

**Environmental Assessment  
Determinations and Compliance Findings  
for HUD-assisted Projects  
24 CFR Part 58**

**Project Information**

**Project Name:** Karam-Senior-New-Construction

**HEROS Number:** 900000010447824

**Start Date:** 01/15/2025

**Responsible Entity (RE):** CLEVELAND, DEPARTMENT OF COMMUNITY  
DEVELOPMENT CLEVELAND OH, 44114

**RE Preparer:** Sasha Ottoson-Deal

**State / Local Identifier:**

**Certifying Officer:** Michiel Wackers

**Grant Recipient (if different than Responsible Entity):**

**Point of Contact:**

**Consultant (if applicable):**

**Point of Contact:**

40 CFR 1506.5(b)(4): The lead agency or, where appropriate, a cooperating agency shall prepare a disclosure statement for the contractor's execution specifying that the contractor has no financial or other interest in the outcome of the action. Such statement need not include privileged or confidential trade secrets or other confidential business information.

- ✓ By checking this box, I attest that as a preparer, I have no financial or other interest in the outcome of the undertaking assessed in this environmental review.

**Project Location:** Detroit Ave, Cleveland, OH 44102

**Additional Location Information:**

PPNs 002-01-007, 002-01-008, 002-01-045, 002-01-046, 002-01-047, 002-01-048

**Direct Comments to:** 601 Lakeside Ave, Room 320, Cleveland, OH 44114

**Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]:**

Karam Senior Living will serve seniors age 55+ making at or below 60% of AMI. The new energy efficient building will provide 51 units and spaces for connection & wrap-around programming through the new Walz branch of the library, developed concurrently. Project amenities include a community room, laundry facilities, on-site parking and a wellness center. The Walz Branch will be located on part of the ground level and first floor of the new facility. The total project square footage is 70,511 with 14,966 of that planned to be the library space. This space will be separately owned and operated by Cleveland Public Library, and will be paid for using the library's bond levy funds.

**Statement of Purpose and Need for the Proposal [40 CFR 1508.9(b)]:**

Need for affordable housing: There are approximately 1,555 total affordable rental units located within the PMA, which were developed via a variety of affordable housing programs. In 2020, ESRI demographics estimated a total of 19,471 total rental units. This yields an approximate ratio of 8.0 percent affordable rental housing to 92.0 percent market rate rental housing within the PMA. The PMA has experienced negative overall population growth between 2000 and 2010, while the senior population grew over this time period. Similarly, from 2010 to 2020, the PMA's total population continued to decrease, while its senior population and households both increased. Through 2025, the senior population in the PMA is projected to increase, at a higher rate than the MSA and a lower rate than the nation. Over the same time period, the number of senior households is also projected to increase. As of 2020, the senior median household income in the PMA is well below that of the MSA and nation. Additionally, 65.2 percent of senior renter households in the PMA earn less than \$40,000 annually. Through 2025, the PMA is projected to experience moderate growth in senior median household income and the percentage of senior renter households earning less than \$40,000 annually is projected to be approximately 72.8 percent. Overall, the demographic trends suggest a need for affordable housing.

**Existing Conditions and Trends [24 CFR 58.40(a)]:**

The site is generally level and consists of minimal vegetation. The Subject offers 51 units on 50,617 square feet, more than the required 48,450 square feet. The Subject will be four stories in height. Finally, the Subject will offer 36 off-street surface parking spaces at no additional cost to tenants, or approximately 0.71 spaces per unit, more than the required 17 spaces. As such, the Subject represents a legal, conforming use as proposed. Surrounding Land Uses: The Subject site is located at 7918 Detroit Avenue, west of downtown Cleveland, Ohio. The Subject's neighborhood is primarily comprised of commercial, retail, institutional, multifamily uses, and single-family homes in generally average condition. North: Land use to the immediate north of the Subject site are single-family homes in average condition, the Lakeview Manor Apartments, a parking lot, and the St. Augustine Towers Assisted-Living Facility to the northeast. Lakeview Manor offers fewer than 10 units, is not professionally managed, and is inferior in condition to the proposed Subject. Further north across Lake Avenue are single-family homes and commercial uses in average condition. East: To the immediate east of the Subject is the St. Augustine Towers Assisted-Living Facility, followed further east by a community center and retail uses. Further east on Detroit Avenue is a place of worship, followed by single-family homes in average to good condition. South: Immediately south of the site across Detroit Avenue is the St. Augustine Health Campus, as well as a mixed-use property with ground floor commercial and upper-floor residential, and commercial and retail properties. The property with ground floor commercial and upper-floor residential multifamily units, which is located at 8003 Detroit Avenue, is a 16-unit Section 8 development called the Muirville Apartments. The Muirville Apartments is a general-tenancy HOME property, restricted to 50 and 60 percent of AMI and offering studio and one-bedroom units. The property is currently 81.3 percent occupied with three vacant units. However, two units are down for repairs and the property has two households on the waiting list. Further southwest are single-family homes in average condition. West: To the immediate west is retail space and the Magnolia Detroit Apartments, 126 unit senior Section 8 development. Further west are the remainder of the units at Magnolia Detroit Apartments, commercial and retail uses along Detroit Avenue, and single-family homes in average condition along W. 83rd Street. Overall, nearby commercial and retail uses exhibited occupancy rates of approximately 80 percent. The Subject is located in close proximity to services including area shopping, public services, and medical facilities.

**Maps, photographs, and other documentation of project location and description:****Determination:**

✓	Finding of No Significant Impact [24 CFR 58.40(g)(1); 40 CFR 1508.13] The project will not result in a significant impact on the quality of human environment
	Finding of Significant Impact

**Approval Documents:**

[ER Determination SIGNED.pdf](#)

**7015.15 certified by Certifying Officer  
on:**

**7015.16 certified by Authorizing Officer  
on:**

**Funding Information**

Grant / Project Identification Number	HUD Program	Program Name	Funding Amount
M-23-MC-39-0207	Community Planning and Development (CPD)	HOME Program	\$600,000.00
TBD	Housing: Multifamily FHA	Section 542(c). Multifamily Mortgage Risk-Sharing Programs with Housing Finance Agencies	\$1,900,000.00
TBD	Public Housing	Project-Based Voucher Program	\$14,900,000.00

**Estimated Total HUD Funded,  
Assisted or Insured Amount:** \$16,000,000.00

**Estimated Total Project Cost [24 CFR 58.2 (a)  
(5)]:** \$21,000,000.00

**Compliance with 24 CFR §50.4, §58.5 and §58.6 Laws and Authorities**

<b>Compliance Factors:</b> Statutes, Executive Orders, and Regulations listed at 24 CFR §50.4, §58.5, and §58.6	Are formal compliance steps or mitigation required?	Compliance determination (See Appendix A for source determinations)
<b>STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR §50.4 &amp; § 58.6</b>		
<b>Airport Hazards</b> Clear Zones and Accident Potential Zones; 24 CFR Part 51 Subpart D	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	The project site is not within 15,000 feet of a military airport or 2,500 feet of a civilian airport. The project is in compliance with Airport Hazards requirements.

<b>Coastal Barrier Resources Act</b> Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	This project is not located in a CBRS Unit. Therefore, this project has no potential to impact a CBRS Unit and is in compliance with the Coastal Barrier Resources Act.
<b>Flood Insurance</b> Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	The structure or insurable property is not located in a FEMA-designated Special Flood Hazard Area. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance requirements.
<b>STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR §50.4 &amp; § 58.5</b>		
<b>Air Quality</b> Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	The project's county or air quality management district is in non-attainment status for the following: Ozone, Particulate Matter, <2.5 microns. This project does not exceed de minimis emissions levels established by the state for the pollutant(s) identified above. The project is in compliance with the Clean Air Act.
<b>Coastal Zone Management Act</b> Coastal Zone Management Act, sections 307(c) & (d)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	This project is not located in or does not affect a Coastal Zone as defined in the state Coastal Management Plan. The project is in compliance with the Coastal Zone Management Act.
<b>Contamination and Toxic Substances</b> 24 CFR 50.3(i) & 58.5(i)(2)]	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Site contamination was evaluated as follows: ASTM Phase I ESA, ASTM Phase II ESA, Remediation or clean-up plan. On-site or nearby toxic, hazardous, or radioactive substances that could affect the health and safety of project occupants or conflict with the intended use of the property were not found. The project is in compliance with contamination and toxic substances requirements.
<b>Endangered Species Act</b> Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	This project May Affect, but is Not Likely to Adversely Affect, listed species, and informal consultation was conducted. This project is in compliance with the

		Endangered Species Act without mitigation.
<b>Explosive and Flammable Hazards</b> Above-Ground Tanks)[24 CFR Part 51 Subpart C	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	There is a current stationary aboveground storage container of concern within 1 mile of the project site. The Separation Distance from the project is acceptable. The project is in compliance with explosive and flammable hazard requirements.
<b>Farmlands Protection</b> Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	This project includes activities that could potentially convert agricultural land to a non-agricultural use, but an exemption applies: the project is on land already in urban development. The project is in compliance with the Farmland Protection Policy Act.
<b>Floodplain Management</b> Executive Order 11988, particularly section 2(a); 24 CFR Part 55	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	This project does not occur in the FFRMS floodplain. The project is in compliance with Executive Orders 11988 and 13690.
<b>Historic Preservation</b> National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Based on Section 106 consultation there are No Historic Properties Affected because there are no historic properties present. The project is in compliance with Section 106.
<b>Noise Abatement and Control</b> Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	A Noise Assessment was conducted. The noise level was acceptable: 58.0 db. See noise analysis. The project is in compliance with HUD's Noise regulation.
<b>Sole Source Aquifers</b> Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	The project is not located on a sole source aquifer area. The project is in compliance with Sole Source Aquifer requirements.
<b>Wetlands Protection</b> Executive Order 11990, particularly sections 2 and 5	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	The project will not impact on- or off-site wetlands. The project is in compliance with Executive Order 11990.
<b>Wild and Scenic Rivers Act</b> Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	This project is not within proximity of a NWSRS river. The project is in compliance with the Wild and Scenic Rivers Act.
<b>HUD HOUSING ENVIRONMENTAL STANDARDS</b>		
<b>ENVIRONMENTAL JUSTICE</b>		

<b>Environmental Justice</b> Executive Order 12898	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	No adverse environmental impacts were identified in the project's total environmental review. The project is in compliance with Executive Order 12898.
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**Environmental Assessment Factors [24 CFR 58.40; Ref. 40 CFR 1508.8 &1508.27]**

**Impact Codes:** An impact code from the following list has been used to make the determination of impact for each factor.

**(1)** Minor beneficial impact

**(2)** No impact anticipated

**(3)** Minor Adverse Impact – May require mitigation

**(4)** Significant or potentially significant impact requiring avoidance or modification which may require an Environmental Impact Statement.

<b>Environmental Assessment Factor</b>	<b>Impact Code</b>	<b>Impact Evaluation</b>	<b>Mitigation</b>
<b>LAND DEVELOPMENT</b>			
Conformance with Plans / Compatible Land Use and Zoning / Scale and Urban Design	1	This project replaces a multi-family building in poor repair with a new multi-family building with modern amenities. Any impact on neighborhood land use will be minimal	
Soil Suitability / Slope/ Erosion / Drainage and Storm Water Runoff	2	Area is level, developed with appropriate draining and storm water runoff systems, and is not anticipated to encounter any significant erosion. Construction will retain the level ground. Cleveland Water Pollution Control to monitor storm water drainage.	
Hazards and Nuisances including Site Safety and Site-Generated Noise	1	Phase I Environmental Site Assessments and Phase II Environmental Site Assessment conducted. Lead Based Paint Inspection completed. Asbestos Survey completed. All hazards were mitigated in an earlier phase of this project in 2022. Site generated noise will be temporary and limited to the construction period.	
<b>SOCIOECONOMIC</b>			
Employment and Income Patterns	2	The influx of new tenants into the community from this project will be minimal in nature, will be supplied primarily by persons currently in the primary market area, and should not	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		affect the overall demographics of the area.	
Demographic Character Changes / Displacement	2	Project should not impact local demographics. The influx of new tenants into the community from this project will be minimal in nature, will be supplied primarily by persons currently in the primary market area, and should not affect the overall demographics of the area.	
Environmental Justice EA Factor	2	No adverse impacts were identified	
<b>COMMUNITY FACILITIES AND SERVICES</b>			
Educational and Cultural Facilities (Access and Capacity)	1	The site was selected because it offer residents proximity to community amenities such as the new Walz library, St Augustine Health campus, and access to public transportation.	
Commercial Facilities (Access and Proximity)	2	This site is on a commercial corridor with easy access to shopping	
Health Care / Social Services (Access and Capacity)	1	The site was selected because it offer residents proximity to community amenities such as the new Walz library, St Augustine Health campus, and access to public transportation.	
Solid Waste Disposal and Recycling (Feasibility and Capacity)	2	Service is city-wide, and will be offered at the project site. Project site shall undergo a temporary increase in waste during construction, but will be redirected out of landfills as appropriate and permitted.	
Waste Water and Sanitary Sewers (Feasibility and Capacity)	2	Structures will be tied into waste water and sanitary sewage system. Tie-ins and monitoring to be provided by Northeast Ohio Regional Sewage District.	
Water Supply (Feasibility and Capacity)	2	Structures will be tied into City of Cleveland, Division of Water, for access to potable water. Tie-ins and monitoring to be provided by Division of Water.	
Public Safety - Police, Fire and Emergency Medical	2	Fire and EMS are less than a mile from the site, police station located approximately two miles away.	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
Parks, Open Space and Recreation (Access and Capacity)	2	This site is located less than half a mile from several parks, including a rec center and the lakefront park and beach.	
Transportation and Accessibility (Access and Capacity)	1	The site was selected because it offer residents proximity to community amenities such as the new Walz library, services, and access to public transportation.	
<b>NATURAL FEATURES</b>			
Unique Natural Features /Water Resources	2	There are no natural features or water resources on the site.	
Vegetation / Wildlife (Introduction, Modification, Removal, Disruption, etc.)	2	There is minimal vegetation or wildlife habitat on this site.	
Other Factors 1			
Other Factors 2			
<b>CLIMATE AND ENERGY</b>			
Climate Change	1	This project will replace an outdated (~100 year old) building with a new energy efficient building, better serving the residents.	
Energy Efficiency	1	This building will be built to LEED standards.	

**Supporting documentation**

[Proximity to parks and recreation.png](#)

[Proximity to grocery stores.png](#)

[Proximity to clinics and dr offices.png](#)

**Additional Studies Performed:**

**Field Inspection [Optional]:** Date and completed by:

**List of Sources, Agencies and Persons Consulted [40 CFR 1508.9(b)]:**

USFWS <https://www.fws.gov/CBRA/Maps/Mapper.html>  
<https://www.fws.gov/midwest/endangered/lists/ohio-cty.html>  
<https://www.fws.gov/wetlands/data/mapper.html> USEPA  
<https://www.epa.gov/criteria-air-pollutants/naaqs-table>  
<https://www3.epa.gov/region5/water/gwdw/solesourceaquifer/index.htm>  
<https://www3.epa.gov/enviro/facts/multisystem.html>  
[https://iaspub.epa.gov/triexplorer/tri\\_factsheet\\_search.searchfactsheet](https://iaspub.epa.gov/triexplorer/tri_factsheet_search.searchfactsheet) HUD  
guidance <https://www.hudexchange.info/environmental-review/explosive-and-flammable-facilities/> <https://www.hudexchange.info/environmental-review/dnl-calculator/> ODNR <http://watercraft.ohiodnr.gov/scenicriversmap>  
<https://gis.ohiodnr.gov/MapView/?config=interactiveatlas>  
<https://gis.ohiodnr.gov/MapView/?config=CEA> Ohio SHPO National Park Service  
FEMA <https://msc.fema.gov/portal/home> Census.gov  
[https://tigerweb.geo.census.gov/tigerwebmain/TIGERweb\\_apps.html](https://tigerweb.geo.census.gov/tigerwebmain/TIGERweb_apps.html)

**List of Permits Obtained:**

**Public Outreach [24 CFR 58.43]:**

Numerous community meetings and events have been held regarding development of this site. See attached community engagement plan.

[Community Engagement.pdf](#)

**Cumulative Impact Analysis [24 CFR 58.32]:**

This project continues a previous phase which consisted of demolition and abatement of buildings that were beyond their useful life. Currently the site sits vacant and surrounded by construction fencing. The proposed project will bring additional affordable housing for seniors to a neighborhood with a shortage of such housing. The project will also share the site with a new library, adding to the amenities for residents which also include access to transit, shopping, parks and medical care.

**Alternatives [24 CFR 58.40(e); 40 CFR 1508.9]**

**No Action Alternative [24 CFR 58.40(e)]**

The no action alternative would leave the site vacant and would not address the needs of low-income seniors in the area.

**Summary of Findings and Conclusions:**

No adverse environmental impacts were identified. Overall the project is anticipated to have a positive impact both on the immediate neighborhood and the future residents of the building.

**Mitigation Measures and Conditions [CFR 1505.2(c)]:**

Summarized below are all mitigation measures adopted by the Responsible Entity to reduce, avoid or eliminate adverse environmental impacts and to avoid non-compliance or non-conformance with the above-listed authorities and factors. These measures/conditions must be incorporated into project contracts, development agreements and other relevant documents. The staff responsible for implementing and monitoring mitigation measures should be clearly identified in the mitigation plan.

Law, Authority, or Factor	Mitigation Measure or Condition	Comments on Completed Measures	Mitigation Plan	Complete
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**Project Mitigation Plan**

**Supporting documentation on completed measures**

## APPENDIX A: Related Federal Laws and Authorities

### Airport Hazards

General policy	Legislation	Regulation
It is HUD's policy to apply standards to prevent incompatible development around civil airports and military airfields.		24 CFR Part 51 Subpart D

1. To ensure compatible land use development, you must determine your site's proximity to civil and military airports. Is your project within 15,000 feet of a military airport or 2,500 feet of a civilian airport?

✓ No

Based on the response, the review is in compliance with this section. Document and upload the map showing that the site is not within the applicable distances to a military or civilian airport below

Yes

### Screen Summary

#### Compliance Determination

The project site is not within 15,000 feet of a military airport or 2,500 feet of a civilian airport. The project is in compliance with Airport Hazards requirements.

#### Supporting documentation

[Distance to BKL.pdf](#)

[Distance to CLE.pdf](#)

[Distance to CGF.pdf](#)

Are formal compliance steps or mitigation required?

Yes

✓ No

## Coastal Barrier Resources

General requirements	Legislation	Regulation
HUD financial assistance may not be used for most activities in units of the Coastal Barrier Resources System (CBRS). See 16 USC 3504 for limitations on federal expenditures affecting the CBRS.	Coastal Barrier Resources Act (CBRA) of 1982, as amended by the Coastal Barrier Improvement Act of 1990 (16 USC 3501)	

**1. Is the project located in a CBRS Unit?**

☒ No

Document and upload map and documentation below.

Yes

### Compliance Determination

This project is not located in a CBRS Unit. Therefore, this project has no potential to impact a CBRS Unit and is in compliance with the Coastal Barrier Resources Act.

### Supporting documentation

[Northeast Ohio CBRS Units.pdf](#)

**Are formal compliance steps or mitigation required?**

Yes

☒ No

## Flood Insurance

General requirements	Legislation	Regulation
Certain types of federal financial assistance may not be used in floodplains unless the community participates in National Flood Insurance Program and flood insurance is both obtained and maintained.	Flood Disaster Protection Act of 1973 as amended (42 USC 4001-4128)	24 CFR 50.4(b)(1) and 24 CFR 58.6(a) and (b); 24 CFR 55.1(b).

**1. Does this project involve financial assistance for construction, rehabilitation, or acquisition of a mobile home, building, or insurable personal property?**

No. This project does not require flood insurance or is excepted from flood insurance.

✓ Yes

**2. Upload a FEMA/FIRM map showing the site here:**

[Karam FIRMETTE.pdf](#)

The Federal Emergency Management Agency (FEMA) designates floodplains. The [FEMA Map Service Center](#) provides this information in the form of FEMA Flood Insurance Rate Maps (FIRMs). For projects in areas not mapped by FEMA, use the best available information to determine floodplain information. Include documentation, including a discussion of why this is the best available information for the site. Provide FEMA/FIRM floodplain zone designation, panel number, and date within your documentation.

**Is the structure, part of the structure, or insurable property located in a FEMA-designated Special Flood Hazard Area?**

✓ No

Based on the response, the review is in compliance with this section.

Yes

**4. While flood insurance is not mandatory for this project, HUD strongly recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). Will flood insurance be required as a mitigation measure or condition?**

Yes

✓ No

**Screen Summary**

**Compliance Determination**

The structure or insurable property is not located in a FEMA-designated Special Flood Hazard Area. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance requirements.

**Supporting documentation**

**Are formal compliance steps or mitigation required?**

Yes

✓ No

## Air Quality

General requirements	Legislation	Regulation
The Clean Air Act is administered by the U.S. Environmental Protection Agency (EPA), which sets national standards on ambient pollutants. In addition, the Clean Air Act is administered by States, which must develop State Implementation Plans (SIPs) to regulate their state air quality. Projects funded by HUD must demonstrate that they conform to the appropriate SIP.	Clean Air Act (42 USC 7401 et seq.) as amended particularly Section 176(c) and (d) (42 USC 7506(c) and (d))	40 CFR Parts 6, 51 and 93

**1. Does your project include new construction or conversion of land use facilitating the development of public, commercial, or industrial facilities OR five or more dwelling units?**

☒ Yes

☐ No

### Air Quality Attainment Status of Project's County or Air Quality Management District

**2. Is your project's air quality management district or county in non-attainment or maintenance status for any criteria pollutants?**

No, project's county or air quality management district is in attainment status for all criteria pollutants.

☒ Yes, project's management district or county is in non-attainment or maintenance status for the following criteria pollutants (check all that apply):

Carbon Monoxide

Lead

Nitrogen dioxide

Sulfur dioxide

- ✓ Ozone
- ✓ Particulate Matter, <2.5 microns
- Particulate Matter, <10 microns

**3. What are the *de minimis* emissions levels (40 CFR 93.153) or screening levels for the non-attainment or maintenance level pollutants indicated above**

Ozone	10.00	ppb (parts per million)
Particulate Matter, <2.5 microns	10.00	µg/m3 (micrograms per cubic meter of air)

**Provide your source used to determine levels here:**

Ohio Administrative Code Rule 3745-15-05 "De Minimis" air contaminant source exemption.  
Effective: February 19, 2023

**4. Determine the estimated emissions levels of your project. Will your project exceed any of the *de minimis* or threshold emissions levels of non-attainment and maintenance level pollutants or exceed the screening levels established by the state or air quality management district?**

- ✓ No, the project will not exceed *de minimis* or threshold emissions levels or screening levels.

**Enter the estimate emission levels:**

Ozone	1.00	ppb (parts per million)
Particulate Matter, <2.5 microns	1.00	µg/m3 (micrograms per cubic meter of air)

Based on the response, the review is in compliance with this section.

Yes, the project exceeds *de minimis* emissions levels or screening levels.

**Screen Summary**

**Compliance Determination**

The project's county or air quality management district is in non-attainment status for the following: Ozone, Particulate Matter, <2.5 microns. This project does not exceed

de minimis emissions levels established by the state for the pollutant(s) identified above. The project is in compliance with the Clean Air Act.

**Supporting documentation**

[EPA Input on Air Q.pdf](#)

[De minimis Ohio Administrative Code.pdf](#)

**Are formal compliance steps or mitigation required?**

Yes

✓ No

## Coastal Zone Management Act

General requirements	Legislation	Regulation
Federal assistance to applicant agencies for activities affecting any coastal use or resource is granted only when such activities are consistent with federally approved State Coastal Zone Management Act Plans.	Coastal Zone Management Act (16 USC 1451-1464), particularly section 307(c) and (d) (16 USC 1456(c) and (d))	15 CFR Part 930

**1. Is the project located in, or does it affect, a Coastal Zone as defined in your state Coastal Management Plan?**

Yes

✓ No

Based on the response, the review is in compliance with this section. Document and upload all documents used to make your determination below.

### Screen Summary

#### **Compliance Determination**

This project is not located in or does not affect a Coastal Zone as defined in the state Coastal Management Plan. The project is in compliance with the Coastal Zone Management Act.

#### **Supporting documentation**

[Coastal Atlast Map Viewer.pdf](#)

#### **Are formal compliance steps or mitigation required?**

Yes

✓ No

## Contamination and Toxic Substances

General Requirements	Legislation	Regulations
It is HUD policy that all properties that are being proposed for use in HUD programs be free of hazardous materials, contamination, toxic chemicals and gases, and radioactive substances, where a hazard could affect the health and safety of the occupants or conflict with the intended utilization of the property.		24 CFR 58.5(i)(2) 24 CFR 50.3(i)
Reference		
<a href="https://www.onecpd.info/environmental-review/site-contamination">https://www.onecpd.info/environmental-review/site-contamination</a>		

**1. How was site contamination evaluated?\* Select all that apply.**

- ✓ ASTM Phase I ESA
- ✓ ASTM Phase II ESA
- ✓ Remediation or clean-up plan

ASTM Vapor Encroachment Screening.

None of the above

\* HUD regulations at 24 CFR § 58.5(i)(2)(ii) require that the environmental review for multifamily housing with five or more dwelling units or non-residential property include the evaluation of previous uses of the site or other evidence of contamination on or near the site.

For acquisition and new construction of multifamily and nonresidential properties HUD strongly advises the review include an ASTM Phase I Environmental Site Assessment (ESA) to meet real estate transaction standards of due diligence and to help ensure compliance with HUD's toxic policy at 24 CFR §58.5(i) and 24 CFR §50.3(i). Also note that some HUD programs require an ASTM Phase I ESA.

**2. Were any on-site or nearby toxic, hazardous, or radioactive substances found that could affect the health and safety of project occupants or conflict with the intended use of the property? (Were any recognized environmental conditions or RECs identified in a Phase I ESA and confirmed in a Phase II ESA?)**

- ✓ No

Explain:

The Subject Property investigations completed to date have properly evaluated the identified recognized environmental conditions. Based on the results of the investigations and the razing/removal of all buildings and materials, there is no information suggesting and/or indicating additional investigation is required.

Yes

#### **Screen Summary**

##### **Compliance Determination**

Site contamination was evaluated as follows: ASTM Phase I ESA, ASTM Phase II ESA, Remediation or clean-up plan. On-site or nearby toxic, hazardous, or radioactive substances that could affect the health and safety of project occupants or conflict with the intended use of the property were not found. The project is in compliance with contamination and toxic substances requirements.

##### **Supporting documentation**

[Karam - Phase I ESA Report 2024.pdf](#)

##### **Are formal compliance steps or mitigation required?**

Yes

✓ No

## Endangered Species

General requirements	ESA Legislation	Regulations
Section 7 of the Endangered Species Act (ESA) mandates that federal agencies ensure that actions that they authorize, fund, or carry out shall not jeopardize the continued existence of federally listed plants and animals or result in the adverse modification or destruction of designated critical habitat. Where their actions may affect resources protected by the ESA, agencies must consult with the Fish and Wildlife Service and/or the National Marine Fisheries Service ("FWS" and "NMFS" or "the Services").	The Endangered Species Act of 1973 (16 U.S.C. 1531 <i>et seq.</i> ); particularly section 7 (16 USC 1536).	50 CFR Part 402

**1. Does the project involve any activities that have the potential to affect species or habitats?**

No, the project will have No Effect due to the nature of the activities involved in the project.

No, the project will have No Effect based on a letter of understanding, memorandum of agreement, programmatic agreement, or checklist provided by local HUD office

- ✓ Yes, the activities involved in the project have the potential to affect species and/or habitats.

**2. Are federally listed species or designated critical habitats present in the action area?**

No, the project will have No Effect due to the absence of federally listed species and designated critical habitat

- ✓ Yes, there are federally listed species or designated critical habitats present in the action area.

**3. What effects, if any, will your project have on federally listed species or designated critical habitat?**

No Effect: Based on the specifics of both the project and any federally listed species in the action area, you have determined that the project will have absolutely no effect on listed species or critical habitat. in the action area.

- ✓ May Affect, Not Likely to Adversely Affect: Any effects that the project may have on federally listed species or critical habitats would be beneficial, discountable, or insignificant.

Likely to Adversely Affect: The project may have negative effects on one or more listed species or critical habitat.

**4. Informal Consultation is required**

Section 7 of ESA (16 USC. 1536) mandates consultation to resolve potential impacts to endangered and threatened species and critical habitats. If a HUD-assisted project may affect any federally listed endangered or threatened species or critical habitat, then compliance is required with Section 7. See 50 CFR Part 402 Subpart B Consultation Procedures.

**Did the Service(s) concur with the finding that the project is Not Likely to Adversely Affect?**

- ✓ Yes, the Service(s) concurred with the finding.

Based on the response, the review is in compliance with this section. Document and upload the following below:

- (1) A biological evaluation or equivalent document
- (2) Concurrence(s) from FWS and/or NMFS
- (3) Any other documentation of informal consultation

Exception: If finding was made based on procedures provided by a letter of understanding, memorandum of agreement, programmatic agreement, or checklist provided by local HUD office, provide whatever documentation is mandated by that agreement.

No, the Service(s) did not concur with the finding.

**6. For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation. This information will be automatically included in the Mitigation summary for the environmental review. If negative effects cannot be mitigated, cancel the project using the button at the bottom of this screen.**

Mitigation as follows will be implemented:

✓ No mitigation is necessary.

Explain why mitigation will not be made here:

No habitat is present on the site

#### **Screen Summary**

##### **Compliance Determination**

This project May Affect, but is Not Likely to Adversely Affect, listed species, and informal consultation was conducted. This project is in compliance with the Endangered Species Act without mitigation.

##### **Supporting documentation**

[Letter of Concurrence from USFWS.pdf](#)

[Species List Ohio Ecological Services Field Office.pdf](#)

[US FWS - Ohio Consultation - Karam.pdf](#)

##### **Are formal compliance steps or mitigation required?**

Yes

✓ No

## Explosive and Flammable Hazards

General requirements	Legislation	Regulation
HUD-assisted projects must meet Acceptable Separation Distance (ASD) requirements to protect them from explosive and flammable hazards.	N/A	24 CFR Part 51 Subpart C

**1. Is the proposed HUD-assisted project itself the development of a hazardous facility (a facility that mainly stores, handles or processes flammable or combustible chemicals such as bulk fuel storage facilities and refineries)?**

✓ No

Yes

**2. Does this project include any of the following activities: development, construction, rehabilitation that will increase residential densities, or conversion?**

No

✓ Yes

**3. Within 1 mile of the project site, are there any current or planned stationary aboveground storage containers that are covered by 24 CFR 51C? Containers that are NOT covered under the regulation include:**

- Containers 100 gallons or less in capacity, containing common liquid industrial fuels OR

- Containers of liquified petroleum gas (LPG) or propane with a water volume capacity of 1,000 gallons or less that meet the requirements of the 2017 or later version of National Fire Protection Association (NFPA) Code 58.

If all containers within the search area fit the above criteria, answer "No." For any other type of aboveground storage container within the search area that holds one of the flammable or explosive materials listed in Appendix I of 24 CFR part 51 subpart C, answer "Yes."

No

✓ Yes

**4. Based on the analysis, is the proposed HUD-assisted project located at or beyond the required separation distance from all covered tanks?**

✓ Yes

Based on the response, the review is in compliance with this section.

No

**Screen Summary**

**Compliance Determination**

There is a current stationary aboveground storage container of concern within 1 mile of the project site. The Separation Distance from the project is acceptable. The project is in compliance with explosive and flammable hazard requirements.

**Supporting documentation**

[Karam nearest AST distance.pdf](#)

[ASD Assessment.png](#)

**Are formal compliance steps or mitigation required?**

Yes

✓ No

## Farmlands Protection

General requirements	Legislation	Regulation
The Farmland Protection Policy Act (FPPA) discourages federal activities that would convert farmland to nonagricultural purposes.	Farmland Protection Policy Act of 1981 (7 U.S.C. 4201 et seq.)	<a href="#">7 CFR Part 658</a>

**1. Does your project include any activities, including new construction, acquisition of undeveloped land or conversion, that could convert agricultural land to a non-agricultural use?**

✓ Yes

No

**2. Does your project meet one of the following exemptions?**

- Construction limited to on-farm structures needed for farm operations.
- Construction limited to new minor secondary (accessory) structures such as a garage or storage shed
- Project on land already in or committed to urban development or used for water storage. (7 CFR 658.2(a))

✓ Yes

Based on the response, the review is in compliance with this section. Document and upload all documents used to make your determination below.

No

### **Screen Summary**

#### **Compliance Determination**

This project includes activities that could potentially convert agricultural land to a non-agricultural use, but an exemption applies: the project is on land already in urban development. The project is in compliance with the Farmland Protection Policy Act.

#### **Supporting documentation**

[Cropland Map.pdf](#)

**Are formal compliance steps or mitigation required?**

Yes

✓ No



## Floodplain Management

General Requirements	Legislation	Regulation
Executive Order 11988, Floodplain Management, requires Federal activities to avoid impacts to floodplains and to avoid direct and indirect support of floodplain development to the extent practicable.	Executive Order 11988 * Executive Order 13690 * 42 USC 4001-4128 * 42 USC 5154a * only applies to screen 2047 and not 2046	24 CFR 55

### 1. Does this project meet an exemption at 24 CFR 55.12 from compliance with HUD's floodplain management regulations in Part 55?

Yes

(a) HUD-assisted activities described in 24 CFR 58.34 and 58.35(b).

(b) HUD-assisted activities described in 24 CFR 50.19, except as otherwise indicated in § 50.19.

(c) The approval of financial assistance for restoring and preserving the natural and beneficial functions and values of floodplains and wetlands, including through acquisition of such floodplain and wetland property, where a permanent covenant or comparable restriction is place on the property's continued use for flood control, wetland projection, open space, or park land, but only if:

(1) The property is cleared of all existing buildings and walled structures; and

(2) The property is cleared of related improvements except those which:

(i) Are directly related to flood control, wetland protection, open space, or park land (including playgrounds and recreation areas);

(ii) Do not modify existing wetland areas or involve fill, paving, or other ground disturbance beyond minimal trails or paths; and

(iii) Are designed to be compatible with the beneficial floodplain or wetland function of the property.

(d) An action involving a repossession, receivership, foreclosure, or similar acquisition of property to protect or enforce HUD's financial interests under previously approved loans, grants, mortgage insurance,

or other HUD assistance.

(e) Policy-level actions described at 24 CFR 50.16 that do not involve site-based decisions.

(f) A minor amendment to a previously approved action with no additional adverse impact on or from a floodplain or wetland.

(g) HUD's or the responsible entity's approval of a project site, an incidental portion of which is situated in the FFRMS floodplain (not including the floodway, LiMWA, or coastal high hazard area) but only if: (1) The proposed project site does not include any existing or proposed buildings or improvements that modify or occupy the FFRMS floodplain except de minimis improvements such as recreation areas and trails; and (2) the proposed project will not result in any new construction in or modifications of a wetland .

(h) Issuance or use of Housing Vouchers, or other forms of rental subsidy where HUD, the awarding community, or the public housing agency that administers the contract awards rental subsidies that are not project-based (i.e., do not involve site-specific subsidies).

(i) Special projects directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and persons with disabilities.

Describe:

✓ No

**2. Does the project include a Critical Action? Examples of Critical Actions include projects involving hospitals, fire and police stations, nursing homes, hazardous chemical storage, storage of valuable records, and utility plants.**

Yes

Describe:

✓ No

**3. Determine the extent of the FFRMS floodplain and provide mapping documentation in support of that determination**

The extent of the FFRMS floodplain can be determined using a Climate Informed Science Approach (CISA), 0.2 percent flood approach (0.2 PFA), or freeboard value approach (FVA). For projects in areas without available CISA data or without FEMA Flood Insurance Rate Maps (FIRMs), Flood Insurance Studies (FISs) or Advisory Base Flood Elevations (ABFEs), use the best available information<sup>1</sup> to determine flood elevation. Include documentation and an explanation of why this is the best available information<sup>2</sup> for the site. Note that newly constructed and substantially improved<sup>3</sup> structures must be elevated to the FFRMS floodplain regardless of the approach chosen to determine the floodplain.

Select one of the following three options:

CISA for non-critical actions. If using a local tool , data, or resources, ensure that the FFRMS elevation is higher than would have been determined using the 0.2 PFA or the FVA.

- ✓ 0.2-PFA. Where FEMA has defined the 0.2-percent-annual-chance floodplain, the FFRMS floodplain is the area that FEMA has designated as within the 0.2-percent-annual-chance floodplain.

FVA. If neither CISA nor 0.2-PFA is available, for non-critical actions, the FFRMS floodplain is the area that results from adding two feet to the base flood elevation as established by the effective FIRM or FIS or — if available — a FEMA-provided preliminary or pending FIRM or FIS or advisory base flood elevations, whether regulatory or informational in nature. However, an interim or preliminary FEMA map cannot be used if it is lower than the current FIRM or FIS.

<sup>1</sup> Sources which merit investigation include the files and studies of other federal agencies, such as the U. S. Army Corps of Engineers, the Tennessee Valley Authority, the Soil Conservation Service and the U. S. Geological Survey. These agencies have prepared flood hazard studies for several thousand localities and, through their technical assistance programs, hydrologic studies, soil surveys, and other investigations have collected or developed other floodplain information for numerous sites and areas. States and communities are also sources of information on past flood 'experiences within their boundaries and are particularly knowledgeable about areas subject to high-risk flood hazards such as alluvial fans, high velocity flows, mudflows and mudslides, ice jams, subsidence and liquefaction.

<sup>2</sup> If you are using best available information, select the FVA option below and provide supporting documentation in the screen summary. Contact your [local environmental officer](#) with additional compliance questions.

<sup>3</sup> Substantial improvement means any repair or improvement of a structure which costs at least 50 percent of the market value of the structure before repair or improvement or results in an increase of more than 20 percent of the number of dwelling units. The full definition can be found at [24 CFR 55.2\(b\)\(12\)](#).

5. Does your project occur in the FFRMS floodplain?

Yes

✓ No

**Screen Summary**

**Compliance Determination**

This project does not occur in the FFRMS floodplain. The project is in compliance with Executive Orders 11988 and 13690.

**Supporting documentation**

[Karam FIRMETTE\(1\).pdf](#)

**Are formal compliance steps or mitigation required?**

Yes

✓ No

## Historic Preservation

General requirements	Legislation	Regulation
Regulations under Section 106 of the National Historic Preservation Act (NHPA) require a consultative process to identify historic properties, assess project impacts on them, and avoid, minimize, or mitigate adverse effects	Section 106 of the National Historic Preservation Act (16 U.S.C. 470f)	36 CFR 800 "Protection of Historic Properties" <a href="https://www.govinfo.gov/content/pkg/CFR-2012-title36-vol3/pdf/CFR-2012-title36-vol3-part800.pdf">https://www.govinfo.gov/content/pkg/CFR-2012-title36-vol3/pdf/CFR-2012-title36-vol3-part800.pdf</a>

### Threshold

#### Is Section 106 review required for your project?

No, because the project consists solely of activities listed as exempt in a Programmatic Agreement (PA ). (See the PA Database to find applicable PAs.)

No, because the project consists solely of activities included in a No Potential to Cause Effects memo or other determination [36 CFR 800.3(a)(1)].

- ✓ Yes, because the project includes activities with potential to cause effects (direct or indirect).

### Step 1 – Initiate Consultation

#### Select all consulting parties below (check all that apply):

- ✓ State Historic Preservation Offer (SHPO) Completed

- ✓ Indian Tribes, including Tribal Historic Preservation Officers (THPOs) or Native Hawaiian Organizations (NHOs)

Other Consulting Parties

**Describe the process of selecting consulting parties and initiating consultation here:**

Historic Compliance Officer has followed the process described in the Programmatic Agreement between the Ohio State Historic Preservation Office (SHPO) and the city of Cleveland

Document and upload all correspondence, notices and notes (including comments and objections received below).

**Was the Section 106 Lender Delegation Memo used for Section 106 consultation?**

Yes

No

***Step 2 – Identify and Evaluate Historic Properties***

1. **Define the Area of Potential Effect (APE), either by entering the address(es) or uploading a map depicting the APE below:**

See attached map

**In the chart below, list historic properties identified and evaluated in the APE. Every historic property that may be affected by the project should be included in the chart.**

Upload the documentation (survey forms, Register nominations, concurrence(s) and/or objection(s), notes, and photos) that justify your National Register Status determination below.

Address / Location / District	National Register Status	SHPO Concurrence	Sensitive Information
----------------------------------	-----------------------------	------------------	--------------------------

**Additional Notes:**

2. **Was a survey of historic buildings and/or archeological sites done as part of the project?**

Yes

✓ No

***Step 3 –Assess Effects of the Project on Historic Properties***

Only properties that are listed on or eligible for the National Register of Historic Places receive further consideration under Section 106. Assess the effect(s) of the project by applying the Criteria of Adverse Effect. (36 CFR 800.5)] Consider direct and indirect effects as applicable as per guidance on direct and indirect effects.

**Choose one of the findings below - No Historic Properties Affected, No Adverse Effect, or Adverse Effect; and seek concurrence from consulting parties.**

✓ No Historic Properties Affected

Based on the response, the review is in compliance with this section. Document and upload concurrence(s) or objection(s) below.

**Document reason for finding:**

✓ No historic properties present.

Historic properties present, but project will have no effect upon them.

No Adverse Effect

Adverse Effect

**Screen Summary**

**Compliance Determination**

Based on Section 106 consultation there are No Historic Properties Affected because there are no historic properties present. The project is in compliance with Section 106.

**Supporting documentation**

[Karam Senior Housing - THPO Submittal - expiration of comment period.msg](#)

[Karam Senior Housing - Section 106 - SHPO response.pdf](#)

[Karam Senior Housing - Section 106 - executed.pdf](#)

[Karam Senior Housing - Section 106 - APE Map.pdf](#)

**Are formal compliance steps or mitigation required?**

Yes

Karam-Senior-New-  
Construction

Cleveland, OH

900000010447824

✓ No

## Noise Abatement and Control

General requirements	Legislation	Regulation
HUD's noise regulations protect residential properties from excessive noise exposure. HUD encourages mitigation as appropriate.	Noise Control Act of 1972  General Services Administration Federal Management Circular 75-2: "Compatible Land Uses at Federal Airfields"	Title 24 CFR 51 Subpart B

### 1. What activities does your project involve? Check all that apply:

- ☒ New construction for residential use

NOTE: HUD assistance to new construction projects is generally prohibited if they are located in an Unacceptable zone, and HUD discourages assistance for new construction projects in Normally Unacceptable zones. See 24 CFR 51.101(a)(3) for further details.

Rehabilitation of an existing residential property

A research demonstration project which does not result in new construction or reconstruction

An interstate land sales registration

Any timely emergency assistance under disaster assistance provision or appropriations which are provided to save lives, protect property, protect public health and safety, remove debris and wreckage, or assistance that has the effect of restoring facilities substantially as they existed prior to the disaster  
None of the above

### 4. Complete the Preliminary Screening to identify potential noise generators in the vicinity (1000' from a major road, 3000' from a railroad, or 15 miles from an airport).

Indicate the findings of the Preliminary Screening below:

There are no noise generators found within the threshold distances above.

- ✓ Noise generators were found within the threshold distances.

5. **Complete the Preliminary Screening to identify potential noise generators in the**

- ✓ Acceptable: (65 decibels or less; the ceiling may be shifted to 70 decibels in circumstances described in §24 CFR 51.105(a))

Indicate noise level here: 58

Based on the response, the review is in compliance with this section. Document and upload noise analysis, including noise level and data used to complete the analysis below.

Normally Unacceptable: (Above 65 decibels but not exceeding 75 decibels; the floor may be shifted to 70 decibels in circumstances described in §24 CFR 51.105(a))

Unacceptable: (Above 75 decibels)

HUD strongly encourages conversion of noise-exposed sites to land uses compatible with high noise levels.

Check here to affirm that you have considered converting this property to a non-residential use compatible with high noise levels.

Indicate noise level here: 58

Document and upload noise analysis, including noise level and data used to complete the analysis below.

**Screen Summary**

**Compliance Determination**

A Noise Assessment was conducted. The noise level was acceptable: 58.0 db. See noise analysis. The project is in compliance with HUD's Noise regulation.

**Supporting documentation**

[472182R Crossing Report.PDF](#)  
[No High Volume Roads.png](#)  
[Karam DNL Calculation.pdf](#)  
[523762A Crossing Report.PDF](#)

**Are formal compliance steps or mitigation required?**

Yes

✓ No

### Sole Source Aquifers

General requirements	Legislation	Regulation
<b>The Safe Drinking Water Act of 1974 protects drinking water systems which are the sole or principal drinking water source for an area and which, if contaminated, would create a significant hazard to public health.</b>	Safe Drinking Water Act of 1974 (42 U.S.C. 201, 300f et seq., and 21 U.S.C. 349)	40 CFR Part 149

1. Does the project consist solely of acquisition, leasing, or rehabilitation of an existing building(s)?

Yes

✓ No

2. Is the project located on a sole source aquifer (SSA)?

A sole source aquifer is defined as an aquifer that supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer. This includes streamflow source areas, which are upstream areas of losing streams that flow into the recharge area.

✓ No

Based on the response, the review is in compliance with this section. Document and upload documentation used to make your determination, such as a map of your project (or jurisdiction, if appropriate) in relation to the nearest SSA and its source area, below.

Yes

### Screen Summary

#### Compliance Determination

The project is not located on a sole source aquifer area. The project is in compliance with Sole Source Aquifer requirements.

**Supporting documentation**

[Sole Source Aquifers.pdf](#)

**Are formal compliance steps or mitigation required?**

Yes

✓ No

## Wetlands Protection

General requirements	Legislation	Regulation
Executive Order 11990 discourages direct or indirect support of new construction impacting wetlands wherever there is a practicable alternative. The Fish and Wildlife Service's National Wetlands Inventory can be used as a primary screening tool, but observed or known wetlands not indicated on NWI maps must also be processed Off-site impacts that result in draining, impounding, or destroying wetlands must also be processed.	Executive Order 11990	24 CFR 55.20 can be used for general guidance regarding the 8 Step Process.

**1. Does this project involve new construction as defined in Executive Order 11990, expansion of a building's footprint, or ground disturbance? The term "new construction" shall include draining, dredging, channelizing, filling, diking, impounding, and related activities and any structures or facilities begun or authorized after the effective date of the Order**

No

✓ Yes

**2. Will the new construction or other ground disturbance impact an on- or off-site wetland? The term "wetlands" means those areas that are inundated by surface or ground water with a frequency sufficient to support, and under normal circumstances does or would support, a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds.**

**"Wetlands under E.O. 11990 include isolated and non-jurisdictional wetlands."**

✓ No, a wetland will not be impacted in terms of E.O. 11990's definition of new construction.

Based on the response, the review is in compliance with this section. Document and upload a map or any other relevant documentation below which explains your determination

Yes, there is a wetland that be impacted in terms of E.O. 11990's definition of new construction.

## Screen Summary

**Compliance Determination**

The project will not impact on- or off-site wetlands. The project is in compliance with Executive Order 11990.

**Supporting documentation**

[Wetlands Map.pdf](#)

**Are formal compliance steps or mitigation required?**

Yes

✓ No

## Wild and Scenic Rivers Act

General requirements	Legislation	Regulation
The Wild and Scenic Rivers Act provides federal protection for certain free-flowing, wild, scenic and recreational rivers designated as components or potential components of the National Wild and Scenic Rivers System (NWSRS) from the effects of construction or development.	The Wild and Scenic Rivers Act (16 U.S.C. 1271-1287), particularly section 7(b) and (c) (16 U.S.C. 1278(b) and (c))	36 CFR Part 297

### 1. Is your project within proximity of a NWSRS river?

✓ No

Yes, the project is in proximity of a Designated Wild and Scenic River or Study Wild and Scenic River.

Yes, the project is in proximity of a Nationwide Rivers Inventory (NRI) River.

### Screen Summary

#### Compliance Determination

This project is not within proximity of a NWSRS river. The project is in compliance with the Wild and Scenic Rivers Act.

#### Supporting documentation

[Wild and Scenic Rivers.png](#)

#### Are formal compliance steps or mitigation required?

Yes

✓ No

## Environmental Justice

General requirements	Legislation	Regulation
Determine if the project creates adverse environmental impacts upon a low-income or minority community. If it does, engage the community in meaningful participation about mitigating the impacts or move the project.	Executive Order 12898	

HUD strongly encourages starting the Environmental Justice analysis only after all other laws and authorities, including Environmental Assessment factors if necessary, have been completed.

1. Were any adverse environmental impacts identified in any other compliance review portion of this project's total environmental review?

Yes

✓ No

Based on the response, the review is in compliance with this section.

### Screen Summary

#### Compliance Determination

No adverse environmental impacts were identified in the project's total environmental review. The project is in compliance with Executive Order 12898.

#### Supporting documentation

Are formal compliance steps or mitigation required?

Yes

✓ No



**Notice of Adoption of Environmental Review**

Project Name: Karam Senior Living, Cleveland, Ohio

HUD HEROS Environmental Review System Number: 900000010218013

March 3, 2025

The City of Cleveland prepared an Environmental Review Record (ERR) at the Environmental Assessment level for the above listed project. On March 3, 2022, HUD/Columbus, Ohio issued an Authority to Use Grant Funds notice for the use of federal funds by the City of Cleveland for the above listed project.

Ohio Housing Finance Agency (OHFA) is also participating with federal funds for the above listed project. Ohio Department of Development (Development) is the Responsible Entity for the federal funds contributed by OHFA.

This notice is to inform the City of Cleveland that Development intends to adopt the City of Cleveland's ERR and confirms the following:

1. Development has confirmed that the proposed scope of the project has not changed;
2. Development has independently evaluated the City of Cleveland's ERR and concurs with its conclusions;
3. Development has informed the City of Cleveland in writing that it intends to adopt the ERR;
4. In the event the proposed project changes significantly in scope, or the project encounters unanticipated environmental conditions during construction, Development agrees to coordinate with the City of Cleveland and the project sponsor to re-evaluate the ERR; and
5. Development is completing its own NOI/RROF process and will have an Authority to Use Grant Funds notice on file.

**Ohio Department of Development**

Lydia L. Mihalik, Director  
Ohio Department of Development

Date



**Statement to Accompany Environmental Review Record**

Project Name: Karam Senior Living, Cleveland, Ohio  
HUD HEROS Environmental Review System Number: 900000010218013

March 3, 2025

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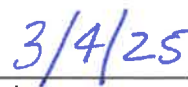
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Development intends to adopt the City of Cleveland's ERR and confirms the following:

1. Development has confirmed that the proposed scope of the project has not changed;
2. Development has independently evaluated the City of Cleveland's ERR and concurs with its conclusions;
3. Development has informed the City of Cleveland in writing that it intends to adopt the ERR;
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5. Development is completing its own NOI/RROF process and will have an Authority to Use Grant Funds notice on file.

**Ohio Department of Development**

  
Lydia L. Mihalik, Director  
Ohio Department of Development

  
Date

## U. S. DOT CROSSING INVENTORY FORM

## DEPARTMENT OF TRANSPORTATION

FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk \* denotes an optional field.

<b>A. Revision Date</b> (MM/DD/YYYY) 10 / 11 / 2024	<b>B. Reporting Agency</b> <input checked="" type="checkbox"/> Railroad <input type="checkbox"/> Transit <input type="checkbox"/> State <input type="checkbox"/> Other	<b>C. Reason for Update</b> (Select only one) <input checked="" type="checkbox"/> Change in Data <input type="checkbox"/> New Crossing <input type="checkbox"/> Closed <input type="checkbox"/> Re-Open <input type="checkbox"/> Date Change Only <input type="checkbox"/> Change in Primary Operating RR <input type="checkbox"/> No Train Traffic <input type="checkbox"/> Quiet Zone Update <input type="checkbox"/> Admin. Correction	<b>D. DOT Crossing Inventory Number</b> 472182R
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## Part I: Location and Classification Information

<b>1. Primary Operating Railroad</b> Norfolk Southern Railway Company [NS]		<b>2. State</b> OHIO		<b>3. County</b> CUYAHOGA	
<b>4. City / Municipality</b> <input checked="" type="checkbox"/> In <input type="checkbox"/> Near CLEVELAND		<b>5. Street/Road Name &amp; Block Number</b> WEST 77TH STREET (Street/Road Name) * (Block Number)		<b>6. Highway Type &amp; No.</b> LS	
<b>7. Do Other Railroads Operate a Separate Track at Crossing?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR			<b>8. Do Other Railroads Operate Over Your Track at Crossing?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR		
<b>9. Railroad Division or Region</b> <input type="checkbox"/> None KEYSTONE		<b>10. Railroad Subdivision or District</b> <input type="checkbox"/> None LAKE ERIE		<b>11. Branch or Line Name</b> <input checked="" type="checkbox"/> None	
<b>12. RR Milepost</b> B 0187.440 (prefix)   (nnnn.nnn)   (suffix)					
<b>13. Line Segment</b> *		<b>14. Nearest RR Timetable Station</b> * CLEVELAND		<b>15. Parent RR</b> (if applicable) <input checked="" type="checkbox"/> N/A	
<b>16. Crossing Owner</b> (if applicable) <input checked="" type="checkbox"/> N/A					
<b>17. Crossing Type</b> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	<b>18. Crossing Purpose</b> <input checked="" type="checkbox"/> Highway <input type="checkbox"/> Pathway, Ped. <input type="checkbox"/> Station, Ped.	<b>19. Crossing Position</b> <input type="checkbox"/> At Grade <input checked="" type="checkbox"/> RR Under <input type="checkbox"/> RR Over	<b>20. Public Access</b> (if Private Crossing) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>21. Type of Train</b> <input checked="" type="checkbox"/> Freight <input type="checkbox"/> Intercity Passenger <input type="checkbox"/> Commuter <input type="checkbox"/> Transit <input type="checkbox"/> Shared Use Transit <input type="checkbox"/> Tourist/Other	<b>22. Average Passenger Train Count Per Day</b> <input type="checkbox"/> Less Than One Per Day <input type="checkbox"/> Number Per Day 0
<b>23. Type of Land Use</b> <input type="checkbox"/> Open Space <input type="checkbox"/> Farm <input type="checkbox"/> Residential <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Institutional <input type="checkbox"/> Recreational <input type="checkbox"/> RR Yard					
<b>24. Is there an Adjacent Crossing with a Separate Number?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Provide Crossing Number			<b>25. Quiet Zone</b> (FRA provided) <input checked="" type="checkbox"/> No <input type="checkbox"/> 24 Hr <input type="checkbox"/> Partial <input type="checkbox"/> Chicago Excused Date Established		
<b>26. HSR Corridor ID</b> <input checked="" type="checkbox"/> N/A		<b>27. Latitude in decimal degrees</b> (WGS84 std: nn.nnnnnnn) 41.4784329		<b>28. Longitude in decimal degrees</b> (WGS84 std: -nnn.nnnnnnn) -81.737797	
<b>29. Lat/Long Source</b> <input checked="" type="checkbox"/> Actual <input type="checkbox"/> Estimated					
<b>30.A. Railroad Use</b> *			<b>31.A. State Use</b> *		
<b>30.B. Railroad Use</b> *			<b>31.B. State Use</b> *		
<b>30.C. Railroad Use</b> *			<b>31.C. State Use</b> *		
<b>30.D. Railroad Use</b> *			<b>31.D. State Use</b> *		
<b>32.A. Narrative</b> (Railroad Use) *			<b>32.B. Narrative</b> (State Use) *		
<b>33. Emergency Notification Telephone No.</b> (posted) 800-946-4744		<b>34. Railroad Contact</b> (Telephone No.) 800-946-4744		<b>35. State Contact</b> (Telephone No.) 614-466-0407	

## Part II: Railroad Information

<b>1. Estimated Number of Daily Train Movements</b>				
<b>1.A. Total Day Thru Trains</b> (6 AM to 6 PM) 1	<b>1.B. Total Night Thru Trains</b> (6 PM to 6 AM) 2	<b>1.C. Total Switching Trains</b> 0	<b>1.D. Total Transit Trains</b> 0	<b>1.E. Check if Less Than One Movement Per Day</b> <input type="checkbox"/> How many trains per week? _____
<b>2. Year of Train Count Data</b> (YYYY) 2024		<b>3. Speed of Train at Crossing</b> 3.A. Maximum Timetable Speed (mph) 35 3.B. Typical Speed Range Over Crossing (mph) From 25 to 35		
<b>4. Type and Count of Tracks</b> Main 1 Siding 0 Yard 0 Transit 0 Industry 0				
<b>5. Train Detection</b> (Main Track only) <input type="checkbox"/> Constant Warning Time <input type="checkbox"/> Motion Detection <input type="checkbox"/> AFO <input type="checkbox"/> PTC <input type="checkbox"/> DC <input type="checkbox"/> Other <input checked="" type="checkbox"/> None				
<b>6. Is Track Signaled?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<b>7.A. Event Recorder</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>7.B. Remote Health Monitoring</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

# U. S. DOT CROSSING INVENTORY FORM

A. Revision Date (MM/DD/YYYY) 10/11/2024		PAGE 2		D. Crossing Inventory Number (7 char.) 472182R	
<b>Part III: Highway or Pathway Traffic Control Device Information</b>					
1. Are there Signs or Signals?  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		2. Types of Passive Traffic Control Devices associated with the Crossing			
2.A. Crossbuck Assemblies (count) 0		2.B. STOP Signs (R1-1) (count) 0	2.C. YIELD Signs (R1-2) (count)	2.D. Advance Warning Signs (Check all that apply; include count) <input type="checkbox"/> None <input type="checkbox"/> W10-1 <input type="checkbox"/> W10-3 <input type="checkbox"/> W10-11 <input type="checkbox"/> W10-2 <input type="checkbox"/> W10-4 <input type="checkbox"/> W10-12	
2.E. Low Ground Clearance Sign (W10-5) <input type="checkbox"/> Yes (count _____) <input type="checkbox"/> No		2.F. Pavement Markings <input type="checkbox"/> Stop Lines <input type="checkbox"/> Dynamic Envelope <input type="checkbox"/> RR Xing Symbols <input checked="" type="checkbox"/> None		2.G. Channelization Devices/Medians <input type="checkbox"/> All Approaches <input type="checkbox"/> Median <input type="checkbox"/> One Approach <input type="checkbox"/> None	2.H. EXEMPT Sign (R15-3) <input type="checkbox"/> Yes <input type="checkbox"/> No
2.J. Other MUTCD Signs Specify Type _____ Count _____ Specify Type _____ Count _____ Specify Type _____ Count _____		2.K. Private Crossing Signs (if private)  <input type="checkbox"/> Yes <input type="checkbox"/> No	2.L. LED Enhanced Signs (List types)		
<b>3. Types of Train Activated Warning Devices at the Grade Crossing (specify count of each device for all that apply)</b>					
3.A. Gate Arms (count)  Roadway 0 Pedestrian 0	3.B. Gate Configuration <input type="checkbox"/> 2 Quad <input type="checkbox"/> Full (Barrier) Resistance <input type="checkbox"/> 3 Quad <input type="checkbox"/> Median Gates <input type="checkbox"/> 4 Quad	3.C. Cantilevered (or Bridged) Flashing Light Structures (count) Over Traffic Lane 0 <input type="checkbox"/> Incandescent Not Over Traffic Lane 0 <input type="checkbox"/> LED		3.D. Mast Mounted Flashing Lights (count of masts) 0 <input type="checkbox"/> Incandescent <input type="checkbox"/> LED <input type="checkbox"/> Back Lights Included <input type="checkbox"/> Side Lights Included	3.E. Total Count of Flashing Light Pairs  0
3.F. Installation Date of Current Active Warning Devices: (MM/YYYY) _____/_____/_____ <input checked="" type="checkbox"/> Not Required		3.G. Wayside Horn <input type="checkbox"/> Yes Installed on (MM/YYYY) ____/____/_____ <input checked="" type="checkbox"/> No		3.H. Highway Traffic Signals Controlling Crossing <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3.I. Bells (count)  0
3.J. Non-Train Active Warning <input type="checkbox"/> Flagging/Flagman <input type="checkbox"/> Manually Operated Signals <input type="checkbox"/> Watchman <input type="checkbox"/> Floodlighting <input checked="" type="checkbox"/> None				3.K. Other Flashing Lights or Warning Devices Count 0 Specify type _____	
4.A. Does nearby Hwy Intersection have Traffic Signals?  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4.B. Hwy Traffic Signal Interconnection <input checked="" type="checkbox"/> Not Interconnected <input type="checkbox"/> For Traffic Signals <input type="checkbox"/> For Warning Signs	4.C. Hwy Traffic Signal Preemption <input type="checkbox"/> Simultaneous <input type="checkbox"/> Advance	5. Highway Traffic Pre-Signals <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Storage Distance * 0 Stop Line Distance * 0	6. Highway Monitoring Devices (Check all that apply) <input type="checkbox"/> Yes - Photo/Video Recording <input type="checkbox"/> Yes - Vehicle Presence Detection <input checked="" type="checkbox"/> None	
<b>Part IV: Physical Characteristics</b>					
1. Traffic Lanes Crossing Railroad <input type="checkbox"/> One-way Traffic <input type="checkbox"/> Two-way Traffic Number of Lanes _____ <input type="checkbox"/> Divided Traffic		2. Is Roadway/Pathway Paved?  <input type="checkbox"/> Yes <input type="checkbox"/> No	3. Does Track Run Down a Street?  <input type="checkbox"/> Yes <input type="checkbox"/> No	4. Is Crossing Illuminated? (Street lights within approx. 50 feet from nearest rail) <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Crossing Surface (on Main Track, multiple types allowed) Installation Date * (MM/YYYY) ____/____/_____ <input type="checkbox"/> 1 Timber <input type="checkbox"/> 2 Asphalt <input type="checkbox"/> 3 Asphalt and Timber <input type="checkbox"/> 4 Concrete <input type="checkbox"/> 5 Concrete and Rubber <input type="checkbox"/> 6 Rubber <input type="checkbox"/> 7 Metal <input type="checkbox"/> 8 Unconsolidated <input type="checkbox"/> 9 Composite <input type="checkbox"/> 10 Other (specify) _____					
6. Intersecting Roadway within 500 feet?  <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Approximate Distance (feet) _____			7. Smallest Crossing Angle  <input type="checkbox"/> 0° - 29° <input type="checkbox"/> 30° - 59° <input type="checkbox"/> 60° - 90°		8. Is Commercial Power Available? *  <input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Part V: Public Highway Information</b>					
1. Highway System <input type="checkbox"/> (01) Interstate Highway System <input type="checkbox"/> (02) Other Nat Hwy System (NHS) <input type="checkbox"/> (03) Federal AID, Not NHS <input type="checkbox"/> (08) Non-Federal Aid		2. Functional Classification of Road at Crossing <input type="checkbox"/> (0) Rural <input type="checkbox"/> (1) Urban <input type="checkbox"/> (1) Interstate <input type="checkbox"/> (5) Major Collector <input type="checkbox"/> (2) Other Freeways and Expressways <input type="checkbox"/> (3) Other Principal Arterial <input type="checkbox"/> (6) Minor Collector <input type="checkbox"/> (4) Minor Arterial <input type="checkbox"/> (7) Local		3. Is Crossing on State Highway System?  <input type="checkbox"/> Yes <input type="checkbox"/> No	4. Highway Speed Limit _____ MPH <input type="checkbox"/> Posted <input type="checkbox"/> Statutory
		5. Linear Referencing System (LRS Route ID) *			
		6. LRS Milepost *			
7. Annual Average Daily Traffic (AADT) Year 1970 AADT _____		8. Estimated Percent Trucks _____%	9. Regularly Used by School Buses? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Average Number per Day 0		10. Emergency Services Route <input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Submission Information - This information is used for administrative purposes and is not available on the public website.</b>					
Submitted by _____ Organization _____ Phone _____ Date _____					
Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection is 2130-0017. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25 Washington, DC 20590.					

## U. S. DOT CROSSING INVENTORY FORM

## DEPARTMENT OF TRANSPORTATION

FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk \* denotes an optional field.

<b>A. Revision Date</b> (MM/DD/YYYY) 10 / 11 / 2024	<b>B. Reporting Agency</b> <input checked="" type="checkbox"/> Railroad <input type="checkbox"/> Transit <input type="checkbox"/> State <input type="checkbox"/> Other	<b>C. Reason for Update (Select only one)</b> <input checked="" type="checkbox"/> Change in Data <input type="checkbox"/> New Crossing <input type="checkbox"/> Closed <input type="checkbox"/> Re-Open <input type="checkbox"/> Date Change Only <input type="checkbox"/> Change in Primary Operating RR <input type="checkbox"/> No Train Traffic <input type="checkbox"/> Quiet Zone Update <input type="checkbox"/> Admin. Correction	<b>D. DOT Crossing Inventory Number</b> 523762A
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## Part I: Location and Classification Information

<b>1. Primary Operating Railroad</b> Norfolk Southern Railway Company [NS]		<b>2. State</b> OHIO		<b>3. County</b> CUYAHOGA	
<b>4. City / Municipality</b> <input checked="" type="checkbox"/> In <input type="checkbox"/> Near CLEVELAND		<b>5. Street/Road Name &amp; Block Number</b> LAKE AVENUE (Street/Road Name) * (Block Number)		<b>6. Highway Type &amp; No.</b> LS	
<b>7. Do Other Railroads Operate a Separate Track at Crossing?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR			<b>8. Do Other Railroads Operate Over Your Track at Crossing?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Specify RR ATK		
<b>9. Railroad Division or Region</b> <input type="checkbox"/> None KEYSTONE		<b>10. Railroad Subdivision or District</b> <input type="checkbox"/> None CHICAGO LINE		<b>11. Branch or Line Name</b> <input checked="" type="checkbox"/> None	
<b>12. RR Milepost</b> CD 0184.440 (prefix)   (nnnn.nnn)   (suffix)					
<b>13. Line Segment</b> *		<b>14. Nearest RR Timetable Station</b> * LORAIN		<b>15. Parent RR (if applicable)</b> <input checked="" type="checkbox"/> N/A	
<b>16. Crossing Owner (if applicable)</b> <input checked="" type="checkbox"/> N/A					
<b>17. Crossing Type</b> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private		<b>18. Crossing Purpose</b> <input checked="" type="checkbox"/> Highway <input type="checkbox"/> Pathway, Ped. <input type="checkbox"/> Station, Ped.		<b>19. Crossing Position</b> <input type="checkbox"/> At Grade <input type="checkbox"/> RR Under <input checked="" type="checkbox"/> RR Over	
<b>20. Public Access (if Private Crossing)</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>21. Type of Train</b> <input checked="" type="checkbox"/> Freight <input type="checkbox"/> Intercity Passenger <input type="checkbox"/> Commuter <input type="checkbox"/> Transit <input type="checkbox"/> Shared Use Transit <input type="checkbox"/> Tourist/Other		<b>22. Average Passenger Train Count Per Day</b> <input type="checkbox"/> Less Than One Per Day <input checked="" type="checkbox"/> Number Per Day 2	
<b>23. Type of Land Use</b> <input type="checkbox"/> Open Space <input type="checkbox"/> Farm <input type="checkbox"/> Residential <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Institutional <input type="checkbox"/> Recreational <input type="checkbox"/> RR Yard					
<b>24. Is there an Adjacent Crossing with a Separate Number?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Provide Crossing Number			<b>25. Quiet Zone (FRA provided)</b> <input checked="" type="checkbox"/> No <input type="checkbox"/> 24 Hr <input type="checkbox"/> Partial <input type="checkbox"/> Chicago Excused Date Established		
<b>26. HSR Corridor ID</b> <input checked="" type="checkbox"/> N/A		<b>27. Latitude in decimal degrees</b> (WGS84 std: nn.nnnnnnn) 41.4845063		<b>28. Longitude in decimal degrees</b> (WGS84 std: -nnn.nnnnnnn) -81.7447494	
<b>29. Lat/Long Source</b> <input checked="" type="checkbox"/> Actual <input type="checkbox"/> Estimated					
<b>30.A. Railroad Use *</b>			<b>31.A. State Use *</b>		
<b>30.B. Railroad Use *</b>			<b>31.B. State Use *</b>		
<b>30.C. Railroad Use *</b>			<b>31.C. State Use *</b>		
<b>30.D. Railroad Use *</b>			<b>31.D. State Use *</b>		
<b>32.A. Narrative (Railroad Use) *</b>			<b>32.B. Narrative (State Use) *</b>		
<b>33. Emergency Notification Telephone No. (posted)</b> 800-946-4744		<b>34. Railroad Contact (Telephone No.)</b> 800-946-4744		<b>35. State Contact (Telephone No.)</b> 614-466-0407	

## Part II: Railroad Information

<b>1. Estimated Number of Daily Train Movements</b>				
<b>1.A. Total Day Thru Trains (6 AM to 6 PM)</b> 24	<b>1.B. Total Night Thru Trains (6 PM to 6 AM)</b> 28	<b>1.C. Total Switching Trains</b> 10	<b>1.D. Total Transit Trains</b> 0	<b>1.E. Check if Less Than One Movement Per Day</b> <input type="checkbox"/> How many trains per week? _____
<b>2. Year of Train Count Data (YYYY)</b> 2024		<b>3. Speed of Train at Crossing</b> 3.A. Maximum Timetable Speed (mph) 79 3.B. Typical Speed Range Over Crossing (mph) From 40 to 60		
<b>4. Type and Count of Tracks</b> Main 2 Siding 0 Yard 0 Transit 0 Industry 0				
<b>5. Train Detection (Main Track only)</b> <input type="checkbox"/> Constant Warning Time <input type="checkbox"/> Motion Detection <input type="checkbox"/> AFO <input type="checkbox"/> PTC <input type="checkbox"/> DC <input type="checkbox"/> Other <input checked="" type="checkbox"/> None				
<b>6. Is Track Signaled?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<b>7.A. Event Recorder</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>7.B. Remote Health Monitoring</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

# U. S. DOT CROSSING INVENTORY FORM

A. Revision Date (MM/DD/YYYY) 10/11/2024		PAGE 2		D. Crossing Inventory Number (7 char.) 523762A	
<b>Part III: Highway or Pathway Traffic Control Device Information</b>					
1. Are there Signs or Signals?  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		2. Types of Passive Traffic Control Devices associated with the Crossing			
2.A. Crossbuck Assemblies (count) 0		2.B. STOP Signs (R1-1) (count) 0	2.C. YIELD Signs (R1-2) (count)	2.D. Advance Warning Signs (Check all that apply; include count) <input type="checkbox"/> None <input type="checkbox"/> W10-1 <input type="checkbox"/> W10-3 <input type="checkbox"/> W10-11 <input type="checkbox"/> W10-2 <input type="checkbox"/> W10-4 <input type="checkbox"/> W10-12	
2.E. Low Ground Clearance Sign (W10-5) <input type="checkbox"/> Yes (count _____) <input type="checkbox"/> No		2.F. Pavement Markings <input type="checkbox"/> Stop Lines <input type="checkbox"/> Dynamic Envelope <input type="checkbox"/> RR Xing Symbols <input checked="" type="checkbox"/> None		2.G. Channelization Devices/Medians <input type="checkbox"/> All Approaches <input type="checkbox"/> Median <input type="checkbox"/> One Approach <input type="checkbox"/> None	2.H. EXEMPT Sign (R15-3) <input type="checkbox"/> Yes <input type="checkbox"/> No
2.J. Other MUTCD Signs Specify Type _____ Count _____ Specify Type _____ Count _____ Specify Type _____ Count _____		2.K. Private Crossing Signs (if private)  <input type="checkbox"/> Yes <input type="checkbox"/> No	2.L. LED Enhanced Signs (List types)		
<b>3. Types of Train Activated Warning Devices at the Grade Crossing (specify count of each device for all that apply)</b>					
3.A. Gate Arms (count)  Roadway 0 Pedestrian 0	3.B. Gate Configuration <input type="checkbox"/> 2 Quad <input type="checkbox"/> Full (Barrier) Resistance <input type="checkbox"/> 3 Quad <input type="checkbox"/> Median Gates <input type="checkbox"/> 4 Quad	3.C. Cantilevered (or Bridged) Flashing Light Structures (count) Over Traffic Lane 0 <input type="checkbox"/> Incandescent Not Over Traffic Lane 0 <input type="checkbox"/> LED		3.D. Mast Mounted Flashing Lights (count of masts) 0 <input type="checkbox"/> Incandescent <input type="checkbox"/> LED <input type="checkbox"/> Back Lights Included <input type="checkbox"/> Side Lights Included	3.E. Total Count of Flashing Light Pairs  0
3.F. Installation Date of Current Active Warning Devices: (MM/YYYY) _____/_____/_____ <input checked="" type="checkbox"/> Not Required		3.G. Wayside Horn  <input type="checkbox"/> Yes Installed on (MM/YYYY) ____/____/_____ <input checked="" type="checkbox"/> No		3.H. Highway Traffic Signals Controlling Crossing <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3.I. Bells (count)  0
3.J. Non-Train Active Warning <input type="checkbox"/> Flagging/Flagman <input type="checkbox"/> Manually Operated Signals <input type="checkbox"/> Watchman <input type="checkbox"/> Floodlighting <input checked="" type="checkbox"/> None				3.K. Other Flashing Lights or Warning Devices Count 0 Specify type _____	
4.A. Does nearby Hwy Intersection have Traffic Signals?  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4.B. Hwy Traffic Signal Interconnection <input checked="" type="checkbox"/> Not Interconnected <input type="checkbox"/> For Traffic Signals <input type="checkbox"/> For Warning Signs	4.C. Hwy Traffic Signal Preemption <input type="checkbox"/> Simultaneous <input type="checkbox"/> Advance	5. Highway Traffic Pre-Signals <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Storage Distance * 0 Stop Line Distance * 0	6. Highway Monitoring Devices (Check all that apply) <input type="checkbox"/> Yes - Photo/Video Recording <input type="checkbox"/> Yes - Vehicle Presence Detection <input checked="" type="checkbox"/> None	
<b>Part IV: Physical Characteristics</b>					
1. Traffic Lanes Crossing Railroad <input type="checkbox"/> One-way Traffic <input type="checkbox"/> Two-way Traffic Number of Lanes _____ <input type="checkbox"/> Divided Traffic		2. Is Roadway/Pathway Paved?  <input type="checkbox"/> Yes <input type="checkbox"/> No	3. Does Track Run Down a Street?  <input type="checkbox"/> Yes <input type="checkbox"/> No	4. Is Crossing Illuminated? (Street lights within approx. 50 feet from nearest rail) <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Crossing Surface (on Main Track, multiple types allowed) Installation Date * (MM/YYYY) ____/____/_____ <input type="checkbox"/> 1 Timber <input type="checkbox"/> 2 Asphalt <input type="checkbox"/> 3 Asphalt and Timber <input type="checkbox"/> 4 Concrete <input type="checkbox"/> 5 Concrete and Rubber <input type="checkbox"/> 6 Rubber <input type="checkbox"/> 7 Metal <input type="checkbox"/> 8 Unconsolidated <input type="checkbox"/> 9 Composite <input type="checkbox"/> 10 Other (specify) _____					
6. Intersecting Roadway within 500 feet?  <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Approximate Distance (feet) _____			7. Smallest Crossing Angle  <input type="checkbox"/> 0° - 29° <input type="checkbox"/> 30° - 59° <input type="checkbox"/> 60° - 90°		8. Is Commercial Power Available? *  <input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Part V: Public Highway Information</b>					
1. Highway System <input type="checkbox"/> (01) Interstate Highway System <input type="checkbox"/> (02) Other Nat Hwy System (NHS) <input type="checkbox"/> (03) Federal AID, Not NHS <input type="checkbox"/> (08) Non-Federal Aid		2. Functional Classification of Road at Crossing <input type="checkbox"/> (0) Rural <input type="checkbox"/> (1) Urban <input checked="" type="checkbox"/> (1) Interstate <input type="checkbox"/> (5) Major Collector <input type="checkbox"/> (2) Other Freeways and Expressways <input type="checkbox"/> (3) Other Principal Arterial <input type="checkbox"/> (6) Minor Collector <input type="checkbox"/> (4) Minor Arterial <input type="checkbox"/> (7) Local		3. Is Crossing on State Highway System?  <input type="checkbox"/> Yes <input type="checkbox"/> No	4. Highway Speed Limit _____ MPH <input type="checkbox"/> Posted <input type="checkbox"/> Statutory
		5. Linear Referencing System (LRS Route ID) *			
		6. LRS Milepost *			
7. Annual Average Daily Traffic (AADT) Year 1986 AADT _____		8. Estimated Percent Trucks _____ %	9. Regularly Used by School Buses? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Average Number per Day _____		10. Emergency Services Route <input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Submission Information - This information is used for administrative purposes and is not available on the public website.</b>					
Submitted by _____ Organization _____ Phone _____ Date _____					
Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection is 2130-0017. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25 Washington, DC 20590.					

# Acceptable Separation Distance (ASD) Electronic Assessment Tool

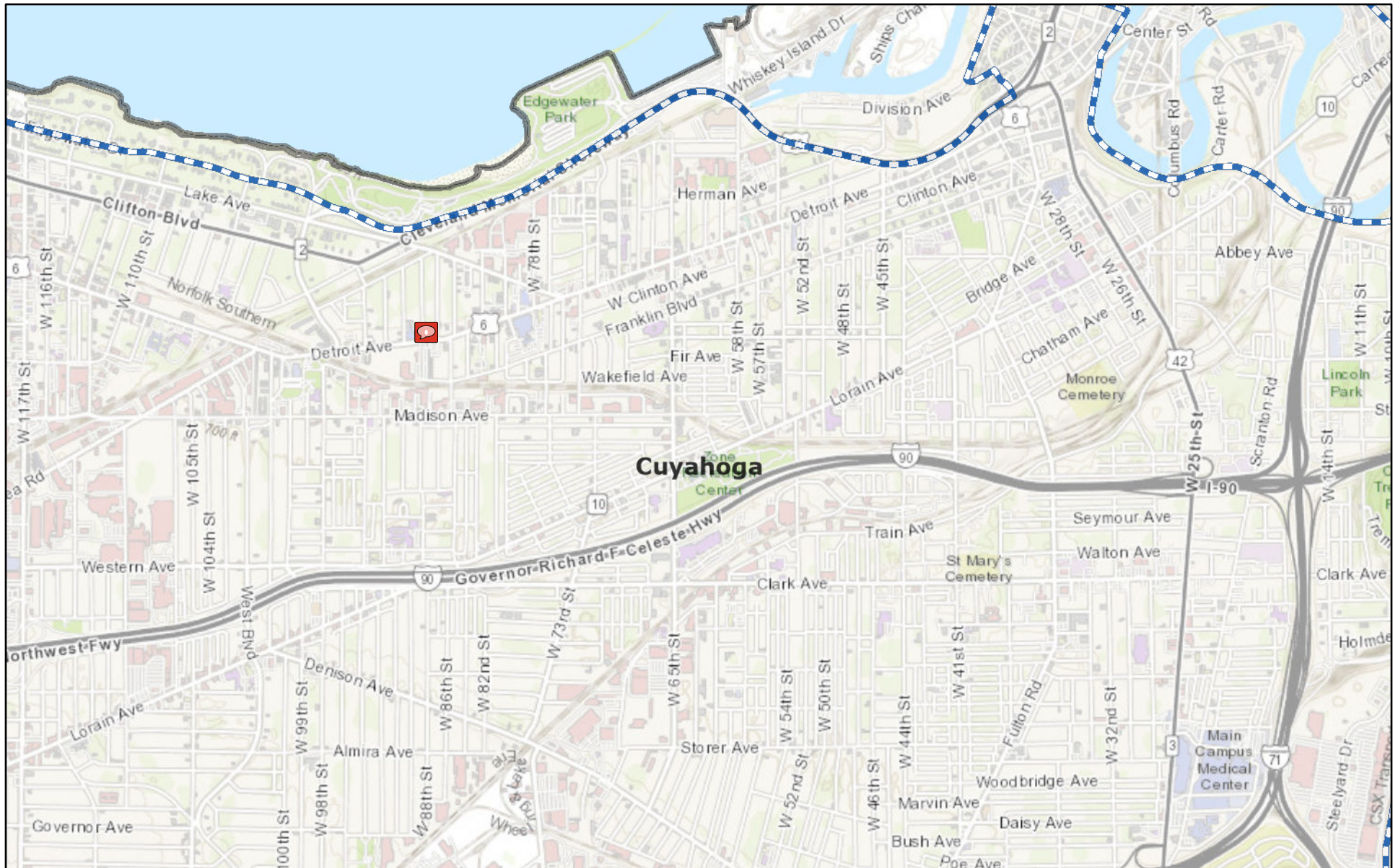
The Environmental Planning Division (EPD) has developed an electronic-based assessment tool that calculates the Acceptable Separation Distance (ASD) from stationary hazards. The ASD is the distance from above ground stationary containerized hazards of an explosive or fire prone nature, to where a HUD assisted project can be located. The ASD is consistent with the Department's standards of blast overpressure (0.5 psi-buildings) and thermal radiation (450 BTU/ft<sup>2</sup> - hr - people and 10,000 BTU/ft<sup>2</sup> - hr - buildings). Calculation of the ASD is the first step to assess site suitability for proposed HUD-assisted projects near stationary hazards. Additional guidance on ASDs is available in the Department's guidebook "Siting of HUD- Assisted Projects Near Hazardous Facilities" and the regulation 24 CFR Part 51, Subpart C, Siting of HUD-Assisted Projects Near Hazardous Operations Handling Conventional Fuels or Chemicals of an Explosive or Flammable Nature.

**Note:** Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the ASD result fields with the mouse.

## Acceptable Separation Distance Assessment Tool

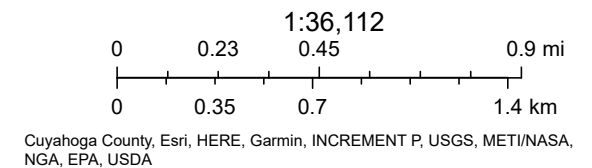
Is the container above ground?	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>
Is the container under pressure?	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>
Does the container hold a cryogenic liquified gas?	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>
Is the container diked?	Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>
What is the volume (gal) of the container?	<input type="text" value="1000"/>
What is the Diked Area Length (ft)?	<input type="text"/>
What is the Diked Area Width (ft)?	<input type="text"/>
<div>Calculate Acceptable Separation Distance</div>	
Diked Area (sqft)	<input type="text"/>
ASD for Blast Over Pressure (ASDBOP)	<input type="text"/>
ASD for Thermal Radiation for People (ASDPPU)	<input type="text" value="276.57"/>
ASD for Thermal Radiation for Buildings (ASDBPU)	<input type="text" value="50.28"/>
ASD for Thermal Radiation for People (ASDPNPD)	<input type="text"/>

# Ohio Coastal Atlas Map Viewer



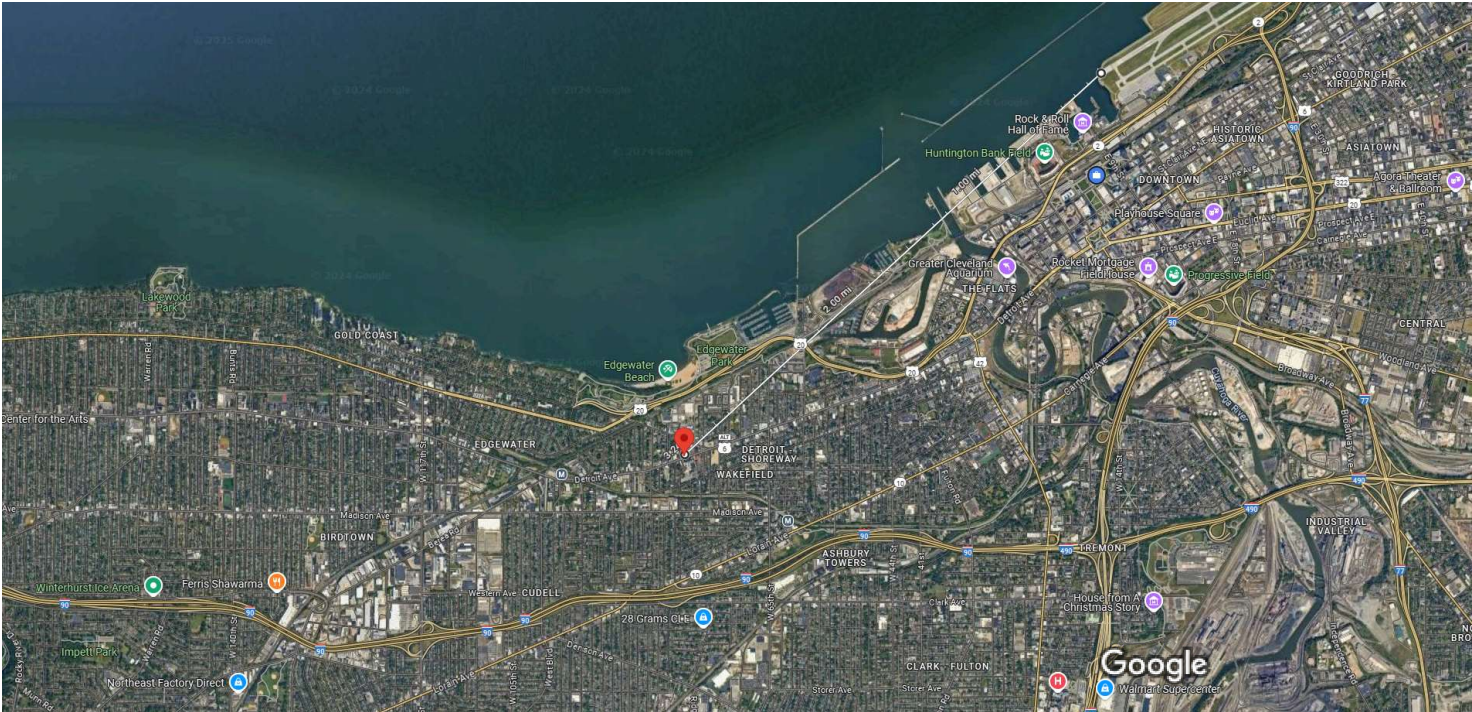
January 15, 2025

 Coastal Management Area Boundary

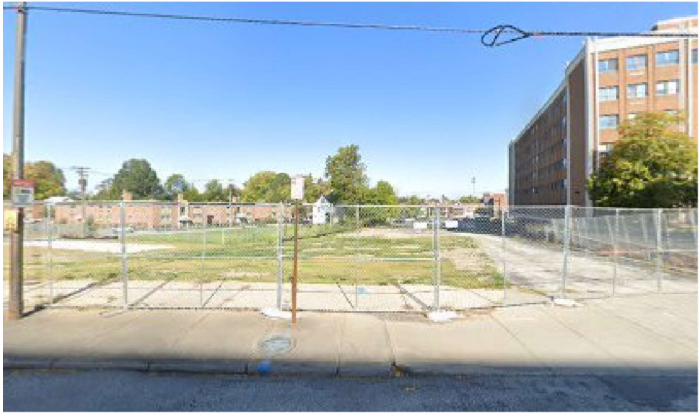


7910 Detroit Ave

Distance to Burke Lakefront Airport



Imagery ©2025 Airbus, CNES / Airbus, Landsat / Copernicus, Maxar Technologies, USDA/FPAC/GEO, Map data ©2025 Google 2000 ft



7910 Detroit Ave

Building



Directions



Save



Nearby



Send to  
phone

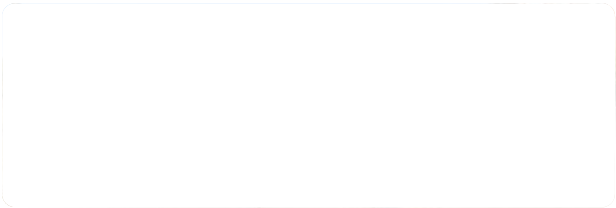


Share



7910 Detroit Ave, Cleveland, OH 44102

Photos



At this place

Cleveland Public Library - Walz Branch

4.7 (30)

Public library

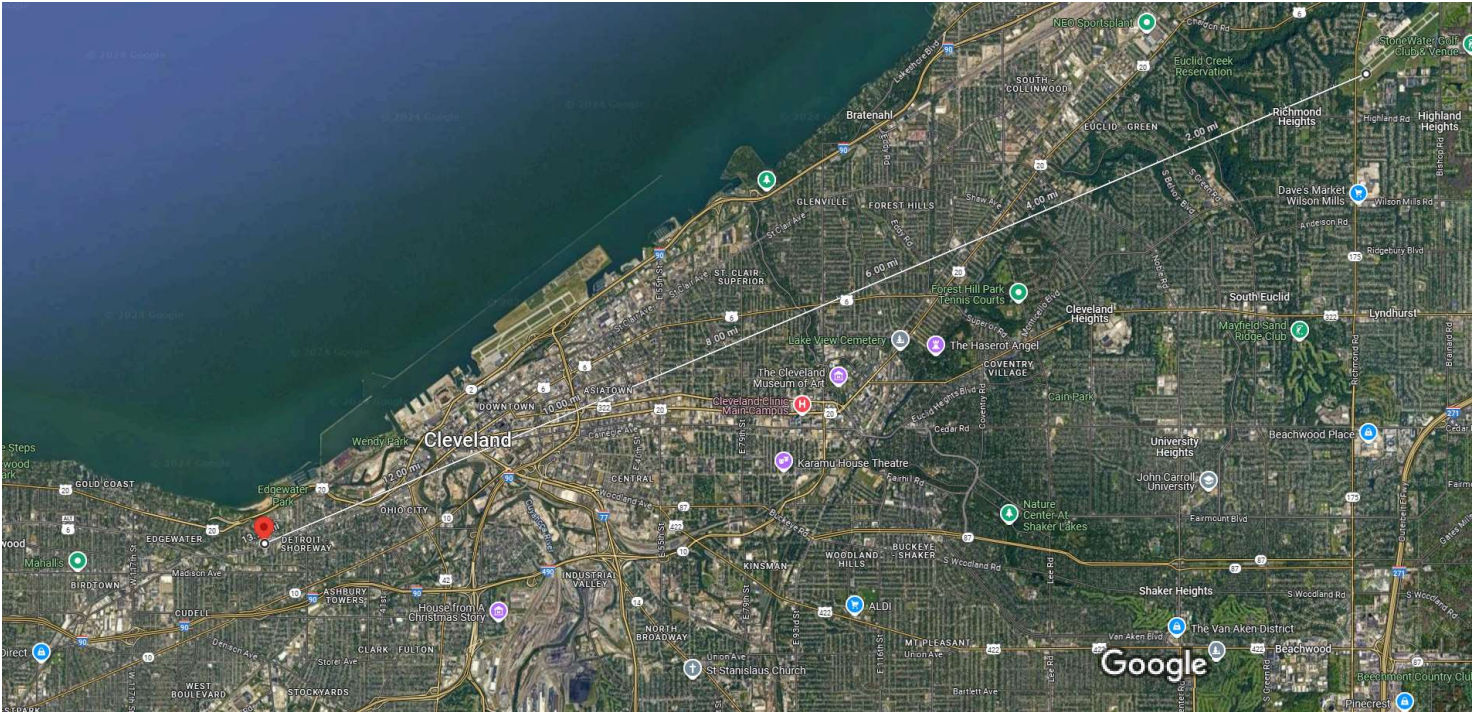


Measure distance  
Total distance: 3.24 mi (5.22 km)

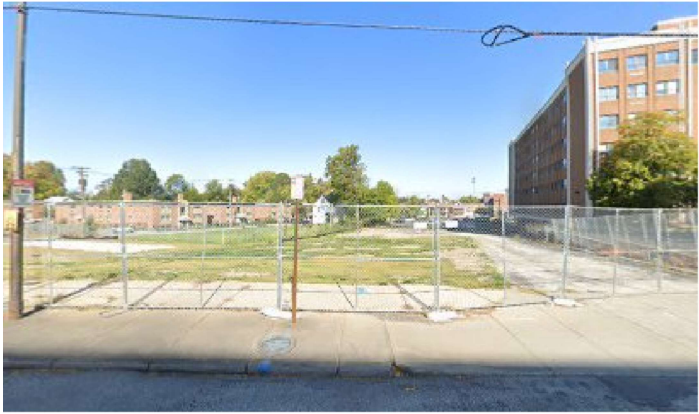


7910 Detroit Ave

Distance to Cuyahoga County Airport



Imagery ©2025 TerraMetrics, Map data ©2025 Google 1 mi



7910 Detroit Ave

Building



Directions



Save



Nearby



Send to  
phone

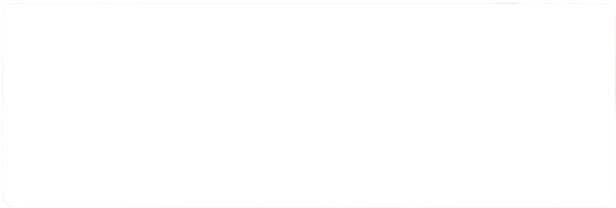


Share



7910 Detroit Ave, Cleveland, OH 44102

Photos



At this place

Cleveland Public Library - Walz Branch

4.7 (30)

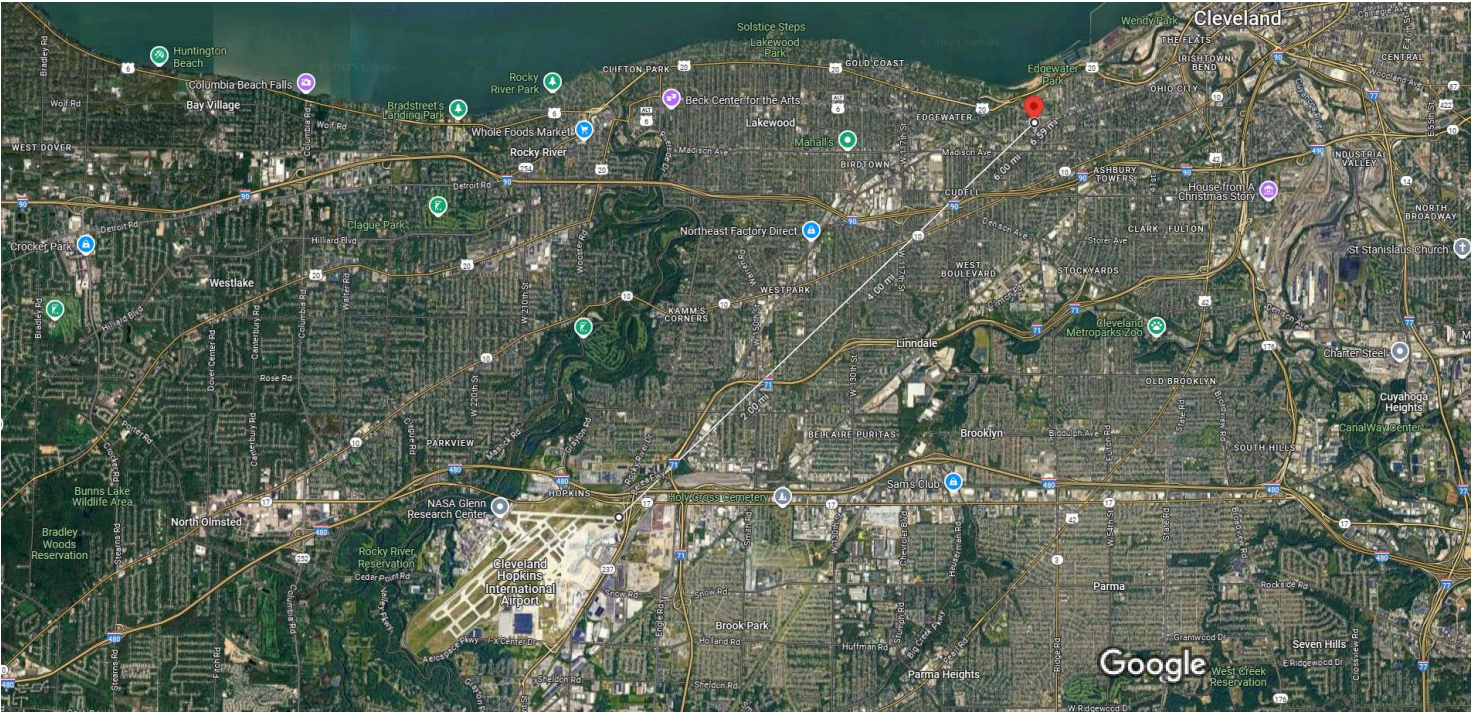
Public library



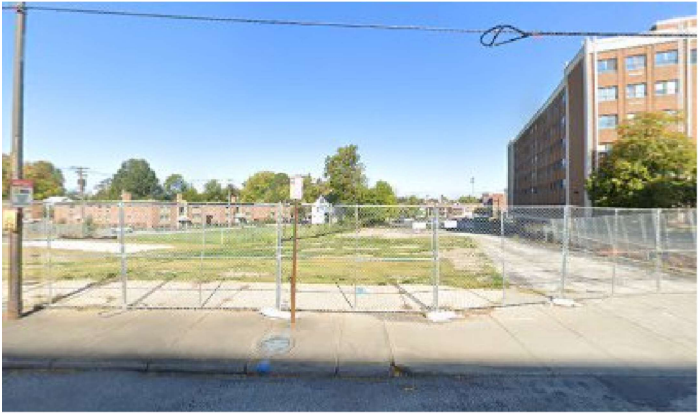
Measure distance  
Total distance: 13.76 mi (22.15 km)

7910 Detroit Ave

Distance to Cleveland Hopkins Airport



Imagery ©2025 Airbus, CNES / Airbus, Landsat / Copernicus, Maxar Technologies, USDA/FPAC/GEQ, Map data ©2025 Google 1 mi



7910 Detroit Ave

Building



Directions



Save



Nearby



Send to  
phone

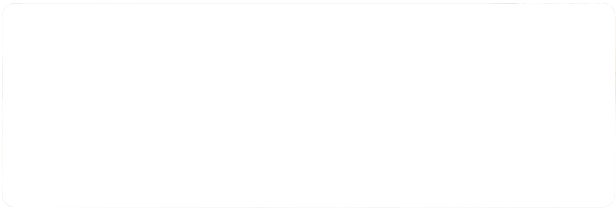


Share



7910 Detroit Ave, Cleveland, OH 44102

Photos



At this place

Cleveland Public Library - Walz Branch

4.7 (30)

Public library



Measure distance  
Total distance: 6.59 mi (10.60 km)



CITY OF CLEVELAND  
HUD Environmental Review Records Form

Complete date submitted and parts 1-4, attach documents and submit to Compliance and Historic Officers

Date Submitted: \_\_\_\_\_

Part 1: Project Identification

Program

HDO - Community Development

Type of Funding

☐ 108

☐ CDBG

☐ ESG

☒ HOME

☐ HOPWA

☐ HTC

☐ ARP

☐ LHRD 19

☐ LHRD 22

☐ NDA

☐ NSP

☒ PBV

☒ Tax Credits

☒ Other: ARPA

(Check All That Apply)

Project Name

Karam Senior

Internal Contact

Sasha Ottoson-Deal

External Contact

Bridget Kent-Marquez

External Telephone

216-961-4242

External Email

Part 2: Current Site Conditions check (X) all that apply

Single Family (1-4)

Parking Lot

Date Built: \_\_\_\_\_

Multi-Family (5+)

Commercial

Current Units: 0

Mixed Use

☒ Vacant

Expected Units: 51

Industrial

No Physical Activity

Site Address & Zip

7918 Detroit Ave

PPN

See attached

(If more than 1 PPN, attach roster of all PPNs and associated addresses)

Total Project Cost: \$20.8M

Federal Funding Amount: \$3M

Part 3: Attachments

Attached

☒ Project Scope

☒ Phase I ESA

☐ Landbank App and Letter

☒ Site Photos

☐ Phase II ESA

☐ HDO App and Award Letter

☐ Architectural Drawings

☐ Asbestos Survey

☐ OFHA Commitment Letter

☒ Market Assessment

☐ Radon Investigation

☐ Historic Tax Credit Commitment

☒ Community Outreach Plan

☐ Groundwater Study

☐ NPS Historic Tax Credit Part II

☒ Site Location Map

☐ Air Quality Study

☐ ED TIF App and Award Letter

☐ Evidence of Site Control

☐ Noise Assessment

☐ County Funding Resoulution

☐ Green Building Standards Plan

☐ Vapor Encroach Screen

☐ Other

Part 4: Attachments (Lead)

Attached

☐ Lead Risk Assessment

☐ Lead Presumption

☐ Signed Exemption Form

☐ Lead Soil Testing

☐ Other

☐

☐

☐

☐

Part 5: Historic Review Categorization (to be completed by Compliance Officer)

☐ Activity Exempt under Stipulation III, Category \_\_\_\_\_ of Programmatic Agreement with SHPO

☐ Non-Exempt Activity

Part 6: Historic Evaluation (to be completed by Compliance Officer)

☐ No historic property within APE

☐ Historic property within APE (Show on APE Map)

Address/Location/District	Status and NRHP Number (if applicable)	SHPO Concurrence
		Yes / No
		Yes / No
		Yes / No

Determination made through:

☐ Review of Maps

☐ Review of Photographs

☐ Site Visit

☐ Survey

☐ Review of Existing Surveys

☐ THPO Submittal (Please Attach Response)

☐ SHPO Submittal (Please Attach Response)

Part 7: Compliance Determination (to be completed by Compliance Officer)

☐ Exempt - Project consists solely of activities listed as exempt in a Programmatic Agreement

Activity Exempt under Stipulation III, Category \_\_\_\_\_ of Programmatic Agreement with SHPO

☐ No Historic Properties Present

☐ No Effect on Historic Properties (Include APE Map)

☐ SHPO/THPO Required Clearance Through Consultation

☐ No Adverse Effect on Historic Properties (Include APE Map)

Reason for Finding of No Adverse Effect: \_\_\_\_\_

☐ Conditions/Modification of Project: \_\_\_\_\_

☐ Adverse Effect - Proposed work will have an adverse effect on historic properties

The project has been determined to adversely affect historic properties. **Project CANNOT proceed** until further review per 36 CFR 800.6 has been conducted. Please consult with the Compliance Officer to revise the project to bring it into compliance and resubmit the project for review.

