ADDRESS: 2337-41 PENNSYLVANIA AVE

Proposal: Construct two-family semi-detached dwelling

Review Requested: Final Approval

Owner: Reuvan Mosheyev

Applicant: Matthew Millan, AIA, LEED AP

History: Vacant lot

Individual Designation: none

District Designation: Spring Garden, Non-Contributing, 10/11/2000 Staff Contact: Heather Hendrickson, heather.hendrickson@phila.gov

**OVERVIEW:** This application proposes to construct a semi-detached, two-family, four-story dwelling with roof decks accessible from pilot houses. A non-contributing two-story building stood on the lot at the time the Spring Garden Historic District was designated. The building was demolished in 2022. Owing to the fact that a building stood on the lot at the time of designation, the Historical Commission has plenary or full jurisdiction over the proposed construction.

The proposed building would include a central drive aisle that leads to interior garages on the ground floor. The proposed façade would feature a central recess and corner windows trimmed in cast stone to break the overall width of the building into rowhouse-like vertical massing. The cornice at the third floor would be in line with the rowhouse to the east while the overall height of the building would match the three-unit townhome complex to the west. The materials are proposed to be cast stone, red brick, and vertical metal siding in Dove Gray. The windows would have dark bronze frames and sash.

**SCOPE OF WORK:** Construct four-story building with roof decks on vacant lot **STANDARDS FOR REVIEW:** 

The Secretary of the Interior's Standards for the Treatment of Historic Properties and Guidelines include:

Standard 9: New additions, exterior alterations, or related new construction will not
destroy historic materials, features, and spatial relationships that characterize the
property. The new work will be differentiated from the old and will be compatible with the
historic materials, features, size, scale and proportion, and massing to protect the
integrity of the property and its environment.

**STAFF RECOMMENDATION:** Approval, with the staff to review details, pursuant to Standard 9.



15 West Highland Avenue Philadelphia, PA 19118 **p** 215.248.1244 **f** 215.248.1246

07/07/25

Philadelphia Historical Commission Attention: Allyson Mehley 1515 Arch Street, 13th Floor Philadelphia, PA 19102

Property Address: 2337-41 Pennsylvania Avenue

Applicant: Matthew Millan, AIA, LEED AP

Applicant Email: mmillan@millanarchitects.com

Applicant Phone #: 215-248-1244
Property Owner: Reuvan Mosheyev

## **Project Description:**

The project is located at 2337-41 Pennsylvania Avenue, between N 24<sup>th</sup> Street and Judson Street. The property is located along the western edge of the Spring Garden Historic District and faces onto the Benjamin Franklin Parkway. The lot included a single 2-story, gray brick, vernacular building that was set back from the street wall and listed as non-contributing. The existing building has been demolished.

Our proposed project consists of the construction of a semi-detached, 2-family dwelling that is 4 stories high and has roof decks accessible from pilot houses. The façade is set to the street line and re-establishes a uniform setback. There is a central drive aisle that accesses interior garages on the ground/1<sup>st</sup> floor. The façade features a central recess and corner windows trimmed in cast stone to break the overall width of the building into rowhouse-like vertical massing.

The overall height of the building matches the 3-unit townhome complex to the west (2343 - 2347 Pennsylvania Ave), but the 4<sup>th</sup> floor is setback from the façade and a cast stone cornice above the 3<sup>rd</sup> floor aligns with the cornice of the existing structure to the east at 2335 Pennsylvania Ave. The base of the building is clad in cast stone to resemble the structure to the east and provide a visual base to ground our building. The 2<sup>nd</sup> and 3<sup>rd</sup> floor walls are clad in red brick to mimic existing structures to the west and east. The recessed 4<sup>th</sup> floor wall will be clad in vertical metal siding in Dove Gray, a light gray that visually recedes and changes the scale and texture of the top floor like a mansard roof. The windows will have dark bronze frames and sash.



15 West Highland Avenue Philadelphia, PA 19118 **p** 215.248.1244 **f** 215.248.1246

All of these design elements were carefully considered to design a building that bridges the scale of several early 20<sup>th</sup> century rowhouses to the east, a larger and taller recent development to the west, and the open landscape and automobile oriented scale of the Benjamin Franklin Parkway and Eakins Oval directly to the south.

