

430 Grant Street Akron, Ohio 44311 330.867.1093 tcarchitects.com

Date: October 17, 2023

BULLETIN NO. 03

Project Name: Germantown Crossing

TC Project No.: 82A21

To: All Contractors

Please provide a proposal for changing the Contract Documents as noted herein. The proposal is due to the Associate within 10 days of issue. A limited extension of time may be granted in writing, for submitting a proposal at a specific future date and time at the sole discretion of the Associate. The estimated effect of the bulletin on current contract completion date is zero (0) days. If the impact to your work is different than zero (0) days, indicate the number of days in your proposal.

Contractor's proposal shall include:

- 1. Bulletin number
- 2. Change in contract amount
- 3. Change in contract time

Contractor's proposal to include itemized pricing including, but not limited to materials, labor, overhead and profit breakdowns as required in the Change Order Pricing Guidelines in the Contract Documents. Lump sum labor or material prices will not be accepted. If Subcontractor's or supplier's prices are included in the prime Contractor's proposal, provide a copy of their quotation.

If no response to a bulletin is received by the Associate by the proposal due date indicated above, the non-response will be determined that the Contract is not affected by the change, and any rights for increased compensation or time extension shall be deemed to have been waived.

For the Contractor's convenience, this Bulletin includes a signature space. If no change is affected by this Bulletin, signed and indicating such and returning this document to the Associate will serve as official notification. If a change is affected, the Associate must receive the contractor's detailed proposal within 10 days.

Please note that this is not a Change Order or authorization to proceed with the proposed changes.

Description of Proposed Change:

State the change in contract sum to reflect the following changes:

<u>Architectural</u>	
A001	Revised to include site survey.
A002	Revised applicable codes to include 2017 International Energy
	Conservation Code and 2015 International Fuel Gas Code.
A101	Revised Room C105 to Storage.
A101A	Revised Room C105 to Storage.
A303	Revised to list 1/8" Sound Mat.
A401	Revised to list 1/8" Sound Mat.
A402	Revised to list 1/8" Sound Mat.
	Revised to call for $\frac{1}{4}$ " / 1'-0" slope @ flat roof.
A403	Revised to list 1/8" Sound Mat.
A404	Revised to list 1/8" Sound Mat.
	Added building envelope notes.
A506	Revised elevator shaft dimensions.
A507	Revised elevator shaft dimensions.
A602	Revised Door C105/1.
A603	Revised to call out through-wall flashing.
A701	Revised Room C105 to Storage.
A703	Revised Room C105 to Storage.
<u>Civil</u>	
C200	Revised to coordinate w/ C300.
C300	(4) additional ADA spaces added.
C301	Revised to coordinate w/ C300.
C400	Revised to coordinate w/ C300.
Landscape	Device state on exclusion and in substantial state with the state state of the
L100	Revised to coordinate parking lot with civil drawings.
<u>Structural</u>	Devise el eleverter de eft
\$100 \$101	Revised elevator shaft. Revised elevator shaft.
S101 S102	Revised elevator shaft.
S200	Revised elevator sections.
Plumbing	
P001	Deleted oil minder requirements from "Plumbing Equipment Schedule".
P302	Deleted oil minder requirements from "Elevator Sump Pup Detail".
1 302	
Fire Suppress	ion
F\$101	Edited note for elevator shaft fire suppression requirements.
F\$102	Edited note for elevator shaft fire suppression requirements.
F\$103	Edited note for elevator shaft fire suppression requirements.
13100	

Mechanical	
Mechanica	

- H101 Deleted ECU-1, ACCU-1, and all refrigerant piping associated with units serving old elevator machine room.
- H301 Deleted "Environmental Conditioning Unit Schedule".

<u>Electrical</u>

- E101 Revised lighting in Room C105.
- E201 Deleted enlarged plan for elevator machine room.
- Deleted ACCU-1.
- Revised receptacles in C105.
- E203 Added connection for main elevator power and cab lighting circuit.
- E301 Deleted heat detector in C105.
- E303 Deleted smoke and heat detectors at the top of the elevator shaft. Added note for data wiring conduit for elevator controller.
- E401 Revised circuiting throughout.
- Revised panel schedule.
- E402 Revised circuiting throughout.
- Revised panel schedule.
- E403 Revised circuiting throughout.
- Revised panel schedule.
- E501 Revised circuit breakers and feeder sizers to the apartments. Revised elevator circuit breaker, feeder, and disconnect switch. Revised the house load calculation.
- E601 Deleted ACCU-1 and ECU-1 from the Mechanical Equipment Schedule.
- E602 Revised panel schedule for H1B (Section 1).
- E704 Deleted the Elevator Disconnect/Shunt Trip Wiring Diagram Detail. Revised the Elevator Recall Fire Alarm Riser Detail for a non-sprinklered shaft.

<u>Specifications</u>

 Attachments:
 A001, Revision 2, Bulletin 03, 10/16/2023

 A002, Revision 3, Bulletin 03, 10/16/2023

 A101, Revision 3, Bulletin 03, 10/16/2023

 A101A, Revision 3, Bulletin 03, 10/16/2023

 A303, Revision 3, Bulletin 03, 10/16/2023

 A401, Revision 3, Bulletin 03, 10/16/2023

 A402, Revision 3, Bulletin 03, 10/16/2023

 A403, Revision 2, Bulletin 03, 10/16/2023

 A404, Revision 2, Bulletin 03, 10/16/2023

 A506, Revision 2, Bulletin 03, 10/16/2023

 A507, Revision 2, Bulletin 03, 10/16/2023

 A602, Revision 2, Bulletin 03, 10/16/2023

 A603, Revision 2, Bulletin 03, 10/16/2023

A703, Revision 2, Bulletin 03, 10/16/2023 Site Survey, dated August 2023 C200, Revision 2, Bulletin 03, 10/16/2023 C300, Revision 3, Bulletin 03, 10/16/2023 C301, Revision 1, Bulletin 03, 10/16/2023 C400, Revision 3, Bulletin 03, 10/16/2023 L100, Revision 3, Bulletin 03, 10/16/2023 \$100, Revision 3, Bulletin 03, 10/16/2023 \$101, Revision 3, Bulletin 03, 10/16/2023 \$102, Revision 3, Bulletin 03, 10/16/2023 S200, Revision 2, Bulletin 03, 10/16/2023 P001, Revision 2, Bulletin 03, 10/16/2023 P302, Revision 3, Bulletin 03, 10/16/2023 FS101, Revision 2, Bulletin 03, 10/16/2023 FS102, Revision 2, Bulletin 03, 10/16/2023 FS103, Revision 2, Bulletin 03, 10/16/2023 H101, Revision 2, Bulletin 03, 10/16/2023 H301, Revision 1, Bulletin 03, 10/16/2023 E101, Revision 3, Bulletin 03, 10/16/2023 E201, Revision 2, Bulletin 03, 10/16/2023 E203, Revision 1, Bulletin 03, 10/16/2023 E301, Revision 3, Bulletin 03, 10/16/2023 E303, Revision 2, Bulletin 03, 10/16/2023 E401, Revision 3, Bulletin 03, 10/16/2023 E402, Revision 3, Bulletin 03, 10/16/2023 E403, Revision 3, Bulletin 03, 10/16/2023 E501, Revision 2, Bulletin 03, 10/16/2023 E601, Revision 3, Bulletin 03, 10/16/2023 E602, Revision 2, Bulletin 03, 10/16/2023 E704, Revision 2, Bulletin 03, 10/16/2023 00 0110 Table of Contents, Revision 2, Bulletin 03, 10/16/2023 Geotechnical Report DEDUCT \$_____ NO CHANGE ADD \$

The impact to the Contract Schedule: ADD _____ days DEDUCT _____ days NO CHANGE _____

All Contractors are to respond to this Bulletin within 10 days with signature, date, and response. The numbers presented are firm quotations and shall include all material and labor to complete the work in its entirety.

Contractor

Date

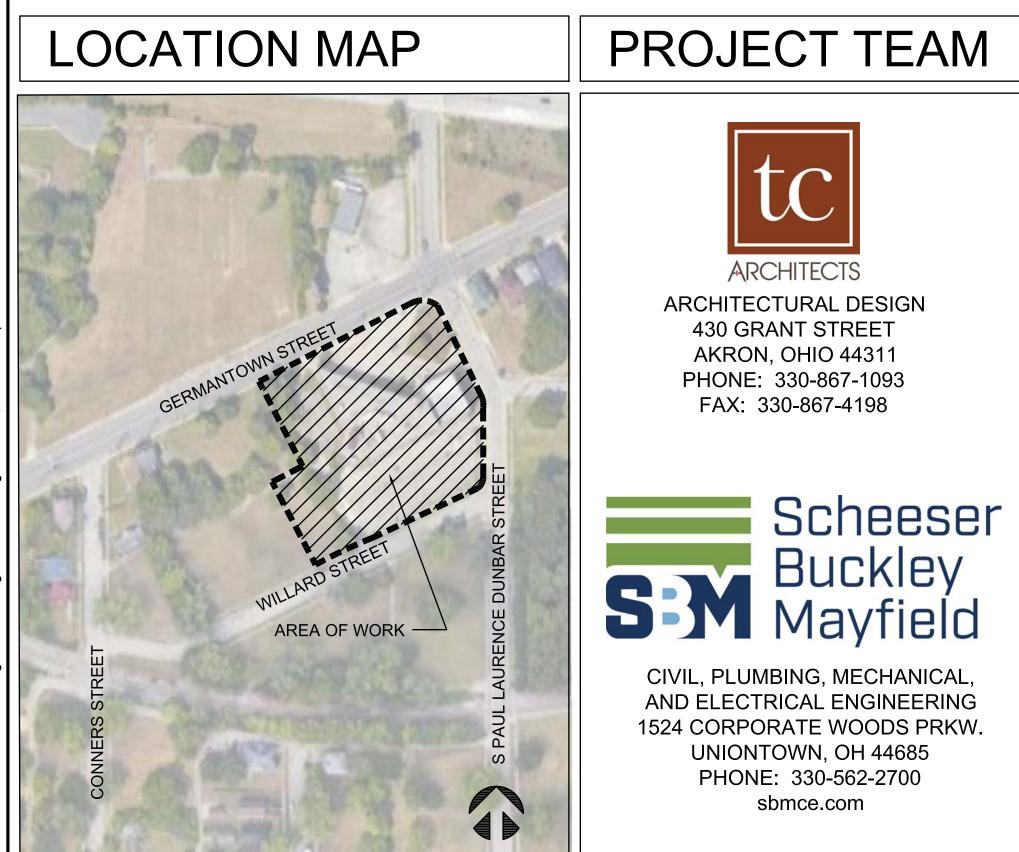
Bulletin Prepared by: TC ARCHITECTS

Germantown Crossing TC Project No.: 82A21



GERMANTOWN CROSSING 1520 GERMANTOWN ST. DAYTON, OH 45417

100% CONSTRUCTION SET







INTERIOR DESIGN **430 GRANT STREET** AKRON, OH 44311 **SUITE 102** PHONE: 330-867-1093

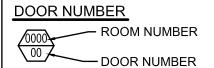
FAX: 330-867-4198



STRUCTURAL ENGINEERING 450 GRANT STREET, SUITE 130 AKRON, OH 44311 PHONE: 330-733-8332

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SYMBOLS



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0 GLASS TYPE ROOM NAME AND NUMBER

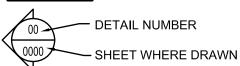
OFFICE ROOM NAME

WINDOW TYPES Α

DOOR TYPES A

FRAME TYPES

(1)ELEVATION



WALL SECTION OR DETAIL

00 DETAIL NUMBER 0000 SHEET WHERE DRAWN

PARTITION TYPE

(P1)-----

NUMERIC SYSTEM CODE DRAWING GROUPS TITLE SHEET A001

A002

A101, A102, ETC.

A201, A202, ETC.

A301, A302, ETC.

A401, A402, ETC.

A501, A502, ETC.

A601, A602, ETC.

A701, A702, ETC.

CODE DATA AND LIFE SAFETY PLAN STAIR, ELEVATOR SECTIONS AND DETAILS WALL SECTIONS AND DETAILS

NUMERIC SYSTEM CODE
GROUP DESIGNATION

FLOOR, ROOF AND REFLECTED CEILING PLANS

BUILDING ELEVATIONS AND MAJOR BUILDING SECTIONS

INTERIOR PLAN DETAILS AND INTERIOR ELEVATIONS

PARTITION TYPES, DOOR SCHEDULE AND DETAILS, WINDOW SCHEDULE AND DETAILS

FURNITURE, FINISH AND EQUIPMENT PLANS, FINISH SCHEDULES, PROJECT SPECIFIC PLANS AND DETAILS (I.E. CAGING, LAB EQUIPMENT, ETC.)

DISCIPLINE IDENTIFICATION			
DISCIPLINE PREFIX	DISCIPLINE		
С	CIVIL		
L	LANDSCAPING		
A	ARCHITECTURAL		
S	STRUCTURAL		
Р	PLUMBING		
FP	FIRE PROTECTION		
н	MECHANICAL		
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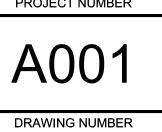
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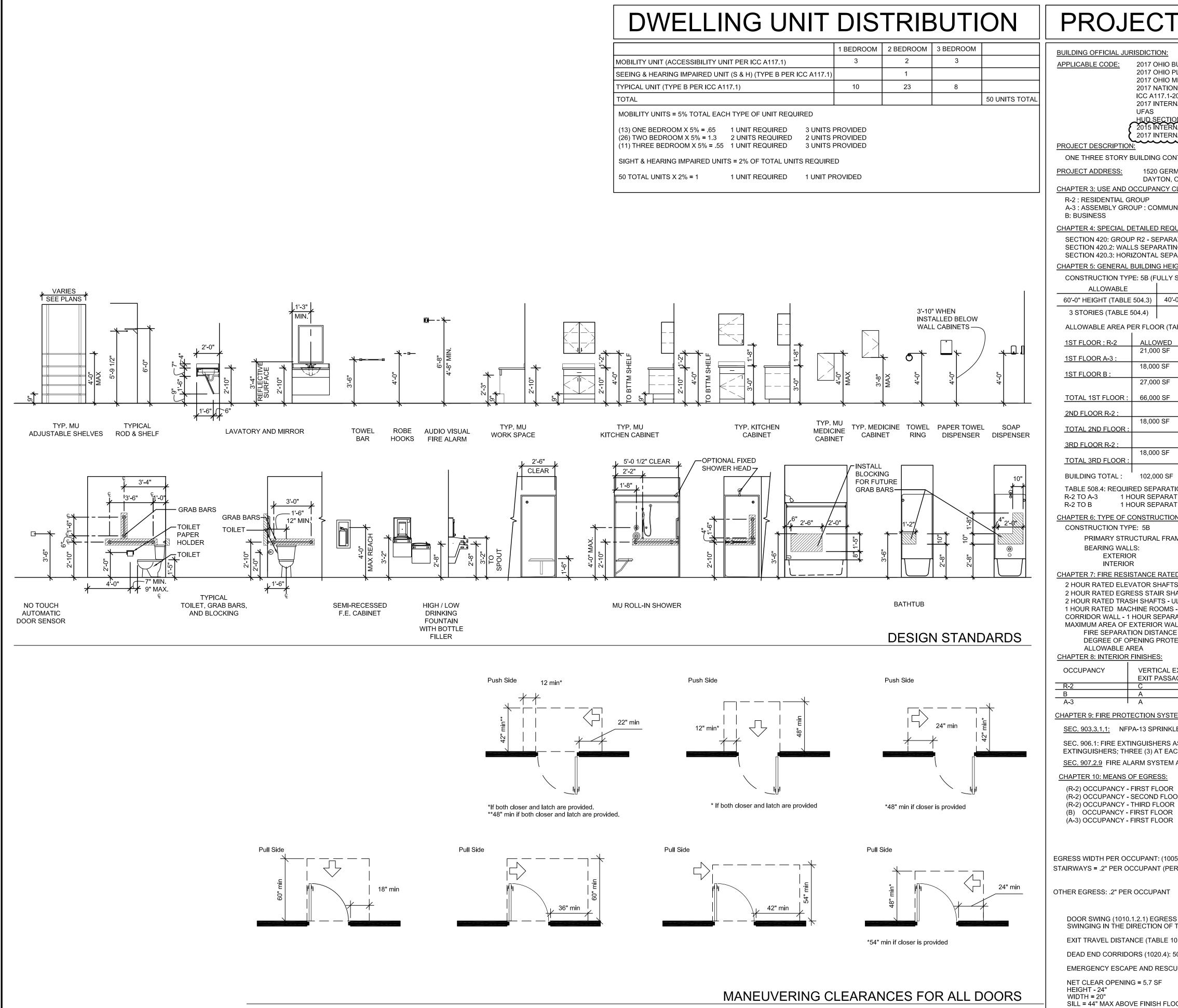
430 GRANT STREET AKRON, OH 44311 PHONE: (330) 867-1093 www.tcarchitects.com

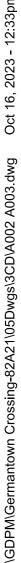
TURNING VISIONS INTO REALITY

03/31/2023 DATE

82A21 PROJECT NUMBER







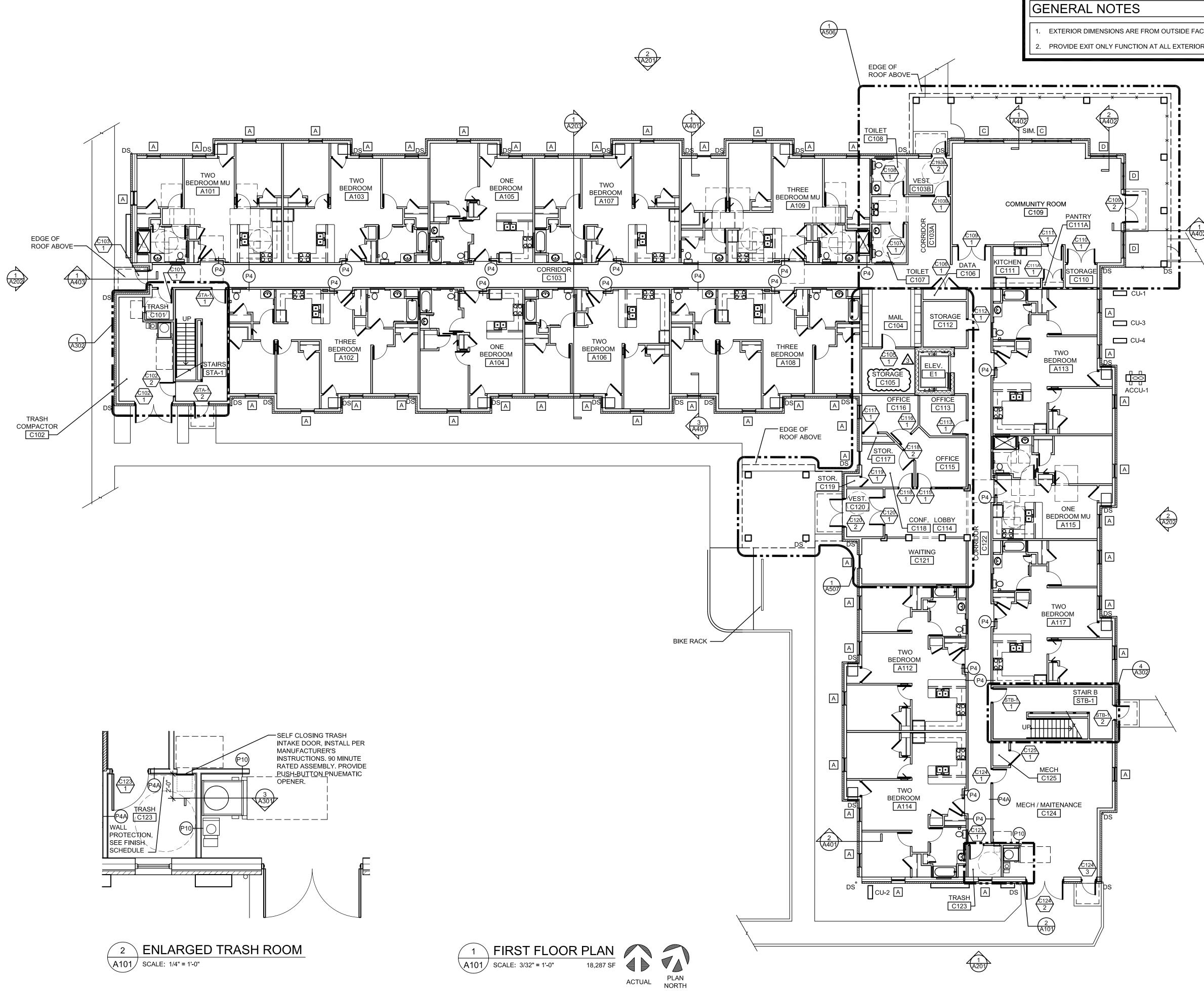
(PER 2009 IBC CH 11 & ICC/ANSI 117.1-2003)

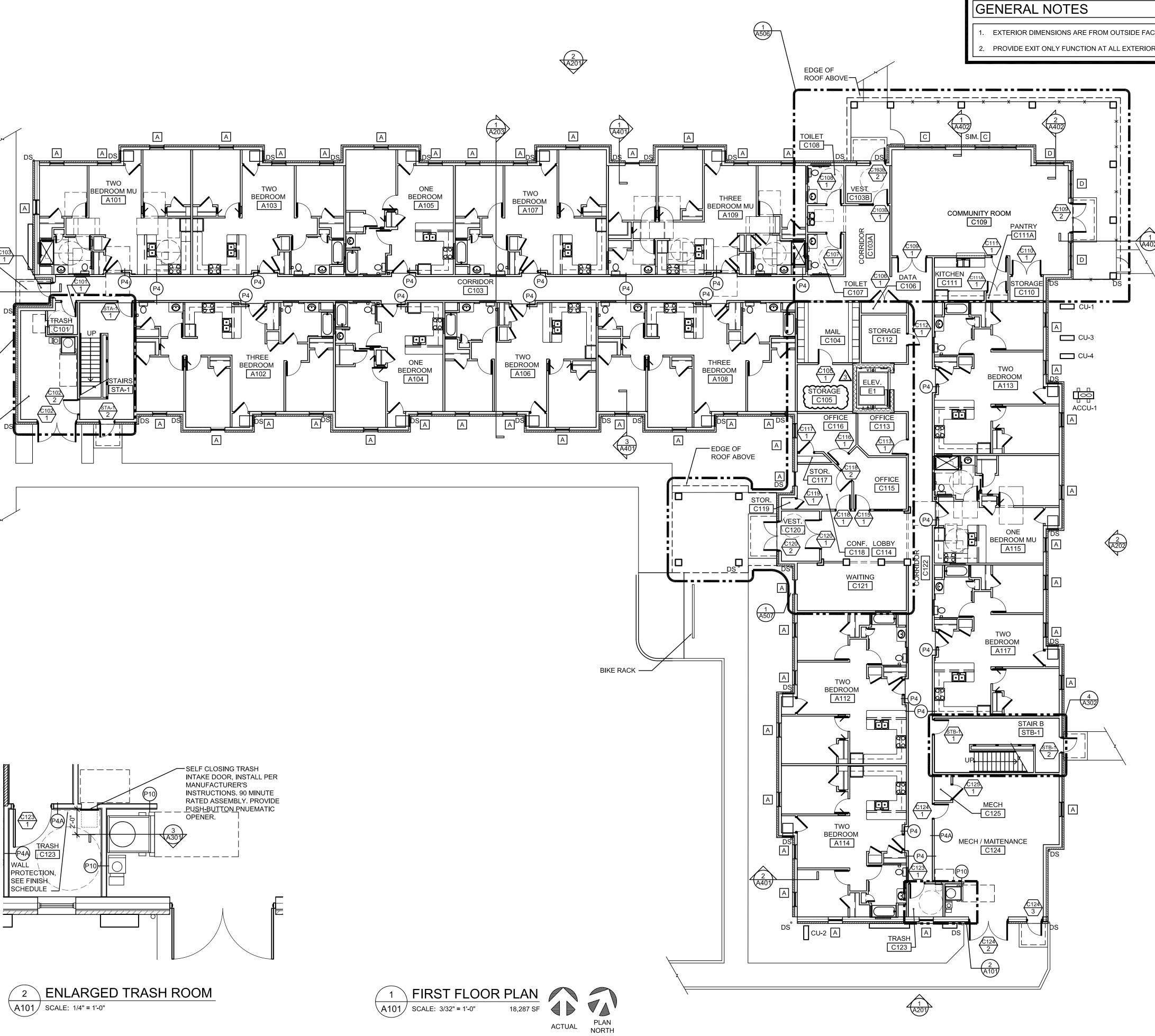
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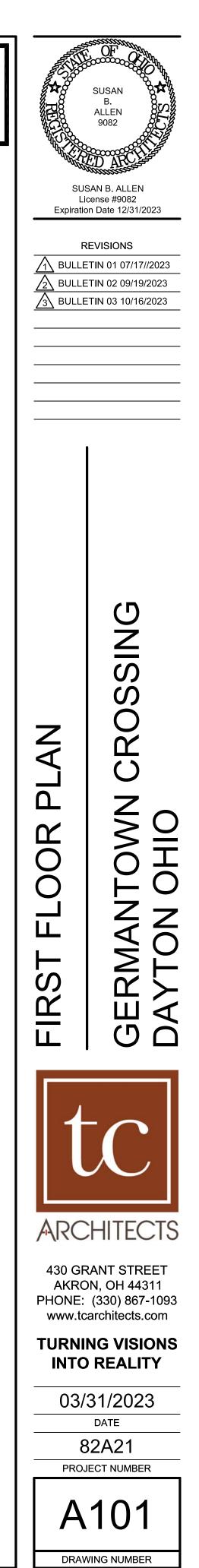
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: 50'-0" WITH SPRINKLER SY CUE: (1030.2) .OOR <u>JIREMENTS:</u>				PROJI	2A21 ECT NUMBER
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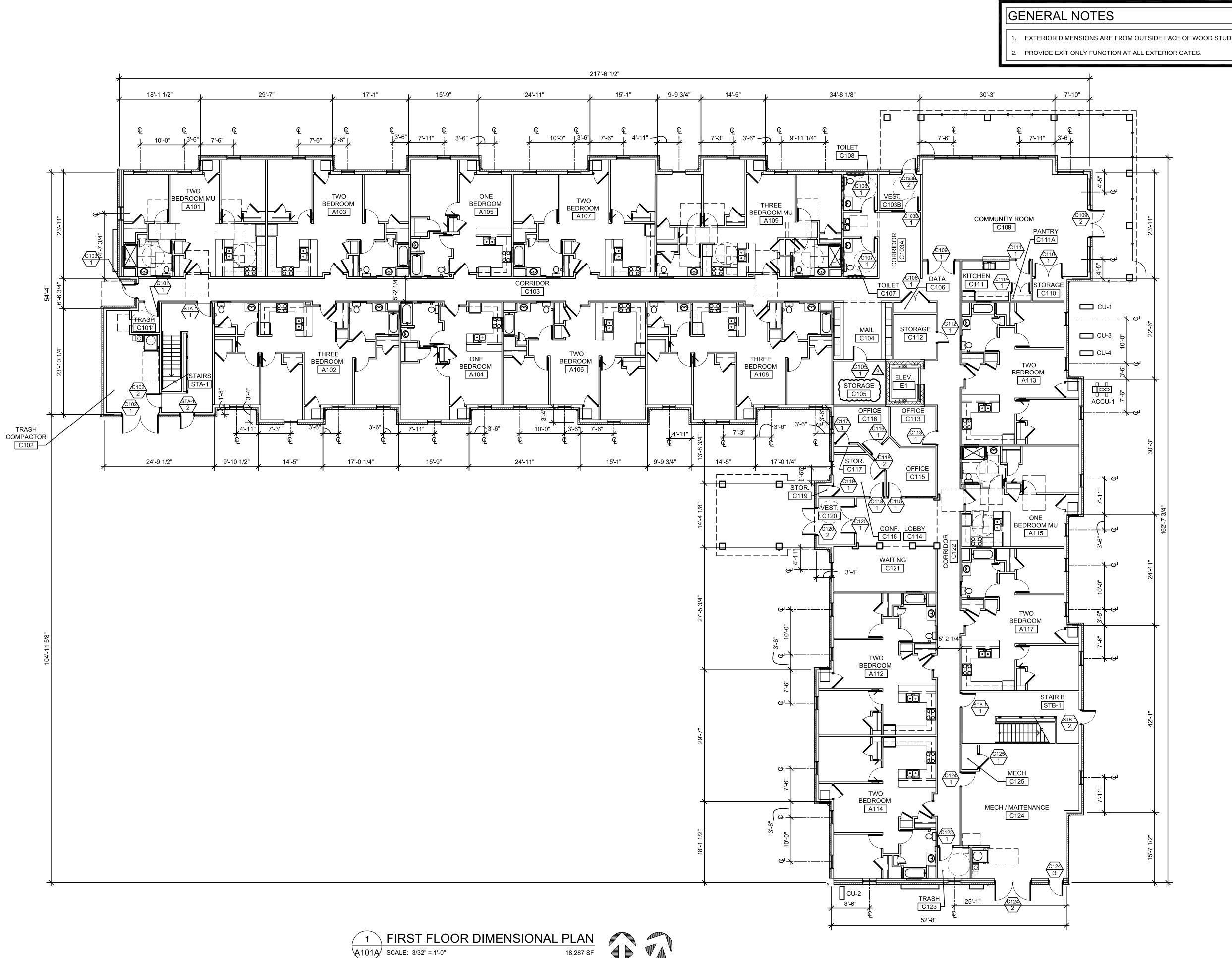
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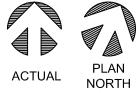


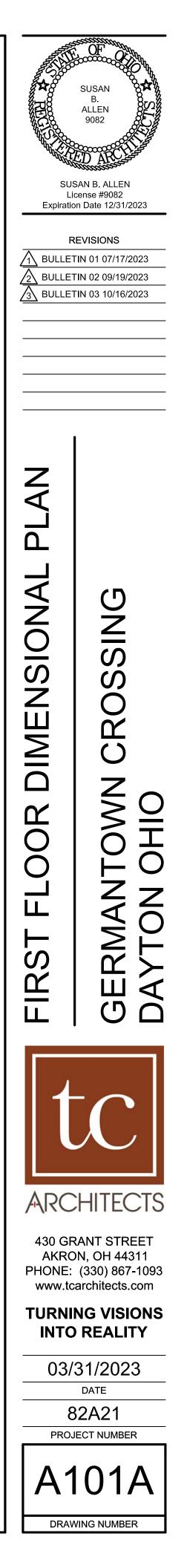


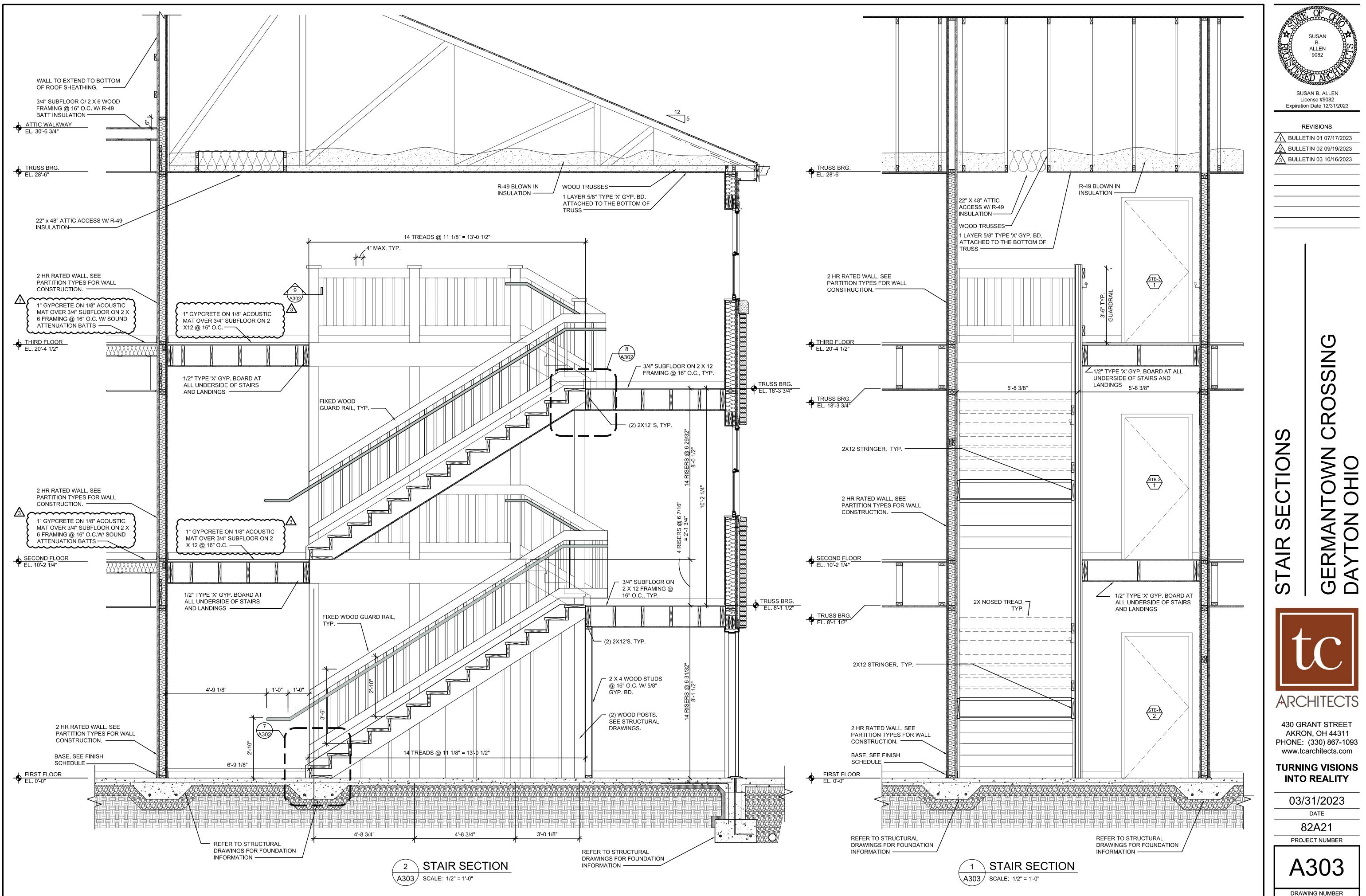
- EXTERIOR DIMENSIONS ARE FROM OUTSIDE FACE OF WOOD STUD
- PROVIDE EXIT ONLY FUNCTION AT ALL EXTERIOR GATES.



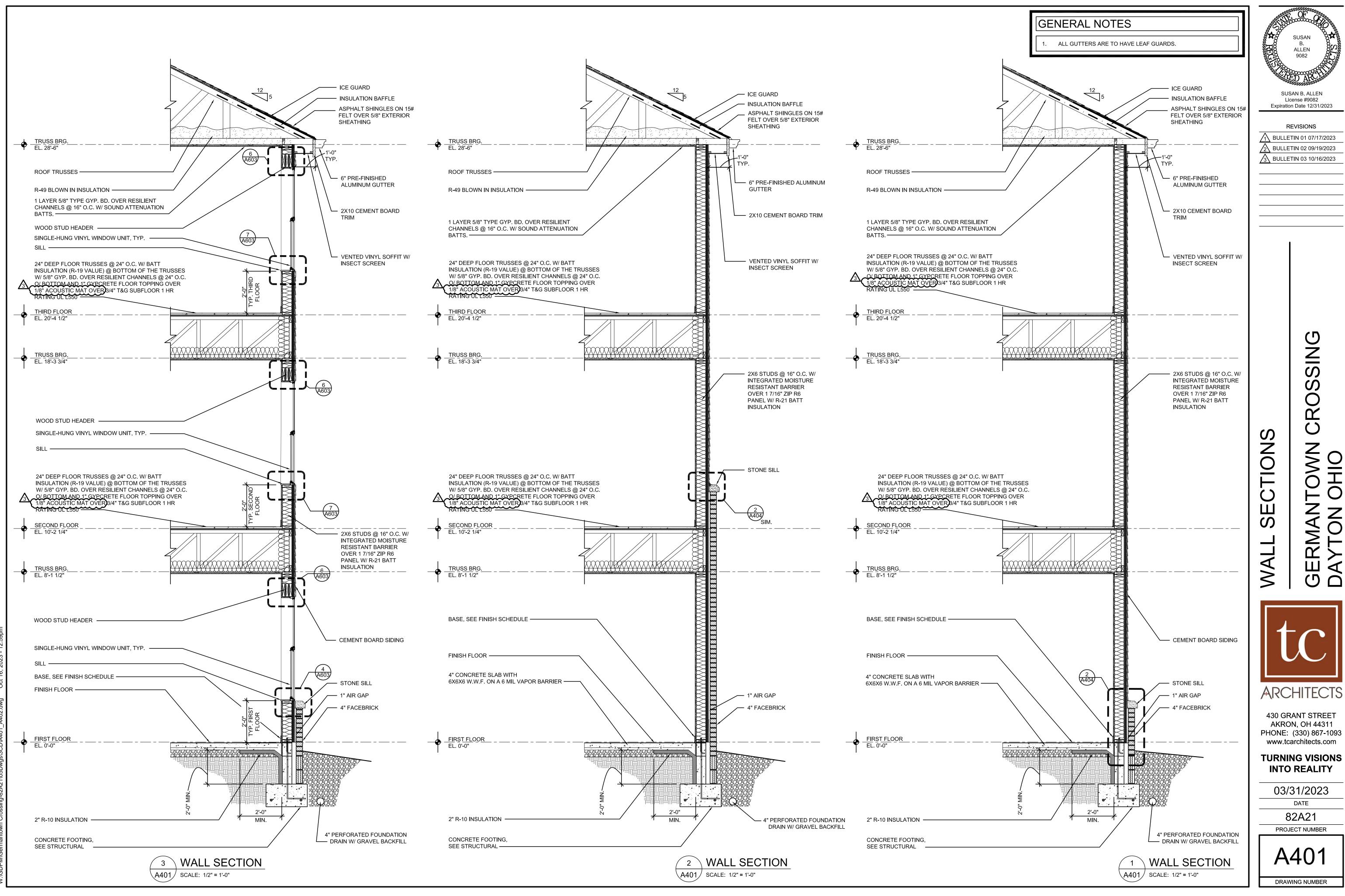


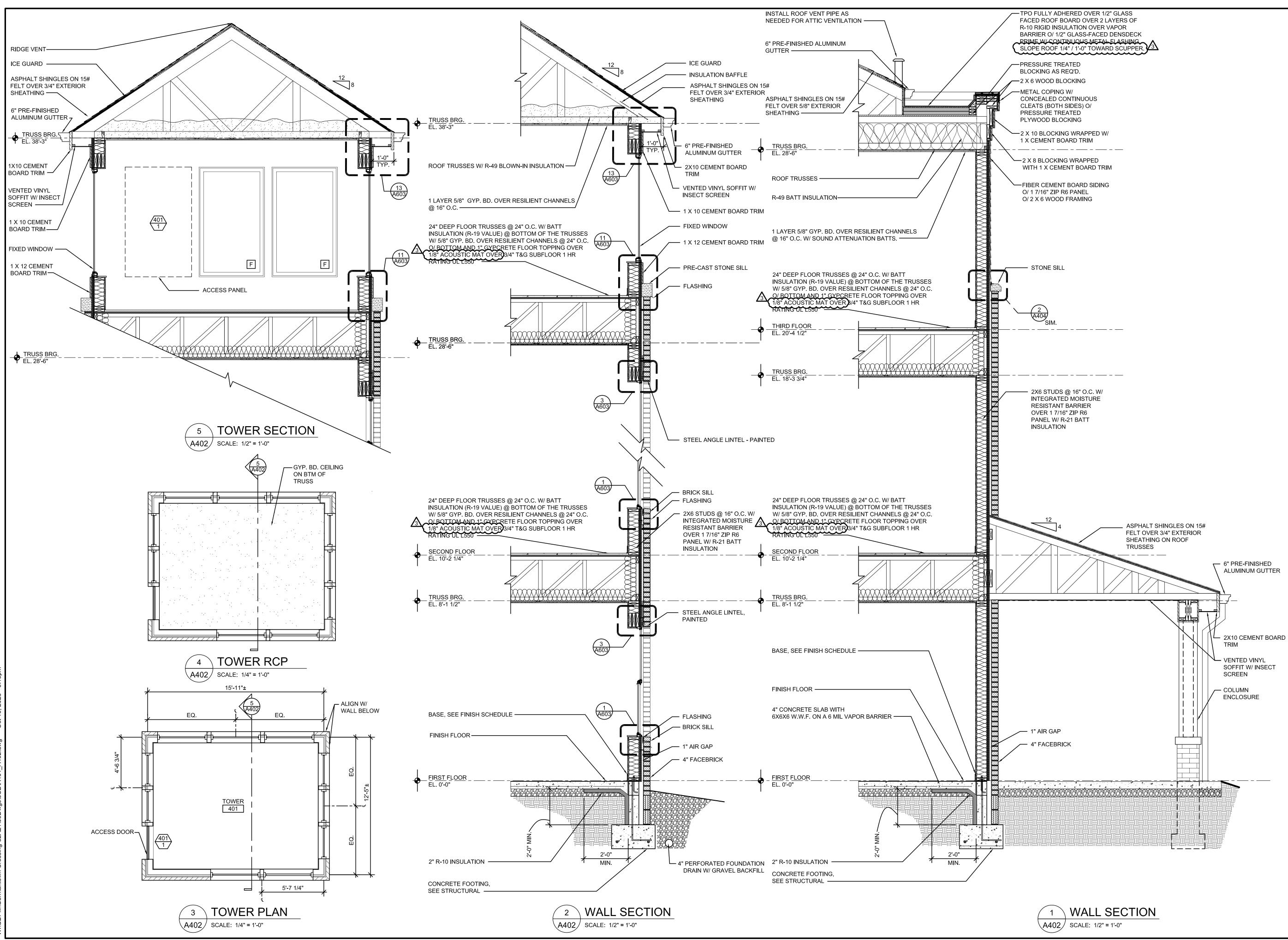






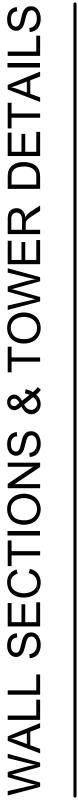
3DPM\Germantown Crossing-82A21\05Dwgs\3CD\A300 Stair Elev.dwg Oct 16, 2023 - 12:57





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ID INSULATION OVER VAPOR	
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RE TREATED IG AS REQ'D.	
OD BLOCKING	

SUSAN B. ALLEN 9082	A STANDARD
SUSAN B. ALLEN License #9082 Expiration Date 12/31/202	3
REVISIONS	
<u>A</u> BULLETIN 01 07/17/20	23
2 BULLETIN 02 09/19/20	23
3 BULLETIN 03 10/16/20	23



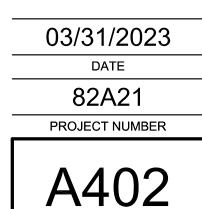


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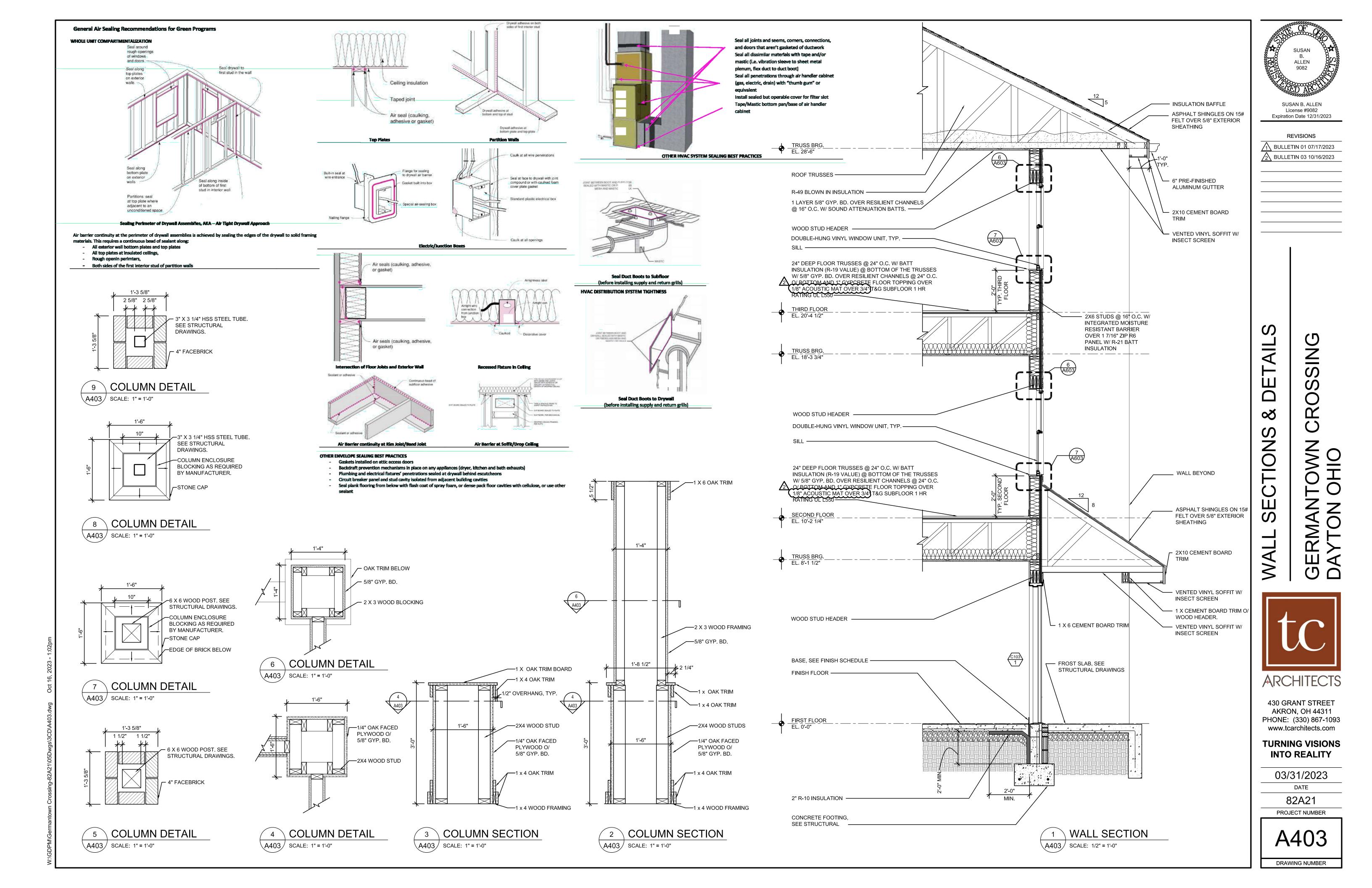


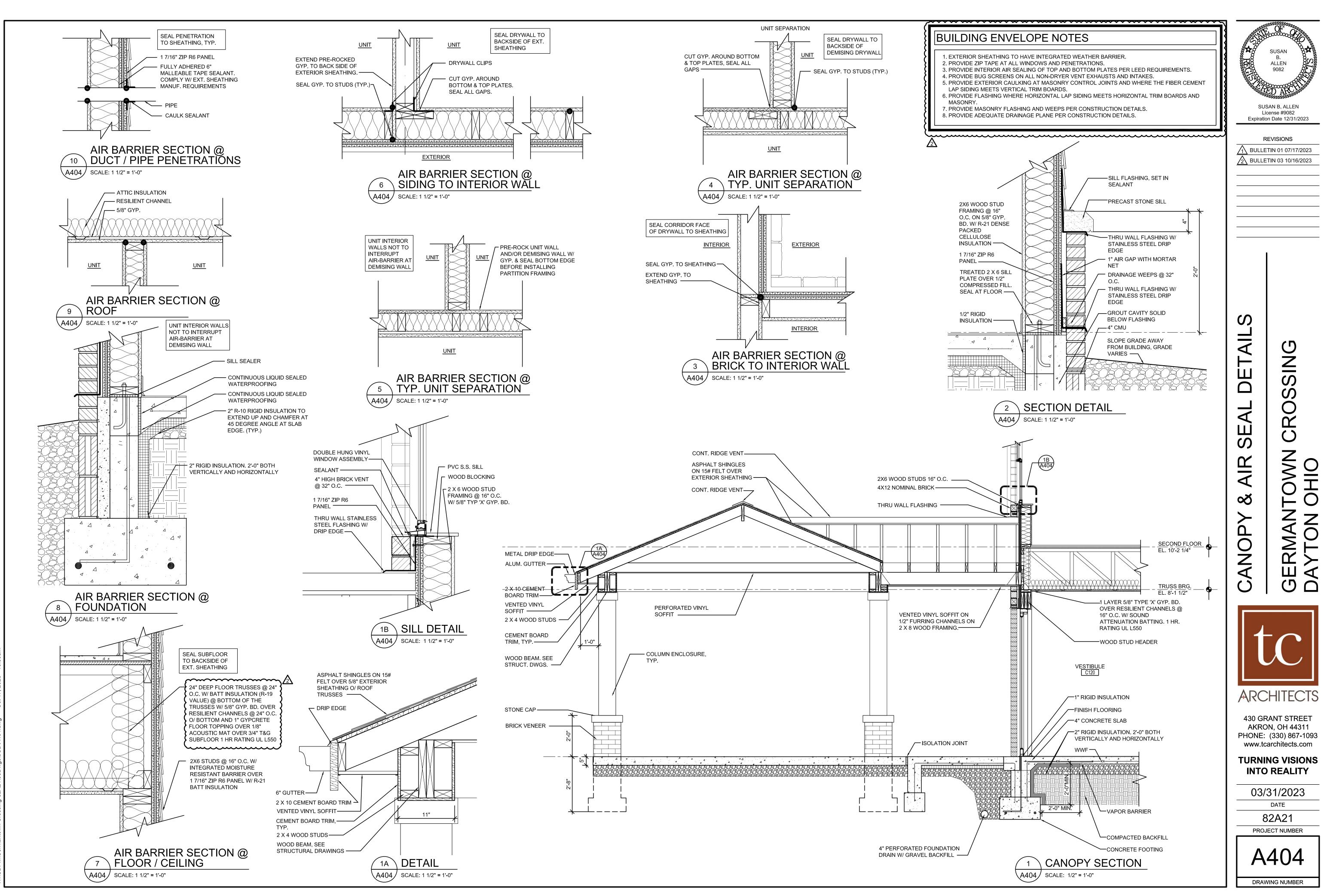
430 GRANT STREET AKRON, OH 44311 PHONE: (330) 867-1093 www.tcarchitects.com

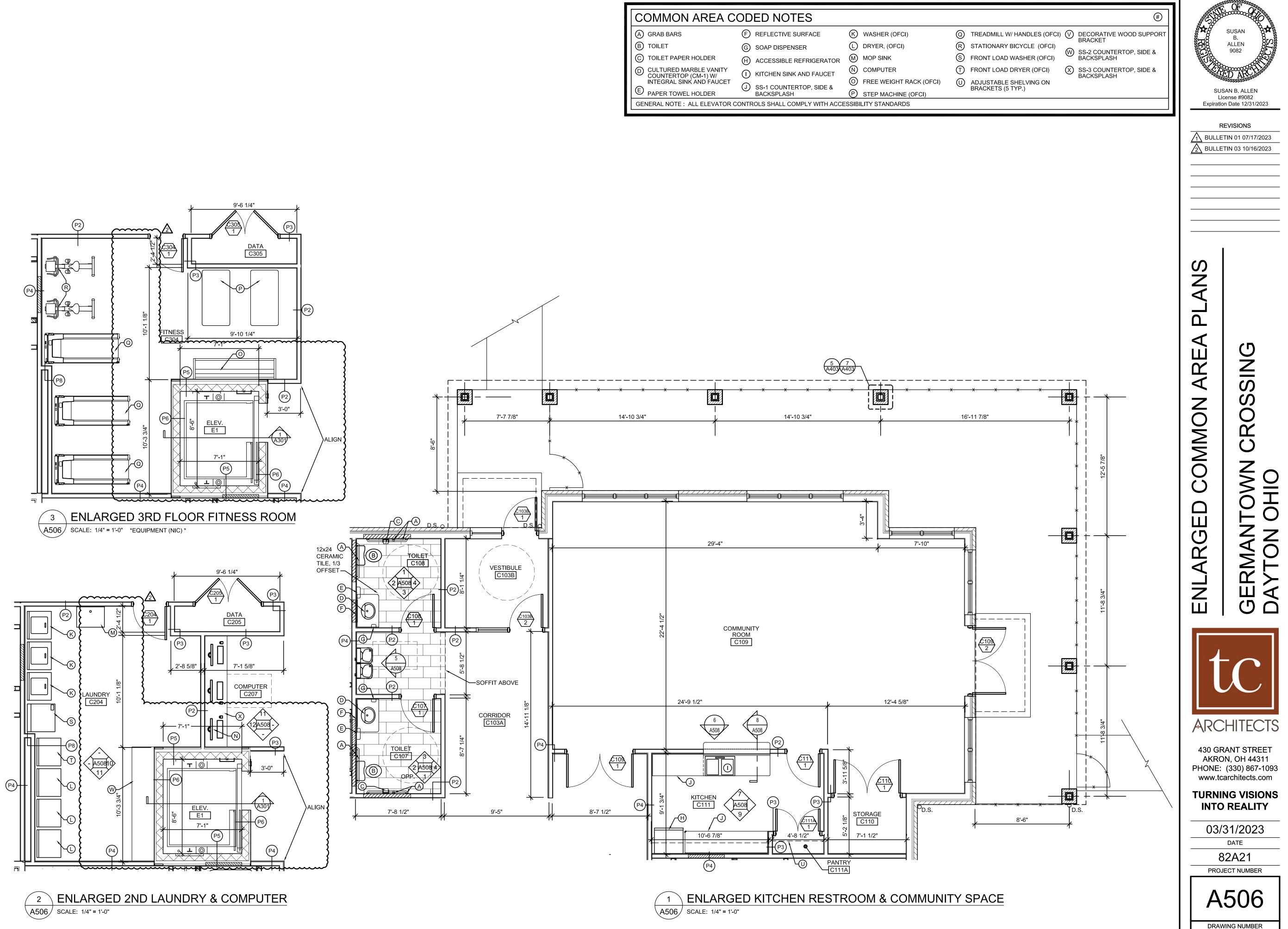
TURNING VISIONS INTO REALITY

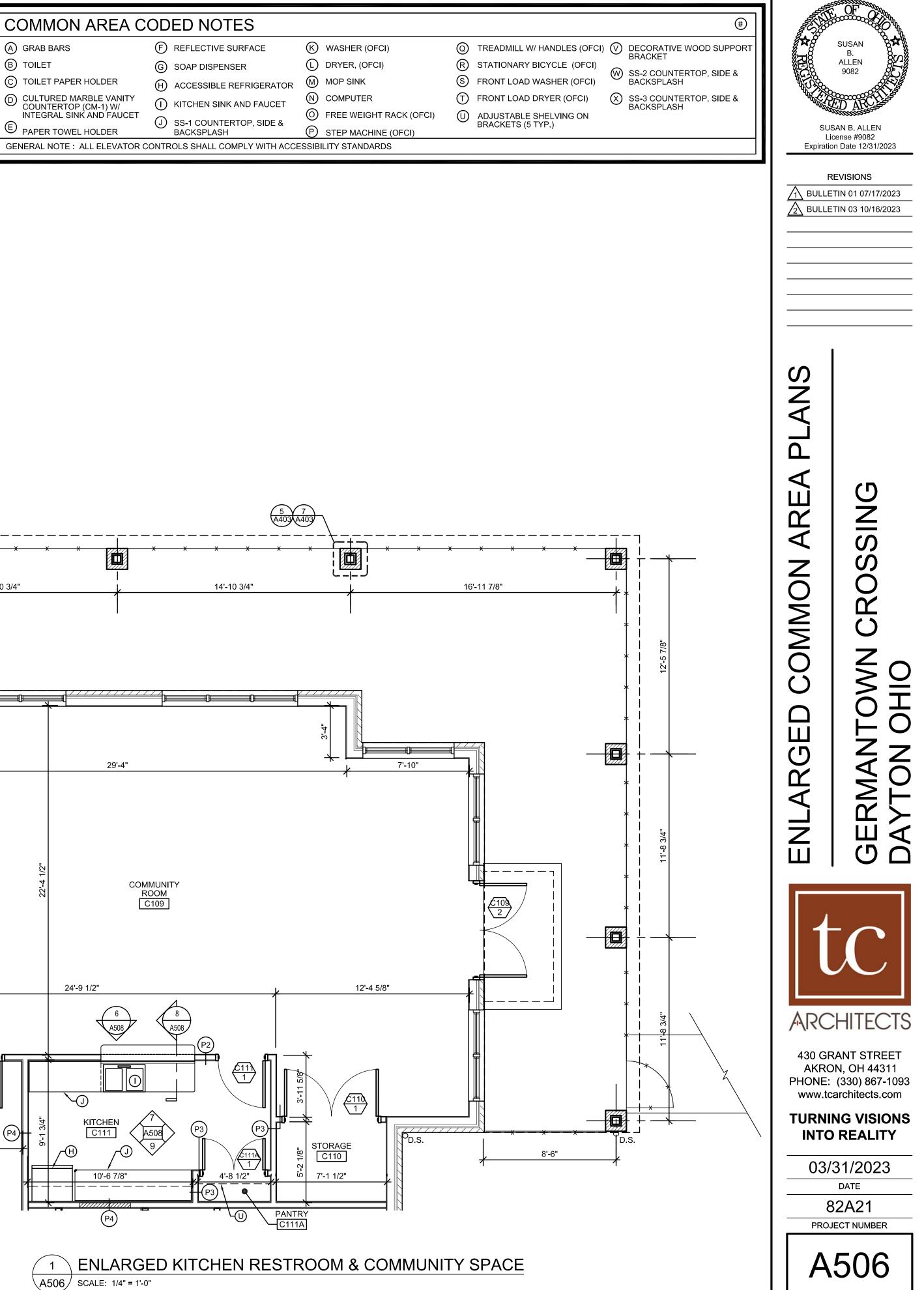


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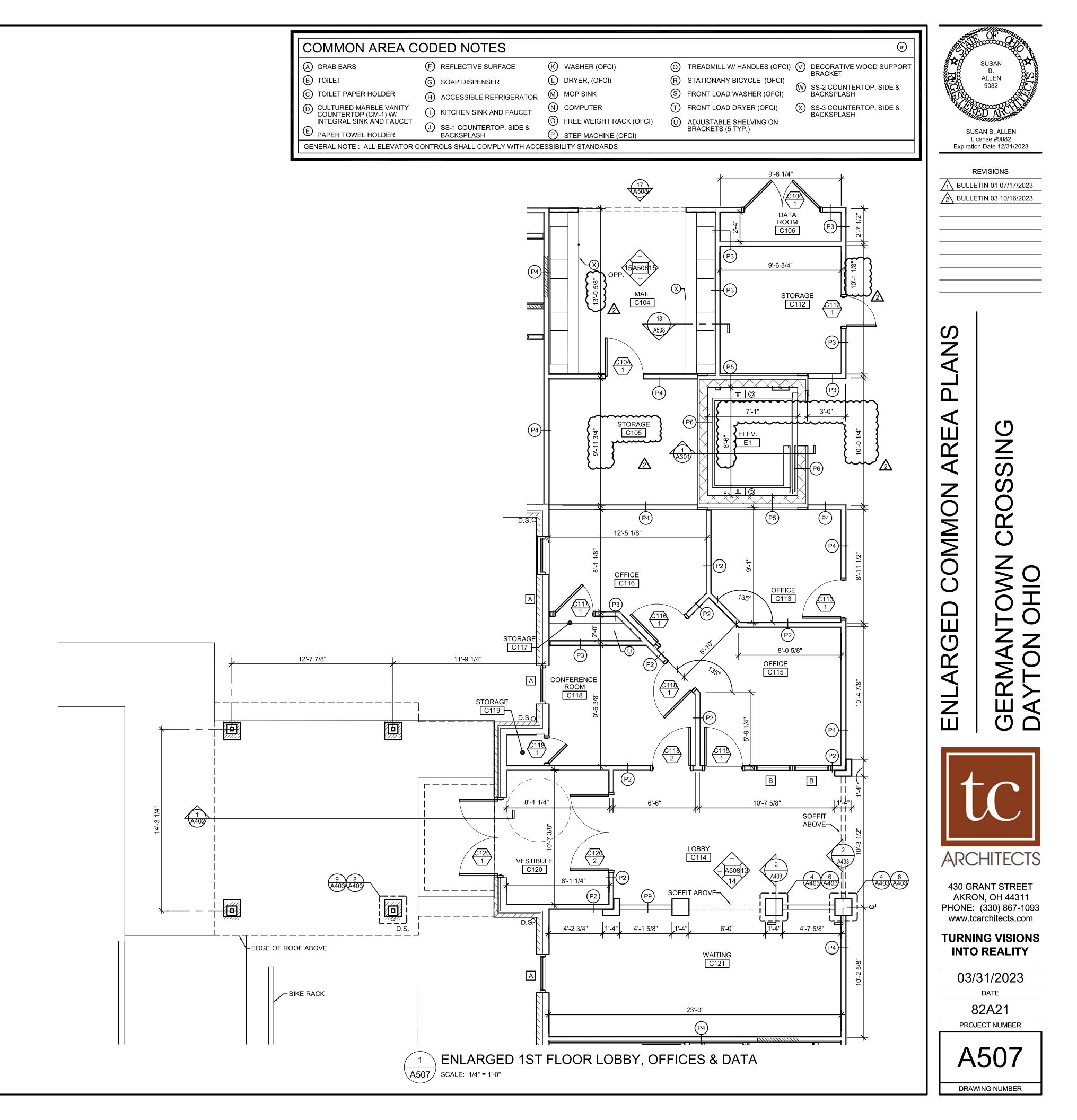








'\GDPM\Germantown Crossing-82A21\05Dwgs\3CD\A506 A507 A508.dwg Oct 16, 2023 - 12:47pm



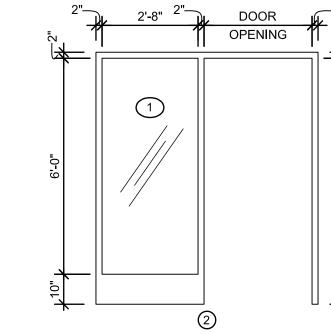
DOOR SCH	HEDULE - UNITS	DOOR SCHEDULE - COMMON AREA
DOOR NO. ROOM NAME	SIZE Image: Door line FRAMES RATING DETAILS HARDWARE NOTES: THICK. HEIGHT TYPE MAT. TYPE MAT. TYPE MAT. TYPE MAT. TYPE MAT. HEAD JAMB SILL NOTES:	Image: Description of the second s
1 BEDROOM - TYPICAL UNITA01/1ENTRY	3'-0" 1 3/4" 6'-8" C STL 1 HM 20 MIN. 4 / A604 3 / A604 A	FIRST FLOOR C101/1 TRASH 3'-0" 1 3/4" 7'-0" A HM 1 HM 45 MIN. 4 / A604 3 / A604 12
A03/1 CLOSET A05/1 UTILITY	2'-6" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 C PRE-HUNG 3'-0" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 D PRE-HUNG	C102/1 TRASH COMPACTOR PR. 4'-0" 1 3/4" 7'-0" A INSUL. HM 1 HM 60 MIN. 14 / A604 13 / A604 12 / A604 6 C102/2 TRASH COMPACTOR 3'-0" 1 3/4" 7'-0" A HM 1 HM 60 MIN. 14 / A604 13 / A604 6
A06/1 BEDROOM	3'-0" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 D PRE-HONG 3'-0" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 B PRE-HUNG	C102/2 TRASH COMPACTOR 3'-0" 1 3/4" 7'-0" A HM 1 HM 60 MIN. 4 / A604 3 / A604 5 C103/1 CORRIDOR 3'-0" 1 3/4" 7'-0" A AL 1 AL 9 / A604 8 / A604 7 / A604 4 DOOR ACCESS CONTROL
A07/1 CLOSET	2'-8" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 C PRE-HUNG	C103B/I VESTIBULE 3'-0" 1 3/4" 7'-0" B AL / GL 16 / A604 15 / A604 2A AUTOMATIC DOOR OPENER / DOOR ACCESS CONTROL
A08/1 BATHROOM	3'-0" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 B PRE-HUNG	C103B/2 VESTIBULE 3'-0" 1 3/4" 7'-0" B AL/GL 2 AL2 9/A604 8/A604 7/A604 1A 2 AUTOMATIC DOOR OPENER
A08/2 BATHROOM	3'-0" 1 3/8" 6'-8" D MCD 1 WD 18 / A604 17 / A604 POCKET DOOR	C105/1 STORAGE A 3'-0" 1 3/4" 7'-0" A HM 1 HM C 4/A604 3/A604 TA TA
1 BEDROOM - MU UNIT B01/1	3'-0" 1 3/4" 6'-8" C STL 1 HM 20 MIN. 4 / A604 3 / A604 A	C106/1 DATA PR. 3'-0" 1 3/4" 7'-0" A WD 1 HM 6 / A604 5 / A604 7 C107/1 TOILET 3'-0" 1 3/4" 7'-0" A WD 1 HM 6 / A604 5 / A604 10
B05/1 CLOSET	2'-6" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 C PRE-HUNG	C108/1 TOILET 3'-0" 1 3/4" 7'-0" A WD 1 HM 6 / A604 5 / A604 10
B06/1 BATHROOM	3'-0" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 B PRE-HUNG	C109/1 COMMUNITY ROOM PR. 3'-0" 1 3/4" 7'-0" A WD 1 HM 20 MIN. 4 / A604 3 / A604 9
B06/2 BATHROOM	3'-0" 1 3/8" 6'-8" D MCD 1 WD 18 / A604 17 / A604 POCKET DOOR	C109/2 COMMUNITY ROOM PR. 3'-0" 1 3/4" 7'-0" B AL/GL 1 AL 11/A604 10/A604 7/A604 9A
B07/1 CLOSET	2'-8" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 C PRE-HUNG	C110/1 STORAGE PR. 3'-0" 1 3/4" 7'-0" A WD 1 HM 6 / A604 5 / A604 7
A08/1 BEDROOM	3'-0" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 B PRE-HUNG	C111/1 KITCHEN 3'-0" 1 3/4" 7'-0" A WD 1 HM 6 / A604 5 / A604 11
B09/1 UTILITY 2 BEDROOM - TYPICAL UNIT / SE	3'-0" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 D PRE-HUNG ENSORY UNIT	C111A/1 PANTRY PR. 2'-0" 1 3/4" 7'-0" A WD 1 HM 6 / A604 5 / A604 7 C112/1 STORAGE 3'-0" 1 3/4" 7'-0" A WD 1 HM 6 / A604 5 / A604 7A
C01/1 ENTRY	3'-0" 1 3/4" 6'-8" C STL 1 HM 20 MIN. 4 / A604 3 / A604 A	C113/1 OFFICE 3'-0" 1 3/4" 7'-0" A WD 1 HM 67 A604 57 A604 7A
C02/1 CLOSET	3'-0" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 C PRE-HUNG	C115/1 OFFICE 3'-0" 1 3/4" 7'-0" A WD 1 HM 6 / A604 5 / A604 3
C03/1 PANTRY	2'-6" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 C PRE-HUNG	C116/1 OFFICE 3'-0" 1 3/4" 7'-0" A WD 1 HM 6 / A604 5 / A604 3
C04/1 BATHROOM	3'-0" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 B PRE-HUNG	C117/1 STORAGE 3'-0" 1 3/4" 7'-0" A WD 1 HM 6 / A604 5 / A604 7A
C04A/1 LINEN C05/1 BEDROOM 1	1'-6" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 C PRE-HUNG 2' 0" 1 2'0" 6' 8" D MCD 1 WD 2 / A604 1 / A604 C PRE-HUNG	C118/1 CONFERENCE 3'-0" 1 3/4" 7'-0" A WD 1 HM 6 / A604 5 / A604 3 C118/2 CONFERENCE 3'-0" 1 3/4" 7'-0" A WD 1 HM 6 / A604 5 / A604 3
C06/1 CLOSET	3'-0" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 B PRE-HUNG 2'-8" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 B PRE-HUNG	C118/2 CONFERENCE 3'-0" 1 3/4" 7'-0" A WD 1 HM 6 / A604 5 / A604 3 C119/1 STORAGE 2'-0" 1 3/4" 7'-0" A WD 1 HM 6 / A604 5 / A604 3
C07/1 BEDROOM 2	3'-0" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 B PRE-HUNG	C120/1 VESTIBULE PR. 3'-0" 1 3/4" 7'-0" B AL / GL 1 6 / A604 15 / A604 2 AUTOMATIC DOOR OPENER / DOOR ACCESS CONTROL
C08/1 CLOSET	2'-8" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 C PRE-HUNG	C120/2 VESTIBULE PR. 3'-0" 1 3/4" 7'-0" B AL / GL 1 / A604 10 / A604 7 / A604 1 AUTOMATIC DOOR OPENER
C10/1 UTILITY	3'-0" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 D PRE-HUNG	C123/1 TRASH 3'-0" 1 3/4" 7'-0" A HM 1 HM 45 MIN. 4 / A604 3 / A604 12
2 BEDROOM - MU UNIT		C124/1 MECH. / MAITENANCE 3'-0" 1 3/4" 7'-0" A HM 1 HM 60 MIN. 4 / A604 3 / A604 5
D01/1 ENTRY	3'-0" 1 3/4" 6'-8" C STL. 1 HM 20 MIN. 4 / A604 3 / A604 A 2' 0" 4 3/0" 6'-8" D MOD 1 MD 2 / A604 3 / A604 A	C124/2 MECH. / MAITENANCE PR. 4'-0" 1 3/4" 7'-0" A INSUL. HM 1 HM 60 MIN. 14 / A604 13 / A604 12 / A604 6
D02/1 CLOSET D03/1 UTILITY	3'-0" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 C PRE-HUNG 2'-6" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 D PRE-HUNG	C124/3 MECH / MAITENANCE 3'-0" 1 3/4" 7'-0" A INSUL. HM 1 HM 60 MIN. 14 / A604 13 / A604 12 / A604 6A C125/1 MECH. 3'-0" 1 3/4" 7'-0" A HM 1 / A604 13 / A604 12 / A604 6A
D04/1 BATHROOM	3'-0" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 B PRE-HUNG	SECOND FLOOR
D04A/1 LINEN	1'-6" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 C PRE-HUNG	C201/1 TRASH 3'-0" 1 3/4" 6'-8" A HM 1 HM 45 MIN. 4 / A604 3 / A604 12
D05/1 BEDROOM 1	3'-0" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 B PRE-HUNG	C202/1 STORAGE 3'-0" 1 3/4" 6'-8" A WD 1 HM 20 MIN. 4 / A604 3 / A604 7A
D06/1 CLOSET	2'-8" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 C PRE-HUNG	C204/1 LAUNDRY 3'-0" 1 3/4" 6'-8" A WD 1 HM 6 / A604 5 / A604 8
D07/1 BEDROOM 2 D08/1 CLOSET	3'-0" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 B PRE-HUNG 2'-8" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 B PRE-HUNG	C205/1 DATA PR. 3'-0" 1 3/4" 6'-8" A WD 1 HM 6 / A604 5 / A604 7 C206/1 STORAGE 3'-0" 1 3/4" 6'-8" A WD 1 HM 20 MIN. 4 / A604 3 / A604 7A
D10/1 UTILITY	3'-0" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 D PRE-HUNG	C209/1 TRASH 3'-0" 1 3/4" 6'-8" A HM 1 HM 4/ A604 3/ A604 12
3 BEDROOM - TYPICAL UNIT		THIRD FLOOR
F01/1 ENTRY	3'-0" 1 3/4" 6'-8" C STL 1 HM 20 MIN. 4 / A604 3 / A604 A	C301/1 TRASH 3'-0" 1 3/4" 6'-8" A HM 1 HM 45 MIN. 4 / A604 3 / A604 12
F02/1 CLOSET	2'-6" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 C PRE-HUNG	C302/1 STORAGE 3'-0" 1 3/4" 6'-8" A WD 1 HM 20 MIN. 4 / A604 3 / A604 7A
F03/1 LINEN F04/1 BATHROOM	2'-6" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 C PRE-HUNG	C304/1 FITNESS 3'-0" 1 3/4" 6'-8" A WD 1 HM 6 / A604 5 / A604 8
F04/1 BATHROOM F05/1 CLOSET	3'-0" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 B PRE-HUNG 2'-8" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 B PRE-HUNG	C305/1 DATA PR. 3'-0" 1 3/4" 6'-8" A WD 1 HM 6 / A604 5 / A604 7 C306/1 STORAGE 3'-0" 1 3/4" 6'-8" A WD 1 HM 20 MIN. 4 / A604 3 / A604 7A
F06/1 BEDROOM 3	3'-0" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 B PRE-HUNG	C308/1 TRASH 3'-0" 1 3/4" 6'-8" A HM 1 HM 4/ A604 3/ A604 12
F08/1 UTILITY	3'-0" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 D PRE-HUNG	STAIRS
F10/1 CLOSET	2'-8" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 C PRE-HUNG	STA-1/1 STAIR A 3'-0" 1 3/4" 6'-8" A INSUL. HM 1 HM 90 MIN. 4 / A604 3 / A604 13 FIRST FLOOR
F11/1 BEDROOM 1	3'-0" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 B PRE-HUNG 2' 0" 1 3/9" 6' 8" D MCD 1 WD 2 / A604 1 / A604 B PRE-HUNG	STA-1/2 STAIR A 3'-0" 1 3/4" 6'-8" A HM 1 4 / A604 13 / A604 12 / A604 14 EXTERIOR
F14/1 BATHROOM F15/1 LINEN	3'-0" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 B PRE-HUNG 3'-0" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 B PRE-HUNG	STA-1/3 STAIR A - 2ND FLOOR 3'-0" 1 3/4" 6'-8" A HM 1 HM 90 MIN. 4 / A604 3 / A604 13 SECOND FLOOR STA-1/4 STA-1/4 STAIR A - 3RD FLOOR 3'-0" 1 3/4" 6'-8" A HM 1 HM 90 MIN. 4 / A604 3 / A604 13 SECOND FLOOR
F16/1 CLOSET	2'-8" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 C PRE-HONG	STA-1/4 STAIR A - 3RD FLOOR 3'-0" 1 3/4" 6'-8" A HM 1 HM 90 MIN. 4 / A604 3 / A604 13 THIRD FLOOR STB-1/1 STB-1/1 STAIR B 3'-0" 1 3/4" 6'-8" A HM 1 HM 90 MIN. 4 / A604 3 / A604 13 THIRD FLOOR
F17/1 BEDROOM 2	3'-0" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 B PRE-HUNG	STB-1/2 STAIR B 3'-0" 1 3/4" 6'-8" A HM 1 4 / A604 13 / A604 12 / A604 14 EXTERIOR
3 BEDROOM - MU UNIT		STB-1/3 STAIR B - 2ND FLOOR 3'-0" 1 3/4" 6'-8" A HM 1 HM 90 MIN. 4 / A604 3 / A604 13 SECOND FLOOR
G01/1 ENTRY	3'-0" 1 3/4" 6'-8" C STL. 1 HM 20 MIN. 4 / A604 3 / A604 A	STB-1/4 STAIR B - 3RD FLOOR 3'-0" 1 3/4" 6'-8" A HM 1 HM 90 MIN. 4 / A604 3 / A604 13 THIRD FLOOR
G02/1 CLOSET	2'-8" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 C PRE-HUNG	
G03/1 PANTRY G04/1 BATHROOM	2'-8" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 C PRE-HUNG 3'-0" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 C PRE-HUNG	401/1 TOWER 3'-0" 5'-0" 21 / A604 20 / A604 19 / A604 ACCESS PANEL
G04A/1 LINEN	2'-8" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 B PRE-HONG	
G05/1 CLOSET	2'-8" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 C PRE-HUNG	
G06/1 BEDROOM 3	3'-0" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 B PRE-HUNG	
G08/1 UTILITY	3'-0" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 D PRE-HUNG	
G10/1 CLOSET	2'-8" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 C PRE-HUNG	$\frac{2^{"}}{1} \frac{2^{"}}{1} 2^$
G11/1 BEDROOM 1 G14/1 BATHROOM	3'-0" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 B PRE-HUNG 3'-0" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 B PRE-HUNG	$\frac{1}{1} \frac{2 \cdot 8^n}{1} \frac{2 \cdot 8^n}{1} \frac{1}{1} $
G14/1 BATHROOM G16/1 LINEN	3'-0" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 B PRE-HUNG 3'-0" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 B PRE-HUNG	
G17/1 CLOSET	2'-8" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 C PRE-HUNG	
G18/1 BEDROOM 2	3'-0" 1 3/8" 6'-8" D MCD 1 WD 2 / A604 1 / A604 B PRE-HUNG	

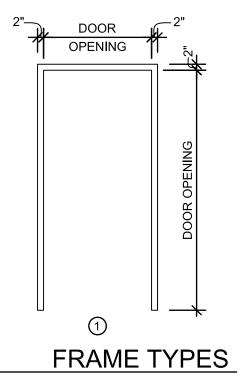
MARK INSUL. HM WD AL HM MCD STL GL

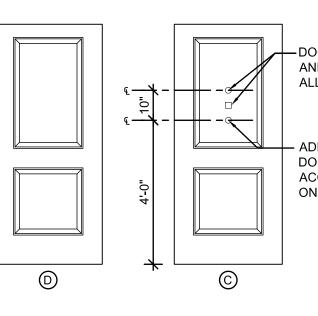
GENERAL DOOR NOTES

1. DOOR CLOSERS FOR COMMON AREAS SUCH AS RESTROOMS, MAIN ENTRY & ACCESSIBLE UNIT ENTRY DOOR MUST HAVE DELAYED ACTION FEATURE THAT

HOLDS DOOR OPEN FOR A MINIMUM OF 5 SECOND.