Notes \_\_\_\_\_

Historic Compliance Officer \_\_\_\_\_ DATE \_\_\_\_\_

523762A	79 MPH
<b>Total Day</b>	24
<b>Total Night</b>	28
<b>Total Switching</b>	10
<b>Night % of ATO</b>	40%
<b>ATO</b>	62
<b>1324 ft</b>	

Default 2 engines, 50 cars  
Diesel  
No horns, no bolted tracks

472182R	35 MPH
<b>Total Day</b>	1
<b>Total Night</b>	2
<b>Total Switching</b>	0
<b>Night % of ATO</b>	50%
<b>ATO</b>	3
<b>1421 ft</b>	

<b>AMTRAK Lakeshore Limited</b>	60MPH
<b>Total Day</b>	0
<b>Total Night</b>	2
<b>Total Switching</b>	0
<b>Night % of ATO</b>	100%
<b>ATO</b>	2
<b>1324 ft</b>	

Default 1 engines 25 cars  
Diesel  
No horns, no bolted tracks

<b>AMTRAK Captitol Limited</b>	50 MPH
<b>Total Day</b>	0
<b>Total Night</b>	2
<b>Total Switching</b>	0
<b>Night % of ATO</b>	100%
<b>ATO</b>	2
<b>1324 ft</b>	

Default 1 engines 25 cars  
Diesel  
No horns, no bolted tracks

<b>RTA Red Line</b>	MPH 30
W 25-Tower City	
<b>Total Trains</b>	174
<b>Night %</b>	48%
<b>1421 ft</b>	

Default 1 engine 3 cars  
Electric  
No horns, yes bolted tracks

Find tracks within 3000 feet of site

Use Crossing Inventory to get max speed and number of freight trains

Values for Amtrak and RTA Red line do not change, except distance to project site

Site ID	Karam Senior
Record Date	01/15/2025
User's Name	Sasha Ottoson-Deal

Railroad #1 Track Identifier:	523762A
-------------------------------	---------

## Rail # 1

Train Type	Electric <input type="checkbox"/>	Diesel <input checked="" type="checkbox"/>
Effective Distance		1324
Average Train Speed		79
Engines per Train		2
Railway cars per Train		50
Average Train Operations (ATO)		62
Night Fraction of ATO		40
Railway whistles or horns?	Yes: <input type="checkbox"/> No: <input type="checkbox"/>	Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>
Bolted Tracks?	Yes: <input type="checkbox"/> No: <input type="checkbox"/>	Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>
Train DNL	0	57
Calculate Rail #1 DNL	57	Reset

Railroad #2 Track Identifier:	472182R
-------------------------------	---------

## Rail # 2

Train Type	Electric <input type="checkbox"/>	Diesel <input checked="" type="checkbox"/>
Effective Distance		1421
Average Train Speed		35

Average Train Speed	<input type="text"/>	<input type="text"/>
Engines per Train	<input type="text"/>	<input type="text"/>
Railway cars per Train	<input type="text"/>	<input type="text"/>
Average Train Operations (ATO)	<input type="text"/>	<input type="text"/>
Night Fraction of ATO	<input type="text"/>	<input type="text"/>
Railway whistles or horns?	Yes: <input type="checkbox"/> No: <input type="checkbox"/>	Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>
Bolted Tracks?	Yes: <input type="checkbox"/> No: <input type="checkbox"/>	Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>
<b>Train DNL</b>	<input type="text"/>	<input type="text"/>
<b>Calculate Rail #2 DNL</b>	<input type="text"/>	<input type="button" value="Reset"/>

**Railroad #3 Track Identifier:****Amtrak Lakeshore****Rail # 3**

<b>Train Type</b>	<b>Electric</b> <input type="checkbox"/>	<b>Diesel</b> <input checked="" type="checkbox"/>
Effective Distance	<input type="text"/>	<input type="text"/>
Average Train Speed	<input type="text"/>	<input type="text"/>
Engines per Train	<input type="text"/>	<input type="text"/>
Railway cars per Train	<input type="text"/>	<input type="text"/>
Average Train Operations (ATO)	<input type="text"/>	<input type="text"/>
Night Fraction of ATO	<input type="text"/>	<input type="text"/>
Railway whistles or horns?	Yes: <input type="checkbox"/> No: <input type="checkbox"/>	Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>
Bolted Tracks?	Yes: <input type="checkbox"/> No: <input type="checkbox"/>	Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>
<b>Train DNL</b>	<input type="text"/>	<input type="text"/>
<b>Calculate Rail #3 DNL</b>	<input type="text"/>	<input type="button" value="Reset"/>

**Railroad #4 Track Identifier:****Amtrak Capitol****Rail # 4**

<b>Train Type</b>	<b>Electric</b> <input type="checkbox"/>	<b>Diesel</b> <input checked="" type="checkbox"/>
Effective Distance	<input type="text"/>	<input type="text" value="1324"/>
Average Train Speed	<input type="text"/>	<input type="text" value="50"/>
Engines per Train	<input type="text"/>	<input type="text" value="1"/>
Railway cars per Train	<input type="text"/>	<input type="text" value="25"/>
Average Train Operations (ATO)	<input type="text"/>	<input type="text" value="2"/>
Night Fraction of ATO	<input type="text"/>	<input type="text" value="100"/>
Railway whistles or horns?	Yes: <input type="checkbox"/> No: <input type="checkbox"/>	Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>
Bolted Tracks?	Yes: <input type="checkbox"/> No: <input type="checkbox"/>	Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>
<b>Train DNL</b>	<input type="text" value="0"/>	<input type="text" value="42"/>
<input type="button" value="Calculate Rail #4 DNL"/>	<input type="text" value="42"/>	<input type="button" value="Reset"/>
<b>Railroad #5 Track Identifier:</b>	<input type="text" value="RTA Redline"/>	

**Rail # 5**

<b>Train Type</b>	<b>Electric</b> <input checked="" type="checkbox"/>	<b>Diesel</b> <input type="checkbox"/>
Effective Distance	<input type="text" value="1421"/>	<input type="text"/>
Average Train Speed	<input type="text" value="30"/>	<input type="text"/>
Engines per Train	<input type="text" value="1"/>	<input type="text"/>
Railway cars per Train	<input type="text" value="3"/>	<input type="text"/>
Average Train Operations (ATO)	<input type="text" value="174"/>	<input type="text"/>
Night Fraction of ATO	<input type="text" value="48"/>	<input type="text"/>
Railway whistles or horns?	Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>	Yes: <input type="checkbox"/> No: <input type="checkbox"/>
Bolted Tracks?	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>	Yes: <input type="checkbox"/> No: <input type="checkbox"/>
<b>Train DNL</b>	<input type="text" value="47"/>	<input type="text" value="0"/>
<input type="button" value="Calculate Rail #5 DNI"/>	<input type="text" value="47"/>	<input type="button" value="Reset"/>

Airport Noise Level

Loud Impulse Sounds?
 ☐ Yes ☒ No

Combined DNL for all Road and Rail sources

Combined DNL including Airport

Site DNL with Loud Impulse Sound

## Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative:** Cancel the project at this location
- **Other Reasonable Alternatives:** Choose an alternate site
- **Mitigation**
  - Contact your Field or Regional Environmental Officer (</programs/environmental-review/hud-environmental-staff-contacts/>)
  - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
  - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses
  - Incorporate natural or man-made barriers. See *The Noise Guidebook* (</resource/313/hud-noise-guidebook/>)
  - Construct noise barrier. See the **Barrier Performance Module** (</programs/environmental-review/bpm-calculator/>)

## Tools and Guidance

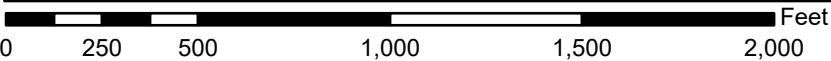
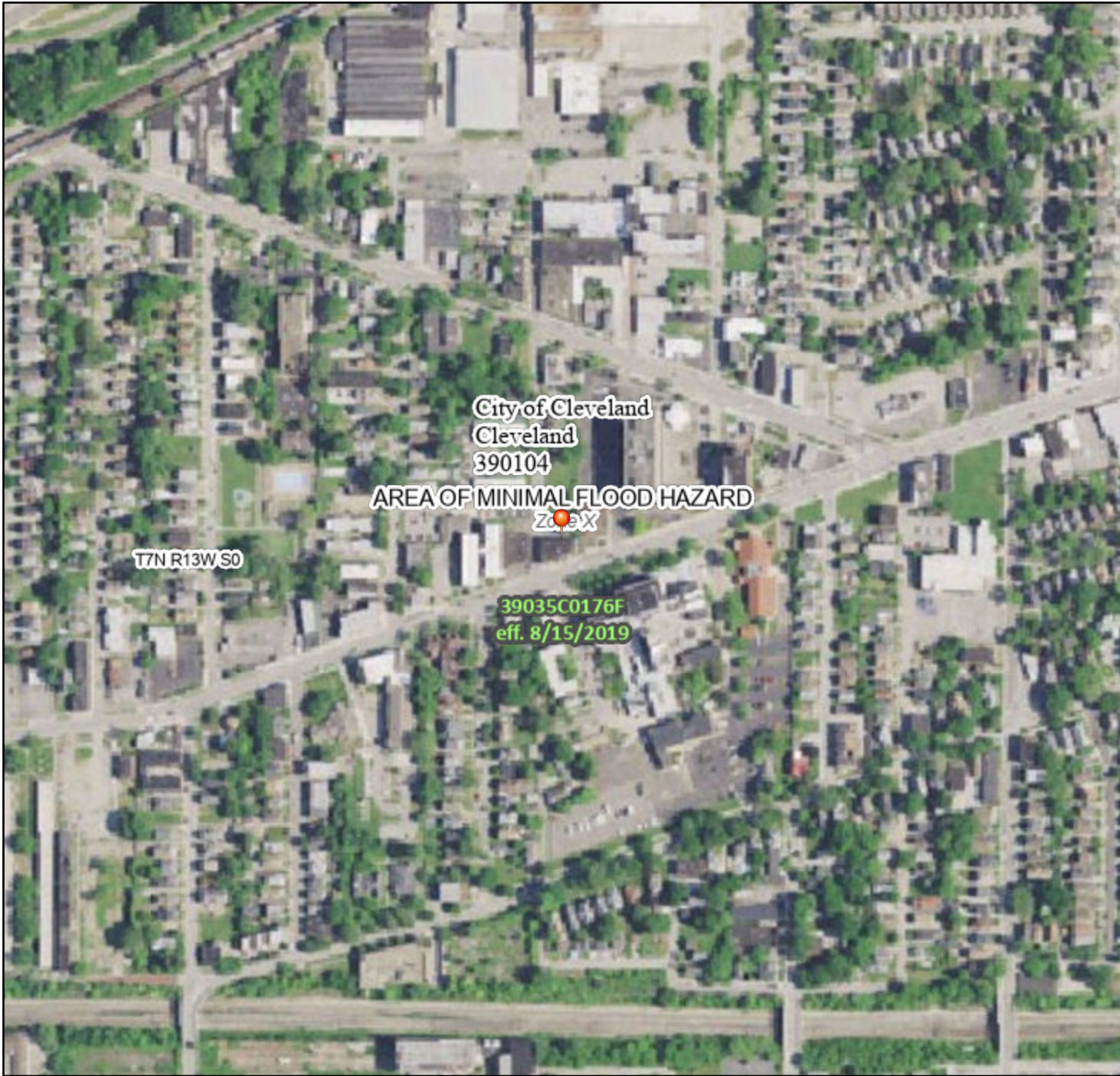
Day/Night Noise Level Assessment Tool User Guide (</resource/3822/day-night-noise-level-assessment-tool-user-guide/>)

Day/Night Noise Level Assessment Tool Flowcharts (</resource/3823/day-night-noise-level-assessment-tool-flowcharts/>)

# National Flood Hazard Layer FIRMMette



81°44'43"W 41°29'8"N



1:6,000

81°44'5"W 41°28'41"N

Basemap Imagery Source: USGS National Map 2023

## Legend

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

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

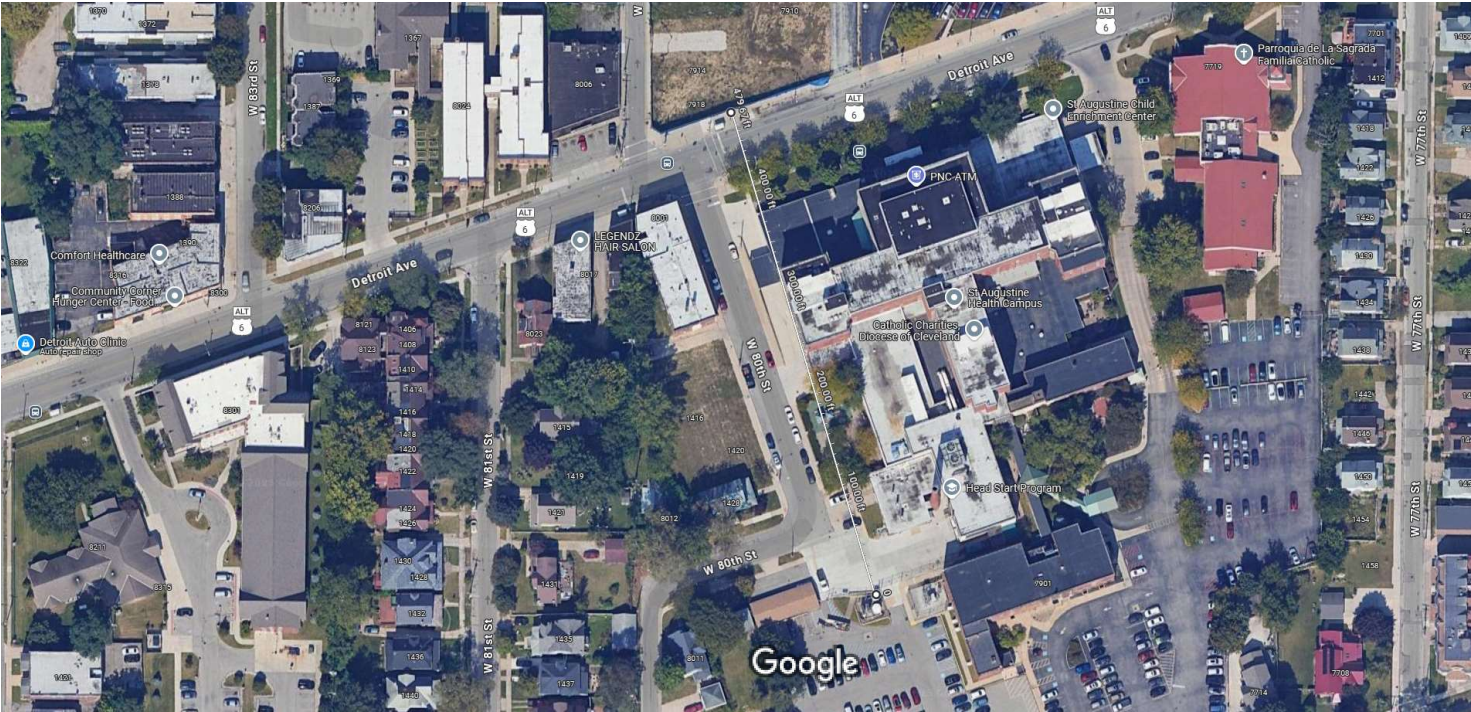
This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 1/15/2025 at 4:46 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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



Distance to nearest AST



Imagery ©2025 Airbus, Maxar Technologies, USDA/FPAC/GEO, Map data ©2025 Google 50 ft

Measure distance  
Total distance: 479.67 ft (146.20 m)

# KARAM SENIOR LIVING

## SCHEMATIC DRAWING PACKAGE

FEBRUARY 11, 2021

PROJECT ADDRESS: 7918 DETROIT AVENUE, CLEVELAND, OH 44102



### PROJECT TEAM

OWNER	DESIGN ARCHITECT	ARCHITECT OF RECORD
DETROIT SHOREWAY COMMUNITY DEVELOPMENT ORGANIZATION 6516 DETROIT AVE, SUITE 1 CLEVELAND, OH 44102 T: 216.961.4242 F: 216.961.8830	BIALOSKY CLEVELAND 6555 CARNEGIE AVE, SUITE 200 CLEVELAND, OH 44103 T: 216.752.8750	ROBERT P. MADISON INTERNATIONAL, INC. 1215 SUPERIOR AVE E, SUITE 110 CLEVELAND, OH 44114 T: 216.861.8195

### SHEET INDEX

1	COVER SHEET	7	FIRST FLOOR PLAN	18	ENLARGED ELEVATIONS
2	CODE INFO	8	SECOND FLOOR PLAN	19-22	BUILDING SECTIONS
3	BUILDING AREAS	9	THIRD & FOURTH FLOOR PLAN	23-24	TYPICAL WALL SECTIONS
4	SITE PLAN	10	DIMENSIONED FLOOR PLANS	25-28	MEP NARRATIVE
5	LANDSCAPE PLAN	11-13	ENLARGED UNIT PLANS		
6	GROUND FLOOR PLAN	14-17	EXTERIOR ELEVATIONS		

CODE INFORMATION

A. APPLICABLE CODES

- 1. 2017 Ohio Building Code.
- 2. 2017 Ohio Mechanical Code.
- 3. 2017 Ohio Plumbing Code.
- 4. 2017 Ohio Fire Code.
- 5. 2017 Ohio Energy Code.
- 6. 2009 ICC A117.1 Accessible and Usable Buildings and Facilities.
- 7. 2020 Enterprise Green Communities Criteria

B. 2017 OHIO BUILDING CODE (OBC) GENERAL INFORMATION

- 1. Chapter 3 - Use and Occupancy Classifications:
  - a. R-2 Residential.
  - b. A-3 Assembly.
  - c. Storage S-1 (Accessory Occupancy).
  - d. Utility U (Accessory Occupancy).
- 2. Chapter 5 - General Building Heights and Areas:
  - a. Table 504.3 Height in Feet, 75-feet allowable > 60-feet proposed.
  - b. Table 504.4 Height in Stories:
    - i. Assembly A-3 = 3 stories allowable = 3 stories proposed.
    - ii. Residential R-2 = 5 stories allowable = 5 stories proposed.
  - c. Table 506.2 Allowable Area Factor (per floor), Assembly is most stringent, 28,500sf allowable < 18,725sf (max) proposed.
  - d. Section 508 Mixed Use and Occupancy - Each separate occupancy shall comply with the building height limitations based on Type of Construction; therefore A-3 Occupancies are limited to 3-stories in height, requiring this building to be constructed as separated mixed use. One-hour fire-rated partitions and horizontal assemblies are required between Residential and Assembly occupancies.
- 3. Chapter 6 - Types of Construction:
  - a. Construction Type = IIIB.
  - b. Table 601 Fire Resistant Rating for Building Elements:
    - i. Primary structural frame: 0-hour
    - ii. Primary structural frame supporting roof only: 0-hour
    - iii. Bearing walls - Exterior: 2-hour
    - iv. Bearing walls - Interior: 0-hour
    - v. Bearing walls supporting roof only: 0-hour
    - vi. Floor constr. and assoc. secondary members: 0-hour
    - vii. Roof constr. and assoc. secondary members: 0-hour

UNIVERSAL DESIGN COMPONENTS

A. ENTRY WAY

- 1. 36"-wide (minimum) entry door with lever-style handle (mandatory for NC only).
- 2. Minimum 5' x 5' level clear space inside and outside entry door.
- 3. Adequate non-glare lighting at walkways, accessible routes, and exterior spaces. Adequate lighting both inside and outside the building and unit entrance.
- 4. High visibility address numbers (both building and exterior units).
- 5. Overhead weather protection at entrances (mandatory for NC only).
- 6. Nonslip surfaces on walkways and entryways.
- 7. No-step entry (1/2" or less threshold) at main entrance.

B. INTERIOR STAIRS & HALLWAYS

- 1. Adequate lighting to illuminate all stairway(s), landings, and hallway(s).
- 2. Hallways with a minimum width of 42".
- 3. Anti-slip strips on front edge of steps in color-contrast material.
- 4. Handrails on both sides of interior stairs.

C. INTERIOR DOORS

- 1. 34"-wide (minimum) doors leading to habitable room, allowing for a 32" minimum clearance.
- 2. Lever-style door hardware on all interior doors.
- 3. Interior maximum door threshold of ¼ inch beveled or flush.

D. FAUCETS

- 1. Anti-scald faucets with lever handle for all sinks, bathtubs, and showers.
- 2. Pressure balanced faucets.

E. ELECTRICAL

- 1. Thermostat and control panels that are easy to read and simple to operate.
- 2. Rocker, touch light, or hands-free switches.
- 3. Extra electrical outlets near the bed (for medical equipment or rechargeable items, etc.) placed 18" to 24" above finished floor (bedroom only).
- 4. Switched outlets for lamps, etc. to be turned on with wall switch.
- 5. Electrical outlets, phone jacks, and data ports at least 18" above finished floor.
- 6. Light switches between 44"-48" above finished floor; thermostats no more than 48" above finished floor.

F. BATHROOMS

- 1. Countertops with beveled edges.
- 2. Adjustable-height showerhead or hand-held showerhead with flexible hose and easily operable controls.
- 3. Non-glare lighting at vanities.
- 4. A full- or half-bath on the main floor with clear floor space of 30" x 48".
- 5. Overhead light fixture in tub/shower.

G. KITCHEN

- 1. At least 15" clear space on each side of stove, sink, and one side of fridge.
- 2. Loop handles on drawers and cabinets.
- 3. Non-glare task lighting to illuminate sink, stove, and work areas.
- 4. Adjustable height shelves in wall cabinets.
- 5. Base cabinets with pull out drawers.
- 6. Visual contrast at front edge of countertop or between the countertop and the cabinets.
- 7. Cooktop/range with front or side-mounted controls (senior units only).
- 8. Extra outlets for small appliances, electronics, etc.

H. CLOSETS/STORAGE

- 1. Area is well-lit with a switch located outside the space.
- 2. Doors and handles that are easy to operate. No bi-fold or accordion-type doors.

SENIOR HOUSING INTERIOR FINISHES

A. COMMON AND SUPPORT AREAS

- 1. Flooring:
  - a. Walk-off Mat @ vestibules.
  - b. LVT @ Lobby/Lounge, Lobby/Mail, Corridors, Laundry, Trash, Elevator., Electric, Janitor, Community Room Kitchen, RR next to Community Room & Wellness Center, Office and Office Storage.
  - c. Sealed Concrete @ ground floor Trash, Mechanical, Elev Equip., Water, Electrical & Bike Storage.
  - d. Sheet Vinyl @ Stairs w/vinyl treads and risers with abrasive contrasting color inserts.
- 2. Wall Base:
  - a. Rubber @ all flooring types.
- 3. Walls:
  - a. Painted gypsum board @ all areas except:
    - i. Painted CMU @ Stairs and ground floor service spaces.
  - b. FRP @ Janitor, Laundry, Trash & Public Restroom.
- 4. Ceilings:
  - a. Painted gypsum board @ Corridors, Janitor, Trash and Electrical.
  - b. Acoustical Ceiling Tile Systems @ Lobbies, Office, Laundry, Wellness Center, Community Room & Public Restroom.
- 5. Doors:
  - a. Public: Pre-finished wood with solid core and painted hollow metal frame.
  - b. Service: Painted hollow metal door and frame.
  - c. Hardware: All lever handsets meeting accessibility requirements.
- 6. Casework:
  - a. Stained wood cabinets with solid wood doors and frames and plastic laminate tops @ Laundry & Community Room.

B. APARTMENTS

- 1. Flooring:
  - a. Luxury Vinyl Tile (LVT).
- 2. Wall Base:
  - a. Rubber.
- 3. Walls:
  - a. Painted gypsum board.
- 4. Ceilings:
  - a. Painted gypsum board.
- 5. Doors:
  - a. Entry & Interior: Pre-finished wood with solid core and painted hollow metal frame.
  - b. Hardware: All lever handsets meeting accessibility requirements.
- 6. Casework:
  - a. Stained wood cabinets with solid wood doors and frames with plastic laminate tops.

# BUILDING AREAS

## BUILDING FLOOR AREAS (GSF)

RESIDENCES	
GROUND FLOOR	6,101
FIRST FLOOR	7,854
SECOND FLOOR	11,438
THIRD FLOOR	13,158
FOURTH FLOOR	13,158
TOTAL	51,709
LIBRARY	
GROUND FLOOR	4,575
FIRST FLOOR	10,421
SECOND FLOOR	0
THIRD FLOOR	0
FOURTH FLOOR	0
TOTAL	14,996
SHARED	
GROUND FLOOR	1,614
FIRST FLOOR	472
SECOND FLOOR	1,720
THIRD FLOOR	0
FOURTH FLOOR	0
TOTAL	3,806
FULL BUILDING	
GROUND FLOOR	12,290
FIRST FLOOR	18,747
SECOND FLOOR	13,158
THIRD FLOOR	13,158
FOURTH FLOOR	13,158
GRAND TOTAL	70,511

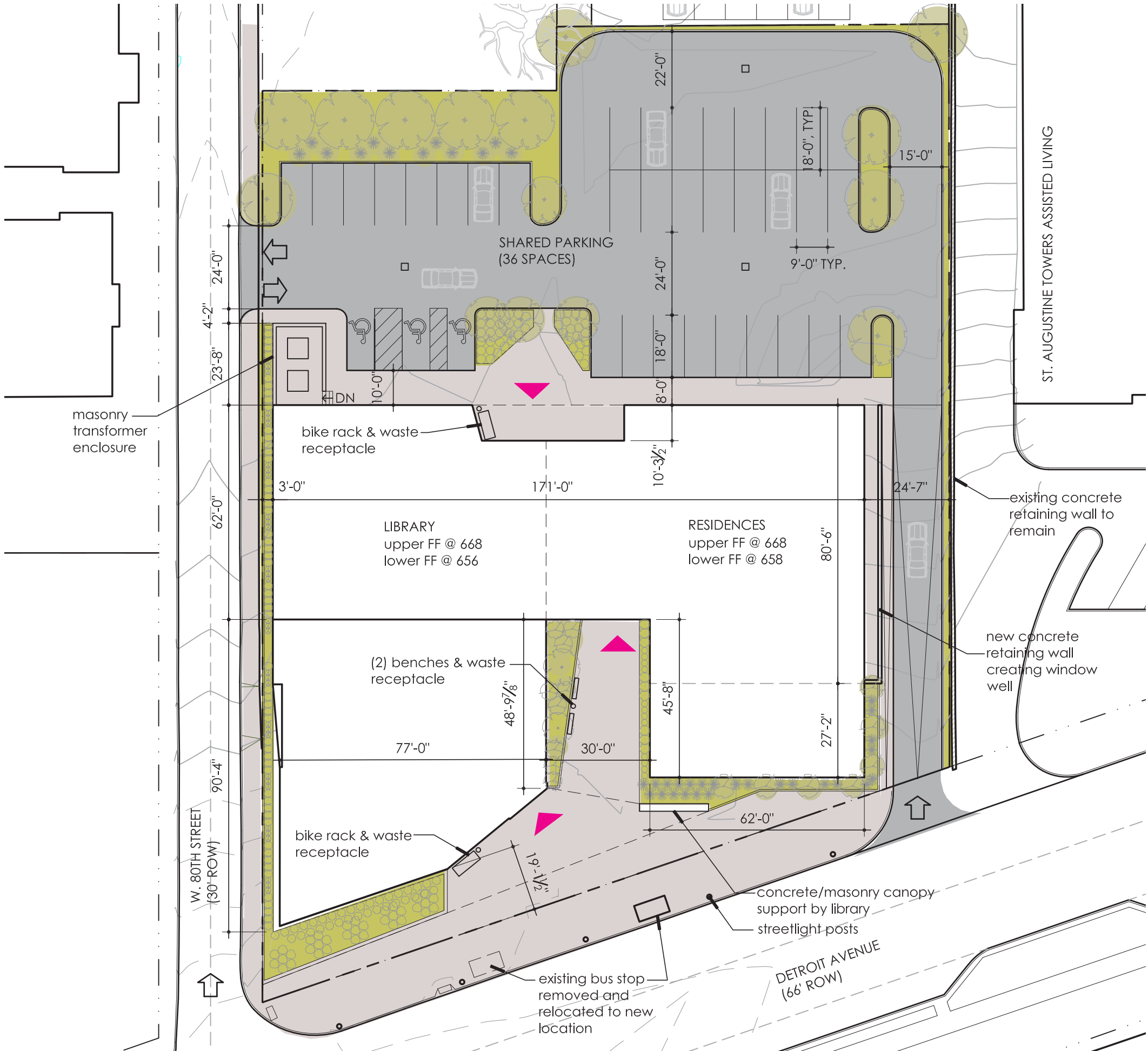
## MAJOR VERTICAL PENETRATIONS (GSF)

GROUND FLOOR	550
FIRST FLOOR	715
SECOND FLOOR	619
THIRD FLOOR	619
FOURTH FLOOR	619
TOTAL	3,122
SUPPORT AREAS (GSF)	
MAIN ELECTRICAL ROOM (SHARED)	644
ELECTRICAL ROOM (SECOND FLOOR)	87
ELECTRICAL ROOM (THIRD FLOOR)	85
ELECTRICAL ROOM (FOURTH FLOOR)	85
ELEVATOR EQUIPMENT (SHARED)	106
WATER ROOM (SHARED)	139
MECHANICAL ROOM	340
STORAGE	333
MAIN TRASH ROOM	679
TRASH ROOM (FIRST FLOOR)	88
TRASH ROOM (SECOND FLOOR)	41
TRASH ROOM (THIRD FLOOR)	40
TRASH ROOM (FOURTH FLOOR)	40
OUTDOOR STORAGE (SHARED)	131
JANITOR'S CLOSETS	90
TOTAL	2,928

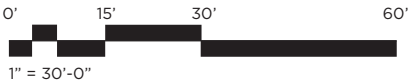
## COMMON AREAS/CIRCULATION (GSF)

GROUND FLOOR	853
FIRST FLOOR	653
SECOND FLOOR	1,782
THIRD FLOOR	1,498
FOURTH FLOOR	1,498
TOTAL	6,284
COMMON AREAS / PUBLIC (GSF)	
NORTH VESTIBULE (SHARED)	372
MAIN LOBBY	529
BIKE STORAGE	237
SOUTH VESTIBULE	195
LOBBY/MAIL	661
LAUNDRY	419
OFFICE	249
OFFICE STORAGE	143
COMMUNITY ROOM (SHARED)	941
SINGLE USER RESTROOM (SHARED)	59
TOTAL	3,805
DEDICATED PROGRAM SPACE (GSF)	
WELLNESS CENTER	458
TOTAL	458

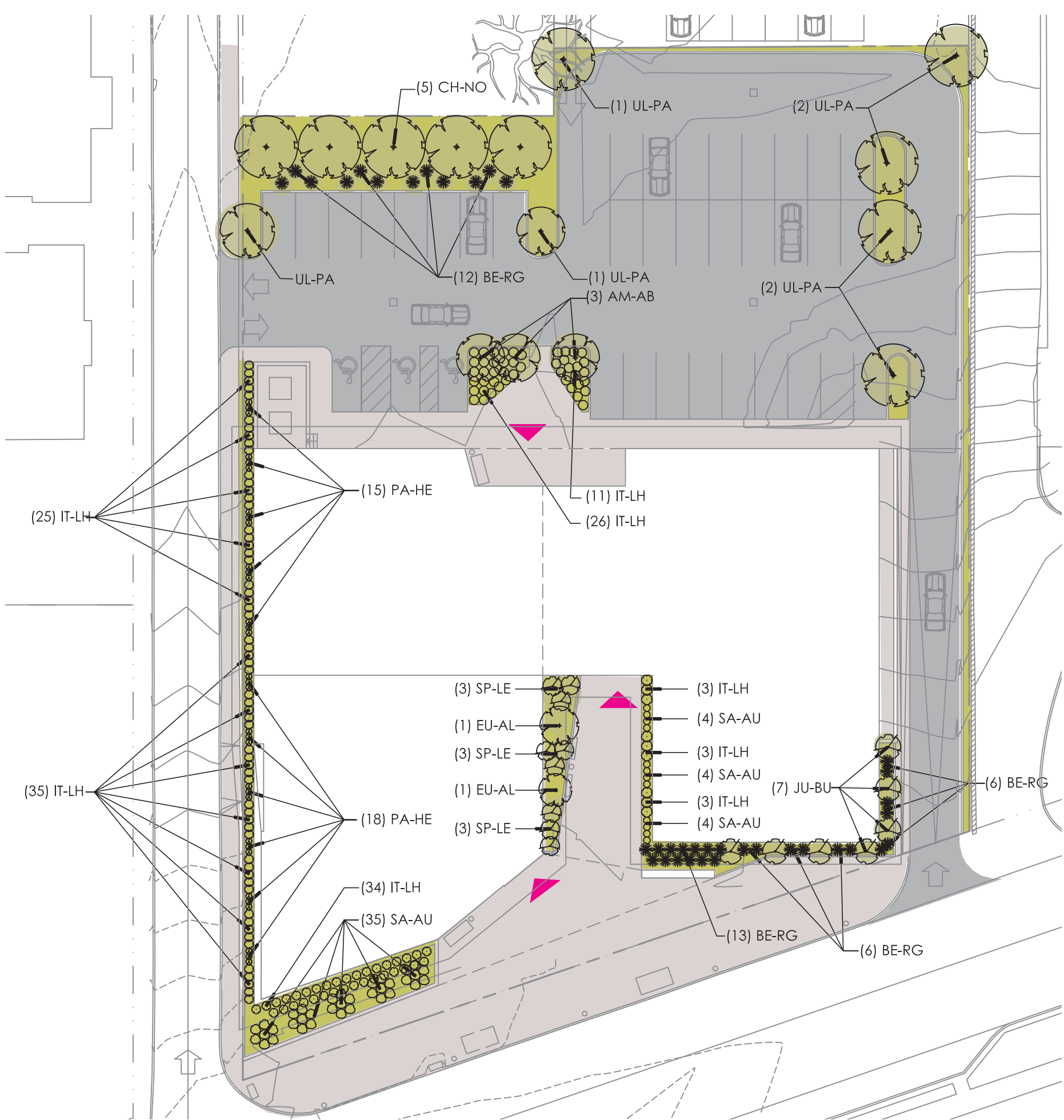
# SITE PLAN



SITE PLAN



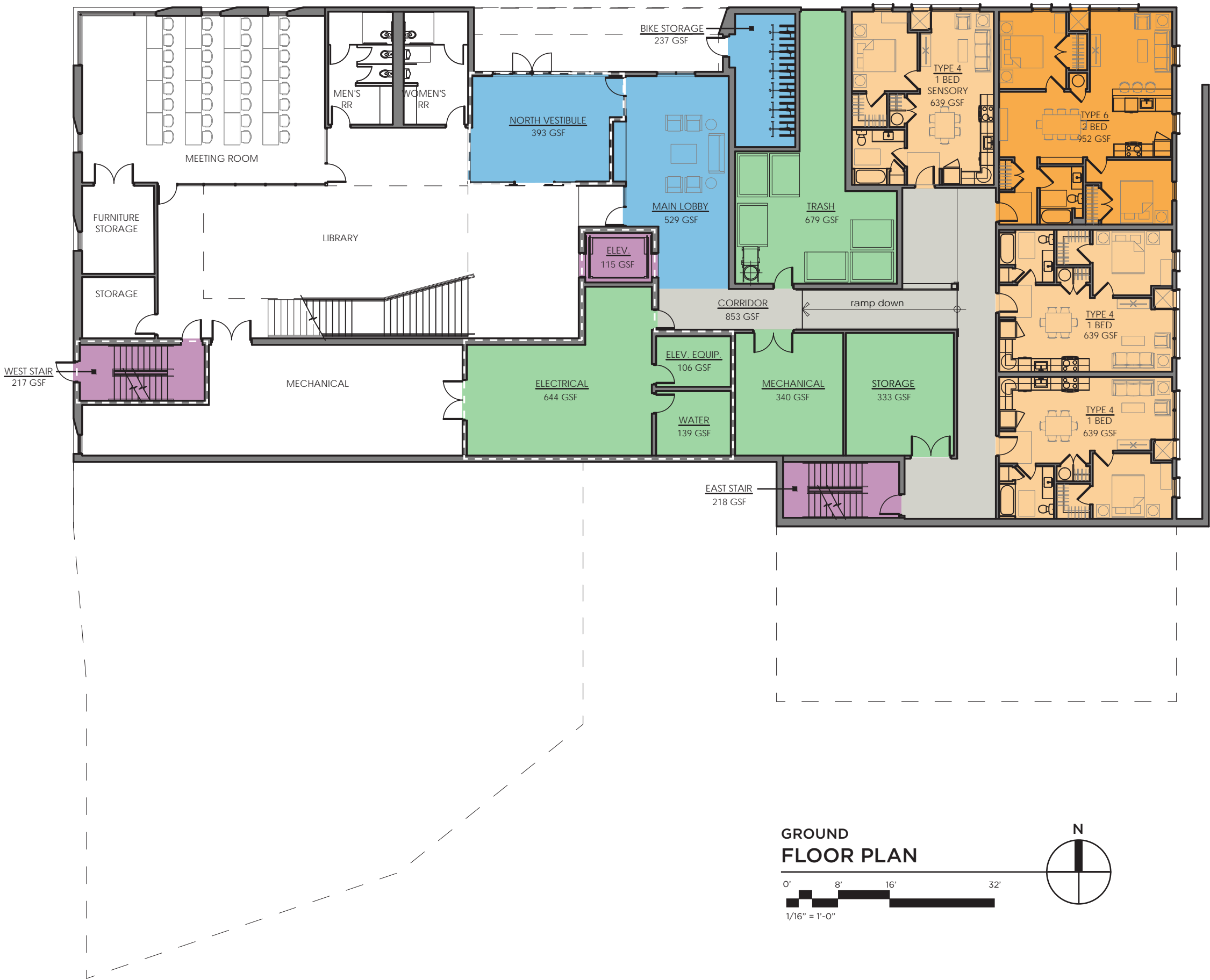
# LANDSCAPE PLAN



PLANT LIST				
QTY	KEY	BOTANICAL NAME	COMMON NAME	SIZE AT MATURITY
3	AM-AB	Amelanchier x Grandiflora "Autumn Brilliance"	Autumn Brilliance Serviceberry	25'H x 15'W
37	BE-RG	Berberis T. "Rose Glow"	Rose Glow Barberry	5'H x 5'W
5	CH-NO	Chamaecyparis N. "Gluaca"	Nootka False Cypress	35'H x 20'W
2	EU-AL	Euonymous Alatus Compactus	Burning Bush	9'H x 9'W
125	IT-LH	Itea Virginica "Little Henry"	Little Henry Sweetspire	40"H x 40"W
7	JU-BU	Juniperus Virginian	Juniper	25'H x 15'W
33	PA-HE	Pancum V. "Heavy Metal"	Heavy Metal Switchgrass	5'H x 3'W
47	SA-AU	Sedum Spectanile "Autumn Joy"	Autumn Joy Sedum	2'H x 2'W
9	SP-LE	Spirea "Lemon Princess"	Lemon Princess Spirea	3'H x 4'W
7	UL-PA	Ulmus x "Patriot"	Patriot Elm	40'H x 25'W



GROUND FLOOR PLAN



APARTMENT UNIT AREAS

UNIT TYPE	QUANTITY	UNIT GSF	TOTAL GSF
TYPE 1 - STUDIO	3	486	1,458
TYPE 2 - STUDIO	1	520	520
TYPE 3 - STUDIO - ADA	1	568	568
TYPE 4 - 1 BEDROOM	22	639	14,058
TYPE 5 - 1 BEDROOM - ADA	4	641	2,564
TYPE 6 - 2 BEDROOM	8	952	7,616
TYPE 7 - 2 BEDROOM	4	1,026	4,104
TYPE 8 - 2 BEDROOM	6	978	5,868
TYPE 9 - 2 BEDROOM - ADA	2	1,009	2,018
STUDIO	5		
1 BEDROOM	26		
2 BEDROOM	20		
TOTAL	51		38,774

ACCESSIBLE UNITS

- All Type 3, 5 & 9 units meet UFAS.
- (1) Type 4 unit indicated on Ground Floor and Type 2 unit on First Floor meet Accessible Communication Features (A/V) requirements.

FLOOR PLAN KEY

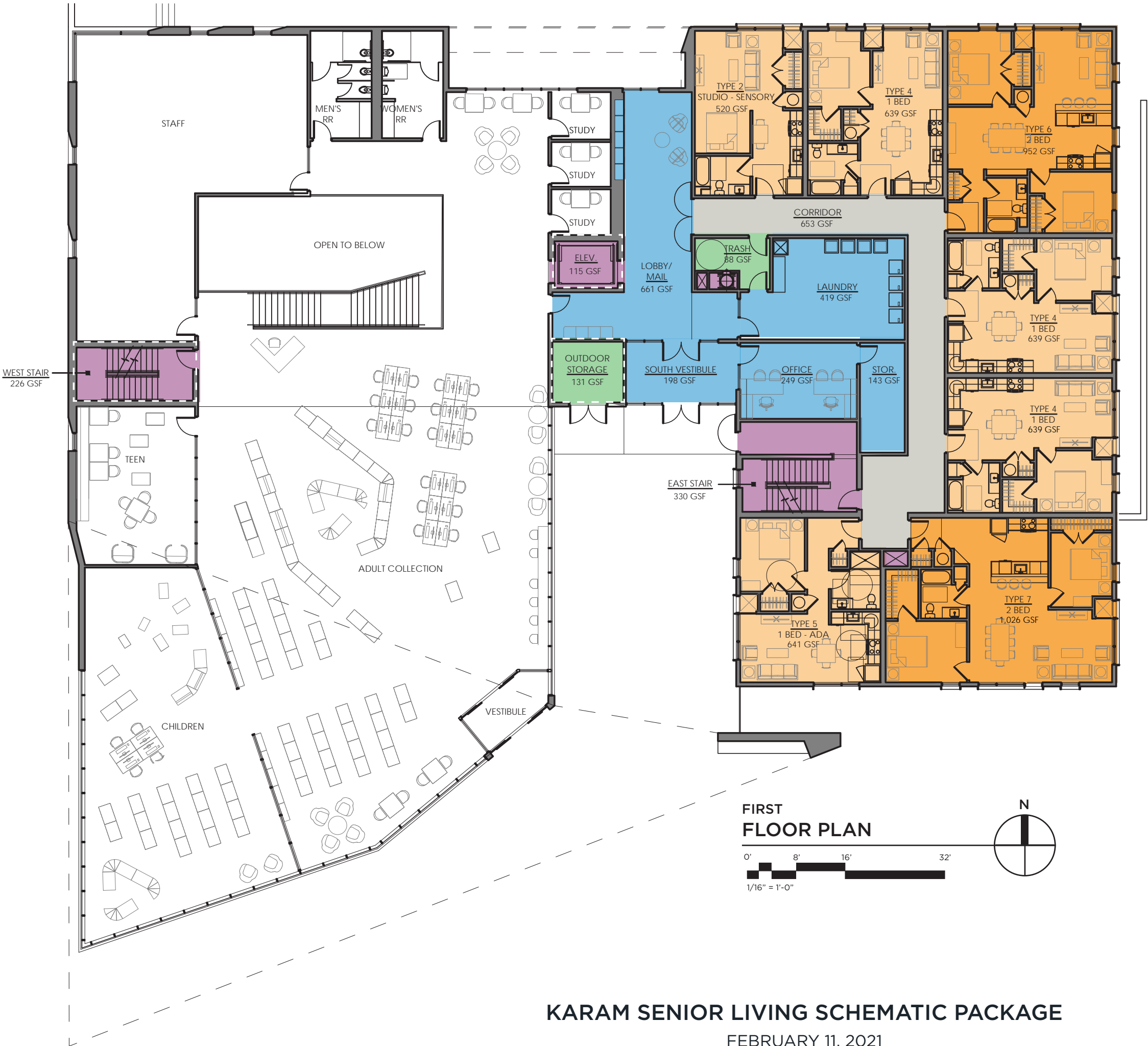
1 BEDROOM UNIT	2 BEDROOM UNIT	COMMON CIRCULATION AREA
COMMON PUBLIC AREA	MAJOR VERTICAL PENETRATION	SUPPORT AREA

- NOTES
- All areas enclosed in a white dashed line to be shared space with the Cleveland Public Library.
  - All areas not colored to fall within the Cleveland Public Library scope.

GROUND FLOOR PLAN



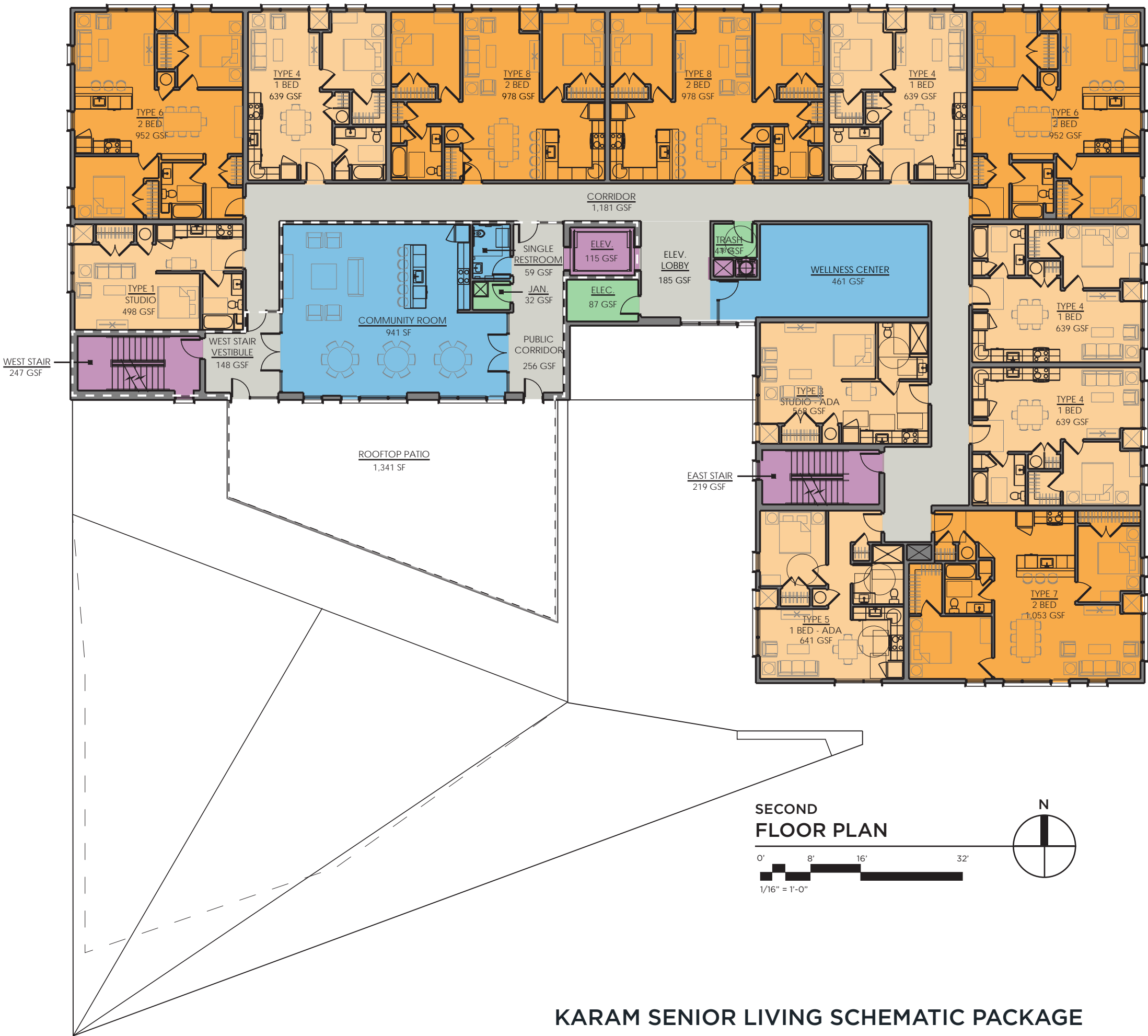
# FIRST FLOOR PLAN



APARTMENT UNIT AREAS			
UNIT TYPE	QUANTITY	UNIT GSF	TOTAL GSF
TYPE 1 - STUDIO	3	486	1,458
TYPE 2 - STUDIO	1	520	520
TYPE 3 - STUDIO - ADA	1	568	568
TYPE 4 - 1 BEDROOM	22	639	14,058
TYPE 5 - 1 BEDROOM - ADA	4	641	2,564
TYPE 6 - 2 BEDROOM	8	952	7,616
TYPE 7 - 2 BEDROOM	4	1,026	4,104
TYPE 8 - 2 BEDROOM	6	978	5,868
TYPE 9 - 2 BEDROOM - ADA	2	1,009	2,018
STUDIO		5	
1 BEDROOM		26	
2 BEDROOM		20	
TOTAL	51		38,774
ACCESSIBLE UNITS			
<ul style="list-style-type: none"><li>All Type 3, 5 &amp; 9 units meet UFAS.</li><li>(1) Type 4 unit indicated on Ground Floor and Type 2 unit on First Floor meet Accessible Communication Features (A/V) requirements.</li></ul>			

FLOOR PLAN KEY			NOTES
<div></div>	1 BEDROOM UNIT	<div></div>	<ul style="list-style-type: none"><li>All areas enclosed in a white dashed line to be shared space with the Cleveland Public Library.</li></ul>
<div></div>	2 BEDROOM UNIT	<div></div>	
<div></div>	COMMON CIRCULATION AREA	<div></div>	<ul style="list-style-type: none"><li>All areas not colored to fall within the Cleveland Public Library scope.</li></ul>
<div></div>	COMMON PUBLIC AREA	<div></div>	
<div></div>	MAJOR VERTICAL PENETRATION	<div></div>	
<div></div>	SUPPORT AREA	<div></div>	

SECOND FLOOR PLAN



APARTMENT UNIT AREAS

UNIT TYPE	QUANTITY	UNIT GSF	TOTAL GSF
TYPE 1 - STUDIO	3	486	1,458
TYPE 2 - STUDIO	1	520	520
TYPE 3 - STUDIO - ADA	1	568	568
TYPE 4 - 1 BEDROOM	22	639	14,058
TYPE 5 - 1 BEDROOM - ADA	4	641	2,564
TYPE 6 - 2 BEDROOM	8	952	7,616
TYPE 7 - 2 BEDROOM	4	1,026	4,104
TYPE 8 - 2 BEDROOM	6	978	5,868
TYPE 9 - 2 BEDROOM - ADA	2	1,009	2,018

STUDIO	5	
1 BEDROOM	26	
2 BEDROOM	20	
TOTAL	51	38,774

ACCESSIBLE UNITS

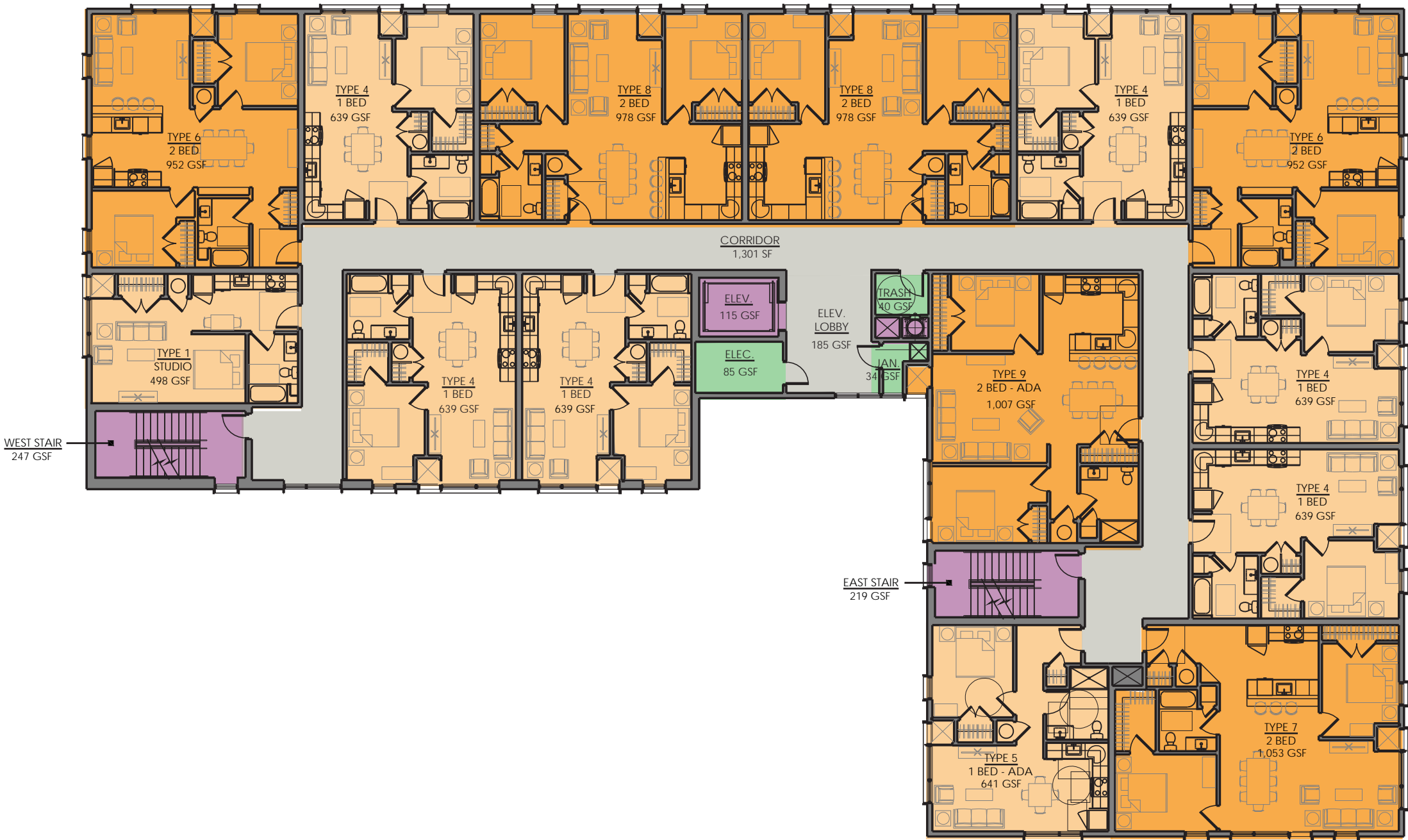
- All Type 3, 5 & 9 units meet UFAS.
- (1) Type 4 unit indicated on Ground Floor and Type 2 unit on First Floor meet Accessible Communication Features (A/V) requirements.

FLOOR PLAN KEY

1 BEDROOM UNIT	2 BEDROOM UNIT	COMMON CIRCULATION AREA
COMMON PUBLIC AREA	MAJOR VERTICAL PENETRATION	SUPPORT AREA

- NOTES
- All areas enclosed in a white dashed line to be shared space with the Cleveland Public Library.
  - All areas not colored to fall within the Cleveland Public Library scope.

# THIRD & FOURTH FLOOR PLAN



## APARTMENT UNIT AREAS

UNIT TYPE	QUANTITY	UNIT GSF	TOTAL GSF
TYPE 1 - STUDIO	3	486	1,458
TYPE 2 - STUDIO	1	520	520
TYPE 3 - STUDIO - ADA	1	568	568
TYPE 4 - 1 BEDROOM	22	639	14,058
TYPE 5 - 1 BEDROOM - ADA	4	641	2,564
TYPE 6 - 2 BEDROOM	8	952	7,616
TYPE 7 - 2 BEDROOM	4	1,026	4,104
TYPE 8 - 2 BEDROOM	6	978	5,868
TYPE 9 - 2 BEDROOM - ADA	2	1,009	2,018

STUDIO	5	
1 BEDROOM	26	
2 BEDROOM	20	
TOTAL	51	38,774

## ACCESSIBLE UNITS

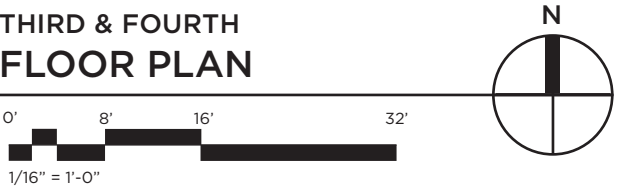
- All Type 3, 5 & 9 units meet UFAS.
- (1) Type 4 unit indicated on Ground Floor and Type 2 unit on First Floor meet Accessible Communication Features (A/V) requirements.

## FLOOR PLAN KEY

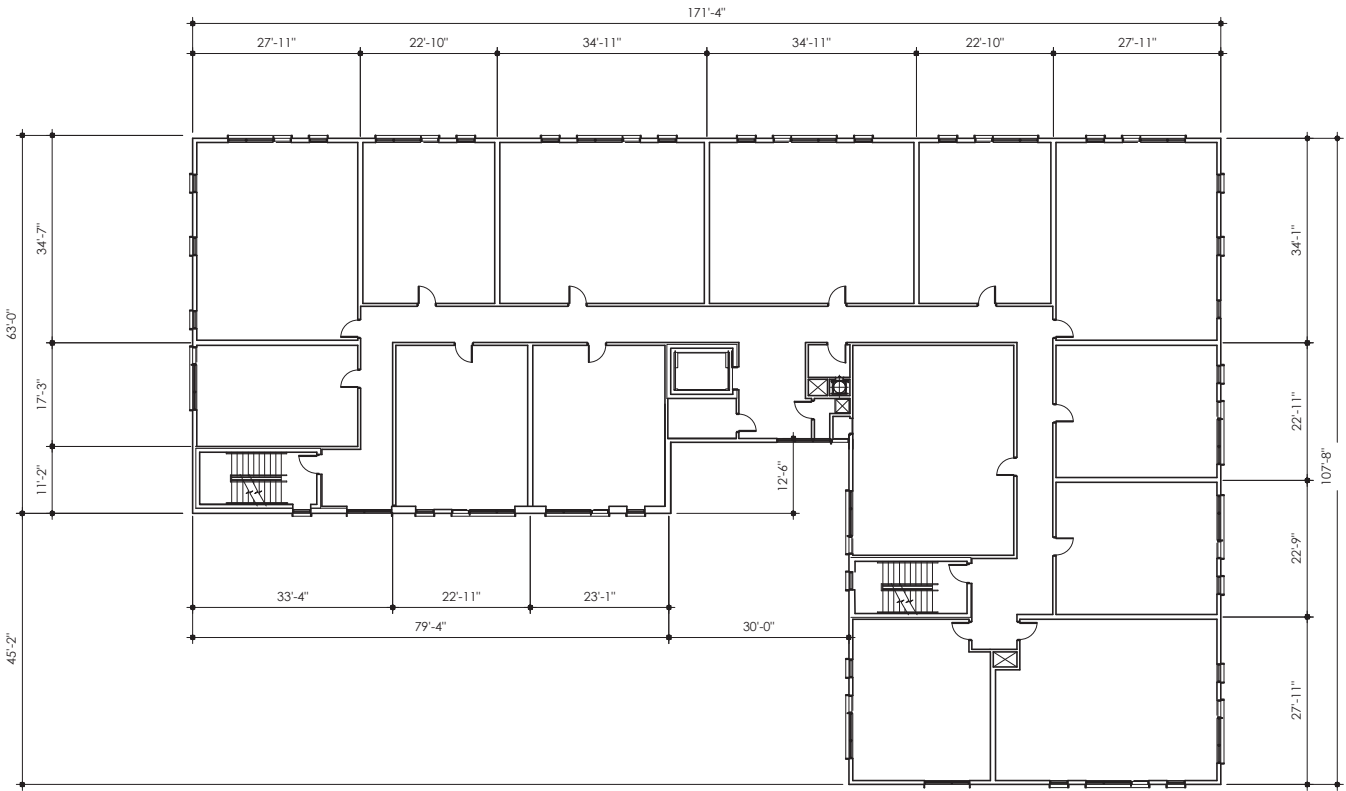
1 BEDROOM UNIT	2 BEDROOM UNIT	COMMON CIRCULATION AREA
COMMON PUBLIC AREA	MAJOR VERTICAL PENETRATION	SUPPORT AREA

- NOTES
- All areas enclosed in a white dashed line to be shared space with the Cleveland Public Library.
  - All areas not colored to fall within the Cleveland Public Library scope.

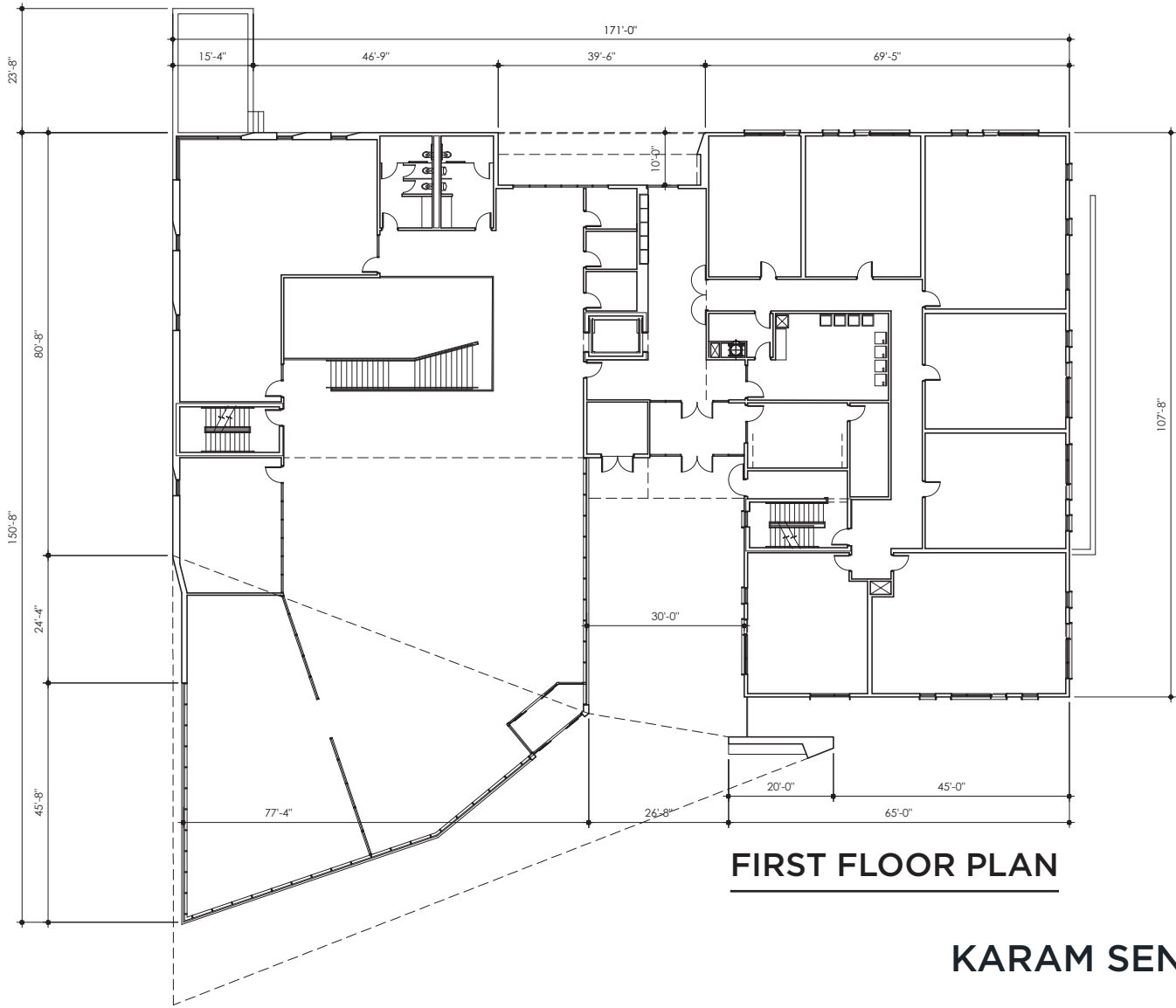
## THIRD & FOURTH FLOOR PLAN



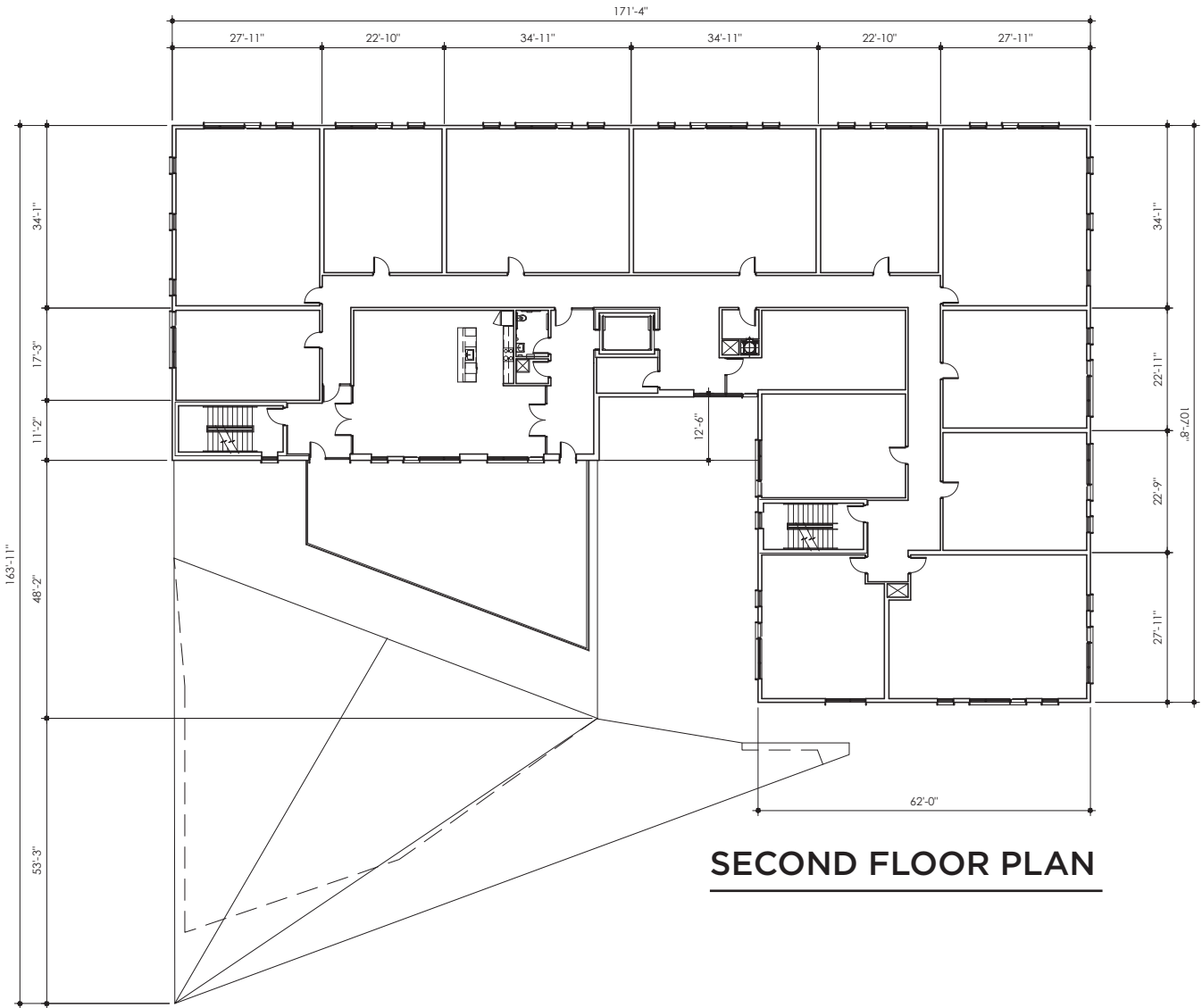
# DIMENSIONED FLOOR PLANS



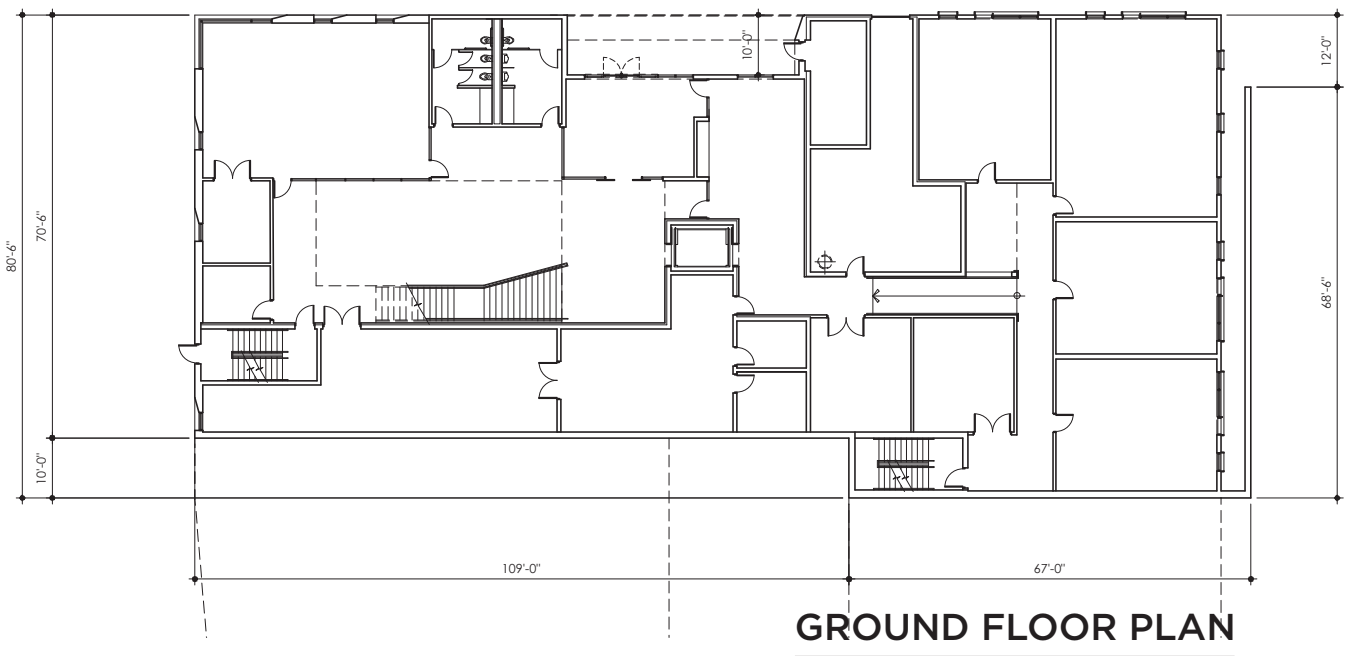
THIRD & FOURTH FLOOR PLAN



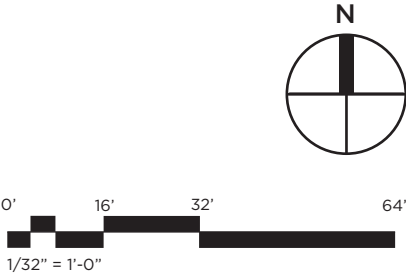
FIRST FLOOR PLAN



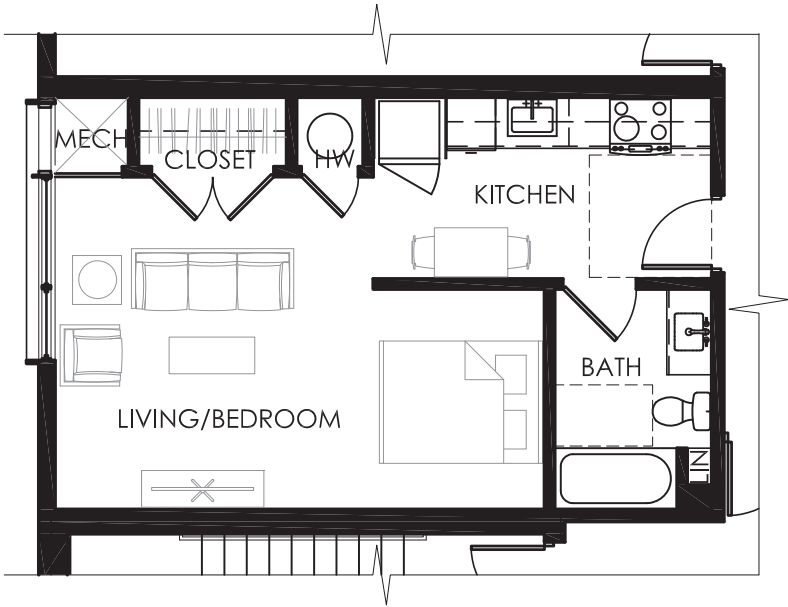
SECOND FLOOR PLAN



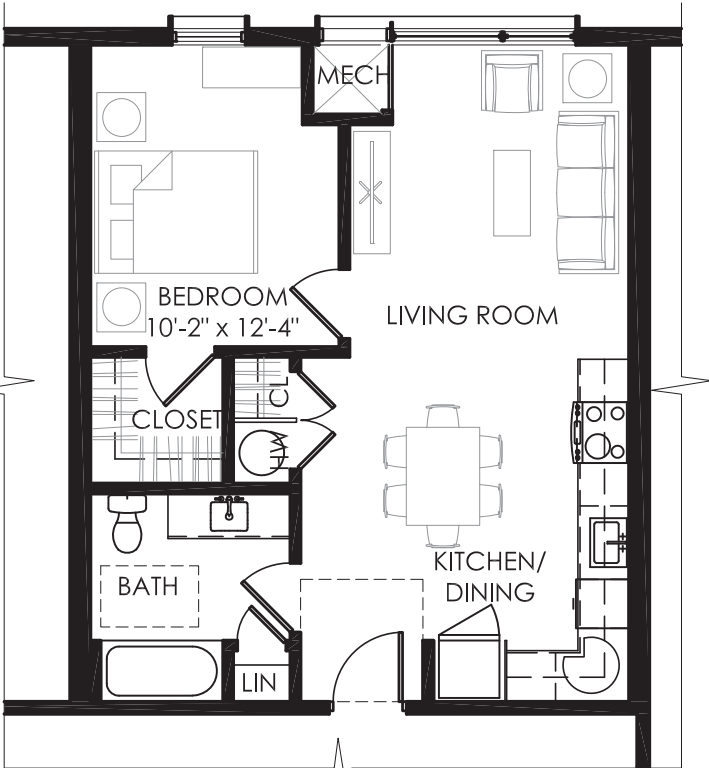
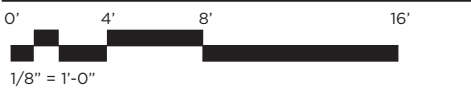
GROUND FLOOR PLAN



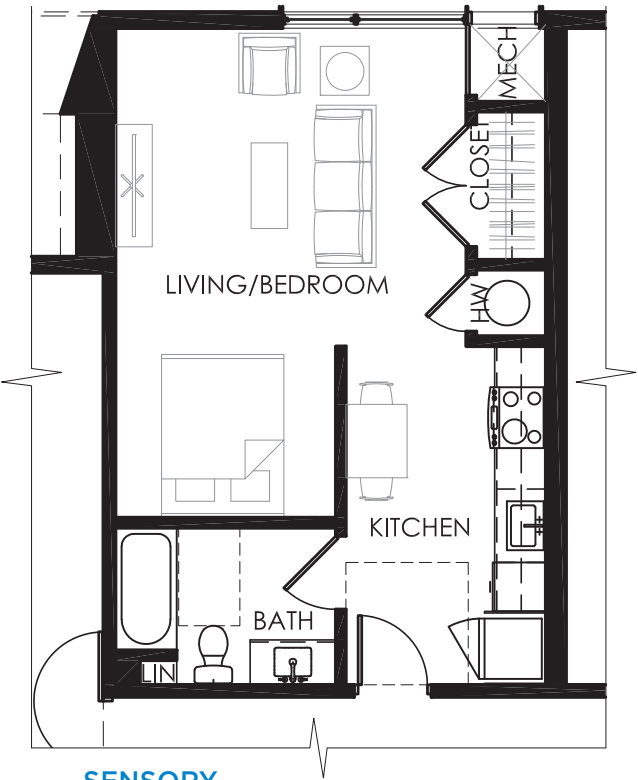
# ENLARGED UNIT PLANS



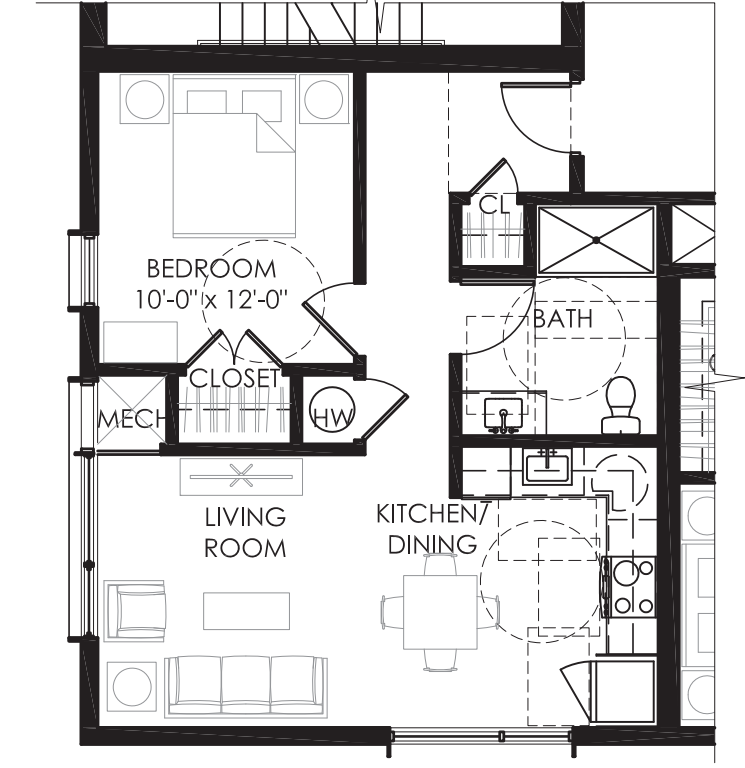
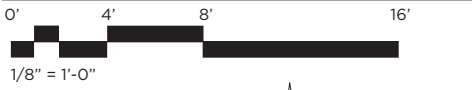
UNIT TYPE 1 - STUDIO



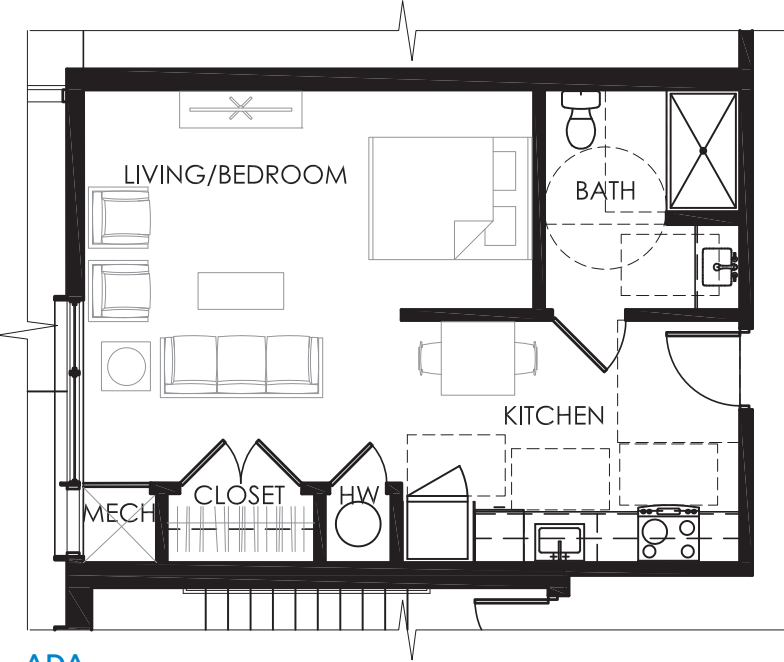
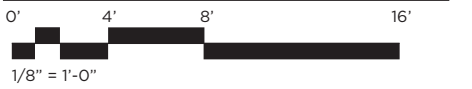
(1) **SENSORY**  
UNIT TYPE 4 - 1 BED



