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# HOLLY PARK RENOVATION AND SITE DRAINAGE WORK

2714 HOLLY PARK DR.  
 LOUISVILLE, KY 40214

LMHA PROPOSAL NO: 1588

FOR THE:  
**LOUISVILLE METRO HOUSING AUTHORITY**  
 420 SOUTH 8TH STREET  
 LOUISVILLE, KY 40203

SCB PROJECT NUMBER: 1849

**FEBRUARY 22, 2023**

## BUILDING STATISTICS

**PROJECT SCOPE:** SELECTIVE DEMOLITION, RECONSTRUCTION, AND RENOVATION

**BUILDING CODE:** 2018 KENTUCKY RESIDENTIAL CODE/  
 2015 INTERNATIONAL EXISTING BUILDING CODE - ALTERATION - LEVEL 2  
 EXISTING 2 STORY RESIDENTIAL TOWNHOMES

**EXISTING CONSTRUCTION:** EXISTING CRAWL SPACE, EXISTING WOOD FLOOR JOISTS, EXISTING WOOD FRAMED WALLS, EXISTING BRICK AND NEW VINYL SIDING VENEER, EXISTING ASPHALT SHINGLE ROOF

**FIRE SEPARATION:** EXISTING TENANT SEPARATION WALL:  
 1 HOUR GYPSUM ASSOCIATION ASSEMBLY WP 5512

**ENERGY COMPLIANCE:** 2012 INTERNATIONAL ENERGY CONSERVATION CODE  
 PERSCRIPTIVE PATH FOR RESIDENTIAL ALTERATIONS

INSULATION AND FENESTRATIONS REQUIREMENTS  
 BY COMPONENT PER TABLE R402.1.1

	U-FACTOR	SHGC	R-VALUE
• FENESTRATION	0.35	0.40	19
• GLAZED FENESTRATION			10
• FLOOR			
• CRAWL SPACE WALL			



**SHERMAN CARTER BARNHART ARCHITECTS, PLLC**

9300 SHELBYVILLE ROAD,  
 SUITE 502  
 LOUISVILLE, KY 40222  
 PHONE: 502.721.6100  
 FAX: 502.721.6111

[www.scbarchitects.com](http://www.scbarchitects.com)

### STRUCTURAL ENGINEER

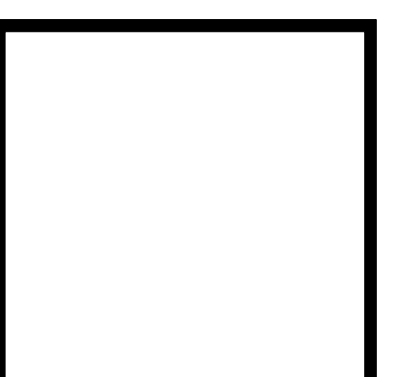
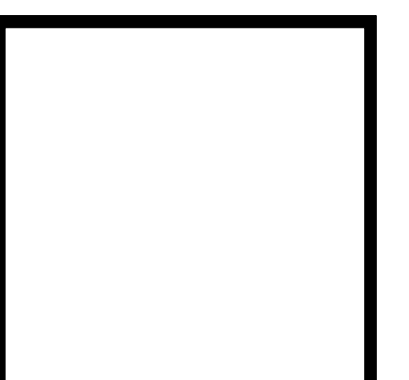
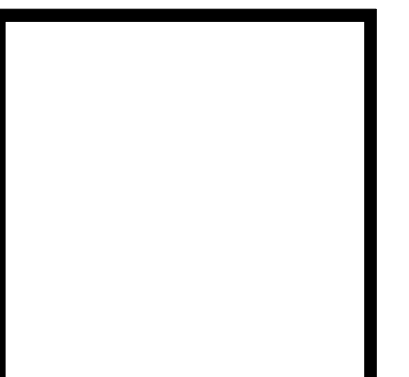
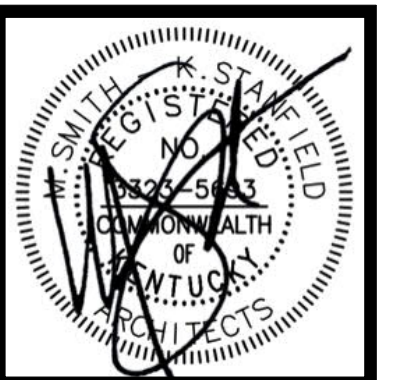
SHERMAN CARTER BARNHART ARCHITECTS, PLLC  
 9300 SHELBYVILLE ROAD, SUITE 502  
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### CIVIL ENGINEER

CIVIL DESIGN, INC.  
 9400 BUNSEN PARKWAY, SUITE 150  
 LOUISVILLE, KY 40220  
 P (502) 670-0060 F (502) 671-0311

### MECHANICAL/ELECTRICAL ENGINEER

SHROUT TATE WILSON ENGINEERING  
 118 EAST MAIN STREET, SUITE 101  
 LOUISVILLE, KY 40202  
 P (502) 829-3001





**CONSTRUCTION SEQUENCE & MAINTENANCE SCHEDULE:**

1. PRECONSTRUCTION MEETING WITH MSD INSPECTOR PRIOR TO DEMOLITION.
2. INSTALL SILT FENCE PER M.S.D. DWG. EF-09-02.
3. CONSTRUCT DRAINAGE IMPROVEMENTS.
4. INSTALL PLANNED SURFACE STABILIZATIONS AS AREAS OF WORK ARE COMPLETED.
5. EPSC CONTROLS ARE TO BE INSPECTED EVERY SEVEN (7) DAYS AND AFTER EVERY 1/2" OR MORE RAINFALL EVENT.
6. ALL SEDIMENT CONTROL STRUCTURES SHALL BE CLEANED WHEN DEPOSITED SEDIMENT REACHES 1/2 THE HEIGHT OF THE STRUCTURE.
7. CARE SHOULD BE TAKEN NOT TO DAMAGE SEDIMENT CONTROL STRUCTURES WHEN REMOVING DEPOSITED SEDIMENT. REPAIR AND/OR REMOVE AND REPLACE ANY DAMAGED SEDIMENT CONTROL STRUCTURE AS SOON AS PRACTICAL.
8. ONCE SITE STABILIZATION IS ACHIEVED, REMOVE ALL EROSION CONTROL MEASURES AND DISPOSE OF IN AN APPROVED WASTE DISPOSAL SITE.

**EPSC KEYNOTES:**

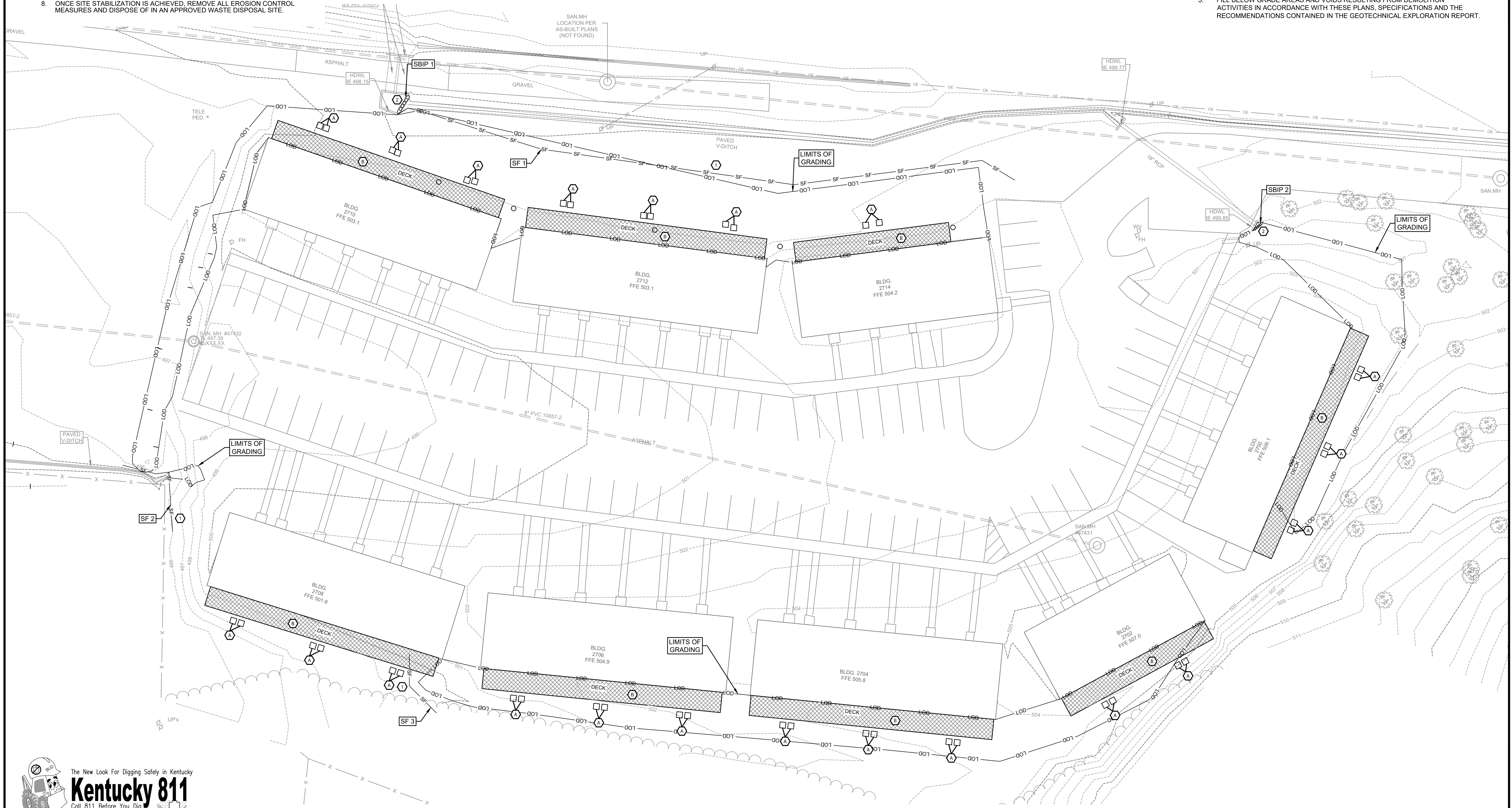
1. INSTALL SILT FENCE PER MSD STANDARD DRAWING EF-09-02.
2. INSTALL STONE BAG INLET PROTECTION (SBIP) PER MSD STANDARD DRAWING EF-03-02.

**DEMOLITION KEYNOTES:**

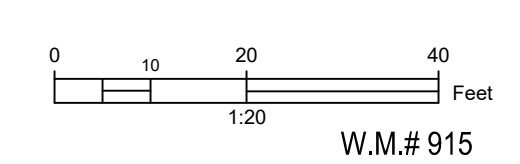
- A. REMOVE AIR CONDITIONING UNITS AND PADS.
- B. REMOVE DECK IN ITS ENTIRETY, INCLUDING ALL SUPPORTS AND FOUNDATIONS.

**DEMOLITION NOTES:**

1. REMOVE ALL PAVEMENT, CURBS, BUILDINGS, UTILITIES, ETC. REQUIRED FOR THE CONSTRUCTION OF THE FACILITIES SHOWN IN THIS PLAN SET WHETHER SHOWN ON THIS SHEET OR NOT.
2. ALL MATERIALS REMOVED FROM THE SITE SHALL BE DISPOSED OF IN AN APPROVED WASTE DISPOSAL SITE. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS AND FEES ASSOCIATED WITH DISPOSAL OF WASTE MATERIALS.
3. ALL UTILITY LINES TO BE ABANDONED IN PLACE, AND ANY OTHER PIPING, CONDUITS, ETC. ENCOUNTERED SHALL BE REMOVED TO A POINT 18" BELOW THE PROPOSED GRADE AND PLUGGED.
4. THE CONTRACTOR SHALL MAKE ALL PROVISIONS TO ASSURE ALL UTILITY MANHOLES, LIDS, VALVES, ETC. (LOCATED HEREON OR NOT) ARE PROPERLY ADJUSTED TO THE GRADES ESTABLISHED BY THIS PROJECT.
5. FILL BELOW GRADE AREAS AND VOIDS RESULTING FROM DEMOLITION ACTIVITIES IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS AND THE RECOMMENDATIONS CONTAINED IN THE GEOTECHNICAL EXPLORATION REPORT.



**UTILITY PROTECTION NOTE:**  
 ALL UTILITIES ON THESE PLANS ARE APPROXIMATE. INDIVIDUAL SERVICE LINES ARE NOT SHOWN. THE CONTRACTOR OR SUBCONTRACTOR SHALL NOTIFY THE UTILITY PROTECTION CENTER KENTUCKY 811 (TOLL FREE PHONE NO. 1-800-752-8007 OR LOCAL NO. 502-268-5123) FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY CONSTRUCTION ON THIS PROJECT. THIS NUMBER WAS ESTABLISHED TO PROVIDE ACCURATE LOCATIONS OF EXISTING BELOW GROUND UTILITIES (I.E. CABLES, ELECTRIC WIRES, GAS & WATER LINES). THE CONTRACTOR SHALL BE RESPONSIBLE FOR BECOMING FAMILIAR WITH ALL UTILITY REQUIREMENTS SET FORTH ON THE PLANS AND IN THE TECHNICAL SPECIFICATIONS & SPECIAL PROVISIONS.



NO.	DATE	DESCRIPTION	BY

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 Louisville, KY 40220  
 502.671.0060

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 CIVIL DESIGN, INC.  
 WBE / DBE  
 CIVIL ENGINEERING  
 www.cpidesign.com

02/22/2023  
 DATE

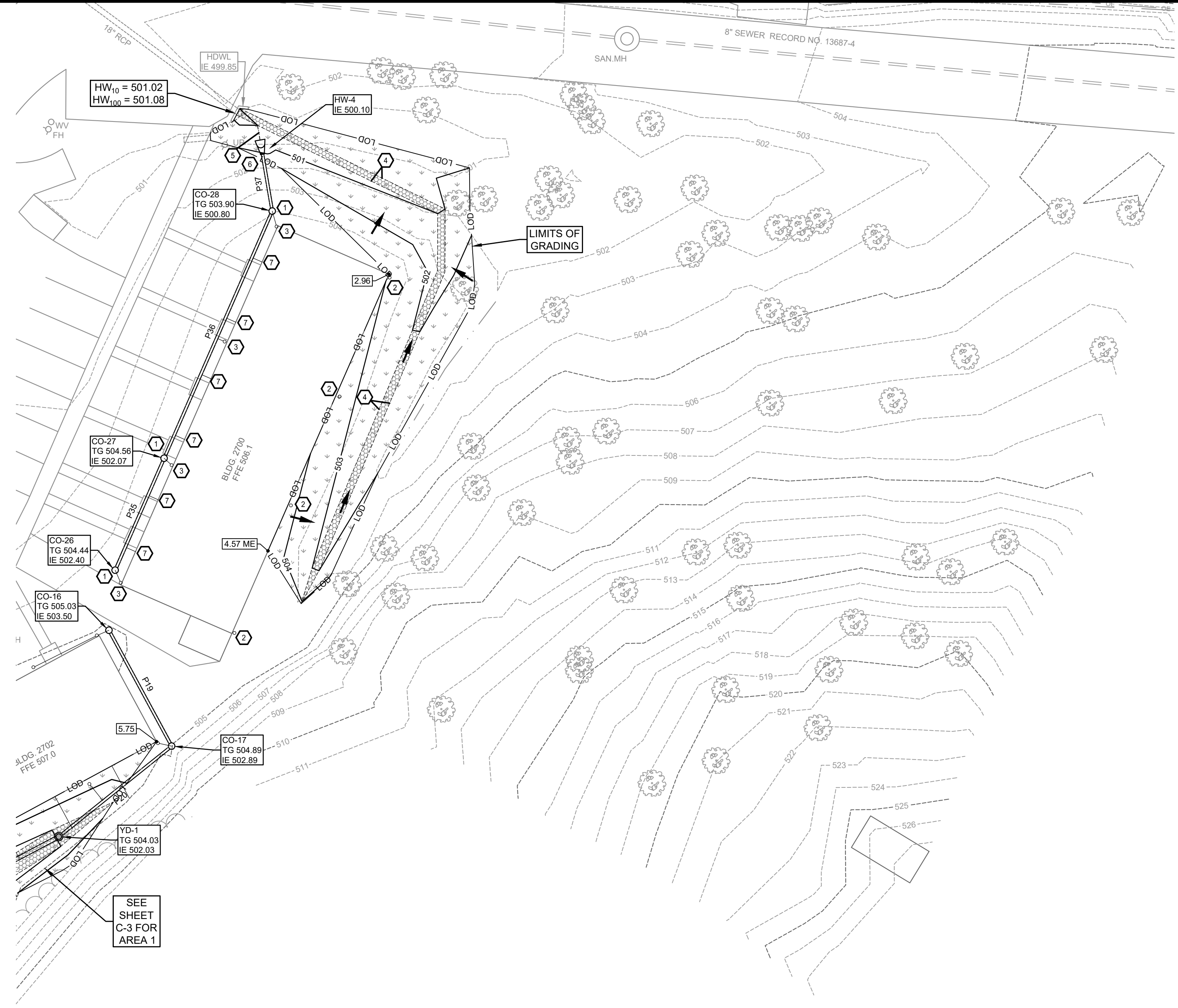
STATE OF KENTUCKY  
 Alexander V. Dornberg  
 20309  
 LICENSED PROFESSIONAL ENGINEER  
 SIGNATURE

**E.P.S.C. / DEMOLITION PLAN**  
**HOLLY PARK RENOVATIONS AND SITE DRAINAGE WORK**  
 LOUISVILLE METRO HOUSING AUTHORITY  
 2714 HOLLY PARK DRIVE  
 LOUISVILLE, KENTUCKY 40203

DRWN BY: RSG	CHKD BY: AD
DATE: FEB. 22, 2023	DRAWING: C-2
SCALE: 1:20	SHEET 2 OF 6







**SITE GRADING NOTES:**

- ALL STORM DRAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE METROPOLITAN SEWER DISTRICT'S STANDARD SPECIFICATIONS AND DRAWINGS UNLESS SHOWN OTHERWISE.
- DITCHES AND SWALES SHALL BE SODDED/REINFORCED TO A MINIMUM FLOW DEPTH OF 12" UNLESS SHOWN OTHERWISE.
- THE CONTRACTOR SHALL SLOPE ALL FINISH GRADES TO PROVIDE POSITIVE DRAINAGE. FLAT AND/OR PONDING AREAS WILL NOT BE ACCEPTED IN THE FINISHED WORK.
- GRADING PLAN REPRESENT FINAL VEGETATED ELEVATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A MINIMUM OF 8" OF COMPACTED TOPSOIL BELOW THE FINAL GRADE AND ESTABLISHMENT OF A VEGETATED SURFACE SUITABLE FOR MOWING.
- ALL DISTURBED AREAS SHALL BE SEEDED AND PROTECTED IN ACCORDANCE WITH MSD STANDARD SPECIFICATIONS, SECTION 11.

**SITE LAYOUT KEYNOTES:**

- STORM CLEANOUT. 18" NYLOPLAST INLINE DRAIN WITH SOLID COVER.
- SPLASHBLOCK AT DOWNSPOUT.
- CONNECT NEW DOWNSPOUT TO NEW STORM STRUCTURE OR NEW STORM PIPE WITH 6" HDPE PIPE.
- SWALE WITH 2" WIDE FLAT BOTTOM.
- V-DITCH.
- 8" FLARED END SECTION.
- 2" PVC SUMP PUMP DISCHARGE LINE. CONNECT TO NEW STORM STRUCTURE OR NEW STORM PIPING. SEE PLUMBING AND ARCHITECTURAL PLANS FOR DETAILS.

**STORMWATER NOTES:**

PROJECT AREA (DISTURBED)	3,402 SQ.FT.
EXISTING IMPERVIOUS SURFACE	0 SQ.FT.
PROPOSED IMPERVIOUS SURFACE	0 SQ.FT.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE METROPOLITAN SEWER DISTRICT'S WATERSHED COORDINATOR AT 1-502-540-6220, 48 HOURS PRIOR TO START OF CONSTRUCTION TO SCHEDULE INSPECTION.

**DOWNSPOUT NOTE:**

CONNECT ALL NEW DOWNSPOUTS TO NEW STORM INFRASTRUCTURE WHETHER SHOWN ON THIS SHEET OR NOT, EXCEPT THOSE NOTED TO DRAIN TO SPLASH BLOCKS. SEE ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.

STRUCTURE NAME:	DETAILS:	PIPES IN:	PIPES OUT:
CO-26	CLEAN OUT RIM = 504.44		P35 502.40
CO-27	CLEAN OUT RIM = 504.56	P35 502.07	P36 502.07
CO-28	CLEAN OUT RIM = 503.90	P36 500.80	P37 500.80
HW-4	END SECTION RIM = 501.14	P37 500.10	

NAME	SIZE	LENGTH	SLOPE	MATERIAL
P35	8"	32.91'	1.00%	HDPE
P36	8"	72.60'	1.75%	HDPE
P37	8"	15.76'	4.44%	HDPE

**AREA 2 PIPE CHART\***

PIPE #	INLET C	INLET Tc (Min.)	INLET I (in/hr)	INLET AREA (Acres)	INLET Q (Cfs)	COMP. CxA	COMP. Tc (Min.)	COMP. I (in/hr)	TOTAL AREA (Acres)	PIPE Q (Cfs)	V ft/sec	PIPE CAPACITY (Cfs)	HW <sub>100</sub> (Ft)	HW <sub>50</sub> (Ft)
P37	0.95	10.0	5.44	0.01	0.05	0.03	17.8	4.08	0.03	0.12	2.90	2.76	500.96	500.99
P36	0.95	10.0	5.44	0.01	0.05	0.02	13.7	4.68	0.02	0.09	1.59	1.73	502.21	502.23
P35	0.95	10.0	5.44	0.01	0.05	0.01	10.0	5.44	0.01	0.05	1.27	1.31	502.50	502.52

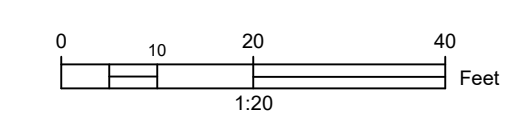


**UTILITY PROTECTION NOTE:**

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**MSD NOTE:**

MSD DOES NOT WARRANT THE DESIGN OR COMPUTATIONS CONTAINED IN THIS PLAN. THE CORRECTNESS OR ACCURACY OF ALL ENGINEERING COMPUTATIONS REMAIN THE SOLE RESPONSIBILITY OF THE APPLICANT'S DESIGN PROFESSIONAL. MSD'S APPROVAL TO PROCEED WITH CONSTRUCTION IS BASED SOLELY ON THAT DESIGN PROFESSIONAL'S SEAL AND SIGNATURE.



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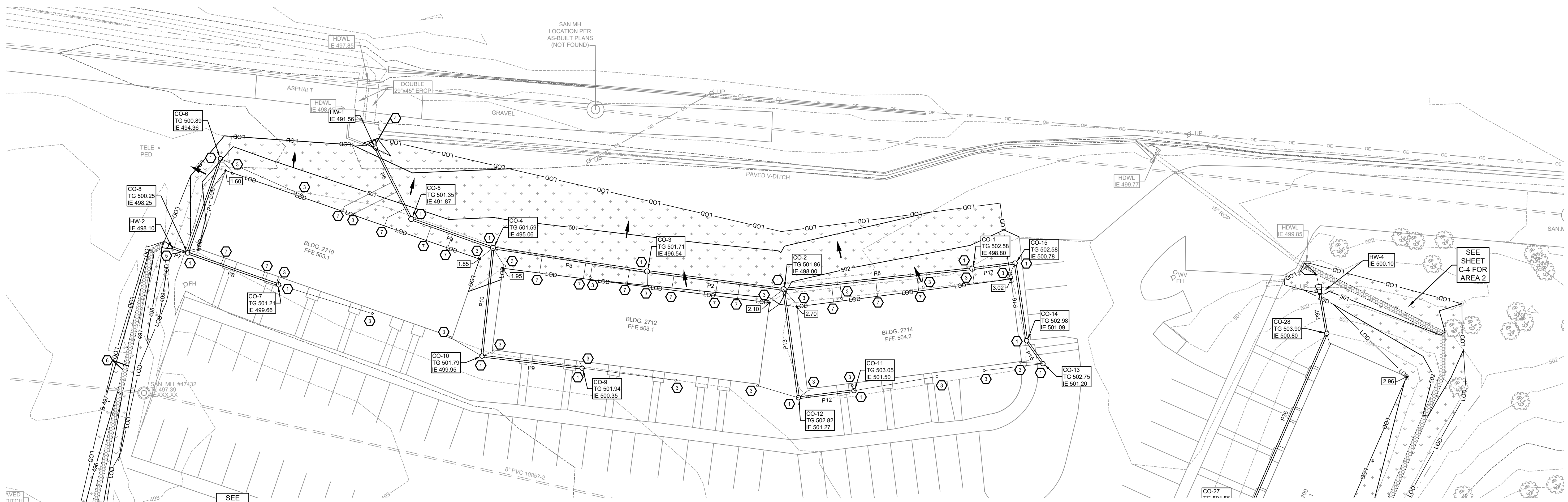
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Alexander V. Dornberg  
20309  
LICENSED PROFESSIONAL ENGINEER

SIGNATURE

AREA 2 SITE LAYOUT AND DRAINAGE PLAN  
HOLLY PARK RENOVATIONS AND SITE DRAINAGE WORK  
LOUISVILLE METRO HOUSING AUTHORITY  
2714 HOLLY PARK DRIVE  
LOUISVILLE, KENTUCKY 40203

DRWN BY: RSG	CHKD BY: AD
DATE: FEB. 22, 2023	
DRAWING: C-4	
SCALE: 1:20	
SHEET 4	OF 6



**SITE LAYOUT KEYNOTES:**

- STORM CLEANOUT. 18" NYLOPLAST INLINE DRAIN WITH SOLID COVER.
- NOT USED.
- CONNECT NEW DOWNSPOUT TO NEW STORM STRUCTURE OR NEW STORM PIPE WITH 6" HDPE PIPE.
- 12" FLARED END SECTION.
- 8" FLARED END SECTION.
- SWALE WITH 2' WIDE FLAT BOTTOM.
- 2" PVC SUMP PUMP DISCHARGE LINE. CONNECT TO NEW STORM STRUCTURE OR NEW STORM PIPING. SEE PLUMBING AND ARCHITECTURAL PLANS FOR DETAILS.

**STORMWATER NOTES:**

PROJECT AREA (DISTURBED) 11,295 SQ.FT.  
 EXISTING IMPERVIOUS SURFACE 0 SQ.FT.  
 PROPOSED IMPERVIOUS SURFACE 0 SQ.FT.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE METROPOLITAN SEWER DISTRICT'S WATERSHED COORDINATOR AT 1-502-540-6220, 48 HOURS PRIOR TO START OF CONSTRUCTION TO SCHEDULE INSPECTION.

**DOWNSPOUT NOTE:**

CONNECT ALL NEW DOWNSPOUTS TO NEW STORM INFRASTRUCTURE WHETHER SHOWN ON THIS SHEET OR NOT, EXCEPT THOSE NOTED TO DRAIN TO SPLASH BLOCKS. SEE ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.

**SITE GRADING NOTES:**

- ALL STORM DRAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE METROPOLITAN SEWER DISTRICT'S STANDARD SPECIFICATIONS AND DRAWINGS UNLESS SHOWN OTHERWISE.
- DITCHES AND SWALES SHALL BE SODDED/REINFORCED TO A MINIMUM FLOW DEPTH OF 12" UNLESS SHOWN OTHERWISE.
- THE CONTRACTOR SHALL SLOPE ALL FINISH GRADES TO PROVIDE POSITIVE DRAINAGE. FLAT AND/OR PONDING AREAS WILL NOT BE ACCEPTED IN THE FINISHED WORK.
- GRADING PLAN REPRESENT FINAL VEGETATED ELEVATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A MINIMUM OF 8" OF COMPACTED TOPSOIL BELOW THE FINAL GRADE AND ESTABLISHMENT OF A VEGETATED SURFACE SUITABLE FOR MOWING.
- ALL DISTURBED AREAS SHALL BE SEEDD AND PROTECTED IN ACCORDANCE WITH MSD STANDARD SPECIFICATIONS, SECTION 11.

**AREA 3 PIPE CHART\***

PIPE #	INLET C	INLET Tc (Min.)	INLET I (In/hr)	INLET AREA (Acres)	INLET Q (Cfs)	COMP. CVA	COMP. Tc (Min.)	COMP. I (In/hr)	TOTAL AREA (Acres)	PIPE Q (Cfs)	V ft/sec	PIPE CAPACITY (Cfs)	HW <sub>10</sub> (Ft)	HW <sub>50</sub> (Ft)
P5	0.95	10.0	5.44	0.01	0.05	0.19	19.8	3.84	0.20	0.73	3.46	1.21	498.81	499.09
P4	0.95	10.0	5.44	0.02	0.10	0.18	19.6	3.87	0.19	0.70	3.21	1.21	499.09	499.45
P3	0.95	10.0	5.44	0.01	0.05	0.12	19.0	3.93	0.13	0.49	2.56	1.30	499.63	499.71
P2	0.95	10.0	5.44	0.04	0.21	0.11	18.5	3.99	0.12	0.45	2.75	1.32	500.16	500.24
P13	0.95	10.0	5.44	0.04	0.21	0.05	12.5	4.91	0.05	0.23	1.86	2.38	501.49	501.54
P12	0.95	10.0	5.44	0.01	0.05	0.01	10.0	5.44	0.01	0.05	1.01	1.34	501.60	501.62
P8	0.95	10.0	5.44	0.01	0.05	0.03	15.7	4.37	0.03	0.12	1.34	1.31	500.76	500.80
P17	0.95	10.0	5.44	0.01	0.05	0.02	14.7	4.51	0.02	0.09	1.53	1.35	500.91	500.94
P16	0.00	10.0	0.00	0.00	0.00	0.01	11.2	5.16	0.01	0.05	1.24	1.31	501.19	501.21
P15	0.95	10.0	5.44	0.01	0.05	0.01	10.0	5.44	0.01	0.05	1.54	1.30	501.30	501.32
P10	0.95	10.0	5.44	0.03	0.16	0.04	14.5	4.56	0.04	0.17	1.45	2.24	500.14	500.18
P9	0.95	10.0	5.44	0.01	0.05	0.01	10.0	5.44	0.01	0.05	1.07	1.31	500.45	500.47
P7	0.95	10.0	5.44	0.01	0.05	0.04	14.3	4.59	0.04	0.17	2.80	1.98	498.44	498.48
P6	0.95	10.0	5.44	0.01	0.05	0.01	10.0	5.44	0.01	0.05	1.07	2.53	499.76	499.78
P1	0.95	10.0	5.44	0.02	0.10	0.02	10.0	5.44	0.02	0.10	1.53	2.18	499.49	499.51

STRUCTURE NAME:	DETAILS:	PIPES IN:	PIPES OUT:
CO-1	CLEAN OUT RIM = 502.58	P17 500.60	P8 498.80
CO-2	CLEAN OUT RIM = 501.86	P13 499.85 P8 498.05	P2 498.00
CO-3	CLEAN OUT RIM = 501.71	P2 497.46	P3 496.54
CO-4	CLEAN OUT RIM = 501.59	P3 495.93 P10 498.70	P4 495.06
CO-5	CLEAN OUT RIM = 501.35	P4 494.72	P5 491.87
CO-7	CLEAN OUT RIM = 501.21		P6 499.66

STRUCTURE NAME:	DETAILS:	PIPES IN:	PIPES OUT:
CO-8	CLEAN OUT RIM = 500.25	P6 498.25 P1 493.97	P7 498.25
CO-9	CLEAN OUT RIM = 501.94		P9 500.35
CO-10	CLEAN OUT RIM = 501.79	P9 499.95	P10 499.95
CO-11	CLEAN OUT RIM = 503.05		P12 501.50
CO-12	CLEAN OUT RIM = 502.82	P12 501.27	P13 501.27
CO-13	CLEAN OUT RIM = 502.75		P15 501.20

STRUCTURE NAME:	DETAILS:	PIPES IN:	PIPES OUT:
CO-14	CLEAN OUT RIM = 502.98	P15 501.09	P16 501.09
CO-15	CLEAN OUT RIM = 502.58	P16 500.78	P17 500.78
HW-1	END SECTION RIM = 492.77	P5 491.56	
HW-2	END SECTION RIM = 499.14	P7 498.10	

NAME	SIZE	LENGTH	SLOPE	MATERIAL
P2	8"	54.07'	1.00%	PERF. HDPE
P3	8"	61.17'	1.00%	PERF. HDPE
P4	8"	34.03'	1.00%	PERF. HDPE
P5	8"	30.50'	1.00%	PERF. HDPE
P6	8"	37.84'	3.73%	HDPE
P7	8"	6.52'	2.30%	HDPE

NAME	SIZE	LENGTH	SLOPE	MATERIAL
P8	8"	74.49'	1.00%	PERF. HDPE
P9	8"	39.64'	1.01%	HDPE
P10	8"	42.67'	2.93%	HDPE
P12	8"	22.01'	1.04%	HDPE
P13	8"	42.91'	3.31%	HDPE
P15	8"	11.06'	0.99%	HDPE