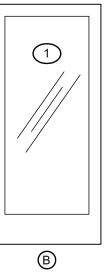




DOOR LEGEND:

DESCRIPTION
INSULATED HOLLOW METAL
SOLID CORE WOOD
ALUMINUM STOREFRONT
HOLLOW METAL
SOLID CORE MOLDED COMPOSITE DOOR
STEEL
GLASS

- ADDITIONAL LOWER DOOR VIEWER IN ACCESSIBLE UNITS ONLY



A

DOOR TYPES

SUSAN B. ALLEN 9082
TED ABC
SUSAN B. ALLEN License #9082 Expiration Date 12/31/2023
REVISIONS
BULLETIN 01 07/17/2023
BULLETIN 03 10/16/2023
1

CHEDULE & LEGEND NTOWN CROSSING I OHIO A 0 S DOOR GEF DAY ARCHITECTS 430 GRANT STREET AKRON, OH 44311 PHONE: (330) 867-1093 www.tcarchitects.com

> A602 DRAWING NUMBER

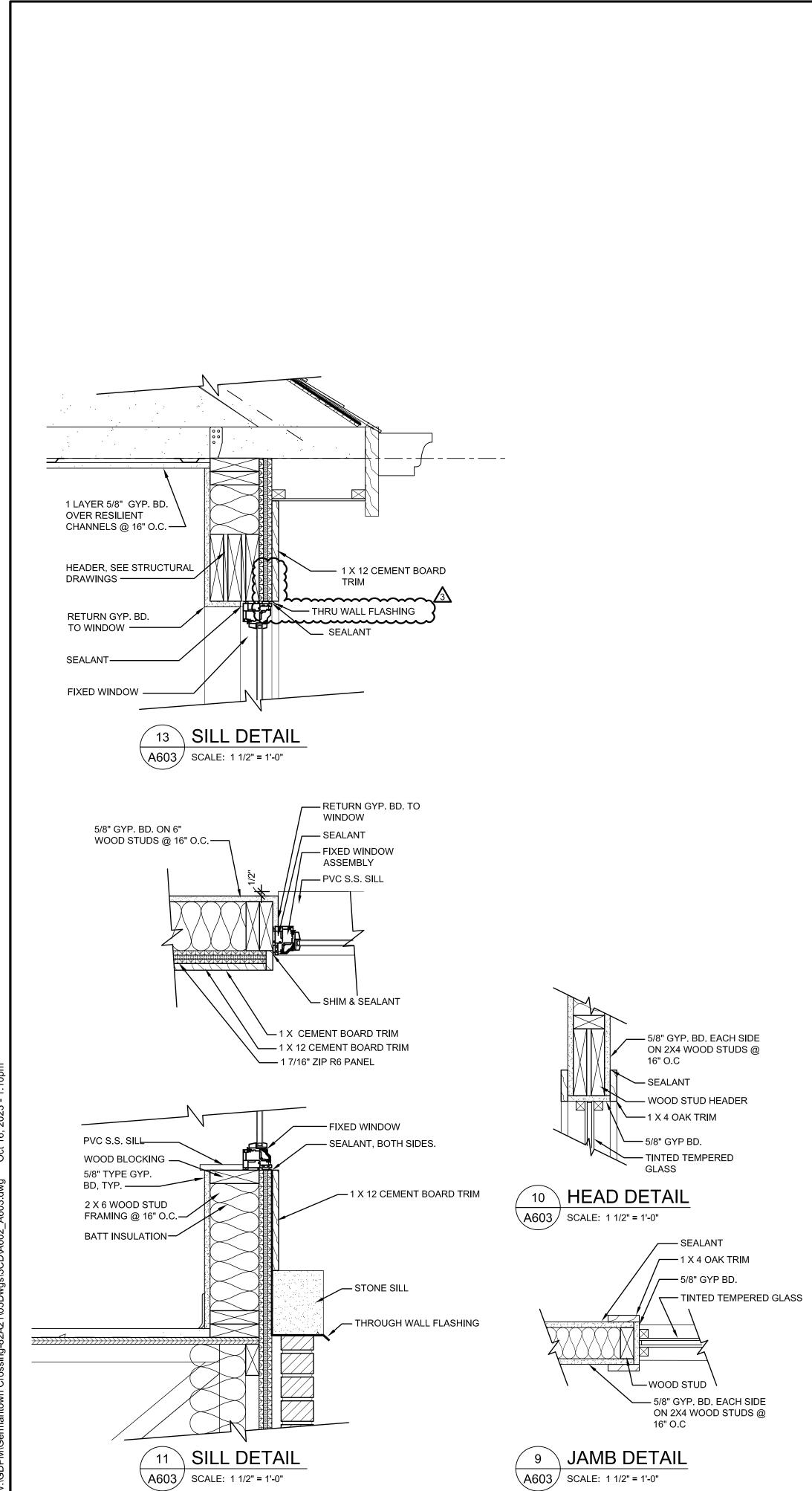
TURNING VISIONS INTO REALITY

03/31/2023

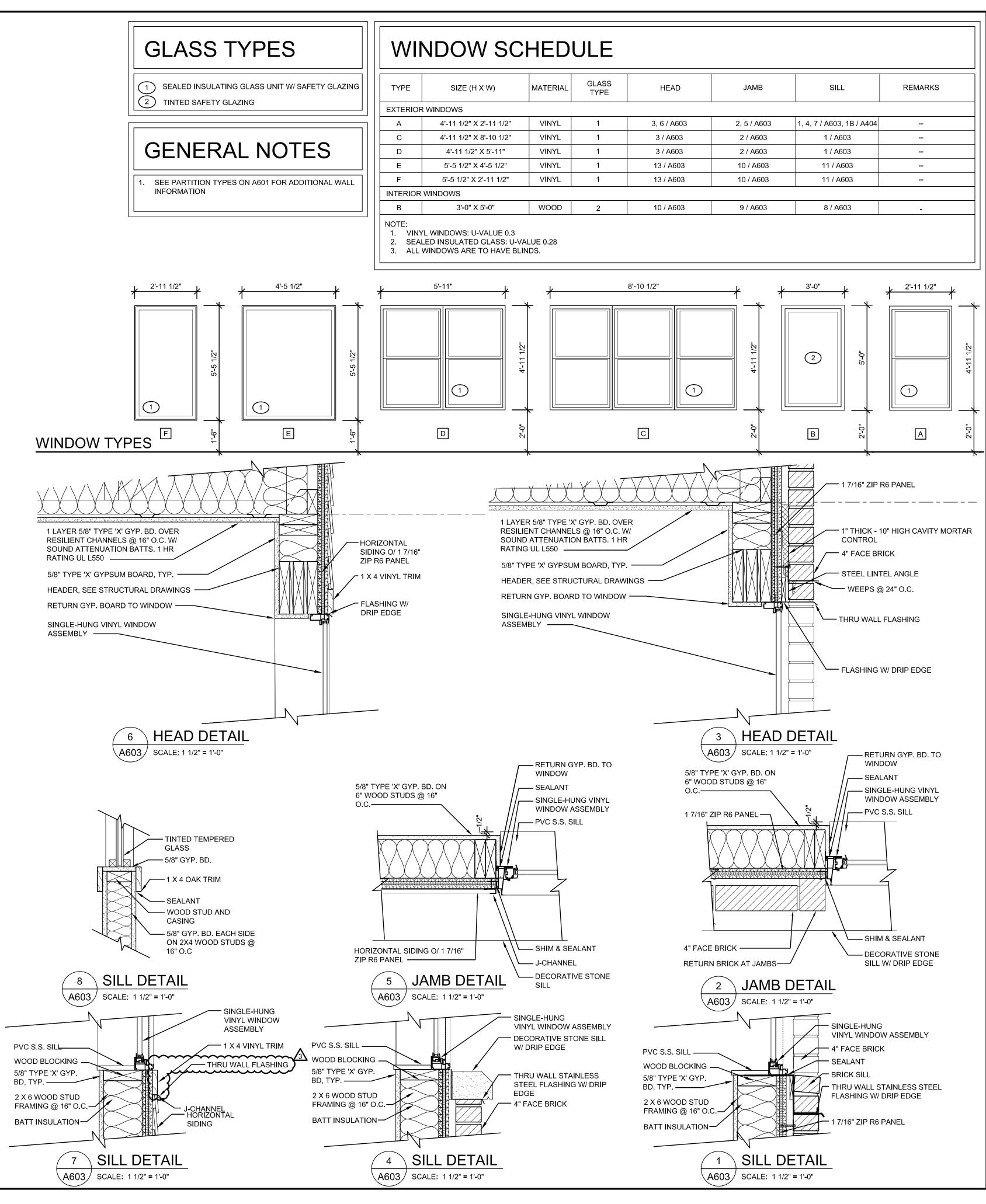
DATE

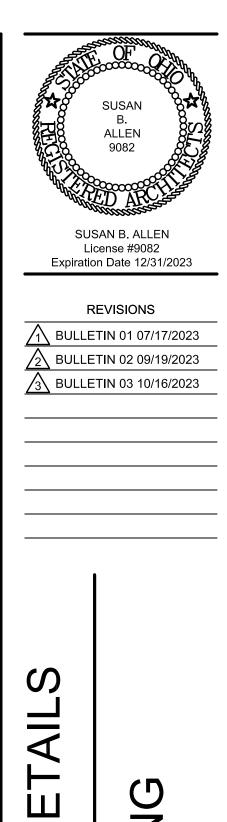
82A21

PROJECT NUMBER



GDPM\Germantown Crossing-82A21\05Dwgs\3CD\A602_A603.dwg Oct 16, 2023 - 1:10pm

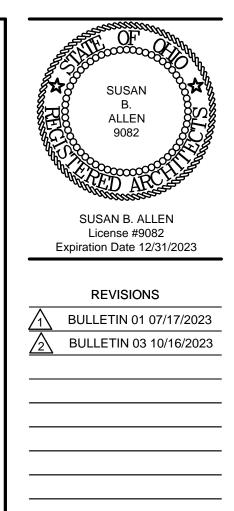






DRAWING NUMBER

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CANC	FINISH SCHE	EDULE	- UNI	TS							FINI	SH SCF	IEDULE	- UNI	TS						
Image App App </td <td>ROOM NO. ROOM NAME</td> <td>FLOORING</td> <td>BASE</td> <td>NORTH</td> <td> </td> <td></td> <td>WEST</td> <td>CEILING</td> <td>COUNTERTO</td> <td>REMARKS:</td> <td>ROOM NO.</td> <td>ROOM NAME</td> <td>FLOORING</td> <td>BASE</td> <td>NORTH</td> <td></td> <td></td> <td>WEST</td> <td>CEILING</td> <td>COUNTERTOP</td> <td>REMARKS:</td>	ROOM NO. ROOM NAME	FLOORING	BASE	NORTH			WEST	CEILING	COUNTERTO	REMARKS:	ROOM NO.	ROOM NAME	FLOORING	BASE	NORTH			WEST	CEILING	COUNTERTOP	REMARKS:
	1 BEDROOM - STANDARD UNIT		-					1			3 BEDROOM	/ - MOBILITY UNIT						•			
1 2 2 2 2 2 2 2 2 2 2 2 3 2 3 2 3 2 3 2 3 2 3																					
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No. No. <td></td>																					
10 10 10 10 10 <td>A05 UTILITY</td> <td>LVP-1</td> <td>RB-1</td> <td>P-1</td> <td>P-1</td> <td>P-1</td> <td>P-1</td> <td>GYP BD.</td> <td></td> <td></td> <td>G16 L</td> <td>INEN</td> <td>CT-1</td> <td>CB-2</td> <td>P-8</td> <td>P-8</td> <td>P-8</td> <td>P-8</td> <td>GYP BD.</td> <td></td> <td></td>	A05 UTILITY	LVP-1	RB-1	P-1	P-1	P-1	P-1	GYP BD.			G16 L	INEN	CT-1	CB-2	P-8	P-8	P-8	P-8	GYP BD.		
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Imple Lor AC P C C C C </td <td></td> <td>G18 E</td> <td>SEDROOM #2</td> <td>LVP-4</td> <td>KB-1</td> <td>P-1</td> <td>P-1</td> <td>P-1</td> <td>P-1</td> <td>GTP BD.</td> <td></td> <td></td>											G18 E	SEDROOM #2	LVP-4	KB-1	P-1	P-1	P-1	P-1	GTP BD.		
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m m											ROOM NO.	ROOM NAME	FLOORING	BASE		1		I	CEILING	COUNTERTOP	REMARKS [.]
Image <td>B06 BATHROOM</td> <td></td> <td>CB-2</td> <td></td> <td>P-8</td> <td>P-8</td> <td></td> <td></td> <td>CM-1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>NORTH</td> <td>EAST</td> <td>SOUTH</td> <td>WEST</td> <td></td> <td></td> <td></td>	B06 BATHROOM		CB-2		P-8	P-8			CM-1						NORTH	EAST	SOUTH	WEST			
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INTERPRETATION <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>																					
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P12 KICPEN LVP-I R8-1 P-1 P-1 OP BD S8-1 - P13 HALLWAY B LVP-I R8-1 P-1 P-1 O'P BD< - - P13 HALLWAY B LVP-I R8-2 P-4 P-4 P-4 O'P BD - - P14 BATH COM C11 C82 P-8 P-8 O'P BD - - P15 LINR C11 C82 P-8 P-8 O'P BD - - P16 CLORET LVP-1 R8-1 P-1 P-1 O'P BD - - P16 CLORET LVP-1 R8-1 P-1 P-1 O'P BD - - SEDEOM-MOBLIT LVP-1 R8-1 P-1 P-1 O'P BD - - G02 CLOSET LVP4 R8-1 P-1 P-1 O'P BD - - G02 CLOSET LVP4 R8-1 P-1 P-1 O'P BD - - G022 CLOSET LVP4													LVP-2	RB-2	P-4	P-4	P-4	P-4			
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G03 PANTRY RVP-4 RVP-4 RVP-1 PV-1														RB-2	P-4	P-4	P-4	P-4			
G04BATHROOMCT-1CB-2P-8P-8P-8P-9GVP BD.CM-1-G04LNENCT-1CB-2P-8P-8P-8GVP BD.GVP BDG05LOSETLVP-4RB-1P-1P-1P-1GVP BD.GVP BDG06BEDROOM #3LVP-4RB-1P-1P-1GYP BD.GYP BDG07LVNGLVP-4RB-1P-1P-1GYP BD.GYP BDG08UTLITYLVP-4RB-1P-1P-1GYP BDG09HALWAY ALVP-4RB-1P-1P-1GYP BD.GYP BD.G09HALWAY ALVP-4RB-1P-1P-1GYP BD.GYP BD.G09HALWAY ALVP-4RB-1P-1P-1GYP BD.GYP BD.G09HALWAY ALVP-4RB-1P-1P-1GYP BD.GYP BD.											STB S	STAIR B	RBST-1	RB-2	P-4	P-4	P-4	P-4	GYP BD.		
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G10 CLOSET LVP-4 RB-1 P-1 P-1 P-1 P-1 P-1 GYP BD.																					
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GERMANTOWN CROSSING DAYTON OHIO

SCHEDULES

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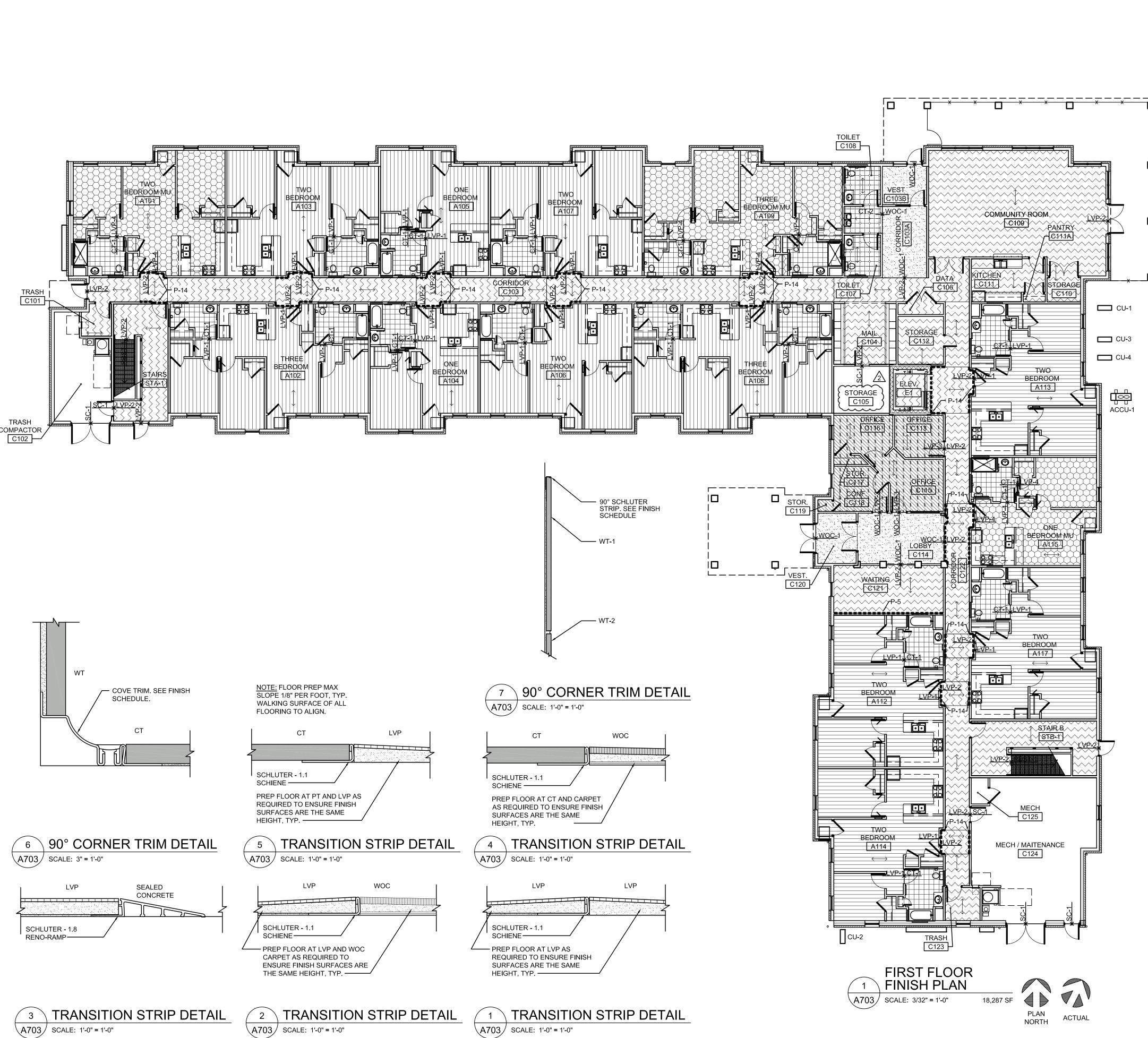
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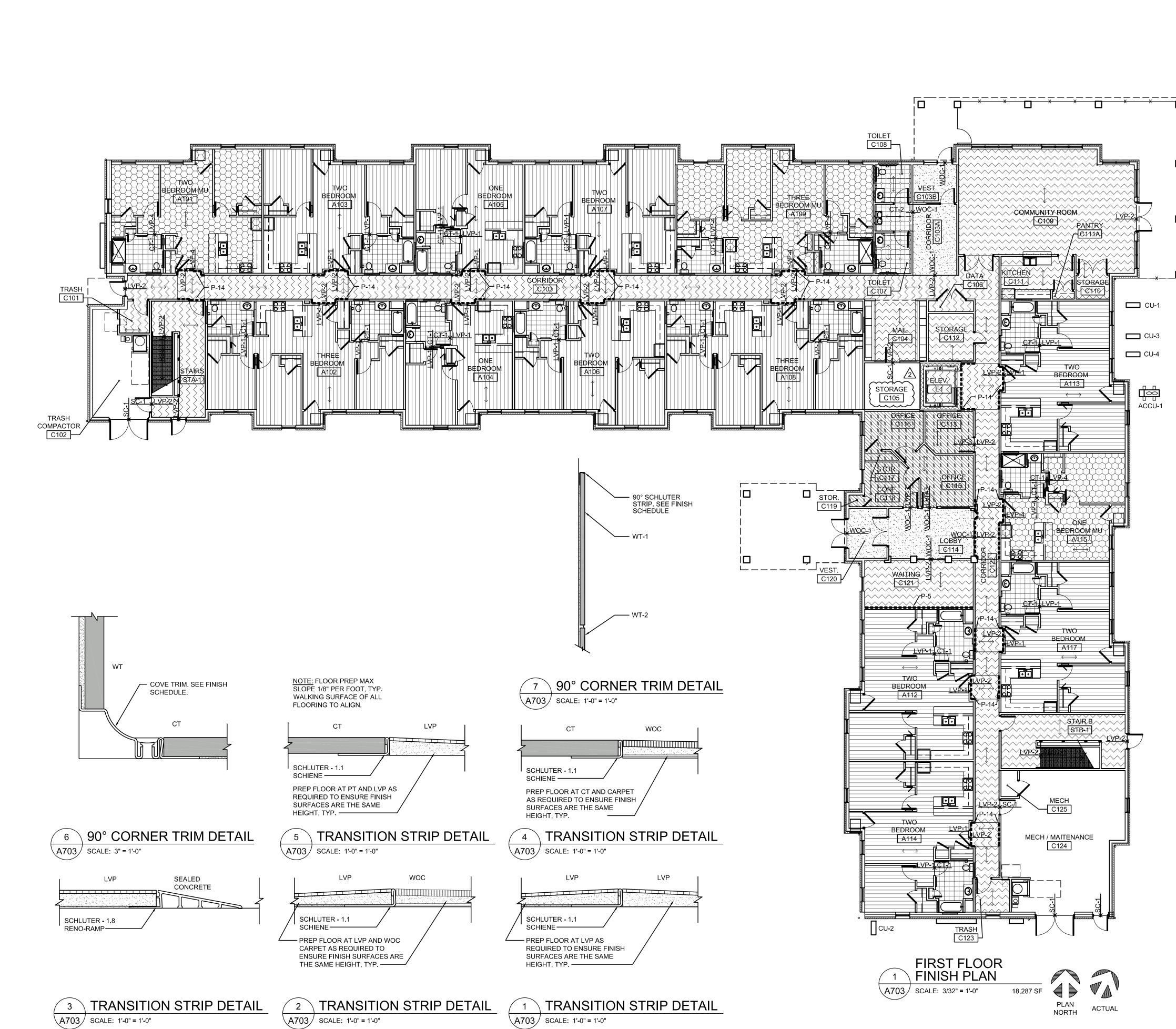


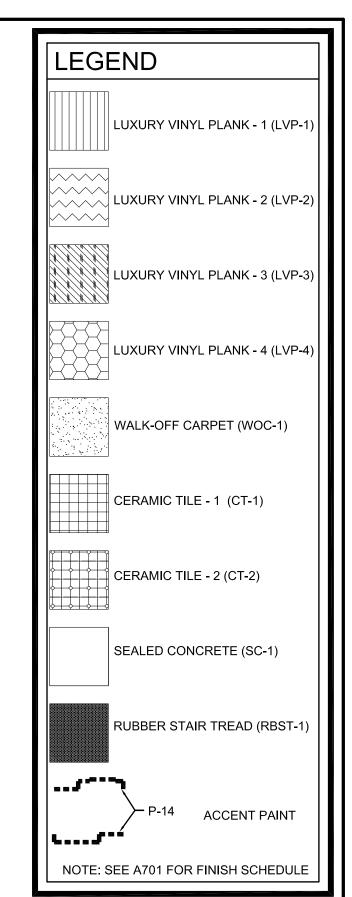
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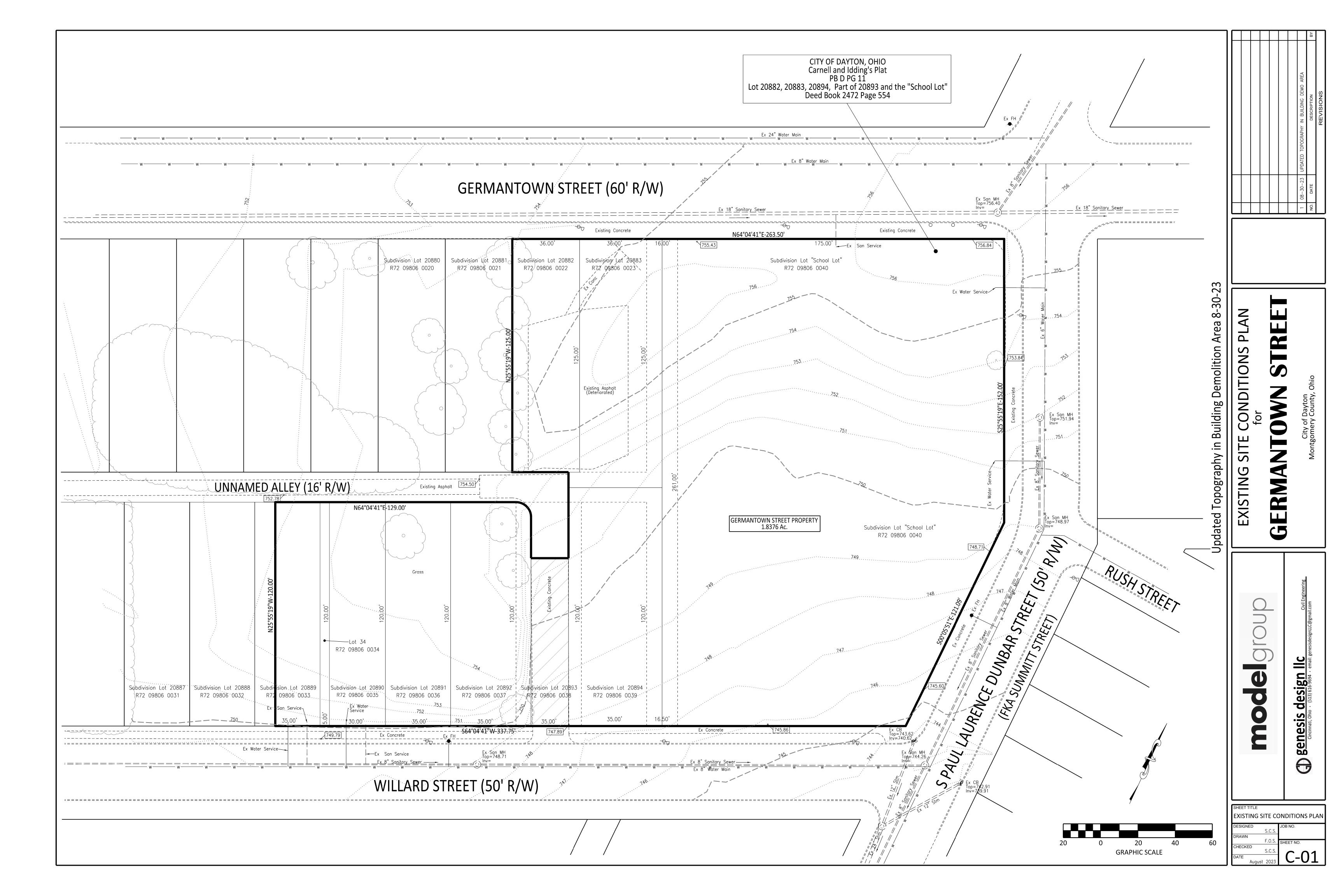
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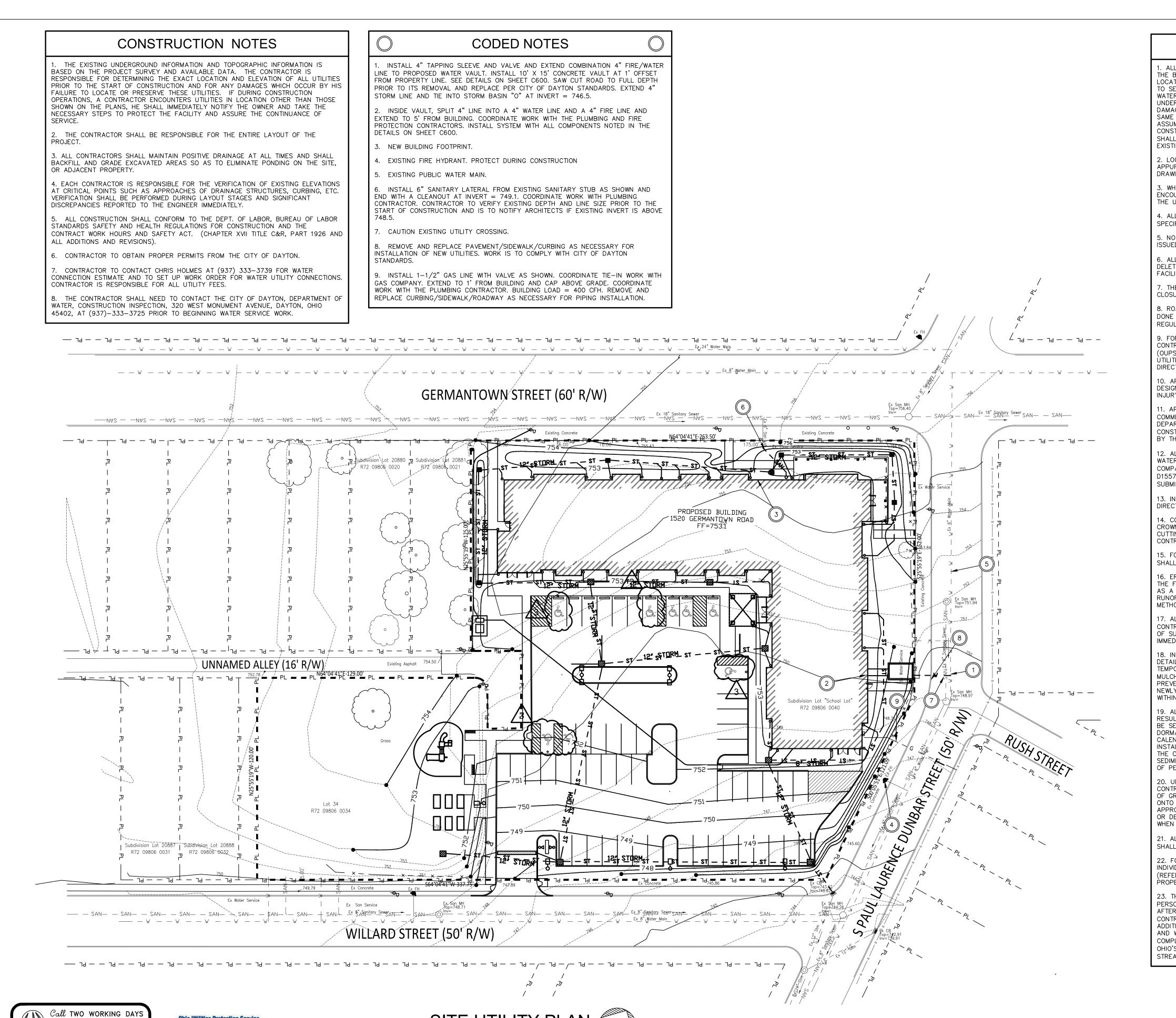
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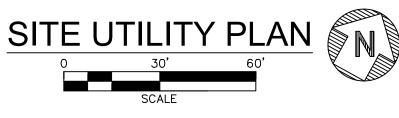
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BEFORE YOU DIG 2 8 2011 ⁵ Ohio Utilities protection servic IN ОНЮ - 800-362-2764 ОUT OF OHIO - 216-744-5191 NON-MEMBERS MUST CALL DIRECTLY

CITY CONSTRUCTION NOTES

1. ALL EXISTING UTILITIES ARE SHOWN IN THEIR APPROXIMATE LOCATION ACCORDING TO THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE REQUIRED TO FIELD LOCATE EXACT LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES PRIOR TO SETTING GRADE AND ALIGNMENT. THE CITY OF DAYTON AND THE DEPARTMENT OF WATER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OR DEPTH OR THE UNDERGROUND FACILITIES SHOWN ON THE APPROVED CONSTRUCTION DRAWINGS. IF DAMAGE IS CAUSED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OF THE SAME AND FOR ANY RESULTING CONTINGENT DAMAGE. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR PROTECTION OF ALL EXISTING UTILITIES DURING CONSTRUCTION. ALL COST FOR LOCATING, REMOVING AND REPLACING OR CONSTRUCTION SHALL BE REPAIRED TO THE UTILITY OWNER'S SATISFACTION. THE EXACT LOCATION OF EXISTING UTILITIES SHALL BE DETERMINED BY HAND DIGGING.

2. LOCATION, SUPPORT, PROTECTION, AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES, WHETHER OR NOT SHOWN ON THE APPROVED CONSTRUCTION DRAWINGS, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

3. WHEN UNKNOWN OR INCORRECTLY LOCATED UNDERGROUND UTILITIES ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY OWNER AND THE DEPARTMENT OF WATER.

4. ALL WORK SHALL CONFORM TO THE CITY OF DAYTON, CONSTRUCTION AND MATERIAL SPECIFICATIONS (LATEST EDITION).

5. NO CONSTRUCTION SHALL COMMENCE UNTIL CITY OF DAYTON PERMITS HAVE BEEN ISSUED AS REQUIRED.

6. ALL PROJECT ORDERS (FIELD OR OFFICE), REQUESTS, CHANGES, ADDITIONS OR DELETIONS PERTAINING TO PUBLIC WATER MAIN, STORM SEWER, AND SANITARY SEWER FACILITIES SHALL BE ONLY BE DIRECTION OR REQUEST OF THE DEPARTMENT OF WATER.

7. THE CONTRACTOR SHALL NOTIFY RESIDENTS AND BUSINESSES AFFECTED BY STREET CLOSURES A MINIMUM OF 48 HOURS IN ADVANCE OF THE ACTUAL STREET CLOSING.

8. ROADWAY RESTORATION WITHIN THE CITY OF DAYTON CORPORATION LIMITS SHALL BE DONE IN COMPLIANCE WITH THE DEPARTMENT OF PUBLIC WORKS "RULES AND REGULATIONS FOR MAKING OPENINGS IN A PUBLIC WAY" (LATEST EDITION).

9. FORTY-EIGHT HOURS PRIOR TO ANY CONSTRUCTION, EXCAVATION OR DIGGING, THE CONTRACTOR SHALL CALL AND NOTIFY THE OHIO UTILITIES PROTECTION SERVICES (OUPS) AT 1-800-362-2764. ALL OTHER AGENCIES, WHICH MIGHT HAVE UNDERGROUND UTILITIES IN THIS AREA AND ARE NOT MEMBERS OF OUPS, SHALL BE NOTIFIED DIRECTLY BY THE CONTRACTOR.

10. APPROVAL OF PLANS BY THE DEPARTMENT OF WATER DOES NOT RELIEVE THE DESIGNER, OWNER, OR PERSON IN CONTROL OF THE PROPERTY FROM LIABILITY FOR INJURY TO PERSONS OR PROPERTY.

11. APPROVAL OF THE PLANS SHALL BECOME VOID IF CONSTRUCTION HAS NOT COMMENCED WITHIN TWELVE (12) MONTHS FROM THE DATE APPROVED BY THE DEPARTMENT OF WATER. IN ADDITION, THE PLANS SHALL BECOME VOID IF CONSTRUCTION IS NOT COMPLETED WITHIN TWO (2) YEARS FROM THE DATE APPROVED BY THE DEPARTMENT OF WATER.

12. ALL FILLS (INCLUDING TRENCH BEDDING AND BACKFILL) INTENDED TO SUPPORT A WATER MAIN, SANITARY SEWER, STORM SEWER OR DRAINAGE CHANNEL SHALL BE COMPACTED TO NOT LESS THAN 90% MAXIMUM DENSITY (MODIFIED PROCTOR TEST ASTM D1557), UNLESS OTHERWISE NOTED. FIELD VERIFICATION AND FORMAL RESULT SUBMITTALS MAY BE REQUESTED (AS NECESSARY) BY THE DEPARTMENT OF WATER.

13. IN ADDITION TO THE NOTES ON THIS SHEET, CONTRACTOR'S ATTENTION SHALL BE DIRECTED TO THE NOTES ON THE ATTACHED SHEETS AS WELL.

14. COMPACTED FILLS ARE TO BE MADE TO A MINIMUM OF THREE FEET ABOVE THE CROWN OF ANY PROPOSED WATER LINE, SANITARY OR STORM SEWER LINES PRIOR TO CUTTING OF TRENCHES FOR PLACEMENT OF SAID LINES. ALL FILLS SHALL BE CONTROLLED, COMPACTED AND INSPECTED.

15. FORTY-EIGHT HOURS PRIOR TO ANY EARTH DISTURBING WORK, THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF WATER AT (937) 333-3739 (FIELD BUREAU).

16. EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO, OR AS THE FIRST STEP IN, CONSTRUCTION. SEDIMENT CONTROL PRACTICES SHALL BE APPLIED AS A PERIMETER DEFENSE AGAINST ANY TRANSPORTING OF SILT OFF THE SITE. ALL RUNOFF RESULTING FROM CONSTRUCTION OPERATIONS MUST BE FILTERED BY APPROVED METHODS PRIOR TO DISCHARGING TO THE STORM SEWER SYSTEM.

17. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSPECTED BY THE CONTRACTOR AND REPAIRED ONCE A WEEK AND AFTER EVERY 1/2" OF RAIN. RECORDS OF SUCH INSPECTION SHALL BE KEPT AT THE JOB SITE AND BE AVAILABLE FOR IMMEDIATE REVIEW UPON REQUEST.

18. IN ADDITION TO ANY TEMPORARY EROSION, SEDIMENT, AND DEBRIS CONTROL DETAILS AND NOTES SHOWN ON THE PLANS, THE CONTRACTOR SHALL CONSTRUCT TEMPORARY SEDIMENT BASINS, EARTH DIKES, TEMPORARY OR PERMANENT SEEDING, MULCHING AND/OR MULCH NETTING OR ANY OTHER GENERALLY ACCEPTED METHODS TO PREVENT EROSION, MUD AND DEBRIS FROM BEING DEPOSITED ON OTHER PROPERTY, ON NEWLY CONSTRUCTED OR EXISTING ROADS, OR INTO EXISTING SEWERS OR NEW SEWERS WITHIN THE DEVELOPMENT.

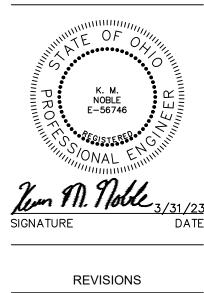
19. ALL GROUND SURFACE AREAS THAT HAVE BEEN EXPOSED OR LEFT BARE AS A RESULT OF CONSTRUCTION AND ARE TO FINAL GRADE AND ARE TO REMAIN SO SHALL BE SEEDED AND MULCHED AS SOON AS PRACTICAL. DISTURBED AREAS THAT LIE DORMANT FOR 21 DAYS OR MORE SHALL BE SEEDED OR PROTECTED WITHIN 7 CALENDAR DAYS OF THE DISTURBANCE. OTHER SEDIMENT CONTROLS THAT ARE INSTALLED SHALL BE MAINTAINED UNTIL VEGETATIVE GROWTH HAS BEEN ESTABLISHED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL TEMPORARY SEDIMENT DEVICES AT THE CONCLUSION OF CONSTRUCTION BUT NOT BEFORE GROWTH OF PERMANENT GROUND COVER.

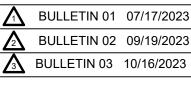
20. UNTIL IMPROVEMENTS IN THE DEVELOPMENT HAVE BEEN COMPLETED, THE CONTRACTOR SHALL TAKE SUCH MEASURES AS ARE NECESSARY TO PREVENT EROSION OF GRADED SURFACES ONTO ROADWAYS, INTO DRAINAGE COURSES, STORM SEWERS, OR ONTO ADJOINING LAND. FOR ANY EARTH DISTURBANCE OR ANY DEVELOPMENT APPROVED BY THE DEPARTMENT OF WATER, THE CONTRACTOR SHALL CLEAN ANY MUD OR DEBRIS DEPOSITED ON ROADWAYS, DRAINAGE COURSES, OR ADJOINING PROPERTY WHEN THE MUD AND DEBRIS ORIGINATES FROM THE EARTH MOVING OPERATIONS.

21. ALL MUD/DIRT TRACKED ONTO ROADS FROM THE SITE, DUE TO CONSTRUCTION, SHALL BE PROMPTLY (WITHIN 24 HOURS) REMOVED.

22. FOR DEVELOPMENT SITES, EROSION CONTROL MEASURES SHALL BE ENFORCED ON INDIVIDUAL OR RESIDENTIAL LOTS. THIS SHALL INCLUDE A CONSTRUCTION ENTRANCE (REFER TO DETAIL – ER–8) AND SILT FENCE ACROSS THE FRONTAGE OF EACH PROPERTY AND A TEMPORARY DIVERSION DITCH ON EACH LOT.

23. THIS PROJECT IS SUBJECT TO INSPECTION BY THE DEPARTMENT OF WATER PERSONNEL FOR COMPLIANCE WITH THE CITY'S STORM WATER ORDINANCE DURING AND AFTER CONSTRUCTION. THIS INCLUDES BUT IS NOT LIMITED TO INSPECTION OF EROSION CONTROL FACILITIES, SURFACE DRAINAGE, AND DETENTION/RETENTION FACILITIES. ADDITIONAL MEASURES MAY BE REQUIRED IF VIOLATIONS OF THE ORDINANCE OCCUR AND WATER DEPARTMENT PERSONNEL DEEM IT NECESSARY. ALL MEASURES SHALL COMPLY WITH CITY OF DAYTON STANDARDS AND "RAINWATER MID LAND DEVELOPMENT, OHIO'S STANDARD FOR STORM WATER MANAGEMENT, LAND DEVELOPMENT, AND URBAN STREAM PROTECTION", (LATEST EDITION).





ERMANTOWN CROSSING AYTON OHIO

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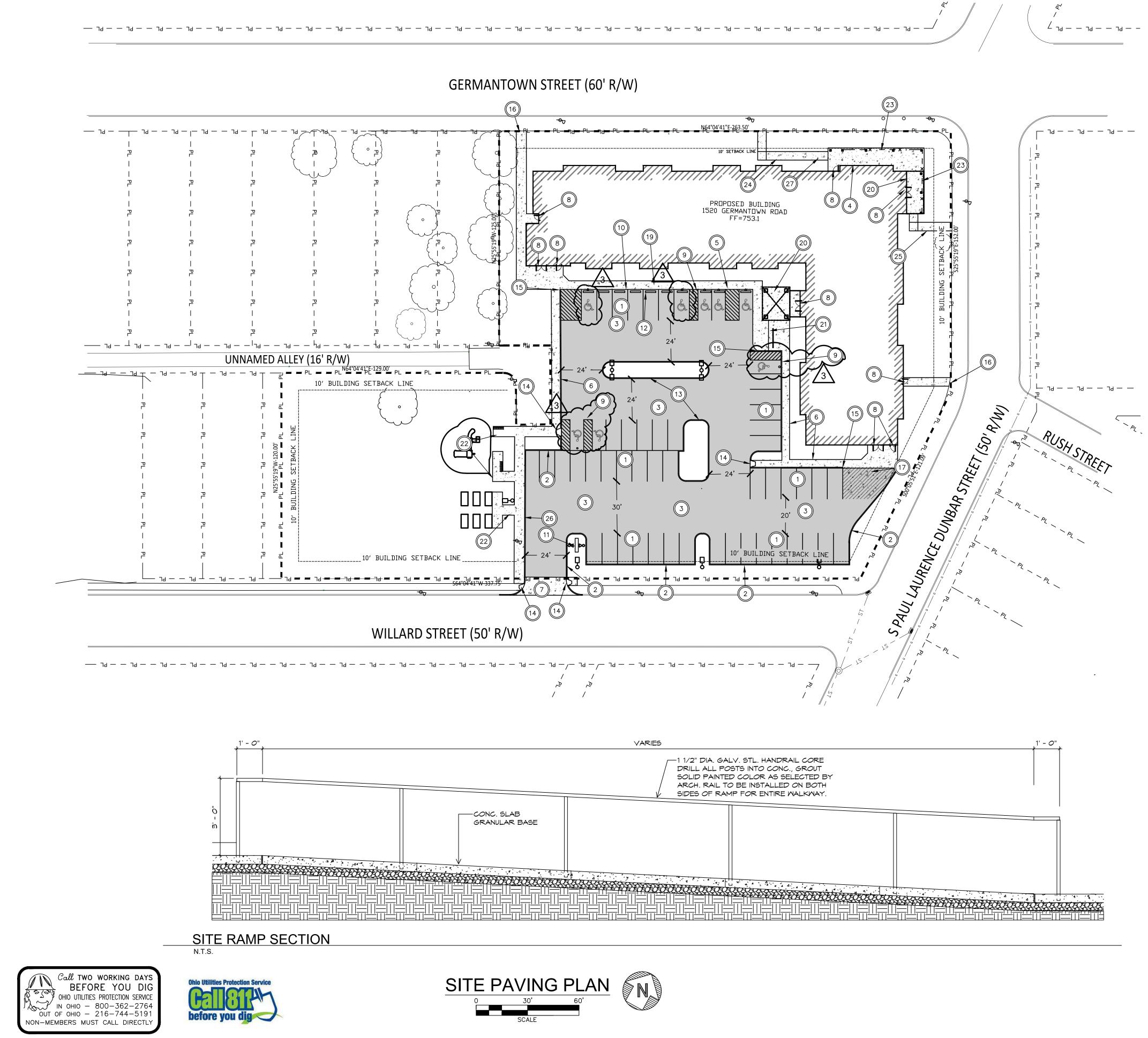
TURNING VISIONS INTO REALITY



82A21 PROJECT NUMBER

C200

DRAWING NUMBER



CONSTRUCTION BEGINS.

C601. STANDARDS. PLANS.

1. PROPOSED SIGN. 12. INSTALL CONCRETE WHEEL STOP PER DETAIL ON SHEET C600. (TYPICAL). 13. LANDSCAPE ISLAND.

14. INSTALL HANDICAP RAMP PER DETAIL ON SHEET C601.

15. INSTALL 5' CURB TAPER.

18. NOT USED.

INFORMATION.

24. INSTALL 48' LONG (12' TO NORTH AND 36' TO EAST) X 5' WIDE CONCRETE RAMP WITH 5' X 5' LANDING AREA. PROVIDE WITH RAILING ON EACH SIDE. MATCH TOP OF CONCRETE SIDEWALK = 756.0 AND TOP OF PROPOSED CONCRETE PORCH = 752.9. LANDING AREA = 755.0.

CONSTRUCTION NOTES

. CONTRACTORS SHALL SCHEDULE THEIR OPERATIONS AND CARRY OUT THE WORK IN A MATTER TO CAUSE THE LEAST DISTURBANCE AND/OR INTERFERENCE WITH NORMAL FLOW OF THE TRAFFIC.

2. ALL PAVEMENT SHALL BE GOVERNED BY THE LATEST EDITION OF ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS.

3. ALL POINTS OF CONNECTION OF PROPOSED IMPROVEMENTS TO EXISTING CONDITIONS SHALL BE UNCOVERED AND ELEVATIONS VERIFIED BY FIELD CHECK BEFORE ANY

4. CONTRACTOR IS TO REGRADE TO MATCH EXISTING ELEVATIONS. RESEED AND MULCH IN ALL DISTURBED AREAS.

5. CAD FILES OF THE LAYOUT WILL BE PROVIDED BY THE ENGINEER TO THE CONTRACTOR FOR HIS USE IN LAYING OUT THE SITE.

CODED NOTES

STRIPE 9'X18' PARKING SPACES AS SHOWN.

2. INSTALL 6" VERTICAL CURBING.

3. INSTALL ASPHALT PAVING IN SHADED AREA PER DETAIL SHEET C601.

4. INSTALL BUILDING PARALLEL TO THE NORTH PROPERTY LINE (RIGHT-OF-WAY) AND OFFSET 20'-0' TO THAT LINE.

INSTALL 8' WIDE HANDICAP SPACE WITH 8' UNLOADING SPACE. PAINT HANDICAP SYMBOL AND STRIPING AS SHOWN. PROVIDE WITH HANDICAP SIGNAGE FOR EACH SPACE. 6. INSTALL 5' WIDE INTEGRAL CONCRETE CURBING/SIDEWALK PER DETAIL ON SHEET

INSTALL CONCRETE APRON WITHIN RIGHT-OF-WAY PER CITY OF DAYTON

8. INSTALL FROST PROOF SLABS AT DOOR PER DETAILS ON THE ARCHITECTURAL

9. INSTALL 8' WIDE HANDICAP SPACES AND 5' WIDE UNLOADING SPACE. PAINT HANDICAP SYMBOL AND INSTALL HANDICAP SIGNAGE FOR EACH SPACE.

10. TOP OF ASPHALT TO MEET TOP OF SIDEWALK.

- 16. INSTALL 5' CONCRETE SIDEWALK AND MATCH TOP OF EXISTING SIDEWALK.
- 17. INSTALL CONCRETE PAVEMENT IN HATCHED AREA PER CONCRETE PAD/APRON DETAIL ON SHEET C601.
- 19. PROPOSED 5' WIDE CONCRETE SIDEWALK.
- 20. INSTALL CONCRETE SIDEWALK UNDER CANOPY AREA. TOP OF CONCRETE = 753.1 AT DOORS. SLOPE AWAY AT 1/4" PER FOOT.

21. PROPOSED BICYCLE RACK. SEE DETAIL ON SHEET C602.

22. PROPOSED 6' WIDE CONCRETE SIDEWALK.

23. FENCING AROUND PORCH. SEE ARCHITECTURAL PLANS FOR ADDITIONAL

25. INSTALL 24' LONG (20' TO THE EAST AND 4' TO THE SOUTH) X 5' WIDE CONCRETE RAMP WITH 5' X 5' LANDING AREA. PROVIDE WITH RAILING ON EACH SIDE. MATCH TOP OF CONCRETE SIDEWALK = 754.4 AND TOP OF PROPOSED CONCRETE PORCH = 752.9. LANDING AREA = 752.7 (LOW POINT).

26. PROPOSED 6' WIDE INTEGRATED CURB AND SIDEWALK.

27. LOW POINT IN SIDEWALK IS 4' FROM EDGE OF PORCH AT 752.7.

LEGE	ND
PROPOSED AS	SPHALT
PROPOSED CO	ONCRETE PAVEMENT

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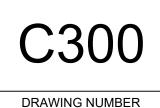


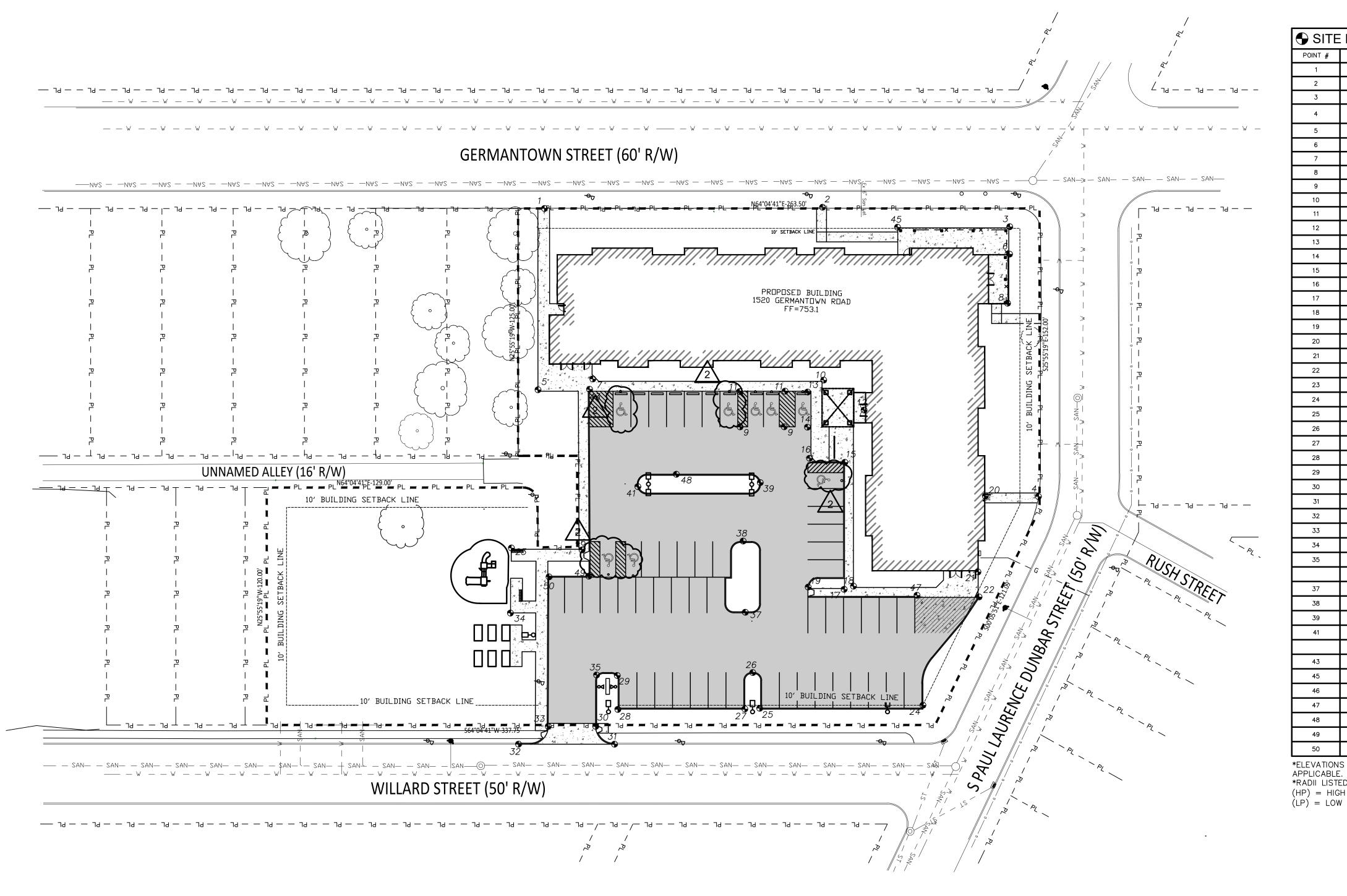
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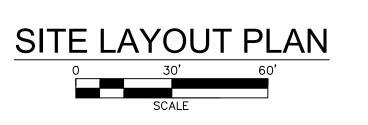




82A21 PROJECT NUMBER









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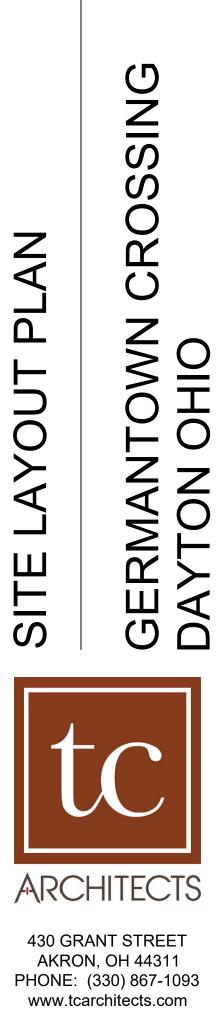
LAYOUT STATION	ONING 🕤
DESCRIPTION	ELEVATION
END OF SIDEWALK	MATCH EXISTING
END OF SIDEWALK	MATCH EXISTING
CORNER OF SIDEWALK	752.9
END OF SIDEWALK	MATCH EX.
CORNER OF SIDEWALK	752.8
EDGE OF PAVEMENT	752.9
CORNER OF SIDEWALK	752.9
EDGE OF PAVEMENT	752.9
END OF UNLOADING ZONE	752.7
CORNER OF SIDEWALK	752.9
TOP OF UNLOADING ZONE	752.8
EDGE OF PAVEMENT	753.1
CORNER OF SIDEWALK	752.8
EDGE OF PAVEMENT	752.7
CORNER OF SIDEWALK	752.8
MIDPOINT OF 5' RADIUS	752.6
CORNER OF SIDEWALK	752.3
CORNER OF SIDEWALK	752.3
CORNER OF PAVEMENT	752.1
EDGE OF PAVEMENT	753.1
CORNER OF BUILDING	753.1
CORNER OF SIDEWALK	751.9
TOP OF SIDEWALK	752.7
CORNER OF PAVEMENT	748.1 (LP)
CORNER OF PAVEMENT	748.8
END OF 4.5' RADIUS	749.5
CORNER OF PAVEMENT	748.8
CORNER OF PAVEMENT	748.3 (LP)
MIDPOINT OF 5' RADIUS	748.9
END OF CONCRETE APRON	MATCH EXISTING
END OF 9' RADIUS	MATCH EXISTING
END OF 9' RADIUS	MATCH EXISTING
END OF 9 RADIOS	MATCH EXISTING
END OF SIDEWALK	752.1
MIDPOINT OF 5' RADIUS	752.1
	/ +0.9
MID POINT OF ISLAND	751.6
MID POINT OF ISLAND	752.2
MID POINT OF ISLAND	752.5
MID POINT OF ISLAND	752.6
TOP OF SIDEWALK	752.8
CORNER OF SIDEWALK	752.9
END OF HC RAMP	752.5
EDGE OF PAVEMENT	751.9
	752.0 (LP)
CORNER OF PAVEMENT	751.8
CORNER OF PAVEMENT	751.8
S ARE TO TOP OF PAVE	MENT WHERE

POINT #

*ELEVATIONS ARE TO TOP OF PAVEMENT WHERE *RADII LISTED ARE TO THE OUTSIDE CURB LINE

(HP) = HIGH POINT (LP) = LOW POINT

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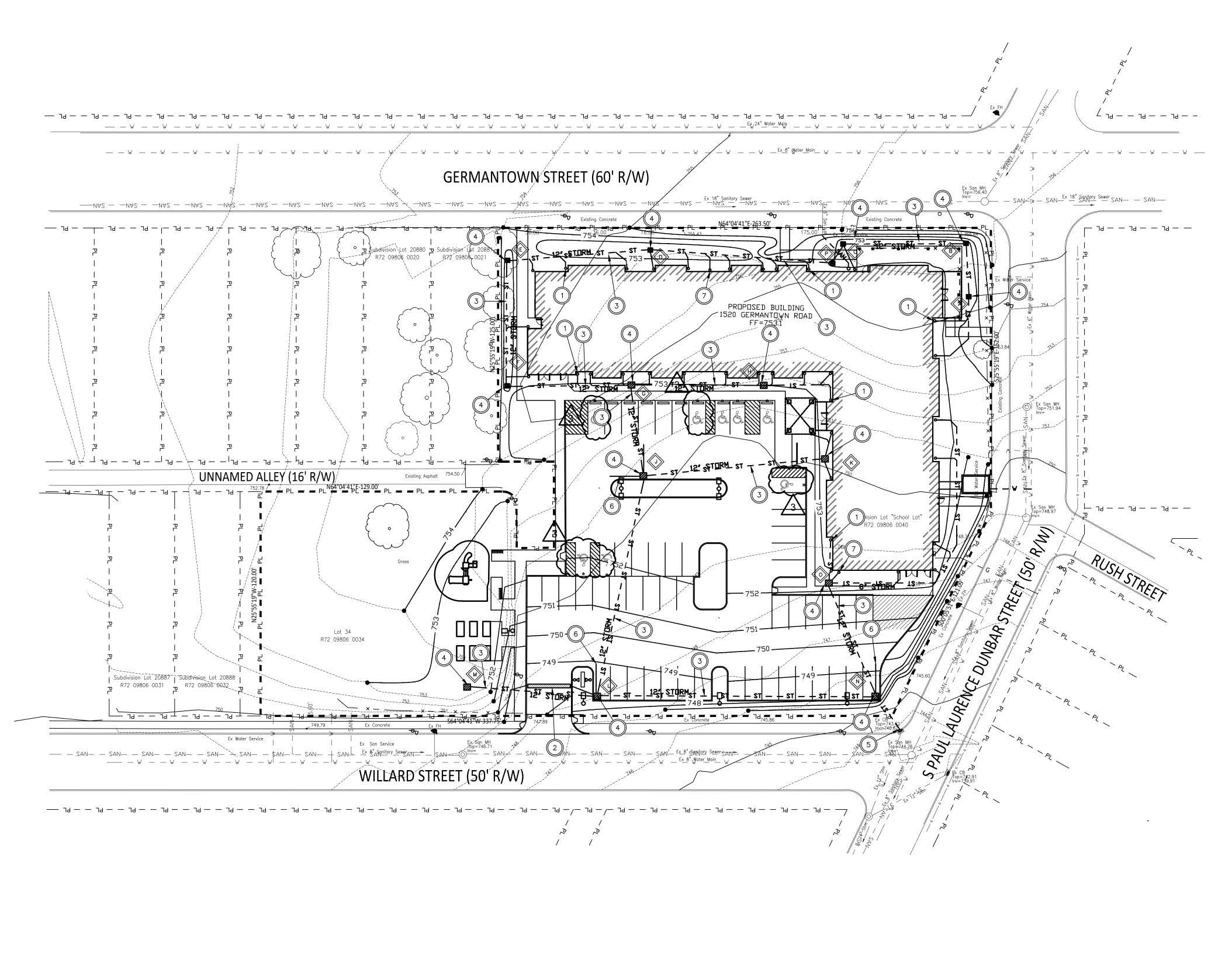


TURNING VISIONS INTO REALITY

> 03/31/2023 DATE

82A21 PROJECT NUMBER

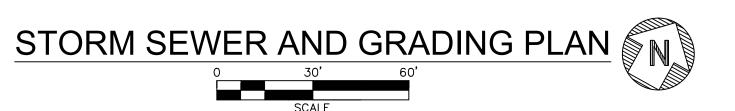






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ROP. PROP. FROP. PROP. PROP. PROP. G PROP. PROP. PROP. =746.0

NOTE: AN E> LOCA PROP SEE RESUL RUNO BE RE SITE H $|R_V = 0.05 + 0.9(i)$ i (EXISTING) = 0.70i (PROPOSED) = 0.53 = 25% REDUCTION

CONSTRUCTION NOTES

I. CONTRACTORS SHALL SCHEDULE THEIR OPERATIONS AND CARRY OUT THE WORK IN A MANNER TO CAUSE THE LEAST DISTURBANCE AND/OR INTERFERENCE WITH NORMAL TRAFFIC FLOW.