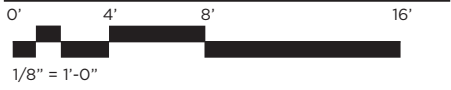
**SENSORY**  
UNIT TYPE 2 - STUDIO



**ADA**  
UNIT TYPE 5 - 1 BED

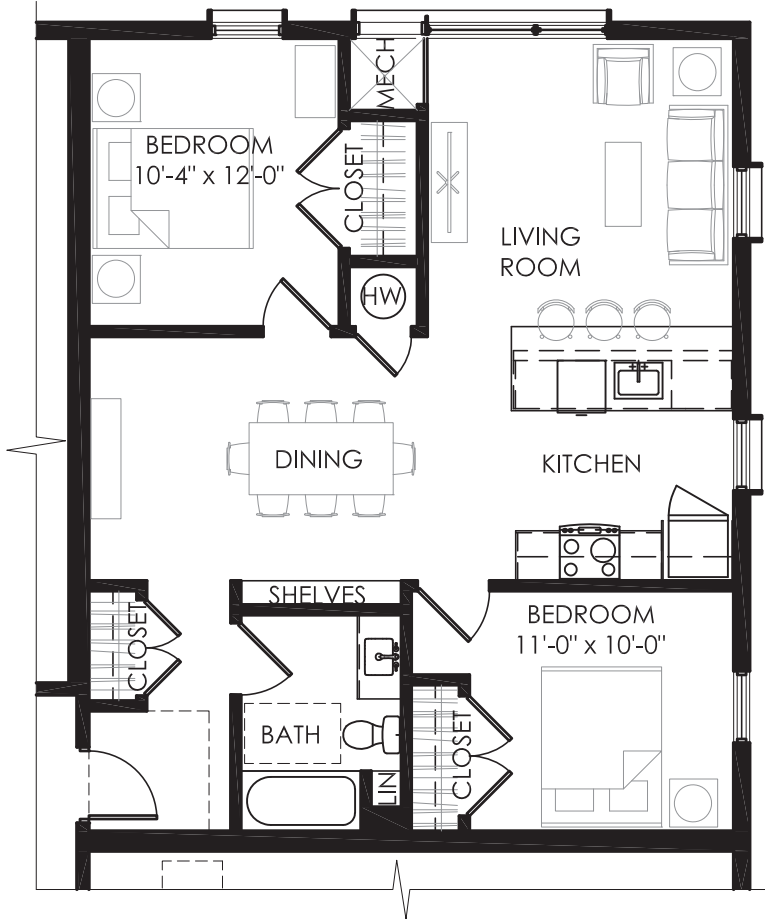


**ADA**  
UNIT TYPE 3 - STUDIO

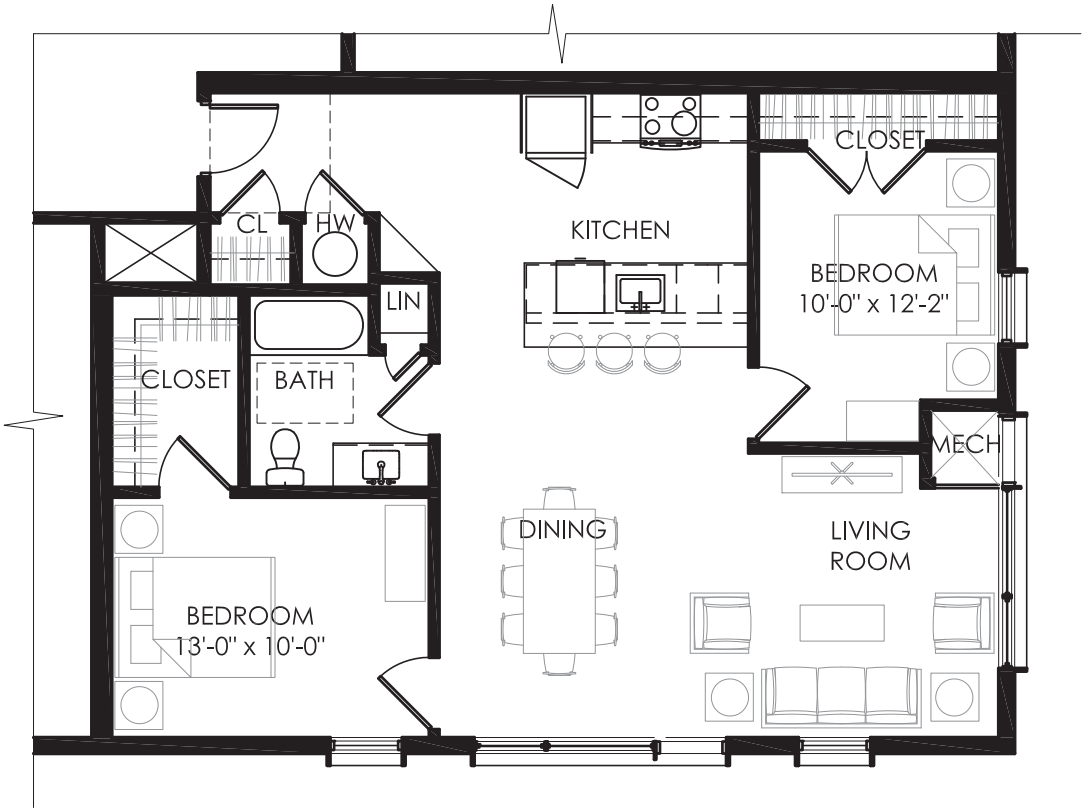
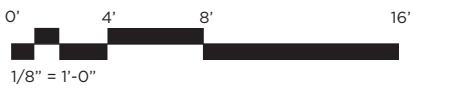


APARTMENT UNIT FINISHES	
1. Flooring:	a. Luxury Vinyl Tile (LVT)
2. Wall Base:	a. Rubber
3. Walls:	a. Painted gypsum board
4. Ceilings:	a. Painted gypsum board
5. Doors:	a. Entry & Interior: Pre-finished wood with solid core and painted hollow metal frame b. Hardware: All lever handsets meeting accessibility requirements
6. Casework:	a. Stained wood cabinets with solid wood doors and frames with plastic laminate tops

# ENLARGED UNIT PLANS



UNIT TYPE 6 - 2 BED

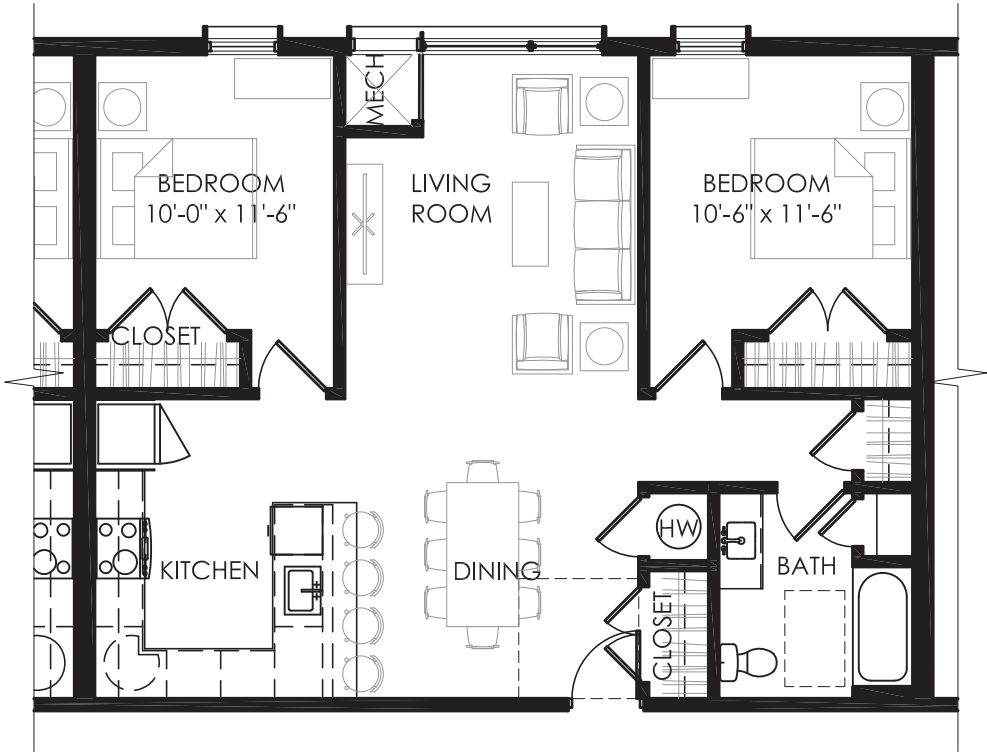


UNIT TYPE 7 - 2 BED

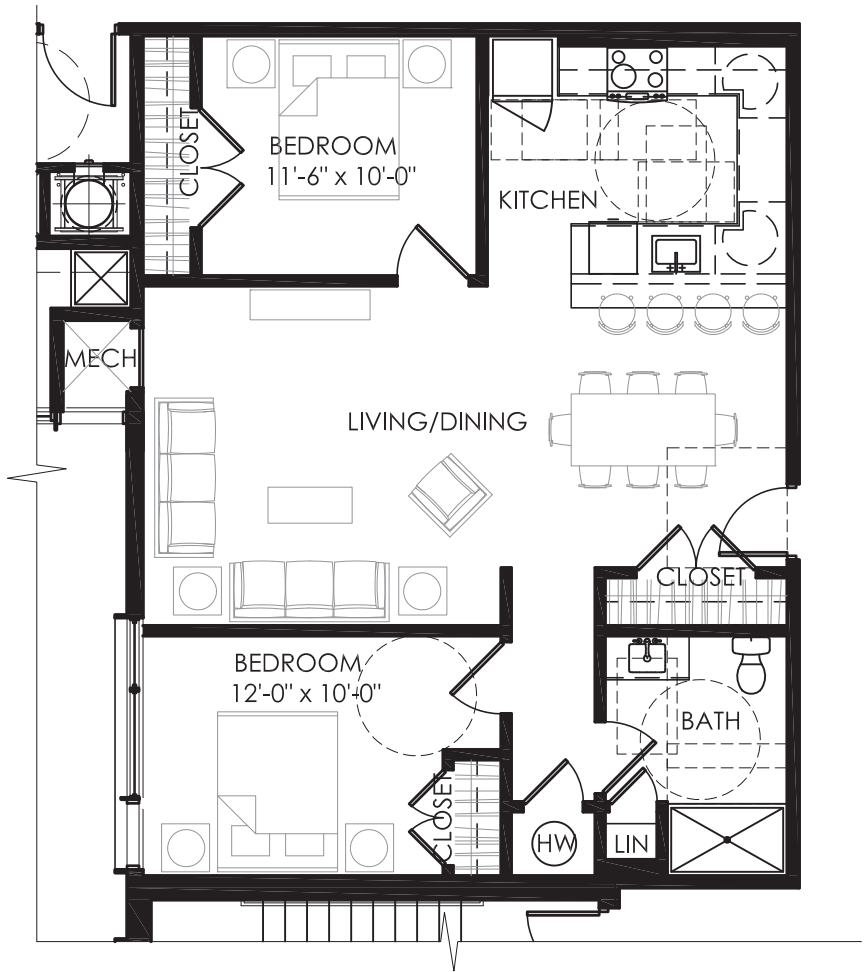
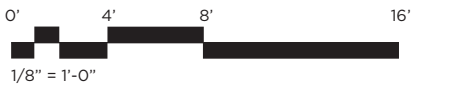


APARTMENT UNIT FINISHES	
1. Flooring:	a. Luxury Vinyl Tile (LVT)
2. Wall Base:	a. Rubber
3. Walls:	a. Painted gypsum board
4. Ceilings:	a. Painted gypsum board
5. Doors:	a. Entry & Interior: Pre-finished wood with solid core and painted hollow metal frame b. Hardware: All lever handsets meeting accessibility requirements
6. Casework:	a. Stained wood cabinets with solid wood doors and frames with plastic laminate tops

# ENLARGED UNIT PLANS



UNIT TYPE 8 - 2 BED



ADA

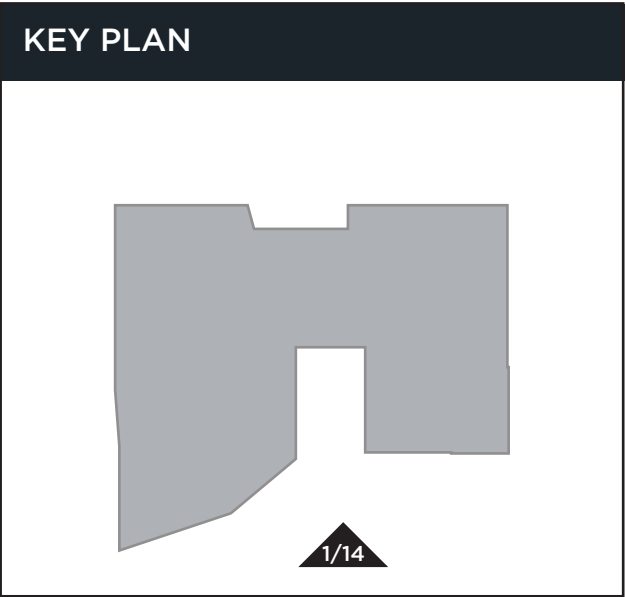
UNIT TYPE 9 - 2 BED



## APARTMENT UNIT FINISHES

1. Flooring:
  - a. Luxury Vinyl Tile (LVT)
2. Wall Base:
  - a. Rubber
3. Walls:
  - a. Painted gypsum board
4. Ceilings:
  - a. Painted gypsum board
5. Doors:
  - a. Entry & Interior: Pre-finished wood with solid core and painted hollow metal frame
  - b. Hardware: All lever handsets meeting accessibility requirements
6. Casework:
  - a. Stained wood cabinets with solid wood doors and frames with plastic laminate tops

MATERIAL LEGEND			
(A)	PREFIN. FIBER CEMENT SIDING; 8" EXPOSURE	(L)	EXTERIOR BUILDING SIGNAGE
(B)	PREFIN. FIBER CEMENT SIDING; 4" EXPOSURE	(M)	PAINTED HOLLOW METAL DOOR
(C)	PREFIN. FIBER CEMENT PANEL	(N)	OVERHEAD DOOR SYSTEM
(D)	PRE FIN. COMPOSITE ALUM PANEL	(P)	PREFIN. ALUM. STOREFRONT ENTRY DOOR
(E)	PREFIN. ALUMINUM COPING & TRIM	(Q)	COMPOSITE PHENOLIC PANEL
(F)	VINYL WINDOW SYSTEM (RESIDENTIAL)	(R)	PREFIN. ALUM. GUARDRAIL
(G)	PREFIN. ALUM. STOREFRONT GLAZING	(S)	CAST STONE COPING
(H)	FACE BRICK; "MONARCH" SIZE (4x4x16 NOM)	(T)	PREFIN. ALUM. CURTAINWALL GLAZING
(J)	MECHANICAL LOUVER	(U)	AUTOMATIC SLIDING DOORS
(K)	STANDING SEAM METAL ROOF	(V)	PREFINISHED ALUM. WRAPPED FLANGE



1 DETROIT AVE  
SOUTH ELEVATION

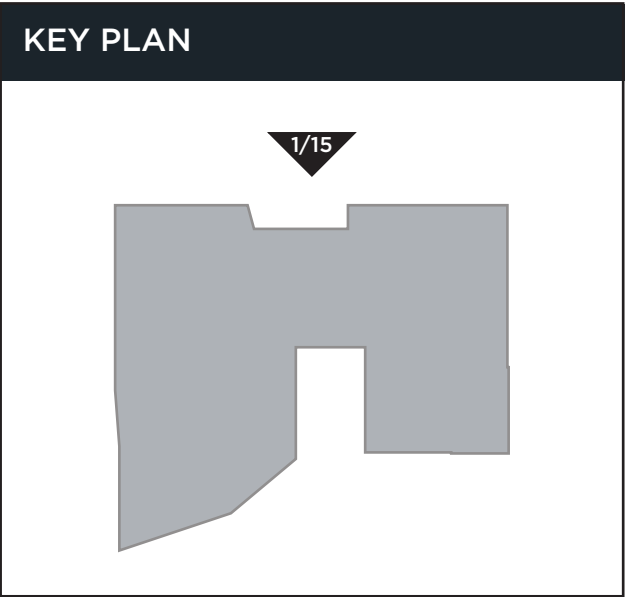
0' 8' 16' 32'

1/16" = 1'-0"

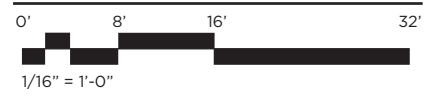
All areas enclosed in a white dashed line to fall within Cleveland Public Library Scope.

ELEVATION

MATERIAL LEGEND			
(A)	PREFIN. FIBER CEMENT SIDING; 8" EXPOSURE	(L)	EXTERIOR BUILDING SIGNAGE
(B)	PREFIN. FIBER CEMENT SIDING; 4" EXPOSURE	(M)	PAINTED HOLLOW METAL DOOR
(C)	PREFIN. FIBER CEMENT PANEL	(N)	OVERHEAD DOOR SYSTEM
(D)	PRE FIN. COMPOSITE ALUM PANEL	(P)	PREFIN. ALUM. STOREFRONT ENTRY DOOR
(E)	PREFIN. ALUMINUM COPING & TRIM	(Q)	COMPOSITE PHENOLIC PANEL
(F)	VINYL WINDOW SYSTEM (RESIDENTIAL)	(R)	PREFIN. ALUM. GUARDRAIL
(G)	PREFIN. ALUM. STOREFRONT GLAZING	(S)	CAST STONE COPING
(H)	FACE BRICK; "MONARCH" SIZE (4x4x16 NOM)	(T)	PREFIN. ALUM. CURTAINWALL GLAZING
(J)	MECHANICAL LOUVER	(U)	AUTOMATIC SLIDING DOORS
(K)	STANDING SEAM METAL ROOF	(V)	PREFINISHED ALUM. WRAPPED FLANGE



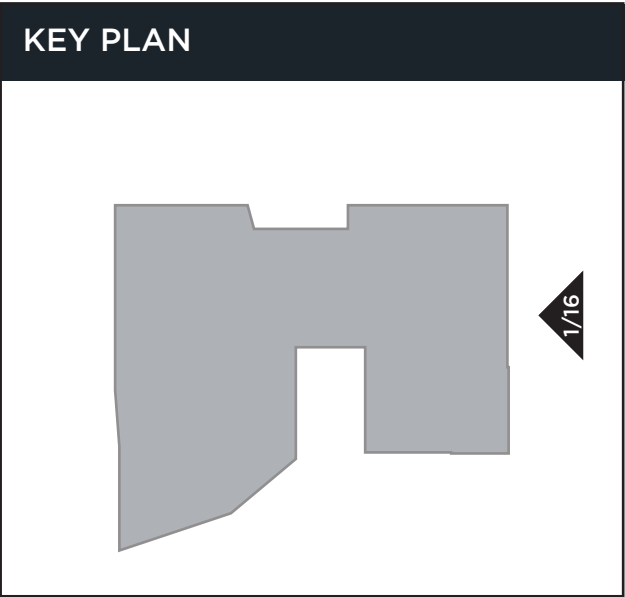
1 NORTH ELEVATION



All areas enclosed in a white dashed line to fall within Cleveland Public Library Scope.

ELEVATION

MATERIAL LEGEND			
(A)	PREFIN. FIBER CEMENT SIDING; 8" EXPOSURE	(L)	EXTERIOR BUILDING SIGNAGE
(B)	PREFIN. FIBER CEMENT SIDING; 4" EXPOSURE	(M)	PAINTED HOLLOW METAL DOOR
(C)	PREFIN. FIBER CEMENT PANEL	(N)	OVERHEAD DOOR SYSTEM
(D)	PRE FIN. COMPOSITE ALUM PANEL	(P)	PREFIN. ALUM. STOREFRONT ENTRY DOOR
(E)	PREFIN. ALUMINUM COPING & TRIM	(Q)	COMPOSITE PHENOLIC PANEL
(F)	VINYL WINDOW SYSTEM (RESIDENTIAL)	(R)	PREFIN. ALUM. GUARDRAIL
(G)	PREFIN. ALUM. STOREFRONT GLAZING	(S)	CAST STONE COPING
(H)	FACE BRICK; "MONARCH" SIZE (4x4x16 NOM)	(T)	PREFIN. ALUM. CURTAINWALL GLAZING
(J)	MECHANICAL LOUVER	(U)	AUTOMATIC SLIDING DOORS
(K)	STANDING SEAM METAL ROOF	(V)	PREFINISHED ALUM. WRAPPED FLANGE



1 EAST ELEVATION

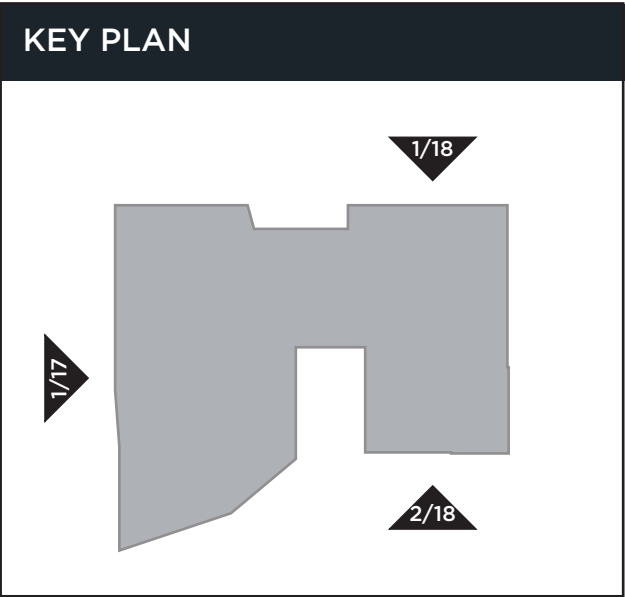
0' 8' 16' 32'

1/16" = 1'-0"

All areas enclosed in a white dashed line to fall within Cleveland Public Library Scope.

ELEVATION

MATERIAL LEGEND			
(A)	PREFIN. FIBER CEMENT SIDING; 8" EXPOSURE	(L)	EXTERIOR BUILDING SIGNAGE
(B)	PREFIN. FIBER CEMENT SIDING; 4" EXPOSURE	(M)	PAINTED HOLLOW METAL DOOR
(C)	PREFIN. FIBER CEMENT PANEL	(N)	OVERHEAD DOOR SYSTEM
(D)	PRE FIN. COMPOSITE ALUM PANEL	(P)	PREFIN. ALUM. STOREFRONT ENTRY DOOR
(E)	PREFIN. ALUMINUM COPING & TRIM	(Q)	COMPOSITE PHENOLIC PANEL
(F)	VINYL WINDOW SYSTEM (RESIDENTIAL)	(R)	PREFIN. ALUM. GUARDRAIL
(G)	PREFIN. ALUM. STOREFRONT GLAZING	(S)	CAST STONE COPING
(H)	FACE BRICK; "MONARCH" SIZE (4x4x16 NOM)	(T)	PREFIN. ALUM. CURTAINWALL GLAZING
(J)	MECHANICAL LOUVER	(U)	AUTOMATIC SLIDING DOORS
(K)	STANDING SEAM METAL ROOF	(V)	PREFINISHED ALUM. WRAPPED FLANGE



WEST 80TH STREET  
1 WEST ELEVATION

0' 8' 16' 32'

1/16" = 1'-0"

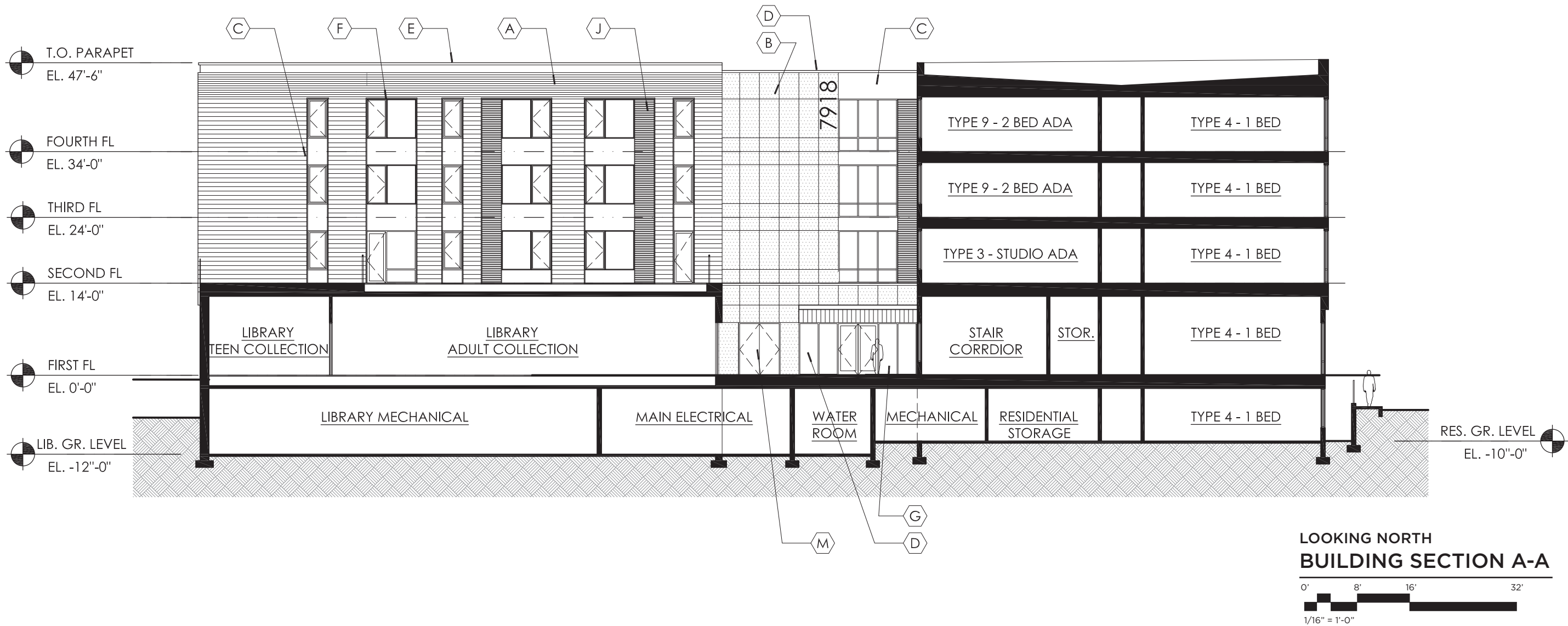
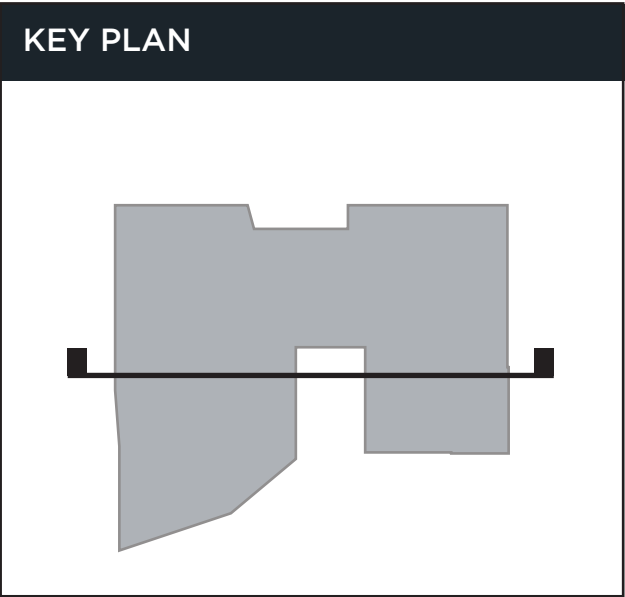
All areas enclosed in a white dashed line to fall within Cleveland Public Library Scope.

# ENLARGED ELEVATIONS



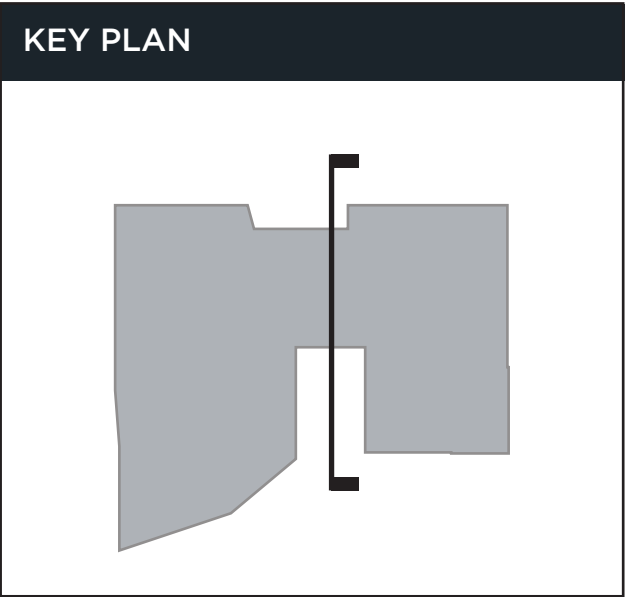
BUILDING SECTION

MATERIAL LEGEND			
(A)	PREFIN. FIBER CEMENT SIDING; 8" EXPOSURE	(L)	EXTERIOR BUILDING SIGNAGE
(B)	PREFIN. FIBER CEMENT SIDING; 4" EXPOSURE	(M)	PAINTED HOLLOW METAL DOOR
(C)	PREFIN. FIBER CEMENT PANEL	(N)	OVERHEAD DOOR SYSTEM
(D)	PRE FIN. COMPOSITE ALUM PANEL	(P)	PREFIN. ALUM. STOREFRONT ENTRY DOOR
(E)	PREFIN. ALUMINUM COPING & TRIM	(Q)	COMPOSITE PHENOLIC PANEL
(F)	VINYL WINDOW SYSTEM (RESIDENTIAL)	(R)	PREFIN. ALUM. GUARDRAIL
(G)	PREFIN. ALUM. STOREFRONT GLAZING	(S)	CAST STONE COPING
(H)	FACE BRICK; "MONARCH" SIZE (4x4x16 NOM)	(T)	PREFIN. ALUM. CURTAINWALL GLAZING
(J)	MECHANICAL LOUVER	(U)	AUTOMATIC SLIDING DOORS
(K)	STANDING SEAM METAL ROOF	(V)	PREFINISHED ALUM. WRAPPED FLANGE

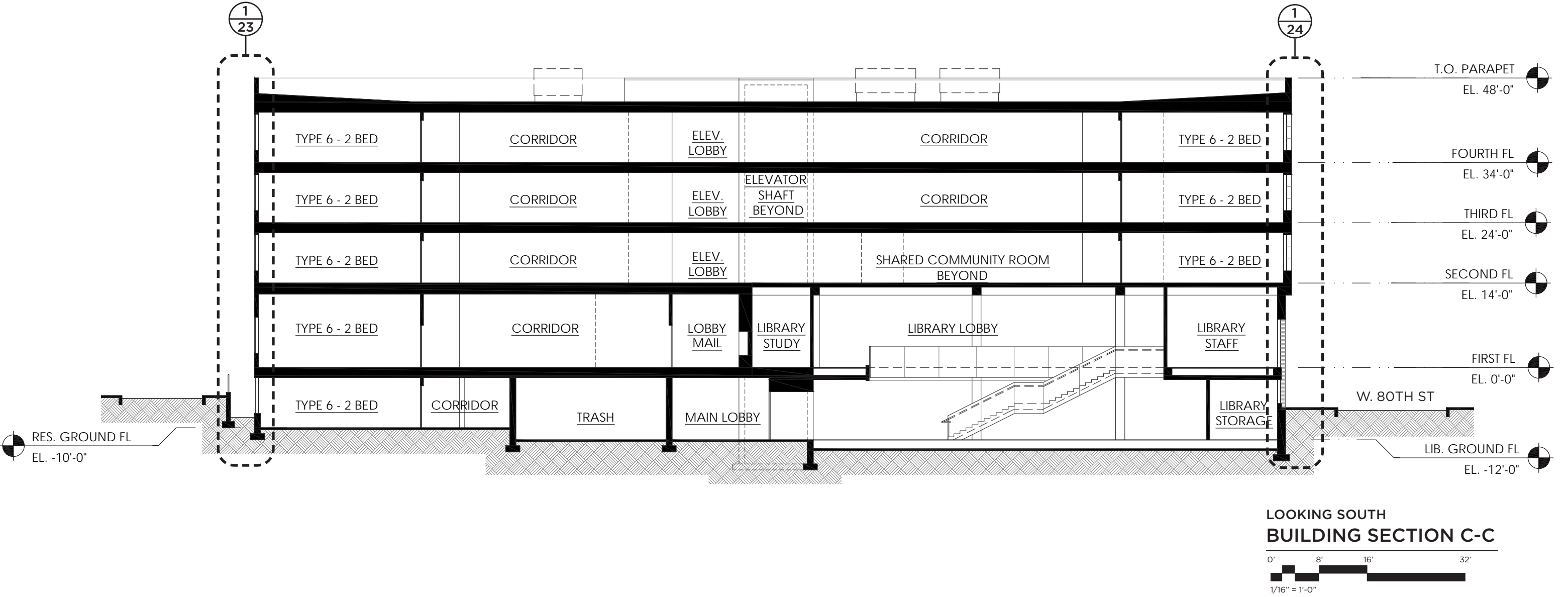
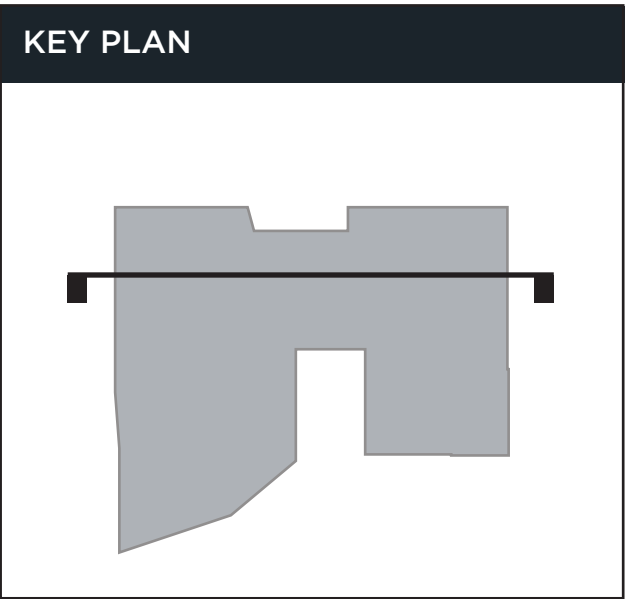


BUILDING SECTION

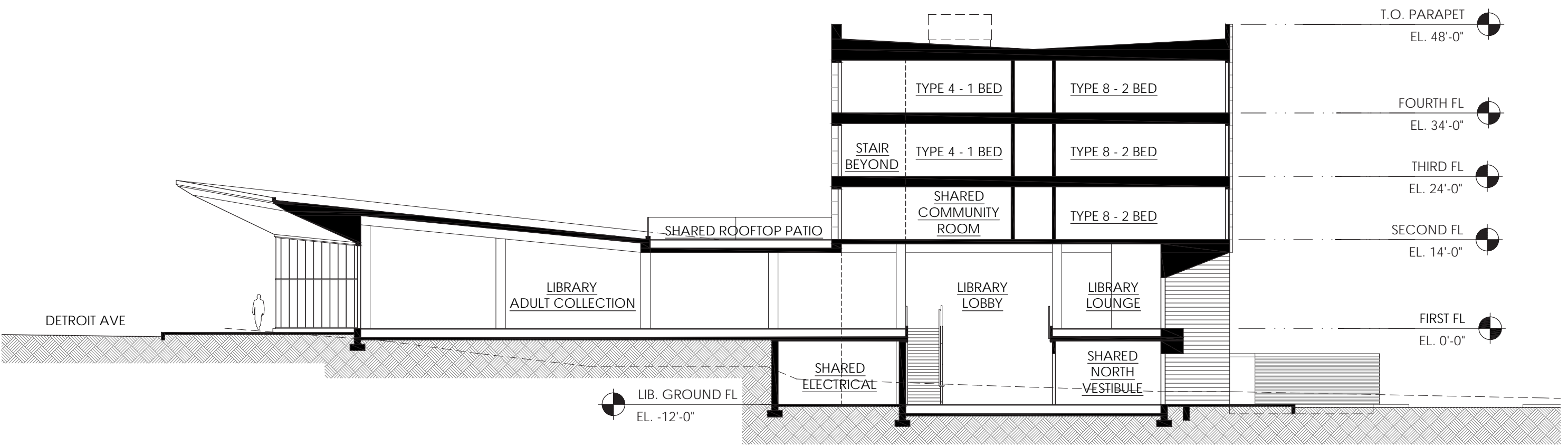
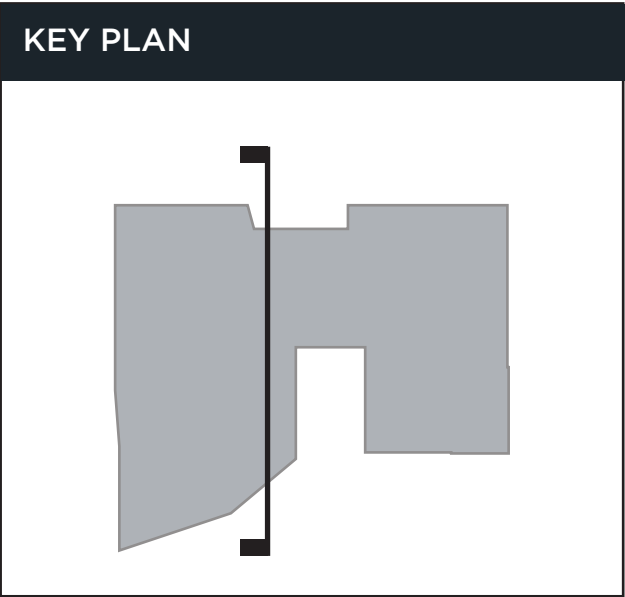
MATERIAL LEGEND			
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# BUILDING SECTION



# BUILDING SECTION

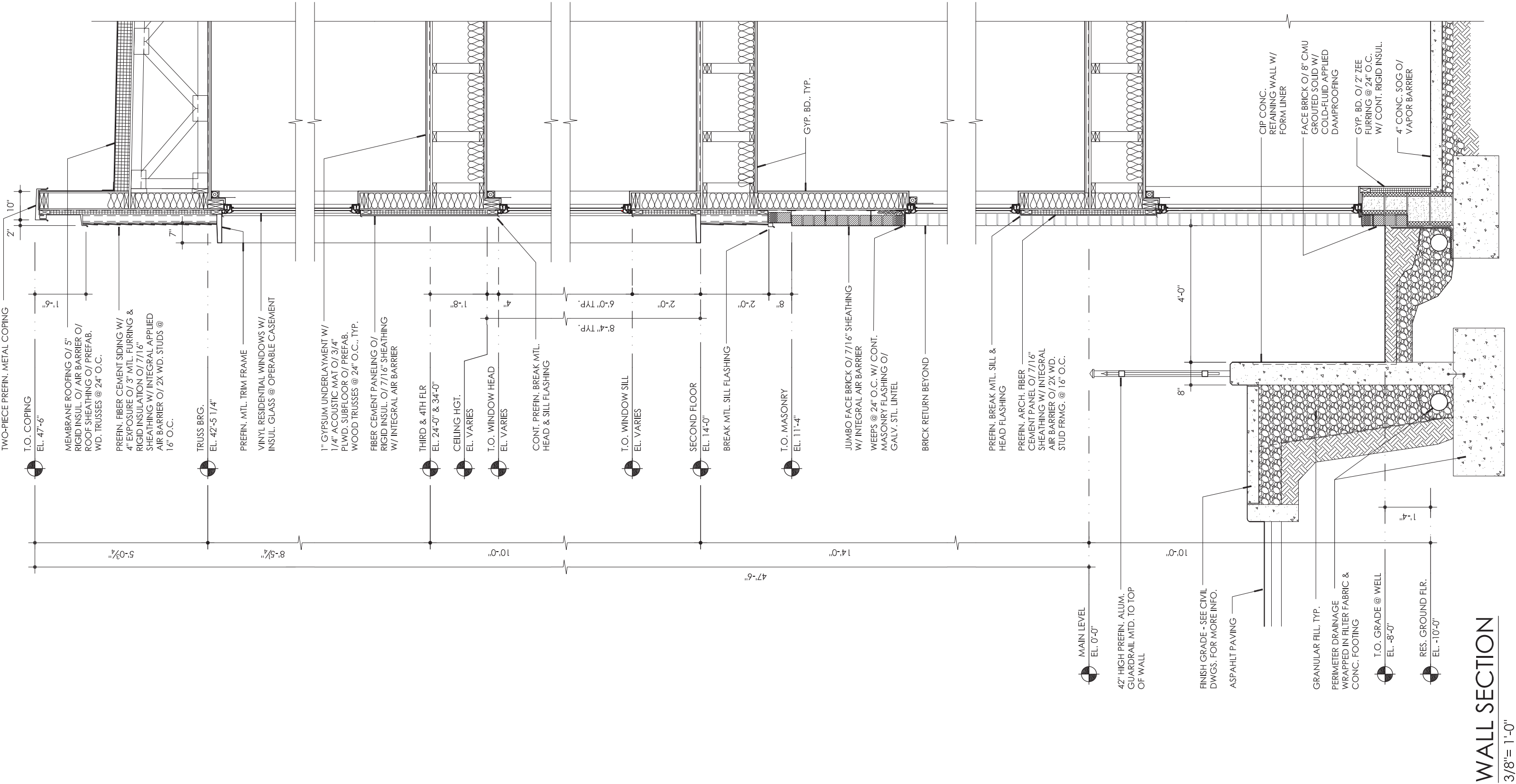


LOOKING WEST  
BUILDING SECTION D-D

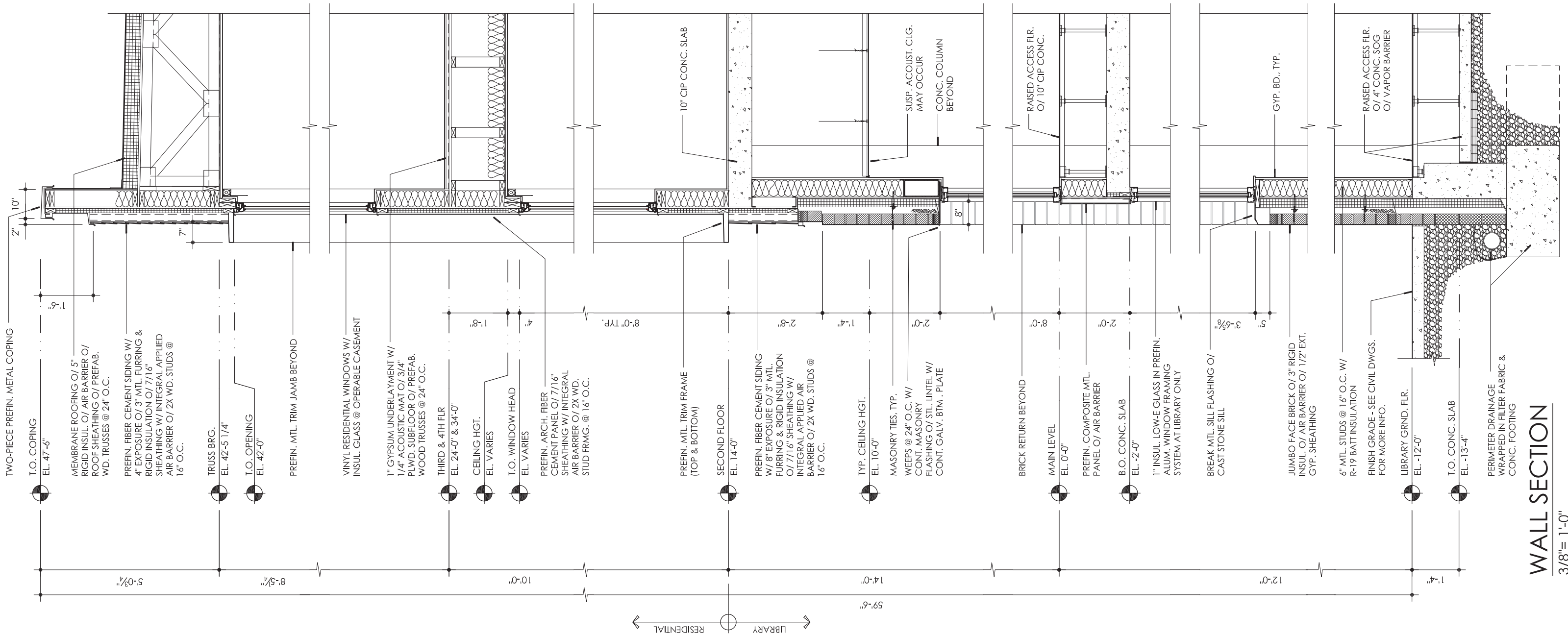
0' 8' 16' 32'

1/16" = 1'-0"

WALL SECTION



WALL SECTION



SECTION 21 0000 – FIRE PROTECTION

- A. Design Criteria Codes and Standards:
  - 1. The Fire Protection systems will be designed to conform, as a minimum, with the following codes and standards:
    - a. The National Fire Protection Association (NFPA)
    - b. The National Electrical Manufacturers Association (NEMA).
    - c. American Society for Testing Materials (ASTM).
    - d. American National Standards Institutes (ANSI).
    - e. American Water Works Association (AWWA).
    - f. Underwriters Laboratories (UL).
- B. Fire Protection System Description: Building Fire Sprinkler and Standpipe System:
  - 1. New fire protection system meeting NFPA 13 requirements.
  - 2. Building shall be fully sprinkled and designed to the following hazard classification
    - a. Light Hazard - Everywhere except Mechanical Rooms.
      - i. Ordinary Hazard Group 1 - Mechanical Rooms.
  - 3. Sprinkler heads shall be concealed type in all finished public areas and semi-recessed in other areas. Open ceilings shall be upright types. Center heads on the ceiling tile.
  - 4. Branches to individual sprinkler zones will be provided with monitored control valves and water flow switches as well as a system drain/test connection.
  - 5. All control valves and water flow switches will be annunciated at the life safety control panel.
  - 6. All isolating and sectionalizing valves on the fire protection system will be provided with tamper switches that will be annunciated at the life safety control panel. At a minimum provide one fire zone per floor.
  - 7. Fire department connections will be provided at the building’s exterior in accessible areas to enable the Fire Department to pump water directly into the system.
  - 8. Fire pump serving both the Library and Senior Living suppression systems.

SECTION 22 0000 - PLUMBING

- A. One new gas and domestic service is to be brought to the building with separate metering for the Library and the Senior Living.
- B. Domestic Cold-Water Service:
  - 1. All areas shall be provided with a minimum of 25 PSI domestic cold water.
  - 2. Backflow preventers will be provided on water systems as required by local codes to prevent cross contamination.
  - 3. Hose Bibs:
    - a. Interior cold-water hose bibs with backflow preventers will be provided for main mechanical and trash rooms. Domestic cold water, hot water, and hot water recirculation piping will be run to serve all equipment and fixtures as required including interior and exterior hose bibs and wall hydrants.
    - b. Exterior freeze-proof securable cold-water hose bibs, one on each elevation and one within the Detroit Avenue courtyard (total of 5).
  - 4. Domestic water piping shall be Type "L" hard copper tube third party certified. Joints shall be made with lead free solder. Piping over 2" diameter to be brazed (Sil-Fos) or joined using Victaulic style 606 roll groove couplings or stainless steel.
  - 5. Domestic water piping within suites are allowed to be PEX.
  - 6. Domestic cold-water piping 6" and larger may be ductile iron pipe with epoxy coated interior and cut grooved Victaulic rigid couplings.
  - 7. Coordinate location of water meter with local utility and site Engineer.

- 8. All water piping, subject to heat loss or sweating, will be provided with insulation and a fire-retardant jacket.
- C. Domestic Hot Water Service:
  - 1. Electric storage type water heaters with the capacity of generating the flow demand at 120 degrees F with each heater sized to supply 75% of demand will be provided. Minimum water storage capacity in each suite will be 50 gallons
- D. Sanitary Sewer and Vent Systems:
  - 1. Connect building to local sewer mains.
  - 2. Standard residential grade system with schedule-40 PVC waste and vent piping.
  - 3. Plumbing fixtures will be drained by gravity through soil stacks and house drains to connect to the sewer system.
  - 4. Adequate gradients will be maintained to ensure a self-cleansing velocity, cleanouts will be provided per code.
  - 5. Floor drains will be provided adjacent to mechanical equipment and in public restrooms. All floor drains shall have deep seal traps and trap primers.
  - 6. Where piping penetrates fire separations, an approved fire stopping installation shall be provided.
- E. Storm Water Drainage System:
  - 1. Connect building to local storm/sewer mains.
  - 2. The storm sewer systems will be a standard schedule 40 PVC piping sized for 4" per hour rainfall.
  - 3. Drains will be provided to allow for complete drainage from the roof areas in accordance with the Building Code.
  - 4. All piping subject to "sweating" will be insulated for its entire horizontal length.
- F. Plumbing Fixtures:
  - 1. Fixtures will be provided with chromium plated brass trim and individual stop valves.
  - 2. Water closets and urinals will be vitreous china.
  - 3. Hose bibbs connected to the buildings potable water system will be provided throughout the building utility areas and recessed wall hydrants around the exterior of the building's perimeter.
  - 4. Appropriate "Barrier Free" fixtures will be provided in accordance with ADA requirements, for handicapped use.
  - 5. Metering low-flow public lavatories will be provided with hot and cold water.
  - 6. Provide flush valves on public toilets.
- G. Natural Gas:
  - 1. Piping will be schedule 40, black steel.
  - 2. Concealed piping in return plenums shall be welded fittings. All piping 3" and larger shall be welded.

SECTION 23 0000 - MECHANICAL

- A. APPLICABLE CRITERIA
  - 1. This narrative is intended to represent a conceptual design level of information to confirm the cost and direction of the HVAC systems. The objective is to provide a general description of a complete functional facility that will meet all appropriate building codes.
    - a. The new building HVAC and plumbing systems shall be designed in accordance with the following codes and standards:
      - i. ASHRAE 62.1 Standard entitled "Ventilation for Acceptable Indoor Air Quality".
      - ii. ASHRAE 55 Standard entitled "Thermal Environmental Conditions for Human Occupancy".
      - iii. ASHRAE 90.1 Standard entitled "Energy Standard for Buildings Except Low-Rise Residential Buildings".

- iv. Other ASHRAE Standards as are reasonably applicable to the project.
  - v. National Fire Protection Association standards.
  - vi. SMACNA Sheet Metal Contractors Association Standards for Duct Construction.
  - vii. ASME - American Society of Mechanical Engineers.
  - viii. ASTM - American Society of Testing and Materials.
  - ix. AWWA - American Water Works Association.
  - x. ULC - Underwriters Laboratories.
- B. HVAC CRITERIA
  - 1. Design Conditions:
    - a. Library Gross Square Footage = 14,996
    - b. Residence Gross Square Footage = 51,709.
    - c. Summer, Outdoor Design Temperature: 89° F dry bulb/74° F coincident wet bulb.
    - d. Winter, Outdoor Design Temperature: -5° F dry bulb.
    - e. Indoor Design Relative Humidity Criteria:
      - i. Winter: 70° F, 20%.
      - ii. Summer: 75° F, 50%.
        - a) In general, the relative humidity is shown as a goal. Humidity is subject to exterior conditions and may vary slightly due to weather conditions. Winter humidification will not be controlled unless humidification equipment is installed as part of the HVAC scope.
    - f. Cooling shall be provided to all areas except:
      - i. Mechanical Rooms.
      - ii. Storage Rooms.
      - iii. Stairs & Exits.
      - iv. Vestibules.
    - g. Heating or freeze protection shall be provided in all areas.
      - i. Residential:
        - a) ASHRAE 62.2 mandated by the current OBC.
        - b) Enterprise Green Communities 2020.
    - h. Acoustics: The background noise criteria for design goals for the following spaces shall be as follows:
      - i. Conference Rooms NC 30-35
      - ii. Enclosed Offices NC 35
      - iii. Open Plan Offices NC 40
      - iv. Lobbies, Corridors NC 40
      - v. Stacks and Study Areas NC 25
      - vi. Meeting Rooms NC 35
      - vii. Residences NC 35
    - i. Occupancy Schedules:
      - i. Offices are occupied 9:00 a.m. to 6:00 p.m. Monday through Friday.
      - ii. Collection spaces and meeting rooms are occupied 9:00 a.m. to 9:00 p.m. all week.
      - iii. Other areas will be designed to allow occupancy twenty-four hours per day and seven days per week. Actual usage will vary and occupancy and vacancy sensors will be utilized.
    - j. Lighting and equipment loads for the building:
      - i. The following lighting and equipment loads shall be used for the design of the air conditioning system:
        - a) Office Space Lights 1 watt/s.f.

- b) Office Space Equipment 2 watt/s.f.
    - c) Residences 1.10 watt/s.f.
  - k. Occupant Loads:
    - i. Load calculations will include 250 BTUH sensible and 200 BTUH latent heat gain per person.
  - l. Zoning: All air handlers shall follow the criteria noted below.
    - i. Residential Common Areas
      - a) Perimeter areas shall be separate from interior areas.
      - b) Perimeter areas vary by orientation.
      - c) Corner rooms are handled as a separate zone.
      - d) Special use rooms (i.e. conference, meeting rooms and divisions of meeting rooms) are separate zones.
      - e) Offices shall not exceed 450 SF (or 3 offices) per zone.
      - f) 2,000 CFM maximum VAV box size for occupied spaces, provide multiple boxes where requirements exceed 2,000 CFM.
    - ii. Residential Dwelling Units:
      - a) Each dwelling unit will have a dedicated air handling unit.
    - iii. Provide a safety factor of 10% on all heating and cooling equipment sizing.
- C. MECHANICAL SYSTEM SUMMARY
  - 1. General:
    - a. The mechanical systems shall provide heating, ventilating, and air conditioning to all areas of the building.
  - 2. Senior Living:
    - a. Common Areas:
      - i. Provide one (1) 30T gas fired VAV Rooftop Unit by Daikin, Johnson Controls, or Carrier. Daikin Rebel unit used for basis of design. Unit Efficiencies meeting Energy Star requirements.
      - ii. Provide VAV boxes with electric reheat.
        - a) Approximately 16 Zones.
    - b. Suites:
      - i. Provide Friedrich Variable Refrigerant Packaged Heat Pumps meeting Energy Star requirements, or approved equal.
        - a) Provide (26) 2T units for 1-bedroom units.
        - b) Provide (24) 3T units for 2-bedroom units.
      - ii. Suites to have ducted exhaust for range hood and bathrooms.
      - iii. Suites to have interlocked supply and exhaust system to meet ASHRAE 62.2 Ventilation requirements.
- D. HEAT AND REFRIGERATION
  - 1. Pipe Work:
    - a. Piping to be ASTM B88, Type L hard drawn copper tubing on sizes 2" and smaller.
    - b. For drain pan piping, not buried, use Type "M" copper, wrought copper fittings and 95-5 solder.
- E. AIR DISTRIBUTION
  - 1. General Materials and Equipment:
    - a. All ductwork shall be constructed of sheet-metal, furnished and installed in accordance with SMACNA.
    - b. Ductwork in Suites need to be sealed to meet Enterprise Green Community standards.

- 2. Low Velocity Flexible Ducts Acoustically insulated flexible duct, consisting of inner core of perforated one-ply corrugated duct, one-inch thick insulation and vapor barrier cover. Five-foot maximum length.
- 3. Round duct connectors to be factory fabricated galvanized for insulated ducts, steel adapter plate on glass fiber ducts. Butterfly damper and locking quadrant operator on all applications except variable air volume systems upstream of variable air volume box.
- 4. Flexible connections to be 24 oz. per yard, UL approved material.
- 5. Provide turning vanes on all rectangular elbows.
- 6. Opposed blade dampers for duct splits and where shown to be steel or aluminum construction with worm drive operator. Screwdriver slotted shaft, factory assembled.
- 7. Provide fire/smoke dampers with UL Label, minimum 1½ hour fire rating and sleeve wherever ductwork or louvers penetrate fire rated construction shown on architectural plans. Dampers shall be of the shutter, curtain type with replaceable fusible links. Use Type "B" dampers at all locations where space permits. Use "C" dampers for round and oval ducts. Use Type "A" dampers only where space will not allow the use of Type "B". Assume fire/smoke dampers at rated walls occur in the service level corridor, demise of kitchen areas, equipment rooms, and electrical rooms.
- 8. All supply, return and outside air ductwork shall be lined unless otherwise noted. Round duct may be lined with Johns Manville rigid faceted duct liner.
  - a. Insulate all plenums, supply ducts, return ducts, outside air intake ducts, and any other ducts called for on the plans with one inch thick, two-pound density, monolithic, long glass fiber duct liner.
  - b. Insulate all plenums for linear slot supply diffusers.

F. INSULATION

- 1. Piping and ductwork insulation, materials, and thickness will comply with the requirements of ASHRAE 90.1 Energy Code.
  - a. Insulation will be finished with all-purpose jacket where it is within mechanical rooms, service rooms, shafts and ceiling spaces (i.e., where concealed from public view). Insulation shall be installed to prevent condensation forming on all piping and ductwork.
  - b. Insulation shall have an additional UL approved fabric jacket over the all-purpose jacket with pre-molded PVC covers over fittings.
  - c. All rectangular duct shall be internally lined for the first ten feet past terminal boxes. At contractor option all remaining rectangular ductwork can be either lined or wrapped. All round duct shall be wrapped.
  - d. Ductwork exposed to view shall not be externally insulated.
  - e. All outside air duct to be wrapped.
  - f. All supply air ductwork within suites to be insulated with vapor barrier jackets.

G. TEST AND BALANCE

- 1. Testing:
  - a. Test all drain and waste lines with standing water test of twelve feet of head, held long enough to inspect each joint.
  - b. Test all water piping, before connecting to units, at 150 psig hydrostatic pressure.
  - c. All tests required by code must be done before covering to the satisfaction of the local authorities having jurisdiction.
- 2. Balancing
  - a. At the completion of the installation, the mechanical systems shall be adjusted and balanced by an independent balancing firm specializing in this work, with a Registered Professional Engineer in charge of the work.
  - b. Furnish and install such items as thermometer wells, pressure test clocks, access doors, etc., as required to allow tests and adjustments to be made.
  - c. Adjust and balance all air and water systems. Check, adjust, and balance all systems to meet the design conditions, and tabulate all information on acceptable forms. All systems

shall be checked for proper performance during design conditions, both heating and cooling.

H. TEMPERATURE CONTROLS

- 1. Library & Senior Living Common Areas
  - a. Are to share a common BAS head end unit with separate password protection for the Library and the Senior Living spaces.
- 2. Senior Living Residences
  - a. 7-day programmable thermostats shall be provided for each air handling system.

SECTION 26 0000 - ELECTRICAL

A. General

- 1. Scope
  - a. This electrical scope narrative and outline specifications are intended to provide general direction for the design and initial cost budgeting for the electrical systems associated with the project.
- 2. Work Included
  - a. The electrical work shall comply with architectural, structural, and mechanical requirements and all documents referred to therein.
  - b. The work will be installed in compliance with all local, state and national codes as appropriate for work within the state of Ohio and City of Cleveland.
  - c. Materials, equipment and installation will be to above codes, and generally accepted good practice.
- 3. System Scope
  - a. The following list of systems and components are included within this narrative:
    - i. Utility Service – New 120/208-volt 3 phase 4 wire system, 4000 Amps. Underground primary and secondary service conductors to and from pad mounted utility transformers shall be used. The Library will have its own dedicated service that is not part of the residential project. Apartments, common areas and the Library will be individually metered.
    - ii. Secondary Distribution – Five individual 800-amp switches. Four switches will feed the meter center and one switch will feed an MDP to serve all public loads (HVAC, elevator & branch panels). One 225-amp panel on the 1st floor for public loads and 100-amp branch panels on floors 2, 3, 4 and 5 electrical rooms to distribute power to lighting, receptacles, systems and mechanical equipment located on those floors.
    - iii. Mechanical Equipment & Connections.
    - iv. Branch Power Receptacles, Wiring & Connections – to meet NEC codes and required accessibility criteria.
    - v. Lighting & Lighting Control –LED fixtures with a combination of switches and occupancy sensors (sensors in common areas) for control.
    - vi. Fire Alarm System(s) – The fire alarm system shall be designed in accordance with the program requirements, latest industry standards and applicable National and local codes. All equipment shall be U.L. approved or code equivalent. Public areas – addressable; apartments – stand-alone devices.
    - vii. Communications System (IT) - The communications infrastructure system may support voice and data applications/systems operated over a multi-media plant including twisted pair copper or fiber.
    - viii. Security System/Entry Access – Electronic access control system shall be provided to secure the main door and all interior doors that separate public and private spaces. These will be opened with a fob and also should be able to be unlocked with a key in the event of malfunction of the electronic system. All other doors should be lockable but not electronic.

- ix. Security Cameras – Security camera system shall be designed to provide coverage of each entry and parking lot area. System shall be designed by a security consultant.

B. DESCRIPTION OF WORK

1. Distribution:

- a. Circuit breakers, panelboards and feeder load capacities will be selected based on the completion of the design and appropriate load calculations.
- b. Panelboards will include twenty percent spare capacity and space for future additional circuit breakers and switches. Circuit breakers will be provided for all base building branch circuits.
- c. Distribution and lighting panelboards shall utilize bolt-on circuit breakers.
- d. Equipment will generally be supplied painted with the factory standard color i.e. ANSI 61 gray.
- e. All branch circuiting home-runs shall be run in EMT. Wiring methods for each facility will comply with NEC code requirements.
- f. All equipment shall be provided with engraved nameplates.
- g. Low voltage wiring for the hearing and visually impaired units.

2. Mechanical & Equipment Connections

- a. Mechanical:
  - i. Power wiring shall be provided for all Division 23 equipment including all local disconnect switches.
  - ii. Starters for all packaged equipment, such as air-handling units, exhaust fans, etc., shall be provided by the electrical contractor (EC). It is assumed all starters will be by the EC.
  - iii. Outlets will be provided for controls in each mechanical room.
  - iv. The Control system shall be provided by Division 23. Conduit & wiring by Division 26.
- b. Equipment Connections:
  - i. Handicapped and other powered entrance doors to be connected to the motor and controller.
  - ii. All equipment supplied as part of the construction of the new facility will be provided with the appropriate electrical power connection. Mechanical equipment to be powered shall be, but not limited to:
    - a) Hot water heaters.
    - b) Hot water pumps.
    - c) Boilers.
    - d) Air Handling Units.
    - e) Toilet exhaust fans.
    - f) Miscellaneous exhaust fans.
    - g) Packaged HVAC Units.

3. Branch Power Receptacles & Connections:

- a. Power connections and receptacles shall be provided throughout the facility as appropriate for the spaces being served.

4. Lighting & Lighting Controls:

- a. All interior areas of the facility will be provided with a lighting system to maintain illumination levels recommend by IES/ASHRAE.
- b. All light fixtures will be commercial quality grade fixtures. The lighting system will be complete with panelboards, feeders, branch circuits, and controls all as specified herein. Circuiting will generally be 120 or 277V volts for all LED lighting.
- c. Provide exit signs along all paths of egress exits. An exit sign shall be no further than 100 feet apart in any egress corridor or path. An exit sign shall be provided at every egress door and stairway.

- d. The interior lighting concepts will be developed with the architectural team during the design development phase.

5. Fire Alarm System:

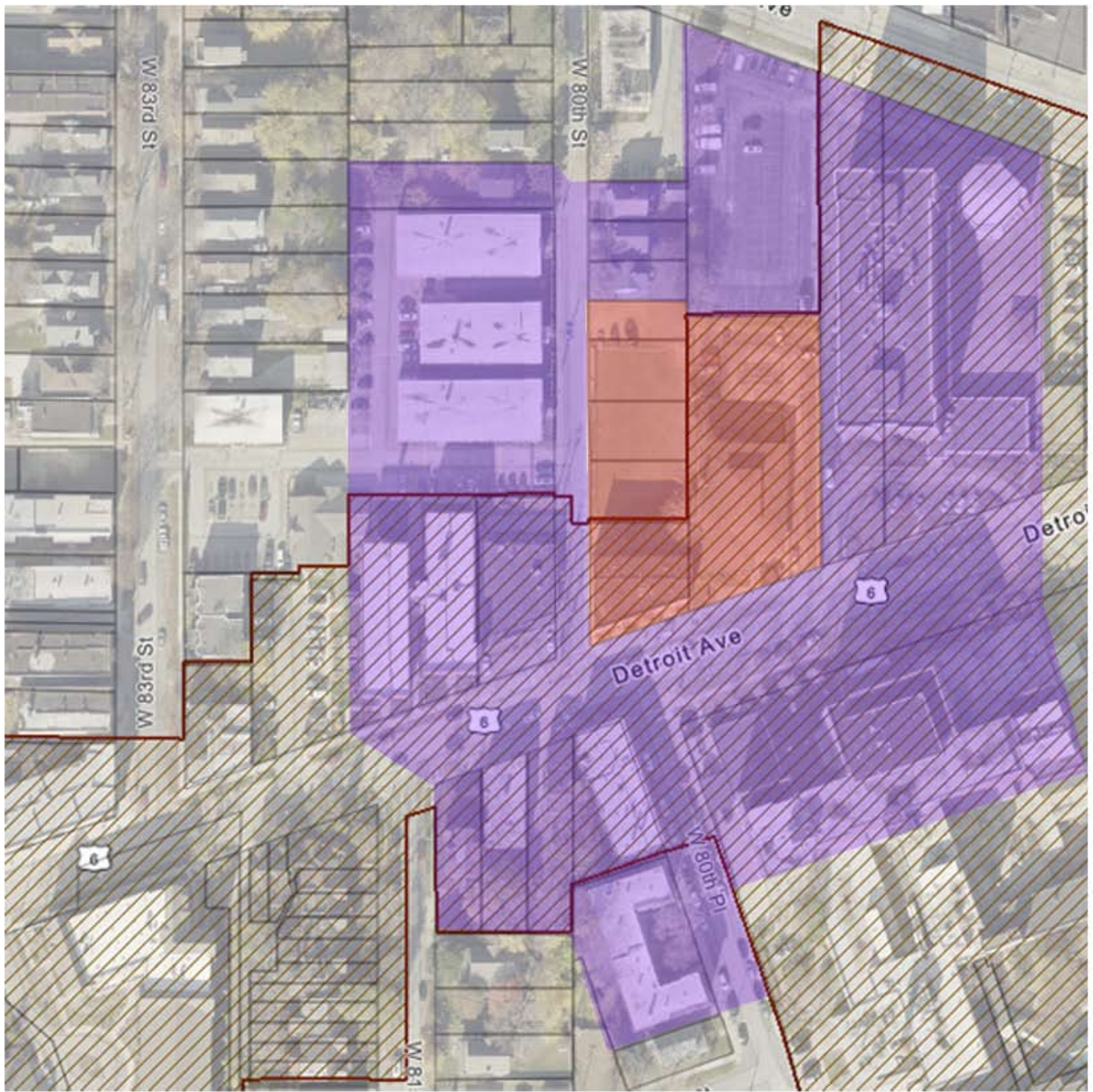
- a. The fire alarm system shall be designed in accordance with the program requirements, latest industry standards and applicable National and Local codes. All equipment shall be U.L. approved or code equivalent.
- b. The fire alarm system for the facility will be electronically supervised, microprocessor based, analog/digital addressable, multiplexed networked fire alarm system.
- c. The fire alarm system will be comprised but not limited to the following key components:
  - i. Fire Alarm Control Panel.
  - ii. Annunciator Panels.
  - iii. Fire Alarm Audible, Visual and Initiating Devices.
  - iv. Interface with Mechanical/Sprinkler/HVAC/Security Systems.
- d. The fire alarm wiring shall be Class A and be installed in an approved raceway where required by code and in exposed areas. Boxes to be painted red.
- e. Include a two-way communication system within each elevator lobby as required by OBC.

6. Communications System:












- a. Service Entrance:
  - i. Primary Service: The telecommunications primary service entrance shall consist of (Qty-2) 4” conduits with pull-wire.
  - ii. Telecommunications Grounding System:
    - a) A dedicated telecommunications ground system with grounding backbone and bus shall be provided at each communications area to bond metallic equipment and hardware components.
  - iii. One conduit w/ pull string within each apartment to a media panel in the entry hallway.
  - iv. One main conduit above the ceiling in each corridor and stubbed into each unit, terminating at the central common electrical room. One main conduit riser from central electrical rooms on each floor to the service entrance on the lower level.

7. Security:

- a. Access Controls:
  - i. Electronic access control system shall be provided to secure the main door and all interior doors that separate public and private spaces. These will all be opened with a fob and also should be able to be unlocked with a key in the event of malfunction of the electronic system. All other doors should be lockable but not electronic.
  - ii. Elevator will require fob access control integrated with central security system.
- b. Security Cameras:
  - i. Security camera system shall be designed to provide coverage of each reception area and each entry. We are recommending Ethernet using a POE system. System shall be designed by a security consultant.



## LEGEND

- |  |  |
|--|--|
|  Parcel                     |  Local Landmark District    |
|  Statistical Planning Area  |  National Landmark District |
|  Pavement                   |  Lake/Rivers                |
|  Street                     |  Subject Property           |
|  Building                   |  Area of Potential Effect   |
|  Individual Local Landmarks |  |



In reply refer to  
2021-CUY-53101

November 22, 2021

Daniel A. Musson  
Department of Community Development, City of Cleveland  
601 Lakeside Ave, Room 320  
Cleveland, Ohio 44114

Dear Mr. Musson:

**Re: Karam Senior Housing, 7918 Detroit Avenue, Cleveland, Cuyahoga County, Ohio**

This is in response to the receipt, on November 12, 2021, regarding the proposed senior housing construction at the above location in Cleveland, Cuyahoga County, Ohio. My comments are made pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended, and the associated regulations at 36 CFR Part 800.

Based on the information submitted, it is my opinion that the proposed undertaking will have no effect on properties listed in or eligible for listing in the National Register of Historic Places. No further coordination is required unless the project changes or archaeological remains are discovered during the course of the project. In such a situation, this office should be contacted as per 36 CFR 800.13.

Please be advised that this is a Section 106 decision. This review decision may not extend to other SHPO programs. If you have any questions, please contact me at (614) 298-2000, or by email at [nyoung@ohiohistory.org](mailto:nyoung@ohiohistory.org). Please note the Ohio SHPO now accepts electronic-only submissions for state and/or federal review under Section 106 and ORC 149.53. Please send your submissions to [section106@ohiohistory.org](mailto:section106@ohiohistory.org). We have also updated our [Survey Report Submission Standards](#).

Sincerely,

A handwritten signature in blue ink that reads "Nathan J. Young".

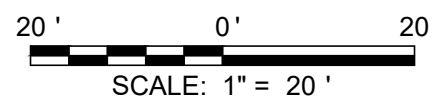
Nathan J. Young, Project Reviews Manager  
Resource Protection and Review











1215 Superior Avenue, Suite 110  
Cleveland, OH 44114  
[www.rpmadison.com](http://www.rpmadison.com)

PRELIMINARY -  
NOT FOR  
CONSTRUCTION

Civil Engineering:  
**CT Consultants, Inc.**  
8150 Sterling Ct  
Mentor, Ohio 44060  
t. 440.951.9000

MEP Engineering:  
**Biolosky Cleveland**  
6555 Carnegie Avenue, Suite 200  
Cleveland, Ohio 44103  
t. 216.752.8750

Structural Engineering:  
**Barber & Hoffman, Inc.**  
2717 E 9th Street, Suite 350  
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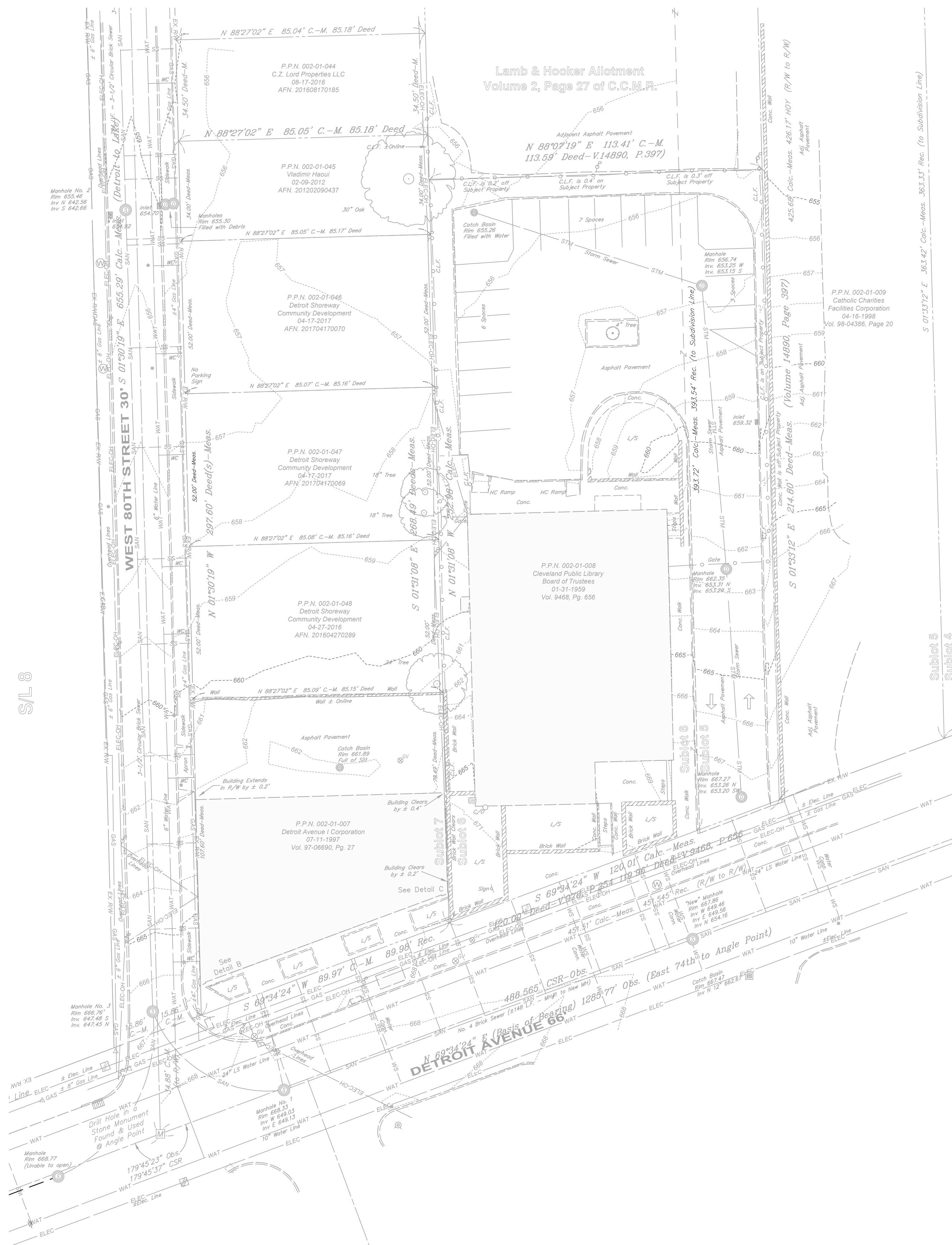
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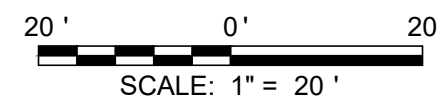
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# EXISTING CONDITIONS PLAN

Project Number	210800
Date	09/16/21
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Sheet No.:	C200
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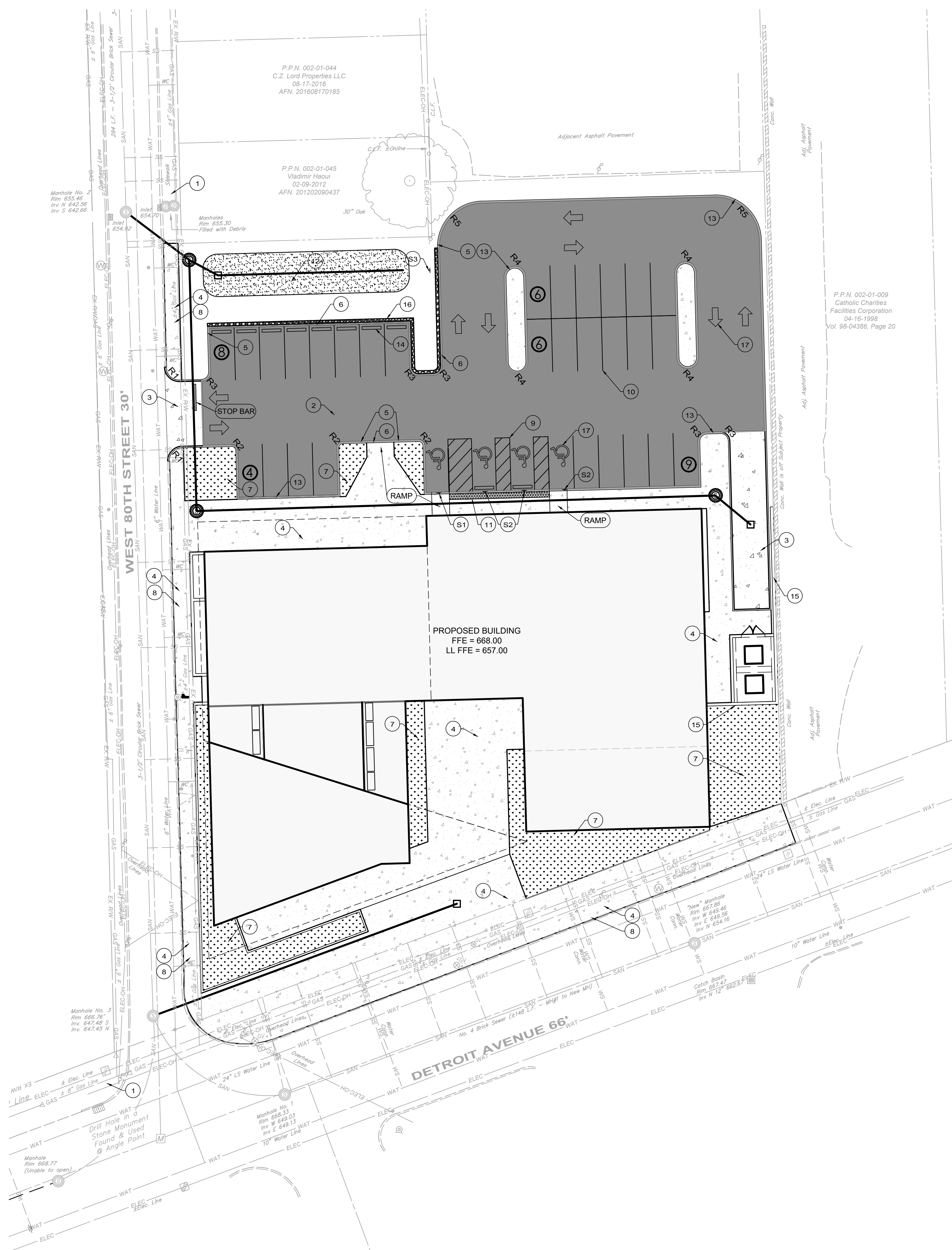
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SITE PLAN	
Project Number	210800
Date	09/16/21
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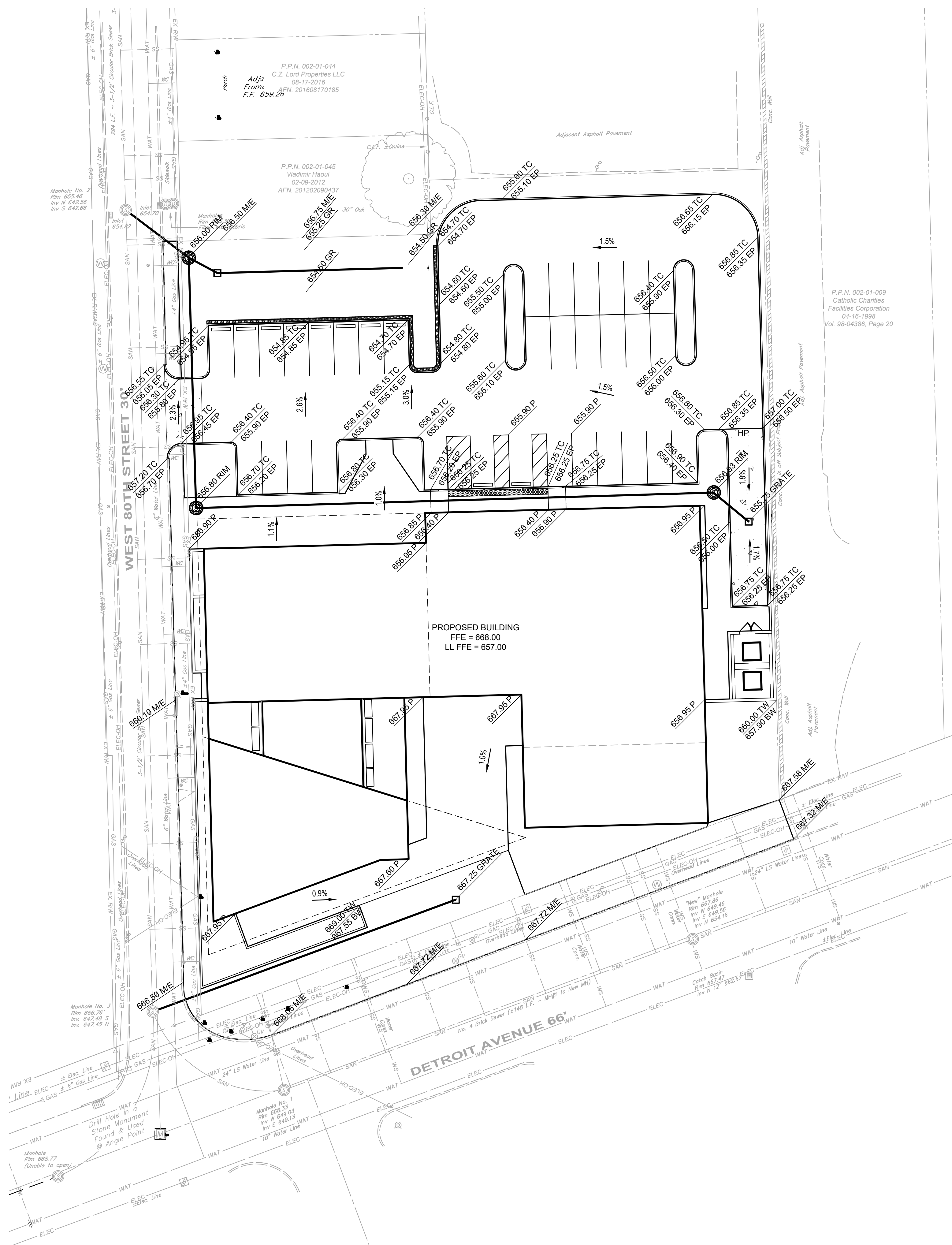


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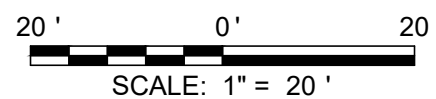
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Project Number	210800
Date	09/16/21
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TC - TOP OF CURB  
P - PAVEMENT  
EP - EDGE OF PAVEMENT  
LP - LOW POINT  
HP - HIGH POINT  
GB - GRADE BREAK  
M/E - MATCH EXISTING

1. ALL EXCAVATION IS CONSIDERED UNCLASSIFIED AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEANS, METHODS AND MATERIALS OF CONSTRUCTION. THE DESIGN ENGINEER SHALL BE RESPONSIBLE FOR THE CLASSIFICATION OF THE MATERIAL UNDERLYING THE PROJECT SITE. THE CONTRACTOR SHALL PERFORM INVESTIGATIONS OR TESTING NECESSARY TO ADEQUATELY DETERMINE OR ESTIMATE TO HIS SATISFACTION ANY AND ALL SITE CONDITIONS THAT MAY AFFECT HIS BID OR THE PERFORMANCE OF THE PROPOSED IMPROVEMENTS. THIS COULD INCLUDE, BUT NOT BE LIMITED TO, UNSUITABLE OR UNSTABLE SOIL/SUBGRADE CONDITIONS, ROCK, WATER, FREEZING TEMPERATURES, AND OTHERS. SEE THE GEOTECHNICAL EXPLORATION REPORT FOR ADDITIONAL INFORMATION.
2. THE CONTRACTOR SHALL PROVIDE FINAL GRADING TO WITHIN THE FINISH ELEVATION.
3. THE CONTRACTOR SHALL PROTECT STRUCTURES, UTILITIES, PAVEMENTS AND OTHER FACILITIES TO REMAIN FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUT, AND OTHER HAZARDS CREATED BY EARTH MOVING OPERATIONS.
4. TOPSOIL SHALL BE STRIPPED AND STOCKPILED FROM ALL AREAS TO BE GRADED, TO WHATEVER DEPTH ENCOUNTERED, AND IN A MANNER TO PREVENT INTERMINGLING WITH UNDERLYING SUBSOIL.
5. EXCESS MATERIAL GENERATED FROM TRENCH EXCAVATIONS SHALL BE INCORPORATED IN THE BID.
6. THE CONTRACTOR SHALL FOLLOW THE RECOMMENDATIONS IN THE GEOTECHNICAL EXPLORATION REPORT FOR EXCAVATION AND EMBANKMENT TO CONSTRUCT THE IMPROVEMENTS AND TO THE FINISH ELEVATION.
7. NO SLAB, COVER GRAVEL, RECYCLED PORTLAND CEMENT CONCRETE (RPC), RECLAIMED ASPHALT CONCRETE, PAVEMENT (RACP) OR RECLAIMED BITUMINOUS AGGREGATE BASE (RAB) SHALL BE USED AS FILL OR EMBANKMENT.
8. EXPOSED PAVEMENT SUBGRADE AREAS SHALL BE MAINTAINED TO PREVENT PONDING TO PREVENT PONDING OF WATER AFTER RAIN. THE CONTRACTOR SHALL RECONSTRUCT ANY SUBGRADE DAMAGED BY RAIN, ACCUMULATED WATER, FROST, FREEZING TEMPERATURES OR CONSTRUCTION ACTIVITIES WITHOUT DELAY TO THE PROJECT COMPLETION.
9. BEFORE ACCEPTANCE OF THE SUB-GRADE UNDER PAVEMENT, A PROOF ROLL TO IDENTIFY SOFT POCKETS AND AREAS OF EXCESS YIELDING SHALL BE PERFORMED IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE USING A SINGLE UNIT, 10,000 POUND DUAL WHEELS, 10,000 POUND AXLE LOAD TO 30,000 POUND AXLE LOAD WITH A GROSS VEHICLE WEIGHT OF 60,000 POUNDS. THE PRESSURE SHALL BE MAINTAINED AT 90 PSI. LOADING SHALL BE IN THE MANNER OF A CERTIFIED WHEEL SLP. DO NOT EXCEED ROLL WET OR SATURATED SUBGRADES.
10. THE CONTRACTOR SHALL EXCAVATE SOFT SPOTS.
11. UNSATISFACTORY SOLS AND AREAS OF EXCESSIVE PUMPING SHALL BE DETECTED BY THE GEOTECHNICAL ENGINEER. THE REPRESENTATIVE, AND REPLACE WITH COMPACTED BACKFILL, AS DIRECTED BY THE GEOTECHNICAL ENGINEER.
12. PROPOSED BUILDINGS ARE SHOWN FOR REFERENCE ONLY. REFER TO THE ARCHITECTURAL PLANS FOR ACTUAL BUILDING FOOTINGS AND FOUNDATIONS. THE CONTRACTOR SHALL PROVIDE FOOTINGS AND FOUNDATIONS OF FROST-FREE SLABS, FOOTINGS AND DOWNSPOUTS.



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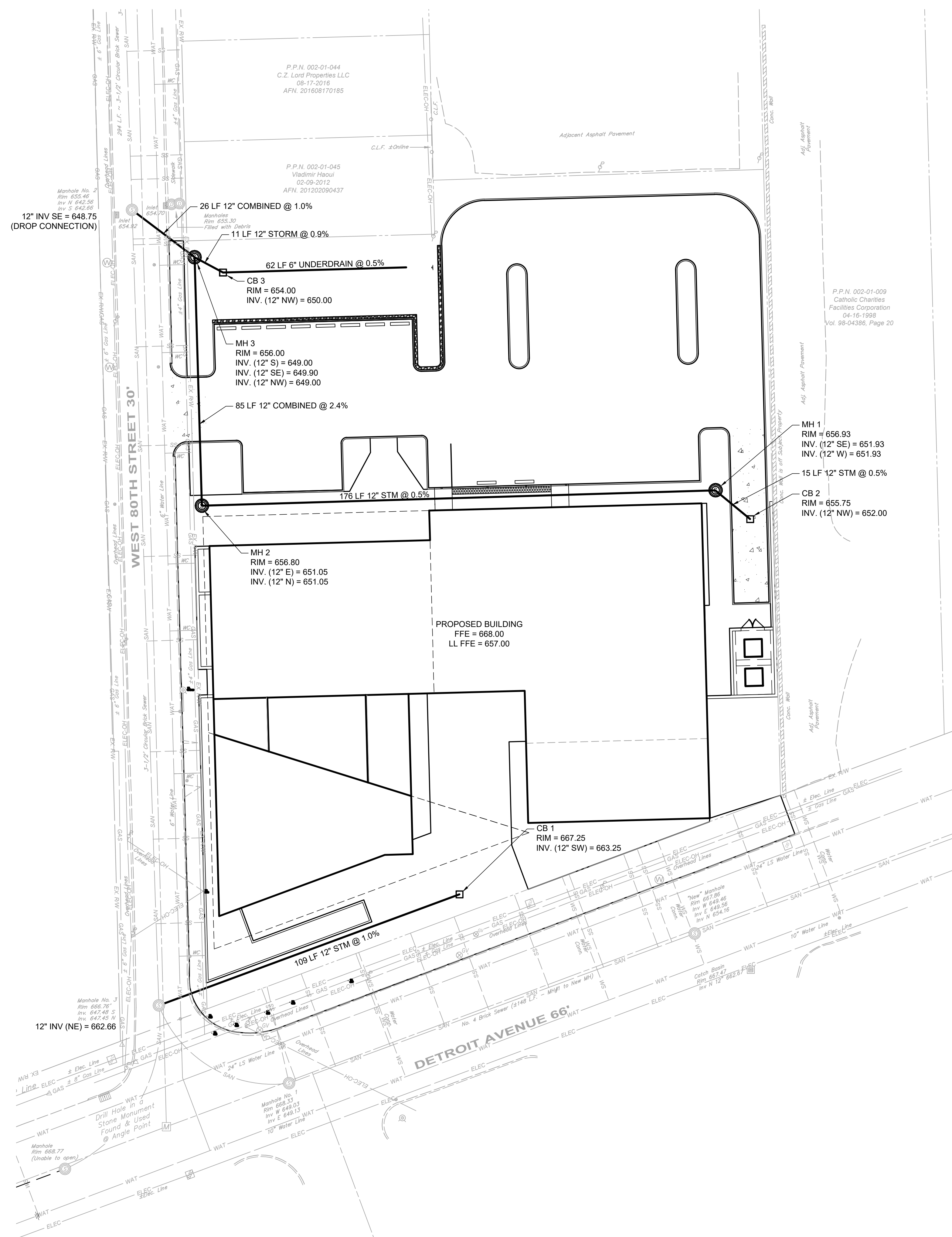
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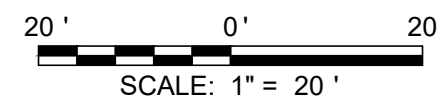
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UTILITY PLAN	
Project Number	210800
Date	09/16/21
Drawn By	DPK
Checked By	JRH
Sheet No.: <b>C500</b>	
Scale:	As indicated



- 1) SEE SURVEY SITE PLAN BY RIVERSTONE FOR SURVEY CONTROL COORDINATES AND BENCH MARKS.
- 2) EXISTING CONDITIONS ARE GRAPHICALLY SHOWN IN LIGHT GRAY ON THIS SHEET FOR CLARITY PURPOSES.
- 3) THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THE CONSTRUCTION PLANS WERE OBTAINED BY FIELD OBSERVATIONS, FROM EXISTING RECORDS, AND/OR FROM THE OWNERS OF THE RESPECTIVE UTILITIES. THE INFORMATION SHOWN IS BELIEVED TO BE CORRECT, HOWEVER, THE COMPLETENESS AND ACCURACY OF THIS INFORMATION CANNOT BE GUARANTEED. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT ALL THE VARIOUS UTILITY COMPANIES (PUBLIC AND PRIVATE) TO VERIFY THE EXISTENCE, LIMITS AND/OR LOCATION OF ANY UTILITIES WHICH MAY BE ALONG THE PROJECT WITHIN THE VICINITY OF THIS IMPROVEMENT.