NAME	SIZE	LENGTH	SLOPE	MATERIAL
P16	8"	30.79'	1.01%	HDPE
P17	8"	16.96'	1.06%	HDPE

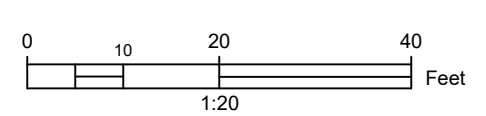


**UTILITY PROTECTION NOTE:**

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02/22/2023  
 DATE

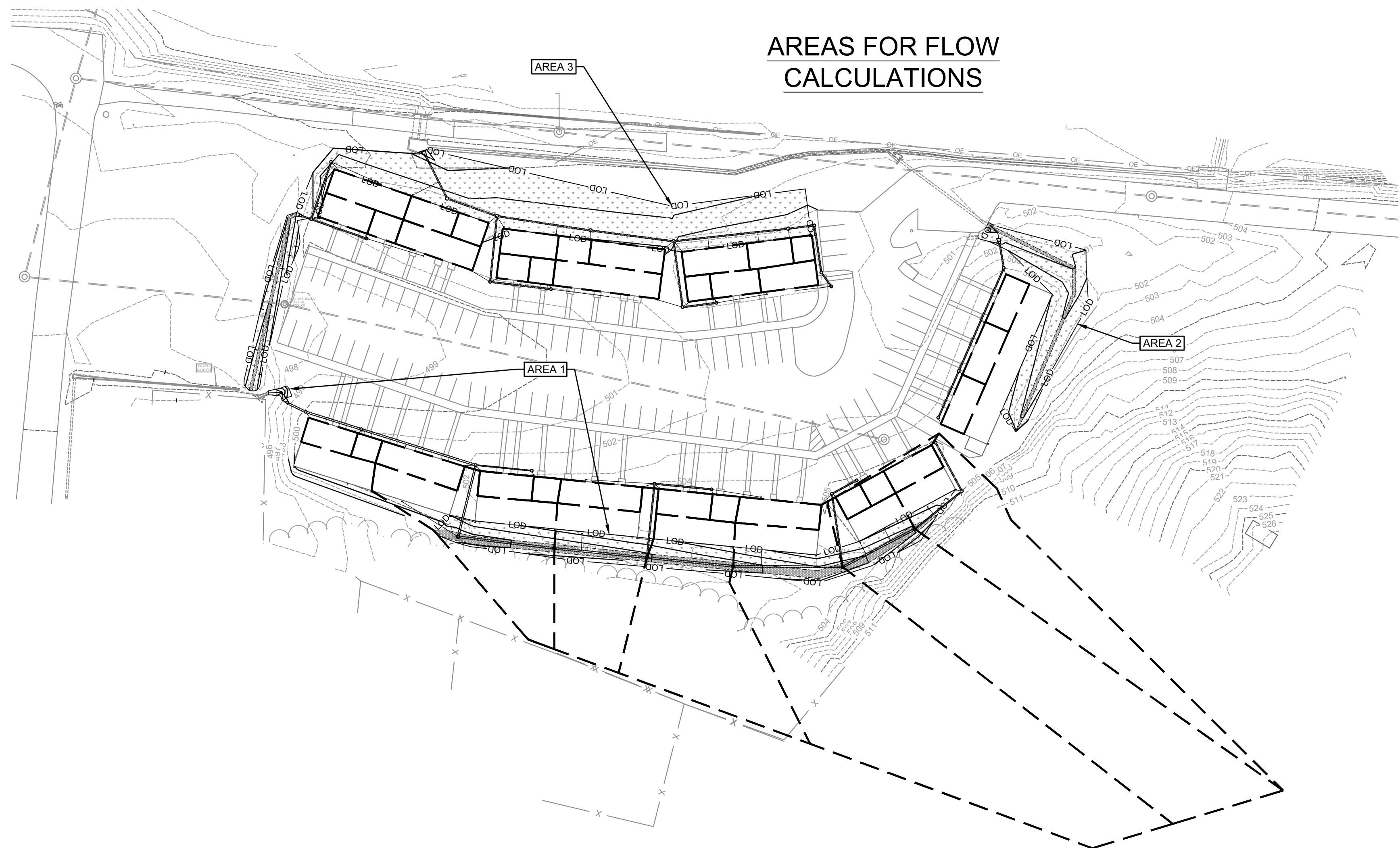
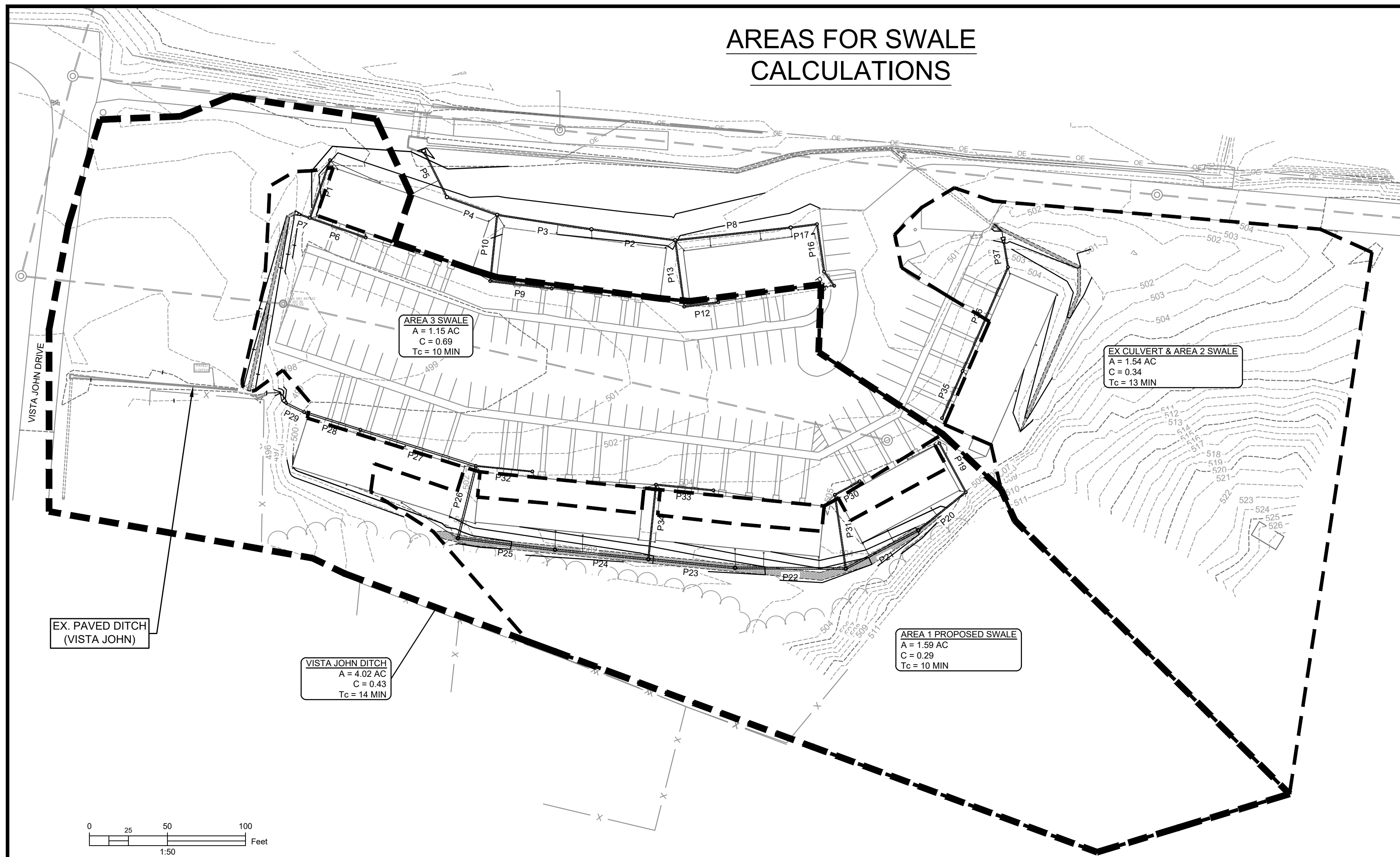
STATE OF KENTUCKY  
 Alexander V. Dornberg  
 20309  
 LICENSED PROFESSIONAL ENGINEER

SIGNATURE

AREA 3 SITE LAYOUT AND DRAINAGE PLAN  
 HOLLY PARK RENOVATIONS AND SITE DRAINAGE WORK  
 LOUISVILLE METRO HOUSING AUTHORITY  
 2714 HOLLY PARK DRIVE  
 LOUISVILLE, KENTUCKY 40203

DRWN BY: RSG	CHKD BY: AD
DATE: FEB. 22, 2023	
DRAWING: C-5	
SCALE: 1:20	
SHEET 5	OF 6

## AREAS FOR SWALE CALCULATIONS



## AREAS FOR FLOW CALCULATIONS

AREA 1  
PEAK FLOWS FROM  
PROJECT AREA (cfs)

RETURN PERIOD	YD 1	YD 2	YD 3	YD 4	YD 5	YD 6	COMB'D ROOF FLOWS	TOTAL
10	0.26	0.48	0.67	0.33	0.24	0.33	0.66	2.97
25	0.29	0.55	0.76	0.38	0.27	0.37	0.78	3.40
100	0.36	0.68	0.93	0.46	0.34	0.46	0.92	4.15

AREA 2  
PEAK FLOWS TO EX  
INLET (cfs)

RETURN PERIOD	EX INLET	COMB'D ROOF FLOWS	TOTAL
10	2.52	0.15	2.60
25	2.88	0.18	2.98
100	3.53	0.21	3.65

AREA 3  
PEAK FLOWS FROM  
PROJECT AREA (cfs)

RETURN PERIOD	DIST. AREA LIMITS	COMB'D ROOF FLOWS	TOTAL
10	0.31	1.23	1.54
25	0.36	1.44	1.80
100	0.44	1.71	2.15

AREAS 1-3 COMBINED  
PEAK FLOWS FROM  
PROJECT AREA (cfs)

RETURN PERIOD	AREA 1	AREA 2	AREA 3	TOTAL
10	2.97	0.15	1.54	4.66
25	3.40	0.18	1.80	5.38
100	4.15	0.21	2.15	6.51



**UTILITY PROTECTION NOTE:**

ALL UTILITIES ON THESE PLANS ARE APPROXIMATE. INDIVIDUAL SERVICE LINES ARE NOT SHOWN. THE CONTRACTOR OR SUBCONTRACTOR SHALL NOTIFY THE UTILITY PROTECTION CENTER KENTUCKY 811 (TOLL FREE PHONE NO. 1-800-752-8007 OR LOCAL NO. 502-268-5123) FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY CONSTRUCTION ON THIS PROJECT. THIS NUMBER WAS ESTABLISHED TO PROVIDE ACCURATE LOCATIONS OF EXISTING BELOW GROUND UTILITIES (I.E. CABLES, ELECTRIC WIRES, GAS & WATER LINES). THE CONTRACTOR SHALL BE RESPONSIBLE FOR BECOMING FAMILIAR WITH ALL UTILITY REQUIREMENTS SET FORTH ON THE PLANS AND IN THE TECHNICAL SPECIFICATIONS & SPECIAL PROVISIONS.

NO.	DATE	REVISIONS DESCRIPTION

9400 Bunsen Parkway, Suite 150  
Louisville, KY 40220  
502.671.0060

**CPI**  
CIVIL DESIGN, INC.  
WBE / DBE  
www.cpidesigninc.com

02/22/2023  
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STATE OF KENTUCKY  
Alexander V. Dornenberg  
20309  
LICENSED PROFESSIONAL ENGINEER

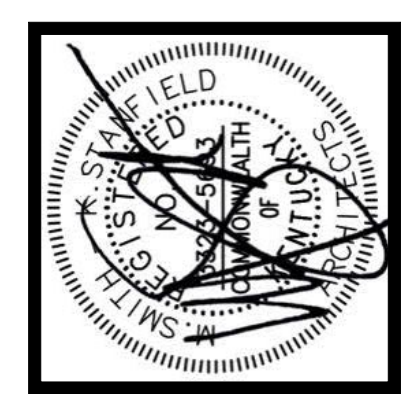
SIGNATURE

DRAINAGE AREA MAP  
HOLLY PARK RENOVATIONS AND SITE DRAINAGE WORK  
LOUISVILLE METRO HOUSING AUTHORITY  
2714 HOLLY PARK DRIVE  
LOUISVILLE, KENTUCKY 40203

DRWN BY: RSG	CHKD BY: AD
DATE: FEB. 22, 2023	
DRAWING: C-6	
SCALE: 1:50	
SHEET 6	OF 6







JOB NO.	1849
DATE	02/22/2023
DRAWN	KL, MM
CHECKED	BKL

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REVISIONS		
No.	Description	Date



THESE PLANS REPRESENT CURRENT  
CONDITIONS PRIOR TO DEMOLITION.  
REFER TO PROJECT DRAWINGS FOR  
REQUIRED WORK.

**DEMOLITION GENERAL NOTES**

- CONTRACTOR TO MINIMIZE RISK OF WATER AND RODENT ENTRY OF THE BUILDINGS TO THE GREATEST EXTENT POSSIBLE.
- THE CONTRACTOR IS TO REVIEW WEATHER FORECAST TO DETERMINE IDEAL DATES FOR SELECT DEMOLITION THAT MAY COMPROMISE THE BUILDING ENVELOPE.
- NEW RENOVATION WORK IS TO BE COORDINATED WITH SELECT DEMOLITION TO RESTORE THE INTEGRITY OF THE BUILDING ENVELOPE AS SOON AS POSSIBLE.
- THE CONTRACTOR IS RESPONSIBLE TO PROVIDE A TEMPORARY ENVELOPE AS NEEDED PRIOR TO EACH DAY'S WORK.
- IF WATER, MOLD, INSECT OR RODENT ACTIVITY ARE DISCOVERED WITHIN THE BUILDING ENVELOPE, THE CONTRACTOR IS WHOLLY AND SINGALLY RESPONSIBLE TO REMOVE AND REPAIR ALL FAULTS.
- SHOULD ANY PORTION OF THE BUILDING ENVELOPE BE REMOVED AND NOT REPLACED WITH NEW MATERIALS INDICATED IN THE CONSTRUCTION DOCUMENTS, TEMPORARY INSTALLATION OF VENEERS, ROOF COVERING AND DOWNSPOUTS MAY BE PERMITTED (WITHOUT ANY ADDITIONAL COST) BY THE ARCHITECT OR LMHA.

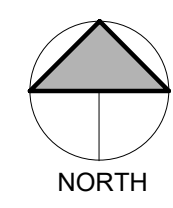
**SEQUENCING**

- GENERAL:**
- THE PERIOD OF TIME FOR FINAL COMPLETION (CONTRACT PERIOD) FOR THE WORK SHALL BE FIVE HUNDRED FORTY (540) CALENDAR DAYS FROM THE NOTICE TO PROCEED.
  - PROJECT WILL BE SEQUENCED BASED ON BUILDING VACANCY. VACANT BUILDINGS SHALL BE COMPLETE PRIOR TO MOVING ON TO OCCUPIED BUILDINGS. COMPLETION SHALL INCLUDE PUNCH LIST REVIEW, COMPLETION OF PUNCH LIST ITEMS, CERTIFICATE (OR TEMPORARY) OF OCCUPANCY (IF APPLICABLE), AND ACCEPTANCE BY THE OWNER. SEQUENCE IS AS FOLLOWS:
    - A. BUILDINGS 2710, 2712 AND 2714.
    - B. BUILDINGS 2700, 2702, 2704, 2706 AND 2708.
  - UPON BEGINNING CONSTRUCTION, VACANT BUILDINGS WILL BE READY FOR CONTRACTOR POSSESSION. REMAINDER OF THE BUILDINGS WILL REMAIN OCCUPIED AND OPERATIONAL.
  - UPON COMPLETION OF A BUILDING, THE COMPLETED BUILDING WILL BE OCCUPIED AND THE SUBSEQUENT BUILDING WILL BE VACANT AND READY FOR CONTRACTOR POSSESSION.

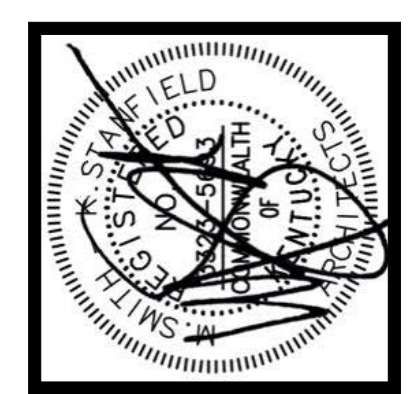
- WINDOWS:**
- THE CONTRACTOR SHALL NOT REMOVE MORE WINDOWS THAN CAN BE REPLACED IN A DAY. REPLACEMENT IN A DAY SHALL INCLUDE A WEATHER (AIR AND WATER) TIGHT INSTALLATION.

**LEGEND**

- [51] — BUILDING IDENTIFICATION REPRESENTS BUILDING ADDRESS NUMBER
- ① — BUILDING IDENTIFICATION REPRESENTS UNIT ADDRESS NUMBER

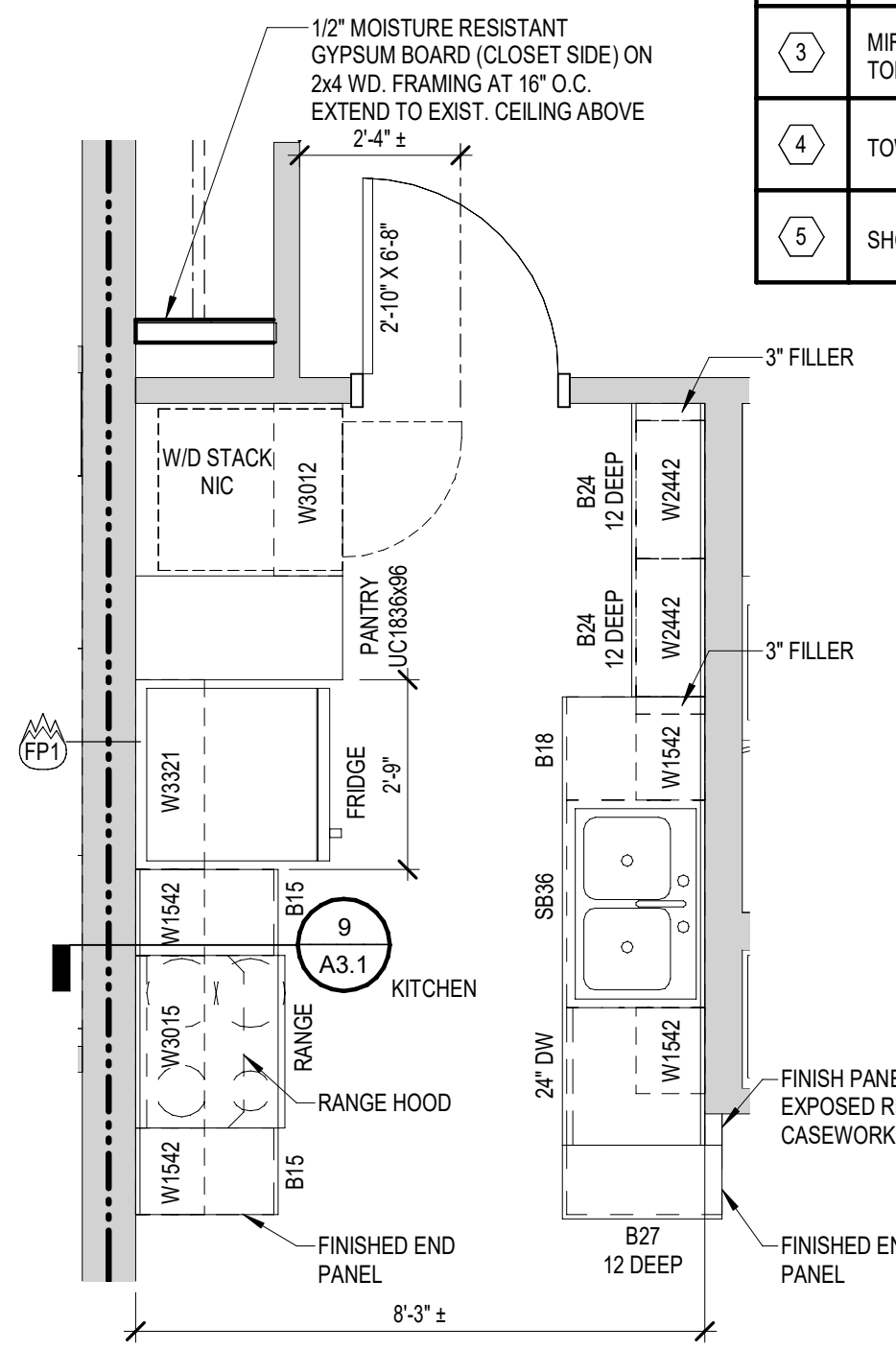


1 SITE KEY AND PHASING PLAN  
1" = 20'-0"

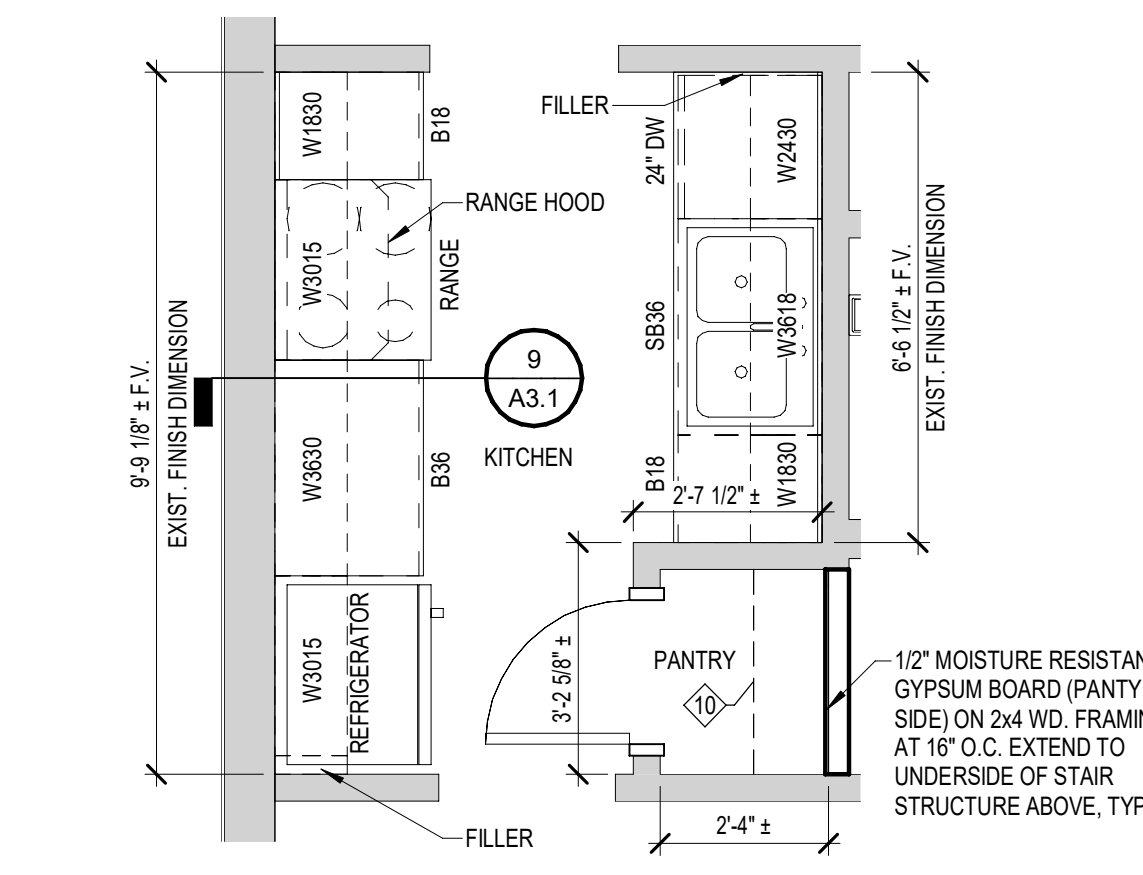


### BATHROOM ACCESSORIES SCHEDULE

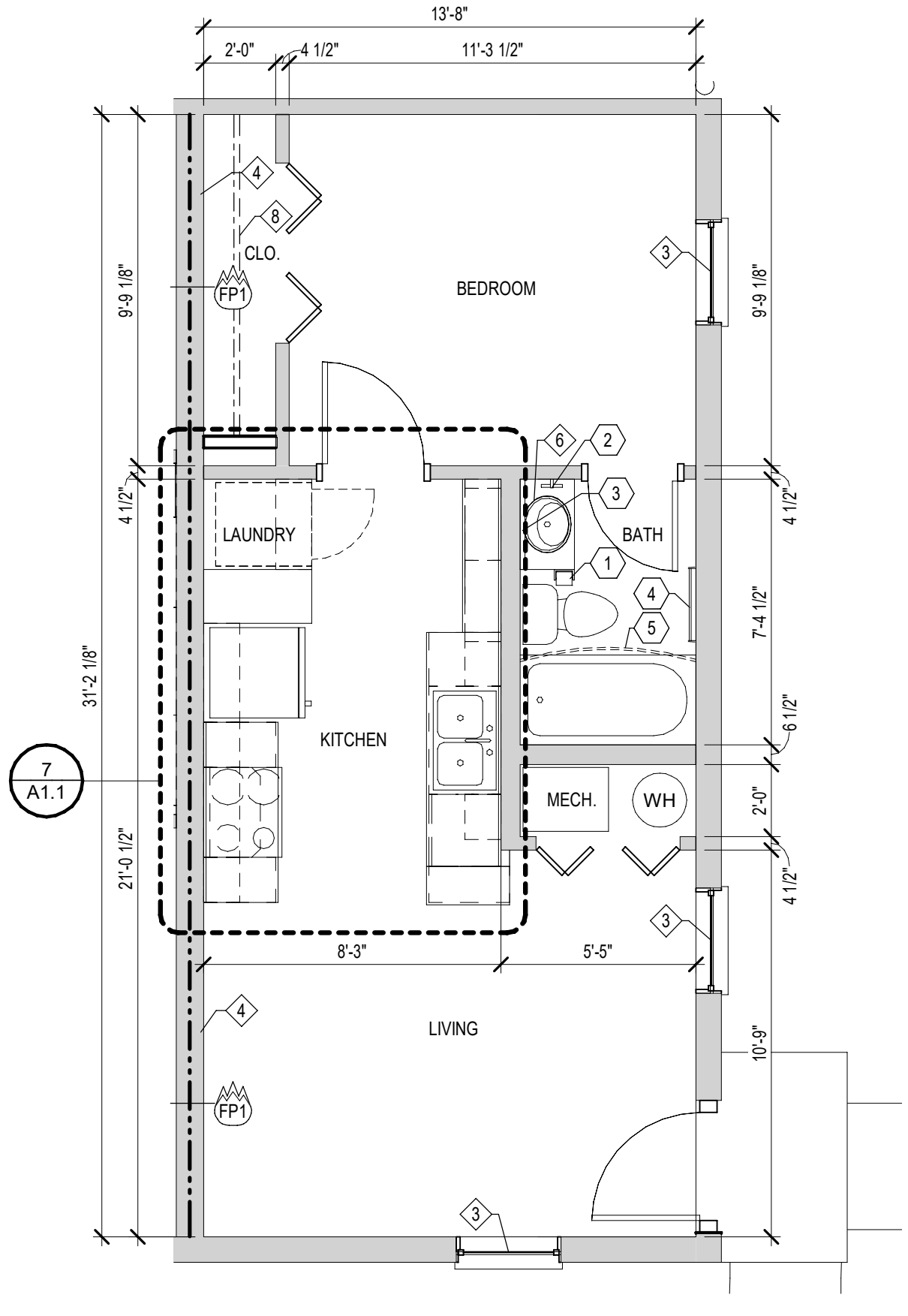
ITEM	MOUNTING HGT.	REMARKS
1 TOILET TISSUE DISPENSER	24" A.F.F. TO ¼ OF HOLDER	WHERE BLOCKING IS NOT PRESENT, PROVIDE 2x6 SOLID WOOD BLOCKING IN WALL
2 TOWEL RING - STAINLESS STEEL	48" A.F.F. TO CENTER OF TOWEL RING (MAX.)	WHERE BLOCKING IS NOT PRESENT, PROVIDE 2x6 SOLID WOOD BLOCKING IN WALL
3 MIRROR (FULL WIDTH OF VANITY TOP) x 36" TALL	MOUNT BTM. OF MIRROR @ TOP OF BACKSPLASH	MASTIC APPLIED
4 TOWEL BAR 24" LONG	48" A.F.F. TO ¼ OF BAR (MAX.H.T.)	WHERE BLOCKING IS NOT PRESENT, PROVIDE 2x6 SOLID WOOD BLOCKING IN WALL
5 SHOWER CURTAIN ROD	78" A.F.F. TO ¼ OF ROD	CURVED



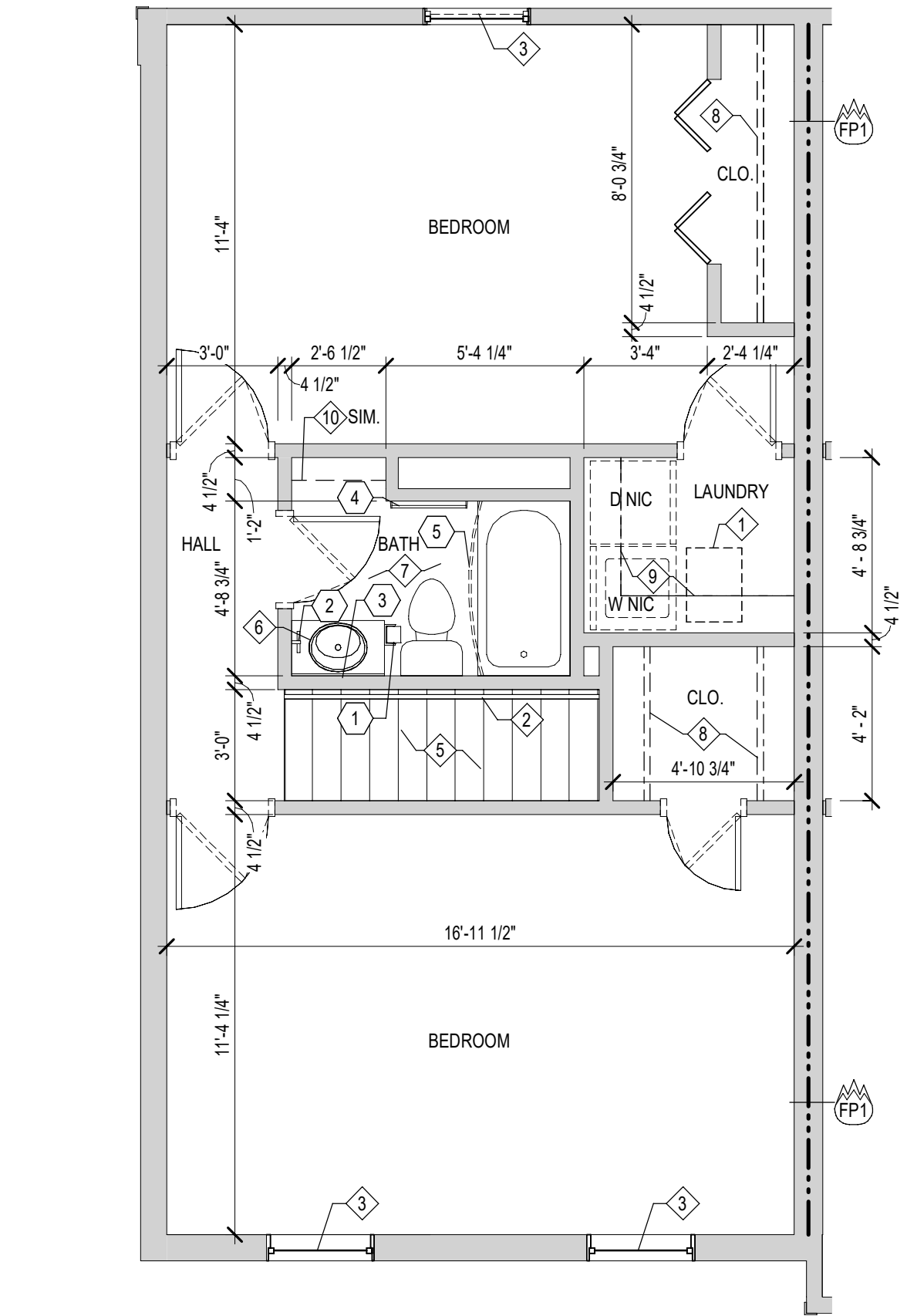
7 ENLARGED UNIT NEW WORK PLAN  
3/8" = 1'-0"



6 ENLARGED TYPICAL NEW WORK KITCHEN PLAN  
3/8" = 1'-0"



4 ENLARGED UNIT NEW WORK PLAN  
1/4" = 1'-0"



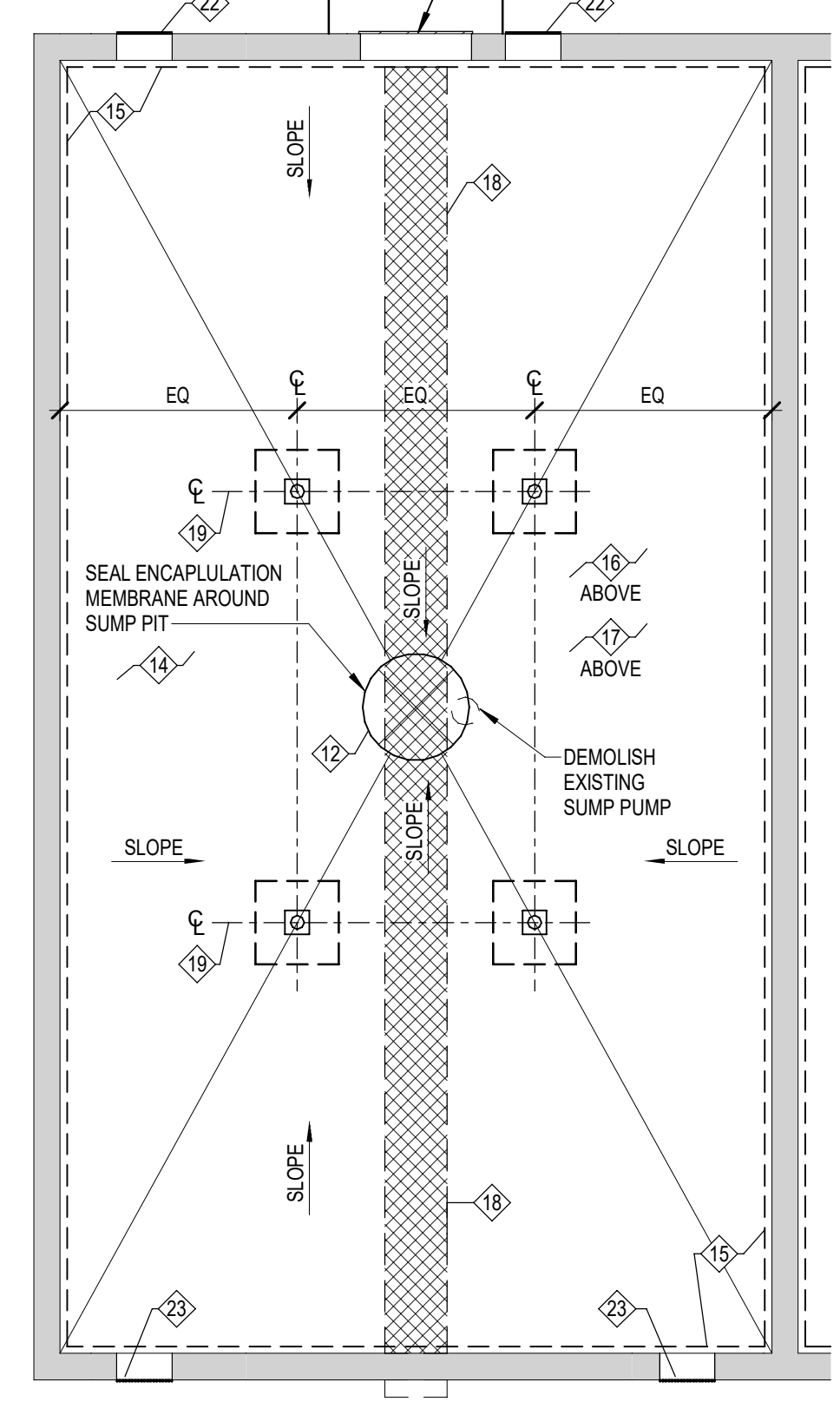
2 ENLARGED TYPICAL SECOND FLOOR DEMOLITION AND NEW WORK UNIT PLAN  
1/4" = 1'-0"

