3. CONTRACTOR SHALL COORDINATE ALL DIMENSIONS AND ELEVATIONS WITH ARCHITECTURAL, M.E.P., AND VENDOR PREPARED SHOP DRAWINGS AND EXISTING CONDITIONS. SEE ARCHITECTURAL DRAWINGS FOR WORKPOINTS. SEE CIVIL DRAWINGS FOR BENCHMARKS.

4. CONTRACTOR SHALL PROVIDE ALL TEMPORARY SHORING, SHEETING, BRACING ETC. AS REQUIRED TO PROTECT EXCAVATIONS AND EXISTING FOUNDATIONS DURING THE CONSTRUCTION PROCESS CONTRACTOR SHALL PROVIDE ALL REQUIRED ENGINEERING REQUIRED FOR SUCH SYSTEMS BY AN ILLINOIS LICENSED STRUCTURAL ENGINEER.

 $\mathsf{5.}\:\:\mathsf{BACKFILLING}\:\mathsf{OF}\:\mathsf{FOUNDATIONS}\:\mathsf{AND}\:\mathsf{BELOW}\:\mathsf{GRADE}\:\mathsf{WALLS}\:\mathsf{SHALL}\:\mathsf{BE}\:\mathsf{COMPLETED}\:\mathsf{IN}\:\mathsf{SUCH}\:\mathsf{A}$ MANNER TO AVOID OVERTURNING OF THE WALL. PROVIDE ALL TEMPORARY BRACING AS REQUIRED.

6. HORIZONTAL RUNS OF CABLING, CONDUIT, PIPING OR ANY SUCH M.E.P. ITEMS ARE NOT TO BE PLACED WITHIN THE CROSS-SECTION OF THE SLABS/DECKS, ALL SUCH ITEMS ARE TO BE INSTALLED BELOW THE SLAB/DECK WITH INDUSTRY STANDARD, ENGINEERED APPROVED SYSTEMS. THE CONTRACTOR DURING HIS BID SHALL ASSUME THAT HE NEEDS TO PROVIDE AND ENGINEER ALL SUPPLEMENTAL FRAMING ELEMENTS TO SPAN TO THE STRUCTURAL ELEMENTS THEREBY BY-PASSING THE SLABS/DECKS. ALL SUCH SYSTEMS ARE SUBJECT TO THE REVIEW OF ENGINEER OF RECORD. SEE REQUIREMENTS FOR HANGING COMPONENTS DIRECTLY FROM ROOF DECKS ON SHEET S010.

REFER TO DRAWING G100 FOR PROJECT GENERAL NOTES.

8. REFER TO ARCHITECTURAL DRAWINGS FOR ALL FINISHES (I.E. FLOOR, WALL, CEILING, ETC.)

9. THE STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ALL CONTRACT DRAWINGS. VENDOR DRAWINGS AND THE SPECIFICATIONS. THE CONTRACTOR SHALL VERIFY THE REQUIREMENTS OF OTHER TRADES FOR LOCATIONS OF SLEEVES, CHASES, HANGERS, INSERTS, ANCHORS, HOLES AND OTHER ITEMS TO BE PLACED OR SET IN THE STRUCTURAL WORK.

10. THE STRUCTURAL DRAWINGS REPRESENT THE FINISHED STRUCTURE. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY GUYING AND BRACING REQUIRED TO ERECT AND HOLD THE STRUCTURE IN ALIGNMENT UNTIL ALL STRUCTURAL WORK AND CONNECTIONS HAVE BEEN COMPLETED. THE INVESTIGATION, DESIGN, SAFETY, ADEQUACY AND INSPECTION OF SUCH GUYING/BRACING IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

11. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY TAGGED OR SHOWN. SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED. SUBJECT TO THE APPROVAL OF THE ENGINEER

12. ALL NON-LOAD BEARING WALLS ARE TO BE HELD DOWN AND AWAY FROM FRAMING ELEMENTS TO ALLOW FOR THESE ELEMENTS TO DEFLECT UNDER THEIR ANTICIPATED LOADING CONDITIONS. DO NOT BLOCK SOLID AROUND FRAMING ELEMENTS PASSING THROUGH NON-LOAD BEARING WALLS.

13. TRADE CONTRACTORS TO COORDINATE WITH M.E.P. DRAWINGS FOR ALL REQUIRED PIPE SLEEVES, HANGERS, CAST-IN / RECESSED COMPONENTS AND INSERTS FOR M.E.P. EQUIPMENT AT SLABS AND

STEEL FRAMING NOTES

S1. ALL STRUCTURAL STEEL SHALL CONFORM TO THE LATEST EDITIONS OF AISC'S "STEEL CONSTRUCTION MANUAL" AND "CODE OF STANDARD PRACTICE FOR STEEL BUILDING AND BRIDGES".

S 2. ALL WELDING SHALL BE IN ACCORDANCE WITH AWS D1.1 USING E70XX ELECTRODES. UNLESS OTHERWISE NOTED. PROVIDE CONT. MIN. SIZED FILLET WELDS PER AISC REQUIREMENTS.

S 3. THE STEEL FABRICATOR AND ERECTOR ARE TO DEVELOP AND IMPLEMENT A QUALITY CONTROL PROGRAM AS SPECIFIED IN AISC 360-10, CHAPTER N. THE STEEL FABRICATOR AND ERECTOR ARE TO PERFORM QUALITY CONTROL INSPECTIONS OF THE STEEL AT THE FABRICATION PLANT AND AT THE PROJECT SITE. REFER TO AISC 360-10, TABLES N5.4-1, N5.4-2, N5.4-3, N5.6-1, N5.6-2, N5.6-3 AND N6.1 FOR MINIMUM INSPECTION REQUIREMENTS.

S 4. STRUCTURAL STEEL ERECTION TO COMPLY WITH OSHA REQUIREMENTS.

S 5. STEEL PROPERTIES:

- A. W & WT SHAPES = A992 (Fy = 50 KSI)
- B. ANGLES, PLATES, CHANNELS & THREADED RODS = A36 (Fy = 36 KSI) C. STRUCTURAL BOLTS = 3/4"Ø A325N
- D. ANCHOR BOLTS = F1554 GRADE 36 (Fy = 36 KSI)
- E. WELDING ELECTRODES = E70XX

S 6. FINISH REQUIREMENTS:

- A. TYPICAL CLEANING = SSPC-SP2 OR SSPC-SP3
- B. PAINT = FABRICATOR'S STANDARD. SEE SPECIFICATIONS FOR ADDITIONAL PAINTING REQUIREMENTS.
- C. GALVANIZED STEEL = ASTM A123, 1.7 OZ./SQ. FT MIN.
- D. TOUCH-UP PRIMER = FABRICATOR'S STANDARD.

S 7. ALL EXTERIOR STEEL ELEMENTS, BOLTS, WASHERS, LINTELS, ETC. TO BE GALVANIZED.

S 8. BEAMS SHALL BE FIELD WELDED TO BEARING PLATES U.N.O. WELD SIZE TO BE 1/4"x2" LONG ON BOTH SIDES OF ELEMENTS. DO NOT WELD LOCATIONS NOTED ON PLAN AS **. SEE LINTEL SCHEDULE NOTES REGARDING WELDING REQUIREMENTS.

S 18. ACCEPTABLE EXPANSION ANCHOR PRODUCTS INCLUDE THE FOLLOWING: a. HILTI: KWIK BOLT 3 EXPANSION ANCHOR. b. SIMPSON STRONG-TIE: STRONG-BOLT 2 WEDGE ANCHOR.