- 1 PROVIDE 24" SUMP AND TRAP IN LAST STRUCTURE BEFORE R/W. TRAP SHALL BE NEEHAH R-3701 TRAP OR APPROVED EQUAL.
- 2 PROVIDE ANTI-SEEP COLLAR ALONG OUTLET PIPE (SEE DETAIL SHEET)



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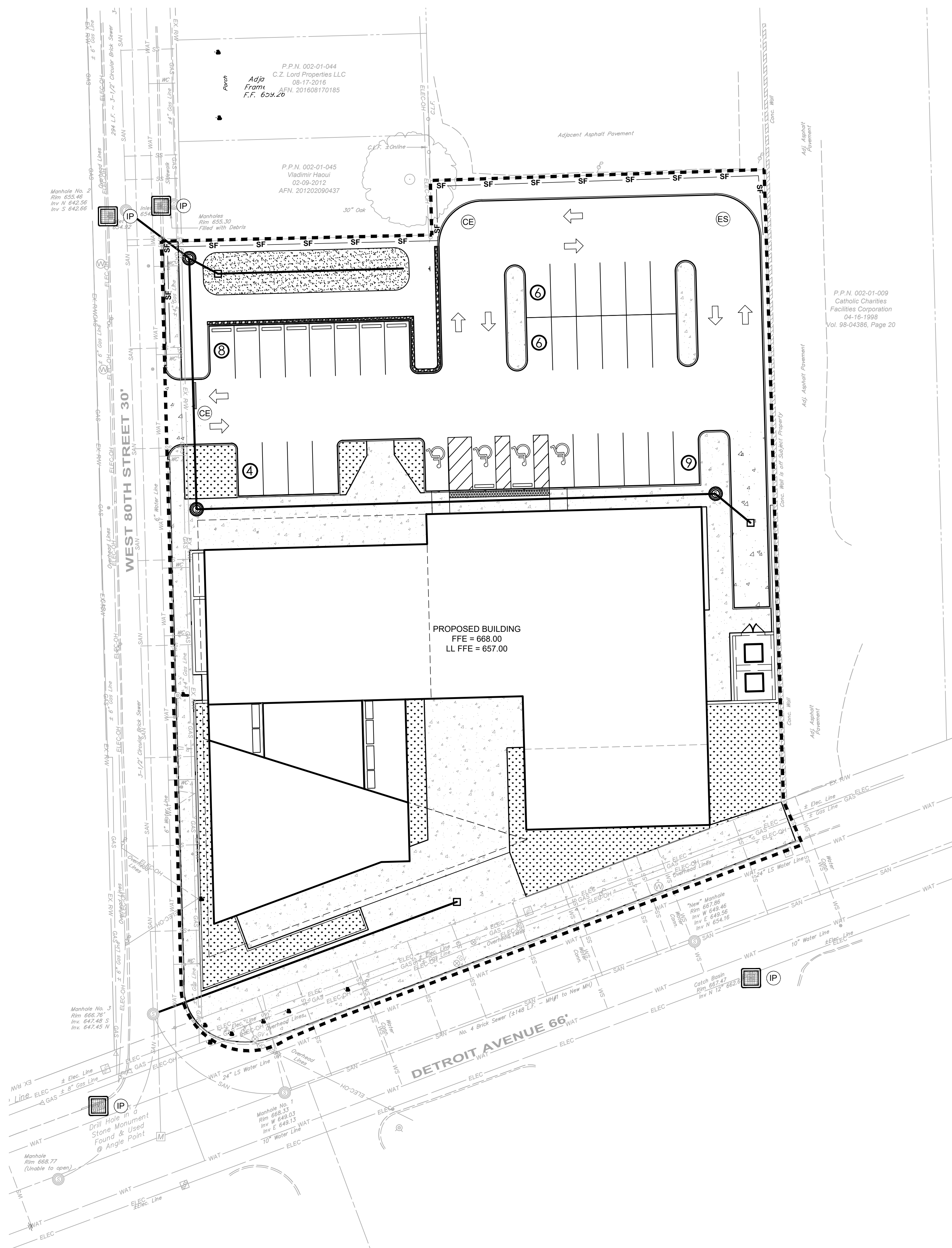
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## STORMWATER POLLUTION PREVENTION PLAN

Project Number	210800
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Drawn By	DPK
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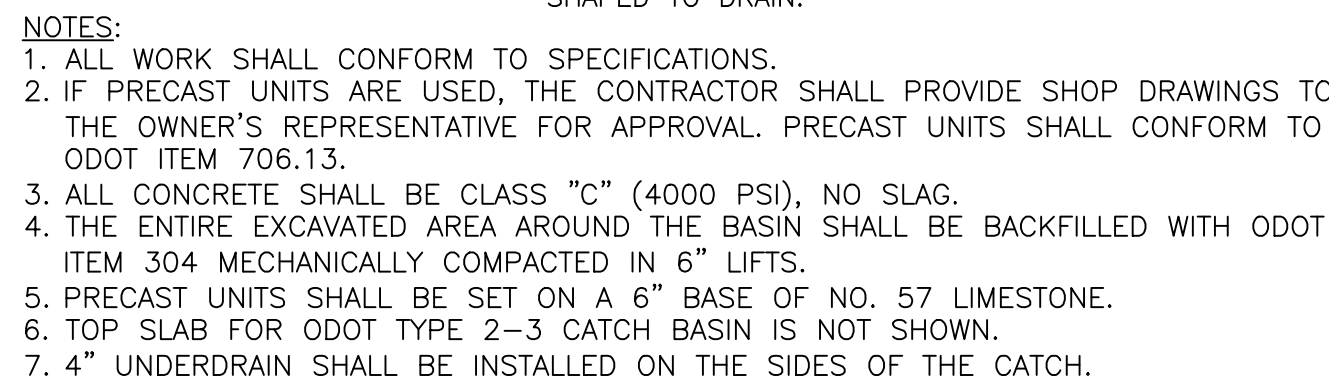
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- NOTES:**
1. STRUCTURE TO MEET H-20 LOADING IF WITHIN PAVEMENT.
  2. SUMP DEPTH SHALL BE 6" MIN. FOR 18" AND 24" DIA. BASIN, 10" MIN. FOR 30" DIA. BASIN, OR PER PLAN.
  3. USE APPROPRIATE INLET/OUTLET ADAPTER FOR TYPE OF PIPE MATERIAL USED (I.E. 4" - 30", HDPE OR PVC) FOR WATER TIGHT CONNECTIONS.
  4. DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS.
  5. USE DOME GRATE IN LANDSCAPE AREAS.

INLET BASIN

PAVEMENT SURFACE

PAVEMENT SUBBASE

END CAP

2'-0" MIN.

FILL INTERSTITIAL SPACE W/ROUT

#57 AGGREGATE LIMESTONE

20' MIN. (OR PER PLAN)

6"

4" PERFORATED UNDERDRAIN PER SPECIFICATIONS TURNED DOWN

1'-4"

6"

ODOT 712.09 TYPE A FILTER FABRIC, ALL 4 SIDES AND OVERLAPPED AT TOP

#57 AGGREGATE LIMESTONE

SECTION A-A

**FINISH GRADE**

3'-0" TRENCH LIMIT 3'-0"

REINFORCING STEEL BACKFILL (SEE UTILITY TRENCH DETAIL) ANTI-SLEEP COLLAR

PIPE 1.0'

TRENCH BOTTOM

2'-0" PIPE O.D.

3'-0"

UNDISTURBED SOIL

**ELEVATION**

ANTI-SLEEP COLLAR

12"

3'-0"

UNDISTURBED SOIL

PIPE O.D.

TRENCH LIMIT

3'-0"

**NOTES:**

1. REINFORCING SHALL BE NO. 5 BARS 18" O.C., MAX OF 24".
2. ANTI-SLEEP COLLAR MAY BE CAST-IN-PLACE OR PRE-CAST.
3. ANTI-SLEEP COLLAR CONNECTION SHALL BE WATERTIGHT.
4. DO NOT PLACE WITHIN 2 FEET OF A PIPE JOINT.
5. CONCRETE SHALL BE PER ODOT ITEM 499 CONCRETE, CLASS QC-1.

**PLAN VIEW**

E.U.W 1710 MANHOLE FRAME AND SOLID COVER OR APPROVED EQUAL UNLESS A VENTED COVER IS SPECIFIED THEN USE E.U.W 1710 TYPE M FLAT GRATE OR APPROVED EQUAL. MAKE FLUSH WITH RIGID OR FLEXIBLE PAVEMENT, TRAVELED ROAD SURFACE OR 3" ABOVE EARTH.

ANHOLE STEP, 16" o/c, FIRST NOT MORE THAN 2'-0" BELOW OF FRAME. MAKE FLUSH WITH 1/2" IF IN 24" DIA. SECTION.

32" MIN.

4" MIN.

SET FRAME ON 2 MASTIC STRIPS PER SPECIFICATIONS

ADJUSTING COLLARS (2 MAX.) PLASTER OUTSIDE WITH 1/2" MORTAR

SET EACH ADJUSTING COLLAR ON 2 MASTIC SEAL STRIPS PER SPECIFICATIONS

ECCENTRIC CONE TOP

0"-RING JOINTS (TYP.) AND FRAME WITH SHRINK WRAP PER SPEC.

ALL PRECAST CONCRETE SHALL BE REINFORCED IN ACCORDANCE WITH THE LATEST REVISIONS OF A.S.T.M. DESIGNATION C478.

ALL PRECAST CONCRETE SECTIONS SHALL BE MANUFACTURED AND FURNISHED AS SOLID SECTION WITHOUT LIFT HOLES OF ANY KIND.

48" DIA.

A.S.T.M. C923 WATERSTOP

FULL CHANNEL FACE TO FACE OF WALL, SLOPE 1:24

SPRING LINE OF PIPE

CLASS "B" CONCRETE FILL

6"

PRECAST CONC. BASE OR CLASS A CONCRETE BASE (POURED IN PLACE)

#4 RE-BARS AT 18" o/c EACH WAY FOR MANHOLE DEPTHS LESS THAN 14'.

#5 RE-BARS AT 18" o/c EACH WAY FOR MANHOLE DEPTHS 14' TO 25'.

6" AGGREGATE BASE OR 4" CLASS "B" CONCRETE (PRECAST BASE ONLY)

- NOTES:**
1. MAXIMUM EXCAVATED TRENCH WIDTH: THE MAXIMUM EXCAVATED TRENCH WIDTH FROM THE BOTTOM OF THE TRENCH TO 12" OVER THE TOP OF THE PIPE (WITHIN PIPE EMBEDMENT) SHALL BE O.D. + 24" FOR ALL PIPES UP TO AND INCLUDING 24" I.D. + 30" FOR PIPE FROM 24" I.D. TO 54" I.D. AND O.D. + 48" FOR PIPES SIZES 60" I.D. AND OVER.
  2. FOUNDATION: WHERE AN UNSTABLE TRENCH BOTTOM CONDITION IS ENCOUNTERED, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH MATERIAL AS DIRECTED BY THE ENGINEER.
  3. PIPE EMBEDMENT:

CLASS A: CLASS A PIPE EMBEDMENT SHALL BE USED FOR ALL PIPING UNDER PAVEMENT OR STRUCTURES WITH LESS THAN 12 INCHES OF PIPE COVER TO THE SUBGRADE. THE CONCRETE CRADLE SHALL BE CLASS "C". THE INITIAL BACKFILL SHALL BE AASHTO NO. 57 OR NO. 67 GRANULAR PIPE EMBEDMENT.

CLASS B: CLASS B PIPE EMBEDMENT SHALL BE USED FOR ALL PIPING UNLESS OTHERWISE NOTED ON THE PLANS OR AUTHORIZED BY THE ENGINEER. THE BEDDING AND HAUNCHING SHALL BE AASHTO NO. 57 OR NO. 67 GRANULAR PIPE EMBEDMENT. IN ALL AREAS UNDER PAVEMENT, STRUCTURES OR WITHIN THE ZONE OF INFLUENCE, THE INITIAL BACKFILL SHALL BE AASHTO NO. 57 OR NO. 67 STONE GRANULAR PIPE EMBEDMENT. IN ALL AREAS OUTSIDE OF PAVEMENT, STRUCTURES OR THE ZONE OF INFLUENCE, THE INITIAL BACKFILL SHALL BE SUITABLE ON-SITE MATERIAL APPROVED BY THE ENGINEER FOR ONLY REINFORCED CONCRETE PIPE AND DUCTILE IRON PIPE. THE INITIAL BACKFILL FOR ALL OTHER PIPES SHALL BE AASHTO NO. 57 OR NO. 67 GRANULAR PIPE EMBEDMENT.

CLASS C: CLASS C PIPE EMBEDMENT SHALL ONLY BE USED FOR DUCTILE IRON WATER MAIN, DUCTILE IRON FORCE MAINS OR AS AUTHORIZED BY THE ENGINEER. THE PIPE EMBEDMENT SHALL BE AASHTO NO. 57 OR NO. 67 GRANULAR PIPE EMBEDMENT IN ALL AREAS UNDER PAVEMENT, STRUCTURES OR WITHIN THE ZONE OF INFLUENCE. THE PIPE EMBEDMENT SHALL BE SUITABLE ON-SITE MATERIAL APPROVED BY THE ENGINEER IN ALL AREAS OUTSIDE OF PAVEMENT, STRUCTURES OR THE ZONE OF INFLUENCE, WHERE ROCK OR SHALE IS ENCOUNTERED, A MINIMUM 6-INCHES OF AASHTO NO. 57 OR NO. 67 GRANULAR PIPE BEDDING OR SAND BEDDING SHALL BE PLACED AS DIRECTED BY THE ENGINEER.
  4. FINAL BACKFILL: IN ALL AREAS UNDER PAVEMENT, STRUCTURES OR WITHIN THE ZONE OF INFLUENCE THE FINAL BACKFILL SHALL BE SPECIAL BACKFILL MATERIAL. IN ALL AREAS OUTSIDE OF PAVEMENT, STRUCTURES OR THE ZONE OF INFLUENCE, THE FINAL BACKFILL SHALL BE SUITABLE ON-SITE MATERIAL APPROVED BY THE ENGINEER.
  5. SPECIFICATIONS: ALL TRENCHING, PIPE EMBEDMENT AND BACKFILL MATERIALS SHALL BE IN ACCORDANCE WITH SPECIFICATION 312000 – EARTHWORK.
  6. CLAY TRENCH DAMS: CLAY TRENCH DAMS SHALL BE REQUIRED AS SHOWN ON PLANS OR WHEN AND WHERE NECESSARY AS DIRECTED BY THE ENGINEER.
  7. GEOTEXTILE FABRIC: INSTALL A GEOTEXTILE FABRIC IN ACCORDANCE WITH ODOT 712.09, TYPE B, AFTER ALL INITIAL BACKFILL CONSISTING OF AASHTO NO. 57 OR NO. 67 GRANULAR PIPE EMBEDMENT.
  8. DETECTOR TAPE: IF REQUIRED IN THE SPECIFICATIONS, INSTALL DETECTABLE WARNING TAPE ABOVE UTILITIES, 12" BELOW FINISHED GRADE, EXCEPT 6 INCHES BELOW SUBGRADE UNDER PAVEMENT AND SLABS.

Diagram illustrating the Parallel Zone of Influence. The diagram shows a cross-section of a pavement structure with a sloped edge. A vertical line represents the 'EDGE OF PAVEMENT OR STRUCTURE'. A diagonal line represents the 'ZONE OF INFLUENCE'. The area between the edge and the zone of influence is labeled 'SPECIAL BACKFILL MATERIAL'. A small circle is shown within this area. The angle between the edge and the zone of influence is marked as  $1:1$ .

PARALLEL  
ZONE OF INFLUENCE

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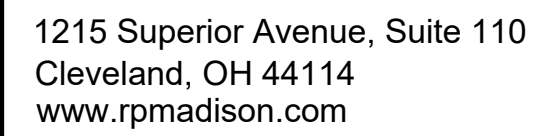
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Project Number	210800
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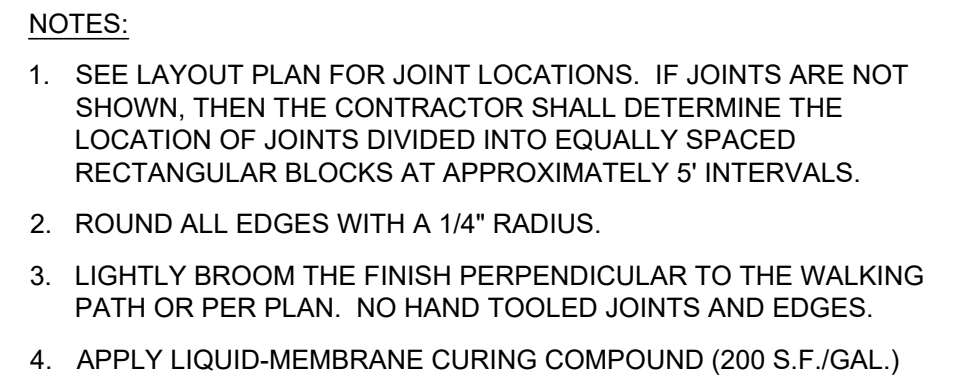


Diagram illustrating a typical cross-section of a concrete curb and gutter. The curb is 6" wide and 12" high. The gutter is 5" wide and 6" deep. The curb is made of concrete (PR PVMT) and is topped with a bituminous sealer. The gutter is made of concrete (PR PVMT) and is topped with a bituminous sealer. The curb has a 1/4" R. (radius) on the outer edge and a 3" R. (radius) on the inner edge.

ODOT 712.09 TYPE "A" FILTER FABRIC, OVERLAPPED AT TOP

TOPSOIL

PAVEMENT

#57 AGGREGATE LIMESTONE

4" PERFORATED PVC SDR 35 UNDERDRAIN (PERFORATIONS SHALL BE TURNED DOWN)

3'-0"

4"

O.D. = 8"

- NOTES:
1. REMOVE OR COMPACT ALL LOOSE EXCAVATION AT BOTTOM OF TRENCH BEFORE INSTALLING AGGREGATE.
  2. MAINTAIN POSITIVE DRAINAGE OF PIPE INVERTS WITH NO DIPS OR HUMPS IN FLOWLINE.

**NOTES:**

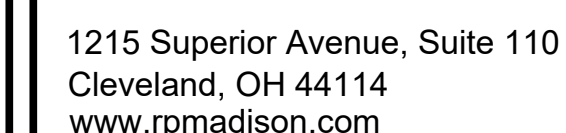
1. SEE LAYOUT PLAN FOR JOINT LOCATIONS. IF JOINTS ARE NOT PROVIDED, THEN THE CONTRACTOR SHALL DETERMINE THE LOCATION OF ALL JOINTS. DIVIDE JOINTS INTO EQUALLY SPACED RECTANGULAR BLOCKS.
2. SAW CUT TRANSVERSE JOINTS TO A DEPTH OF 1/4 THE THICKNESS OF THE SUB AND A WIDTH OF 1/8". NO HAND TOOLED JOINTS AND EDGES.
3. ROUND ALL EDGES WITH A 1/4" RADIUS.
4. INSTALL 1/2" PREFORMED JOINT MATERIAL EVERY 30' OR BETWEEN SIDEWALK AND ANY FIXED OBJECT (I.E. MANHOLES, BUILDING, WALLS).
5. LIGHTLY BROOM THE FINISH PERPENDICULAR TO THE WALKING PATH OR PER PLAN.
6. APPLY LIQUID-MEMBRANE CURING COMPOUND (200 S.F./GAL.)

**HEAVY DUTY  
PAVEMENT SECTION  
FOR DRIVE AISLES**

- 17A) ODOT ITEM 448, 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22
- 18A) ODOT ITEM 448, 1" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22
- 19A) ODOT ITEM 448, 1-3/4" ASPHALT CONCRETE INTER. COURSE, TYPE 2
- 20A) ODOT ITEM 448, 3" ASPHALT CONCRETE INTER. COURSE, TYPE 2
- 3) ODOT ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE (@ 0.04 GALS./S.Y.)
- 4A) ODOT ITEM 304 (MODIFIED), 10" AGGREGATE BASE (SEE GEOTECHNICAL REPORT)
- 4B) ODOT ITEM 304, 6" AGGREGATE BASE
- 5) SUBGRADE COMPACTION PER SPECIFICATIONS
- 6) 8" PORTLAND CEMENT CONCRETE PER SPECIFICATIONS W/6X6-W6X6 WWF ON CHAIRS 3' O.C. MAX. CONTRACTOR MUST SUBMIT A JOINT LAYOUT PLAN FOR APPROVAL BY THE ENGINEER. JOINT SPACING SHALL NOT EXCEED 15'.

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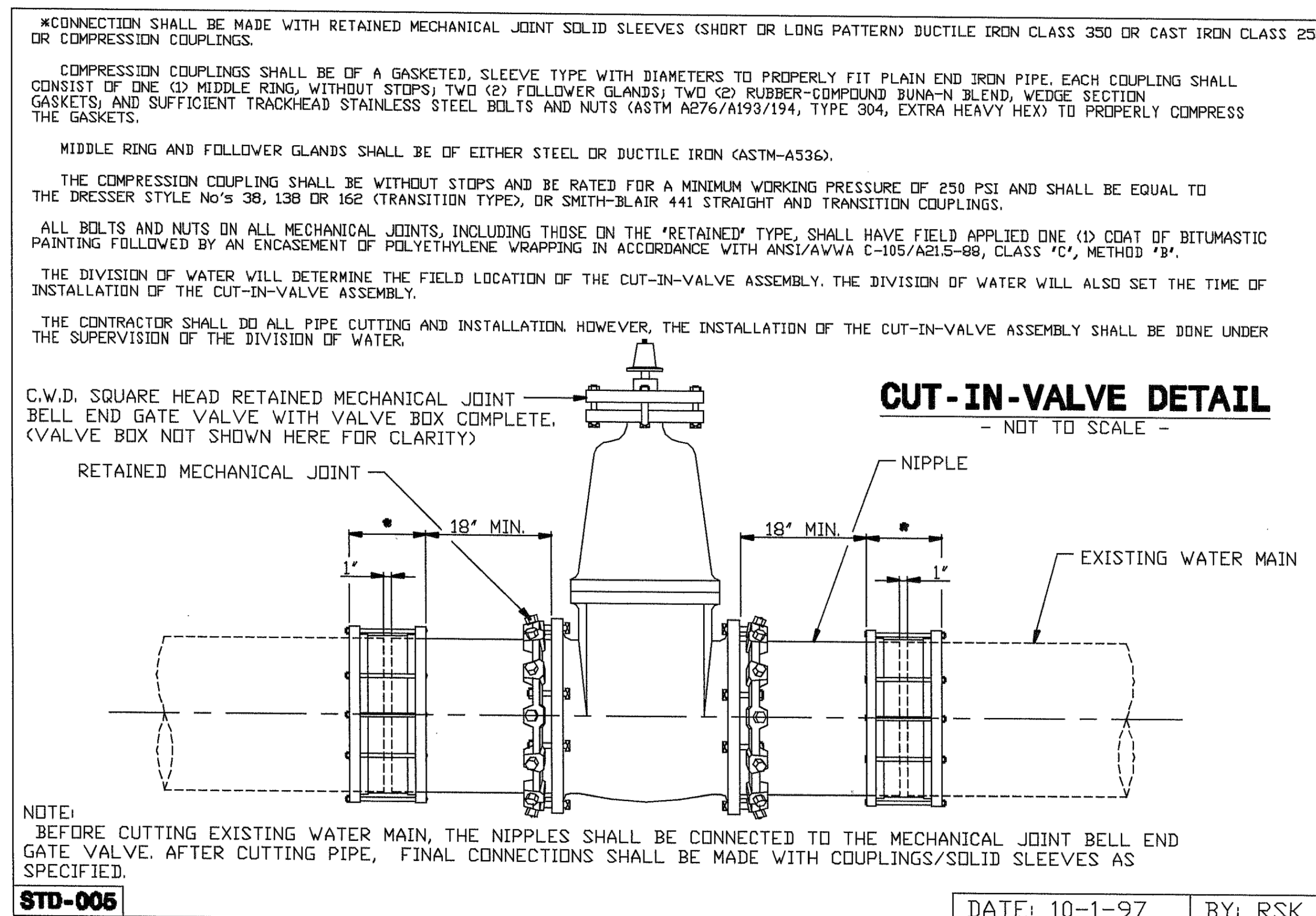
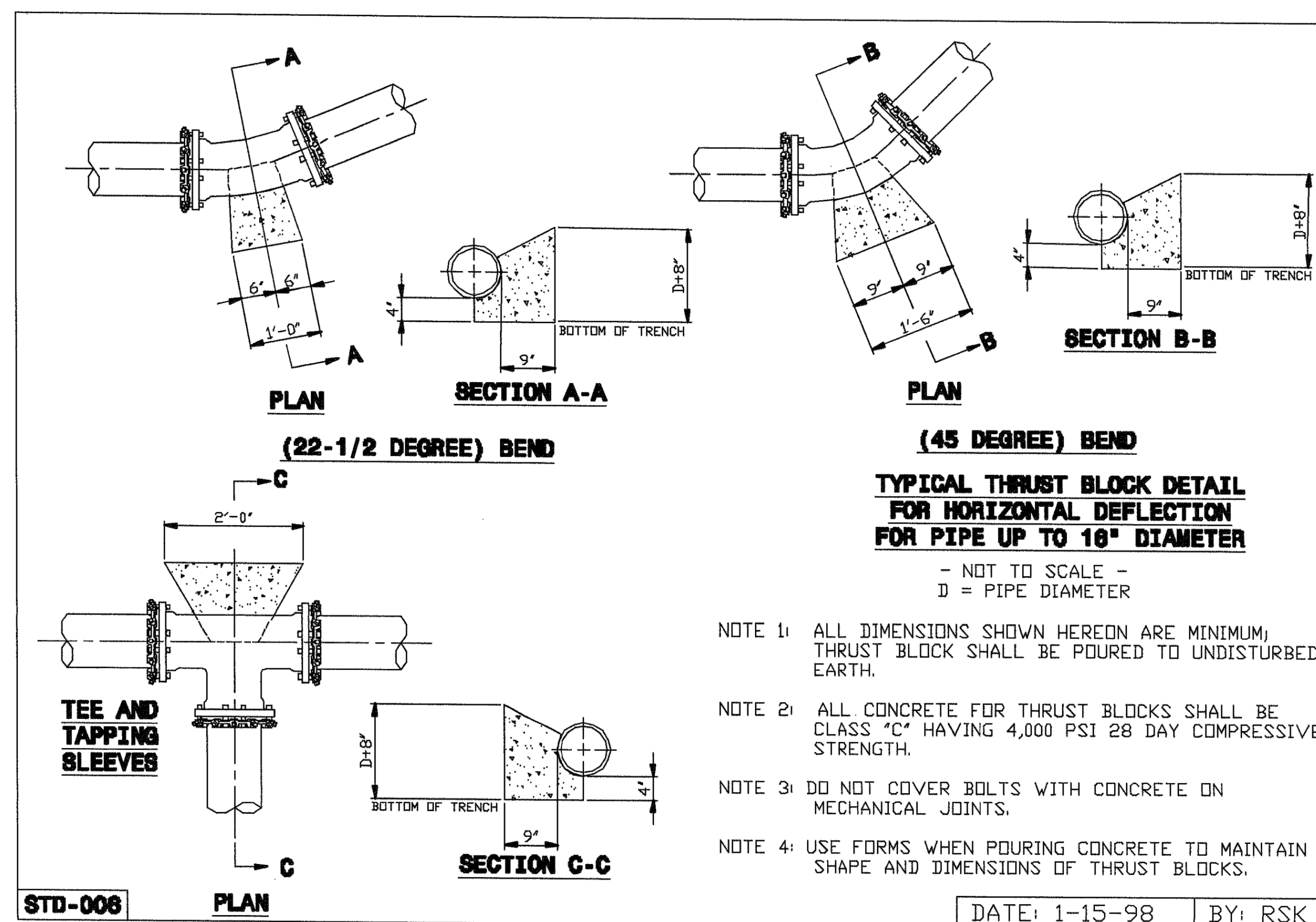
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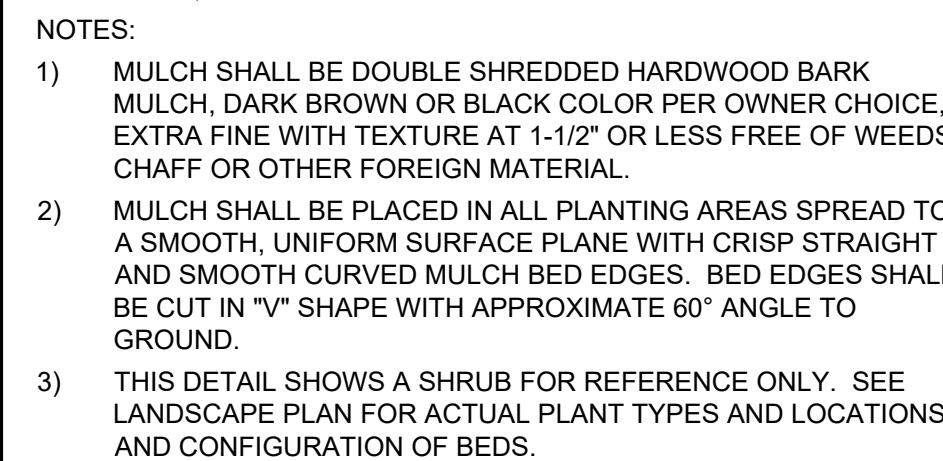
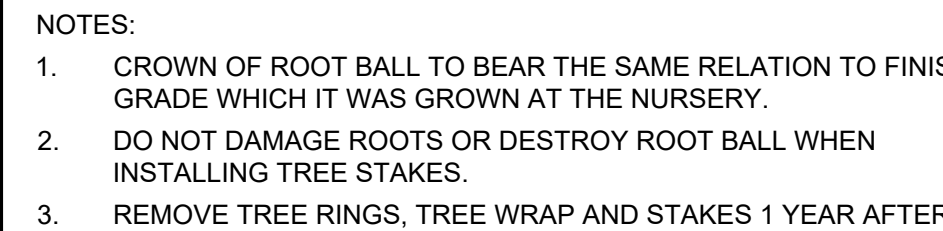
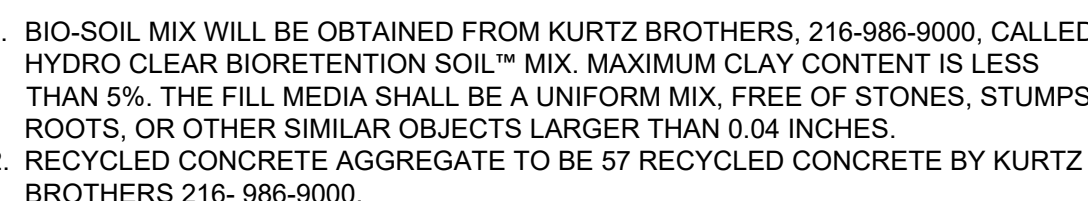
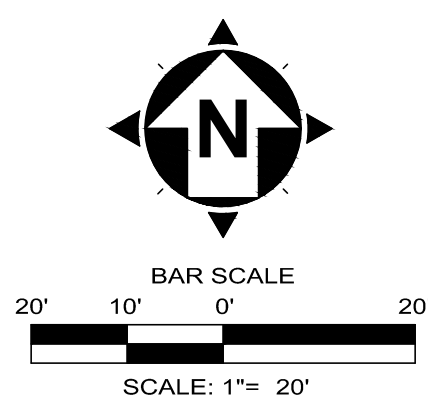
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7918 Detroit Avenue Cleveland, Ohio 44102

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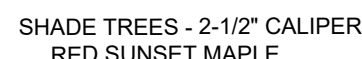
## SITE DETAILS

Project Number	21080
Date	09/16/2023
Drawn By	DPH
Checked By	JR
Sheet No.:	C704
Scale:	As indicated

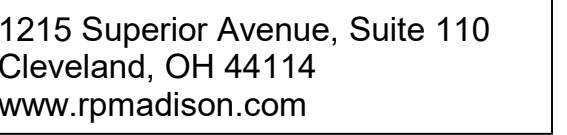




- ### LEGEND



LANDSCAPE PLAN	
Project Number	210800
Date	09/16/21
Drawn By	RS
Checked By	RW
Sheet No.: <b>L100</b>	
Scale:	As indicated



Civil Engineering:  
**CT Consultants, Inc.**  
8150 Sterling Ct  
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t. 440.951.9000

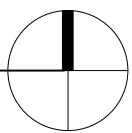
MEP Engineering:  
**Bialosky Cleveland**  
6555 Carnegie Avenue, Suite 200  
Cleveland, Ohio 44103  
t. 216.752.8750

Structural Engineering:  
**Barber & Hoffman, Inc.**  
2217 E 9th Street, Suite 350  
Cleveland, Ohio 44103  
t. 216.875.0100

Design Architect:  
**Bialosky Cleveland**  
6555 Carnegie Avenue, Suite 200  
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t. 216.752.8750

[illegible]

Project Number	2002
Date	09/23/21
Drawn By	Author
Checked By	Checker
Sheet No.:	AS101
Scale	As indicated





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MEP Engineering:  
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Structural Engineering:  
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Design Architect:  
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[illegible]

Project Number	2002
Date	09/23/21
Drawn By	Author
Checked By	Checker
Sheet No.:	A100
Scale	As indicated

9/16/2021 10:29:57 PM

 NEW WALL CONSTRUCTION

 SEE CPL WALZ BRANCH LIBRARY DOCUMENTS

1.	Civil first floor finish floor elev. = 648'00" Architectural first level finish floor elev. = 100'-0"	6.	Coordinate location of equipment and penetrations with mechanical, electrical, and plumbing drawings.	11.	All doors are dimensioned to the center line of the rough opening or overall rough opening.	14.	Provide blocking behind all d/v equipment, wall speakers, monitors, ceiling mounted cameras, sensors, projectors, etc. Contractor responsible for misc. steel, unstud. In wood blocking, strapping, etc. as required to fully support equipment and accessories indicated in documents.
2.	Field verify all existing conditions prior to bidding, demolition, and new construction.	7.	Provide "J" type drywall trim at all perpendicular intersections with dissimilar materials and at all exposed edges.	12.	Verify locations of fire extinguishers with local fire department official and Architect prior to placement. All extinguishers to be semi-recessed cabinet mounted type, u.n.o. (see specifications).	15.	All walls to be type 34b' unless noted otherwise, see wall types legend sheet for wall types.
3.	Follow dimensions as noted on the drawings. Do not scale drawings.	8.	Provide double top track deflection joint at all walls which extend to underside of deck above.	13.	All wall dimensions are to outside face of wall, (including mtg. studs, masonry), unless noted otherwise. Wall turing, sheathing and finished materials are to be dimensioned on floor plans - see wall legend, plan details, wall sections, etc. for complete wall assembly dimensions.	16.	Refer to A600 for exterior typical construction types. Refer to A601 for wall typical wall types. Refer to A902 for window types.
4.	Notify Architect immediately upon discovery of dimensional discrepancies within the drawings. Do not proceed with work until discrepancies are resolved by Architect.	9.	All wood blocking and plywood sheathing shall be fire retardant treated.				
5.	Construction shall in no way interfere with the day to day operation of the adjacent buildings without prior documented consent of the Owner.	10.	Hinge side of door jamb located in metal stud walls to be 4" from adjacent perpendicular wall u.n.o.				



Civil Engineering:  
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MEP Engineering:  
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Cleveland, Ohio 44103  
216.752.8750

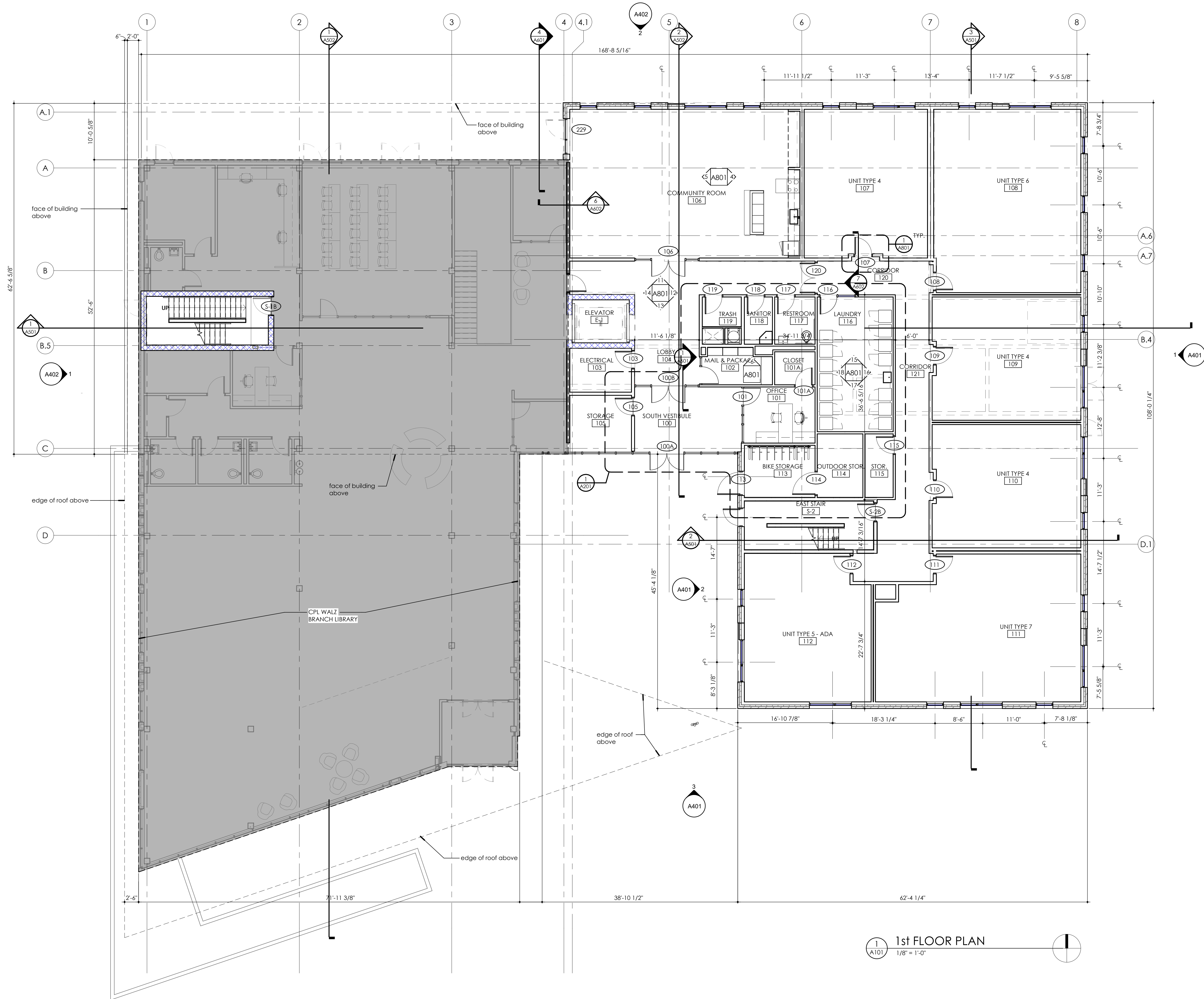
Structural Engineering:  
**Barber & Hoffman, Inc.**  
1217 E 9th Street, Suite 350  
Cleveland, Ohio 44103  
216.875.0100

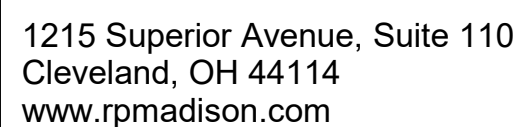
Design Architect:  
**Bialosky Cleveland**  
3555 Carnegie Avenue, Suite 200  
Cleveland, Ohio 44103  
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[illegible]

Project Number	2002
Date	09/23/21
Drawn By	Author
Checked By	Checker
Sheet No.:	
A101	
Scale	As indicated

1. Civil first floor finish floor elev. = 668.00' Architectural first level finish floor elev. = 100.47'	6. Coordinate location of equipment and penetrations with mechanical, electrical, and plumbing drawings.	11. All doors are dimensioned to the center line of the rough opening or overall rough opening.	14. Provide blocking behind all a/v equipment, wall speakers, monitors, ceiling mounted cameras, screens, projectors, etc. Contractor responsible for steel, steel, unstirred, fire wood blocking, strapping, etc., as required to fully support equipment and accessories indicated in documents.
2. Field verify all existing conditions prior to bidding, demolition, and new construction.	7. Provide "I" type drywall firm at all perpendicular intersections with dissimilar materials and at all exposed edges.	12. Verify locations of fire extinguishers with local fire department official and Architect prior to placement. All extinguishers to be semi-recessed cabinet mounted type, u.n.o. (see specifications).	15. All walls to be type S40 unless noted otherwise, see wall types legend sheet for wall types.
3. Follow dimensions as noted on the drawings. Do not scale drawings.	8. Provide double top track deflection joint at all walls which extend to underside of deck above.	13. All wall dimensions are to outside face of wall, (including mtl., studs, masonry), unless noted otherwise. Wall finishing, sheathing and finished materials and dimensions on floor plans - see wall legend, panel details, wall sections, etc., for complete wall assembly dimensions.	16. Refer to A900 for exterior physical construction types. Refer to A900 for exterior wall types. Refer to A902 for window types.
4. Notify Architect immediately upon discovery of dimensional discrepancies within the drawings. Do not proceed with work until discrepancies are resolved by Architect.	9. All wood blocking and plywood sheathing shall be fire retardant treated.		
5. Construction shall in no way interfere with the day to day operation of the adjacent buildings without prior documented consent of the Owner.	10. Hinge side of door jamb located in metal stud walls to be 4" from adjacent perpendicular wall u.n.o.		





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MEP Engineering:  
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Structural Engineering:  
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Design Architect:  
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Cleveland, Ohio 44103  
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**Karam Senior Living  
DSCDO**  
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[illegible]

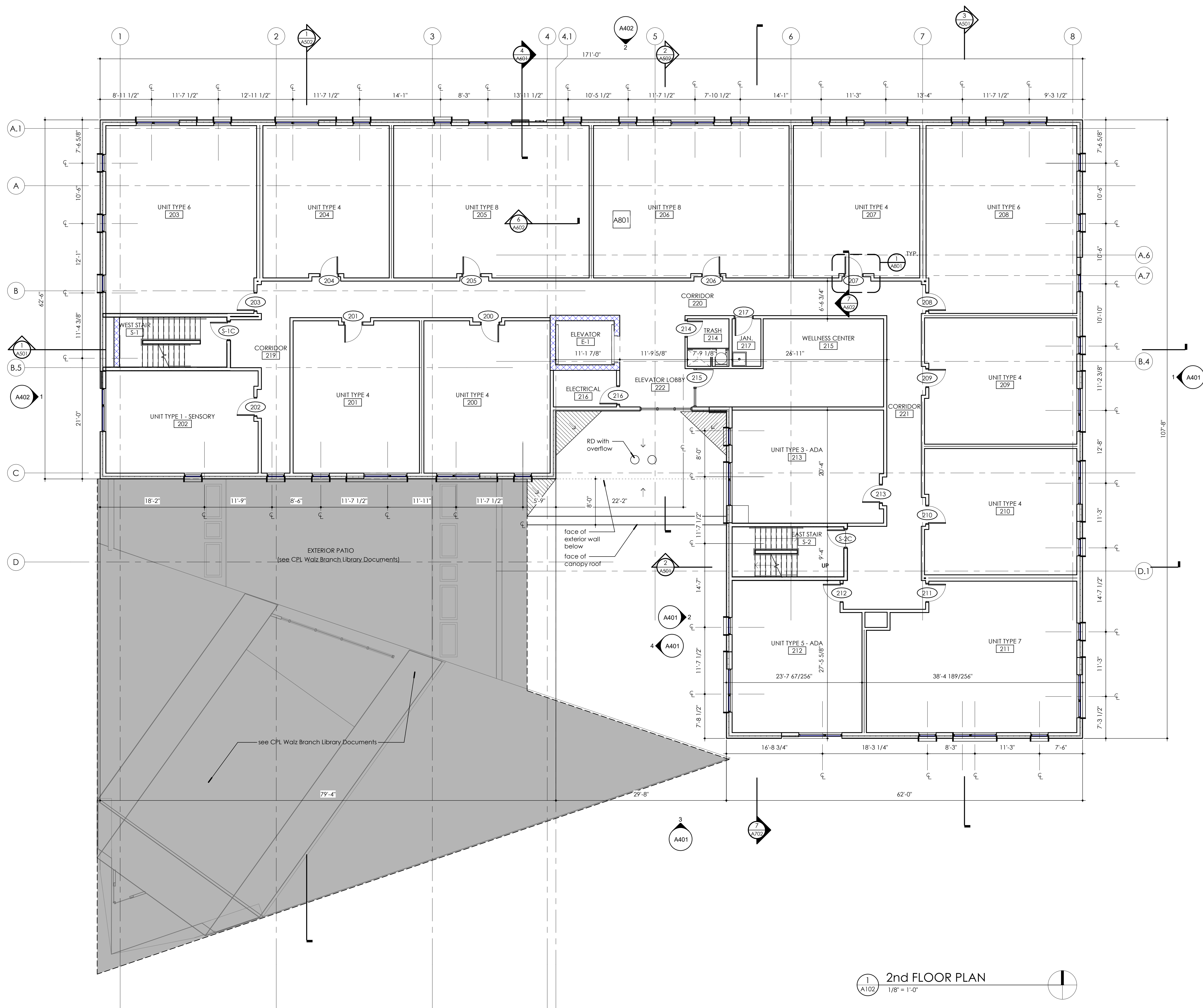
Project Number	2002
Date	09/23/21
Drawn By	Author
Checked By	Checker
Sheet No.:	A102
Scale	As indicated

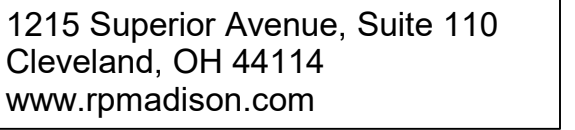
9/16/2021 10:30:56 PM

 NEW WALL CONSTRUCTION

 SEE CPL WALZ BRANCH LIBRARY DOCUMENTS

1. Civil first floor finish floor elev. = 668.00'. Architectural first level finish floor elev. = 100'-0".	6. Coordinate location of equipment and penetrations with mechanical, electrical, and plumbing drawings.	11. All doors are dimensioned to the center line of the rough opening or overall rough opening.	14. Provide blocking behind all a/v equipment, wall speakers, monitors, ceiling mounted cameras, screens, projectors, etc. Contractor responsible for mtc, steel, unit/fut, fir wood blocking, strapping, etc. as required to fully support equipment and accessories indicated in documents.
2. Field verify all existing conditions prior to bidding, demolition, and new construction.	7. Provide "J" type drywall trim at all perpendicular intersections with dissimilar materials and at all exposed edges.	12. Verify locations of fire extinguishers with local fire department official and Architect prior to placement. All extinguishers to be semi-recessed cabinet mounted type, u.n.o. (see specifications).	15. All walls to be type 340' unless noted otherwise. see wall types legend sheet for wall types.
3. Follow dimensions as noted on the drawings. Do not scale drawings.	8. Provide double top track deflection joint at all walls which extend to underside of deck above.	13. All wall dimensions are to outside face of wall, (including mt., studs, masonry), unless noted otherwise. Wall furring, sheathing and finished materials are not dimensioned on floor plans - see wall legend, plan details, wall sections, etc. for complete wall assembly dimensions.	16. Refer to A600 for exterior typical construction types. Refer to A900 for wall typical wall types. Refer to A902 for window types.
4. Notify Architect immediately upon discovery of dimensional discrepancies within the drawings. Do not proceed with work until discrepancies are resolved by Architect.	9. All wood blocking and plywood sheathing shall be fire retardant treated.		
5. Construction shall in no way interfere with the day to day operation of the adjacent buildings without prior documented consent of the Owner.	10. Hinge side of door jamb located in metal stud walls to be 4" from adjacent perpendicular wall u.n.o.		





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Structural Engineering:  
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Design Architect:  
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Cleveland, Ohio 44103  
t, 216.752.8750

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Project Number	2002
Date	09/23/21
Drawn By	Author
Checked By	Checker
Sheet No.:	A103
Scale	As indicated

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 NEW WALL CONSTRUCTION

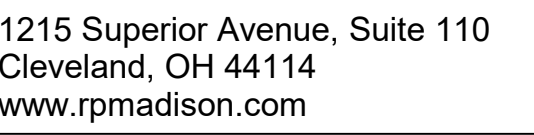
 SEE CPL WALZ BRANCH LIBRARY DOCUMENTS

1. Civil first floor finish floor elev. = 668.00' Architectural first level finish floor elev. = 100'-0".	6. Coordinate location of equipment and penetrations with mechanical, electrical, and plumbing drawings.	11. All doors are dimensioned to the center line of the rough opening or overall rough opening.	14. Provide blocking behind all a/v equipment, wall speakers, monitors, ceiling mounted cameras, screens, projectors, etc. Contractor responsible for misc. steel, unstirrut, fr wood blocking, strapping, etc. as required to fully support equipment and accessories indicated in documents.
2. Field verify all existing conditions prior to bidding, demolition, and new construction.	7. Provide "J" type drywall trim at all perpendicular intersections with dissimilar materials and at all exposed edges.	12. Verify locations of fire extinguishers with local fire department official and Architect prior to placement. All extinguishers to be semi-recessed cabinet mounted type, u.n.o. (see specifications).	15. All walls to be type 340 unless noted otherwise; see wall types legend sheet for wall types.
3. Follow dimensions as noted on the drawings. Do not scale drawings.	8. Provide double top track deflection joint at all walls which extend to underside of deck above.	13. All wall dimensions are to outside face of wall, (including mtl. studs, masonry), unless noted otherwise. Wall turing, sheathing and finished materials are not dimensioned on floor plans - see wall legend, plan details, wall sections, etc. for complete wall assembly dimensions.	16. Refer to A600 for exterior typical construction types. Refer to A900 for wall typical wall types. Refer to A902 for window types.
4. Notify Architect immediately upon discovery of dimensional discrepancies within the drawings. Do not proceed with work until discrepancies are resolved by Architect.	9. All wood blocking and plywood sheathing shall be fire retardant treated.		
5. Construction shall in no way interfere with the day to day operation of the adjacent buildings without prior documented consent of the Owner.	10. Hinge side of door jamb located in metal stud walls to be 4" from adjacent perpendicular wall u.n.o.		



- Contractor shall supply all tapered insulation as required to achieve roof slopes as detailed on drawing. R/P to maintain a minimum of R19 at all locations.
- Coordinate mechanical/pumbing equipment such as fans, vent pipe penetrations, roof drains, and other misc. roof penetrations with mechanical drawings.
- Patch roof deck as required by fully welding new roof deck to existing.
- All existing roof drain locations and associated piping are to remain. Refer to Pumbing drawings for new work. (RD) indicates exist. roof drain location, (RD) indicates new roof drain location, (OD) indicates new overflow roof drain locations. (D.S) indicates new down spouts.
- Slope all rigid insulation positively to drain, minimum slope 1/4" per foot. Slope all roof crickets a minimum of 1/2" per foot. Provide tapered insulation as necessary.
- Dimension of ice and water guard location measured parallel with roof slope, 3'-0" min.

	SEE CPL WALZ BRANCH LIBRARY DOCUMENTS
	NEW TPO ROOF SYSTEM
	CLAY TILE ROOF
	ICE & WATER GUARD AT EAVES
	CRICKET/ TAPERED ROOF INSULATION
	ROOF WALKWAY PADS



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Design Architect:  
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Project Number	2002
Date	09/23/21
Drawn By	Author
Checked By	Checker
Sheet No.:	A104
Scale	As indicated



1215 Superior Avenue, Suite 110  
Cleveland, OH 44114  
[www.rpmadison.com](http://www.rpmadison.com)

PRELIMINARY -  
NOT FOR  
CONSTRUCTION

Civil Engineering:  
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Mentor, Ohio 44060  
t. 440.951.9000

MEP Engineering:  
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Structural Engineering:  
**Barber & Hoffman, Inc.**  
2217 E 9th Street, Suite 350  
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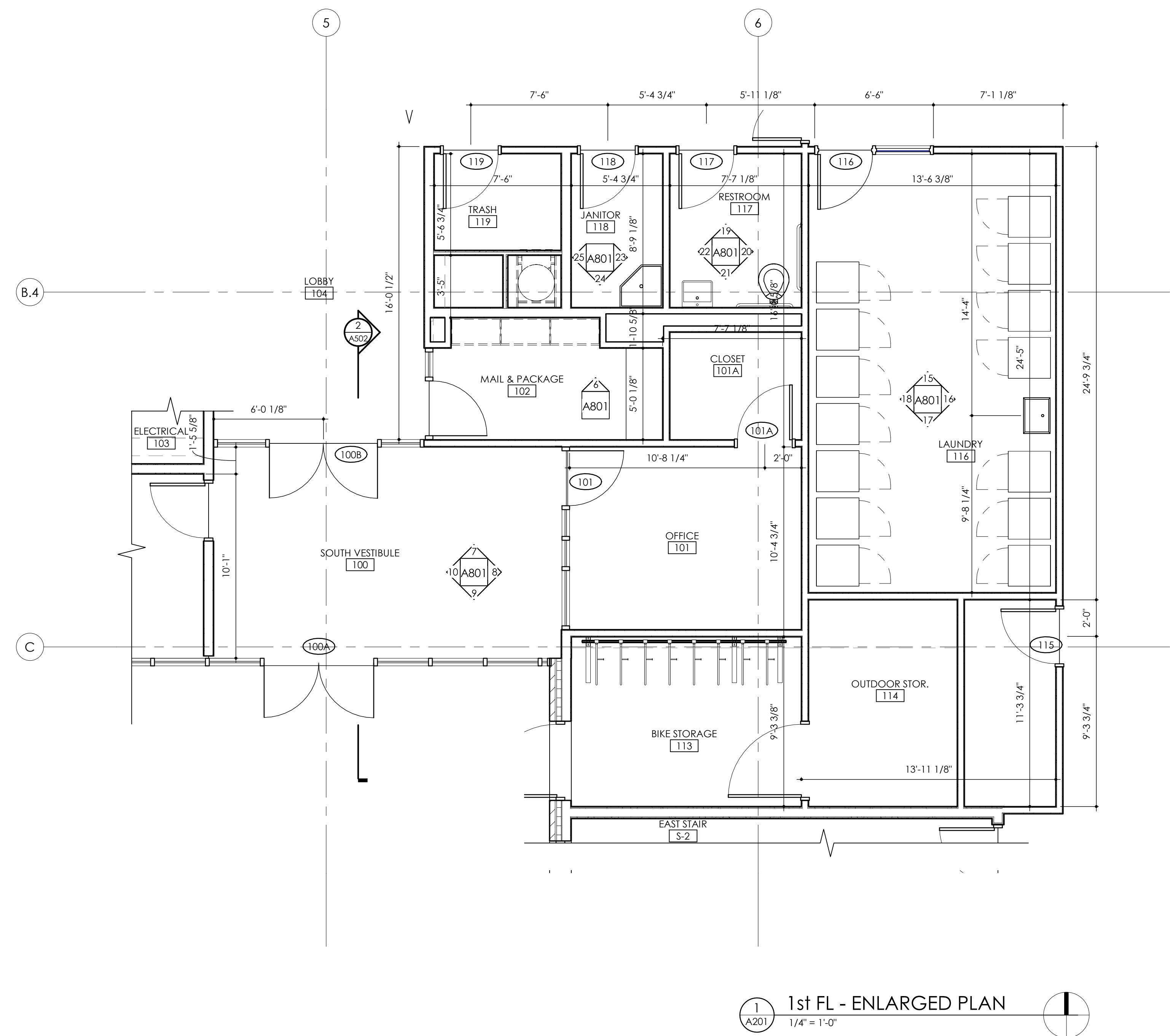
Design Architect:  
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7918 Detroit Avenue Cleveland, Ohio 44102

[illegible]

## ENLARGED PLANS & DETAILS

Project Number	2002
Date	09/23/21
Drawn By	AMcM
Checked By	TF
Sheet No.:	A201
Scale	1/4" = 1'-0"



1.	Refer to A800 series sheet and unit MEP drawings for residential unit layout information	6.	Verify all lighting layout dimensions with Architect prior to installation.
2.	Coordinate all air diffusers and return air grill locations with mechanical drawings. Coordinate location with Architect prior to final placement.	7.	All sprinkler head locations to be coordinated with Architect prior to final fire protection design. Fire protection contractor understands the Architect has final say in sprinkler pipe and sprinkler head locations, provided that they fall within allowable coverage areas.
3.	All ceilings to be centered in rooms, u.o.o.	8.	All ceiling elevations are in reference to finish floor elevation. Ceiling elevations for the main level are referenced from elev. 100'-0".
4.	Refer to electrical drawings for all emergency lighting, fire detection, and signaling system components. Coordinate location with Architect prior to final placement		
5.	All recessed downlights to be centered on ceiling tiles and soffits, u.o.o.		

	Exposed Structure (ETS)		2x2 Light fixture
	ACT-1 - 2'-0" X 2'-0" Suspended acoustical ceiling system		Can downlights
	Suspended gypsum board ceiling system		Surface mounted linear it. fix.



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**IT Consultants, Inc.**  
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[illegible]

Project Number	2002
Date	09/23/21
Drawn By	JB
Checked By	TF
Sheet No.:	A301
Scale	As indicated

1.	Refer to A801 series unit sheets and unit MEP drawings for residential unit layout information	6.	Verify all lighting layout dimensions with Architect prior to installation.
2.	Coordinate all air diffusers and return air grill locations with mechanical drawings. Coordinate location with Architect prior to final placement.	7.	All sprinkler head locations to be coordinated with Architect prior to final fire protection design. Fire protection contractor understands the Architect has final say in sprinkler pipe and sprinkler head locations, provided that they fall within allowable coverage areas.
3.	All ceilings to be centered in rooms, u.n.o.	8.	All ceiling elevations are in reference to finish floor elevation. Ceiling elevations for the main level are referenced from elev. 100.07'-0"
4.	Refer to electrical drawings for all emergency lighting, fire detection, and signaling system components. Coordinate location with Architect prior to final placement		
5.	All recessed downlights to be centered on ceiling tiles and soffits, u.n.o.		

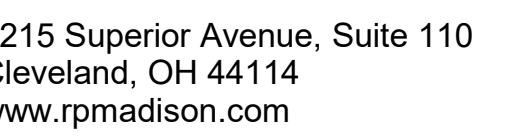
	Exposed Structure (ETS)		2x2 Light fixture
	ACT-1 - 2'-0" X 2'-0" Suspended acoustical ceiling system		Can downlights
	Suspended gypsum board ceiling system		Surface mounted linear lt. fixt.



1 FIRST FLOOR REFLECTED CEILING PLAN  
A301 1/8" = 1'-0"

1.	Refer to A800 series unit sheets and unit MEP drawings for residential unit layout information	6.	Verify all lighting layout dimensions with Architect prior to installation.
2.	Coordinate all air diffusers and return air grill locations with mechanical drawings. Coordinate location with Architect prior to final placement.	7.	All sprinkler head locations to be coordinated with Architect prior to final fire protection design. Fire protection contractor understands the Architect has final say in sprinkler pipe and sprinkler head locations, provided that they fall within allowable coverage areas.
3.	All ceilings to be centered in rooms, u.o.o.	8.	All ceiling elevations are in reference to finish floor elevation. Ceiling elevations for the main level are referenced from elev./100'-0".
4.	Refer to electrical drawings for all emergency lighting, fire detection, and signaling system components. Coordinate location with Architect prior to final placement		
5.	All recessed downlights to be centered on ceiling tiles and soffits, u.o.o.		

	Exposed Structure (ETS)		2x2 Light fixture
	ACT 1 - 2' 0" X 2' 0" Suspended acoustical ceiling system		Can downlights
	Suspended gypsum board ceiling system		Surface mounted linear IT. fix.



PRELIMINARY -  
NOT FOR  
CONSTRUCTION

Civil Engineering:  
**TC Consultants, Inc.**  
150 Sterling Ct  
Kentor, Ohio 44060  
440.951.9000

MEP Engineering:  
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Cleveland, Ohio 44103  
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Design Architect:  
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7918 Detroit Avenue Cleveland, Ohio 44102

[illegible]

Project Number	2002
Date	09/23/21
Drawn By	Author
Checked By	Checker
Sheet No.:	A302
Scale	As indicated

1.	Refer to A800 series ceiling sheets and unit MEP drawings for residential unit layout information	6.	Verify all lighting layout dimensions with Architect prior to installation.
2.	Coordinate all air diffusers and return air grill locations with mechanical drawings. Coordinate location with Architect prior to final placement.	7.	All sprinkler head locations to be coordinated with Architect prior to final fire protection design. Fire protection contractor understands the Architect has final say in sprinkler pipe and sprinkler head locations, provided that they fall within allowable coverage areas.
3.	All ceilings to be centered in rooms, u.n.o.	8.	All ceiling elevations are in reference to finish floor elevation. Ceiling elevations for the main level are referenced from elev. 100'-0".
4.	Refer to electrical drawings for all emergency lighting, fire detection, and signaling system components. Coordinate location with Architect prior to final placement		
5.	All recessed downlights to be centered on ceiling tiles and soffits, u.n.o.		

	Exposed Structure (ETS)		2x2 Light fixture
	ACT-1-2-0 X-2-0"		Can downlights
	Suspended acoustical ceiling system		Surface mounted linear I.F. fix.
	Suspended gypsum board ceiling system		



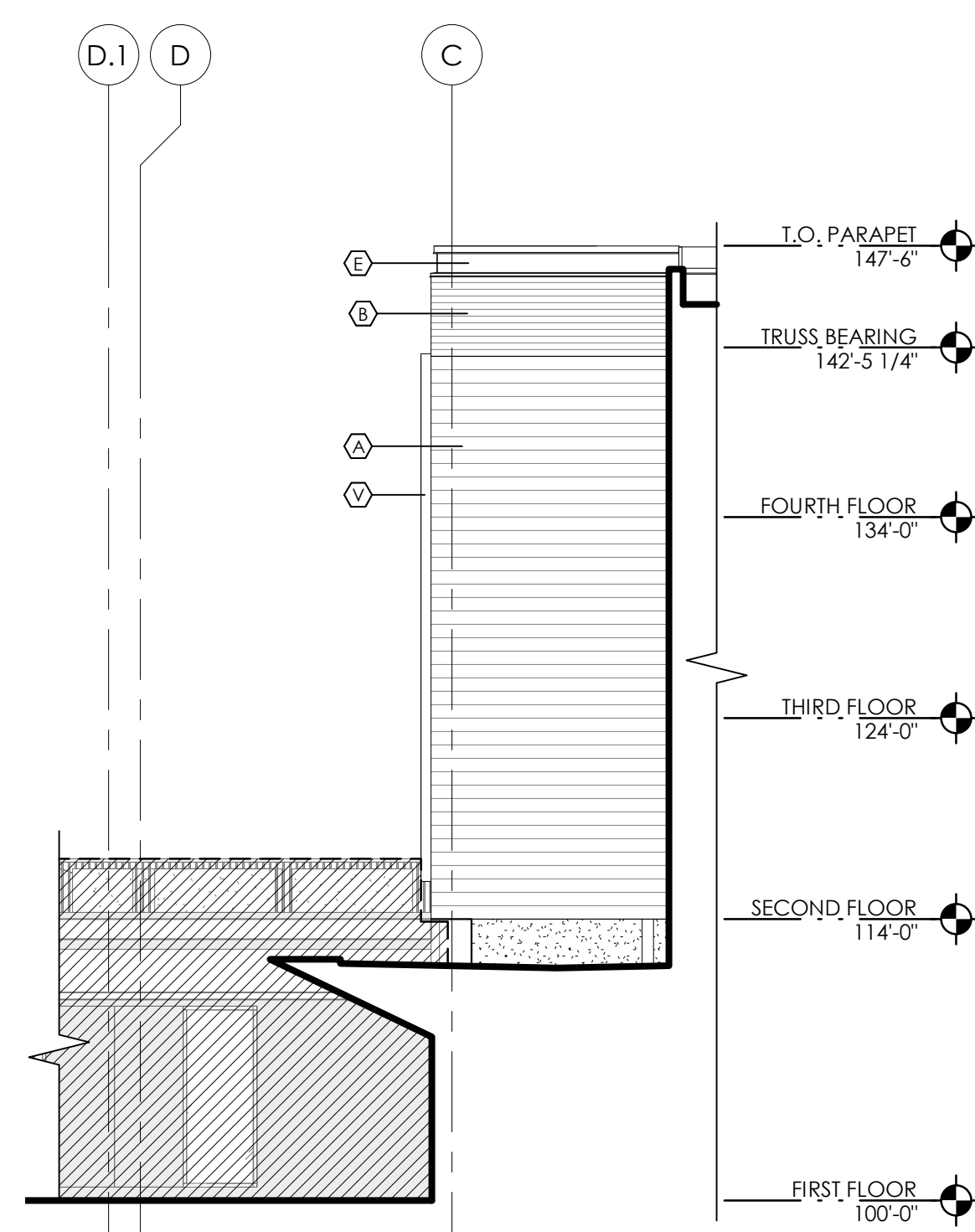
THIRD & FOURTH FLOOR RCP	
Project Number	2002
Date	09/23/21
Drawn By	JB
Checked By	TF
Sheet No.:	A303
Scale	As indicated

SEE CPL WALZ BRANCH LIBRARY DOCUMENTS

WINDOW TYPE - SEE A902

KEY	ITEM/MATERIAL	SIZE/TYPE/COLOR	MANUFACTURER	KEY	ITEM/MATERIAL	SIZE/TYPE/COLOR	MANUFACTURER
(A)	PREFIN. FIBER CEMENT SIDING; 8" EXPOSURE	XXXX	XXXX	(L)	EXTERIOR BUILDING SIGNAGE		
(B)	PREFIN. FIBER CEMENT SIDING; 4" EXPOSURE	XXXX	XXXX	(M)	PAINTED HOLLOW METAL DOOR	XXXX	XXXX
(C)	PREFIN. FIBER CEMENT PANEL	XXXX	XXXX	(N)	OVERHEAD DOOR SYSTEM	XXXX	XXXX
(D)	PREFIN. COMPOSITE ALUM PANEL	XXXX	XXXX	(P)	PREFIN. ALUM. STOREFRONT ENTRY DOOR	XXXX	XXXX
(E)	PREFIN. ALUMINUM COPING AND TRIM	XXXX	XXXX	(Q)	COMPOSITE PHENOLIC PANEL	XXXX	XXXX
(F)	VINYL WINDOW SYSTEM (RESIDENTIAL)	XXXX	XXXX	(R)	PREFIN. ALUM. GAUDDRAIL	XXXX	XXXX
(G)	PREFIN. ALUM. STOREFRONT GLAZING			(S)	CAST STONE COPING		
(H)	FACE BRICK; "NORMAN" SIZE			(T)	PREFIN. ALUM. CURTAINWALL GLAZING		
(J)	MECHANICAL LOUVER			(U)	AUTOMATIC SLIDING DOORS		
(K)	STANDING SEAM METAL ROOF			(V)	PREFINISHED ALUM. WRAPPED FLANGE		

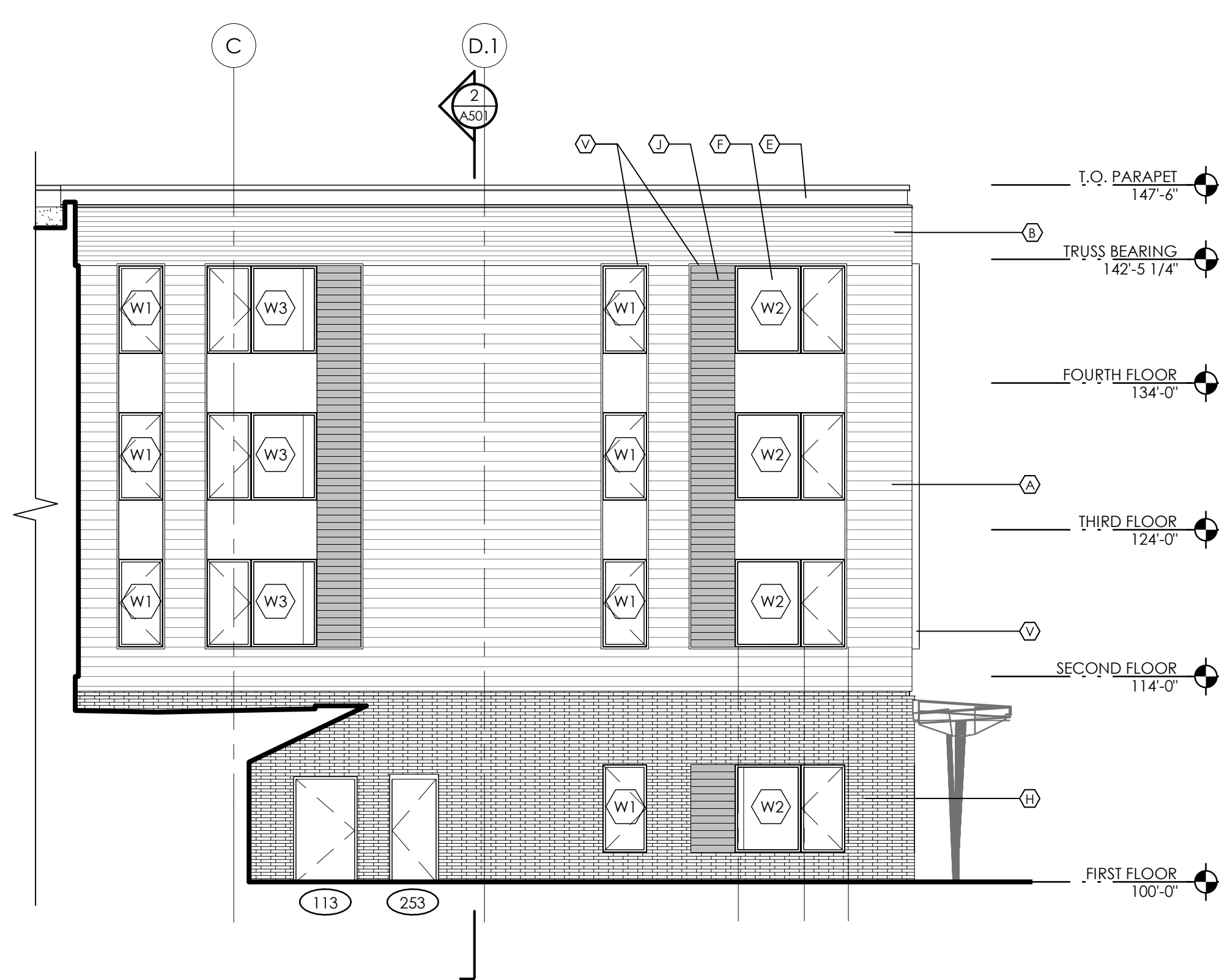
\*All typical glazing to be insulated glazing system      (L) = laminated glass



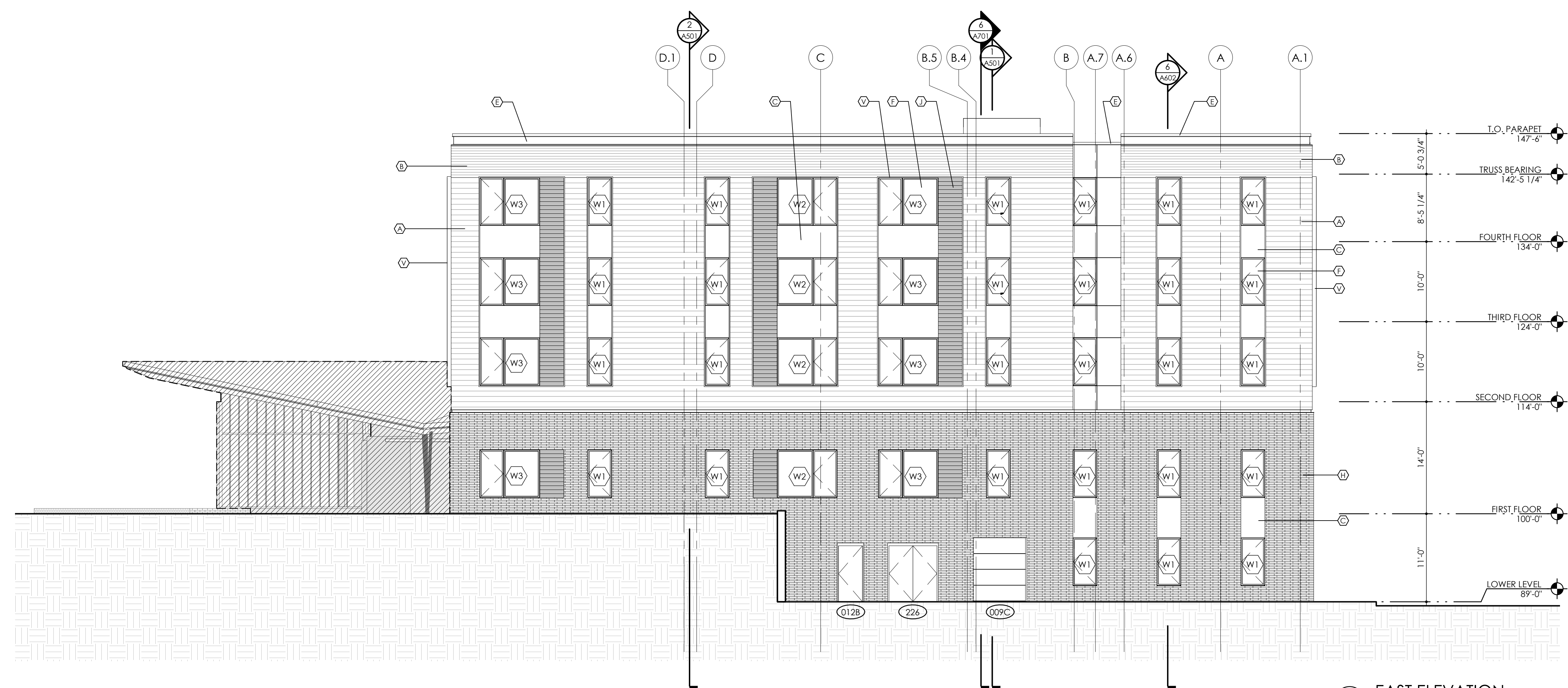
4 EAST ELEVATION - FORECOURT  
A401 1/8" = 1'-0"



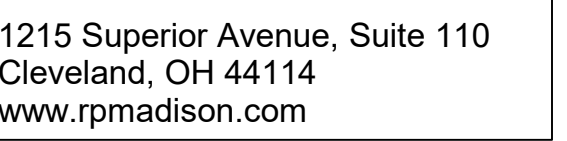
3 SOUTH ELEVATION  
A401 1/8" = 1'-0"



2 WEST ELEVATION - FORECOURT  
A401 1/8" = 1'-0"



1 EAST ELEVATION  
A401 1/8" = 1'-0"



PRELIMINARY -  
NOT FOR  
CONSTRUCTION

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7918 Detroit Avenue Cleveland, Ohio 44102

[illegible]

## BUILDING ELEVATIONS

Project Number	2002
Date	09/23/21
Drawn By	AMcM
Checked By	TF
Sheet No.:	A401
Scale	As indicated

Civil Engineering:  
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Mentor, Ohio 44060  
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MEP Engineering:  
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3555 Carnegie Avenue, Suite 200  
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Structural Engineering:  
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Design Architect:  
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216.752.8750

**Karam Senior Living**  
**DSCDO**  
7918 Detroit Avenue Cleveland, Ohio 44102

[illegible]

# BUILDING ELEVATIONS

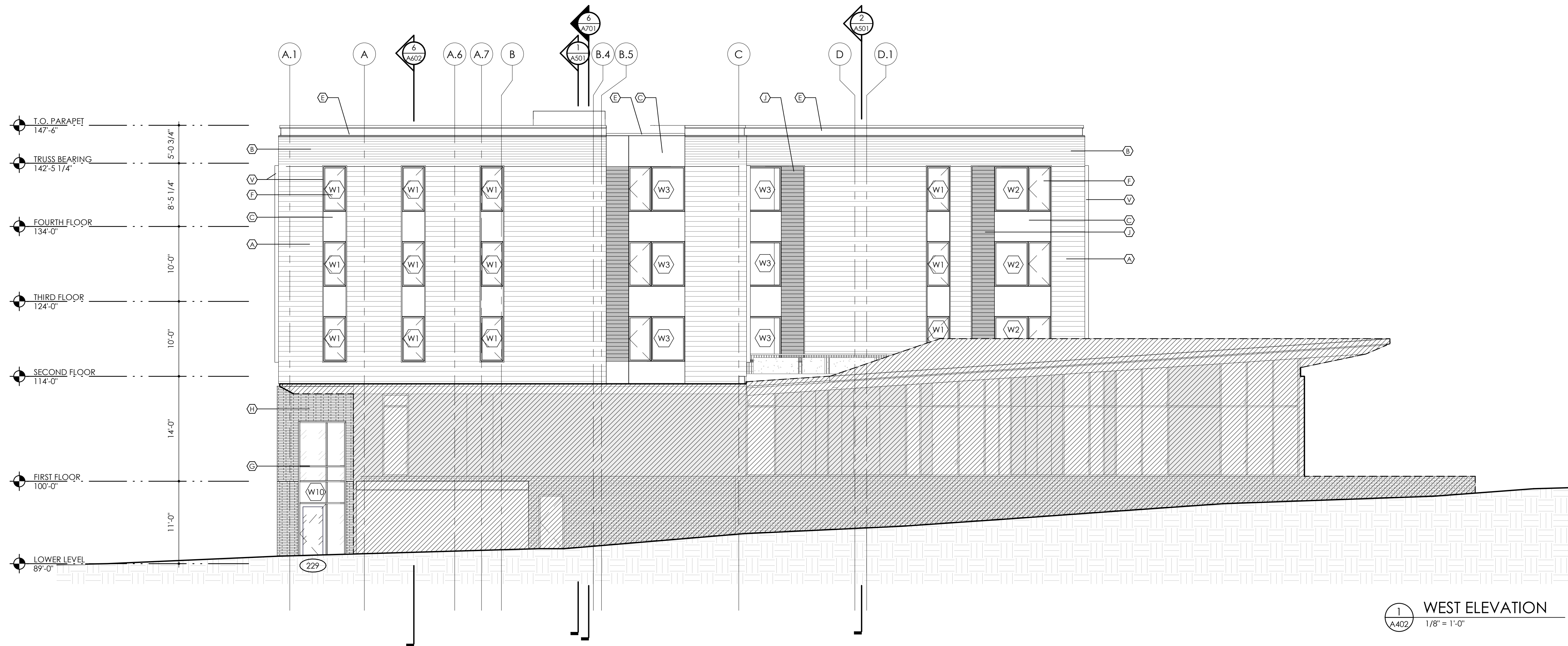
Project Number	2002
Date	09/23/21
Drawn By	AMcM
Checked By	TF
Sheet No.:	A402
Scale	As indicated

KEY	ITEM/MATERIAL	SIZE/TYPE/COLOR	MANUFACTURER
(L)	EXTERIOR BUILDING SIGNAGE	XXXX	XXXX
(M)	PAINTED HOLLOW METAL DOOR	XXXX	XXXX
(N)	OVERHEAD DOOR SYSTEM	XXXX	XXXX
(P)	PREFIN. ALUM. STOREFRONT ENTRY DOOR	XXXX	XXXX
(Q)	COMPOSITE PHENOLIC PANEL	XXXX	XXXX
(R)	PREFIN. ALUM. GAUDDRAIL	XXXX	XXXX
(S)	CAST STONE COPING		
(T)	PREFIN. ALUM. CURTAINWALL GLAZING		
(U)	AUTOMATIC SLIDING DOORS		
(V)	PREFINISHED ALUM. WRAPPED FLANGE		

\*All typical glazing to be insulated glazing system (L) = laminated glass



2 NORTH ELEVATION  
A402 1/8" = 1'-0"



1 WEST ELEVATION  
A402 1/8" = 1'-0"

Civil Engineering:  
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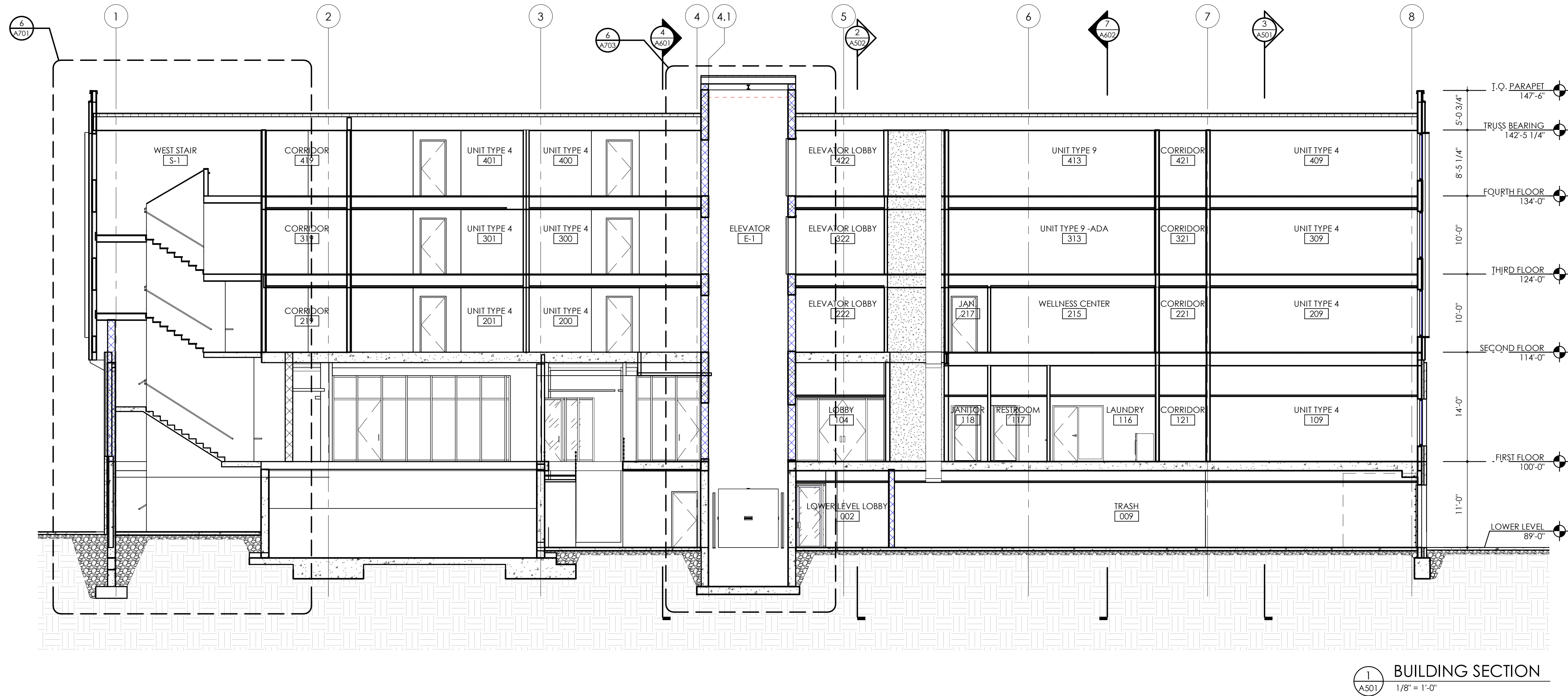
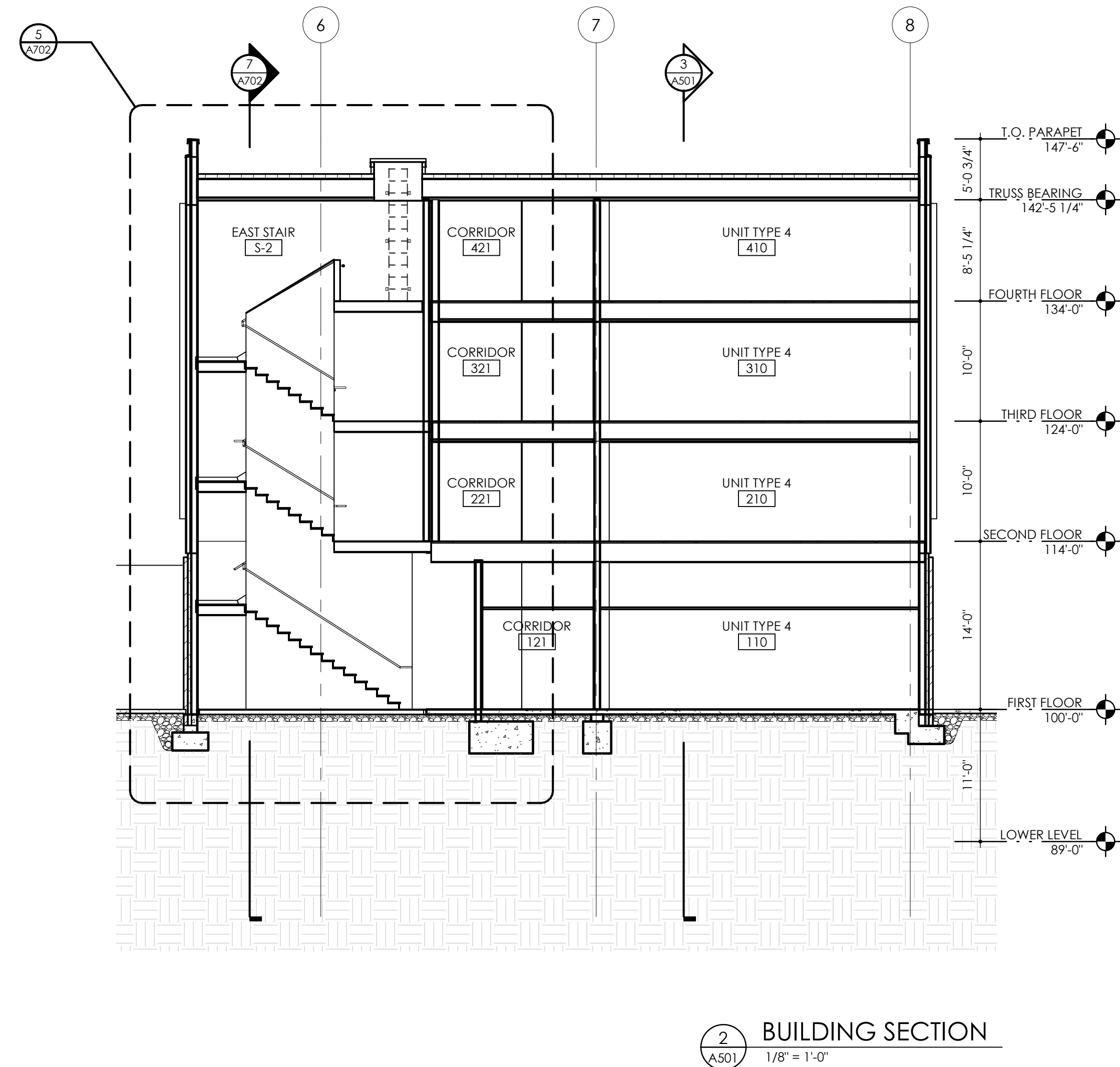
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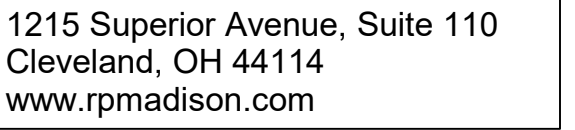
## BUILDING SECTIONS

Project Number	2002
Date	09/23/21
Drawn By	AMcM
Checked By	TF
Sheet No.:	

# A501

Scale 1/8" = 1'-0"





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Design Architect:  
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[illegible]

Project Number	2002
Date	09/23/21
Drawn By	AMcM
Checked By	TF
Sheet No.:	A502
Scale	1/8" = 1'-0"



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CONSTRUCTION

Civil Engineering:  
**CT Consultants, Inc.**  
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MEP Engineering:  
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Diagram illustrating the cross-section of a roof assembly, showing the following components and dimensions:

- single ply membrane roofing
- cover board
- rigid insulation
- vapor barrier
- roof sheathing
- tapered insulation may occur, see roof plans
- 2'-0" min. stagger insulation joints
- prefab. wd. trusses w/ tapered top chord @ 24" o.c.

Dimensions shown on the left side of the diagram:

- 12"
- 5"
- 3/4"

Diagram label: R01

**X01 BRICK VENEER ON WOOD STUD**

- 4" face brick veneer
- 1" air space
- 3" rigid insulation
- air barrier
- 1/2" sheathing
- 2x6 wood stud framing
- 5/8" gwb

**X02 BRICK VENEER ON METAL STUD**

- 4" face brick veneer
- 1" air space
- 3" rigid insulation
- air barrier
- 1/2" sheathing
- 6" metal stud framing
- 5/8" gwb

**X03 4" EXPOSED SIDING ON WOOD STUD**

- prefin. fiber cement siding w/ 4" exposure
- 1" air space
- 3" metal furring channel
- 1 1/2" rigid insulation
- air barrier
- 1/2" sheathing
- 2x6 wood stud framing

**X04 8" EXPOSED SIDING ON WOOD STUD**

- prefin. fiber cement siding w/ 8" exposure
- 1 1/2" XPS rigid insulation
- 1/2" exterior gyp. sheathing w/ integral applied air barrier
- 2x6 wd. studs @ 16" o.c. w/ batt insulation
- 5/8" gyp. bd.