### UNIT SPECIFIC SCOPE OF WORK

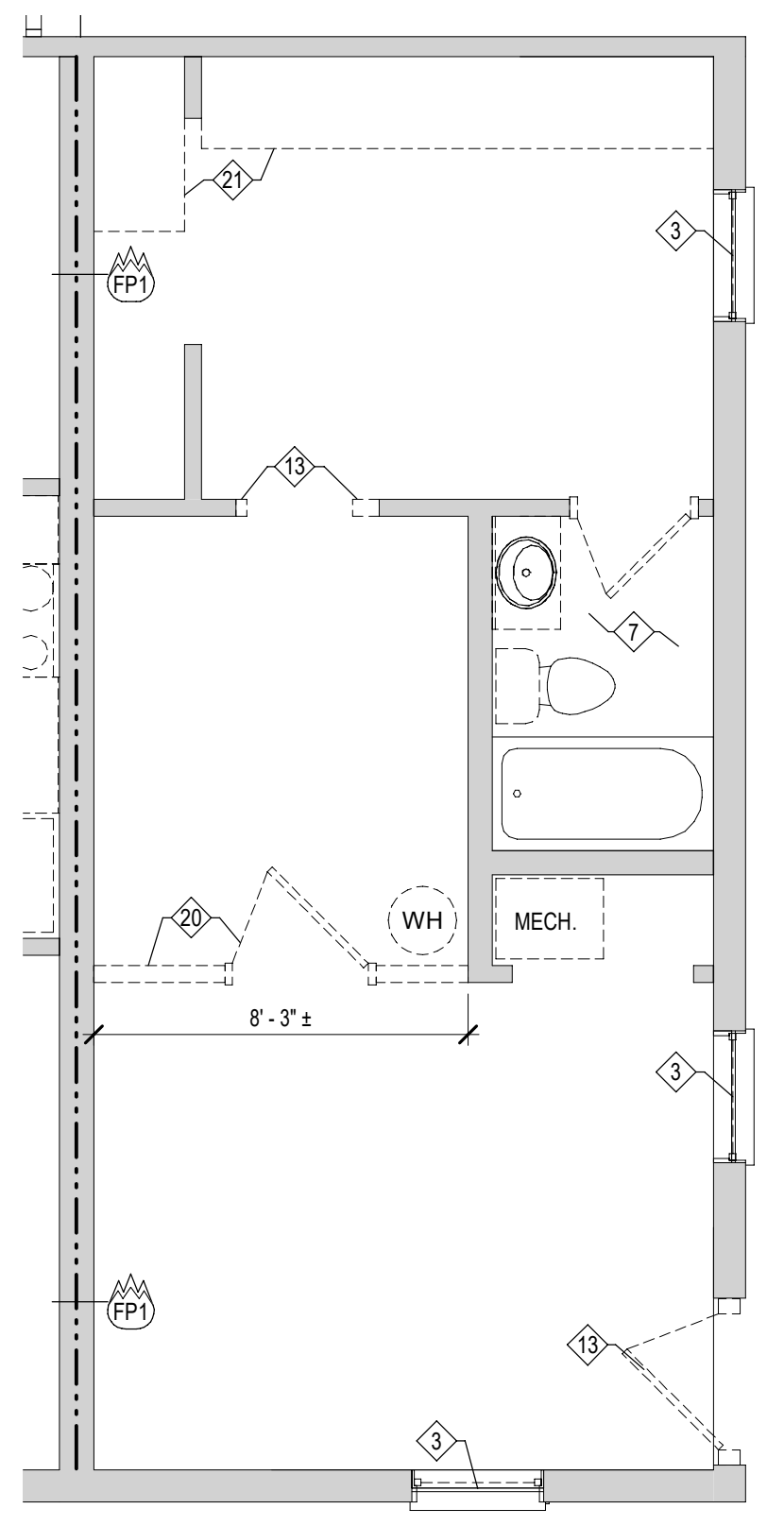
- NOTE:** SCOPE LISTED BELOW SPECIFIC TO THE UNITS NOTED IS EITHER WORK THAT HAS BEEN COMPLETED OR WORK TO BE COMPLETED OUTSIDE OF THE TYPICAL INTERIOR SCOPE OF WORK. TYPICAL INTERIOR SCOPE OF WORK ALSO APPLIES TO THE UNITS LISTED BELOW.
- BUILDING 2700, UNIT #5**  
1. FIRST FLOOR HALL, KITCHEN AND BATH FLOORING AND FLOOR SHEATHING HAVE BEEN REMOVED.  
2. KITCHEN AND BATH CASEWORK AND PLUMBING FIXTURES HAVE BEEN REMOVED.
- BUILDING 2704, UNIT #6**  
1. GYPSUM BOARD HAS BEEN REMOVED TO 2'-0" AT FIRST FLOOR PERIMETER.  
2. SINK SIDE KITCHEN CABINETS, PLUMBING FIXTURES, FLOORING AND SHEATHING HAVE BEEN REMOVED.  
3. FIRST FLOOR BATH PLUMBING FIXTURES AND FIRST AND SECOND FLOOR BATH VANITIES HAVE BEEN REMOVED.  
4. PANTRY, FIRST FLOOR HALL, MECH., STAIR, FIRST AND SECOND FLOOR BATHS AND SINK SIDE KITCHEN GYPSUM WALL AND CEILING BOARD HAS BEEN REMOVED AND SHALL BE REINSTALLED PER THE TYPICAL INTERIOR SCOPE OF WORK NOTES.
- BUILDING 2708, UNIT #1**  
1. KITCHEN FLOORING AND FLOOR SHEATHING HAVE BEEN PARTIALLY REMOVED.
- BUILDING 2708, UNIT #5**  
1. PANTRY FINISH FLOOR AND FLOOR SHEATHING HAVE BEEN REMOVED.  
2. STAIR CARPET AND HANDRAIL HAVE BEEN REMOVED.
- BUILDING 2710, UNIT #1**  
1. MAJORITY OF FIRST FLOOR FINISH FLOOR AND FLOOR SHEATHING HAVE BEEN REMOVED.
- BUILDING 2712, UNIT #6**  
1. FIRST FLOOR GYPSUM BOARD AT KITCHEN AND BATH HAS BEEN PARTIALLY REMOVED.  
2. KITCHEN FINISH FLOOR HAS BEEN REMOVED. KITCHEN FLOOR SHEATHING HAS BEEN PARTIALLY REMOVED.
- BUILDING 2714, UNIT #1**  
1. SINK SIDE KITCHEN CABINETS, PLUMBING FIXTURES, FINISH FLOOR AND SHEATHING HAVE BEEN REMOVED.  
2. FIRST FLOOR BATH VANITY AND PLUMBING FIXTURES HAVE BEEN REMOVED AND SECOND FLOOR BATH VANITY AND TOILET HAVE BEEN REMOVED.  
3. FIRST FLOOR, STAIR, SECOND FLOOR HALL AND SECOND FLOOR BATH FINISH FLOOR HAVE BEEN REMOVED.  
4. FIRST FLOOR HALL, SINK SIDE KITCHEN, PANTRY, AND FIRST AND SECOND FLOOR BATH FLOOR SHEATHING HAVE BEEN REMOVED.  
5. STAIR, SINK SIDE KITCHEN, PANTRY, FIRST FLOOR BATH, GYPSUM WALL AND CEILING BOARD HAS BEEN REMOVED AND SHALL BE REINSTALLED PER THE TYPICAL INTERIOR SCOPE OF WORK NOTES.  
5. SECOND FLOOR BATH GYPSUM WALL BOARD HAS BEEN REMOVED TO 3'-0".
- BUILDING 2714, UNIT #2**  
1. FIRST FLOOR FINISH FLOOR HAS BEEN REMOVED, EXCEPT AT THE KITCHEN AND PANTRY.  
2. FIRST FLOOR HALL FLOOR SHEATHING HAS BEEN REMOVED.  
3. SECOND FLOOR BATH VANITY AND TOILET HAVE BEEN REMOVED.  
4. SECOND FLOOR BATH FINISH FLOOR AND FLOOR SHEATHING HAS BEEN PARTIALLY REMOVED.  
5. KITCHEN, FIRST AND SECOND FLOOR BATHS AND DINING GYPSUM CEILING BOARD HAS BEEN REMOVED AND SHALL BE REINSTALLED PER THE TYPICAL INTERIOR SCOPE OF WORK NOTES.
- BUILDING 2714, UNIT #3**  
1. KITCHEN CABINETS, PLUMBING FIXTURES, FINISH FLOOR AND FLOOR SHEATHING HAVE BEEN REMOVED AT THE KITCHEN.  
2. FIRST FLOOR HALL FINISH FLOOR AND FLOOR SHEATHING HAVE BEEN REMOVED.
- BUILDING 2714, UNIT #4**  
1. KITCHEN CABINETS, PLUMBING FIXTURES, FINISH FLOOR AND FLOOR SHEATHING HAVE BEEN REMOVED AT THE KITCHEN.  
2. FIRST FLOOR BATH PLUMBING FIXTURES AND VANITY HAVE BEEN REMOVED.  
3. FIRST FLOOR BATH AND HALL FINISH FLOOR AND FLOOR SHEATHING HAS BEEN REMOVED.

50"x36"x3/8" GALVANIZED STEEL AREA WELL (TOWARDS ST. PAUL CORRUGATING LUX-RIGHT BASIS-OF-DESIGN). INSTALL TOP AT F.F.E. FILL BASE WITH #57 GRAVEL, NOT TO INTERFERE WITH ACCESS PANEL.

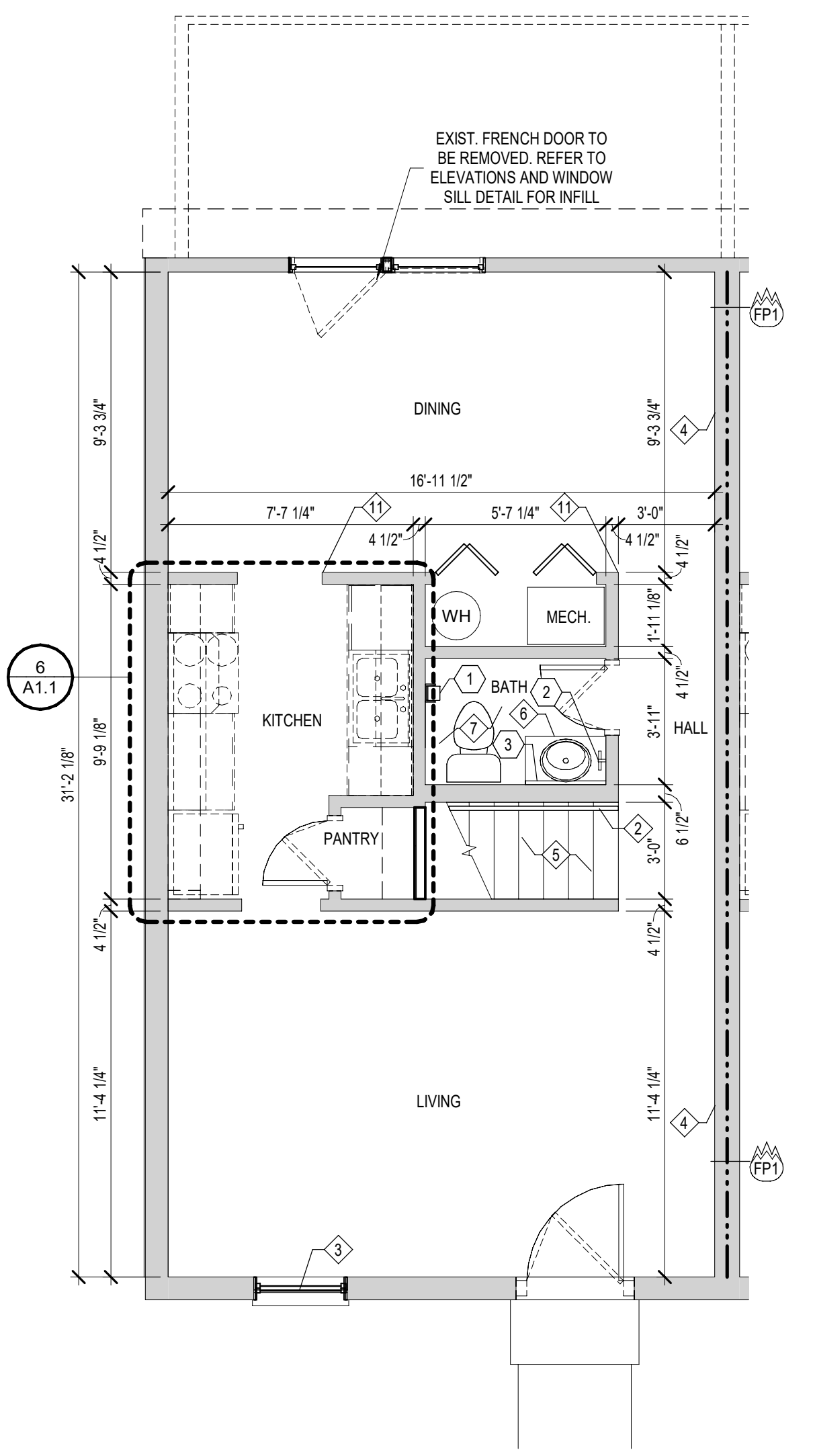
DEMO EXISTING AND PROVIDE NEW 16"x32" GALVANIZED STEEL CRAWL SPACE ACCESS PANEL (PAINT) WITH IC CORE LOCK KEY TO MATCH OWNERS EXISTING KEYING SYSTEM. INSTALL NEW ACCESS PANELS WEATHERTIGHT



5 ENLARGED TYPICAL CRAWL SPACE PLAN  
1/4" = 1'-0"



3 ENLARGED UNIT DEMOLITION PLAN  
1/4" = 1'-0"



1 ENLARGED TYPICAL FIRST FLOOR DEMOLITION AND NEW WORK UNIT PLAN  
1/4" = 1'-0"

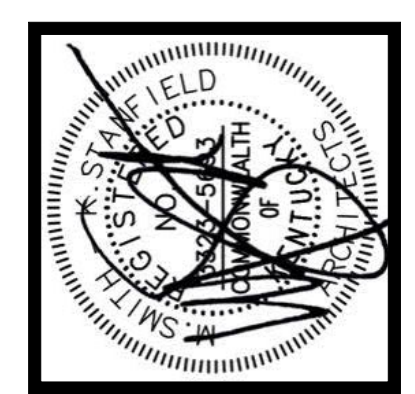
### TYPICAL INTERIOR SCOPE OF WORK

- AT THE FIRST FLOOR, REMOVE EXISTING GYPSUM WALL BOARD AND INSULATION TO 4'-0" A.F.F.
- REMOVE EXISTING INTERIOR TRIM (BASE BOARDS, TOE STRIPS, WINDOW TRIM/STOOL, DOOR TRIM, ETC.), WOOD CLOSET SHELVING (AND CLEATS) U.N.O. REFER TO DETAILS FOR NEW WORK.
- PREPARE EXISTING CEILINGS TO RECEIVE NEW PAINT (SMOOTH FINISH).
- REMOVE EXISTING FLOOR FINISHES (MAY BE MULTIPLE LAYERS) AND FLOOR SHEATHING AT FIRST FLOOR. PROVIDE NEW 5/8" TYPE 'X' MOISTURE RESISTANT PLYWOOD FLOOR SHEATHING, GLUED AND SCREWED. REFER TO NOTES BELOW FOR NEW FLOOR FINISHES.
- DEMOLISH EXISTING HANDRAILS AND BRACKETS AND PREPARE WALLS TO RECEIVE NEW HANDRAILS. REFER TO KEY NOTES BELOW.
- DEMOLISH EXISTING BATT INSULATION AT FIRST FLOOR ASSEMBLY FROM CRAWLSPACE.
- REMOVE ALL EXISTING INTERIOR DOORS, HARDWARE, AND TRIM COMPLETELY. EXISTING FRAMES TO REMAIN. PREPARE FOR NEW WORK. PROVIDE NEW INTERIOR DOORS TO MATCH EXISTING SIZES, UNLESS NOTED OTHERWISE. FIELD VERIFY EXISTING DOOR SIZES PRIOR TO ORDERING NEW DOORS. NEW DOORS SHALL BE 2-PANEL H.C.H.B. INTERIOR DOORS (PAINT). CUSTOM DOOR SIZES MAY BE REQUIRED. CUT, TRIM, AND MODIFY NEW DOOR AND CASING AS REQUIRED. NO CONSIDERATION WILL BE GIVEN TO CHANGE ORDERS.
- DEMOLISH EXISTING KITCHEN CASEWORK AND APPLIANCES COMPLETELY. PROVIDE NEW KITCHEN CASEWORK AND APPLIANCES. REFER TO FLOOR PLAN FOR LAYOUT.
- REMOVE, DISPOSE OF AND REPLACE EXISTING HVAC SYSTEM EQUIPMENT, EXHAUST FANS AND GRILLES. EXISTING DUCTWORK TO REMAIN AND BE CLEANED. FIELD VERIFY.
- REMOVE, DISPOSE OF AND REPLACE EXISTING HOT WATER HEATER, AND PLUMBING FIXTURES UNLESS NOTED OTHERWISE. REFER TO NOTE 24, FLOOR PLANS AND MEP DRAWINGS FOR NEW WORK.
- EXISTING ELECTRICAL SYSTEM TO REMAIN. EXISTING ELECTRICAL AND LIGHTING FIXTURES TO BE REMOVED AND REPLACED. REFER TO ELECTRICAL DRAWINGS FOR WORK RELATED TO SYSTEM SUPPORT OF NEW SYSTEMS.
- REFER TO MEP DRAWINGS FOR ADDITIONAL SCOPE.
- PROVIDE NEW WOOD CASING AT WINDOW HEADS, JAMBS, STOOLS AND RETURNS (PAINT).
- WHERE EXISTING FIRST FLOOR WOOD JOISTS HAVE EXTENSIVE MOISTURE DETRIORATION OR INSECT INFESTATION, SISTER ON NEW P.T. WOOD JOISTS OF THE SAME SIZE. FIELD VERIFY.
- DEMOLISH EXISTING VANITY BASES AND PROVIDE NEW VANITY BASES WITH CULTURED MARBLE TOP WITH INTEGRAL BOWL. REFER TO FLOOR PLAN FOR SIZE.
- DEMOLISH EXISTING TOILET ACCESSORIES COMPLETELY. PROVIDE NEW TOILET ACCESSORIES. REFER TO PLANS FOR LAYOUT.
- PROVIDE NEW DOOR HARDWARE THROUGHOUT. REFER TO HARDWARE SCHEDULE, SHEET A0.0.
- PROVIDE NEW INSULATION WHERE DEMOLISHED:
  - EXTERIOR WALLS - R-15 MIN. KRAFT FACED BATT INSULATION. KRAFT FACE TOWARDS WARM IN WINTER SIDE.
  - TENANT SEPARATION WALL - PROVIDE 5 1/2" SOUND ATTENUATION INSULATION.
  - FIRST FLOOR ASSEMBLY - PROVIDE R-21 CLOSED CELL SPRAY FOAM INSULATION.
  - ATTIC - SUPPLEMENT EXISTING INSULATION TO ACHIEVE R-42 WITH BLOW-IN INSULATION. PROVIDE INSULATION BAFFLES AT EXTERIOR WALLS TO MAINTAIN ATTIC VENTING.
- PROVIDE NEW GYPSUM BOARD WHERE DEMOLISHED. PROVIDE PAINT THROUGHOUT:
  - PARTITIONS - 1/2" MOISTURE AND MOLD RESISTANT GYPSUM BOARD, EACH SIDE.
  - TENANT SEPARATION WALL - 5/8" TYPE 'X' MOISTURE AND MOLD RESISTANT ON EACH SIDE. CONTINUE GYPSUM BOARD THICKNESS ACROSS FULL LENGTH OF WALL IN ROOM WHEN WALL TYPE CHANGES.
  - CEILING - EXISTING TO REMAIN. CEILINGS SHALL HAVE SMOOTH FINISH.
- PROVIDE NEW FLOOR FINISHES:
  - FIRST FLOOR - PROVIDE NEW FLOATING VINYL PLANK FLOORING.
  - STAIRS - PROVIDE NEW OAK TREADS (3 LAYERS OF POLYURETHANE) AND OAK VENEER PLYWOOD RISERS.
  - SECOND FLOOR - PROVIDE NEW FLOATING VINYL PLANK FLOORING.
- WHERE 1/4" UNDERLAYMENT IS PROVIDED, UNDERLAYMENT SHALL BE GLUED AND SCREWED TO EXISTING SUBFLOOR/STRUCTURE. FILL SCREW HEADS AND JOINTS.
- PROVIDE BASEBOARD AND SHOE MOULD (PAINT) AT FLOATING VINYL PLANK FLOORING. REFER TO 5/A3.1.
- DEMOLISH EXISTING WINDOW BLINDS COMPLETELY. PROVIDE NEW MINI BLINDS AT ALL WINDOWS.
- CLEAN, PREP AND PRIME ALL EXISTING BATHTUBS TO BE REFINISHED. REGLAZE ALL EXISTING BATHTUBS. PATCH ANY IMPERFECTIONS PRIOR TO PROJECT CLOSEOUT.
- REMOVE AND DISPOSE OF ALL EXISTING CLOSET SHELVING AND TV WALL MOUNTS. PREPARE GYPSUM BOARD TO RECEIVE NEW FINISH.

### KEY NOTES

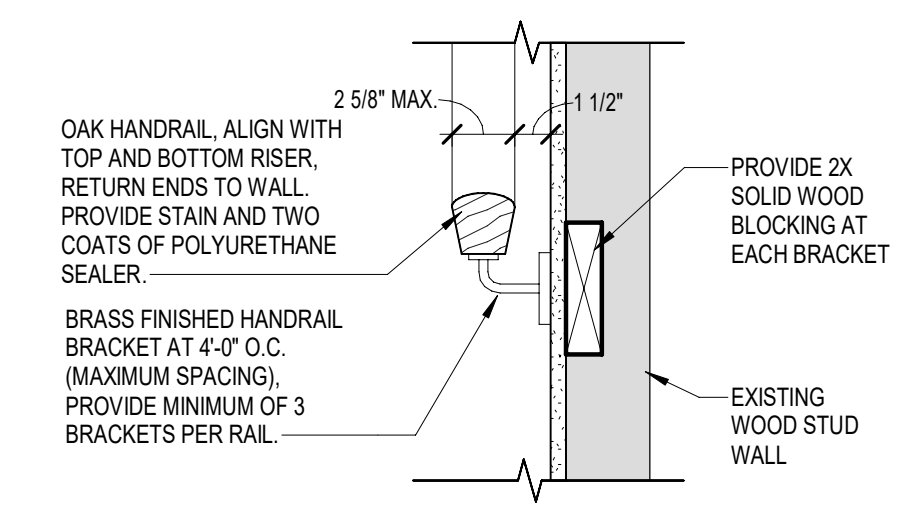
- EXISTING ATTIC ACCESS PANEL AND TRIM TO REMAIN (PAINT).
- PROVIDE NEW WALL MOUNTED SOLID WOOD HANDRAIL, STAINED AND FINISHED WITH (2) COATS OF POLYURETHANE. PROVIDE BRASS FINISHED BRACKETS. RETURN HANDRAIL TO WALL AT TOP AND BOTTOM REFER TO DETAIL 7/A3.1.
- REMOVE EXISTING AND PROVIDE NEW WINDOWS TO MATCH EXISTING SIZE (3553x F.V.) PER NOTES ON SHEET A2.1.
- FULL LENGTH OF DWELLING UNIT SEPARATION WALL: 1-HR. RATED FIRE PARTITION (FP) GYPSUM ASSOCIATION ASSEMBLY WP 5512  
WHERE GYPSUM REMOVED PROVIDE NEW 5/8" TYPE 'X' GYPSUM BOARD (PAINT) OVER EXISTING AND/OR NEW WOOD STUDS. SEAL TIGHT. PROVIDE ADDITIONAL FRAMING AS REQUIRED AND NECESSARY TO FACILITATE WORK. PROVIDE NEW BASEBOARD TRIM (PAINT).
- DEMOLISH CARPET TREADS AND RISERS FROM STAIRS. REPLACE AS NOTED ABOVE.
- PROVIDE NEW 30" WIDE X 18" DEEP VANITY BASE WITH CULTURED MARBLE TOP WITH INTEGRAL BOWL.
- DEMOLISH EXISTING BATHROOM ACCESSORIES COMPLETELY. PROVIDE NEW TOILET ACCESSORIES PER LAYOUT SHOWN. PROVIDE 2x6 SOLID WOOD BLOCKING IN WALLS AT ATTACHMENT LOCATIONS WHERE REQUIRED.
- PROVIDE NEW 12" DEEP SHELF (COATED, VENTILATED WIRE) WITH INTEGRAL ROD BY LENGTH SHOWN. MOUNT AT 5'-0" AFF TO CENTER LINE OF ROD. PROVIDE CENTER SUPPORT FOR EVERY 40" OF SHELF LENGTH.
- PROVIDE A 12" DEEP SHELF (COATED, VENTILATED WIRE). MOUNTING HEIGHT TO BE 5'-0" TO TOP OF SHELF.
- PROVIDE (2) 12" DEEP SHELVES (COATED, VENTILATED WIRE) BY WIDTH OF PANTRY. MOUNTING HEIGHT TO BE 14" TO TOP OF SHELF, BOTTOM SHELF STARTING AT 2'-0" A.F.F.
- REPAIR EXISTING GYP. BD. CRACKS WITH TAPE AND MUD, TYP. (PAINT).
- HIDE SUMP PIT #31-0039 BY ZOELLER CO., BASIS OF DESIGN (60 GALLON CAPACITY). PROVIDE ONE PIECE SLOTTED HDPE COVER, #P1N 17-0135 BY ZOELLER CO., BASIS OF DESIGN. PROVIDE REQUIRED HUB FOR PIPE CONNECTION.
- REMOVE PORTION OF EXISTING WALL AS REQUIRED FOR INSTALLATION OF NEW OPENING.
- REGRADE EXISTING CRAWL SPACE TO ASSURE SLOPE TO SUMP PUMP.
- PROVIDE NEW 3" UNREINFORCED MUD SLAB OVER REINFORCED 20 MIL VAPOR BARRIER. EXTEND VAPOR BARRIER TO TOP OF NEW 2" RIGID INSUL. AT FOUNDATION WALLS FOR CRAWL SPACE ENCAPSULATION. ALL JOINTS TO BE SEALED AND TAPED. (CLEANSACE ENCAPSULATION SYSTEM, BASIS OF DESIGN)
- PROVIDE 1/2" MOISTURE AND MOLD RESISTANT GYPSUM BOARD ON BOTTOM OF EXISTING FLOOR JOIST FOR INSULATION IGNITION BARRIER.
- PROVIDE NEW 20 MIL VAPOR BARRIER ON BOTTOM OF NEW 1/2" MOISTURE AND MOLD RESISTANT GYPSUM BOARD FOR CRAWL SPACE ENCAPSULATION. PROVIDE A SEALED SEAM AT THE FOUNDATION WALL VAPOR BARRIER. ALL JOINTS TO BE SEALED AND TAPED. (CLEANSACE ENCAPSULATION SYSTEM, BASIS OF DESIGN)
- PROVIDE 6" PERFORATED PIPE WITH SOCK IN 18" WIDE X 8" DEEP TRENCH. SLOPE BOTTOM OF TRENCH 1/2% TOWARD SUMP PUMP. FILL TRENCH WITH #57 GRAVEL TO CRAWL SPACE GRADE AFTER PIPE IS IN PLACE.
- CENTER NEW JACK POST AND FOOTING UNDER EXISTING (3) PLY 2x8 JOIST GIRDER, TYP.
- REMOVE EXISTING DOOR AND WALL TO THE EXTENTS SHOWN. REFER TO NEW WORK.
- REMOVE EXISTING BUILT-IN SHELVING IN ITS ENTIRETY.
- REMOVE AND REPLACE EXISTING FOUNDATION VENT WITH POWERED FOUNDATION VENT (GAF MASTER FLOW PFV1, BASIS OF DESIGN). REFER TO MEP DRAWINGS.
- REMOVE AND REPLACE EXISTING FOUNDATION VENT WITH AUTOMATIC FOUNDATION VENT (GAF MASTER FLOW FVRA1B, BASIS OF DESIGN). REFER TO MEP DRAWINGS FOR ADDITIONAL REQUIREMENTS.



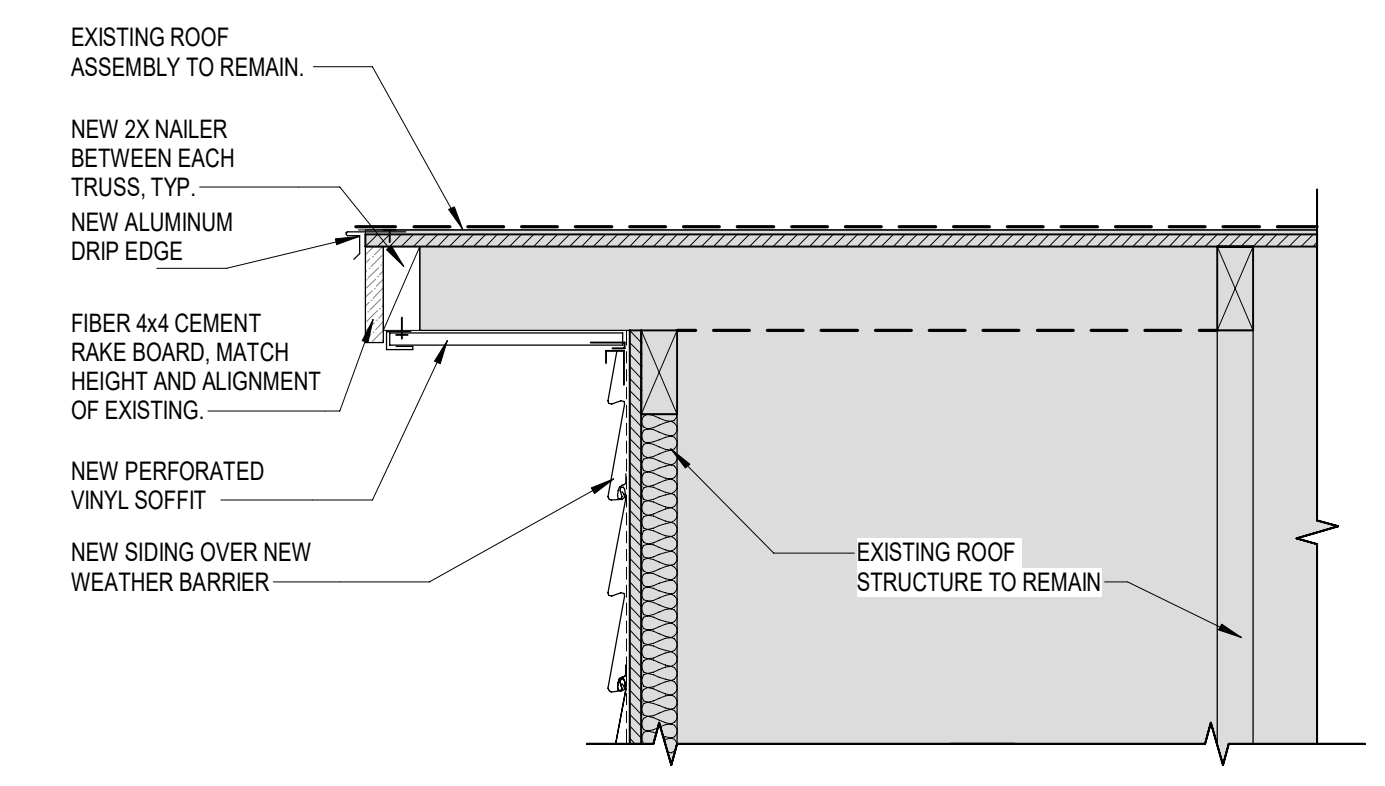


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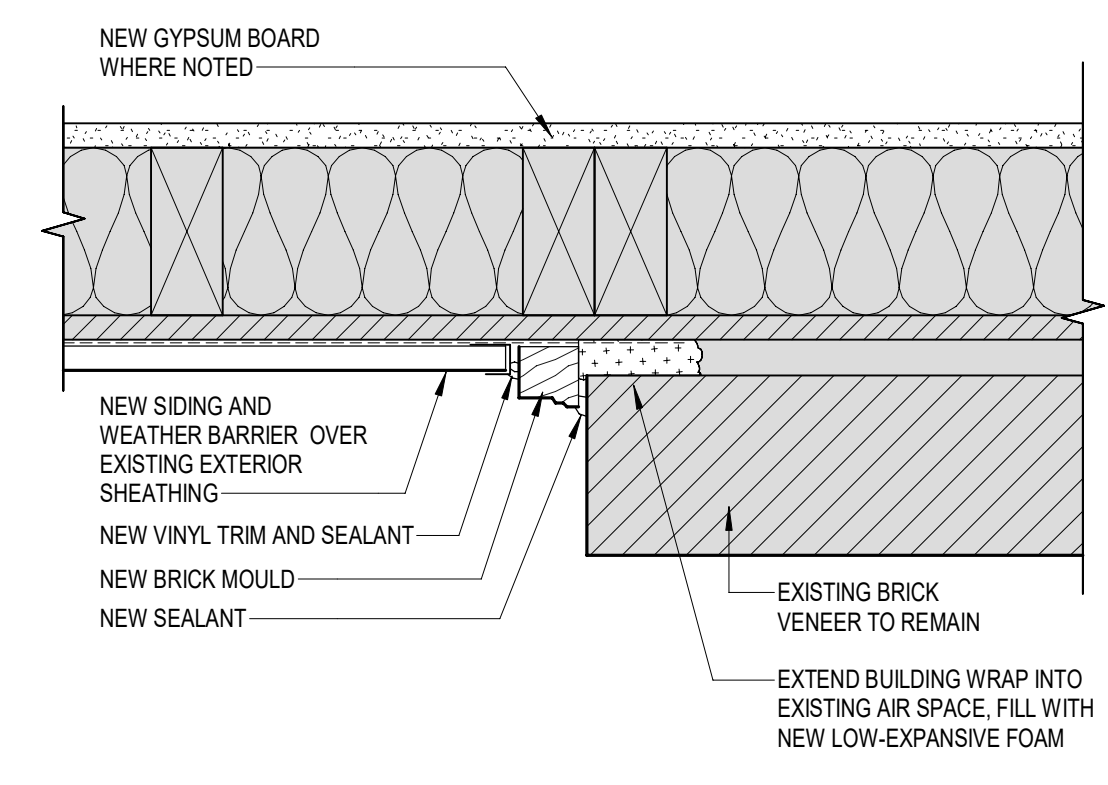
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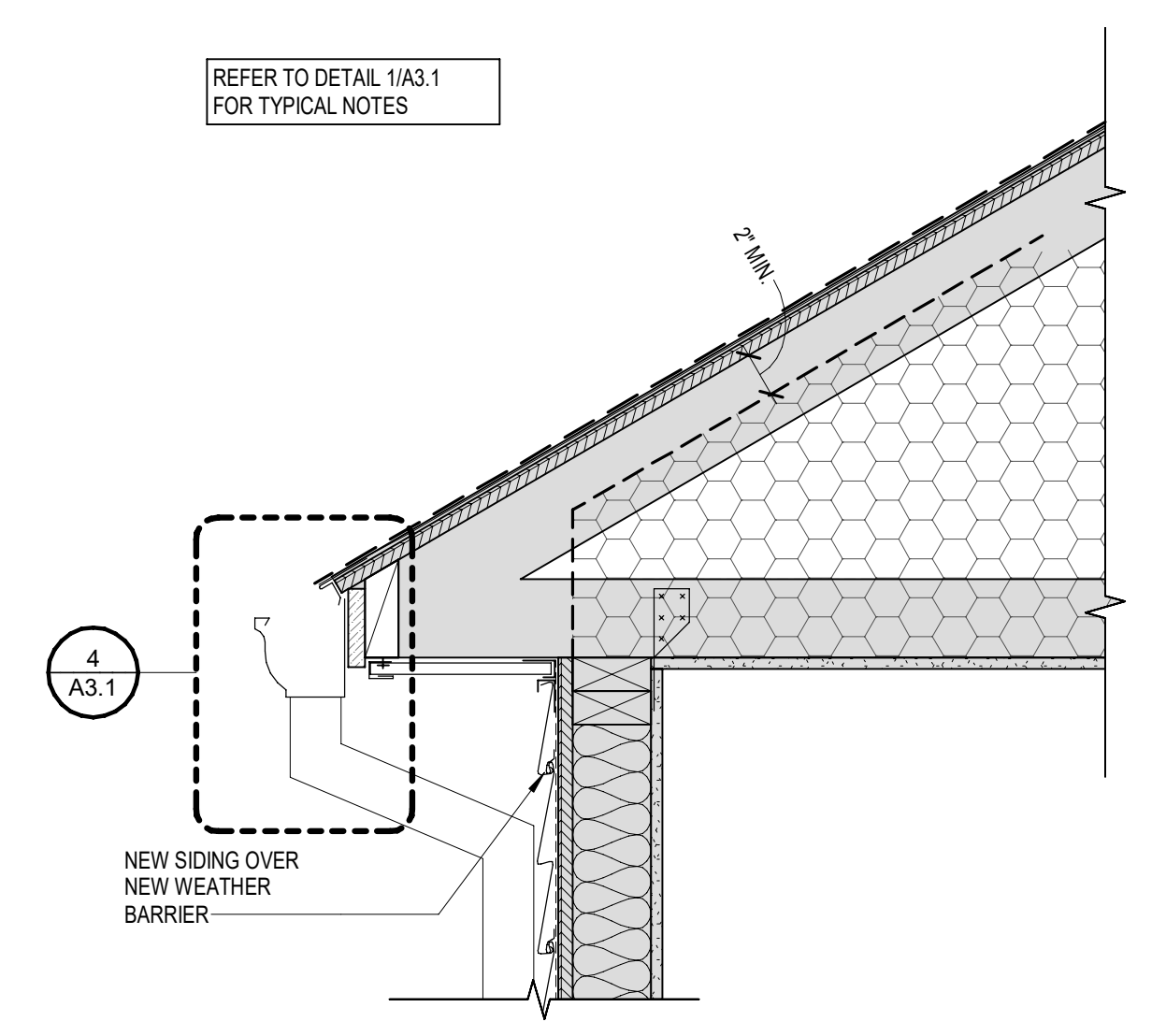
7 HANDRAIL DETAIL  
1 1/2" = 1'-0"