2. THE EXISTING UNDERGROUND INFORMATION AND TOPOGRAPHIC INFORMATION IS BASED ON THE PROJECT'S SURVEY. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND ELEVATION OF ALL UTILITIES PRIOR TO THE START OF CONSTRUCTION AND FOR ANY DAMAGES WHICH OCCUR BY HIS FAILURE TO LOCATE OR PRESERVE THESE UTILITIES. IF DURING CONSTRUCTION OPERATIONS, A CONTRACTOR ENCOUNTERS UTILITIES IN LOCATION OTHER THAN THOSE SHOWN ON THE PLANS, HE SHALL IMMEDIATELY NOTIFY THE OWNER AND TAKE THE NECESSARY STEPS TO PROTECT THE FACILITY AND ASSURE THE CONTINUANCE OF SERVICE.

3. ALL CONTRACTORS SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES AND SHALL BACKFILL AND GRADE EXCAVATED AREAS SO AS TO ELIMINATE PONDING ON THE SITE, OR ADJACENT PROPERTY.

4. CONTRACTOR IS RESPONSIBLE FOR THE VERIFICATION OF EXISTING ELEVATIONS AT CRITICAL POINTS SUCH AS APPROACHES OF DRAINAGE STRUCTURES, CURBING, ETC. VERIFICATION SHALL BE PERFORMED DURING LAYOUT STAGES AND SIGNIFICANT DISCREPANCIES REPORTED TO THE ENGINEER IMMEDIATELY.

5. CONTRACTOR SHALL CONDUCT HIS OPERATIONS SUCH THAT THE FLOW OF ALL EXISTING SEWERS AND LATERALS WILL BE MAINTAINED AT ALL TIMES.

CODED NOTES

INSTALL 6" RAIN LEADER AS SHOWN (TYPICAL). EXTEND UP TO 1' ABOVE GRADE AND END WITH BOOT THAT MATCHES DOWNSPOUT SIZE. INSTALL WITH INVERT @ DOWNSPOUT OF 18" BELOW GRADE FINISHED GRADE. COORDINATE EXACT LOCATIONS OF DOWNSPOUTS WITH ARCHITECTURAL PLANS. (TYPICAL).

2. INSTALL TRENCH DRAIN "A" PER DETAIL ON SHEET C601.

3. INSTALL 12" STORM SEWER.

4. INSTALL INLET BASIN. INSTALL INLET PROTECTION AROUND BASIN AND REMOVE AT THE END OF THE PROJECT.

5. MAKE WATERTIGHT CONNECTION INTO EXISTING BASIN AT INVERT = 740.62.

6. INSTALL 20' LONG BY 4" PERFORATED (NO FILTER SOCK) SUBSURFACE DRAINS WITHIN BASE COARSE. TYPICAL OF THREE AT EACH BASIN IN THE PARKING LOT.

. EXTEND 4" DRAIN LINE AND TIE INTO THE BUILDING'S FOUNDATION DRAIN.



\bigcirc	>	SEWEF	R SUMM	ARY		\bigcirc
	PROP PROP	. INLET BASI . CASTING = . 12" INV (N 6" INV (S)	· 752.6) =748.8	Ŧ	PROP. INLET BASIN "H" PROP. CASTING = 752.6 PROP. 12" INV (W) =748 PROP. 6" INV (E) = 749	.8 .0
B	PROP.	. INLET BASI . CASTING = . 12" INV (W			PROP. INLET BASIN "J" PROP. CASTING = 752.0 PROP. 12" INV (E, N & S =745.6	5)
	PROP. PROP.	NLET BASI CASTING = 12" INV (S 6" INV (S)	752.4 W & E) =748.2	ĸ	PROP. INLET BASIN "K" PROP. CASTING = 752.6 PROP. 12" INV (E) =748. PROP 6" INV (N&S) = 75	
D	PROP. PROP.	INLET BASI CASTING = 12" INV (E 4" INV (S)	752.6 & W) =747.7		PROP. INLET BASIN "L" PROP. CASTING = 748.3 PROP. 12" INV (E, W & N =744.3 PROP. 8" INV (W) = 746.	
E	PROP.	INLET BASII CASTING = 12" INV (E			PROP. YARD BASIN "M" PROP. CASTING = 752.1 PROP. 12" INV (E) = $748.$	
F	PROP.	INLET BASIN CASTING = 12" INV (N	N "F" 752.6 & E) =746.5		PROP. INLET BASIN "N" PROP. CASTING = 748.1 PROP. 12" INV (W & N &	: SE)
¢	PROP.	INLET BASIN CASTING = 12" INV (E, 0	752.6		=741.0 PROP. INLET BASIN "O" PROP. CASTING = 752.0 PROP. 12" INV (SE) =746 PROP. 6" INV (N) = 750. PROP. 8" INV (E) = 750. PROP. 4" INV (NE) = 749	8 0
				P	PROP. INLET BASIN "P" PROP. CASTING = 752.4 PROP. 12" INV (NE & W)	=748.0
AN LO PR SE RE RL	CAT COP E C SUL JNOF	RISTING ED ON DSED P UTLINE T IN A	THE SAN PARKING L ON SHEI REDUCTI THE ONSI	ИЕ Р _от н ет с ion i	D PAVED PARK ARCEL AS THE HAVE BEEN RE 2.0. THIS PRO N SITE STORM MPERVIOUS AR	: MOVED. JECT WI WATER
			DRE THAN RUNOFF		% NET REDUCT FICIENT	ion in

NOBLE E-56746 Jun M. Noble 3/31/23 SIGNATURE DATE REVISIONS BULLETIN 01 07/17/2023 BULLETIN 02 09/19/2023 BULLETIN 03 10/16/2023



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430 GRANT STREET AKRON, OH 44311 PHONE: (330) 867-1093 www.tcarchitects.com

TURNING VISIONS INTO REALITY



C400 DRAWING NUMBER

LANDSCAPE SYMBOLS:

INDICATES GRASS AREAS, SEE SPECIFICATIONS FOR SEED MIXTURE (ALL DISTURBED AREAS ARE TO BE SEEDED)

PLANT LIST:

KEY		BOTANICAL NAME	COMMON NAME	D/E	QTY.	SIZE	MIN. HT/W	REMARKS
DECID	UOUS TR	EES	•					
AG	· · · · · · · · · · · · · · · · · · ·	AMELANCHIER GRAND. "AUTUMN BRILLIANCE"	AUTUMN BRILLIANCE SERVICEBERRY	D	27		6'-7"	B&B MULTISTE
GT	Robert Contraction	GLEDITSIA TRIACANTHOS INERMIS	TRUE SHADE HONEY LOCUST	D	8	2.5" CAL		B&B
CONIF	EROUS T	REES						
то	*	THUJA OCCIDENTALIS "TECHNY"	MISSION PYRAMIDAL ARBORITAE	E	6	5'-6"		B&B
SHRUE	3S							
BG	\odot	BUXUX X. "GREEN VELVET"	BOXWOOD	D	49	18"		CONT.
GRASS	SES	·	•		-		•	
MI	+	MISCANTHUS SINENSIS "MORNING LIGHT"	MORNING LIGHT MAIDEN GRASS	PER	32	PLUGS		CONT. 18" O.C.
HE		HEMEROCALLIS "HAPPY RETURNS"	HAPPY RETURNS DAY LILLY		290	18" SP		CONT.
НВА	\bigcirc	HOSTA "BLUE ANGEL"	BLUE ANGEL		8	36" SP		CONT.
GROU	ND COVE	R						
WC		EUONYMUS FORTUNEI	WINTERCREEPER		AS REQ'D	LOW GROWING	6" OR UNDER	

GENERAL LANDSCAPING NOTES:

1. LOCATE AND VERIFY THE EXISTENCE OF ALL UTILITIES PRIOR TO STARTING WORK.

2. SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTING SHOWN ON ALL DRAWINGS.

3. ALL MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE CURRENT AMERICAN STANDARD FOR NURSERY STOCK, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN OR EQUIVALENT.

5. ALL PLANTS SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS THE PLANT'S ORIGINAL GRADE BEFORE DIGGING.

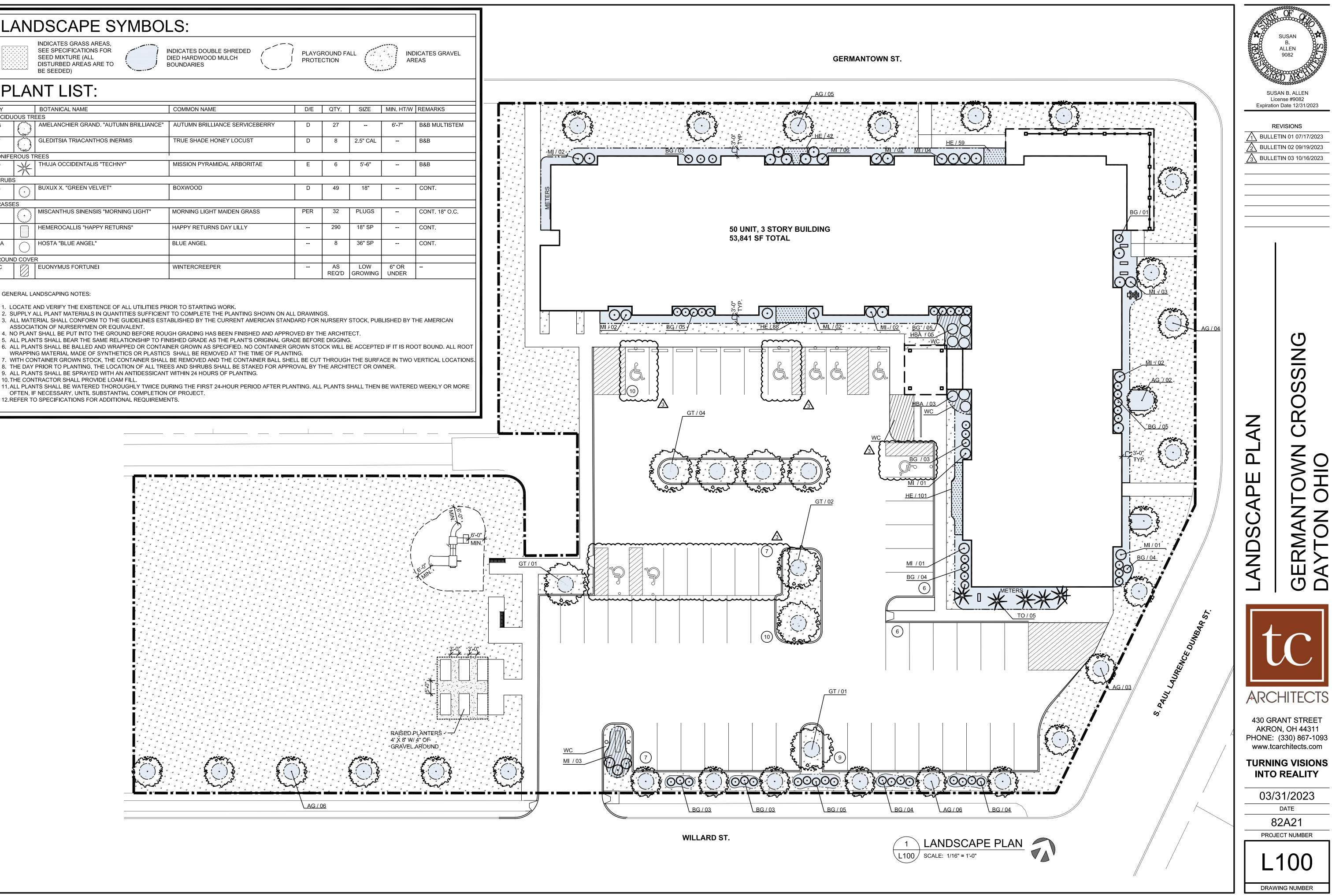
6. ALL PLANTS SHALL BE BALLED AND WRAPPED OR CONTAINER GROWN AS SPECIFIED. NO CONTAINER GROWN STOCK WILL BE ACCEPTED IF IT IS ROOT BOUND. ALL ROOT WRAPPING MATERIAL MADE OF SYNTHETICS OR PLASTICS SHALL BE REMOVED AT THE TIME OF PLANTING.

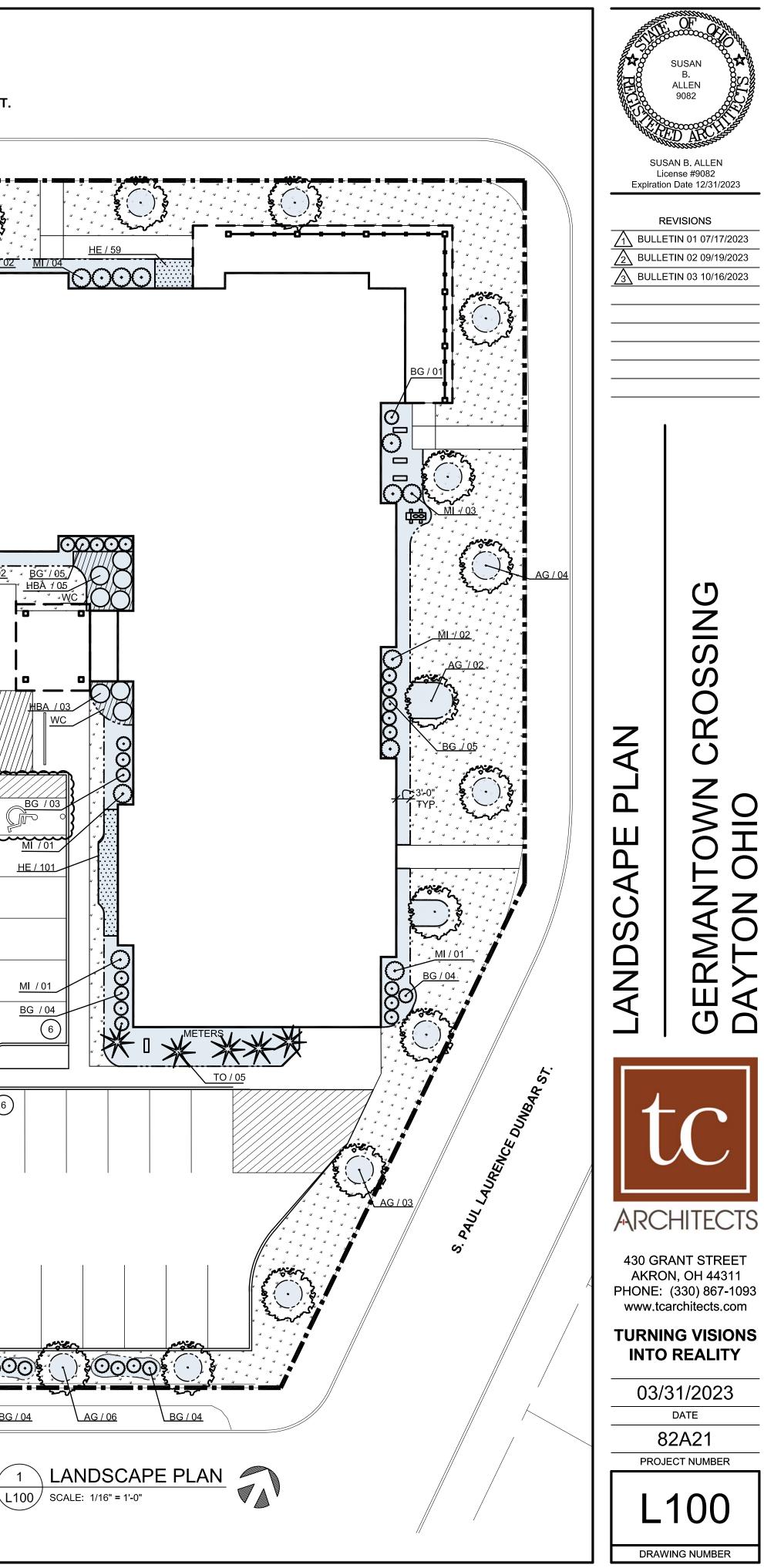
8. THE DAY PRIOR TO PLANTING, THE LOCATION OF ALL TREES AND SHRUBS SHALL BE STAKED FOR APPROVAL BY THE ARCHITECT OR OWNER. 9. ALL PLANTS SHALL BE SPRAYED WITH AN ANTIDESSICANT WITHIN 24 HOURS OF PLANTING.

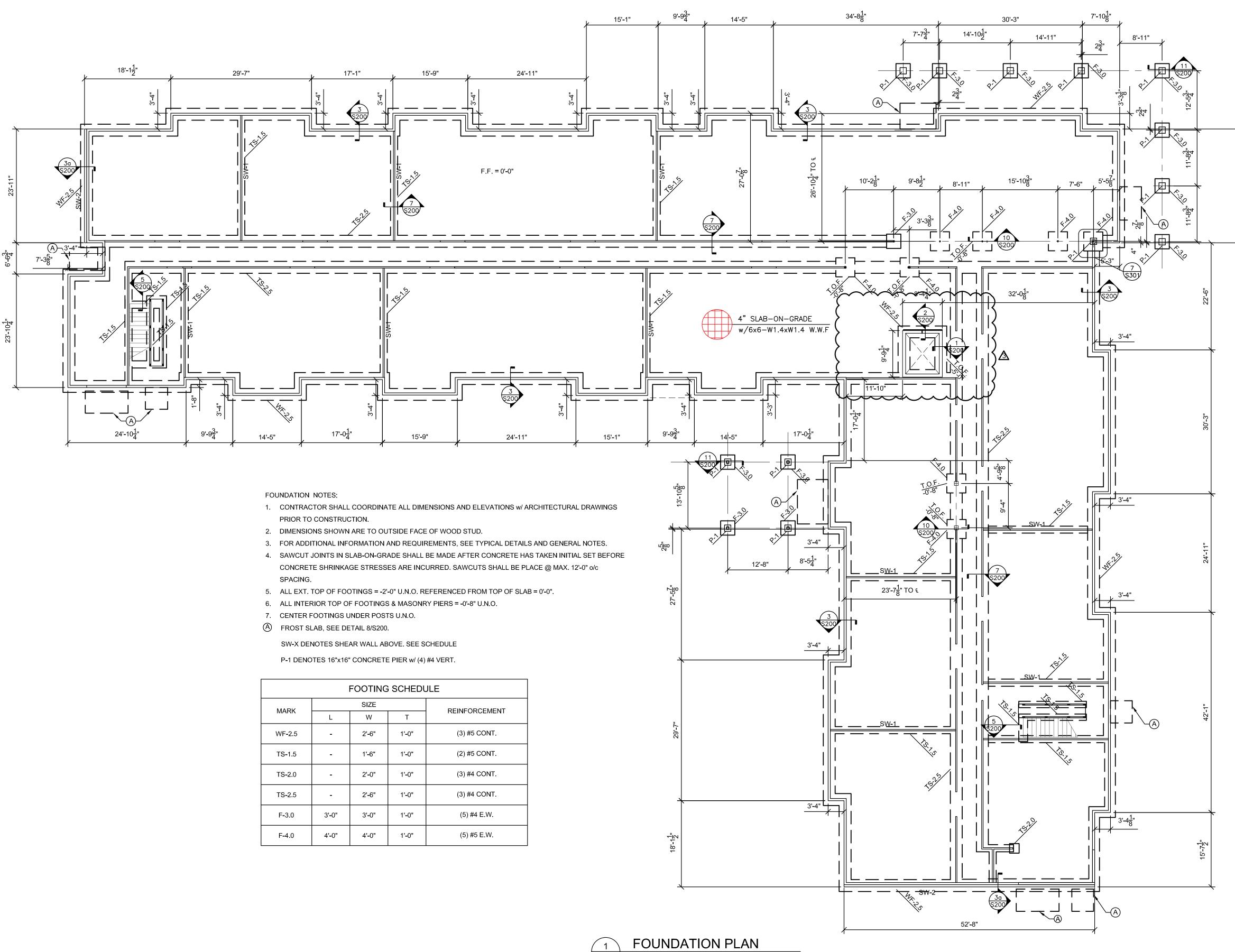
10. THE CONTRACTOR SHALL PROVIDE LOAM FILL.

11. ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24-HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL THEN BE WATERED WEEKLY OR MORE OFTEN, IF NECESSARY, UNTIL SUBSTANTIAL COMPLETION OF PROJECT.

12. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

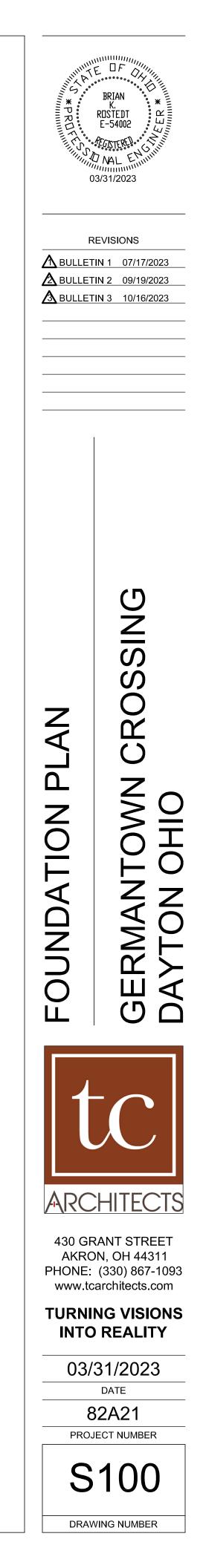


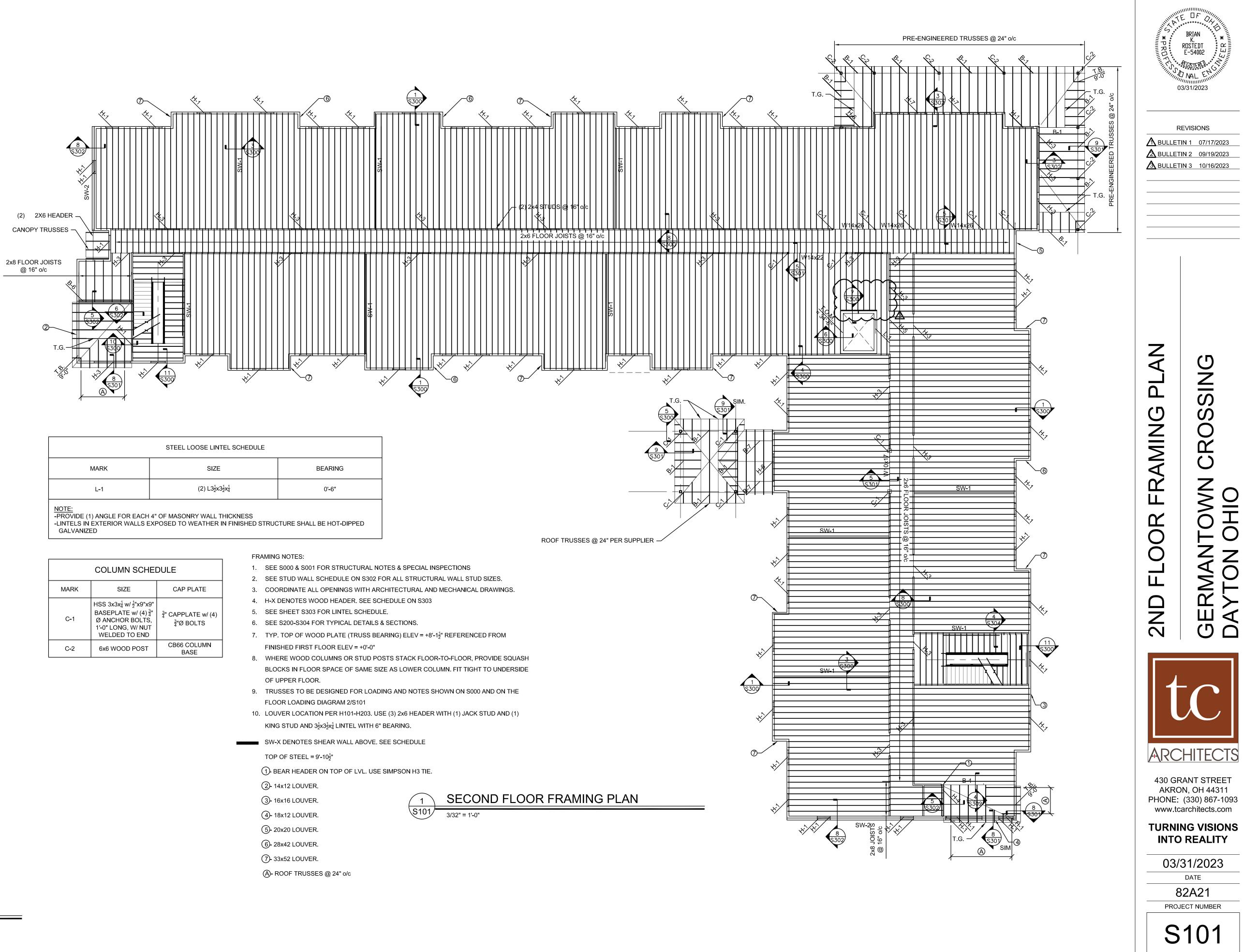




FOOTING SCHEDU									
	SIZE								
L	W	Т							
-	2'-6"	1'-0"							
-	1'-6"	1'-0"							
-	2'-0"	1'-0"							
-	2'-6"	1'-0"							
3'-0"	3'-0"	1'-0"							
4'-0"	4'-0"	1'-0"							
	L - - - 3'-0"	SIZE L W - 2'-6" - 1'-6" - 2'-0" - 2'-6" 3'-0" 3'-0"	SIZE L W T - 2'-6" 1'-0" - 1'-6" 1'-0" - 2'-0" 1'-0" - 2'-6" 1'-0" 3'-0" 3'-0" 1'-0"						

S100 3/32" = 1'-0"





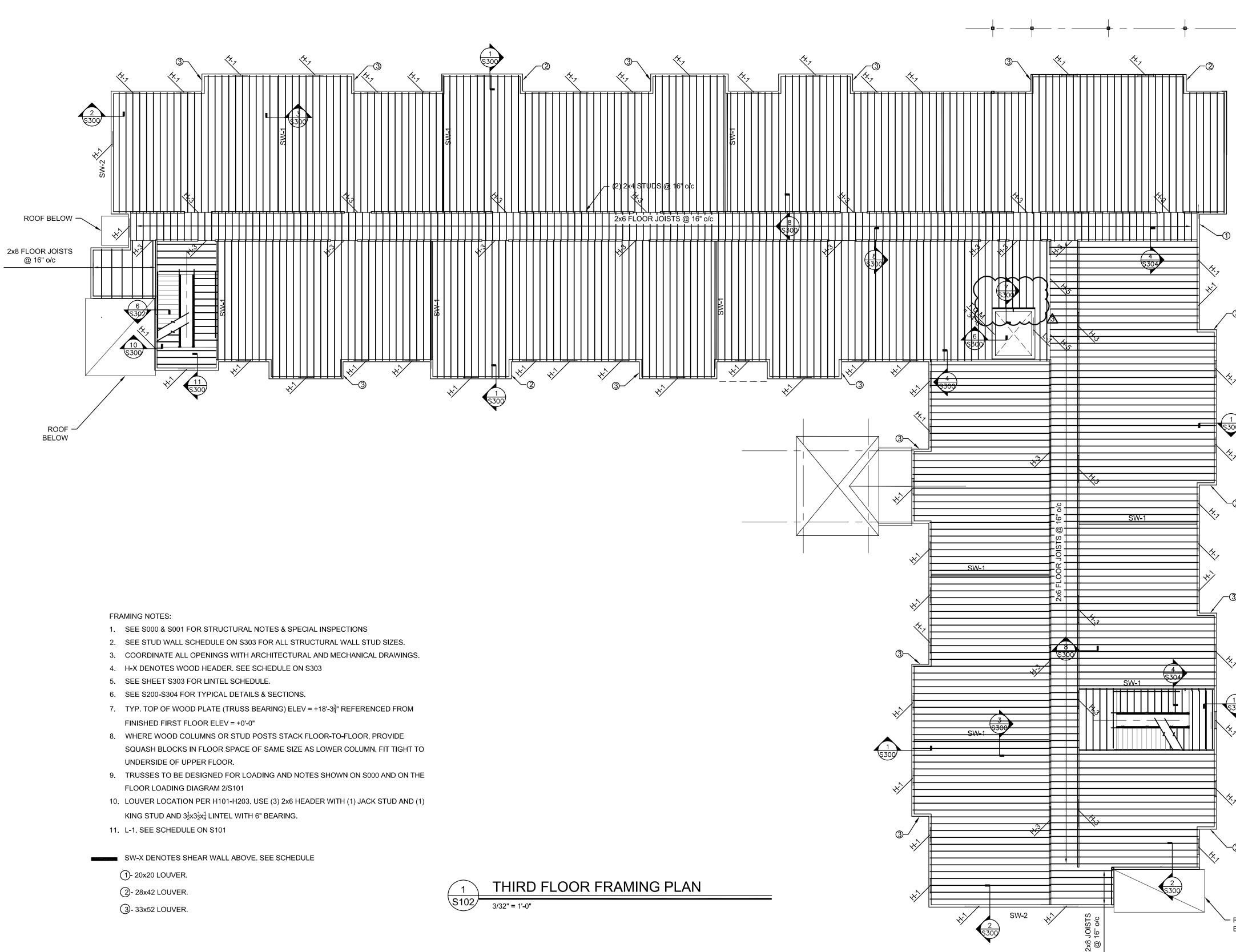
DRAWING NUMBER

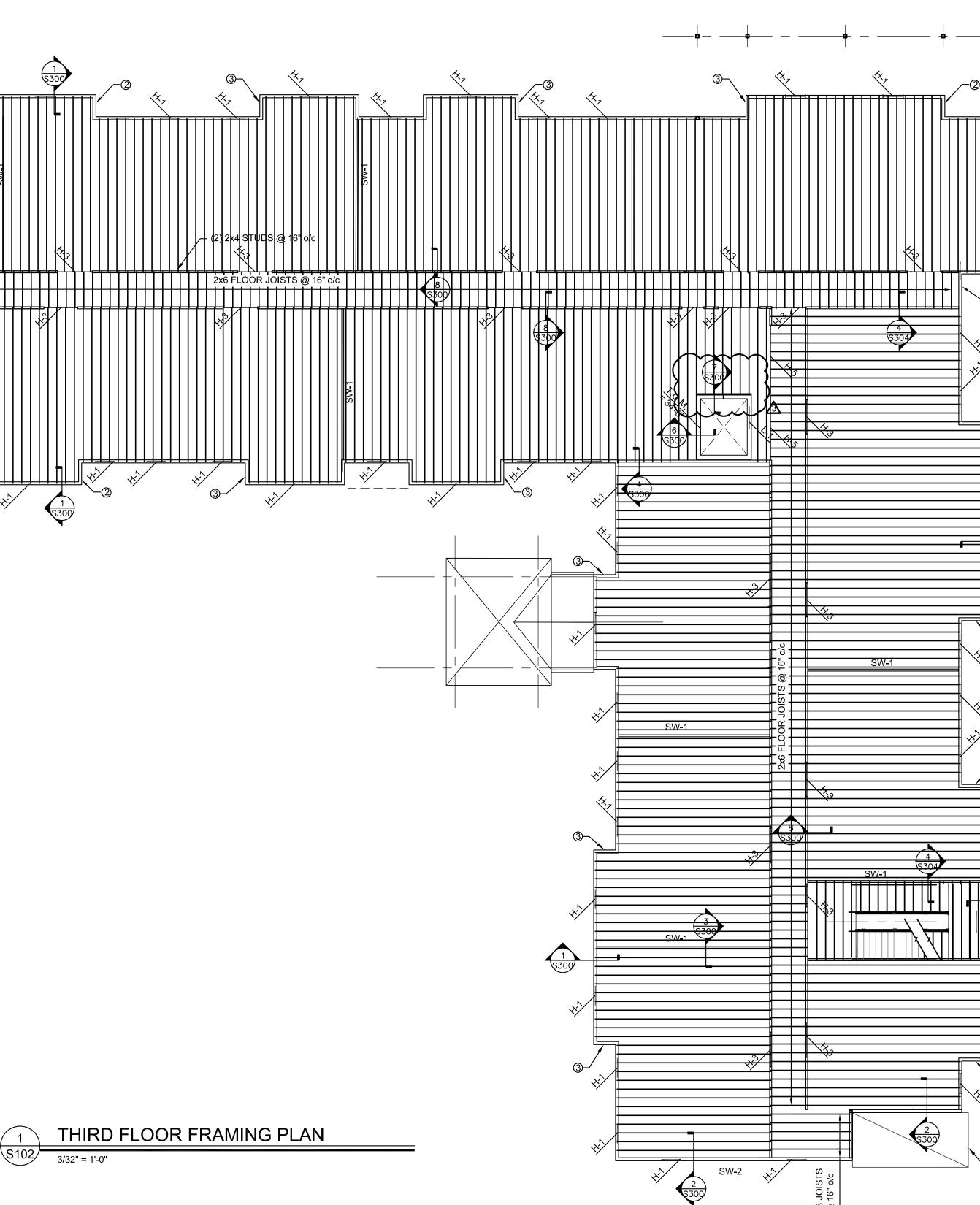
	STEEL LOOSE LINTEL SCHEDULE
MARK	SIZE
L-1	(2) L3 ¹ ₂ x3 ¹ ₂ x ¹

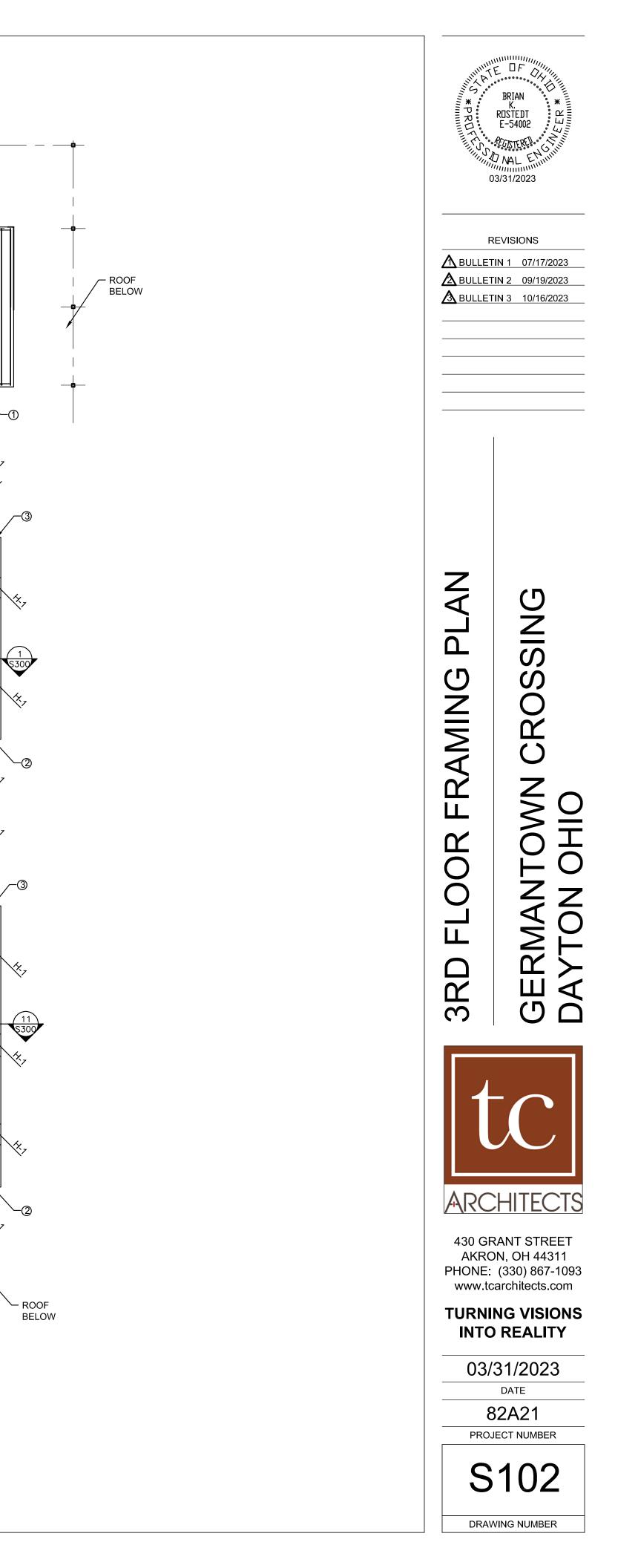
	COLUMN SCHEDULE									
MARK	SIZE	CAP PLATE								
C-1	HSS 3x3x ¹ / ₄ w/ ¹ / ₂ "x9"x9" BASEPLATE w/ (4) ³ / ₄ " Ø ANCHOR BOLTS, 1'-0" LONG, W/ NUT WELDED TO END	³ 4" CAPPLATE w/ (4) ³ 4"Ø BOLTS								
C-2	6x6 WOOD POST	CB66 COLUMN BASE								

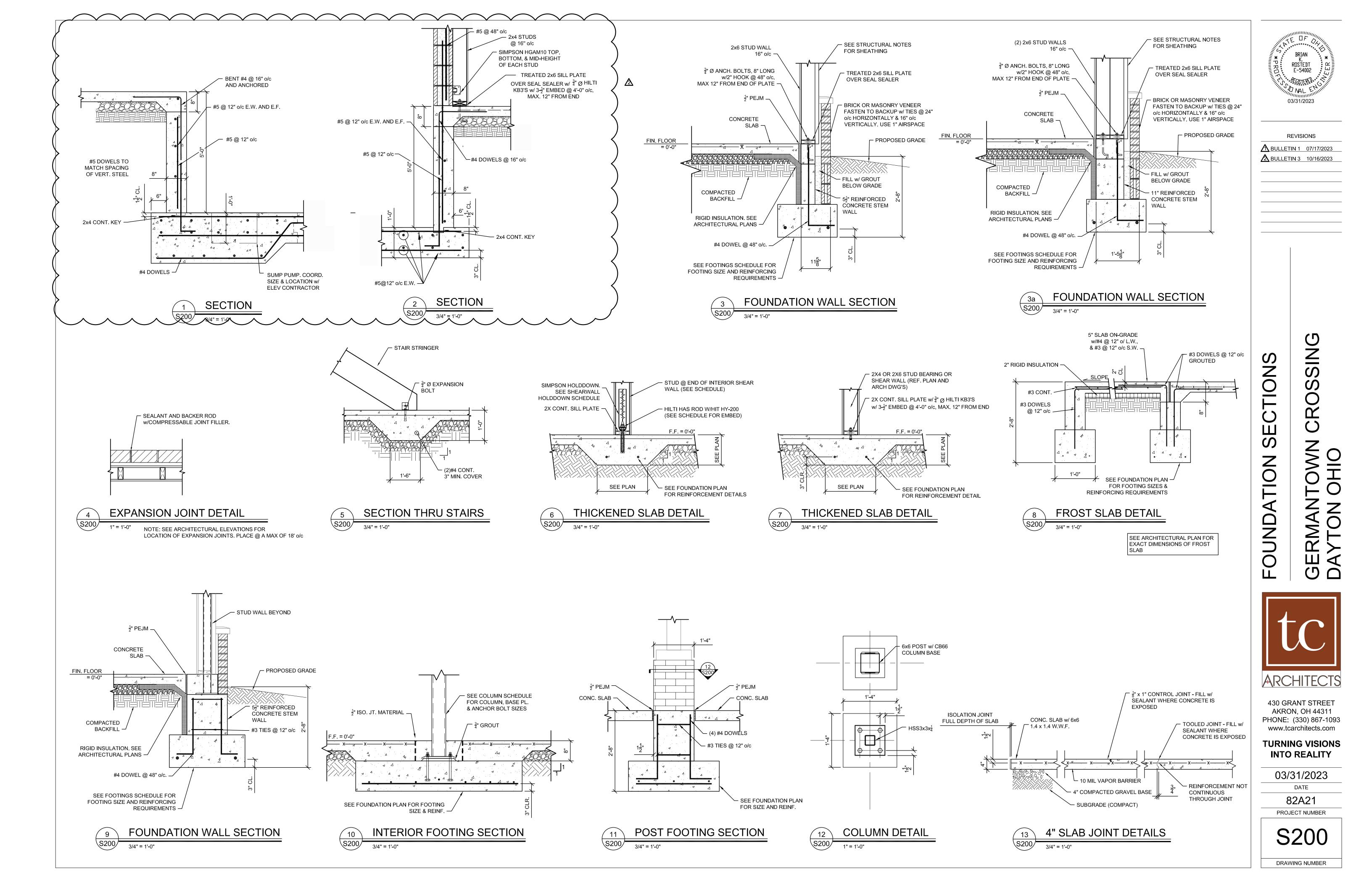


\S101/ 1/32" = 1'-0"









	1	<u> </u>	I				E SCHEDULE				$ \square$			MBING SYMBOL LEG	
RK DESCR	PTION MANUFACTURER	MODEL	SIZE TR	M DRAIN/ W.P.		CARRIER		REI	MARKS		ABE	BREVIATION	SYMBOL	DESCRIPTION	
											1	US	US	- SANITARY SEWER BELOW FLOOR	OR GRADE
1 CLOSET		Z5561	- a1,a	2,d1 4"	2" 1-1/4"		OUNT, FLOOR OUTLET, VITRE		OWL, 1-1/2" TOP INLET SPUD	, SIPHON JET ACTION, RIM AT 17" A.F.F.		SAN	SAN		
2 WAT CLOS		Z5571	- a1,a:	2,d1 4"	2" 1/2"		OUNT, FLOOR OUTLET, VITRE		OWL, 1-1/2" TOP INLET SPUE	, SIPHON JET ACTION, RIM AT 15" A.F.F.				- SANITARY VENT	
1 LAVAT	ORY AMERICAN STANDARD	AQUALYN	- a4,a5 c1,d2	,b1, ,d3 1-1/2"	1-1/2" 1/2" 1/	2" - COUNTE	R MOUNT, VITREOUS CHINA W	TH ROUND BASIN AND OVE	ERFLOW. FAUCET HOLES ON	4" CENTERS.		UST	UST		R GRADE
-1 DOU BOWL		DSE23322 33"	x22"x8" a3,b1	,c2, 1-1/2"	1-1/2" 1/2" 1/	2" - 20 GAUG	E S.S. DOUBLE BOWL UNDER M	IOUNT SINK, 4" CENTER FA	UCET HOLES (OPTION 4), 8"	DEEP BOWL, BOTTOM ONLY PADS		PD	PD DCW		
2 BOWL	BLE	D23322 33"x2	2"x6-1/2" a3,b1	,c2, 1-1/2"	1-1/2" 1/2" 1/			IOUNT SINK, 4" CENTER FA	UCET HOLES (OPTION 4), 6-	1/2" DEEP BOWL, BOTTOM ONLY PADS.			DCW		
(AD			d2							SISTANT TEXTURED BOTTOM FULLY	_	RDHW	RDHW		VATER
-1 SHOV (AD		1603BFSC 62"	36"x77" a6,b3	5,d4 3"	1-1/2" 1/2" 1/		D WITH ADA COMPLIANT SEAT			H FLOOR PLANS. COORDINATE FINISH				- SHOCK STOP IN HORIZONTAL	
-2 BATH	TUB CLARION	8623LT(RT) 60";	(33"x74" a6.b)	.d4 3"	1-1/2" 1/2" 1/	2-PIECE	UB/SHOWER WITH MOLDED S			VEL BAR, 2-1/2" OVERFLOW AND PLANS. COORDINATE FINISH WITH				- GATE VALVE	
				, 		ARCHITE								- GAS COCK	
-1 MOP E	ASIN FIAT	MSB-2424 24	1"x24" a7,		1-1/2" 1/2" 1/	^{2"} - BRACKE	, MOP HANGER, AND TWO PAN	IEL STAINLESS STEEL WAL	LGAURD.	· · · · · · · · · · · · · · · · · · ·				- GLOBE VALVE	
-2 TUB 5	INK FIAT	L-1 2	0"x17" a8,b1 d2		1-1/2" 1/2" 1/	^{2" -} DRAIN AI	ID STOPPER. FAUCET HOLES	ON 4" CENTERS.		VITHSTANDING 600 LBS WITH INTEGRAL				BALL VALVE	
6-1 WASHE	R BOX IPS CORP	83045		2"	1-1/2" 1/2" 1/	^{2² - INTEGRA}	TED MOUNTING FLANGES.			WATER HAMMER ARRESTORS AND			Q	BALANCE VALVE (SEE SPECIFIC	ATIONS)
-1 HOSE	BIBB WOODFORD	MODEL 17		-	- 3/4"		FREEZE WALL FAUCET WITH S ER. P.C. TO VERIFY WALL THI			ZE FACE AND ANTI-SIPHON BACKFLOW				_ CHECK VALVE (SWING)	
B-1 WAT	ER ELKAY	LZSTL8WSLK	- c1,	d2 1-1/2"	1-1/2" 1/2"		ELECTRIC WATER COOLER W G F. ENTERING WATER, PUSH			CITY, 50 DEG F. DRINKING WATER BASED				PUMP DISCHARGE SILENT LIFT (
C00	ER							,			-				
S:	I													BUTTERFLY VALVE	
	NG FIXTURES SHALL BE W		:D.										.*.	OS&Y GATE VALVE	
JRN" Z5958S	OMB CLOSET BOLT AND V S-EL ELONGATED CLOSED AU 7430 SINGLE HANDLE 1	FRONT TOILET SEAT					ΜΡΙ ΙΔΝΤ						X	-	
OWERS" NO. OEN" CHATE	FLM495 (ASSE 1070 COM AU L4601 SINGLE HANDLE	PLIANT) THERMOSTAT 1.5 GPM MAX LAVATO	IC POINT OF US RY FAUCET. FA	E MIXING VALV	/E SET AT 110 DEG ATER SENSE CERT	. F. PROVIDE WITH INTEG IFIED.	RAL CHECK VALVES AND TEMP							- CONCENTRIC REDUCER/INCREAS	ER
OEN" T2903 ⁻ &S" B-0665-B	.75 GPM ADA COMPLIANT TR SERVICE SINK FAUCE	TUB/SHOWER TRIM W WITH VACUUM BREA	ITH 62370 (CC) I KER AND PAIL I	PRESSURE BAL 100K.			S. SHOWER VALVE AND HEAD	TO BE WATER SENSE CER	RTIFIED.					STRAINER WITH BLOWDOWN	
	WO HANDLE 1.5 GPM UTIL		H LEVER STYLE	HANDLES.										- UNION	
MERICAN STA	NDARD" NO. 2411.015 DRA HALF KIT PFW0350- SCH4	IN ASSEMBLY (1-1/4"													
4" CHROME	PLATED CAST BRASS P-TR	AP W/ CLEANOUT												- FLANGED UNION	
	PLATED CAST BRASS P-TR		FR											- EXPANSION JOINT	
ICGUIRE" NO.		EY ANGLE STOPS, WI	TH 3/8" O.D. BR/	NDED STAINLE	SS STEEL SUPPLY	RISERS (FIELD CUT TO LE FINGS, AND VALVES)	NGTH) AND WALL ESCUTCHE	DNS					——————————————————————————————————————	- PIPE ANCHOR	
PROFLO" PFS	R60 5' CHROME STRAIGH A HOSE AND HOSE BRAC	SHOWER ROD WITH				, <u></u>					」			- PIPE GUIDE	
											-			- PIPE SLEEVE (SEE SPECIFICATIO	
														- VIBRATION CONNECTION (SEE SF	PECIFICATIONS)
							ER SCHEDL						l	_ PETE'S TEST PLUG	
NO.	MAKE	MODEL		BFP SIZE	BFP MAX GF	MAX PRESSUR		RATED GPM FLOW	SERVICE	REMARKS			<u>+</u>	MANUAL AIR VENT	
						LOSS (PSIG)	PRESSURE (PSIG)	(PSIG)					L L	AUTOMATIC AIR VENT WITH BAL	L VALVE
BP-1	ZURN	375		3"	145	13	13	145	DOMESTIC WATER	ASSE 1013					
												BFP		_ DOUBLE CHECK BACKFLOW PRE'	VENIER
TES:												RPBP		- REDUCED PRESSURE BACKFLOW	PREVENTER WITH AIR GAP DEVICE AND DRAIN
R.P.B.P. = RE	PLANS FOR LOCATION DUCED PRESSURE B	ACKFLOW PREVEN	ITER										Ţ	- COMPANION FLANGE	
.C.V. = DOL	OUBLE CHECK DETEC BLE CHECK VALVE												C.O.	CLEANOUT	
.P.B.P. TO E	OUBLE DETECTOR CH	IR GAP DEVICE AN					REST FLOOR DRAIN.						FW/FCO	FLUSH WITH FLOOR CLEANOUT	
	CATIONS AND PLUMB												FW/WCO	FLUSH WITH WALL CLEANOUT	
												F.P.S.C.	–— F.P.S.C.	FROSTPROOF SILL COCK / WALI	_ HYDRANT
				PLUM	IBING	EQUIPMEN	IT SCHEDU	ILE					→ н.в.	FAUCET OR HOSE BIBB	
IARK NO.				AKE / MOE				DEMARKO				F.D.	 ∅ F.D.	SANITARY FLOOR DRAIN	
ARK NU.	DE	SCRIPTION	M	TRE / MUL	JLL / SIZE			REMARKS				A.F.D.	◎ A.F.D.	ACID FLOOR DRAIN	
					PI					PH AT A TEMPERATURE DEG. F. WATER HEATER		R.D.	@ R.D.	ROOF DRAIN	
WH—1/2	DOMESTIC	WATER HEATER		AO SM BTH-1	ШН м/	NUFACTURER TO F	URNISH TEMPERATURE MENTS. PROVIDE WITH	AND PRESSURE RE	LIEF VALVE. SEE SF	ECIFICATIONS FOR		A.D.	∅ A.D.	AREA DRAIN (STORM)	
							ALL BE 120V/1 PHASE					D.S.	D.S.	DOWNSPOUT	
												R.L.	R.L.	RAIN LEADER	
MX—1	DIGITAI MAS	STER MIXING VAL	.VE	ARMSTRON						DELIVERING 133 GPM OF				PRESSURE GAUGE WITH GAUGE	
. •					12	U DEGREE DOMEST	C HOT WATER AT A P	KESSUKE DROP OF	10 PSI.					PRESSURE GAUGE WITH BALL V	· ·
													P	PLUMBING FIXTURE (SEE SCHED	•
EXT		IC HOT WATER			GA	LLONS @ 40 PSI A	PRECHARGED EXPANS			NCE VOLUME OF 14.5 AVE 1" INLET CON <u>NEC</u> TION.		E.C.	PE E.C.	PLUMBING EQUIPMENT (SEE SCH ELECTRICAL CONTRACTOR	IEDULE)
			$\overline{}$			HK TO BE PRECHA	ROED TO 40 PSIG.			\sim		F.S.C.	 F.S.C.	FIRE SUPPRESSION CONTRACTOR	۲
					50		TDH. 1/2 HP 115/SIN	GLE PHASE PROVID		D PLUG – COORDINATE	ר (G.C.	G.C.	GENERAL CONTRACTOR	
ESP	ELEVATO	R SUMP PUMP		LIBERTY F	PUMPS RE	QUIRED LENGTH PF	IOR TO ORDERING, FLO	AT OPERATED MECH	HANICAL SWITCH. PR	DVIDE WITH 24" DIAMETER		H.C.	H.C.	HVAC CONTRACTOR	
				LLV-2		36" DEEP FIBERGL		TUATIONS AND DET	AL FUR ADDITIONAL	INFORMATION. PROVIDE)	P.C.	P.C.	PLUMBING CONTRACTOR	
		<u> </u>	\sim	<u> </u>					<u> </u>		∕⊢	K.E.C.	K.E.C.	KITCHEN EQIPMENT CONSULTAN	Γ
\smile		WATER RECIRCU					CERTIFED CARTRIDGE					A.D.	A.D. A.F.F.	ACCESS DOOR ABOVE FINISHED FLOOR	
DHWP		PUMP		TACO (S1	ARTER. SEE SPECIE	ICATIONS FOR ADDITIO	NAL REQUIREMENTS.	P.C. SHALL PROVID	DISCONNECT SWITCH AND E AND INSTALL AQUASTAT		F.F.E.	A.F.F. F.F.E.	FINISHED FLOOR ELEVATION	
					WI		ENSOR ON THIRD FLO		IVIE.			MFR.	MFR.	MANUFACTURER	
												N.O.	N.O.	NORMALLY OPEN	
												N.C.	N.C.	NORMALLY CLOSED	
				י א חח								TYP.	TYP.		
<u>, </u>					UNA GNU	ULEANUUT	S SCHEDULE	DEMARKA						- INDICATES TIE INTO EXISTING	
0. D-1	DESCRIPTION FLOOR DRAIN		MAKE/MOD ZURN NO. Z	N415-VP			EGRAL REVERSIBLE CLAMPIN			CONZE VANDAL-PROOF				- INDICATES REMOVE TO POINT FO	
			SERIE ZURN NO.	S	STRAINER. PROVI	DE WITH TRAP PRIMER CO	NNECTION OF 4" DEEP SEAL T ' SUMP, ALUMINUM DOME STR	RAP AS NOTED ON PLANS.			L		<u> </u>		
D-2	FLOOR DRAIN		SERIE	S	CONNECTION, ALL	IMINUM SEDIMENT BUCKE	T, AND 3/4 GRATE.					_			7
	FLUSH WITH FLC	UK	ZURI NO. ZN1400-V			CLEANOUT WITH SPIGO	OUTLET FOR "NO-HUB" OR "T E TOP.	-SEAL" CONNECTION, THR	EADED ADJUSTABLE HOUS	NG, FLANGED FERRULE WITH		SH	OCK ABSORBER	R SCHEDULE	
CO	CLEANOUT									-					_
		LL	ZURI NO. Z1440-VF		CLEANOUT FERRU	ILE WITH BRASS PLUG AN	D ROUND STAINLESS STEEL S	ECURED ACCESS COVER.				NO.	DESCRIPTION	REMARKS	
co	CLEANOUT FLUSH WITH WA	LL			CLEANOUT FERRU	ILE WITH BRASS PLUG AN	D ROUND STAINLESS STEEL S	ECURED ACCESS COVER.				HOCK ABSORBER	PPP	1/2", FIXTURE CAPACITY: 1-11 (PDI "A")	
0	CLEANOUT FLUSH WITH WA	LL			CLEANOUT FERRU	ILE WITH BRASS PLUG AN	D ROUND STAINLESS STEEL S	ECURED ACCESS COVER.			SH			-	

			F	PLUMBING FIX	TURE SCHEDULE						PLUM	BING SYMBOL LEG	END
ARK No. DESCRIPT	ION MANUFACTURER	MODEL SIZE	TRIM DRAINAGE	CARRIER		REI	MARKS		┓┠	ABBREVIATION	SYMBOL	DESCRIPTION	
									_] -	US	US	SANITARY SEWER BELOW FLOOR	OR GRADE
-1 WATER CLOSET (A		Z5561 -	a1,a2,d1 4" 2'	" 1-1/4"	FLOOR MOUNT, FLOOR OUTLET, VITRE 2-PIECE TOILET WITH PRESSURE ASS	STED TANK. 1.0 GPF				SAN	SAN	SANITARY SEWER ABOVE FLOOR	
2 WATER CLOSE		Z5571 -	a1,a2,d1 4" 2'	" 1/2"	FLOOR MOUNT, FLOOR OUTLET, VITRE 2-PIECE TOILET WITH PRESSURE ASS		OWL, 1-1/2" TOP INLET SPUD, SI	IPHON JET ACTION, RIM AT 15" A.F.	F.			SANITARY VENT	
	AMERICAN STANDARD	AQUALYN -	a4,a5,b1, c1,d2,d3 1-1/2" 1-1/	/2" 1/2" 1/2" -	COUNTER MOUNT, VITREOUS CHINA V	/ITH ROUND BASIN AND OVE	ERFLOW. FAUCET HOLES ON 4"	" CENTERS.		UST	UST	STORM SEWER BELOW FLOOR OF	R GRADE
DOUBL BOWL SI		DSE23322 33"x22"x8"	a3,b1,c2, d2 1-1/2" 1-1/	/2" 1/2" 1/2" -	20 GAUGE S.S. DOUBLE BOWL UNDER	MOUNT SINK, 4" CENTER FA	AUCET HOLES (OPTION 4), 8" DE	EEP BOWL, BOTTOM ONLY PADS		PD DCW	——— PD ——— ——— DCW ———	PUMP DISCHARGE DOMESTIC COLD WATER	
DOUBL		D23322 33"x22"x6-1/2"	a3,b1,c2, 1-1/2" 1-1/	/2" 1/2" 1/2" -	20 GAUGE S.S. DOUBLE BOWL UNDER	MOUNT SINK, 4" CENTER FA	AUCET HOLES (OPTION 4), 6-1/2'	" DEEP BOWL, BOTTOM ONLY PADS	. -	DHW	DHW	DOMESTIC HOT WATER	
(ADA)			d2		ADA COMPLIANT				F	RDHW	RDHW	RECIRCULATED DOMESTIC HOT V	IATER
1 SHOWE (ADA)	R AQUATIC	1603BFSC 62"x36"x77"	a6,b3,d4 3" 1-1/	/2" 1/2" 1/2" -	EQUIPPED WITH ADA COMPLIANT SEA WITH ARCHITECT.							SHOCK STOP IN HORIZONTAL	
2 BATH TU	B CLARION	8623LT(RT) 60"x33"x74"	a6.b3.d4 3" 1-1/	/2" 1/2" 1/2" -	2-PIECE TUB/SHOWER WITH MOLDED INTEGRAL 1" NAILING FLANGE. COORE				╡┟			GATE VALVE	
					ARCHITECT. MOLDED STONE MOP BASIN WITH 3" D				_ L			GAS COCK	
I MOP BAS	IN FIAT	MSB-2424 24"x24"	a7,d5 3" 1-1/	/2" 1/2" 1/2" -	BRACKET, MOP HANGER, AND TWO PA	NEL STAINLESS STEEL WAL	LGAURD.	- ,				GLOBE VALVE	
2 TUB SIN	K FIAT	L-1 20"x17"	a8,b1,c2, d2 1-1/2" 1-1/	/2" 1/2" 1/2" -	WALL HUNG, HEAVY GAUGE GALVANIZ DRAIN AND STOPPER. FAUCET HOLES	ON 4" CENTERS.						BALL VALVE	
I WASHER I	BOX IPS CORP	83045 -	- 2" 1-1/	/2" 1/2" 1/2" -	2-HOUR FIRE RATED WASHING MACHI INTEGRATED MOUNTING FLANGES.							BALANCE VALVE (SEE SPECIFIC)	ATIONS)
I HOSE BI	BB WOODFORD	MODEL 17 -		3/4"	3/4" NON-FREEZE WALL FAUCET WITH PREVENTER. P.C. TO VERIFY WALL TH			FACE AND ANTI-SIPHON BACKFLO	W			CHECK VALVE (SWING)	
ELECTR WATEF	ELKAY	LZSTL8WSLK -	c1, d2 1-1/2" 1-1/	/2" 1/2"	BI-LEVEL ELECTRIC WATER COOLER V ON 80 DEG F. ENTERING WATER, PUSH	/ITH BUILT-IN FILTER, WALL	MOUNT UNIT, 8.0 GPH CAPACIT	TY, 50 DEG F. DRINKING WATER BAS	SED -			PUMP DISCHARGE SILENT LIFT (
COOLE	2					,,							
3:	I				1							BUTTERFLY VALVE	
	FIXTURES SHALL BE WA											OS&Y GATE VALVE	
RN" Z5958SS-E		AX RING KIT. FRONT TOILET SEAT WITH COV 5 GPM KITCHEN FAUCET WITH			ED. ADA COMPLIANT								
WERS" NO. LF EN" CHATEAU	LM495 (ASSE 1070 COMP L4601 SINGLE HANDLE 1	LIANT) THERMOSTATIC POINT (.5 GPM MAX LAVATORY FAUCE	OF USE MIXING VALVE S ET. FAUCET TO BE WATE	SET AT 110 DEG. F. PROVIDE V ER SENSE CERTIFIED.	VITH INTEGRAL CHECK VALVES AND TEM							CONCENTRIC REDUCER/INCREAS	-ĸ
DEN" T2903 1.7 S" B-0665-BSTI	5 GPM ADA COMPLIANT T R SERVICE SINK FAUCET	UB/SHOWER TRIM WITH 62370 WITH VACUUM BREAKER AND	(CC) PRESSURE BALAN PAIL HOOK.		TURN STOPS. SHOWER VALVE AND HEA	D TO BE WATER SENSE CEF	RTIFIED.					STRAINER WITH BLOWDOWN	
	O HANDLE 1.5 GPM UTILI	TY SINK FAUCET WITH LEVER S	DITLE HANDLES.									UNION	
IERICAN STAND	ARD" NO. 2411.015 DRAI	N ASSEMBLY (1-1/4" TAILPIECE WITH CHROME PLATED TRIM	ē)								· ·		
	ATED CAST BRASS P-TRA											FLANGED UNION	
	ATED CAST BRASS P-TRA	AP W/ CLEANOUT										EXPANSION JOINT	
GUIRE" NO. ST GUIRE" ANTI-M	09LK 1/4 TURN LOOSE KE IICROBIAL PROWRAP PIP	EY ANGLE STOPS, WITH 3/8" O.I PE WRAP (INSTALL ON ALL EXPO	OSED WASTE AND SUPF	PLY PIPING, FITTINGS, AND VA	O CUT TO LENGTH) AND WALL ESCUTCHE LVES)	ONS					X	PIPE ANCHOR	
OFLO" PFSCR T" NO. 832-AA	00 5' CHROME STRAIGHT HOSE AND HOSE BRACK	SHOWER ROD WITH PFC71F D	IECAST EXPANDITE ROD	D HOLDER KIT					⊢			PIPE GUIDE	
									-			PIPE SLEEVE (SEE SPECIFICATIO VIBRATION CONNECTION (SEE SF	· ·
			BACKE		ENTER SCHED				ŀ			PETE'S TEST PLUG	
						усс ,			ŀ		<u> </u>	MANUAL AIR VENT	
NO.	MAKE	MODEL	BFP SIZE		PRESSURE MAX WORKING SS (PSIG) PRESSURE (PSIG)	RATED GPM FLOW (PSIG)	SERVICE	REMARKS	ŀ		<u> </u>		
											Å	AUTOMATIC AIR VENT WITH BAL	L VALVE
BP-1	ZURN	375	3"	145	13 13	145	DOMESTIC WATER	ASSE 1013	F	BFP		DOUBLE CHECK BACKFLOW PRE	/ENTER
									⊢				
ES: FE FLOOR PL	ANS FOR LOCATIONS	5.								RPBP		REDUCED PRESSURE BACKFLOW	PREVENTER WITH AIR GAP DEVICE AND DRAIN
P.B.P. = RED	JCED PRESSURE BA	CKFLOW PREVENTER							F			COMPANION FLANGE	
C.V. = DOUB	ELE CHECK DETECT E CHECK VALVE BLE DETECTOR CHE								Ē		C.O.	CLEANOUT	
P.B.P. TO BE	FURNISHED WITH AI				IN TO NEAREST FLOOR DRAIN.						FW/FCO	FLUSH WITH FLOOR CLEANOUT	
									F		FW/WCO	FLUSH WITH WALL CLEANOUT	
									1 L	F.P.S.C.	→ F.P.S.C.	FROSTPROOF SILL COCK / WAL	- HYDRANT
			PLUME	SING EQUIP	MENT SCHEDU	JLE					→ н.в.	FAUCET OR HOSE BIBB	
ARK NO.	DES	SCRIPTION	MAKE / MODEL	_ /SIZE		REMARKS				F.D.	Ø F.D.	SANITARY FLOOR DRAIN	
				100 0411 011	CAPACITY GAS WATER HEATE					A.F.D.	⊗ A.F.D.	ACID FLOOR DRAIN	
			AO SMITH	RISE OF 90 I	DEG. F. WITH AN INPUT OF 19 ER TO FURNISH TEMPERATURE	9,000 BTU. SET TE	MPERATURE AT 120 DE	EG. F. WATER HEATER		R.D.	◎ R.D.	ROOF DRAIN	
/H—1/2	DOMESTIC	WATER HEATER	BTH-199	ADDITIONAL	REQUIREMENTS. PROVIDE WITH	I UNIONS AND TEMPE	ERATURE GAUGES AT V	WATER INLET AND		A.D. D.S.	◎ A.D. D.S.	AREA DRAIN (STORM)	
				UUILEI. VOL	TAGE SHALL BE 120V/1 PHAS	L, J.U AMPS.			╎┝	D.S. R.L.	D.S. R.L.	RAIN LEADER	
												PRESSURE GAUGE WITH GAUGE	COCK (WATER)
MX-1	DIGITAL MAS	TER MIXING VALVE	ARMSTRONG E		MOSTATIC MIXING VALVE WITH			LIVERING 133 GPM OF				PRESSURE GAUGE WITH BALL V	
											P	PLUMBING FIXTURE (SEE SCHED	
					ER TYPE PRECHARGED EXPAN				1 F		PE	PLUMBING EQUIPMENT (SEE SCH	,
EXT		C HOT WATER	WATTS	, GALLONS @ 4	40 PSI AND A TOTAL STORAG PRECHARGED TO 40 PSIG.				l F	E.C.	E.C.	ELECTRICAL CONTRACTOR	
\vee \vee		\mathbf{v} \mathbf{v} \mathbf{v}						\vee \vee \setminus	$ \vdash [$	F.S.C.	F.S.C.	FIRE SUPPRESSION CONTRACTOR	R
			LIBERTY PUI		P AT 15 TDH. 1/2 HP 115/SI NGTH PRIOR TO ORDERING, FL				∖	G.C.	G.C.	GENERAL CONTRACTOR	
ESP	ELEVATO	R SUMP PUMP	ELV-280) X 36" DEEP	FIBERGLASS BASIN. SEE SPEC					H.C. P.C.	H.C. P.C.	HVAC CONTRACTOR PLUMBING CONTRACTOR	
				WITH UNIONS	FOR QUICK REMOVAL.				[K.E.C.	K.E.C.	KITCHEN EQIPMENT CONSULTAN	Γ
\smile	$\overline{}$	$\overline{}$	\sim		TEEL NSF CERTIFED CARTRIDG		D GPM WITH 10 FF		P^{F}	A.D.	A.D.	ACCESS DOOR	
DHWP		WATER RECIRCULATION	TACO 001	RPM=3250, N	MOTOR HP=1/8, 115V/1PH. CO E SPECIFICATIONS FOR ADDITION	NNECTIONS-1". E.C.	TO PROVIDE MOTOR D	SCONNECT SWITCH AND	I [A.F.F.	A.F.F.	ABOVE FINISHED FLOOR	
				WITH TEMPER	ATURE SENSOR ON THIRD FLC	OR TO CONTROL PU	MP.	AND INSTALL AQUASIAI		F.F.E.	F.F.E.	FINISHED FLOOR ELEVATION	
									╹┣	MFR.	MFR	MANUFACTURER NORMALLY OPEN	
									ŀ	N.O. N.C.	N.O. N.C.	NORMALLY OPEN NORMALLY CLOSED	
									F	TYP.	TYP.	TYPICAL	
			DRAIN	IS AND CLEAN	NOUTS SCHEDULE				F			INDICATES TIE INTO EXISTING	
	DESCRIPTION		MODEL/SIZE			REMARKS					— — — —I	INDICATES REMOVE TO POINT FO	
-1	FLOOR DRAIN		SERIES STR	RAINER. PROVIDE WITH TRAP	LANGE, INTEGRAL REVERSIBLE CLAMPII PRIMER CONNECTION OF 4" DEEP SEAL	TRAP AS NOTED ON PLANS.			L		— — — —E	INDICATES REMOVE TO POINT A	ND CAP
0-2	FLOOR DRAIN			ST IRON 12" SQUARE FLOOR S NNECTION, ALUMINUM SEDIM	SINK WITH 8" SUMP, ALUMINUM DOME ST ENT BUCKET, AND 3/4 GRATE.	RAINER AND NICKEL BRONZ	ZE HINGED TOP. PROVIDE WITH		—				1
FCO	FLUSH WITH FLOO CLEANOUT			ST IRON FLOOR CLEANOUT W JG AND ROUND SECURED NIC	ITH SPIGOT OUTLET FOR "NO-HUB" OR " KEL BRONZE TOP.	Y-SEAL" CONNECTION, THR	READED ADJUSTABLE HOUSING	G, FLANGED FERRULE WITH		SI	HOCK ABSORBER S	CHEDULE	
'CO	FLUSH WITH WAL CLEANOUT	LL			S PLUG AND ROUND STAINLESS STEEL	ECURED ACCESS COVER.				NO.	DESCRIPTION	REMARKS	4
	-		I							SHOCK ABSORBER	PPP	1/2", FIXTURE CAPACITY: 1-11 (PDI "A")]
										SHOCK ABSORBER		3/4", FIXTURE CAPACITY: 12-32 (PDI "B")	-
									1	SHOCK ABSORBER	PPP	1", FIXTURE CAPACITY: 33-60 (PDI "C")	1

SHOCK ABSORBER

PPP

1", FIXTURE CAPACITY: 33-60 (PDI "C") 1-1/4", FIXTURE CAPACITY: 61-113 (PDI "D")