We look forward to discussing our proposed project with the Architectural Committee and the Historical Commission. Thank you for your consideration.

Sincerely,

Matthew Millan, AIA, LEED AP

President

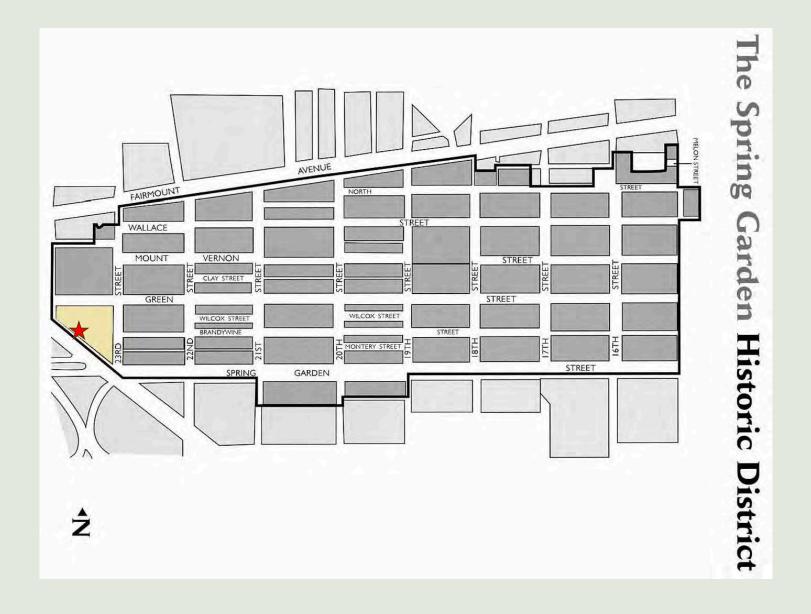


2341 – 2337 Pennsylvania Ave – Proposed Rendering



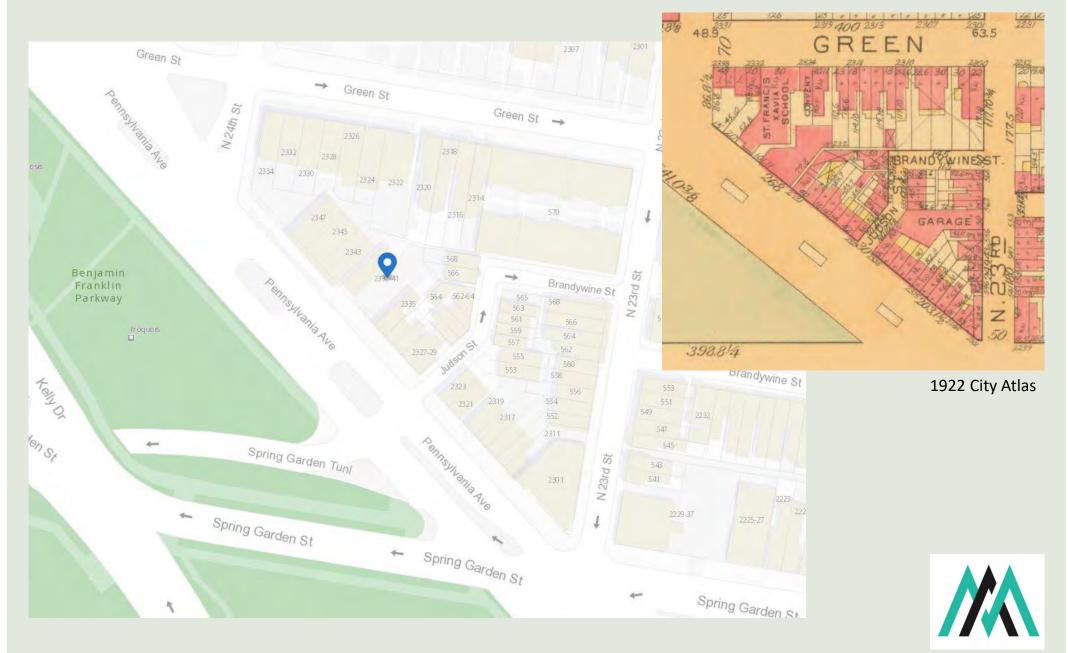








Philadelphia, PA 19118



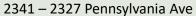
# Philadelphia Historical Commission Presentation 7/08/2025