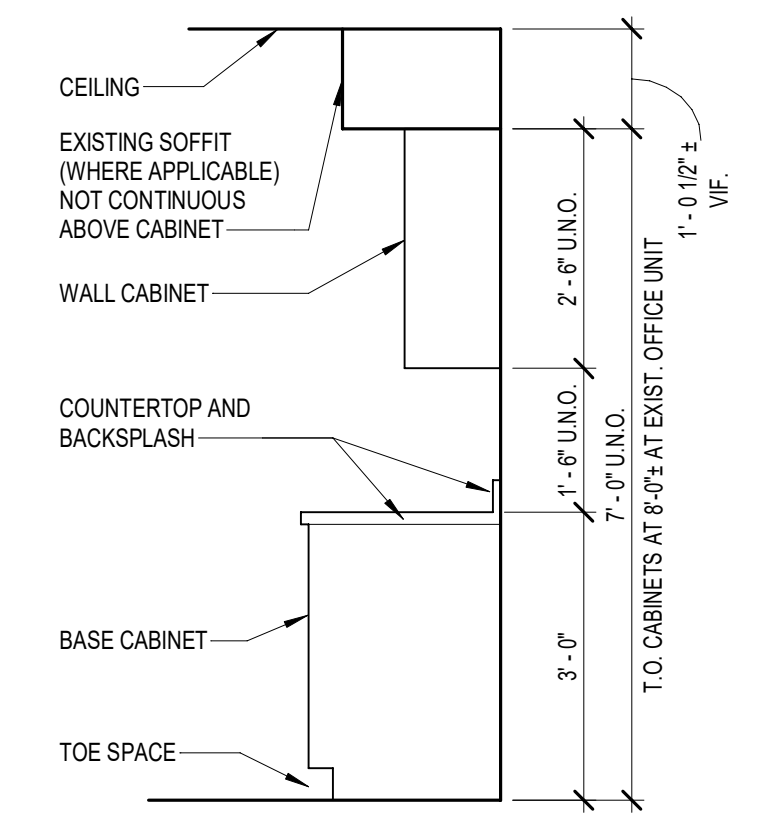
3 RAKE DETAIL  
1 1/2" = 1'-0"



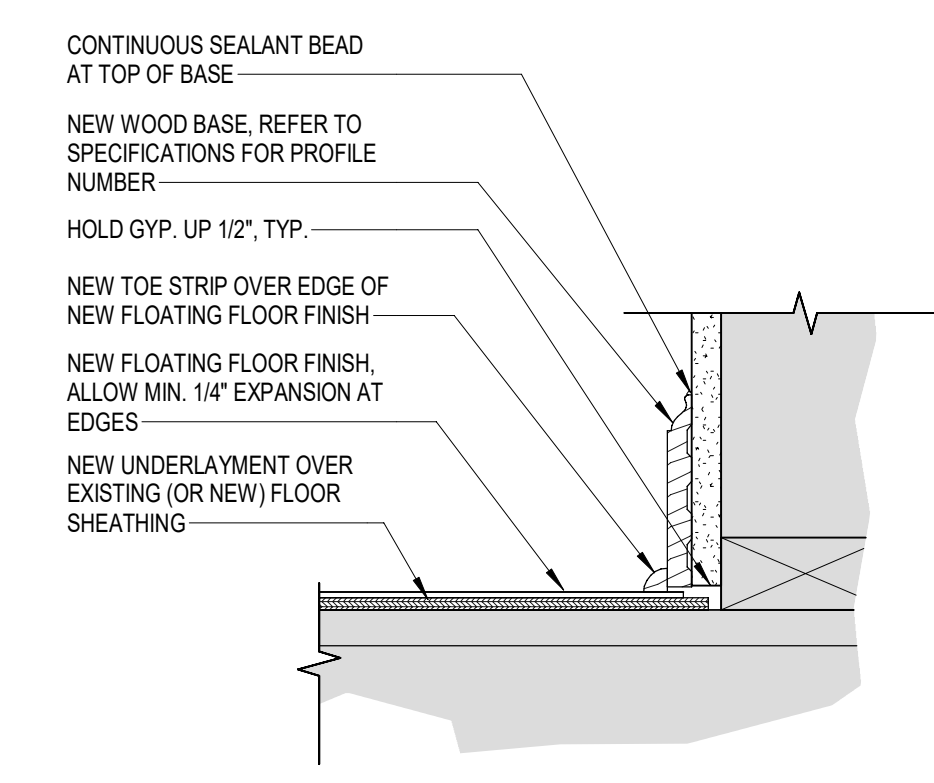
6 VENEER END DETAIL  
3" = 1'-0"



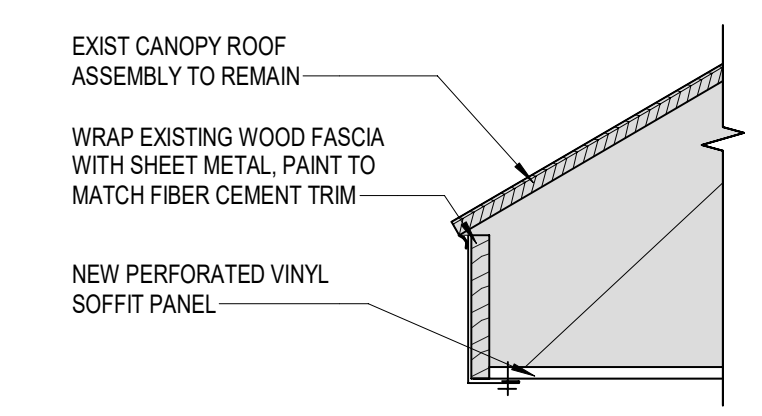
2 ROOF DETAIL  
1 1/2" = 1'-0"



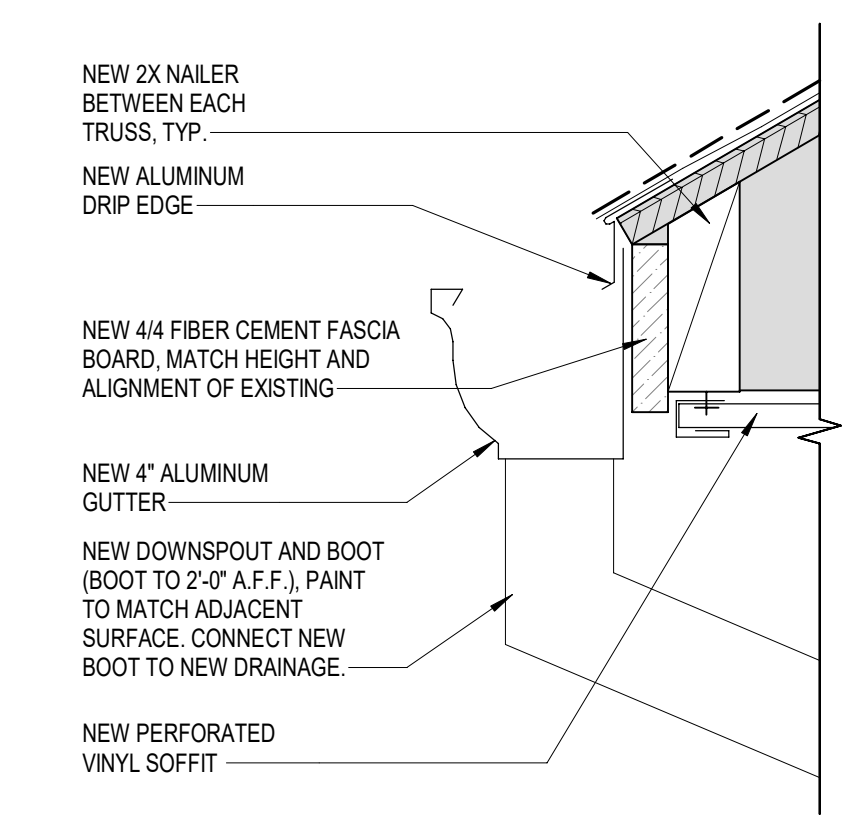
9 TYPICAL CASEWORK MOUNTING HEIGHT  
1/2" = 1'-0"



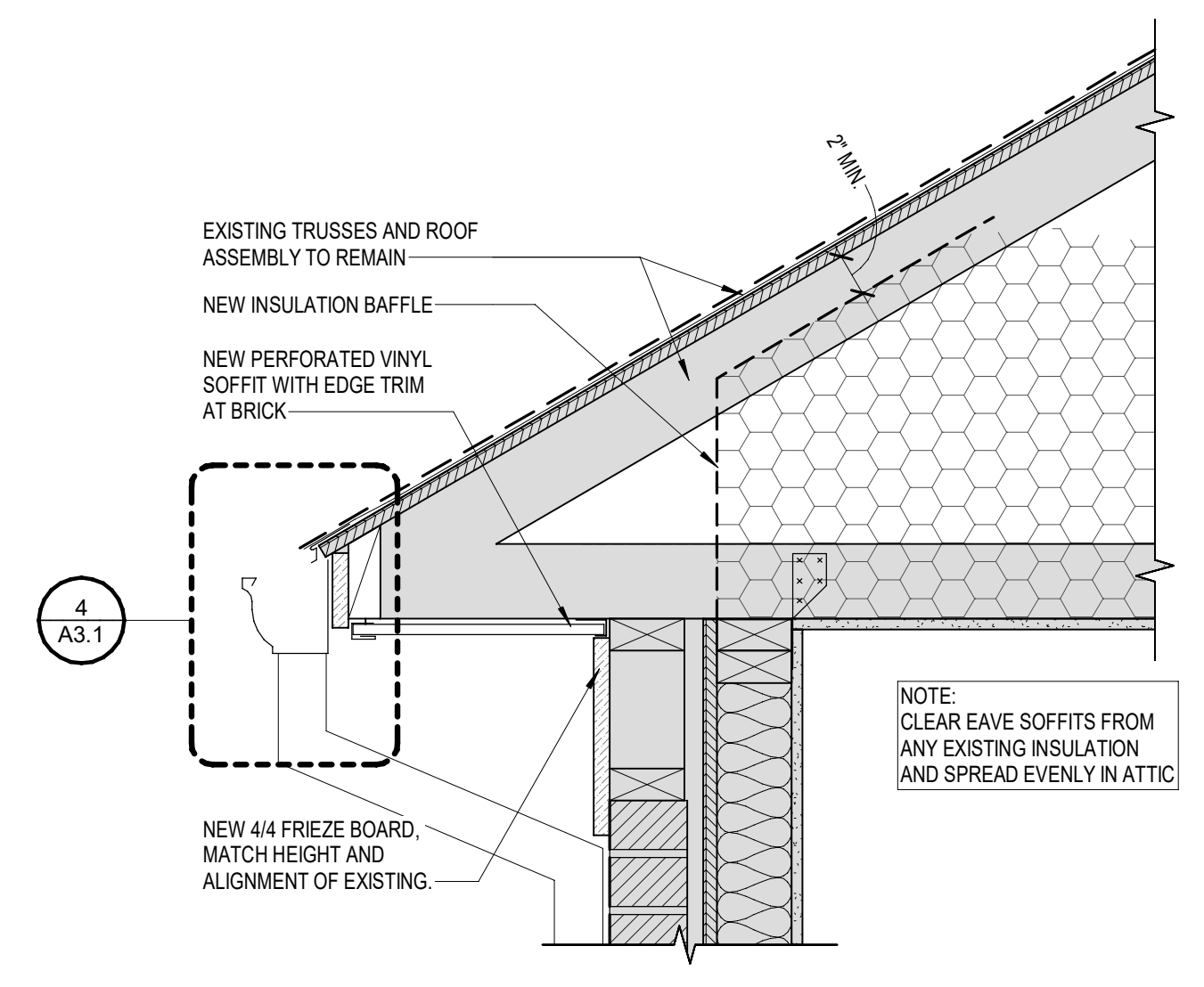
5 TYPICAL BASEBOARD DETAIL  
3" = 1'-0"



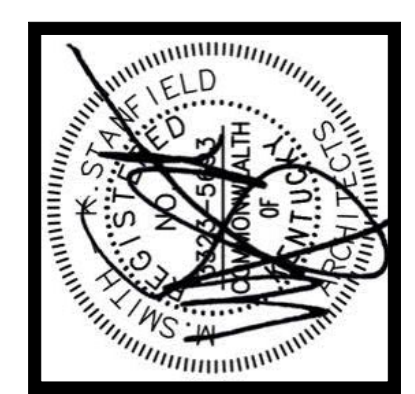
8 CANOPY DETAIL  
1 1/2" = 1'-0"



4 FASCIA DETAIL  
3" = 1'-0"



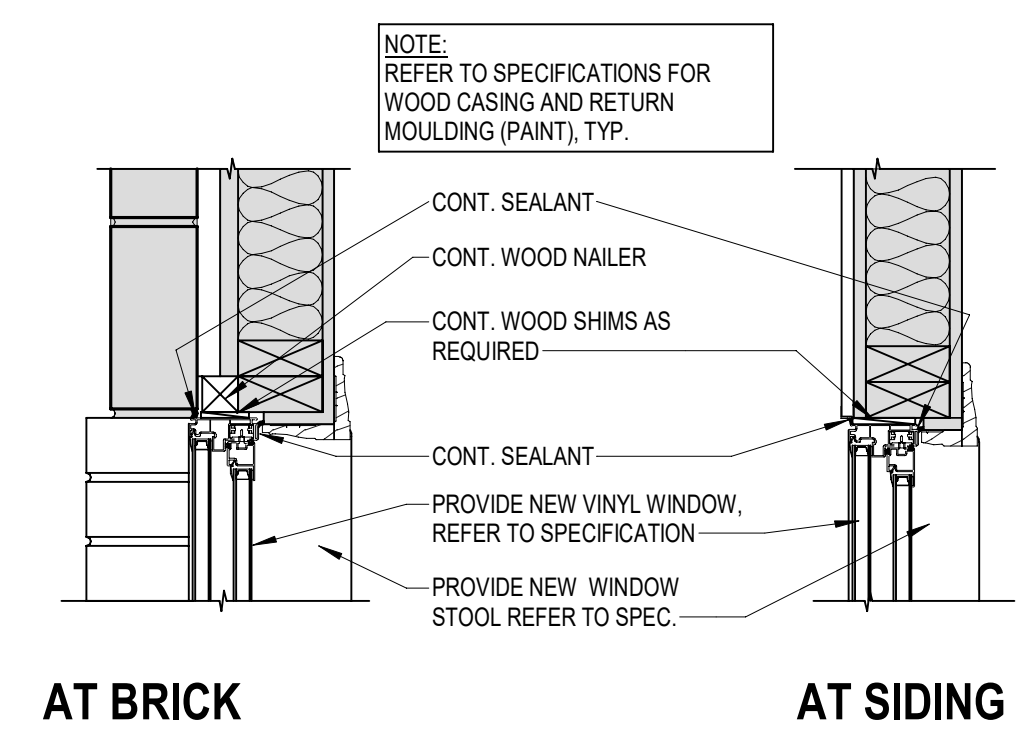
1 ROOF DETAIL  
1 1/2" = 1'-0"



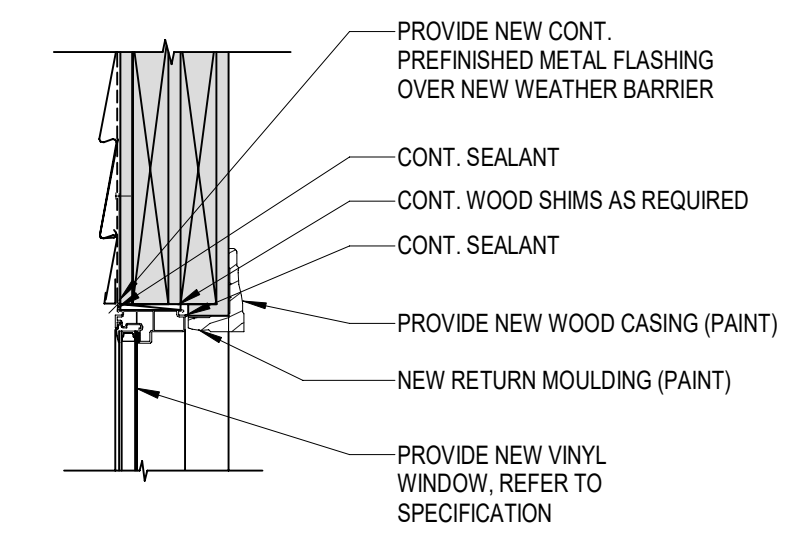
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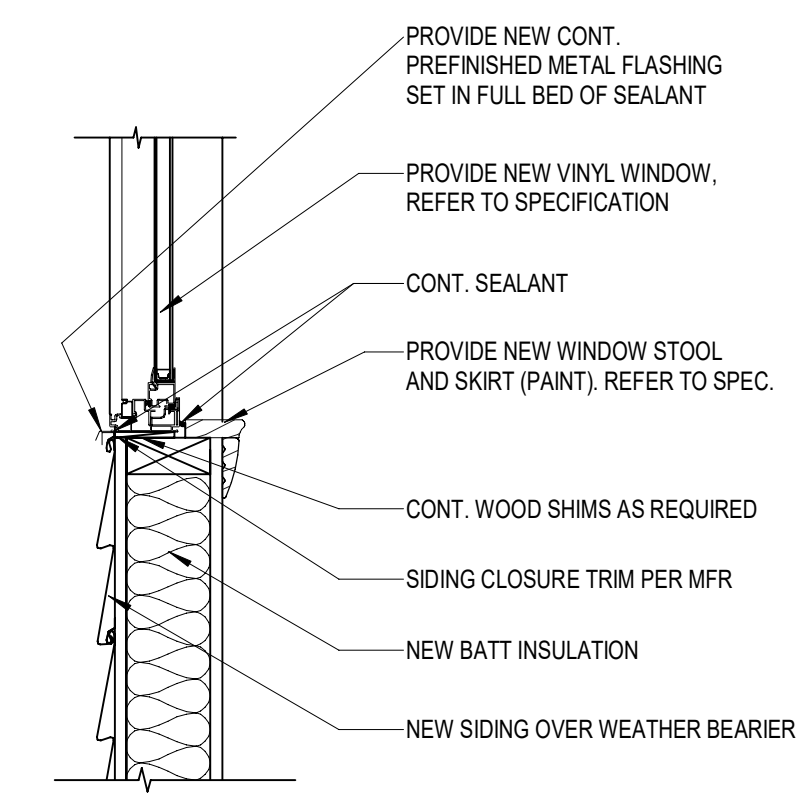
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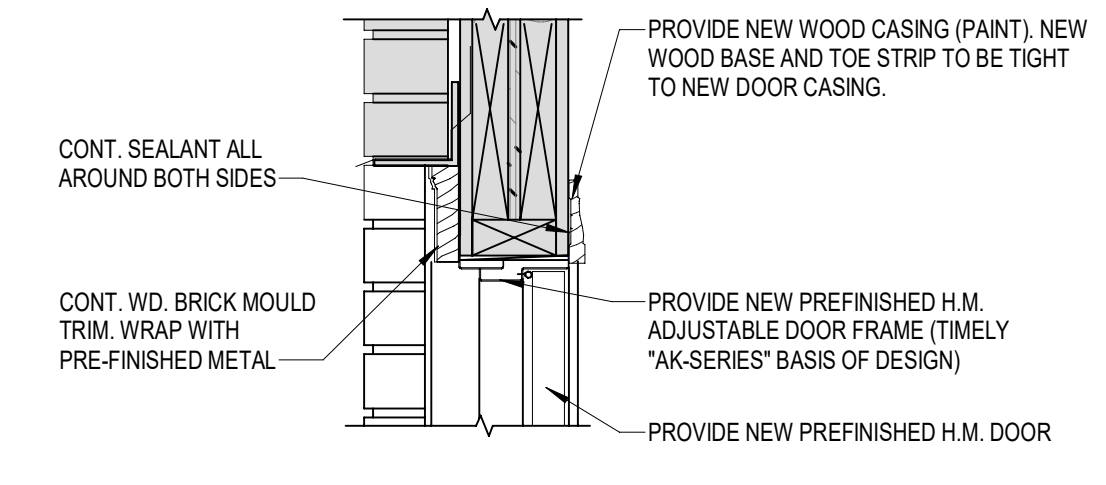
4 TYPICAL WINDOW JAMB DETAIL  
1 1/2" = 1'-0"



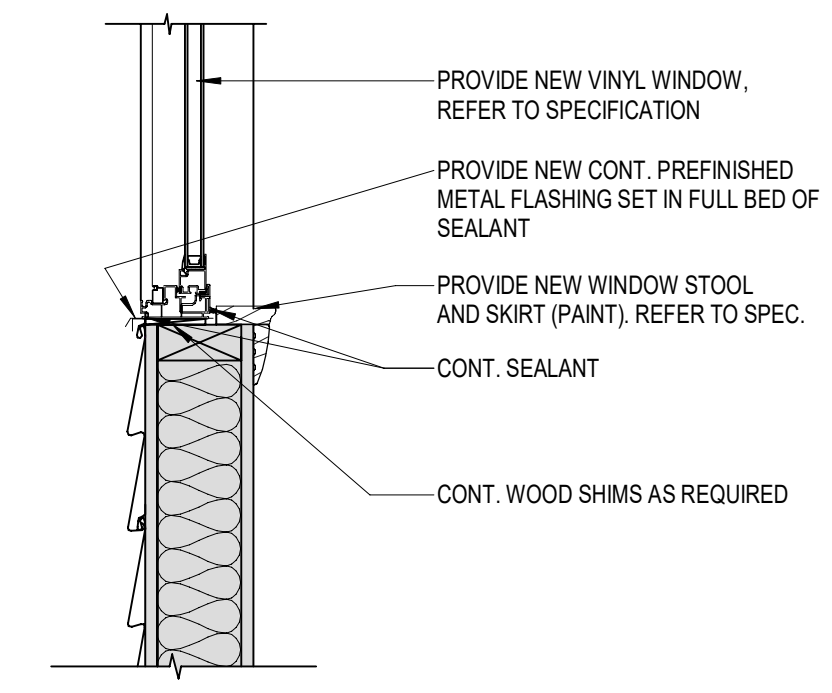
8 TYPICAL WINDOW HEAD DETAIL AT SIDING  
1 1/2" = 1'-0"



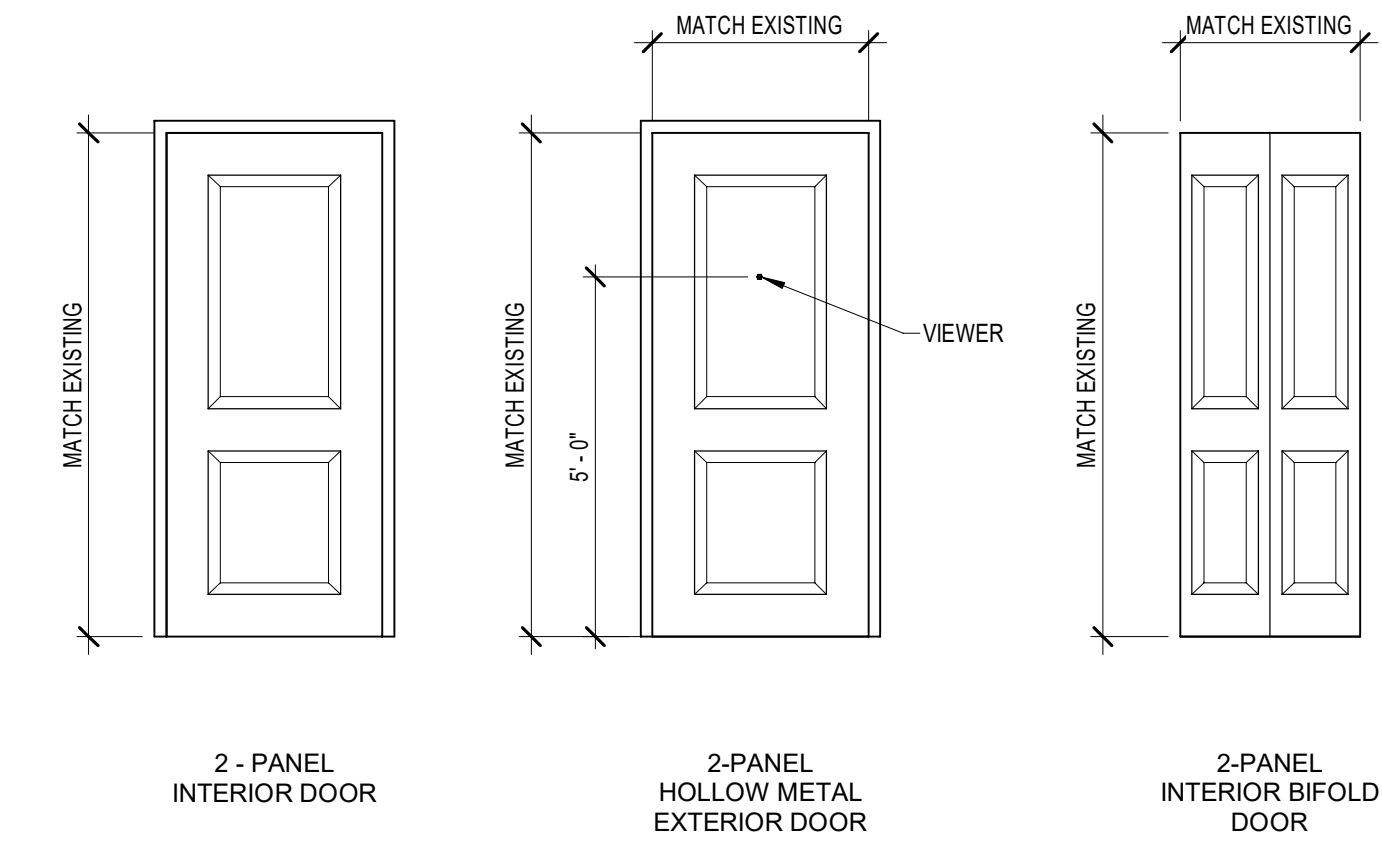
9 WINDOW SILL DETAIL AT SIDING WALL INFILL  
1 1/2" = 1'-0"



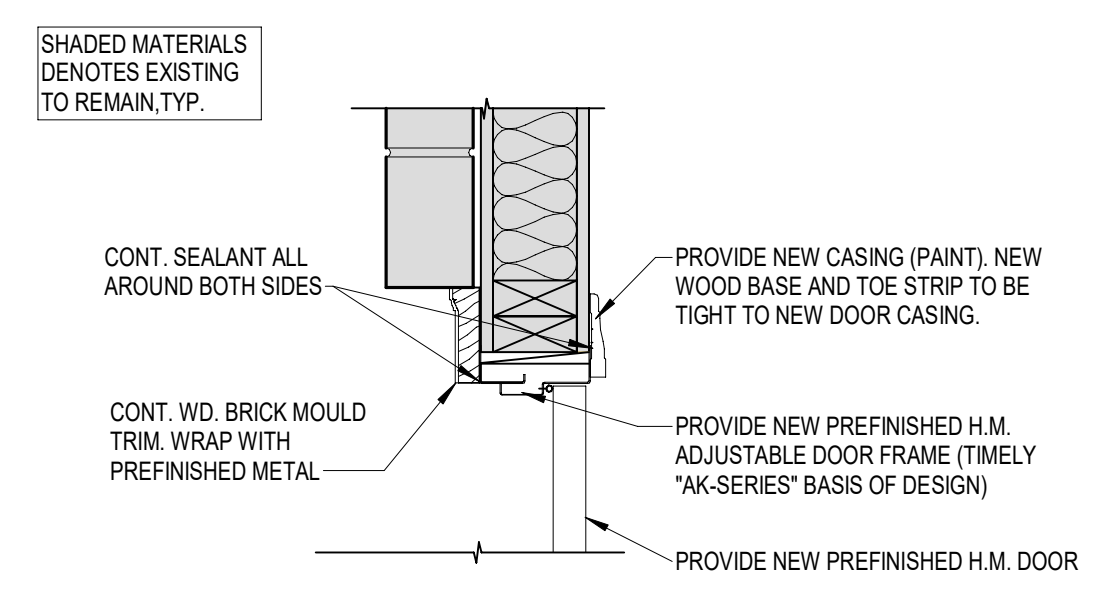
3 TYPICAL DOOR HEAD DETAIL  
1 1/2" = 1'-0"



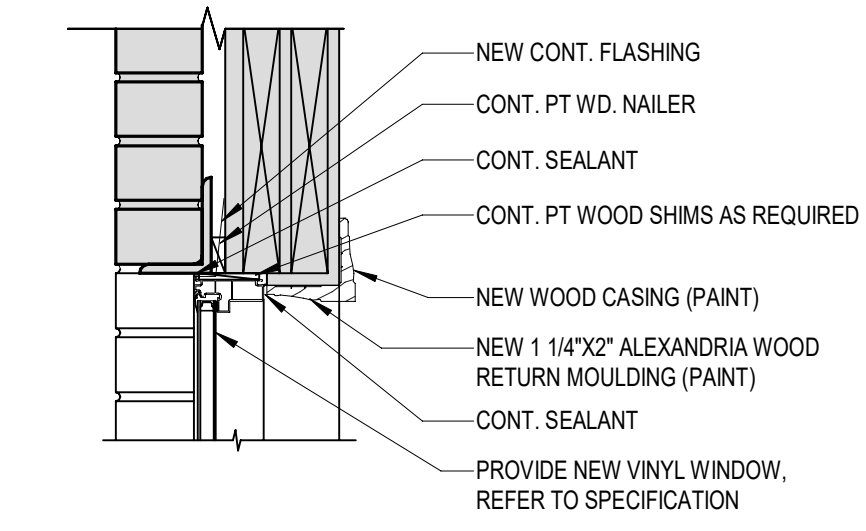
7 TYPICAL WINDOW SILL DETAIL AT SIDING  
1 1/2" = 1'-0"



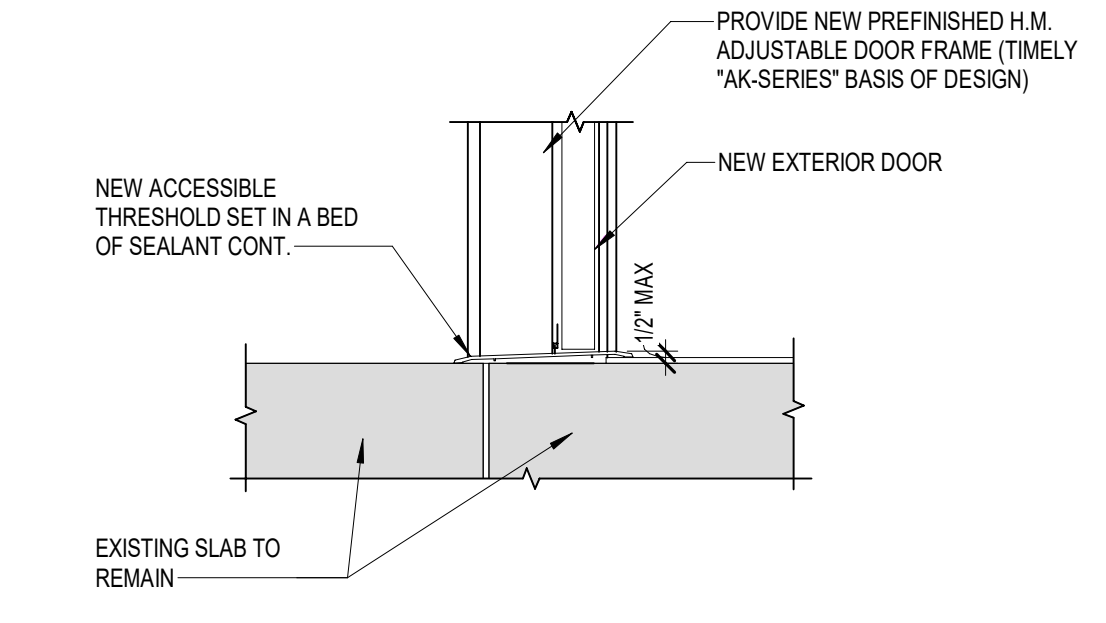
DOOR TYPES  
3/8" = 1'-0"



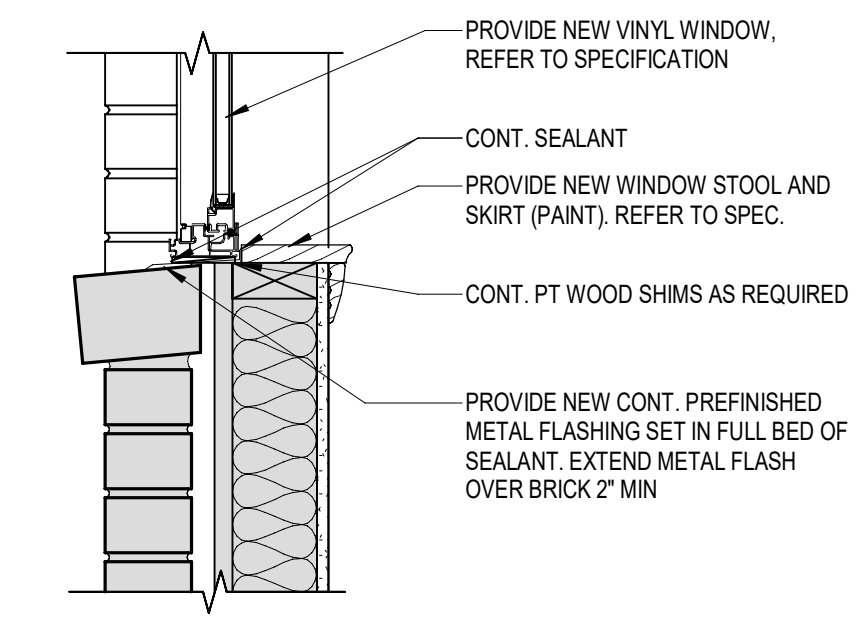
2 TYPICAL DOOR JAMB DETAIL  
1 1/2" = 1'-0"



6 TYPICAL WINDOW HEAD DETAIL AT BRICK  
1 1/2" = 1'-0"



1 TYPICAL EXTERIOR DOOR THRESHOLD DETAIL  
1 1/2" = 1'-0"



5 TYPICAL WINDOW SILL DETAIL AT BRICK  
1 1/2" = 1'-0"

# PLUMBING/FIRE PROTECTION LEGEND

PLUMBING SYMBOLS	
SYMBOL	DESCRIPTION
	PIPE DOWN
	PIPE UP
	TEE DOWN
	TEE UP
	CONTINUATION
	CAP
	HAMMER ARRESTOR
	BALANCING VALVE
	BALL VALVE
	BUTTERFLY VALVE
	ELECTRIC CONTROL VALVE
	PRESSURE REDUCING VALVE
	CHECK VALVE
	GATE VALVE
	PLUG VALVE
	REDUCER
	UNION
	VALVE IN VERTICAL
	PRESSURE GAUGE
	STRAINER
	FLOW INDICATOR
	CLEANOUT
	FLOOR CLEANOUT
	THERMOMETER
	RECIRC. BALANCING STATION
	FLOW SWITCH
	TAMPER SWITCH ON VALVE
	PUMP, INLINE
	SUMP PUMP
	GAS METER
	WATER METER
	THRUST BLOCK
	GAS REGULATOR
	FLOOR DRAIN
	P-TRAP
	FLOOR DRAIN GRATE
	FIRE PROTECTION RISER
	FIRE PROTECTION CONNECTION (DOUBLE)
	FIRE PROTECTION CONNECTION (SINGLE)
	SHEET NOTE
	DEMOLITION NOTE
	CONNECT NEW TO EXISTING
	EXTENT OF DEMOLITION
	EQUIPMENT TAG
	RISER IDENTIFICATION TAG