TESTING AND INSPECTION

- 1. THE APPROVED TESTING AGENCY SHALL BE RETAINED BY THE OWNER.
- 2. THE APPROVED TESTING AGENCY SHALL BE THE "SPECIAL INSPECTOR" REFERRED TO IN OF THE INTERNATIONAL BUILDING CODE (IBC), CHAPTER 17 "STRUCTURAL TESTS AND SPECIAL INSPECTIONS."
- 3. REFER TO CHAPTER 17 OF THE 2018 INTERNATIONAL BUILDING CODE FOR DEFINITION OF TERMS
- 4. THE TESTING AGENCY SHALL SUBMIT TO THE ENGINEER OF RECORD ONE (1) COPIES OF WEEKLY REPORTS OF THE TEST AND INSPECTIONS CONDUCTED DURING THE WEEK. THE REPORTS SHALL STATE IF THE TESTS AND INSPECTIONS MET THE PROJECT REQUIREMENTS AND. IF NOT. WHAT FOLLOW-UP TESTS OR INSPECTIONS WILL BE MADE.
- 5. THE TESTING AGENCY SHALL NOTIFY GENERAL CONTRACTOR IMMEDIATELY IF ANY OF THE SCHEDULED TESTS FAIL IN ORDER TO AVOID PROJECT DELAYS.
- 6. SEE SPECIFICATION SECTION 1400 "QUALITY REQUIREMENTS" FOR ADDITIONAL INFORMATION.

FOUNDATION INSPECTION

- 4. ALL FOUNDATION EXCAVATIONS SHALL BE OBSERVED AND TESTED BY A REPRESENTATIVE OF A QUALIFIED GEOTECHNICAL ENGINEERING FIRM. DAILY REPORTS OF OBSERVATIONS SHALL BE PREPARED.
- PROVIDE CONTINUOUS INSPECTION FOR THE FOLLOWING:
- A. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF CONTROLLED FILL.
- 3. PROVIDE PERIODIC INSPECTION FOR THE FOLLOWING:
- A. VERIFY MATERIALS BELOW FOOTINGS AS ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.
- B. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.
- C. PERFORM CLASSIFICATION AND TESTING OF CONTROLLED FILL MATERIALS.
- D. PRIOR TO PLACEMENT OF CONTROLLED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.

REINFORCED CONCRETE INSPECTION

- 1. PROVIDE CONTINUOUS INSPECTION FOR THE FOLLOWING:
- A. SAMPLING OF FRESH CONCRETE FOR SLUMP, AIR CONTENT AND TEMPERATURE AT THE TIME MAKING SPECIMENS FOR STRENGTH TESTS PER ACI 318, CHAPTERS 5.6, 5.8.
- B. INSPECTION OF CONCRETE PLACEMENT PER ACI 318, CHAPTERS 5.9, 5.10,
- 2. PROVIDE PERIODIC INSPECTIONS FOR THE FOLLOWING FOR CONFORMANCE TO ACI 318:
- A. INSPECT REINFORCING STEEL PLACEMENT PER ACI 318. CHAPTERS 3.5. 7.1-7.7.
- B. VERIFY USE OF REQUIRED MIX DESIGN PER ACI 318, CHAPTERS 4, 5,2-5,4.
- C. MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES PER ACI 318, CHAPTER 5.11-5.13
- 3. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS PER ACI 318, CHAPTER 6.1.1.

STRUCTURAL WOOD CONSTRUCTION

- . INSPECTION OF FABRICATED STRUCTURAL LOAD-BEARING MEMBERS REQUIRED PER IBC SECTION 1704.2 SHALL CONSIST OF EITHER THE FOLLOWING:
- A. SPECIAL INSPECTION IN ACCORDANCE WITH IBC 1704.2.5.1 "FABRICATION AND IMPLEMENTATIO PROCEDURES"
- B. FABRICATOR PARTICIPATION IN A QUALITY ASSURANCE INSPECTION PROGRAM IN ACCORDANCE WITH IBC 1704.2.5.2 "FABRICATOR APPROVAL".
- CONTINUOUS SPECIAL INSPECTION IS REQUIRED DURING FIELD GLUING OPERATIONS OF ELEMEN OF THE MAIN WINDFORCE-RESISTING SYSTEM. PERIODIC SPECIAL INSPECTION IS REQUIRED FOR NAILING, BOLTING, ANCHORING AND OTHER FASTENING OF ELEMENTS OF THE MAIN WIND-FORCE RESISTING SYSTEM, INCLUDING WOOD SHEAR WALLS, WOOD DIAPHRAGMS, DRAG STRUTS, BRACES AND HOLD-DOWNS.

FOUNDATION & SLAB NOTES

F 1. ALL CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF ACI 301, "SPECIFICATION FOR STRUCTURAL CONCRETE BUILDINGS" AND ACI 318, "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE". HOT WEATHER CONCRETING SHALL BE IN ACCORDANCE WITH ACI 305. COLD WEATHER CONCRETING SHALL BE IN ACCORDANCE WITH ACI 306.

F 2. CONCRETE CONTRACTOR TO COORDINATE ALL DIMENSIONS, ELEVATIONS, SLOPES, ETC. OF ALL CONCRETE SLABS / FOUNDATIONS WITH ARCHITECTURAL DRAWINGS.

F 3. CONCRETE STRENGTHS AS FOLLOWS (28 DAY):

- A. FOOTINGS, FOUNDATION WALLS & PIERS= 3,000 PSI
- B. INTERIOR SLABS= 4,000 PSI C. EXTERIOR SLABS= 4,500 PSI
- D. SEE SPECIFICATIONS FOR DETAILED CONCRETE MIX DESIGNS.

F 4. REINFORCEMENT:

- A. BARS, TIES & STIRRUPS: ASTM A615 GRADE 60, DEFORMED
- B. W.W.F.: ASTM A185, SMOOTH. FLAT SHEETS ONLY. PLACEMENT (I.E. SUPPORT SPACING, LAP SPLICE LENGTHS, ETC.) TO BE IN ACCORDANCE WITH THE STRUCTURAL WELDED WIRE REINFORCEMENT MANUAL OF STANDARD PRACTICE; (WWR-500); WIRE REINFORCEMENT INSTITUTE: LATEST EDITION.
- C. WELDABLE BARS: ASTM A706 GRADE 60, DEFORMED.
- D. PROVIDE LAP SPLICES IN ACCORDANCE WITH ACI 301.
- E. FABRICATE & DETAIL REINFORCING STEEL IN ACCORDANCE WITH CRSI (DA4) MANUAL OF STANDARD PRACTICE.
- F. FACTORY MADE WIRE BAR SUPPORTS AND HOLDING BARS SHALL BE PROVIDED FOR ALL REINFORCING STEEL TO ENSURE MINIMUM CONCRETE COVER AND MAINTAIN POSITION DURING CASTING.
- G. PROVIDE ADEQUATE AND PROPER SUPPORT OF ALL REINFORCING STEEL AS REQUIRED TO PROVIDE THE COVER REQUIREMENTS NOTED ON THE PROJECT DRAWINGS AND ACI 318.
- H. CONCRETE COVER FOR REINFORCEMENT TO BE AS FOLLOWS:

COVER
3"
2"
3"

F 5. BACKFILLING OF FOUNDATIONS AND BELOW GRADE WALLS SHALL BE COMPLETED IN SUCH A MANNER TO AVOID OVERTURNING OF THE WALL. PROVIDE ALL TEMPORARY BRACING AS REQUIRED.