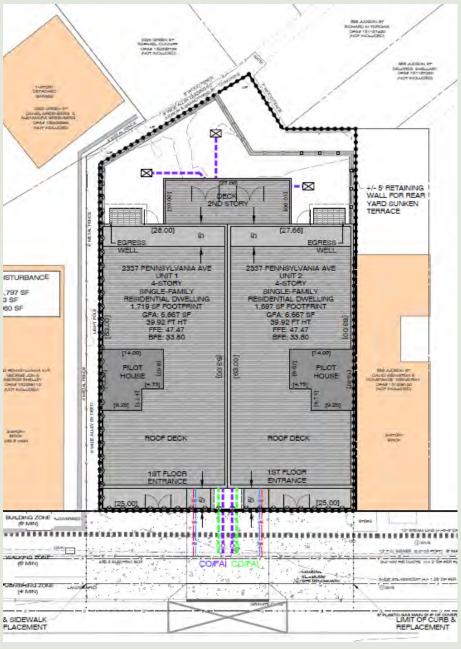
2347 - 2343 Pennsylvania Ave





2323 – 2317 Pennsylvania Ave





**Proposed Site Plan** 

Philadelphia Historical Commission Presentation 7/08/2025



15 W. Highland Avenue Philadelphia, PA 19118 MILLANARCHITECTS.COM



2341 – 2337 Pennsylvania Ave – Proposed Model





2341 – 2337 Pennsylvania Ave – Proposed Rendering





Pennsylvania Ave Elevation

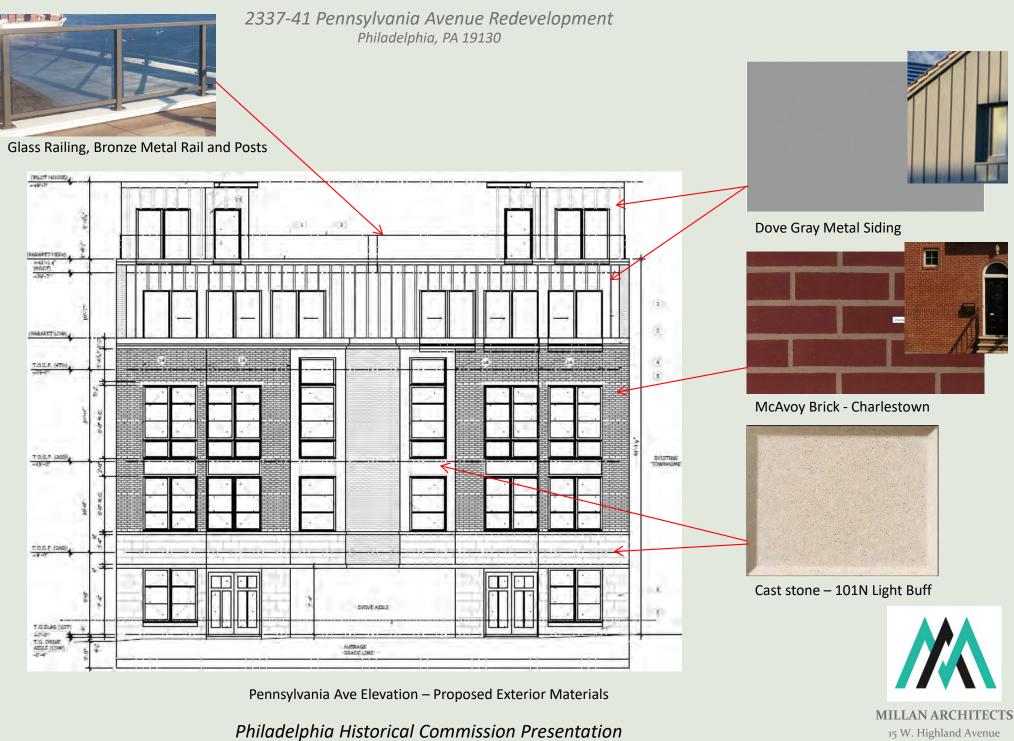


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**Rear Elevation** 