**X05 FIBER CEMENT PANEL ON WOOD STUD**

- Fiber cement panel board
- 1 1/2" rigid insulation
- air barrier
- 1/2" sheathing
- 2x6 wood stud framing
- 5/8" gwb

**X06 COMPOSITE METAL PANEL ON WOOD STUD**

- composite metal panel
- 2-girt, 16" o.c. min. verify w/ metal panel manuf.
- 1 1/2" XPS rigid insulation
- 1/2" exterior gyp. sheathing w/ integral applied air barrier
- 2x6 wd. studs @ 16" o.c. w/ batt insulation
- 5/8" gyp. bd.

concrete slab on grade

under slab vapor retarder

rigid insulation, R-10, install in all areas within 24" of perimeter

drainable fill

undisturbed earth

SEE STRUCTURE

TYPICAL SLAB ON GRADE

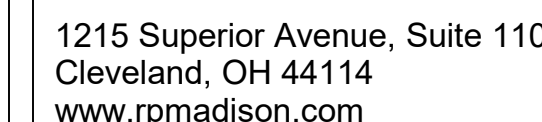
**Karam Senior Living  
DSCDO**  
7918 Detroit Avenue Cleveland, Ohio 44102

[illegible]

### EXTERIOR CONSTRUCTION TYPES

Project Number	2002
Date	09/23/21
Drawn By	AMCM
Checked By	TF
Sheet No.:	A600
Scale	1 1/2" = 1'-0"





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Civil Engineering:  
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Design Architect:  
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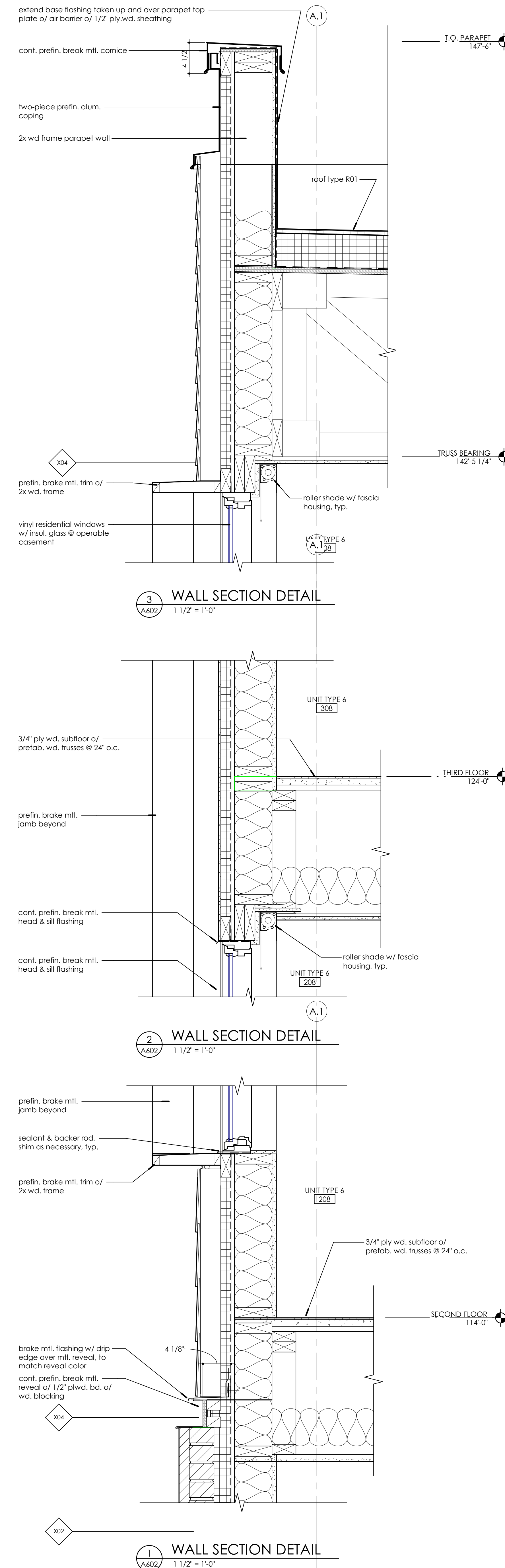
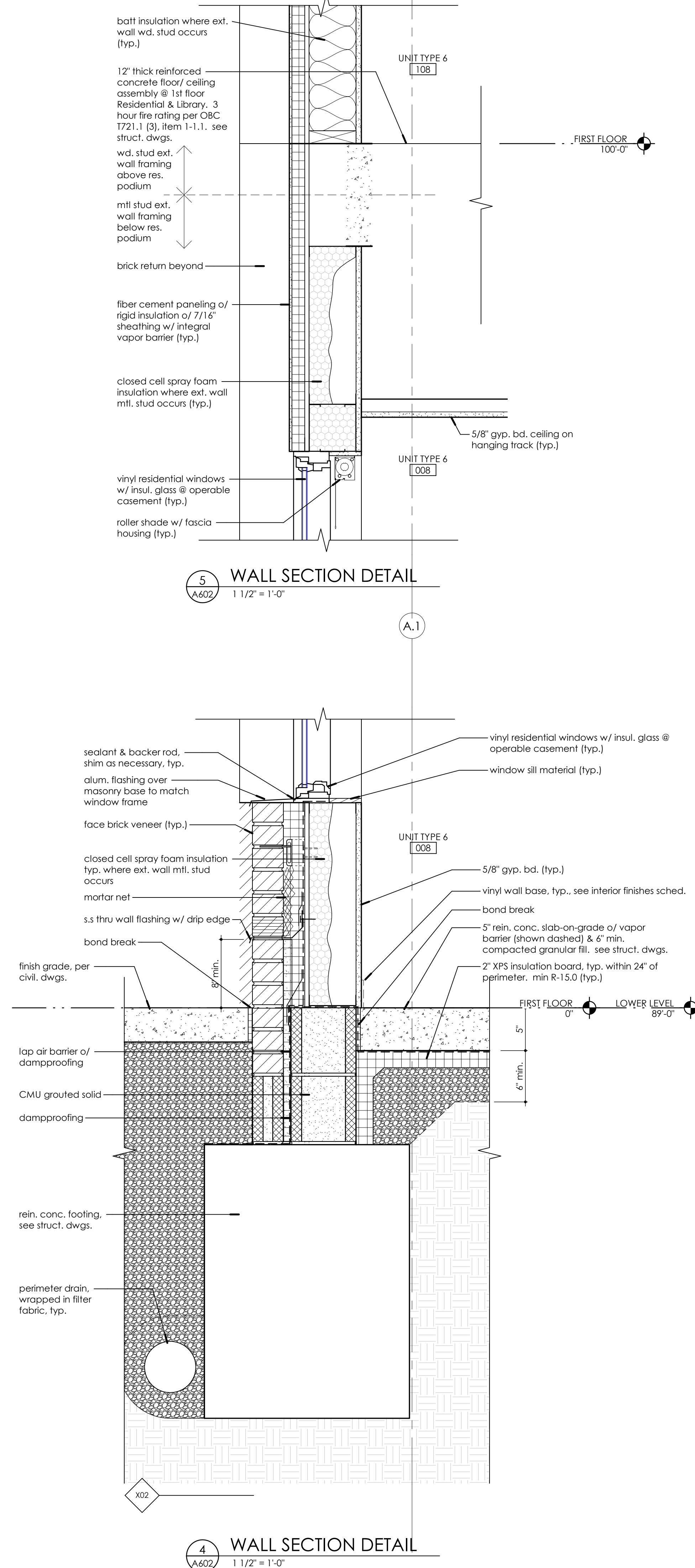
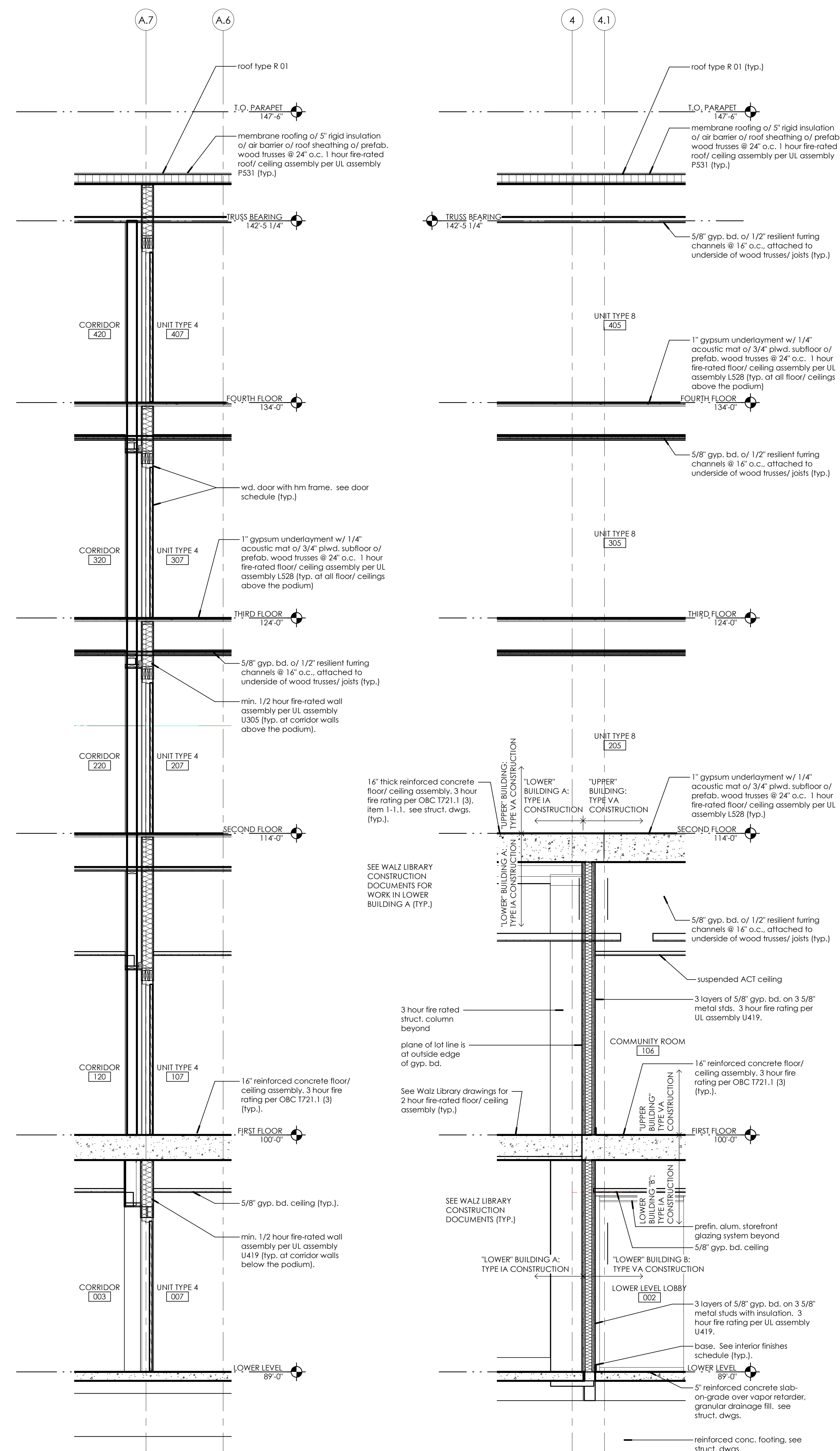
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[illegible]

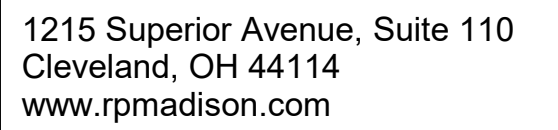
## WALL SECTION DETAILS

Project Number	200
Date	09/23/2012
Drawn By	AMC
Checked By	T
Sheet No.:	A602
Scale	As indicated

9/16/2021 10:37:56 PM







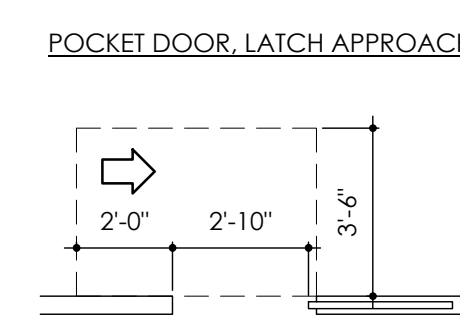
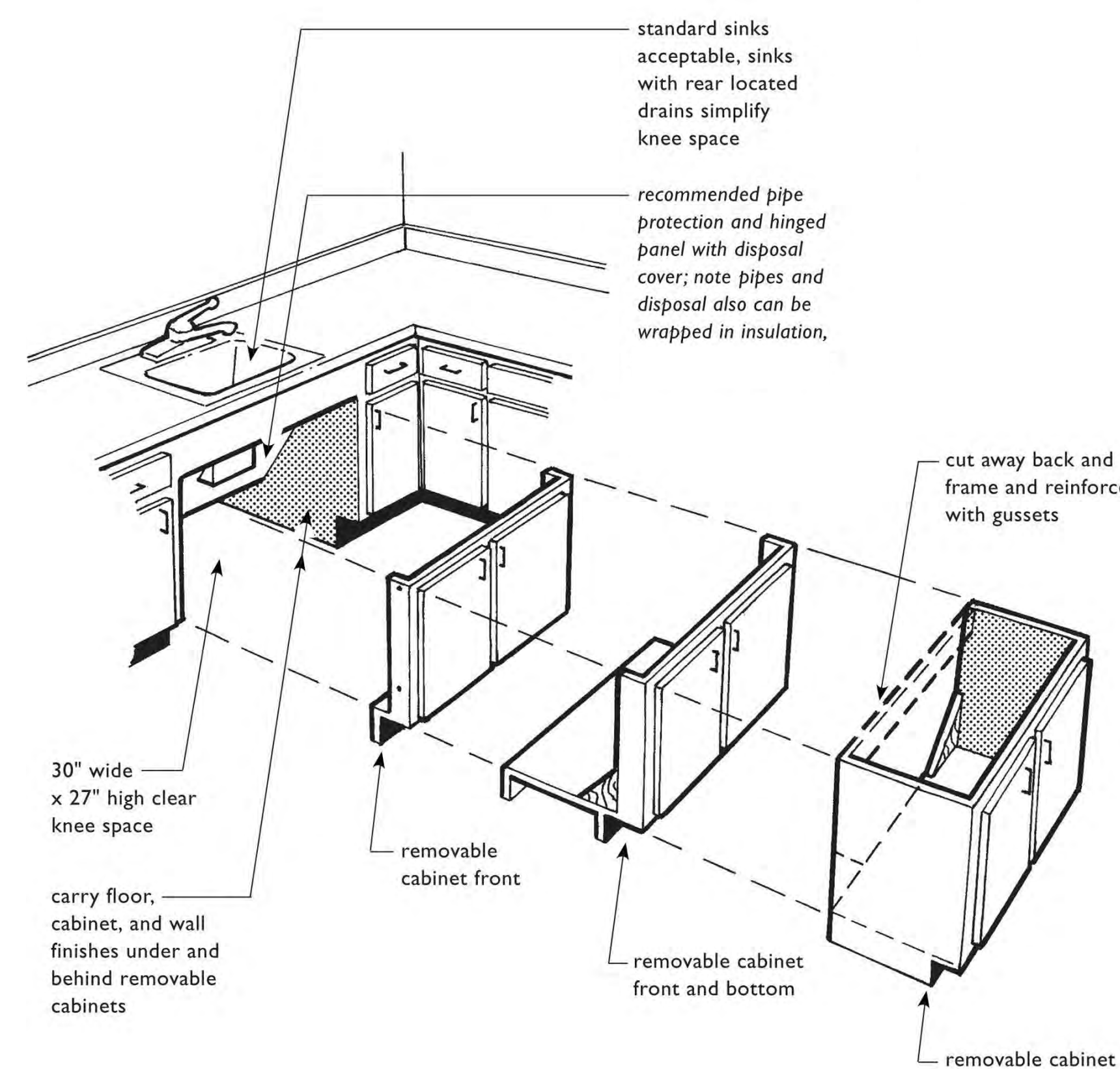
Civil Engineering:  
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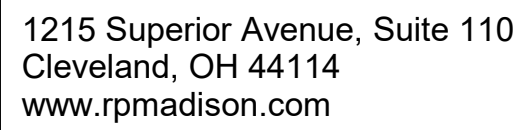
Structural Engineering:  
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Design Architect:  
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DWELLING UNIT STANDARDS	
Project Number	2002
Date	09/23/21
Drawn By	Author
Checked By	Checker
Sheet No.: <b>A810</b>	
Scale	As indicated



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[illegible]UNIT PLANS - UNIT  
TYPE 1

Project Number	2002
Date	09/23/21
Drawn By	JB
Checked By	TF

Sheet No.: **A811**

Scale **As indicated**

Scale	As indicated
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UNIT TYPE MATRIX			
UNIT TYPE	QUANTITY	UNIT GSF	TOTAL GSF
TYPE 1 - STUDIO	3	526	1,578
TYPE 2 - STUDIO - NOT USED	-	-	-
TYPE 3 - STUDIO - ADA	1	561	561
TYPE 4 - 1 BEDROOM	23	639	14,697
TYPE 5 - 1 BEDROOM - ADA	4	639	2,556
TYPE 6 - 2 BEDROOM	8	945	7,560
TYPE 7 - 2 BEDROOM	4	987	3,948
TYPE 8 - 2 BEDROOM	6	973	5,838
TYPE 9 - 2 BEDROOM - ADA	2	1,104	2,028
STUDIO	4		
1 BEDROOM	27		
2 BEDROOM	20		
<b>TOTAL</b>	<b>51</b>		<b>38,766</b>
<b>ACCESSIBLE UNITS</b>			
All Type 3, 5 & 9 Units meet UFAS. Designated one Type 4 Unit on the Lower Level (#R06) and one Type 1 Unit (#202) on the Second Floor as well as all Type 3, 5 & 9 Units to meet Accessible Communication Features (A/V) requirements.			



## ENLARGED SUITE GENERAL NOTES

1. Unit floor plans are typical layout. Refer to building floor plans for orientation.
2. Dimensions are from stud to stud unless noted otherwise.
3. Coordinate architectural plans with all other drawings in the set to accommodate mechanical, plumbing and electrical openings and/or penetrations through walls and floors. Notify architect upon discovery of any conflicts.
4. See structural drawings for locations and extent of shear and loadbearing partitions.
5. All building services are to be run inside walls or through floor/ceiling assemblies. UL approved firestop details are to be used at all penetrations through fire rated assemblies to maintain rating of wall and floor/ceiling assemblies.
6. All walls are type S4 (Lower Level Only) or type W4 (First Floor thru Fourth Floor) unless otherwise noted on the individual unit plans.
7. Any walls indicated to be 2 x 6 shall contain vents and sanitary stacks. Reference enlarged plumbing drawings for further details.
8. Provide sound attenuation insulation in public corridor walls between units and in all tenant demising walls per wall legend on overall floor plan drawings.
9. Accessibility: All residential dwelling units on ALL floors to be TYPE B.
10. Accessible Dwelling Units per CBC & ANSI A117.1 requirements a. See overall floor plans for the location of (4) TYPE A Accessible Dwelling units throughout the buildings.
11. Reference details on sheet A800A for requirements for TYPE A & B Dwelling Units. Reference door clearances on sheet A800A for clearances required at doors.
12. Provide solid blocking in bathroom walls in all dwelling units on all floors for future grab bars. See blocking details, sheet A800A.
13. See sheet A800A Reach Ranges for information on shelving heights in Type A dwelling units; heights of electrical outlets and switches, thermostats and other accessible features.
14. All doors are to be located 6' to rough opening from adjacent wall unless otherwise noted. Where applicable, doors are dimensioned to the centerline of the rough opening.

## FINISH GENERAL NOTES

1. Paint finishes u.n.o.:  
Walls: eggshell  
Ceilings: flat  
HM Door/Frames: semi-gloss  
Misc. Metal: semi-gloss  
"E": epoxy eggshell
2. All painted walls to be PT-1 unless noted otherwise on drawings or in finish schedule.

## FINISH PLAN LEGEND

-  Denotes floor finish
-  Denotes floor finish direction

## SUITE DOOR SCHEDULE

- (AA) 2'-10" Wood Door  
 (AA1) 2'-0" Wood Door  
 (AA2) 1'-6" Wood Door  
 (AA3) 2'-6" Wood Door  
 (AA4) 3'-0" Wood Door  
 (BB) Pair of 2'-6" Wood Doors  
 (BB1) Pair of 2'-0" Wood Doors

NOTE:

1. All closed openings within typical units to be 6'-8" high.
2. All doors within typical units to be solid core 6'-8" high doors.
3. Refer to sheet A810 for residential door elevations.
4. All doors within units to be painted PT-2. Suite entry doors to be stained to match unit entry surround.





## KEYED NOTES

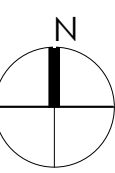
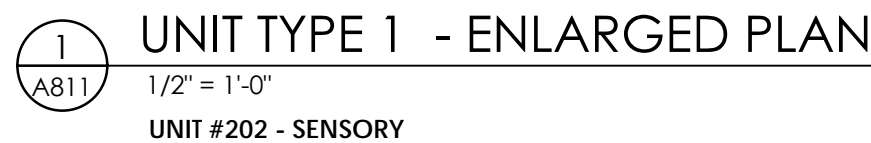
- |  |   |
|--|---|
| 1 Vinyl mini blinds                      | 6 Toilet tissue holder                  |
| 2 Fixed laminate shelf with clothing rod | 7 24" towel bar                         |
| 3 Fixed laminate shelving (3 shelves)    | 8 Shower curtain rod                    |
| 4 Mirror                                 | 9 Robe hook                             |
| 5 Hand towel ring                        | 10 Fixed wireframe shelving (4 shelves) |

## LIGHTING KEY

NOTE:

1. All ceilings to be painted gypsum wall board at approx 8'-4" AFF.
2. Locate fixtures in the approx. locations as shown on electrical plans. Fixtures to be centered in rooms unless specifically dimensioned on the electrical plans.
3. 7'-8" gyp. soffit above kitchen upper cabinets, refer to plan for extent

- |   |               |
|---|---------------|
|  | Vanity Light  |
|  | Recessed Can  |
|  | Surface Mount |
|  | Surface Mount |





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UNIT TYPE MATRIX			
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TYPE 1 - STUDIO	3	526	1,578
TYPE 2 - STUDIO - NOT USED	-	-	-
TYPE 3 - STUDIO - ADA	1	561	561
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TYPE 6 - 2 BEDROOM	8	945	7,560
TYPE 7 - 2 BEDROOM	4	987	3,948
TYPE 8 - 2 BEDROOM	6	973	5,838
TYPE 9 - 2 BEDROOM - ADA	2	1,104	2,028
STUDIO	4		
1 BEDROOM	27		
2 BEDROOM	20		
<b>TOTAL</b>	<b>51</b>		<b>38,766</b>
<b>ACCESSIBLE UNITS</b>			
All Type 3, 5 & 9 Units meet UFAS.			
Designated one Type 4 Unit on the Lower Level (#006) and one Type 1 Unit (#202) on the Second Floor as well as All Type 3, 5 & 9 Units to meet Accessible Communication Features (A/V) requirements.			

1. Unit floor plans are typical layout. Refer to building floor plans for orientation.
2. Dimensions are from stud to stud unless noted otherwise.
3. Coordinate architectural plans with all other drawings in the set to accommodate mechanical, plumbing and electrical openings and/or penetrations through walls and floors. Notify architect upon discovery of any conflict.
4. See structural drawings for locations and extent of shear and loadbearing partitions.
5. All building services are to be run inside walls or through floor/ceiling assemblies. UL approved firestopping details are to be used at all penetrations through fire rated assemblies to maintain rating of wall and floor/ceiling assemblies.
6. All walls are Type S4 (Lower Level Only) or Type W4 (First Floor thru Fourth Floor) unless otherwise noted on the individual unit plans.
7. Any walls indicated to be 2 x 6 shall contain vents and sanitary stacks. Reference enlarged plumbing drawings for further details.
8. Provide sound attenuation insulation in public corridor walls between suites and in all tenant demising walls per wall legend on overall floor plan drawings.
9. Accessibility: ALL residential dwelling units on ALL floors to be TYPE B.
10. Accessible Dwelling units per CBC & ANSI A117.1 requirements u.n.o. See overall floor plans for the location of (M) TYPE A Accessible Dwelling units throughout the building.
11. Reference details on sheet AB00A for requirements for TYPE A & B Dwelling Units. Reference door clearances on sheet AB00A for clearances required at doors.
12. Provide solid blocking in bathroom walls in all dwelling units on all floors for future grab bars. See blocking details, sheet AB00A.
13. See sheet AB00A Reach Ranges for information on shelving heights in Type A dwelling units, heights of electrical outlets and switches, thermostats and other accessible features.
14. All doors to be located 6" to rough opening from adjacent wall unless otherwise noted. Where applicable, doors are dimensioned to the centerline of the rough opening.

1. Paint finishes u.n.o.:
  - Walls: eggshell
  - Ceilings: flat
  - HM Door/Frames: semi-gloss
  - Misc. Metal: semi-gloss
  - "E": epoxy eggshell
2. All painted walls to be PT-1 unless noted otherwise on drawings or in finish schedule.

 Denotes floor finish

 Denotes floor finish direction

<b>(AA)</b> 2'-10" Wood Door	<b>(BB)</b> Pair of 2'-6" Wood Doors
<b>(AA1)</b> 2'-0" Wood Door	<b>(BB1)</b> Pair of 2'-0" Wood Doors
<b>(AA2)</b> 1'-6" Wood Door	
<b>(AA3)</b> 2'-6" Wood Door	
<b>(AA4)</b> 3'-0" Wood Door	

NOTE:

1. All cased openings within typical units to be 6'-8" high.
2. All doors within typical units to be solid core 6'-8" high doors.
3. Refer to sheet A810 for residential door elevations.
4. All doors within units to be painted PI-2. Suite entry doors to be stained to match unit entry surround.

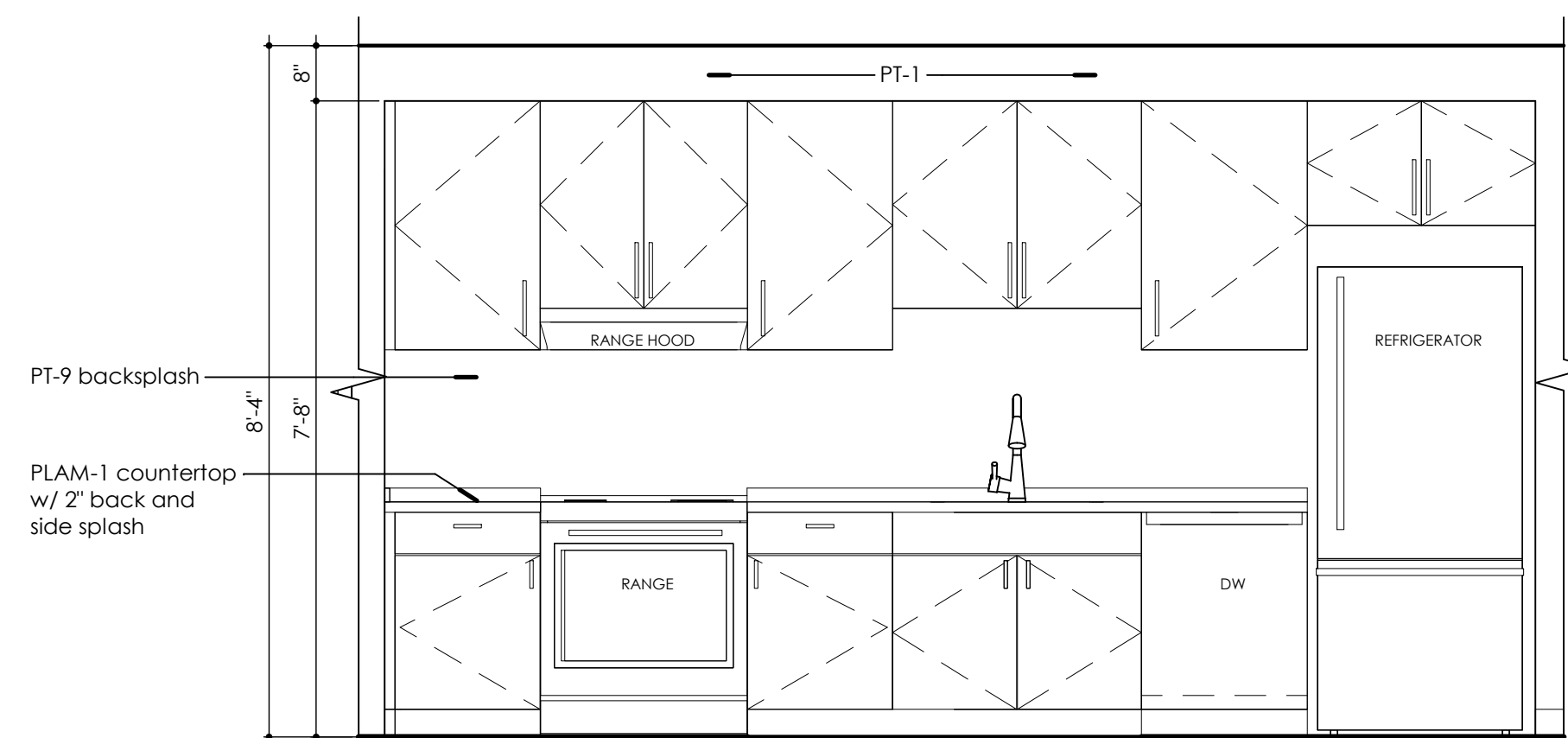
① Vinyl mini blinds	⑥ Toilet tissue holder
② Fixed laminate shelf with clothing rod	⑦ 24" towel bar
③ Fixed laminate shelving (3 shelves)	⑧ Shower curtain rod
④ Mirror	⑨ Robe hook
⑤ Hand towel ring	⑩ Fixed wireframe shelving (4 shelves)

NOTE:

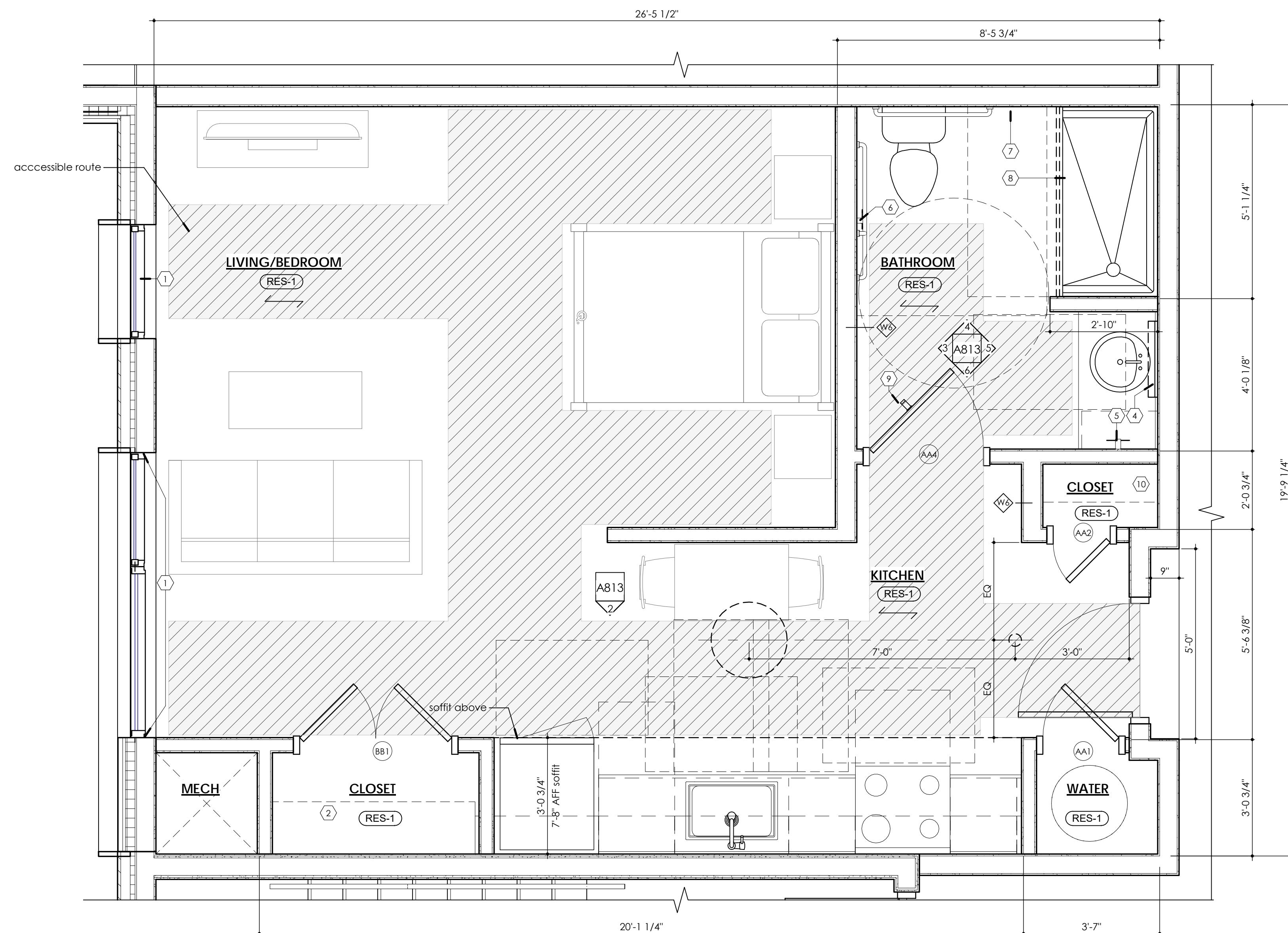
1. All ceilings to be painted gypsum wall board at approx 8'-4" AFF.
2. Locate fixtures in the approx. locations as shown on electrical plans. Fixtures to be centered in rooms unless specifically dimensioned on the electrical plans.
3. 7'-8" gyp. soffit above kitchen upper cabinets, refer to plan for extent

Technical drawing of a bathroom vanity unit. The unit consists of a white rectangular sink with a chrome faucet, mounted on a white vanity cabinet. Above the sink is a rectangular mirror with a simple frame. To the right of the sink, there is a small rectangular cabinet door with a handle. The entire unit is shown in a side view, with a wall and floor indicated by simple lines.

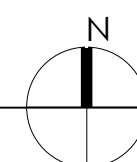
3 RESTROOM ELEVATION - WEST  
A813 1/2" = 1'-0"



2 KITCHEN ELEVATION  
A813 1/2" = 1'-0"



ADA & SENSORY  
QUANTITY: 1  
UNIT NUMBER: 213

UNIT PLANS - UNIT  
TYPE 3 - ACCESSIBLE

Project Number	2002
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Date	09/23/21
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Drawn By JB

Checked By	TF
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Sheet No.: 1010

A813


Source	As indicated
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PRELIMINARY -  
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UNIT TYPE MATRIX			
UNIT TYPE	QUANTITY	UNIT GSF	TOTAL GSF
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STUDIO 1 BEDROOM 2 BEDROOM	4 27 20		
TOTAL	51		38,766
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#### ENLARGED SUITE GENERAL NOTES

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- Coordinate architectural plans with all other drawings in the set to accommodate mechanical, plumbing and electrical openings and/or penetrations through walls and floors. Notify architect upon discovery of any conflicts.
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- All building services are to be run inside walls or through floor/ceiling assemblies. UL approved firestopping details are to be used at all penetrations through fire rated assemblies to maintain rating of wall and floor/ceiling assemblies.
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- Any walls indicated to be 2 x 6 shall contain vents and sanitary stacks. Reference enlarged plumbing drawings for further details.
- Provide sound attenuation insulation in public corridor walls between suites and in all tenant demising walls per wall legend on overall floor plan drawings.
- Accessibility: ALL residential dwelling units on ALL floors to be TYPE B.
- Accessible Dwelling Units per OBC & ANSI A117.1 requirements u.n.o. See overall floor plans for the location of [4] TYPE A Accessible Dwelling units throughout the buildings.
- Reference details on sheet A800A for requirements for TYPE A & B Dwelling Units. Reference door clearances on sheet A800A for clearances required at doors.
- Provide solid blocking in bathroom walls in all dwelling units on all floors for future grab bars. See blocking details, sheet A800A.
- See sheet A800A Reach Ranges for information on shelving heights in Type A dwelling units, heights of electrical outlets and switches, thermostats and other accessible features.
- All doors to be located 6" to rough opening from adjacent wall unless otherwise noted. Where applicable, doors are dimensioned to the centerline of the rough opening.

#### FINISH GENERAL NOTES

- Paint finishes u.n.o.:  
Walls: eggshell  
Ceilings: flat  
HM Door/Frames: semi-gloss  
Misc. Metal: semi-gloss  
"E": epoxy eggshell
- All painted walls to be PT-1 unless noted otherwise on drawings or in finish schedule.

#### FINISH PLAN LEGEND

- 7 Denotes floor finish
- Denotes floor finish direction

#### SUITE DOOR SCHEDULE

- AA 2'-10" Wood Door
- AA 2'-0" Wood Door
- AA 1'-6" Wood Door
- AA 2'-6" Wood Door
- AA 3'-0" Wood Door
- BB Pair of 2'-6" Wood Doors
- BB Pair of 2'-0" Wood Doors

- NOTE:
- All cased openings within typical units to be 6'-8" high.
  - All doors within typical units to be solid core 6'-8" high doors.
  - Refer to sheet A810 for residential door elevations.
  - All doors within units to be painted PT-2. Suite entry doors to be stained to match unit entry surround.

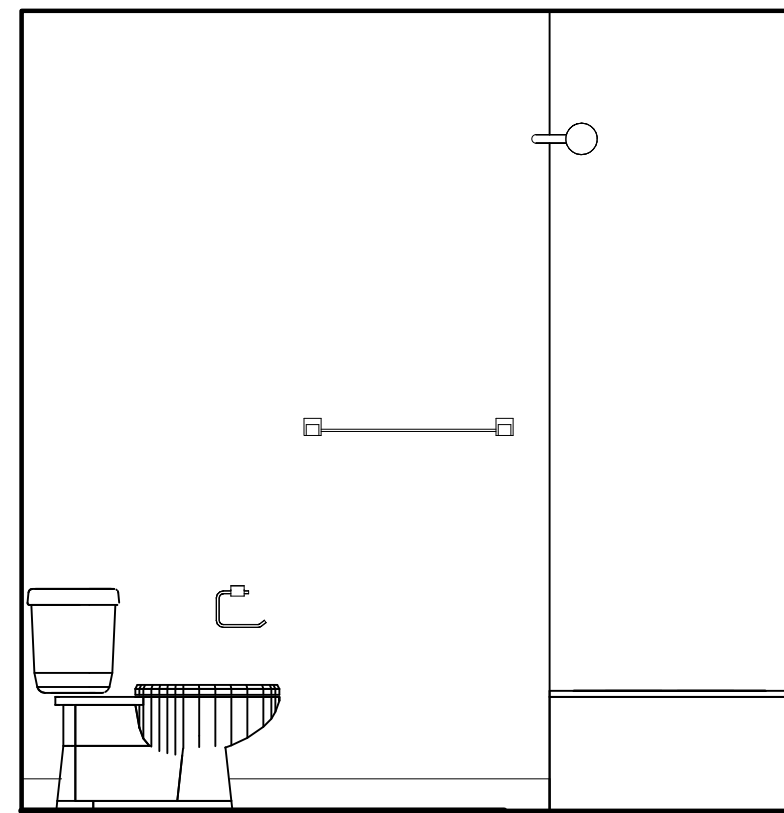
#### KEYED NOTES

- 1 Vinyl mini blinds
- 2 Fixed laminate shelf with clothing rod
- 3 Fixed laminate shelving (3 shelves)
- 4 Mirror
- 5 Hand towel ring
- 6 Toilet tissue holder
- 7 24" towel bar
- 8 Shower curtain rod
- 9 Robe hook
- 10 Fixed wireframe shelving (4 shelves)

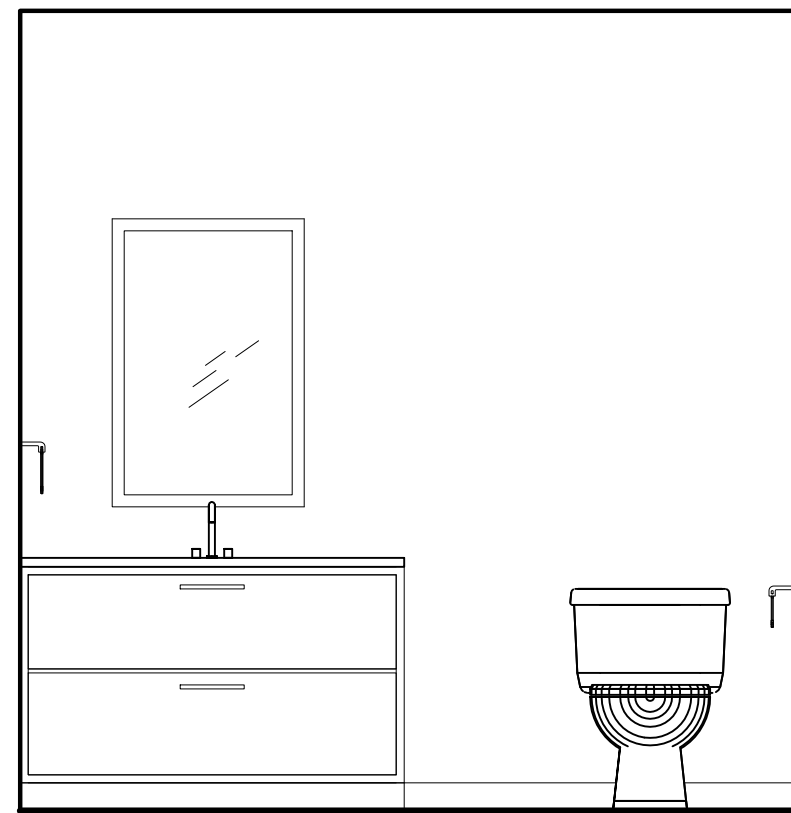
#### LIGHTING KEY

- NOTE:
- All ceilings to be painted gypsum wall board at approx 8'-4" AFF.
  - Locate fixtures in the approx. locations as shown on electrical plans. Fixtures to be centered in rooms unless specifically dimensioned on the electrical plans.
  - 7'-8" gyp. soffit above kitchen upper cabinets, refer to plan for extent

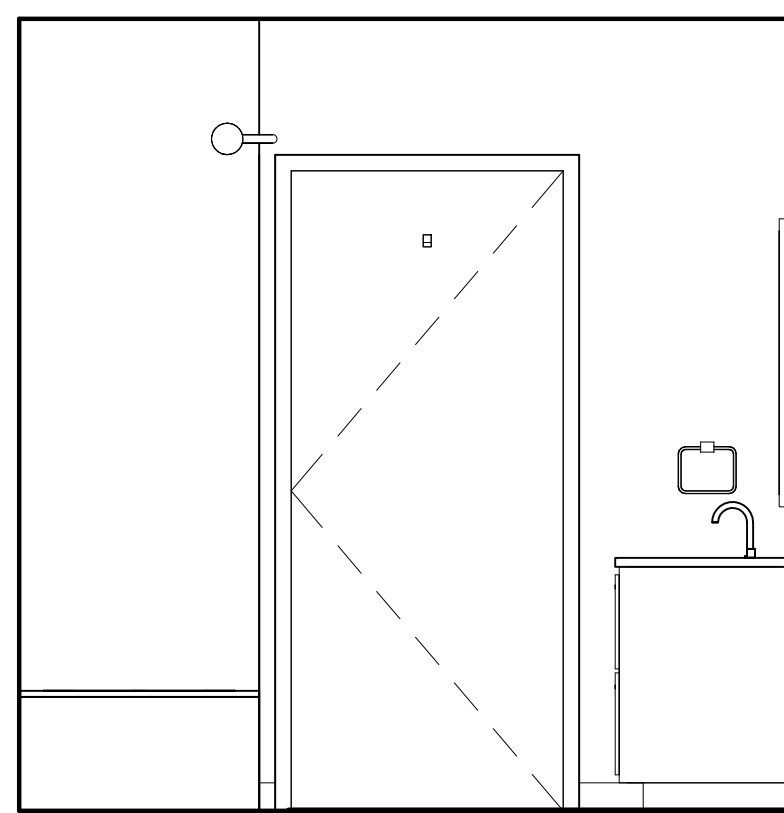
- Vanity Light
- ( ) Recessed Can
- Surface Mount
- Surface Mount



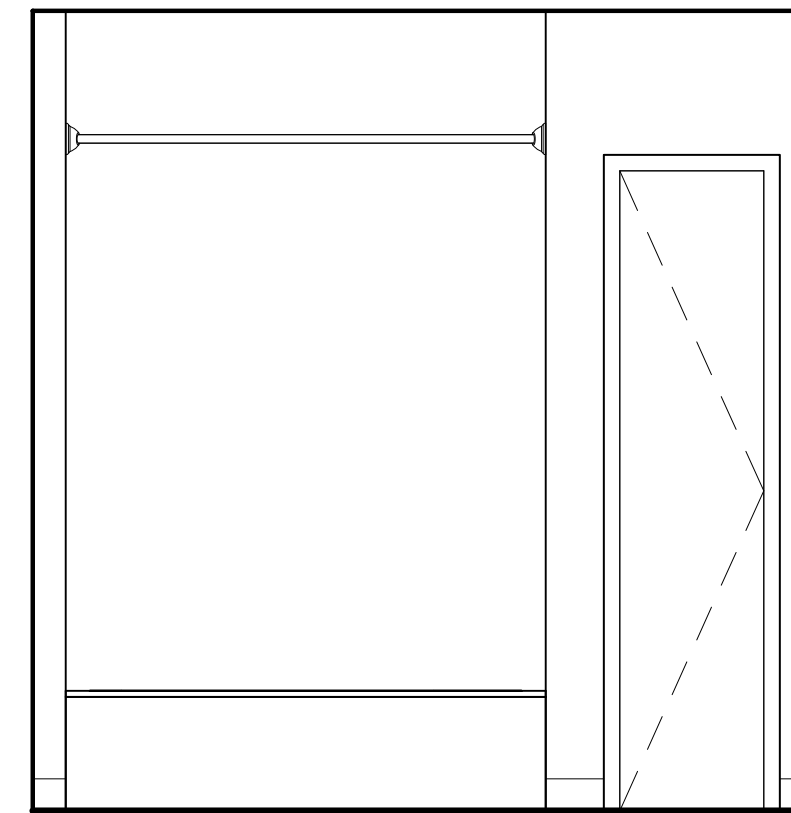
8 RESTROOM ELEVATION - WEST  
1/2" = 1'-0"



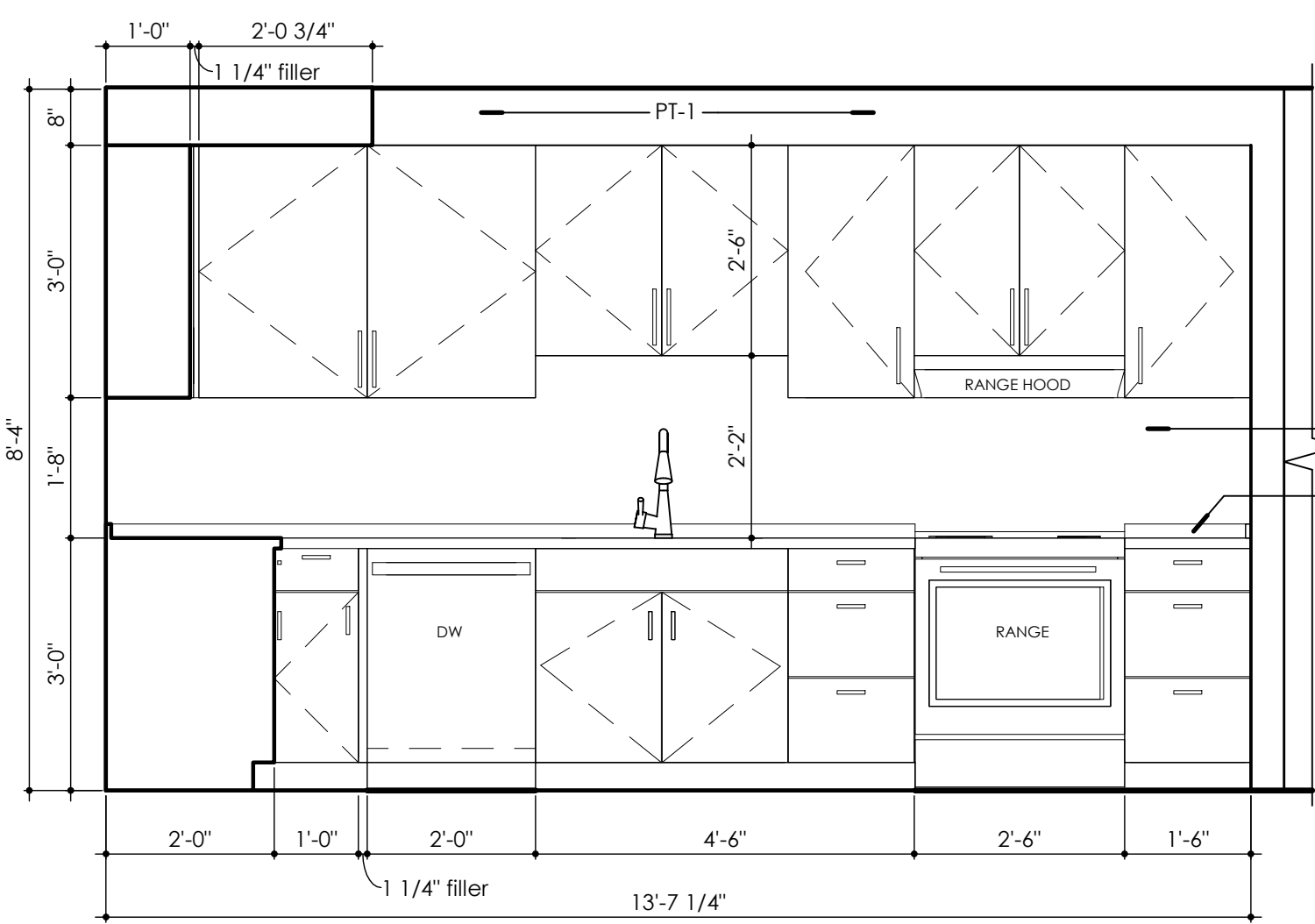
7 RESTROOM ELEVATION - SOUTH  
1/2" = 1'-0"



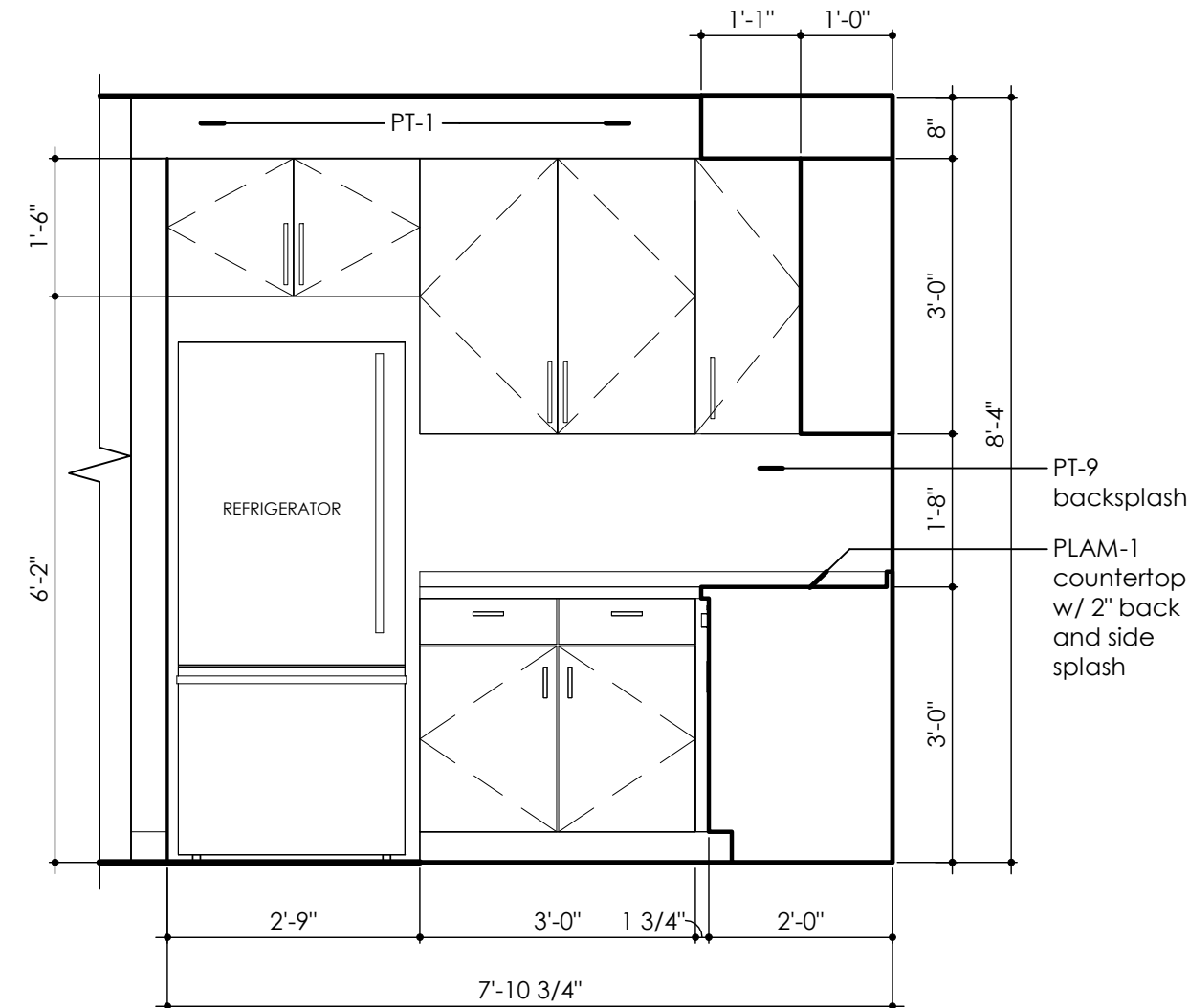
6 RESTROOM ELEVATION - EAST  
1/2" = 1'-0"



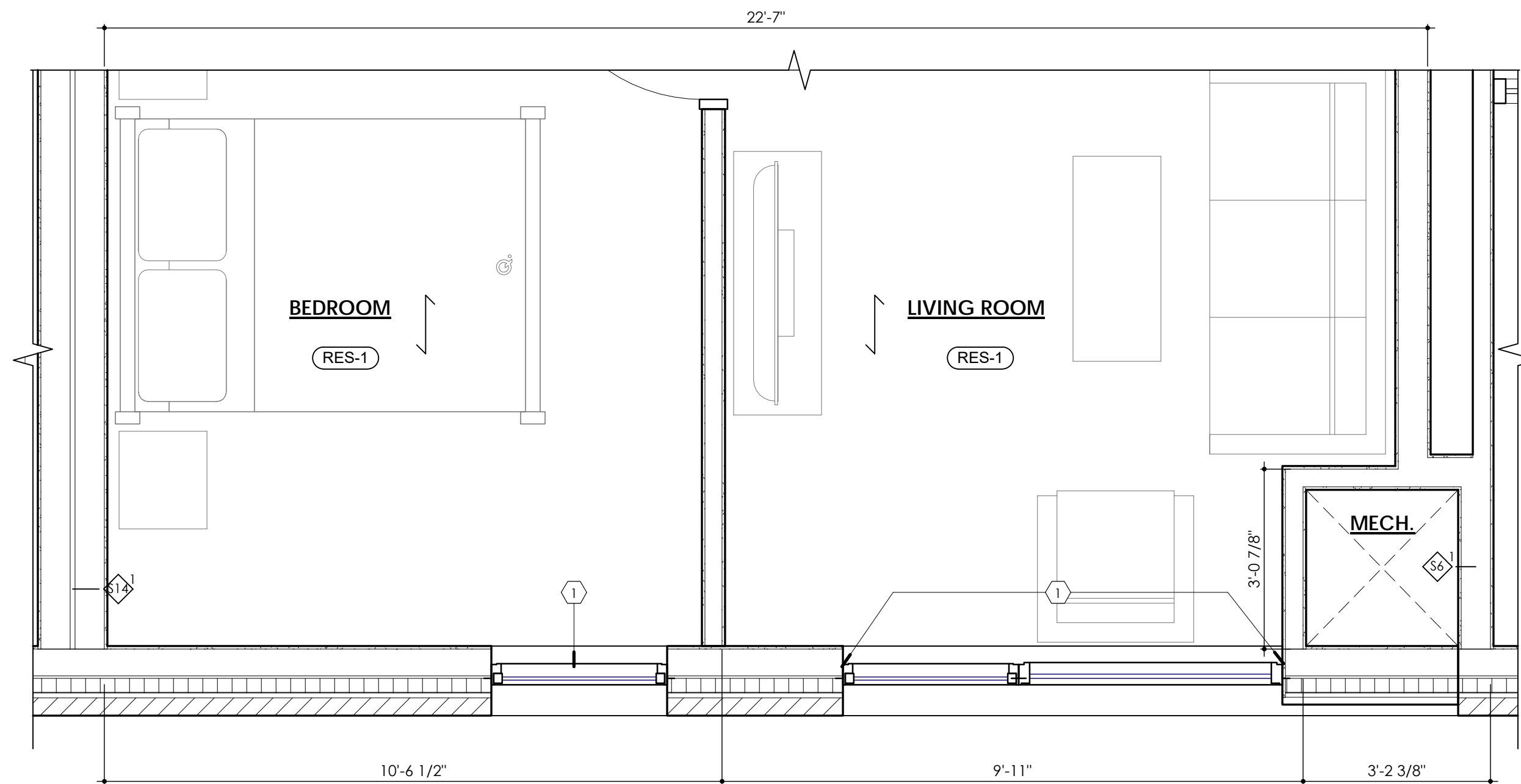
5 RESTROOM ELEVATION - NORTH  
1/2" = 1'-0"



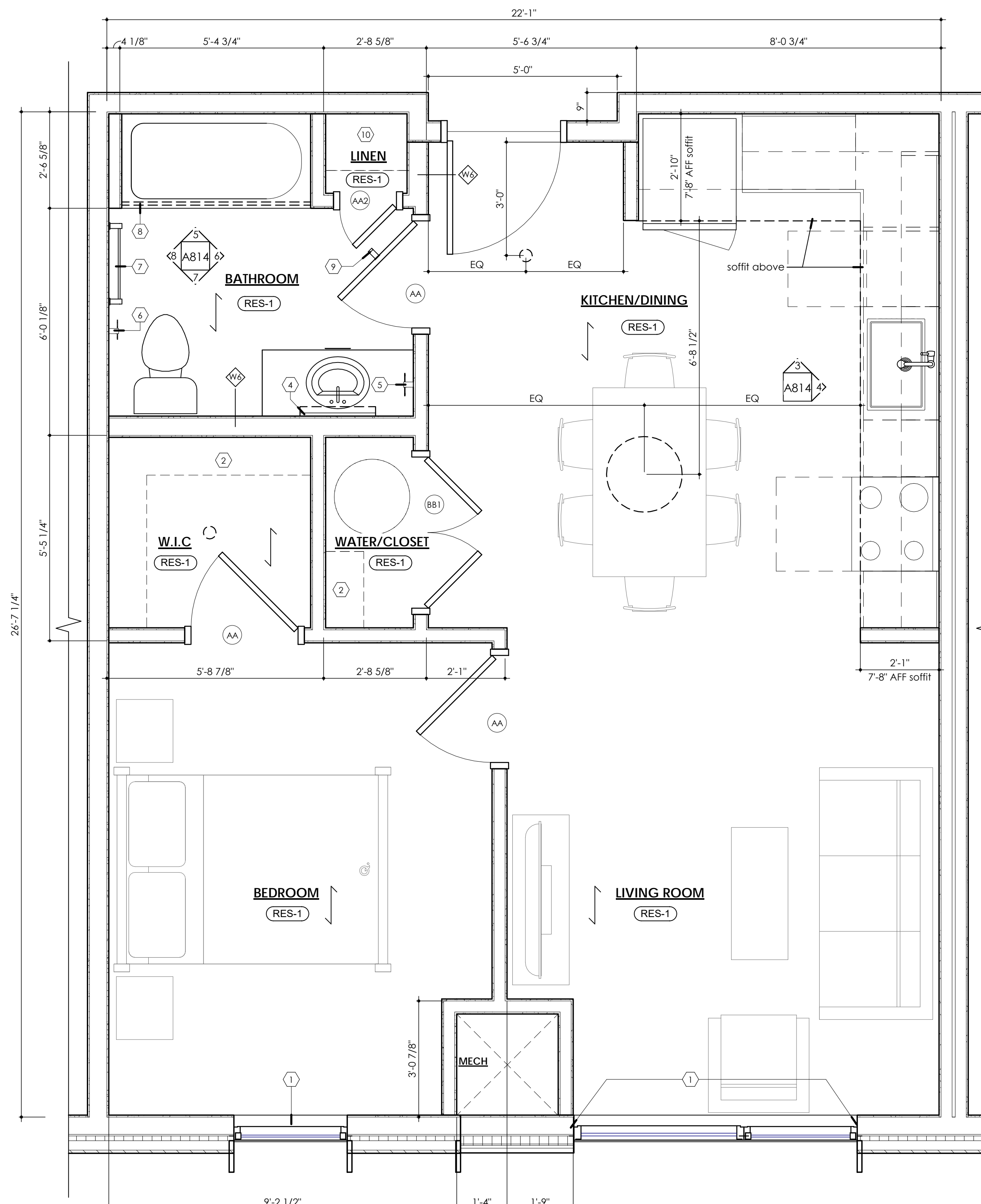
4 KITCHEN ELEVATION  
1/2" = 1'-0"



3 KITCHEN ELEVATION  
1/2" = 1'-0"



2 UNIT TYPE 4A FLOOR PLAN  
1/2" = 1'-0"  
UNIT #006 - SENSORY



1 UNIT TYPE 4 FLOOR PLAN  
1/2" = 1'-0"

#### UNIT PLANS - UNIT TYPE 4

Project Number	2002
Date	09/23/21
Drawn By	JB
Checked By	TF
Sheet No.:	A814
Scale	As indicated

PRELIMINARY -  
NOT FOR  
CONSTRUCTION

Civil Engineering:  
**CT Consultants, Inc.**  
8150 Sterling Ct  
Mentor, Ohio 44060  
t. 440.951.9000

MEP Engineering:  
**Bialosky Cleveland**  
6555 Carnegie Avenue, Suite 200  
Cleveland, Ohio 44103  
t. 216.752.8750

Structural Engineering:  
**Barber & Hoffman, Inc.**  
2217 E 9th Street, Suite 350  
Cleveland, Ohio 44103  
t. 216.875.0100

Design Architect:  
**Bialosky Cleveland**  
6555 Carnegie Avenue, Suite 200  
Cleveland, Ohio 44103  
t. 216.752.8750

Karam Senior Living  
DSCDO  
7918 Detroit Avenue Cleveland, Ohio 44102

UNIT TYPE MATRIX			
UNIT TYPE	QUANTITY	UNIT GSF	TOTAL GSF
TYPE 1 - STUDIO	3	526	1,578
TYPE 2 - STUDIO - NOT USED	-	-	-
TYPE 3 - STUDIO - ADA	1	561	561
TYPE 4 - 1 BEDROOM	23	639	14,697
TYPE 5 - 1 BEDROOM - ADA	4	639	2,556
TYPE 6 - 2 BEDROOM	8	945	7,560
TYPE 7 - 2 BEDROOM	4	987	3,948
TYPE 8 - 2 BEDROOM	6	973	5,838
TYPE 9 - 2 BEDROOM - ADA	2	1,104	2,028
STUDIO	4		
1 BEDROOM	27		
2 BEDROOM	20		
TOTAL	51		38,766
ACCESSIBLE UNITS			
All Type 3, 5 & 9 Units meet UFAS. Designated one Type 4 Unit on the Lower Level (#006) and one Type 1 Unit (#202) on the Second Floor as well as ALL Type 3, 5 & 9 Units to meet Accessible Communication Features (A/V) requirements.			

#### ENLARGED SUITE GENERAL NOTES

- Unit floor plans are typical layout. Refer to building floor plans for orientation.
- Dimensions are from stud to stud unless noted otherwise.
- Coordinate architectural plans with all other drawings in the set to accommodate mechanical, plumbing and electrical openings and/or penetrations through walls and floors. Notify architect upon discovery of any conflicts.
- See structural drawings for locations and extent of shear and loadbearing partitions.
- All building services are to be run inside walls or through floor/ceiling assemblies. UL approved firestopping details are to be used at all penetrations through fire rated assemblies to maintain rating of wall and floor/ceiling assemblies.
- All walls are Type S4 (Lower Level Only) or Type W4 (First Floor thru Fourth Floor) unless otherwise noted on the individual unit plans.
- Any walls indicated to be 2 x 6 shall contain vents and sanitary stacks. Reference enlarged plumbing drawings for further details.
- Provide sound attenuation insulation in public corridor walls between suites and in all tenant demising walls per wall legend on overall floor plan drawings.
- Accessibility: ALL residential dwelling units on ALL floors to be TYPE B.
- Accessible Dwelling Units per OBC & ANSI A117.1 requirements u.n.o. See overall floor plans for the location of [4] TYPE A Accessible Dwelling units throughout the buildings.
- Reference details on sheet A800A for requirements for TYPE A & B Dwelling Units. Reference door clearances on sheet A800A for clearances required at doors.
- Provide solid blocking in bathroom walls in all dwelling units on all floors for future grab bars. See blocking details, sheet A800A.
- See sheet A800A Reach Ranges for information on shelving heights in Type A dwelling units, heights of electrical outlets and switches, thermostats and other accessible features.
- All doors to be located 6" to rough opening from adjacent wall unless otherwise noted. Where applicable, doors are dimensioned to the centerline of the rough opening.

#### FINISH GENERAL NOTES

- Paint finishes u.n.o.:  
Walls: eggshell  
Ceilings: flat  
HM Door/Frames: semi-gloss  
Misc. Metal: semi-gloss  
"E": epoxy eggshell
- All painted walls to be PT-1 unless noted otherwise on drawings or in finish schedule.

#### FINISH PLAN LEGEND

- 7 Denotes floor finish
- Denotes floor finish direction

#### SUITE DOOR SCHEDULE

- AA 2'-10" Wood Door  
AA1 2'-0" Wood Door  
AA2 1'-6" Wood Door  
AA3 2'-6" Wood Door  
AAA 3'-0" Wood Door
- BB Pair of 2'-6" Wood Doors  
BB1 Pair of 2'-0" Wood Doors

- NOTE:
- All casied openings within typical units to be 6'-8" high.
  - All doors within typical units to be solid core 6'-8" high doors.
  - Refer to sheet A810 for residential door elevations.
  - All doors within units to be painted PT-2. Suite entry doors to be stained to match unit entry surround.

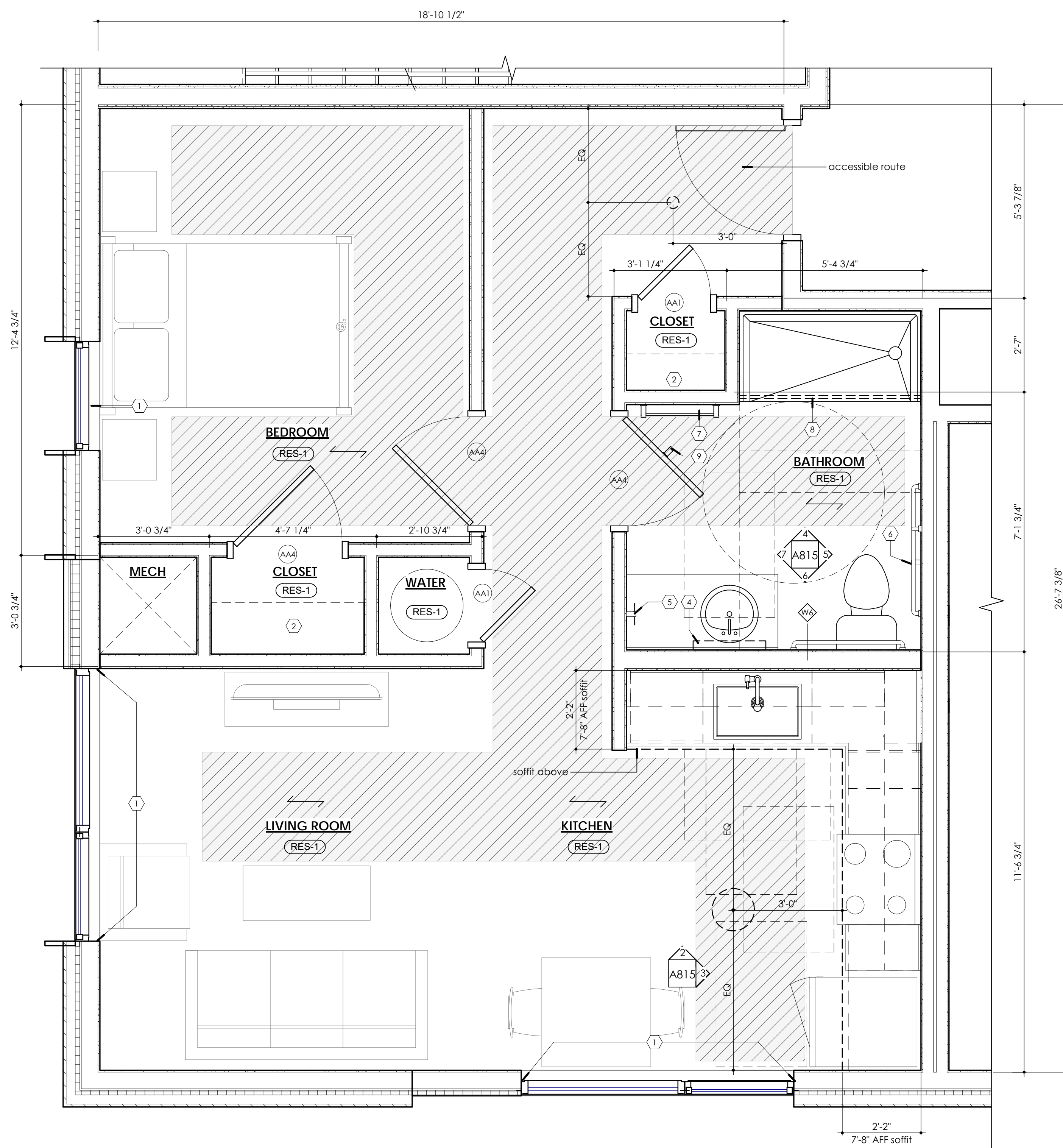
#### KEYED NOTES

- 1 Vinyl mini blinds  
2 Fixed laminate shelf with clothing rod  
3 Fixed laminate shelving (3 shelves)  
4 Mirror  
5 Hand towel ring  
6 Toilet tissue holder  
7 24" towel bar  
8 Shower curtain rod  
9 Robe hook  
10 Fixed wireframe shelving (4 shelves)

#### LIGHTING KEY

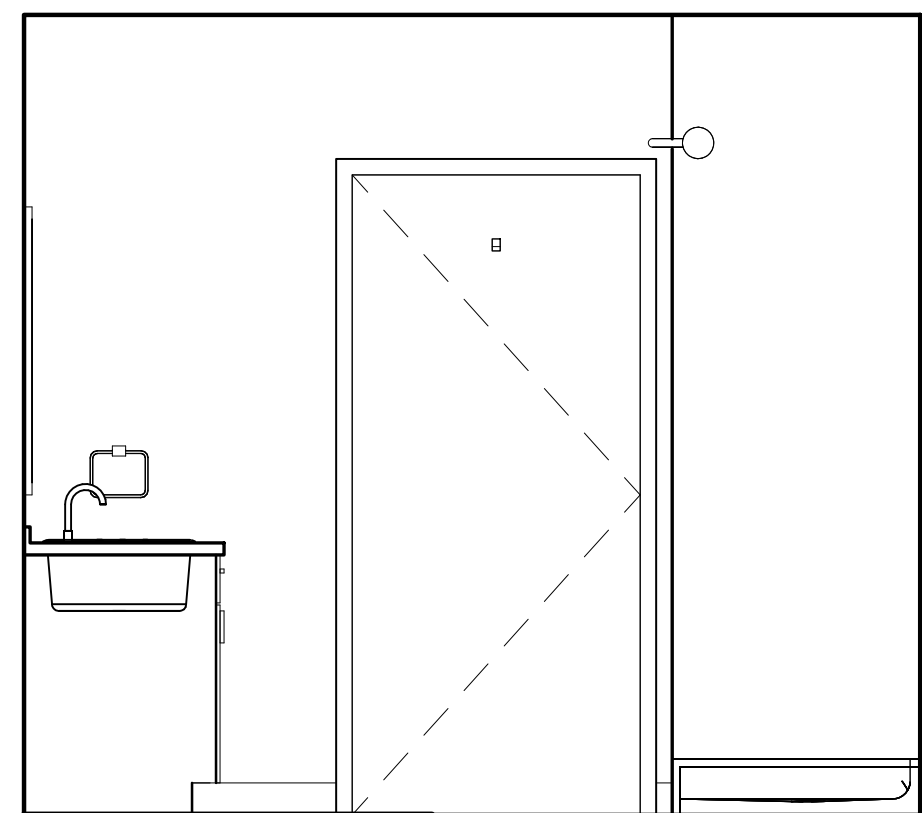
- NOTE:
- All ceilings to be painted gypsum wall board at approx 8'-4" AFF.
  - Locate fixtures in the approx. locations as shown on electrical plans. Fixtures to be centered in rooms unless specifically dimensioned on the electrical plans.
  - 7'-8" gyp. soffit above kitchen upper cabinets, refer to plan for extent

- Vanity Light  
( ) Recessed Can  
Surface Mount  
Surface Mount

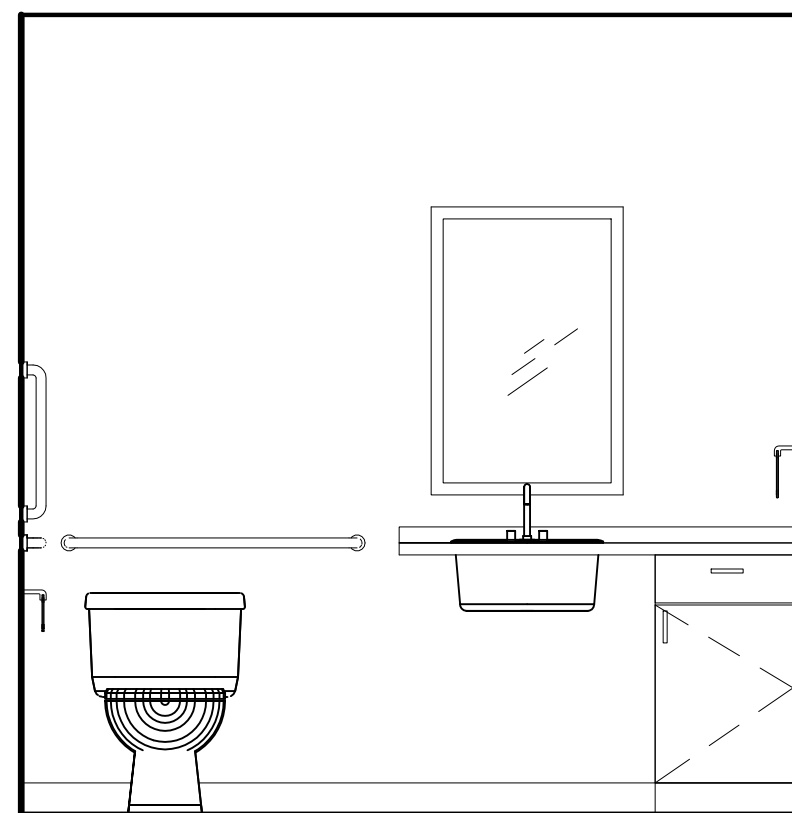


#### UNIT TYPE 5 FLOOR PLAN

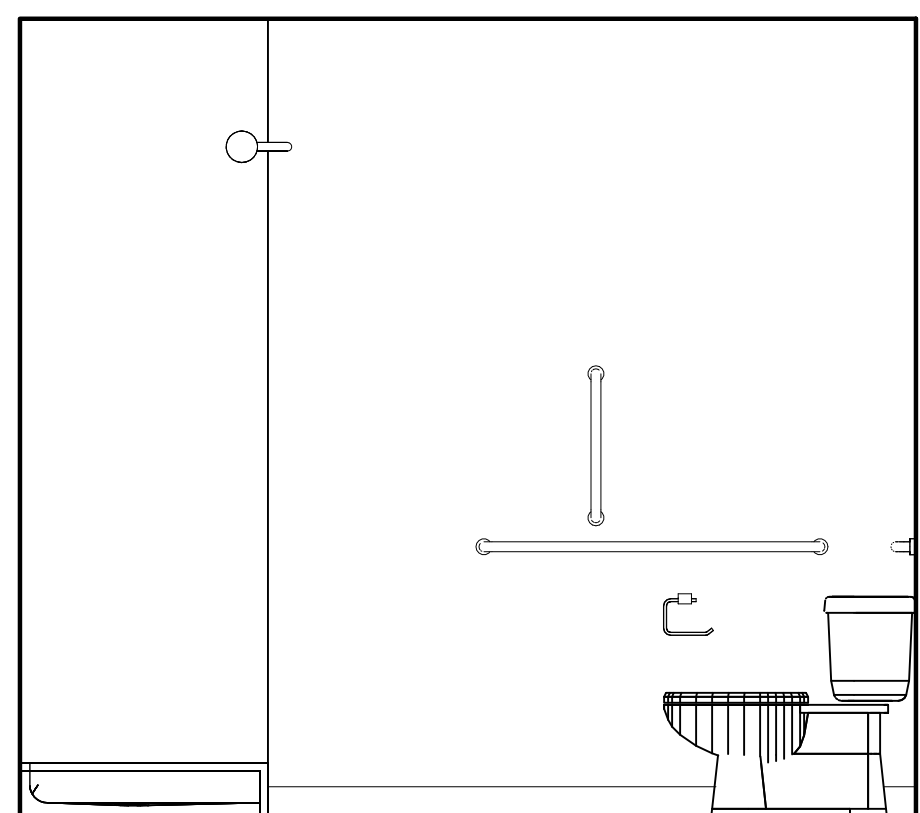
1 A815  
1/2" = 1'-0"  
ADA & SENSORY  
QUANTITY: 4  
UNIT NUMBERS: 112, 212, 312, 412



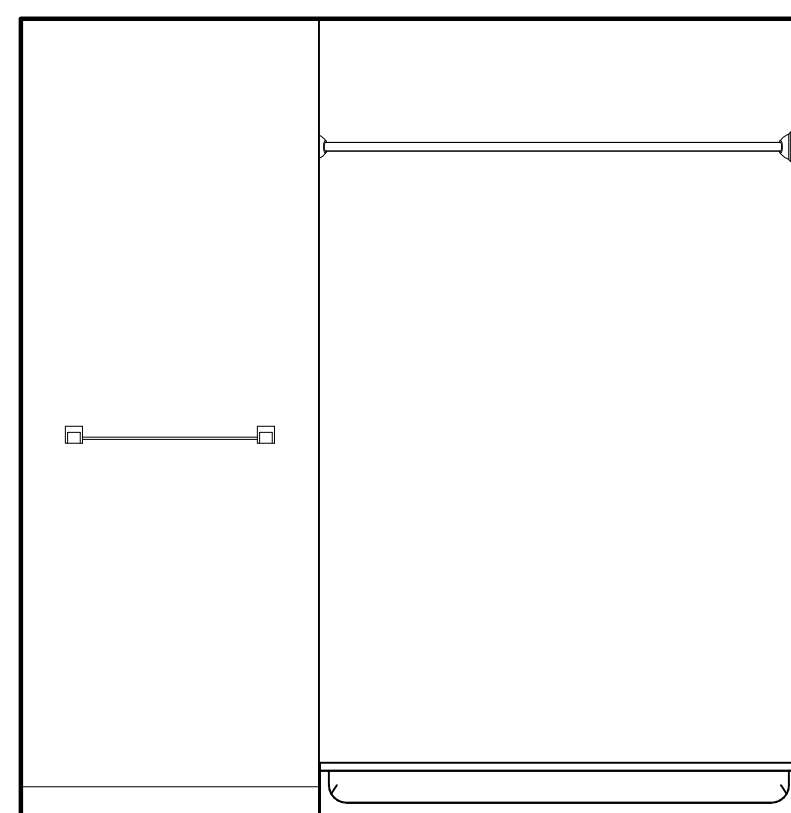
7 RESTROOM ELEVATION - WEST  
A815 1/2" = 1'-0"



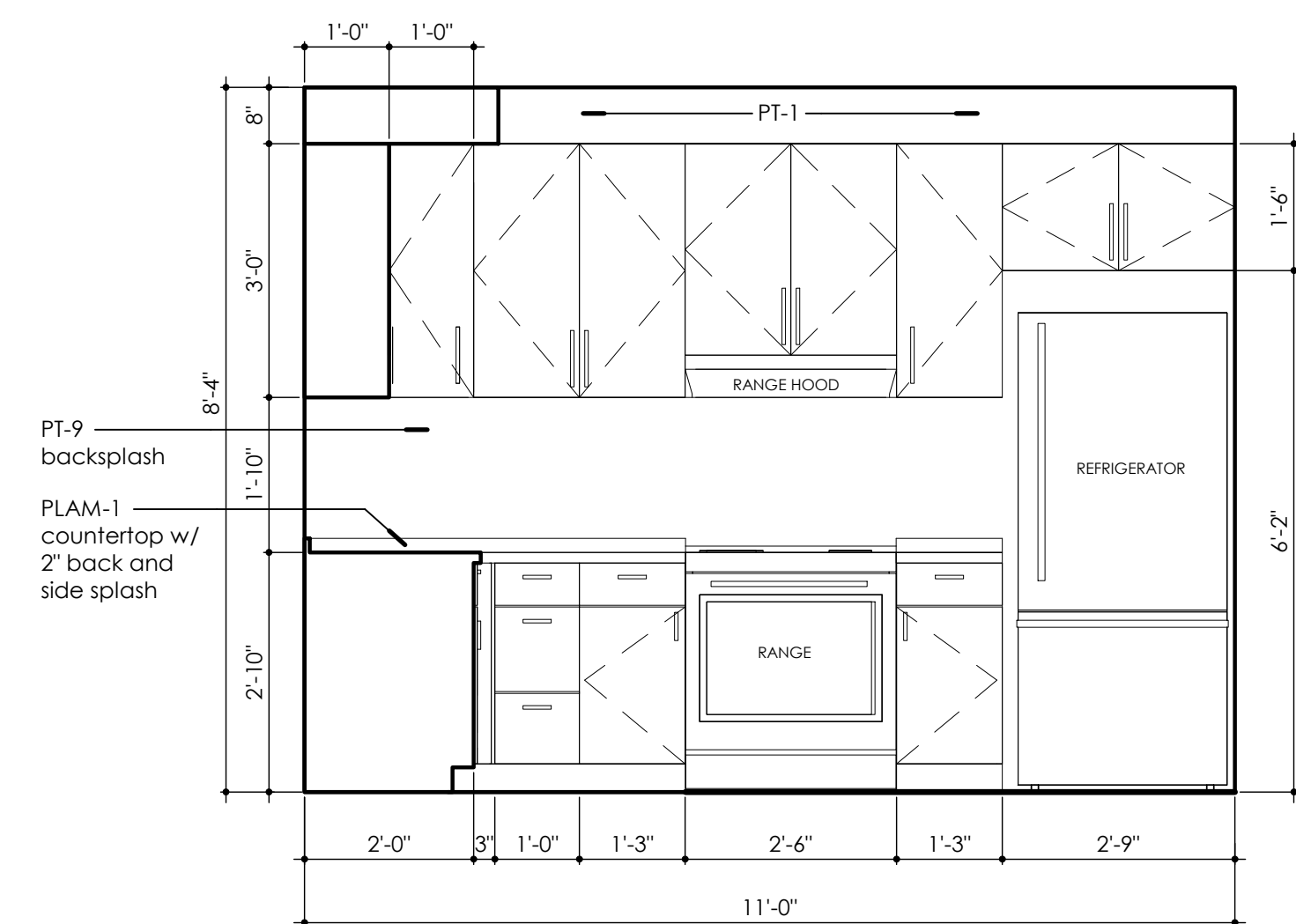
6 RESTROOM ELEVATION - SOUTH  
A815 1/2" = 1'-0"



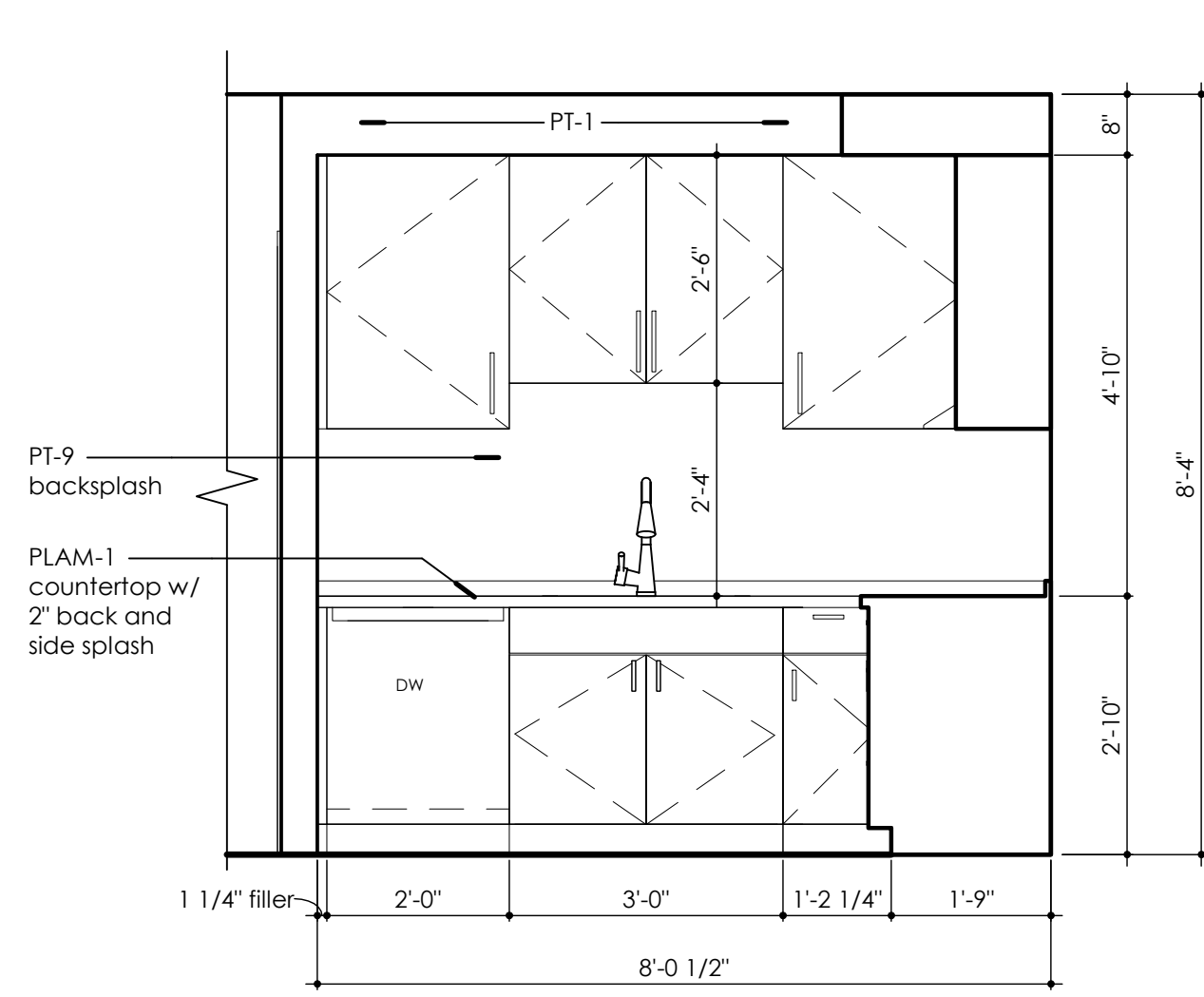
5 RESTROOM ELEVATION - EAST  
A815 1/2" = 1'-0"



4 RESTROOM ELEVATION - NORTH  
A815 1/2" = 1'-0"



3 KITCHEN ELEVATION  
A815 1/2" = 1'-0"



2 KITCHEN ELEVATION  
A815 1/2" = 1'-0"

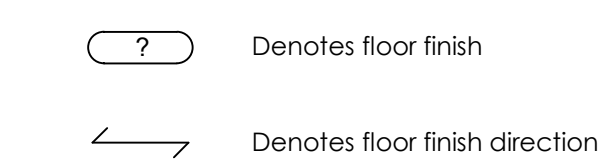
ENLARGED SUITE GENERAL NOTES

1. Unit floor plans are typical layout. Refer to building floor plans for orientation.
2. Dimensions are from stud to stud unless noted otherwise.
3. Coordinate architectural plans with all other drawings in the set to accommodate mechanical, plumbing and electrical openings and/or penetrations through walls and floors. Notify architect upon discovery of any conflicts.
4. See structural drawings for locations and extent of shear and loadbearing partitions.
5. All building services are to be run inside walls or through floor/ceiling assemblies. UL approved firestopping details are to be used at all penetrations through fire rated assemblies to maintain rating of wall and floor/ceiling assemblies.
6. All walls are to be Type S4 (Lower Level Only) or Type W4 (First Floor thru Fourth Floor) unless otherwise noted on the individual unit plans.
7. Any walls indicated to be 2 x 6 shall contain vents and sanitary stacks. Reference enlarged plumbing drawings for further details.
8. Provide sound attenuation insulation in public corridor walls between suites and in all tenant demising walls per wall legend on overall floor plan drawings.
9. Accessibility: ALL residential dwelling units on ALL floors to be TYPE B.
10. Accessible Dwelling Units per CBC & ANSI A117.1 requirements u.n.o. See overall floor plans for the location of (4) TYPE A Accessible Dwelling units throughout the building.
11. Reference details on sheet AB00A for requirements for TYPE A & B Dwelling Units. Reference door clearances on sheet AB00A for clearances required at doors.
12. Provide solid blocking in bathroom walls in all dwelling units on all floors for future grab bars. See blocking details, sheet AB00A.
13. See sheet AB00A Reach Ranges for information on shelving heights in Type A dwelling units, heights of electrical outlets and switches, thermostats and other accessible features.
14. All doors to be located 6" to rough opening from adjacent wall unless otherwise noted. Where applicable, doors are dimensioned to the centerline of the rough opening.

## FINISH GENERAL NOTES

1. Paint finishes u.n.o.:
  - Walls: eggshell
  - Ceilings: flat
  - HM Door/Frames: semi-gloss
  - Misc. Metal: semi-gloss
  - "E": epoxy eggshell
2. All painted walls to be PT-1 unless noted otherwise on drawings or in finish schedule.

## FINISH PLAN LEGEND













## SUITE DOOR SCHEDULE

- (AA) 2-10" Wood Door      (BB) Pair of 2-6" Wood Doors  
 (AA1) 2-0" Wood Door      (BB1) Pair of 2-0" Wood Doors  
 (AA2) 1'-6" Wood Door  
 (AA3) 2'-6" Wood Door  
 (AA4) 3'-0" Wood Door

NOTE:

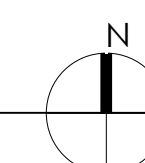
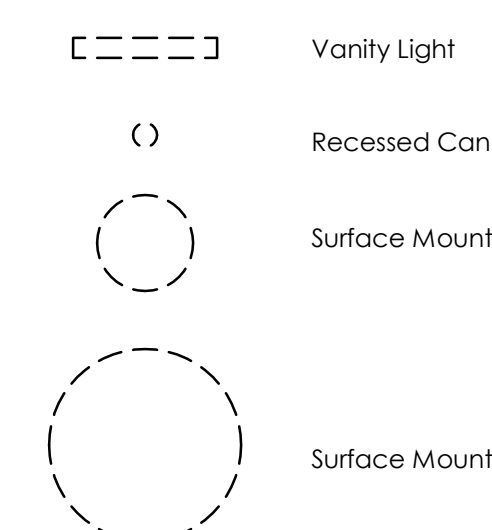
1. All cased openings within typical units to be 6'-8" high.
2. All doors within typical units to be solid core 6'-8" high doors.
3. Refer to sheet A810 for residential door elevations.
4. All doors within units to be painted PT-2. Suite entry doors to be stained to match unit entry surround.

## KEYED NOTES

- |  |   |
|--|---|
|  1 Vinyl mini blinds                      |  6 Toilet tissue holder                  |
|  2 Fixed laminate shelf with clothing rod |  7 24" towel bar                         |
|  3 Fixed laminate shelving (3 shelves)    |  8 Shower curtain rod                    |
|  4 Mirror                                 |  9 Robe hook                             |
|  5 Hand towel ring                        |  10 Fixed wireframe shelving (4 shelves) |

LIGHTING KEY

- NOTE:
1. All ceilings to be painted gypsum wall board at approx 8'-4" AFF.
  2. Locate fixtures in the approx. locations as shown on electrical plans, Fixtures to be centered in rooms unless specifically dimensioned on the electrical plans.
  3. 7'-8" gyp. soffit above kitchen upper cabinets, refer to plan for extent



Design Architect:  
**Bialosky Cleveland**  
6555 Carnegie Avenue, Suite 200  
Cleveland, Ohio 44103  
t. 216.752.8750

**Karam Senior Living  
DSCDO**  
77918 Detroit Avenue Cleveland, Ohio 44102

[illegible]UNIT PLANS - UNIT  
TYPE 6

Project Number	2002
Date	09/23/21
Drawn By	JB
Checked By	TF
Sheet No.:	A816
Scale	As indicated

PRELIMINARY -  
NOT FOR  
CONSTRUCTION

Civil Engineering:  
CT Consultants, Inc.  
8150 Sterling Ct  
Mentor, Ohio 44060  
t. 440.951.9000

MEP Engineering:  
Bialosky Cleveland  
6555 Carnegie Avenue, Suite 200  
Cleveland, Ohio 44103  
t. 216.752.8750

Structural Engineering:  
Barber & Hoffman, Inc.  
2217 E 9th Street, Suite 350  
Cleveland, Ohio 44103  
t. 216.875.0100

Design Architect:  
Bialosky Cleveland  
6555 Carnegie Avenue, Suite 200  
Cleveland, Ohio 44103  
t. 216.752.8750

Karam Senior Living  
DSCDO  
7918 Detroit Avenue Cleveland, Ohio 44102

UNIT TYPE MATRIX			
UNIT TYPE	QUANTITY	UNIT GSF	TOTAL GSF
TYPE 1 - STUDIO	3	526	1,578
TYPE 2 - STUDIO - NOT USED	-	-	-
TYPE 3 - STUDIO - ADA	1	561	561
TYPE 4 - 1 BEDROOM	23	639	14,697
TYPE 5 - 1 BEDROOM - ADA	4	639	2,556
TYPE 6 - 2 BEDROOM	8	945	7,560
TYPE 7 - 2 BEDROOM	4	987	3,948
TYPE 8 - 2 BEDROOM	6	973	5,838
TYPE 9 - 2 BEDROOM - ADA	2	1,104	2,028
STUDIO 1 BEDROOM 2 BEDROOM	4 27 20		
TOTAL	51		38,766
ACCESSIBLE UNITS All Type 3, 5 & 9 Units meet UFAS. Designated one Type 4 Unit on the Lower Level (#004) and one Type 1 Unit (#202) on the Second Floor as well as ALL Type 3, 5 & 9 Units to meet Accessible Communication Features (A/V) requirements.			