F 6. CONTRACTOR SHALL PROVIDE PROTECTION FOR ALL SUBGRADES, FOUNDATIONS AND SLABS FROM FROST EFFECTS DURING INCLEMENT WEATHER.

F 7. ALL BOTTOM OF EXTERIOR FOOTINGS SHALL HAVE A MINIMUM OF 3'-6" GROUND COVER. COORDINATE ALL FINAL GRADE ELEVATIONS WITH ARCHITECTURAL AND CIVIL DRAWINGS.

F 8. SEE ARCHITECTURAL DRAWINGS AND PROJECT SPECIFICATIONS FOR ALL WATERPROOFING DAMPROOFING AND INSULATION REQUIREMENTS.

F 9. ALUMINUM MATERIALS OF ANY TYPE ARE PROHIBITED FROM BEING CAST, EMBEDDED OR IN CONTACT WITH THE CONCRETE WORK.

F 10. CONCRETE CONTRACTOR TO COORDINATE WITH M.E.P. CONTRACTORS FOR ANY REQUIRED FOUNDATION DEPRESSIONS, OPENINGS, KNOCK-OUTS, FLOOR DRAINS, INSERTS, ETC.

- F 11. ACCEPTABLE INJECTION EPOXY ADHESIVE PRODUCTS INCLUDE THE FOLLOWING:
 - a. HILTI HY-150 FAST-CURING INJECTION ADHESIVE SYSTEM. b. SIMPSON STRONG-TIE SET-XP HIGH-STRENGTH ANCHORING ADHESIVE SYSTEM. c. POWERS FASTENERS PURE 110+ EPOXY INJECTION ADHESIVE ANCHORING SYSTEM.

F 12. FOUNDATION AND SLAB ELEMENTS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT COMPLETED BY GEOCON PROFESSIONAL SERVICES DATED APRIL 9, 2924, PER GEOCON'S REPORT, FOUNDATION AND SLAB ELEMENTS SHALL BE DESIGNED FOR A MAXIMUM BEARING PRESSURE OF 3,000 PSF FOUNDED ON UNDISTURBED OR ENGINEERED FILL AT THE DESIGN ELEVATION NOTED ON THE DRAWINGS. CONTRACTOR SHALL ALERT THE QUALIFIED AND APPROVED TESTING AGENCY TO VERIFY THE SUB-BASE MATERIAL PRIOR TO INSTALLING FORMWORK, REINFORCING STEEL AND CASTING FOUNDATIONS AND SLABS. REMOVE AND REPLACE ANY UNSUITABLE MATERIALS AS DEEMED NECESSARY BY THE PROJECT SOILS REPORT AND TESTING AGENCY.

FOUNDATION & SLAB SYMBOLS & NOMENCLATURE

- F a. S.C.J. DENOTES SLAB CONTRACTION/CONTROL JOINT.
- Fb. SF6.0 DENOTES SPREAD FOOTING. SEE SCHEDULE ON SHEET S310.
- F c. SLAB S1 DENOTES CONCRETE SLAB. SEE PLANS AND SCHEDULE ON SHEET S311 FOR ALL SLAB TYPES AND LOCATIONS.
- F d. DENOTES TOP OF FOOTING ELEVATION. ALL FOOTINGS NOT SPECIFICALLY TAGGED SHALL HAVE A TOP OF FOOTING ELEVATION OF 96'-6".
- Fe. [6'-0"] DENOTES ANTICIPATED BOTTOM OF FOOTING UNDERCUT BASED ON INFORMATION EXTRACTED FROM THE PROJECT SOILS REPORT NOTED ABOVE.

WOOD FRAMING NOTES

W1. WOOD FRAMING TO CONFORM TO THE LATEST EDITIONS OF THE NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION MANUAL.

W2. ALL STRUCTURAL PLYWOOD SHEATHING / DECKING TO MEET THE REQUIREMENTS OF THE "VOLUNTARY PRODUCT STANDARD PS 1-09" BY THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY.

W3. ALL STRUCTURAL PLYWOOD SHEATHING / DECKING TO MEET THE REQUIREMENTS OF "APA PRP-108/ APA PRP-108, FORM B455 - PERFORMANCE STANDARDS AND QUALITY POLICY FOR STRUCTURAL-USE PANELS".

W4. PENETRATIONS THROUGH THE ROOF REQUIRE SUPPLEMENTAL FRAMING AS DETAILED ON SHEET S800. CONTRACTOR TO COORDINATE SIZE, LOCATIONS AND QUANTITIES WITH THE FULL SET OF

W5. ALL NON-LOAD BEARING WALLS ARE TO BE HELD DOWN AND AWAY FROM FRAMING ELEMENTS TO ALLOW FOR THESE ELEMENTS TO DEFLECT UNDER THEIR ANTICIPATED LOADING CONDITIONS.

W6. HORIZONTAL RUNS OF CABLING, CONDUIT, PIPING OR ANY SUCH M.E.P. ITEMS ARE NOT TO BE PLACED THROUGH LOAD BEARING WALLS. ALL SUCH ITEMS ARE TO TRAVEL VERTICALLY WITHIN LOAD BEARING WALLS WITH INDUSTRY STANDARD, ENGINEER APPROVED SUPPORT SYSTEMS. DO NOT HANG DIRECTLY FROM WOOD SHEATHING DECKS.

W7. ALL PENETRATIONS ARCHITECTURAL AND M.E.P. ITEMS THROUGH WOOD LOAD BEARING WALLS REQUIRE A HEADER. CONTRACTOR TO COORDINATE SIZE, LOCATIONS AND QUANTITIES WITH THE FULL SET OF DOCUMENTS AVAILABLE AT THE TIME OF BIDDING. IF A HEADER IS NOT SPECIFICALLY TAGGED, THE CONTRACTOR SHALL ASSUME THAT THE MINIMUM /HEADER WILL BE A H1.

W8. ALL LIGHT GAUGE WOOD CONNECTORS ARE TO BE AS MANUFACTURED BY SIMPSON STRONG-TIE. PROVIDE FASTENER TYPE AND QUANTITY THAT RESULTS IN THE MAXIMUM TABULATED VALUES.

W9. SEE SCHEDULE ON SHEET S800 FOR TYPICAL MINIMUM FASTENER CONNECTION REQUIREMENTS FOR ALL WOOD FRAMING ELEMENTS.

W10. MINIMUM ELEMENT PROPERTIES AS FOLLOWS:

CONVENTIONAL LUMBER	ENGINEERED	LUMBER
SPECIES: SPRUCE PINE-FIR NO. 2	SPECIES: LVL	GLULAM: SP_26F-1.
Fb: 875 PSI	Fb: 2,600 PSI	Fb: 2,500 PSI
Fc₀: 450 PSI	Fc _b : 750 PSI	Fc⊪: 1,600 PSI
Fv: 135 PSI	Fv: 285 PSI	Fv: 565 PSI
E: 1,400,000 PSI	E: 1,900,000 PSI	E: 1,900,000 PSI

W11. ALL SHEATHING FOR EXTERIOR WALLS TO BE ZIP SYSTEM, STRUCTURAL I. ATTACH TO ALL SUPPORTING MEMBERS USING 8d NAILS @ 6" O.C. AT PANEL EDGES AND 12" O.C. IN FIELD OF PANEL U.N.O. ALL PANELS SHALL BE 1/2" NOMINAL THICKNESS, SPAN RATING 32/16. SEE SCHEDULES ON SHEET S800 FOR ADDITIONAL INFORMATION REGARDING ADDITIONAL FASTENERS REQUIRED AT SHEAR WALL ELEMENTS.