7/08/2025

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**APPENDIX** 



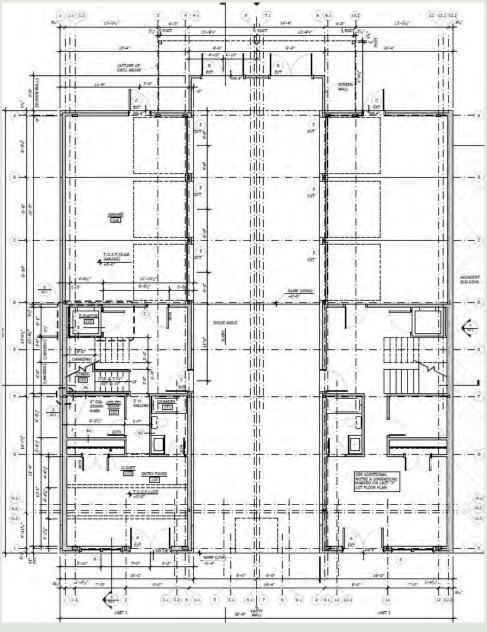




2337 Pennsylvania Ave: Looking West

2337 Pennsylvania Ave: Looking East



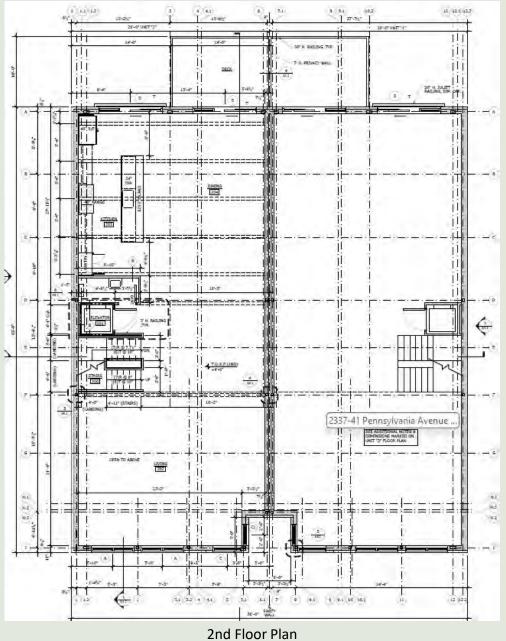


1st Floor Plan

Philadelphia Historical Commission Presentation 7/08/2025



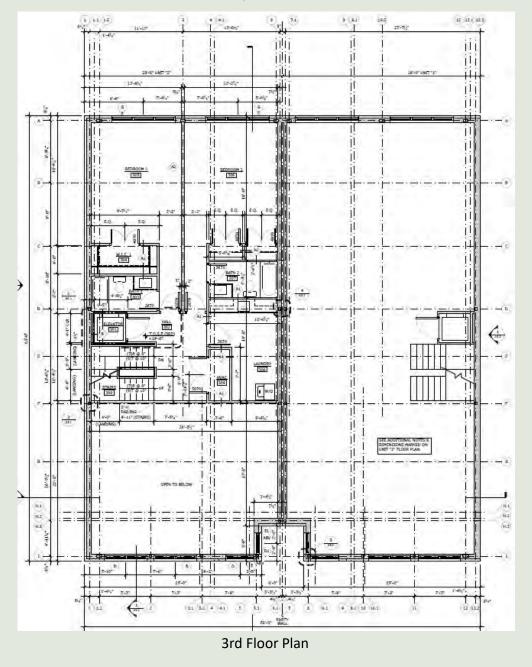
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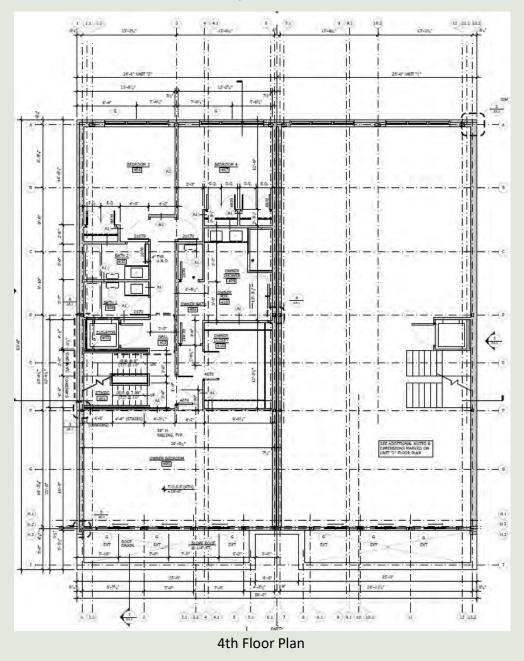