							FIXTURE SCHEDULE				PLU	MBING SYMBOL LEGEND	
IARK No. DESCRIPTION	MANUFACTURER	MODEL	SIZE	TRIM	DRAINAGE W.P. V.P		RRIER	REMARKS		ABBREVIATION	SYMBOL	DESCRIPTION	
WATER	711011	75504		- 1 - 0 - 14	41 01		FLOOR MOUNT, FLOOR OUTLET, VITR	EOUS CHINA, ELONGATED BOWL, 1-1/2" TOP INLET SPUD, SIPHON JET ACTION, RIN	T 17" A.F.F.	US	US	SANITARY SEWER BELOW FLOOR OR GRADE	
CLOSET (ADA)	ZURN	Z5561	-	a1,a2,d1	4" 2"		2-PIECE TOILET WITH PRESSURE ASS			SAN	SAN	SANITARY SEWER ABOVE FLOOR	
1-2 CLOSET	ZURN	Z5571	-	a1,a2,d1 a4,a5,b1,	4" 2"		2-PIECE TOILET WITH PRESSURE ASS	STED TANK. 1.0 GPF		UST	UST	SANITARY VENT STORM SEWER BELOW FLOOR OR GRADE	
22-1 LAVATORY	STANDARD	AQUALYN	-	c1,d2,d3	1-1/2" 1-1/2			VITH ROUND BASIN AND OVERFLOW. FAUCET HOLES ON 4" CENTERS.		PD	PD	PUMP DISCHARGE	
P3-1 DOUBLE BOWL SINK DOUBLE	ELKAY	DSE23322	33"x22"x8"	d2	1-1/2" 1-1/2	2" 1/2" 1/2"	- 20 GAUGE S.S. DOUBLE BOWL UNDER	MOUNT SINK, 4" CENTER FAUCET HOLES (OPTION 4), 8" DEEP BOWL, BOTTOM ON	' PADS	DCW	DCW	DOMESTIC COLD WATER	
P3-2 BOWL SINK (ADA)	ELKAY	D23322	33"x22"x6-1/2"	a3,b1,c2, d2	1-1/2" 1-1/2	2" 1/2" 1/2"	- 20 GAUGE S.S. DOUBLE BOWL UNDER ADA COMPLIANT	MOUNT SINK, 4" CENTER FAUCET HOLES (OPTION 4), 6-1/2" DEEP BOWL, BOTTOM	NLY PADS.	DHW	DHW	DOMESTIC HOT WATER	
P4-1 SHOWER (ADA)	AQUATIC	1603BFSC	62"x36"x77"	a6,b3,d4	3" 1-1/2	2" 1/2" 1/2"		EVELED BASE, CENTER DRAIN LOCATION AND SLIP RESISTANT TEXTURED BOTT T. COORDINATE LEFT/RIGHT HAND REQUIREMENTS WITH FLOOR PLANS. COORDI		RDHW	RDHW	RECIRCULATED DOMESTIC HOT WATER SHOCK STOP IN HORIZONTAL	
(ADA)							WITH ARCHITECT. 2-PIECE TUB/SHOWER WITH MOLDED	SHELVING AND SLIP RESISTANT FLOOR, 1" ACRYLIC TOWEL BAR, 2-1/2" OVERFLO	AND			GATE VALVE	
P4-2 BATH TUB	CLARION	8623LT(RT)	60"x33"x74"	a6,b3,d4	3" 1-1/2	2" 1/2" 1/2"	- INTEGRAL 1" NAILING FLANGE. COOR ARCHITECT.	NATE LEFT/RIGHT HAND REQUIREMENTS WITH FLOOR PLANS. COORDINATE FIN				GAS COCK	
P5-1 MOP BASIN	FIAT	MSB-2424	24"x24"	a7,d5	3" 1-1/2	2" 1/2" 1/2"	- MOLDED STONE MOP BASIN WITH 3" I BRACKET, MOP HANGER, AND TWO P	RAIN AND STAINLESS STEEL STRAINER, VINYL BUMPER GUARD, HOSE AND HOSE NEL STAINLESS STEEL WALLGAURD.				GLOBE VALVE	
P5-2 TUB SINK	FIAT	L-1	20"x17"	a8,b1,c2, d2	1-1/2" 1-1/2	2" 1/2" 1/2"	DRAIN AND STOPPER. FAUCET HOLES		_			BALL VALVE	
P6-1 WASHER BOX	IPS CORP	83045	-	-	2" 1-1/2	2" 1/2" 1/2"	- 2-HOUR FIRE RATED WASHING MACH INTEGRATED MOUNTING FLANGES.	NE OUTLET BOX WITH INTEGRAL 1/4 TURN VALVES WITH WATER HAMMER ARRES	ORS AND			BALANCE VALVE (SEE SPECIFICATIONS)	
P7-1 HOSE BIBB	WOODFORD	MODEL 17	-	-		3/4" -	- 3/4" NON-FREEZE WALL FAUCET WITH PREVENTER. P.C. TO VERIFY WALL T	STRAIGHT INLET CONNECTION, BRONZE CASING, BRONZE FACE AND ANTI-SIPHC IICKNESS PRIOR TO PURCHASE.	BACKFLOW			CHECK VALVE (SWING)	
P8-1 ELECTRIC COOLER	ELKAY	LZSTL8WSLK	-	c1, d2	1-1/2" 1-1/2	2" 1/2" -		VITH BUILT-IN FILTER, WALL MOUNT UNIT, 8.0 GPH CAPACITY, 50 DEG F. DRINKING IBAR CONTROLS, 6 FLA, 115V/1P. PROVIDE WITH BOTTLE FILLER.	ATER BASED			PUMP DISCHARGE SILENT LIFT CHECK VALVE	
COOLER													
DTES: DTE: ALL PLUMBING FIX	TURES SHALL BE W	ATERSENSE CE									<u> </u>	BUTTERFLY VALVE	
. "ZURN" Z5972-COMB (CLOSET BOLT AND W	AX RING KIT.									¢	OS&Y GATE VALVE	
	30 SINGLE HANDLE 1.	.5 GPM KITCHE	N FAUCET WIT	TH SIDE SPRA	Y. FAUCET T	O BE WATER SENSE CE	ERTIFIED. ADA COMPLIANT. /IDE WITH INTEGRAL CHECK VALVES AND TEM	PERATURE ADJUSTMENT WITH LOCK SCREW.		+		CONCENTRIC REDUCER/INCREASER	
5. "MOEN" CHATEAU L46 5. "MOEN" T2903 1.75 GP	001 SINGLE HANDLE ² PM ADA COMPLIANT 1	1.5 GPŃ MAX L/ TUB/SHOWER 1	AVATORY FAUC RIM WITH 6237	CET. FAUCET 70 (CC) PRESS	TO BE WATER SURE BALANC	R SENSE CERTIFIED.	TH 1/4 TURN STOPS. SHOWER VALVE AND HE			 		STRAINER WITH BLOWDOWN	
. "T&S" B-0665-BSTR SE . "MOEN" 74998 TWO HA										 	×***		
I."CHICAGO FAUCETS" N 2."AMERICAN STANDARI	D" NO. 2411.015 DRAI	IN ASSEMBLY (UNION	
. "PROFLO" W&O HALF .1-1/4" CHROME PLATEI	D CAST BRASS P-TR	AP W/ CLEANO	JT	n								FLANGED UNION	
.1-1/2" CHROME PLATEI	D CAST BRASS P-TRA	AP W/ CLEANO	JT									EXPANSION JOINT	
. "ZURN" Z8800-CR STA . "McGUIRE" NO. ST09LI . "McGUIRE" ANTI-MICR	K 1/4 TURN LOOSE K	EY ANGLE STO	PS, WITH 3/8" C	O.D. BRAIDED	STAINLESS S	STEEL SUPPLY RISERS (LY PIPING, FITTINGS, AN	(FIELD CUT TO LENGTH) AND WALL ESCUTCH ND VALVES)	ONS			X	PIPE ANCHOR	
. "PROFLO" PFSCR60 5 . "FIAT" NO. 832-AA HOS	' CHROME STRAIGHT	SHOWER ROD											
										 +		PIPE SLEEVE (SEE SPECIFICATIONS FOR ADDIT. REQUIREMENTS) VIBRATION CONNECTION (SEE SPECIFICATIONS)	
				R			EVENTER SCHED	Л F		├ ────┼	 	PETE'S TEST PLUG	
										+	<u> </u>	MANUAL AIR VENT	
NO.	MAKE	M	ODEL	BFP	SIZE	BFP MAX GPM	MAX PRESSURE MAX WORKING LOSS (PSIG) PRESSURE (PSIG	RATED GPM FLOW (PSIG) SERVICE REMARKS			 口 求	AUTOMATIC AIR VENT WITH BALL VALVE	
BP-1	ZURN		375		3"	145	13 13	145 DOMESTIC WATER ASSE 1013		BFP		DOUBLE CHECK BACKFLOW PREVENTER	
OTES:										RPBP			
SEE FLOOR PLANS										КЪВЬ		REDUCED PRESSURE BACKFLOW PREVENTER WITH AIR GAP DEVICE	. AND DRAIN
. R.P.B.P. = REDUCE . D.C.D.A. = DOUBLE	E CHECK DETECT											COMPANION FLANGE	
D.C.V. = DOUBLE (D.D.C.V. = DOUBLE	E DETECTOR CHE						DRAIN TO NEAREST FLOOR DRAIN.				C.O. FW/FCO	CLEANOUT FLUSH WITH FLOOR CLEANOUT	
SEE SPECIFICATIO							DRAIN TO NEAREST FLOOR DRAIN.				FW/WCO	FLUSH WITH WALL CLEANOUT	
										F.P.S.C.		FROSTPROOF SILL COCK / WALL HYDRANT	
				Pl		ING EQU	JIPMENT SCHED	JLE		 	у̀ н.в.	FAUCET OR HOSE BIBB	
MARK NO.		SCRIPTION		MAKE	/ MODEL	/SI7F		REMARKS	—	F.D.	<i>%</i> ⊗ F.D.	SANITARY FLOOR DRAIN	
MARK NU.	DES	JURIT HUN		MAKE	/ MODEL					A.F.D.	◎ A.F.D.	ACID FLOOR DRAIN	
						RISE OF	90 DEG. F. WITH AN INPUT OF 19	R WITH A RECOVERY CAPACITY OF 261 GPH AT A TEMPERA 9,000 BTU. SET TEMPERATURE AT 120 DEG. F. WATER H		R.D.	◎ R.D.	ROOF DRAIN	
DWH-1/2	DOMESTIC	WATER HE	ATER		AO SMITH BTH-199	MANUFAC	CTURER TO FURNISH TEMPERATUR AL REQUIREMENTS. PROVIDE WIT	E AND PRESSURE RELIEF VALVE. SEE SPECIFICATIONS FOR I UNIONS AND TEMPERATURE GAUGES AT WATER INLET AN		A.D.	⊗ A.D.	AREA DRAIN (STORM)	
						OUTLET.	VOLTAGE SHALL BE 120V/1 PHAS	E, 5.0 AMPS.		D.S. R.L.	D.S. R.L.	DOWNSPOUT RAIN LEADER	
											K.L.	PRESSURE GAUGE WITH GAUGE COCK (WATER)	
MX-1	DIGITAL MAS	STER MIXING	S VALVE	ARMS	STRONG D	RV50 DIGITAL 120 DEGR	THERMOSTATIC MIXING VALVE WITH REE DOMESTIC HOT WATER AT A	INTEGRAL CHECK VALVES CAPABLE OF DELIVERING 133 GP PRESSURE DROP OF 10 PSI.	OF	+		PRESSURE GAUGE WITH BALL VALVE (WATER)	
										+	P	PLUMBING FIXTURE (SEE SCHEDULE)	
		IC HOT WA	TER		WATTS			SION TANK. TANK TO HAVE AN ACCEPTANCE VOLUME OF 14			PE	PLUMBING EQUIPMENT (SEE SCHEDULE)	
EXT		NSION TAN					© 40 PSI AND A TOTAL STORAC BE PRECHARGED TO 40 PSIG.	E CAPACITY OF 22 GALLONS. TANK TO HAVE 1" INLET CON	CTION.	E.C.	E.C.		
• • •	•	<u>• </u>		• • •		• •	<u>v v v v</u>			F.S.C.	F.S.C. G.C.	FIRE SUPPRESSION CONTRACTOR GENERAL CONTRACTOR	
ESP		R SUMP PI	IMP		ERTY PUN	MPS REQUIRED	D LENGTH PRIOR TO ORDERING, FI	NGLE PHASE. PROVIDE WITH 3-WIRE CORD PLUG - COORDII .OAT OPERATED MECHANICAL SWITCH. PROVIDE WITH 24" DI	IETER	G.C. H.C.	G.C. H.C.	HVAC CONTRACTOR	
	LLÉVATO	N JUNIF PU	1911 ب		ELV-280		EEP FIBERGLASS BASIN. SEE SPEC IONS FOR QUICK REMOVAL.	IFICATIONS AND DETAIL FOR ADDITIONAL INFORMATION. PRO	DE	P.C.	P.C.	PLUMBING CONTRACTOR	,
~	^	•	^		<u></u>					K.E.C.	K.E.C.	KITCHEN EQIPMENT CONSULTANT	
					\smile			E CIRCULATOR TO BE 6 GPM WITH 10 FT OF HEAD. MOTOR		A.D.	A.D.		
RDHWP	DOMESTIC HOT	WATER REC PUMP	IRCULA HON	N -	TACO 0010	STARTER.	. SEE SPECIFICATIONS FOR ADDITI	DNNECTIONS-1". E.C. TO PROVIDE MOTOR DISCONNECT SWITC DNAL REQUIREMENTS. P.C. SHALL PROVIDE AND INSTALL AQ	ASTAT	A.F.F. F.F.E.	A.F.F. F.F.E.	ABOVE FINISHED FLOOR FINISHED FLOOR ELEVATION	
							IPERATURE SENSOR ON THIRD FL	JUN TO CONTROL FUMP.		MFR.	MFR.	MANUFACTURER	
										N.O.	N.O.	NORMALLY OPEN	
										N.C. TYP.	N.C. TYP.	NORMALLY CLOSED	
					DRAIN	S AND CLE	ANOUTS SCHEDULE		7			INDICATES TIE INTO EXISTING	
NO.	DESCRIPTION		MAK	KE/MODEL/SIZ				REMARKS	_		!	INDICATES REMOVE TO POINT FOR RECONNECTION	
FD-1	FLOOR DRAIN		ZUR	N NO. ZN415- SERIES			VITH FLANGE, INTEGRAL REVERSIBLE CLAMP TRAP PRIMER CONNECTION OF 4" DEEP SEAL	NG COLLAR, SEEPAGE OPENINGS AND 6" DIA. NICKEL BRONZE VANDAL-PROOF TRAP AS NOTED ON PLANS.			— — — —C	INDICATES REMOVE TO POINT AND CAP	
FD-2	FLOOR DRAIN		ZUF	RN NO. ZN190 SERIES			OOR SINK WITH 8" SUMP, ALUMINUM DOME ST SEDIMENT BUCKET, AND 3/4 GRATE.	RAINER AND NICKEL BRONZE HINGED TOP. PROVIDE WITH TRAP PRIMER					
FW/FCO	FLUSH WITH FLO CLEANOUT	OR	NO. ZN	ZURN N1400-VP SER			DUT WITH SPIGOT OUTLET FOR "NO-HUB" OR ' ED NICKEL BRONZE TOP.	TY-SEAL" CONNECTION, THREADED ADJUSTABLE HOUSING, FLANGED FERRULE V	н	SI	HOCK ABSORBEF	SCHEDULE	
w/wco	FLUSH WITH WA CLEANOUT	LL		ZURN 21440-VP SERI	CLE		BRASS PLUG AND ROUND STAINLESS STEEL	SECURED ACCESS COVER.	7 F	NO.	DESCRIPTION	REMARKS	
	-				I					SHOCK ABSORBER	PPP	1/2", FIXTURE CAPACITY: 1-11 (PDI "A")	
										SHOCK ABSORBER	PPP	3/4", FIXTURE CAPACITY: 12-32 (PDI "B")	
										SHOCK ABSORBER	PPP	1", FIXTURE CAPACITY: 33-60 (PDI "C")	

						PLUMBING FIX	XTURE SCHEDULE			PLUM	IBING SYMBOL LEG	END
MARK No. DESCRIPTION	MANUFACTURER	MODEL	SIZE TR	M DR	RAINAG P. V	GE WATER CARRIER	REMARKS		ABBREVIATION	SYMBOL	DESCRIPTION	
WATER							FLOOR MOUNT, FLOOR OUTLET, VITREOUS CHINA, ELONGATED BOWL, 1-1/2" TOP INLET		US	US	SANITARY SEWER BELOW FLOOR	OR GRADE
P1-1 CLOSET (ADA) WATER) ZURN	Z5561	- a1,a	2,d1 4"		2" 1-1/4"	2-PIECE TOILET WITH PRESSURE ASSISTED TANK. 1.0 GPF FLOOR MOUNT, FLOOR OUTLET, VITREOUS CHINA, ELONGATED BOWL, 1-1/2" TOP INLET		SAN	SAN	SANITARY SEWER ABOVE FLOOR	
CLOSET	ZURN	Z5571	- a1,a			2" 1/2"	2-PIECE TOILET WITH PRESSURE ASSISTED TANK. 1.0 GPF				SANITARY VENT	0.004.05
2-1 LAVATORY	AMERICAN STANDARD	AQUALYN	- a4,a5	2,d3	2" 1-'	.1/2" 1/2" -	COUNTER MOUNT, VITREOUS CHINA WITH ROUND BASIN AND OVERFLOW. FAUCET HOL	LES ON 4" CENTERS.	UST PD	UST PD	STORM SEWER BELOW FLOOR OF PUMP DISCHARGE	GRADE
P3-1 DOUBLE BOWL SINK	ELKAY	DSE23322	33"x22"x8" a3,b d		2" 1-'	.1/2" 1/2" -	20 GAUGE S.S. DOUBLE BOWL UNDER MOUNT SINK, 4" CENTER FAUCET HOLES (OPTION	N 4), 8" DEEP BOWL, BOTTOM ONLY PADS	DCW	DCW	DOMESTIC COLD WATER	
DOUBLE BOWL SINK	ELKAY	D23322	33"x22"x6-1/2" a3,b	,c2, 1-1/2	2" 1-'	.1/2" 1/2" -	20 GAUGE S.S. DOUBLE BOWL UNDER MOUNT SINK, 4" CENTER FAUCET HOLES (OPTION ADA COMPLIANT	N 4), 6-1/2" DEEP BOWL, BOTTOM ONLY PADS.	DHW	DHW	DOMESTIC HOT WATER	
(ADA) SHOWER					+-		ADA COMPLIANT SHOWER WITH PRE-LEVELED BASE, CENTER DRAIN LOCATION AND SL	LIP RESISTANT TEXTURED BOTTOM FULLY	RDHW	——— RDHW ———	RECIRCULATED DOMESTIC HOT V	VATER
P4-1 (ADA)	AQUATIC	1603BFSC	62"x36"x77" a6,b	s,d4 3"	1-1	.1/2" 1/2" -	EQUIPPED WITH ADA COMPLIANT SEAT. COORDINATE LEFT/RIGHT HAND REQUIREMENT WITH ARCHITECT.	TS WITH FLOOR PLANS. COORDINATE FINISH			SHOCK STOP IN HORIZONTAL	
P4-2 BATH TUB	CLARION	8623LT(RT)	60"x33"x74" a6,b	,d4 3"	1-*	.1/2" 1/2" -	2-PIECE TUB/SHOWER WITH MOLDED SHELVING AND SLIP RESISTANT FLOOR, 1" ACRYL INTEGRAL 1" NAILING FLANGE. COORDINATE LEFT/RIGHT HAND REQUIREMENTS WITH F				GATE VALVE	
				15			ARCHITECT. MOLDED STONE MOP BASIN WITH 3" DRAIN AND STAINLESS STEEL STRAINER, VINYL BU	UMPER GUARD, HOSE AND HOSE			GAS COCK	
P5-1 MOP BASIN	FIAT	MSB-2424	24"x24" a7,			.1/2" 1/2" -	BRACKET, MOP HANGER, AND TWO PANEL STAINLESS STEEL WALLGAURD. WALL HUNG, HEAVY GAUGE GALVANIZED LAUNDRY TUB WITH STEEL BRACKET CAPABL				GLOBE VALVE	
P5-2 TUB SINK	FIAT	L-1	20"x17" d3		2" 1-'	.1/2" 1/2" -	DRAIN AND STOPPER. FAUCET HOLES ON 4" CENTERS.				BALL VALVE	
6-1 WASHER BOX	IPS CORP	83045		2"	1-'	.1/2" 1/2" 1/2" -	2-HOUR FIRE RATED WASHING MACHINE OUTLET BOX WITH INTEGRAL 1/4 TURN VALVES INTEGRATED MOUNTING FLANGES.			Q	BALANCE VALVE (SEE SPECIFIC	ATIONS)
7-1 HOSE BIBB	WOODFORD	MODEL 17		-		- 3/4"	3/4" NON-FREEZE WALL FAUCET WITH STRAIGHT INLET CONNECTION, BRONZE CASING, PREVENTER. P.C. TO VERIFY WALL THICKNESS PRIOR TO PURCHASE.	B, BRONZE FACE AND ANTI-SIPHON BACKFLOW			CHECK VALVE (SWING)	
P8-1 ELECTRIC WATER	ELKAY	LZSTL8WSLK	- c1,	d2 1-1/2	2" 1-'	.1/2" 1/2"	BI-LEVEL ELECTRIC WATER COOLER WITH BUILT-IN FILTER, WALL MOUNT UNIT, 8.0 GPH ON 80 DEG F. ENTERING WATER, PUSHBAR CONTROLS, 6 FLA, 115//1P. PROVIDE WITH F				PUMP DISCHARGE SILENT LIFT (
COOLER					_							
TES:				I							BUTTERFLY VALVE	
TE: ALL PLUMBING FIX			RTIFIED.							*	OS&Y GATE VALVE	
"ZURN" Z5972-COMB C "ZURN" Z5958SS-EL EL	LONGATED CLOSED	FRONT TOILET										
"POWERS" NO. LFLM49	95 (ASSE 1070 COMP	LIANT) THERMO	OSTATIC POINT OF US	E MIXING V	VALVE	T TO BE WATER SENSE CERTIFI SET AT 110 DEG. F. PROVIDE V TER SENSE CERTIFIED.	IED. ADA COMPLIANT. WITH INTEGRAL CHECK VALVES AND TEMPERATURE ADJUSTMENT WITH LOCK SCREW.				CONCENTRIC REDUCER/INCREAS	ER
"MOEN" T2903 1.75 GP "T&S" B-0665-BSTR SE	PM ADA COMPLIANT 1 ERVICE SINK FAUCET	UB/SHOWER TI WITH VACUUM	RIM WITH 62370 (CC) BREAKER AND PAIL	PRESSURE 100K.	BALAI		TURN STOPS. SHOWER VALVE AND HEAD TO BE WATER SENSE CERTIFIED.				STRAINER WITH BLOWDOWN	
. "MOEN" 74998 TWO HA ."CHICAGO FAUCETS" N			T WITH LEVER STYLE	HANDLES.					+	↓	UNION	
"CHICAGO FAUCETS" N "AMERICAN STANDARE "PROFLO" W&O HALF I	D" NO. 2411.015 DRAI	NASSEMBLY (*							├ ────┼	1		
1-1/4" CHROME PLATED	D CAST BRASS P-TR/	AP W/ CLEANOU	JT								FLANGED UNION	
1-1/2" CHROME PLATE											EXPANSION JOINT	
"ZURN" Z8800-CR STAI "McGUIRE" NO. ST09LF "McGUIRE" ANTI-MICR	K 1/4 TURN LOOSE K	EY ANGLE STOP	PS, WITH 3/8" O.D. BR.	NDED STAL		S STEEL SUPPLY RISERS (FIELI PPLY PIPING, FITTINGS, AND VA	D CUT TO LENGTH) AND WALL ESCUTCHEONS ALVES)			X	PIPE ANCHOR	
"PROFLO" PFSCR60 5' "FIAT" NO. 832-AA HOS	' CHROME STRAIGHT	SHOWER ROD					,				PIPE GUIDE	
									ļ		PIPE SLEEVE (SEE SPECIFICATIO	· ·
				D • ~	<u></u>						VIBRATION CONNECTION (SEE SF	PECIFICATIONS)
				RAC	K	FLOW PREV	ENTER SCHEDULE		ļ	<u>T</u>	PETE'S TEST PLUG	
				D==	_	MAX	PRESSURE MAX WORKING RATED GPM FLOW			<u> </u>	MANUAL AIR VENT	
NO. BP-1	ZURN		375	BFP SIZE	E		SS (PSIG) PRESSURE (PSIG) (PSIG) SERVICE DOMESTIC	ASSE 1013		¥	AUTOMATIC AIR VENT WITH BAL	LVALVE
	20111			0			WATER		BFP		DOUBLE CHECK BACKFLOW PRE	VENTER
OTES:									RPBP			PREVENTER WITH AIR GAP DEVICE AND DRAIN
SEE FLOOR PLANS											REDUCED PRESSURE BACKFLOW	PREVENTER WITH AIR GAP DEVICE AND DRAIN
R.P.B.P. = REDUCE D.C.D.A. = DOUBLE	E CHECK DETECT										COMPANION FLANGE	
D.C.V. = DOUBLE C D.D.C.V. = DOUBLE		CK VALVE								C.O.	CLEANOUT	
R.P.B.P. TO BE FUI							AIN TO NEAREST FLOOR DRAIN.			FW/FCO	FLUSH WITH FLOOR CLEANOUT	
										FW/WCO	FLUSH WITH WALL CLEANOUT	
					IN 41				F.P.S.C.		FROSTPROOF SILL COCK / WALI	_ HYDRANI
				PLU	IMI	BING EQUIP	PMENT SCHEDULE			—∽ Н.В.	FAUCET OR HOSE BIBB	
MARK NO.	DES	SCRIPTION	м	AKE / N	MODE	EL /SIZE	REMARKS		F.D.	◎ F.D.	SANITARY FLOOR DRAIN	
							CAPACITY GAS WATER HEATER WITH A RECOVERY CAPACITY OF 2		A.F.D.	⊗ A.F.D.	ACID FLOOR DRAIN	
			A TED	۵∩	SMIT	RISE OF 90	DEG. F. WITH AN INPUT OF 199,000 BTU. SET TEMPERATURE AT	120 DEG. F. WATER HEATER	R.D.	© R.D.	ROOF DRAIN	
DWH-1/2	DOMESTIC	WATER HE	AIER		H—19	99 ADDITIONAL	RER TO FURNISH TEMPERATURE AND PRESSURE RELIEF VALVE. SE REQUIREMENTS. PROVIDE WITH UNIONS AND TEMPERATURE GAUGE	ES AT WATER INLET AND	A.D.	@ A.D.	AREA DRAIN (STORM)	
						OUTLET. VOL	TAGE SHALL BE 120V/1 PHASE, 5.0 AMPS.		D.S. R.L.	D.S. R.L.	DOWNSPOUT RAIN LEADER	
									<u>п.с.</u>	K.L.	PRESSURE GAUGE WITH GAUGE	COCK (WATER)
MX-1	DIGITAL MAS	TER MIXING	VALVE	ARMSTRO	ONG	DRV50 DIGITAL THEF	RMOSTATIC MIXING VALVE WITH INTEGRAL CHECK VALVES CAPABLE DOMESTIC HOT WATER AT A PRESSURE DROP OF 10 PSI.	OF DELIVERING 133 GPM OF	+	<u> </u>	PRESSURE GAUGE WITH BALL V.	
							ALL ALL ALL AND		 +	P	PLUMBING FIXTURE (SEE SCHED	· · ·
							DER TYPE PRECHARGED EXPANSION TANK. TANK TO HAVE AN ACCI			P PE	PLUMBING EQUIPMENT (SEE SCHED	,
EXT		C HOT WAT NSIO <u>N T</u> ANK		W/	ATTS	GALLONS @	40 PSI AND A TOTAL STORAGE CAPACITY OF 22 GALLONS. TANK		E.C.	E.C.	ELECTRICAL CONTRACTOR	·,
						I ADAK TO BE	PRECHARGED TO 40 PSIC.		F.S.C.	F.S.C.	FIRE SUPPRESSION CONTRACTOR	2
							IP AT 15 TDH. 1/2 HP 115/SINGLE PHASE. PROVIDE WITH 3-WIRE		G.C.	G.C.	GENERAL CONTRACTOR	
ESP	ELEVATO	R SUMP PL	JMP	LIBERT ELV	[Y PL V−28	UMPS REQUIRED LE	NGTH PRIOR TO ORDERING, FLOAT OPERATED MECHANICAL SWITCH FIBERGLASS BASIN. SEE SPECIFICATIONS AND DETAIL FOR ADDITIO	I. PROVIDE WITH 24" DIAMETER	H.C.	H.C.	HVAC CONTRACTOR	
				v	20		FIBERGLASS BASIN. SEE SPECIFICATIONS AND DETAIL FOR ADDITIO 5 FOR QUICK REMOVAL.		P.C.	P.C.	PLUMBING CONTRACTOR	
$\overline{}$				$\overline{}$					K.E.C.	K.E.C.	KITCHEN EQIPMENT CONSULTAN	
	DOMESTIC HOT	WATER RECO		- \			TEEL NSF CERTIFED CARTRIDGE CIRCULATOR TO BE 6 GPM WITH 1 MOTOR $HP=1/8$, 115V/1PH. CONNECTIONS-1". E.C. TO PROVIDE MO		A.D. A.F.F.	A.D. A.F.F.	ACCESS DOOR ABOVE FINISHED FLOOR	
RDHWP		PUMP		TAC	0 00	STARTER. SE	RATURE SENSOR ON THIRD FLOOR TO CONTROL PUMP.	ROVIDE AND INSTALL AQUASTAT	F.F.E.	F.F.E.	FINISHED FLOOR ELEVATION	
							ATONE SENSOR ON INKU FLOOR TO CONTROL FUMP.		MFR.	MFR.	MANUFACTURER	
									N.O.	N.O.	NORMALLY OPEN	
									N.C.	N.C.	NORMALLY CLOSED	
					A 14				TYP.	TYP.	TYPICAL	
						NO AND CLEAP	NOUTS SCHEDULE		├ ───┼		INDICATES TIE INTO EXISTING	
NO.	DESCRIPTION		MAKE/MOD ZURN NO. Z		C.	AST IRON FLOOR DRAIN WITH	REMARKS FLANGE, INTEGRAL REVERSIBLE CLAMPING COLLAR, SEEPAGE OPENINGS AND 6" DIA. NICI	KEL BRONZE VANDAL-PROOF	├ ───┼	 	INDICATES REMOVE TO POINT FO	
FD-1	FLOOR DRAIN		SERIE	S	S	TRAINER. PROVIDE WITH TRAP	2 PRIMER CONNECTION OF 4" DEEP SEAL TRAP AS NOTED ON PLANS. SINK WITH 8" SUMP, ALUMINUM DOME STRAINER AND NICKEL BRONZE HINGED TOP. PROV		L		INDIONILO NEMOVE TO POINT A	וחס שה
FD-2	FLOOR DRAIN		ZURN NO. SERIE	S	C	ONNECTION, ALUMINUM SEDIM	IENT BUCKET, AND 3/4 GRATE.	Г				7
W/FCO	FLUSH WITH FLO CLEANOUT		ZUR NO. ZN1400-V			AST IRON FLOOR CLEANOUT W LUG AND ROUND SECURED NIC	VITH SPIGOT OUTLET FOR "NO-HUB" OR "TY-SEAL" CONNECTION, THREADED ADJUSTABLE CKEL BRONZE TOP.	HOUSING, FLANGED FERRULE WITH	SI	HOCK ABSORBER	SCHEDULE	
W/WCO	FLUSH WITH WA CLEANOUT		ZUR NO. Z1440-V		СІ	LEANOUT FERRULE WITH BRAS	SS PLUG AND ROUND STAINLESS STEEL SECURED ACCESS COVER.		NO.	DESCRIPTION	REMARKS	4
									SHOCK ABSORBER	PPP	1/2", FIXTURE CAPACITY: 1-11 (PDI "A")]
									SHOCK ABSORBER	PPP	3/4", FIXTURE CAPACITY: 12-32 (PDI "B")	4
									SHOCK ABSORBER	PPP	1", FIXTURE CAPACITY: 33-60 (PDI "C")	1

PLUMBING NEW WORK GENERAL NOTES

HE GENERAL NOTES LISTED HERE APPLY TO ALL PLUMBING DRAWINGS IN ADDITION TO ADDITIONAL DRAWING NOTES ON THE INDIVIDUAL DRAWINGS.

EE CODED NOTES ON INDIVIDUAL DRAWING SHEETS FOR SPECIFIC INSTRUCTIONAL

IELD VERIFY EXISTING CONDITIONS PRIOR TO THE START OF CONSTRUCTION.

HE PLUMBING CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT LOCATION ELEVATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING WORK. PLUMBING CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES WHICH OCCURS BY HIS URE TO LOCATE OR PRESERVE THE UNDERGROUND CONDITIONS.

DURING CONSTRUCTION OPERATIONS, THE PLUMBING CONTRACTOR ENCOUNTERS ITIES OTHER THAN THOSE LOCATIONS SHOWN IN THE PLANS, HE SHALL IMMEDIATELY FY THE ENGINEER AND TAKE THE NECESSARY STEPS TO PROTECT THE FACILITY AND JRE THE CONTINUANCE OF SERVICE.

OORDINATE WITH GENERAL TRADES WORK, HVAC WORK, FIRE PROTECTION WORK, CTRICAL WORK AND OTHER WORK.

IS RECOGNIZED THAT DRAWINGS MAY BE PLOTTED AT DIFFERENT SCALES, SUCH T PLOTTED DRAWINGS MAY VARY FROM ACTUAL OR INTENDED DIMENSIONS. REFORE, DRAWINGS ARE DIAGRAMMATIC AND ARE NOT TO BE SCALED. SBM TAKES RESPONSIBILITY FOR ERRORS REGARDING DISCREPANCIES FROM THE ORIGINAL WINGS DRAWN AT THE PROPER SCALE AND THOSE DRAWINGS THAT HAVE BEEN TTFD

EE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF FIRE AND SMOKE WALLS AND ED STRUCTURES. SEE DETAILS AND SPECIFICATIONS FOR PIPE PENETRATION SEAL JIREMENTS.

HE PLUMBING DESIGN DRAWINGS ARE DIAGRAMMATIC AND ARE NOT INTENDED TO W EXACT LOCATION OF EQUIPMENT AND PIPING UNLESS DIMENSIONS ARE GIVEN OR ERWISE IMPLIED FOR CLEARANCES, ETC. PIPING AND PLUMBING EQUIPMENT ARE TO BE ALLED ALONG THE GENERAL PLANS SHOWN ON THE DRAWINGS, BUT KEEPING IN MIND JAL BUILDING CONDITIONS WHICH MUST BE CONFORMED WITH IN THE ACTUAL WORK. TRACTORS IN THEIR BIDS ARE REQUIRED TO INCLUDE ALL LABOR AND MATERIALS OTHER RELATED WORK NECESSARY TO PROVIDE MINOR OFFSETS IN PLUMBING WORK REQUIRED TO AVOID CONFLICT WITH OTHER WORK ON THIS PROJECT OR AS REQUIRED RDER TO OBTAIN MAXIMUM HEAD ROOM OR EQUIPMENT ACCESS IN SPACES.

THE PLUMBING CONTRACTOR IS TO COORDINATE ALL PIPING WITH OTHER TRADES OR TO ROUTING PIPING AND SHALL MAKE OFFSETS AND ADJUST PIPE ROUTING AS JIRED TO HANDLE CONFLICTS IN FIELD. THE PLUMBING CONTRACTOR SHALL ALSO BE JIRED TO OFFSET VERTICAL SANITARY AND VENT LINES AROUND STRUCTURAL BERS AS REQUIRED AND SHALL INCLUDE IN THEIR BASE BID THE ASSOCIATED COST ADDITIONAL FITTINGS, PIPING, AND MAN HOURS TO ACCOMMODATE CONFLICTS.

SEE ARCHITECTURAL PLANS FOR EXACT LOCATION AND ELEVATION OF PLUMBING URES.

ALL COLD WATER AND HOT WATER PIPING TO INDIVIDUAL SINKS AND INDIVIDUAL ATORIES TO BE 1/2", UNLESS OTHERWISE INDICATED.

ALL COLD WATER AND HOT WATER PIPING SERVING 3 OR LESS SINKS OR LAVS ARE BE 3/4" UNLESS NOTED OTHERWISE.

FINAL COLD WATER PIPING CONNECTIONS TO WATER CLOSETS TO BE 1/2".

UNLESS OTHERWISE NOTED SEE PLUMBING FIXTURE SCHEDULE FOR FIXTURE DRAIN, T, DCW AND DHW PIPE SIZES.

P.C. TO FURNISH WALL FLANGES AROUND ALL PIPING EXPOSED BELOW CEILING AND EWORK.

P.C. TO COORDINATE ALL SHOWER UNITS WITH G.C. TO ENSURE PROPER ALLATION, ROUGH-IN, AND CLEARANCE REQUIREMENTS PRIOR TO ORDERING AND ALLATION. COORDINATE ANY CHANGE IN SIZE OR CONFIGURATION WITH ARCHITECT.

P.C. TO COORDINATE ALL COUNTERTOP SINKS WITH CASEWORK TO ENSURE PROPER ALLATION AND CLEARANCE REQUIREMENTS PRIOR TO ORDERING AND INSTALLATION. RDINATE ANY CHANGE IN SIZE OR CONFIGURATION WITH PROJECT ENGINEER AND HITECT.

SEE PLUMBING ISOMETRICS FOR SANITARY PIPE SIZES NOT INDICATED ON FLOOR IS. 20. UNLESS OTHERWISE INDICATED, ALL PIPING TO RUN GENERALLY BELOW TWORK FOR ACCESS TO VALVING. DO NOT OBSTRUCT EQUIPMENT OR ACCESS DOORS. THE PLUMBING CONTRACTOR IS TO INSTALL HOUSEKEEPING PADS FOR ALL PLUMBING

IPMENT UNITS.

SEE PROJECT SPECIFICATIONS FOR CUTTING AND PATCHING RESPONSIBILITIES.

FINAL FLOOR DRAIN ELEVATIONS ARE TO BE SET BY THE PLUMBING CONTRACTOR. RDINATE EXACT POSITIONING OF FLOOR DRAINS WITH HVAC CONTRACTOR TO SERVE EQUIPMENT AS INTENDED, AND TO AVOID TRIPPING HAZARDS WITH ABOVE FLOOR IN PIPING.

PLUMBING FIXTURE NUMBERS ARE SHOWN ON WASTE PLANS AND REFERS TO MBING FIXTURE SCHEDULE.

ACCESS PANELS ARE TO BE FURNISHED AND INSTALLED BY THE PLUMBING TRACTOR. THE PLUMBING CONTRACTOR IS TO COORDINATE LOCATION AND ALLATION OF VALVES, SHOCK STOPS, AND CLEANOUTS ABOVE ACCESS PANEL WITH AND ARCHITECTURAL DRAWINGS TO MINIMZE SIZE OF PANELS.

DRAIN VALVES WITH HOSE ADAPTORS ARE TO BE INSTALLED AT THE BASE OF ALL , DHW, AND RDHW RISERS.

EQUIPMENT CONNECTION ARRANGEMENTS, FLANGES, UNIONS, VALVING, ETC. ARE NOT CALLY SHOWN ON PLAN VIEWS. REFER TO DETAILS AND FLOW DIAGRAMS FOR JIREMENTS. INSTALL ALL VALVES AND OTHER ITEMS REQUIRING OR FACILITATING ITENANCE IN ACCESSIBLE LOCATIONS, AND SO AS TO NOT OBSTRUCT MAINTENANCE EQUIPMENT SERVED.



1 BULLETIN 01 - 07/17/2023 2 BULLETIN 03 - 10/16/2023



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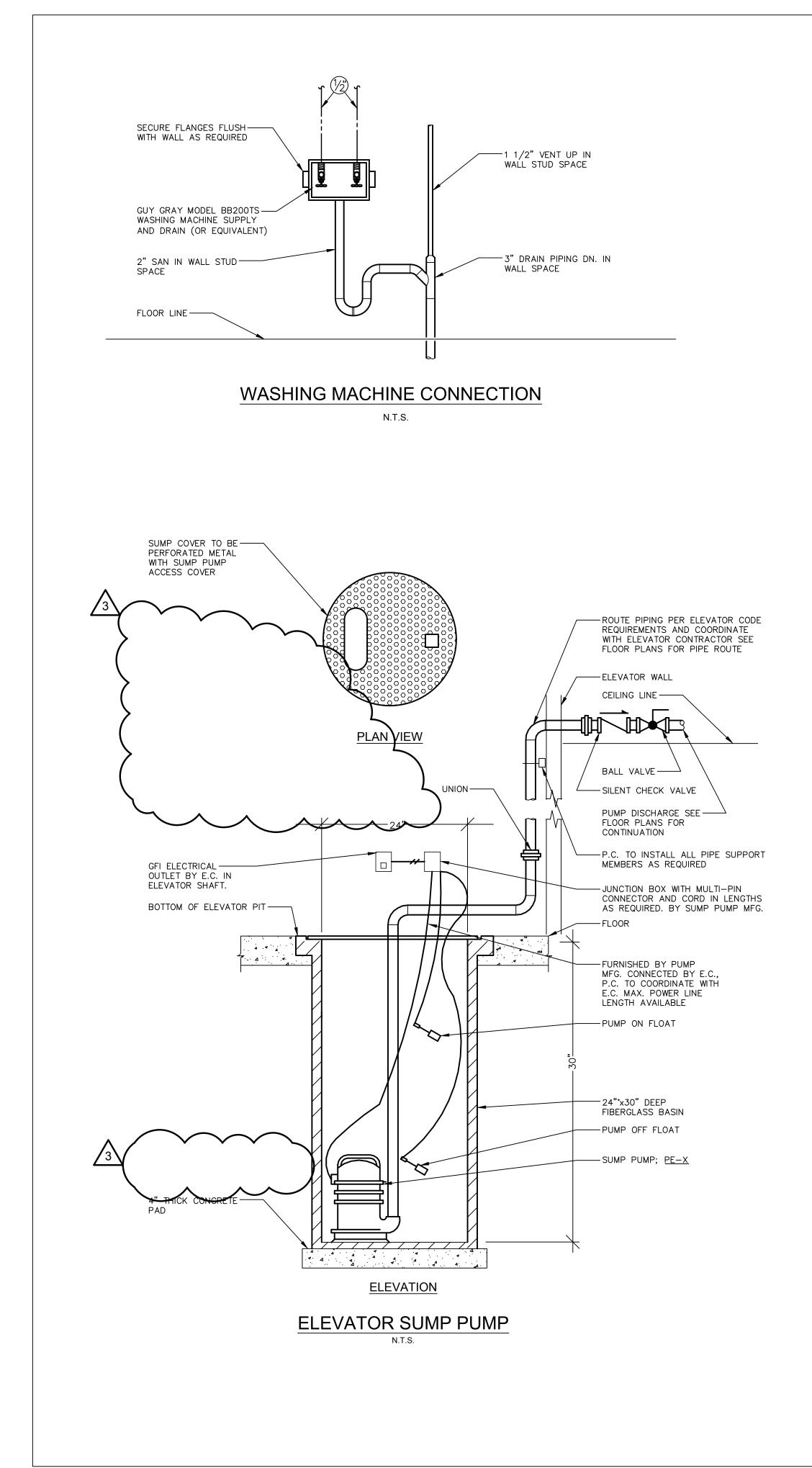
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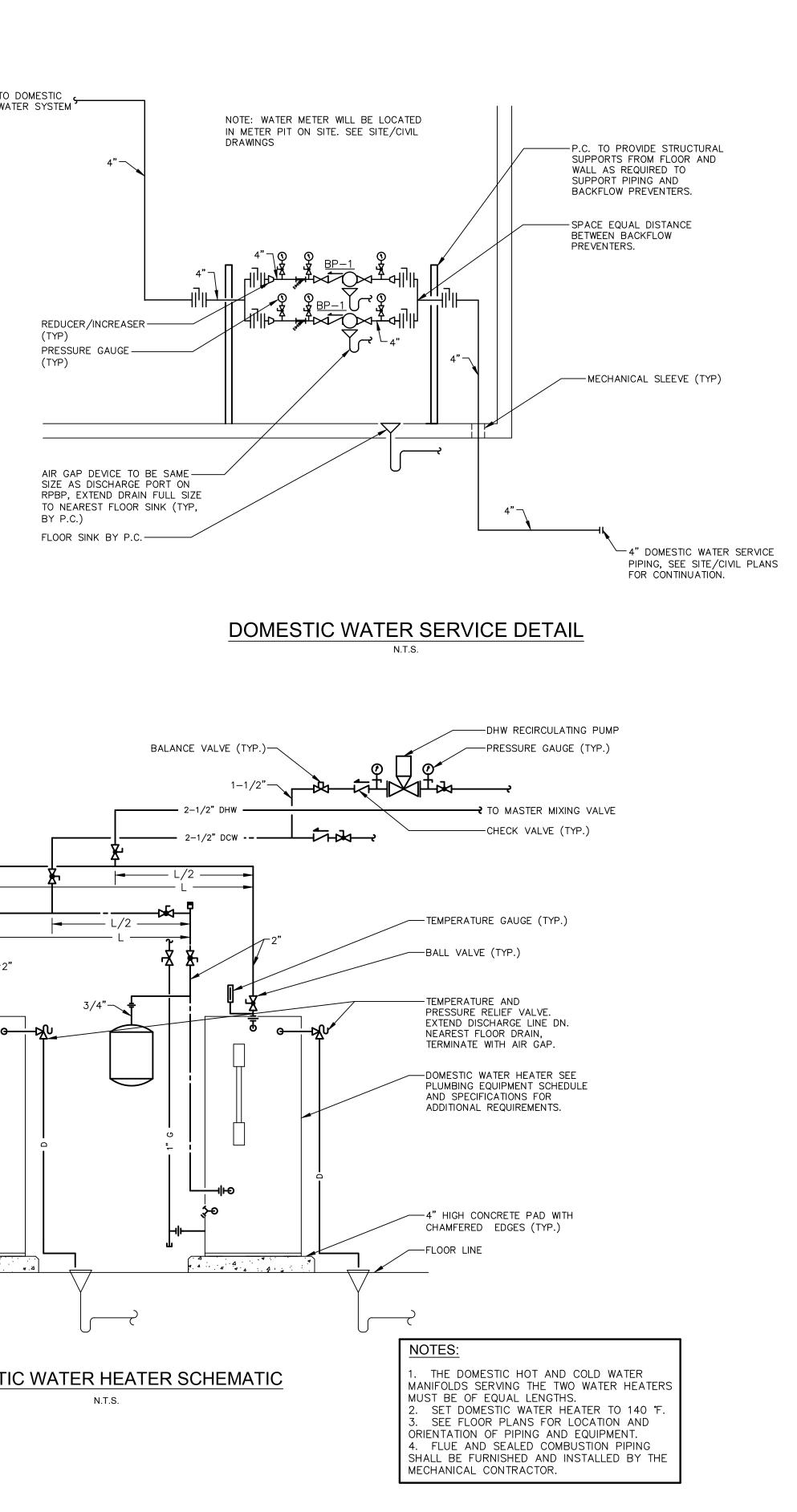
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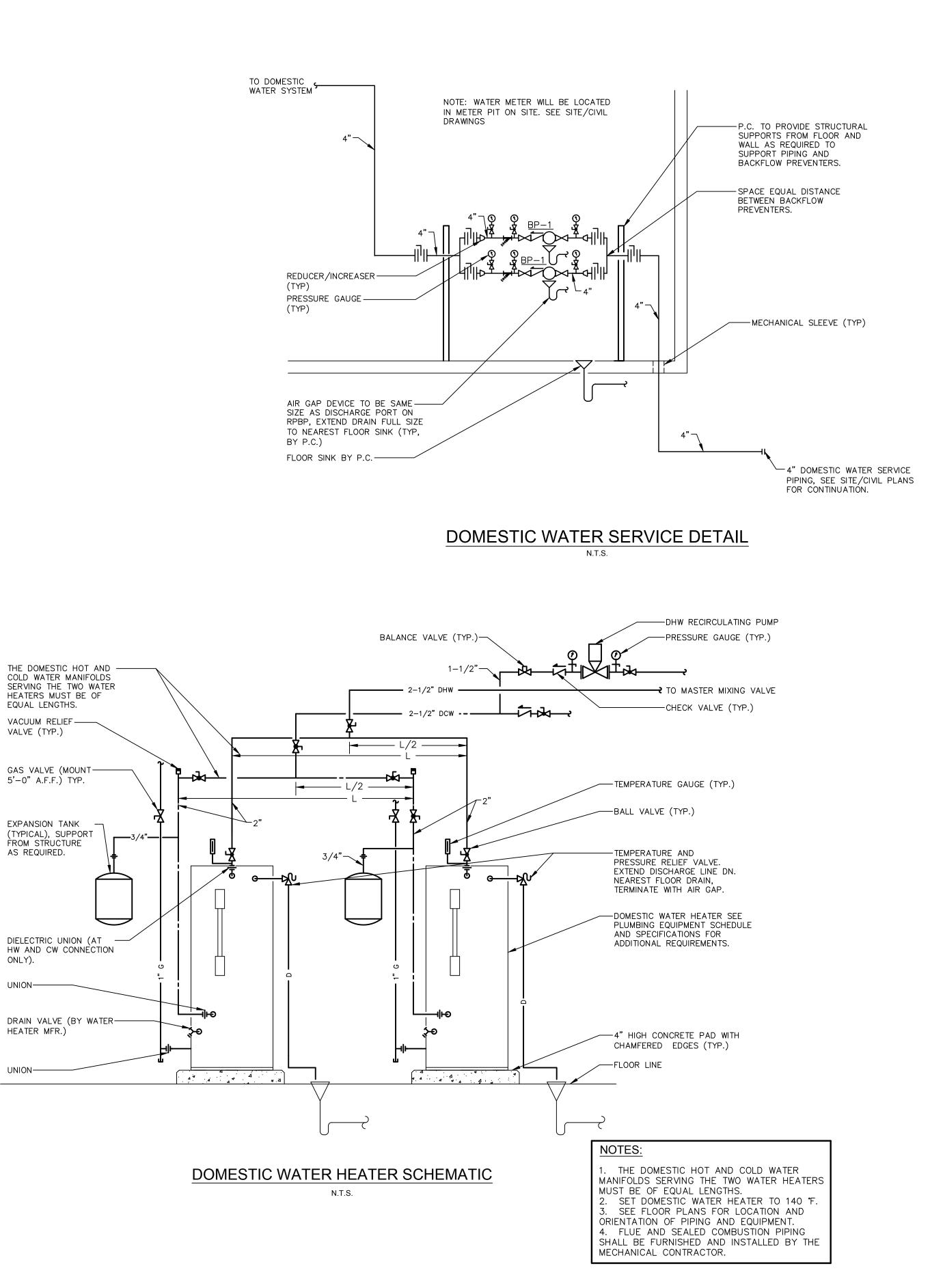
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P001

DRAWING NUMBER







SCHOONOVER E-62197 Chief. Schammer 3/31/23 SIGNATOR DATE REVISIONS 1 BULLETIN 01 - 07/17/2023 2 BULLETIN 02 - 09/19/2023 3 BULLETIN 03 - 10/16/2023

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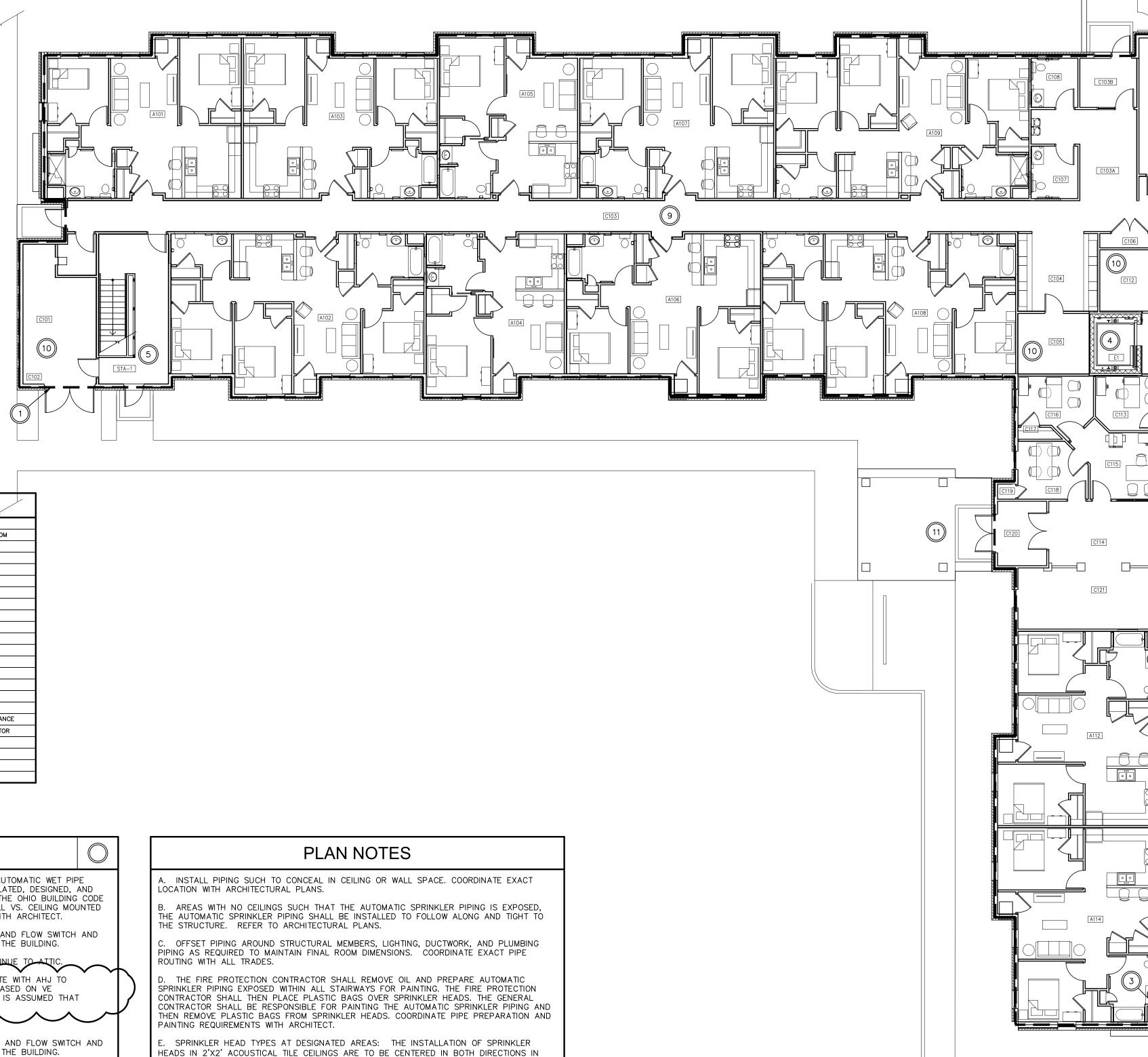
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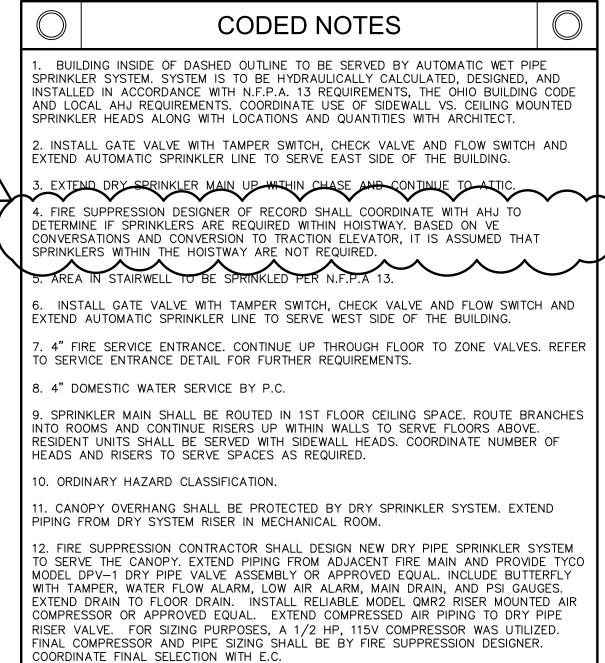
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82A21 PROJECT NUMBER





	ROOM L	EGEN	ND x
A101	TWO BEDROOM MU	C108	TOILET
A102	THREE BEDROOM	C109	COMMUNITY ROOM
A103	TWO BEDROOM	C110	STORAGE
A104	ONE BEDROOM	C111	KITCHEN
A105	ONE BEDROOM	C111A	PANTRY
A106	TWO BEDROOM	C112	STORAGE
A107	TWO BEDROOM	C113	OFFICE
A108	THREE BEDROOM	C114	LOBBY
A109	THREE BEDROOM	C115	OFFICE
A112	TWO BEDROOM	C116	OFFICE
A113	TWO BEDROOM	C117	STORAGE
A114	TWO BEDROOM	C118	CONF.
A115	ONE BEDROOM MU	C119	STORAGE
A117	TWO BEDROOM	C120	VEST.
C101	TRASH	C121	WAITING
C102	TRASH COMPACTOR	C122	CORRIDOR
C103	CORRIDOR	C123	TRASH
C103A	CORRIDOR	C124	MECH / MAINTENANCE
C103B	VEST	C125	TRASH COMPACTOR
C104	MAIL	C126	MECH
C105	STORAGE	E1	ELEV.
C106	DATA	STA-1	STAIRS
C107	TOILET	STB-1	STAIR B



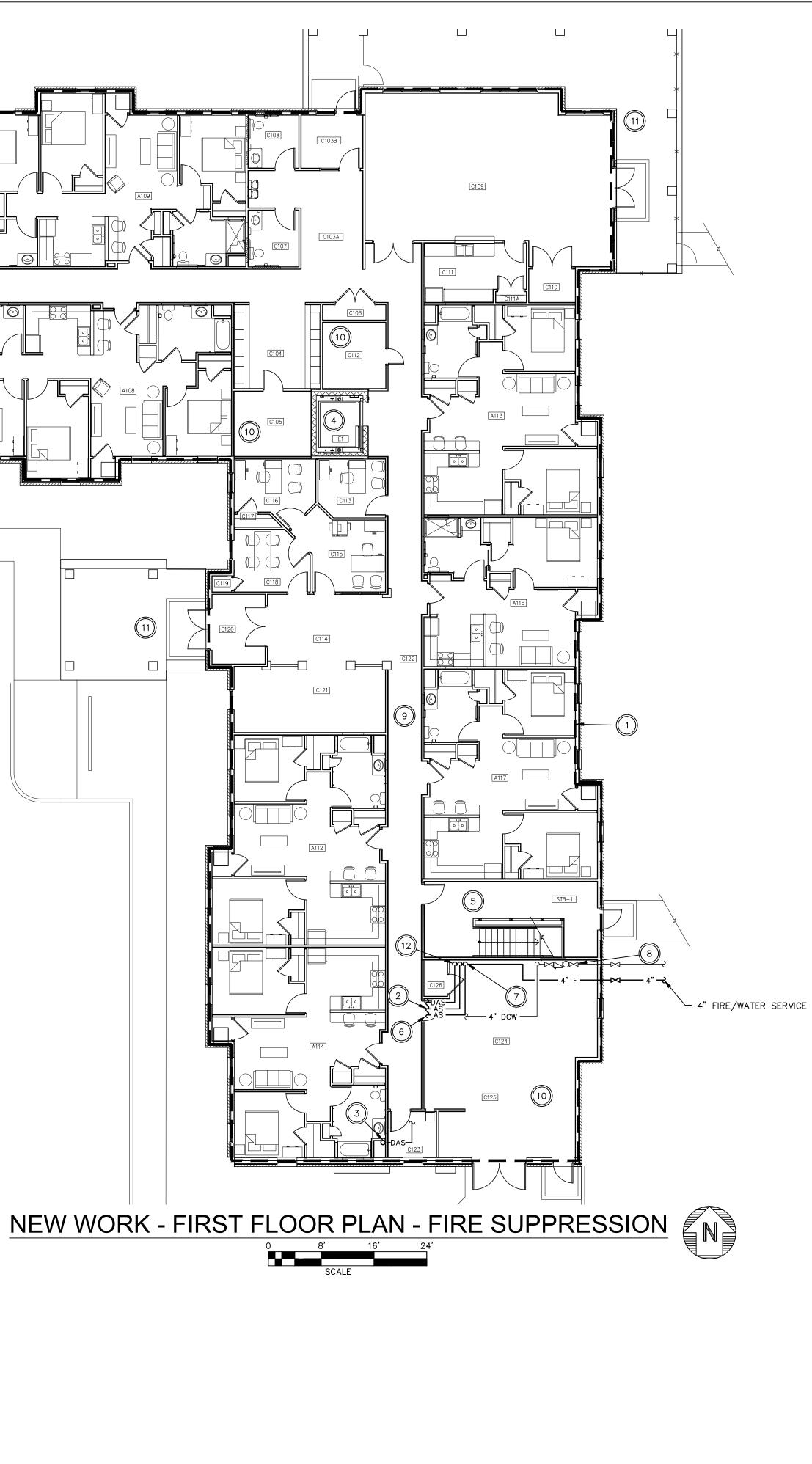
2'X4' TILES AS NOTED BELOW. IN GYPSUM AND EXPOSED CEILINGS, INSTALL SPRINKLER HEADS SYMMETRICALLY IN A STRAIGHT LINE. MAINTAIN A SYMMETRICAL PATTERN FOR ALL CEILING TYPES FOR AN AESTHETICALLY PLEASING EFFECT. COORDINATE WITH ARCHITECTURAL REFLECTED CEILING PLAN.

F. ALL FINISHED CEILINGS UNLESS NOTED OTHERWISE (SUSPENDED LAY-IN AND GYPSUM): SPRINKLERS ARE TO BE SEMI RECESSED PENDANT TYPÈ. COORDINATE WITH ARCHITECTURAL REFLECTED CEILING PLAN.

G. EXPOSED CEILINGS: SPRINKLERS ARE TO BE UPRIGHT TYPE. PROVIDE SPRINKLER HEAD GUARDS IN ALL AREAS SUBJECTED TO DAMAGE SUCH AS MECHANICAL ROOMS, ELECTRICAL ROOMS, AND STORAGE ROOMS. COORDINATE WITH ARCHITECTURAL REFLECTED CEILING PLAN. H. REFER TO ARCHITECTURAL DRAWINGS FOR CLARIFICATION TO OPEN SPACES. PIPING CAN NOT EXTEND THROUGH THE MIDDLE OF OPEN SPACES. PIPING IS TO BE INSTALLED TIGHT TO

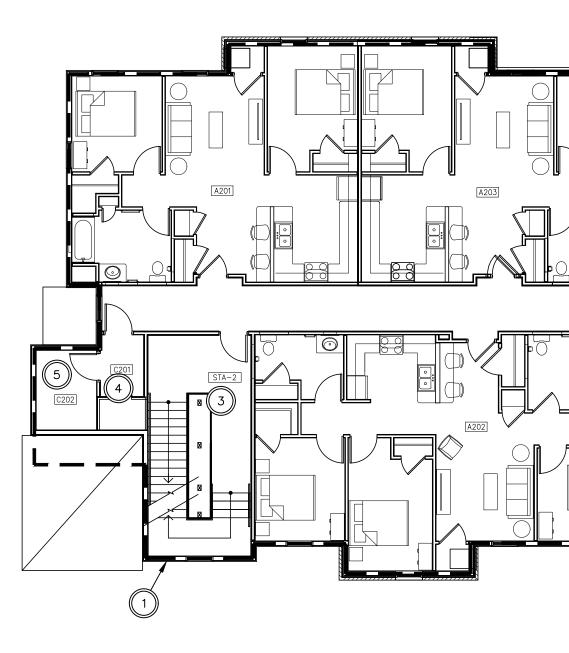
STRUCTURE.

. DO NOT INSTALL AUTOMATIC SPRINKLER PIPING DIRECTLY ABOVE ELECTRICAL EQUIPMENT OR PANELS. COORDINATE INSTALLATION WITH ELECTRICAL CONTRACTOR PRIOR TO CONSTRUCTION.



THE PROFESSION		
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	REVISIONS	6
	_ETIN 01 - 07/	17/2023
	LETIN 03 - 10/	16/2023





	ROOM LEGEND													
A201	TWO BEDROOM	A217	ONE BEDROOM											
A202	THREE BEDROOM	A219	TWO BEDROOM											
A203	TWO BEDROOM	A221	ONE BEDROOM MU											
A204	ONE BEDROOM	C201	TRASH											
A205	ONE BEDROOM	C202	STORAGE											
A206	TWO BEDROOM	C203	CORRIDOR											
A207	TWO BEDROOM	C204	LAUNDRY											
A208	THREE BEDROOM MU	C205	DATA											
A209	THREE BEDROOM	C206	STORAGE											
A210	THREE BEDROOM	C207	COMPUTERS											
A211	TWO BEDROOM	C208	CORRIDOR											
A212	TWO BEDROOM	C209	TRASH											
A213	ONE BEDROOM	E1	ELEV.											
A214	TWO BEDROOM	STA-2	STAIR A											
A215	TWO BEDROOM S&H	STB-2	STAIR B											

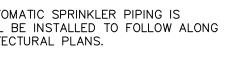
\bigcirc	CODED NOTES	\bigcirc	PLAN NOTES
SPRINK INSTAL AND LC FIRST I SIDEWA HEAD I 2. FIRE DETERN CONVEI SPRINK 3. ARE 4. PRC	ILDING INSIDE OF DASHED OUTLINE TO BE SERVED BY AUTOMATIC WET PIL LER SYSTEM. SYSTEM IS TO BE HYDRAULICALLY CALCULATED, DESIGNED, LED IN ACCORDANCE WITH N.F.P.A. 13 REQUIREMENTS, THE OHIO BUILDING OCAL AHJ REQUIREMENTS. FIRE SUPPRESSION PIPING TO BE ROUTED UP F FLOOR MAINS BELOW UP WITHIN STUD WALLS TO SERVE THIS FLOOR. INST ALL SPRINKLER HEADS TO SERVE ROOMS. COORDINATE FINAL SIDEWALL SF LOCATIONS AND QUANTITIES WITH ARCHITECT PRIOR TO INSTALLATION. E SUPPRESSION DESIGNER OF RECORD SHALL COORDINATE WITH AHJ TO MINE IF SPRINKLERS ARE REQUIRED WITHIN HOISTWAY. BASED ON VE RSATIONS AND CONVERSION TO TRACTION ELEVATOR, IT IS ASSUMED THA LERS WITHIN THE HOISTWAY ARE NOT REQUIRED. A IN STAIRWELL TO BE SPRINKLED PER N.F.P.A 13. DTECT TRASH CHUTE IN ACCORDANCE WITH NFPA 13. DINARY HAZARD CLASSIFICATION.	AND G CODE FROM TALL PRINKLER	 A. INSTALL PIPING SUCH TO CONCEAL IN CEILING OR WALL SPACE. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS. B. AREAS WITH NO CEILINGS SUCH THAT THE AUTOMATIC SPRINKLER PIPING IS EXPOSED, THE AUTOMATIC SPRINKLER PIPING SHALL BE INSTALLED TO FOLLOW ALONG AND TIGHT TO THE STRUCTURE. REFER TO ARCHITECTURAL PLANS. C. OFFSET PIPING AROUND STRUCTURAL MEMBERS, LIGHTING, DUCTWORK, AND PLUMBING PIPING AS REQUIRED TO MAINTAIN FINAL ROOM DIMENSIONS. COORDINATE EXACT PIPE ROUTING WITH ALL TRADES. D. THE FIRE PROTECTION CONTRACTOR SHALL REMOVE OIL AND PREPARE AUTOMATIC SPRINKLER PIPING EXPOSED WITHIN ALL STAIRWAYS FOR PAINTING, THE FIRE PROTECTION CONTRACTOR SHALL BE RESPONSIBLE FOR PAINTING. THE AUTOMATIC SPRINKLER PIPING AND THEN REMOVE PLASTIC BAGS OVER SPRINKLER HEADS. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PAINTING THE AUTOMATIC SPRINKLER PIPING AND THEN REMOVE PLASTIC BAGS FROM SPRINKLER HEADS. COORDINATE PIPE PREPARATION AND PAINTING REQUIREMENTS WITH ARCHITECT. E. SPRINKLER HEAD TYPES AT DESIGNATED AREAS: THE INSTALLATION OF SPRINKLER HEADS. COORDINATE PIPE PREPARATION AND PAINTING REQUIREMENTS WITH ARCHITECT. E. SPRINKLER HEAD TYPES AT DESIGNATED AREAS: THE INSTALLATION OF SPRINKLER HEADS. SYMMETRICALLY IN A STRAIGHT LINE. MAINTAIN A SYMMETRICAL PATTERN FOR ALL CEILING TYPES FOR AN AESTHETICALLY PLEASING EFFECT. COORDINATE WITH ARCHITECTURAL REFLECTED CEILING PLAN. F. ALL FINISHED CEILINGS UNLESS NOTED OTHERWISE (SUSPENDED LAY-IN AND GYPSUM): SPRINKLERS ARE TO BE UPRIGHT TYPE. PROVIDE SPRINKLER HEAD SUBJECTED TO DAMAGE SUCH AS MECHANICAL ROOMS, ELECTRICAL ROOMS, AND STORAGE ROOMS. COORDINATE WITH ARCHITECTURAL REFLECTED CEILING PLAN. G. EXPOSED CEILINGS AND STORAGE ROOMS. COORDINATE WITH ARCHITECTURAL REFLECTED CEILING PLAN. G. EXPOSED CEILINGS AND STORAGE ROOMS. COORDINATE WITH ARCHITECTURAL REFLECTED CEILING PLAN. H. REFER TO ARCHITECTURAL DRAWINGS FOR CLARIFICATION TO OPEN SPACES. PIPING IS TO BE INSTALLED TIGHT

PRIOR TO CONSTRUCTION.