12. ALL PLYWOOD AND OSB SHEATHING FOR ROOFS TO BE APA RATED EXPOSURE 1, STRUCTURAL I. ATTACH SHEATHING TO SUPPORTING MEMBERS USING 10d NAILS @ 6" O.C. AT PANEL EDGES AND 12" 10/2.C. IN FIELD OF PANEL U.N.O. PROVIDE 1/8" GAP BETWEEN ADJACENT PANELS. PROVIDE MINIMUM OF 3 SPAN CONDITION. ORIENT PLYWOOD STRENGTH AXIS OF PLYWOOD PERPENDICULAR TO FRAMING ELEMENTS. STAGGER PANEL END JOINTS. SEE SPECIFICS BELOW FOR DIFFERENT TYPES AND LOCATIONS.

A. FLAT ROOFS: TYPE CDX, 4-PLY, 3/4" NOMINAL THICKNESS, SPAN RATING 40/20. PROVIDE "PSCL" CLIPS AT MID-SPAN OF UNSUPPORTED EDGES OF PANELS. CONTRACTOR OPTION: TYPE OSB, 3/4" NOMINAL THICKNESS, SPAN RATING 40/20.

WOOD FRAMING SYMBOLS & NOMENCLATURE

Wa. H1/H1M DENOTES WOOD HEADER. SEE HEADER SCHEDULE ON SHEET S800.

Wb. P1 DENOTES WOOD POST. SEE SCHEDULE ON SHEET S800.

Wc. CR1 DENOTES CRIPPLE STUD. SEE SCHEDULE ON SHEET S800.

Wd. K1 DENOTES KING STUD. SEE SCHEDULE ON SHEET S800. We. WSWALL-1 DENOTES WOOD SHEARWALL. SEE SCHEDULE ON SHEET S800.

CODE AND LOADING

A. DESIGN REQUIREMENTS AND STRUCTURAL LOADS ARE TO BE IN ACCORDANCE WITH THE 2018 INTERNATIONAL BUILDING CODE AND ANY VILLAGE AMENDMENTS.

B. LOADING CRITERIA:

- OCCUPANCY GROUP: U
- 2. OCCUPANCY CATEGORY: II

3. ROOF LOADS: a. GROUND SNOW LOAD (Pg) = b. FLAT-ROOF SNOW LOAD (Pf) = 21 PSF c. SNOW EXPOSURE FACTOR (Ce) = 1.0 d. SNOW IMPORTANCE FACTOR (Is) = 1.0

e. THERMAL FACTOR (Ct) =

5. WIND LOADS:

- 115 MPH d. BASIC WIND SPEED (V) = e. IMPORTANCE FACTOR (I) = 1.00 f. EXPOSURE CATEGORY = q. ENCLOSURE CLASSIFICATION = **ENCLOSED**
- 20 PSF h. MWFRS = i. COMPONENTS AND CLADDING = 25 PSF

i. ROOFTOP STRUCTURES & EQUIPMENT = 35 PSF

SEISMIC CRITERIA:

- a. IMPORTANCE FACTOR (I) = b. MAPPED SPECTRAL RESPONSE (Ss & S1) = 16.0%g & 6.6%g
- c. SPECTRAL RESPONSE COEF. (Sps & Sp1) = .171 & .106 d. DESIGN CATEGORY =
- e. SITE CLASS = f. BASIC RESISTING SYSTEM= WOOD SHEAR WALLS, Rw=6.5
- g. RESPONSE COEFFICIENT (Cs) = h. ANALYSIS PROCEDURE = EQUIVALENT LATERAL FORCE

Z R H

DRAFTING LEGEND

PIER DETAIL LETTER-SOLID BLOCKING. S402 SHEET NUMBER — REFER TO DETAILS $\left(\begin{array}{c}2\end{array}\right)$ ELEVATION NUMBER— EARTH \S710 / SHEET NUMBER — CONCRETE SECTION NUMBER -SHEET NUMBER — LOCATION 1ST FLR. INSULATION **ELEVATION** 100'-0" FOUNDATION DEPRESSION ELEVATION WOOD SHEAR WALL WS-WALL 1 PAVEMENT SF6.0 FOOTING TAG KEYNOTE ROOF/FLOOR FRAME 0.000 IDENTIFICATION FOR FRAMED OPENING (NO DECK /SLAB) |0| CONTINUOUS FOR OPENING W/ PIPING/CONDUITS