#### ENLARGED SUITE GENERAL NOTES

- Unit floor plans are typical layout. Refer to building floor plans for orientation.
- Dimensions are from stud to stud unless noted otherwise.
- Coordinate architectural plans with all other drawings in the set to accommodate mechanical, plumbing and electrical openings and/or penetrations through walls and floors. Notify architect upon discovery of any conflicts.
- See structural drawings for locations and extent of shear and loadbearing partitions.
- All building services are to be run inside walls or through floor/ceiling assemblies. UL approved firestopping details are to be used at all penetrations through fire rated assemblies to maintain rating of wall and floor/ceiling assemblies.
- All walls are Type S4 (Lower Level Only) or Type W4 (First Floor thru Fourth Floor) unless otherwise noted on the individual unit plans.
- Any walls indicated to be 2 x 6 shall contain vents and sanitary stacks. Reference enlarged plumbing drawings for further details.
- Provide sound attenuation insulation in public corridor walls between suites and in all tenant demising walls per wall legend on overall floor plan drawings.
- Accessibility: ALL residential dwelling units on ALL floors to be TYPE B.
- Accessible Dwelling Units per OBC & ANSI A117.1 requirements u.n.o. See overall floor plans for the location of [4] TYPE A Accessible Dwelling units throughout the buildings.
- Reference details on sheet A800A for requirements for TYPE A & B Dwelling Units. Reference door clearances on sheet A800A for clearances required at doors.
- Provide solid blocking in bathroom walls in all dwelling units on all floors for future grab bars. See blocking details, sheet A800A.
- See sheet A800A Reach Ranges for information on shelving heights in Type A dwelling units, heights of electrical outlets and switches, thermostats and other accessible features.
- All doors to be located 6" to rough opening from adjacent wall unless otherwise noted. Where applicable, doors are dimensioned to the centerline of the rough opening.

#### FINISH GENERAL NOTES

- Point finishes u.n.o.:  
Walls: eggshell  
Ceilings: flat  
HW Door/Frames: semi-gloss  
Misc. Metal: semi-gloss  
"E": epoxy eggshell
- All painted walls to be PT-1 unless noted otherwise on drawings or in finish schedule.

#### FINISH PLAN LEGEND

- 7 Denotes floor finish
- Denotes floor finish direction

#### SUITE DOOR SCHEDULE

- (AA) 2'-10" Wood Door (BB) Pair of 2'-6" Wood Doors  
(AA1) 2'-0" Wood Door (BB1) Pair of 2'-0" Wood Doors  
(AA2) 1'-6" Wood Door  
(AA3) 2'-6" Wood Door  
(AA4) 3'-0" Wood Door

NOTE:  
1. All closed openings within typical units to be 6'-8" high.  
2. All doors within typical units to be solid core 6'-8" high doors.  
3. Refer to sheet A810 for residential door elevations.  
4. All doors within units to be painted PT-2. Suite entry doors to be stained to match unit entry surround.

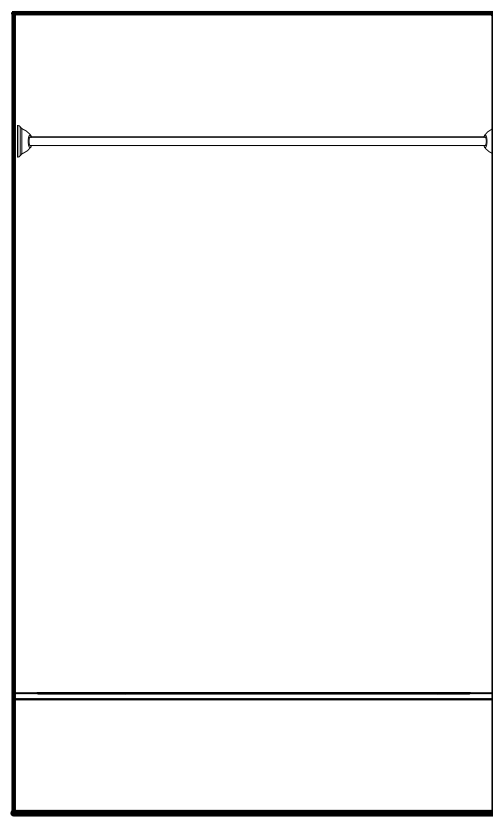
#### KEYED NOTES

- (1) Vinyl mini blinds (6) Toilet tissue holder  
(2) Fixed laminate shelf with clothing rod (7) 24" towel bar  
(3) Fixed laminate shelving (3 shelves) (8) Shower curtain rod  
(4) Mirror (9) Robe hook  
(5) Hand towel ring (10) Fixed wireframe shelving (4 shelves)

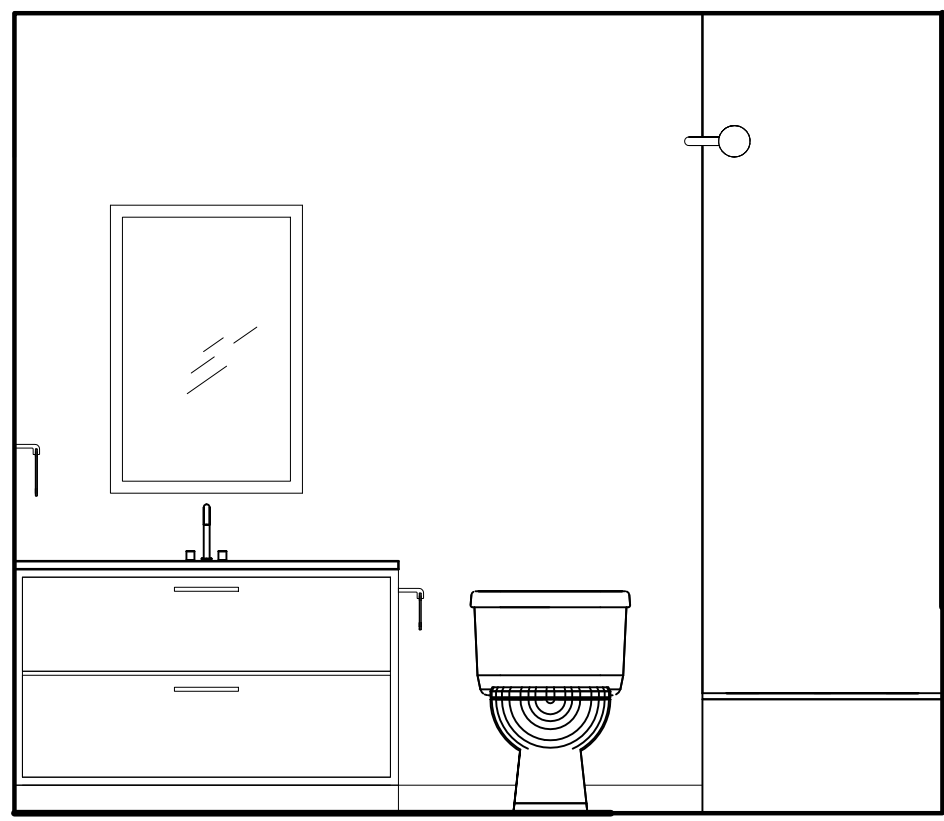
#### LIGHTING KEY

- NOTE:  
1. All ceilings to be painted gypsum wall board at approx 8'-4" AFF.  
2. Locate fixtures in the approx. locations as shown on electrical plans. Fixtures to be centered in rooms unless specifically dimensioned on the electrical plans.  
3. 7'-8" gyp. soffit above kitchen upper cabinets, refer to plan for extent

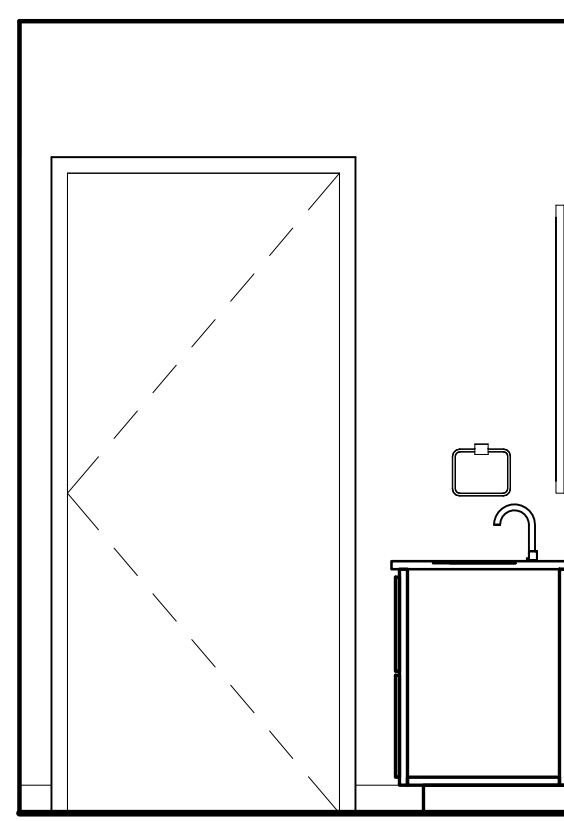
- [---] Vanity Light  
( ) Recessed Can  
( ) Surface Mount  
( ) Surface Mount



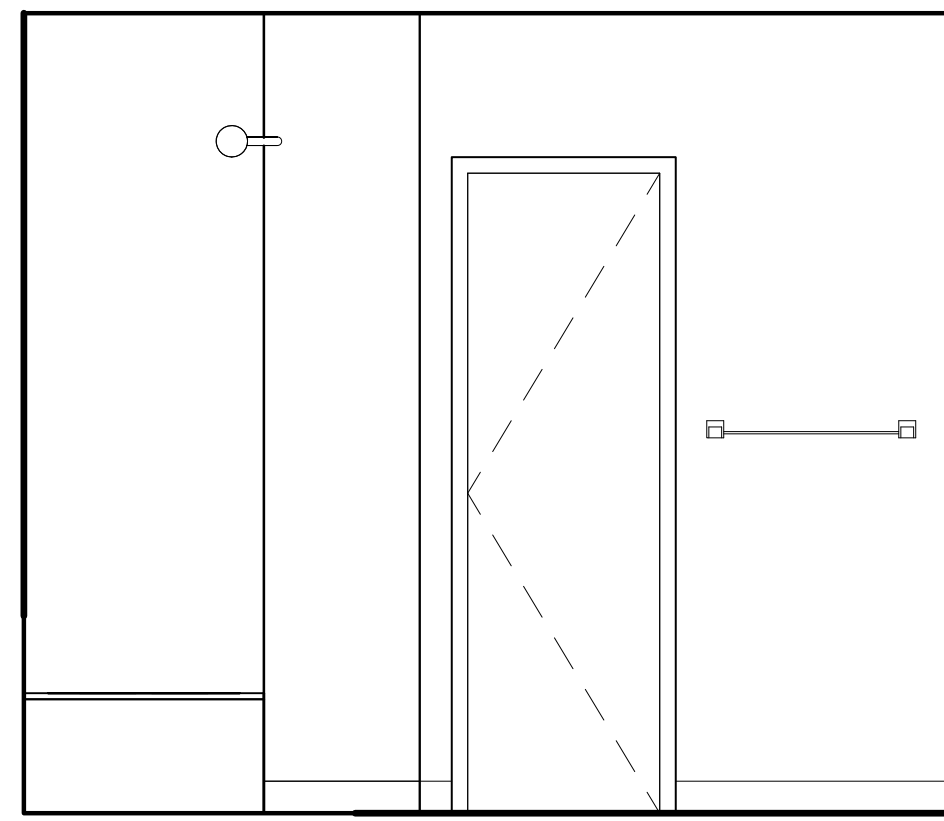
7 RESTROOM ELEVATION - WEST  
A817 1/2" = 1'-0"



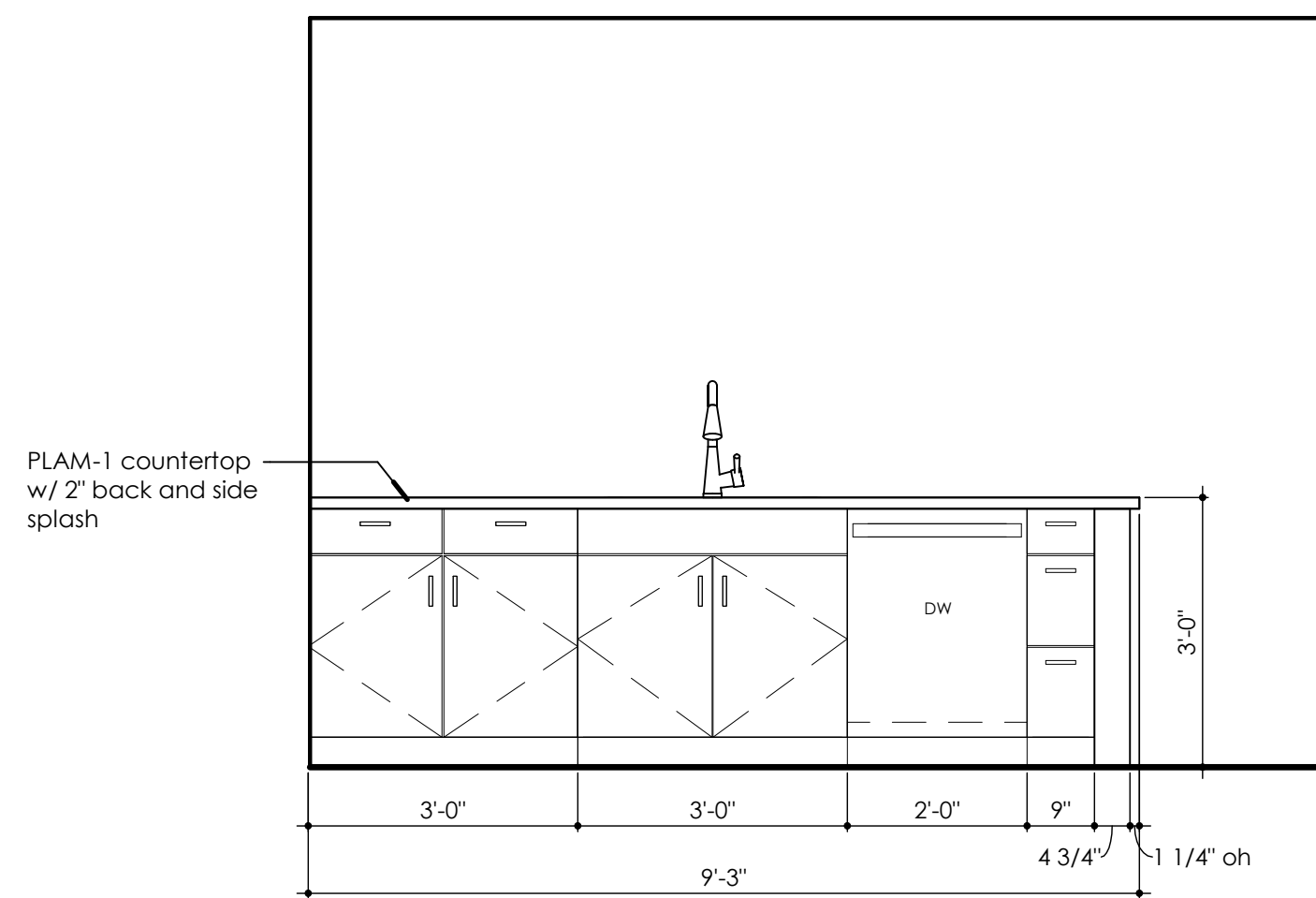
6 RESTROOM ELEVATION - SOUTH  
A817 1/2" = 1'-0"



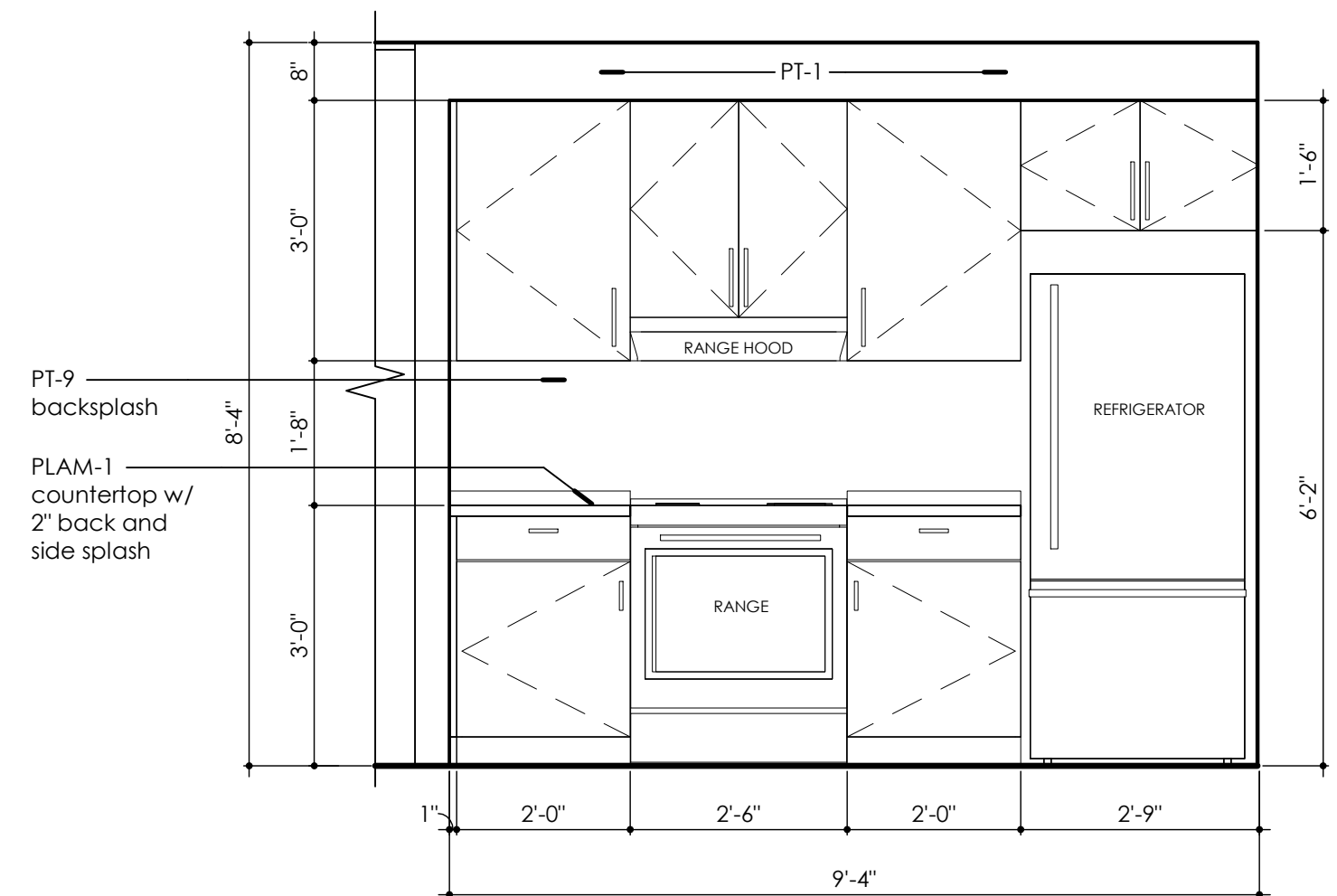
5 RESTROOM ELEVATION - EAST  
A817 1/2" = 1'-0"



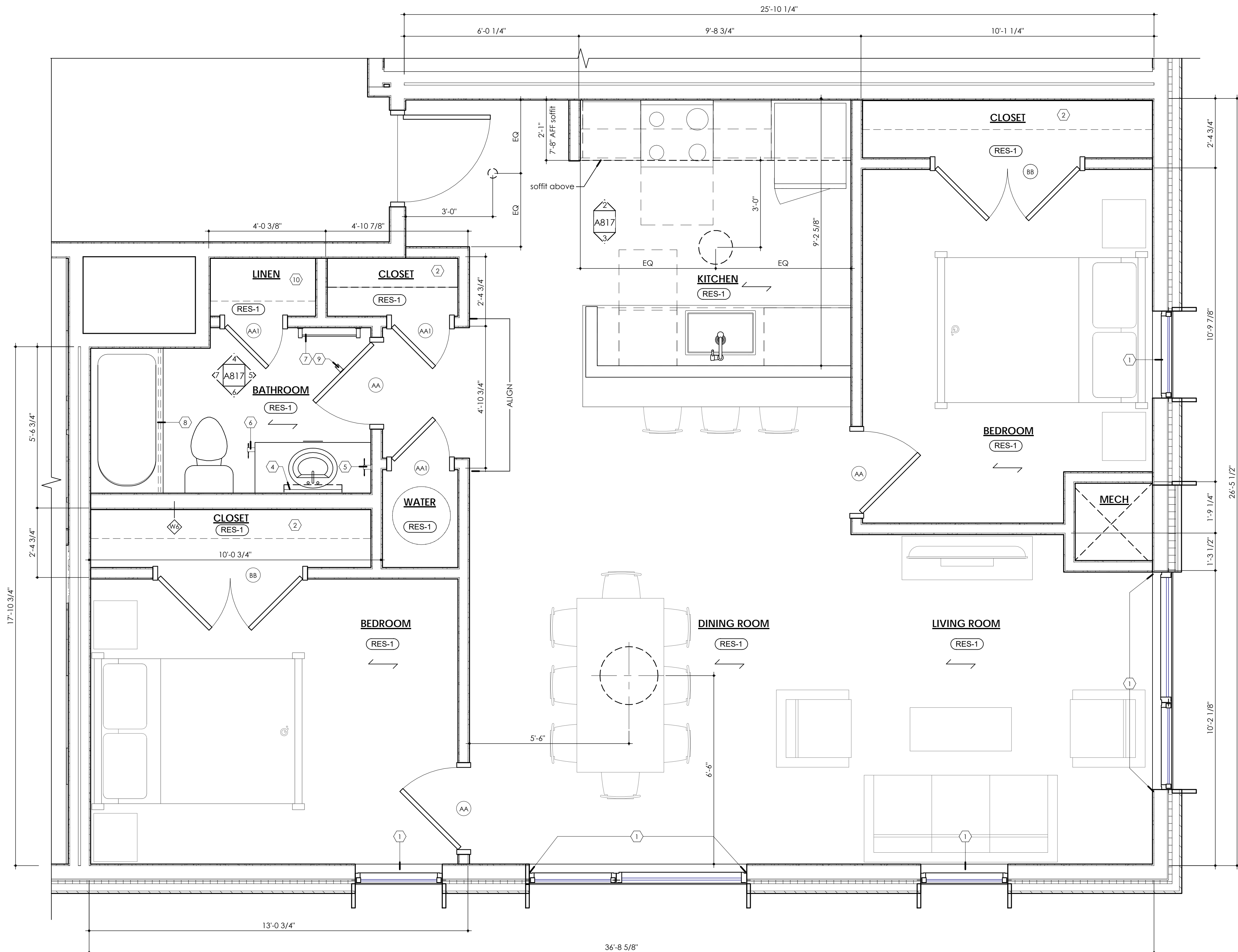
4 RESTROOM ELEVATION - NORTH  
A817 1/2" = 1'-0"



3 KITCHEN ELEVATION  
A817 1/2" = 1'-0"



2 KITCHEN ELEVATION  
A817 1/2" = 1'-0"



1 UNIT TYPE 7 FLOOR PLAN  
A817 1/2" = 1'-0"

#### UNIT PLANS - UNIT TYPE 7

Project Number	2002
Date	09/23/21
Drawn By	JB
Checked By	TF
Sheet No.:	A817
Scale	As indicated

PRELIMINARY -  
NOT FOR  
CONSTRUCTION

Civil Engineering:  
**CT Consultants, Inc.**  
8150 Sterling Ct  
Mentor, Ohio 44060  
1, 440.951.9900

MEP Engineering:  
**Bialosky Cleveland**  
6555 Carnegie Avenue, Suite 200  
Cleveland, Ohio 44103  
1, 216.752.8750

Structural Engineering:  
**Barber & Hoffman, Inc.**  
1717 E 9th Street, Suite 350  
Cleveland, Ohio 44103  
1, 216.875.0100

Design Architect:  
**Bialosky Cleveland**  
6555 Carnegie Avenue, Suite 200  
Cleveland, Ohio 44103  
1, 216.752.8750

**Karam Senior Living  
DSCDO**  
7918 Detroit Avenue Cleveland, Ohio 44102

[illegible]UNIT PLANS - UNIT  
TYPE 8

Project Number	2002
Date	09/23/21
Drawn By	JB
Checked By	TF
Sheet No.:	A818
Scale	As indicated

UNIT TYPE MATRIX			
UNIT TYPE	QUANTITY	UNIT GSF	TOTAL GSF
TYPE 1 - STUDIO	3	526	1,577
TYPE 2 - STUDIO - NOT USED	-	-	-
TYPE 3 - STUDIO - ADA	1	561	561
TYPE 4 - 1 BEDROOM	23	639	14,697
TYPE 5 - 1 BEDROOM - ADA	4	639	2,556
TYPE 6 - 2 BEDROOM	8	945	7,560
TYPE 7 - 2 BEDROOM	4	987	3,948
TYPE 8 - 2 BEDROOM	6	973	5,838
TYPE 9 - 2 BEDROOM - ADA	2	1,104	2,202
STUDIO	4		
1 BEDROOM	27		
2 BEDROOM	20		
<b>TOTAL</b>	<b>51</b>		<b>38,766</b>
<b>ACCESSIBLE UNITS</b>			
All Type 3, 5 & 9 Units meet UFAS.			
Designated one Type 4 Unit on the Lower Level (#006) and one Type 1 Unit (#022) on the Second Floor as well as All Type 3, 5 & 9 Units to meet Accessible Communication Features (AVJ) requirements.			



## ENLARGED SUITE GENERAL NOTES

1. Unit floor plans are typical layout. Refer to building floor plans for orientation.
2. Dimensions are from stud to stud unless noted otherwise.
3. Coordinate architectural plans with all other drawings in the set to accommodate mechanical, plumbing and electrical openings and/or penetrations through walls and floors. Notify architect upon discovery of any conflicts.
4. See structural drawings for locations and extent of shear and loadbearing partitions.
5. All building services are to be run inside walls or through floor/ceiling assemblies. UL approved firestopping details are to be used at all penetrations through fire rated assemblies to maintain rating of wall and floor/ceiling assemblies.
6. All walls are Type 34 (Lower Level Only) or Type W4 (First Floor thru Fourth Floor) unless otherwise noted on the individual unit plans.
7. Any walls indicated to be 2 x 6 shall contain vents and sanitary stacks. Reference enlarged plumbing drawings for further details.
8. Provide sound attenuation insulation in public corridor walls between suites and in all tenant demising walls per wall legend on overall floor plan drawings.
9. Accessibility: ALL residential dwelling units on ALL floors to be TYPE B.
10. Accessible Dwelling Units per CBC & ANSI A117.1 requirements u.n.o. See overall floor plans for the location of (4) Type A Accessible dwelling units throughout the buildings.
11. Reference details on sheet AB00A for requirements for TYPE A & B Dwelling Units. Reference door clearances on sheet AB00A for clearances required at doors.
12. Provide solid blocking in bathroom walls in all dwelling units on all floors for future grab bars. See blocking details, sheet AB00A.
13. See sheet AB00A Reach Ranges for information on shelving heights in Type A dwelling units, heights of electrical outlets and switches, thermostats and other accessible features.
14. All doors to be located 6" to rough opening from adjacent wall unless otherwise noted. Where applicable, doors are dimensioned to the centerline of the rough opening.

## FINISH GENERAL NOTES

1. Paint finishes u.n.o.:
  - Walls: eggshell
  - Ceilings: flat
  - HM Door/Frames: semi-gloss
  - Misc. Metal: semi-gloss
  - "E": epoxy eggshell
2. All painted walls to be PT-1 unless noted otherwise on drawings or in finish schedule.

### FINISH PLAN LEGEND

-  Denotes floor finish
-  Denotes floor finish direction

## SUITE DOOR SCHEDULE

- |       |                  |       |                          |
|-------|------------------|-------|--------------------------|
| (AA)  | 2'-10" Wood Door | (BB)  | Pair of 2'-6" Wood Doors |
| (AA1) | 2'-0" Wood Door  | (BB1) | Pair of 2'-0" Wood Doors |
| (AA2) | 1'-6" Wood Door  |       |                          |
| (AA3) | 2'-6" Wood Door  |       |                          |
| (AA4) | 3'-0" Wood Door  |       |                          |

NOTE:

1. All cased openings within typical units to be 6'-8" high.
2. All doors within typical units to be solid core 6'-8" high doors.
3. Refer to sheet A810 for residential door elevations.
4. All doors within units to be painted PT-2. Suite entry doors to be stained to match unit entry surround.





## KEYED NOTES

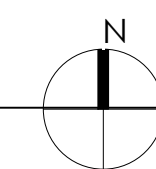
- |  |   |
|--|---|
| 1 Vinyl mini blinds                      | 6 Toilet tissue holder                  |
| 2 Fixed laminate shelf with clothing rod | 7 24" towel bar                         |
| 3 Fixed laminate shelving (3 shelves)    | 8 Shower curtain rod                    |
| 4 Mirror                                 | 9 Robe hook                             |
| 5 Hand towel ring                        | 10 Fixed wireframe shelving (4 shelves) |

### LIGHTING KEY

NOTE:

1. All ceilings to be painted gypsum wall board at approx 8'-4" AFF.
2. Locate fixtures in the approx. locations as shown on electrical plans. Fixtures to be centered in rooms unless specifically dimensioned on the electrical plans.
3. 7'-8" gyp. soffit above kitchen upper cabinets, refer to plan for extent

- |   |               |
|---|---------------|
|  | Vanity Light  |
|  | Recessed Can  |
|  | Surface Mount |
|  | Surface Mount |



PRELIMINARY -  
NOT FOR  
CONSTRUCTION

Civil Engineering:  
CT Consultants, Inc.  
8150 Sterling Ct  
Mentor, Ohio 44060  
t. 440.951.9000

MEP Engineering:  
Bialosky Cleveland  
6555 Carnegie Avenue, Suite 200  
Cleveland, Ohio 44103  
t. 216.752.8750

Structural Engineering:  
Barber & Hoffman, Inc.  
2217 E 9th Street, Suite 350  
Cleveland, Ohio 44103  
t. 216.875.0100

Design Architect:  
Bialosky Cleveland  
6555 Carnegie Avenue, Suite 200  
Cleveland, Ohio 44103  
t. 216.752.8750

Karam Senior Living  
DSCDO  
7918 Detroit Avenue Cleveland, Ohio 44102

UNIT TYPE MATRIX			
UNIT TYPE	QUANTITY	UNIT GSF	TOTAL GSF
TYPE 1 - STUDIO	3	526	1,578
TYPE 2 - STUDIO - NOT USED	-	-	-
TYPE 3 - STUDIO - ADA	1	561	561
TYPE 4 - 1 BEDROOM	23	639	14,697
TYPE 5 - 1 BEDROOM - ADA	4	639	2,556
TYPE 6 - 2 BEDROOM	8	945	7,560
TYPE 7 - 2 BEDROOM	4	987	3,948
TYPE 8 - 2 BEDROOM	6	973	5,838
TYPE 9 - 2 BEDROOM - ADA	2	1,104	2,028
STUDIO 1 BEDROOM 2 BEDROOM	4 27 20		
TOTAL	51		38,766
ACCESSIBLE UNITS			
All Type 3, 5 & 9 Units meet UFAS. Designated one Type 4 Unit on the Lower Level (#004) and one Type 1 Unit (#202) on the Second Floor as well as ALL Type 3, 5 & 9 Units to meet Accessible Communication Features (A/V) requirements.			

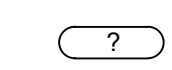
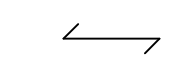
#### ENLARGED SUITE GENERAL NOTES

- Unit floor plans are typical layout. Refer to building floor plans for orientation.
- Dimensions are from stud to stud unless noted otherwise.
- Coordinate architectural plans with all other drawings in the set to accommodate mechanical, plumbing and electrical openings and/or penetrations through walls and floors. Notify architect upon discovery of any conflicts.
- See structural drawings for locations and extent of shear and loadbearing partitions.
- All building services are to be run inside walls or through floor/ceiling assemblies. UL approved firestopping details are to be used at all penetrations through fire rated assemblies to maintain rating of wall and floor/ceiling assemblies.
- All walls are Type S4 (Lower Level Only) or Type W4 (First Floor thru Fourth Floor) unless otherwise noted on the individual unit plans.
- Any walls indicated to be 2 x 6 shall contain vents and sanitary stacks. Reference enlarged plumbing drawings for further details.
- Provide sound attenuation insulation in public corridor walls between suites and in all tenant demising walls per wall legend on overall floor plan drawings.
- Accessibility: ALL residential dwelling units on ALL floors to be TYPE B.
- Accessible Dwelling Units per OBC & ANSI A117.1 requirements u.n.o. See overall floor plans for the location of [4] TYPE A Accessible Dwelling units throughout the buildings.
- Reference details on sheet A800A for requirements for TYPE A & B Dwelling Units. Reference door clearances on sheet A800A for clearances required at doors.
- Provide solid blocking in bathroom walls in all dwelling units on all floors for future grab bars. See blocking details, sheet A800A.
- See sheet A800A Reach Ranges for information on shelving heights in Type A dwelling units, heights of electrical outlets and switches, thermostats and other accessible features.
- All doors to be located 6" to rough opening from adjacent wall unless otherwise noted. Where applicable, doors are dimensioned to the centerline of the rough opening.

#### FINISH GENERAL NOTES

- Paint finishes u.n.o.:  
Walls: eggshell  
Ceilings: flat  
HW Door/Frames: semi-gloss  
Misc. Metal: semi-gloss  
"E": epoxy eggshell
- All painted walls to be PT-1 unless noted otherwise on drawings or in finish schedule.

#### FINISH PLAN LEGEND

-  Denotes floor finish
-  Denotes floor finish direction

#### SUITE DOOR SCHEDULE

- (AA) 2'-10" Wood Door  
(AA1) 2'-0" Wood Door  
(AA2) 1'-6" Wood Door  
(AA3) 2'-6" Wood Door  
(AA4) 3'-0" Wood Door
- (BB) Pair of 2'-6" Wood Doors  
(BB1) Pair of 2'-0" Wood Doors

#### NOTE:

- All closed openings within typical units to be 6'-8" high.
- All doors within typical units to be solid core 6'-8" high doors.
- Refer to sheet A810 for residential door elevations.
- All doors within units to be painted PT-2. Suite entry doors to be stained to match unit entry surround.

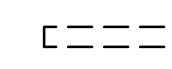
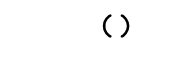

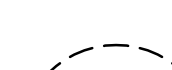
#### KEYED NOTES

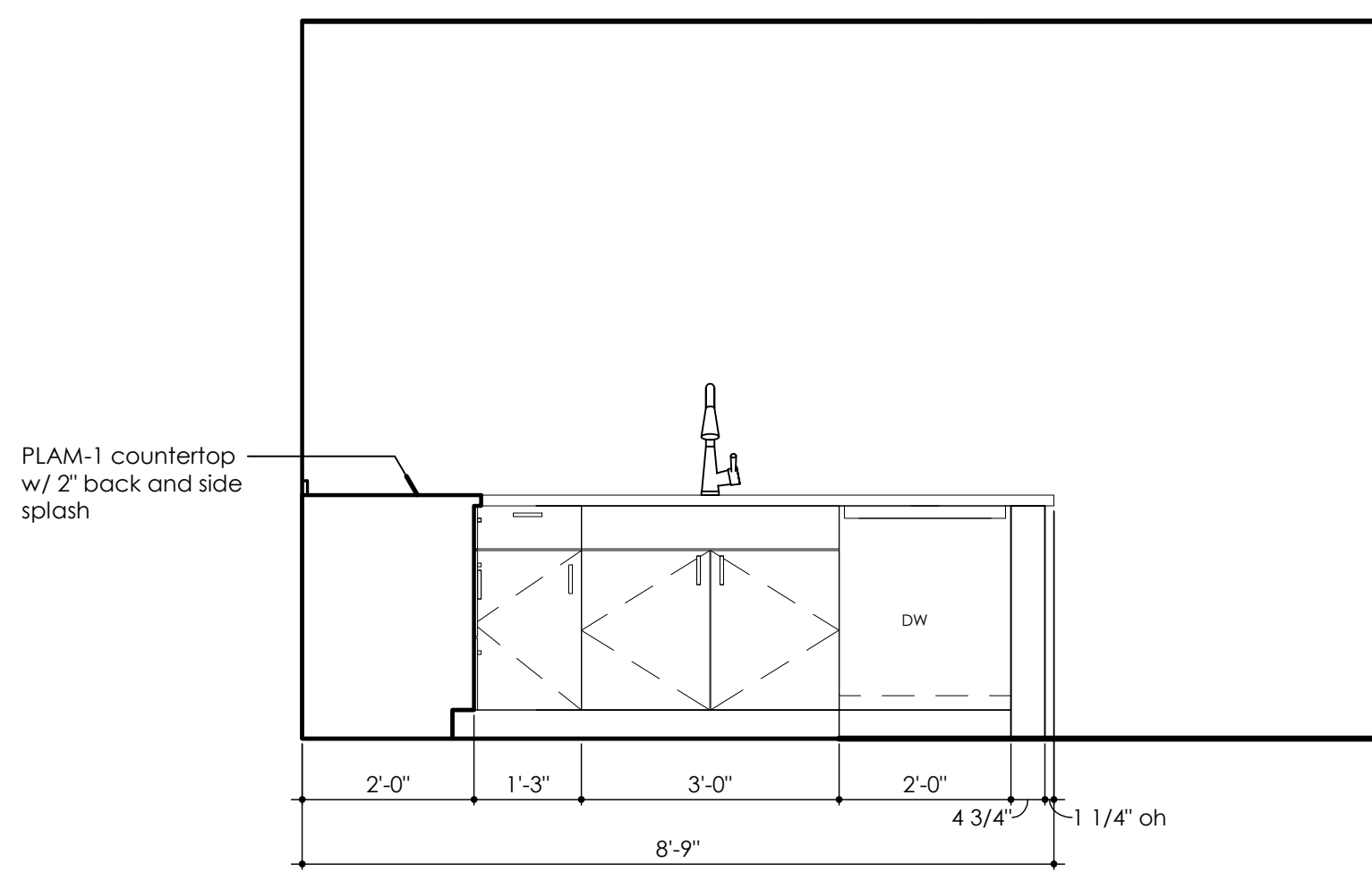
- (1) Vinyl mini blinds  
(2) Fixed laminate shelf with clothing rod  
(3) Fixed laminate shelving (3 shelves)  
(4) Mirror  
(5) Hand towel ring  
(6) Toilet tissue holder  
(7) 24" towel bar  
(8) Shower curtain rod  
(9) Robe hook  
(10) Fixed wireframe shelving (4 shelves)

#### LIGHTING KEY

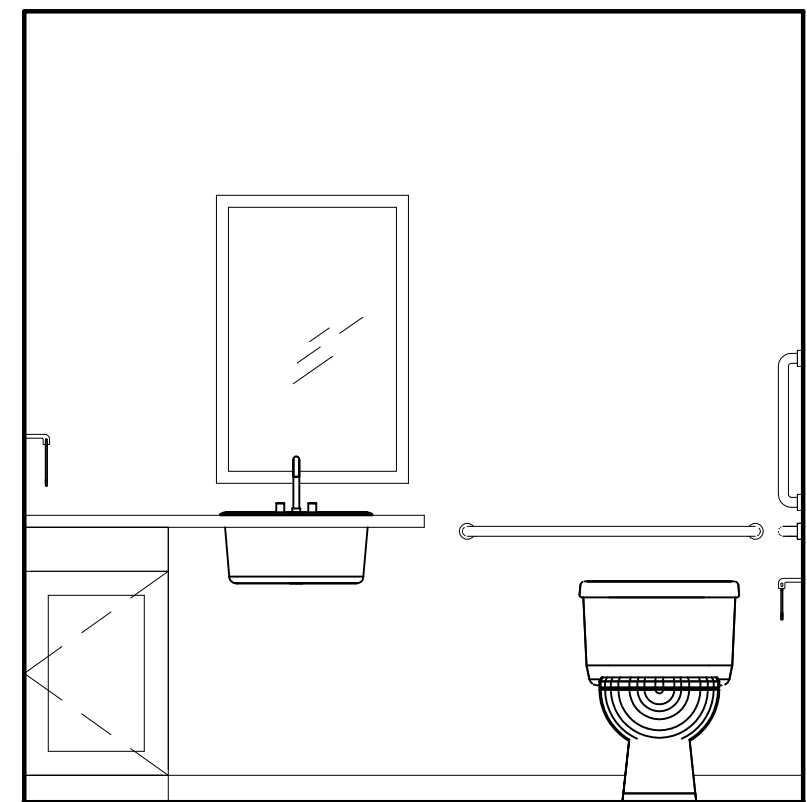
#### NOTE:

- All ceilings to be painted gypsum wall board at approx 8'-4" AFF.
- Locate fixtures in the approx. locations as shown on electrical plans. Fixtures to be centered in rooms unless specifically dimensioned on the electrical plans.
- 7'-8" gyp. soffit above kitchen upper cabinets, refer to plan for extent

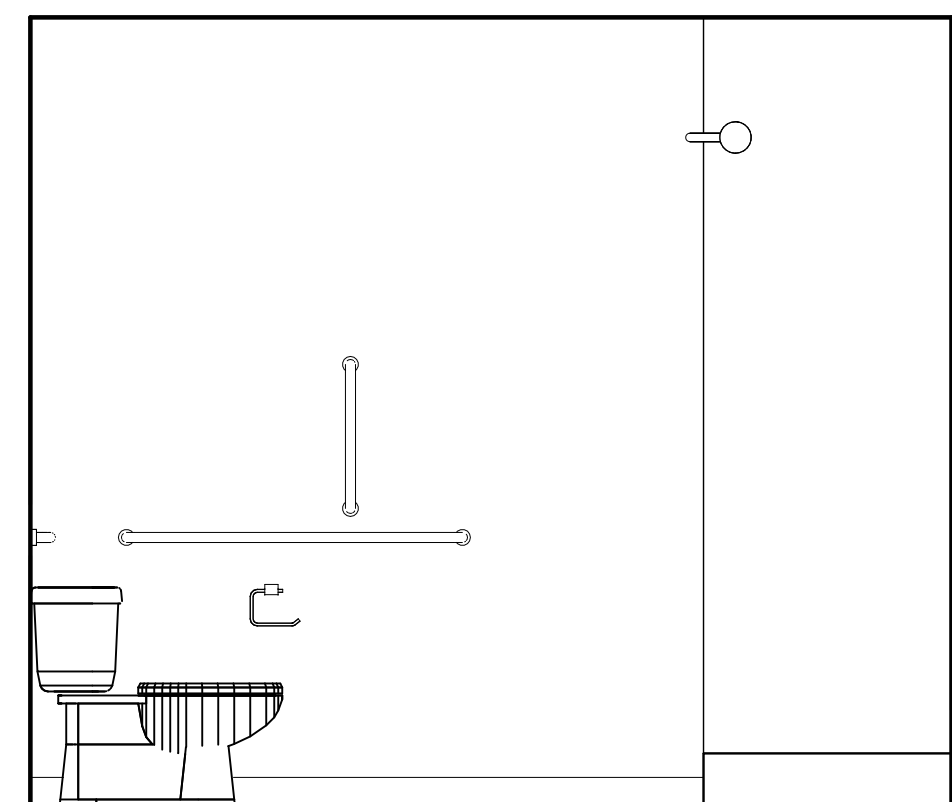
-  Vanity Light
-  Recessed Can
-  Surface Mount
-  Surface Mount



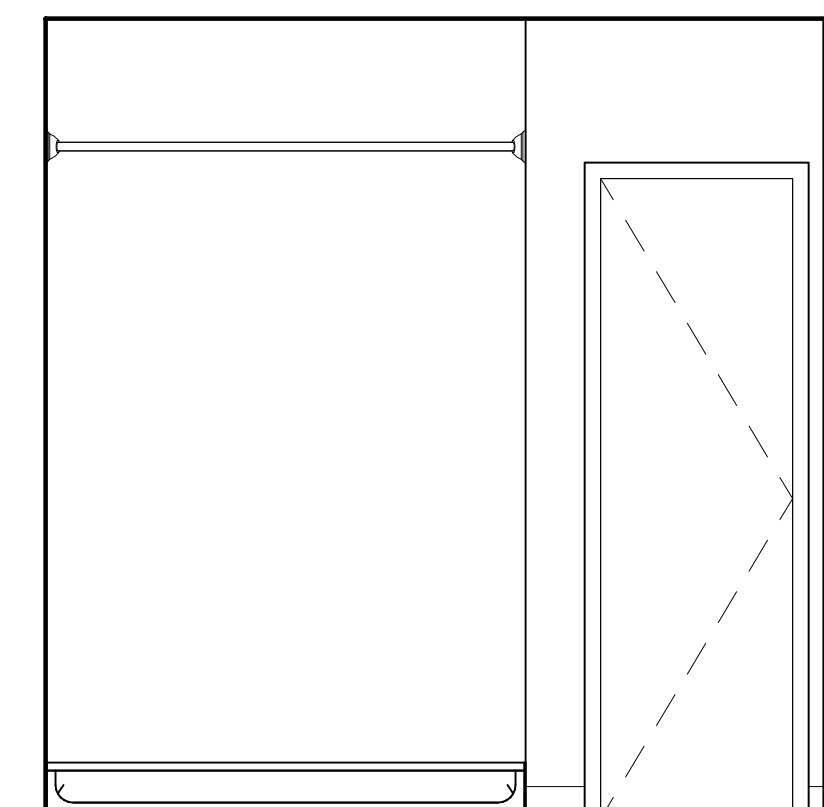
8 KITCHEN ELEVATION  
1/2" = 1'-0"



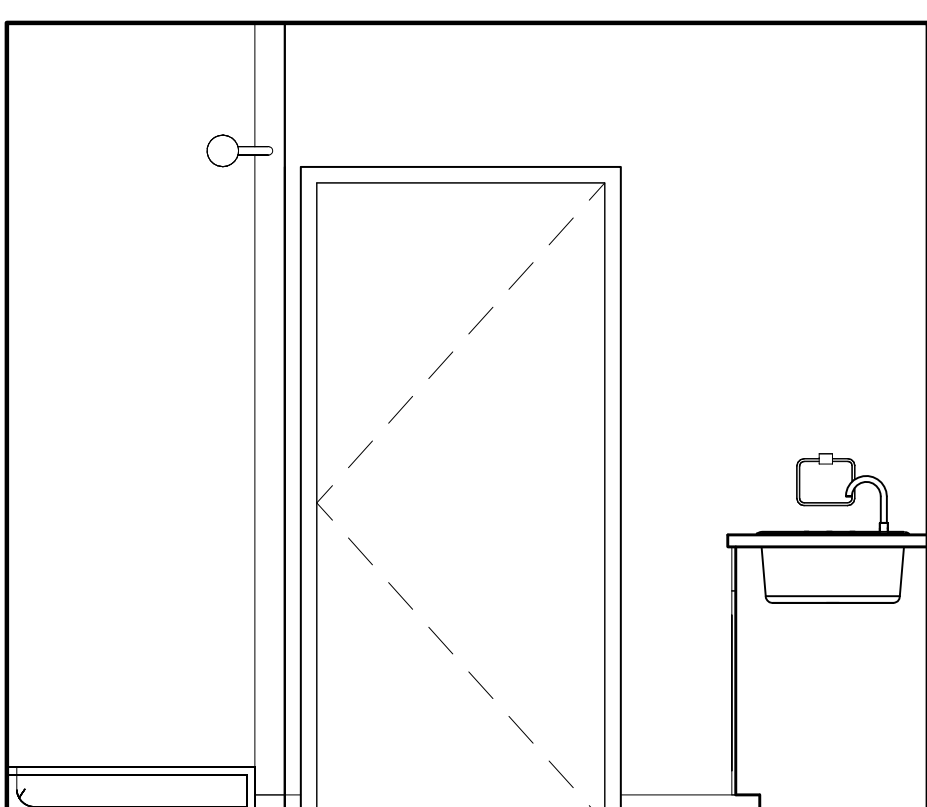
5 RESTROOM ELEVATION - NORTH  
1/2" = 1'-0"



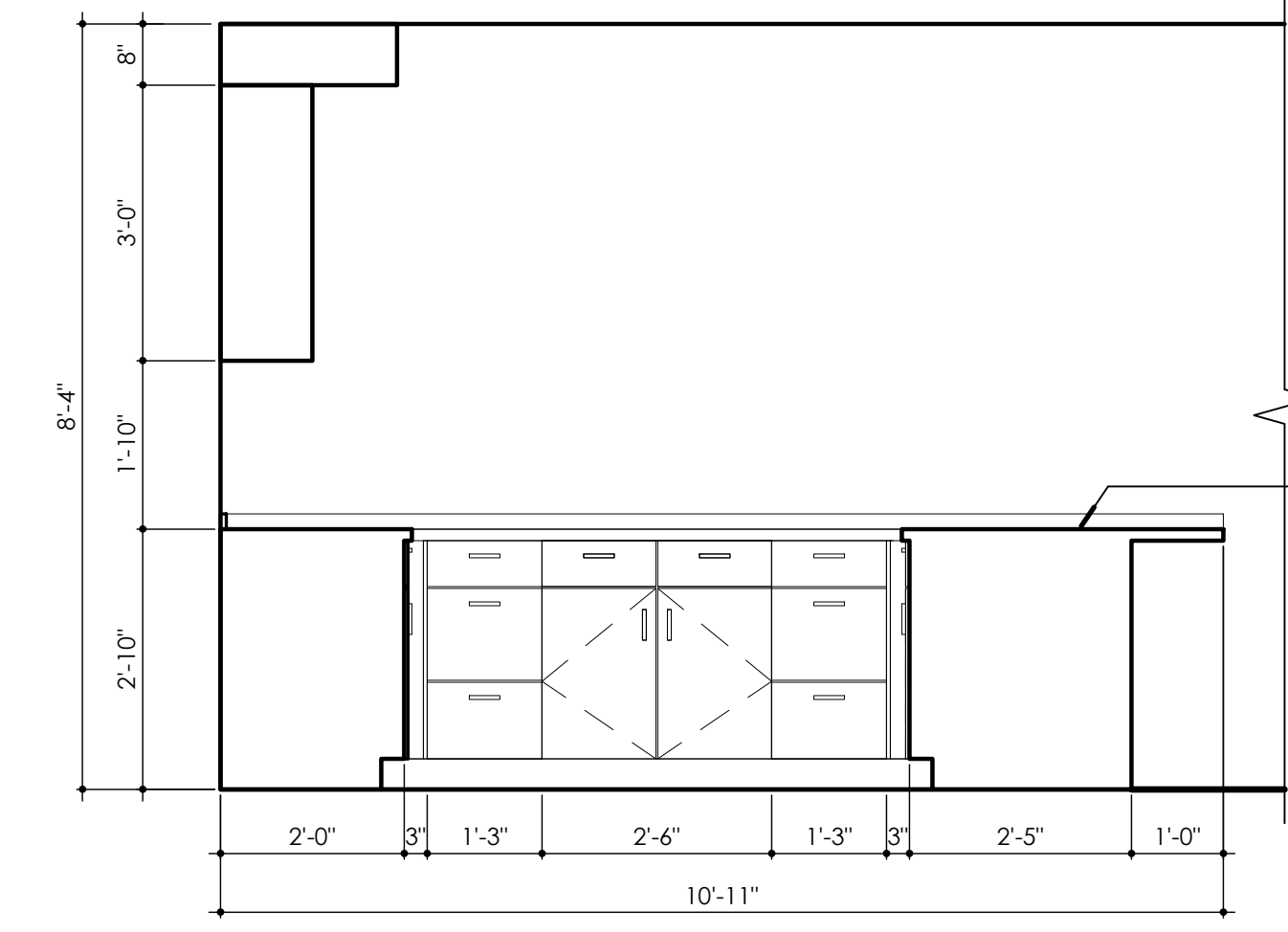
4 RESTROOM ELEVATION - WEST  
1/2" = 1'-0"



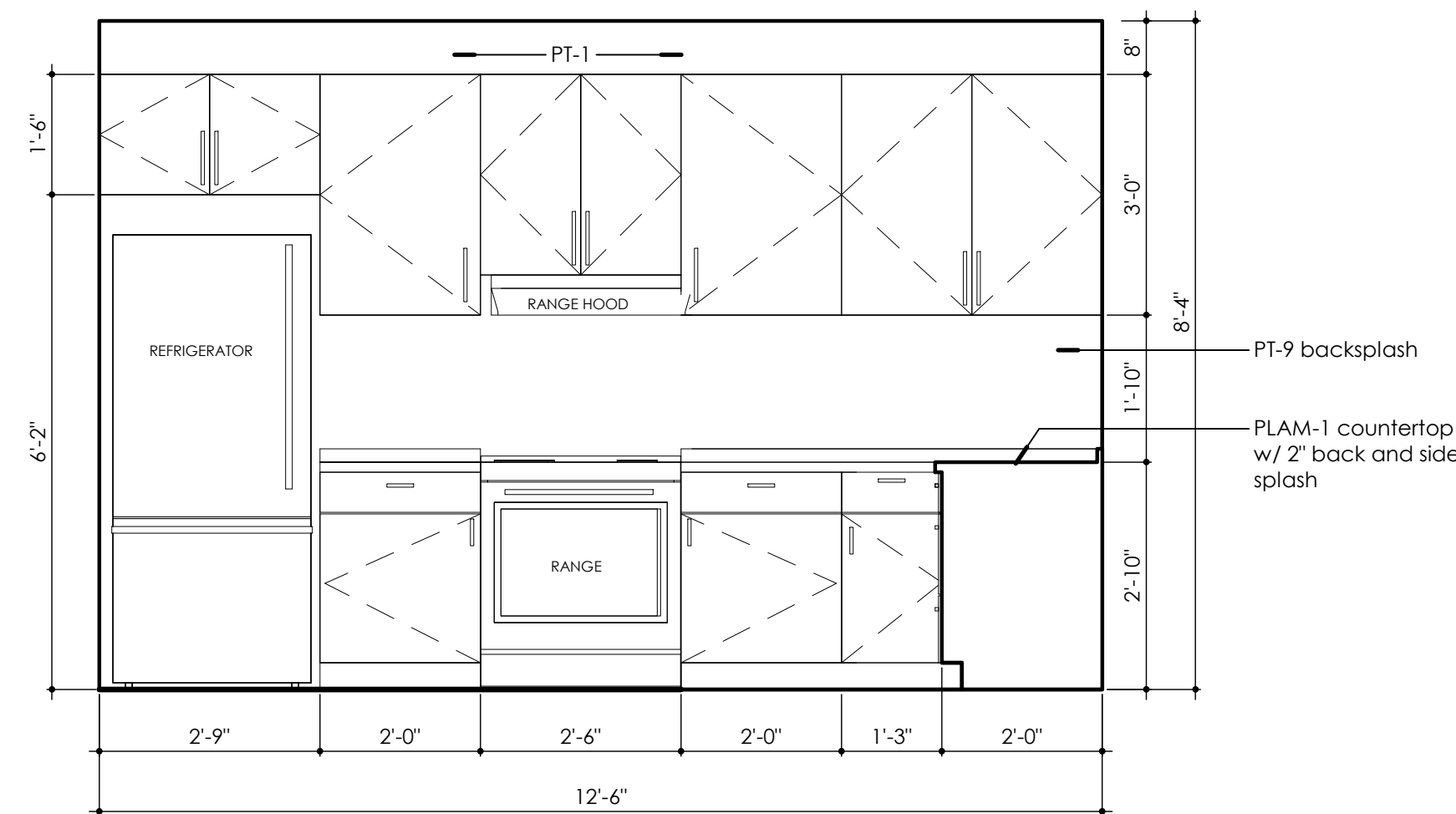
3 RESTROOM ELEVATION - SOUTH  
1/2" = 1'-0"



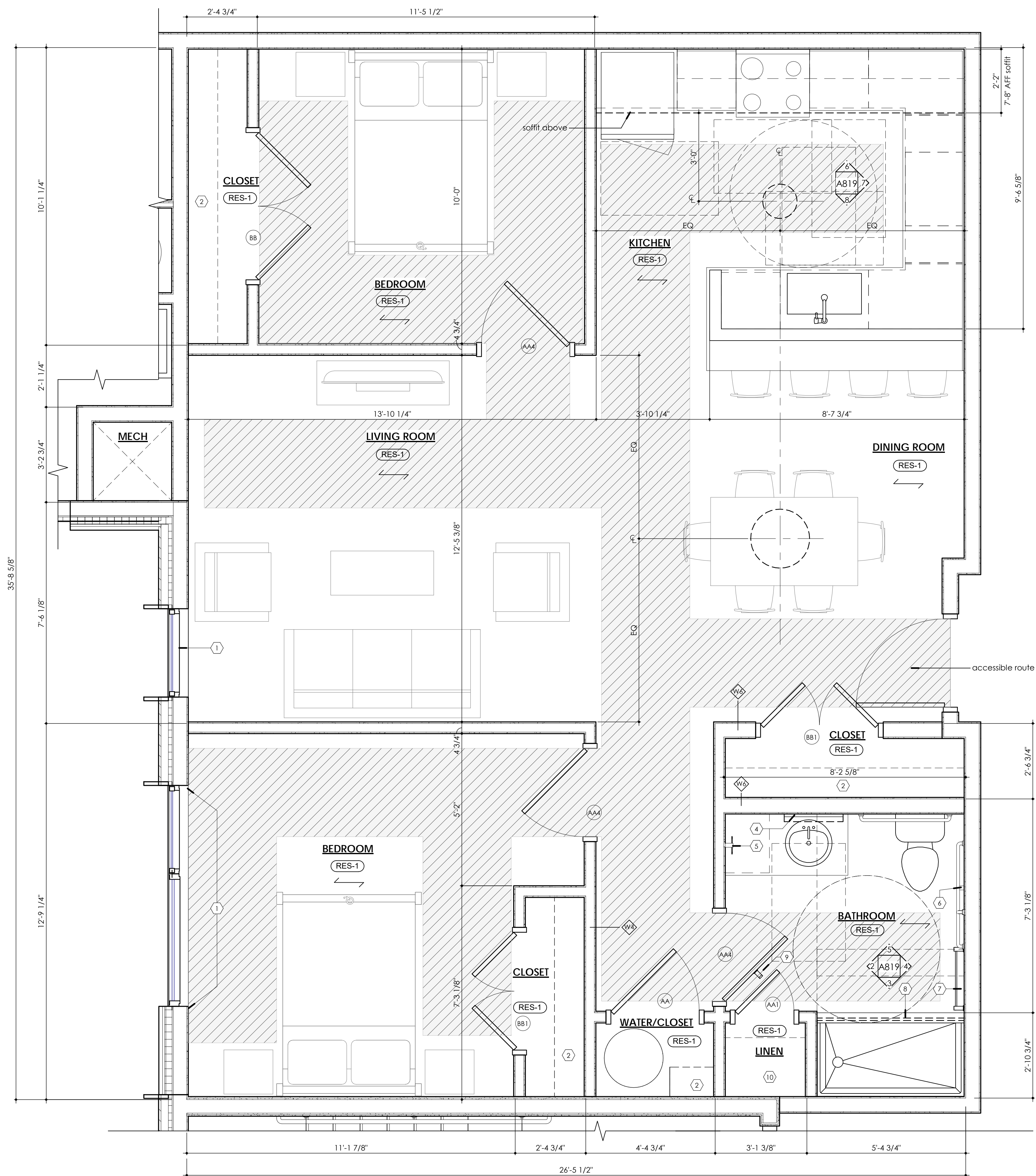
2 RESTROOM ELEVATION - WEST  
1/2" = 1'-0"



7 KITCHEN ELEVATION  
1/2" = 1'-0"



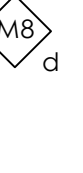
6 KITCHEN ELEVATION  
1/2" = 1'-0"



1 UNIT TYPE 9 FLOOR PLAN  
1/2" = 1'-0"  
ADA & SENSORY  
QUANTITY: 2  
UNIT NUMBER: 313, 413

#### UNIT PLANS - UNIT TYPE 9 - ACCESSIBLE

Project Number	2002
Date	09/23/21
Drawn By	JB
Checked By	TF
Sheet No.:	A819
Scale	As indicated

$$1\frac{1}{2}'' = 1'-0''$$


## WALL KEY TAG



b = add x1 additional layer of 5/8" GWB on **both** sides of stud or furring.  
c = add x1 layer of 1/2" resilient channel on **one** side of stud or masonry.  
d = add x1 layer of 1 1/2" hat channel on **one** side of stud or masonry.  
e = add x1 layer of 1 1/2" hat channel on **both** sides of stud or masonry.  
f = eliminate sound attenuation blankets.  
g = eliminate hat channel and GWB.

1. Provide moisture resistant gypsum board at all wet wall locations.
2. All restroom walls indicated to have gypsum board shall be moisture resistant.
3. Provide backer board behind all wet wall locations.
4. Verify stud spacing with structural drawings.
5. Refer to Life Safety Plans for partition railing requirements.
6. Provide firestop assemblies at all penetrations through fire-rated assemblies.
7. Refer to UL design listing for full requirements. Materials and notes listed are descriptive only.
8. Acoustical sealant typical at top and bottom of gwb.

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Cleveland, Ohio 44103  
t. 216.875.0100

Design Architect:  
**Bialosky Cleveland**  
6555 Carnegie Avenue, Suite 200  
Cleveland, Ohio 44103  
t. 216.752.8750

7918 Detroit Avenue Cleveland, Ohio 44102

## WALL TYPES LEGEND & DETAILS

# A900

Scale  $1\frac{1}{2}'' = 1'-0''$

1.	All exit doors shall operate in the direction of egress travel, without the use of keys or special knowledge.	5.	Door thresholds to be provided at all exterior doors.
2.	All doors shall have a minimum clear opening width of 32".	6.	All glass lifts to be laminated IGU's unless noted otherwise - see specifications.
3.	All door latches shall be equipped with lever-type handles or panic bars - see specs. Door opening hardware shall be mounted between 34" and 48" above finish floor.	7.	Floor transition strips to be provided at all floor material transitions per A504.
4.	Door levels at each side of all doors shall be clear and level. Maximum threshold height shall be 1/2" unless noted otherwise.	8.	All existing HM doors and frames to be to be painted PT-X, unless noted otherwise.
		9.	All new HM doors and frames to be painted PT-X, unless noted otherwise.

IG-1	INSULATED CLEAR
FG-45	FIRE RATED 45 MIN
FG-90	FIRE RATED 90 MIN
FG-120	FIRE RATED 120 MIN
GL-1	CLEAR MONOLITHIC
L	LAMINATED GLASS

4" typ  
u.n.o.

— scheduled door and frame

— scheduled wall

DOOR SCHEDULE - UNITS																		
Door										Frame					Fire Rtg.	Hdwr. Set	Comments	No.
No.	Type	Door Pair	Width	Height	Thk.	Mat.	Finish	Type	Mat.	Finish	Jamb Detail	Head Detail						
Unit Type 1																		
1-01	AA	SGL	2'-10"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				1-01	
1-02	AA1	SGL	2'-0"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				1-02	
1-03	BB1	PAIR	4'-0"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				1-03	
Unit Type 3																		
3-01	AA	SGL	3'-0"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				3-01	
3-02	AA2	SGL	1'-6"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				3-02	
3-03	AA1	SGL	2'-0"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				3-03	
3-04	BB1	PAIR	4'-0"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				3-04	
Unit Type 4																		
4-01	AA	SGL	2'-10"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				4-01	
4-02	AA1	SGL	2'-0"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				4-02	
4-03	AA1	SGL	2'-10"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				4-03	
4-04	AA2	SGL	1'-6"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				4-04	
4-05	BB1	PAIR	4'-0"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				4-05	
Unit Type 5																		
5-01	AA4	SGL	3'-0"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				5-01	
5-02	AA4	SGL	3'-0"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				5-02	
5-03	AA4	SGL	3'-0"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				5-03	
5-04	AA1	SGL	2'-0"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				5-04	
5-05	AA1	SGL	2'-0"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				5-05	
Unit Type 6																		
6-01	AA	SGL	2'-10"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				6-01	
6-02	AA	SGL	2'-10"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				6-02	
6-03	AA	SGL	2'-10"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				6-03	
6-04	AA	SGL	2'-10"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				6-04	
6-05	AA1	SGL	2'-0"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				6-05	
6-06	BB1	PAIR	4'-0"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				6-06	
0607	BB1	PAIR	4'-0"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				0607	
Unit Type 7																		
7-01	AA	SGL	2'-10"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				7-01	
7-02	AA	SGL	2'-10"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				7-02	
7-03	AA	SGL	2'-10"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				7-03	
7-04	AA1	SGL	2'-0"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				7-04	
7-05	AA1	SGL	2'-0"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				7-05	
7-06	AA1	SGL	2'-0"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				7-06	
7-07	BB	PAIR	5'-0"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				7-07	
7-08	BB	PAIR	5'-0"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				7-08	
Unit Type 8																		
8-01	AA	SGL	2'-10"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				8-01	
8-02	AA	SGL	2'-10"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				8-02	
8-03	AA	SGL	2'-10"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				8-03	
8-04	AA3	SGL	2'-6"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				8-04	
8-05	AA1	SGL	2'-0"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				8-05	
8-06	AA1	SGL	2'-0"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				8-06	
8-07	BB1	PAIR	4'-0"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				8-07	
8-08	BB1	PAIR	4'-0"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				8-08	
8-09	BB1	PAIR	4'-0"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				8-09	
Unit Type 9																		
9-01	AA4	SGL	3'-0"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				9-01	
9-02	AA4	SGL	3'-0"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				9-02	
9-03	AA4	SGL	3'-0"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				9-03	
9-04	AA4	SGL	3'-0"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				9-04	
9-05	AA1	SGL	2'-0"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				9-05	
9-06	BB1	PAIR	4'-0"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				9-06	
9-07	BB	PAIR	5'-0"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				9-07	
9-08	BB1	PAIR	4'-0"	6'-8"	1 3/4"	S.C. WOOD	STAINED	F1	H.M.	PTD.			-				9-08	

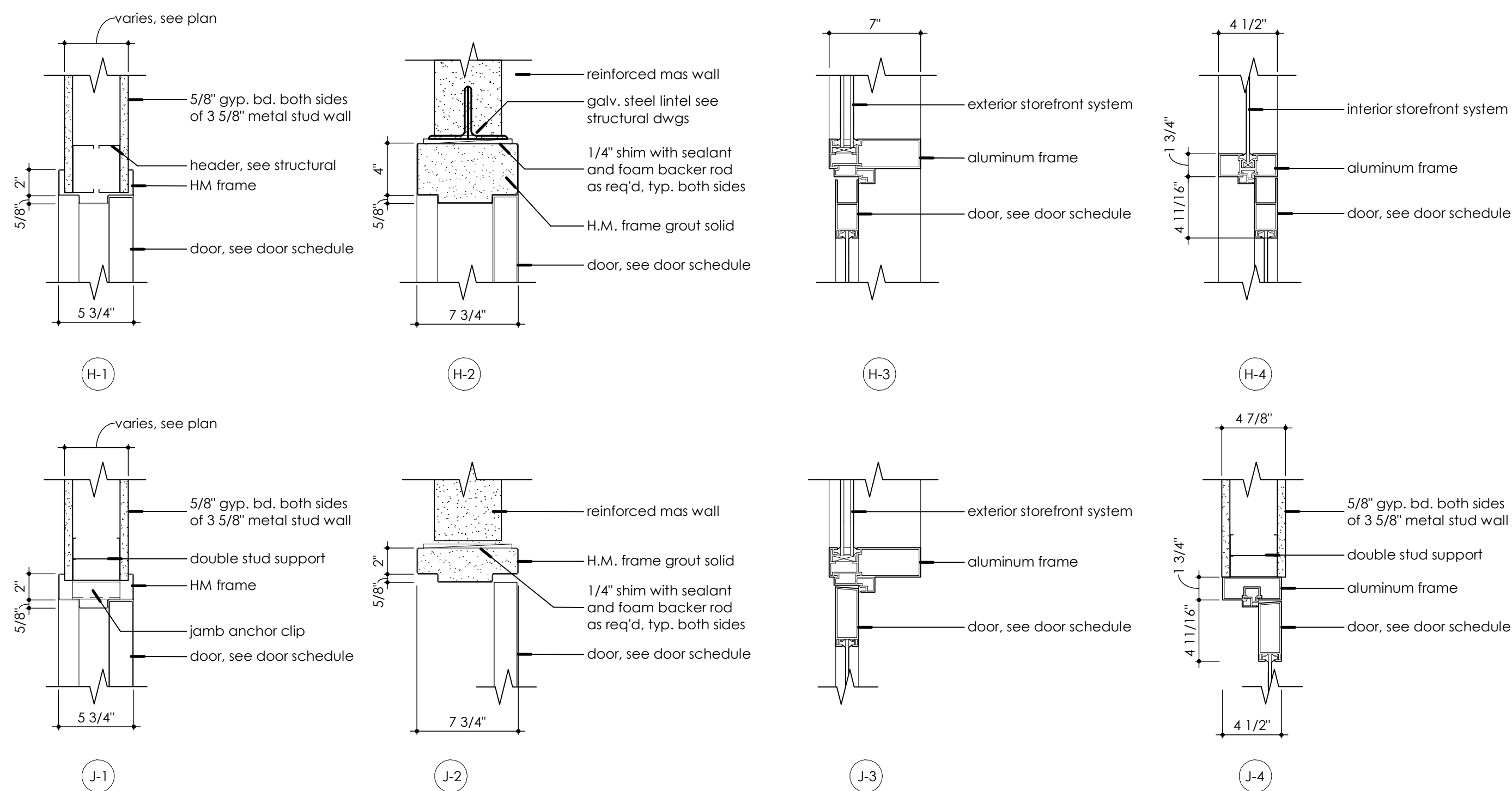


Diagram showing eight door types (A-H) with their dimensions and labels. A: SINGLE SWING DOOR, B: DOUBLE SWING DOOR, C: SINGLE SWING DOOR WITH LITE, D: DOUBLE SWING DOOR WITH LITE, E: SINGLE SWING DOOR WITH LITE, F: DOUBLE SWING DOOR WITH LITE, G: SINGLE SWING DOOR WITH SIDE LITE, H: OVERHEAD DOOR. Dimensions include door width, door height, and specific offsets like 6'-0", 6'-7", 1'-2", 3'-0", 7'-0", 10", 4", and 1'-4".

DOOR SCHEDULE																					
				Door			Frame							Glazing							
No.	To Room:	From Room:	Type	Door Pair	Width	Height	Thk.	Mat.	Finish	Type	Mat.	Finish	Jamb Detail	Head Detail	Type	Thk.	Fire Rtg.	Hdwr. Set	Comments	No.	
LOWER LEVEL																					
001	NORTH VESTIBULE	LOWER LEVEL LOBBY	F		6'-0"	7'-10 3/4"														001	
001B		NORTH VESTIBULE	E		3'-6"	8'-0"	1 3/4"													001B	
006	UNIT TYPE 4A - SENSORY	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													006	
007	UNIT TYPE 4	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													007	
008	UNIT TYPE 6	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													008	
009A	TRASH	LOWER LEVEL LOBBY	A		4'-0"	6'-8"	1 3/4"													009A	
009B	TRASH	CORRIDOR	B		6'-0"	7'-0"	1 3/4"													009B	
009C	TRASH		H	O.H.	9'-0"	7'-0"	1 3/4"													009C	
010	PLUMBING	CORRIDOR	A		3'-0"	6'-8"	1 3/4"													010	
011	ELECTRICAL	CORRIDOR	A		3'-0"	6'-8"	1 3/4"													011	
011B		ELECTRICAL	B		6'-0"	7'-0"	1 3/4"													011B	
012A	CORRIDOR	LOWER LEVEL LOBBY	B		6'-0"	7'-0"	1 3/4"													012A	
012B		CORRIDOR	A		3'-0"	7'-0"	1 3/4"													012B	
013	IT ROOM	CORRIDOR	A		3'-0"	6'-8"	1 3/4"													013	
014	ELECTRICAL	CORRIDOR	B		5'-4"	7'-0"	1 3/4"													014	
015	JAN.	CORRIDOR	A		3'-0"	6'-8"	1 3/4"													015	
FIRST FLOOR																					
100A	SOUTH VESTIBULE		F		6'-0"	8'-0"														100A	
100B	LOBBY	SOUTH VESTIBULE	F		5'-11"	7'-10 3/4"														100B	
101	OFFICE	SOUTH VESTIBULE	F		3'-0 1/8"	7'-10 3/4"														101	
101A	CLOSET		A		3'-0"	7'-0"	1 3/4"													101A	
102	LOBBY	MAIL & PACKAGING	F		3'-0"	7'-10 3/4"														102	
103	ELECTRICAL	LOBBY	A		3'-0"	7'-0"	1 3/4"													103	
104	LOBBY		A		3'-0"	7'-0"	1 3/4"													104	
105		SOUTH VESTIBULE	A		3'-0"	7'-0"	1 3/4"													105	
106	COMMUNITY ROOM	LOBBY	F		5'-11"	7'-10 3/4"														106	
107	UNIT TYPE 4	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													107	
108	UNIT TYPE 6	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													108	
109	UNIT TYPE 4	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													109	
110	UNIT TYPE 4	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													110	
111	CORRIDOR	UNIT TYPE 7	A		3'-0"	7'-0"	1 3/4"													111	
112	UNIT TYPE 5 - ADA	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													112	
113	BIKE STORAGE		A		4'-0"	7'-0"	1 3/4"													113	
114	BIKE STORAGE	OUTDOOR STOR.	A		4'-0"	6'-8"	1 3/4"													114	
115	STOR.	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													115	
116	LAUNDRY	CORRIDOR	G		3'-0"	7'-0"	1 3/4"													116	
117	RESTROOM	LOBBY	A		3'-0"	7'-0"	1 3/4"													117	
118	LOBBY	JANITOR	A		3'-0"	7'-0"	1 3/4"													118	
119	TRASH	LOBBY	A		3'-0"	7'-0"	1 3/4"													119	
120	LOBBY	CORRIDOR	B		5'-4"	7'-0"	1 3/4"													120	
S-1B			A		3'-0"	7'-0"	1 3/4"													S-1B	
S-2A	EAST STAIR		A		3'-0"	7'-0"	1 3/4"													S-2A	
S-2B	EAST STAIR	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													S-2B	
SECOND FLOOR																					
200	CORRIDOR	UNIT TYPE 4	A		3'-0"	7'-0"	1 3/4"													200	
201	UNIT TYPE 4	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													201	
202	UNIT TYPE 1 - SENSORY	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													202	
203	CORRIDOR	UNIT TYPE 6	A		3'-0"	7'-0"	1 3/4"													203	
204	CORRIDOR	UNIT TYPE 4	A		3'-0"	7'-0"	1 3/4"													204	
205	CORRIDOR	UNIT TYPE 8	A		3'-0"	7'-0"	1 3/4"													205	
206	UNIT TYPE 8	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													206	
207	UNIT TYPE 4	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													207	
208	UNIT TYPE 6	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													208	
209	UNIT TYPE 4	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													209	
210	UNIT TYPE 4	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													210	
211	CORRIDOR	UNIT TYPE 7	A		3'-0"	7'-0"	1 3/4"													211	
212	UNIT TYPE 5 - ADA	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													212	
213	UNIT TYPE 3 - ADA	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													213	
214	TRASH	ELEVATOR LOBBY	A		2'-8"	6'-8"	1 3/4"													214	
215	WELLNESS CENTER	ELEVATOR LOBBY	F		2'-0 1/4"	7'-9 1/2"														215	
216	ELECTRICAL	ELEVATOR LOBBY	A		3'-0"	7'-0"	1 3/4"													216	
217	JAN.	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													217	
S-1C		CORRIDOR	A		3'-0"	7'-0"	1 3/4"													S-1C	
S-2C	EAST STAIR	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													S-2C	
THIRD FLOOR																					
300	CORRIDOR	UNIT TYPE 4	A		3'-0"	7'-0"	1 3/4"													300	
301	UNIT TYPE 4	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													301	
302	UNIT TYPE 1	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													302	
303	CORRIDOR	UNIT TYPE 6	A		3'-0"	7'-0"	1 3/4"													303	
304	CORRIDOR	UNIT TYPE 4	A		3'-0"	7'-0"	1 3/4"													304	
305	CORRIDOR	UNIT TYPE 8	A		3'-0"	7'-0"	1 3/4"													305	
306	UNIT TYPE 8	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													306	
307	UNIT TYPE 4	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													307	
308	UNIT TYPE 6	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													308	
309	UNIT TYPE 4	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													309	
310	UNIT TYPE 4	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													310	
311	CORRIDOR	UNIT TYPE 7	A		3'-0"	7'-0"	1 3/4"													311	
312	UNIT TYPE 5 - ADA	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													312	
313	UNIT TYPE 9 -ADA	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													313	
314	TRASH	ELEVATOR LOBBY	A		2'-8"	6'-8"	1 3/4"													314	
315	JANITOR	ELEVATOR LOBBY	A		2'-8"	7'-0"	1 3/4"													315	
316	ELECTRICAL	ELEVATOR LOBBY	A		3'-0"	7'-0"	1 3/4"													316	
404	ELEVATOR LOBBY	ELEVATOR	G																	404	
S-1D	Room	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													S-1D	
S-2D	EAST STAIR	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													S-2D	
FOURTH FLOOR																					
025	UNIT TYPE 1	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													025	
027	JAN.	ELEVATOR LOBBY	A		2'-8"	7'-0"	1 3/4"													027	
133	WEST STAIR	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													133	
228	EAST STAIR	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													228	
400	CORRIDOR	UNIT TYPE 4	A		3'-0"	7'-0"	1 3/4"													400	
401	UNIT TYPE 4	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													401	
403	CORRIDOR	UNIT TYPE 6	A		3'-0"	7'-0"	1 3/4"													403	
403	ELEVATOR LOBBY	ELEVATOR	G																	403	
404	CORRIDOR	UNIT TYPE 4	A		3'-0"	7'-0"	1 3/4"													404	
405	CORRIDOR	UNIT TYPE 8	A		3'-0"	7'-0"	1 3/4"													405	
405		ELEVATOR LOBBY	A		3'-0"	7'-0"	1 3/4"													405	
406	UNIT TYPE 8	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													406	
407	UNIT TYPE 4	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													407	
408	UNIT TYPE 6	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													408	
409	UNIT TYPE 4	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													409	
410	UNIT TYPE 4	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													410	
411	CORRIDOR	UNIT TYPE 7	A		3'-0"	7'-0"	1 3/4"													411	
412	CORRIDOR	UNIT TYPE 5	A		3'-0"	7'-0"	1 3/4"													412	
413	UNIT TYPE 9	CORRIDOR	A		3'-0"	7'-0"	1 3/4"													413	
416	ELECTRICAL	ELEVATOR LOBBY																			

1215 Superior Avenue, Suite 110  
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PRELIMINARY -  
NOT FOR  
CONSTRUCTION

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**CT Consultants, Inc.**  
8150 Sterling Ct  
Mentor, Ohio 44060  
t. 440.951.9000

MEP Engineering:  
**Bialosky Cleveland**  
6555 Carnegie Avenue, Suite 200  
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Structural Engineering:  
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Design Architect:  
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t. 216.752.8750

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**Karam Senior Living  
DSCDO**  
7918 Detroit Avenue Cleveland, Ohio 44102

[illegible]

Project Number	2002
Date	09/23/21
Drawn By	Author
Checked By	Checker
Sheet No.:	

# A901

Scale	As indicated
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PRELIMINARY -  
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CONSTRUCTION

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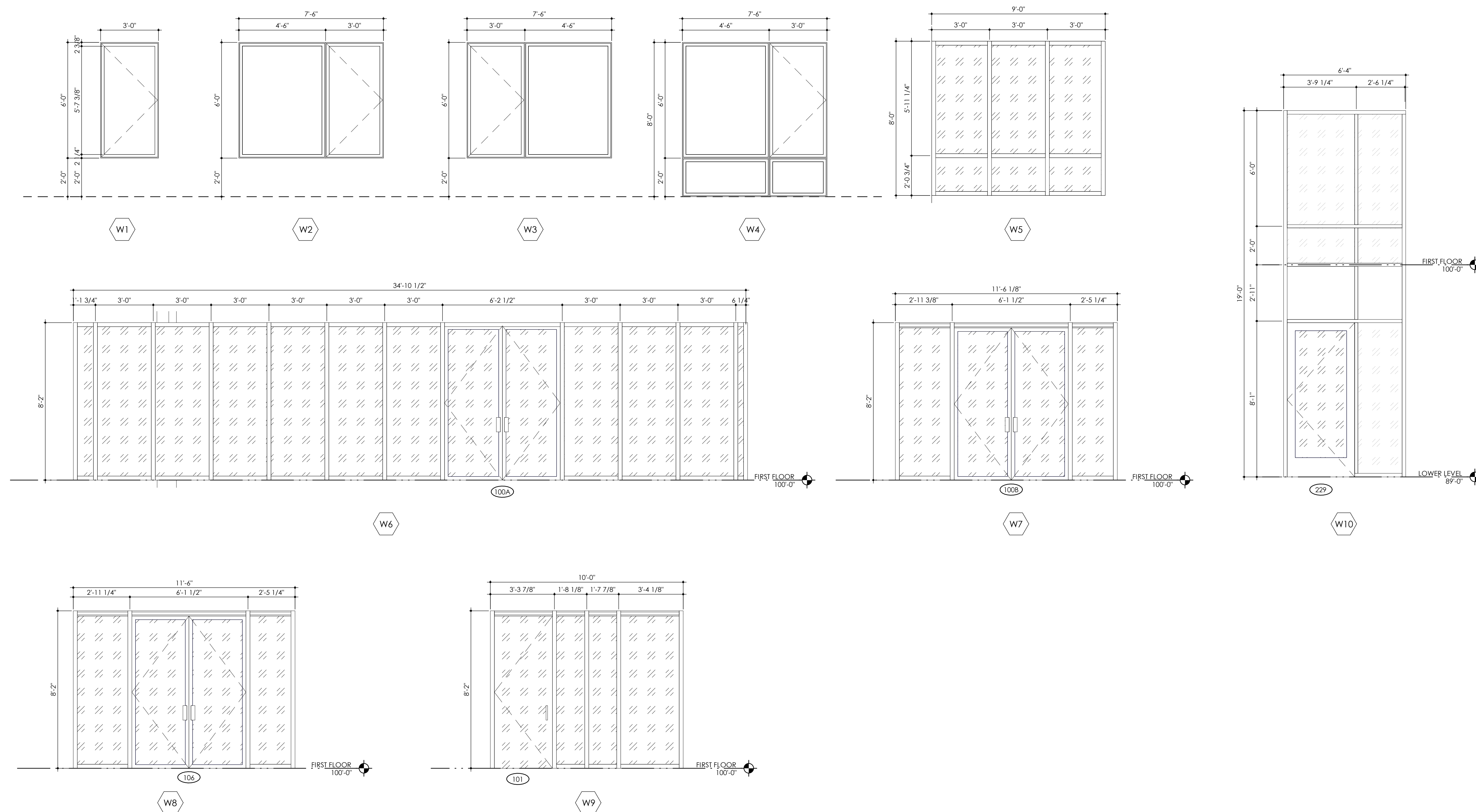
Design Architect:  
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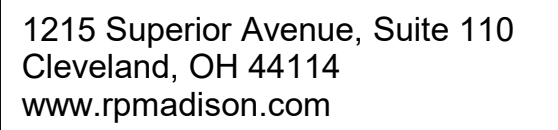
**Karam Senior Living  
DSCDO**  
7918 Detroit Avenue Cleveland, Ohio 44102

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## WINDOW SCHEDULE & DETAILS

Project Number	2002
Date	09/23/21
Drawn By	Author
Checked By	Checker
Sheet No.:	A902
Scale	3/8" = 1'-0"





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**Karam Senior Living  
DSCDO**  
7918 Detroit Avenue Cleveland, Ohio 44102

## FINISH SELECTIONS & DETAILS

# A904

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FINISH SELECTIONS		
Finish Code	Description	Manufacturer's Specification
ACT-1	Acoustic: Ceiling Tile	Basis of Design: Armstrong Tile: Optima Square Regular Size: 2' x 2' 3/4" Thick Grid: 9/16" Color: White
CPT-1	Walk Off Carpet Tile	Basis of Design: Shaw Contract Collection: All Access; Pattern: Jive 5142 Color: Traversal # 12557 Size: 24" x 24" Installation Pattern: Monolithic Installation Method: Direct Glue Down See Finish Floor Plans for pattern detail.
CT-1	Wall Tile Community Room	Allow \$4.00 per sqft material only
CT-2	Wall Tile Public Restrooms	Vine Street Studio Collection: Ceramic Wall Tile; Color: White Ice Bright Size: 4" x 16"; Thickness: 8mm Installation: Stacked vertical - alternating Recommended Grout Joint: 1/8" Grout: To be selected by Architect. "MIN. 3 WEEK LEAD TIME"
PCT-1	Parcelatin Tile Public Restrooms	Allow \$2.00 per sqft material only
PCTB-1	Parcelatin Tile Wall Base	Coordinate with PCT-1
PLAM-1	Plastic Laminatte Countertops	Basis of Design: Formica Pattern: Ice Onyx 7408
PT	Paint	Flat or Ceilings, unless noted otherwise Eggshell at Walls Semi-gloss at Hollow Metal Doors and Frames PT-E (Epoxy) in Restrooms, Janitors Closets or where specified
PT-1	Paint - Field	Manufacturer: Sherwin Williams Color: To be selected by Architect
PT-2	Paint - Ceiling	Manufacturer: Sherwin Williams Color: To be selected by Architect
PT-3	Paint - Stair	Manufacturer: Sherwin Williams Color: To be selected by Architect
PT-4	Paint - Lower Level Accent	Manufacturer: Sherwin Williams Color: To be selected by Architect
PT-5	Paint - First Floor Accent	Manufacturer: Sherwin Williams Color: To be selected by Architect
PT-6	Paint - Second Floor Accent	Manufacturer: Sherwin Williams Color: To be selected by Architect
PT-7	Paint - Third Floor Accent	Manufacturer: Sherwin Williams Color: To be selected by Architect
PT-8	Paint - Fourth Floor Accent	Manufacturer: Sherwin Williams Color: To be selected by Architect
PT-9	Paint - Kitchen Backsplash	Manufacturer: Sherwin Williams Color: To be selected by Architect
RES-1	Luxury Vinyl Tile Units	Basis of Design: Shaw Contract Pattern: Reside 12 nil 4094V Color: To be selected by Architect Size: 6" x 47" Installation Pattern: Stagger Installation Method: Direct Glue Down See Finish Floor Plans for pattern detail.
RES-2	Luxury Vinyl Tile Amenities	Basis of Design: Shaw Contract Collection: Grain & Pigment; Pattern: Pigment 0365V Color: Charcoal #0503V Size: 7" x 48" Installation Pattern: Stagger Installation Method: Direct Glue Down See Finish Floor Plans for pattern detail.
RES-3	Luxury Vinyl Tile Lobbies & Corridors	Basis of Design: Potlcraft Collection: Mixed Materials - Pattern: Wood Plank Facet 1316V Color: To be selected by Architect Size: 12" x 24" Installation Pattern: Mitre Installation Method: Direct Glue Down See Finish Floor Plans for pattern detail.  Alternate: Shaw Contract Collection: Shift and Tilt; Pattern: TIT 0710V Color: To be selected by Architect Size: 9" x 36" Installation Pattern: Monolithic Installation Method: Direct Glue Down
RES-4	Luxury Vinyl Tile Lower Level Accent	Basis of Design: Shaw Contract Collection: Grain & Pigment; Pattern: Pigment 0365V Color: Blue #64509 Size: 7" x 48" Installation Pattern: Stagger Installation Method: Direct Glue Down See Finish Floor Plans for pattern detail.
RES-5	Luxury Vinyl Tile First Floor Accent	Basis of Design: Shaw Contract Collection: Grain & Pigment; Pattern: Pigment 0365V Color: Cyan #64536 Size: 7" x 48" Installation Pattern: Stagger Installation Method: Direct Glue Down See Finish Floor Plans for pattern detail.
RES-6	Luxury Vinyl Tile Second Floor Accent	Basis of Design: Shaw Contract Collection: Grain & Pigment; Pattern: Pigment 0365V Color: Green #65326 Size: 7" x 48" Installation Pattern: Stagger Installation Method: Direct Glue Down See Finish Floor Plans for pattern detail.
RES-7	Luxury Vinyl Tile Third Floor Accent	Basis of Design: Shaw Contract Collection: Grain & Pigment; Pattern: Pigment 0365V Color: Orange #65675 Size: 7" x 48" Installation Pattern: Stagger Installation Method: Direct Glue Down See Finish Floor Plans for pattern detail.
RES-8	Luxury Vinyl Tile Fourth Floor Accent	Basis of Design: Shaw Contract Collection: Grain & Pigment; Pattern: Pigment 0365V Color: Red #65855 Size: 7" x 48" Installation Pattern: Stagger Installation Method: Direct Glue Down See Finish Floor Plans for pattern detail.
RES-9	Luxury Vinyl Tile Elevator	Basis of Design: Shaw Contract Collection: Rethink; Pattern: Rethink 0733V Color: Carbon #33505 Size: 9" x 36" Installation Pattern: Stagger Installation Method: Direct Glue Down See Finish Floor Plans for pattern detail.
SC	Sealed Concrete	See Specifications
STR-1	One-Piece Rubber Stair Tread	Basis of Design: Tarkett Angle Fit Rubber Stair Treads w/ Integrated Risers Texture: Diamond Rubber: Type TS, Group 1 solid Rubber Color: To be selected by Architect Insert: Solid color rubber Insert Color: To be selected by Architect
WB-1	Vinyl Wall Base Units	Basis of Design: Tarkett Color: To be selected by Architect; Type: Cove Size: 4 1/8" x 1/8" thick; 100' coiled lengths Content: Vinyl; Type TV, Group 1 solid
WB-2	Vinyl Wall Base Amenities	Basis of Design: Tarkett Color: To be selected by Architect; Type: Cove Size: 4 1/8" x 1/8" thick; 100' coiled lengths Content: Vinyl; Type TV, Group 1 solid
WB-3	Vinyl Wall Base Lobbies & Corridors	Basis of Design: Tarkett Color: To be selected by Architect; Type: Cove Size: 4 1/8" x 1/8" thick; 100' coiled lengths Content: Vinyl; Type TV, Group 1 solid
WB-4	Vinyl Wall Base Lower Level Accent	Basis of Design: Tarkett Color: To be selected by Architect; Type: Cove Size: 4 1/8" x 1/8" thick; 100' coiled lengths Content: Vinyl; Type TV, Group 1 solid
WB-5	Vinyl Wall Base First Floor Accent	Basis of Design: Tarkett Color: To be selected by Architect; Type: Cove Size: 4 1/8" x 1/8" thick; 100' coiled lengths Content: Vinyl; Type TV, Group 1 solid
WB-6	Vinyl Wall Base Second Floor Accent	Basis of Design: Tarkett Color: To be selected by Architect; Type: Cove Size: 4 1/8" x 1/8" thick; 100' coiled lengths Content: Vinyl; Type TV, Group 1 solid
WB-7	Vinyl Wall Base Third Floor Accent	Basis of Design: Tarkett Color: To be selected by Architect; Type: Cove Size: 4 1/8" x 1/8" thick; 100' coiled lengths Content: Vinyl; Type TV, Group 1 solid
WB-8	Vinyl Wall Base Fourth Floor Accent	Basis of Design: Tarkett Color: To be selected by Architect; Type: Cove Size: 4 1/8" x 1/8" thick; 100' coiled lengths Content: Vinyl; Type TV, Group 1 solid
WP-1	Wall Protection Surface Mounted Corner Guards	Basis of Design: Construction Specialties - Acrovyn Style: Surface Mount Corner Guard VA-250N Height: 8-0" H Base: Corner guard to stop at wall base unless noted otherwise Color: To be selected by Architect.