(SUSPENDED LAY-IN AND DANT TYPE. COORDINATE WITH

E OIL AND PREPARE AUTOMATIC R PAINTING. THE FIRE BAGS OVER SPRINKLER HEADS. DR PAINTING THE AUTOMATIC ROM SPRINKLER HEADS.

GHTING, DUCTWORK, AND OM DIMENSIONS. COORDINATE

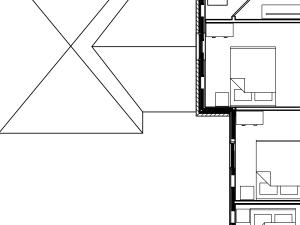


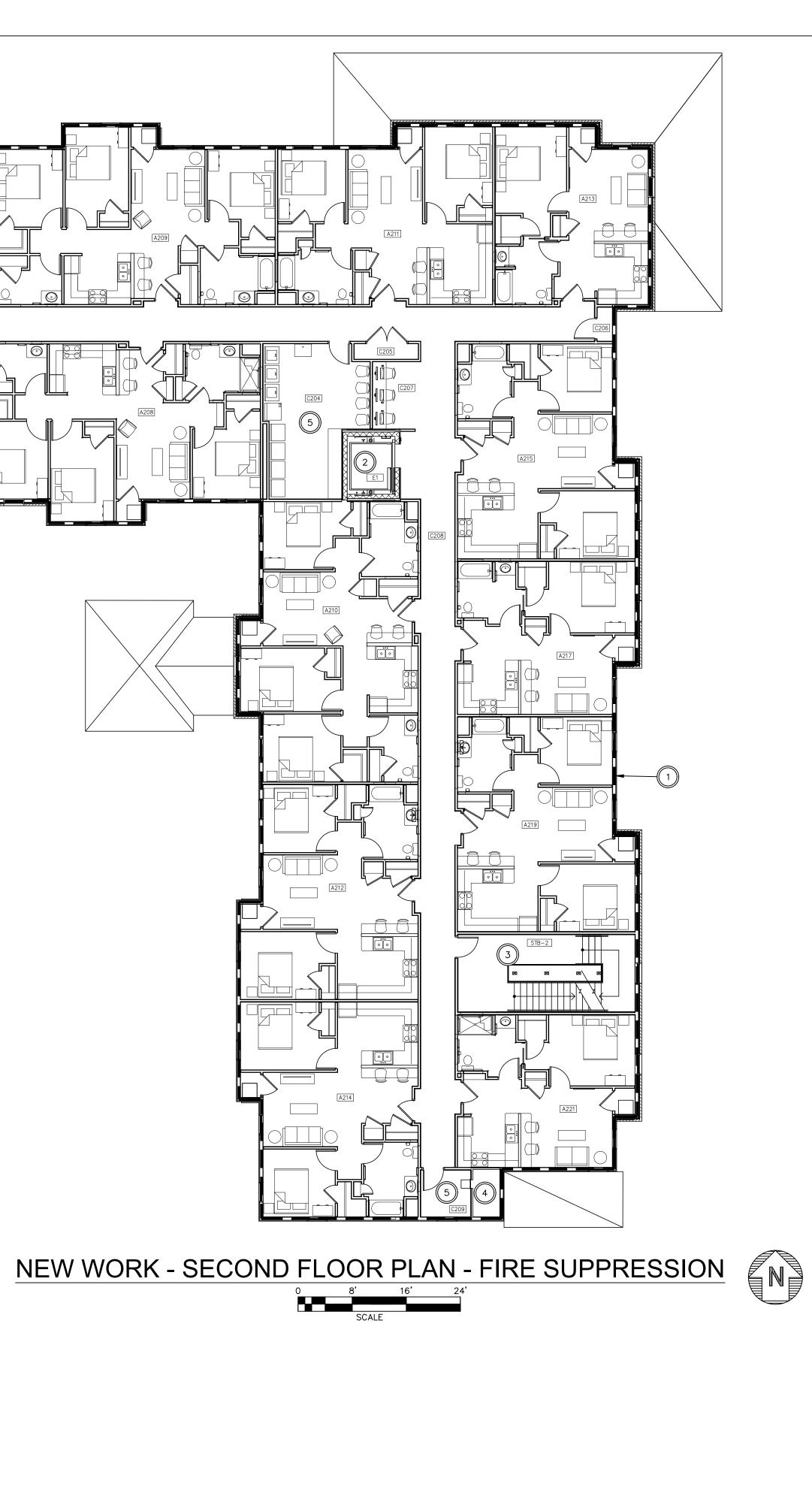




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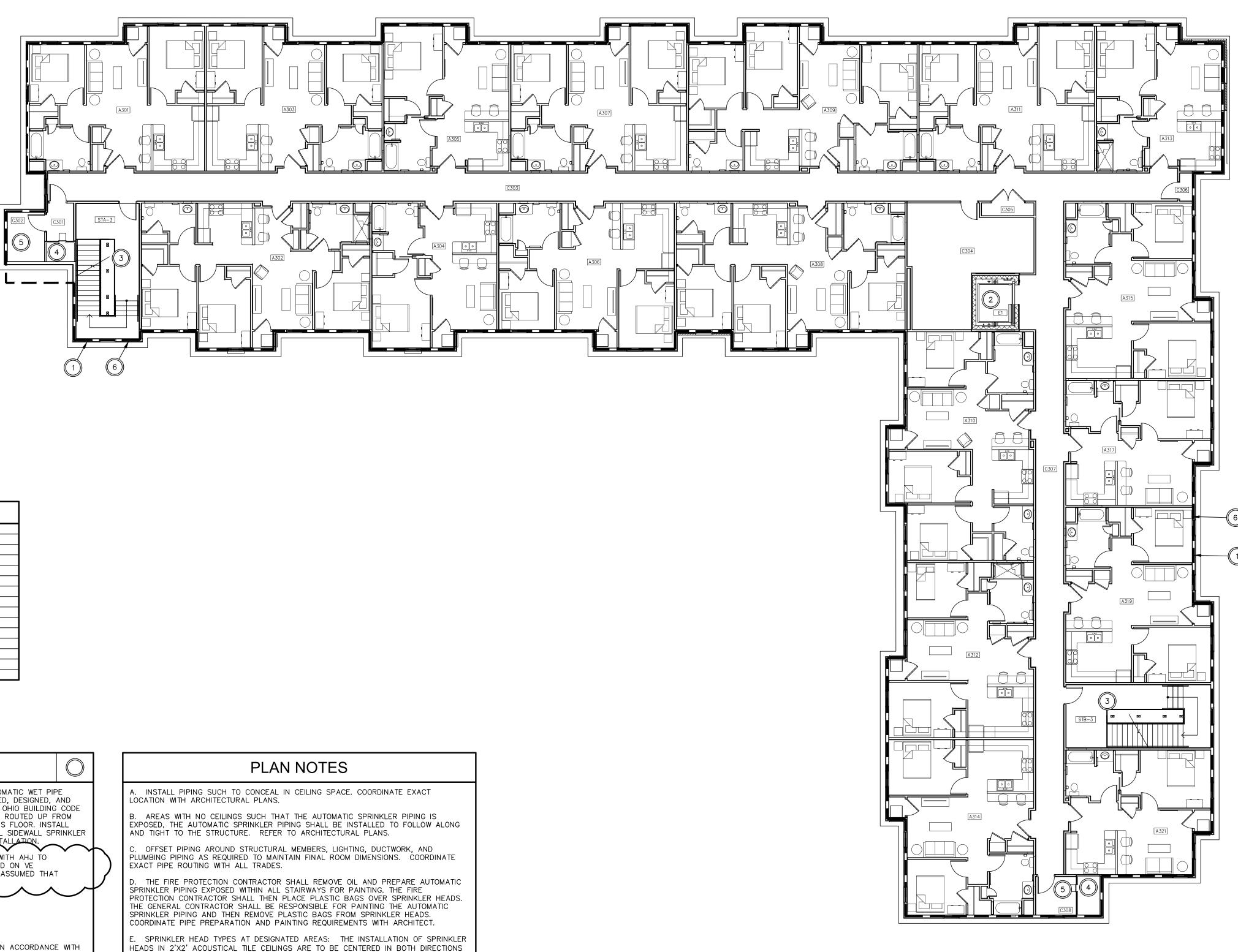
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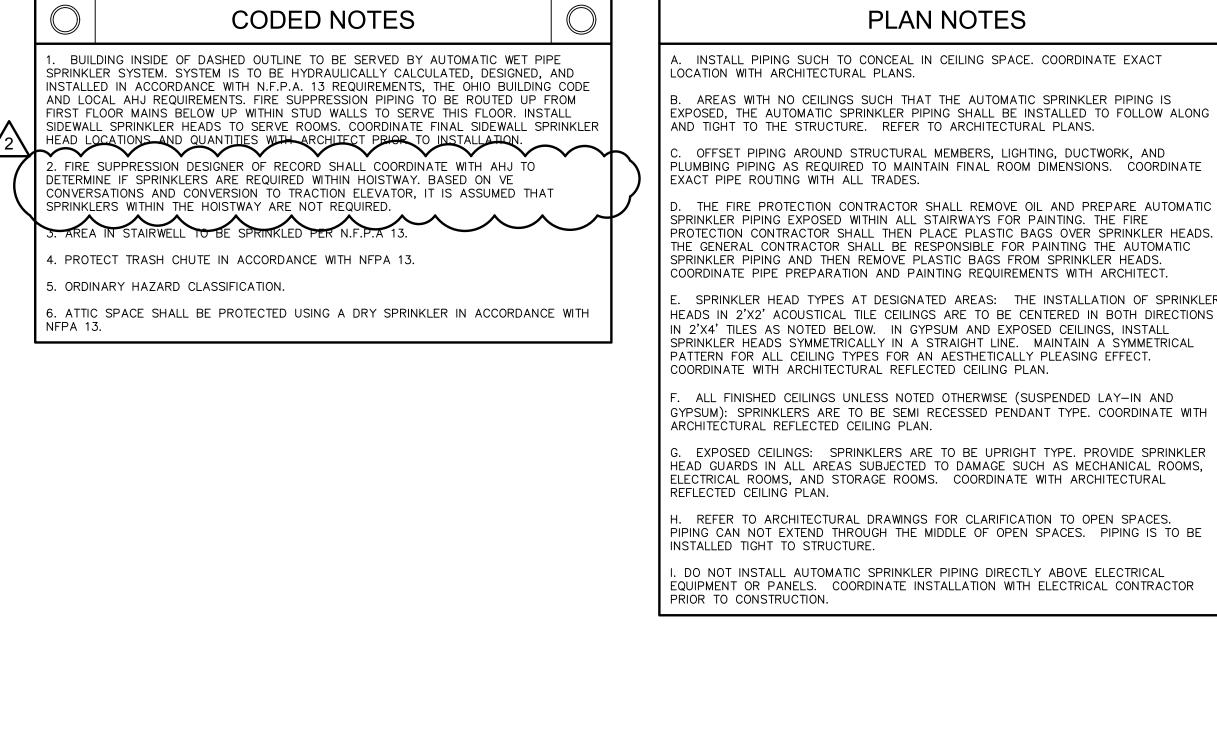


PROFESSION	C. J. SCHOONOVER E-62197	
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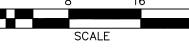




ROOM LEGEND												
A301	TWO BEDROOM	A317	ONE BEDROOM									
A302	THREE BEDROOM MU	A319	TWO BEDROOM									
A303	TWO BEDROOM	A321	ONE BEDROOM									
A304	ONE BEDROOM	C301	TRASH									
A305	ONE BEDROOM	C302	STORAGE									
A306	TWO BEDROOM	C303	CORRIDOR									
A307	TWO BEDROOM	C304	FITNESS									
A308	THREE BEDROOM	C305	DATA									
A309	THREE BEDROOM	C306	STORAGE									
A310	THREE BEDROOM	C307	CORRIDOR									
A311	TWO BEDROOM	C308	TRASH									
A312	TWO BEDROOM MU	E1	ELEV.									
A313	ONE BEDROOM MU	STA-3	STAIR A									
A314	TWO BEDROOM	STB-3	STAIR B									
A315	TWO BEDROOM											



NEW WORK - THIRD FLOOR PLAN - FIRE SUPPRESSION



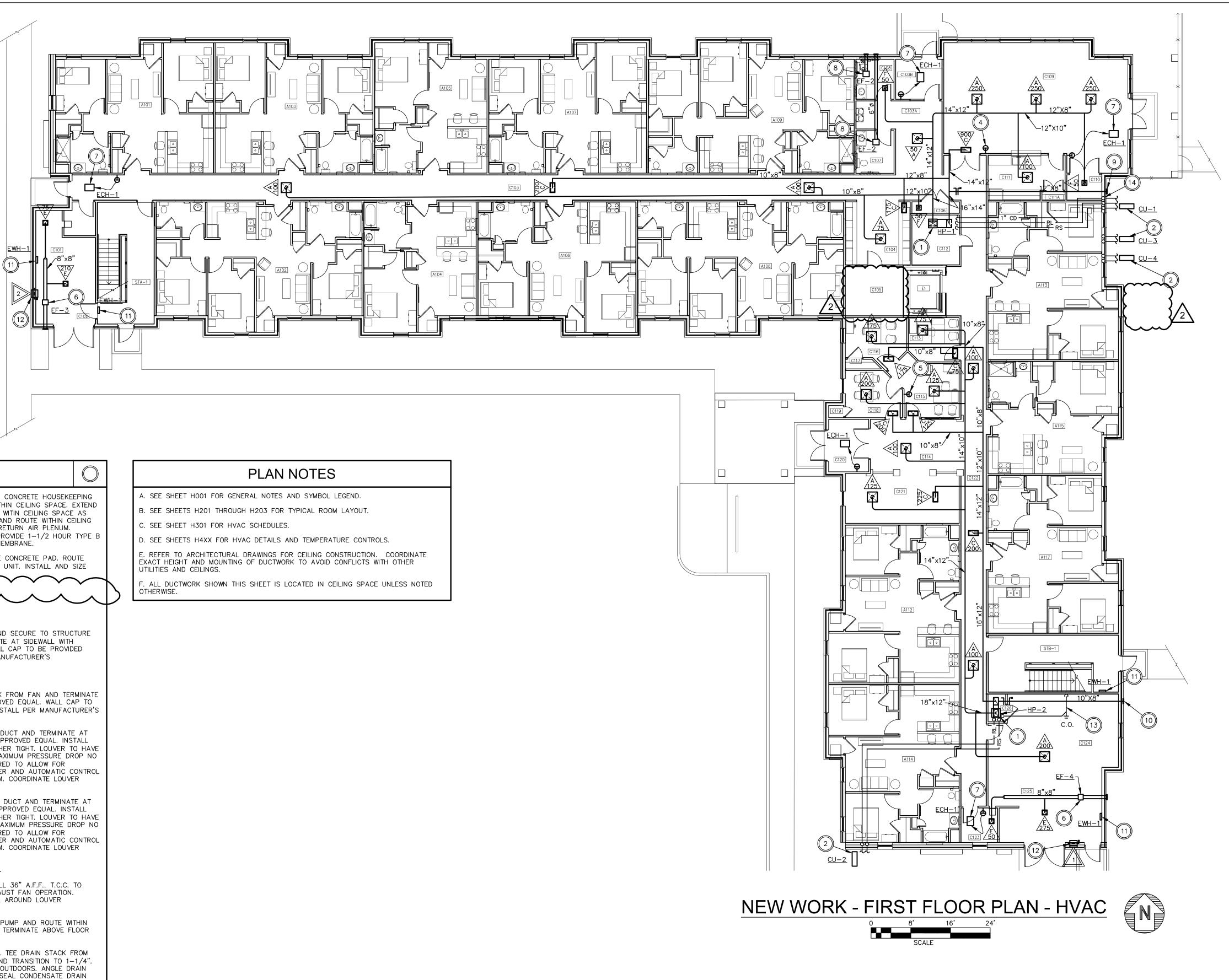


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	ROOM	I LEGEN	1D
A101	TWO BEDROOM MU	C108	TOILET
A102	THREE BEDROOM	C109	COMMUNITY ROOM
A103	TWO BEDROOM	C110	STORAGE
A104	ONE BEDROOM	C111	KITCHEN
A105	ONE BEDROOM	C111A	PANTRY
A106	TWO BEDROOM	C112	STORAGE
A107	TWO BEDROOM	C113	OFFICE
A108	THREE BEDROOM	C114	LOBBY
A109	THREE BEDROOM	C115	OFFICE
A112	TWO BEDROOM	C116	OFFICE
A113	TWO BEDROOM	C117	STORAGE
A114	TWO BEDROOM	C118	CONF.
A115	ONE BEDROOM MU	C119	STORAGE
A117	TWO BEDROOM	C120	VEST.
C101	TRASH	C121	WAITING
C102	TRASH COMPACTOR	C122	CORRIDOR
C103	CORRIDOR	C123	TRASH
C103A	CORRIDOR	C124	MECH / MAINTENANCE
C103B	VEST	C125	TRASH COMPACTOR
C104	MAIL	C126	MECH
C105	STORAGE	E1	ELEV.
C106	DATA	STA-1	STAIRS
C107	TOILET	STB-1	STAIR B



CODED NOTES VERTICAL AIR SOURCE HEAT PUMP. MOUNT ON 4" HIGH CONCRETE HOUSEKEEPING PAD. EXTEND RL/RS PIPING UP FROM UNIT AND ROUTE WITHIN CEILING SPACE. EXTEND 1" CONDENSATE DRAIN FROM UNIT AND ROUTE CONCEALED WITIN CEILING SPACE AS SHOWN. EXTEND S.A. AND R.A. DUCTWORK UP FROM UNIT AND ROUTE WITHIN CEILING SPACE AS SHOWN. UNIT TO BE MOUNTED ON FIELD BUILT RETURN AIR PLENUM. REINFORCE PLENUM TO CARRY FULL HEAT PUMP WEIGHT. PROVIDE 1-1/2 HOUR TYPE B FIRE DAMPERS WHERE S.A. AND R.A. PENETRATE CEILING MEMBRANE. AIR COOLED CONDENSING UNIT. MOUNT ON FROST FREE CONCRETE PAD. ROUTE RL/RS PIPING DOWN IN WALL AND EXTEND TO CONDENSING UNIT. INSTALL AND SIZE 4 THERMOSTA 5. THERMOSTAT SERVING HP-2. 6. INLINE EXHAUST FAN. MOUNT WITHIN CEILING SPACE AND SECURE TO STRUCTURE ABOVE. EXTEND 8"X8" DUCTWORK FROM FAN AND TERMINATE AT SIDEWALL WITH GREENHECK WC-8X8 WALL CAP OR APPROVED EQUAL. WALL CAP TO BE PROVIDED WITH INTEGRAL DAMPER AND BIRDSCREEN. INSTALL PER MANUFACTURER'S RECOMMENDATIONS AND SEAL WEATHER TIGHT. 7. ELECTRIC CEILING HEATER. 8. CEILING MOUNTED EXHAUST FAN. EXTEND 6" DUCTWORK FROM FAN AND TERMINATE AT SIDEWALL WITH GREENHECK WC-6 WALL CAP OR APPROVED EQUAL. WALL CAP TO BE PROVIDED WITH INTEGRAL DAMPER AND BIRDSCREEN. INSTALL PER MANUFACTURER'S RECOMMENDATIONS AND SEAL WEATHER TIGHT. 9. EXTEND 12"X8" O.A. DUCTWORK FROM HEAT PUMP R.A. DUCT AND TERMINATE AT SIDEWALL WITH GREENHECK ESD-635-20X20 LOUVER OR APPROVED EQUAL. INSTALL PER MANUFACTURER'S RECOMMENDATIONS AND SEAL WEATHER TIGHT. LOUVER TO HAVE A FREE AREA OF NO LESS THAN 1.1 SQUARE FEET AND MAXIMUM PRESSURE DROP NO GREATER THAN 0.03"WC. TRANSITION DUCTWORK AS REQUIRED TO ALLOW FOR CONNECTION TO LOUVER. INSTALL MANUAL BALANCE DAMPER AND AUTOMATIC CONTROL DAMPER WITHIN O.A. DUCTWORK AND BALANCE TO 405 CFM. COORDINATE LOUVER FINISH COLOR WITH ARCHITECT PRIOR TO ORDERING. 10. EXTEND 10"X8" O.A. DUCTWORK FROM HEAT PUMP R.A. DUCT AND TERMINATE AT SIDEWALL WITH GREENHECK ESD-635-16X16 LOUVER OR APPROVED EQUAL. INSTALL PER MANUFACTURER'S RECOMMENDATIONS AND SEAL WEATHER TIGHT. LOUVER TO HAVE A FREE AREA OF NO LESS THAN 0.6 SQUARE FEET AND MAXIMUM PRESSURE DROP NO GREATER THAN 0.03"WC. TRANSITION DUCTWORK AS REQUIRED TO ALLOW FOR CONNECTION TO LOUVER. INSTALL MANUAL BALANCE DAMPER AND AUTOMATIC CONTROL DAMPER WITHIN O.A. DUCTWORK AND BALANCE TO 240 CFM. COORDINATE LOUVER FINISH COLOR WITH ARCHITECT PRIOR TO ORDERING. 11. ELECTRIC WALL HEATER, SURFACE MOUNT. SEE DETAILS. 12. WALL MOUNTED LOUVER WITH CONTROL DAMPER, INSTALL 36" A.F.F.. T.C.C. TO INTERLOCK DAMPER OPERATION WITH CORRESPONDING EXHAUST FAN OPERATION. DAMPER SHALL FAIL TO NORMALLY CLOSED POSITION. SEAL AROUND LOUVER PENETRATION WEATHER TIGHT. 13. EXTEND 1" CONDENSATE DRAIN PIPING UP FROM HEAT PUMP AND ROUTE WITHIN CEILING SPACE AS SHOWN. DROP PIPING ALONG WALL AND TERMINATE ABOVE FLOOR DRAIN TO AVOID TRIP HAZARD. 14. 1-1/4" CONDENSATE DRAIN PIPE FROM FLOORS ABOVE. TEE DRAIN STACK FROM FLOORS ABOVE INTO 1" CONDENSATE DRAIN FROM HP-1 AND TRANSITION TO 1-1/4". EXTEND CONDENSATE PIPING THROUGH EXTERIOR WALL TO OUTDOORS. ANGLE DRAIN PIPE DOWNWARD TO DRAIN ONTO EXTERIOR LANDSCAPING. SEAL CONDENSATE DRAIN WALL PENETRATIONS WEATHER TIGHT.

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BULLETIN 01 - 07/17/2	023
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	\sum	DIFFUSER, REGISTER, & GRILLE SCHEDULE																\bigtriangleup																											
MARK		E MODE	EL DAM		MOUNTING	NOMINAL	MAX																	REMARKS																					
						FACE SIZE	NC	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	575	600	625	650	675	700	725	750	775	800	825	850	875	900	950	1000	NEWARKS
A	TITUS	S OMN	I DU	ЛСТ	CEILING	24x24	20	6	6	6	8	8	8	8	8	8	8	8	10	10	10	10	10	12	12	12	12	12	14	14	14	14	14	14	14	-	-	-	-	-	-	-	-	-	SQUARE PLAQUE S.A. DIFFUSER, PROVIDE WITH 1 HOUR RATED CEILING RADIATION DAMPER
В	TITUS	S 300R	L OE	BD	CEILING	VARIES	20	10x6	12x8	12x8	12x8	12x8	12x8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DOUBLE DEFLECTION S.A. GRILLE, PROVIDE WITH 1 HOUR RATED CEILING RADIATION DAMPER						
С	TITUS	S PAR	DU	лст	CEILING	12x24	20	10x22	10x22	10x22	10x22	10x22	10x22 1	0x22 1	10x22	PERFORATED FACE R.A. DIFFUSER, PROVIDE WITH 1 HOUR RATED CEILING RADIATION DAMPER																													
D	TITUS	S 350R	L DU	ЛСТ	SURFACE	VARIES	20	6x6	6x6	8x6	8x6	8x6	8x6	12x6	12x6	12x6	12x8	12x8	12x8	12x8	12x10	12x10	12x10	8x10 1	18x10	18x12	18x12	18x12	18x12	18x12	18x12	-	-	-	-	-	-	LOUVERED R.A. GRILLE, PROVIDE WITH 1 HOUR RATED CEILING RADIATION DAMPER							
E	TITUS	S 350R	L DU	лст	CEILING	VARIES	20	6x6	6x6	6x6	8x8	8x8	8x8	8x8	10x10	10x10	12x12	12x12	12x12	12x12	12x12	12x12	12x12	2x12 1	12x12	12x12	12x12	14x14	-	-	-	-	-	-	-	-	-	LOUVERED E.A. GRILLE, PROVIDE WITH 1 HOUR RATED CEILING RADIATION DAMPER							
F	TITUS	S OMN	I DU	лст	CEILING	12x12	20	6	6	6	8	8	8	8	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SQUARE PLAQUE S.A. DIFFUSER, PROVIDE WITH 1 HOUR RATED CEILING RADIATION DAMPER

1. MOUNTING FRAME TYPES SHALL BE COORDINATED WITH THE ARCHITECTURAL REFLECTED CEILING PLAN. . FURNISH ALL DIFFUSERS, REGISTERS AND GRILLES IN STANDARD WHITE FINISH UNLESS OTHERWISE NOTED.

. NOT ALL DIFFUSERS, REGISTERS OR GRILLES ARE NECESSARILY USED ON THIS PROJECT. SEE DRAWINGS FOR ACTUAL TYPE AND QUANTITY REQUIREMENTS.

THE SCHEDULE DETERMINED FROM THE SCHEDULED CHARACTERISTICS . IF LARGER NECK SIZE WILL BE DETERMINED FROM THIS SCHEDULED, INSTALLING CONTRACTOR MUST INCLUDE ALL COSTS ASSOCIATED WITH CHANGES OF THIS SCHEDULED, INSTALLING CONTRACTOR MUST INCLUDE ALL COSTS ASSOCIATED WITH CHANGES OF THIS SCHEDULED, INSTALLING CONTRACTOR MUST INCLUDE ALL COSTS ASSOCIATED WITH CHANGES OF THIS SCHEDULED, INSTALLING CONTRACTOR MUST INCLUDE ALL COSTS ASSOCIATED WITH CHANGES OF THIS SCHEDULED, INSTALLING CONTRACTOR MUST INCLUDE ALL COSTS ASSOCIATED WITH CHANGES OF THIS SCHEDULED, INSTALLING CONTRACTOR MUST INCLUDE ALL COSTS ASSOCIATED WITH CHANGES OF THIS SCHEDULED, INSTALLING CONTRACTOR MUST INCLUDE ALL COSTS ASSOCIATED WITH CHANGES OF THIS SCHEDULED, INSTALLING CONTRACTOR MUST INCLUDE ALL COSTS ASSOCIATED WITH CHANGES OF THIS SCHEDULED, INSTALLING CONTRACTOR MUST INCLUDE ALL COSTS ASSOCIATED WITH CHANGES OF THIS SCHEDULED, INSTALLING CONTRACTOR MUST INCLUDE ALL COSTS ASSOCIATED WITH CHANGES OF THIS SCHEDULED, INSTALLING CONTRACTOR MUST INCLUDE ALL COSTS ASSOCIATED WITH CHANGES OF THIS SCHEDULED, INSTALLING CONTRACTOR MUST INCLUDE ALL COSTS ASSOCIATED WITH CHANGES OF THIS SCHEDULED, INSTALLING CONTRACTOR MUST INCLUDE ALL COSTS ASSOCIATED WITH CHANGES OF THIS SCHEDULED, INSTALLING CONTRACTOR MUST INCLUDE ALL COSTS ASSOCIATED WITH CHANGES OF THIS SCHEDULED. NATURE IN HIS BID. IN NO CASE WILL SMALLER NECK SIZES THAN SCHEDULED BE PERMITTED. 5. RETURN REGISTERS ON PLANS WITH AIR QUANTITIES NOT INDICATED SHALL BE SELECTED AN D BALANCED TO RECEIVE IN EQUAL AMOUNTS THE SUM OF THE SUPPLY AIR INTRODUCED INTO THE SAME SPACE. 6. ALL DAMPERS FURNISHED IN ROUND NECK DIFFUSERS SHALL BE INSTALLED IN DUCTWORK RATHER THAN DIFFUSER NECK, AS FAR FROM DIFFUSER AS POSSIBLE AND STILL PERMIT ADJUSTMENT FROM DIFFUSER FACE. UNLESS NOTED OTHERWISE, ALL DIFFUSERS, REGISTERS AND GRILLES SHALL BE PROVIDED WITH A MEANS FOR BALANCING. 7. ALL DIFFUSERS SHALL BE SELECTED FOR FOUR WAY THROW PATTERN UNLESS OTHERWISE INDICATED.

	VARIABLE REFRIGERANT PACKAGED HEAT PUMP SCHEDULE																				
	UNIT EFFICIENCY COOLING PERFORMANCE HEATING COIL (ELECTRIC) HEAT PUMP HEAT																				
NO.	MAKE	MODEL	TYPE	VOLTS / PHASE	FAN CFM	ESP	MIN. OA CFM	SEER	HSPF	EDB DEG. F	EWB DEG. F	SENS MBH	ТОТ МВН	OA TEMP DEG. F (MIN - MAX)	KW	МВН	CONTROL STEPS	OA TEMP DEG. F (MIN - MAX)	MBH	FILTER TYPE	REMARKS
VRP-1	FRIEDRICH	VRP24K	VERTICAL, THRU-WALL	208/1	475	0.4	75	17.5	10.0	77.6	64.6	19.6	28	55 - 115	6.1	20.9	1	0 - 70	26	MERV 8	
VRP-2	FRIEDRICH	VRP36K	VERTICAL, THRU-WALL	208/1	650	0.4	100	15.5	8.6	77.6	64.6	27.4	36	55 - 115	7.2	24.6	1	0 - 70	30	MERV 8	
VRP-3	FRIEDRICH	VRP36K	VERTICAL, THRU-WALL	208/1	800	0.4	120	15.5	8.6	77.6	64.6	27.4	36	55 - 115	10.8	36.9	1	0 - 70	30	MERV 8	
NOTES:					•		•				•										
1. SEE SPE	CIFICATIONS F		ED ACCESSORIES.																		

SEE SPECIFICATIONS FOR REQUIRED ACCESSORIE 2. MFR TO PROVIDE EACH UNIT WITH OUTDOOR AIR LOUVER. COORDINATE WITH ARCHITECT FOR FINAL COLOR.

3. PROVIDE EACH UNIT WITH REMOTE WALL THERMOSTAT. FAN CFM IS FOR HIGH FAN SPEED.

5. SEE OTHER SCHEDULES FOR COMPONENTS NOT LISTED.

								AIF	R SO	URCI	E HEA	ΑΤ Ρ	JMP	SCHED	DULE																		
																		UNIT EFFICIENCY			COOLING PERFORMANCE				HEATING	HEATING COIL (ELECTRIC)		HEAT PUMP HEAT		HEAT	OUTDOOR CONDENSING UNIT		
NO.	MAKE	MODEL	DESCRIPTION	FAN CFM	MIN. OA CFM	ESP IN. H20	VOLTS / PHASE	SEER	HSPF	EDB DEG. F	EWB DEG. F	ТОТ МВН	SENS MBH	OA TEMP DEG. F (MIN - MAX)	MODEL	КW	VOLTS / PHASE	EAT DEG. F	MBH	OA TEMP DEG. F (MIN - MAX)	NO / MODEL	VOLTS / PHASE	REMARKS										
HP-1	DAIKIN	FTQ48TAVJUD	VERTICAL HEAT PUMP	1,325	405	1.0	208 / 1	14.8	10.4	80.3	66.7	42.0	32.7	0 - 122	HKSC19CA	20	208 / 1	48.0	54.0	-4 - 60	CU-1 / RZQ48TAVJUA	208 / 1											
HP-2	DAIKIN	FTQ42TAVJUD	VERTICAL HEAT PUMP	1,200	240	1.0	208 / 1	16.0	9.0	78.4	65.3	42.0	30.6	0 - 122	HKSC19CB	20	208 / 1	55.8	47.0	-4 - 60	CU-2 / RZQ42TAVJUA	208 / 1											
HP-3	DAIKIN	FTQ30TAVJUD	VERTICAL HEAT PUMP	925	380	1.0	208 / 1	16.0	10.4	82.0	68.0	30.0	21.4	0 - 122	HKSX10XC	10	208 / 1	41.0	34.0	-4 - 60	CU-3 / RZQ30TAVJUA	208 / 1											
HP-4	DAIKIN	FTQ30TAVJUD	VERTICAL HEAT PUMP	975	305	1.0	208 / 1	16.0	10.4	80.3	66.7	30.0	21.4	0 - 122	HKSX10XC	10	208 / 1	48.0	34.0	-4 - 60	CU-3 / RZQ30TAVJUA	208 / 1											
NOTES:								•		•			•		•							· · ·											

1. SEE SPECIFICATIONS FOR REQUIRED ACCESSORIES.

2. PROVIDE EACH UNIT WITH INTEGRAL DISCONNECT SWITCH AND CONDENSATE DRAIN PUMP. 3. PROVIDE OUTDOOR UNIT WITH LOW AMBIENT KIT.

					FAN	I SCF	IEDUL	E		
NO.	MAKE	MODEL	SERVICE	DESCRIPTION	DRIVE TYPE	CFM	ESP IN H20	INPUT WATTS	RPM	VOLTS / PHASE
EF-1	GREENHECK	SP-A390-VG	BATHROOM EXHAUST	CEILING MOUNTED	DIRECT	30 / 105	0.5	20	880	115 / 1
EF-2	GREENHECK	SP-A390-VG	KITCHEN EXHAUST	CEILING MOUNTED	DIRECT	100	0.5	24	1,220	115 / 1
EF-3	GREENHECK	CSP-390-VG	TRASH ROOM EXHAUST	INLINE	DIRECT	285	0.5	64	1,347	115 / 1
EF-4	GREENHECK	CSP-390-VG	TRASH ROOM EXHAUST	INLINE	DIRECT	325	0.5	81	1,406	115 / 1
EF-5	GREENHECK	SP-L0511	TRASH ROOM EXHAUST	CEILING MOUNTED	DIRECT	50	0.5	12	685	115 / 1
IOTES:						•	•			•

	DUCT MATERIAL SCHEDULE									
NO.	SMANCA PRESSURE CLASSIFICATION	DUCT MATERIAL	REMARKS							
1	2"	GALV. STEEL	EXTERNAL (WRAP OR RIGID – SEE SPECIFICATIONS)							
2	2 2" GALV. STEEL NONE									
NOTES:										

SIZES OF INTERNALLY LINED DUCTWORK INDICATED ON THE PLANS ARE ACTUAL SHEET METAL SIZE. PRESSURE CLASSIFICATIONS SCHEDULED ARE IN ACCORDANCE WITH THE LATEST EDITION OF THE SMACNA "HVAC DUCT CONSTRUCTION STANDARDS".

ALL S.A. DUCTWORK TO BE TYPE 1 UNLESS NOTED OTHERWISE. ALL E.A. DUCTWORK TO BE TYPE 2 UNLESS NOTED OTHERWISE. ALL R.A. DUCTWORK IN CEILING SPACE TO BE TYPE 2 UNLESS NOTED OTHERWISE.

ALL O.A. DUCTWORK TO BE TYPE 1 UNLESS NOTED OTHERWISE.

	ELECTRIC HEATING EQUIPMENT SCHEDULE								
NO.	MAKE	MODEL	DESCRIPTION	MOUNTING TYPE	CAPACITY	AMPS	CFM	VOLTS / PHASE	REMARKS
ECH-1	INDEECO	CCI	ELECTRIC CEILING HEATER	RECESSED	4,800 W	23.5	160	208/1	PROVIDE WITH REMOTE MOUNT THERMOSTAT
EWH-1	INDECO	WAI	ELECTRIC WALL HEATER	SURFACE	6,000 W	29.2	320	208/1	PROVIDE WITH INTEGRAL THERMOSTAT

NOTES:

. SEE SPECIFICATIONS AND DETAILS FOR REQUIRED ACCESSORIES. 2. PROVIDE UNITS WITH T-BAR ADAPTER WHEN MOUNTED WITHIN DROP IN CEILING GRID. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR CEILING TYPE.

3. PROVIDE UNITS WITH INTEGRAL DISCONNECT SWITCH. 4. COORDINATE FINISH COLOR WITH OWNER / ARCHITECT PRIOR TO ORDERING.

4. COLOR SHALL BE AS SELECTED BY ARCHITECT.

	\bigtriangleup				LOUV	′ER	\bigtriangleup			
NO.	MAKE	MODEL	SERVES	NOMINA L SIZE W"xH"	MIN. FREE AREA SQ. FT.	MAX CFM	Maximum Press. Drop In. W.G.	MAX. WATER PENETRATION	FINISH	REMARKS
1	GREENHECK	ESD-403	TRASH ROOM INTAKE	18x12	0.5	275	0.10	0.0	KYNAR 500	
2	GREENHECK	ESD-403	TRASH ROOM INTAKE	14x12	0.5	210	0.10	0.0	KYNAR 500	
NOTE	NOTES:									

1. WATER PENETRATION IS RATED IN OUNCES OF WATER PER SQUARE FOOT OF FREE AREA WHEN TESTED OVER A 15 MINUTE PERIOD AT THE MAXIMUM SCHEDULED FREE AREA VELOCITY. 2. ALL LOUVERS SHALL HAVE 1/2" MESH ALUMINUM BIRDSCREEN, CONCEALED MULLIONS AND DRAINABLE LOUVER BLADES. BIRDSCREENS TO BE MOUNTED ON INSIDE OF LOUVER UNLESS OTHERWISE INDICATED. 3. HVAC CONTRACTOR SHALL FIELD VERIFY THAT SCHEDULED LOUVER SIZES ARE COMPATIBLE WITH BRICK COURSING. NOMINAL LOUVER SIZE SHALL BE ADJUSTED TO FIT BRICK COURSING AS LONG AS SCHEDULED FREE AREA AND PRESSURE DROPS ARE MET.

/	REMARKS
	PROVIDE WITH 1 HOUR RATED CEILING RADIATION DAMPER AND DUAL SPEED CONTROLLER
	PROVIDE WITH 1 HOUR RATED CEILING RADIATION DAMPER
	PROVIDE WITH 1 HOUR RATED CEILING RADIATION DAMPER

ALL S.A. AND R.A. DUCTWORK IN ATTIC SPACE TO BE TYPE 1 UNLESS NOTED OTHERWISE.

PROTOSONAL	
Chief, Scharme SIGNATURE	DATE
REVISIC	NS
1 BULLETIN 03	- 10/16/2023

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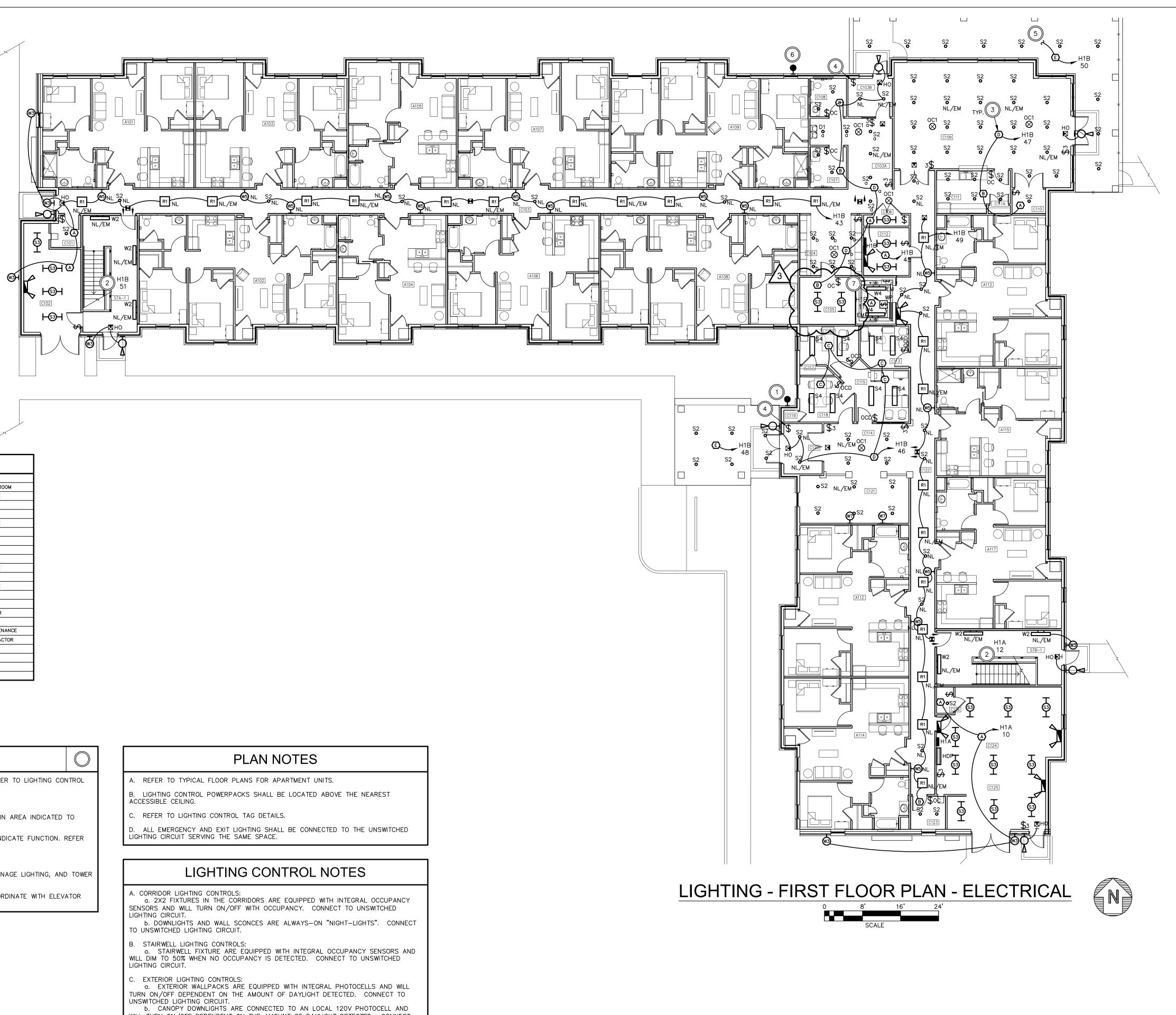


430 GRANT STREET AKRON, OH 44311 PHONE: (330) 867-1093 www.tcarchitects.com



03/31/2023 DATE 82A21 PROJECT NUMBER

H301 DRAWING NUMBER



	ROOM LEGEND							
A101	TWO BEDROOM MU	C108	TOILET					
A102	THREE BEDROOM	C109	COMMUNITY ROOM					
A103	TWO BEDROOM	C110	STORAGE					
A104	ONE BEDROOM	C111	KITCHEN					
A105	ONE BEDROOM	C111A	PANTRY					
A106	TWO BEDROOM	C112	STORAGE					
A107	TWO BEDROOM	C113	OFFICE					
A108	THREE BEDROOM	C114	LOBBY					
A109	THREE BEDROOM	C115	OFFICE					
A112	TWO BEDROOM	C116	OFFICE					
A113	TWO BEDROOM	C117	STORAGE					
A114	TWO BEDROOM	C118	CONF.					
A115	ONE BEDROOM MU	C119	STORAGE					
A117	TWO BEDROOM	C120	VEST.					
C101	TRASH	C121	WAITING					
C102	TRASH COMPACTOR	C122	CORRIDOR					
C103	CORRIDOR	C123	TRASH					
C103A	CORRIDOR	C124	MECH / MAINTENANCE					
C103B	VEST	C125	TRASH COMPACTOR					
C104	MAIL	C126	MECH					
C105	STORAGE	E1	ELEV.					
C106	DATA	STA-1	STAIRS					
C107	TOILET	STB-1	STAIR B					

CODED NOTES

1. PHOTOCELL FOR WEST EXTERIOR CANOPY LIGHTING. REFER TO LIGHTING CONTROL tag "e".

2 LIGHTING CIRCUIT FOR ALL FIXTURES IN STAIRWELL.

3. LIGHTING CONTROL TAG (TYP). CONNECT ALL LIGHTING IN AREA INDICATED TO CIRCUIT SHOWN.

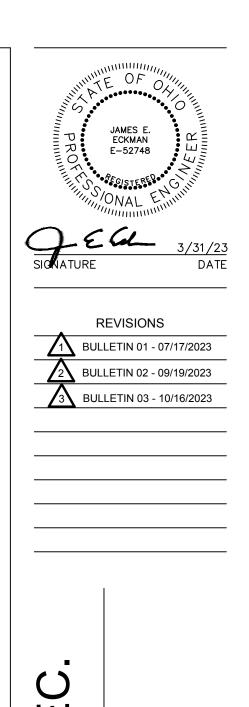
4. OVERRIDE SWITCH FOR EXTERIOR LIGHTING. LABEL TO INDICATE FUNCTION. REFER TO LIGHTING CONTROL TAG "E".

5. UP TO SIGNAGE LIGHTING.

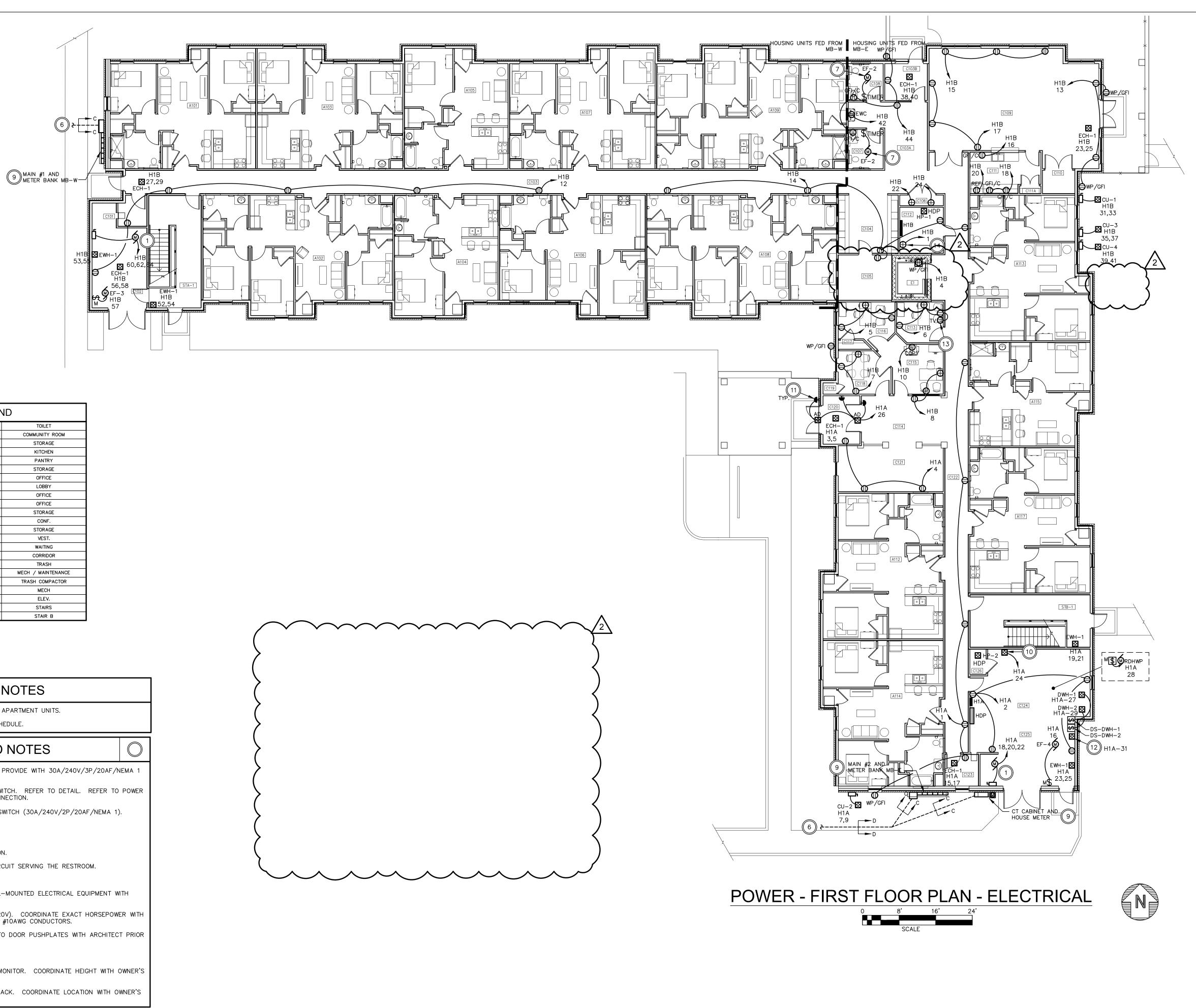
6. PHOTOCELL FOR NORTH EXTERIOR CANOPY LIGHTING, SIGNAGE LIGHTING, AND TOWER LIGHTING. REFER TO LIGHTING CONTROL TAG "E".

7. INSTALL ELEVATOR PIT LIGHT SWITCH BY LADDER - COORDINATE WITH ELEVATOR MANUFACTURER.

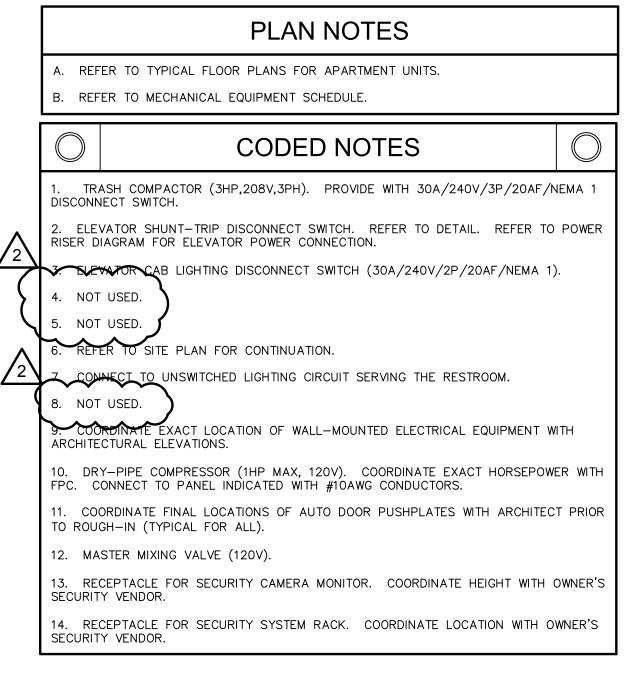
WILL TURN ON/OFF DEPENDENT ON THE AMOUNT OF DAYLIGHT DETECTED. CONNECT TO UNSWITCHED LIGHTING CIRCUIT.

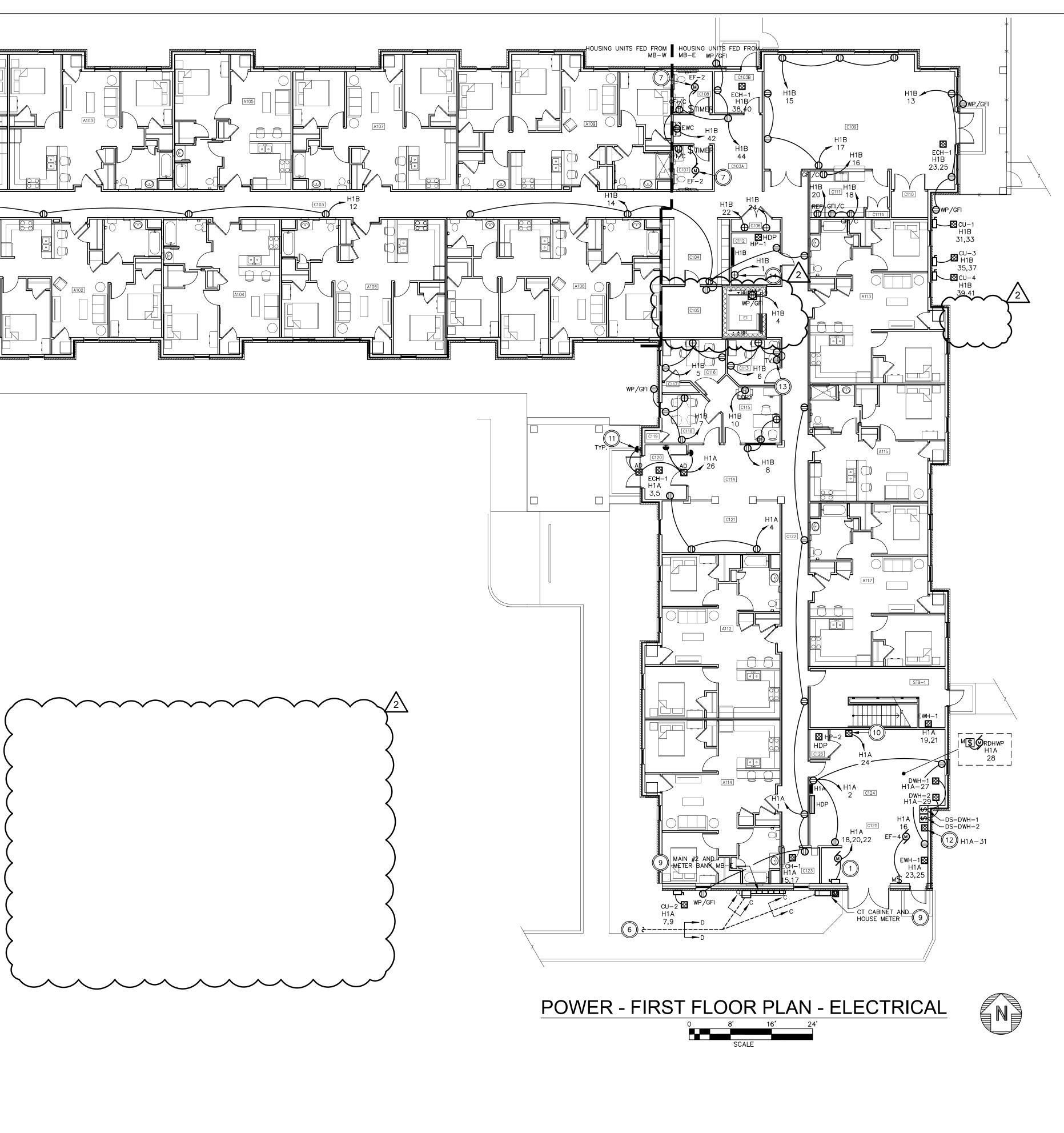


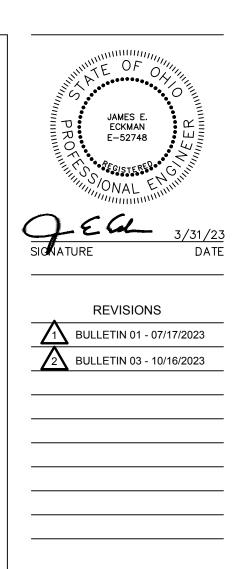


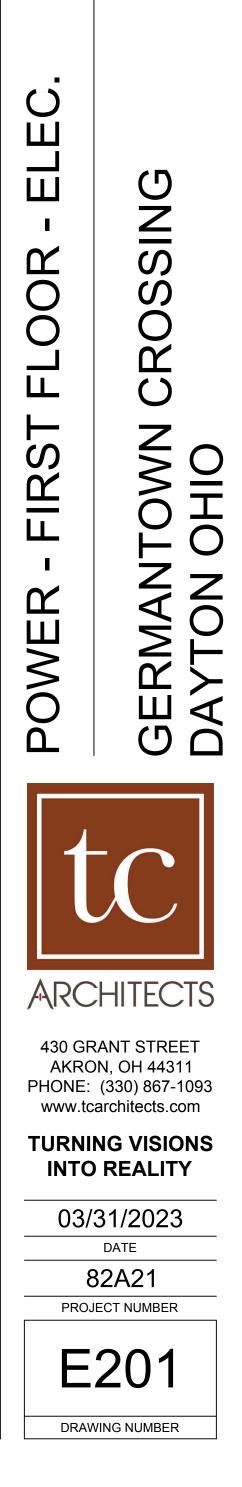


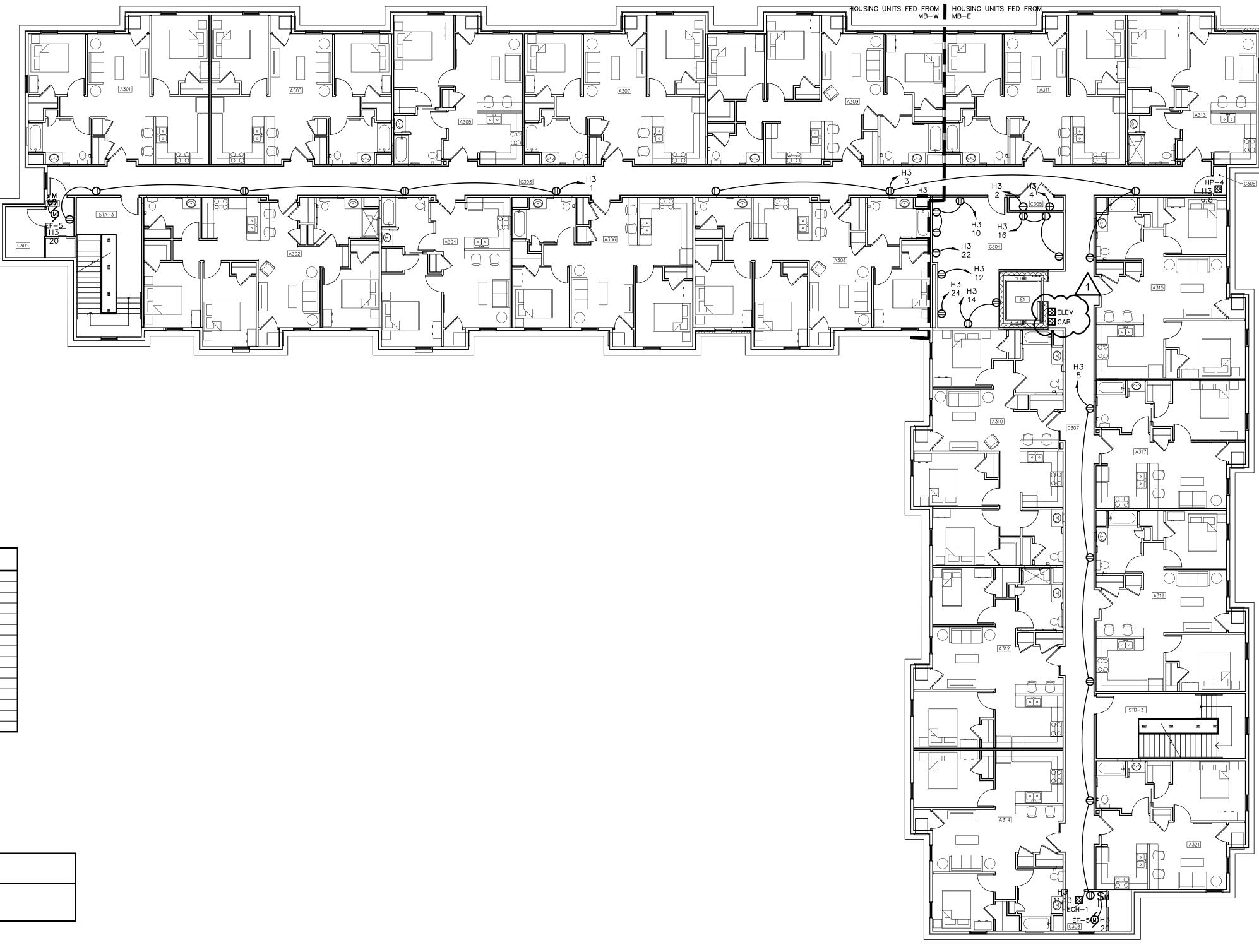
	ROOM LEGEND							
A101	TWO BEDROOM MU	C108	TOILET					
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C104	MAIL	C126	MECH					
C105	STORAGE	E1	ELEV.					
C106	DATA	STA-1	STAIRS					
C107	TOILET	STB-1	STAIR B					







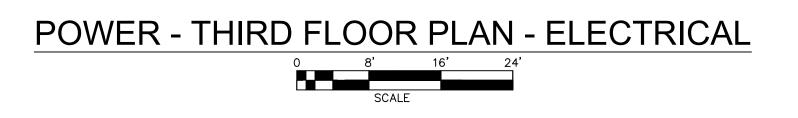




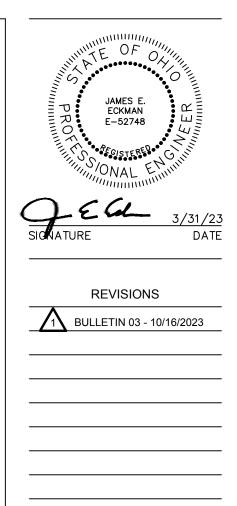
ROOM LEGEND								
A301	TWO BEDROOM	A317	ONE BEDROOM					
A302	THREE BEDROOM MU	A319	TWO BEDROOM					
A303	TWO BEDROOM	A321	ONE BEDROOM					
A304	ONE BEDROOM	C301	TRASH					
A305	ONE BEDROOM	C302	STORAGE					
A306	TWO BEDROOM	C303	CORRIDOR					
A307	TWO BEDROOM	C304	FITNESS					
A308	THREE BEDROOM	C305	DATA					
A309	THREE BEDROOM	C306	STORAGE					
A310	THREE BEDROOM	C307	CORRIDOR					
A311	TWO BEDROOM	C308	TRASH					
A312	TWO BEDROOM MU	E1	ELEV.					
A313	ONE BEDROOM MU	STA-3	STAIR A					
A314	TWO BEDROOM	STB-3	STAIR B					
A315	TWO BEDROOM							

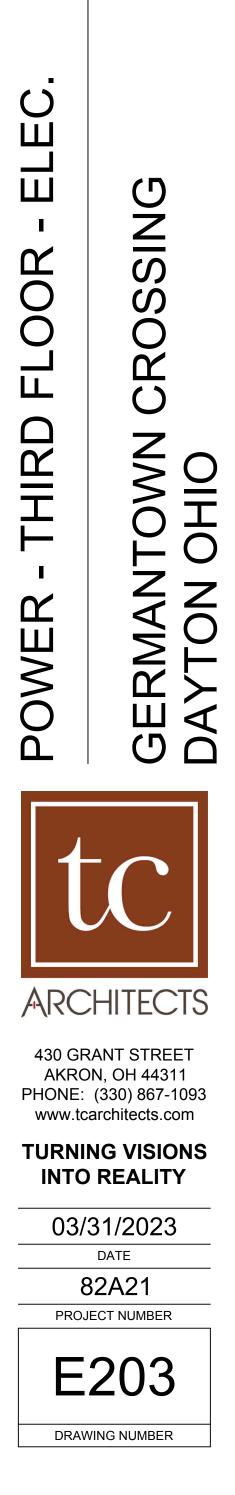
PLAN NOTES

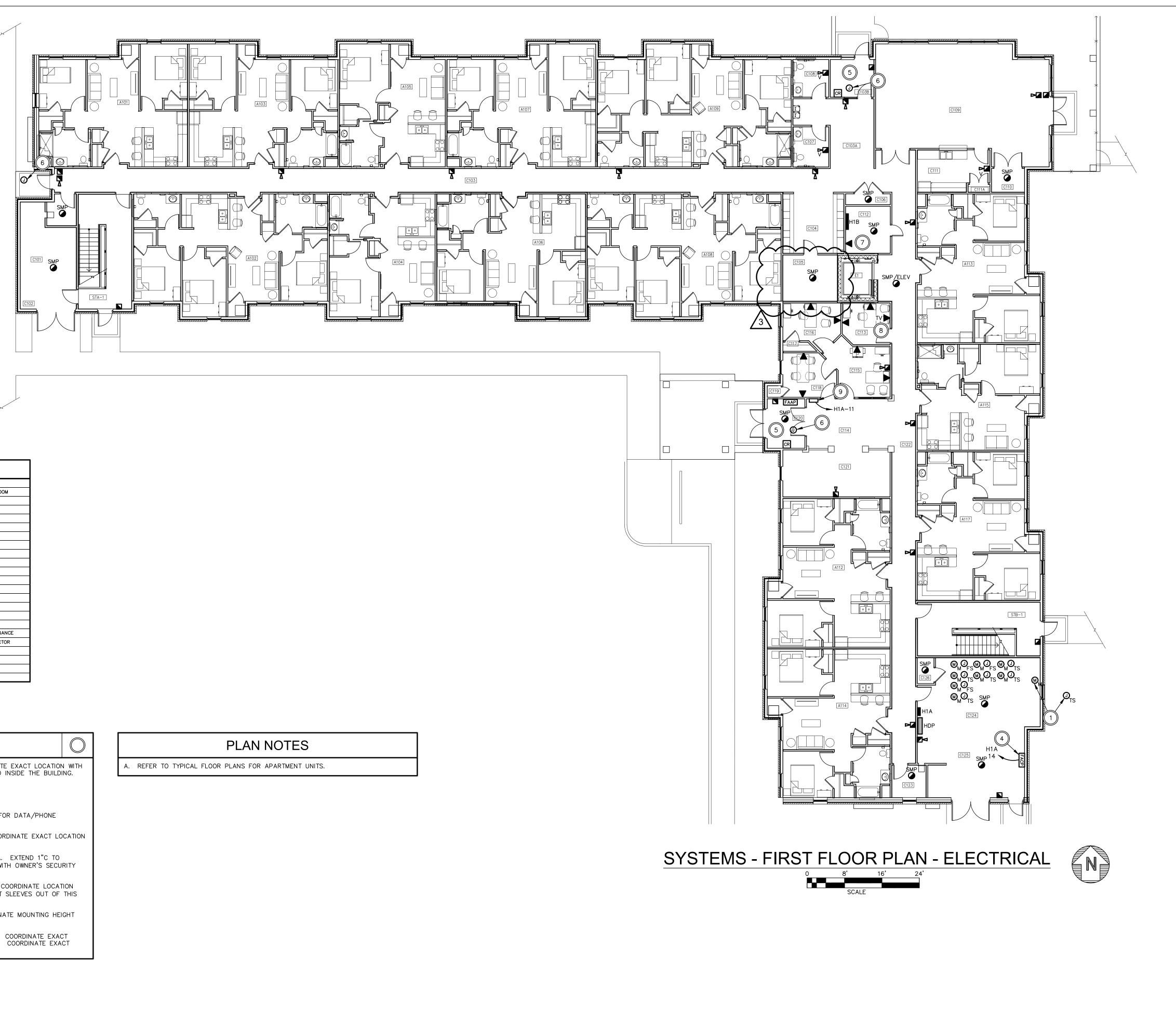
- A. REFER TO TYPICAL FLOOR PLANS FOR APARTMENT UNITS.
- B. REFER TO MECHANICAL EQUIPMENT SCHEDULE.