BLOCKING

AND FIRE CAULKED

NOT CONTINUOUS

CHECKED **APPROVED** SHEET TITLE

GENERAL NOTES CODE & LOADING TESTING & INSPECTIONS SHEET NUMBER

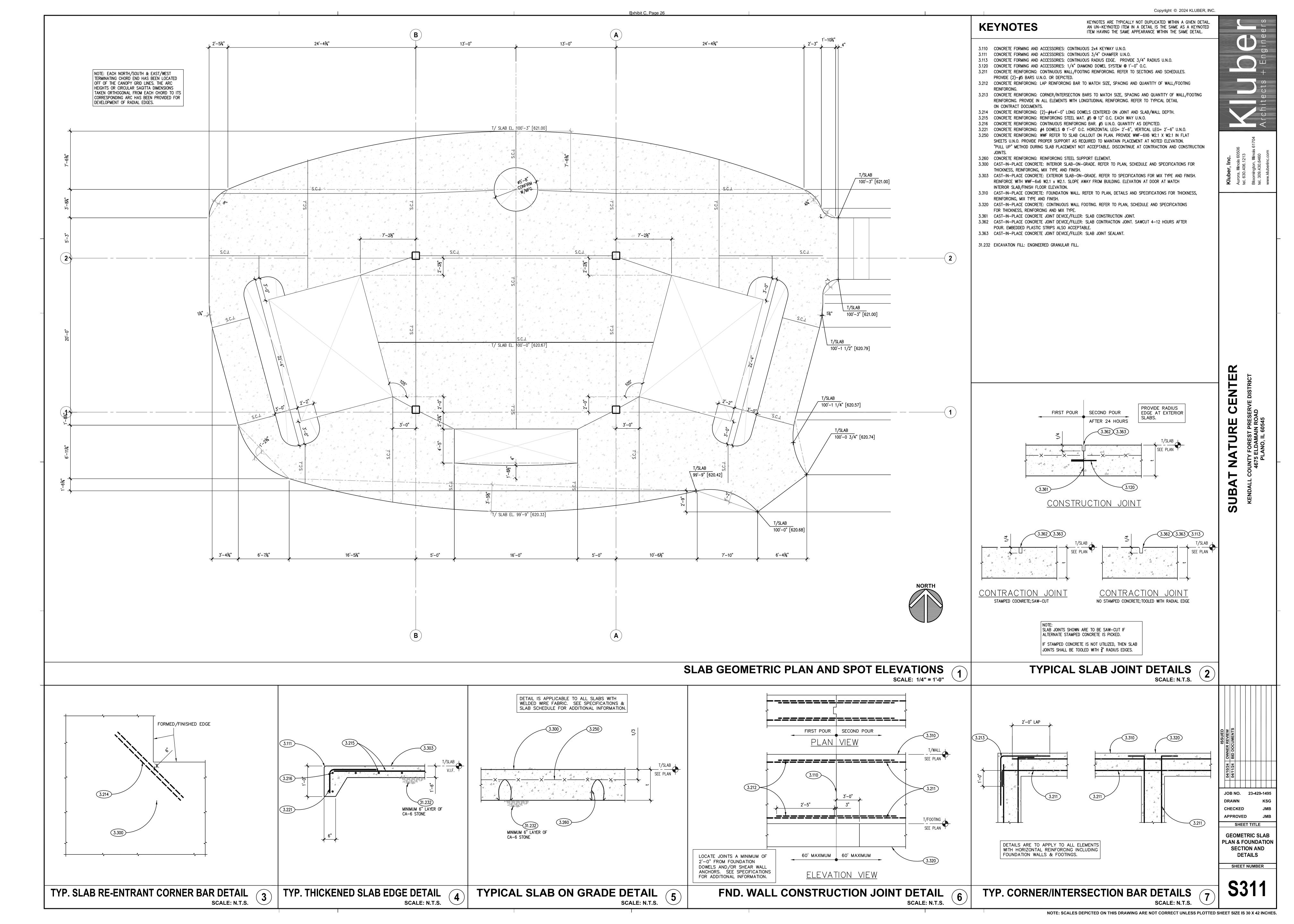
REQ'D TO BE SLEEVED

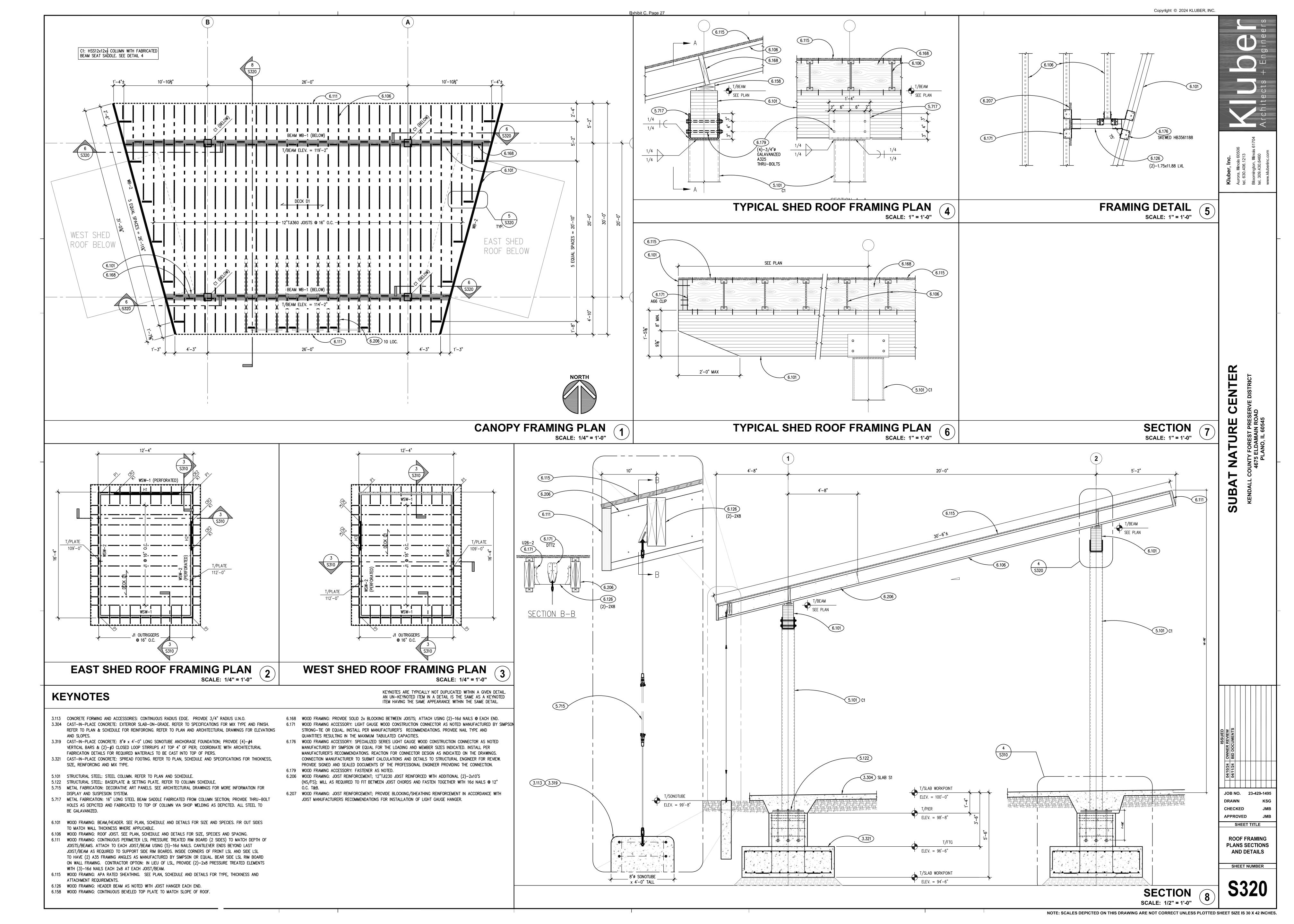
8. REINFORCING BARS SHALL BE ASTM A615 GRADE 60, DEFORMED. ALL WWF SHALL BE ASTM A185, SMOOTH 9. NORMAL WEIGHT CONCRETE (NW) SHALL HAVE A MAXIMUM DENSITY OF 145 PCF. 10. EXTERIOR CONCRETE TO HAVE 6% AIR ENTRAINMENT.

11. SEE CIVIL DRAWINGS FOR ALL SIDEWALKS.

SCALE: 1/4" = 1'-0"

SHEET NUMBER





KING ELEMENT SIZE

HEADER MARK

HEADER ELEMENT SIZE

MINIMUM WOOD FRAMING FASTENING SCHEDULE							
CONNECTION TYPE	FASTENER TYPE, SPACING & QTY.	FASTENER LOCATION	SPECIAL COMMENTS	1			
1. OWT TO SILL, GIRDER, PLATE, ETC.	PER MANUFACTURER	FACE NAIL					
2. OWT BRIDGING	PER MANUFACTURER	PER MANUFACTURER					
3. PLYWOOD WALL SHEATHING	8d @ 6" (EDGES), 12" (FIELD)	FACE NAIL	SEE SHEARWALL SCHEDULE				
4. PLYWOOD ROOF SHEATHING	8d @ 6" (EDGES), 12" (FIELD)	FACE NAIL	SEE SHEET S010				
5. SOLID BLOCKING BETWEEN OWT SEATS	(4)-16d	FACE NAIL					
6. TOP PLATE TO STUD	(2)-16d	END NAIL					
7. SILL PLATE TO STUD	(2)-16d	FACE NAIL		Г			
8. BUILT-UP POSTS, CRIPPLES, KINGS	SEE DETAIL ON SCHEDULE	FACE NAIL					
9. BUILT-UP HEADERS & BEAMS	SEE DETAIL ON SCHEDULE	FACE NAIL		ĺ			
10. HEADER & BEAM TO KING STUD	(2)-16d @ 4" VERTICALLY	FACE NAIL					
11. LEDGER BOARD TO SUPPORT	(4)-16d @ 16" VERTICALLY	FACE NAIL					
12. TOP PLATE: CORNERS/INTERSECTIONS	(3)–16d	FACE NAIL		ĺ			
13. TOP PLATE: LAP SPLICES	(3)-16d @ 24"	FACE NAIL	MIN. SPLICE LENGTH=36"	ĺ			
14. JOIST BRIDGING	(3)–16d	FACE NAIL	OFFSET 2" FOR FACE NAIL	ĺ			
15. MULTIPLE SILL PLATES	(2)-16d @ 24"	FACE NAIL		ĺ			
16. MISCELLANEOUS BLOCKING	(3)–16d	END NAIL		ĺ			
17. JOISTS TO LEDGERS & BEAMS	TOP FLANGE JOIST HANGER	PER MANUFACTURER	* SEE APPLICABLE DETAILS				
18. SILL TO CONCRETE	(2)-1/4"øx3" TITEN SCREW @ 24"	FACE SCREW					
19. DIAGONAL BRACES & STRUTS	(3)–16d	FACE NAIL					
20. I-JOIST TO DOUBLE TOP PLATE	(2)-16d E.F.	FACE NAIL					
21. RIM BOARD TO I-JOIST	(2)-16d T&B	FACE NAIL					