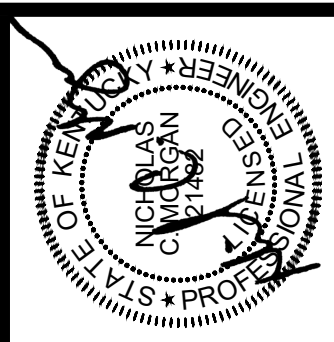
ABBREVIATIONS	
ADP	ACID DILUTION PIT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AG	AIR GAP
AV	ACID VENT
AW	ACID WASTE
BFF	BELOW FINISHED FLOOR
BFG	BELOW FINISHED GRADE
BTU	BRITISH THERMAL UNIT
CA	COMPRESSED AIR
CFH	CUBIC FEET/HOUR
CI	CAST IRON
CRD	COMBINATION ROOF DRAIN
CO	CLEANOUT
CON	CONDENSATE
CW	COLD WATER
D	DISPOSAL
DD	DECK DRAIN
DI	DUCTILE IRON
DF	DRINKING FOUNTAIN
DSN	DOWNSPOUT NOZZLE
ECO	EXTERIOR CLEANOUT
EEW	EMERGENCY EYE WASH
ESEW	EMERGENCY SHOWER / EYE WASH
ET	EXPANSION TANK
ETP	ELECTRONIC TRAP PRIMER
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FS	FLOOR SINK
FS	FLOW SWITCH
G	NATURAL GAS
GPM	GALLONS PER MINUTE
GR	GREASE
GRV	GREASE VENT
GT	GREASE TRAP
GWH	GAS WATER HEATER
HA	HAMMER ARRESTOR
HB	HOSE BIBB
HW	HOT WATER
HWR	HOT WATER RETURN
I.E.	INVERT ELEVATION
IMB	ICE MAKER BOX
L/LAV	LAVATORY
LPG	LIQUID PETROLEUM GAS
LT	LAUNDRY TUB
MA	MEDICAL AIR
MB	MOP BASIN
MBH	1,000 BTU
MG	MEDICAL GAS
MH	MANHOLE
MIN	MINIMUM
MS	MOP SINK
N2	NITROGEN
O2	OXYGEN
OR	OPEN RECEPTACLE
ORD	OVERFLOW ROOF DRAIN
ORL	OVERFLOW ROOF LEADER
OWS	OIL WATER SEPARATOR
PD	PUMP DISCHARGE
PDI	PLUMBING DRAINAGE INSTITUTE

ABBREVIATIONS CONT.	
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
PT	PLASTER TRAP
RBS	RECIRC. BALANCE STATION
RD	ROOF DRAIN
RL	ROOF LEADER
RP	RECIRCULATION PUMP
RPZ	REDUCED PRESSURE ZONE BACKFLOW PREVENTER
S	SINK
SAN	SANITARY
SCO	STACK CLEANOUT
SP	SUMP PUMP
SS	SERVICE SINK
ST	STORAGE TANK
STM	STORM
TB	THRUST BLOCK
TD	TRENCH DRAIN
TP	TRAP PRIMER
TMV	THERMOSTATIC MIXING VALVE
T&P	TEMPERATURE & PRESSURE
TS	TAMPER SWITCH
U	URINAL
UT	UTILITY TUB
V	VENT
VB	VACUUM BREAKER
VTR	VENT THROUGH ROOF
WB	WASHER BOX
WC	WATER CLOSET
W.C.	WATER COLUMN
WCO	WALL CLEANOUT
WH	WALL HYDRANT
WS	WASH STATION
WS	WATER SOFTENER
X	EXISTING

PLUMBING LINETYPES	
SYMBOL	DESCRIPTION
	UNDER SLAB COLD WATER PIPING WITH SIZE
	COLD WATER PIPING WITH SIZE
	HOT WATER PIPING WITH SIZE
	HOT WATER RETURN PIPING WITH SIZE
	UNDER SLAB SANITARY PIPING WITH SIZE
	SANITARY PIPING WITH SIZE
	UNDER SLAB VENT PIPING WITH SIZE
	VENT PIPING WITH SIZE
	UNDER SLAB GREASE PIPING WITH SIZE
	UNDER SLAB GREASE VENT PIPING WITH SIZE
	GREASE VENT PIPING WITH SIZE
	UNDER SLAB ACID WASTE PIPING WITH SIZE
	ACID WASTE PIPING WITH SIZE
	UNDER SLAB ACID VENT PIPING WITH SIZE
	ACID VENT PIPING WITH SIZE
	ROOF LEADER PIPING WITH SIZE
	UNDER SLAB STORM PIPING WITH SIZE
	UNDER SLAB GAS PIPING WITH SIZE (SLEEVED)
	GAS PIPING WITH SIZE
	TEMPERED WATER PIPING WITH SIZE
	FIRE PROTECTION PIPE
	COMPRESSED AIR PIPING WITH SIZE
	VACUUM PIPING WITH SIZE

## GENERAL NOTES - PLUMBING:

- CONSTRUCTION PHASING: ALL WORK SHALL BE COORDINATED AND SCHEDULED WITH THE GENERAL CONTRACTOR, OTHER TRADES, THE OWNER, RELATED UTILITY COMPANIES SHALL COINCIDE WITH CONSTRUCTION PHASING PER THE ARCHITECTURAL DOCUMENTS. CONTACT THE ARCHITECT/ENGINEER IN THE EVENT OF A CONFLICT.
- NEW UTILITIES: THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NEW UTILITY SERVICES AND COSTS IF REQUIRED UNDER THIS CONTRACT. COORDINATE AND SCHEDULE ALL RELATED WORK WITH THE UTILITY COMPANIES.
- VERIFY UTILITIES: FIELD VERIFY THE LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES WHERE REQUIRED FOR CONNECTIONS OF NEW WORK PRIOR TO CONSTRUCTION AND FABRICATION. DOCUMENT ON THE AS-BUILT DRAWINGS; THE TYPE, SIZE, MATERIAL, LOCATION AND INVERT ELEVATIONS OF ALL UTILITIES ENCOUNTERED. COORDINATE ALL RELATED WORK WITH ALL PARTIES INVOLVED. CONTACT THE ENGINEER IN THE EVENT OF A CONFLICT.
- CONTACT B.U.D.: THE EXISTING UTILITIES, EQUIPMENT, AND PIPING SHOWN ON THESE DRAWINGS ARE FROM RECORD DRAWINGS AND VISUAL INSPECTION OF THE SITE. THE NUMBER, LOCATION, SIZE, AND TYPE OF UTILITIES SHOWN ARE APPROXIMATE, AND THERE MAY BE OTHER UTILITIES NOT SHOWN. THE CONTRACTOR SHALL CONTACT ALL AFFECTED UTILITY COMPANIES AND KENTUCKY B.U.D. PRIOR TO BEGINNING EXCAVATION.
- PERMITS, TESTING, AND INSPECTIONS: THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS, TESTING AND SCHEDULES INSPECTIONS.
- TEMPORARY CONSTRUCTION HEAT: PROVIDE TEMPORARY HEAT IN CONSTRUCTION AREAS AS REQUIRED TO PREVENT FREEZING OF WATER PIPING DURING CONSTRUCTION.
- PATCHING AND REPAIRING: PATCH AND REPAIR ALL AREAS WHERE WALLS, SLABS, PAVEMENT, CURBS, VEGETATION AND MATERIALS ARE CUT, REMOVED, DISTURBED AND OR MODIFIED. MATCH EXISTING MATERIALS, RATINGS, AND FINISHES.
- CUTTING EXISTING MATERIALS: CUTTING OF EXISTING PAVEMENT, SLABS, CONCRETE MASONRY, WALLS, ETC. SHALL BE SAW-CUT OR CORE DRILLED. NO "HAMMER DRILLING" WILL BE ALLOWED.
- ROOFING PENETRATIONS: ALL ROOF PENETRATIONS SHALL BE IN COMPLIANCE WITH THE ROOFING MANUFACTURER'S GUIDELINES, THE AMERICAN ROOFING COUNCIL, AND MAINTAIN ALL WARRANTIES.
- WALL PENETRATIONS: SEAL ALL PIPING PENETRATIONS THROUGH EXTERIOR WALLS WITH SILICONE SEALANT AS REQUIRED TO MAKE WATERWEATHER TIGHT. COLOR TO BE SELECTED BY ARCHITECT.
- EXISTING WALL OPENINGS: EXISTING PLUMBING RELATED OPENINGS IN WALLS THAT ARE NOT BEING RE-USED SHALL BE PATCHED/CLOSED. COORDINATE WITH THE GENERAL CONTRACTOR.
- PIPING PENETRATIONS: ALL NEW AND EXISTING PLUMBING PENETRATIONS THROUGH FIRE/SMOKE RATED WALLS, ASSEMBLIES AND SLABS SHALL BE SEAL AS REQUIRED TO MAINTAIN REQUIRED FIRE/SMOKE RATING. THE PLUMBING CONTRACTOR SHALL COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH THE GENERAL CONTRACTOR AND OTHER TRADES.
- INSULATION: INSULATE ALL DOMESTIC HOT/COLD WATER, RECIRCULATION PIPING, AND ROOF LEADERS.
- HAMMER ARRESTOR: ALL HAMMER ARRESTORS SHOWN ON FLOOR PLANS, BUT NOT ON RISERS OR VICE VERSA SHALL BE PROVIDED AND INSTALLED AS IF SHOWN ON BOTH.
- VALVES: ALL VALVES SHOWN ON FLOOR PLANS, BUT NOT ON RISERS OR VICE VERSA, SHALL BE PROVIDED AND INSTALLED AS IF SHOWN ON BOTH.
- ELECTRICAL PANELS AND EQUIPMENT: PLUMBING PIPING, SYSTEMS, AND EQUIPMENT SHALL BE INSTALLED TO MAINTAIN THE DEDICATED WORKING/ELECTRICAL SPACE ABOVE, BELOW, AND IN FRONT OF ELECTRICAL PANELS AND EQUIPMENT PER THE REQUIREMENTS OF THE N.E.C. (NATIONAL ELECTRIC CODE).
- NO CUTTING OR DRILLING THROUGH EXISTING STRUCTURE JOISTS, TRUSSES, BMS IS ALLOWED. MODIFICATION OF EXISTING STRUCTURE MAY RESULT IN REPLACEMENT OF STRUCTURAL ELEMENTS AT THE CONTRACTOR'S RISK.
- CONTRACTOR'S USE OF EXISTING NON-MODIFIED PENETRATIONS IS ALLOWED. PHOT DOCUMENTATION OF THE EXISTING CONDITIONS PRIOR TO NEW INSTALLATION ARE REQUIRED.



HOLLY PARK RENOVATIONS AND  
SITE DRAINAGE WORK  
2714 HOLLY PARK DR  
LOUISVILLE, KY 40214

## PLUMBING LEGENDS AND GENERAL NOTES

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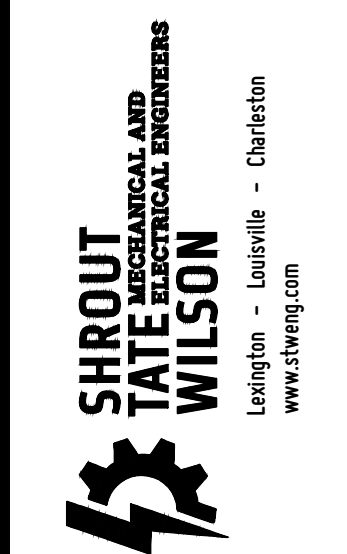
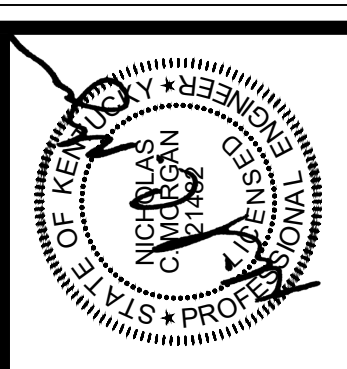
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HOLLY PARK RENOVATIONS AND  
SITE DRAINAGE WORK  
2714 HOLLY PARK DR  
LOUISVILLE, KY 40214

PLUMBING RISERS,  
DETAILS AND  
SCHEDULES

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PLUMBING FIXTURE SCHEDULE											
MARK	MANUFACTURER	MODEL / TYPE	TRIM	CW	HW	TRAP	WASTE	VENT	MOUNTING	REMARKS	OTHER ACCEPTABLE MANUFACTURERS
WC1	AMERICAN STANDARD	270CA001.020 WATER CLOSET	BOWL: AMERICAN STANDARD 3717C001 TANK: AMERICAN STANDARD 4021001N SEAT: AMERICAN STANDARD 5311.012	1/2"	—	INTEGRAL	4"	2"	FLOOR SET, RIM 15"	ELONGATED BOWL, TANK TYPE, SIPHON JET MANUAL FLUSH, CLOSED FRONT SEAT WITH COVER.	ZURN, SLOAN,
L1	BY ARCHITECT	BY ARCHITECT	FAUCET: AMERICAN STANDARD 7385.003 TRIM: CHROME PLATED, POP-UP DRAIN, LOOSE KEY OPERATED SUPPLY STOPS.	1/2"	1/2"	1-1/4"	2"	2"	COUNTER SET	SINGLE LEVER FAUCET	ZURN, SLOAN,
S1	ELKAY	LR3322 TWO COMPARTMENT KITCHEN SINK	FAUCET: AMERICAN STANDARD 4205.001 TRIM: CHROME PLATED BASKET STRAINERS, LOOSE KEY OPERATED SUPPLY STOPS.	1/2"	1/2"	1-1/4"	2"	2"	COUNTER SET	16" X 13-1/2" X 7-3/4" INSIDE BOWLS, #18 GAUGE 304 STAINLESS STEEL, OFF-CENTER REAR DRAIN, 4 HOLE PUNCH, SINGLE HANDLE FAUCET W/ HAND SPRAY	DELTA, KOHLER
T/SH1	EXISTING TUB TO REMAIN		TRIM: AMERICAN STANDARD 3275.502 TRIM KIT SLIP-ON DIVERTER TUB SPOUT, SHOWER HEAD, LEVER HANDLES	1/2"	1/2"	—	—	—	—		JUST, KOHLER, MOEN, DELTA, T&S
WB	GUY GRAY	MWB27 WASHING MACHINE OUTLET BOX	TRIM: 1/2" QTR TURN CPVC VALVE TM INSTALLED, ARRESTER, 2" SLIPNUT DRAIN KIT	1/2"	1/2"	1-1/4"	2"	1-1/2"	48" AFF	WHITE POWDER COAT 20 GAUGE STEEL BOX	SOUIX CHIEF

SUMP PUMP SCHEDULE													
MARK	MANUFACTURER	MODEL	TYPE	LOCATION	FLOW (GPM)	HEAD (FT)	RPM	CONNECTIONS		ELECTRICAL			REMARKS
								INLET	OUTLET	HP	AMPS	V / Ø / Hz	
SP-1	ZOELLER	M161	SUBMERSIBLE	CRAWL SPACE	100	5	—	—	2"	1/2	5.7	120/1/60	1,2

REMARKS:  
1. INTEGRAL FLOAT OPERATED MECHANICAL SWITCH. AUTOMATIC OPERATION.  
2. UL LISTED. DIRECT ELECTRICAL CONNECTION.  
OTHER ACCEPTABLE MANUFACTURERS INCLUDE: WEIL, LITTLE GIANT

**GENERAL WATER HEATER NOTES**

- INSTALL DIELECTRIC PIPE NIPPLES WITH UNIONS AT ALL WATER CONNECTIONS TO HEATERS.

**DETAIL NOTES**

- WATER HEATER. INSTALL PER MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS. SET TEMPERATURE TO 110°F. REFER TO FLOOR PLAN FOR LOCATION. INSTALL WITH CORROSION RESISTANT DRAIN PAN.
- CORROSION RESISTANT DRAIN PAN. PIPE 3/4" DRAIN PIPING FROM PAN TO SUMP PIT IN CRAWL SPACE.
- 3/4" HOSE BIBB SYSTEM DRAIN.
- EXPANSION TANK. INSTALL PER MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.
- UNION AND BALL VALVE SHUTOFF (TYPICAL).
- CONNECT TO EXISTING PIPING (EWH-01 TO HAVE ALL NEW PIPING).
- ROUTE P&T RELIEF VALVE DISCHARGE PIPING TO SUMP PIT IN CRAWL SPACE.

**TYPICAL WATER HEATER PIPING DETAIL**  
NOT TO SCALE

GAS WATER HEATER SCHEDULE											
MARK	MANUFACTURER	MODEL	TANK CAPACITY (GAL)	RECOVERY (GPH) AT 90°F RISE	EXPANSION TANK #	NATURAL GAS		UEF	ELECTRICAL		REMARKS
						INPUT	OUTPUT		V / Ø / Hz	MOCF	
GWH-01	AO SMITH	GPDL	40	45	ET-01	40,000	68%	120/1/60	15	ALL	

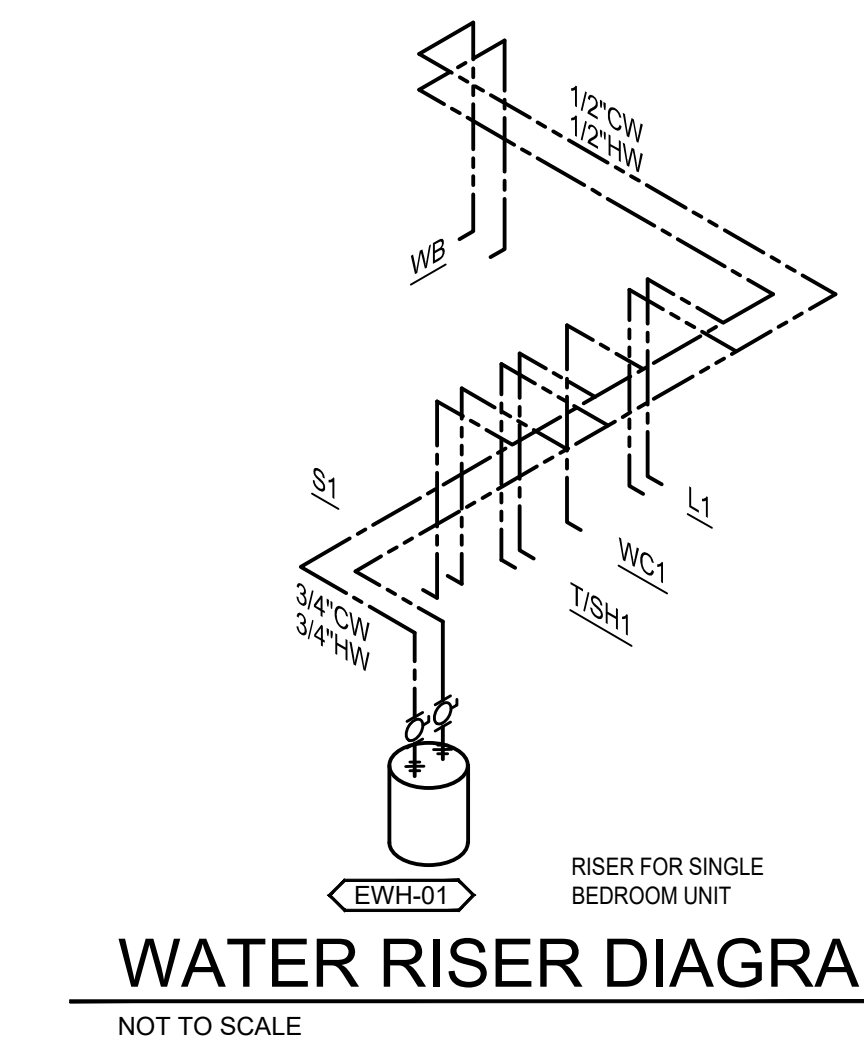
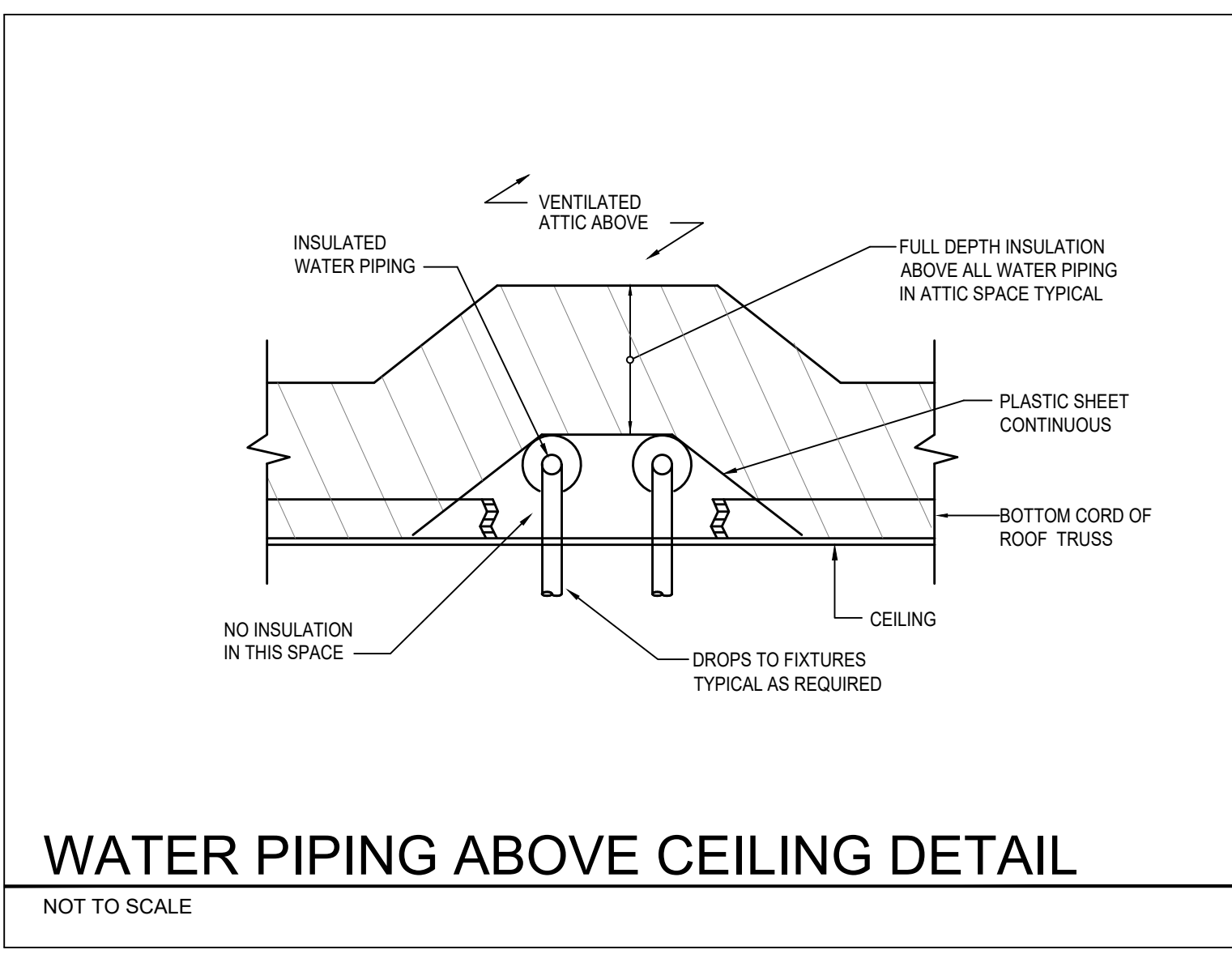
REMARKS:  
1. POWER DIRECT VENT DESIGN WITH TWO PIPE SEALED COMBUSTION SYSTEM.  
2. 2" VENT KIT - COUPLING, SOUND SUPPRESSOR.  
3. THROUGH ROOF CONCENTRIC VENT KIT.  
4. PROVIDE WITH CONDENSATE DRAINAGE PIPING FROM BLOWER ASSEMBLY AND NEUTRALIZATION CHAMBER KIT.  
OTHER ACCEPTABLE MANUFACTURERS INCLUDE: STATE, RHEEM, BRADFORD WHITE. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

ELECTRIC WATER HEATER SCHEDULE											
MARK	MANUFACTURER	MODEL	TANK CAPACITY (GAL)	RECOVERY (GPH) AT 90°F RISE	EXPANSION TANK #	UEF	ELECTRICAL				REMARKS
							KW	V / Ø / Hz	MCA	MOCF	
EWH-01	A.O. SMITH	ENT-40	40	21	ET-01	0.92	4.5	240/1/60	27	30	1

REMARKS:  
1. T&P RELIEF VALVE.  
OTHER ACCEPTABLE MANUFACTURERS INCLUDE: STATE, RHEEM, BRADFORD WHITE OR EQUIVALENT.

EXPANSION TANK SCHEDULE						
MARK	MANUFACTURER	MODEL	LOCATION	TANK VOLUME (GAL)	ACCEPTANCE FACTOR	REMARKS
ET-01	AMTROL	ST-5	REFER TO PLANS	2.0	0.45	1,2,3,4

REMARKS:  
1. NON-ASME RATED  
2. 150 PSIG PRESSURE RATING  
3. 200°F. MAXIMUM ALLOWABLE WORKING TEMPERATURE  
4. 40 PSIG STANDARD FACTORY PRECHARGE  
OTHER ACCEPTABLE MANUFACTURERS INCLUDE: WESSELS, WATTS.  
REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.



# MECHANICAL LEGEND

HVAC	
SYMBOL	DESCRIPTION
	SUPPLY AIR DIFFUSER (4-WAY, 3-WAY, 2-WAY, 1-WAY)
	SUPPLY AIR DIFFUSER (ROUND)
	RETURN GRILLES
	EXHAUST GRILLES
	FLEXIBLE CONNECTION
	SUPPLY AIR DUCT (UP, - DOWN)
	RETURN AIR DUCT (UP, - DOWN)
	EXHAUST AIR DUCT (UP, - DOWN)
	ACCESS DOOR
	RECTANGULAR TO ROUND DUCTWORK TRANSITION
	RECTANGULAR TO RECTANGULAR TRANSITION
	DUCT CHANGE IN ELEVATION; R= RISE, D= DROP
	DUCT SIZE BACKDRAFT DAMPER (ARROW INDICATES FLOW DIRECTION)
	FIRE DAMPER
	MANUAL VOLUME CONTROL BALANCE DAMPER
	SMOKE DAMPER
	MOTORIZED DAMPER
	COMBINATION - FIRE / SMOKE DAMPER
	ELBOW WITH TURNING VANES
	ELBOW ROUND
	CONNECT NEW TO EXISTING
	INDICATES AIR FLOW DIRECTION
	EXISTING PIPING/DUCT/EQUIPMENT TO REMAIN
	EXISTING PIPING/DUCT/EQUIPMENT TO BE REMOVED
	CAP OR PLUG
	PIPE DOWN, PIPE UP
	INCRASER / REDUCER
	ROOM THERMOSTAT OR DUCT STAT
	SENSOR (CO, CO2, ETC.)
	HUMIDISTAT
	SUPPLY AIR DEVICE (S-1) / AIRFLOW (CFM)
	EQUIPMENT IDENTIFICATION
	DETAIL NO. / SHEET NO.
	SECTION NO. / SHEET NO.
	INDICATED TAG OR SHEET NOTE
	DEMOLITION NOTE
	REVISION TAG
	EXTENT OF DEMOLITION
	OUTSIDE AIR DUCTWORK
	REFRIGERANT LINE SET PIPING
	RETURN AIR DUCTWORK
	SUPPLY AIR DUCTWORK
	EXHAUST AIR DUCTWORK
	CONDENSATE DRAIN LINE
	REFRIGERANT LINE SET PIPING

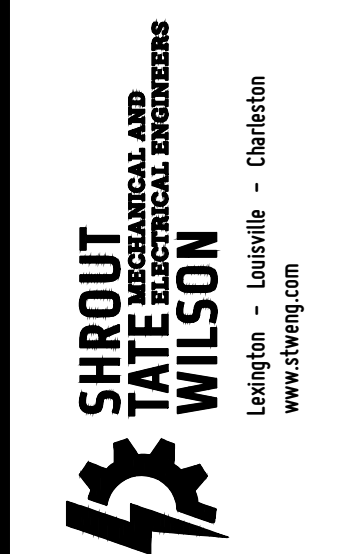
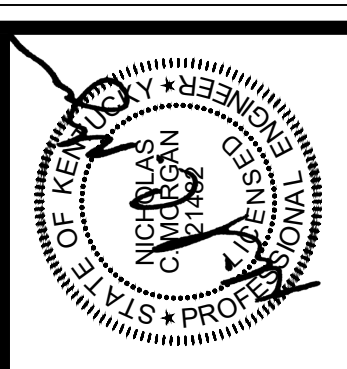
ABBREVIATIONS	
AFC	ABOVE FINISHED CEILING
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
BTU	BRITISH THERMAL UNIT
BTUH	BRITISH THERMAL UNITS PER HOUR
CFM	CUBIC FEET PER MINUTE
CU-X	CONDENSING UNIT
E-X	EXHAUST AIR DEVICE
EF-X	EXHAUST FAN DESIGNATION
EH-X	ELECTRIC HEATER
ESP	EXTERNAL STATIC PRESSURE
F-X	FURNACE WITH DX COOLING COIL
GBD	GRAVITY BACKDRAFT DAMPER
HP	HORSEPOWER
KW	KILOWATT
L-X	LOUVER DESIGNATION
MBH	THOUSAND BRITISH THERMAL UNITS PER HOUR
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
R-X	RETURN AIR DEVICE
S-X	SUPPLY AIR DEVICE
SP	TOTAL STATIC PRESSURE

# GENERAL NOTES:

- A. REFER TO SPECIFICATIONS AND THE CONTRACT DOCUMENTS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
- B. ALL MECHANICAL WORK SHALL BE PERFORMED BY A LICENSED MECHANICAL CONTRACTOR.
- C. ALL WORK SHALL BE COORDINATED AND SCHEDULED WITH THE CONSTRUCTION MANAGER (CM) OR GENERAL CONTRACTOR (GC), OTHER TRADES, THE OWNER, AND RELATED UTILITY COMPANIES. ALL WORK SHALL COINCIDE WITH THE CONSTRUCTION PHASING PER THE CONTRACT DOCUMENTS OR CONSTRUCTION DOCUMENTS AND/OR AS MODIFIED BY THE CM/GC AND APPROVED BY THE OWNER AND DESIGN TEAM. THE MECHANICAL CONTRACTOR SHALL COORDINATE AND DEVELOP A PHASING PLAN WHERE ONE IS NOT EXPLICITLY SHOWN AND SHALL ENSURE THAT SAID PHASING PLAN IS APPROVED PRIOR TO PROCEEDING WITH WORK. ANY AND ALL DEMOLITION SHALL NOT PERMIT INTERRUPTION OF SERVICE IN AN OCCUPIED BUILDING UNLESS COORDINATED AND APPROVED.
- D. ALL DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENTS OR GEOMETRICAL RELATIONSHIPS OF DUCTWORK, PIPING, EQUIPMENT, AND SERVICES. THEY ARE NOT INTENDED TO SPECIFY OR SHOW EVERY OFFSET, SEQUENCE, DEVICE, OPTION, FITTING, VALVE, OR COMPONENT. CONTRACTOR TO PROVIDE ANY ADDITIONAL DUCT OR PIPING OFFSETS AND/OR FITTINGS, INCLUDING DIVIDED DUCTS AND FLATTENED DUCTS, REQUIRED FOR PROPER INSTALLATION AND TO MAINTAIN CLEARANCES AS ENCOUNTERED IN THE FIELD.
- E. THE MECHANICAL CONTRACTOR SHALL OBTAIN A COPY OF THE ENTIRE SET OF CONTRACT DOCUMENTS PRIOR TO BID AND SHALL COORDINATE ROUTING AND INSTALLATION OF MECHANICAL DUCTWORK, PIPING, AND EQUIPMENT WITH ALL OTHER DISCIPLINES AND TRADES INCLUDING BUT NOT LIMITED TO CIVIL, ARCHITECTURAL, STRUCTURAL, FIRE SUPPRESSION, PLUMBING, AND ELECTRICAL.
- F. REFER TO THE ENTIRE SET OF CONTRACT DOCUMENTS FOR DETAILS OF CONSTRUCTION AND INSTALLATION REQUIREMENTS. FURNISH ALL LABOR, MATERIAL, AND EQUIPMENT REQUIRED FOR COMPLETION AND OPERATION OF A FULLY FUNCTIONAL MECHANICAL SYSTEM AND IN ACCORDANCE WITH ALL APPLICABLE CODES AND STANDARDS INCLUDING BUT NOT LIMITED TO THE KENTUCKY BUILDING CODE, ASHRAE, IMC, IECC, SMACNA, AND NFPA.
- G. THE EXACT LOCATIONS OF ALL EQUIPMENT, DUCTS, DIFFUSERS, ETC. SHALL BE COORDINATED WITH ALL OTHER TRADES, INCLUDING MOUNTED LIGHTING AND ELECTRICAL REQUIREMENTS TAKE PRECEDENCE OVER CEILING MOUNTED MECHANICAL EQUIPMENT. SEE ARCHITECTURAL REFLECTED CEILING PLANS FOR CEILING GRID AND LIGHTING LAYOUT FOR COORDINATION OF FINAL DIFFUSER LOCATIONS.
- H. THE MECHANICAL DRAWINGS REFLECT A "BASIS OF DESIGN" HVAC SYSTEM THAT HAS BEEN DESIGNED AROUND SPECIFIC PRODUCTS/MANUFACTURER'S (SEE SCHEDULES). THE SELECTION OF A "BASIS OF DESIGN" HAS INFLUENCED THE DESIGNS OF OTHER TRADES (ELECTRICAL, STRUCTURAL, ETC.). THE CONTRACTOR MAY USE "NON-BASIS OF DESIGN" PRODUCTS/MANUFACTURER'S AS PERMITTED BY THE SPECIFICATIONS AND/OR CONTRACT DOCUMENTS. COORDINATION OF ALL MODIFICATIONS TO EACH DISCIPLINE WHICH RESULT FROM THE USE OF "NON-BASIS OF DESIGN" EQUIPMENT OR MATERIALS SHALL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR. IF "NON-BASIS OF DESIGN" MANUFACTURERS, SIZES, OR MODEL NUMBERS ARE BID, SUBMITTED, OR INSTALLED, IT IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR AND ALL OF HIS OR HER SUBCONTRACTORS TO COORDINATE ALL DIFFERENCES PRIOR TO BID. ALL COSTS OF ALL TRADES ASSOCIATED WITH THE USE OF "NON-BASIS OF DESIGN" EQUIPMENT SHALL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR AND SHALL BE INCLUDED IN THE BID. SUBSEQUENTLY, ANY ADDITIONAL COST BORE BY THE ENGINEER (MECHANICAL, ELECTRICAL, ETC) TO ACCOMMODATE "NON-BASIS OF DESIGN" EQUIPMENT SHALL BE BORE BY THE CONTRACTOR AND PAID TO THE ENGINEER OF RECORD DURING SUBMITTALS.
- I. EQUIPMENT OR MATERIALS AS ALLOWED BY THE SPECIFICATIONS AND/OR CONTRACT DOCUMENTS, WHICH ARE INSTALLED AND SUBSEQUENTLY VIEWED UNSATISFACTORY BY THE OWNER AND/OR ENGINEER WITHIN THE WARRANTY PERIOD, SHALL BE REMOVED COMPLETELY BY THE CONTRACTOR AND REPLACED WITH THE ORIGINAL DESIGN OR CORRECTED AS DIRECTED BY THE ENGINEER WITHOUT ADDITIONAL COST TO THE OWNER.
- J. CONTRACTOR SHALL VISIT THE JOB SITE, FIELD VERIFY FIT, COORDINATE WITH OTHER TRADES, AND BECOME FAMILIAR WITH ALL PROJECT CONDITIONS PRIOR TO FABRICATING DUCTWORK, INSTALLING EQUIPMENT, ETC. NO ALLOWANCES WILL BE MADE FOR LACK THEREOF.
- K. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION AND COSTS FOR ALL PERMITS, TESTING, AND INSPECTIONS.
- L. CONTRACTOR TO REMOVE UNUSED/ABANDONED HVAC SYSTEMS AND EQUIPMENT UNLESS INDICATED OTHERWISE ON THE CONTRACT DOCUMENTS.
- M. COORDINATE WITH THE CONTRACT DOCUMENTS AND PROVIDE TEMPORARY HEAT AS REQUIRED.
- N. INFORMATION AND COMPONENTS SHOWN ON RISER DIAGRAMS OR DETAILS BUT NOT SHOWN ON PLANS AND VICE VERSA, SHALL BE PROVIDED AS IF REQUIRED BY BOTH.
- O. THE ENTIRE MECHANICAL INSTALLATION SHALL BE PROVIDED AND INSTALLED AS REQUIRED TO MAINTAIN FIRE/SMOKE RATINGS AND/OR "UL" ASSEMBLY RATINGS AS REQUIRED BY THE CONTRACT DOCUMENTS AND AS SHOWN ON THE ARCHITECTURAL AND MECHANICAL DRAWINGS. SEAL AROUND ALL PENETRATIONS THROUGH ALL FIRE/SMOKE SEPARATIONS AND/OR "UL" RATED ASSEMBLIES. COORDINATE ALL PENETRATIONS WITH THE CONSTRUCTION MANAGER AND/OR GENERAL CONTRACTOR. PROVIDE ADDITIONAL FIRE DAMPERS, SMOKE DETECTORS, AND SMOKE DAMPERS (INCLUSIVE OF WIRING) AS REQUIRED FOR A FULLY FUNCTIONAL AND CODE COMPLIANT SYSTEM.
- P. ALL DUCTWORK, PIPING, AND MECHANICAL EQUIPMENT SHALL BE SUPPORTED DIRECTLY FROM THE STRUCTURE. NO OTHER TRADES, I.E. ELECTRICAL, CEILING, PLUMBING, ETC., SHALL BE SUSPENDED, HUNG, OR SUPPORTED FROM MECHANICAL DUCTWORK OR MECHANICAL PIPING.
- Q. ALL BUILDING PENETRATIONS MUST BE COORDINATED WITH THE ARCHITECT AND SHALL BE FLASHED AND SEALED WEATHER-TIGHT. ALL MATERIALS AND COLORS MUST BE PRE-APPROVED BY THE ARCHITECT. NEW OPENINGS AND/OR PENETRATIONS FOR MECHANICAL ITEMS SHALL BE CUT, SLEEVED, ETC. BY THE MECHANICAL CONTRACTOR. ALL OPENINGS SHALL BE CORE DRILLED OR SAW-CUT. NO "HAMMER DRILLING" WILL BE ALLOWED.
- R. ROUTE DUCTWORK AS HIGH AS POSSIBLE TO FACILITATE ACCESS TO ABOVE CEILING SPACE. COORDINATE ROUTING WITH OTHER SERVICES AND TRADES. PROVIDE ADDITIONAL DUCTWORK, OFFSETS, ETC. TO ACCOMMODATE FIELD CONDITIONS AS REQUIRED FOR A COMPLETE AND FUNCTIONING SYSTEM AT NO ADDITIONAL COST. ADDITIONAL OFFSETS REQUIRE APPROVAL FROM THE ENGINEER. ROUTE DUCTWORK BETWEEN JOISTS WHERE POSSIBLE.
- S. ALL AIR DEVICES LOCATED ABOVE GYPBOARD OR HARD CEILINGS SHALL HAVE ACCESSIBLE BALANCING DAMPERS.
- T. ALL DUCTWORK SHALL BE CONSTRUCTED AND INSTALLED PER SMACNA HVAC DUCT CONSTRUCTION STANDARDS.
- U. PROVIDE AND INSTALL DUCT ACCESS DOORS FOR INSPECTION OF ALL INSTALLED FIRE DAMPERS AS DIRECTED BY SMACNA HVAC CONSTRUCTION STANDARDS.
- V. MAXIMUM FLEXIBLE DUCT LENGTH SHALL BE 5'-0". ALL FLEXIBLE DUCT SHALL CONFORM TO THE REQUIREMENTS OF UL 181 FLEXIBLE AIR DUCTS. SUPPORT TO ELIMINATE SAGGING AND KINKING. INSULATED FLEXIBLE DUCTS SHALL MEET MINIMUM R-VALUES REQUIRED BY THE IECC.
- W. ALL HVAC EQUIPMENT TO BE INSTALLED PER MANUFACTURER'S REQUIREMENTS. UTILIZE FACTORY FILTERS DURING CONSTRUCTION.
- X. THE MECHANICAL CONTRACTOR SHALL BALANCE SYSTEM TO AIR QUANTITIES INDICATED ON PLANS AND PROVIDE OWNERS REPRESENTATIVES WITH COMPLETE NEBB/AABC BALANCE REPORT. THE MECHANICAL CONTRACTOR SHALL PROVIDE AS MANY ADDITIONAL SITE VISITS BY THE LICENSED TAB CONTRACTOR AS REQUIRED BY THE ENGINEER FOR A COMPLETE AND FUNCTIONING AND APPROVED SYSTEM IN COMPLIANCE WITH THE CONTRACT DOCUMENTS.
- Y. ALL RECTANGULAR 90 DEG. AND 45 DEG. ELBOWS SHALL HAVE TURNING VANES.
- Z. ALL DUCT DIMENSIONS SHOWN ARE INTERIOR "CLEAR" DUCT DIMENSIONS.
- AA. MAINTAIN 10'-0" MINIMUM CLEARANCE BETWEEN OUTDOOR AIR INTAKES AND EXHAUST, PLUMBING VENTS, ETC. AND/OR AS REQUIRED BY IMC, WHICHEVER IS MORE STRINGENT.
- AB. MAINTAIN 10'-0" MINIMUM CLEARANCE FROM EDGE OF ROOFTOP EQUIPMENT TO ROOF EDGE UNLESS RAILING OR PARAPET OF SUFFICIENT HEIGHT IS TO BE PROVIDED IN ACCORDANCE WITH ALL APPLICABLE CODES INCLUDING BUT NOT LIMITED TO: KBC, IBC, IMC, LOCAL CODES, OSHA GUIDELINES (WHERE APPLICABLE). REFER TO ARCHITECTURAL.
- AC. ALL CONTROL WIRING AND CONDUIT SHALL COMPLY WITH NEC.
- AD. MECHANICAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR AND DRAWINGS FOR CONNECTIONS AND LOCATION OF ALL EQUIPMENT.
- AE. CONTRACTOR SHALL PROVIDE ADDITIONAL OFFSETS OR BENDS IN PIPING AS REQUIRED TO ALLOW FOR EXPANSION AND CONTRACTION DUE TO TEMPERATURE CHANGES AND DIFFERENCES IN THE AMBIENT TEMPERATURE WHEN PIPING AND EQUIPMENT IS INSTALLED.
- AF. PROVIDE MANUAL AIR VENTS AT HIGH POINTS AND DRAIN VALVES AT LOW POINTS OF ALL HYDRONIC PIPING. AUTOMATIC AIR VENTS SHALL BE INSTALLED WHERE INDICATED IN THE CONTRACT DOCUMENTS AND/OR AS REQUIRED FOR A FULLY FUNCTIONAL SYSTEM.
- AG. MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE ARCHITECTURAL PLANS AND GC/CM ALL AREAS WHERE MECHANICAL / ELECTRICAL EQUIPMENT AND DEVICES ARE INDICATED TO BE DEMOLISHED AND THE REQUIRED REPAIR AND RESTORATION OF ALL WALLS, ROOFS, CEILINGS, FLOORS, ETC. SHALL BE INCLUDED IN THEIR BID.
- AH. ALL ROOF PENETRATIONS SHALL BE IN COMPLIANCE WITH THE ROOFING MANUFACTURER'S GUIDELINES AND THE AMERICAN ROOFING COUNCIL. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE AS NECESSARY TO MAINTAIN ALL WARRANTIES.
- AI. STRUCTURAL MEMBERS SHALL NOT BE CUT OR COMPROMISED IN ANY WAY.
- AJ. DO NOT BLOCK ACCESS TO HVAC OR ELECTRICAL EQUIPMENT. DO NOT INSTALL PIPING, DUCTWORK, OR EQUIPMENT OVER ELECTRICAL PANELS/SWITCHGEAR OR THE 30" x 42" (W x D) CLEARANCE IN FRONT OF THESE ELECTRICAL ITEMS. COORDINATE ADDITIONAL REQUIREMENTS WITH NEC.