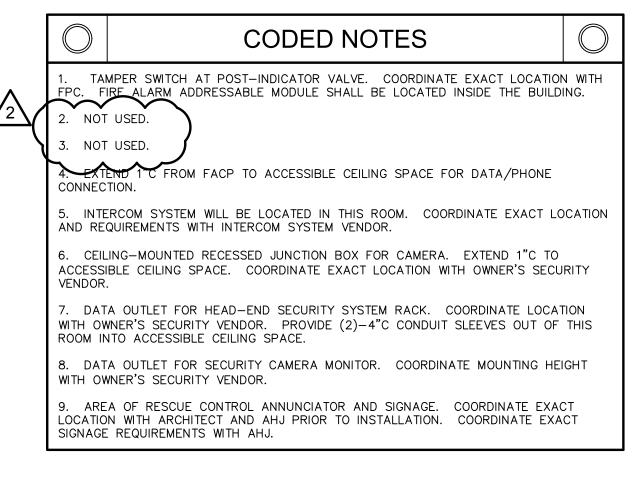


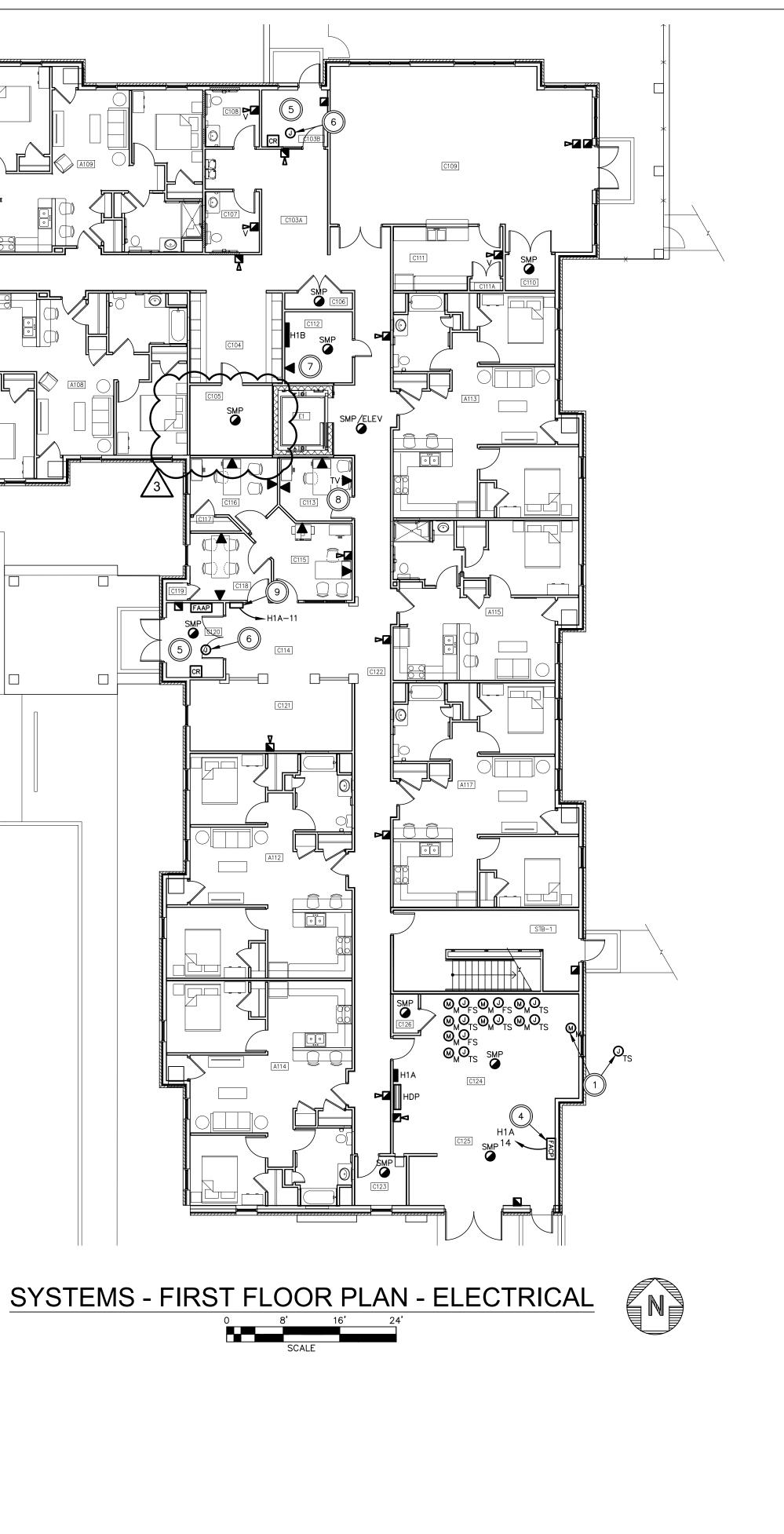


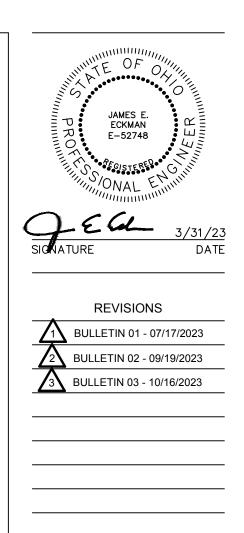


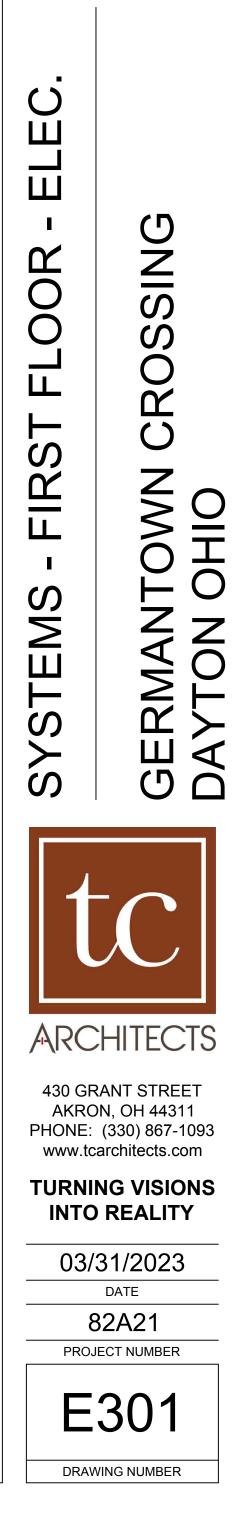


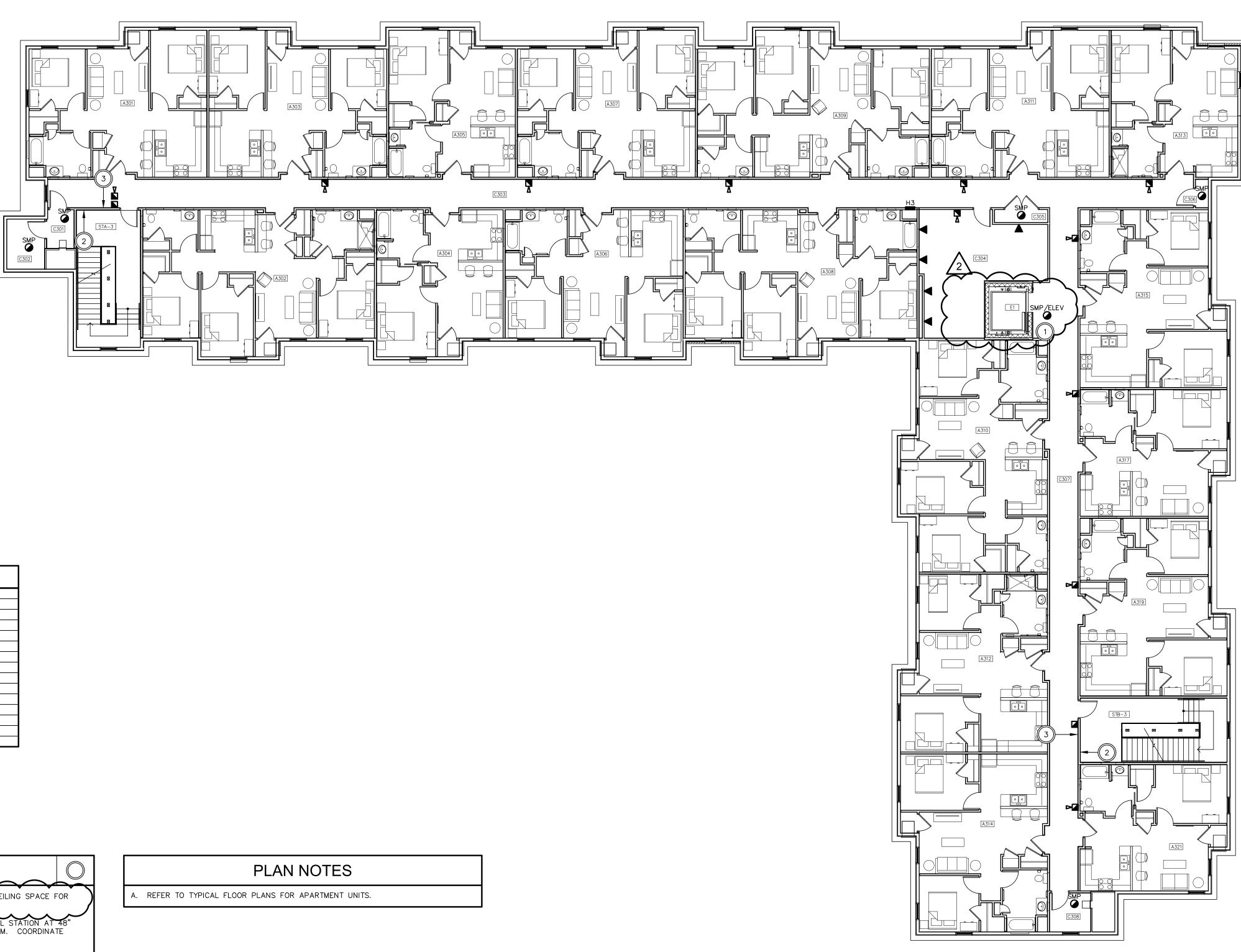
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C106	DATA	STA-1	STAIRS					
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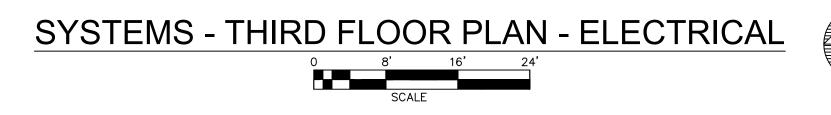
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A302	THREE BEDROOM MU	A319	TWO BEDROOM						
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A312	TWO BEDROOM MU	E1	ELEV.						
A313	ONE BEDROOM MU	STA-3	STAIR A						
A314	TWO BEDROOM	STB-3	STAIR B						
A315	TWO BEDROOM								

CODED NOTES

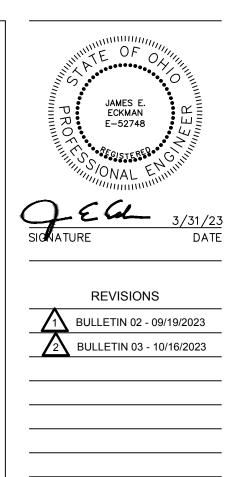
EXTEND 1"C FROM ELEVATOR CONTROLLER TO ACCESSIBLE CEILING SPACE FOR DATA/PHONE CONNECTION.

2. AREA OF RESCUE CALL STATION AND SIGNAGE. MOUNT CALL STATION AT 48" AFF TO CENTERLINE. REFER TO AREA OF RESCUE WIRING DIAGRAM. COORDINATE EXACT SIGNAGE REQUIREMENTS WITH AHJ.

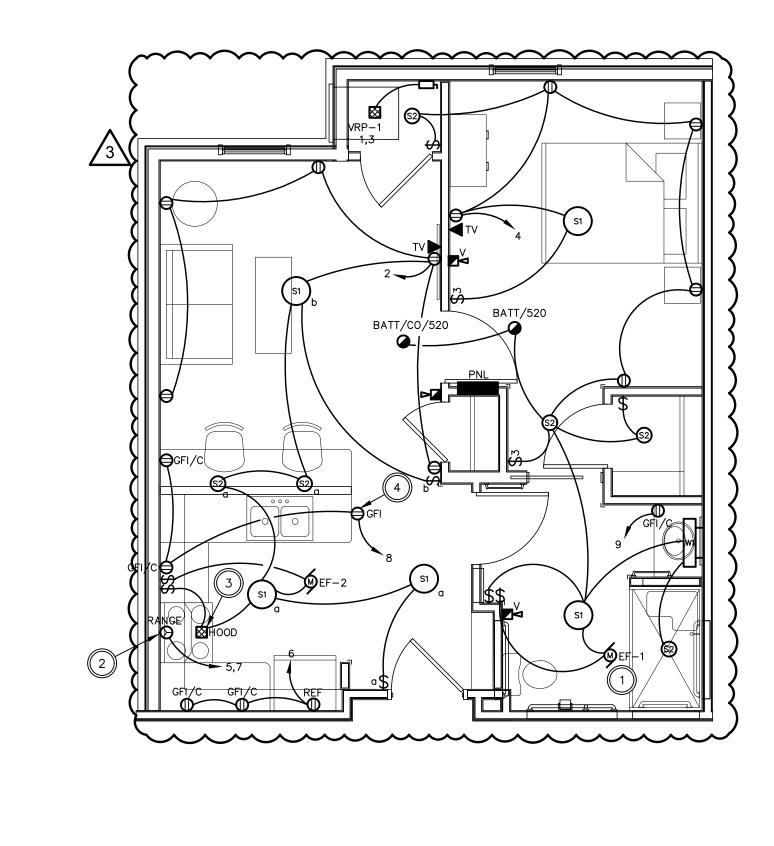
3. AREA OF RESCUE ASSISTANCE SIGNAGE.





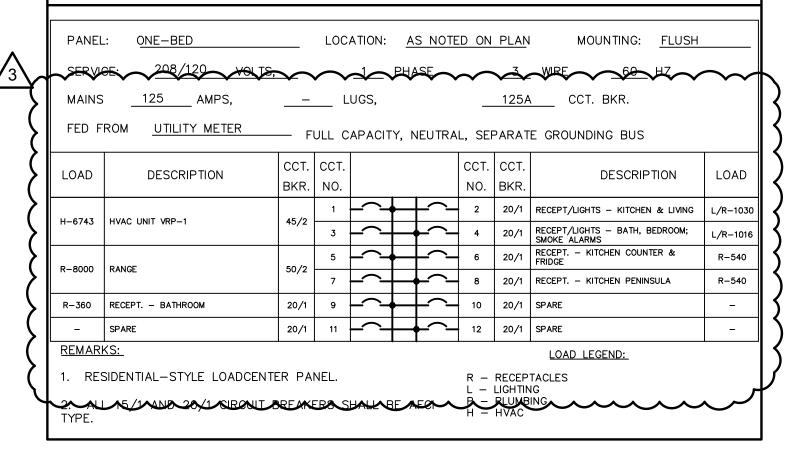


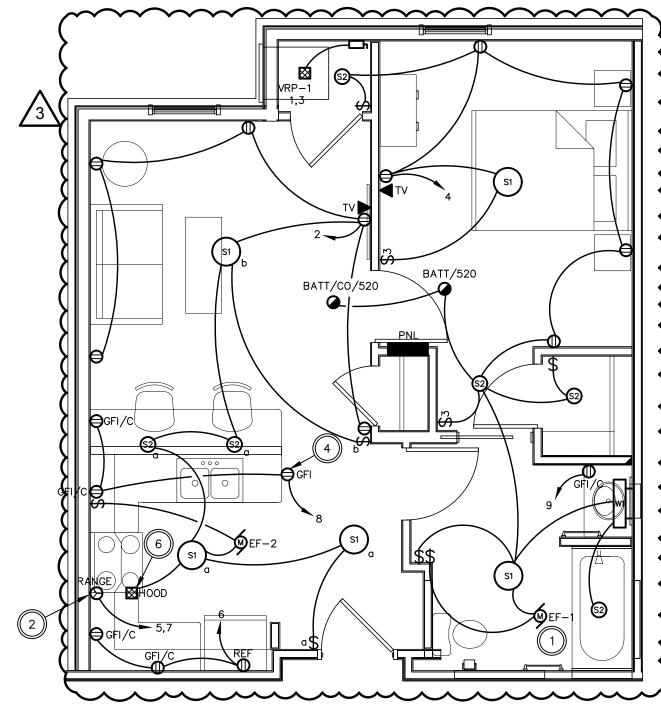




NEW WORK - TYP. ONE BEDROOM MU - ELECTRICAL







NEW WORK - TYP. ONE BEDROOM - ELECTRICAL



CENTERLINE. 5, NOT USED.

PLAN NOTES

A. LIGHT FIXTURES IN CLOSETS SHALL BE LOCATED AT LEAST 12" FROM STORAGE SHELVES.

CODED NOTES

 \bigcirc

1. EXHAUST FAN HAS LOW/HIGH SPEED SETTING. FAN WILL RUN CONTINUOUSLY AT LOW SPEED. FAN WILL SWITCH TO HIGH SPEED WHEN THE WALL SWITCH IS TURNED ON. CONNECT TO UNSWITCHED LIGHTING CIRCUIT IN ROOM.

2. NEMA 14-50R RECEPTACLE FOR RANGE. CONNECT TO CIRCUIT INDICATED WITH (3)-#8, (1)-#10GND IN 3/4"C.

3. RANGE HOOD. PROVIDE ON/OFF SWITCH IN ACCESSIBLE LOCATION ABOVE COUNTERTOP AS SHOWN.

4. RECEPTACLE MOUNTED ON SIDE OF CABINET, 8" BELOW COUNTERTOP TO

6. RANGE HOOD WITH INTEGRAL SWITCH.

ACCESSIBILITY REQUIREMENTS FOR MOBILITY UNITS

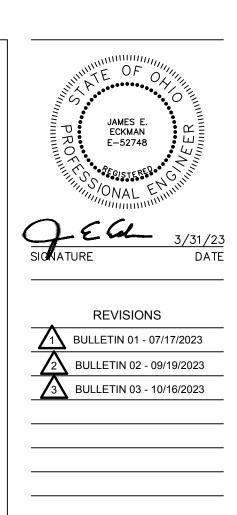
THE FOLLOWING OUTLINES THE MINIMUM ADA REQUIREMENTS FOR DEVICE MOUNTING HEIGHTS IN MOBILITY UNITS.

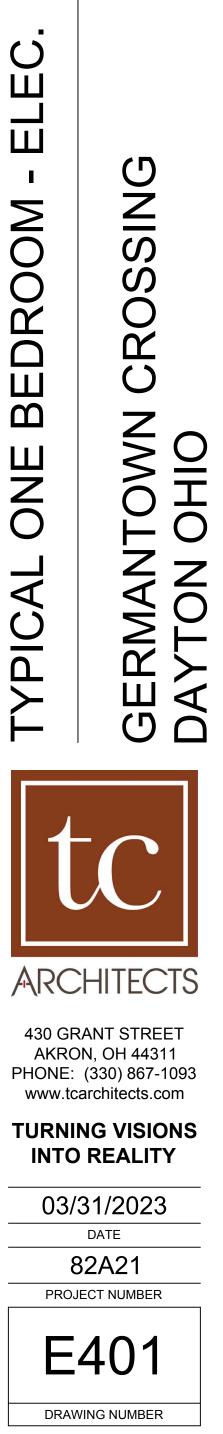
FORWARD REACH WITH NO OBSTRUCTION:

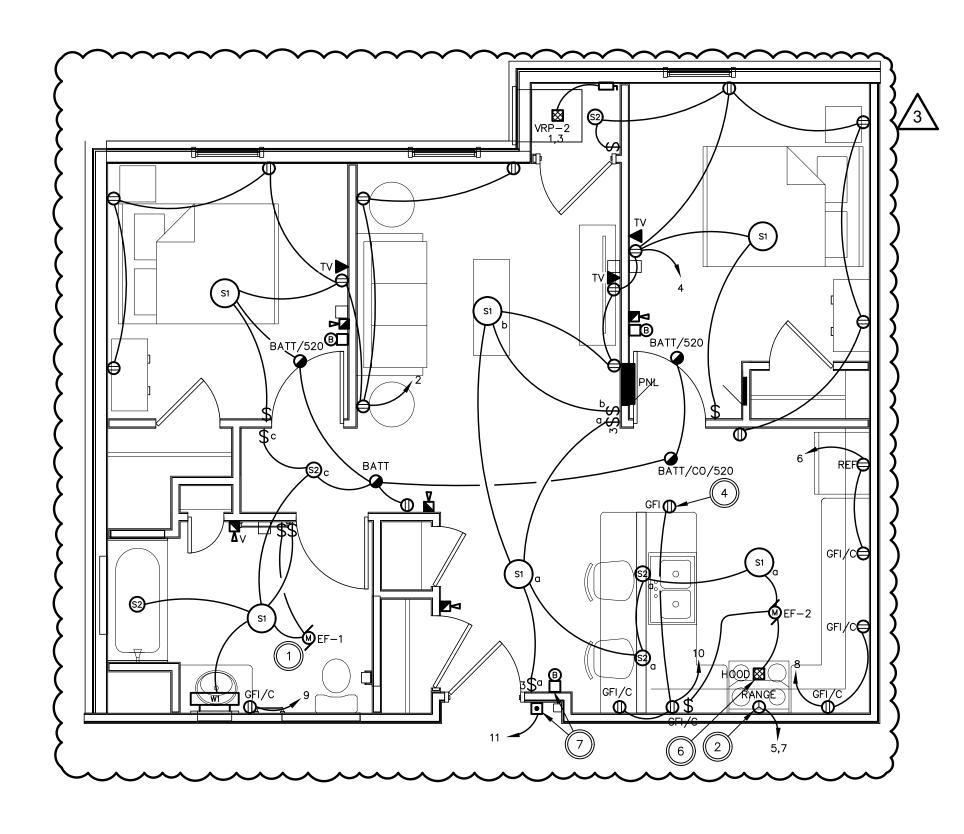
A. LIGHT SWITCHES MAXIMUM HEIGHT: 48" TO CENTERLINE. B. POWER RECEPTACLE MINIMUM HEIGHT: 15" TO BOTTOM OF DEVICE. C. DATA OUTLET MINIMUM HEIGHT: 15" TO BOTTOM OF DEVICE.

2. SIDE REACH OVER AN OBSTRUCTION (WHERE DEVICES ARE LOCATED ABOVE COUNTERTOPS WITH NO KNEE SPACE): A. MAXIMUM HEIGHT OF ALL DEVICES: 46" TO CENTERLINE.

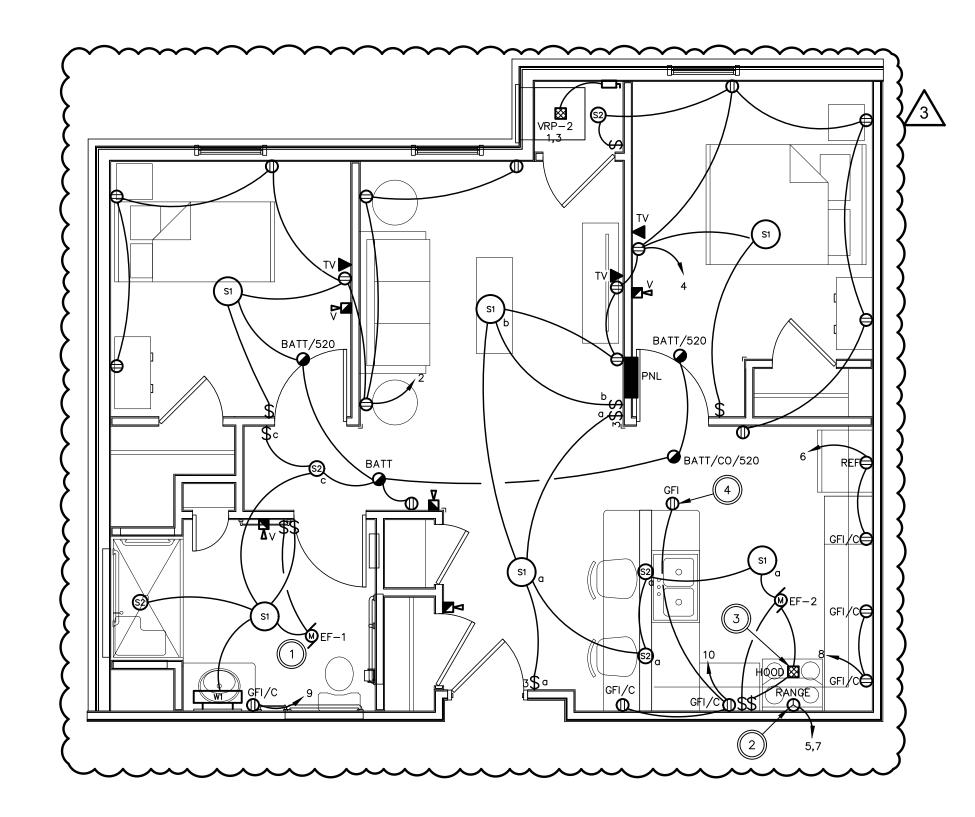
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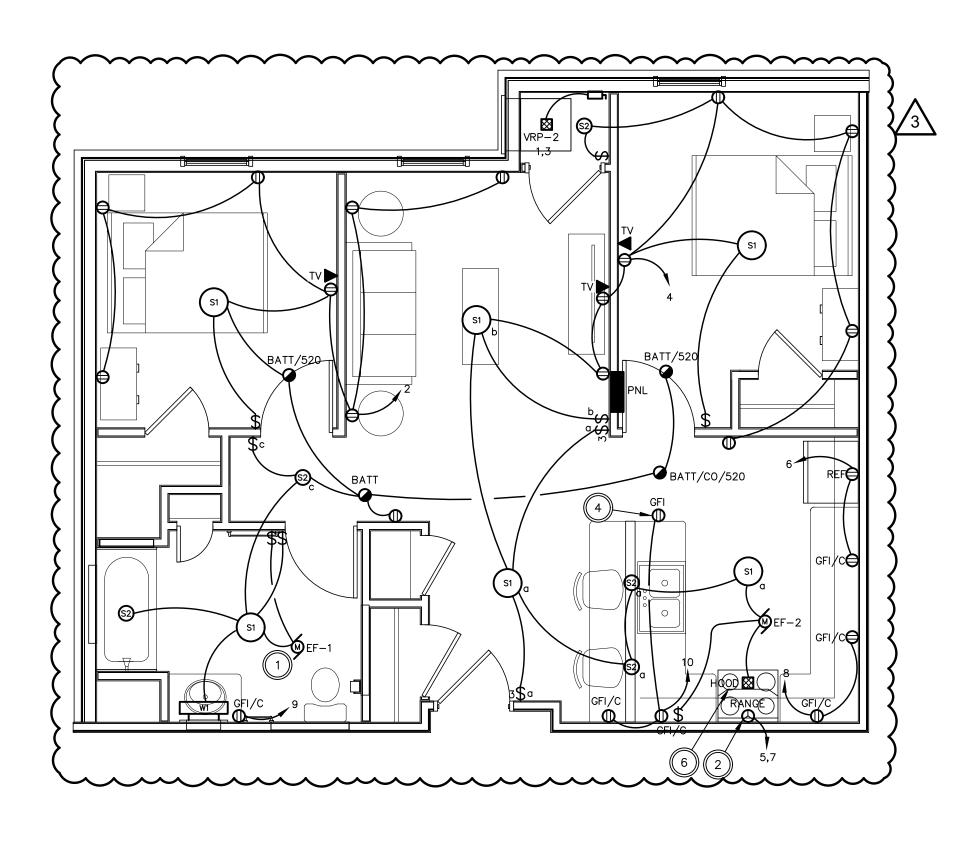
# NEW WORK - TYP. TWO BEDROOM S&H - ELECTRICAL



NEW WORK - TYP. TWO BEDROOM MU - ELECTRICAL



MAINS	5 <u>125</u> AMPS,		L	UGS,				125A	CCT. BKR.	
FED F	ROM UTILITY METER	FI	ULL C	APACIT	Y, N	IEUTRA	L, SEI	PARAT	E GROUNDING BUS	3
LOAD	DESCRIPTION	CCT. BKR.	CCT. NO.				CCT. NO.	CCT. BKR.	DESCRIPTION	LOAD
			1	-~-			2	20/1	RECEPT/LIGHTS – BED, BATH, LIVING: SMOKE ALARMS	L/R-1546
H-7862	HVAC UNIT VRP-2	50/2	3	-~-			4	20/1	RECEPT/LIGHTS – LIVING, KITCHEN, BED	L/R-1422
D 0000	D.11105	50 (0	5			$\langle  $	6	20/1	RECEPT. – KITCHEN COUNTER, FRIDGE	R-360
R-8000	RANGE	50/2	7	-~-		$\langle  $	- 8	20/1	RECEPT KITCHEN COUNTER	R-360
R-180	RECEPT. – BATHROOM	20/1	9	-			10	20/1	RECEPT. – KITCHEN PENINSULA	R-540
M-50	DOORBELL (S&H UNIT ONLY)	20/1	11			$\langle  $	12	20/1	SPARE	- )
-	SPARE	20/1	13	-~-		$\langle  $	14	20/1	SPARE	- 5
-	SPARE	20/1	15	-~-		$\left( -\frac{1}{2} \right)$	16	20/1	SPARE	- )
REMAR	KS:	-							LOAD LEGEND:	] )
1. RE	SIDENTIAL-STYLE LOADCEN	TER PAI	NEL.						TACLES	



NEW WORK - TYP. TWO BEDROOM - ELECTRICAL

# PLAN NOTES

A. LIGHT FIXTURES IN CLOSETS SHALL BE LOCATED AT LEAST 12" FROM STORAGE RACKING.

# CODED NOTES

1. EXHAUST FAN HAS LOW/HIGH SPEED SETTING. FAN WILL RUN CONTINUOUSLY AT LOW SPEED. FAN WILL SWITCH TO HIGH SPEED WHEN THE WALL SWITCH IS TURNED ON. CONNECT TO UNSWITCHED LIGHTING CIRCUIT IN ROOM.

2. NEMA 14-50R RECEPTACLE FOR RANGE. CONNECT TO CIRCUIT INDICATED WITH (3)-#8, (1)-#10GND IN 3/4"C.

3. RANGE HOOD. PROVIDE ON/OFF SWITCH IN ACCESSIBLE LOCATION ABOVE COUNTERTOP AS SHOWN.

4. RECEPTACLE MOUNTED ON SIDE OF CABINET, 8" BELOW COUNTERTOP TO CENTERLINE.

5. NOT USED.

6. RANGE HOOD WITH INTEGRAL SWITCH.

DOORBELL AND ASSOCIATED STROBE DEVICE (TYP.). REFER TO DETAIL.

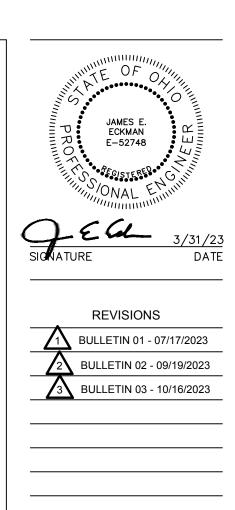
# ACCESSIBILITY REQUIREMENTS FOR MOBILITY UNITS

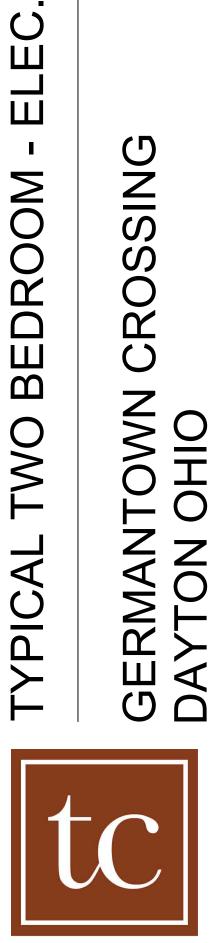
THE FOLLOWING OUTLINES THE MINIMUM ADA REQUIREMENTS FOR DEVICE MOUNTING HEIGHTS IN MOBILITY UNITS.

FORWARD REACH WITH NO OBSTRUCTION: A. LIGHT SWITCHES MAXIMUM HEIGHT: 48" TO CENTERLINE. B. POWER RECEPTACLE MINIMUM HEIGHT: 15" TO BOTTOM OF DEVICE.

C. DATA OUTLET MINIMUM HEIGHT: 15" TO BOTTOM OF DEVICE. SIDE REACH OVER AN OBSTRUCTION (WHERE DEVICES ARE LOCATED

ABOVE COUNTERTOPS WITH NO KNEE SPACE): A. MAXIMUM HEIGHT OF ALL DEVICES: 46" TO CENTERLINE.





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ARCHITECTS

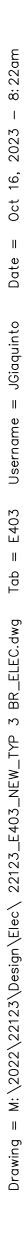
430 GRANT STREET AKRON, OH 44311 PHONE: (330) 867-1093 www.tcarchitects.com

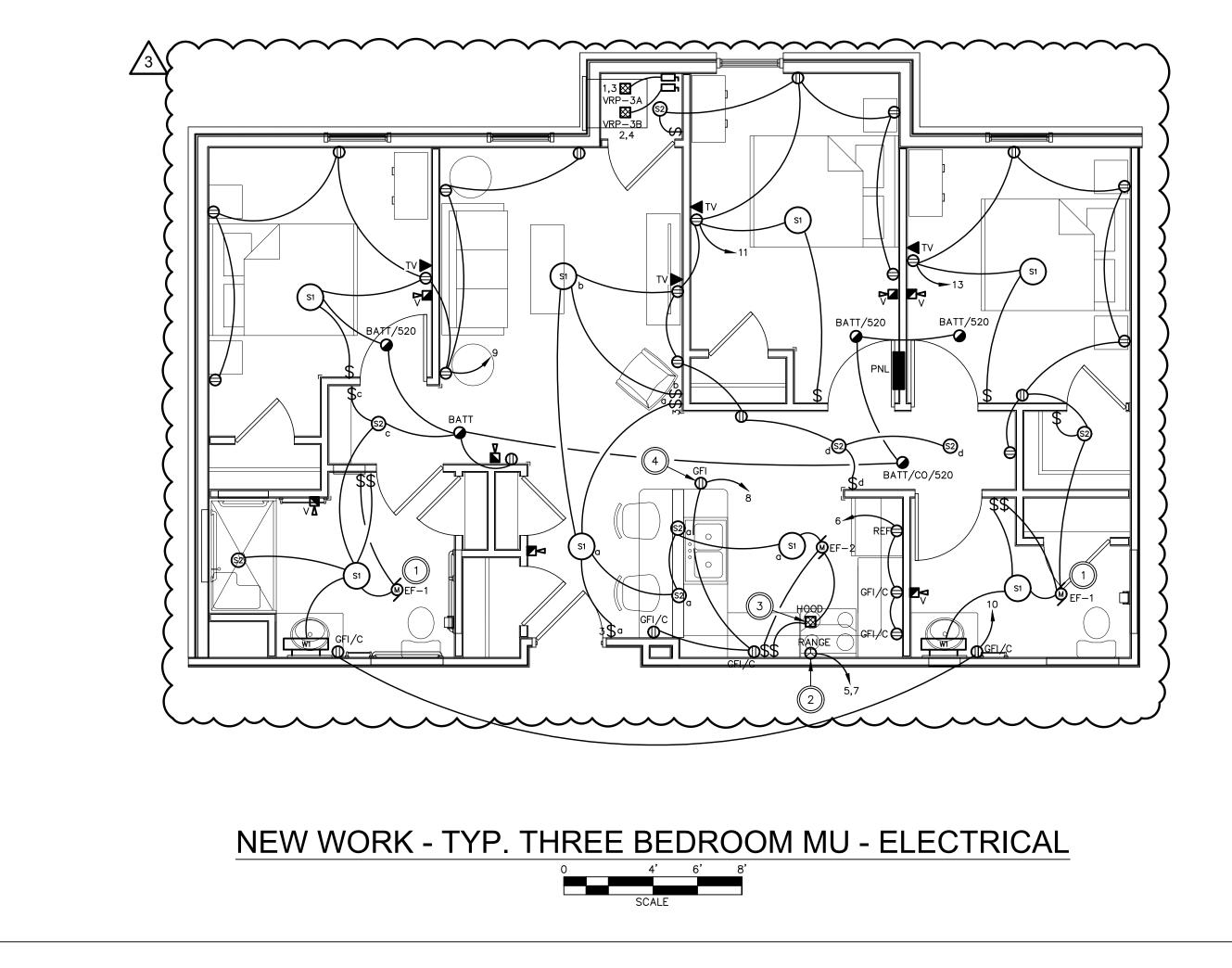
**TURNING VISIONS** INTO REALITY

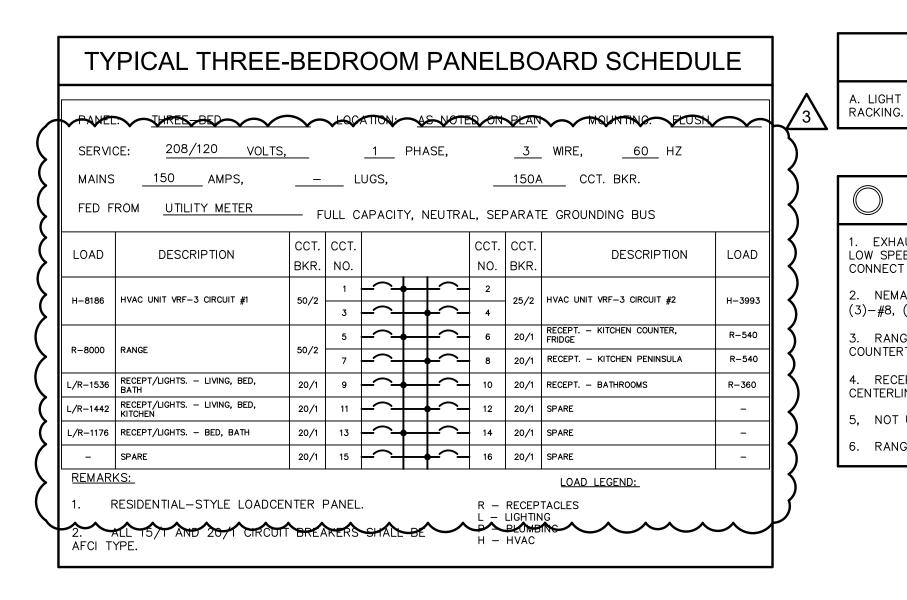
> 03/31/2023 DATE

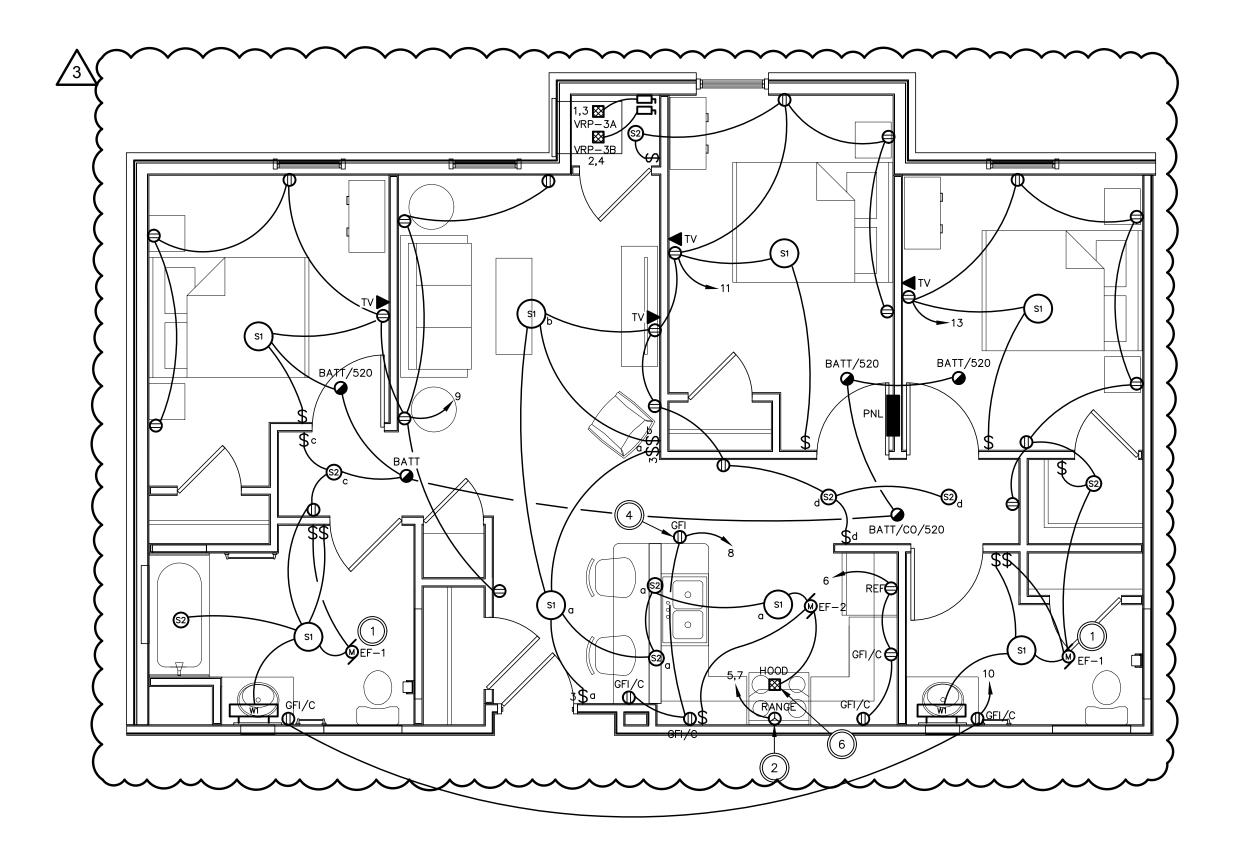
82A21 PROJECT NUMBER











NEW WORK - TYP. THREE BEDROOM - ELECTRICAL

# PLAN NOTES

A. LIGHT FIXTURES IN CLOSETS SHALL BE LOCATED AT LEAST 12" FROM STORAGE

# CODED NOTES

EXHAUST FAN HAS LOW/HIGH SPEED SETTING. FAN WILL RUN CONTINUOUSLY AT LOW SPEED. FAN WILL SWITCH TO HIGH SPEED WHEN THE WALL SWITCH IS TURNED ON. CONNECT TO UNSWITCHED LIGHTING CIRCUIT IN ROOM.

2. NEMA 14-50R RECEPTACLE FOR RANGE. CONNECT TO CIRCUIT INDICATED WITH (3)-#8, (1)-#10GND IN 3/4"C.

3. RANGE HOOD. PROVIDE ON/OFF SWITCH IN ACCESSIBLE LOCATION ABOVE COUNTERTOP AS SHOWN.

4. RECEPTACLE MOUNTED ON SIDE OF CABINET, 8" BELOW COUNTERTOP TO CENTERLINE.

5, NOT USED.

6. RANGE HOOD WITH INTEGRAL SWITCH.

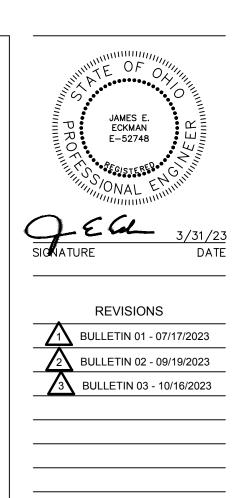
# ACCESSIBILITY REQUIREMENTS FOR MOBILITY UNITS

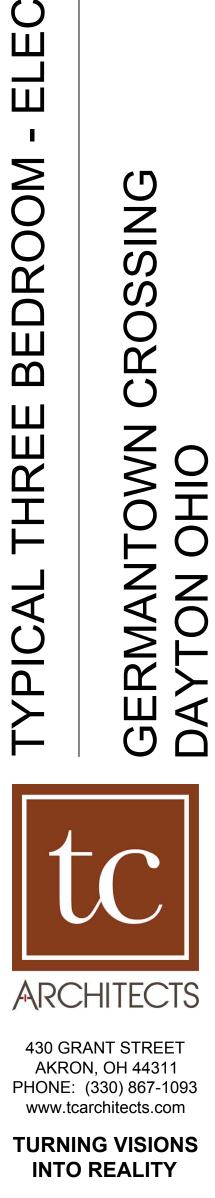
THE FOLLOWING OUTLINES THE MINIMUM ADA REQUIREMENTS FOR DEVICE MOUNTING HEIGHTS IN MOBILITY UNITS.

FORWARD REACH WITH NO OBSTRUCTION:

- A. LIGHT SWITCHES MAXIMUM HEIGHT: 48" TO CENTERLINE.
- B. POWER RECEPTACLE MINIMUM HEIGHT: 15" TO BOTTOM OF DEVICE. C. DATA OUTLET MINIMUM HEIGHT: 15" TO BOTTOM OF DEVICE.

SIDE REACH OVER AN OBSTRUCTION (WHERE DEVICES ARE LOCATED ABOVE COUNTERTOPS WITH NO KNEE SPACE): A. MAXIMUM HEIGHT OF ALL DEVICES: 46" TO CENTERLINE.





03/31/2023 DATE

82A21 PROJECT NUMBER

E403 DRAWING NUMBER

	MULT	FIFAMILY DWELLING UNIT LOAD		TIONS		
BASED ON 2017 NEC 220.84.						
ONE-BED UNIT (559 SQUARE FEET)		TWO-BED UNIT (751 SQUARE FEET)		THREE-BED UNIT (981 SQUARE FEET)		
LOAD	VA	LOAD	VA	LOAD	VA	
GENERAL USE LIGHTING & RECEPTACLES (3W/SQ FT)	1677	GENERAL USE LIGHTING & RECEPTACLES (3W/SQ FT)	2253	GENERAL USE LIGHTING & RECEPTACLES (3W/SQ FT)	2943	
SMALL APPLIANCE (1500W EACH)	3000	SMALL APPLIANCE (1500W EACH)	3000	SMALL APPLIANCE (1500W EACH)	3000	
RANGE	8000	RANGE	8000	RANGE	8000	
HVAC	6743	HVAC	7862	HVAC	12179	
TOTAL	19420	TOTAL	21115	TOTAL	26122	
TOTAL AMPS @ 208V, 1PH: 93A		TOTAL AMPS @ 208V, 1PH: 102A		TOTAL AMPS @ 208V, 1PH: 127A		

WEST METER BANK "MB-W"		EAST METER BANK "MB-E"				
NUMBER OF ONE-BED UNITS	6	NUMBER OF ONE-BED UNITS	7			
NUMBER OF TWO-BED UNITS	12	NUMBER OF TWO-BED UNITS	14			
NUMBER OF THREE-BED UNITS	9	NUMBER OF THREE-BED UNITS	2			
TOTAL CONNECTED LOAD	605 KVA	TOTAL CONNECTED LOAD	483.8 KVA			
DEMAND FACTOR (TABLE 220.84)	34%	DEMAND FACTOR (TABLE 220.84)	36%			
TOTAL DEMAND LOAD	205.7 KVA	TOTAL DEMAND LOAD	174.2 KVA			
TOTAL AMPS @ 208V, 3PH	571 A	TOTAL AMPS @ 208V, 3PH	483.4 A			

# METERING ASSEMBLY NOTES

A. EATON IS THE BASIS-OF-DESIGN FOR THE RESIDENTIAL METER BANK ASSEMBLIES. EQUALS BY SQUARE D, SIEMENS, AND ABB ARE ACCEPTABLE.

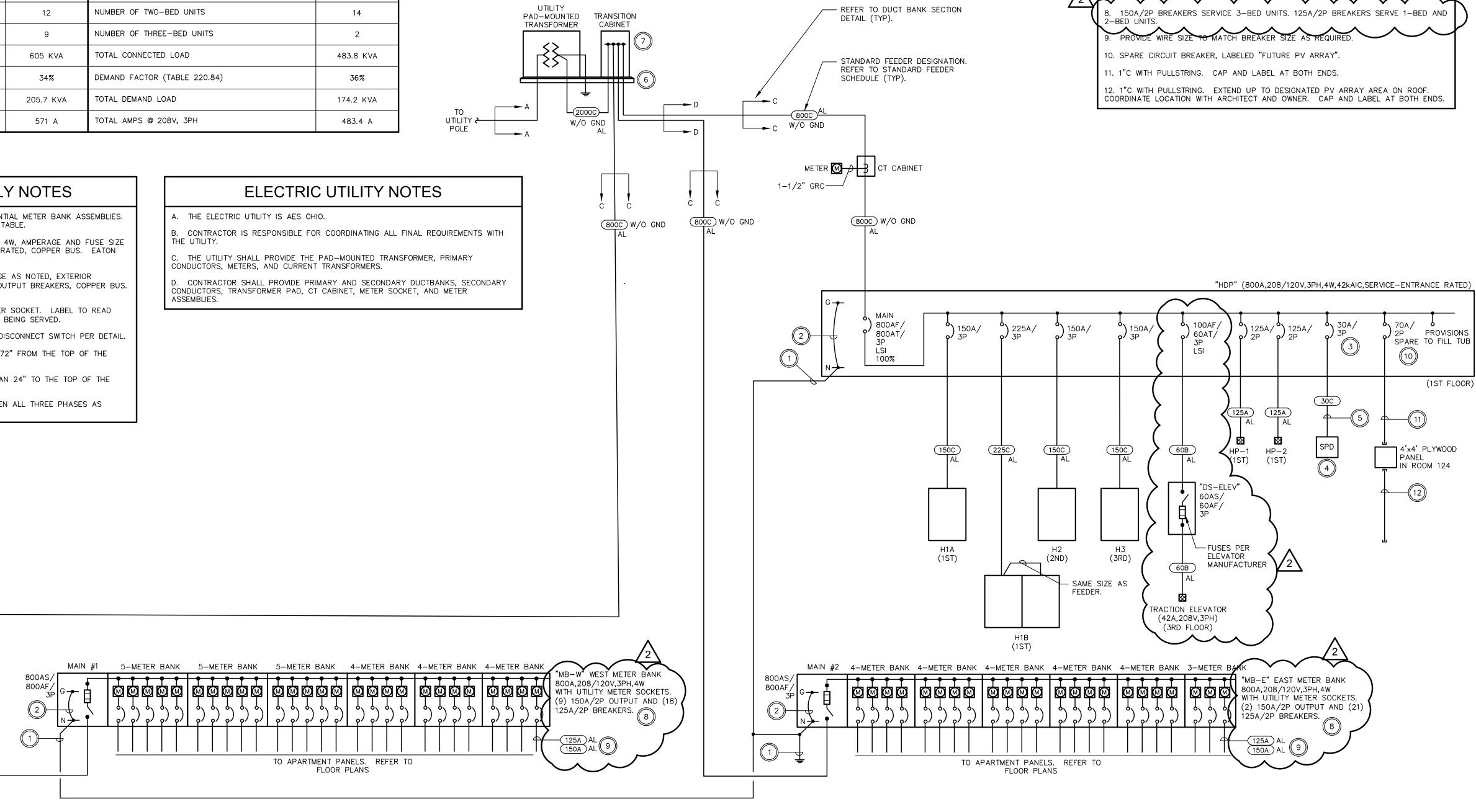
B. MAIN FUSED SWITCH DISCONNECT: 208/120V, 3PH, 4W, AMPERAGE AND FUSE SIZE AS NOTED, EXTERIOR ENCLOSURE, SERVICE-ENTRANCE RATED, COPPER BUS. EATON #3MFS SERIES WITH #3MFSBBK BARRIER KIT.

C. METER ASSEMBLIES: 208/120V, 3PH, 4W, AMPERAGE AS NOTED, EXTERIOR ENCLOSURE, RINGLESS WITH HORN BYPASS, 200A/2P OUTPUT BREAKERS, COPPER BUS. EATON #3MM SERIES. . PROVIDE PLASTIC ENGRAVED LABEL ON EACH METER SOCKET. LABEL TO READ "APARTMENT ###" AND INDICATE WHICH APARTMENT IS BEING SERVED.

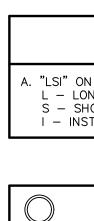
E. PROVIDE PLASTIC ENGRAVED LABEL ON THE MAIN DISCONNECT SWITCH PER DETAIL. F. THE TOP METER MUST BE NOT ANY HIGHER THAN 72" FROM THE TOP OF THE METER FROM FINAL GRADE.

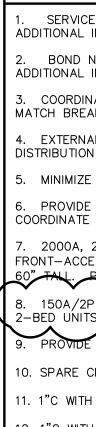
. THE BOTTOM METER MUST NOT BE ANY LOWER THAN 24" TO THE TOP OF THE METER FROM FINAL GRADE.

BALANCE THE METER STACKS IN THE FIELD BETWEEN ALL THREE PHASES AS EVENLY AS POSSIBLE.



LOAD	CONNECTED VA	DEMAND VA
LIGHTING	7598	7598
RECEPTACLE	24440	17220
HVAC	147353	131353
WASHERS	4000	4000
DRYERS	20000	20000
ELEVATOR	15120	15120
MISCELLANEOUS	8120	5000
TOTAL	226631	200291





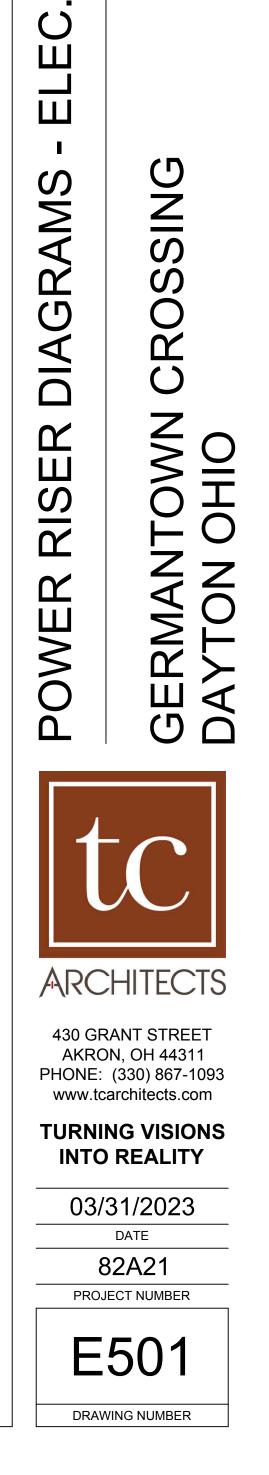
POWER RISER DIAGRAM N.T.S.

# PLAN NOTES

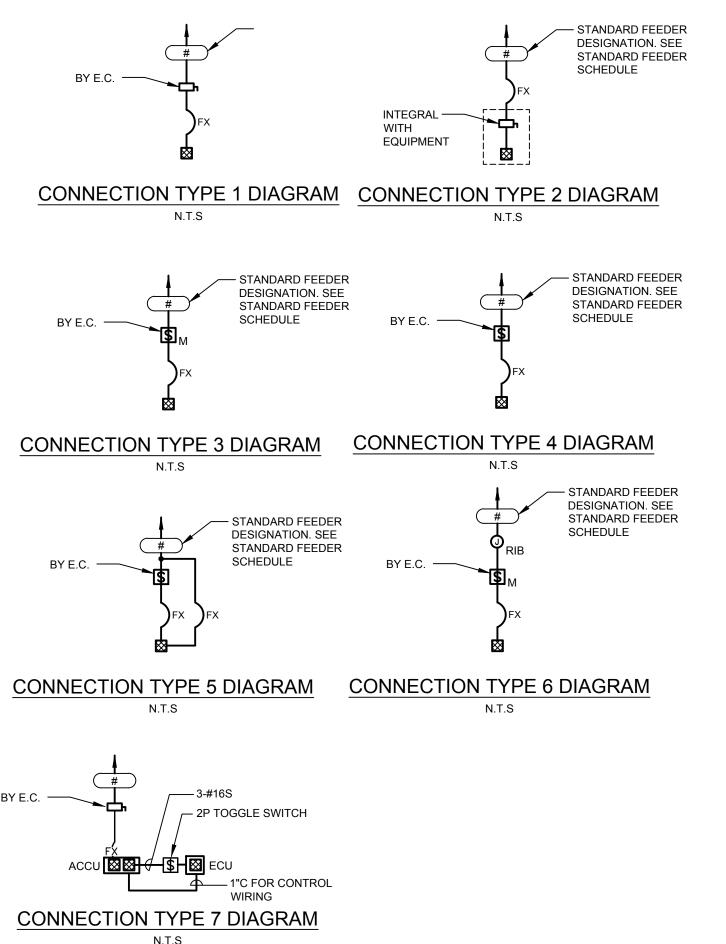
A. "LSI" ON BREAKER IN INDICATES INDEPENDENTLY-ADJUSTABLE TRIP UNIT. L – LONG-TIME PICKUP S - SHORT-TIME PICKUP I – INSTANTANEOUS PICKUP

CODED NOTES
CE ENTRANCE GROUNDING ELECTRODE CONDUCTOR. SEE DETAIL SHEET FOR INFORMATION.
NEUTRAL AND GROUND AT SERVICE ENTRANCE. SEE DETAIL SHEET FOR INFORMATION.
NATE BREAKER SIZE WITH SPD MANUFACTURER. REVISE FEEDER SIZE TO CAKER SIZE RECOMMENDED BY MANUFACTURER.
IALLY-MOUNTED SURGE PROTECTION DEVICE LOCATED ON TOP OR SIDE OF ON PANEL. REFER TO SPECIFICATIONS.
E CONDUCTOR LENGTH AS MUCH AS POSSIBLE.
E TRANSFORMER PAD PER UTILITY REQUIREMENTS. REFER TO DETAIL AND E WITH UTILITY.
208V, 3PH, 4W TRANSITION CABINET WITH MECHANICAL LUGS, CESSIBLE WITH REMOVABLE SIDE AND BACK COVERS, 39" WIDE × 24" DEEP × PROVIDE "SCC" SERIES CADINET BY AMERICAN MIDWEST POWER (OF EQUAL).
P BREAKERS SERVICE 3-BED UNITS. 125A/2P BREAKERS SERVE 1-BED AND TS.
E WIRE SIZE TO MATCH BREAKER SIZE AS REQUIRED.
CIRCUIT BREAKER, LABELED "FUTURE PV ARRAY".
H PULLSTRING. CAP AND LABEL AT BOTH ENDS.
TH PULLSTRING. EXTEND UP TO DESIGNATED PV ARRAY AREA ON ROOF. E LOCATION WITH ARCHITECT AND OWNER. CAP AND LABEL AT BOTH ENDS.