MINIMUM WOOD FRAMING FASTENING SCHEDULE NOTES

- "FASTENING SCHEDULE" IN CHAPTER 23 OF THE LATEST EDITION OF THE INTERNATIONAL BUILDING CODE. THE LATEST EDITION OF THE INTERNATIONAL BUILDING CODE.
- 4. SEE SCHEDULES ON THIS SHEET FOR ADDITIONAL FASTENING REQUIREMENTS.
- 6. PROVIDE CORROSIVE RESISTANT FASTENERS FOR ALL EXTERIOR APPLICATIONS 7. * JOIST HANGERS ALWAYS REQUIRED. CONTRACTOR TO ASSUME MINIMUM HANGERS AS NOTED IN THE JOIST/TRUSS SCHEDULE.

KEYNOTES

- 3.211 CONCRETE REINFORCING: CONTINUOUS WALL/FOOTING REINFORCING. REFER TO SECTIONS AND SCHEDULES.
- PROVIDE (2)-#5 BARS U.N.O. OR DEPICTED. 3.219 CONCRETE REINFORCING: CONTINUOUS #4 NOSING BAR.
- 3.240 CONCRETE REINFORCING: #5 VERTICAL BARS HOOKED INTO FOOTING (QUANTITY AS DEPICTED) AND #4 TIES @ FOLLOWING SPACING...(3) @ 2", (1) @ 4", R @ 12" U.N.O. PIER DIMENSIONS AS NOTED.
- 3.304 CAST-IN-PLACE CONCRETE: EXTERIOR SLAB-ON-GRADE. REFER TO SPECIFICATIONS FOR MIX TYPE AND FINISH. REFER TO PLAN & SCHEDULE FOR REINFORCING. REFER TO PLAN AND ARCHITECTURAL DRAWINGS FOR ELEVATIONS AND SLOPES.
- 3.315 CAST-IN-PLACE CONCRETE: CONCRETE PIER. REFER TO PLAN AND DETAILS FOR REQUIRED REINFORCING. REFER TO SPECIFICATIONS FOR MIX TYPE AND FINISH.
- 3.320 CAST-IN-PLACE CONCRETE: CONTINUOUS WALL FOOTING. REFER TO PLAN, SCHEDULE AND SPECIFICATIONS
- FOR THICKNESS, REINFORCING AND MIX TYPE. 3.331 CAST-IN-PLACE CONCRETE: DRILL AND EPOXY ANCHORS. PROVIDE MINIMUM EMBEDMENT AS SHOWN. SEE SPECIFICATIONS FOR EPOXY TYPE.
- 6.100 WOOD FRAMING: LOAD BEARING WALL. SEE PLAN, SCHEDULE AND DETAILS FOR SIZE, SPECIES AND SPACING. 6.101 WOOD FRAMING: BEAM/HEADER. SEE PLAN, SCHEDULE AND DETAILS FOR SIZE AND SPECIES. FIR OUT SIDES
- TO MATCH WALL THICKNESS WHERE APPLICABLE. 6.102 WOOD FRAMING: WALL POST DIRECTLY BELOW JOIST/BEAM. SPECIES AND SIZE TO MATCH SURROUNDING WALL
- FRAMING U.N.O. QUANTITY OF STUDS TO MATCH WIDTH OF JOIST/BEAM U.N.O.. 6.103 WOOD FRAMING: FULL HEIGHT JAMB (KING) STUD. SEE PLAN, SCHEDULE AND DETAILS FOR SIZE, SPECIES
- AND QUANTITY. MINIMUM REQUIREMENT TO BE ONE (1) STUD. 6.104 WOOD FRAMING: HEADER HEIGHT JAMB (CRIPPLE) STUD. SEE PLAN, SCHEDULE AND DETAILS FOR SIZE,
- SPECIES AND QUANTITY. MINIMUM REQUIREMENT TO BE ONE (1) STUD. 6.105 WOOD FRAMING: FULL HEIGHT POST/COLUMN. SEE PLAN, SCHEDULE AND DETAILS FOR SIZE, SPECIES AND
- 6.113 WOOD FRAMING: 3/4 STRUCTURAL SHEATHING "H"x "L" WIDE NS/FS, GLUED AND NAILED TO BOTH FACES OF
- TRUSS MEMBERS WITH 10d NAILS AT 3" O.C. PLYWOOD TRANSFER GUSSET SHOULD BE CENTERED WITH AND COVER THE TOP METAL PANEL POINT AND EXTEND TO CENTERLINE OF EACH ADJACENT BOTTOM MENDING PLATE.
- 6.116 WOOD FRAMING: ZIP SYSTEM STRUCTURAL 1 SHEATHING. SEE PLAN, SCHEDULES AND DETAILS FOR TYPE, THICKNESS AND ATTACHMENT REQUIREMENTS.
- 6.120 WOOD FRAMING: PRE-FABRICATED OPEN WEB TRIM JOIST FLOOR TRUSS. SEE PLAN, SCHEDULE AND DETAILS FOR TYPE, DEPTH AND LOAD REQUIREMENTS.
- 6.130 WOOD FRAMING: CONTINUOUS PRESSURE TREATED SILL PLATE. SIZE AND SPECIES TO MATCH WALL FRAMING. ATTACHMENT TO BASE MATERIAL AS FOLLOWS: MASONRY/CONCRETE: (2)-1/4" SIMPSON TITEN SCREWS @ 2'-0" O.C. AND (1)-1/2"\sigma HOOKED ANCHORS @ 4'-0" O.C. U.N.O.
- 6.132 WOOD FRAMING: CONTINUOUS PRESSURE TREATED SILL PLATE. SIZE AND SPECIES TO MATCH WALL FRAMING. ATTACH TO FOUNDATION WALL WITH 1/2"øx8" LONG + 3" HOOKED ANCHOR RODS @ 4'-0" O.C. U.N.O.
- 6.133 WOOD FRAMING: JOIST GIRDER. SEE PLAN FOR SIZE. 6.135 WOOD FRAMING: CONTINUOUS DOUBLE TOP PLATE. SIZE AND SPECIES TO MATCH WALL FRAMING. PROVIDE (2)-16d NAILS INTO EACH STUD FOR LOWER TOP PLATE. ATTACH UPPER TOP PLATE USING (2)-16d NAILS
- @ 2'-0" O.C. LAP LOWER TOP PLATE SPLICES MINIMUM OF 2'-0". CORNERS AND INTERSECTIONS TO BE OVERLAPPED WITH A MINIMUM OF (4)-16d NAILS. 6.137 WOOD FRAMING: CONTINUOUS SINGLE TOP PLATE.
- 6.171 WOOD FRAMING ACCESSORY: LIGHT GAUGE WOOD CONSTRUCTION CONNECTOR AS NOTED MANUFACTURED BY SIMPSON STRONG-TIE OR EQUAL. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE NAIL TYPE AND QUANTITIES RESULTING IN THE MAXIMUM TABULATED CAPACITIES.
- 6.210 WOOD FRAMING: BUILT-UP COLUMN REINFORCEMENT ELEMENT AS NOTED. SISTER NEW ELEMENT TO EXISTING W/(2)-1/4"ø x 4 1/2" (SDS25412) FASTENERS @ 8" O.C. VERTICALLY TYPICAL. ELEMENT TO BE (1
- PIECE) CUT TIGHT TO FIT BETWEEN FLOOR SLAB & UNDERSIDE OF BEAM CONNECTOR. 6.211 WOOD FRAMING: BUILT-UP COLUMN REINFORCEMENT ELEMENT; CONTRACTOR TO MILL OFF TOP PORTION OF ELEMENT BACKSIDE TO MISS COLUMN CONNECTOR AND FASTERNERS AS REQUIRED.
- 31.232 EXCAVATION FILL: ENGINEERED GRANULAR FILL.
- 32.315 DECORATIVE METAL GATE POST.