Philadelphia, PA 19118



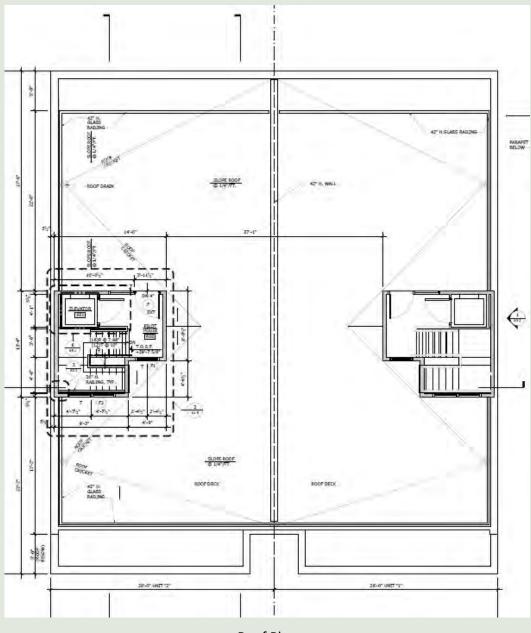
Philadelphia Historical Commission Presentation 7/08/2025





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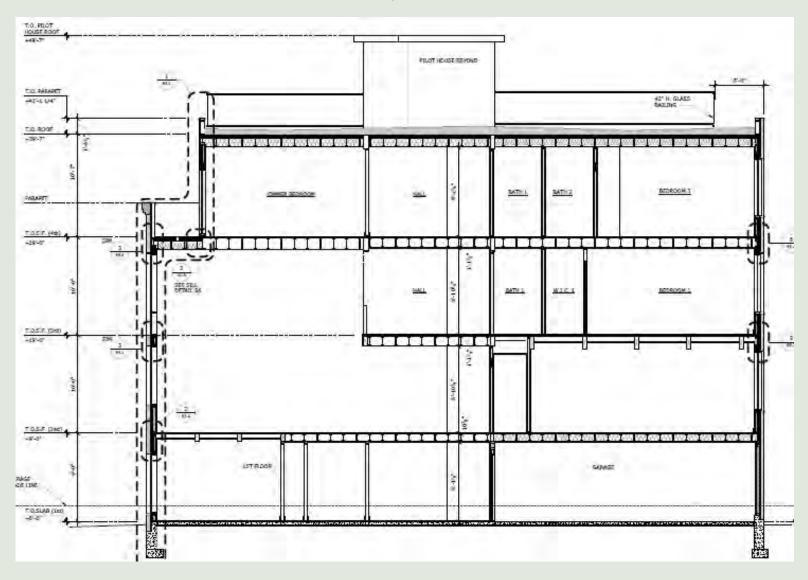


**Roof Plan** 

Philadelphia Historical Commission Presentation 7/08/2025



Philadelphia, PA 19118



**Building Section** 



## 2337-41 PENNSYLVANIA AVE.

## PROJECT SPECIFICATIONS

## A COMPLETE and WELL EXECUTED PROJECT

-The intent of the Contract Documents, the Drawings and Specifications, is to include all items necessary for the proper execution and completion of the Work. These are complementary, and what is required by any one shall be binding as required by all. Work not covered will not be required unless it is consistent with and is reasonably inferable as being essary to produce the intended results.

-The General Contractor (G.C.) and subcontractors warrant to the Owner that all materials and equipment furnished under the Contract shall be new, unless specified otherwise. All Work not conforming to the requirements of the Contract Documents, including substitutions not properly approved and authorized, may be considered defective.

-All Work shall be performed according to manufacturers' instructions with regard to the use or installation of their products. All work shall be performed according to superior practice in a well-crafted manner.