# GENERAL DEMOLITION NOTES:

- A. GENERAL MECHANICAL DEMOLITION NOTES APPLY TO ALL MECHANICAL SHEETS.
- B. SEE ARCHITECTURAL DRAWINGS FOR BUILDING FLOOR PLAN LAYOUT.
- C. THE EXISTING CONDITIONS REPRESENTED ON PLANS DEPIC APPROXIMATE LOCATIONS AND SIZES OF EQUIPMENT AND COMPONENTS. FIELD-VERIFY ACTUAL CONDITIONS AND DETERMINE ACTUAL LOCATIONS AND SIZES OF EQUIPMENT PRIOR TO COMMENCING WORK.
- D. SUBSTANTIAL DEVIATIONS BETWEEN THE CONTRACT DOCUMENTS DEMOLITION SCOPE AND ACTUAL CONDITIONS SHALL BE REPORTED TO THE ARCHITECT/ENGINEER IN THE FORM OF A REQUEST FOR INFORMATION WITH THE DESCRIPTIONS AND SKETCHES.
- E. SCHEDULING OF ALL DEMOLITION OPERATIONS SHALL BE COORDINATED WITH OWNER NO LATER THAN THE DATE OF THE PROJECT PRECONSTRUCTION MEETING.
- F. PROVIDE DEMOLITION WORK SHOWN ON THE DRAWINGS AND ALL INCIDENTAL DEMOLITION WORK REQUIRED TO COMPLETE NEW CONSTRUCTION WORK.
- G. PROTECT EXISTING EQUIPMENT, PIPING, DUCTWORK, AIR OPENINGS, ETC. FROM DIRT AND DAMAGE DURING DEMOLITION AND CONSTRUCTION.
- H. COMPLETELY REMOVE ALL COMPONENTS INDICATED ON PLANS FOR DEMOLITION INCLUDING REMOVAL OF ALL SUPPORTS, HANGERS, PIPING, WIRING, ECT. THAT ARE ASSOCIATED WITH THE COMPONENT BEING REMOVED, UNLESS OTHERWISE STATED.
- I. CONTRACTOR SHALL PATCH AND REPAIR ALL DAMAGE ASSOCIATED WITH DEMOLITION. ALL FINISHED SURFACES (FLOORS, WALLS, CEILINGS, ROOF, ETC.) SHALL MATCH EXISTING CONDITIONS.
- J. WHERE DUST CREATED DURING DEMOLITION MAY ENTER AN HVAC SYSTEM RETURN AIR DUCT, PROVIDE TEMPORARY FILTERS AS REQUIRED TO PREVENT DUST INTRUSION.
- K. REMOVE, RELOCATE AND REINSTALL ANY COMPONENTS WHEN REQUIRED TO ACCOMMODATE DEMOLITION OR NEW WORK SCOPE. COMMUNICATE TO ARCHITECT/ENGINEER THE EXTENT OF ITEMS TO BE REMOVED PRIOR TO BEGINNING THE WORK.
- L. STORE AND PROTECT ALL EXISTING ITEMS WHICH ARE TO BE RELOCATED OR REUSED.
- M. WHERE DEMOLITION/RE-WORK OF EXISTING MEP ITEMS CONTAINING HAZARDOUS MATERIALS OCCUR, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER FOR ABATEMENT AND REMEDIATION AS REQUIRED.



HOLLY PARK RENOVATIONS AND SITE DRAINAGE WORK  
 2714 HOLLY PARK DR  
 LOUISVILLE, KY 40214

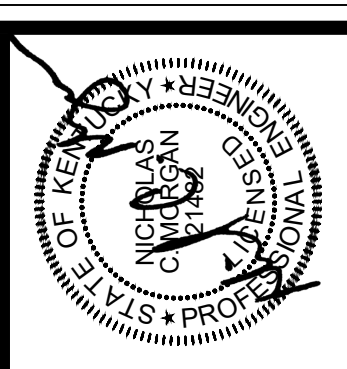
MECHANICAL LEGENDS AND GENERAL NOTES

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SHEET  
**M0.1**



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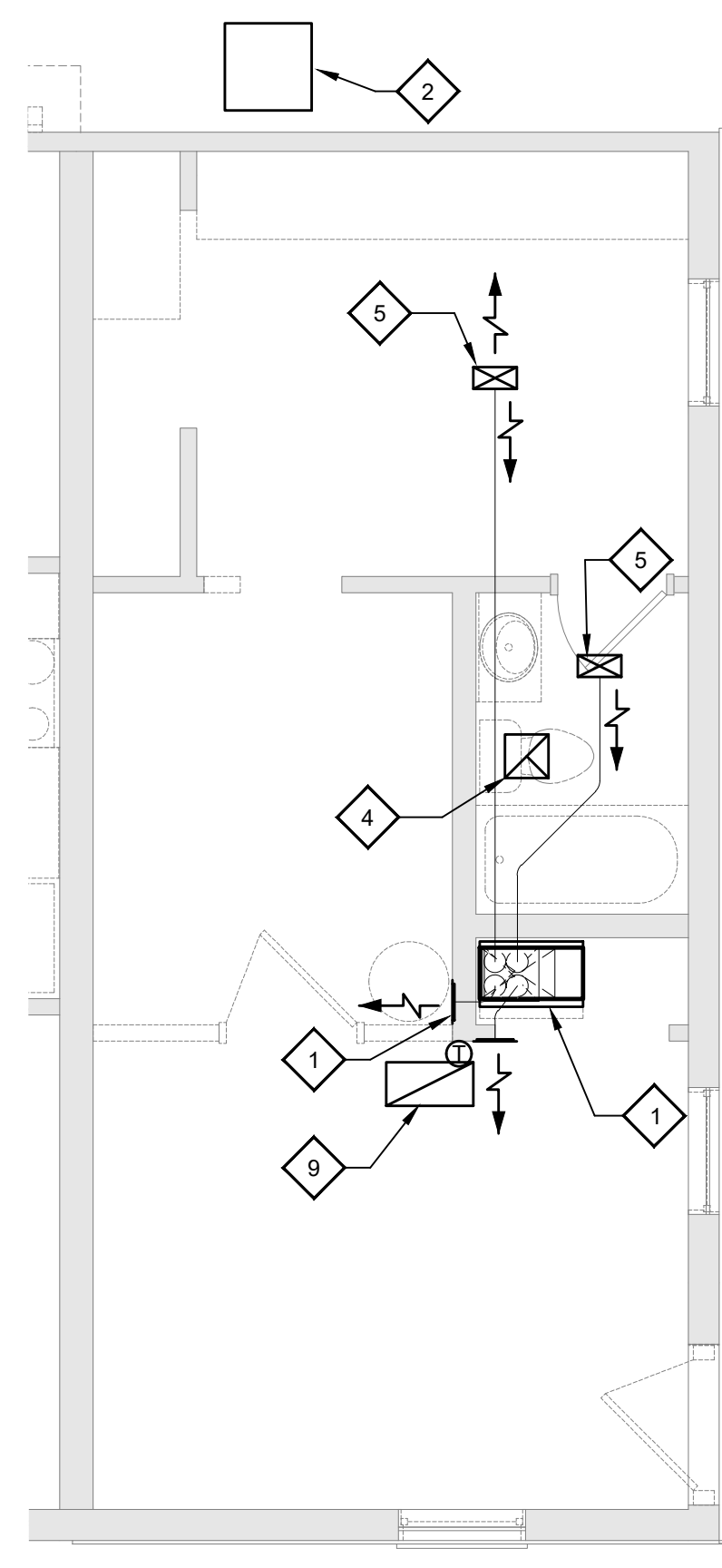
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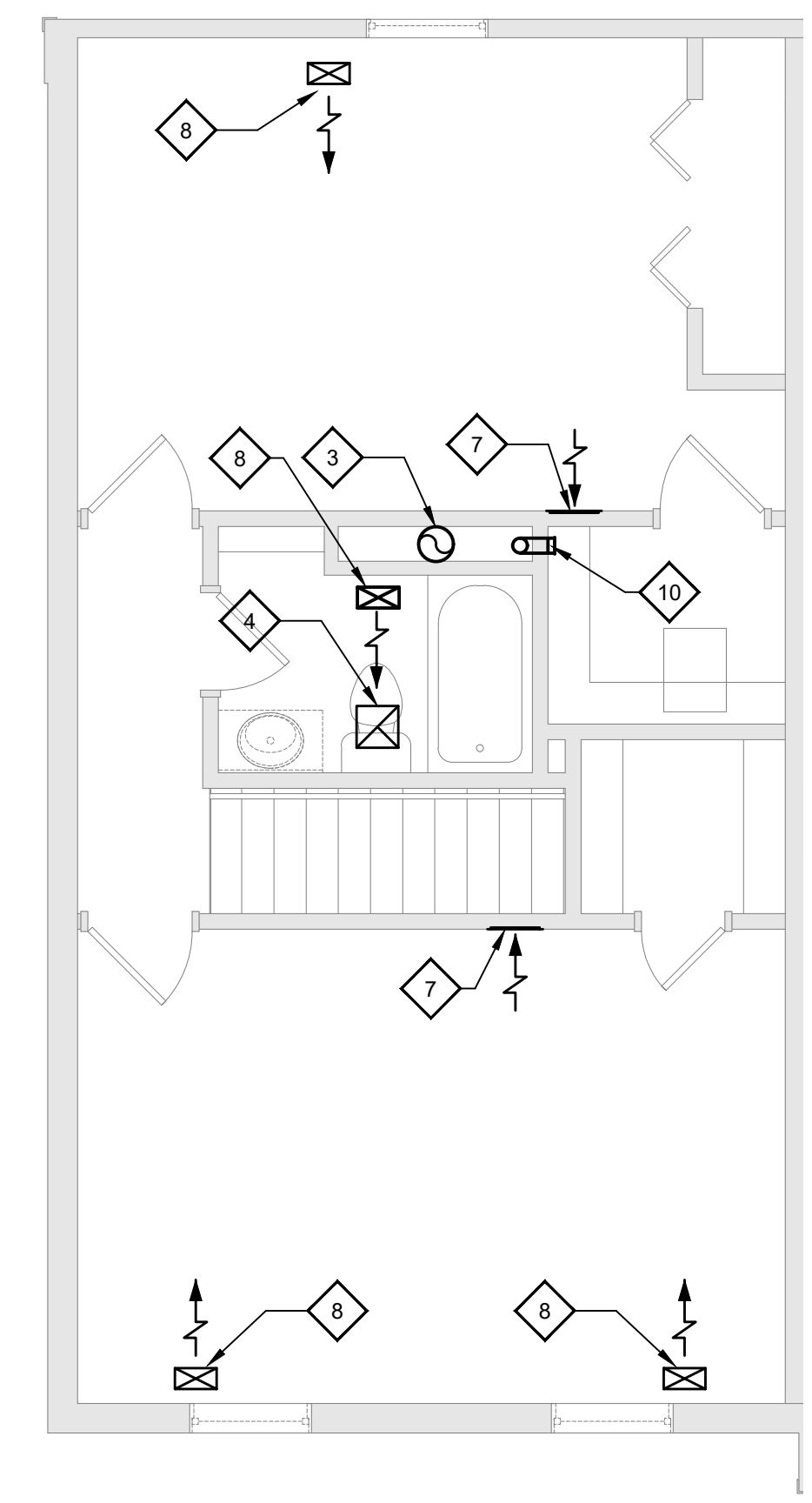
- A. REFER TO SHEET M0.1 FOR GENERAL NOTES.

**SHEET KEYNOTES:**

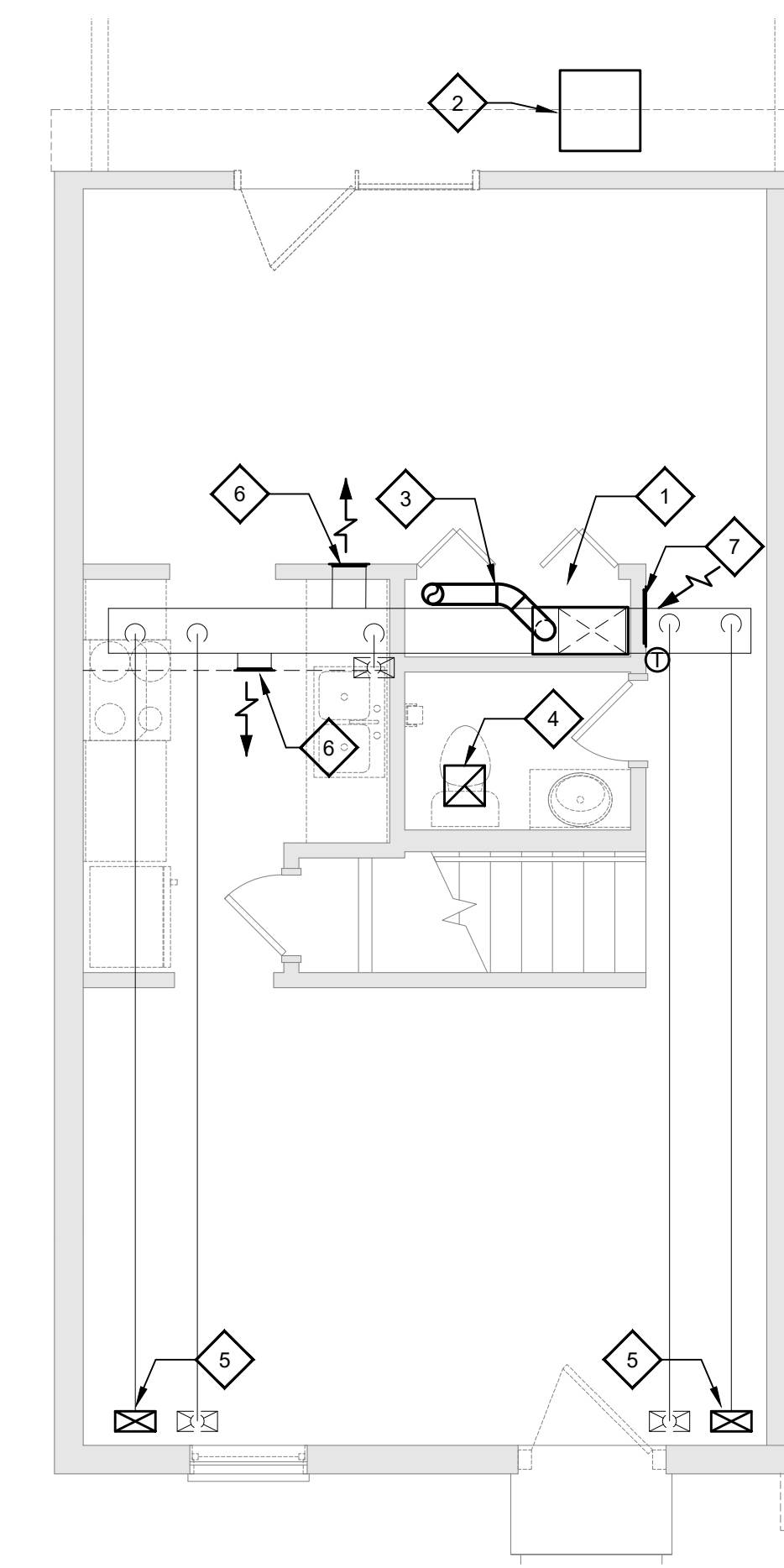
- EXISTING GAS FIRED FURNACE AND COOLING COIL AND RELATED THERMOSTAT CONTROLS TO BE REMOVED FOR REPLACEMENT WITH NEW FURNACE/COOLING COIL. SEE NEW WORK PLAN. DISCONNECT FROM EXISTING DUCTWORK AND GAS PIPING.
- EXISTING CONDENSING UNIT (FIELD VERIFY EXACT LOCATION) TO BE REMOVED ALONG WITH ALL RELATED REFRIGERANT PIPING TO INDOOR FURNACE COOLING COIL. REFER TO SITE DRAWINGS FOR EXISTING CONDENSING UNIT LOCATIONS.
- EXISTING GAS FLUE FOR FURNACE AND WATER HEATER TO BE REMOVED THROUGH ROOF. CUT AND PATCH WALL AS/IF REQUIRED.
- EXISTING CEILING MOUNTED EXHAUST FAN AND RELATED EXHAUST DUCTWORK IN ATTIC TO BE REMOVED FOR REPLACEMENT WITH NEW FAN AND DUCTWORK. SEE NEW WORK PLAN. DISCONNECT FROM EXISTING EXHAUST DUCTWORK AS REQUIRED.
- EXISTING CEILING MOUNTED SUPPLY AIR REGISTER TO BE REMOVED FOR REPLACEMENT WITH NEW REGISTER. SEE NEW WORK PLAN.
- EXISTING WALL MOUNTED SUPPLY AIR REGISTER TO BE REMOVED FOR REPLACEMENT WITH NEW REGISTER. SEE NEW WORK PLAN.
- EXISTING WALL MOUNTED RETURN AIR GRILLE TO BE REMOVED FOR REPLACEMENT WITH NEW GRILLE. SEE NEW WORK PLAN.
- EXISTING FLOOR MOUNTED SUPPLY AIR REGISTER TO BE REMOVED FOR REPLACEMENT WITH NEW REGISTER. SEE NEW WORK PLAN.
- EXISTING FLOOR MOUNTED RETURN AIR GRILLE TO BE REMOVED AND LOCATION OF OF GRILLE TO BE REVISED. SEE NEW WORK PLAN. REWORK EXISTING RETURN AIR DUCTWORK AS REQUIRED. FLOOR TO BE PATCHED AS REQUIRED.
- EXISTING DRYER VENTING TO BE REMOVED FOR REPLACEMENT WITH NEW DRYER VENTING. SEE NEW WORK PLAN.



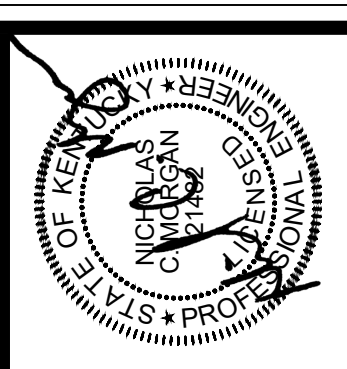
**3** ENLARGED DEMOLITION PLAN  
SINGLE BEDROOM - MECHANICAL  
SCALE: 1/4"=1'-0"  
0 2' 4' 8'



**2** ENLARGED DEMOLITION PLAN  
TYPICAL SECOND FLOOR - MECHANICAL  
SCALE: 1/4"=1'-0"  
0 2' 4' 8'



**1** ENLARGED DEMOLITION PLAN  
TYPICAL FIRST FLOOR - MECHANICAL  
SCALE: 1/4"=1'-0"  
0 2' 4' 8'



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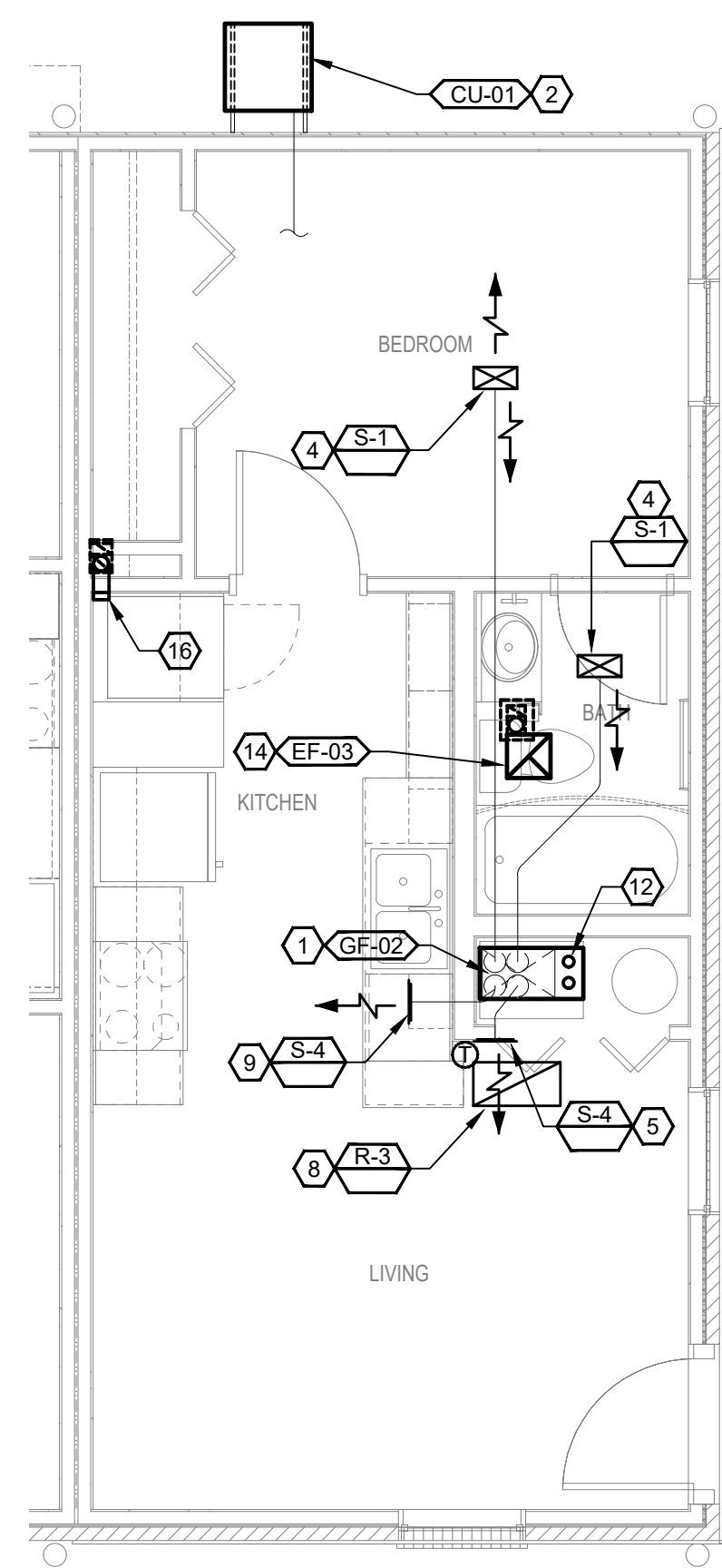
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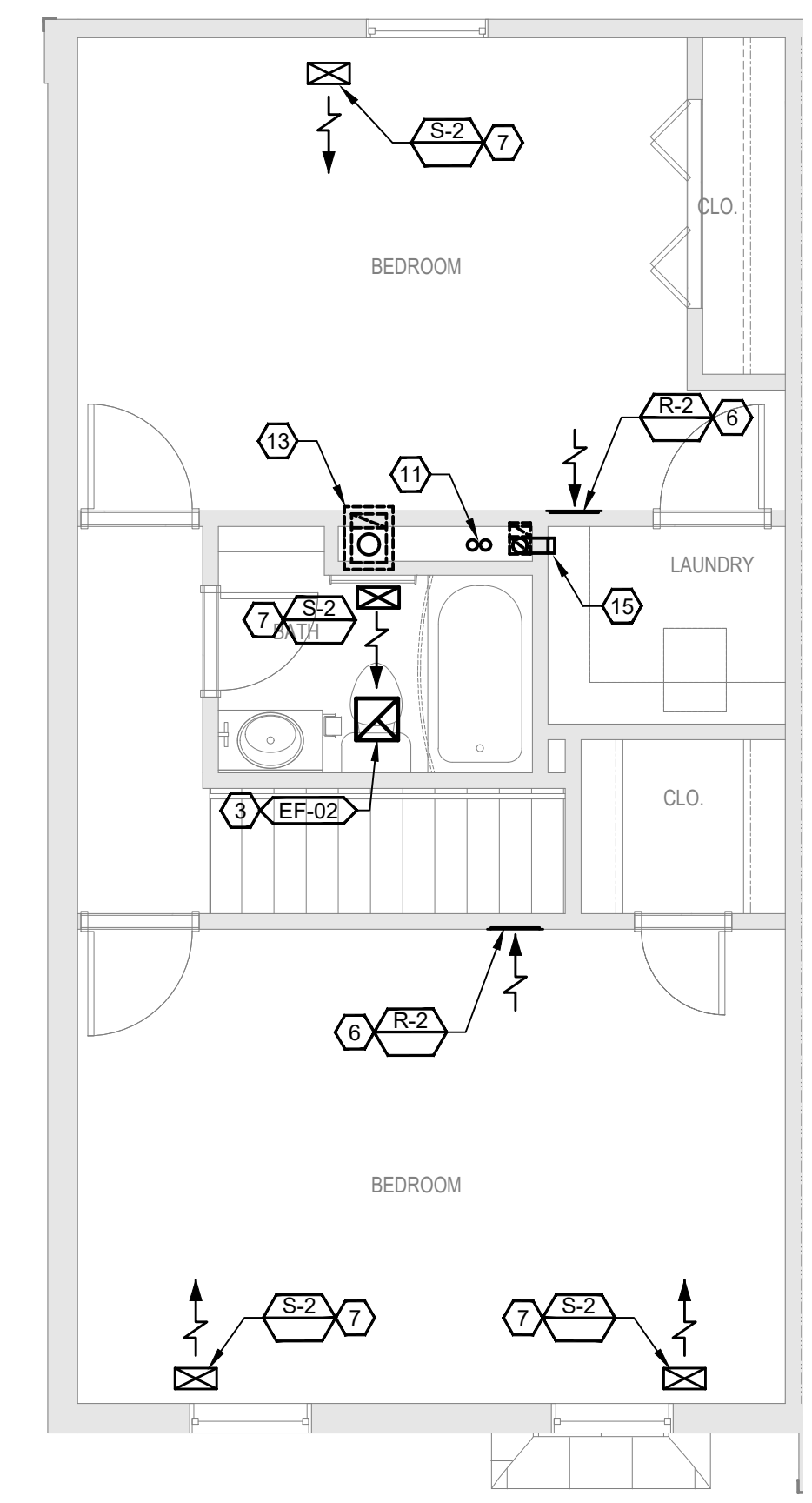
- A. REFER TO SHEET M0.1 FOR GENERAL NOTES.
- B. ALL EXISTING SUPPLY AIR DUCTWORK TO BE CLEANED. SEE SPECIFICATION SECTION 230130.51 HVAC AIR DISTRIBUTION SYSTEM CLEANING.