1.	Refer to sheet XXXX for the Finish Selections.	7.	Paint finishes u.n.o.: Walls: eggshell Ceilings: flat HM Door/Frame: semi-gloss Misc. Metal: semi-gloss T.E.: epoxy eggshell
2.	Refer to Door Schedule for painted HM door and frame paint colors.	8.	Tile joints to align with control joints in slab. Provide crack isolation membrane as specified below floor tile where floor joints are indicated to not align with slab control joints.
3.	Refer to typical unit sheets for all unit finishes.	9.	Grout all thresholds over tile solid.
4.	Refer to sheet XXXX for floor transition details.	10.	For ceiling soffit heights, see reflected ceiling plans.
5.	Transition strips are based on Tarkett or Schluter. Submit alternates to Architect for approval. Architect requires resilient molding assembly from same source as resilient base manufacturer.	11.	Refer to Finish Schedule and Wall Types for substrate at wall tile and in Toilet Rooms, Janitor's Closets, etc.
6.	All painted walls to be PT-1 unless noted otherwise on drawings or in finish schedule.		

CODE	FINISH DESCRIPTION		
ACT	Acoustical Ceiling Tile	PT	Paint
AP	Acoustical Plaster	PT-E	Epoxy Paint
CMU	Concrete Masonry Unit	RES	Resilient Flooring
CPT	Carpet	SC	Sealed Concrete
CT	Ceramic Tile	SSM	Solid Surface Countertop
ETR	Existing to Remain	STR	Stair Tread/Riser Combination
ETS	Exposed to Structure	SWD	Structural Wood Decking
FRP	Fiberglass Reinforced Plastic	TAC	Tackable Surface
GWB	Gypsum Wall Board	TB	Tile Backer
N.I.C	Not in Contract	TRZ	Terrazzo
PART	Toilet Partitions	WB	Wall Base
PCT	Porcelain Tile	WD	Wood Plank Flooring
PCTB	Porcelain Tile Base	WP	Wall Protection
PLAM	Plastic Laminate	WRGWB	Water Resistant Gypsum Wall Board

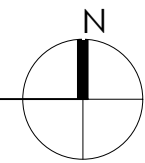
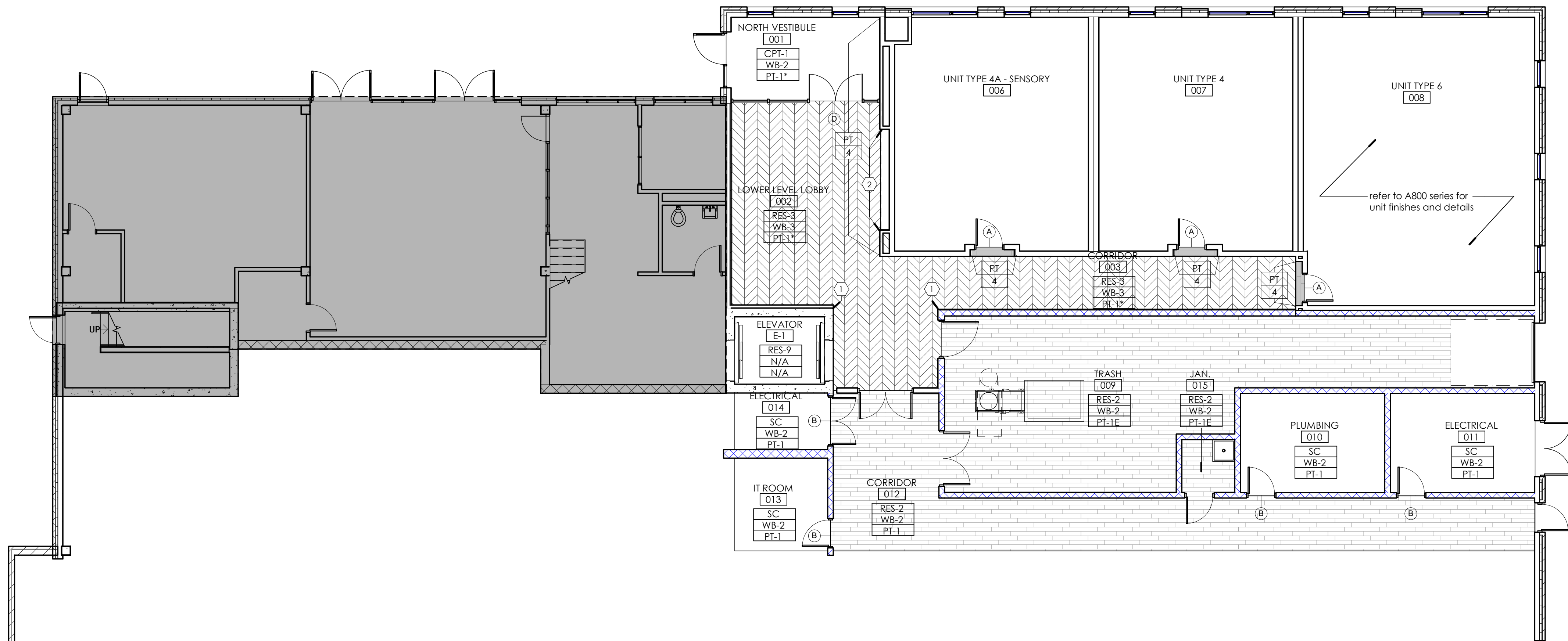
FLOOR	Denotes floor finish
BASE	Denotes wall base
WALL	Denotes wall finish
	Refer to finish selections for descriptions.
PT	Denotes accent or special wall finish. Refer to
5	finish selections for description.
*	Denotes more than one wall or floor finish occurs. Refer to finish plans and elevations

- 1 Flush mounted corner guard, full height
- 2 Custom bookshelf
- 3 4'-0"W x 8'-0"H mirror; refer to interior elevations for extent of material

RES-2

RES-3

RES-4 to RES-8; accent color varies by floor, refer to overall finish plans



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PRELIMINARY -  
NOT FOR  
CONSTRUCTION

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t. 440.951.9000

MEP Engineering:  
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t. 216.752.8750

Structural Engineering:  
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Design Architect:  
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t. 216.752.8750

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DSCDO**  
7918 Detroit Avenue Cleveland, Ohio 44102

[illegible]

Project Number	2002
Date	09/23/21
Drawn By	JB
Checked By	TF
Sheet No.:	A910
Scale	1/8" = 1'-0"

PRELIMINARY -  
NOT FOR  
CONSTRUCTION

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[illegible]

FIRST FLOOR FINISH  
PLAN

Project Number	200
Date	09/23/2012
Drawn By	J
Checked By	T
Sheet No.:	A911
Scale	1/8" = 1'-0"

1.	Refer to sheet XXXX for the Finish Selections.	7.	Paint finishes u.n.o.: Walls: eggshell Ceilings: flat HM Door/Frames: semi-gloss Misc. Metal: semi-gloss E: epoxy eggshell
2.	Refer to Door Schedule for painted HM door and frame point colors.	8.	Tie joints to align with control joints in slab. Provide crack isolation membrane as specified below floor tile where tie joints are indicated to not align with slab control joints.
3.	Refer to typical unit floor for all unit finishes.	9.	Grout all thresholds over tile solid.
4.	Refer to sheet XXXX for floor transition details.	10.	For ceiling soffit heights, see reflected ceiling plans.
5.	Transition strips are based on Tarkett or Schluter. Submit alternates to Architect for approval. Architect requires resilient molding accessory from same source as resilient base manufacturer.	11.	Refer to Finish Schedule and Wall Types for substrate at wall tile and in Toilet Rooms, Janitor's Closets, etc.
6.	All pointed walls to be PT-1 unless noted otherwise on drawings or in finish schedule.		

CODE	FINISH DESCRIPTION		
ACT	Acoustical Ceiling Tile	PT	Paint
AP	Acoustical Plaster	PT-E	Epoxy Paint
CMU	Concrete Masonry Unit	RES	Resilient Flooring
CPT	Carpet	SC	Sealed Concrete
CT	Ceramic Tile	SSM	Solid Surface Countertop
EIR	Existing to Remain	STR	Stair Tread/Riser Combination
ETS	Exposed to Structure	SWD	Structural Wood Decking
FRP	Fiberglass Reinforced Plastic	TAC	Tackable Surface
GWB	Gypsum Wall Board	TB	Tile Backer
N.I.C.	Not in Contract	TRZ	Terrazzo
PART	Toilet Partitions	WB	Wall Base
PCT	Porcelain Tile	WD	Wood Plank Flooring
PCTB	Porcelain Tile Base	WP	Wall Protection
PLAM	Plastic Laminate	WRGWB	Water Resistant Gypsum Wall Board

FLOOR	Denotes floor finish
BASE	Denotes wall base
WALL	Denotes wall finish

Refer to finish selections for descriptions.

PT	Denotes accent or special wall finish. Refer to
5	finish selections for description.

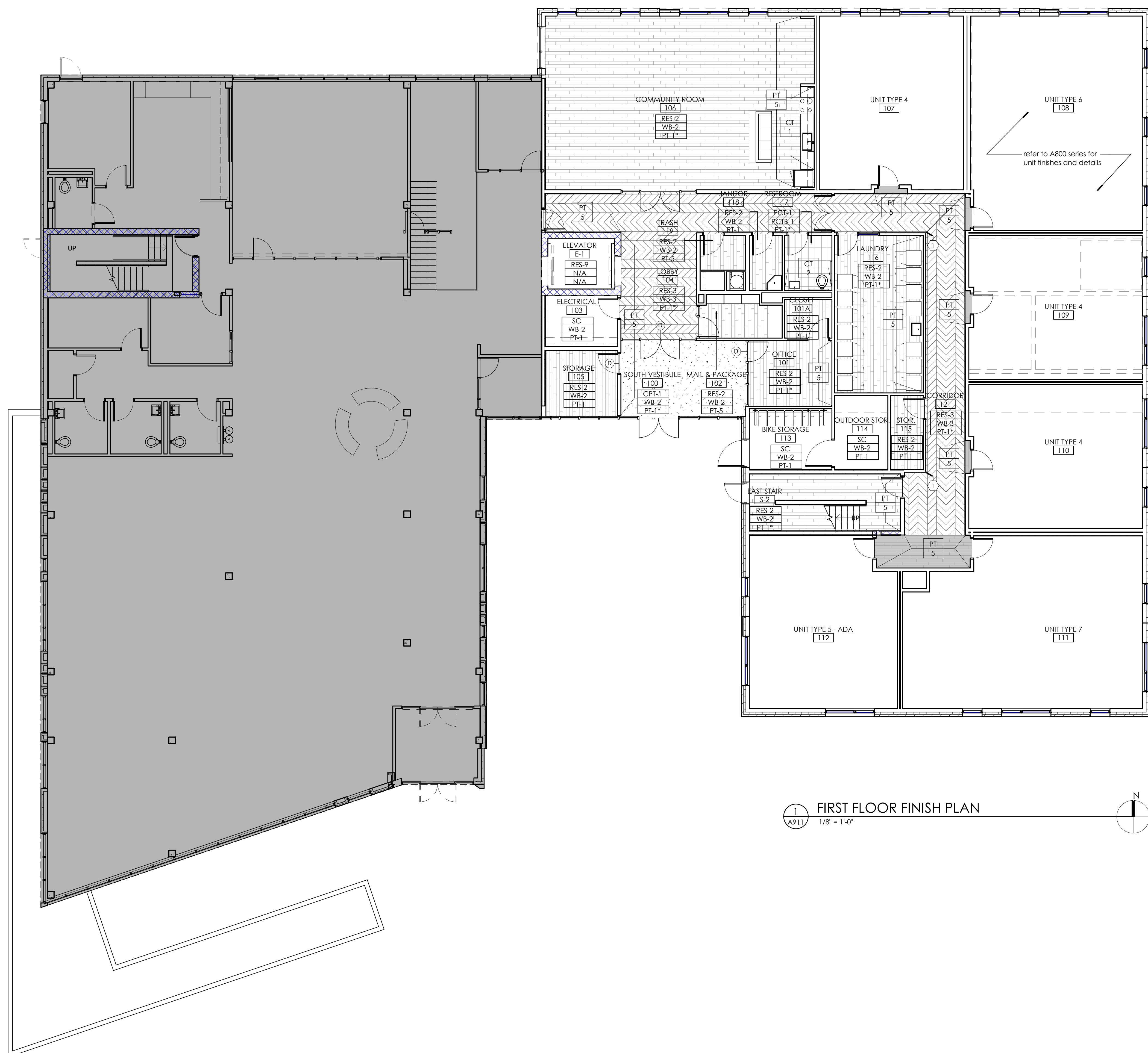
\* Denotes more than one wall or floor finish occurs. Refer to finish plans and elevations

- 1 Flush mounted corner guard, full height
- 2 Custom bookshelf
- 3 4'-0"W x 8'-0"H mirror; refer to interior elevations for extent of material

 RES-2

 RES-3

 RES-4 to RES-8; accent color varies by floor, refer to overall finish plans



1 FIRST FLOOR FINISH PLAN  
A911 1/8" = 1'-0"

1.	Refer to sheet XXXX for the Finish Selections.	7.	Paint finishes u.n.o.: Walls: eggshell Ceilings: flat HM Door/frames: semi-gloss Misc. Metal: semi-gloss T": epoxy eggshell
2.	Refer to Door Schedule for painted HM door and frame paint colors.	8.	The joints to align with cabinet joints in slab. Provide crack isolation membrane as specified below floor tile where tile joints are indicated to not align with slab cabinet joints.
3.	Refer to typical unit sheets for all unit finishes.	9.	Grout all thresholds over tile solid.
4.	Refer to sheet XXXX for floor transition details.	10.	For ceiling soffit heights, see reflected ceiling plans.
5.	Transition strips are based on Tarkett or Schluter. Submittal alternates to Architect for approval. Architect requires resilient molding accessory from same source as resilient base manufacturer.	11.	Refer to Finish Schedule and Wall Types for substrate at wall tile and in Toilet Rooms, Janitor's Closets, etc.
6.	All painted walls to be PT-1 unless noted otherwise on drawings or in finish schedule.		

CODE	FINISH DESCRIPTION		
ACT	Acoustical Ceiling Tile	PT	Paint
AP	Acoustical Plaster	PT-E	Epoxy Paint
CMU	Concrete Masonry Unit	RES	Resilient Flooring
CPT	Carpet	SC	Sealed Concrete
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ETS	Exposed to Structure	SWD	Structural Wood Decking
FRP	Fiberglass Reinforced Plastic	TAC	Tackable Surface
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PLAM	Plastic Laminate	WRGWB	Water Resistant Gypsum Wall Board

FLOOR	Denotes floor finish
BASE	Denotes wall base
WALL	Denotes wall finish Refer to finish selections for descriptions.

PT	Denotes accent or special wall finish. Refer to finish selections for description.
S	

\*

Denotes more than one wall or floor finish occurs. Refer to finish plans and elevations

- ① Flush mounted corner guard, full height
- ② Custom bookshelf
- ③ 4'-0"W x 8'-0"H mirror; refer to interior elevations for extent of material

 RES-2

 RES-3

 RES-4 to RES-8: accent color varies by floor, refer to overall finish plan



1.	Refer to sheet AXXX for the Finish Selections.	7.	Paint finishes u.n.o.: Walls: eggshell
2.	Refer to Door Schedule for painted HM door and frame paint colors.		Ceilings: flat
3.	Refer to typical unit sheets for all unit finishes.		HM Door/Frames: semi-gloss
4.	Refer to sheet AXXX for floor transition details.		Misc. Metal: semi-gloss
5.	Transition strips are based on Tarkett or Schluter. Submit alternatives to Architect for approval. Architect requires resilient molding accessory from same source as resilient base manufacturer.	8.	"E": epoxy eggshell
6.	All painted walls to be PT-I unless noted otherwise on drawings or in finish schedule.	9.	Tile joints to align with control joints in slab. Provide crack insulation membrane as specified below floor tile where tile joints are indicated to not align with slab control joints.
		10.	Grout all thresholds over tile solid.
		11.	For ceiling soffit heights, see reflected ceiling plans.
			Refer to Finish Schedule and Wall Types for substrate at wall tile and in Toilet Rooms, Janitor's Closets, etc

CODE	FINISH DESCRIPTION		
ACI	Acoustical Ceiling Tile	PT	Paint
AP	Acoustical Plaster	PT-E	Epoxy Paint
CMU	Concrete Masonry Unit	RES	Resilient Flooring
CPT	Carpet	SC	Sealed Concrete
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Refer to finish selections for descriptions.

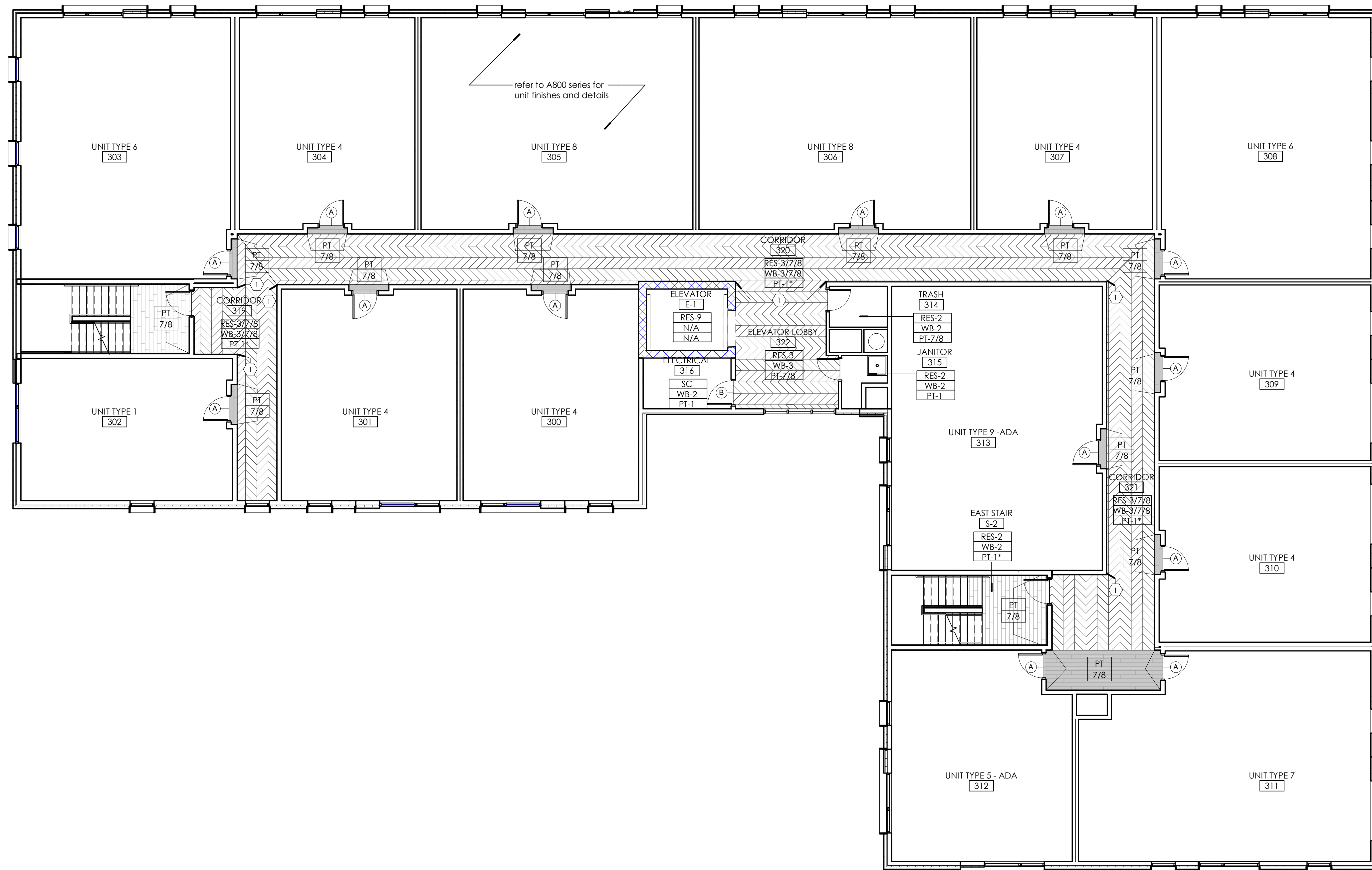
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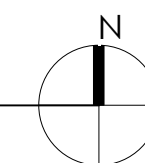
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	RES-2
	RES-3
	RES-4 to RES-8: accent color varies by floor, refer to overall finish plans



1 THIRD & FOURTH FLOOR FINISH PLANS  
A913 1/8" = 1'-0"



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[illegible]

Project Number	2002
Date	09/23/21
Drawn By	JB
Checked By	TF
Sheet No.:	<b>A913</b>
Scale	1/8" = 1'-0"

**CODES AND STANDARDS**

- New construction has been designed to, and shall be constructed in accordance with the following building codes and standards:
  - 2017 Ohio Building Code (OBC 2017)
  - City of Cleveland, Ohio, Code of Ordinances
  - ASCE 7-10, Minimum Design Loads for Buildings and Other Structures
  - Unless explicitly modified in the Contract Drawings and Specifications, the Contractor shall comply with provisions of:
    - ACI 301-10, Specifications for Structural Concrete
    - ACI 318-14, Building Code Requirements for Structural Concrete
    - ACI 530-13, Building Code Requirements for Masonry Structures
    - ACI 530-13, Specification for Masonry Structures
    - AISC 360-10, Specification for Structural Steel Buildings
    - AWS D1.1-10, Structural Welding Code - Steel
    - NDS-2015, National Design Specification (NDS) for Wood Construction with 2015 Supplement
    - TPI 1-2014, National Design Specification for Metal-plate-connected Wood Truss Construction
    - APA PSD-12, Panel Design Specification

**DESIGN LOADS (OBC 2017)**

Floor live load (unless otherwise noted)

Residential units & corridors serving them	40 psf (1)
Public areas	100 psf
Stairs & exits	100 psf

- (1) Live Loads are reduced per OBC section 1607.10 to a maximum reduction of 40%

**Roof live load**

Roof live load	20 psf
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**Roof snow load data**

Minimum roof snow load (City of Cleveland)	30 psf
Ground snow load (ASCE 7, Figure 1-1)	$p_g = 20.2 \text{ psf}$ $p_g = 20.2/(5+3) \text{ psf}$
Flat-roof snow load (ASCE 7, 7.3)	$s = 119.2 \text{ psf}$
Snow exposure factor (ASCE 7, Table 7-2)	$C_e = 1.0$
Snow importance factor (ASCE 7, Table 1.5-2)	$I_s = 1.0$
Thermal factor (ASCE 7, Table 7-3)	$C_t = 1.1$

- (2) Increased for snow buildup / unbalanced per ASCE 7, 7.6 to 7.9
- (3) Rain-on-snow surcharge (ASCE 7, 7.10) applied only to balanced snow load

**Wind design data**

Minimum wind speed (City of Cleveland - Allowable)	20 psf
Less than 50'	24 psf
50' to 99'	$V_{50} = 115 \text{ mph}$
Ultimate design wind speed (ASCE 7, Figure 26.5-1)	$V_{max} = 90 \text{ mph}$
Nominal design wind speed (OBC 1609.3.1)	II
Risk category (ASCE 7, Table 1.5-1)	II
Exposure category (ASCE 7, 26.11.1)	C
Internal pressure coefficient (ASCE 7, Table 26.11-1)	$GCF_x = \pm 0.18$
Components and cladding	10' (P) 4'
Effective Wind Area	$+19.2, -47.2 \text{ psf}$
Zone 1 (Roof Interior)	$+19.2, -79.2 \text{ psf}$
Zone 2 (Roof Edge)	$+19.2, -79.2 \text{ psf}$
Zone 3 (Roof Corner)	$+47.2, -51.2 \text{ psf}$
Zone 4 (Wall Interior)	$+47.2, -51.2 \text{ psf}$
Zone 5 (Wall Corner)	$+47.2, -63.2 \text{ psf}$

- (+) Indicates pressure acting toward the surface
- (-) Indicates pressure acting away from the surface
- Edge and corner zones are defined as areas within 6'-6" of edge or corners

Uplift on canopies and overhangs = 75.2 psf

- (4) Components and cladding engineer may calculate wind loads based on actual effective wind area per ASCE 7

**Earthquake design data**

Risk category (ASCE 7, Table 1.5-1)	II
Seismic importance factor (ASCE 7, Table 1.5-2)	$I_m = 1.0$
Mapped spectral response acceleration parameters	$S_{a1} = 0.164 \text{ g}$ $S_{a2} = 0.057 \text{ g}$
Short period	D
Site class (assumed)	D
Design spectral response acceleration parameters	$S_{a1} = 0.176 \text{ g}$ $S_{a2} = 0.091 \text{ g}$
Short period	B
Seismic design category	B
Basic seismic-force-resisting system (ASCE 7, Table 12.2-1)	(Upper) A.15 Light-Frame (wood) walls sheathed with wood structural panels
(Lower) C.6 Intermediate reinforced concrete moment frames	
Design base shear (ASCE 7, 12.8.1)	$V = \text{Kips}$
Seismic response coefficient (ASCE 7, 12.8.1.1)	$R = 6.5 \text{ (Upper)}$ $5.0 \text{ (Lower)}$
Response modification factor (ASCE 7, Table 12.2-1)	
Analysis procedure	Equivalent lateral force procedure

**DESIGN STRESSES**

Concrete minimum compressive strength in 28 days:

Footings	$f'_c = 3,000 \text{ psi}$
Interior slabs on grade, grade beams, walls	$f'_c = 4,000 \text{ psi}$
Columns, beams, and slabs	$f'_c = 4,000 \text{ psi}$
Structural concrete subject to freezing and thawing	$f'_c = 5,000 \text{ psi}$
Reinforcing bars (ASTM A615, Grade 60)	$F_y = 60,000 \text{ psi}$
Welded wire reinforcement (ASTM A1064)	$F_y = 70,000 \text{ psi}$
Structural steel W, WT and S shapes (ASTM A992 or ASTM A572/50)	$F_y = 50,000 \text{ psi}$
Structural steel other shapes (ASTM A36)	$F_y = 36,000 \text{ psi}$
Anchor rods (ASTM F1554, Grade 55 weldable)	$F_y = 55,000 \text{ psi}$
Hollow structural sections (ASTM A500, Grade C)	$F_y = 50,000 \text{ psi}$
Masonry	$F_m = 2,000 \text{ psi}$
Load-bearing CMU (ASTM C55 or C90)	Type M or S
Mortar (ASTM C476)	3,000 psi
Soil bearing pressure for foundations	
Compacted engineered fill (assumed)	2,500 psf

**GENERAL**

- All new construction shall comply with the Contract Documents and the Building Code.
- Typical details and general notes apply to all parts of the work except where specifically detailed or unless otherwise noted.
- The structural drawings illustrate structural members. Refer to architectural, mechanical, and electrical drawings for non-structural items which require special provisions during the construction of the structural members.
- Drawings are not to be scaled.
- Refer to architectural plans for floor depressions, openings, slopes, drains, curbs, pads, embedded items, non-bearing partitions, etc. Refer to mechanical and electrical plans for sleeves, openings, and hangers for pipes, ducts, and equipment. No pipes or ducts shall be embedded into structural members unless so shown on the plans or approved by the Engineer.
- The Contractor shall verify and be responsible for all dimensions and conditions which impact the work. Field verify sizes, elevations, hole locations, etc., prior to fabrication.
- The Contractor shall carefully review the drawings to identify the scope of work required, visit the site to relate the scope of work to existing conditions and determine the extent to which those conditions and physical surroundings will impact the work.
- Locate existing underground utilities in areas of construction. Coordinate with utility companies for any shut-off requirements of all active lines.
- The Contractor shall resolve any conflicts on the drawings or in the specifications with the Architect/Engineer before proceeding with the work.
- If any deviation, modification, or substitution from the approved set of structural drawings shall be submitted to the Owner, Architect, and Engineer for review/approval prior to its use or inclusion on the shop drawings.
- The Contractor shall provide means, method, techniques, sequence, and procedure of construction as required.
- The Contractor shall protect all work, materials, and equipment from damage and shall provide proper storage facilities for materials and equipment during construction.
- Site visits performed by the Architect/Engineer do not constitute inspections of means and methods of construction performed by the Contractor.
- Structural observations performed by the Architect/Engineer during construction are not the continuous and special inspection services and do not waive the responsibility for the inspections required of the Building Department Inspector or the testing agency. Observations also do not guarantee the Contractor's performance and shall not be considered as supervision of construction.
- The Contractor shall review shop drawings for completeness and compliance with contract documents. The Contractor shall stamp shop drawings prior to submission to the Architect and Engineer.
- Review of the shop drawings by the Architect's Engineers shall not be construed as an authorization to deviate from the Contract Documents.
- Shop drawings will not be processed if they are incomplete, lack coordination with relevant portion of contract documents, lack calculations if required, or if deviations, modifications, and substitutions are indicated without prior written approval from the Architect/Engineer.

**FOUNDATIONS AND SLABS ON GROUND**

- Ground supported building components including foundations, slabs-on-grade, foundation walls, and retaining walls are designed in accordance with recommendations provided in the Geotechnical Report prepared by the Geotechnical Engineers, dated \_\_\_\_\_.
- The Geotechnical Report is provided for reference as the source of information used to design ground supported building components. The Structural Engineer is not responsible or liable for the accuracy of information presented in the Geotechnical Report.
- Footings and grade beams: Elevations given are as to footings and grade beams.
- Slab on ground, ramps and steps: Slab elevations given are as to top structural slab. See Architect's drawings for layout of ramps and steps.
- All footings must be supported on undisturbed soil capable of achieving the design soil bearing pressure without appreciable settlement. Where additional excavation is required to attain the design bearing pressure, backfill the overexcavated area with lean concrete up to the design bearing level.
- Provide (2) #5 minimum continuous in all footings directly under masonry walls. Unless otherwise noted, compact all engineered fills to 95% of the maximum dry density per ASTM D1557 Modified Proctor Method.
- In granular soils (sands and gravel) the soil shall be mechanically tamped to a hard surface immediately prior to placing footing.
- Before backfill, all walls must be adequately braced. For backfill requirements, see specifications and/or geotechnical report.
- Provide a minimum of (4) #5 vertical bars and #3@12" on center horizontal ties for concrete piers under columns or beams.
- When excavations approach the ground water level, the water level shall be lowered by an acceptable dewatering system so that the water level is maintained continuously a minimum of 2'-0" below the excavation.
- The bottom of foundations shall be protected against freezing until backfill or other permanent protective cover is in place.

**TEMPORARY SHORING AND BRACING**

- Structure is designed to be self-supporting and stable after the building is fully completed.
- Each contractor shall be responsible for erection procedures and sequence, shall maintain stability of the building and its component parts, and shall be responsible for adequacy of temporary or incomplete construction and connections during erection. Such responsibilities include, but are not limited to: addition of shoring as required to support forms, decks, columns, walls, and other elements as required during construction, sheathing, temporary connections, bracing, gus, or tie-downs necessary to maintain stability of parts, subassemblies, or all of the structure.
- Contractor shall assume full design responsibility for temporary shoring and bracing, which shall be designed, sized, and sealed by a professional engineer licensed in the jurisdiction where project is located.
- Temporary shoring shall be maintained throughout construction and shall be removed only after completion of all required supporting elements.
- Remove any remaining temporary shoring after construction is complete.

**ROOF, FLOOR, OR WALL OPENINGS**

- The Contractor shall verify and coordinate the number, size, and location of all sleeves and openings required for mechanical or electrical items.
- Sleeves and openings shall be located in a manner that will maintain the structural integrity of the roof, floor, and wall.
- No structural elements are to be cut unless specifically approved by the Engineer.

**CONCRETE CONSTRUCTION**

- All concrete construction shall be in accordance with the latest Building Code Requirements for Structural Concrete (ACI 318) as well as the specifications which state that construction and removal of forms and rebar shall be inspected by the Contractor's engineer.
- Reinforcing steel shall have the following minimum coverage. Place bars as near to the concrete surface as these minima permit wherever possible, unless noted otherwise:
  - Concrete poured against earth: 3"
  - Formed concrete in contact with earth: 2"
  - Exterior face of walls: 2"
  - All other wall faces and slabs: 3/4" (#1 and smaller), 1 1/2" (#14 and #18)
  - Beams, columns: 1 1/2" (2" for exterior)
- Welded wire reinforcement for slabs on ground shall have a minimum top coverage of 1" and a maximum top coverage of 1 1/2" unless otherwise specified. Reinforcement shall be positively supported and maintained in this position during placement of concrete.
- Furnish bar supports where necessary during construction.
- Provide plastic-coated (not plastic-tipped) or stainless steel chairs in all concrete exposed to view in completed structure.
- Provide pipe sleeves and inserts in concrete work where required. See architectural and mechanical drawings.
- Obtain approval of Engineer before locating sleeves, holes, or inserts in slabs within 2'-0" of face of columns or anywhere in beams or columns.
- Unless noted otherwise, provide the following minimum reinforcing:
  - Slabs on ground, slabs on deck, and toppings (2" minimum): 6x6-W14x14.4 welded wire reinforcement in flat slabs.
  - Grade beams: (2) #6 top and bottom continuous.
  - Walls: #4@12" on center each way (for each 6" of wall thickness).
  - Framed slabs: #4@8" on center each way (for each 6" of wall thickness).
- Provide a minimum of #4 dowels at 12" on center connecting framed floors to concrete walls.
- Canilevered construction shall be shored for a minimum of 28 days after being placed.
- Construction joints shall be positioned so as not to change the structural design requirements. Framed floors and roofs shall be construction joints so that the ratio of length to width of a single pour shall not exceed 2. The location and size of all construction joints shall be approved by the Engineer. Submit proposed pour layout for Engineer's review and approval prior to placing concrete.
- Welding of reinforcing bars (including tack welding) is not permitted without permission of Engineer in writing. Where and when permitted, welded rebars shall comply with ASTM A706 (F-60 ksi) and welding shall conform to AWS D1.4.
- Welding shall be performed by certified welders.
- Provide horizontal keyways in construction joints in beams, supported slabs, walls, and wall footings: minimum 1 1/2" depth with height equal to one-third of member depth, unless otherwise shown or noted.
- All exposed corners of concrete beams, columns, walls are to be chamfered 45".
- Minimum chamfer to be 1/2".
- Unless noted otherwise in project specifications or drawings, all exposed concrete subjected to freezing and thawing shall have a minimum cement content of 610 pounds per cubic yard, a maximum water-cement ratio of 0.40, and 6%± 0.5% of entrained air.
- In slab construction, provide a minimum of #4 x 6'-0" long (top) at 12" on center over beams or walls when slabs span parallel to beams or walls.
- Provide a minimum of #3 closed stirrups in all spandrel beams. Spacing to be equal to minimum beam dimension but not greater than 16" on center.
- At wall and footing corners, innermost reinforcing shall have 1'-0" long hook at far face. For outer reinforcing, provide corner bars with lap length of 36 bar diameters (2'-0" minimum).
- Key and dowel all ariseways and other projecting elements to supporting walls with #4@12" on center extension 1'-0" into supporting wall unless noted.
- Provide foundation dowels for all walls, piers, and columns same size and spacing as vertical steel.
- All bars interrupted by structural steel shall extend to within 1" of structural steel flange or web and have a 90° hook unless otherwise shown.
- Drawings show typical reinforcing conditions. Contractor shall prepare detailed placement drawings of all conditions showing quantity, spacing, sizes, clearances, laps, intersections, and coverage required by the structural details, applicable code, and trade standards. Contractor shall notify reinforcing inspector of any adjustments from typical conditions which are proposed in placement drawings to facilitate field placement of reinforcing steel and concrete.
- Bar bends shall be made cold. Bars shall not be bent after any portion of the bar is encased in concrete.
- Beams and slabs under concrete walls terminating at a floor shall be fully shored during and after wall pour until concrete wall attains design strength.
- Splices (Grade 60 deformed bars):
  - Lap all compression splices 30 bar diameters of the larger bar.
  - Lap all tension splices in accordance with the following tables. Provide Class B Tension Lap Splices unless otherwise noted.
  - Top bars are defined as horizontal bars with more than 12" of fresh concrete below.

Bar Size	Class B Tension Lap Splice			
	$f'_c = 3,000 \text{ psi}$		$f'_c = 4,000 \text{ psi}$	
	Top	Other	Top	Other
#3	28"	22"	24"	19"
#4	37"	29"	33"	25"
#5	47"	36"	41"	31"
#6	56"	43"	49"	37"
#7	61"	47"	54"	41"
#8	65"	50"	57"	44"
#9	72"	56"	62"	49"
#10	78"	61"	68"	54"
#11	84"	66"	74"	59"

Bar Size	Class A Development Length, $l_d$			
	$f'_c = 3,000 \text{ psi}$		$f'_c = 4,000 \text{ psi}$	
	Top	Other	Top	Other
#3	22"	17"	19"	15"
#4	29"	22"	25"	19"
#5	36"	28"	31"	24"
#6	43"	33"	37"	29"
#7	47"	37"	41"	33"
#8	50"	40"	44"	36"
#9	56"	45"	50"	41"
#10	61"	49"	55"	45"
#11	66"	53"	60"	49"

**CONDUITS AND PIPES IN FORMED SLAB CONSTRUCTION**

- The acceptance of the placement of conduits and pipes in formed slabs is at the discretion of Architect/Engineer. Submit layout for Architect/Engineer's review and approval. A guideline to placement of conduits and pipes in formed slabs follows:
- No aluminum conduits or pipes shall be permitted in the slab construction.
  - Conduits, pipes and sleeves passing through shall not impair the strength of the slab construction.
  - Concrete cover for pipes, conduits, and fittings shall be not less than 1 1/2" for concrete exposed to earth or weather, nor less than 3/4" for concrete not exposed to weather or in contact with earth.
  - In solid slabs, piping shall be placed between top and bottom reinforcing, unless it is for radiant heating or snow melting. Reinforcing with an area not less than #3@12" on center x 3'-0" for slabs less than 6 1/2" thick and #4@12" on center x 4'-0" for slabs 6 1/2" thick or greater shall be provided perpendicular to piping.
  - Size, spacing, cover and bundles:
    - The maximum out-to-out dimension is the smaller of 1/3 of the total slab thickness but no more than 2" in diameter.
    - Minimum spacing is not less than 3 diameters on center.
    - Alternatively, conduits or pipes can be bundled. A maximum of three can be bundled:
      - If two are bundled, there must be at least 4 diameters clear spacing between bundles.
      - If three are bundled, there must be at least 6 diameters clear spacing between bundles.
      - If more than three are bundled, notify Architect/Engineer prior to commencing field work.
  - Conduits and pipes may cross only if the sum of the diameters does not exceed the smaller of 1/3 of the total slab thickness but no more than 2" total.

**MASONRY CONSTRUCTION**

- Masonry walls shown on structural drawings have been designed in accordance with ACI 530, Building Code Requirements for Masonry Structures.
- Masonry walls shall be constructed in accordance with ACI 530.1, Specifications for Masonry Structures, and the project specifications.
- Determine compressive strength of masonry ( $f'_m$ ) by the unit strength method (Section 1.4.8.2 of ACI 530.1).
  - Mortar shall meet the Property Specifications' requirements of ASTM C270, and shall be field tested according to ASTM C780.
  - The strength of grout shall be determined by tests in accordance with ASTM C1019.
- Intersecting walls shall be anchored by one of the following methods (does not apply at joint controls or where non-load-bearing partitions abut bearing walls):
  - Fifty percent of the units at the intersection shall be laid in an overlapping masonry bonding pattern, with alternate units having a bearing of not less than 3" on the unit.
  - Walls shall be tied by galvanized steel straps 1 1/2" x 1/4" x 24" with 2" bend at 90° each end. Grout straps solid into cores of block at 24" maximum vertical spacing.
- Control of bearing walls shall be built in running bond.
- Provide corner bars in bond beams at wall intersections and corners to match bond beam reinforcing.
- Provide a minimum of 24" depth of solid masonry under the bearing ends of all beams and beam lintels, and 8" of solid masonry under the bearing ends of loose lintels.
- Unless otherwise noted, provide galvanized ladder type joint reinforcement at 16" on center vertically per ASTM A82.
- Welding of reinforcing bars (including tack welding) is not permitted without permission of Engineer in writing.
- Provide shop drawings which indicate size, spacing, bending details, and type of all reinforcing bars placed in masonry walls.
- Provide dowels from supporting member (beeing, beam, or slab) for all reinforced walls same size, location, and spacing as wall reinforcement.
- Wall reinforcing shall be held in position during grouting.
- For bars at face of wall, maintain 1/2" clearance from inside face of CMU to reinforcing.
- Provide bond beam with (1) #4 continuous reinforcing bar at sill of all openings, unless otherwise noted.
- Splices:
  - Lap all splices in accordance with the following table.
  - Beam (16" or greater in depth) and columns that are encased in masonry shall have adjustable masonry anchors spaced at 2'-0" on center.

Reinforcing Centered in Wall						Reinforcing at Face 2" cover
Bar Size	Nominal Wall Width					
	F <sub>m</sub> = 2,000 psi					
	6"	8"	10"	12"	16"	
#3	15"	15"	15"	15"	15"	15"
#4	20"	20"	20"	20"	20"	22"
#5	28"	25"	25"	25"	25"	35"
#6	53"	38"	30"	30"	30"	64"
#7		52"	40"	35"	35"	87"
#8		79"	61"	50"	40"	131"
#9			78"	64"	46"	166"

Reinforcing Centered in Wall						Reinforcing at Face 2' cover
Bar Size	Nominal Wall Width					
	F <sub>m</sub> = 3,000 psi					
	6"	8"	10"	12"	16"	
#3	15"	15"	15"	15"	15"	
#4	20"	20"	20"	20"	20"	20"
#5	25"	25"	25"	25"	25"	28"
#6	43"	31"	30"	30"	30"	53"
#7		42"	35"	35"	35"	71"
#8		65"		40"	41"	107"
#9			54"	52"	45"	136"

**LOOSE LINTEL SCHEDULE**

- Interior lintels shall be shop painted. Lintels exposed to weather shall be 3/8" exterior thick galvanized steel with hot-dip galvanizing.
- Bottom plates in beam/plate assemblies shall be 1/2" less in width than the supported masonry wall. Stop end of bottom plates 1/2" from edge of opening.
- Weld bottom plates to lintels with continuous fillet welds (exterior side).
- Steel lintels and lintel plates in exterior walls shall be fabricated, followed by hot-dip galvanizing of the complete assembly.
- Lintels shall have 8" minimum bearing at each end of 1" per foot of opening (6" minimum) except as detailed.
- Lintels shall have 8" minimum solid masonry below bearing points and shall extend beyond the bearing points to the exterior wall face.
- Lintel bearing plates shall be held back 1/2" minimum from face of masonry at opening. Provide flexible caulk between lintel and masonry at this location. Match mortar color.
- The following schedules apply to all non-bearing masonry walls and to bearing walls where lintels are not indicated on the structural drawings. See drawings for other lintels in bearing walls.
  - For 4", 8", 12", and 16" walls, provide one angle for each 4" of masonry wall thickness with 3 1/2" leg horizontal as follows:

Span Limits	Lintel Size
0'-0" to 4'-0"	L3 x 3 1/2 x 1/4
4'-1" to 6'-6"	L4 x 3 1/2 x 5/16
6'-7" to 7'-6"	L5 x 3 1/2 x 5/16
7'-7" to 8'-6"	L6 x 3 1/2 x 3/8
  - For 8" walls provide:

Span Limits	Lintel Size
0'-0" to 4'-0"	WT5x6
4'-1" to 6'-6"	WT5x8.5
6'-7" to 9'-6"	WT7x11 (interior) WT7x13 (exterior)

**STEEL CONSTRUCTION**

- Steel detailing, fabrication, and erection shall conform to the AISC Specification for Structural Steel Buildings and Code of Standard Practices, and the AWS Structural Welding Code.
- Stresses occurring during fabrication, shipment, and erection shall be temporary and not excessive. Stresses at all times shall be less than design and allowable stresses. The full design and load-carrying capacity of the steel work shall not be impaired due to fabrication, shipment, or erection procedures. Throughout the complete process, the stability of all individual members and assemblies shall be maintained.
- The Contractor shall be responsible for the control of all erection procedures and sequences with relation to temperature differentials and weld shrinkage.
- All additional steel required for erection purposes shall be provided at no additional cost and shall be removed unless approved by the Owner in writing.
  - Bolts shall be ASTM F3125 and shall be installed in accordance with "Specifications for Structural Joints Using High-Strength Bolts".
  - Provide hardened washers under nuts at all high-strength bolts, except where plate washers are used per AISC Specifications.
  - Unless snug tight connections are noted on the drawings as being permitted, all bolts should be tightened to full pretensioning load.
  - Use standard holes with the following exceptions: oversize holes are permitted when bolts are loaded in tension; short slotted holes are permitted for shear loading perpendicular to the slot.
  - Provide beveled washers on all connections to sloping flanges of I sections and channels where slope exceeds 1:20.
  - Where minimum AISC fillet weld thickness requirement exceeds welds shown on details, or weld size is not specified, provide minimum AISC weld.
  - The length of connection shall not be less than one-half of the T distance of the beam web.
  - Where reaction is noted, develop same. Where not noted, for non-composite beams, connections shall develop one-half of the total uniform load capacity of the beam; for composite beams, see table listed in typical details.
  - Welding electrodes shall be E70XX except where other electrodes are required for compatibility with material being welded.
  - Shop drawings are required and shall note type of electrodes, size of all welds, and type and size of all bolts. Shop drawings shall be prepared under the supervision of a professional engineer licensed in the jurisdiction where the project is located.
  - Primer, see specifications.
  - Lap all splices in accordance with angle wall anchors and bear a minimum of 8" onto the wall. Masonry shall be built tightly around beam unless otherwise noted.
  - Beams (16" or greater in depth) and columns that are encased in masonry shall have adjustable masonry anchors spaced at 2'-0" on center.
  - See all contract drawings for miscellaneous steel requirements.
  - All shop and field welding shall be performed by a recently certified welder.
  - All welding and high strength bolting must be inspected by a qualified testing laboratory. Laboratory shall be approved by the Architect and/or Engineer.
  - At column base plates, provide a minimum of 1" grout with (4) 3/4" diameter anchor bolts with 1'-0" embedment.
  - Spandrel beams are to have top and bottom 3/8" thick clip angles with (2) 3/4" diameter bolts in each angle at connections to columns in addition to standard shear connection. See drawings for camber requirements in

## STRUCTURAL TESTING AND SPECIAL INSPECTIONS

Structural testing and special inspections are required. The owner shall engage a qualified independent testing agency to conduct structural testing and special inspections. Special inspectors shall be employed or retained by the approved testing agency and have the recommended experience and certifications as summarized in Appendix C of the current International Code Council (ICC) Special Inspection Manual. The testing agency may employ or retain multiple special inspectors with differing areas of expertise as required for the project.

At or before project completion, the qualified testing agency shall submit a written summary statement indicating that applicable structural testing and special inspections have been completed. The written summary statement shall clearly identify non-compliant test and inspection results. The written summary statement shall be sealed by the testing agencies supervising professional engineer and be submitted to the owner, building official, and design professionals. The required testing and inspections are indicated in the following table.

Description of Structural Special Inspection & Testing Requirements				
Verification and Inspection	Frequency	Referenced Standard	BC Reference	Additional Notes

## Soils

**Foundation Bearing & Fill Placement**

Verify materials below shallow foundations are adequate to achieve the design bearing capacity.	Periodic	Geotechnical Report	N/A	
Verify excavations are extended to proper depth and have reached proper material.	Periodic	Geotechnical Report	N/A	
Perform classification and testing of compacted fill materials.	Periodic	Geotechnical Report	N/A	
Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill.	Continuous	Geotechnical Report	N/A	
Prior to placement of compacted fill, observe subgrade and verify that site has been prepared properly.	Periodic	Geotechnical Report	N/A	
Verify all requirements of geotechnical report are met.	Periodic	Geotechnical Report	N/A	

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### Level B Inspection of Masonry

Verification of form and AAC prior to construction.	Periodic	ACI 530.1: Art. 1.4B	N/A	
Verify slump flow and VSI delivered to the site for self-consolidating grout.	Continuous	ACI 530.1: Art. 1.5B.1.b.3	N/A	
Verify compliance with approved submittals.	Periodic	ACI 530.1: Art. 1.5	N/A	
<b>As masonry construction begins, the following shall be verified to ensure compliance:</b>				
Verify proportions of site-prepared mortar.	Periodic	ACI 530.1: Art. 2.1, 2.6A	N/A	
Verify construction of mortar joints.	Periodic	ACI 530.1: Art. 3.3B	N/A	
Verify location of reinforcement and connectors.	Periodic	ACI 530.1: Art. 3.4	N/A	
<b>During construction the inspection program shall verify:</b>				
Verify size and location of structural elements.	Periodic	ACI 530.1: Art. 3.3F	N/A	
Verify type, size, and location of anchors, including other details of anchorage of masonry to structural members, frames, or other construction.	Periodic	ACI 530.1: 1.2.1(e), 6.1.4.3, 6.2.1	N/A	
Verify specified size, grade, and type of reinforcement and anchor bolts.	Periodic	ACI 530.1: 6.1 ACI 530.1: Art. 2.4	N/A	
Verify welding of reinforcing bars.	Continuous	ACI 530.1: 8.1.6.7.2, 9.3.3.4 (a) 11.3.3.4 (b)	N/A	
Verify preparation, construction and protection of masonry during cold weather (temperature below 40° F)	Periodic	ACI 530.1: Art. 1.8C	N/A	
Verify preparation, construction and protection of masonry during hot weather (temperature above 90° F)	Periodic	ACI 530.1: Art. 1.8D	N/A	
<b>Prior to grouting, the following shall be verified to ensure compliance:</b>				
Verify grout space is clean.	Periodic	ACI 530.1: Art. 3.2D, 3.2F	N/A	
Verify placement of reinforcement and connectors.	Periodic	ACI 530.1: 6.1 ACI 530.1: Art. 2.4	N/A	
Verify proportions of site-prepared grout.	Periodic	ACI 530.1: Art. 2.6B, 2.4 G.1.b	N/A	
Verify construction of mortar joints.	Periodic	ACI 530.1: Art. 3.3B	N/A	
Verify grout placement.	Continuous	ACI 530.1: Art. 3.5	N/A	
Observe preparation of any required grout specimens, mortar specimens and/or prisms.	Periodic	ACI 530.1: Art. 1.4 B.2 a.3, 1.4 b.2 b.3, 1.4 b.2 c.3, 1.4 B.3, 1.4 B.4	N/A	

Description of Structural Special Inspection & Testing Requirements				
Verification and Inspection	Frequency	Referenced Standard	BC Reference	Additional Notes
<b>Concrete</b>				
<b>Cast-In-Place Concrete</b>				
Inspect reinforcing steel including prestressing tendons: <ul style="list-style-type: none"> <li>a. Verify reinforcing bar grade.</li> <li>b. Verify reinforcing bars are free of dirt, excessive rust, and damage.</li> <li>c. Verify reinforcing bars are adequately tied, chaired, and supported to prevent displacement during concrete placement.</li> <li>d. Verify proper clear distances between bars and to surfaces of concrete.</li> <li>e. Verify reinforcing bar size and placement.</li> <li>f. Verify bar laps for proper length and stagger.</li> <li>g. Verify mechanical splices placement and attachment.</li> <li>h. Verify epoxy or galvanized coating and coating damage is repaired.</li> </ul>	Periodic - Prior to each pour.	ACI 318: Ch 20, 25.2, 25.3, 26.1-26.6.3	1908.4	
Inspection of reinforcing steel welding: <ul style="list-style-type: none"> <li>a. Verify weldability of reinforcing steel.</li> <li>b. Verify proper electrodes and storage of electrodes.</li> <li>c. Verify proper joint preparation.</li> <li>d. Inspect single-pass fillet welds, maximum 5/16".</li> <li>e. Inspect all other welds.</li> <li>d. Review welder certifications for both fabricator's shop staff and field erectors.</li> </ul>	Periodic Continuous Periodic Continuous Each welder	AWS D1.4 ACI 318: 26.6.4		
Inspect embedments, bolts, headed bolts, and headed studs to be installed in concrete prior to and during concrete placement.	Periodic	ACI 318: 17.8.2	N/A	
Verify use of required mix design: <ul style="list-style-type: none"> <li>a. Verify mixer truck trip ticket conforms to approved mix design.</li> <li>b. Verify that total water added to mix on site does not exceed that allowed by the concrete mix design.</li> <li>c. Verify that concrete quality is indicative of adequate mixing time, consistency, and relevant time limits.</li> </ul>	Periodic - Prior to each pour.	ACI 318: 26.4.3 ACI 301, ACI 214R	1904.1 1904.2 1908.2 1908.3	
Inspect formwork for cleanliness, shape, location and dimensions of the concrete member being formed.	Periodic - Prior to each pour.	ACI 318: 26.11.1,2(b)	N/A	
Inspect concrete and shotcrete placement for proper application techniques, including proper consolidation, reinforcement remains at proper location, and conveyance and depositing avoid segregation and contamination.	Continuous	ACI 318: 26.5	1908.6 1908.7 1908.8	
Sample fresh concrete:	Obtain one composite sample of each class of concrete placed each day shall be taken not less than once a day, nor less than once for each 150 cu. yd. concrete nor less than once for each 5,000 sqft. of surface area for slabs or walls. If the total volume of concrete is such that frequency of testing required would provide less than five composite samples for a given class of concrete, tests shall be made from at least five randomly selected batches (per ASTM D3685) or from each batch if fewer than five batches are used.	ACI 318: 26.4 ASTM C 172	1908.10	A composite sample shall consist of the following: five 4" diameter cylinders, or four 6" diameter cylinders.
Obtain test cylinders of concrete.	One set of five 4" diameter cylinders or four 6" diameter cylinders for each composite sample.	ACI 318: 26.12 ASTM C 31	N/A	Cast additional cylinders at contractor's request and expense for field cured specimens to determine shoring removal, early strength for post-tensioning, etc.
Obtain grout cubes for deferred placed concrete toppings	One set of three 2" molded-cube for each composite sample.	ASTM C 109	N/A	
Perform slump tests.	One test at point of discharge for each composite sample.	ASTM C 143	N/A	
Perform air content tests.	One test at point of discharge for each composite sample.	ASTM 231 pressure method for normalweight concrete, ASTM C 173, volumetric method for lightweight concrete	N/A	
Determine the temperature of fresh concrete.	One test for each composite sample, and test hourly and when air temperature is below 40 F or when above 80 F.	ASTM C 1064	N/A	
Determine the unit weight of fresh lightweight concrete.	One test at point of discharge for each composite sample of lightweight concrete.	ASTM C567	N/A	
Review and inspect cold weather concrete procedures and placement.	Periodic - Prior to each pour.	ACI 306.1 ACI 318 26.5.4		
Review and inspect hot weather concrete procedures and placement.	Periodic - Prior to each pour.	ACI 305.1 ACI 318 26.5.5		
Inspect for maintenance of specified curing temperature and techniques.	Periodic - After each pour.	ACI 318: 26.5.3	1908.9	
Laboratory test concrete cylinders for compressive strength.	One specimen tested at 7 days, two specimens tested at 28 days, and one specimen retained in reserve for later testing if required.	ACI 318: 26.12 ASTM C 39	N/A	Three specimens shall be tested at 28 days if using 4" diameter cylinders. Test additional cylinders at contractor's request and expense.
Laboratory test concrete cubes for compressive strength for deferred placement toppings.	Test one set of three specimens at 28 days.	ASTM C 109	N/A	
Inspect anchors post-installed into hardened concrete <ul style="list-style-type: none"> <li>a. Adhesive anchors installed in horizontally or upwardly inclined orientations to resist sustained tension loads.</li> <li>b. All other Mechanical anchors and adhesive anchors not defined in a.</li> </ul>	Continuous  Periodic	ACI 318: 17.8.2.4	N/A	
Measure & report floor slab levelness (FL) and flatness (FF) for shored, non-cambered, and non-inclined surfaces.	Measure all floors within 24 hours of finishing	ACI 117 4.8.5 ASTM E1155	ACI 318: 17.8.2	N/A
Measure & report floor slab flatness for cambered, unshored, and inclined surfaces.	Measure the gap under a freestanding (unleveled) 10 ft. straightedge.	ACI 117: 4.8.6	N/A	
Deferred placement floor toppings shall be tested for delamination by dragging a steel chain over the surface.	All floor areas after 28 days.	N/A	N/A	

Description of Structural Special Inspection & Testing Requirements					
Verification and Inspection		Frequency	Referenced Standard	BC Reference	Additional Notes
Metals					
Structural Steel					
Inspection Tasks Prior to Welding:			AISC 360 Table N5.4-1	2204.1	
Verify procedure specifications (WPS) available		Perform	AISC 360 Section N5.4		
Manufacturer certifications for welding consumables available.		Perform	AISC 360 Section N5.4		
Material identification (type/grade)		Observe	AISC 360 Section N5.4		
Check identification system		Observe	AISC 360 Section N5.4		
Fit up of groove welds a. Joint preparation b. Dimensions (alignment, root opening, root face, bevel) c. Cleanliness (condition of steel surface) d. Tacking (tack weld quality and location) e. Backing type and fit		Observe	AISC 360 Section N5.4		
Configuration and finish of access holes		Observe	AISC 360 Section N5.4		
Fit up of fillet welds a. Dimensions (alignment,gaps at root) b. Cleanliness (condition of steel surface) c. Tacking(tack weld quality and location)		Observe			
Inspection Tasks During Welding:			AISC 360 Table N5.4-2	2204.1	
Use of qualified welders		Observe	AISC 360 Section N5.4		
Control and handling of welding consumables a. Packing b. Exposure control		Observe	AISC 360 Section N5.4		
No welding over cracked tack welds		Observe	AISC 360 Section N5.4		
Environmental conditions a. Wind speed within limits b. Precipitation and temperature		Observe	AISC 360 Section N5.4		
WPS followed a. Settings on welding equipment b. Travel speed c. Selected welding material d. Shielding gas type/flow rate e. Preheat applied f. Interpass temperature maintained g. Proper position (F,V,H,OH)		Observe	AISC 360 Section N5.4		
Welding techniques a. Interpass and final cleaning b. Each pass within profile limitations c. Each pass meets quality requirements		Observe	AISC 360 Section N5.4		
Inspection Tasks After Welding:			AISC 360 Table N5.4-3	2204.1	
Welds cleaned		Observe	AISC 360 Section N5.4		
Size,length and location of welds		Perform	AISC 360 Section N5.4		
Welds meet visual acceptance criteria a. Crack prohibition b. Weld/base-metal fusion c. Crater cross section d. Weld profiles e. Weld size f. Undercut g. Porosity		Perform	AISC 360 Section N5.4		
Arc strikes		Perform	AISC 360 Section N5.4		
k-Area (When welding of doubler plate, continuity plates or stiffeners in k-area, visually inspect the weld k-area for crack with in 3 in.)		Perform	AISC 360 Section N5.4		
Backing removed and weld tabs removed (if required)		Perform	AISC 360 Section N5.4		
Repair activities		Perform	AISC 360 Section N5.4		
Document acceptance or rejection of welded joint or member		Perform	AISC 360 Section N5.4		
Inspection of Welding in Field and in Non AISC Certified Shops: a. Complete joint penetration groove welds subject to transversely applied tension loading in butt, T and corner joints with materials 5/16 inches or thicker. b. Welder qualifications.		Test 100% of welds by ultrasonic testing for risk category III or IV Test 10% of welds by ultrasonic testing for risk category II.	AISC 360 Section N5.5		All welds subject to non-destructive testing shall also meet visual acceptance criteria per AWS Table 6.1.
Inspection Tasks Prior to Bolting:			AISC 360 Table N5.6-1	2204.2	
Manufacturer's certifications available for fastener materials		Perform	AISC 360 Section N5.6		
Fasteners marked in accordance with ASTM requirements		Observe	AISC 360 Section N5.6		
Proper fasteners selected for the joint detail (grade, type, bolt length if threads are to be excluded from shear plane)		Observe	AISC 360 Section N5.6		
Proper bolting procedure selected for joint detail		Observe	AISC 360 Section N5.6		
Connecting elements, including the appropriate faying surface condition and hole preparation, if specified, meet applicable requirements		Observe	AISC 360 Section N5.6		
Pre-Installation verification testing by installation personnel observed and documented for fastener assemblies and methods used		Observe	AISC 360 Section N5.6		
Proper storage provided for bolts,nuts washers and other fastener components		Observe	AISC 360 Section N5.6		

Inspection Tasks During Bolting:			AISC 360 Table N5.6-2	2204.2	
Fastener assemblies, of suitable condition, placed in all holes and washers (if required) are positioned as required	Observe		AISC 360 Section N5.6		
Joint brought to the snug-tight condition prior to the pretensioning operation	Observe		AISC 360 Section N5.6		
Fastener component not turned by the wrench prevented from rotating	Observe		AISC 360 Section N5.6		
Fasteners are pretensioned in accordance with the RCSC specification, progressing systematically from the most rigid point toward the free edges	Observe		AISC 360 Section N5.6 AISC 348		
Inspection Tasks After Bolting:			AISC 360 Table N5.6-3	2204.2	
Document acceptance or rejection of bolted connections	Perform		AISC 360 Section N5.6		
Inspection of Steel Frame: a. Verify installation of all members. b. Verify proper application of details to each joint and connection. c. Verify bracing and stiffening of framing members. d. Verify members and detail critical for frame stability.	Perform		AISC 360 Section N5.7		
Verify Material Grade of Structural Steel: a. Verify identification markings conform to AISC 360 for materials specified in the approved construction documents. b. Manufacturer's certificate of compliance required.	Observe		AISC 360 Section N5.7		
Inspection of anchor rods and other embedments supporting structural steel: a. Verify the diameter, grade, type and length of anchor rod or embedded item b. Verify the extent or depth of embedment into concrete prior to placement of concrete.	Observe		AISC 360 Section N5.7		
Inspection of Welding and Bolting in AISC Certified Shop: a. Review Fabricator's Certificate of Compliance for certified fabricators shop.	Once for Each Fabricator		AISC 360 Section N7	1704.2	

Wood				
Wood Construction				
Review manufacturer's Certificate of Compliance for certified fabricators.	Once per manufacturer.	N/A	1704.2	Shop inspection is required if the manufacturer is not certified.
Verify temporary installation restraint/bracing and permanent individual truss member restraint/bracing.	Continuous for truss spans greater than 60'-0"	N/A	N/A	
Verify drag struts, braces, and shear wall strapping, hold-downs, end posts, sheathing thickness, attachment size, quantity, and pattern.	Periodic	N/A	N/A	



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PRELIMINARY -  
NOT FOR  
CONSTRUCTION

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[illegible]

## SPECIAL INSPECTIONS

Project Number	19-67
Date	
Drawn By	LJP
Checked By	JTL
Sheet No.:	S002
Scale	12" = 1'-0"

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**Karam Senior Living**  
**DSCDO**  
7918 Detroit Avenue



NOTES:

1. FIRST FLOOR ELEVATION = +88'-0" = REFERENCE ELEVATION (0'-0").
2. ELEVATIONS GIVEN ARE TO BOTTOM OF FOOTING AND ARE REFERENCED FROM REFERENCE ELEVATION (0'-0").
3. DIMENSIONS ARE TO THE EXTERIOR FACE OF WALL/CURB.
4. FOUNDATION ARE BASED ON ASSUMED 2,500 PSF BEARING CAPACITY. FOUNDATION SIZES MAY VARY WITH GEOTECHNICAL RECOMMENDATIONS.
5. REINFORCED CONCRETE WALL STEEL WEIGHT = 5 PSF.
6. SEE ARCHITECTURAL DRAWINGS FOR RAMP AND SLAB DEPRESSION LOCATIONS AND DIMENSIONS.

- LEGEND:**
- 5" S.O.G. INDICATES 5" SLAB ON GROUND WITH 6x6-W2.9xW2.9 WWR.
- FFS INDICATES FROST FREE SLAB. PROVIDE AT ALL EXTERIOR DOORS. COORDINATE WITH ARCHITECT.
- FXF SPREAD FOOTING. SEE SCHEDULE ON SHEET S100
- CC-1 INDICATES 30"x24" CONCRETE COLUMN WITH (8) #5 VERTICAL AND 4 TIES AT 16" O.C. AND CONCRETE STRENGTH OF 5000 PSI.
- CC-2 INDICATES 30"x24" CONCRETE COLUMN WITH (10) #5 VERTICAL AND 4 TIES AT 16" O.C. AND CONCRETE STRENGTH OF 5000 PSI.
- WF-1 INDICATES 4'-0"x1'-6" FOOTING WITH (4) #5 BARS BOTTOM.
- WF-2 INDICATES 2'-0"x2'-8" FOOTING WITH (3) #5 BARS TOP AND BOTTOM.
- WF-3 INDICATES 3'-0"x1'-6" FOOTING WITH (3) #5 BARS BOTTOM

[illegible]

LOWER LEVEL  
FOUNDATION PLAN

Project Number	19-6
Date	
Drawn By	LJ
Checked By	JT
Sheet No.:	S100
Scale	1/8" = 1'-

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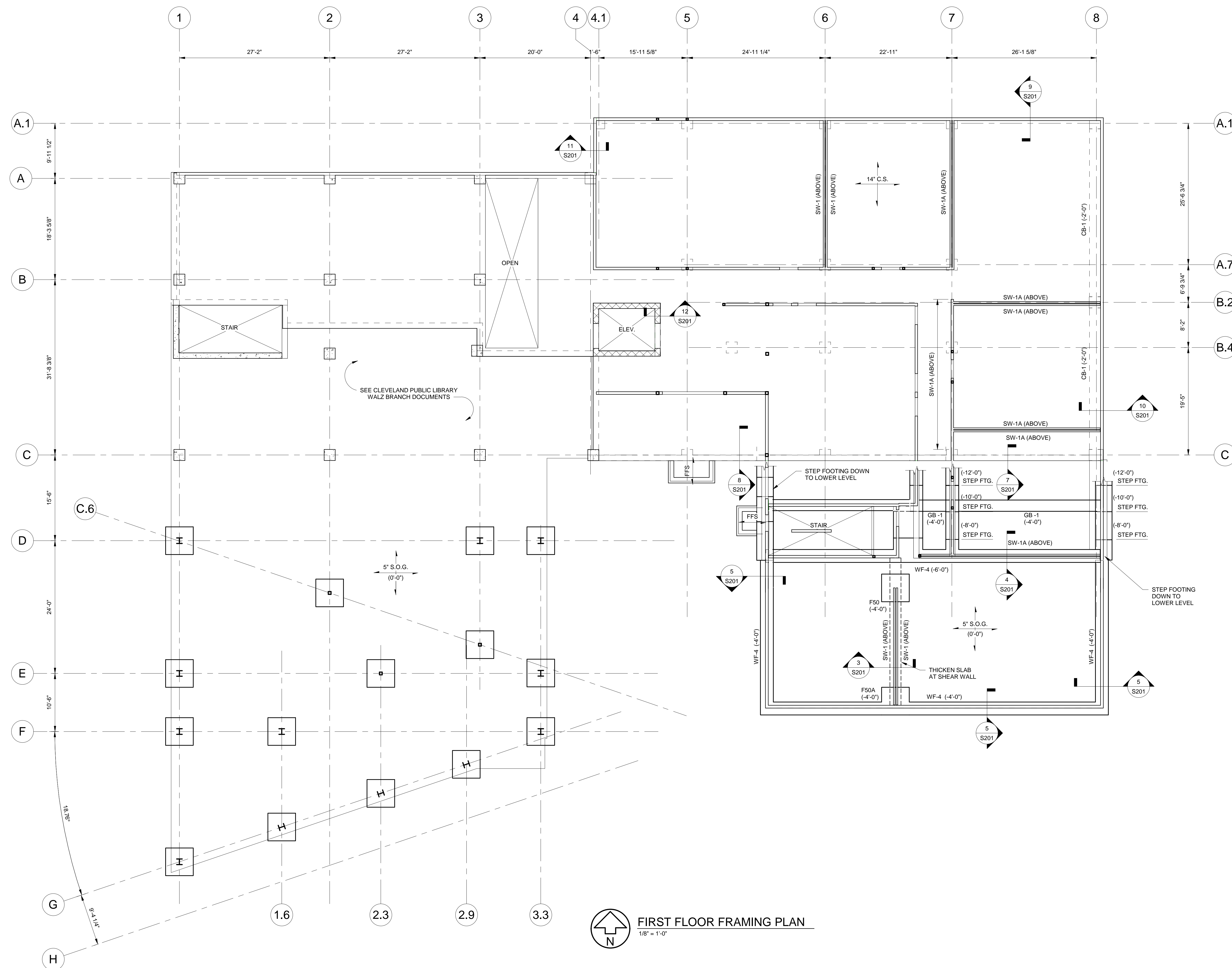
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FIRST FLOOR  
FRAMING PLAN

Project Number	19-67
Date	
Drawn By	LJP
Checked By	JTL
Sheet No.:	S101
Scale	1/8" = 1'-0"



- NOTES:
1. FIRST FLOOR ELEVATION =  $+100'-0"$  = REFERENCE ELEVATION ( $0'-0"$ ).
  2. ELEVATIONS GIVEN ARE TO BOTTOM OF FOOTING, BOTTOM OF GRADE BEAMS AND TO BOTTOM OF CONCRETE BEAMS, ELEVATIONS ARE REFERENCED FROM REFERENCE ELEVATION ( $0'-0"$ ).
  3. SEE ARCHITECTURAL DRAWINGS FOR RAMP AND SLAB DEPRESSION LOCATIONS AND DIMENSIONS.

**LEGEND:**

14" C.S. INDICATES 14" TWO-WAY CONCRETE SLAB

5" S.O.G. INDICATES 5" SLAB ON GROUND WITH 6x6-W2.9xW2.9 WWR

FFS INDICATES FROST FREE SLAB. PROVIDE AT ALL EXTERIOR DOORS.  
← → COORDINATE WITH ARCHITECT.

WF-4 INDICATES 2'-4"x2'-8" (MIN. DEPTH) FOOTING WITH (4) #5 BARS TOP AND BOTTOM. PLACE FOOTING DOWN AS REQUIRED TO ACHIEVE BOTTOM OF FOOTING ELEVATION GIVEN ON PLAN.

CB-1 2'-6" x 2'-0" CONCRETE BEAM

GB-1 2'-0" x 3'-0" GRADE BEAM.



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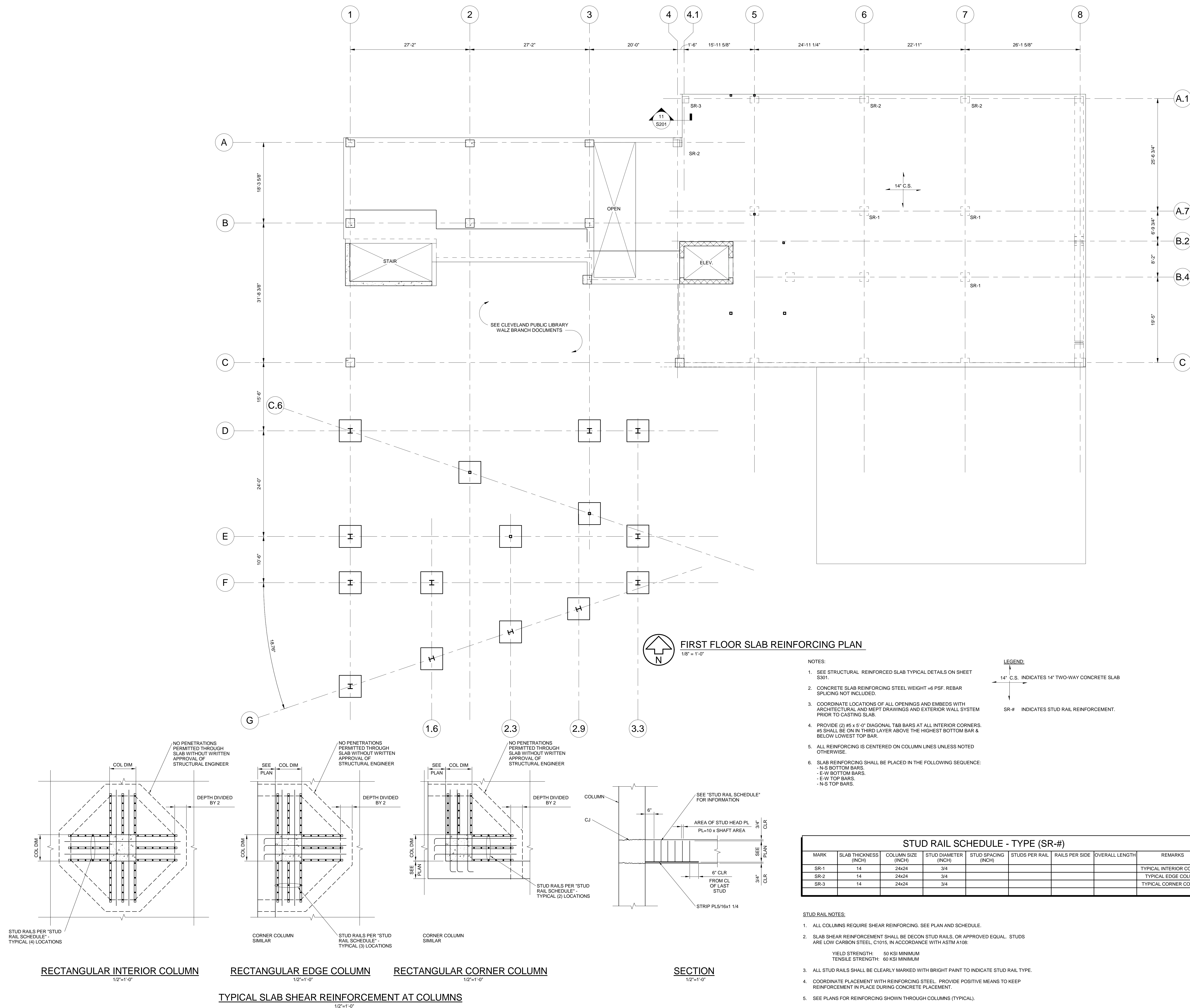
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[illegible]

FIRST FLOOR SLAB  
REINFORCING PLAN

Project Number	19-6
Date	
Drawn By	LJ
Checked By	JT
Sheet No.:	
S101R	
Scale	As indicated



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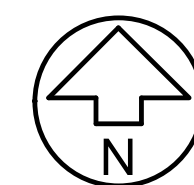
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## SECOND FLOOR FRAMING PLAN

Project Number	19-6
Date	
Drawn By	LJ
Checked By	JT
Sheet No.:	S102
Scale	1/8" = 1'-0"



## SECOND FLOOR FRAMING PLAN

$$\frac{1}{8}'' = 1' - 0$$

## NOTES

1. TOP OF SHEATHING = (VARIES) = (REFERENCE ELEVATION (0'-0")).
2. TOP OF WOOD TRUSSES ARE AT (3'-4") BELOW TOP OF SHEATHING. ELEVATION, UNLESS OTHERWISE NOTED.
3. SEE STUD WALL SCHEDULE FOR STUD FRAMING.
4. WOOD POSTS DENOTED ON PLAN ARE BELOW, UNLESS OTHERWISE NOTED.
5. EXTERIOR DIMENSIONS ARE TO THE FACE OF SHEATHING OR CMU. INTERIOR DIMENSIONS ARE TO CENTERLINE OF STUD WALL. SEE ARCHITECTURAL DRAWINGS FOR WALL CONSTRUCTION.
6. SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS AND ELEVATIONS.
7. WALL CONSISTS OF STAGGERED 2x6 STUDS AT 12" O.C. WITH 2x8 TOP AND BOTTOM PLATES.

LEGEND

- |          |   |
|----------|---|
| FD-1     | 3/4" THICK TONGUE-AND-GROOVE APARATED (4824) FLOOR SHEATHING. COORDINATE FLOOR CONSTRUCTION AND FINISHES WITH ARCHITECTURAL DRAWINGS. SEE DETAILS FOR ADDITIONAL INFORMATION. |
| FT-1     | 18" DEEP, 2x4 OPEN-WEB WOOD FLOOR TRUSSES SPACED AT 24" O.C. SEE GENERAL NOTES FOR DESIGN CRITERIA.   |
| RD-1.5   | 1 1/2" TYPE 'B' GALVANIZED STEEL ROOF DECK.   |
| WP-#     | WOOD POST. SEE SCHEDULE AND TYPICAL DETAILS.  |
| WB-#     | WOOD BEAM. SEE SCHEDULE AND TYPICAL DETAILS.  |
| SW-X     | SHEAR WALL. - SEE SHEAR WALL SCHEDULE AND DETAILS FOR MORE INFORMATION.   |
| D.S.     | DRAG STRUT TO MATCH WIDTH OF SHEAR WALL AND DEPTH OF SURROUNDING FRAMING MEMBER. - SEE TYPICAL DETAIL FOR MORE INFORMATION.   |
| 16" C.S. | INDICATES 16" TWO-WAY CONCRETE SLAB   |

WALL HEADER SCHEDULE				
ROUGH OPENING	HEADER SIZE	JACK STUDS	KING STUDS	COMMENTS
< 4'-0"	(3) 2x10	2	1	INTERIOR WALLS
< 4'-0"	(3) 2x10	2		EXTERIOR WALLS
< 8'-0"	DOUBLE RIM BOARD	4	2	EXTERIOR WALLS
< 10'-6"	(3) 1 3/4"x11 1/4" LVL	4	2	EXTERIOR WALLS

NOTES:

- NOTES:
1. JACK AND KING STUD DEPTHS TO MATCH TYPICAL WALL STUDS, U.O.N
  2. PROVIDE SOLID BLOCKING ABOVE HEADER TO MATCH JACK STUDS ABOVE.
  3. PROVIDE STUD PACKS AT FLOOR FRAMING, PACKS TO MATCH WIDTH OF POST ABOVE.
  4. DOUBLE RIB BOARD SHALL NOT BE SPLICED OVER OPENINGS.
  5. WHERE DOUBLE RIB BOARD OCCURS, JACK STUDS TO EXTEND TO UNDERSIDE OF DOUBLE TOP PLATE AT EACH END OF OPENINGS.

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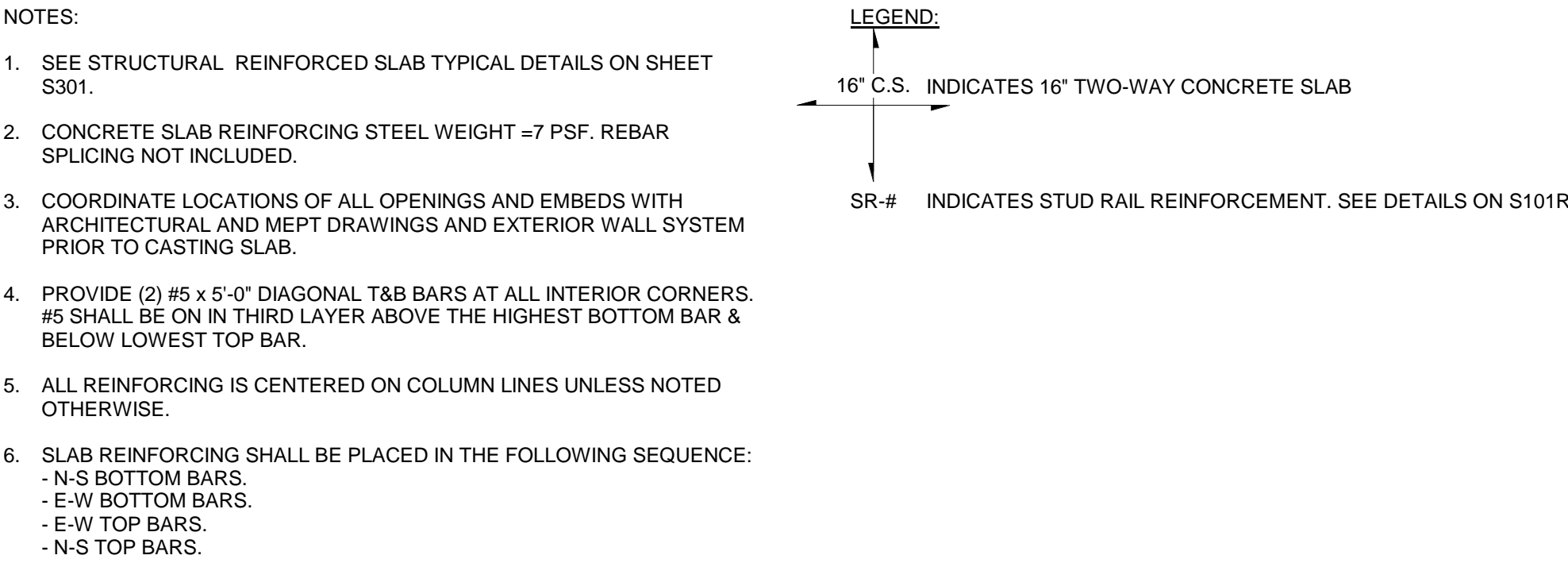
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Project Number	19-67
Date	
Drawn By	LJP
Checked By	JTL
Sheet No.:	<b>S102R</b>
Scale	1/8" = 1'-0"



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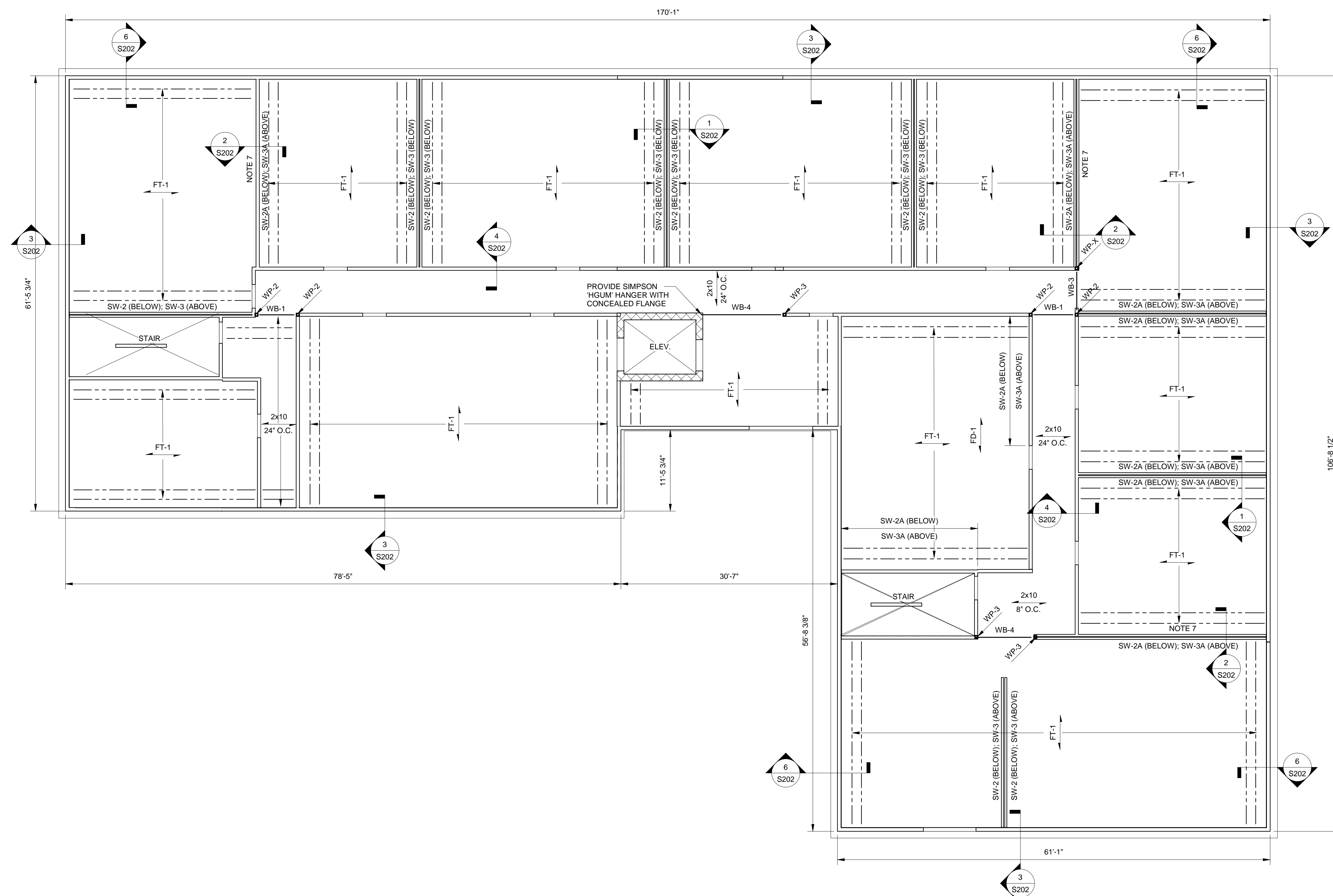
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[illegible]

### THIRD FLOOR FRAMING PLAN

Project Number	19-67
Date	
Drawn By	LJP
Checked By	JTL
Sheet No.:	<b>S103</b>
Scale	1/8" = 1'-0"



ROUGH OPENING	HEADER SIZE	JACK STUDS	KING STUDS	COMMENTS
< 4'-0"	(3) 1 3/4"x11 1/4" LVL	2	1	INTERIOR WALLS
< 4'-0"	DOUBLE RIM BOARD	3	-	EXTERIOR WALLS
< 8'-0"	DOUBLE RIM BOARD	4	-	EXTERIOR WALLS
< 10'-6"	DOUBLE RIM BOARD	5	-	EXTERIOR WALLS

- NOTES:
1. JACK AND KING STUD DEPTHS TO MATCH TYPICAL WALL STUDS, U.O.N.
  2. PROVIDE SOLID BLOCKING ABOVE HEADER TO MATCH JACK STUDS ABOVE.
  3. PROVIDE STUD PACKS AT FLOOR FRAMING, PACKS TO MATCH WIDTH OF POST ABOVE.
  4. DOUBLE RIM BOARD SHALL NOT BE SPLICED OVER OPENINGS.
  5. WHERE DOUBLE RIM BOARD OCCURS, JACK STUDS TO EXTEND TO UNDERSIDE OF DOUBLE TOP PLATE AT EACH END OF OPENINGS.

$$\overline{1/8^* = 1'-0^*}$$

- NOTES:**
1. TOP OF SHEATHING = (124'-0") = REFERENCE ELEVATION (0'-0").
  2. TOP OF WOOD TRUSSES ARE AT (3'-4") BELOW TOP OF SHEATHING ELEVATION, UNLESS OTHERWISE NOTED.
  3. SEE STUD WALL SCHEDULE FOR STUD FRAMING.
  4. WOOD POSTS DENOTED ON PLAN ARE BELOW, UNLESS OTHERWISE NOTED.
  5. EXTERIOR DIMENSIONS ARE TO THE FACE OF SHEATHING OR CMU. INTERIOR DIMENSIONS ARE TO CENTERLINE OF STUD WALL. SEE ARCHITECTURAL DRAWINGS FOR WALL CONSTRUCTION.
  6. SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS AND ELEVATIONS.
  7. WALL CONSISTS OF STAGGERED 2x6 STUDS AT 12" O.C. WITH 2x8 TOP AND BOTTOM PLATES.

**LEGEND:**

- |      |   |
|------|---|
| FD-1 | 3/4" TYP. TONGUE-AND-GROOVE APA-RATED (4824) FLOOR SHEATHING. COORDINATE FLOOR CONSTRUCTION AND FINISHES WITH ARCHITECTURAL DRAWINGS. SEE DETAILS FOR ADDITIONAL INFORMATION. |
| FT-1 | 18" DEEP 2x4 OPEN-WEB WOOD FLOOR TRUSSES SPACED AT 24" O.C. SEE GENERAL NOTES FOR DESIGN CRITERIA.  |
| WP-W | WOOD POST. SEE SCHEDULE AND TYPICAL DETAILS.  |
| WB-W | WOOD BEAM. SEE SCHEDULE AND TYPICAL DETAILS.  |
| SW-X | INDICATES SHEAR WALL BELOW. SEE SHEAR WALL SCHEDULE AND DETAILS FOR MORE INFORMATION.   |

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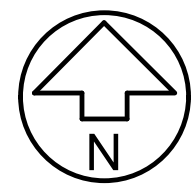
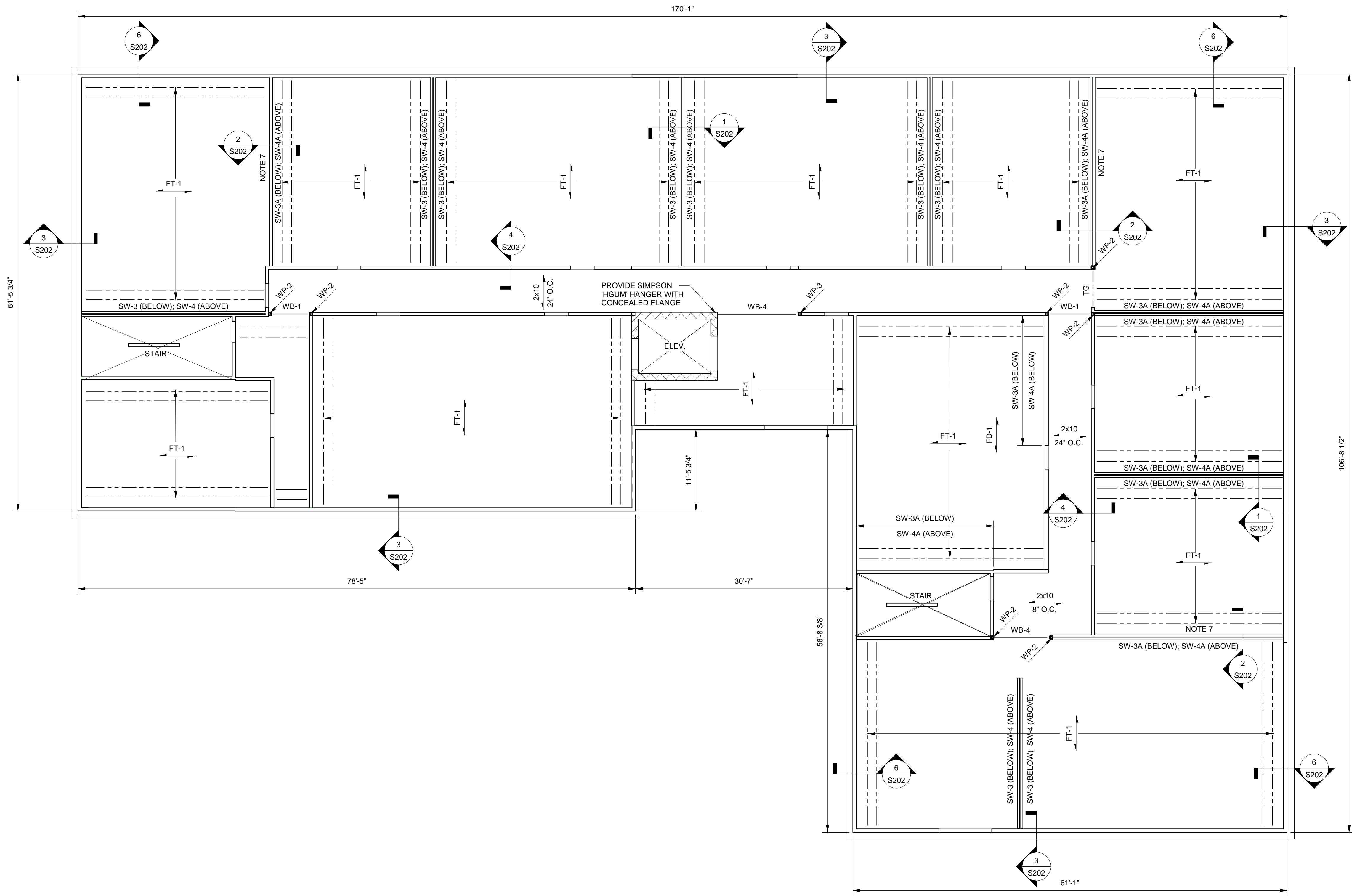
Civil Engineering:  
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MEP Engineering:  
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FOURTH FLOOR FRAMING PLAN

1/8" = 1'-0"

WALL HEADER SCHEDULE

ROUGH OPENING	HEADER SIZE	JACK STUDS	KING STUDS	COMMENTS
< 4'-0"	(3) 1 3/4"x11 1/4" LVL	2	1	INTERIOR WALLS
< 4'-0"	DOUBLE RIM BOARD	3	-	EXTERIOR WALLS
< 8'-0"	DOUBLE RIM BOARD	3	-	EXTERIOR WALLS
< 10'-6"	DOUBLE RIM BOARD	3	-	EXTERIOR WALLS

NOTES:

- JACK AND KING STUD DEPTHS TO MATCH TYPICAL WALL STUDS, U.O.N.
- PROVIDE SOLID BLOCKING ABOVE HEADER TO MATCH JACK STUDS ABOVE.
- PROVIDE STUD PACKS AT FLOOR FRAMING, PACKS TO MATCH WIDTH OF POST ABOVE.
- DOUBLE RIM BOARD SHALL NOT BE SPLICED OVER OPENINGS.
- WHERE DOUBLE RIM BOARD OCCURS, JACK STUDS TO EXTEND TO UNDERSIDE OF DOUBLE TOP PLATE AT EACH END OF OPENINGS.