-All Work shall be executed in accordance with all governing codes and ordinances including the current edition of the PA Uniform Construction Code and by reference, 2018 International Building Code, 2018 Philadelphia Fire Code amendments to and the 2009 International Fire Code. 2018 International Energy Conservation Code. 2018 International Mechanical Code, Philadelphia Plumbing Code, and 2018 ICC Electrical Code (incorporates the 2017 National Electric Code standards), and City of Philadelphia rules and regulations

## A THOROUGH REVIEW of the SITE, PLANS, and SPECIFICATIONS

-The G.C. shall visit the site, familiarize themselves with the local conditions under which the Work is to be performed, and correlate their observations with the requirements of these plans and specifications.

-The G.C. shall carefully review the Contract Documents and shall report at once to Matthew Millan Architects, Inc. (hereafter Architect) any error, inconsistency or omission they may discover. The G.C. and subcontractors shall not scale the drawings. The G.C. shall perform no portion of the Work without Contract Documents or where required approved Shop Drawings, Product Data, or Samples for such portion of the Work.

-The G.C. shall determine and verify all materials, field measurements, and field conditions related to the Work, and shall carefully compare such information known to the G.C. with the Contract Documents before commencing activities Errors, inconsistencies or omissions discovered shall be reported to the Architect at once.

## ATTENTION TO CONDITIONS DURING CONSTRUCTION

-The G.C. shall be solely responsible for job site safety precautions and programs. The G.C. shall be solely responsible for and have control over construction means, methods, techniques, sequences, and procedures and for coordinating all nortions of Work under the Contract

-The G.C. is responsible for laying out all work and coordination of all installations, allowing adequate space for other work, equipment, piping, wiring, etc. and adequate space for access to any equipment requiring service. -The G.C. shall determine and verify all materials, field measurements and construction criteria, and shall check and coordinate the information contained within any submittals with the work in progress. Verification and coordination shall be accomplished with such timing so that there is no delay in completing work on schedule and in a workmanship-like

-The G.C. shall not cut structural members or operational elements without prior written approval of Architect Where The GO. As also or or systems are required to be personned, elicotated or abandoned, bypass such services or systems seeks such services or systems before cutting to minimary point properties of personned and properties of the personned personned before cutting to minimary point properties or systems before cutting to minimary personned before cutting to minimary personned before cutting to minimary personned by the provide access personned to the provide access that provide access the provide access the provide access the provide access the provide access that the provide access the provide access the provide access the provide access that the provide access the provide access the provide access that the provide access the provide access the provide access the provide access that the provide access that the provide access to the provide access to the provide access to the provide access the provide access the provide access to the pro

## A WELL RUN JOB

-The G.C. shall supervise and direct the Work, using their best skills and attention. The G.C. shall at all times enforce strict discipline and good order among their employees and the subcontractors and shall not employ on the Project any unfit person or anyone not skilled in the task assigned to them. The G.C. shall appoint a single job foreman for the duration of the construction. The G.C. shall furnish a construction schedule prior to the start of the job and shall update it on a regular basis and if the schedule changes.

The G.C. shall arrange all City required inspections and special inspections (by 3<sup>rd</sup> party inspector hired by Owner), maintain records of all inspections, and alert Owner and Architect of any failed inspections.

-The G.C. shall be responsible for maintaining a clean and orderly job site. The premises shall be kept free from accumulation of waste materials or rubbish cause by their operations. All waste material shall be disposed of safely and

-The G.C. shall provide a site or cell phone contact for the foreman, job toilet and trash removal for the duration of the

## AN ENVIRONMENTALLY RESPONSIBLE WORK SITE

 Recycling containers shall be provided for paper, glass, metals, cardboard, and all other locally recycled materials.
 Scrap wood shall be saved for blocking or as kindling as possible. All material shall be used as efficiently as possible. -All adhesives, paints, and sealants should be non-toxic, and low or non-VOC emitting. All workers shall be reasonably -Site disturbance shall be minimized, and existing soils and vegetation to remain shall be protected to the maximum extent possible. All areas of the site that are not absolutely necessary to the construction shall be clearly delineated, and vehicular, storage and other uses shall be prohibited. Sediment control measures shall be established to protect any turbed areas of the site as necessary.

## SHOP DRAWINGS PRODUCT DATA SAMPLES

-The G.C. shall provide Architect three (3) copies of any submittals, such as shop drawings, product data or samples, for review and approval or other appropriate action. The Architect shall review submittals for the limited purpose of checking for conformance with the information given and design concept expressed in the Contract Documents. Approval by Architect is required prior to commencement of work. The G.C. shall allow reasonable time for review of submittals, and in such sequence as to cause no delay in the Work.