**○ SHEET KEYNOTES:**

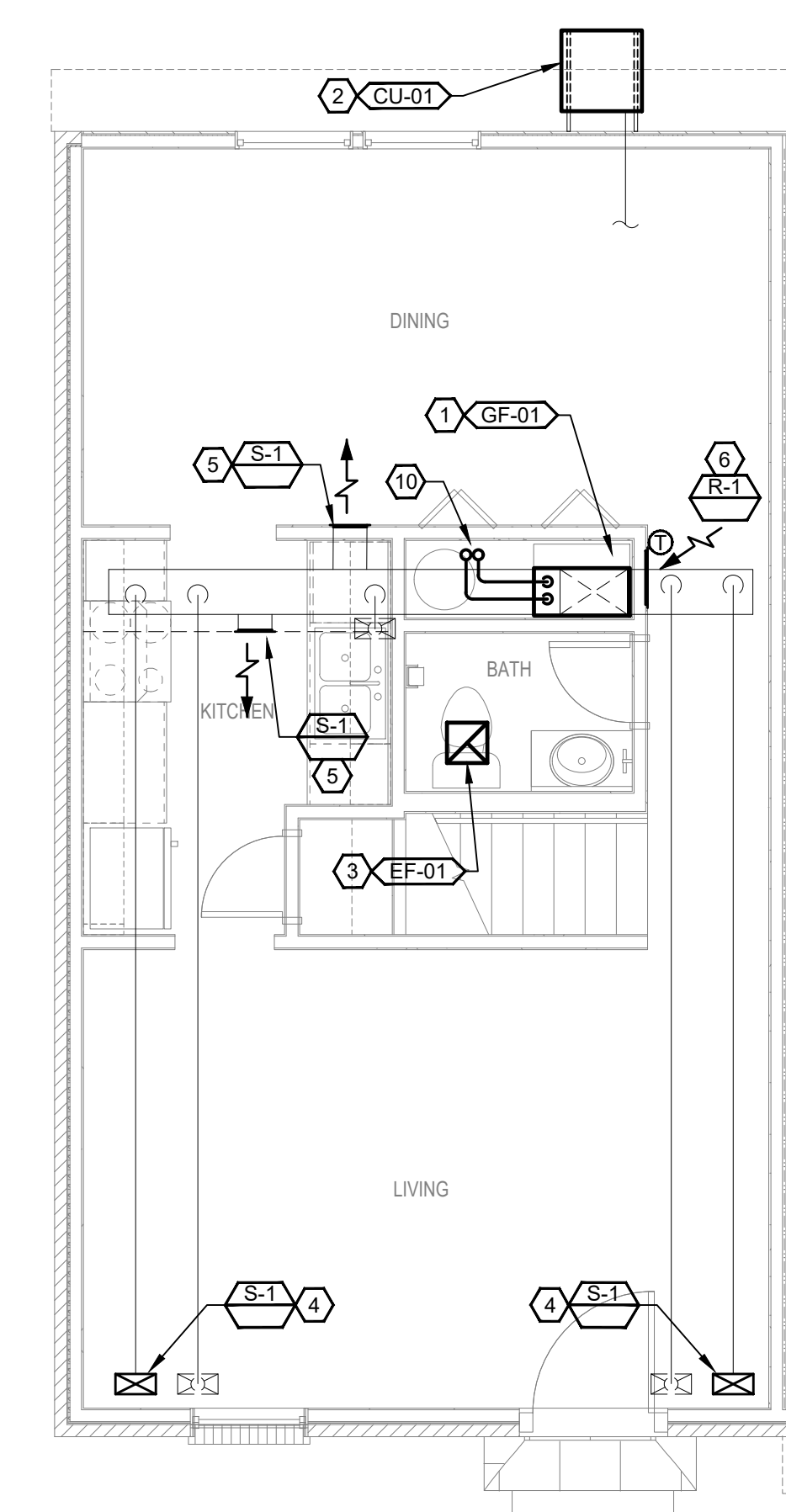
1. NEW GAS FIRED FURNACE WITH COOLING COIL TO REPLACE EXISTING REMOVED FURNACE. RECONNECT TO EXISTING DUCTWORK AND GAS PIPING AS REQUIRED. ROUTE COOLING COIL CONDENSATE DRAIN PIPING AND FURNACE CONDENSATE DRAIN PIPING TO SUMP PUMP IN CRAWL SPACE. SEE PLUMBING DRAWINGS FOR LOCATION.
2. NEW CONDENSING UNIT. MOUNT UNIT ON AC MOUNTING BRACKETS SECURED TO FOUNDATION WALL. BRACKETS TO BE 1.75" ALUMINUM - DIVERSITECH MODEL ACB-30-AL OR EQUAL. MOUNT CONDENSING UNIT AT FLOOR LEVEL. COORDINATE EXACT LOCATION WITH ACCESS DOOR TO CRAWL SPACE AND CRAWL SPACE VENTS. PROVIDE NEW REFRIGERANT PIPING FROM UNIT TO INTERIOR FURNACE MOUNTED COOLING COIL. ROUTE PIPING THROUGH CRAWL SPACE. COORDINATE EXACT LOCATION WITH FOUNDATIONS VENTS AND ACCESS PANEL AND WITH ARCHITECT.
3. NEW CEILING MOUNTED EXHAUST FAN TO REPLACE EXISTING REMOVED FAN. PROVIDE NEW 4" ROUND FLEXIBLE EXHAUST DUCTWORK FROM FAN TO NEW EXHAUST AIR ROOF CAP ON ROOF. SEE NOTE #13.
4. NEW CEILING MOUNTED SUPPLY AIR REGISTER TO REPLACE REMOVED REGISTER.
5. NEW WALL MOUNTED SUPPLY AIR REGISTER TO REPLACE EXISTING REMOVED REGISTER.
6. NEW WALL MOUNTED RETURN AIR GRILLE TO REPLACE EXISTING REMOVED GRILLE.
7. NEW FLOOR MOUNTED SUPPLY AIR REGISTER TO REPLACE EXISTING REMOVED REGISTER.
8. NEW LOCATION FOR NEW FLOOR MOUNTED RETURN GRILLE TO REPLACE EXISTING REMOVED GRILLE. REWORK EXISTING RETURN AIR DUCTWORK WITHIN CRAWL SPACE AS REQUIRED FOR NEW GRILLE LOCATION.
9. MOUNT NEW REGISTER ON SOFFIT SIDEWALL ABOVE CABINETS. EXTEND EXISTING SUPPLY DUCTWORK AS REQUIRED.
10. 3" COMBUSTION AIR AND VENT PIPING FROM FURNACE UP. SEE SECOND FLOOR PLAN.
11. 3" COMBUSTION AIR AND VENT PIPING FROM BELOW CONTINUED UP THROUGH ROOF VIA CONCENTRIC VENT THROUGH ROOF.
12. 3" COMBUSTION AIR AND VENT PIPING FROM FURNACE UP THROUGH ROOF VIA CONCENTRIC VENT THROUGH ROOF. CUT AND PATCH ROOF AS REQUIRED TO MATCH EXISTING AND MAKE WATER TIGHT.
13. BROAN-NUTONE MODEL 634M ROOF CAP OR EQUAL FOR EXHAUST FAN DUCTWORK CONNECTION.
14. NEW CEILING MOUNTED EXHAUST FAN TO REPLACE EXISTING REMOVED FAN. PROVIDE NEW 4" ROUND FLEXIBLE EXHAUST DUCTWORK FROM FAN TO NEW EXHAUST AIR ROOF CAP ON ROOF. ROOF CAP TO BE A BROAN-NUTONE MODEL 636 OR EQUAL. CUT AND PATCH ROOF AS REQUIRED TO MATCH EXISTING AND MAKE WATER TIGHT.
15. PROVIDE NEW 4" ROUND RIGID DRYER VENT TO REPLACE EXISTING REMOVED DRYER VENT. BEGIN VENT 4" AFF AND EXTEND UP THROUGH ROOF. TERMINATE ON ROOF WITH DRYERJACK MODEL 477 OR EQUAL. CUT AND PATCH ROOF AS REQUIRED TO MATCH EXISTING AND MAKE WATER TIGHT.
16. PROVIDE NEW 4" ROUND RIGID DRYER VENT. BEGIN VENT 4" AFF AND EXTEND UP THROUGH ROOF. TERMINATE ON ROOF WITH DRYERJACK MODEL 477 OR EQUAL.



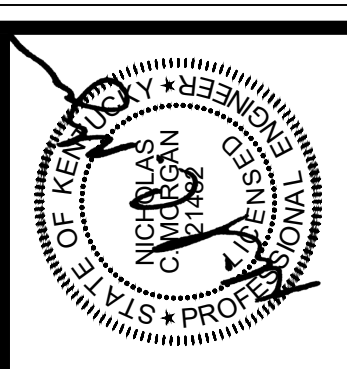
**4 ENLARGED NEW WORK PLAN SINGLE BEDROOM UNIT - MECHANICAL**  
SCALE: 1/4"=1'-0"



**2 ENLARGED NEW WORK PLAN TYPICAL SECOND FLOOR - MECHANICAL**  
SCALE: 1/4"=1'-0"



**1 ENLARGED NEW WORK PLAN TYPICAL FIRST FLOOR - MECHANICAL**  
SCALE: 1/4"=1'-0"



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**SPLIT SYSTEM FURNACE/CONDENSING UNIT SCHEDULE**

MARK	MANUFACTURER	MODEL	COOLING COIL	CFM @ .05" ESP	MIN SEER	COOLING CAPACITY MBH	HEATING CAPACITY INPUT/OUTPUT MBH	ELECTRICAL			REMARKS
								V/Ø/Hz	MCA	MOCp	
OUTDOOR CONDENSING UNIT											
CU-01	GOODMAN	GSX13024	-	-	13	23,000	-	240/1/60	10.3	15	1,2,3,4,5
CU-02	GOODMAN	GSX13024	-	-	13	23,000	-	240/1/60	10.3	15	1,2,3,4,5
INDOOR FURNACE UNIT WITH COOLING COIL											
GF-01	GOODMAN	GMES960402AN	CAPF3030	800	-	23,000	40.0/38.44	115/1/60	9.3	15	1,2,3,6,7,8,9
GF-02	GOODMAN	GMES960402AN	CAPF3030	800	-	23,000	40.0/38.44	115/1/60	9.3	15	1,2,3,6,7,8,9

REMARKS:  
 1. INSTALL PER MANUFACTURERS' INSTRUCTIONS. MAINTAIN MANUFACTURERS' CLEARANCES.  
 2. COOLING DESIGN CONDITIONS: EAT 80F DB / 67F WB AND 95F DB / 78F WB AMBIENT. HEATING AMBIENT DESIGN CONDITIONS BASED ON 5F DB / 4F WB.  
 3. R-410A REFRIGERANT. SIZE ALL REFRIGERANT PIPING PER MANUFACTURER'S INSTRUCTIONS. REVIEW PIPING RUNS WITH MANUFACTURER.  
 4. PROVIDE OUTDOOR UNIT WITH CONDENSER COIL GUARD.  
 5. INSTALL OUTDOOR UNIT ON WALL MOUNTED BRACKETS. SEE FLOOR PLAN FOR DETAILS.  
 6. PROVIDE INDOOR UNITS WITH VIBRATION ISOLATORS.  
 7. PROVIDE INDOOR UNIT WITH 1" THROWAWAY FILTERS.  
 8. PROVIDE INDOOR FURNACES WITH CONCENTRIC VENT TERMINAL.  
 9. PROVIDE CONDENSATE NEUTRALIZATION CHAMBER KIT FOR GAS VENT CONDENSATE DRAIN.  
 10. PROVIDE SYSTEM WITH 7-DAY PROGRAMMABLE THERMOSTAT CONTROL.  
 OTHER ACCEPTABLE MANUFACTURERS INCLUDE: CARRIER, LENNOX, TRANE. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

**EXHAUST FAN SCHEDULE**

MARK	MANUFACTURER	MODEL	CFM	ESP (IN H2O)	SONES	DRIVE TYPE	DUCT RPM	MOUNTING	ELECTRICAL			REMARKS
									V/Ø/Hz	FLA	MOCp	
EF-01	NUTONE	670	50	0.125	3.5	DIRECT	1700	CEILING	120/1/60	0.8	15	1,2,3,4
EF-02	NUTONE	670	50	0.125	3.5	DIRECT	1700	CEILING	120/1/60	0.8	15	1,2,3,4
EF-03	NUTONE	670	50	0.125	3.5	DIRECT	1700	CEILING	120/1/60	0.8	15	1,2,3,4

REMARKS:  
 1. PROVIDE WITH UNIT MOUNTED DISCONNECT AND UNIT MOUNTED SPEED CONTROLLER.  
 2. PROVIDE WITH APPROPRIATE BACKDRAFT DAMPER  
 3. PROVIDE WITH ISOLATION KIT TO SUPPORT FROM THE STRUCTURE  
 4. CONTROL FROM WALL SWITCH. COORDINATE WITH ELECTRICAL CONTRACTOR  
 OTHER ACCEPTABLE MANUFACTURERS INCLUDE: GREENHECK, GARNES, COOK. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

**AIR DEVICE SCHEDULE**

MARK	MANUFACTURER	MODEL	MODULE	NECK	MAX CFM	S. P.	OBD	MAX NC	MOUNTING	COLOR	REMARKS
S-1	PRICE	540	12x6	10x4	110	.046"	YES	20	CEILING/SIDEWALL	BY ARCHITECT	1,2
S-2	PRICE	LMPH	14x6	12x4	110	.046"	YES	20	FLOOR	BY ARCHITECT	1
S-3	PRICE	LMPH	12x6	10x4	110	.046"	YES	20	FLOOR	BY ARCHITECT	1
S-4	PRICE	540	12x8	10x6	125	.046"	YES	20	SURFACE	BY ARCHITECT	1,2
R-1	PRICE	535	18X18	16X16	800	.071"	YES	30	SIDEWALL	BY ARCHITECT	1,4
R-2	PRICE	535	16x8	14x6	200	.071"	YES	28	SIDEWALL	BY ARCHITECT	1,4
R-3	PRICE	LMPH	16x8	14x6	800	.071"	YES	28	FLOOR	BY ARCHITECT	1

REMARKS:  
 1. ALUMINUM GRILLE.  
 3. ADJUSTABLE FRONT BLADES WITH INTEGRATED DAMPER.  
 4. 45 DEGREE BLADES @ 1/2" SPACING.  
 OTHER ACCEPTABLE MANUFACTURERS INCLUDE: KRUEGER, TTUS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

# ELECTRICAL LEGEND

LIGHTING	
SYMBOL	DESCRIPTION
	SURFACE MOUNTED LUMINAIRE (NORMAL & EMERGENCY)
	RECESSED LUMINAIRE (NORMAL & EMERGENCY)
	WALL MOUNTED LUMINAIRE (NORMAL AND EMERGENCY)
	RECESSED LUMINAIRE (NORMAL AND EMERGENCY)
	SURFACE MOUNTED LUMINAIRE (NORMAL AND EMERGENCY)
	LINEAR PENDANT LUMINAIRE (NORMAL AND EMERGENCY)
	CIRCULAR LUMINAIRE (NORMAL AND EMERGENCY)
	WALL BRACKET LUMINAIRE (NORMAL AND EMERGENCY)
	INDUSTRIAL STRIP LUMINAIRE (NORMAL AND EMERGENCY)
	TRACK LUMINAIRE
	CEILING FAN
	TWO-HEAD EMERGENCY LIGHTING UNIT
	EMERGENCY REMOTE HEAD (SINGLE OR DOUBLE)
	EMERGENCY EXIT SIGN WITH COMBINATION EMERGENCY LUMINAIRE WALL AND CEILING MOUNT
	EMERGENCY EXIT SIGN - SINGLE FACE WITH ARROWS AS INDICATED WALL AND CEILING MOUNTED
	EMERGENCY EXIT SIGN - DOUBLE FACE
	POLE MOUNTED LUMINAIRE
	FLOOD OR SPOT LUMINAIRE
	BOLLARD OR POST TOP LUMINAIRE
	LIGHTING CONTROL RISER REFERENCE TAG
	PHOTOCELL
	EMERGENCY POWER PACK
	EMERGENCY BYPASS RELAY (UL924)
	EMERGENCY TRANSFER CONTROL (UL1008)
	BATTERY PACK
	LIGHTING CONTROL POWER PACK
	PORT INJECTOR
	LOW VOLTAGE LIGHTING RELAY PANEL
	PLUG LOAD CONTROL PACK
	ROOM CONTROLLER
	NETWORK BRIDGE
	SYSTEM CONTROLLER
	USER CONTROLLER
	POWER SUPPLY
	TIME CLOCK
	CONTACTOR, POLES AS REQUIRED
	RJ45 CONTROL WIRE SPLITTER
	DAYLIGHT SENSOR
	DUAL TECHNOLOGY LOW VOLTAGE CORNER MOUNTED OCCUPANCY SENSOR WITH POWER PACK AND CEILING MOUNT OR WALL MOUNT BRACKET AS SHOWN.
	DUAL TECHNOLOGY LOW VOLTAGE CEILING MOUNTED, 360° OCCUPANCY SENSOR.
	LIGHTING CONTROL PANEL
	LIGHT SWITCH - SUBSCRIPT INDICATES THE FOLLOWING : 3 - 3 WAY, 4 - 4 WAY, K - KEY OPERATED, D - DIMMER, OS - LINE VOLTAGE OCCUPANCY SENSOR, L - LOW VOLTAGE, M - MANUAL MOTOR STARTER W/ HANDLE GUARD KIT AND PADLOCK. SEE LIGHTING CONTROL DIAGRAM SHEET FOR OTHER SUBSCRIPTS.

ONE LINE DIAGRAM	
SYMBOL	DESCRIPTION
	CIRCUIT BREAKER
	GROUND FAULT PROTECTION
	VARIABLE FREQUENCY DRIVE
	DIGITAL MONITORING METER
	SURGE PROTECTION DEVICE
	DIGITAL METER DISPLAY
	POWER METERING DEVICE
	NON FUSED SWITCH
	FUSED SWITCH
	FUSE
	RELAY (NORMALLY OPEN)
	PANEL
	DOUBLE THROW SWITCH OR TRANSFER SWITCH

POWER	
SYMBOL	DESCRIPTION
	TAMPER RESISTANT DUPLEX RECEPTACLE - SUBSCRIPT INDICATES THE FOLLOWING : C - INSTALL 4 INCHES ABOVE COUNTER OR BACKSPASH, CM - CEILING MOUNTED, E - EMERGENCY, G - GROUND FAULT CIRCUIT INTERRUPTER, GB - BLANK FACE GROUND FAULT INTERRUPT, IG - ISOLATED GROUND, P - SPLIT-WIRED PLUG LOAD CONTROL, WP - WEATHER PROOF, A - AFCI, AG - COMBINATION AFCI/GFCI
	TAMPER RESISTANT QUADRUPLEX RECEPTACLE
	TAMPER RESISTANT SINGLE RECEPTACLE
	TAMPER RESISTANT SPECIAL PURPOSE RECEPTACLE
	TAMPER RESISTANT PEDESTAL MOUNTED RECEPTACLE
	TAMPER RESISTANT FLOOR MOUNTED RECEPTACLE AND COVERPLATE. SEE PLAN FOR CONFIGURATION.
	POKE THRU BOX
	COMBO POKE THRU BOX
	EMERGENCY SHUT-OFF BUTTON
	JUNCTION BOX
	HAND DRYER
	DISCONNECT SWITCH (SIZE/FUSING/POLES/NEMA - OPTIONAL)
	ENCLOSED CIRCUIT BREAKER DISCONNECT (SIZE/POLES/NEMA - OPTIONAL)
	COMBINATION MOTOR STARTER AND DISCONNECT (SIZE/FUSING/POLES/NEMA - OPTIONAL)
	MOTOR STARTER (SIZE/FUSING/POLES/NEMA - OPTIONAL)
	VARIABLE FREQUENCY DRIVE
	MOTOR
	CORD REEL
	CONDUIT TURNED DOWN
	CONDUIT TURNED UP
	CONDUIT WITH END CAP
	EQUIPMENT CONNECTION
	CONDUIT CONTINUATION
	TRANSFORMER; X - INDICATES IDENTIFICATION
	SURFACE MOUNTED PANELBOARD/DISTRIBUTION PANEL/AUTOMATIC TRANSFER SWITCH; X - INDICATES IDENTIFICATION
	FLUSH MOUNTED PANELBOARD; X - INDICATES IDENTIFICATION
	EXISTING SURFACE MOUNTED PANELBOARD/DISTRIBUTION PANEL; X - INDICATES IDENTIFICATION
	EXISTING FLUSH MOUNTED PANELBOARD; X - INDICATES IDENTIFICATION
	GROUND ROD
	LOW-VOLTAGE CIRCUIT WITH CONDUCTOR TYPES AS REQUIRED BY THE MANUFACTURER FOR THE PARTICULAR SYSTEM.
	UTP LIGHTING CONTROL CABLE
	CIRCUIT CONNECTED TO EMERGENCY POWER
	SURFACE MOUNTED RACEWAY
	BRANCH CIRCUIT HOMERUN TO PANELBOARD. THE NUMBER OF TICK MARKS INDICATES THE NUMBER OF CONDUCTORS. LONG TICK MARKS REPRESENT UNGROUNDED CONDUCTORS. SHORT TICK MARKS REPRESENT GROUNDED CONDUCTORS (NEUTRAL). A GROUNDING CONDUCTOR (GROUND) SHALL BE INSTALLED WITH ALL CIRCUITS. TICK MARKS AND CONDUCTOR SIZES ARE ONLY SHOWN ON THE HOMERUN. INSTALL THE REQUIRED QUANTITY AND SIZE CONDUCTORS TO EACH DEVICE ON THE SAME CIRCUIT AS INDICATED ON THE DRAWINGS. MINIMUM CONDUCTOR SIZE = #12 MINIMUM CONDUIT SIZE = 3/4 INCH SUBSCRIPT EXAMPLE: 4#8 = (3) UNGROUNDED AND (1) NEUTRAL CONDUCTORS SIZE IF OTHER THAN #12 1#10 = GROUNDING CONDUCTOR SIZE IF OTHER THAN #12 1" C = CONDUIT SIZE A-1 = PANEL NAME - POLE POSITION IN PANEL
	ELECTRICAL METER
	EXISTING UTILITY POLE
	NEW UTILITY POLE
	NEW UTILITY POLE WITH POLE MOUNTED TRANSFORMERS
	EXISTING UTILITY POLE WITH POLE MOUNTED TRANSFORMERS

## DEMOLITION vs EXISTING LINE WEIGHTS

DEMO	EXISTING

	3 POSITION SELECTOR SWITCH: LOCAL-OFF-REMOTE HAND-OFF-AUTOMATIC
	GROUND
	ELECTRIC HEATER

FIRE ALARM	
SYMBOL	DESCRIPTION
	FIRE ALARM MANUAL PULL STATION
	FIRE ALARM NOTIFICATION DEVICE (WALL & CEILING) - SUBSCRIPT INDICATES THE FOLLOWING : S - STROBE, SS - SPEAKER STROBE, H - HORN, HS - HORN STROBE, SP - SPEAKER
	FIRE ALARM INITIATION DEVICE (WALL & CEILING) - SUBSCRIPT INDICATES THE FOLLOWING : S - SMOKE, H - HEAT, CO - CARBON MONOXIDE, CS - COMBINATION CARBON MONOXIDE/SMOKE, CH - COMBINATION CARBON MONOXIDE/HEAT
	FIRE ALARM INITIATION AND NOTIFICATION DEVICE (WALL & CEILING) - SUBSCRIPT INDICATES THE FOLLOWING : SS - COMBINATION SMOKE DETECTOR/SOUNDER BASE
	FIRE ALARM DUCT TYPE SMOKE DETECTOR - SUBSCRIPT INDICATES EQUIPMENT IDENTIFICATION TAG
	MAGNETIC DOOR HOLDER (WALL & CEILING)
	FIRE ALARM TAMPER SWITCH
	FIRE ALARM FLOW SWITCH
	FIRE ALARM CONTROL PANEL. PANEL IS RECESSED TYPE WHEN SHOWN WITHIN WALLS ON DRAWING.
	FIRE ALARM ANNUNCIATOR. PANEL IS RECESSED TYPE WHEN SHOWN WITHIN WALLS ON DRAWING.

SYSTEMS	
SYMBOL	DESCRIPTION
	EXISTING COMMUNICATIONS OUTLET
	DATA OUTLET FOR WIRELESS ACCESS POINT WITH TWO RJ45 DATA JACKS WITH TWO UTP CABLES IN SURFACE RACEWAY, 1 INCH CONDUIT OR CABLE TRAY TO THE NEAREST MDF OR IDF. (WALL & CEILING)
	VOICE/DATA OUTLET WITH # VOICE AND # OF DATA JACKS AND # UTP CABLES IN SURFACE RACEWAY, 1 INCH CONDUIT, OR CABLE TRAY TO THE NEAREST MDF OR IDF (#V/#D - INDICATES THE NUMBER OF VOICE JACKS AND CABLES, #D - INDICATES THE NUMBER OF DATA JACKS AND CABLES), C - INSTALL 4 INCHES ABOVE COUNTER OR BACKSPASH, CG - CEILING MOUNTED
	PEDESTAL MOUNTED VOICE/DATA OUTLET WITH # VOICE AND # DATA JACKS AND # RJ45 DATA JACKS AND # UTP WET LOCATION CABLES IN A 1 INCH CONDUIT TO THE NEAREST MDF OR IDF (#V - INDICATES THE NUMBER OF VOICE JACKS AND CABLES, #D - INDICATES THE NUMBER OF DATA JACKS AND CABLES)
	FLOOR BOX WITH # RJ45 DATA JACKS. PROVIDE WITH COVERPLATE. INSTALL # UTP WET LOCATION CABLES IN A 1 INCH CONDUIT FROM THE DATA COMPARTMENT TO THE NEAREST MDF OR IDF (# - INDICATES THE NUMBER OF JACKS AND CABLES)
	MULTIMEDIA OUTLET. 4-11/16 INCHES OUTLET BOX WITH TWO 1-1/4 INCH CONDUITS TO ABOVE ACCESSIBLE CEILING. (WALL & CEILING)
	VGA/RCA OUTLET WITH ONE VGA CONNECTOR AND TWO RCA CONNECTORS. INSTALL CABLES IN SURFACE RACEWAY, 1-1/4 INCH CONDUIT, J-HOOKS OR CABLE TRAY. THE VGA CABLE MUST BE RAPID RUN TYPE WITH REMOVABLE LEADS OR APPROVED EQUAL.
	TELEVISION OUTLET WITH ONE F-TYPE CONNECTOR WITH COAXIAL CABLE IN SURFACE RACEWAY, 3/4 INCH CONDUIT, OR CABLE TRAY TO THE TELEVISION DISTRIBUTION SYSTEM
	PROJECTOR (CEILING & WALL MOUNT)
	ADMINISTRATIVE CONTROL CENTER. CONNECT TO THE INTERCOM SYSTEM AS REQUIRED
	DOOR RELEASE BUTTON
	INTERCOM SPEAKER (CEILING, RECESSED WALL-MOUNTED; HORN-TYPE WALL MOUNTED)
	INTERCOM SPEAKER WITH INTEGRAL VOLUME CONTROL (CEILING & WALL MOUNT)
	SELF-AMPLIFIED SPEAKER (CEILING & WALL MOUNT)
	SOUND SYSTEM SPEAKER (SC - CAFETERIA; SG - GYMNASIUM; SM - MEDIA CENTER)
	SPEAKER VOLUME CONTROL
	SINGLE SIDED CLOCK (DIGITAL & ANALOG)
	DOUBLE SIDED CLOCK (DIGITAL & ANALOG)
	MICROPHONE OUTLET
	AUXILIARY INPUT OUTLET FOR THE LOCAL SOUND SYSTEM
	INTERCOM CALL BUTTON
	CABLE TRAY. MINIMUM DIMENSIONS AS INDICATED ON DRAWINGS.
	J-HOOK PATHWAY
	FLOOR MOUNTED FOUR POST DATA RACK, 84 INCHES TALL, 30 INCHES DEEP, WITH VERTICAL WIRE MANAGEMENT.
	FLOOR MOUNTED TWO POST DATA RACK, 84 INCHES TALL, 30 INCHES DEEP, WITH VERTICAL WIRE MANAGEMENT.
	DOORBELL PUSH BUTTON
	DOORBELL AUDIO/VISUAL NOTIFICATION DEVICE
	SECURITY SYSTEM SIREN
	SECURITY INTERCOM STATION
	SECURITY SYSTEM KEY PAD
	SECURITY SYSTEM CARD READER
	SECURITY SYSTEM AUDIO SENSOR
	SECURITY SYSTEM MOTION DETECTOR (CEILING & WALL); X - DEGREE OF MOTION
	CEILING MOUNTED SECURITY SYSTEM CAMERA
	WALL MOUNTED SECURITY SYSTEM CAMERA
	DOOR CONTACT/POSITION SWITCH
	PRESS PLATE FOR AUTOMATIC DOOR OPERATOR
	ACCESS POINTS WITH ELECTRIFIED DOOR HARDWARE
	SOUND SYSTEM ANTENNA

ABBREVIATIONS	
±10'	+10' INDICATES THE MOUNTING HEIGHT OF THE DEVICE TO BOTTOM.
1Ø	1-PHASE
3Ø	3-PHASE
ATS	AUTOMATIC TRANSFER SWITCH
BTM	BOTTOM
CT	CURRENT TRANSFORMER
EOE	EXISTING OVERHEAD ELECTRIC
EOF	EXISTING OVERHEAD FIBER OPTIC
EOP	EXISTING OVERHEAD PRIMARY
EOS	EXISTING OVERHEAD SECONDARY
EOT	EXISTING OVERHEAD TELEPHONE
EUE	EXISTING UNDERGROUND ELECTRIC
EUF	EXISTING UNDERGROUND FIBER OPTIC
EUP	EXISTING UNDERGROUND PRIMARY
EUS	EXISTING UNDERGROUND SECONDARY
EUT	EXISTING UNDERGROUND TELEPHONE
EOTV	EXISTING OVERHEAD TELEVISION
EUTV	EXISTING UNDERGROUND TELEVISION
GF	GROUND FAULT PROTECTION
GND	GROUND
KWH	KILO WATT HOUR
OE	OVERHEAD ELECTRIC
OF	OVERHEAD FIBER OPTIC
OP	OVERHEAD PRIMARY
OS	OVERHEAD SECONDARY
OT	OVERHEAD TELEPHONE
OTV	OVERHEAD TELEVISION
PT	POTENTIAL TRANSFORMER
SPD	SURGE PROTECTIVE DEVICE
UE	UNDERGROUND ELECTRIC
UF	UNDERGROUND FIBER OPTIC
UP	UNDERGROUND PRIMARY
US	UNDERGROUND SECONDARY
UT	UNDERGROUND TELEPHONE
UTP	UNSHIELDED TWISTED PAIR
UTV	UNDERGROUND TELEVISION
WG	PROVIDE DEVICE WITH MANUFACTURER'S WIREGUARD.
WP	PROVIDE DEVICE WITH WEATHERPROOF COVER, RECEPTACLES TO BE WEATHER-RESISTANT TYPE AND PROVIDED WITH A CAST ALUMINUM, EXTRA DUTY, WHILE-IN-USE COVER.

## ELECTRICAL DEVICE MOUNTING HEIGHTS

SWITCHES	48 INCHES TO TOP
INTERIOR RECEPTACLES	16 INCHES TO BOTTOM
EXTERIOR RECEPTACLES	24 INCHES TO BOTTOM
COMMUNICATIONS / DATA OUTLETS	16 INCHES TO BOTTOM
FIRE ALARM MANUAL PULL STATIONS	48 INCHES TO TOP
FIRE ALARM HORN/STROBE SIGNAL	80 INCHES TO BOTTOM
FIRE ALARM STROBE SIGNAL	80 INCHES TO BOTTOM
WALL TELEPHONES	48 INCHES TO TOP
TELEVISION OUTLETS	72 INCHES TO BOTTOM
CLOCKS	96 INCHES TO TOP

NOTE: MOUNTING HEIGHTS UNLESS OTHERWISE NOTED ON DRAWINGS.

**GENERAL NOTES:**

**DEMOLITION**

- A. ALL ELECTRICAL DEVICES AND FIXTURES ARE TO BE DEMOLISHED UNLESS SPECIFICALLY NOTED OTHERWISE.
- B. ALL EXISTING WIRING AND OUTLET BOXES TO REMAIN AND BE REUSED UNLESS NOTED OTHERWISE. ANY WIRING AND BOXES NOT REUSED ARE TO BE DEMOLISHED AND WALL PATCHED AS REQUIRED.
- C. REFER TO THE MECHANICAL, AND PLUMBING PLANS FOR LOCATION OF EQUIPMENT REQUIRING ELECTRICAL DEMOLITION. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR DISCONNECTING EQUIPMENT AND RECONNECTING TO THE NEW EQUIPMENT AT THE SAME LOCATIONS.
- D. ALL EXISTING ITEMS SHOWN HAVE BEEN COMPILED FROM SITE VISUAL SITE INSPECTIONS. ALL ITEMS TO BE REMOVED MAY NOT BE SHOWN ON THIS DRAWING. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BID TO BECOME FAMILIAR WITH THE EXTENT OF THE DEMOLITION WORK REQUIRED.

**SITE UTILITIES:**

- A. ALL EXISTING ELECTRICAL SERVICES, METER BANKS, TELEPHONE AND CABLE TV SERVICES TO THE BUILDING ARE TO REMAIN AS-IS.

**SYSTEMS**

- A. ALL NEW SMOKE DETECTORS SHOWN ARE TO BE BATTERY OPERATED, COMBINATION SMOKE AND CARBON MONOXIDE DETECTOR/ALARMS, AS MANUFACTURED BY FIRST ALERT. CUT / PATCH EXISTING CEILING AS REQUIRED TO CONNECT / WIRE ALL DETECTORS IN EACH UNIT TOGETHER.
- B. AT LOCATIONS WHERE EXISTING COAX FOR CABLE TV IS STUBBED INTO ROOMS DIRECTLY THROUGH WALLS OR FROM BELOW BASEBOARDS, INSTALL OUTLET BOX IN WALL WITH F-CONNECTOR AND COVER PLATE, AND ROUTE EXISTING CABLE INTO BOX AND TERMINATE.

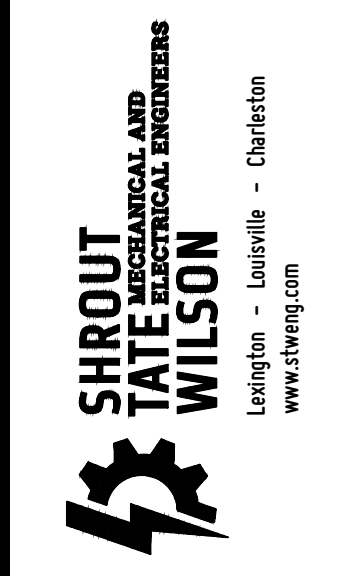
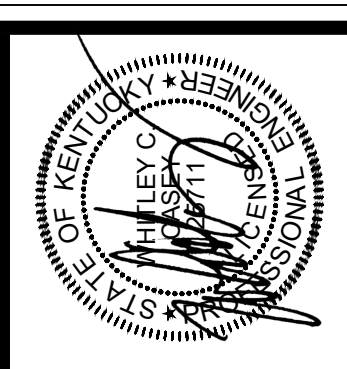
**DEVICES/OUTLET BOXES**

- A. ALL NEW LIGHT FIXTURES, SWITCHES, RECEPTACLES, TELEPHONE JACKS, CATV JACKS, ETC. ARE TO BE INSTALLED AT SAME LOCATION AS EXISTING, UTILIZING THE EXISTING OUTLET BOXES AND WIRING UNLESS SPECIFICALLY NOTED OTHERWISE.
- B. PROVIDE BLANK COVERS FOR ANY EXISTING OUTLET BOXES THAT ARE NOT REUSED.

**LIGHTING**

- A. ALL EXISTING CIRCUIT BREAKERS UTILIZED FOR LIGHTING CIRCUITS ARE TO BE REPLACED WITH AFCI TYPE BREAKERS.

LIGHT FIXTURE SCHEDULE											
FIXTURE TYPE	DESCRIPTION	LAMPS						VOLTS	MOUNTING TYPE	MANUFACTURER - MODEL NUMBER	NOTES
		TYPE	CRI	DIMMING	COLOR TEMP	LUMENS	WATTS				
A	BEDROOM CEILING FIXTURE	LED	80	NA	3000	1104	16	120	SURFACE CEILING	LITHONIA #FMLS 11 148 30 OR APPROVED EQUIVALENT	N/A
B	KITCHEN CEILING FIXTURE	LED	80	NA	3000	1100	16	120	SURFACE CEILING	LITHONIA #FMSATL 13 148 30 OR APPROVED EQUIVALENT	1
C	WALL MOUNT BATHROOM VANITY FIXTURE	LED	90	NA	3000	1300	18	120	WALL MOUNTED	LITHONIA #FMVSL 24IN MVOLT 30K 90CRI OR APPROVED EQUIVALENT	1
D	HALLWAY/LAUNDRY ROOM/CLOSET FIXTURE	LED	90	NA	3000	1000	15	120	SURFACE CEILING	JUNO #JSF 7IN 10LM 30K 90CRI MVOLT ZT WH OR APPROVED EQUIVALENT	N/A
F	SUSPENDED DINING ROOM CEILING FIXTURE	LED	80	NA	3000	1800	24	120	SUSPENDED	LITHONIA #FMSATL 16 208 30 3SHL6 OR APPROVED EQUIVALENT	1
G	EXTERIOR WALL MOUNT FLOODLIGHT	LED	90	NA	4000	1550	11	120	WALL MOUNTED	LITHONIA HGX LED 2RH ALO 40K 120 PE OR APPROVED EQUIVALENT	1
NOTES: 1 COLOR SELECTION / FINISH BY ARCHITECT.											