NOTES:

- TOP OF SHEATHING/TOP OF SLAB = (114'-0") = REFERENCE ELEVATION (0'-0").
- TOP OF WOOD TRUSSES ARE AT (-3/4") BELOW TOP OF SHEATHING ELEVATION, UNLESS OTHERWISE NOTED.
- SEE STUD WALL SCHEDULE FOR STUD FRAMING.
- WOOD POSTS DENOTED ON PLAN ARE BELOW, UNLESS OTHERWISE NOTED.
- EXTERIOR DIMENSIONS ARE TO THE FACE OF SHEATHING OR CMU. INTERIOR DIMENSIONS ARE TO CENTERLINE OF STUD WALL. SEE ARCHITECTURAL DRAWINGS FOR WALL CONSTRUCTION.
- SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS AND ELEVATIONS.
- WALL CONSISTS OF STAGGERED 2x6 STUDS AT 12" O.C. WITH 2x8 TOP AND BOTTOM PLATES.

LEGEND:

- FD-1 3/4" THICK TONGUE-AND-GROOVE APA-RATED (48/24) FLOOR SHEATHING. COORDINATE FLOOR CONSTRUCTION AND FINISHES WITH ARCHITECTURAL DRAWINGS. SEE DETAILS FOR ADDITIONAL INFORMATION.
- FT-1 18" DEEP, 2x4 OPEN-WEB WOOD FLOOR TRUSSES SPACED AT 24" O.C. SEE GENERAL NOTES FOR DESIGN CRITERIA.
- WP-# WOOD POST. SEE SCHEDULE AND TYPICAL DETAILS.
- WB-# WOOD BEAM. SEE SCHEDULE AND TYPICAL DETAILS.
- SW-X INDICATES SHEAR WALL BELOW - SEE SHEAR WALL SCHEDULE AND DETAILS FOR MORE INFORMATION.

FOURTH FLOOR  
FRAMING PLAN

Project Number	19-67
Date	
Drawn By	LJP
Checked By	JTL
Sheet No.:	S104
Scale	1/8" = 1'-0"

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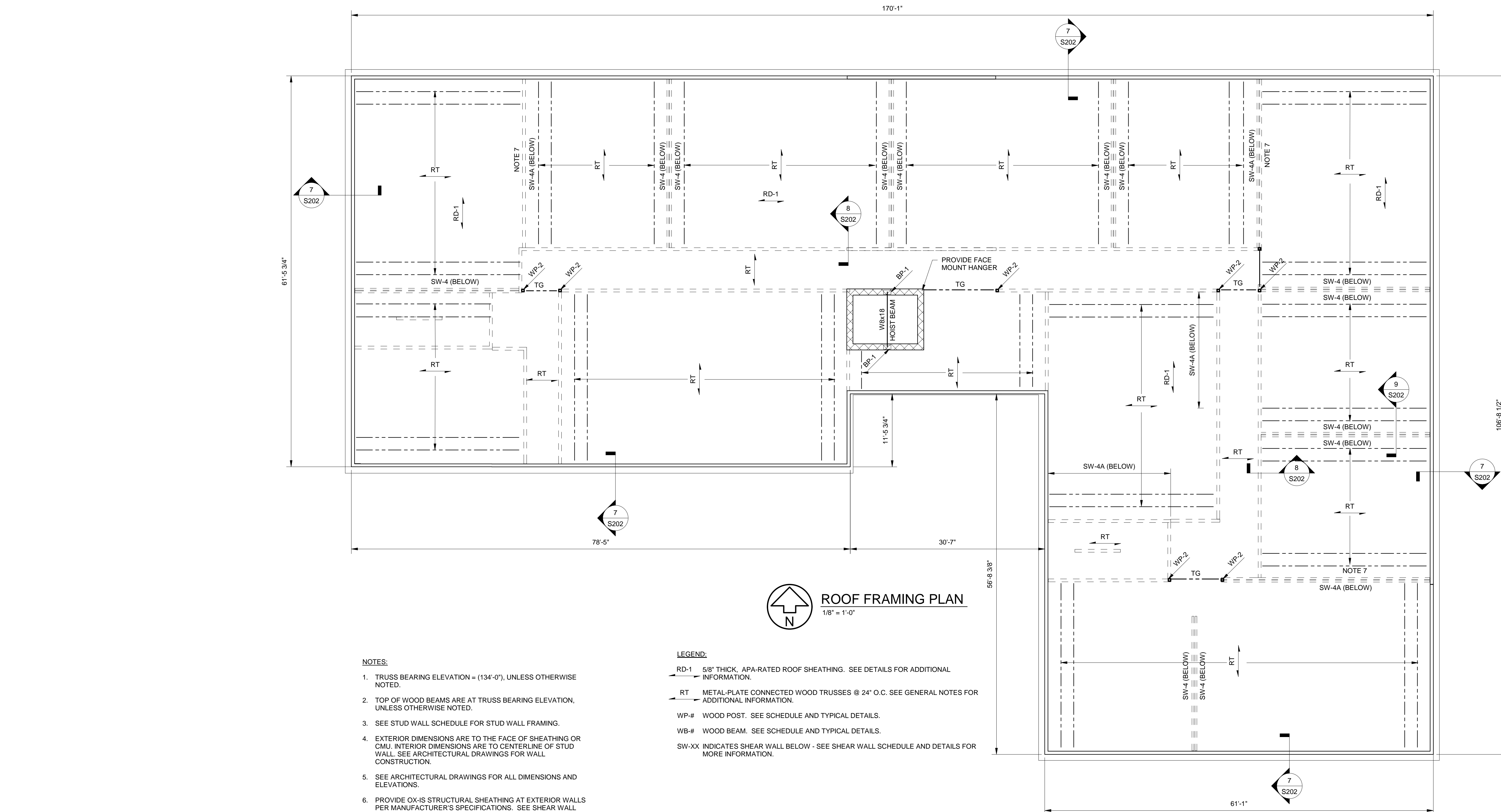
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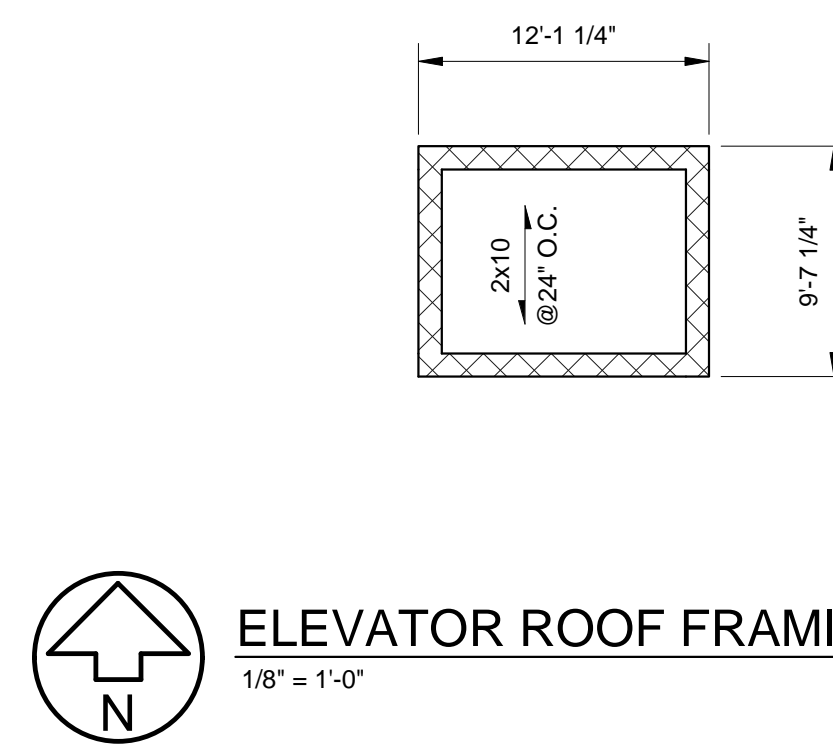
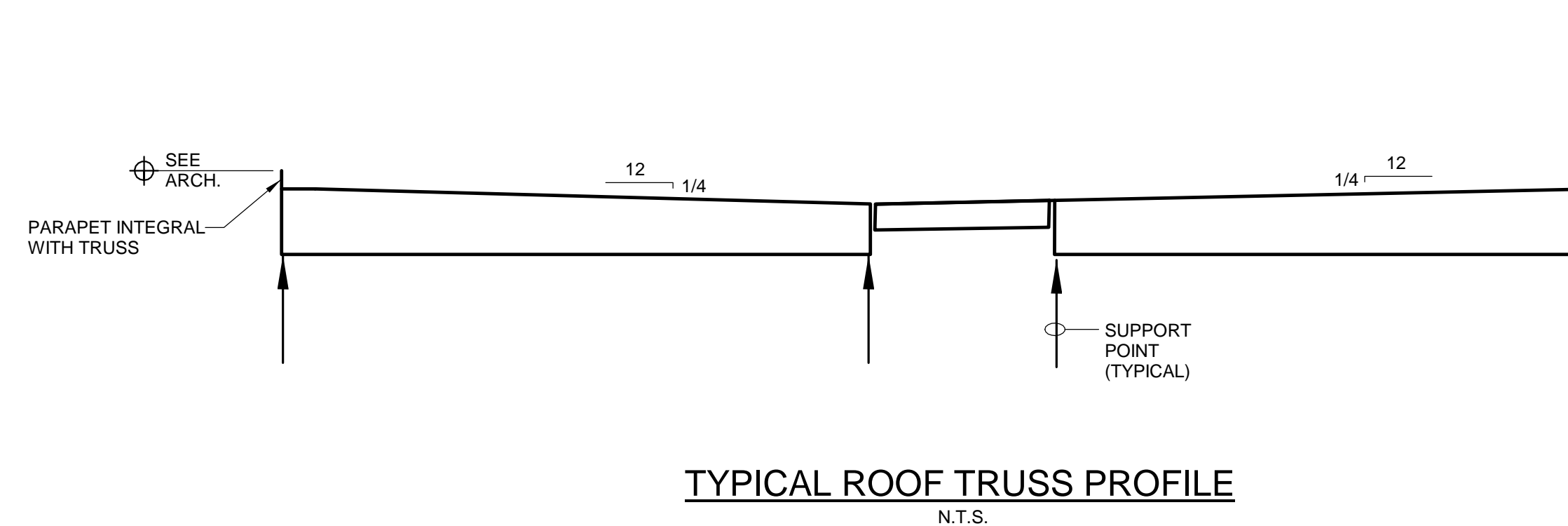
Project Number	19-6
Date	
Drawn By	LJ
Checked By	JT
Sheet No.:	S105
Scale	1/8" = 1'-0"



WALL HEADER SCHEDULE				
ROUGH OPENING	HEADER SIZE	JACK STUDS	KING STUDS	COMMENTS
< 4'-0"	3 1/4"x11 1/4" LVL	2	1	INTERIOR WALLS
< 4'-0"	DOUBLE RIM BOARD	2	-	EXTERIOR WALLS
< 8'-0"	DOUBLE RIM BOARD	3	-	EXTERIOR WALLS
< 10'-6"	DOUBLE RIM BOARD	3	-	EXTERIOR WALLS

NOTES:

1. JACK AND KING STUD DEPTHS TO MATCH TYPICAL WALL STUDS, U.O.N
2. PROVIDE SOLID BLOCKING ABOVE HEADER TO MATCH JACK STUDS ABOVE.
3. PROVIDE STUD PACKS AT FLOOR FRAMING, PACKS TO MATCH WIDTH OF POST ABOVE.
4. DOUBLE RIM BOARD SHALL NOT BE SPLICED OVER OPENINGS.
5. WHERE DOUBLE RIM BOARD OCCURS, JACK STUDS TO EXTEND TO UNDERSIDE OF DOUBLE TOP PLATE AT EACH END OF OPENINGS.





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Project Number	19-67
Date	
Drawn By	Author
Checked By	Checker
Sheet No.:	<b>S201</b>
Scale	1/2" = 1'-0"

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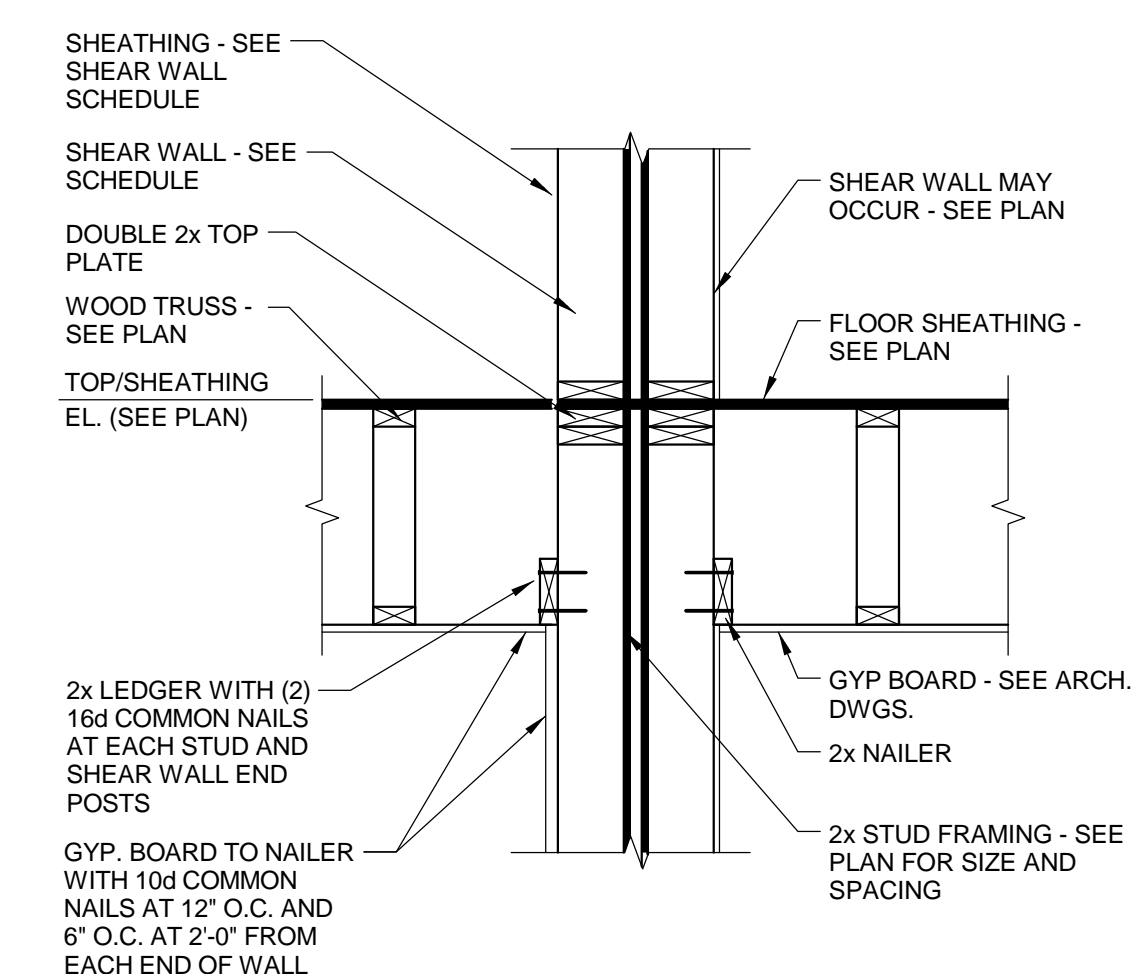
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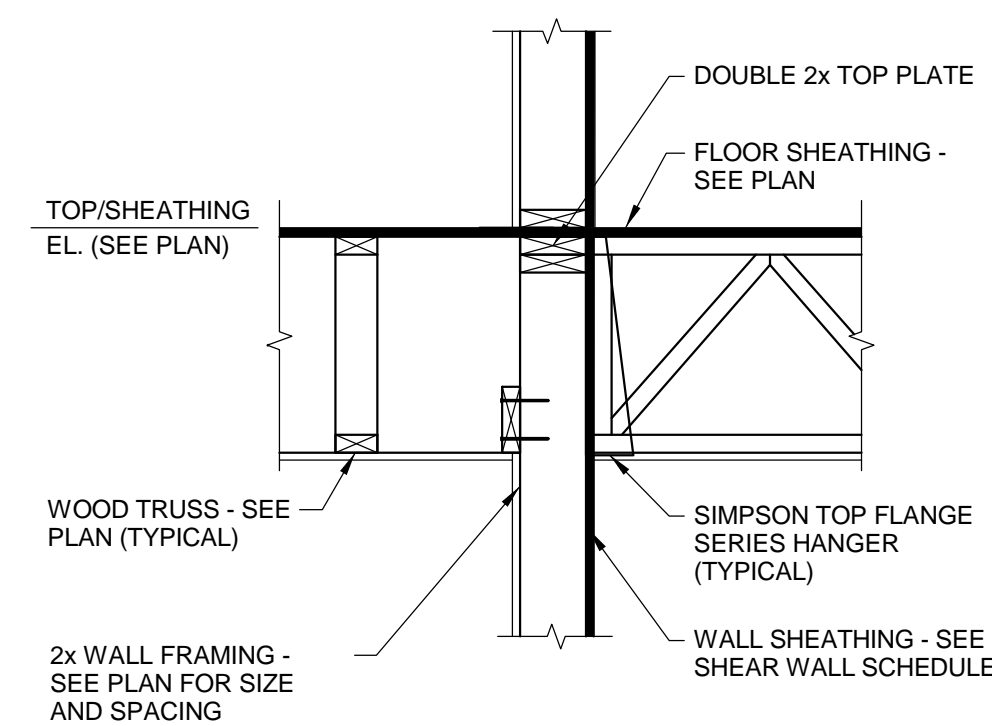
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## SECTIONS

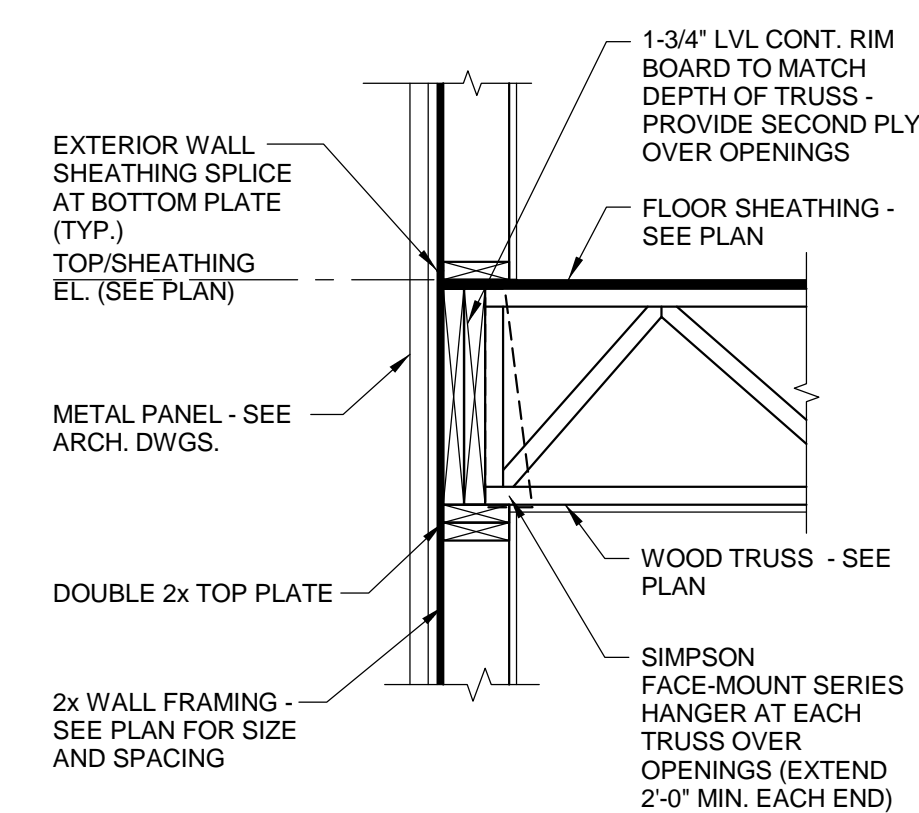
Project Number	19-6
Date	
Drawn By	LJ
Checked By	JT
Sheet No.:	S202
Scale	3/4" = 1'-0"



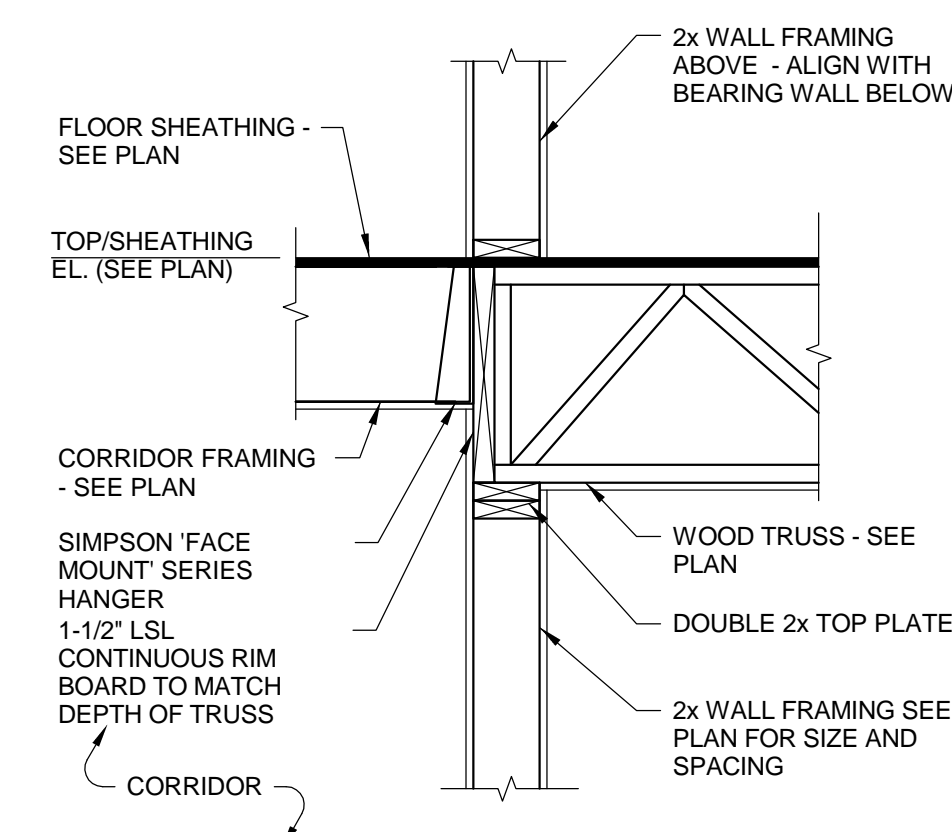
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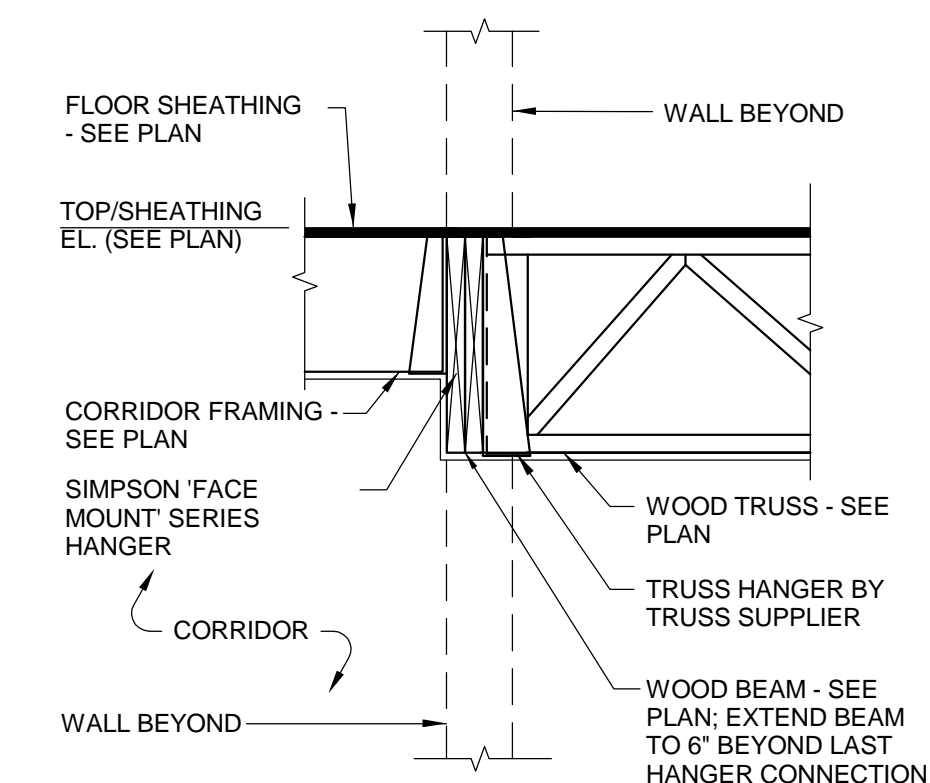
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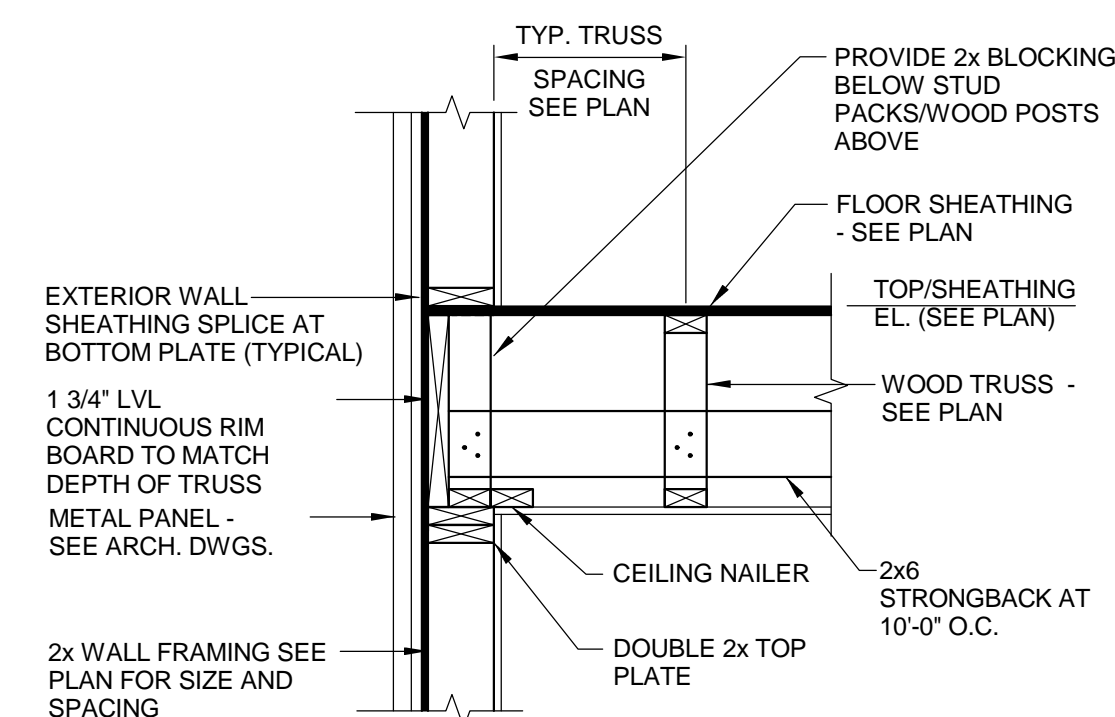
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3/4"=1'-0"



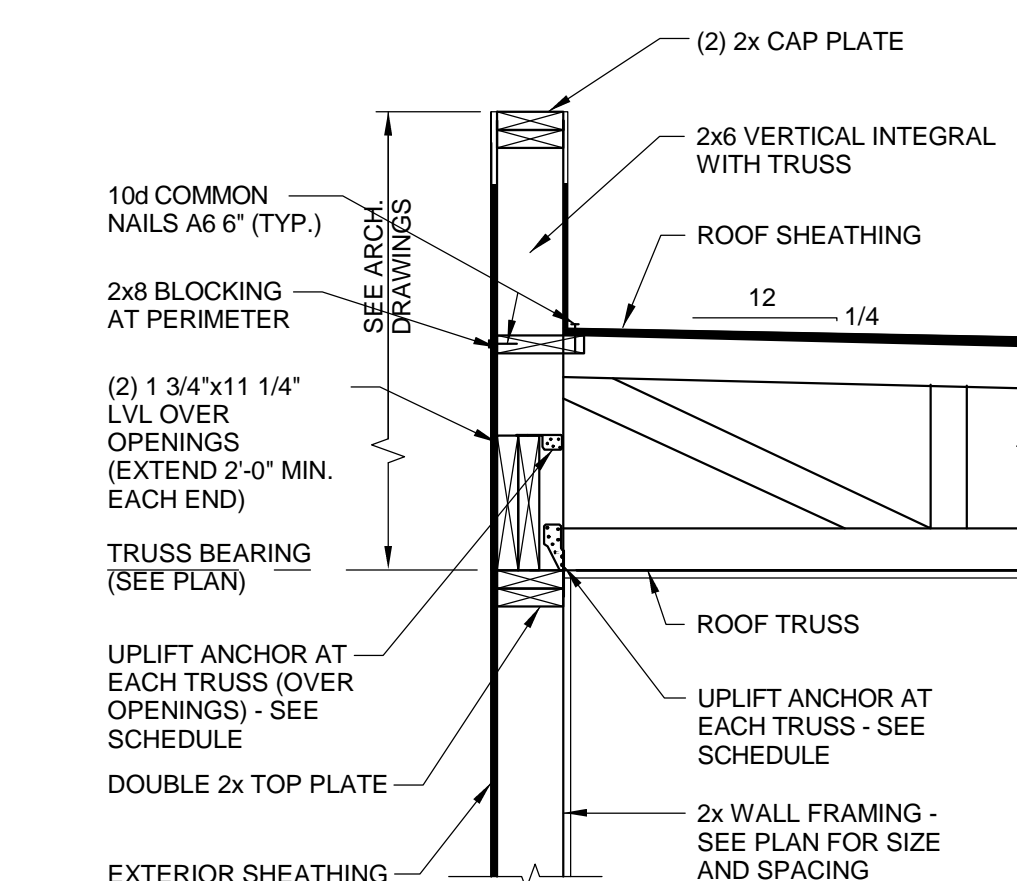
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3/4"=1'-0"



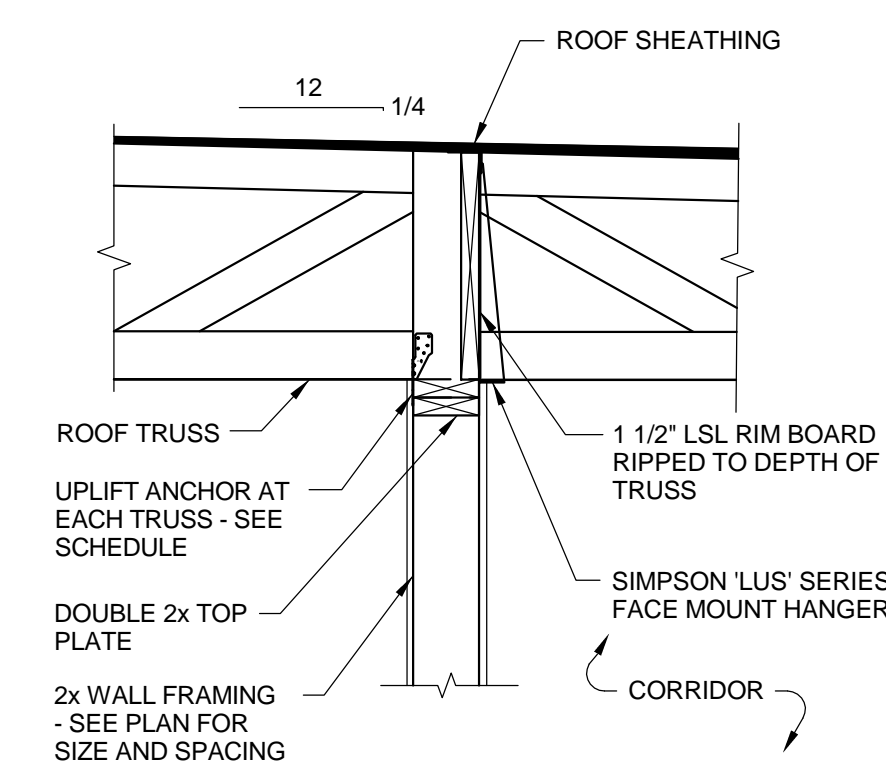
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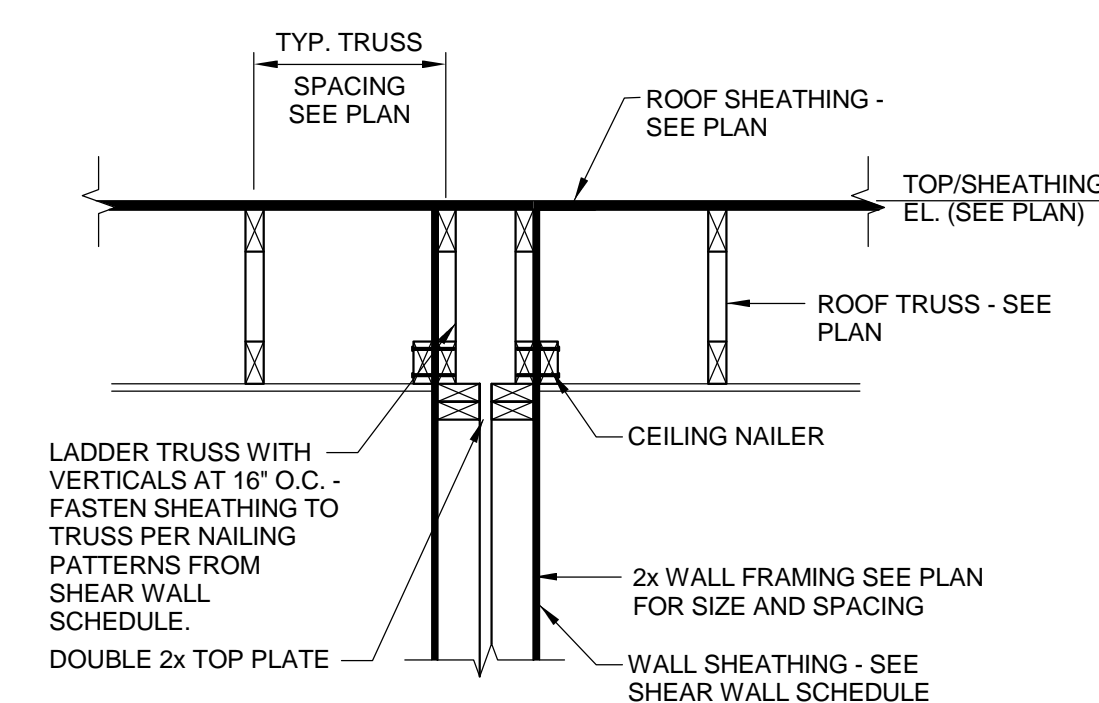
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3/4"=1'-0"



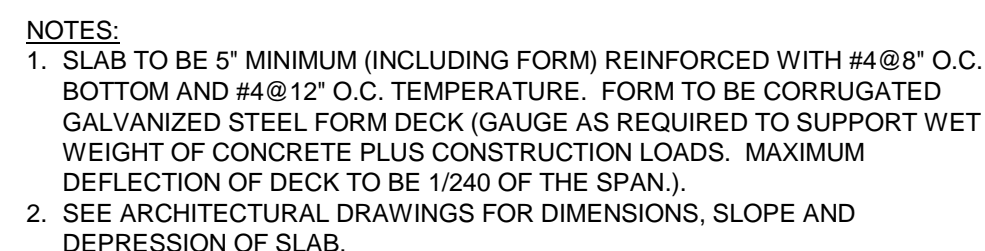
SECTION 7  
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SECTION 8  
3/4"=1'-0"



**SECTION 9**  
3/4"=1'-0"



## TYPICAL DETAILS

Project Number	19-67
Date	
Drawn By	LJP
Checked By	JTL
Sheet No.:	<b>S301</b>
Scale	1/2" = 1'-0"

Civil Engineering:  
**CT Consultants, Inc.**  
8150 Sterling Ct  
Mentor, Ohio 44060  
T. 440.951.9000

MEP Engineering:  
**Bialosky Cleveland**  
6555 Carnegie Avenue, Suite 200  
Cleveland, Ohio 44103  
T. 216.752.8750

Structural Engineering:  
**Strickland & Hoffman, Inc.**  
2217 E 9th Street, Suite 350  
Cleveland, Ohio 44103  
T. 216.875.0100

Design Architect:  
**Bialosky Cleveland**  
6555 Carnegie Avenue, Suite 200  
Cleveland, Ohio 44103  
T. 216.752.8750

**Karam Senior Living**  
**DSCDO**  
7918 Detroit Avenue

[illegible]

Project Number	19-67
Date	
Drawn By	LJP
Checked By	JTL
Sheet No.:	S302
Scale	As indicated



\* GROUT REINFORCED CELLS SOLID FOR FULL HEIGHT OF WALL -TYPICAL



$\frac{3}{4}"=1'-0"$

Civil Engineering:  
**CT Consultants, Inc.**  
8150 Sterling Ct  
Mentor, Ohio 44060  
t. 440.951.9000

MEP Engineering:  
**Biology Cleveland**  
6555 Carnegie Avenue, Suite 200  
Cleveland, Ohio 44103  
t. 216.752.8750

Structural Engineering:  
**Barber & Hoffman, Inc.**  
2217 E 9th Street, Suite 350  
Cleveland, Ohio 44103  
t. 216.875.0100

Design Architect:  
**Biology Cleveland**  
6555 Carnegie Avenue, Suite 200  
Cleveland, Ohio 44103  
t. 216.752.8750

**Karam Senior Living**  
**DSCDO**  
7918 Detroit Avenue

[illegible]

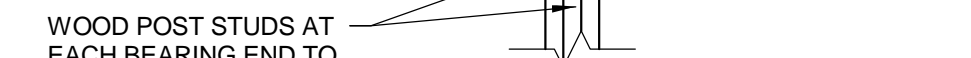
Project Number	19-67
Date	
Drawn By	LJP
Checked By	JTL
Sheet No.:	<b>S303</b>
Scale	As indicated



The diagram illustrates a cross-section of a truss girder. Key components and labels include:

- VARIES**: A vertical dimension line on the left indicating the height of the truss.
- A**: A label pointing to the top chord of the truss.
- B DIA.**: A label pointing to the diameter of the circular opening in the bottom chord.
- OPEN WEB WOOD FLOOR TRUSS**: A label pointing to the truss structure.
- DOUBLE TOP AND BOTTOM CHORDS MAY OCCUR AT TRUSS GIRDERS OR LONGER SPAN TRUSSES. REDUCE MAXIMUM OPENING AS REQUIRED.**: A note pointing to the bottom chord area.
- COORDINATE ACTUAL CLEARANCES WITH TRUSS MANUFACTURER**: A note pointing to the bottom chord area.

TYPICAL DETAIL AT HEADER  
BEAM BEARING



PRELIMINARY -  
NOT FOR  
CONSTRUCTION

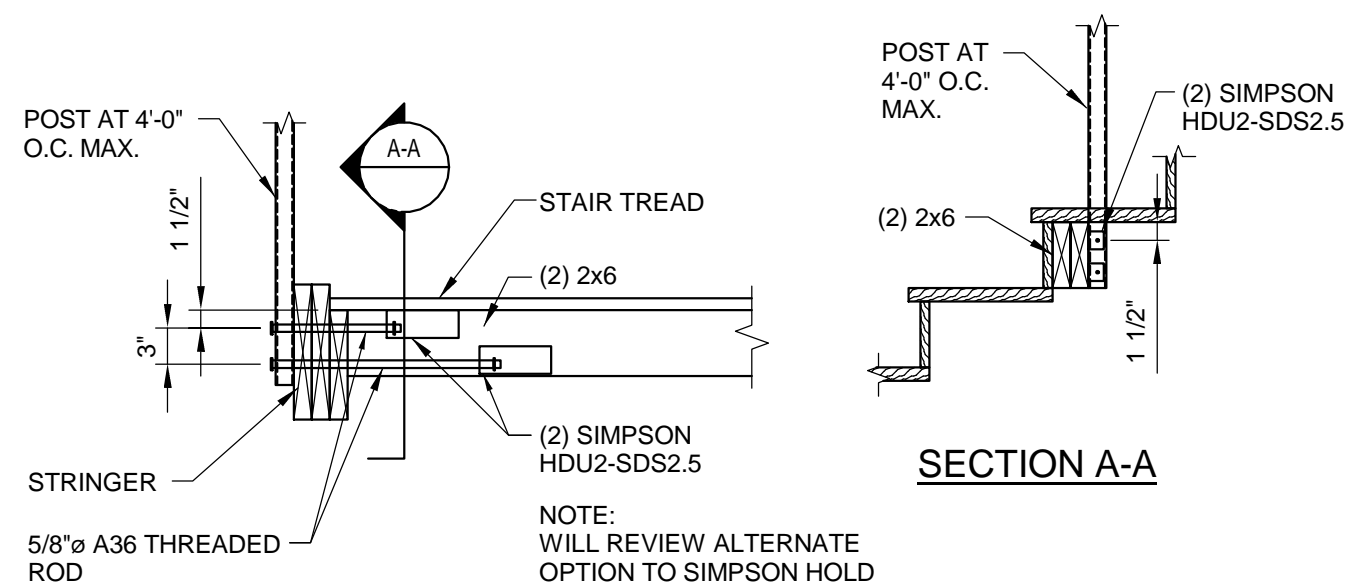
Civil Engineering:  
**CT Consultants, Inc.**  
8150 Sterling Ct  
Mentor, Ohio 44060  
t. 440.951.9000

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6555 Carnegie Avenue, Suite 200  
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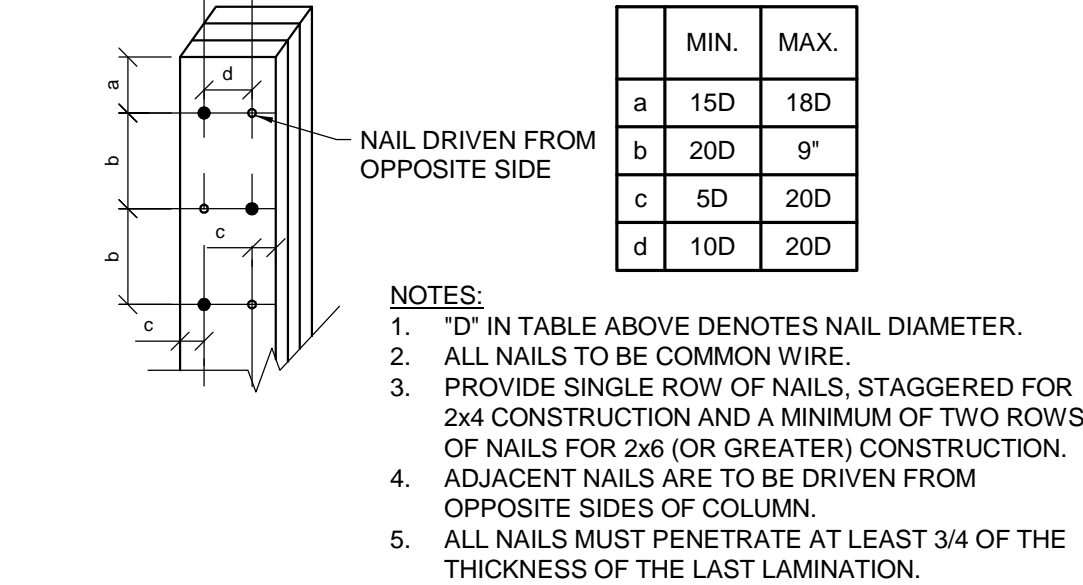
Structural Engineering:  
**Barber & Hoffman, Inc.**  
2217 E 9th Street, Suite 350  
Cleveland, Ohio 44103  
t. 216.875.0100

Design Architect:  
**Bialosky Cleveland**  
6555 Carnegie Avenue, Suite 200  
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t. 216.752.8750

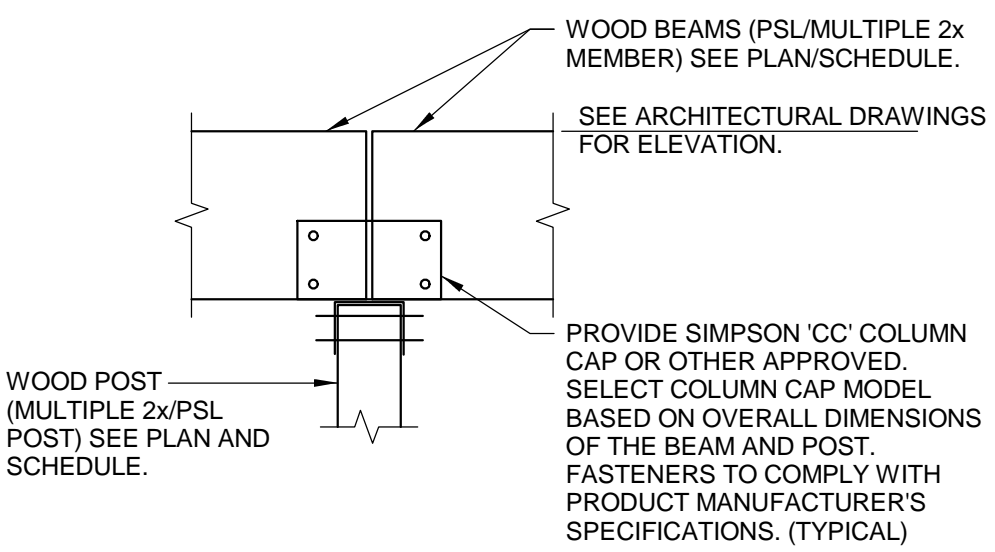
Karam Senior Living  
DSCDO  
7918 Detroit Avenue



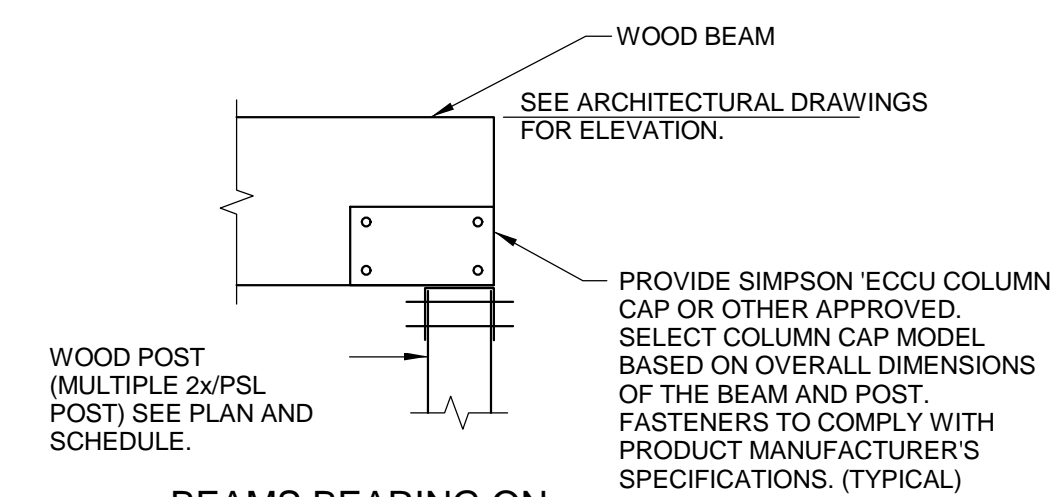
RAILING ATTACHMENT DETAIL



TYPICAL BUILT-UP COLUMN NAILING DETAIL

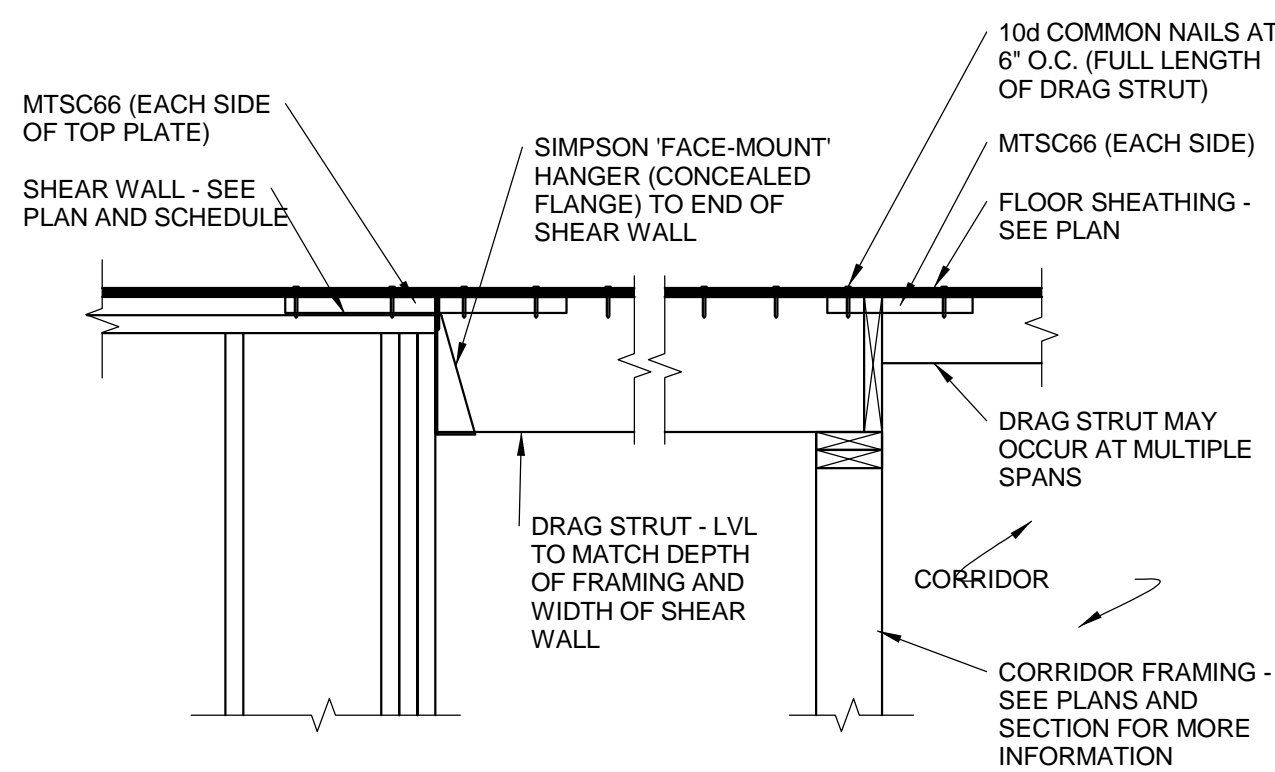


BEAMS BEARING ON  
INTERIOR WOOD POST

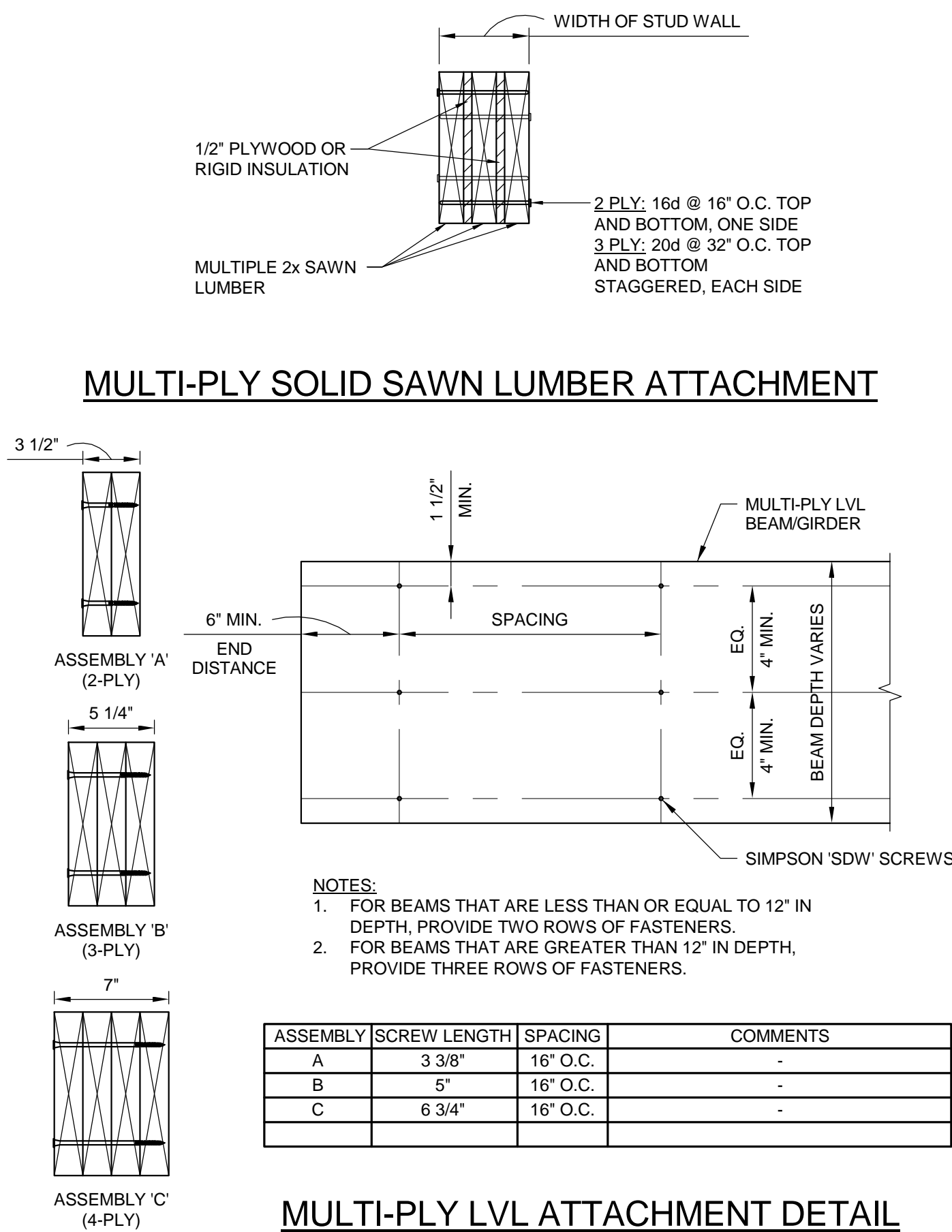


BEAMS BEARING ON  
END WOOD POST

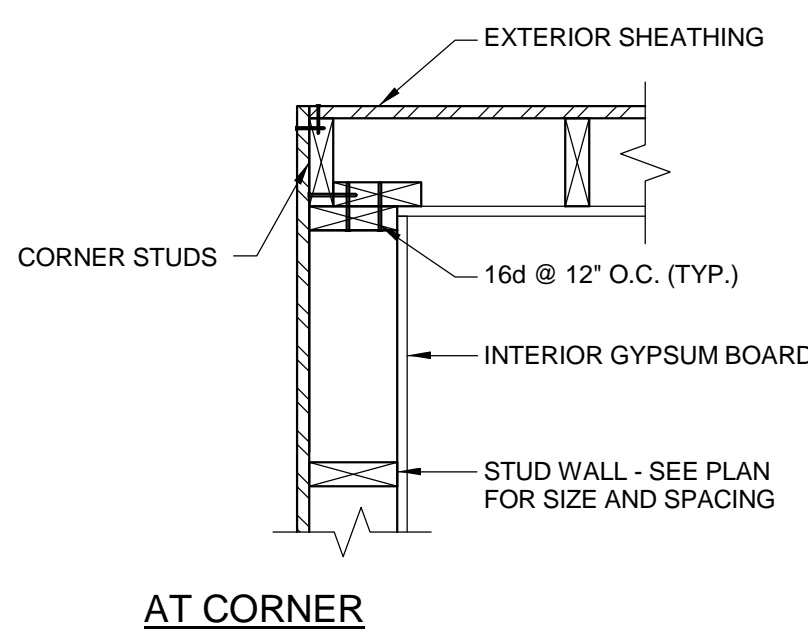
TYPICAL BEAM AND POST DETAILS



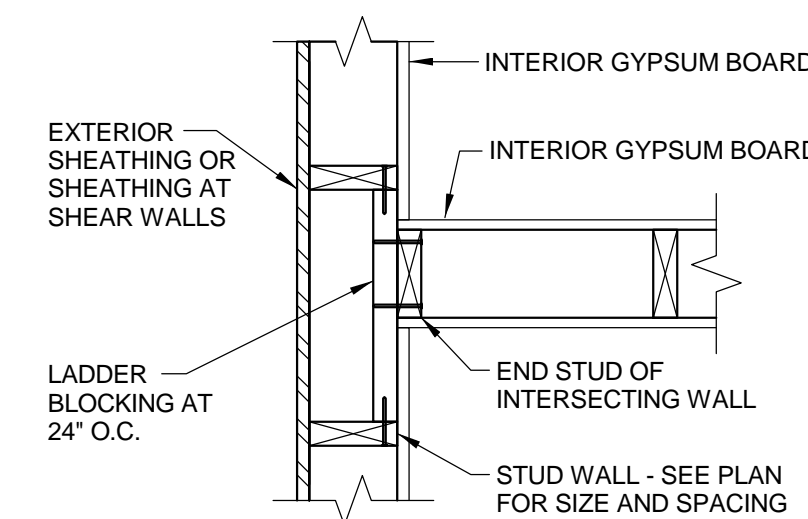
TYPICAL DRAG STRUT DETAIL



MULTI-PLY LVL ATTACHMENT DETAIL

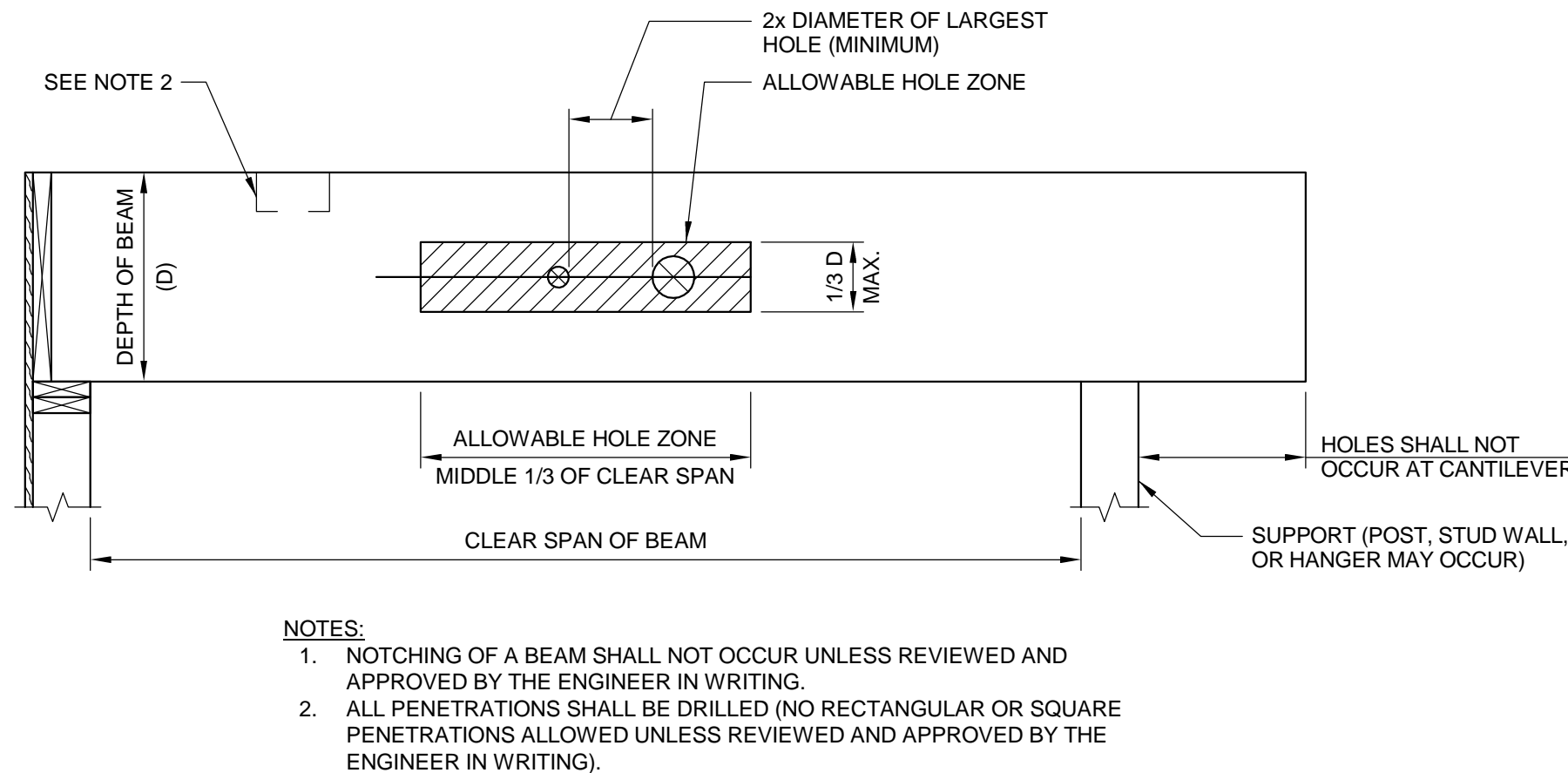


AT CORNER



AT INTERSECTION

TYPICAL PLAN VIEWS OF STUD  
WALLS DETAILS



TYPICAL HOLE PENETRATION THROUGH LVL  
AND WOOD BEAMS DETAIL

WOOD POST SCHEDULE		
MARK	SIZE AND QUANTITY	COMMENTS
WP-2	(2) 2x	WIDTH TO MATCH WALL STUDS
WP-3	(3) 2x	WIDTH TO MATCH WALL STUDS
WP-4	(4) 2x	WIDTH TO MATCH WALL STUDS
WP-44	4x4	
WP-46	4x6	
WP-66	6x6	
WP-68	6x8	
WP-88	8x8	
SCP-44	3 1/2"x3 1/2" PSL	
SCP-46	3 1/2"x5 1/4" PSL	
SCP-66	5 1/4"x5 1/4" PSL	
SCP-68	5 1/4"x7" PSL	
SCP-88	7"x7" PSL	

- WOOD POST SCHEDULE NOTES:
- SPECIES OF SAWN LUMBER TO MATCH SPECIES OF STUD WALL - SEE STUD WALL SCHEDULE.
  - SEE TYPICAL BUILT-UP COLUMN NAILING DETAIL FOR FASTENING OF PLYS.
  - WHERE A WOOD POST IS INDICATED, EQUIVALENT POSTS SHALL OCCUR AT ALL LEVELS OF FRAMING BELOW UNLESS NOTED OTHERWISE.
  - BLOCKING SHALL OCCUR AT FLOOR FRAMING (BELOW WOOD POST) WITH A WIDTH EQUAL TO OR GREATER THAN THE POST ABOVE.
  - TOP AND BOTTOM PLATES TO BE DISCONTINUED WHERE PSL POSTS OCCUR. PROVIDE SIMPSON 'RPS' STRAPS AT EACH TOP AND BOTTOM PLATE LOCATION.
  - ENGINEER TO PROVIDE POST BASE DETAIL WHERE PSL POSTS OCCUR AT THE SLAB ON GROUND CONDITION.
  - WHERE SOLID WOOD POSTS ARE SPECIFIED, SUBSTITUTING MULTI-PLY BUILT-UP POSTS IS NOT PERMITTED WITHOUT THE APPROVAL OF THE ENGINEER.

WOOD BEAM SCHEDULE		
MARK	SIZE	COMMENTS
WB-1	(2) 2x10	
WB-2	(3) 2x10	
WB-3	(2) 1 3/4"x18" LVL	
WB-4	(3) 1 3/4"x18" LVL	
WB-5	(4) 1 3/4"x18" LVL	

- WOOD BEAM SCHEDULE NOTES:
- SPECIES OF SAWN LUMBER SHALL BE A MINIMUM OF SPRUCE-PINE-FIR NO. 1/NO. 2 UNLESS NOTED OTHERWISE.
  - SPECIES OF WOOD BEAMS WITHIN WALL FRAMING SHALL MATCH THE SPECIES OF WALL FRAMING.
  - SEE TYPICAL POST DETAILS FOR CONNECTION TO POST.
  - SEE TYPICAL DETAIL FOR WOOD MULTI-PLY ATTACHMENT.

STUD WALL SCHEDULE					
FLOOR	EXTERIOR WALLS		INTERIOR BEARING WALLS		LOCATIONS
	SIZE/SPACING	SPECIES	SIZE/SPACING	SPECIES	
4TH TO ROOF	2x6 AT 16" O.C.	SPRUCE-PINE-FIR NO. 1/NO. 2	2x6 AT 16" O.C.	SPRUCE-PINE-FIR NO. 1/NO. 2	TYP. AT FLOOR
3RD TO 4TH	2x6 AT 16" O.C.	SPRUCE-PINE-FIR NO. 1/NO. 2	2x6 AT 16" O.C.	SPRUCE-PINE-FIR NO. 1/NO. 2	TYP. AT FLOOR
2ND TO 3RD	2x6 AT 16" O.C.	SPRUCE-PINE-FIR NO. 1/NO. 2	2x6 AT 16" O.C.	SPRUCE-PINE-FIR NO. 1/NO. 2	TYP. AT FLOOR
1ST TO 2ND	(2) 2x6 AT 16" O.C.	SOUTHERN PINE NO. 1	(2) 2x6 AT 16" O.C.	SOUTHERN PINE NO. 1	TYP. AT FLOOR

- STUD WALL SCHEDULE NOTES:
- SEE SHEAR WALL ELEVATIONS, NOTES, AND SCHEDULES ON S4.1 FOR FRAMING INFORMATION.
  - STUDS WALLS ARE PER SCHEDULE U.N.O.

MINIMUM WOOD FASTENER SCHEDULE		
CONNECTION TYPE	NUMBER, TYPE, SPACING OF FASTENER	APPLICATION
RIM BOARD TO TOP PLATE	8d COMMON NAILS AT 6" O.C.	TOE NAIL
FRAMING MEMBER TO TOP PLATE	(3) 8d COMMON NAIL	TOE NAIL
BLOCKING BETWEEN FRAMING MEMBERS TO TOP PLATE	(3) 8d COMMON NAIL	EACH END, TOE NAIL
BRIDGING OR BLOCKING TO FRAMING MEMBER	(2) 10d COMMON NAIL	EACH END, TOE NAIL
STUD TO STUD AT INTERSECTING WALL CORNERS	16d COMMON NAILS AT 16" O.C.	FACE NAIL
CONTINUOUS HEADER TO STUD	(4) 8d COMMON NAIL	TOE NAIL
TOP PLATE TO TOP PLATE	16d COMMON NAILS AT 16" O.C.	FACE NAIL (STAGGERED)
TOP PLATE TO TOP PLATE LAP	(8) 16d COMMON NAIL	FACE NAIL AT 4'-0" MIN. SPLICE
STUD TO TOP OR BOTTOM PLATE	(4) 8d COMMON NAIL OR (2) 16d COMMON NAIL	TOE NAIL, END NAIL
TOP PLATE TO TOP PLATE AT END JOINTS	(8) 16d COMMON NAIL	EACH SIDE OF END JOINT
TOP PLATE LAPS AT CORNERS AND INTERSECTIONS	(4) 16d COMMON NAIL	FACE NAIL
STUDS AT ADJACENT PANELIZED WALL SECTIONS	(2) 16d COMMON NAILS AT 4" O.C.	FACE NAIL
BOTTOM PLATE TO RIM BOARD	(2) 16d COMMON NAILS AT 16" O.C.	FACE NAIL
KING STUDS TO HEADER	(4) 16d COMMON NAILS	FACE NAIL
FLOOR / ROOF SHEATHING TO RIM BOARD	10d COMMON NAILS AT 4" O.C.	FACE NAIL
BOTTOM PLATE TO TOP OF CMU OR CONCRETE	1/2" A SIMPSON TITEN HD AT 16" O.C.	4 1/2" MIN. EMBED.

UPLIFT ANCHOR SCHEDULE		
STRAP OR TIE DESIGNATION	UPLIFT CAPACITY	COMMENTS
MITEK RT7A	510 LBS	
MITEK (2) RT7A	1,020 LBS	2 1/2" MIN. THICKNESS OF FRAMING MEMBER
SIMPSON H2.5A	535 LBS	UPLIFT CAPACITY REDUCED TO 260 LBS WHEN 1 1/2" LONG FASTENER AS USED
SIMPSON (2) H2.5A	1,070 LBS	2 1/2" MIN. THICKNESS OF FRAMING MEMBER
SIMPSON TSP	875 LBS	3" LONG FASTENERS TO TOP PLATE
SIMPSON (2) TSP	1,750 LBS	2 1/2" MIN. THICKNESS OF FRAMING MEMBER

- UPLIFT ANCHOR SCHEDULE NOTES:
- FASTENER SIZE AND LENGTHS ARE PER MANUFACTURER'S SPECIFICATIONS.
  - THE ENGINEER SHALL BE NOTIFIED IF UPLIFT VALUES EXCEED THE MAXIMUM UPLIFT CAPACITY GIVEN IN THIS TABLE.
  - UPLIFT CAPACITIES ASSUME ANCHORAGE TO A DOUBLE TOP PLATE.

TYPICAL FRAMING  
DETAILS

Project Number	19-67
Date	
Drawn By	LJP
Checked By	JTL
Sheet No.:	S304
Scale	As indicated

Civil Engineering:  
**CT Consultants, Inc.**  
8150 Sterling Ct  
Mentor, Ohio 44060  
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MEP Engineering:  
**Biology Cleveland**  
6555 Carnegie Avenue, Suite 200  
Cleveland, Ohio 44103  
t. 216.752.8750

Structural Engineering:  
**Baker & Hoffman, Inc.**  
2217 E 9th Street, Suite 350  
Cleveland, Ohio 44103  
t. 216.875.0100

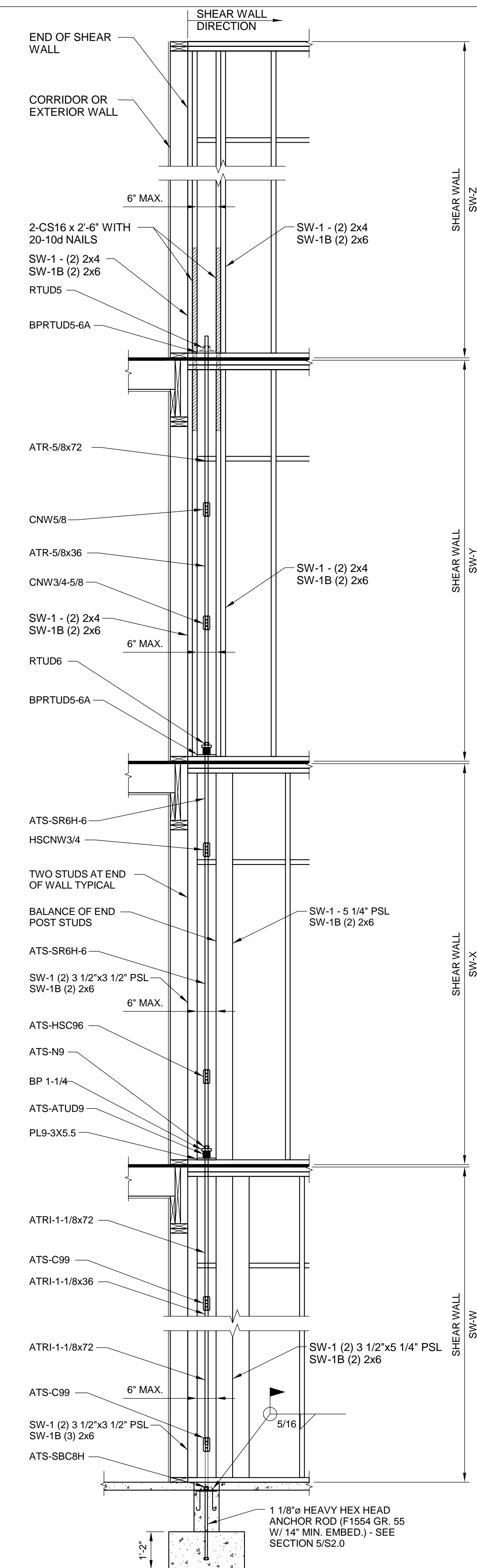
Design Architect:  
**Biology Cleveland**  
6555 Carnegie Avenue, Suite 200  
Cleveland, Ohio 44103  
t. 216.752.8750

**Karam Senior Living**  
**DSCDO**  
7918 Detroit Avenue

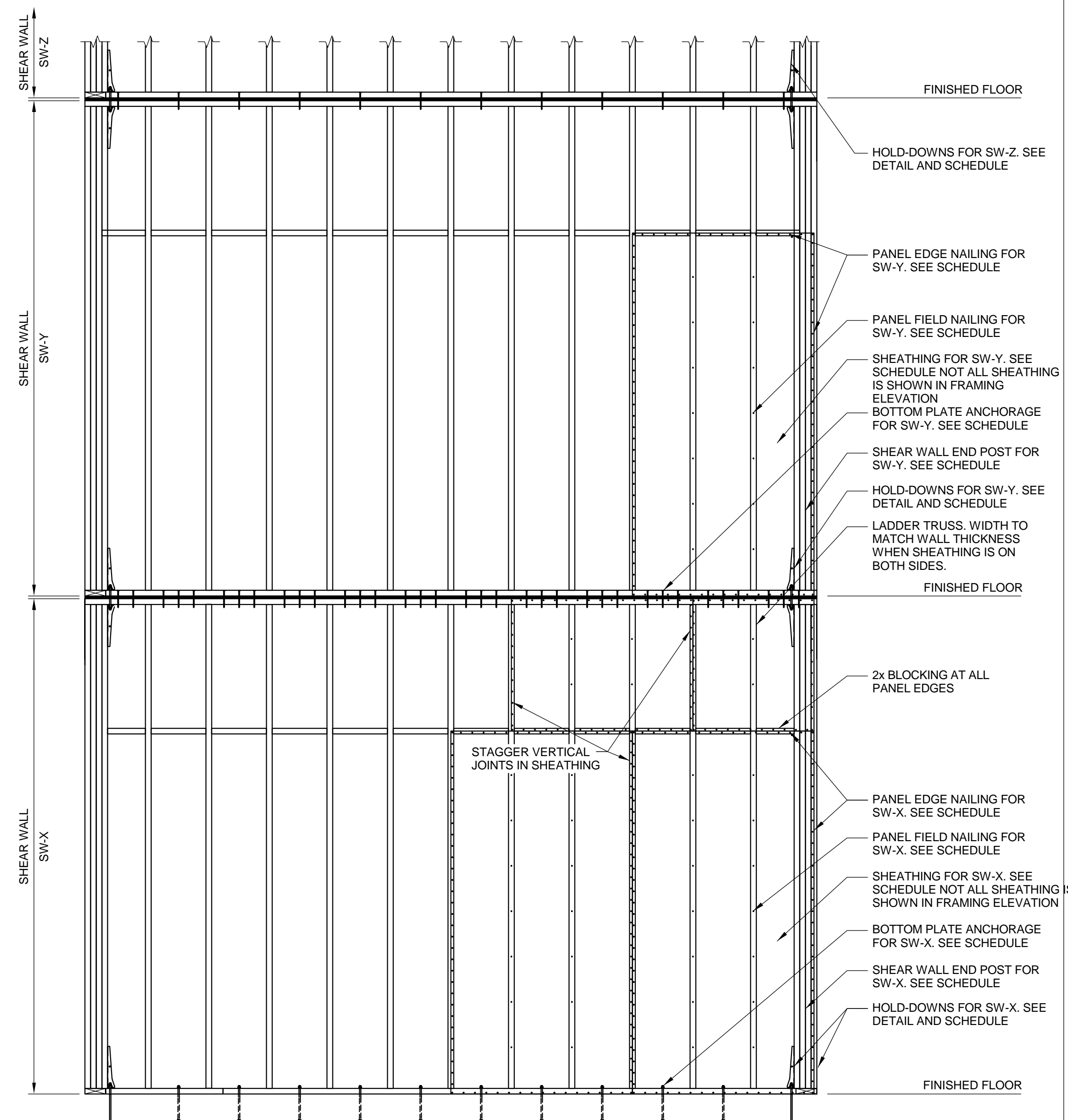
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## SHEAR WALL SCHEDULE AND DETAILS

Project Number	19-67
Date	
Drawn By	LJP
Checked By	JTL
Sheet No.:	S401
Scale	As indicated



TYPICAL FULL-HEIGHT SHEAR WALL END  
POST ELEVATION



### TYPICAL MULTI-STORY SHEAR WALL FRAMING ELEVATION

SIMPSON ATS SHEAR WALL SCHEDULE						
MARK	SHEATHING	FASTENERS	END POST	HOLD DOWN	BOTTOM PLATE ANCHORAGE	REMARKS
SW-1	15/32" APA RATED EXPOSURE I, ONE SIDE	EDGES: 3" O.C. FIELD: 12" O.C.	3 1/2"x3 1/2" PSL 3 1/2"x5 1/4" PSL 3 1/2" x 7" PSL	SIMPSON ATS	1 1/2" HILTI KWIK HUS-EZ AT 2'-8" O.C. W/ 3 1/2" MIN. EMBED	* INDICATES 3 1/2"x3 1/2" PSL + 3 1/2"x7" PSL END POSTS
SW-1A	15/32" APA RATED EXPOSURE I, ONE SIDE	EDGES: 3" O.C. FIELD: 12" O.C.	(8) 2x6	SIMPSON ATS	1 1/2" HILTI KWIK HUS-EZ AT 2'-8" O.C. W/ 3 1/2" MIN. EMBED	10d COMMON NAILS AT SHEATHING
SW-2	15/32" APA RATED EXPOSURE I, ONE SIDE	EDGES: 4" O.C. FIELD: 12" O.C.	(7) 2x4	SIMPSON ATS	(2) 16d NAILS AT 12" O.C.	-
SW-2A	15/32" APA RATED EXPOSURE I, ONE SIDE	EDGES: 4" O.C. FIELD: 12" O.C.	(6) 2x6	SIMPSON ATS	(2) 16d NAILS AT 6" O.C.	10d COMMON NAILS AT SHEATHING
SW-3	15/32" APA RATED EXPOSURE I, ONE SIDE	EDGES: 6" O.C. FIELD: 12" O.C.	(4) 2x4	SIMPSON ATS	(2) 16d NAILS AT 16" O.C.	-
SW-3A	15/32" APA RATED EXPOSURE I, ONE SIDE	EDGES: 6" O.C. FIELD: 12" O.C.	(6) 2x6	SIMPSON ATS	(2) 16d NAILS AT 6" O.C.	-
SW-4	15/32" APA RATED EXPOSURE I, ONE SIDE	EDGES: 6" O.C. FIELD: 12" O.C.	(4) 2x4	SIMPSON ATS	(2) 16d NAILS AT 16" O.C.	-
SW-4A	15/32" APA RATED EXPOSURE I, ONE SIDE	EDGES: 6" O.C. FIELD: 12" O.C.	(6) 2x6	SIMPSON ATS	(2) 16d NAILS AT 6" O.C.	-

SHEAR WALL SCHEDULE NOTES:

1. ALL LUMBER FOR BEAR WALLS, INCLUDING BOTTOM PLATE, BLOCKING, BRIDGING, STUDS, TOP PLATES, ETC. SHALL BE SOUTHERN PINE NO. 1.
2. ALL NAILS FROM SHEATHING INTO STUDS ARE TO BE  $\phi 8$  (0.131") COMMON WIRE NAILS WITH A 1/3" MINIMUM PENETRATION.
3. WHERE MULTIPLE 2" END POSTS ARE SPECIFIED, PILES SHALL BE FACE NAILED TOGETHER WITH (2) 16d (0.162") COMMON WIRE NAILS.
4. WHERE STUD EDGE NAILING OCCURS WITH 10d NAILS AT ANY SPACING, OR  $\phi 8$  NAILS AT SPACING LESS THAN 3" O.C., STUDS AND BOTTOM PLATE SHALL BE 3x MEMBERS OF DOUBLE 2x MEMBERS FACE NAILED (2) 16d (0.162") COMMON WIRE NAILS  $\leq$  6" O.C.

SIMPSON STRONG-ROD ANCHOR TIEDOWN SYSTEM (ATS) NOTES

1. ATJS IS AN ASSEMBLY OF STEEL COMPONENTS, WHICH INCLUDE RODS, PLATES, COUPLER NUTS, TAKE-UP DEVICES AND NUTS. NO SUBSTITUTION OF PIECES IS ALLOWED WITHOUT THE WRITTEN PERMISSION OF THE DESIGNER.
2. FOLLOW ALL COMPONENT MANUFACTURER'S INSTALLATION INSTRUCTIONS.
3. DO NOT WELD TO ANY ATJS ASSEMBLY COMPONENTS UNLESS SPECIFICALLY SHOWN ON THE STRUCTURAL DRAWINGS.
4. THE MINIMUM TIGHTENING TORQUE SHALL BE 2" FROM FLOOR TO FLOOR, FULLY ENGAGE EACH ROD INTO THE SPECIFIED COUPLING NUT OR TAKE UP DEVICE UNTIL EACH ROD CAN BE SEEN FULLY IN THE WINTESS HOLES.
5. THE DESIGNER HAS ALLOWED FOR AN ADDITIONAL 12 TURN.
6. NO SPLICE IN TOP PLATE IS PERMITTED WITHIN 8" OF EDGE OF STRONG-ROD TAKE UP DEVICE.
7. THE FOLLOWING IS REQUIRED AT FLOOR ASSEMBLIES TO MATCH THE STUD QUANTITY, SIZE AND SPECIES OF THE END POST BELOW.
8. END POSTS COMPOSE OF A MINIMUM OF (4) STUDS. ASYMMETRIC STUD PLACEMENT HAS BEEN DESIGNED AND SHOWN ON THE (a) STUD OF SHEAR WALL, AND BALANCE OF STUDS ON OTHER SIDE OF STRONG-ROD.
9. SHEAR WALL EDGE NAILING SHALL OCCUR ON EACH OF THE (a) STUDS ON EACH SIDE OF STRONG-ROD. NAILING TO ADDITIONAL STUDS OF THE END POSTS SHALL BE AT 12" O.C.

# United States Department of the Interior



## FISH AND WILDLIFE SERVICE

Ecological Services  
4625 Morse Road, Suite 104  
Columbus, Ohio 43230  
(614) 416-8993 / FAX (614) 416-8994



January 22, 2025

Project Code: 2025-0041814

Dear Ms. Ottoson-Deal:

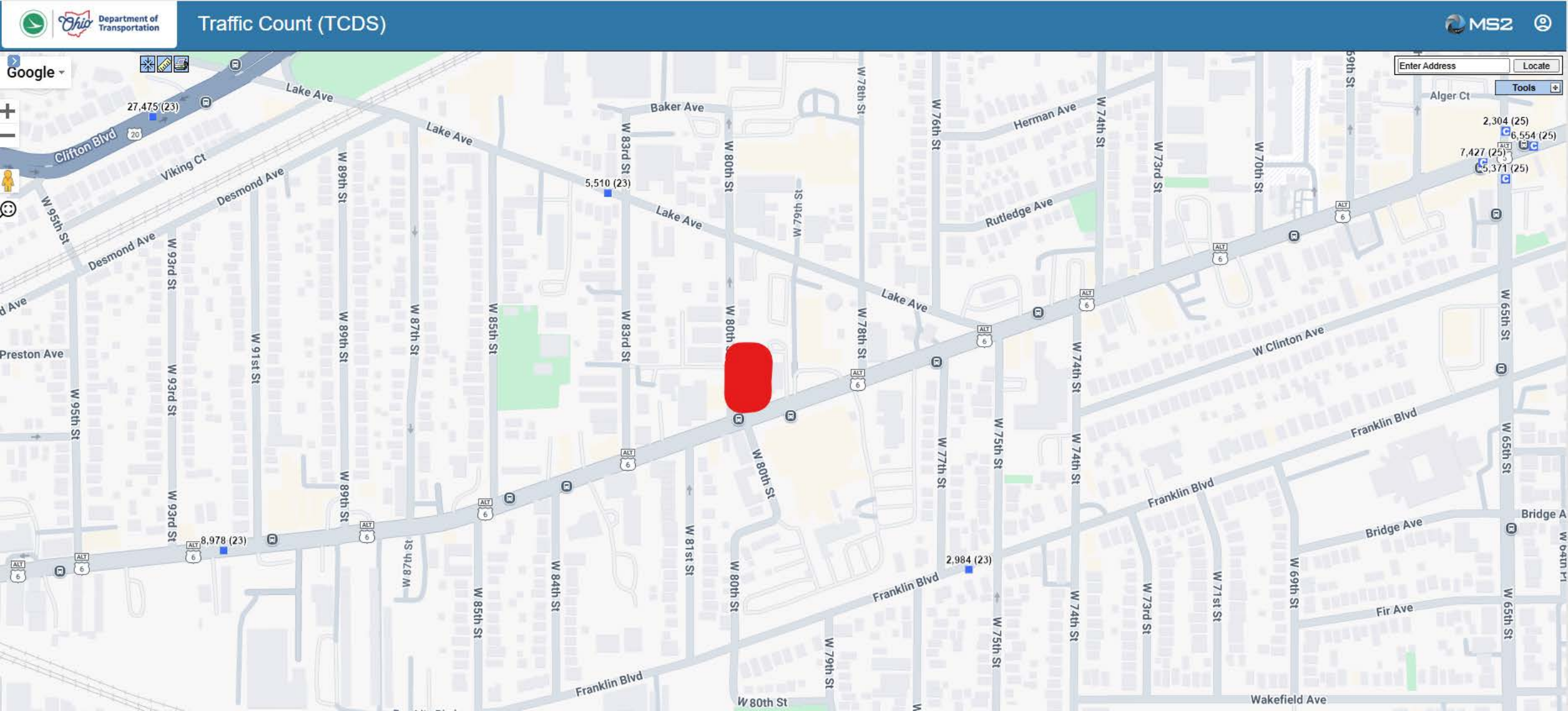
The U.S. Fish and Wildlife Service (Service) received your recent correspondence requesting information about the subject proposal. We offer the following comments and recommendations to assist you in minimizing and avoiding adverse effects to threatened and endangered species pursuant to the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq), as amended (ESA).

Federally Threatened and Endangered Species: Due to the project, type, size, and location, we do not anticipate adverse effects to federally endangered, threatened, or proposed species or proposed or designated critical habitat. If there are any project modifications during the term of this action, or additional information for listed or proposed species or their critical habitat becomes available, or if new information reveals effects of the action that were not previously considered, then please contact us for additional project review.

If you have questions, or if we can be of further assistance in this matter, please contact our office at (614) 416-8993 or [ohio@fws.gov](mailto:ohio@fws.gov).

Sincerely,

Erin Knoll  
Field Office Supervisor





## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

Ohio Ecological Services Field Office

4625 Morse Road, Suite 104

Columbus, OH 43230-8355

Phone: (614) 416-8993 Fax: (614) 416-8994



In Reply Refer To:

01/14/2025 17:17:03 UTC

Project Code: 2025-0041814

Project Name: City of Cleveland - NWN CDC - Karam Senior

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

#### To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

**Migratory Birds:** In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see <https://www.fws.gov/program/migratory-bird-permit/what-we-do>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

## OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Ohio Ecological Services Field Office**

4625 Morse Road, Suite 104

Columbus, OH 43230-8355

(614) 416-8993

## PROJECT SUMMARY

Project Code: 2025-0041814  
Project Name: City of Cleveland - NWN CDC - Karam Senior  
Project Type: Residential Construction  
Project Description: New construction of multifamily senior housing  
Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@41.48198635,-81.7397949729356,14z>



Counties: Cuyahoga County, Ohio

## ENDANGERED SPECIES ACT SPECIES

There is a total of 4 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## MAMMALS

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5949">https://ecos.fws.gov/ecp/species/5949</a>	Endangered

## BIRDS

NAME	STATUS
Piping Plover <i>Charadrius melodus</i> Population: [Great Lakes watershed DPS] - Great Lakes, watershed in States of IL, IN, MI, MN, NY, OH, PA, and WI and Canada (Ont.) There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/6039">https://ecos.fws.gov/ecp/species/6039</a>	Endangered
Rufa Red Knot <i>Calidris canutus rufa</i> There is <b>proposed</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/1864">https://ecos.fws.gov/ecp/species/1864</a>	Threatened

## INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> There is <b>proposed</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Proposed Threatened

## CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

## **IPAC USER CONTACT INFORMATION**

Agency: Cleveland city  
Name: Sasha Ottoson-Deal  
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City: Cleveland  
State: OH  
Zip: 44114  
Email: [sottoson-deal@clevelandohio.gov](mailto:sottoson-deal@clevelandohio.gov)  
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**City of Cleveland**

Justin M. Bibb Mayor

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Department of Community Development  
601 Lakeside Avenue, Room 320  
Cleveland, Ohio 44114-1070

January 14, 2025

Ms. Angela Boyer  
Endangered Species Coordinator  
U.S. Fish and Wildlife Service  
Ohio Ecological Services Office  
4625 Morse Road, Suite 104  
Columbus, OH 43230

Dear Ms. Boyer:

We are requesting concurrence from the U.S. Fish and Wildlife Service that the proposed Karam Senior new construction project is not likely to adversely affect the Indiana Bat, Piping Plover, Rufa Red Knot and the Monarch Butterfly. The proposed project is located in Cuyahoga County, city of Cleveland, and is a project that is proposing the use of HOME Investment Partnership Program federal funds from the City of Cleveland.

The proposed project involves new construction of a multi-family building and library, with 51 units of affordable senior housing. Significant ground disturbance, including installation of new utilities, is proposed. The project site has been cleared and maintained as a vacant lot since 2022. There is minimal vegetation to provide any habitat on this site.

We carefully reviewed your agency's Section 7 Consultation website for a list of species and critical habitat that "may be present" within the project area. There are four species that may be present, as shown in the attached Species List provided by your office. We believe that this project is "Not Likely to Adversely Affect" any of these species due to the urban location, the developed character of the neighborhood and the frequent mowing and maintenance that occurs on this vacant lot.

For these reasons, we conclude that the Karam Senior new construction project is not likely to adversely affect the Indiana Bat, the Monarch Butterfly, the Piping Plover or the Red Knot. We request your concurrence with our determination.

Sincerely,  
Sasha Ottoson-Deal  
Community Development Specialist  
Department of Community Development  
City of Cleveland  
sottoson-deal@clevelandohio.gov