WOOD POST (P), CRIPPLE (CR) AND KING (K) STUD SCHEDULE NOTES & DETAILS

CRIPPLE ELEMENT SIZE

KING MARK

2. MULTIPLE ELEMENTS TO BE ATTACHED TOGETHER USING (2)-16d NAILS PER ROW, EACH SIDE AT SPACING NOTED. SEE TYPICAL 3. ELEMENT SPECIES TO MATCH TYPICAL STUD FRAMING U.N.O.

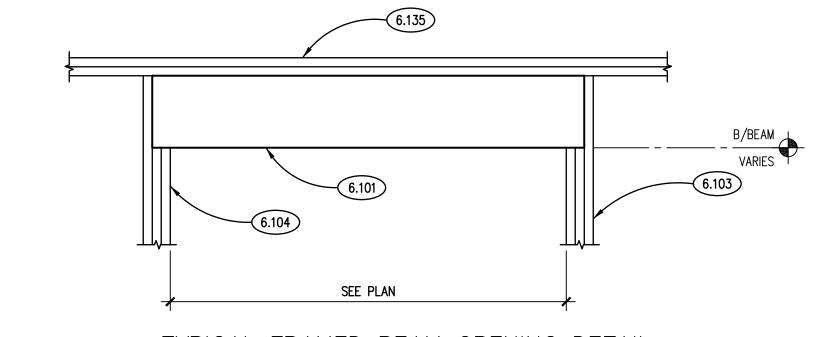
CRIPPLI MARK

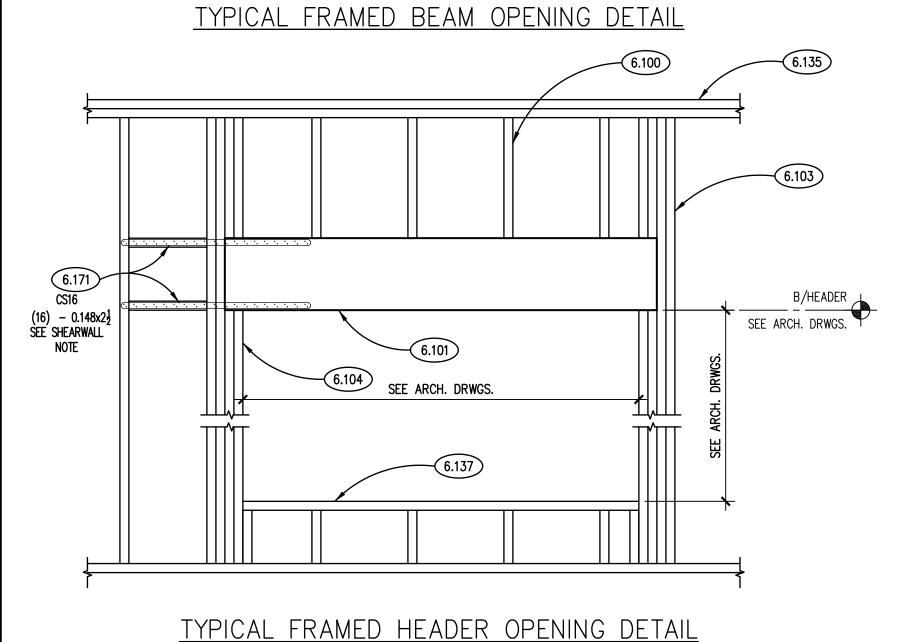
DETAILS:

4. MINIMUM ELEMENT PROPERTIES AS FOLLOWS: SEE SHEET S010

POST ELEMENT SIZE

6x6 POST





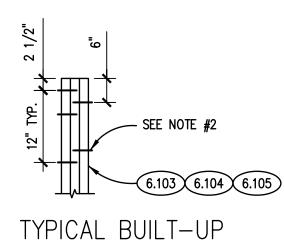
SHEARWALL NOTE:
STRAPPING SHOWN ABOVE IS ONLY TO BE UTILIZED

AT WALL OPENING LOCATIONS THAT ARE LOCATED WITHIN A PERFORATED SHEARWALL. STRAPPING SHALL

ONLY SHOWN ONE SIDED FOR CLARITY OF TYPICAL

FRAMING CONDITIONS INDICATED AT OPPOSITE END.

OCCUR ON BOTH SIDES OF THE OPENING — ABOVE IS



COLUMN SCHEDULE, NOTES AND DETAILS

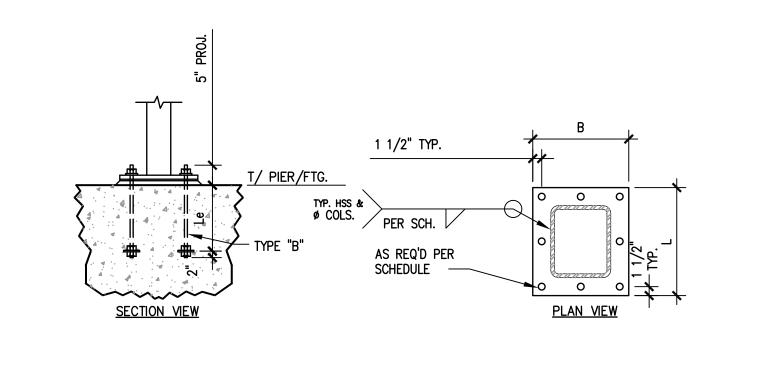
			BASE	PLATE			ANCHO	OR ROD		
MARK	ELEMENT SIZE	THICK (t)	WIDTH (B)	LENGTH (L)	WELD	DIA.	TYPE	QTY.	Le	REMARKS
C1	HSS12x12x1/2	1 1/4"	1'-10"	1'-10"	5/16"	3/4"	В	8	24"	GALVANIZED

ELEMENT DETAIL

- NOTES:

 1. SEE PLAN FOR COLUMN LOCATIONS. 2. MATERIAL PROPERTIES:
- a. PLATES=ASTM A36 b. HSS SHAPES=ASTM A500, GRADE B (Fy=46 KSI)
- c. ANCHOR RODS: TYPE B=A36, FULLY THREADED; TYPE AS NOTED d. WELDING ELECTRODES=E70xx
- e. ALL ANCHOR RODS, NUTS, WASHERS AND PLATES TO BE GALVANIZED. 4. ANCHOR ROD TYPE "B" REQUIRES 3/8"x3"x3" WASHER PLATES AT BOTTOM.
- 5. MINIMUM OF (4)-ANCHOR RODS ARE REQUIRED AT EACH COLUMN AND LOCATED AT EACH CORNER U.N.O. ANCHOR ROD QUANTITIES GREATER THAN (4) ARE TO BE PLACED BETWEEN THE CORNER BOLTS AS NOTED.
- 6. 1/4" SETTING PLATE IS REQUIRED AT ALL LOCATIONS U.N.O. SETTING PLATE TO MATCH BASEPLATE FOOTPRINT. 7. BOTTOM OF BASEPLATE TO BE 1" (3/4" GROUT BED + 1/4" SETTING PLATE) ABOVE TOP OF PIER/FOOTING U.N.O.