**HOLLY PARK RENOVATIONS AND  
SITE DRAINAGE WORK**  
2714 HOLLY PARK DR  
LOUISVILLE, KY 40214

**GENERAL ELECTRICAL  
NOTES**

JOB NO.	1849
DATE	01/25/2023
DRAWN	JMR
CHECKED	JSF

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REVISIONS		
No.	Description	Date

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SHEET

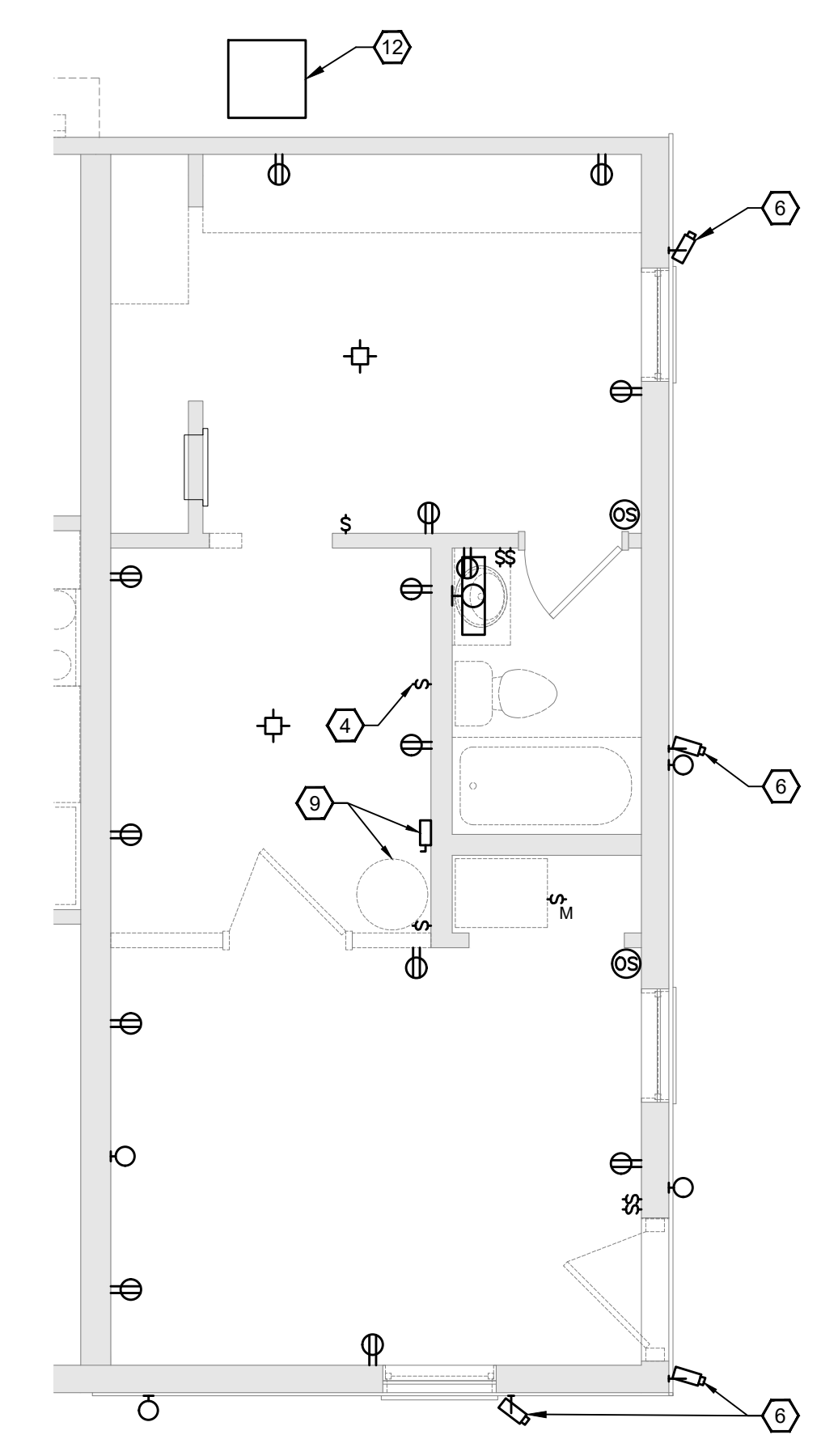
ED1.1

**GENERAL NOTES:**

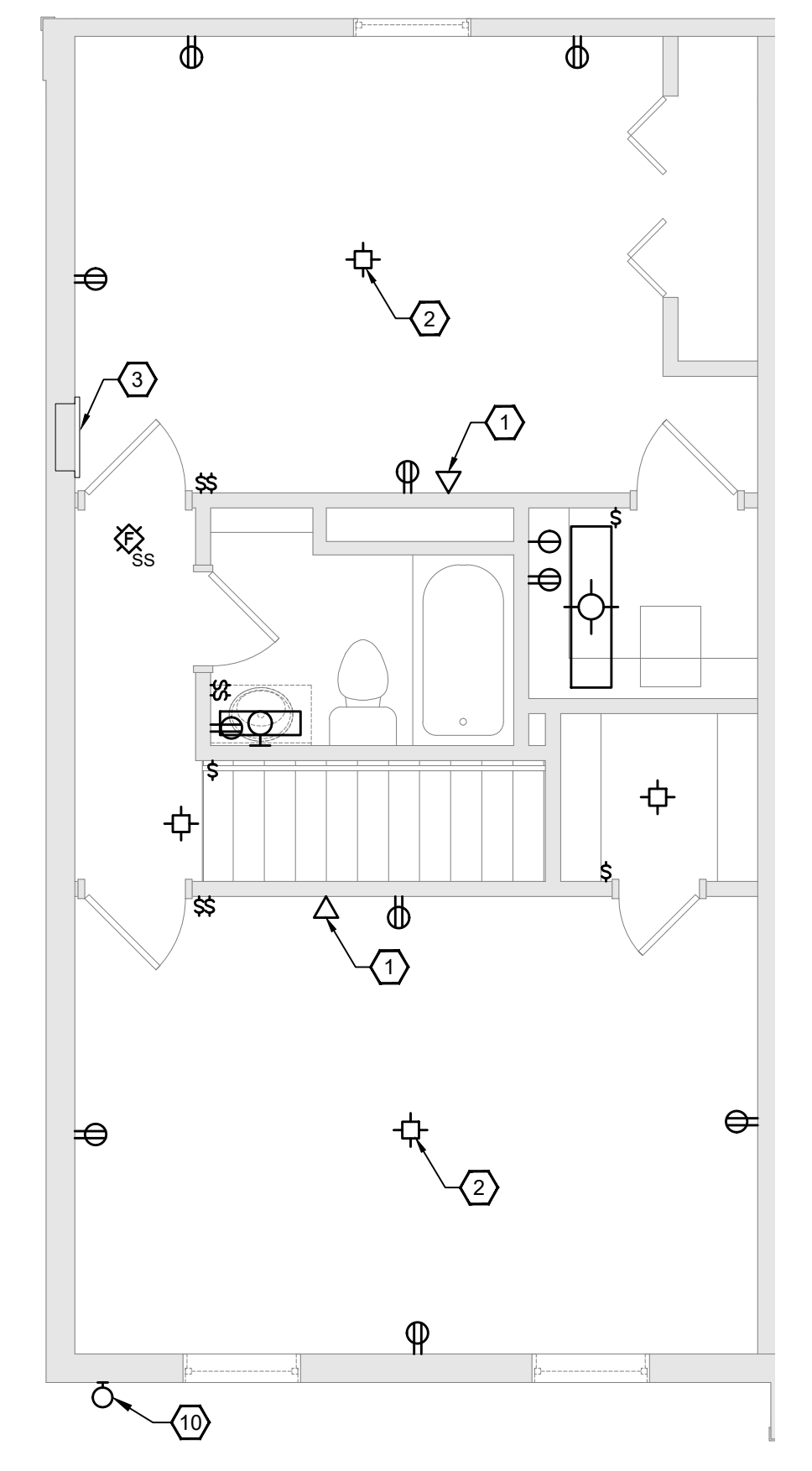
- A. REFER TO SHEET E0.2 FOR GENERAL ELECTRICAL NOTES.

**KEYNOTES:**

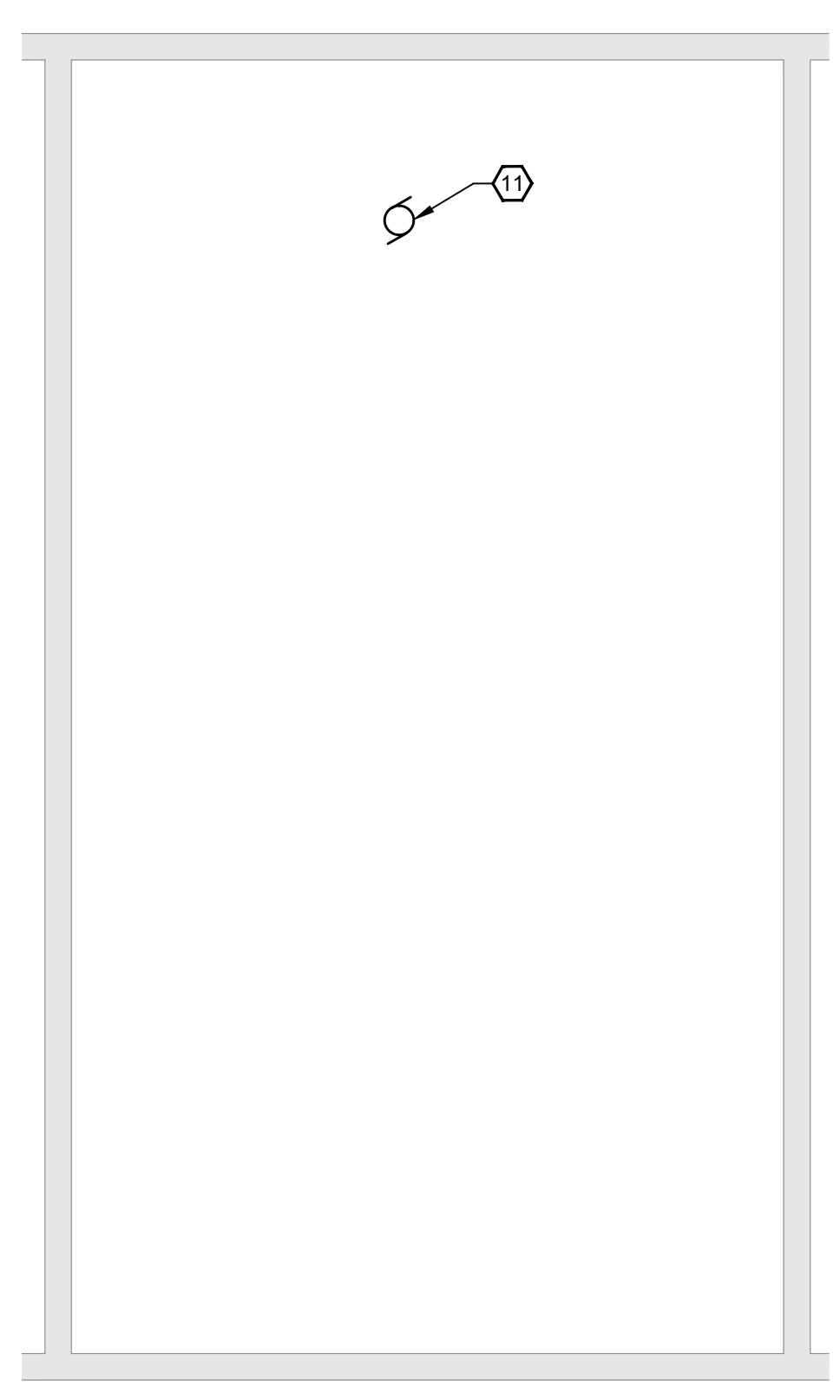
- EXISTING TELEPHONE JACK. QUANTITY AND EXACT LOCATION WILL VARY FROM UNIT TO UNIT.
- SOME UNITS HAVE SURFACE MOUNTED LIGHT FIXTURES AND SOME HAVE CEILING FANS AT THIS LOCATION.
- EXISTING 125A PANEL WITH 20 POSITIONS.
- EXISTING SWITCH AND RELATED ELECTRICAL CONNECTIONS FOR DISPOSAL TO BE DEMOLISHED. RENOVATED UNITS WILL NOT HAVE DISPOSALS.
- EXISTING LIGHT FIXTURE AND RELATED SWITCH AT BACK DECK ARE TO BE DEMOLISHED AND WILL NOT BE REPLACED. RENOVATED UNITS WILL NOT HAVE DECKS.
- EXISTING CAMERA AND RELOCATED EQUIPMENT TO BE REMOVED AND TURNED OVER TO OWNER. CABLING TO BE DEMOLISHED.
- EXISTING 125A PANEL WITH 18 POSITIONS.
- EXISTING RANGE HOOD ELECTRICAL CONNECTION TO REMAIN FOR NEW RANGE HOOD.
- NOTE THAT, AS PART OF THE RENOVATION, THE NEW WATER HEATER WILL BE LOCATED IN THE UTILITY CLOSET WITH THE HVAC UNIT. RELOCATE AND EXTEND EXISTING DISCONNECT AND CIRCUIT AS REQUIRED.
- EACH SECTION OF APARTMENTS HAS ONE (1) FLOODLIGHT MOUNTED UP HIGH ON A CORNER. EXISTING FLOODLIGHTS WILL BE DEMOLISHED AND REPLACED WITH NEW AT SAME LOCATION. (TOTAL OF 10.)
- EXISTING SUMP PUMP IN CRAWL SPACE IS TO BE DEMOLISHED, AND WILL BE REPLACED WITH A NEW SUMP PUMP. MAINTAIN CIRCUIT WIRING AND REPAIR / REPLACE AS NEEDED IF DAMAGED. EXTEND WIRE AS REQUIRED TO NEW SUMP PUMP LOCATION.
- EXISTING CONDENSING UNIT AND RELOCATED DISCONNECT SWITCH ARE TO BE DEMOLISHED. EXISTING CIRCUIT TO REMAIN AND BE RE-USED FOR NEW UNIT.



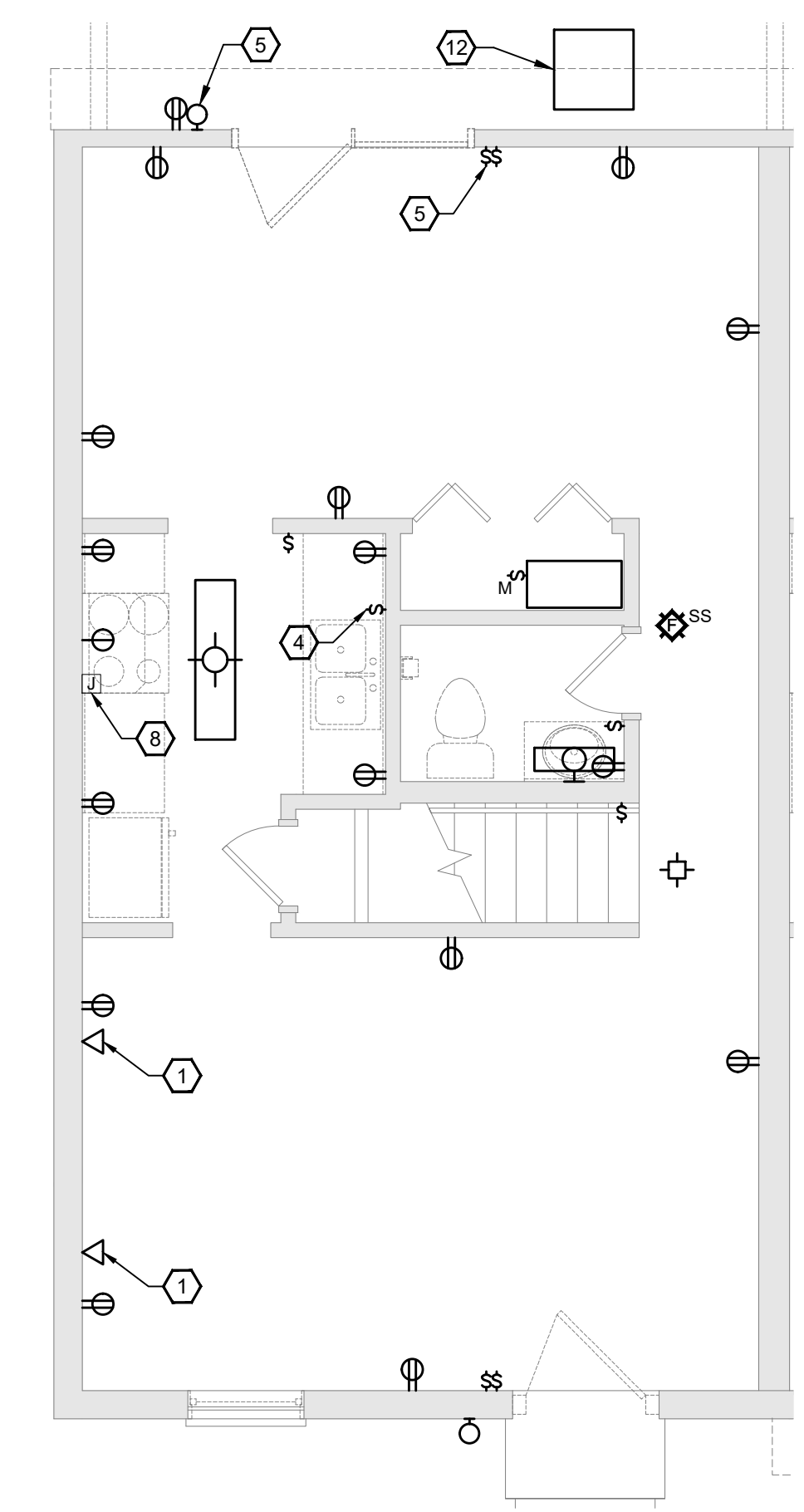
**4** ENLARGED DEMOLITION PLAN  
SINGLE BEDROOM UNIT ELECTRICAL  
SCALE: 1/4"=1'-0"  
0 2' 4' 8'



**2** ENLARGED DEMOLITION PLAN  
TYPICAL SECOND FLOOR - ELECTRICAL  
SCALE: 1/4"=1'-0"  
0 2' 4' 8'



**3** ENLARGED DEMOLITION PLAN  
TYPICAL CRAWL SPACE - ELECTRICAL  
SCALE: 1/4"=1'-0"  
0 2' 4' 8'



**1** ENLARGED DEMOLITION PLAN  
TYPICAL FIRST FLOOR - ELECTRICAL  
SCALE: 1/4"=1'-0"  
0 2' 4' 8'



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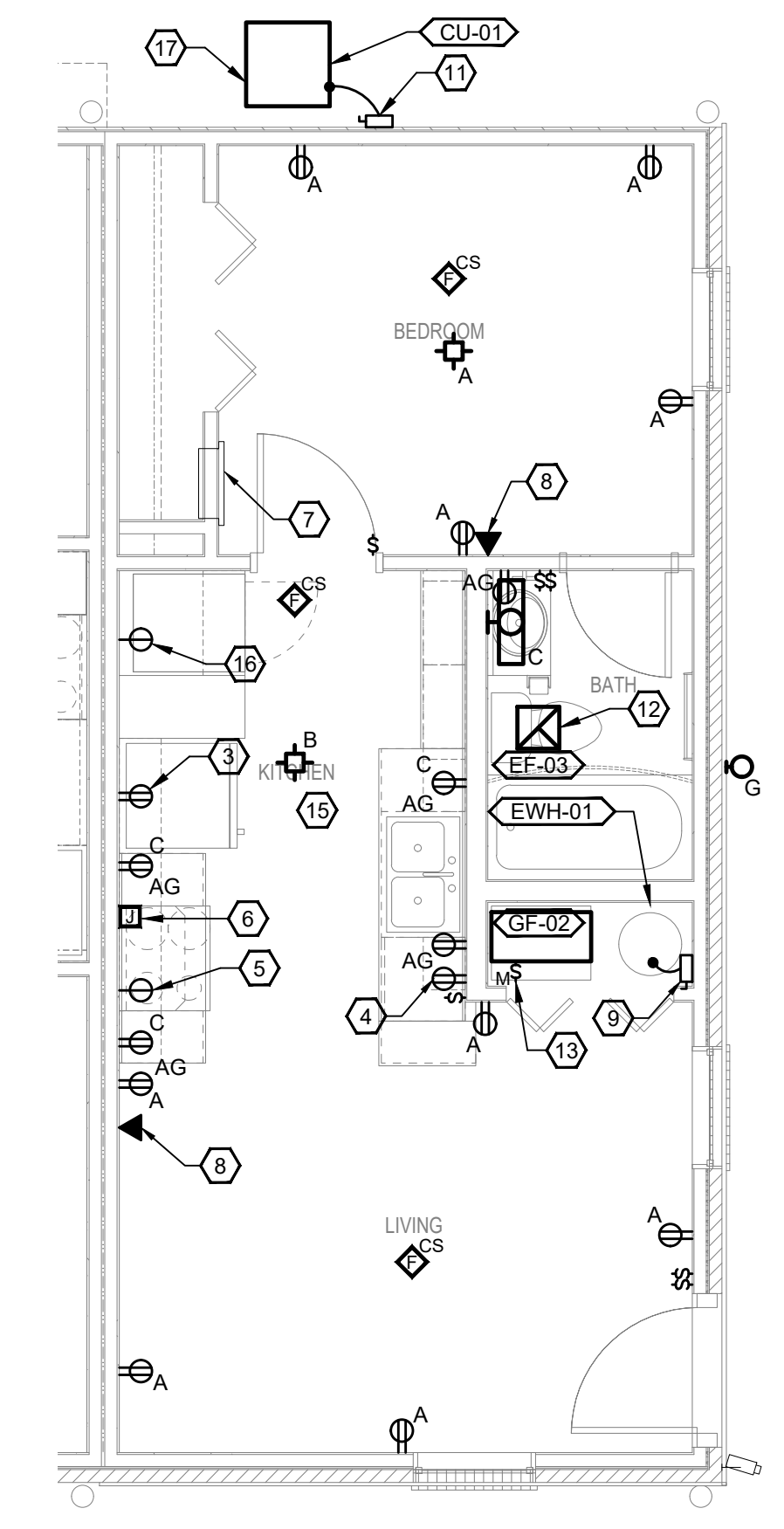
REVISIONS		
No.	Description	Date

**GENERAL NOTES:**

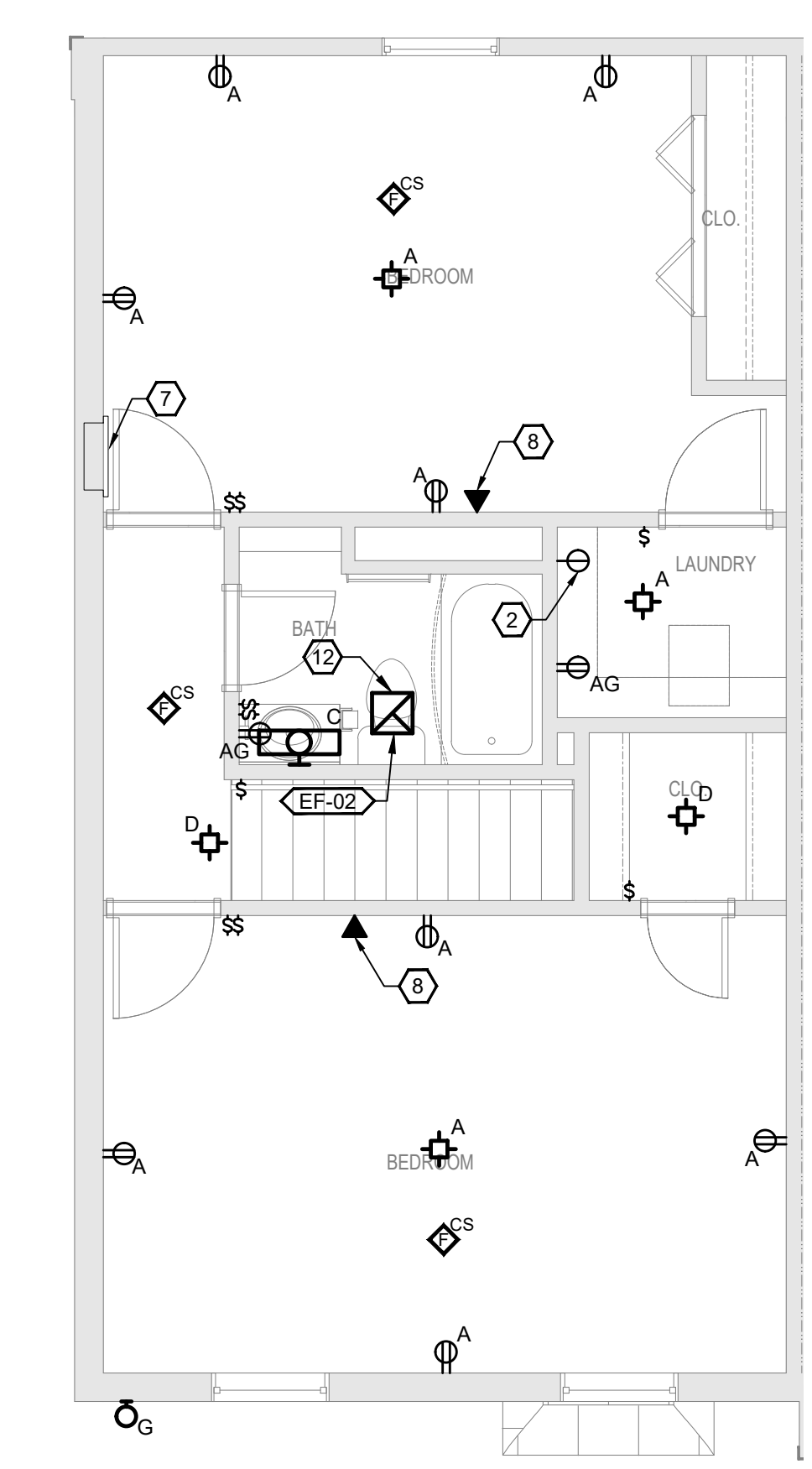
- A. REFER TO SHEET E.02 FOR GENERAL ELECTRICAL NOTES.

**SHEET KEYNOTES:**

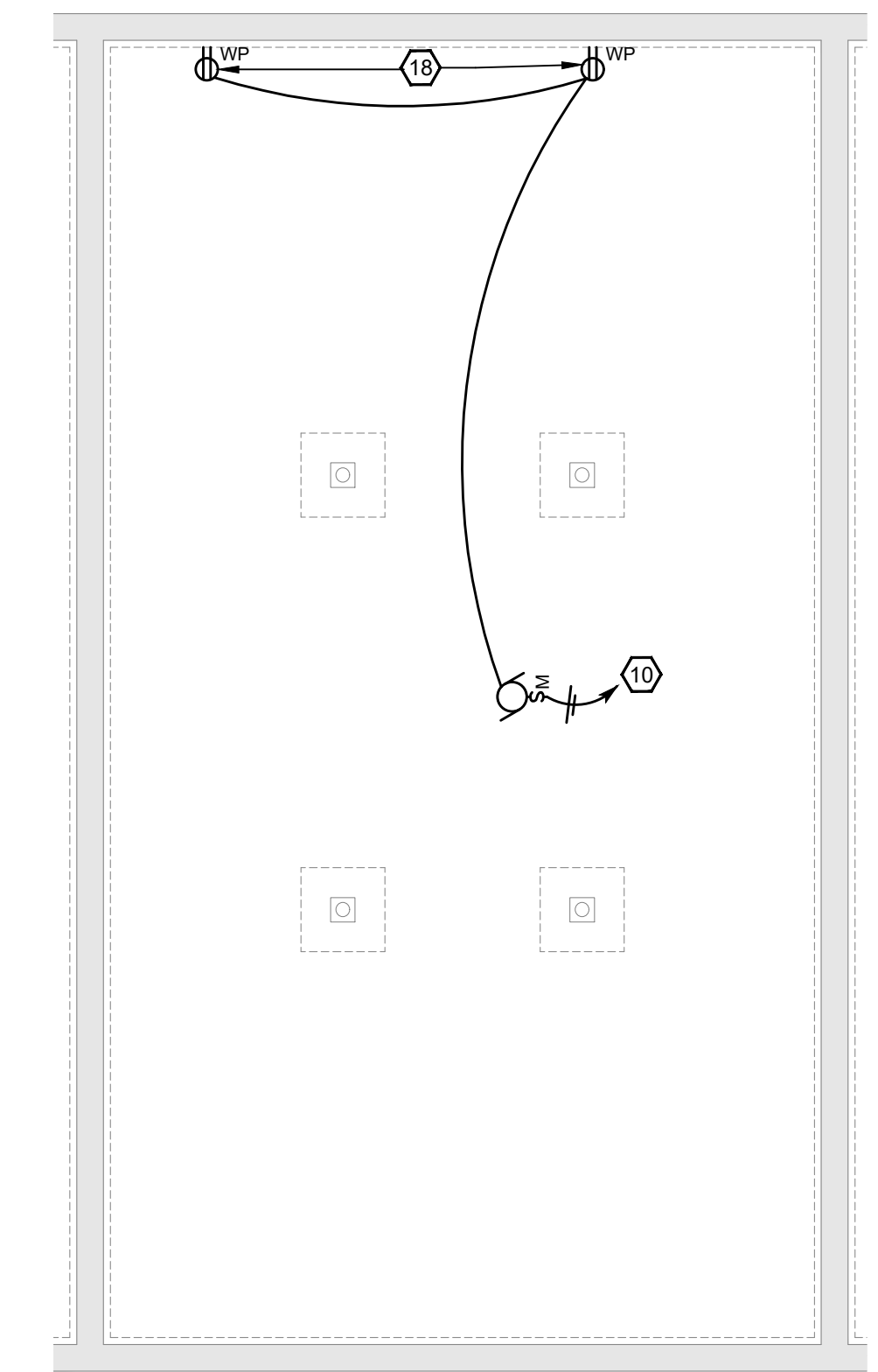
- CEILING MOUNT FIXTURE TO BE ADDED IN DINING ROOM AT LOCATION WHERE THERE IS NOT AN EXISTING FIXTURE. TIE INTO KITCHEN LIGHTING CIRCUIT AS SHOWN.
- EXISTING CIRCUIT BREAKER FOR DRYER TO BE REPLACED WITH A COMBINATION AFCI/GFCI BREAKER.
- EXISTING CIRCUIT BREAKER FEEDING REFRIGERATOR TO BE REPLACED WITH A COMBINATION AFCI/GFCI BREAKER.
- EXISTING CIRCUIT BREAKER FEEDING DISHWASHER TO BE REPLACED WITH A COMBINATION AFCI/GFCI BREAKER.
- EXISTING CIRCUIT BREAKER FOR RANGE TO BE REPLACED WITH A GFCI BREAKER.
- FEED NEW RANGE HOOD FROM EXISTING RANGE HOOD CIRCUIT.
- EXISTING PANEL.
- AT ALL EXISTING TELEPHONE OUTLET LOCATIONS, PROVIDE NEW JACKS AND COVER PLATES. NOTE THAT LOCATIONS ARE NOT CONSISTENT BETWEEN APARTMENT UNITS. FIELD VERIFY ALL EXACT LOCATIONS.
- RECONNECT EXISTING DISCONNECT AND CIRCUIT TO NEW WATER HEATER.
- NEW SUMP PUMP IN CRAWL SPACE TO CONNECT BACK TO EXISTING CIRCUIT. REPLACE EXISTING, STANDARD CIRCUIT BREAKER IN PANEL WITH GFCI TYPE.
- PROVIDE NEW DISCONNECT FOR NEW UNIT AND TIE BACK INTO EXISTING CIRCUIT. DISCONNECT TO BE 240V, 1-PHASE, 15 AMP, NEMA 3R.
- TIE NEW EXHAUST FAN BACK INTO EXISTING, SWITCHED CIRCUIT.
- PROVIDE NEW DISCONNECTING MEANS FOR INDOOR HVAC UNIT AND, TIE BACK INTO EXISTING CIRCUIT.
- PROVIDE NEW DISCONNECTING MEANS FOR INDOOR GAS WATER HEATER AND TIE BACK INTO EXISTING CIRCUIT.
- NOTE THAT RECEPTACLES IN KITCHEN HAVE BEEN RELOCATED TO WORK WITH REVISED KITCHEN LAYOUT. THIS INCLUDES GENERAL PURPOSE RECEPTACLES, DISHWASHER, RANGE, ETC. EXTEND WIRING AS REQUIRED TO RELOCATED RECEPTACLES AND TIE BACK INTO EXISTING PANEL CIRCUITS.
- LOCATION FOR NEW, STACK WASHER/DRYER. PROVIDE 30AMP, SINGLE-PHASE RECEPTACLE OF CONFIGURATION TO MATCH PLUG WITH UNIT. PROVIDE COMBINATION AFCI/GFCI 30AMP, 2-POLE BREAKER IN SPACES OF EXISTING PANEL TO FEED STACK WASHER/DRYER. CIRCUIT WITH #10 WIRE.
- REFER TO CIVIL DRAWINGS FOR EXACT HVAC CONDENSING UNIT LOCATIONS.
- PROVIDE WEATHERPROOF 120V, 20A, RECEPTACLES FOR POWERED CRAWLSPACE VENTS. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND TIE INTO GFCI PROTECTED SUMP PUMP CIRCUIT.



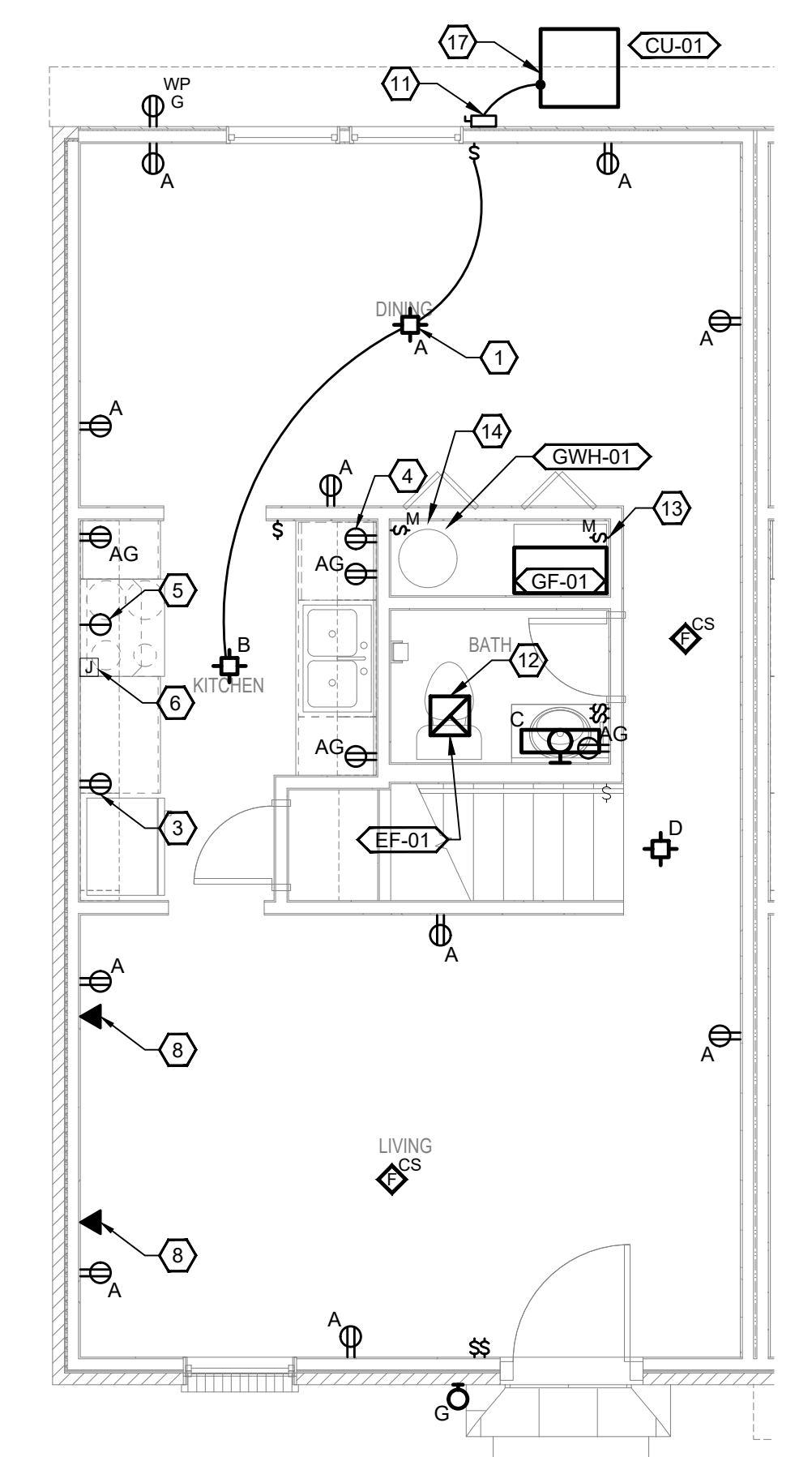
**4** ENLARGED NEW WORK PLAN  
SINGLE BEDROOM UNIT - ELECTRICAL  
SCALE: 1/4"=1'-0"



**2** ENLARGED NEW WORK PLAN  
TYPICAL SECOND FLOOR - ELECTRICAL  
SCALE: 1/4"=1'-0"



**3** ENLARGED NEW WORK PLAN  
TYPICAL CRAWL SPACE - ELECTRICAL  
SCALE: 1/4"=1'-0"



**1** ENLARGED NEW WORK PLAN  
TYPICAL FIRST FLOOR - ELECTRICAL  
SCALE: 1/4"=1'-0"