JAMES E ECKMAN E-52748 SIGNATURE 3/31/23 DATE REVISIONS BULLETIN 01 - 07/17/2023 2 BULLETIN 03 - 10/16/2023



POLE A M POLE B (2): M R1 M S1 S2 S3 S3 CSS S4 BLW	CATALOG NO. X17FA-80 RSX2-P1-40K-R4- MVOLT-SPA-PE-TBD 2)-RSX2-P1-40K-R4- MVOLT-SPA-PE-TBD 2BLT2-33L-ADSM- MVOLT-GZ10-LP830- MSD7ADCX-(EL14L) P7253-0930K9 SMD6R-6-930-WH SS-L48-AL03-MVOLT- SWW3-80CRI	DESCRIPTION RAB: X17 SERIES FLOODLIGHT, 9–1/2" WIDE x 11" TALL x 3" DEEP, ALUMINUM HOUSING, 10,700 LUMENS, 82 WATTS, FIELD ADJUSTABLE COLOR TEMPERATURE (SET TO 3000K), INTEGRAL PHOTOCELL, WET LOCATION LISTED, BRONZE FINISH, AND (1) MULTI–VOLT LED DRIVER. LITHONIA: RSX SIZE 2 AREA LIGHT, TYPE IV DISTRIBUTION, 4000K, 11,100 LUMENS, 71 WATTS, INTEGRAL PHOTOCELL, WET LOCATION LISTED, AND (1) MULTI–VOLT LED DRIVER. MOUNT TO 20' SQUARE ALUMINUM POLE. SAME AS POLE A, EXCEPT WITH (2) FIXTURES AT 180 DEGREES. LITHONIA: BLT SERIES 2X2 TROFFER, CURVED CENTER ACRYLIC LENS, 3300 LUMENS, 3000K, 27 WATTS, INTEGRAL PIR OCCUPANCY SENSOR, AND (1) MULTI–VOLT LED DRIVER. WHERE "EM" SUBSCRIPT IS SHOWN, PROVIDE INTEGRAL 1400 LUMEN BATTERY PACK WITH INTEGRAL TEST SWITCH. PROGRESS LIGHTING: ROUND DECORATIVE LIGHT, 14" DIAMETER, 3–3/4 TALL, STEEL BANDS WITH BRUSHED NICKEL FINISH, WHITE ACRYLIC DIFFUSER, 1184 LUMENS, 3000K, 22 WATTS, 120V. COOPER 6" ROUND SURFACE DOWNLIGHT, POLYCARBONATE FRAME, WHITE ACRYLIC LENS, NON–CONDUCTIVE DEAD–FRONT TRIM, 600 LUMENS, 3000K, 10 WATTS, WHITE FINISH, 120V. LITHONIA: CSS SERIES STRIP FIXTURE, 4' LONG, STEEL HOUSING, FLAT DIFFUSE ACRYLIC	MOUNTING CONCRETE BASE. REFER TO DETAIL. CONCRETE BASE. REFER TO DETAIL. CONCRETE BASE. REFER TO DETAIL. CEILING RECESSED CEILING SURFACE	LAMP(S) INTEGRAL LED INTEGRAL LED INTEGRAL LED INTEGRAL LED	CU-2 CU-3 CU-4 DWH-1 DWH-2	NT DESC CONDEN CONDEN CONDEN CONDEN CONDEN GAS WA	DENSING UNIT DENSING UNIT DENSING UNIT VATER HEATER	LOCATION EXTERIOR EXTERIOR EXTERIOR EXTERIOR	APPARENT POWER 3952 3952		208 PH	ASE (NOTE 1)		DISCONNECT DESCRIPTION (NOTE 2) 604/240V/2R/354F/NEMA 3B 604/240V/2P/354F/NEMA 3R			REMARKS 29.1 MCA, 35A MOP
POLE A M POLE B (2): M R1 (2): M S1 (2): M S2 (2): M S1 (2):M S1 (2)	RSX2-P1-40K-R4- MVOLT-SPA-PE-TBD 2)-RSX2-P1-40K-R4- MVOLT-SPA-PE-TBD 2BLT2-33L-ADSM- MVOLT-GZ10-LP830- MSD7ADCX-(EL14L) P7253-0930K9 SMD6R-6-930-WH	INTEGRAL PHOTOCELL, WET LOCATION LISTED, BRONZE FINISH, AND (1) MULTI-VOLT LED DRIVER. LITHONIA: RSX SIZE 2 AREA LIGHT, TYPE IV DISTRIBUTION, 4000K, 11,100 LUMENS, 71 WATTS, INTEGRAL PHOTOCELL, WET LOCATION LISTED, AND (1) MULTI-VOLT LED DRIVER. MOUNT TO 20' SQUARE ALUMINUM POLE. SAME AS POLE A, EXCEPT WITH (2) FIXTURES AT 180 DEGREES. LITHONIA: BLT SERIES 2X2 TROFFER, CURVED CENTER ACRYLIC LENS, 3300 LUMENS, 3000K, 27 WATTS, INTEGRAL PIR OCCUPANCY SENSOR, AND (1) MULTI-VOLT LED DRIVER. WHERE "EM" SUBSCRIPT IS SHOWN, PROVIDE INTEGRAL 1400 LUMEN BATTERY PACK WITH INTEGRAL TEST SWITCH. PROGRESS LIGHTING: ROUND DECORATIVE LIGHT, 14" DIAMETER, 3-3/4 TALL, STEEL BANDS WITH BRUSHED NICKEL FINISH, WHITE ACRYLIC DIFFUSER, 1184 LUMENS, 3000K, 22 WATTS, 120V.	REFER TO DETAIL. CONCRETE BASE. REFER TO DETAIL. CONCRETE BASE. REFER TO DETAIL. CEILING RECESSED CEILING SURFACE	INTEGRAL LED	CU-2 CU-3 CU-4 DWH-1 DWH-2	CONDEI CONDEI CONDEI CONDEI I GAS WA	DENSING UNIT DENSING UNIT DENSING UNIT VATER HEATER	EXTERIOR	3952					60A/240+/2R/35AF/NEMA3B	ADVACENT TO INTEGRAL UNIT ADJACENT TO INTEGRAL		291 MGA 38A MON
POLE A M POLE B (2): M R1 M S1 S2 S3 S3 CSS S4 BLW	MVOLT-SPA-PE-TBD 	LITHONIA: RSX SIZE 2 AREA LIGHT, TYPE IV DISTRIBUTION, 4000K, 11,100 LUMENS, 71 WATTS, INTEGRAL PHOTOCELL, WET LOCATION LISTED, AND (1) MULTI-VOLT LED DRIVER. MOUNT TO 20' SQUARE ALUMINUM POLE. SAME AS POLE A, EXCEPT WITH (2) FIXTURES AT 180 DEGREES. LITHONIA: BLT SERIES 2X2 TROFFER, CURVED CENTER ACRYLIC LENS, 3300 LUMENS, 3000K, 27 WATTS, INTEGRAL PIR OCCUPANCY SENSOR, AND (1) MULTI-VOLT LED DRIVER. WHERE "EM" SUBSCRIPT IS SHOWN, PROVIDE INTEGRAL 1400 LUMEN BATTERY PACK WITH INTEGRAL TEST SWITCH. PROGRESS LIGHTING: ROUND DECORATIVE LIGHT, 14" DIAMETER, 3–3/4 TALL, STEEL BANDS WITH BRUSHED NICKEL FINISH, WHITE ACRYLIC DIFFUSER, 1184 LUMENS, 3000K, 22 WATTS, 120V. COOPER 6" ROUND SURFACE DOWNLIGHT, POLYCARBONATE FRAME, WHITE ACRYLIC LENS, NON-CONDUCTIVE DEAD-FRONT TRIM, 600 LUMENS, 3000K, 10 WATTS, WHITE FINISH, 120V.	REFER TO DETAIL. CONCRETE BASE. REFER TO DETAIL. CEILING RECESSED CEILING SURFACE	INTEGRAL LED	CU-2 CU-3 CU-4 DWH-1 DWH-2	CONDEI CONDEI CONDEI GAS WA 2 GAS WA	DENSING UNIT DENSING UNIT DENSING UNIT VATER HEATER	EXTERIOR	3952						ADJACENT TO		
POLE A M POLE B (2): M R1 M S1 S2 S3 S3 CSS S4 BLW	MVOLT-SPA-PE-TBD 	<ul> <li>WATTS, INTEGRAL PHOTOCELL, WET LOCATION LISTED, AND (1) MULTI-VOLT LED DRIVER. MOUNT TO 20' SQUARE ALUMINUM POLE.</li> <li>SAME AS POLE A, EXCEPT WITH (2) FIXTURES AT 180 DEGREES.</li> <li>LITHONIA: BLT SERIES 2X2 TROFFER, CURVED CENTER ACRYLIC LENS, 3300 LUMENS, 3000K, 27 WATTS, INTEGRAL PIR OCCUPANCY SENSOR, AND (1) MULTI-VOLT LED DRIVER. WHERE "EM" SUBSCRIPT IS SHOWN, PROVIDE INTEGRAL 1400 LUMEN BATTERY PACK WITH INTEGRAL TEST SWITCH.</li> <li>PROGRESS LIGHTING: ROUND DECORATIVE LIGHT, 14" DIAMETER, 3-3/4 TALL, STEEL BANDS WITH BRUSHED NICKEL FINISH, WHITE ACRYLIC DIFFUSER, 1184 LUMENS, 3000K, 22 WATTS, 120V.</li> <li>COOPER 6" ROUND SURFACE DOWNLIGHT, POLYCARBONATE FRAME, WHITE ACRYLIC LENS, NON-CONDUCTIVE DEAD-FRONT TRIM, 600 LUMENS, 3000K, 10 WATTS, WHITE FINISH, 120V.</li> </ul>	REFER TO DETAIL. CONCRETE BASE. REFER TO DETAIL. CEILING RECESSED CEILING SURFACE	INTEGRAL LED	CU-3 CU-4 DWH-1 DWH-2	CONDEI CONDEI I GAS WA 2 GAS WA	DENSING UNIT DENSING UNIT VATER HEATER	EXTERIOR									
R1 M R1 M S1 S2 S3 S3 CSS S4 BLW FEM	ŃVOLT-SPA-PE-TBD 2BLT2-33L-ADSM- MVOLT-GZ10-LP830- MSD7ADCX-(EL14L) P7253-0930К9 SMD6R-6-930-WH SS-L48-AL03-MVOLT-	LITHONIA: BLT SERIES 2X2 TROFFER, CURVED CENTER ACRYLIC LENS, 3300 LUMENS, 3000K, 27 WATTS, INTEGRAL PIR OCCUPANCY SENSOR, AND (1) MULTI-VOLT LED DRIVER. WHERE "EM" SUBSCRIPT IS SHOWN, PROVIDE INTEGRAL 1400 LUMEN BATTERY PACK WITH INTEGRAL TEST SWITCH. PROGRESS LIGHTING: ROUND DECORATIVE LIGHT, 14" DIAMETER, 3–3/4 TALL, STEEL BANDS WITH BRUSHED NICKEL FINISH, WHITE ACRYLIC DIFFUSER, 1184 LUMENS, 3000K, 22 WATTS, 120V. COOPER 6" ROUND SURFACE DOWNLIGHT, POLYCARBONATE FRAME, WHITE ACRYLIC LENS, NON-CONDUCTIVE DEAD-FRONT TRIM, 600 LUMENS, 3000K, 10 WATTS, WHITE FINISH, 120V.	REFER TO DETAIL. CEILING RECESSED CEILING SURFACE	INTEGRAL LED	DWH-1 DWH-2	I GAS WA	VATER HEATER	EXTERIOR	J952	- 2	208	1 35A	DS-CU-3	60A/240V/2P/35AF/NEMA 3R	ADJACENT TO INTEGRAL	1	29.1 MCA, 35A MOP
R1 M R1 M S1 S2 S3 S3 CSS S4 BLW FEM	ŃVOLT-SPA-PE-TBD 2BLT2-33L-ADSM- MVOLT-GZ10-LP830- MSD7ADCX-(EL14L) P7253-0930К9 SMD6R-6-930-WH SS-L48-AL03-MVOLT-	LITHONIA: BLT SERIES 2X2 TROFFER, CURVED CENTER ACRYLIC LENS, 3300 LUMENS, 3000K, 27 WATTS, INTEGRAL PIR OCCUPANCY SENSOR, AND (1) MULTI-VOLT LED DRIVER. WHERE "EM" SUBSCRIPT IS SHOWN, PROVIDE INTEGRAL 1400 LUMEN BATTERY PACK WITH INTEGRAL TEST SWITCH. PROGRESS LIGHTING: ROUND DECORATIVE LIGHT, 14" DIAMETER, 3–3/4 TALL, STEEL BANDS WITH BRUSHED NICKEL FINISH, WHITE ACRYLIC DIFFUSER, 1184 LUMENS, 3000K, 22 WATTS, 120V. COOPER 6" ROUND SURFACE DOWNLIGHT, POLYCARBONATE FRAME, WHITE ACRYLIC LENS, NON-CONDUCTIVE DEAD-FRONT TRIM, 600 LUMENS, 3000K, 10 WATTS, WHITE FINISH, 120V.	REFER TO DETAIL. CEILING RECESSED CEILING SURFACE	INTEGRAL LED	DWH-2	2 GAS WA			3952	- 2	208	1 35A	DS-CU-4	60A/240V/2P/35AF/NEMA 3R	ADJACENT TO INTEGRAL	1	29.1 MCA, 35A MOP
R1 M N S1 S2 S S3 CSS S4 BLW	VVOLT-GZ10-LP830- MSD7ADCX-(EL14L) P7253-0930K9 SMD6R-6-930-WH	<ul> <li>3000K, 27 WATTS, INTEGRAL PIR OCCUPANCY SENSOR, AND (1) MULTI-VOLT LED DRIVER. WHERE "EM" SUBSCRIPT IS SHOWN, PROVIDE INTEGRAL 1400 LUMEN BATTERY PACK WITH INTEGRAL TEST SWITCH.</li> <li>PROGRESS LIGHTING: ROUND DECORATIVE LIGHT, 14" DIAMETER, 3–3/4 TALL, STEEL BANDS WITH BRUSHED NICKEL FINISH, WHITE ACRYLIC DIFFUSER, 1184 LUMENS, 3000K, 22 WATTS, 120V.</li> <li>COOPER 6" ROUND SURFACE DOWNLIGHT, POLYCARBONATE FRAME, WHITE ACRYLIC LENS, NON-CONDUCTIVE DEAD-FRONT TRIM, 600 LUMENS, 3000K, 10 WATTS, WHITE FINISH, 120V.</li> </ul>	CEILING SURFACE					MECH ROOM	600	- 1	120	1 20A	DS-DWH-1	TOGGLE SWITCH DISCONNECT	ADJACENT TO UNIT INTEGRAL	4	
S1 S2 S3 S4 FEM	MSD7ADCX-(EL14L) P7253-0930K9 SMD6R-6-930-WH	INTEGRAL TEST SWITCH. PROGRESS LIGHTING: ROUND DECORATIVE LIGHT, 14" DIAMETER, 3–3/4 TALL, STEEL BANDS WITH BRUSHED NICKEL FINISH, WHITE ACRYLIC DIFFUSER, 1184 LUMENS, 3000K, 22 WATTS, 120V. COOPER 6" ROUND SURFACE DOWNLIGHT, POLYCARBONATE FRAME, WHITE ACRYLIC LENS, NON-CONDUCTIVE DEAD-FRONT TRIM, 600 LUMENS, 3000K, 10 WATTS, WHITE FINISH, 120V.	CEILING SURFACE				VATER HEATER	MECH ROOM	600	- 1	120	1 20A	DS-DWH-2	TOGGLE SWITCH DISCONNECT	ADJACENT TO UNIT INTEGRAL	4	
S2 S S3 CSS S4 BLW	SMD6R-6-930-WH SS-L48-AL03-MVOLT-	BANDS WITH BRUSHED NICKEL FINISH, WHITE ACRYLIC DIFFUSER, 1184 LUMENS, 3000K, 22 WATTS, 120V. COOPER 6" ROUND SURFACE DOWNLIGHT, POLYCARBONATE FRAME, WHITE ACRYLIC LENS, NON-CONDUCTIVE DEAD-FRONT TRIM, 600 LUMENS, 3000K, 10 WATTS, WHITE FINISH, 120V.		INTEGRAL LED	ECH-1		TRIC CABINET HEATER	VARIOUS	4800	- 2	208	1 30A	_	INTEGRAL	– INTEGRAL	2	
S3 CSS S4 BLW	SS-L48-AL03-MVOLT-	COOPER 6" ROUND SURFACE DOWNLIGHT, POLYCARBONATE FRAME, WHITE ACRYLIC LENS, NON-CONDUCTIVE DEAD-FRONT TRIM, 600 LUMENS, 3000K, 10 WATTS, WHITE FINISH, 120V.			EWH-1	ELECTRIC	C WALL HEATER	VARIOUS	6000	- 2	208	1 40A	-	INTEGRAL	– INTEGRAL	2	
S3 CSS S4 BLW	SS-L48-AL03-MVOLT-	NON-CONDUCTIVE DEAD-FRONT TRIM, 600 LUMENS, 3000K, 10 WATTS, WHITE FINISH, 120V.	CEILING SUREACE		EF-1	INLINE E	EXHAUST FAN	VARIOUS	20	- 1	120	1 20A	-	TOGGLE SWITCH	ON WALL NEAR	5	REFER TO FLOOR PLANS FOR CO
S4 BLW	SS-L48-AL03-MVOLT- SWW3-80CRI	LITHONIA' CSS SERIES STRIP FIXTURE 4' LONG STEEL HOUSING FLAT DIFFUSE ACRYLIC	SEILING SOM AGE	INTEGRAL LED	EF-2	INLINE E	EXHAUST FAN	VARIOUS	24	- 1	120	1 20A	-	TOGGLE SWITCH IN APARTMENTS. TIMER SWITCH IN PUBLIC RESTROOMS	ON WALL NEAR	4	REFER TO FLOOR PLANS FOR CO
S4 BLW	SWW3-80CRI	LENS, SWITCHABLE LUMENS (3000/4000/5000), SWITCHABLE COLOR TEMPERATURE		INTEGRAL LED	EF-3	INLINE E	EXHAUST FAN	VARIOUS	64	- 1	120	1 20A	DS-EF-3	MANUAL MOTOR STARTER	ON WALL NEAR _	3	FAN SHALL RUN CONTINUOUS
54 FEM		(3500K/4000K/5000K), 44 WATTS AT HIGHEST OUTPUT, AND (1) MULTI-VOLT LED DRIVER.	CEILING SURFACE	INTEGRAL LED	EF-4		EXHAUST FAN	VARIOUS	81	- 1	120	1 20A	DS-EF-4	MANUAL MOTOR STARTER	ON WALL NEAR _	3	FAN SHALL RUN CONTINUOUS
FEM	WP4-40L-ADSM-GZ1-	LITHONIA: BLWP SERIES FIXTURE, 4' LONG, STEEL HOUSING, WHITE ARCYLIC LENS, 4000	CEILING SURFACE	INTEGRAL LED	EF-5		EXHAUST FAN	VARIOUS	12		120	1 20A	DS-EF-5	MANUAL MOTOR STARTER	ON WALL NEAR	3	FAN SHALL RUN CONTINUOUS
	LP830	LUMENS, 3000K, 35 WATTS, AND (1) MULTI-VOLT LED DRIVER (0-10V DIMMING)	CEIEING SONTACE		HP-1 HP-2		EAT PUMP EAT PUMP	1ST FLOOR 1ST FLOOR	20000 20000		208 208	1 125A 1 125A	_	INTEGRAL INTEGRAL	-         INTEGRAL           -         INTEGRAL	2	
	M-L48-4000LM-LPPCL VD-MVOLT-GZ10-30K-	LITHONIA: ENCLOSED AND GASKETED INDUSTRIAL FIXTURE, 4' LONG, FIBERGLASS HOUSING, LOW-PROFILE CLEAR POLYCARBONATE LENS, WIDE DISTRIBUTION, 4000 LUMENS, 24	SURFACE. REFER TO	INTEGRAL LED	HP-3 HP-4		EAT PUMP EAT PUMP	2ND FLOOR 3RD FLOOR	10000 10000	<u> </u>	208 208	1 70A 1 70A	-	INTEGRAL INTEGRAL	– INTEGRAL – INTEGRAL	2	
	80CRI	WATTS, 3000K, WET LOCATION LISTED, AND (1) MULTI-VOLT LED DRIVER.	FLOOR PLANS.		RDHWP	DOMES	ESTIC WATER	1ST FLOOR	1176		120	1 70A 1 20A	_	MANUAL MOTOR STARTER	ADJACENT TO SEE UNIT REMARKS	6	PROVIDE WITH RELAY-IN-A-E
W1	P300223-009-30	PROGRESS LIGHTING: 24" CYLINDRICAL VANITY, ALUMINUM ENDCAPS AND BACKPLATE WITH BRUSHED NICKEL FINISH, WHITE ACRYLIC DIFFUSER, 1600 LUMENS, 22 WATTS, 3000K,	WALL SURFACE ABOVE MIRROR	INTEGRAL LED	VRP-1		AL HEAT PUMP	1-BED UNITS	6743	- 2	208	2 45A	DS-VRP-1	60A/240V/2P/45AF/NEMA 1	ADJACENT TO	1	41.8 MCA, 45A MOP
BI'	_WP4-40L-PDSMT-GZ1	120V. LITHONIA: BLWP WALL FIXTURE, 4' LONG, STEEL HOUSING, WHITE POLYCARBONATE LENS,			VRP-2	2 VERTICAL	AL HEAT PUMP	2-BED UNITS	7862	- 2	208	2 50A	DS-VRP-2	60A/240V/2P/45AF/NEMA 1	ADJACENT TO UNIT INTEGRAL	1	49.2 MCA, 50A MOP
	LP830-MSD7ADCX-DIM 50-E10WLCP	4000 LUMENS, 3000K, 35 WATTS, INTEGRAL PIR OCCUPANCY SENSOR, INTEGRAL 10W BATTERY PACK, AND (1) MULTI–VOLT LED DRIVER. FIXTURE DIMS TO 50% WHEN NO OCCUPANCY IS DETECTED.	WALL SURFACE AT 7' AFF	INTEGRAL LED	VRP-3A		L HEAT PUMP - RCUIT #1	3-BED UNITS	8186	- 2	208	2 50A	DS-VRP-3A	60A/240V/2P/50AF/NEMA 1	ADJACENT TO UNIT INTEGRAL	1	49.2 MCA, 50A MOP
W3 WP	PX2-40K-MVOLT-PE- TBD	LITHONIA: WPX SIZE 2 WALLPACK, 12" WIDE x 9" TALL x 4.1" DEEP, ALUMINUM HOUSING, 6000 LUMENS, 47 WATTS, 4000K, INTEGRAL PHOTOCELL, WET LOCATION LISTED, AND (1) MULTI-VOLT LED DRIVER.	WALL SURFACE AT 9' AFG	INTEGRAL LED	VRP-3B		L HEAT PUMP - IRCUIT #2	3-BED UNITS	3993	- 2	208	2 25A	DS-VRP-3B	30A/240V/2P/24AF/NEMA 1	ADJACENT TO UNIT INTEGRAL	1	24 MCA, 25A MOP
W4 – ME	M-L48-3000LM-LPPFL ID-MVOLT-GZ10-40K- 80CRI-E10WMCP	LITHONIA: ENCLOSED AND GASKETED INDUSTRIAL FIXTURE, 4' LONG, FIBERGLASS HOUSING, LOW-PROFILE FROSTED POLYCARBONATE LENS, 3000 LUMENS, 18 WATTS, 4000K, WET LOCATION LISTED, INTEGRAL BATTERY PACK, AND (1) MULTI-VOLT LED DRIVER.	WALL SURFACE	INTEGRAL LED													
W5	P7088-0930K9	PROGRESS LIGHTING: WALL SCONCE, CURVED WHITE ACRYLIC LENS WITH BRUSHED NICKEL BARS, 611 LUMENS, 17 WATTS, 3000K, 120V.	WALL SURFACE	INTEGRAL LED			1	_			1		3		PANELBOARD S		
	75-R06L-HFC0XX18-T BD-M-00-0-840-00	ELLIPTIPAR: S175 SERIES LINEAR FIXTURE, 6' LONG, ALUMINUM HOUSING, ASYMMETRIC DISTRIBUTION, ADJUSTABLE AIMING, 4588 LUMENS, 48 WATTS, WET LOCATION LISTED, AND (1) MULTI-VOLT LED DRIVER. MOUNT TO 18" CANTILEVER ARM AND AIM TO ILLUMINATE LETTERING. PROVIDE ALL REQUIRED JOINERS AND ENDCAPS FOR MULTIPLE ADJACENT FIXTURES.	WALL SURFACE ABOVE LETTERING	INTEGRAL LED		BY E.C					FX	DESIGNATION. SEE STANDARD FEEDER SCHEDULE		PANEL: <u>H1A</u>	LOCATION: <u>1ST FL</u>		MOUNTING: <u>SURFACE</u>
W7	P710118-009	PROGRESS LIGHTING: DECORATIVE WALL SCONCE, CURVED WHITE GLASS LENS WITH BRUSHED NICKEL BARS, (2) MEDIUM-BASE E26 LAMP SOCKETS, 120V. PROVIDE WITH (2) 3500K LED A19 BULBS (12.5 WATT MAX PER BULB).	WALL SURFACE	INTEGRAL LED			)FX		WIT EQU	JIPMENT				SERVICE: <u>208/120 vo</u> MAINS <u>150</u> AMPS, FED FROM <u>HDP</u>	LTS, 2 PHASE, LUGS, FULL CAPACITY, NEUTF	 	
	ELM4L	LITHONIA: QUANTUM EMERGENCY LIGHT WITH (2) ADJUSTABLE LED HEADS, WHITE THERMOPLASTIC HOUSING, INTEGRAL NICAD BATTERY, AND (1) MULTI-VOLT LED DRIVER.	WALL SURFACE AT 7'	INTEGRAL LED		CONNECT	TION TYPE	E 1 DIAGRA	<u>M</u> CON	NECTION	N TYPE	2 DIAGRAM			сст. сст.		
	HQM-LED-R-HO-RO	LITHONIA: QUANTUM EXIT SIGN, WHITE THERMOPLASTIC HOUSING, RED LETTERS, INTEGRAL HIGH-OUTPUT NICAD BATTERY SUITABLE FOR CONNECTION TO EMERGENCY HEAD, AND (1) MULTI-VOLT LED DRIVER.	WALL OR CEILING SURFACE	INTEGRAL LED	-									R-900 RECEPT HALLWAYS	BKR. NO.	NO. BKR.	DESCRIPTION LOAE
	QM-S-W-3-R-MVOLT	LITHONIA: QUANTUM EXIT SIGN, WHITE THERMOPLASTIC HOUSING, RED LETTERS, INTEGRAL NICAD BATTERY, AND (1) MULTI-VOLT LED DRIVER.	WALL OR CEILING SURFACE	INTEGRAL LED	-		#		SEE EDER	( Y E.C	#	STANDARD FEEDER DESIGNATION. SEE STANDARD FEEDER SCHEDULE		H-4800 CABINET HEATER - MAIN VESTIBI		6 20/1	RECEPT. – MAIN LOBBY R–54 PARKING LOT LIGHTING L–63
EL'	LMRW-LP220L-TBD-T	LITHONIA: QUANTUM EMERGENCY REMOTE LIGHT WITH (2) ADJUSTABLE LED HEADS, ALUMINUM HOUSING. CONNECT TO EXIT SIGN PER DETAIL. COORDINATE FINISH WITH ARCHITECT.	WALL SURFACE ABOVE DOOR	INTEGRAL LED		BY E.C.		CONEDULE		L.U	<b>`</b> \$   			H-3952 CU-2	35/2 9	10 20/1	MONUNENT SIGN LIGHTING L-16 LIGHTING - MAINTENANCE ROOM L-54
SYMBOL MAN	NUFACTURER	ES BY THE FOLLOWING MANUFACTURERS ARE ACCEPTABLE:			-									M-200 AREA OF RESCUE SYSTEM - SPARE	20/1 11 20/1 13 15	14 20/1	
	D LIGHTING, COOPER, IL I, EATON, HUBBELL, CO	P DPER, SIGNIFY, CURRENT			<u><u> </u></u>	ONNECTIC	ION TYPE 3	3 DIAGRAM		NECTION		4 DIAGRAM		H-4800 CABINET HEATER - TRASH		<b>1</b> 6 20/1 <b>1</b> 8	EF-4 - MAINTENANCE H-8
		ATON, HUBBELL, SIGNIFY					N.T.S				N.T.S			H-6000 WALL HEATER - STAIRWELL	19	20 20/3	TRASH COMPACTOR M-396
	NPARK, SUNLITE, LUMEI X, JUNO, ARTIKA PRO,	LIGHTOLIER, GM LIGHTING			-			— STANDARD FEE	DER	C	#	DESIGNATION. SEE STANDARD FEEDER			21		DRY-PIPE SUPPRESSION SYSTEM M-50
		GNIFY, HUBBELL, EATON, CURRENT					#	DESIGNATION. STANDARD FEE	SEE DER			SCHEDULE		H-6000 WALL HEATER - MAINTENANCE	40/2	26 20/1	MAIN ENTRANCE AUTO DOORS M-20
	· · ·	GNIFY, HUBBELL, EATON, CURRENT GNIFY, HUBBELL, EATON, CURRENT			-	BY E.C.		SCHEDULE	BY	E.C.	<b>`\$</b> ™			P-600 DWH-1			DOMESTIC WATER RECIRC PUMP P-117
	NPARK, ARTIKA PRO, L						)FX )FX	(			FX			P-600 DWH-2 P-50 MASTER MIXING VALVE	20/1 29	32 20/1	SPARE –
	OPER, PARAMOUNT, CU RFORMANCE IN LIGHTING				-		<u>k</u>				<b>≦</b>			– SPARE	20/1 33		
		GNIFY, HUBBELL, EATON, CURRENT					ON TYPE 5	DIAGRAM	CONN	IECTION	TYPF	6 DIAGRAM		– SPARE	20/1 35		
	X, SUNLITE, LUMENCIA	TSHEET TO ARCHITECT FOR APPROVAL.					N.T.S				N.T.S			– SPARE – SPARE	20/1 39	40 20/1	SPARE –
		DUAL-LITE, SURE-LITES			1									- SPARE	20/1 41	42 20/1	
	ITRONIX, EMERGI-LITE, I	DUAL-LITE, SURE-LITES			1	#	$\supset$							REMARKS: 1. ALL NEW CIRCUIT BREAKER	S TO BE 22,000 AIC FOR 208	R – RECEPT	LOAD LEGEND: FACLES K – KITCHEN
	ITRONIX, EMERGI-LITE, I	DUAL-LITE, SURE-LITES			BY E.C.		<b>h</b> 3-#16	6S FOGGLE SWITCH						OR 240V SYSTEMS UNLESS OT		L – LIGHTING P – PLUMBII H – HVAC	G M – MISCELLANEOUS
CONFIRM ALL	NOTES: FINISH COLORS WITH /	RCHITECT			-		ਲ਼ੑੑ੶ੑੑੑ ਫ਼੶	CU					L				
		TURE IS CONNECTED TO AN UNSWITCHED CIRCUIT FOR "NIGHT LIGHT" ILLUMINATION.				ک سے ا		— 1"C FOR CONTR WIRING	OL								



JAMES E. ECKMAN E-52748 SIGNATURE DATE REVISIONS 
 Image: State of the s

# - ELECTRICAL CROSSING GERMANTOWN DAYTON OHIO JLES SCHEDU ARCHITECTS 430 GRANT STREET AKRON, OH 44311 PHONE: (330) 867-1093 www.tcarchitects.com **TURNING VISIONS** INTO REALITY 03/31/2023 DATE 82A21 PROJECT NUMBER E601

DRAWING NUMBER

												7		
PANEL	: H1B (SECTION 1)		LOC	ATION:	<u>1</u>	ST FLC	OOR			MOUNTING: SURFA	ACE		PANEI	.: <u>H1B (SECTION</u>
SERVIO	CE: <u>208/120 volts</u> ,			_3	PH	ASE,		_4	_ WIRE,	<u>60</u> HZ			SERVI	CE: <u>208/120</u>
MAINS		X	L	UGS,			_		(	CCT. BKR.			MAINS	3 <u>225</u> AMP
FED F	ROM <u>HDP</u>	— F	ULL C	APACIT	IY, I	NEUTR	AL, SE	PARA	TE GRO	JNDING BUS			FED F	ROM <u>H1B (SECT</u>
LOAD	DESCRIPTION	CCT. BKR.					CCT. NO.	CCT. BKR.			LOAD		LOAD	DESCRIPTION
R-360	RECEPT. – SECURITY RACK	20/1	1	-~-	┥┤	$\vdash \frown$	2	20/	SPARE		- <b></b>	$\mathbb{K}^{-1}$	L-825	LIGHTING - WEST CORRIDO
L-200	ELEVATOR CAB LIGHTING	20/1	3		╟╋	$\vdash \frown$	4	20/1	RECEPT.	- ELEVATOR PIT	R-180	$\mathbb{M}$	L-352	LIGHTING - MAILROOM, M CORRIDOR, RESTROOMS
R-720	RECEPT. – OFFICE C116	20/1	5			<u>+</u> ^-	6	20/1	RECEPT.	- OFFICE C113	R-720		L-307	LIGHTING - COMMUNITY F
P-990	RECEPT CONFERENCE C118,	20/1	7		╉	$\vdash \frown$	8	20/1	RECEPT.	- OFFICE C115 / LOBBY	R-720		L-413	LIGHTING - SOUTH CORR
-	SPARE	201	9		$\mathbf{H}$	$\vdash \frown$	10	20/1	RECEPT.	- OFFICE C115 COPIER	R-1000		L-292	LIGHTING - WEST STAIRW
L=36	LIGHTING ELEVATOR PIT	20/1	11		$\mathbf{H}$	<b>↓</b> ^-	12	20/1	RECEPT.	- HALLWAYS	R-1080			
R-720	RECEPT COMMUNITY ROOM, EXTERIOR	20/1	13		┥┼	$\vdash \frown$	14	20/1	RECEPT.	- HALLWAYS	R-900		H-6000	WALL HEATER – TRASH
R-720	RECEPT COMMUNITY ROOM	20/1	15	-^-	$\mathbf{H}$	$\vdash \frown$	16	20/1	RECEPT.	- KITCHEN	R-360		H-64	EF-3 - TRASH
R-720	RECEPT COMMUNITY ROOM, RESTROOMS	20/1	17	$\langle  $		┣ <u></u>	18	20/1	RECEPT.	- KITCHEN	R-540		-	SPARE
-	SPARE	20/1	19		╉┼	$\vdash \frown$	20	20/1	RECEPT.	- KITCHEN REFRIGERATOR	R-1000		-	SPARE
-	SPARE	20/1	21	$\langle  $	$\mathbf{H}$	$\vdash \frown$	22	20/1	RECEPT.	- DATA CLOSET	R-360		-	SPARE
H-4800	CABINET HEATER - COMMUNITY	30/2	23	$\langle  $		┣-^-	24	20/1	RECEPT.	- DATA CLOSET	R-360		-	SPARE
11-4800	ROOM	5072	25	-~-	╋┼╴	+ -	26	20/+	SPARE	$\sim$	$\checkmark$	$\sqrt{2}$	-	SPARE
H-4800	CABINET HEATER - WEST ENTRANCE	30/2	27	<u> </u>		+	28	20/1	SPARE		-		-	SPARE
	CADINET HERTEN WEST ENTRANCE	50/2	29	<u> </u>		<b>↓</b> ^-	30	20/1	SPARE		-	<u> </u>	-	SPARE
H-3952		35/2	31		┢╂	+	32	20/1	SRARE	$\sim$	$\downarrow \sim$	T .	_	SPARE
n-3932		35/2	33	<u> </u>	┝	$+^{-}$	34	20/1	SPARE				-	SPARE
H-3952	01-3	35/2	35	<u> </u>		<b>↓</b> ^-	- 36	20/	SPARE	• • • •	· - ·	<u> </u>	-	SPARE
n-3932		35/2	37		┢┨╴	+	- 38	30/2		HEATER - NORTH	H-4800	ľ	-	SPARE
H-3952		3E /0	39			+	40	30/2	ENTRANO				-	SPARE
n-3922	∪u+	35/2	41	-^-	$\square$	$+ \overline{}$	42	20/1		– DRINKING FOUNTAIN, NTRANCE	R-600		-	SPARE
REMAR	<u> </u>					•			LOA	D LEGEND:			REMAR	KS:

PANEL	.: <u>H3</u>		LOC	ATION:	3	RD FLC	OR		MOUNTING: <u>FLUSH</u>	
SERVICE: <u>208/120 volts,3</u> PHASE,4_ WIRE,60_ HZ										
MAINS MAPS,X LUGS, CCT. BKR.										
FED F							_			
		—— Fl	ULL C		Υ, Ι	NEUTRA	L, SEI	PARAT	E GROUNDING BUS	
LOAD	DESCRIPTION	CCT. BKR.	CCT. NO.				CCT. NO.	CCT. BKR.	DESCRIPTION	LOAD
R-900	RECEPT. – HALLWAYS	20/1	1		$\square$	<u> </u>	2	20/1	RECEPT. – DATA CLOSET	R-360
R-720	RECEPT HALLWAYS	20/1	3		┠╋	<u> </u>	4	20/1	RECEPT. – DATA CLOSET	R-360
R-900	RECEPT. – HALLWAYS	20/1	5	<u> </u>	╟		6	70/2	HP-4	H–1000
L-919	LIGHTING - NORTH CORRIDOR, FITNESS	20/1	7			<u>+</u> ^-	8	,_		
L-449	LIGHTING - SOUTH CORRIDOR	20/1	9	<u> </u>	┝╋	<u>+</u> ^-	10	20/1	RECEPT. – FITNESS	R-360
H-4800	CABINET HEATER – TRASH	30/2	11	<u> </u>		<u> </u>	12	20/1	RECEPT. – FITNESS TREADMILL	R-180
			13		┣┼	<u>+</u> ^-	14	20/1	RECEPT. – FITNESS	R-360
L-328	TOWER LIGHTING	20/1	15	<u> </u>		<u> </u>	16	20/1	RECEPT. – FITNESS	R-540
-	SPARE	20/1	17	<u> </u>		<b>↓</b> ^	18	20/1	EF-5 - WEST TRASH ROOM	H–12
-	SPARE	20/1	19	<u> </u>		<u>+</u> ^-	20	20/1	EF-5 - EAST TRASH ROOM	H–12
-	SPARE	20/1	21	<u> </u>	╞╋	<u> </u>	22	20/1	RECEPT. – FITNESS TREADMILL	R-180
-	SPARE	20/1	23	<u> </u>		<b>├</b> ^-	24	20/1	RECEPT. – FITNESS TREADMILL	R-180
-	SPARE	20/1	25			<u>+</u> ^-	26	20/1	SPARE	-
-	SPARE	20/1	27	<u> </u>	┝╋	<u>+</u> ^-	28	20/1	SPARE	-
-	SPARE	20/1	29	<u> </u>	┢╋	<b>⊢</b> ^-	30	20/1	SPARE	_
-	SPARE	20/1	31	$\vdash \frown$	┢┼╴	<u>-</u>	32	20/1	SPARE	-
-	SPARE	20/1	33	<u> </u>	┝╋╴	<u>-</u>	34	20/1	SPARE	-
-	SPARE	20/1	35	<u> </u>		<b>-</b> ^-	36	20/1	SPARE	-
-	SPARE	20/1	37	<u> </u>		-∽-	38	20/1	SPARE	-
-	SPARE	20/1	39	<u> </u>	┝╋	-∽-	40	20/1	SPARE	-
-	SPARE	20/1	41			<b>↓</b>	42	20/1	SPARE	-

PA	NE	LBO	CA	R	D	S	2	HE	DU	LE	
2)		LOC	ATION	:	<u>1</u> :	ST FL	.00	OR		MOUNTING: <u>SURFA</u>	CE
VOLTS,			_3	_ F	РΗΑ	ASE,			_4	WIRE, <u>60</u> HZ	
,	X	L	UGS,							CCT. BKR.	
N 1)	_										
	F			Y	, r	NEUTR	(A)	L, SEF		E GROUNDING BUS	1
	CCT. BKR.	CCT. NO.						CCT. NO.	CCT. BKR.	DESCRIPTION	LOAD
	20/1	43	$\neg$	+	$\left  \right $	$\vdash \frown$		44	20/1	RECEPT. – NORTH ENTRANCE, RESTROOMS	R-540
HANICAL,	20/1	45		╡	┢			46	20/1	LIGHTING - OFFICES, LOBBY	L-412
м	20/1	47		╡	╄			48	20/1	LIGHTING - FRONT CANOPY	L-66
R	20/1	49		╉		$\neg$		50	20/1	LIGHTING – COMM. ROOM CANOPY, BUILDING SIGNAGE, TOWER	L-800
-	20/1	51			┢	$\neg$		52	40.70		
		53		+	┡			54	40/2	WALL HEATER – STAIRWELL	H-6000
	40/2	55		╉	╀	$\neg$		56	70 /2	CABINET HEATER – TRASH	H-4800
	20/1	57		+	┢	$\neg$		58	30/2	COMPACTOR	H-4800
	20/1	59			┢	$\neg$		60			
	20/1	61		╉	+	$\neg$		62	20/3	TRASH COMPACTOR	M-3960
	20/1	63			┢	$\neg$		64			
	20/1	65	$\neg$		┢			66	20/1	SPARE	-
	20/1	67	$\vdash$			$\vdash$		68	20/1	SPARE	_
	20/1	69	$\neg$		┢	-		70	20/1	SPARE	_
	20/1	71	$\neg$		F	$\sim$		72	20/1	SPARE	_
	20/1	73	-			$\vdash$		74	20/1	SPARE	-
	20/1	75	$\neg$		┢	-		76	20/1	SPARE	_
	20/1	77	-		F			78	20/1	SPARE	-
	20/1	79	-			$\vdash$		80	20/1	SPARE	-
	20/1	81	-		┢	$\vdash$		82	20/1	SPARE	-
	20/1	83			$\mathbf{F}$			84	20/1	SPARE	_
										LOAD LEGEND:	
		~~ ~~				000		_			

	PA	NE	LB	JAF	RD	SC	HE	DU	LE	
PANEI	PANEL: H2 LOCATION: 2ND FLOOR MOUNTING: FLUSH									
	SERVICE: 208/120 VOLTS,3 PHASE,4 WIRE,60 HZ									
MAINS	MAINS <u>150</u> AMPS, <u>X</u> LUGS, <u></u> CCT. BKR.									
FED F	FED FROM <u>HDP</u> FULL CAPACITY, NEUTRAL, SEPARATE GROUNDING BUS									
LOAD	DESCRIPTION	CCT. BKR.	CCT. NO.				CCT. NO.		DESCRIPTION	LOAD
M-5000	RECEPT. – DRYER	30/2	1				2 4	- 30/2	RECEPT. – DRYER	M-5000
M-5000	RECEPT. – DRYER	30/2	5 7				6 8	- 30/2	RECEPT. – DRYER	M-5000
M-1000	RECEPT. – WASHER	20/1	9		$\mathbf{H}$	<u>+</u> ^-	10	20/1	RECEPT. – WASHER	M-1000
M-1000	RECEPT. – WASHER	20/1	11				12	20/1	RECEPT. – WASHER	M-1000
R-1080	RECEPT COMPUTERS	20/1	13		H	$\vdash \frown$	14	20/1	RECEPT. – LAUNDRY	R-540
R-360	RECEPT. – DATA CLOSET	20/1	15			$\vdash \frown$	16	20/1	RECEPT. – HALLWAYS	R-900
R-360	RECEPT. – DATA CLOSET	20/1	17			<b>↓</b> ^	18	20/1	RECEPT. – HALLWAYS	R-720
H-10000	I-10000 HP-3		19			+ -	20	20/1	RECEPT. – HALLWAYS	R-900
11 10000		70/2	21	$\langle  $	$\vdash$	+ -	22	20/1	LIGHTING - NORTH CORRIDOR, LAUDNRY	L-914
H-4800	CABINET HEATER – TRASH	30/2	23			┝──	24	20/1	LIGHTING - SOUTH CORRIDOR	L-454
11-4800		3072	25	-~-	$\vdash$	<u>+</u> ^-	26	20/1	EF-5 - WEST TRASH ROOM	H-12
_	SPARE	20/1	27		$\vdash$	+~-	28	20/1	EF-5 - EAST TRASH ROOM	H-12
_	SPARE	20/1	29			┝──	30	20/1	SPARE	-
-	SPARE	20/1	31			+ -	32	20/1	SPARE	-
-	SPARE	20/1	33		$\vdash$	+~-	34	20/1	SPARE	-
-	SPARE	20/1	35			+^	36	20/1	SPARE	-
_	SPARE	20/1	37	-~-	$\mathbf{H}$	<u>+</u> ^-	38	20/1	SPARE	-
_	SPARE	20/1	39		$\mathbf{H}$		40	20/1	SPARE	-
-	SPARE	20/1	41			<b>↓</b> ^	42	20/1	SPARE	-
REMAR	KS:								LOAD LEGEND:	
	L NEW CIRCUIT BREAKERS T OV SYSTEMS UNLESS OTHER				OR	208	L — P —	RECEP LIGHTIN PLUMB HVAC		IS

# KERS TO BE 22,000 AIC FOR 208R - RECEPTACLESK - KITCHENOTHERWISE NOTED.L - LIGHTINGM - MISCELLANEOUSP - PLUMBINGF - FUTUREH - HVACH - HVAC

# 

		C	ONDUCTOR	SIZE (AWO	G)			CC	ONDUIT SIZE		
	WIRE SIZE AMPS					,	A		В		С
FEEDER NO.	NOMINAL FEEDER SIZE (AMPS)	PHASE/I	NEUTRAL	GRC	UND	2	C	2	3C		4C
	SIZE (AMFS)					W,	/G	W	/G		W/G
		CU	AL	CU	AL	CU	AL	CU	AL	CU	AL
15	15	12	_	12	_	3/4"	_	3/4"		3/4"	_
20	20	12	_	12	-	3/4"	_	3/4"	_	3/4"	_
25	25	10	_	10	-	3/4"	_	3/4"	_	3/4"	_
30	30	10	_	10	-	3/4"	_	3/4"	_	3/4"	_
35	35	8	_	10	-	3/4"	_	3/4"	_	3/4"	-
40	40	8	_	10	_	3/4"	_	3/4"	-	3/4"	-
45	45	8	_	10	-	3/4"	-	3/4"	_	3/4"	-
50	50	8	_	10	-	3/4"	-	3/4"	_	3/4"	-
60	60	6	-	10	-	3/4"	-	3/4"	_	1"	-
70	70	4	_	8	-	1"	-	1"	_	1-1/2"	-
80	80	4	-	8	-	1"	-	1"	-	1-1/2"	-
90	90	3	-	8	-	1"	-	1-1/2"	-	1-1/2"	-
100	100	2	1	8	6	1"	1-1/4"	1-1/2"	1-1/2"	1-1/2"	1-1/2"
110	110	2	1/0	6	4	1"	1-1/2"	1-1/2"	1-1/2"	1-1/2"	1-1/2"
125	125	1	2/0	6	4	1-1/2"	1-1/2"	1-1/2"	1-1/2"	1-1/2"	2"
150	150	1/0	3/0	6	4	1-1/2"	1-1/2"	1-1/2"	2"	2"	2"
175	175	2/0	4/0	6	4	1-1/2"	1-1/2"	2"	2"	2"	2"
200	200	3/0	250	6	4	1-1/2"	2"	2"	2"	2"	2-1/2"
225	225	4/0	350	4	2	2"	2"	2"	2-1/2"	2-1/2"	3"
250	250	250	350	4	2	2"	2"	2-1/2"	2-1/2"	2-1/2"	3"
300	300	350	500	4	2	2-1/2"	2-1/2"	3"	3"	3"	3-1/2"
350	350	500	4/0	3	1	3"	2 PARALLEL RUNS OF 2"	3"	2 PARALLEL RUNS OF 2"	3"	2 PARALLEL RUNS OF 2"
400	400	500	250	3	1	3"	2 PARALLEL RUNS OF 2"	3"	2 PARALLEL RUNS OF 2–1/2"	3"	2 PARALLEL RUNS OF 3"
450	450	4/0	350	2	1/0	2 PARALLEL RUNS OF 2-1/2"	2 PARALLEL RUNS OF 2"	2 PARALLEL RUNS OF 2"	2 PARALLEL RUNS OF 2–1/2"	2 PARALLEL RUNS OF 2–1/2"	2 PARALLEL RUNS OF 2-1/2
500	500	250	350	2	1/0	2 PARALLEL RUNS OF 2–1/2"	2 PARALLEL RUNS OF 2"	2 PARALLEL RUNS OF 2–1/2"	2 PARALLEL RUNS OF 2–1/2"	2 PARALLEL RUNS OF 2–1/2"	2 PARALLEL RUNS OF 2-1/2
600	600	350	500	1	2/0	2 PARALLEL RUNS OF 3"	2 PARALLEL RUNS OF 2–1/2"	2 PARALLEL RUNS OF 3"	2 PARALLEL RUNS OF 3"	2 PARALLEL RUNS OF 3"	2 PARALLEL RUNS OF 3-1/2
700	700	500	350	1/0	3/0	2 PARALLEL RUNS OF 3"	3 PARALLEL RUNS OF 2"	2 PARALLEL RUNS OF 3"	3 PARALLEL RUNS OF 2–1/2"	2 PARALLEL RUNS OF 3"	3 PARALLEL RUNS OF 2-1/2
800	800	350	500	1/0	3/0	3 PARALLEL RUNS OF 3"	3 PARALLEL RUNS OF 2–1/2"	3 PARALLEL RUNS OF 2–1/2"	3 PARALLEL RUNS OF 3"	3 PARALLEL RUNS OF 3"	3 PARALLEL RUNS OF 3-1/2
1000	1000	250	350	2/0	4/0	4 PARALLEL RUNS OF 2-1/2"	4 PARALLEL RUNS OF 2"	4 PARALLEL RUNS OF 2–1/2"	4 PARALLEL RUNS OF 2–1/2"	4 PARALLEL RUNS OF 2–1/2"	4 PARALLEL RUNS OF 2-1/2

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tc
ARCHITECTS
430 GRANT STREET AKRON, OH 44311 PHONE: (330) 867-1093 www.tcarchitects.com
TURNING VISIONS INTO REALITY
03/31/2023
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ELECTRICAL SCHEDULES

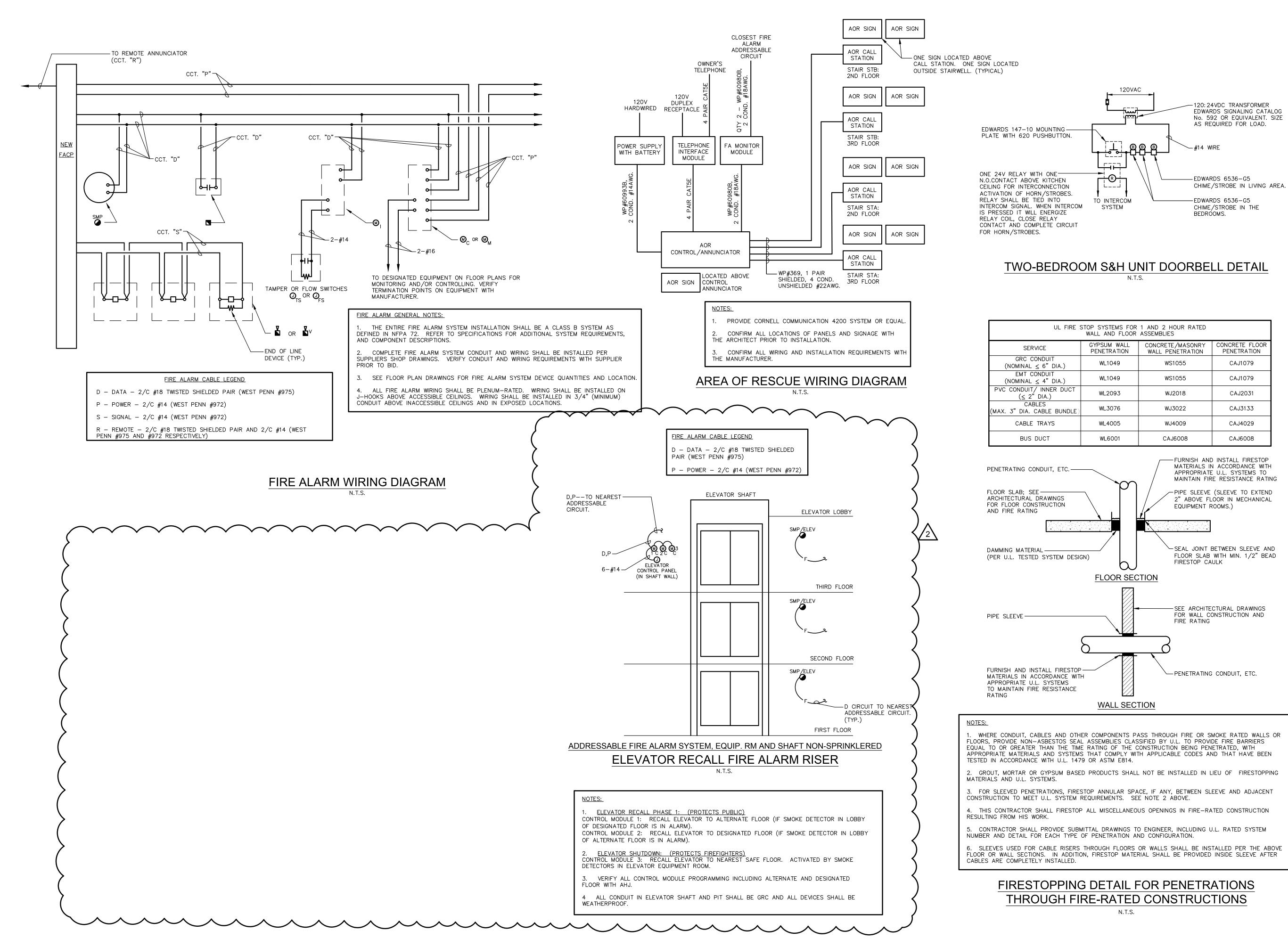
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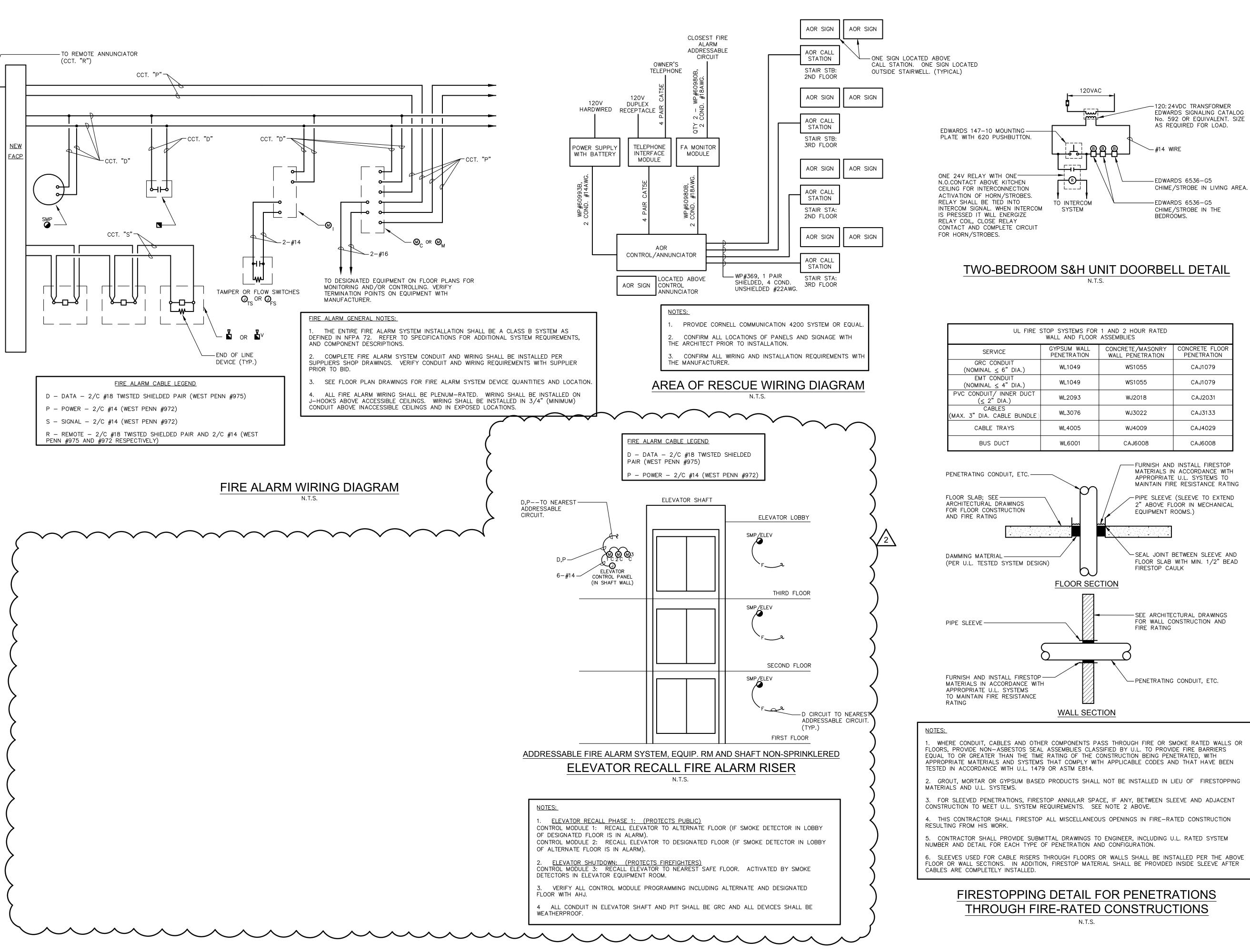
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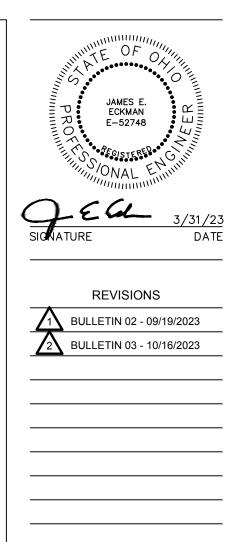
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	GYPSUM WALL PENETRATION	CONCRETE/MASONRY WALL PENETRATION	CONCRETE FLOOR PENETRATION
IA.)	WL1049	WS1055	CAJ1079
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BUNDLE)	WL3076	WJ3022	CAJ3133
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	WL6001	CAJ6008	CAJ6008



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PROJECT NUMBER E704 DRAWING NUMBER

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Germantown Crossing Geotechnical Report

**Prepared for** 

Model Group 1826 Race Street Cincinnati, Ohio

**September 26, 2022** 

Project No. CN220187



September 26, 2022

David Daugherty Model Group 1826 Race Street Cincinnati, Ohio

Attention:Mr. David DaughertySent via e-mail:ddaugherty@modelgroup.net

Subject: Geotechnical Report for Germantown Crossing 1520 Germantown Street Dayton, Ohio CSI Project No. CN220187

Dear Mr. Daugherty,

**Consulting Services Incorporated of Cincinnati (CSI)** is pleased to present our geotechnical report for the proposed Germantown Crossing project located at 1520 Germantown Street, Dayton, Ohio. We provided our services in general accordance the CSI Proposal 7981, dated July 12, 2022.

Our report represents information provided to us, readily available published data relevant to the site and site area, our observations and subsurface conditions encountered and our opinion of primary geotechnical conditions (discussion and recommendations) affecting site work and foundation design for the project.

Again, we greatly appreciate the opportunity to provide our services and look forward to working with you and the project team on this (and hopefully) more projects in the future. Please do not hesitate to contact us for questions or comments about the information contained herein.

Cordially,

James P. Haines, P.E. Senior Project Engineer



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Joseph S. Burkhardt, P.E. Principal Geotechnical Engineer



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Project Number: CN220187

#### INTRODUCTION

#### 1 SCOPE OF THE GEOTECHNICAL EXPLORATION

As proposed, CSI conducted a geotechnical exploration for the proposed Germantown Crossing development located at 1520 Germantown Street in Dayton, Ohio. Our services included a review of the project information provided, conducting a subsurface exploration that utilized soil borings to obtain samples for modeling the soil conditions at the proposed development, an analysis of data and information obtained, providing foundation recommendations for the site conditions and providing recommendations for site earth work.

#### 2 SITE AND PROJECT INFORMATION

In preparing for this final report, CSI was provided with a Site Plan titled "Germantown Crossing Dayton Ohio" Sheet C101 prepared by tc Architects dated 6/28/2022 which depicts the layout of the proposed development. Based on the provided information, CSI understands the proposed project consists of a 50 unit 3-story L-shaped building with associated surface parking. A summary of the site and project information is presented in Tables 1 and 2 below.

ltem	Description				
Site Location	The site is located at the southwest quadrant of the intersection between Germantown Street and S. Paul Laurence Dunbar Street at address 1520 Germantown Street, Dayton, Ohio.				
Size of Site	The overall property is approximately 1.5 acres.				
Surrounding Area	The site is bordered by Germantown Street to the north, S. Paul Laurence Dunbar Street to the east and Willard Street to the south. An open and vacant grass covered area neighbors the site to the west.				
Existing Conditions	The property is currently occupied by a vacant 3-story building situated within the central/northern portion of the site and is surrounded by asphalt and concrete pavement. There is approximately 10 feet of downward relief across the site from north to south ranging in elevation of about 756 feet amsl to 746 feet amsl.				
Existing/Previous Structures(s)	A 3-story building currently occupies the central/northern portion of the site with the remainder of the site comprised of asphalt and concrete pavement. The lower level of the 3-story building is below grade at the north end of the building that transitions to an at grade level along the south end of the building. Prior to the existing development, the contained a rectangular shaped building oriented in a north-south direction that extended the full length of the site.				
Existing/Previous Utilities	The site contains several existing underground utilities consisting of electric, gas, water and sewer. Overhead power is also present along the north side of the property.				
Previous Site Use	The existing development was formerly the Day-Mont Behavioral Health Care.				

#### Table 1: Site Information

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#### Table 2: Project Information

ltem	Description			
Site Layout and Grading	See Boring Location Plan included within the appendix for depiction of the plan layout of the proposed structure and pavements. Proposed final grading and finish floor elevation was not provided at the time of this report.			
Proposed Structure(s)	The proposed building will consist of a 50 unit 3-story L-shaped building positioned along the north and east sides of the site that occupies a footprint of 52,500 square feet. Proposed parking and drive lanes will occupy the remainder of the site.			
Building Construction	It is assumed the building will be wood framed with a slab on grade floor.			
Finish Floor Elevation	Not provided. It is assumed the finish floor will closely match existing grades.			
Maximum Loads	Structure loads were not provided; therefore, CSI assumes Continuous loads: 2 kips per linear foot or less; Column loads: 150 kips or less; Floor Slab: 120 psf or less			

#### 3 AREA/SITE INFORMATION

#### 3A AREA PHYSIOGRAPHY / TOPOGRAPHY

The site is located within the Southern Ohio Loamy Till Plain. This area is characterized by WIsconsinan age till, outwash and loess over lower Paleozoic age carbonate rocks and shales in the east. Surface of loamy till, end and recessional moraines, commonly associated with boulder belts, between relatively flat lying ground moraine, cut by steep valleyed large streams fill with outwash. The existing ground surface within the limits of the site provides gentle relief from north to south ranging from about elevation 756 feet amsl to 746 feet amsl. The open grass area at the southwest corner of the site is somewhat elevated in comparison to the existing pavement area to the east and is at about elevation 756 to 754 feet amsl. Figures 1 and 2 below depict the location of the site with respect to the regional physiography and existing topography, respectively.



Figure 1: Ohio Physiographic Map (Approximate Site Location Shown With Star)



Figure 2: Montgomery County GIS 2017 Topography

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#### 3B SITE GEOLOGY

A review of the *Surficial Geology of the Ohio Portions of the Dayton Quadrangle* shown in **Figure 3**, indicates the site is mapped with deep Wisconsinan age deposits of sand and gravel with discontinuous layers containing unsorted mixtures of silt, clay, sand, gravel and boulders. Based on this mapping, the underlying limestone interbedded with shale bedrock is ordovician age and estimated to be in excess of 200 feet.

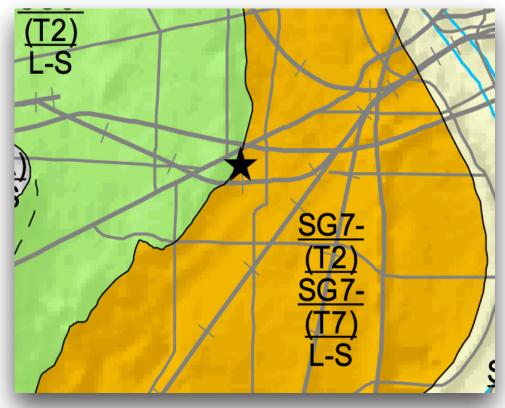


Figure 3: Site Geology (Approximate Site Location Shown With Star)

#### **3C PUBLISHED SITE SOIL CONDITIONS**

Published surficial soil mapping from the USDA soil survey indicates the surficial soils on the site are associated with Crosby- and Miamian-Urban Land Complex. Sites mapped with the Urban Land Complex designated are those that have been associated with prior and existing developments. Figure 4 on the following page depicts the USDA soil survey mapping of the site. Table 3 below summarizes relevant information for the Crosby and Miamian soil series.



Figure 4: USDA Soil Survey Map

Table 3: Summary	of USDA Soil Survey
------------------	---------------------

Soil Series	Abbreviation	Slope (%)	Parent Material	Percentage of Site (%)	Depth to Restrictive Feature (in.)	Depth to Water Table (in.)
Crosby	Cu	0 to 2	Silty material or loess over loamy till	80.6	24 to 40	6 to 24
Miamian	МоВ	2 to 6	Silty loess over loamy till	19.4	>80	>80

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#### 3D AERIAL PHOTOGRAPHS (GOOGLE EARTH)

Review of historical aerial images since the 1950's indicate that the site was developed prior to 1956 with a rectangular shaped building the appears to encompass much of the site. The referenced building appears to have been demolished prior to 1968 and the site was vacant as shown in the 1968 aerial. The 1994 image shows the building the is currently on the site. There does not appear to have been much change to the site or current development since 1994.





1968 Aerial



March 1994 Aerial



November 2020 Aerial

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#### 4 SITE PHOTOGRAPHS

Representative photographs of the site from August 17, 2022 are shown below.



Photo 1: Standing at Boring B-4 facing West to Boring B-2.

Photo 2: Northwest Portion of the Site Facing East



Photo 3: Northwest Portion of the Site Facing South.

Photo 4: Southwest Corner of Existing Building Facing East.



Photo 5: Southern Portion of the Site.



Photo 6: Northeast Corner of Existing Building Facing West Depicting Lower Level.

#### FINDINGS

#### 5 SUBSURFACE CONDITIONS

CSI performed ten (10) soil test borings to explore the subsurface conditions at the site. In general, our borings encountered either topsoil, concrete or asphalt pavement at the ground surface that was underlain by either previously placed fill or natural granular deposits of medium dense to dense sand and gravelly sand.

#### 5A SUBSURFACE STRATA INFORMATION

The subsurface conditions encountered at the test boring locations are shown on the Test Boring Logs in the Appendix. These records represent our interpretation of the subsurface conditions based on the field logs, visual examination of field samples by an engineer, and field and laboratory tests of the samples collected. The letters in parentheses following the soil descriptions are the soil classifications in general accordance with the Unified Soil Classification System (USCS). It should be noted that dashed stratification lines shown on the soil boring logs and Cross Sections A-A' and B-B' in the appendix represent approximate transitions between material types. In-situ stratum changes could occur gradually or at slightly different depths. Boring location coordinates and ground surface elevations were determined using a Real Time Kinetics (RTK) type GPS unit.

#### SURFICIAL MATERIALS

The surficial materials at the site consist of either topsoil, concrete or asphalt pavement. Topsoil was present at the ground surface at Borings B-3, B-4, B-7 and B-8 and was generally 6 inches thick. Concrete pavement comprises the majority of the north portion of the site in between the

existing building and Germantown Street and was measured to be about 3 inches thick at Boring B-2. Asphalt pavement is present within majority of the western and southern portion of the site and measured about 2 to 4 inches thick within Borings B-1, B-5, B-6, B-9 and B-10. Underlying the asphalt pavement at Borings B-5, B-6, B-9 and B-10, an approximate 3 to 5 inch thick aggregate base layer was present. The surficial materials and associated thickness encountered at each boring location is included on the boring logs within the appendix.

#### EXISTING FILL

Existing fill soils were encountered underlying the existing pavement and/or topsoil at Borings B-1, B-2, and B-7 through B-10 that extended to depths between about 3.5 and 6 feet bgs (corresponding to elevations between about 750 and 751.5 feet amsl). The existing fill in Borings B-7, B-9 and B-10 extended to the maximum explored depth of about 5 feet bgs (elevations between about 741 and 751 feet amsl). Based on the referenced boring locations, the existing fill appears to be relatively sparatic across the site. The fill soil was generally described to be brown and gray sandy lean clay, lean clay, silt, or clayey sand with varying amounts of gravel. At isolated depths and locations the existing fill contained few roots, brick and rock fragments. Standard Penetration Test (SPT) N-Values were reported to generally range from 3 to 15 blows per foot (bpf). Split spoon refusal (I.e., greater than 50 blows per 6-inch increment) was encountered at one sample at Boring B-2 due to a rock floater. The consistency of the cohesive fill ranged from soft to stiff and the relative density of the granular fill is considered very loose to medium dense. Unconfined compressive strengths of the cohesive existing fill (estimated using a Hand Penetrometer) ranged from 0.5 to 2.5 tons per square foot (tsf). The in-situ moisture contents were reported to range between 6 and 18.2 percent.

#### GLACIAL OUTWASH

Natural soils designated as glacial outwash were encountered underlying the topsoil and/or pavement within Borings B-3 through B-6 or underlying the existing fill within Borings B-1, B-2 and B-8 and extended to the maximum explored depth of about 5 to 30 feet bgs (elevations between about 725 and 749 feet amsl). The glacial outwash is generally described as medium dense sand and clayey sand with trace amounts of gravel that transition to medium dense to very dense gravelly sand containing trace amounts of clay and silt below a depth of about 6 to 8.5 feet bgs (between about elevations 746.5 and 750 feet amsl). At Borings B-3 and B-4, an approximate 2.5 foot thick layer of very stiff to hard silt was encountered prior to transitioning into the gravelly sand. Standard Penetration (SPT) N-Values were reported to range from 11 to 43 bpf within the upper portion of the glacial outwash strata (i.e., sand, clayey sand and silt), and ranged from 12 to 62 bpf within the gravelly sand. Overall, the SPT values increased with depth. Two moisture content tests were performed on the samples of silt obtained from Borings B-3 and B-4 which were 19.4 percent and 18.3 percent, respectively.

For details of subsurface conditions encountered at a particular boring location please refer to the boring logs contained in the Appendix. It should be noted that our borings were drilled and

sampled according to the procedures presented in the appendix. The boring locations shown in the appendix should be considered accurate only to the degree implied by the method used.

#### 5B GROUNDWATER CONDITIONS

Groundwater was not encountered in any of the borings. In many areas of Ohio with similar geology, water conditions that can affect construction and performance of projects is often related to trapped/perched water zones, which can be erratic, but often observed in granular soils. Perched water sources are typically not linked to the more continuous relatively stable ground water table that typically occurs at greater depths. In addition to perched water surfaces, groundwater may also be encountered at the interface between existing fill and natural soil. Site excavation activities or ground disturbance can expose these features and the resulting seepage can vary greatly. Groundwater issues are also dependent upon recent rainfall activity and surface and subsurface drainage patterns in the area that may change depending on climatic conditions.

#### 6 LABORATORY TESTING

Laboratory tests were performed on selected recovered samples from the borings to assist with classification of the soils and provide recommendations for earthwork. Details for the test methods and results are shown in the Appendix. Tests performed included:

- 8 Moisture Content Tests
- 6 Particle Size Distribution Tests

#### **GEOTECHNICAL DISCUSSION AND RECOMMENDATIONS**

#### 7 DISCUSSION—GEOTECHNICAL ISSUES

Based on our experience with similar projects and the conditions observed during our subsurface exploration, we believe the site is suitable for the proposed construction, provided the recommendations outlined in this report are followed. The primary geotechnical concerns are:

#### EXISTING FILL

#### • SITE DEMOLITION AND TEMPORARY EARTH RETENTION

#### 7A EXISTING FILL

Previously placed fill material was encountered within Borings B-1, B-2 and B-7 through B-10 to depths ranging from about 3.5 to 6 feet bgs. The existing fill is generally comprised of clay, silt and sand mixtures and contained trace amounts of roots, rock and brick fragments. The existing fill is considered variable with respect to strength and moisture content as noted by N values ranging from 3 to 12 bpf, unconfined compressive strengths ranging from 0.5 to 2.5 tsf and moisture contents ranging from about 6 to 18.2 percent. Based on the location of the

proposed building in relation to the borings that encountered existing fill, it is expected the existing fill will be most prominent within the north/east portion of the new building that borders Germantown Street.

Due to the inconsistencies/variability with respect to strength and moisture content, it is CSI's opinion that the existing fill was not placed as an engineered fill with the intent to support new In general, the existing fill will be subject to unpredictable total and differential structures. settlement that could exceed typical design settlement tolerances when subject to new loads associated with building foundations and/or floor slabs. Assuming that the proposed finish floor elevation for the new building will be relatively close to the existing ground surface, it is expected that existing fill will be present at the design foundation elevation and floor slab subgrade, specifically within the north and eastern portions of the building. In general, where previously placed fill is present at or below the foundation bearing surface, building foundations will need to be extended or lowered, as needed, to penetrate the existing fill and bear directly atop natural soil. Given the existing fill appears to be localized within the north and eastern portion of the new building, consideration should be given to removing the existing fill within the building footprint to avoid differential subgrade support between the existing fill and medium dense natural soils. If the owner is willing to accept some risk associated with differential floor slab settlement, the fill may remain in place within the building footprint provided the earthwork recommendations contained in Section 9 are followed.

#### 7B SITE DEMOLITION AND TEMPORARY EARTH RETENTION

Demolition and removal of the existing building, foundations, pavements underground utilities, etc., within the planned development areas will be critical to the successful long term performance of the new structure and associated development. It is understood the existing structure has a lower level; however, CSI is unaware of the extent/limits of the lower level, elevation of the lower level, and how it compares with the surrounding existing grades and site boundaries. Given that the existing building boarders portions of the property boundary and existing roadway and the subsurface profile consists of granular soils, it is possible that excavations and demolition activities required to remove the existing buildings lower level may not allow for minimum temporary slopes needed to protect adjacent property boundaries, easements, underground utilities and roadway. As a result, it is possible that a temporary earth retention system may be required in some areas prior to or as the excavations associated with the demolition activities are made. Based on the existing building location, it appears that one critical location of the site may be along the east property boundary. For this project, a feasible temporary earth retention system to consider is driven sheet piles or H-piles with wood lagging. Recommendations regarding site demolition are provided in Section 7. Lateral earth pressure recommendations for use in design of temporary or permanent soil retention/retaining walls are provided in Section 13.

#### 8 SITE DEMOLITION

In accordance with the discussions section of this report, demolition and removal of the existing building, pavements, underground utilities, etc., within the planned development footprint will be

required prior to earthwork, foundation and building construction. It is important that both the existing at-grade and below-ground structures are removed and the associated debris is hauled to an appropriate landfill, properly recycled or stockpiled in an approved area of the site. CSI recommends that below ground and at grade structures (building foundations, floor slabs, underground utilities, sidewalks, pavements, etc.) be completely removed from within the planned building footprint including a 10-feet wide buffer, where possible. CSI recommends that prior to demolition activities, the limits of the lower level of the existing building be evaluated in comparison with the existing grades, easement and/or property boundaries and associated underground utilities to determine if the minimum temporary slope recommendations contained in Section 9B can be adequately maintained and/or if a temporary earth retention system is required.

Existing structures and underground utilities located at least 10 feet beyond the building limits and extending at least 2 feet below the planned finish grades may remain in place, if approved by the Geotechnical Engineer and owner. CSI recommends any pipe or cavity left in place (beyond the building limits) must be fully grouted or backfilled with engineered fill. Construction debris generated demolition activities is not considered suitable for use in on-site fills.

# 9 EARTHWORK

Historically, more change orders (in orders and costs) occur during the earthwork portion of construction than in almost any other part of the project. Further, the site preparation phase of construction always affects the future performance of project structures and pavements. Add into this, the fact that earthwork is the portion of work most influenced by wet weather and unknown conditions and time-wise, this section of the report could be the most important to prevent and minimize delays and costs during construction and for the life of the project.

Please review the geotechnical concerns listed in Section 7 prior to reading the following recommendations. We recommend that cuts and fills should not be performed without being evaluated by CSI. If problems occur and the recommendations do not address or do not adequately remedy, please contact CSI as soon as possible.

# 9A EXCAVATIONS TO REMOVE EXISTING FILL

As discussed in Section 7A, existing fill is present within portions of the proposed structure. The existing fill was primarily encountered within the north and east portions of the new building and is un suitable for direct support of the building foundations. The existing fill may be left in place to provide support for the planned floor slab provided the owner is willing to accept the risk of potential differential floor slab settlement associated with the existing fill and differential subgrade support conditions between the existing fill and natural soils and the earthwork and engineered fill recommendations contained in Section 9 are followed. Provided the owner is not willing to accept the risk of differential floor slab settlement, associated cracks and/or distortions, CSI recommends that the existing fill be completely removed from with the building footprint, including 10 feet beyond the building limits, prior to building and foundation construction. Based on encountered existing fill thickness, CSI expects the excavations to remove the existing fill will

range from about 3 to 6 feet. Once the existing fill is removed, the associated excavation should be backfilled with engineered fill meeting the requirements contained in Section 9C and 9D of this report.

### 9B TEMPORARY EXCAVATIONS

Normal earth excavation equipment should be suitable for excavation operations that are associated with the on-site soils. All excavations should comply with OSHA requirements. For below-grade excavations, the existing fill soils and granular natural soils should be classified as an OSHA Type C soil with slope excavations of  $1\frac{1}{2}$  H:1V. If soil types other than what has been mentioned above are encountered, CSI should be contacted to evaluate stability.

## 9C SITE PREPARATION (WORK PRIOR TO FILLING)

- Site demolition should be performed in accordance with the recommendations contained within Section 8;
- The area should be stripped of any topsoil and/or vegetative cover prior to commencing fill operations;
- Areas ready to receive new fill should be proofrolled with a heavily loaded dump truck or similar equipment judged acceptable by the geotechnical engineer;
- The level of proofroll should be determined by the geotechnical engineer on a case-bycase basis;
- Perform the proofrolling after a suitable period of dry weather to avoid degrading the subgrade;
- Areas which pump, rut, or wave during proofrolling may require undercutting, depending on the location of the area and the use of the area, so the geotechnical engineer should be contacted for guidance.
- Backfill of undercut areas should be done in accordance with section 9D;
- Deleterious materials such as topsoil, roots, wood or other materials that will decay should be removed from the site;
- Retain CSI to observe the proofrolling operations and make recommendations for any unstable or unsuitable conditions encountered. This can save time on the construction schedule and save unnecessary undercutting;
- We recommend that site grading should take place between about late April to early November. Earthwork taking place outside this time period will likely encounter wet conditions and weather conditions that will provide little to no assistance with drying the soils.

### 9D NEW FILL OPERATIONS (MASS EARTHWORK)

Before new fill construction, representative samples should be obtained of the proposed fill material to determine the moisture-density, classification of the material, and whether the material is suitable to be used as structural fill. After the subgrade has been approved to receive new fill, the fill may commence with the following procedures and guidelines recommended:

- Place cohesive fill (clay) in maximum 8-inch thick loose lifts. Granular soils may be placed in maximum 12 inch thick loose lifts provided properly sized equipment is used in the compaction process;
- Fill lifts should be compacted to at least 98 percent of the soil's maximum dry density (ASTM D698) in areas beneath structures (buildings and pavements). If necessary due to material or equipment size, a modified Proctor may also be considered. CSI can provide specific recommendations if needed.
- Non-structural areas (i.e., grassed and/or landscape areas) can utilize a lower compaction requirement of 90 percent if approved by the owner and geotechnical engineer. In general, non-structural areas should be considered 5 feet beyond the limits of structural entities (i.e., building, pavements, sidewalks, etc.).
- For soils which are high plasticity, maintain the moisture content of compacted fill between minus 1 and plus 2 percent of optimum moisture. Lower plasticity soils can have a variance of plus or minus 2 percent of optimum moisture;
- Soils with a plasticity index (PI) of greater than 35 should not be used in the upper 4 feet
  of new fill within roadways or buildings where the slab will be within 4 feet of the exterior
  surface grade. The on-site soils are generally non-plastic; however, CSI recommends
  any import soils that will be used as engineered fill be evaluated and tested by CSI prior
  to use to confirm plasticity;
- Maximum particle size of the soil should be limited to half the lift thickness. Equipment should be large enough that any limestone slabs are thoroughly broken up. Large pieces not able to be satisfactorily broken up should be removed from the fill;
- Density testing should be performed as a means to verify percent compaction and moisture content of the material as it is being placed and compacted;
- Observation of fill "stability" is also critical, so it is recommended to observe the operation of the filling equipment traversing over the new fill to document movement (similar to proof rolling);
- Density testing should be performed at a rate of at least one per 10,000 square feet per lift with a minimum of 3 tests per lift;
- Soils should not be "over compacted" and construction traffic should be kept to minimum to assure compaction is achieved and that the soil is not allowed to "break down".

• Retain a representative of CSI to observe and document fill placement and compaction operations.

# 9E BACKFILL OPERATIONS (FOUNDATION WALLS, UTILITIES, ETC.)

These materials are placed in more confined areas than mass earthwork materials or pavement materials and therefore cannot be placed in full compliance with sections the recommendations below. The following are general recommendations for backfill areas:

- Fill lift thicknesses will vary dependent on compaction equipment available and material types, but in no case should exceed 8 inches for clay and 12 inches for granular soils
- For crushed stone/aggregate backfills in trenches or wall backfill and when using smaller compaction equipment the lift thickness should be based on the type of aggregate and equipment. For well-graded granular soils such as Dense Grade Aggregate, a thickness of 4 to 6 inches is typically required. If open-graded stone is used, the lift thickness may be able to be increased. This should be evaluated by the geotechnical engineer
- Fill lifts should be compacted to at least 98 percent of the soil's maximum dry density (ASTM D 698) in areas beneath structures (buildings, equipment foundations and pavements)
- For granular and lean clay soils, maintain the moisture content of compacted fill between minus 2 and plus 2 percent of optimum moisture
- Maximum particle size of the soil should be limited to half the lift thickness. Equipment should be large enough that any large particles are thoroughly broken up. Large pieces not able to be satisfactorily broken up should be removed from the fill
- Density testing should be performed as a means to verify percent compaction and moisture content of the material as it is being placed and compacted
- Density testing should be performed at a rate of at least 3 tests per lift; CSI should be retained to provide additional recommendations for backfill

## 9F PERMANENT CUT/FILL SLOPES

The following are general slope construction guidelines:

- Any permanent cut or fill slope should be designed and constructed no steeper than a gradient of 3H:1V.
- Any area within 10 horizontal feet of a structure should be slightly sloped to allow surface water drainage away from the structure;

#### 9G GENERAL NOTES

- For all earthwork operations, positive surface drainage is prudent to keep water from ponding on the surface and to assist in maintaining surface stability
- The surface should be sealed prior to expected wet weather. This can usually be accomplished with rubber-tired construction equipment or a steel-drum roller
- If any soil placement problems occur, CSI should be retained to provide additional recommendations, as needed

#### 10 SITE DRAINAGE

During construction, water should not be allowed to pond in excavations and fill areas or undercutting will likely be required. During the life of the project, slope the subgrade and other site features so that surface water flows away from the site structures.

For excavations during construction, most free water from the subsurface conditions could likely be removed via sump pumps and open channel flow (if possible) at or near the source of seepage. However, if normal dewatering measures prove insufficient, CSI should be retained to provide recommendations on the issue.