DETAILS:



WOOD HEADER AND BEAM SCHEDULE NOTES & DETAILS

BEAM ELEMENT SIZE

10.5x17.875 GLULAM

WB-2 (2)-1 3/4x11.875 LVL

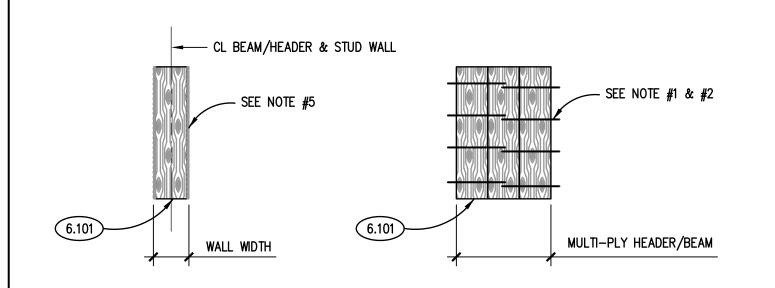
NOTES

2. ATTACH SIDE LOADED MULTIPLE ELEMENTS (LVL) PER THE MANUFACTURER'S REQUIREMENTS.

BEAM MARK

- HEADERS WITH "M" ON PLAN INDICATES THAT HEADER IS FOR M.E.P. ITEM. COORDINATE SIZE, LOCATION AND ELEVATION WITH RESPECTIVE CONTRACTOR. PROVIDE ONE CRIPPLE STUD AT EACH END OF HEADER ATTACHED TO ADJACENT FULL HEIGHT STUDS. MINIMUM ELEMENT PROPERTIES AS FOLLOWS: SEE SHEET S010

DETAILS:



WOOD SHEARWALL SCHEDULE NOTES

HOLD-DOWN ANCHOR

8d @ 4" 8d @ 12" P1 HDU4-SDS2.5 W/SET-3G W/5/8"ø F1554 GR. 55 ANCHOR(12" EMBED.) TITEN HD 1/4"ø x 4" @ 16" 8d @ 4" 8d @ 12" P1 HDU4-SDS2.5 W/SET-3G W/5/8"ø F1554 GR. 55 ANCHOR(12" EMBED.) TITEN HD 1/4"ø x 4" @ 16"

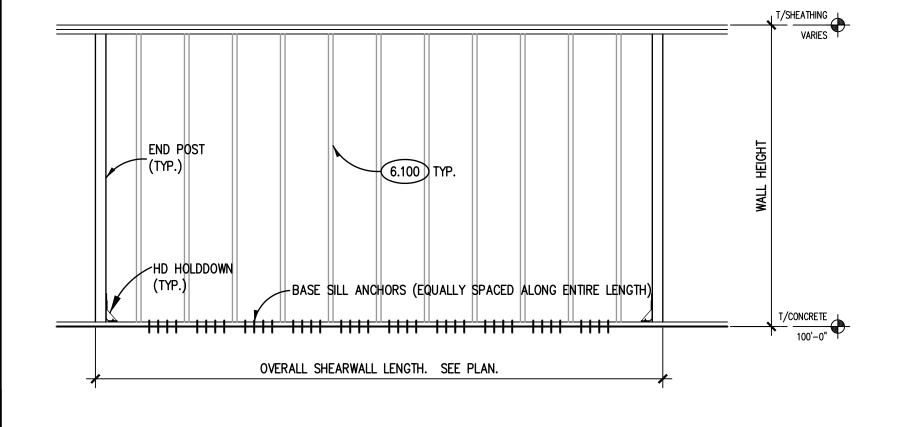
BASE SILL ANCHORS

(QTY-TYPE @ SPC'G)

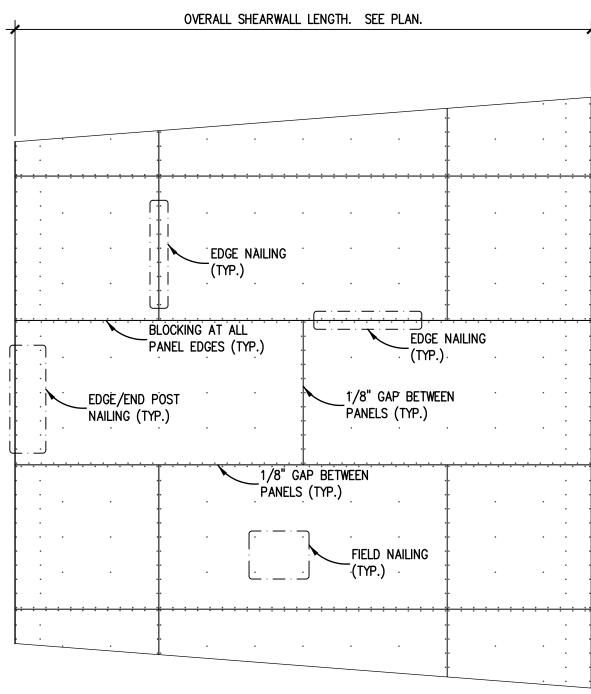
SIZE GRADE # OF EDGE FIELD POSTS

8. ALL ANCHORS/HOLDOWNS ARE AS MANUFACTURED BY SIMPSON STRONG-TIE. 9. FOR PERFORATED SHEARWALLS - SEE ADDITIONAL STRAPPING DETAIL SHOWN ON TYPICAL FRAMED HEADER OPENING

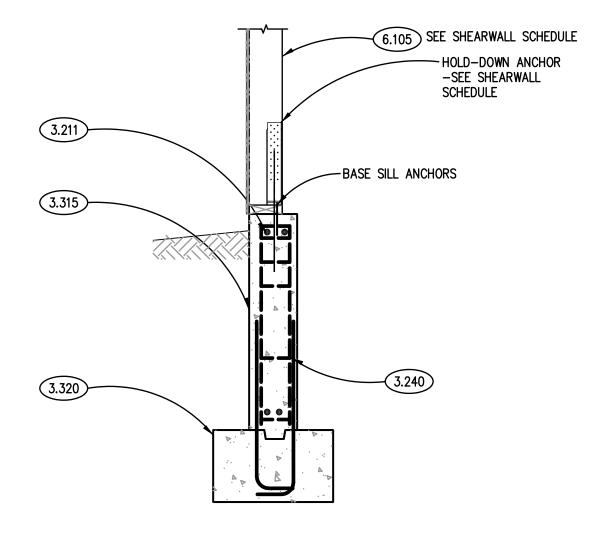
WOOD SHEARWALL DETAILS



TYPICAL SHEARWALL ELEVATION DETAIL



TYPICAL SHEARWALL SHEATHING DETAIL



TYPICAL SHEARWALL FOUNDATION DETAIL