#### 11 FOUNDATIONS

Based on the information provided and the conditions encountered, conventional spread footings should be a suitable foundation system to support the proposed building addition. As mentioned above, existing fill soils are present at the site that will require over-excavation if the existing fill is exposed at the design bearing elevation. Assuming the finish floor elevation of the new structure is relatively close to existing grade, over-excavation depths below typical frost depth are expected to be required within the north and east portions of the new building unless the existing fill is removed during the earthwork phase of the project as discussed in Section 9A. If there are any changes in the project criteria or building locations, CSI should be allowed to review the recommendations to determine if any modifications are required.

#### 11A SHALLOW FOUNDATION RECOMMENDATIONS

Spread footings may be sized using a maximum net allowable bearing pressure of 3,000 pounds per square foot (psf). Foundations should bear on the medium dense to dense glacial outwash or better natural soils or engineered fill placed over the medium dense to dense natural soils. Detailed settlement analysis was beyond the scope of this exploration. However, based on the estimated structure loads, the anticipated behavior of soil types encountered during field activities, and our experience with similar projects, we expect that total settlements will not exceed 1 inch, and that differential settlements will not exceed 3/4 inch between columns or along continuous footing distances of 25 feet or less. We recommend the structures be designed to accommodate this magnitude of total and differential settlement. Settlement estimates are based, in part, upon the assumption that site preparation is performed in

accordance with our recommendations and with good quality control of the earthwork. Additional design considerations for project foundations are outlined as follows:

- Exterior footing bottoms should bear at least 30 inches below finished exterior grading for frost protection.
- Interior footings (those not exposed to freezing) may be placed at nominal depths provided they bear on suitable material as recommended in this report;
- Include control joints at suitable intervals in the walls of structures and in areas where changes in support from native soil to fill are anticipated, to help accommodate differential foundation movements.

## 11B SHALLOW FOUNDATION NOTES

In general, cohesive soils, if present, tend to lose strength if they become wet. We recommend the foundation subgrades be protected from exposure to water. For foundations construction, we also recommend the following procedures.

- For soils that will remain exposed overnight or for an extended period of time, place a "lean" concrete mudmat (1 to 2 inches) over the bearing areas. Flowable fill concrete or low-strength concrete is suitable for this cover, as conditions allow.
- Foundation bearing conditions should be benched level.
- Areas loosened by excavation operations should be recompacted prior to reinforcing steel placement.
- Loose soil, debris, and excess surface water should be removed from the bearing surface prior to concrete placement.
- Retain the geotechnical engineer to observe all foundation excavations and provide recommendations for treatment of any unsuitable conditions encountered.
- The bearing conditions should be checked by means of portable dynamic cone penetration (DCP) testing or a hand auger in conjunction with field unconfined compression strength testing using a Hand Penetrometer at the direction of the geotechnical engineer.
- Even though fill soils placed for foundation support have likely been checked for compaction at the time of placement, these soils may have become wet or lost some level of strength since that time. The areas should be hand probed to check for surface hardness/strength.

#### 12 GRADE SUPPORTED FLOOR SLABS

Grade supported floor slabs are suitable for the proposed structure, provided the subgrade is prepared according to the recommendations contained within this report. As noted in this report, if the owner is willing to accept the risk of potential floor slab settlement and associated cracks, distortions, etc., the existing fill may be left in place to provide support for the floor slab provided the existing fill passes a thorough proofroll and a minimum 2 feet of newly placed

engineered fill is placed to provide the immediate subgrade support for the floor slab. Alternately the existing fill can be removed and replaced with engineered fill as discussed in Section 9A. We recommend the floor slab be supported on a minimum of 4 inches of compacted granular base. The slab should be designed to be structurally independent of any building footings or walls and should be appropriately reinforced to support the proposed loads. The following features are also recommended as part of the floor slab construction:

- Provide isolation joints between the slab and columns and along footing supported walls
- Adequate joint patterns (ACI and ICC guidelines) should be used to permit slab movement due to normal soil settlement, normal subgrade disturbance and material expansion/contraction
- Keep the crushed stone or gravel moist, but not wet, immediately prior to slab concrete placement to minimize curling of the slab due to differential curing conditions between the top and bottom of the slab
- DO NOT allow soils directly below the slab to become overly wet or dry prior to placement of concrete; and
- Retain CSI to review the actual subgrade conditions prior to slab construction and make recommendations for any unsuitable conditions encountered

# Note: Slab subgrade conditions are also considered earthwork areas and the recommendations contained in the Earthwork section of the report should be followed

# 13 TEMPORARY AND PERMANENT EARTH RETENTION AND RETAINING WALLS

CSI recommends that temporary or permanent soil retention structures and retaining walls for the project be designed to meet the site needs including maximum retention height, location, tolerable deflection at the top of the structure, and constructibility. It is recommended that the retention structure(s) or retaining wall(s) be designed and sealed by a professional engineer licensed in the state of Ohio acknowledging that the appropriate internal, external, and global stability factors of safety for the particular retaining wall structure or soil retention system are met.

Soil retention structures and retaining walls should be designed to resist lateral loads imposed by the surrounding soils, hydrostatic pressure (if adequate drainage of the backfill is not provided), and surface surcharge loads adjacent to the wall (i.e., structures, foundations, pavements, traffic loads, stockpiles, inclined backfill, etc.). Depending on the lateral movement acceptance criteria, the structure may be designed as: 1) cantilevered (not fixed at the top allowing lateral deflection); or, 2) restrained or anchored (fixed at the top). With respect to the lateral earth pressure design, CSI recommends that "active" earth pressures be used for cantilevered designs and "at-rest" lateral earth pressures be used for restrained/anchored designs (i.e., basement foundation walls). Should wall backfill be placed before floor joists are constructed, it may be necessary to provide temporary bracing if the walls cannot accommodate construction phase stresses, or the walls should be designed for the active earth pressure condition as self-supporting cantilever walls.

The lateral earth pressure coefficients should be selected based on the predominate soil within the retained zone of the soil retention structure or retaining wall. The retained zone should be considered as an imaginary line drawn upward at a 45 degree angle from the top of footing. The following table presents granular backfill and on-site materials earth pressure design parameters for Equivalent Fluid Density's (EFD's) and Earth Pressure coefficients. The values given assume the backfill surface is level, drained or undrained backfill, the zone of backfill conforms to the minimum zone size given above, and no surcharge is placed on the backfill.

	Granular	Backfill	On-	Site Materials	s (1)
Condition	Coefficients	EFD (Drained) (pcf)	Coefficients	EFD (Drained) (pcf)	EFD (Undrained) (pcf)
At-Rest	Ko = 0.35	45	Ko = 0.50	63	94
Active	Ka = 0.22	30	Ka = 0.33	42	83
Passive	Kp = 2.75	300	Kp = 3.00	375	250

 Table 4: Equivalent Fluid Density (EFD) and Earth Pressure Coefficient

(1) On-site soil having a unit weight of 125 pcf and friction angle of 30 degrees.

The above table provides drained and undrained (i.e., includes hydrostatic pressure of 62.4 pcf) lateral earth pressure design parameters. For all retaining walls, where possible, CSI recommends that the wall design include sufficient drainage of the backfill soils to relieve hydrostatic pressure. For this purpose, CSI recommends that drainage backfill be constructed immediately behind the wall and extend from the foundation elevation to the top of the wall. This backfill should be effectively drained using a piping system connected to a storm sewer, gravity outlet, weep holes or a sump. Where possible, CSI recommends that the immediate backfill soils (within a minimum of 2 feet laterally from the wall) consist of a free-draining compacted granular material. The free-draining granular material should consist of a uniformlygraded aggregate that is between 1/2 inch to 1-inch in size and contain less than 5 percent passing a #200 size sieve. The free draining granular backfill should be separated from clayey soil using a non-woven geotextile filter fabric. Alternately, a drainage geocomposite may be used as the drainage layer behind the back face of the wall. CSI recommends that the drainage system be comprised of a minimum 8 inch diameter perforated pipe placed at the base of the free draining granular backfill (i.e., adjacent to and continuously along the wall foundation) or geocomposite and gravity drained to a storm outlet, weep holes or sump.

With respect to global stability of the site retaining walls, CSI recommends that the retaining wall design meet a minimum factor of safety (FS) of 1.5 for global stability. CSI recommends that the wall designer submit the design plans to the Geotechnical Engineer of Record for review to confirm that the final design achieves a global stability FS of 1.5.

## 14 PAVEMENTS

Proper support of pavement structures will be critical to the long term performance of the roadway. This begins with appropriate earthwork procedures including fill placement and proof rolling to identify soft and yielding areas per Section 9 of this report. Existing fill is expected to be present in portions of the site at the pavement subgrade elevation that will likely yield to proof rolls and construction traffic that will require localized over-excavation and replacement or stabilization prior to placing the aggregate base layer. In addition to proper earthwork procedures, adequate pavement drainage will also have a significant role in the future performance. If the subgrade beneath the pavement becomes wet, it will lose strength and stability and make the overlying pavement structure susceptible to breakup under imposed loads. For surface drainage, we recommend the pavements be constructed/designed in a manner that allows the water to flow away from the pavement so that water does not collect and pond at the edges. This is typically achieved by crowning the center of the pavement and having a minimum 2% slope in each direction toward a curb and gutter system with positive drainage.

The design traffic loads for this project were not available at the time of this report; therefore, specific pavement designs were not performed. In absence of a specific pavement and evaluation design, CSI has provided some suggested minimums, based on our experience with similar projects and subgrade soil conditions. For light duty pavements (cars and light trucks only), a traffic load of 25,000 equivalent single-axle loads (ESALs) has been assumed. For heavy duty pavements subjected to occasional truck traffic, a traffic load of 100,000 ESALs is assumed. However, CSI recommends that a specific design be performed to confirm that the minimum pavement sections provided herein are sufficient.

The following recommended pavement sections are based on a properly prepared subgrade having a California Bearing Ratio (CBR) value of at least 3. Based on the defined limitations and our assumptions, CSI suggests the minimum pavement section thicknesses described below.

Pavement Application	Minimum Asphalt Concrete/ Aggregate Base Course Thickness (inches)	Minimum Portland cement Concrete/Aggregate Base Course Thickness (inches)
Light Duty(1)	4/8	6/6
Heavy Duty(2)	6/8	6/6

#### Table 5: Summary of Recommended Pavement Sections

## 15 NOTES ON THE REPORT AND RECOMMENDATIONS

We recommend that this complete report be provided to the various design team members, the contractors and the project Owner. Potential contractors should be informed of this report in the "Instructions to Bidders" section of the bid documents. A geotechnical exploration, such as the one we performed, used ten borings to attempt to model the subsurface conditions at the site. Because no exploration contains complete data or a complete model, there is always a possibility that conditions between borings will be different from those at specific boring locations. Thus, it is possible that some subsurface conditions will not be as anticipated by the project team or contractor. If this report is included or referenced in the actual contract documents, it shall be explicitly understood that this report is for informational purposes only. CSI shall not be responsible for the opinions of, or conclusions drawn by others.

It has been our experience that the construction process often disturbs soil conditions and this process, no matter how much experience we use to anticipate construction methodology, is not completely predictable. Therefore, changes or modifications to our recommendations are likely needed due to these possible variances. Experienced CSI geotechnical personnel should be used to observe and document the construction procedures and the conditions encountered. Unanticipated conditions and inadequate procedures should be reported to the design team along with timely recommendations to solve the problems created. We recommend that the Owner retain CSI to provide this service based upon our familiarity with the project, the subsurface conditions and the intent of our recommendations.

This report is based on the supplied project information, the subsurface conditions observed at the time of the report, and our experience with similar conditions. As such, it cannot be applied to other project sites, types, or combinations thereof. If the Project Information section in this report contains incorrect information or if additional information is available, you should convey the correct or additional information to us and retain us to review our recommendations. Our recommendations may then require modification.

No section or portion of this report (including Appendix information) can be used as a stand alone article to make distinct changes or assumptions. The entire report and Appendix should be used together as one resource. We wish to remind you that our exploration services include storing the soil samples collected and making them available for inspection for 30 days. The soil samples are then discarded unless you request otherwise. Please inform us if you wish to keep any of the obtained samples.

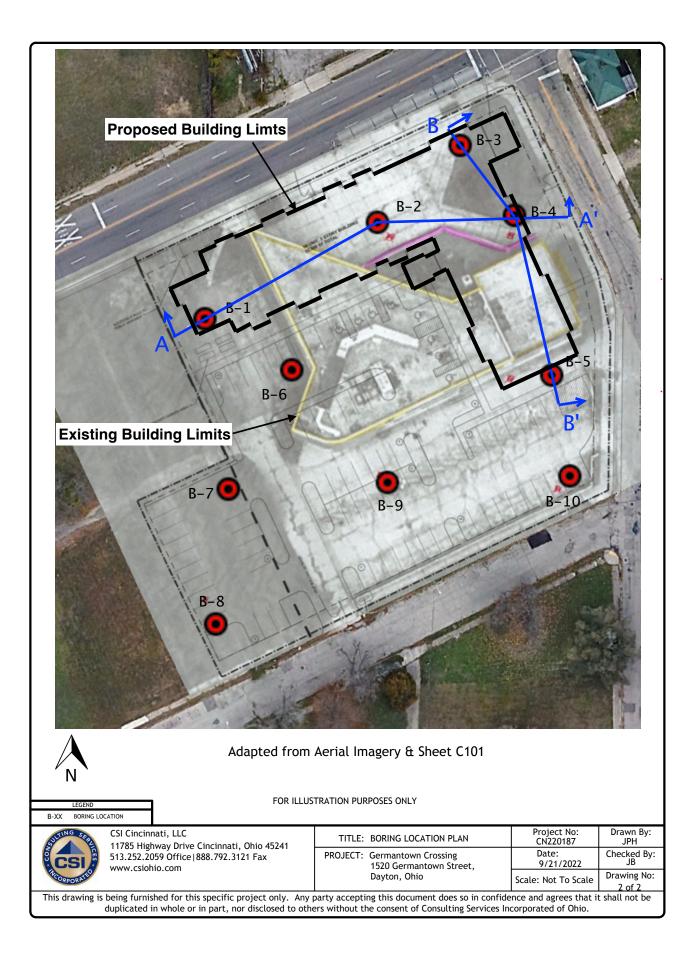
While this report deals with samples of subsurface materials and some comments on water conditions at the site, no assessment of site environmental conditions or the presence of contaminants were performed.

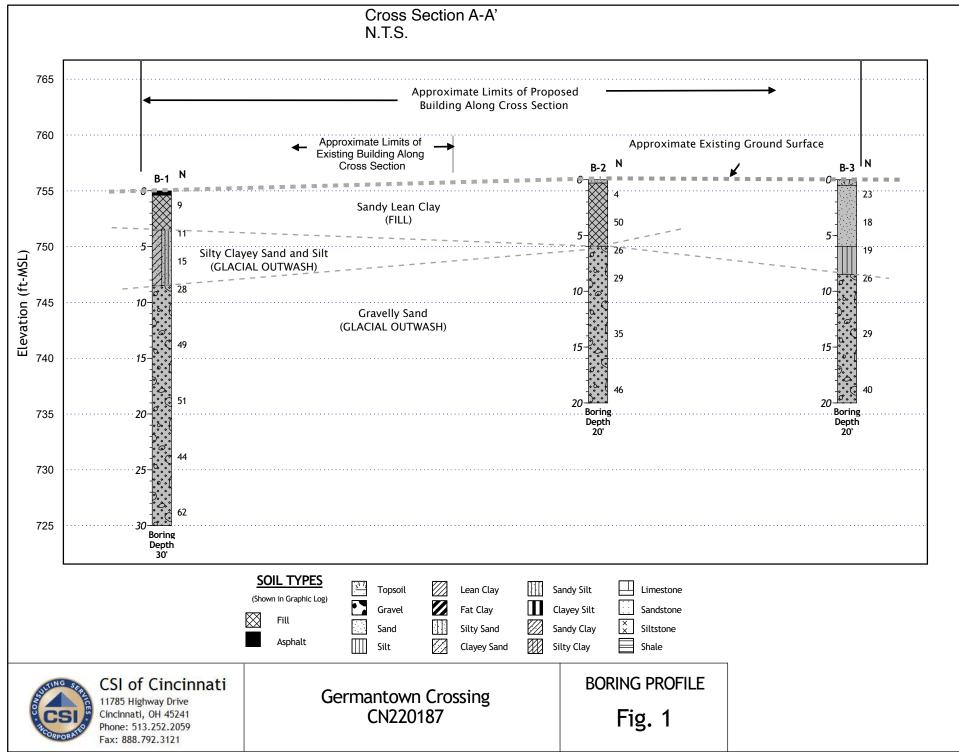
We wish to remind you that our exploration services include storing the soil samples collected and making them available for inspection for 30 days. The samples are then discarded unless you request otherwise. Please inform us if you wish to keep any of the obtained samples.

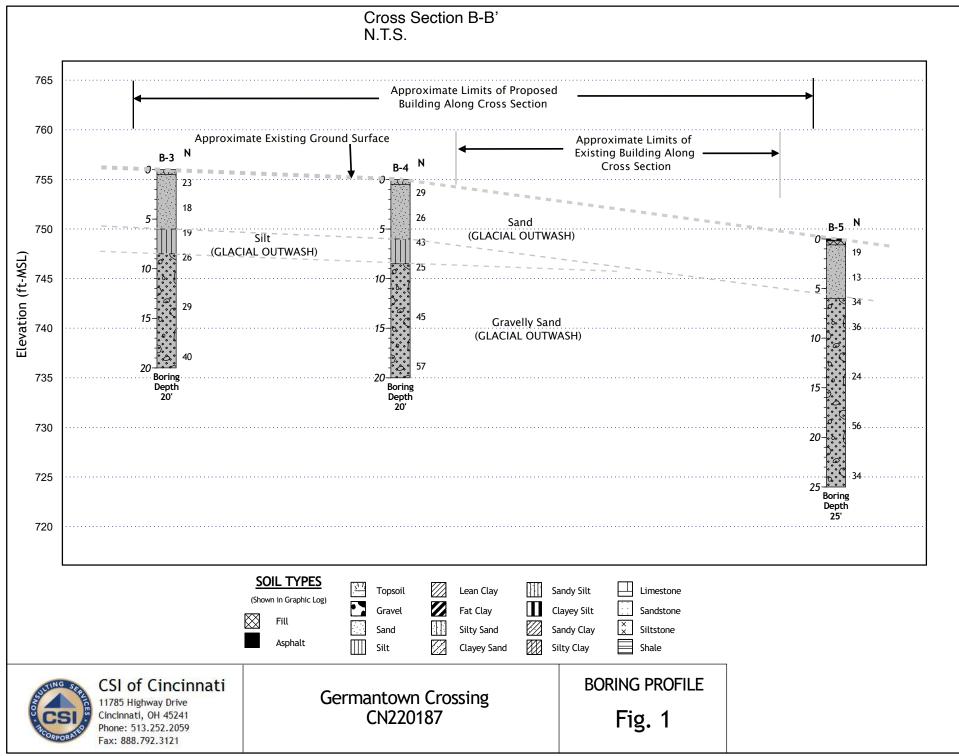
# APPENDIX

SITE LOCATION PLAN BORING LOCATION PLAN CROSS SECTIONS A-A', B-B' GEOTECHNICAL BORING INFORMATION SHEET TEST BORING LOGS FIELD TESTING PROCEDURES SUMMARY OF LABORATORY RESULTS GRAIN SIZE DISTRIBUTION LABORATORY TESTING PROCEDURES











# Consulting Services Incorporated LEXINGTON | LOUISVILLE | CINCINNATI

# Geotechnical Boring Information Sheet

Sample Type Symbols		Definitions	
		SPT-"Splitspoon"	or standard penetration test. Blow counts are number of drops required
Splitspoon (SPT)	Χ		ner dropping 30 inches to drive the sampler 6 inches.
Shelby Tube		N-value is the add	dition of the last two intervals of the 18-inch sample.
Grab	Ċ		often called "undisturbed samples". They are directly pushed into the allowed to rest for a small period of time and then pulled out of the
Rock Core	U	ground. Tops and	d bottoms are cleaned and then sealed.
Auger Cuttings			tion is done in general accordance with ASTM D2487 and 2488 using the
Surface Symbols		Unified Soil Class	ification System (USCS) as a general guide.
Topsoil	11, 11	المصرية فتعمد النص	
Asphalt	<u><u> </u></u>		escriptions are based on the recovered sample observations. The ry, slightly moist, moist, very moist and wet. These are typically based
Concrete	a	on relative estim	ates of the moisture condition of a visual estimation of the soils optimum
Lean Clay	11111		E (EOMC). Dry is almost in a "dusty" condition usually 6 or more percent which moist is from about 6 to 2 percent below EOMC at a point at which
Fat Clay			bes not readily change with the addition of water. Moist is usually 2
Glacial Till			2 percent above EOMC and the point at which the soil will tend to begin
Sandy Clay	(1))))		Inder some pressure in the hand. Very moist is usually from about 2 prcent above EOMC and also the point at which it's often considered
Silt		"muddy". Wet so	il is usually 6 or more percent above EOMC and often contains free water
Elastic Silt	TTTT	or the soil is in a	saturated state.
Lean Clay to Fat Clay		Silt or Clay is def	fined at material finer than a standard #200 US sieve (<0.075mm) Sand is
Gravelly Clay	FITTI	defined as mater	ial between the size of #200 sieve up to #4 sieve. Gravel is from #4 size
Sandy Silt		sieve material to	3". Cobbles are from 3" to 12". Boulders are over 12".
Gravelly Silt	.00		classified as follows:
Sand		Very Soft:	Easily broken by hand pressure
Gravel	200	Soft:	Ends can be broken by hand pressure; easily broken with hammer
Fill		Medium:	Ends easily broken with hammer; middle requires moderate blow
Limestone		Hard:	Ends require moderate hammer blow; middle requires several blows
Sandstone		Very Hard:	Many blows with a hammer required to break core
Shale/Siltstone			
Weathered Rock			ignation (RQD) is defined as total combined length of 4" or longer pieces
Samples Strength Desc		of core divided by	y the total core run length; defined in percentage.
Cohesive Soils:	N		
Very Soft	0-1	Water or cave-in	n observed in borings is at completion of drilling each boring unless
Soft	2-4	otherwise noted.	
Firm	5-8		
Stiff	9-15	Strata lengths sh	nown on borings represents a rough estimate. Transition may be more
Very Stiff	16-30		I. Soil borings are representative of that estimated location at that time
Hard	31+		n recovered samples. Conditions may be different between borings and
Non-cohesive Soils:	0.4		
Very Loose	0-4		intervals. Boring information is not to be considered stand alone but
Loose	5-10		in context with comments and information in the geotechnical report and
Firm	11-20	the means by whi	ich the borings are logged, sampled and drilled.
Very Firm	21-30		
Dense Very Dense	30-50		
Very Dense	51+		



CLIENT		Model Group										5#		B-1		
PROJECT N	OJECT NAME Germantown Crossing								·	JOB #				<u>220</u>	187	
PROJECT L	OCATIO	N <b>1520</b>	Germanto	wn Street,	Day	ton	, C	Dhi	0		LOGGE	D BY		CG		
											APPRO	VED BY		JPH	1	
	ſ	ORILLING and SAMP	LING INFORMATIC	N	ſ						1			TEST	DAT/	4
Date St	tarted	8/22/2022	Contractor	CS	L											
Date C	omplete	d <b>8/22/2022</b>	Boring Size	6	<u>in.</u>						Pen.					
Drill Ri		Mobile B-57	Boring Method	3.25" I.D. HSA	<u> </u>					Test	cket				ieve	
Weathe	er	Overcast	Hammer Type	Automatic	<u> </u>					tion 7 / foot	l (Poc	%		<del>.</del>	200 S	
								hics	_	lows,	finec	tent	(TT)	ex (F	ing #:	Remarks
		SO	IL CLASSIFICATIO	N		No.	Type	Grap	y (in	d Per er 6" e ] b	Incon	con	imit	y Ind	Pass	
Elev. Had	Scale Water Level	SURFA	ACE ELEVATION: 7	55.0		Sample No.	Sample Type	Sample Graphics	Recovery (in)	Standard Penetration Test Blows per 6" [ <i>N-Value</i> ] <i>blows/foot</i>	Qu-tsf Unconfined (Pocket Pen.) Compressive Strength	Moisture Content %	Liquid Limit (LL)	Plasticity Index (PI)	Percent Passing #200 Sieve	
		ASP	PHALT (4 inche	es)	/****		0,	0,	-	0,810		~		<u> </u>	<u>ц</u>	
754 2	-	Brown SAND	DY LEAN CLAY	(CLS) with	1	1	SS	X	14	4-4-5 [9]	2.5	11.3				
752			l, noted brick L] - moist, sti													
750-4		Brown SILTY (				2	SS	Д	16	3-5-6 [ 11 ]	2.5				58	
6	,	trace grave	el [GLACIAL OL	ĴTWASĤ] -		3	SS		13	3-6-9	2					
		mois	st, medium de	nse			55	$\square$	15	[ 15 ]						
746	-		graded GRAV			4	SS	$\mathbf{X}$	13	11-14-14					10	
10    744	)	(SWG), trace OUTWASH] - c	silt, trace cla							[ 28 ]						
12	-		dense													
	_									40 24 20						
740						5	SS	Å	14	19-21-28 [ <b>49</b> ]						
16	,															
738-18																
736-	-					6	SS	$\square$	9	20-22-29 [51]						
734	-									[3,]						
22	:															
						7	SS		10	15-19-25					25	
730-						Ľ	55	$\square$	10	[44]					25	
26 728					, ,											
28	-															
726					, î. Ç	8	SS	X	12	21-29-33 [62]						
724																
		Boring Teri	minated at 30	feet - No												
722 		5	Refusal													
	Depth	to Groundwater					Sar		Тур	ю.						Boring Method
Noted on Drilling Tools     ft.							Sta	ndar	d Pe	netration	Test					ISA- Hollow Stem Augers
	Completi Pr		ft. ft.			SS- S ST- S										FA- Continuous Flight Augers ND- Mud Drilling
	▼ After hours ft.           ☑ Cave Depth ft.					RC- I	Rock	Cor	e							
						CU- /	Auge	er Cu	uttin	gs						



CLIENT	Model Group							BORING	5#		B-2		
PROJECT NAME	Germantown Crossing							Job #			CN2	220	187
PROJECT LOCATIO	1520 Germantown Street,	Day	ton	i, C	)hi	0		LOGGE	D BY		CG		
								APPRO	ved by	′ _	JPH	4	
I	DRILLING and SAMPLING INFORMATION	Г						1		1	TEST	T DAT	A
Date Started	<u>8/22/2022</u> Contractor <u>CS</u>	_											
Date Complete	d 8/22/2022 Boring Size 6	in.						en.)					
Drill Rig	Mobile B-57 Boring Method 3.25" I.D. HSA	<u> </u>					est	ket F				ieve	
Weather	Overcast Hammer Type Automatic	_					ion T <i>foot</i>	gth (Poc	%		_	5 00	
[ <del></del>					nics		Standard Penetration Test Blows per 6" [ <i>N-Value</i> ] <i>blows/foot</i>	Qu-tsf Unconfined (Pocket Pen.) Compressive Strength	cent 5	(T	Plasticity Index (PI)	Percent Passing #200 Sieve	Remarks
	SOIL CLASSIFICATION		9	Sample Type	Sample Graphics	Recovery (in)	l Pen er 6" e ] <i>bl</i>	ncon	Moisture Content	Liquid Limit (LL)	y Ind	Passi	
(t) (t) (t) (t) (t) (t) (t)	الم					over	vs pe Valui	tsf U	sture	uid Li	sticity	cent	
Lev Ka (tt)	SURFACE ELEVATION. 750.0		Sample No.	Sam	Sam	Rec	Star Blov [ N-	Con-1	Mois	Liqu	Plas	Perc	
	CONCRETE (3 inches)	/											
754 2	Brown SANDY LEAN CLAY (CLS) with gravel [FILL] - moist, soft		1	SS	Д	5	3-2-2 [ <b>4</b> ]		9.5				
752 4			2	SS	$\times$	6	3-50-	1					
	Noted rock fragment at about 4 feet						[ 50 ]						
	Brown and gray well graded GRAAVELLY		3	SS	$\mathbf{X}$	10	15-12-14						
748 - 8 -	SAND (SWG), trace silt, trace clay [GLACIAL OUTWASH] - dry, medium						[ 26 ]						
746-10-	dense to very dense		4	SS	Х	12	8-16-13 [ <b>29</b> ]						
744-12-													
742-14-			5	SS	$\bigtriangledown$	11	8-16-19						
		.8.0		55	$\bigtriangleup$		[ 35 ]						
740-16-													
738-18-													
736-20-		<u></u>	6	SS	Х	14	15-24-22 [ <b>46]</b>						
734-22-	Boring Terminated at 20 feet - No												
732-24-	Refusal												
730-26-													
728-28-													
726-30-													
722-34-													
	n to Groundwater			Sar	nnle	e Typ	)e	I	I	I	I	I	Boring Method
Noted on Dr	Noted on Drilling Toolsft.					d Pe	netration	n Test					HSA- Hollow Stem Augers
⊈ At Completi ⊈ After			SS- S ST- S										CFA- Continuous Flight Augers MD- Mud Drilling
I Arter I Cave Depth	L Cave Depth ft.					e							
			CU- /	Auge	er Cu	uttin	gs						



CLIENT	Mode	el Group							I	BORING	G#		B-3		
PROJECT NAME		nantown Cr							、	Job #			CN2	220	187
PROJECT LOCATIO	N 1520	) Germanto	wn Street,	Day	tor	ı, C	Dhi	0	I	LOGGE	D BY		CG		
										APPRO	ved by		JPF	1	
I	DRILLING and SAMI	PLING INFORMATIC	N		[ <b></b>					1	I	ı	TEST	T DAT	A
Date Started	8/22/2022	Contractor	CSI												
Date Complete	ed 8/22/2022	Boring Size	6	_in.						en.)					
Drill Rig	Mobile B-57	Boring Method	3.25" I.D. HSA	<u> </u>					est	ket F				eve	
Weather	Overcast	Hammer Type	Automatic						on T foot	gth gth				00 Si	
							ics		trati ws/j	ined	ent %	F	X (PI	lg #2	Remarks
	SC	DIL CLASSIFICATION	1			ype	Sample Graphics	(in)	Standard Penetration Test Blows per 6" [ N-Value ] blows/foot	Qu-tsf Unconfined (Pocket Pen.) Compressive Strength	Moisture Content %	Liquid Limit (LL)	Plasticity Index (PI)	Percent Passing #200 Sieve	
Elev. He je je					Sample No.	Sample Type	ole G	Recovery (in)	dard 's per 'alue	sf Un press	ture	id Lir	icity	ent F	
Elen. (tt) Vater Level	SURF	ACE ELEVATION: 7	56.0		Samp	Samp	Samp	Reco	Stan Blow [ N-V	Com Com	Moist	Liqui	Plast	Perc	
	η ΤΟ	PSOIL (6 inche	s)		<u>,</u>										
754-2-		ly graded SANE		′   · · · ·	1	SS	X	16	10-12-11 [ <b>23</b> ]					21	
752 4		el, trace silt, t )UTWASH] - mc													
752 4-		medium dense	nst to ury,		2	SS	Д	14	7-10-8 [ <b>18</b> ]						
	Brown CII	T (ML) with tra	aco cand		-	ss		14	8-9-10		19.4			87	
748 8		TWASH] - mois			3	- 22	igtarrow	14	[19]		19.4			0/	
	- Brown and g	ray well graded	GRAVELLY	0.00	• 4	ss	$\bigtriangledown$	12	13-14-12						
746-10-	SAND (SWG)	with trace silt	, trace clay				$\vdash$		[ 26 ]						
744-12-		)UTWASH] - dry Jense to dense			•										
					•										
742-14-					5	SS	$\mathbb{X}$	11	15-14-15 [ <b>29</b> ]						
740-16-					•	1			[27]						
					•										
738-18-									19-19-21						
736-20-					6	SS	Å	8	[40]						
734-22-	Boring Ter	minated at 20	feet - No												
732-24-		Refusal													
730-26-															
728-28-															
726-30-															
724-32-															
722-34-															
	the Care and the														Dentir in Marthaulta
Depth Depth Noted on Dr	n to Groundwater rilling Tools	ft.			SPT		mple ndar		<u>e</u> enetration	Test				ŀ	<u>Boring Method</u> HSA- Hollow Stem Augers
∑ At Completi	ion	ft.			SS- S	Split	Spo	on						(	CFA- Continuous Flight Augers
	▼ After hours ft.           ☑ Cave Depth ft.					Shell Rock	-							N	MD- Mud Drilling
	Cave Depth ft. RC- Rock Core CU- Auger Cuttings								gs						



CLIENT	Mode	el Group							I	BORING	5#		<b>B-4</b>		
PROJECT NAME		nantown Cro	-						、	Job #			CN2	<u>220</u>	187
PROJECT LOCATIO	N 1520	) Germanto	wn Street,	Day	tor	ı, C	Dhi	0	I	LOGGE	D BY		CG		
										APPRO	ved by	·	JPH	1	
I	DRILLING and SAMI	PLING INFORMATIC	N		·					1	I	ı	TEST	T DAT	A
Date Started	8/22/2022	Contractor	CSI												
Date Complete	ed 8/22/2022	Boring Size	6	_in.						en.)					
Drill Rig	Mobile B-57	Boring Method	3.25" I.D. HSA	<u> </u>					est	ket F				eve	
Weather	Overcast	Hammer Type	Automatic	. <u> </u>					on T foot	gth gth				00 Si	
							ics		trati ws/j	ined	ent %	-F	X (PI	lg #2	Remarks
	SC	DIL CLASSIFICATION	1		Sample No.	Sample Type	Sample Graphics	(in)	Standard Penetration Test Blows per 6" [ N-Value ] blows/foot	Qu-tsf Unconfined (Pocket Pen.) Compressive Strength	Moisture Content %	Liquid Limit (LL)	Plasticity Index (PI)	Percent Passing #200 Sieve	
Elev. He je je	SURFACE ELEVATION: 755.0						ole G	Recovery (in)	dard 's per 'alue	sf Un press	ture	id Lir	icity	ent P	
Level Dep. (ft)							Samp	Reco	Stand Blow [ N-V	Comp Comp	Moist	Liqui	Plast	Perce	
754	η ΤΟ	PSOIL (6 inche	s)	/	<u>.</u>										
		y graded SAND		′   · · · ·	1	SS	X	11	13-14-15 [ <b>29</b> ]						
752		e silt, trace cla 1] - dry, mediu			:										
750	0011175	ij diy, niculu			2	SS	Д	14	3-19-7 [ <b>26 ]</b>						
6-	Brown SILT (	ML) with trace	clay trace		3	ss		12	3-19-24		18.3				
748		L OUTWASH] -			<b>_</b>	- 33	ho	12	[43]		10.5				
746	Brown and g	ray well graded	GRAVELLY	<b>v</b>	4	ss	$\bigtriangledown$	14	10-11-14						
	SAND (SWG)	with trace silt	, trace clay				$\vdash$		[ 25 ]						
		)UTWASH] - dry nse to very den													
742		····, ···,													
740					5	SS	X	14	23-23-22 [ <b>45</b> ]						
-16-															
738															
						ss		12	21-29-28						
20-					6	- 33	igap	12	[ 57 ]						
732	Boring Ter	minated at 20	feet - No												
24		Refusal													
728															
726															
30-															
724															
34-															
Depth to Groundwater									<u> </u>			<u> </u>	<u> </u>	<u> </u>	Roring Mothed
Deptr Noted on Dr		ft.			SPT		mple ndar		<u>e</u> enetration	Test				ł	<u>Boring Method</u> HSA- Hollow Stem Augers
∑ At Completi	✓ At Completion    ft.					Split									CFA- Continuous Flight Augers
	▼ After hours ft.           ☑ Cave Depth ft.					Shell Rock	-							1	MD- Mud Drilling
	t Cave Depthft. RC- Rock Core CU- Auger Cuttings								gs						



CLIENT	Model Gr	oup						I	BORING	i#		<u>B-5</u>		
PROJECT NAME		own Crossing						、	Job #			CN2	<u>220</u> ′	187
PROJECT LOCATIO	N 1520 Gei	rmantown Street,	Day	ton	n, C	)hi	0	I	LOGGEI	) BY		CG		
									APPRO\	/ED BY	,	JPH		
ļ	DRILLING and SAMPLING I	NFORMATION	I									TEST	DATA	<u>م</u>
Date Started	8/22/2022 Cont	ractor <u>CS</u>	L											
Date Complete	ed <b>8/22/2022</b> Borin	ng Size 🥂 🤞	<u>5 in.</u>						Pen.)					
Drill Rig	Mobile B-57 Borin	ng Method 3.25" I.D. HSA	<u> </u>					est	ket I				Sieve	
Weather	Overcast Ham	mer Type Automatic	<u> </u>					ion T <i>foot</i>	(Poc	<u>&gt;</u> 0		(	:00 S	
[ <del></del>						ics		Standard Penetration Test Blows per 6" [ N-Value ] blows/foot	Qu-tsf Unconfined (Pocket Pen.) Compressive Strength	Moisture Content %	(LL)	Plasticity Index (PI)	Percent Passing #200	Remarks
	SOIL CLA	SSIFICATION		o.	ype	Graphics	Recovery (in)	Pen r 6" <i>e</i> ] <i>bl</i>	sive :	Cont	Liquid Limit (LL)	/ Inde	Passi	
Elev. Har ele				Sample No.	Sample Type	Sample (	ver	dard /s pe /alue	sf Ur	iture	id Li	ticity	ent	
Elen. (tt) Vater Level	SURFACE EL	EVATION: 749.0		Sam	Sam	Sam	Reco	Stan Blov [ N-I	Con-t	Mois	Liqu	Plas	Perc	
748	ASPHALT	J XXXX												
2-		se (5 inches)	]	1	SS	Х	12	8-9-10 [ <b>19</b> ]						
		ded SAND (SP) with trace clay [GLACIAL		-		$\bigtriangledown$	10	6-6-7					9	
744		ry, medium dense		2	SS	$\bigtriangleup$	10	[13]					9	
744	Brown and gray w	ell graded GRAVELLY	<b>.</b>	3	SS	$\bigtriangledown$	13	6-15-19						
	SAND (SWG) with	trace silt, trace clay				$ \bigtriangleup $		[ 34 ]						
740		ASH] - dry medium		4	ss	X	11	14-17-19 [ <b>36</b> ]						
							[ 30 ]							
				_		$\overline{}$		7 40 44						
734				5	SS	Д	14	7-10-14 [ <b>24</b> ]						
732														
730				6	ss	$\mathbf{X}$	11	22-25-31						
								[ 56 ]						
22-														
				-		$\bigtriangledown$		8-15-19						
724				7	SS	Å	14	[34]						
26														
		ted at 25 feet - No												
720	Ke	efusal												
30														
716														
	n <u>to Groundwater</u> rilling Tools	ft.		ςρτ.			Typ d Pe	<u>e</u> netration	Test				F	<u>Boring Method</u> ISA- Hollow Stem Augers
	$\overline{\mathbb{Y}}$ At Completion ft.					Spo	on		icst				C	FA- Continuous Flight Augers
	⊈ After hours ft.					by Ti							Ν	ND- Mud Drilling
.⊠ Cave Depth	Cave Depth ft. RC- Rock Core CU- Auger Cuttings													



CLIENT	лт <b>Model Group</b>											B-6		
PROJECT NAME		ntown Crossing							Job #			CN2	220	187
PROJECT LOCATIO	N 1520 G	ermantown Street,	Day	tor	ı, C	)hi	0		LOGGE	D BY		CG		
									APPRO	/ED By	·	JPF	1	
I	DRILLING and SAMPLIN	G INFORMATION	Г						ii		1	TEST	DAT	Α
Date Started	<u>8/22/2022</u> Co	ontractor CSI	_											
Date Complete	d <u>8/22/2022</u> Bo	oring Size <u>6</u>	_in.						Pen.)					
Drill Rig	Mobile B-57 Bo	oring Method 3.25" I.D. HSA	_					_est	cket I				ieve	
Weather	Overcast Ha	ammer Type Automatic	_					ion T foot	(Poc	%		=	200 S	
[ <b></b>									Qu-tsf Unconfined (Pocket Pen.) Compressive Strength	tent	E.	Plasticity Index (PI)	Percent Passing #200 Sieve	Remarks
	SOIL C	LASSIFICATION		Ģ	Sample Type	Sample Graphics	Recovery (in)	Standard Penetration Test Blows per 6" [ <i>N-Value</i> ] <i>blows/foot</i>	ncon	Moisture Content	Liquid Limit (LL)	y Ind	Passi	
Elen: Vater Level	L						overy	vs pe Valui	tsf U	sture	iid Li	ticity	cent	
Lev Ka Sca Per	JORFACE		Sample No.	Sam	Sam	Rec	Star Blov	Corr-1	Mois	Liqu	Plas	Perc		
752	ASPHA	LT (2 inches)	¢											
		Base (3 inches)		1	SS	Д	6	7-6-6 [ 12 ]						
	Brown and gray SAND (SWG) wit	well graded GRAVELLY h trace silt, trace clay		2	SS	$\bigtriangledown$	12	9-11-16						
748		WASH] - dey medium		~		$\bigtriangleup$	12	[27]						
746		dense												
	Boring Terminate	ed at 5 feet - No Refusal												
742														
12														
736														
18-														
732														
24-														
726														
28														
30-														
722														
34-														
Depth	to Groundwater		1		Sar	nple	Тур	e e	1		I	1	I	Boring Method
Noted on Dr	rilling Tools	ft.			Sta	ndar	d Pe	enetration	Test					HSA- Hollow Stem Augers
♀ At Completi ▼ After	•					Spo by Ti								CFA- Continuous Flight Augers MD- Mud Drilling
La Cave Depth							e							
				-UJ	Auge		irriu	క్రం						



CLIENT	Mode	el Group								BORING	G#		B-7		
PROJECT NAME		nantown Cro								JOB #			CN2	220 ⁻	187
PROJECT LOCATIC	N 1520	) Germantov	vn Street,	Day	tor	n, C	)hi	0		LOGGE	D BY		CG		
										APPRO	ved by	′	JPH	1	
	DRILLING and SAMI	PLING INFORMATIO	N	г									TEST	DAT/	A
Date Started	8/22/2022	Contractor	CSI	_											
Date Complete	ed <b>8/22/2022</b>	Boring Size	6	_in.						en.)					
Drill Rig	Mobile B-57	Boring Method	3.25" I.D. HSA	_					est	ket F				eve	
Weather	Overcast	Hammer Type	Automatic	_					ion T <i>foot</i>	(Poc gth	%		-	00 Si	
[r							lics		etrat ows/	ined	ent 9	(T	IA) Xe	ng #2	Remarks
	SC	DIL CLASSIFICATION	I		Sample No.	Sample Type	Sample Graphics	Recovery (in)	Standard Penetration Test Blows per 6" [ <i>N-Value</i> ] <i>blows/foot</i>	Qu-tsf Unconfined (Pocket Pen.) Compressive Strength	Moisture Content	Liquid Limit (LL)	Plasticity Index (PI)	Percent Passing #200 Sieve	
Elev. Hala							) aldr	over	vs pe Valu	tsf U npres	sture	nid Li	sticit	cent	
(ft) De SS Pe						San	San	Rec	Stal Blo	ŚŚ	Moi	Liqu	Pla	Per	
	L	PSOIL (6 inches	,					42	540		7.0				
754 2	Light brown	SILT (ML) with s [FILL] - dry, s	sand, trace		1	SS	igarproduct	12	5-6-9 [ 15 ]		7.9				
752-4-	1000	5[1]22] 019,5			4	SS	$\bigtriangledown$	10	4-4-6		6.0				
750-6-									[ 10 ]						
748	Boring Termir	nated at 5 feet	- No Refusal												
746-10-															
742-14-															
740-16-															
738-18-															
736-20-															
734-22-															
732-24-															
730-26-															
728-28-															
726-30-															
724-32-															
722-34-															
	n to Groundwater							Typ		. <b>T</b> ·					Boring Method
<ul> <li>● Noted on Di</li> <li>☑ At Complet</li> </ul>		ft. ft.				Sta Split			enetration	1 Test					ISA- Hollow Stem Augers FA- Continuous Flight Augers
⊈ After	After hours ft.					Shell Rock	су Т	ube							ND- Mud Drilling
超 Cave Depth	⊈ After hours ft.     Z Gave Depth ft.							e uttin	gs						



CLIENT	Model Group		BORING	i#		<u>B-8</u>						
PROJECT NAME	Germantown Crossing						JOB #			<u>CN2</u>	<u>220</u>	187
PROJECT LOCATIO	N 1520 Germantown Street, Da	ayto	on,	Oh	io		LOGGE	D BY		CG		
							APPRO	/ED BY	·	JPH	1	
ļ	DRILLING and SAMPLING INFORMATION			_						TEST	T DAT	A
Date Started	8/22/2022 Contractor CSI											
Date Complete	d <b>8/22/2022</b> Boring Size <u>6</u> in.						en.)					
Drill Rig	Mobile B-57 Boring Method 3.25" I.D. HSA					est	ket F				ieve	
Weather	Overcast Hammer Type Automatic					ion T foot	(Poc gth	%		<u> </u>	:00 Si	
[ <del></del>				ics		etrat ows/	ined	ent 9	(LL)	ex (PI	ng #2	Remarks
	SOIL CLASSIFICATION		VDe	Sample Graphics	Recovery (in)	Standard Penetration Test Blows per 6" [ <i>N-Value</i> ] <i>blows/foot</i>	Qu-tsf Unconfined (Pocket Pen.) Compressive Strength	Moisture Content	Liquid Limit (LL)	Plasticity Index (PI)	Percent Passing #200 Sieve	
Elev. Hala	SURFACE ELEVATION: 754.0		sample No. Sample Tvpe	ble (	overy	vs pe Value	tsf Ul	sture	iid Li	ticity	cent	
(t) Scale Level	SURFACE ELEVATION. 754.0	Sam	Sam	Rec	Star Blov [ N-	Qu-1 Corr	Mois	Liqu	Plas	Perc		
	TOPSOIL (6 inches)		_		7							
752 2	Brown CLAYEY SAND (SC) with gravel [FILL] - moist, medium dense	▓–	1 55	X	11	7-8-4 [ 12 ]						
750-4-	Brown CLAYEY SAND (SC) with gravel		2 SS		13	3-5-7						
	GLACIAL OUTWASH] - moist, medium			$\vdash$		[ 12 ]						
748-6	dense											
746	Boring Terminated at 5 feet - No Refusal											
744-10-												
740-14-												
738-16-												
736-18-												
734-20-												
732-22-												
730-24-												
728-26-												
726-28-												
724-30-												
722-32-												
720-34-												
Depth Noted on Dr	<u>n to Groundwater</u> rilling Tools ft.	SP			<u>e Tyr</u> rd Pe	<u>pe</u> enetration	n Test				I	<u>Boring Method</u> HSA- Hollow Stem Augers
⊈ At Complet	ion ft.	SS	- Spli - She	t Spo	oon						(	CFA- Continuous Flight Augers
⊈ After       ⊠ Cave Depth	⊈ After hours ft.     ≝ Cave Depth ft.											MD- Mud Drilling
	re uttir	Igs										



CLIENT	Mode		BORING	5#		B-9								
PROJECT NAME		nantown Crossing							JOB #			CN2	<u>220</u>	187
PROJECT LOCATIO	N <b>1520</b>	Germantown Street,	, Day	tor	ı, C	Dhi	0		LOGGE	D BY		CG		
									APPRO	VED BY	,	JPH	1	
I	ORILLING and SAMP	LING INFORMATION	ſ						1	1	1	TEST	T DAT	A
Date Started	8/22/2022	Contractor CS	<u> </u>											
Date Complete	d <u>8/22/2022</u>	Boring Size	<u>5 in.</u>						en.)					
Drill Rig	Mobile B-57	Boring Method 3.25" I.D. HSA	<u>\</u>					est	ket F				eve	
Weather	Overcast				ion T foot	(Poc			_	00 Si				
·				ic		etrati ows/	ined	ent %	<b>F</b>	X (PI	lg #2	Remarks		
	SO	IL CLASSIFICATION			ype	Sample Graphics	(in)	Standard Penetration Test Blows per 6" [ N-Value ] blows/foot	Qu-tsf Unconfined (Pocket Pen.) Compressive Strength	Moisture Content %	Liquid Limit (LL)	Plasticity Index (PI)	Percent Passing #200 Sieve	
Elev. fa el te		ACE ELEVATION: 749.0		Sample No.	Sample Type	ole G	Recovery (in)	dard 's pel 'alue	sf Un press	ture	id Lir	icity	ent F	
Elen. (tt) Level	SURFA		Samp	Samp	Samp	Reco	Stan Blow [ N-V	Com C	Mois	Liqui	Plast	Perc		
748	ASP	PHALT (2 inches)					,							
2-	Grav	el Base (5 inches)	]	1	SS	$\boxtimes$	13	6-4-3 [7]	2	12.2				
746	Brown SANE	OY LEAN CLAY (CLS) with			-		,							
		el, noted brick fragment _L] - moist, firm		2	SS	$\mid$	14	2-2-2 [4]						
6-	-	EY SAND (SC) with gravel	-											
742	[FILL]	- moist, very loose												
740	Boring Termin	ated at 5 feet - No Refusa												
738														
736														
732														
20-														
726														
24														
724														
722														
30-														
716														
34-														
Denth	to Groundwater			L	Sar	mole	e Typ	e	<u> </u>	I	I	I	I	Boring Method
Noted on Dr	illing Tools	ft.			Sta	ndaı	rd Pe	enetration	n Test					HSA- Hollow Stem Augers
♀ At Completi ▼ After	∠ At Completion ft.     ∠ After hours ft.					Spo by T								CFA- Continuous Flight Augers MD- Mud Drilling
⊈ Cave Depth														
				CU-	Auge	er Ci	uttin	gs						



CLIENT	Model Group							BORING	;#		B-1	0	
PROJECT NAME	Germantown Crossing							JOB #			<u>CN2</u>	220	187
PROJECT LOCATIO	N 1520 Germantown Street, Da	ayto	on,	0	hi	C		LOGGE	DBY		CG		
								APPRO	VED BY		JPH	1	
I	DRILLING and SAMPLING INFORMATION	[									TEST	T DAT	A
Date Started	<u>8/22/2022</u> Contractor <u>CSI</u>												
Date Complete	d <u>8/22/2022</u> Boring Size <u>6</u> in.	.						Pen.					
Drill Rig	Mobile B-57 Boring Method 3.25" I.D. HSA						Standard Penetration Test Blows per 6" [ <i>N-Value</i> ] blows/foot	Qu-tsf Unconfined (Pocket Pen.) Compressive Strength	8			ieve	
Weather	Overcast Hammer Type Automatic										()	200 5	
					hics	_	lows	Stre	itent	(LL)	lex (F	ing #	Remarks
	SOIL CLASSIFICATION		ġ,	Type	Grap	y (in	d Per er 6" <i>ie</i> ] <i>b</i>	Jncor ssive	e Con	imit	cy Inc	Pass	
Elen: Vater Level	SURFACE ELEVATION: 746.0		Sample No.	Sample Type	Sample Graphics	Recovery (in)	Standar Blows p [ N-Valu	Qu-tsf L Compre	Moisture Content	Liquid Limit (LL)	Plasticity Index (PI)	Percent Passing #200 Sieve	
	ASPHALT (2 inches)	<b>-</b>	_										
744-2-	Gravel Base (4 inches)	▓–	1	ss /	Д	11	2-1-2 [3]	1	18.2				
742 4	Brown LEAN CLAY (CL) with sand, noted brick fragment [FILL] - moist, soft		2 9	ss	$\overline{\langle}$	13	1-2-2	0.5					
740-6-	Dark brown and dark gray LEAN CLAY			ľ	$\sim$		[4]						
	(CL) with sand, roots and organics [FILL] - most, soft												
738 8-	Boring Terminated at 5 feet - No Refusal												
736-10-													
734-12-													
730-16-													
728-18-													
724-22-													
722-24-													
720-26-													
716-30-													
714-32-													
712-34-													
Depth Noted on Di	<u>n to Groundwater</u> rilling Tools ft.	SP			nple Idaro		<u>e</u> netration	n Test				I	Boring Method HSA- Hollow Stem Augers
∑ At Complet	ion ft.		5- Sp									(	CFA- Continuous Flight Augers
⊈ After ፼ Cave Depth	hours ft ft.		r- Sh C- Ro									I	MD- Mud Drilling
		CL	J- Ai	ugei	r Cu	ttin	gs						

#### FIELD TESTING PROCEDURES

<u>Field Operations</u>: The general field procedures employed by CSI are summarized in ASTM D 420 which is entitled "Investigating and Sampling Soils and Rocks for Engineering Purposes." This recommended practice lists recognized methods for determining soil and rock distribution and ground water conditions. These methods include geophysical and in situ methods as well as borings.

Borings are drilled to obtain subsurface samples using one of several alternate techniques depending upon the subsurface conditions. These techniques are:

- a. Continuous 2-1/2 or 3-1/4 inch I.D. hollow stem augers;
- b. Wash borings using roller cone or drag bits (mud or water);
- c. Continuous flight augers (ASTM D 1425).

These drilling methods are not capable of penetrating through material designated as "refusal materials." Refusal, thus indicated, may result from hard cemented soil, soft weathered rock, coarse gravel or boulders, thin rock seams, or the upper surface of sound continuous rock. Core drilling procedures are required to determine the character and continuity of refusal materials.

The subsurface conditions encountered during drilling are reported on a field test boring record by the chief driller. The record contains information concerning the boring method, samples attempted and recovered, indications of the presence of various materials such as coarse gravel, cobbles, etc., and observations between samples. Therefore, these boring records contain both factual and interpretive information. The field boring records are on file in our office.

The soil and rock samples plus the field boring records are reviewed by a geotechnical engineer. The engineer classifies the soils in general accordance with the procedures outlined in ASTM D 2488 and prepares the final boring records which are the basis for all evaluations and recommendations.

The final boring records represent our interpretation of the contents of the field records based on the results of the engineering examinations and tests of the field samples. These records depict subsurface conditions at the specific locations and at the particular time when drilled. Soil conditions at other locations may differ from conditions occurring at these boring locations. Also, the passage of time may result in a change in the subsurface soil and ground water conditions at these boring locations. The lines designating the interface between soil or refusal materials on the records and on profiles represent approximate boundaries. The transition between materials may be gradual. The final boring records are included with this report.

The detailed data collection methods using during this study are discussed on the following pages.

<u>Soil Test Borings</u>: Soil test borings were made at the site at locations shown on the attached Boring Plan. Soil sampling and penetration testing were performed in accordance with ASTM D 1586.

The borings were made by mechanically twisting a hollow stem steel auger into the soil. At regular intervals, the drilling tools were removed and soil samples obtained with a standard 1.4 inch I.D., 2 inch O.D., split tube sampler. The sampler was first seated 6 inches to penetrate any loose cuttings, then driven an additional foot with blows of a 140-pound hammer falling 30 inches. The number of hammer blows required to drive the sampler the final foot was recorded and is designated the "penetration resistance". The penetration resistance, when properly evaluated, is an index to the soil strength and foundation supporting capability.

Representative portions of the soil samples, thus obtained, were placed in glass jars and transported to the laboratory. In the laboratory, the samples were examined to verify the driller's field classifications. Test Boring Records are attached which graphically show the soil descriptions and penetration resistances.

<u>Core Drilling</u>: Refusal materials are materials that cannot be penetrated with the soil drilling methods employed. Refusal, thus indicated, may result from hard cemented soil, soft weathered rock, coarse gravel or boulders, thin rock seams or the upper surface of sound continuous rock. Core drilling procedures are required to determine the character and continuity of refusal materials.

Prior to coring, casing is set in the drilled hole through the overburden soils, if necessary, to keep the hole from caving. Refusal materials are then cored according to ASTM D 2113 using a diamond-studded bit fastened to the

end of a hollow double tube core barrel. This device is rotated at high speeds, and the cuttings are brought to the surface by circulating water. Core samples of the material penetrated are protected and retained in the swivel-mounted inner tube. Upon completion of each drill run, the core barrel is brought to the surface, the core recovered is measured, the samples are removed and the core is placed in boxes for storage.

The core samples are returned to our laboratory where the refusal material is identified and the percent core recovery and rock quality designation is determined by a soils engineer or geologist. The percent core recovery is the ratio of the sample length obtained to the depth drilled, expressed as a percent. The rock quality designation (RQD) is obtained by summing up the length of core recovered, including only the pieces of core which are four inches or longer, and dividing by the total length drilled. The percent core recovery and RQD are related to soundness and continuity of the refusal material. Refusal material descriptions, recoveries, and RQDs are shown on the "Test Boring Records".

Hand Auger Borings and Dynamic Cone Penetration Testing: Hand auger borings are performed manually by CSI field personnel. This consists of manually twisting hand auger tools into the subsurface and extracting "grab" or baggie samples at intervals determined by the project engineer. At the sample intervals, dynamic cone penetration (DCP) testing is performed. This testing involves the manual raising and dropping of a 20 pound hammer, 18 inches. This "driver" head drives a solid-1¾ inch diameter cone into the ground. DCP "counts" are the number of drops it takes for the hammer to drive three 1¾ inch increments, recorded as X-Y-Z values.

<u>Test Pits:</u> Test pits are excavated by the equipment available, often a backhoe or trackhoe. The dimensions of the test pits are based on the equipment used and the power capacity of the equipment. Samples are taken from the spoils of typical buckets of the excavator and sealed in jars or "Ziplock" baggies. Dynamic Cone Penetration or hand probe testing is often performed in the upper few feet as OSHA standards allow. Refusal is deemed as the lack of advancement of the equipment with reasonable to full machine effort.

<u>Water Level Readings</u>: Water table readings are normally taken in conjunction with borings and are recorded on the "Test Boring Records". These readings indicate the approximate location of the hydrostatic water table at the time of our field investigation. Where impervious soils are encountered (clayey soils) the amount of water seepage into the boring is small, and it is generally not possible to establish the location of the hydrostatic water table through water level readings. The ground water table may also be dependent upon the amount of precipitation at the site during a particular period of time. Fluctuations in the water table should be expected with variations in precipitation, surface run-off, evaporation and other factors.

The time of boring water level reported on the boring records is determined by field crews as the drilling tools are advanced. The time of boring water level is detected by changes in the drilling rate, soil samples obtained, etc. Additional water table readings are generally obtained at least 24 hours after the borings are completed. The time lag of at least 24 hours is used to permit stabilization of the ground water table which has been disrupted by the drilling operations. The readings are taken by dropping a weighted line down the boring or using an electrical probe to detect the water level surface.

Occasionally the borings will cave-in, preventing water level readings from being obtained or trapping drilling water above the caved-in zone. The cave-in depth is also measured and recorded on the boring records.

# Summary of Laboratory Results

															Sheet	1 of 1
Borehole	Depth	Sample Type	Liquid Limit	Plastic Limit	Plasticity Index	Classification Water Content (%)	Unconfined Compressive Strength (tsf)	Dry Density (pcf)	Wet Density (pcf)	Max. Dry Density (pcf)	Opt. Water Content (%)	CBR	Swell (%)	RQD	Percent Recovery	Percent Finer (No. 200)
B-1	1.0					11.3										
B-1	3.5															58
B-1	8.5															10
B-1	23.5															25
B-2	1.0					9.5										
B-3	1.0															21
B-3	6.0					19.4										87
B-4	6.0					18.3										
B-5	3.5															9
B-7	1.0					7.9										
B-7	3.5					6.0										
B-9	1.0					12.2										
B-10	1.0					18.2										

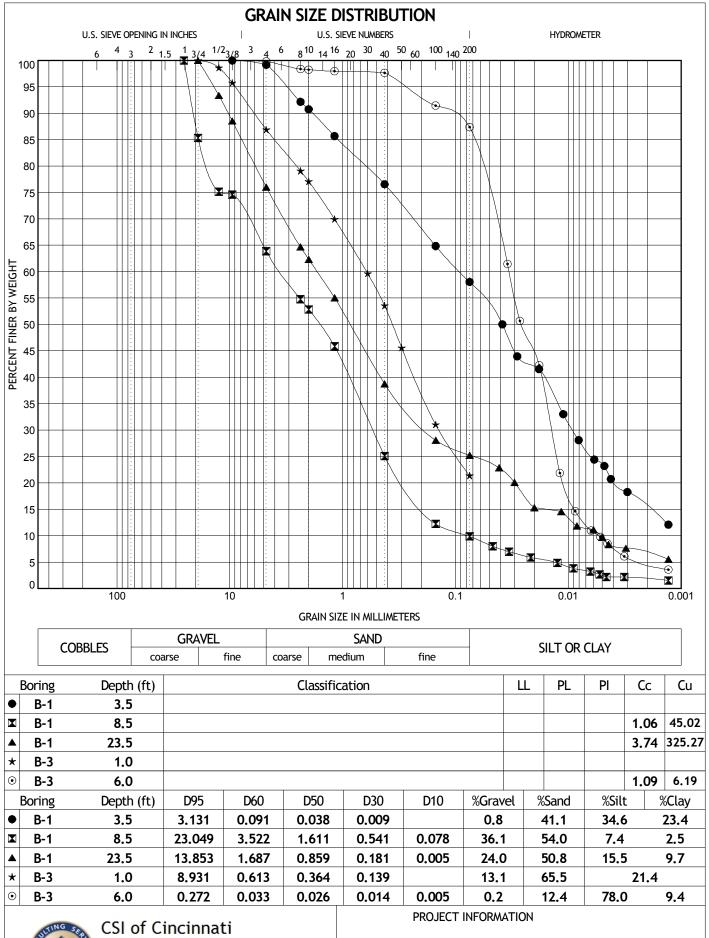
# CSI Cincinn Phone:

# CSI of Cincinnati

11785 Highway Drive Cincinnati, OH 45241 Phone: 513.252.2059 Fax: 888.792.3121 SS - Split Spoon Sample GRAB - Bulk Grab Sample

### PROJECT INFORMATION

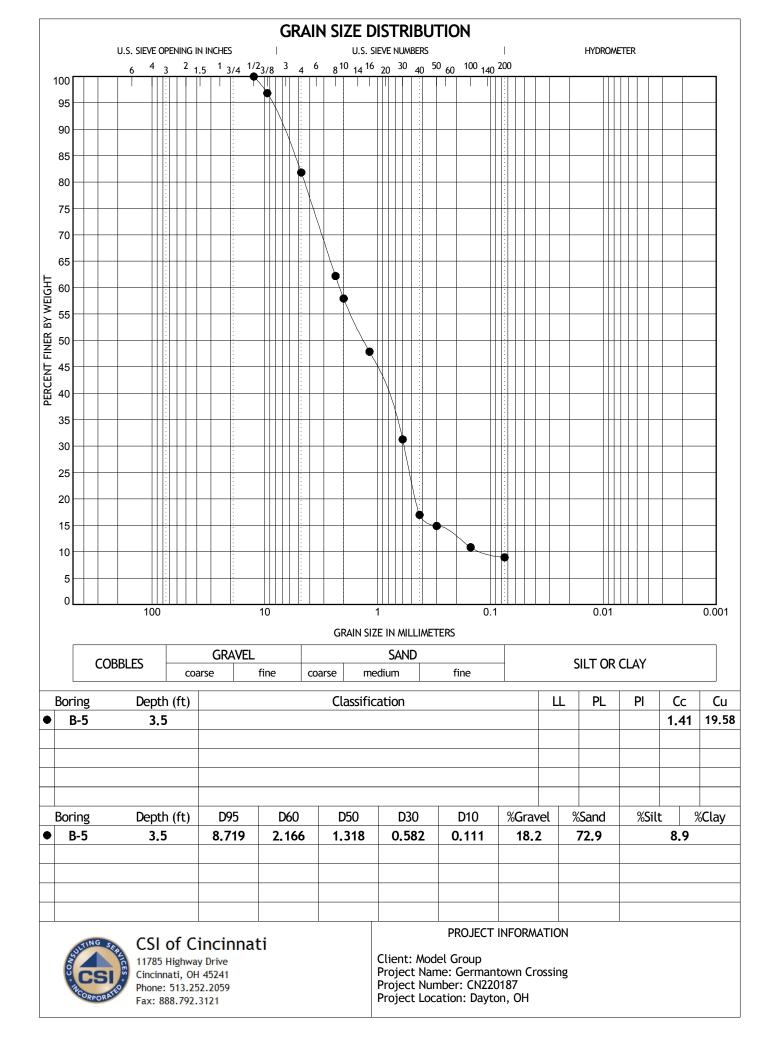
Client: Model Group Project Name: Germantown Crossing Project Number: CN220187 Project Location: Dayton, OH



SULTING SER

11785 Highway Drive Cincinnati, OH 45241 Phone: 513.252.2059 Fax: 888.792.3121

Client: Model Group Project Name: Germantown Crossing Project Number: CN220187 Project Location: Dayton, OH



#### LABORATORY TESTING PROCEDURES

<u>Soil Classification</u>: Soil classifications provide a general guide to the engineering properties of various soil types and enable the engineer to apply past experience to current problems. In our investigations, samples obtained during drilling operations are examined in our laboratory and visually classified by an engineer. The soils are classified according to consistency (based on number of blows from standard penetration tests), color and texture. These classification descriptions are included on our "Test Boring Records."

The classification system discussed above is primarily qualitative and for detailed soil classification two laboratory tests are necessary: grain size tests and plasticity tests. Using these test results the soil can be classified according to the AASHTO or Unified Classification Systems (ASTM D 2487). Each of these classification systems and the in-place physical soil properties provides an index for estimating the soil's behavior. The soil classification and physical properties obtained are presented in this report.

<u>Rock Classification</u>: Rock classifications provide a general guide to the engineering properties of various rock types and enable the engineer to apply past experience to current situations. In our explorations, rock core samples obtained during drilling operations are examined in our laboratory and visually classified by an engineer. The rock cores are classified according to relative hardness and RQD (see Guide to Rock Classification Terminology), color, and texture. These classification descriptions are included on our Test Boring Records.

<u>Atterberg Limits</u>: Portions of the samples are taken for Atterberg Limits testing to determine the plasticity characteristics of the soil. The plasticity index (PI) is the range of moisture content over which the soil deforms as a plastic material. It is bracketed by the liquid limit (LL) and the plastic limit (PL). The liquid limit is the moisture content at which the soil becomes sufficiently "wet" to flow as a heavy viscous fluid. The plastic limit is the lowest moisture content at which the soil is sufficiently plastic to be manually rolled into tiny threads. The liquid limit and plastic limit are determined in accordance with ASTM D 4318.

Moisture Content: The Moisture Content is determined according to ASTM D 2216.

<u>Percent Finer Than 200 Sieve</u>: Selected samples of soils are washed through a number 200 sieve to determine the percentage of material less than 0.074 mm in diameter.

<u>Rock Strength Tests:</u> To obtain strength data for rock materials encountered, unconfined compression tests are performed on selected samples. In the unconfined compression test, a cylindrical portion of the rock core is subjected to increasing axial load until it fails. The pressure required to produce failure is recorded, corrected for the length to diameter ratio of the core and reported.

<u>Compaction Tests</u>: Compaction tests are run on representative soil samples to determine the dry density obtained by a uniform compactive effort at varying moisture contents. The results of the test are used to determine the moisture content and unit weight desired in the field for similar soils. Proper field compaction is necessary to decrease future settlements, increase the shear strength of the soil and decrease the permeability of the soil.

The two most commonly used compaction tests are the Standard Proctor test and the Modified Proctor test. They are performed in accordance with ASTM D 698 and D 1557, respectively. Generally, the Standard Proctor compaction test is run on samples from building or parking areas where small compaction equipment is anticipated. The Modified compaction test is generally performed for heavy structures, highways, and other areas where large compaction equipment is expected. In both tests a representative soil sample is placed in a mold and compacted with a compaction hammer. Both tests have three alternate methods.

Test	Method	Hammer Wt./Fall	Mold Diam.	Run on Material Finer Than	No. of Layers	No. of Blows/ Layer
Standard	А	5.5 lb./12"	4"	No. 4 sieve	3	25
D 698	В	5.5 lb./12"	4"	3/8" sieve	3	25
	С	5.5 lb./12"	6"	3/4" sieve	3	56

Test	Method	Hammer Wt./Fall	Mold Diam.	Run on Material Finer Than	No. of Layers	No. of Blows/ Layer
Modified	Α	10 lb./18"	4"	No. 4 sieve	5	25
D 1557	В	10 lb./18"	4"	3/8" sieve	5	25
	С	10 lb./18"	6"	3/4" sieve	5	56

The moisture content and unit weight of each compacted sample is determined. Usually 4 to 5 such tests are run at different moisture contents. Test results are presented in the form of a dry unit weight versus moisture content curve. The compaction method used and any deviations from the recommended procedures are noted in this report.

<u>Laboratory California Bearing Ratio Tests</u>: The California Bearing Ratio, generally abbreviated to CBR, is a punching shear test and is a comparative measure of the shearing resistance of a soil. It provides data that is a semi-empirical index of the strength and deflection characteristics of a soil. The CBR is used with empirical curves to design pavement structures.

A laboratory CBR test is performed according to ASTM D 1883. The results of the compaction tests are utilized in compacting the test sample to the desired density and moisture content for the laboratory California Bearing Ratio test. A representative sample is compacted to a specified density at a specified moisture content. The test is performed on a 6-inch diameter, 4.58-inch-thick disc of compacted soil that is confined in a cylindrical steel mold. The sample is compacted in accordance with Method C of ASTM D 698 or D 1557.

CBR tests may be run on the compacted samples in either soaked or unsoaked conditions. During testing, a piston approximately 2 inches in diameter is forced into the soil sample at the rate of 0.05 inch per minute to a depth of 0.5 inch to determine the resistance to penetration. The CBR is the percentage of the load it takes to penetrate the soil to a 0.1 inch depth compared to the load it takes to penetrate a standard crushed stone to the same depth. Test results are typically shown graphically.