- -G.C. shall provide Shop Drawings for the following items:
- Heating and cooling systems, including schematic supply ducting, plant, and duct and register sizing and locations.
- 2. Steel calculations, steel frame and connections
- 3. Roof truss plans and elevations, with load calculations
- 5 Elevator
- 6. Exterior door and transom window assembly elevations, and door and window schedules prior to supplier placing
- 7. Cabinet work, including shelving, millwork, kitchen and bath cabinets
- Automatic fire protection sprinkler system, including hydronic load calculations
- -G.C. shall provide Samples for the following items:
   Stained wood sheathing for interior trim, three (3) pieces, 2'-0" length
- Stucco, 2'-0" x 2'-0" field sample for finish color and texture Brick and cast stone veneer, 2'-0" x 2'-0", field samples for exterior walls, for finish color and texture
- 4. Metal panels, three (3) pieces, 2'-0" length, for color and finish.
- -G.C. shall provide Product Data for the following items
- 1. Heating and cooling system equipment, and controls
- Fire protection and fire alarm system equipment, control panel and all devices.
- A Exterior yents & exhaust honds

### SUBSTITUTIONS

The G.C. may request substitution for proprietary products specified. G.C. shall provide all necessary product information to Architect for consideration of equivalent substitution. G.C. shall allow reasonable time for review and

-The Architect encourages substitutions which might be seen as better choices environmentally, and is especially interested in materials which are non-toxic, come from recycled or renewable sources, or come from local sources as near to the Project site as possible.

-The G.C. and subcontractors shall provide Owner with certificates of insurance with the Owner listed as a named insured prior to starting work. All contractors and subcontractors shall purchase and maintain liability insurance that shall offer protection to the Owner and Architect arising from claims that may arise out of or result from the G.C.'s or subcontractors operations under the Contract. Claims include those for workers' compensation or disability; for damage because of bodily injury, disease or death; for damages insured by usual personal injury insurance; for damages, other than to Work itself because of injury to or destruction of tangible property including loss of use there from; or for damages because of bodily injury, death, or property damage arising from ownership, maintenance, or operation of any

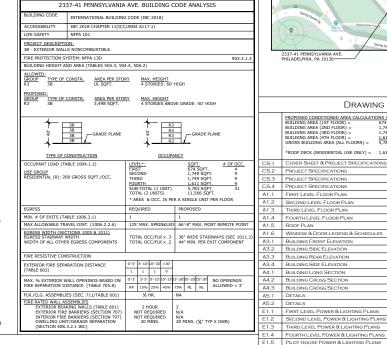
## CONTRACT OLOSE OUT

-The G.C. shall prepare punch list during walk-through with Architect and Owner.

-The G.C. shall deliver the following to Owner: Certificate of Occupancy, UL Fire Underwriter's Certification, Release of Liens, and manuals and warrantees for equipment purchased by Contractor and Subcontractors. -The G.C. and subcontractors shall remove all their waste materials and rubbish from and about the Project as well as

their tools, construction equipment, machinery and surplus materials. Project shall be broom cleaned; windows shall be professionally cleaned.

-Work shall include the following: All necessary permits and certificates of inspection; site work, electrical, natural gas, water, and sewer connections related to the new structure; all construction of the new structure; new heating and cooling



# 215.248.1244

PROJECT LOCATION MAP

DRAWING LEGEND

\*ROOF DECK (RESIDENTIAL USE ONLY) = 1.611 SOFT.

GROSS BUILDING AREA (ALL FLOORS) =

S0.0 Notes & Schedules

Millan Architects MILLANARCHITECTS.COM

2337-41 PENNSYLVANIA AVE

2337-41 PENNSYLVANIA AVE PHILADELPHIA, PA 19130 156.03

UGGIERO PLANTE LAND LA 900 RIDGE AVENUE HILADELPHIA, PA 19128

MATTHEW MILLAN RA-014879-B

## PROJECT DIRECTORY

OWNER: MRR INVESTMENTS MATTHEW MILLAN ARCHITECTS, INC. 435 JEANES ST. PHILADELPHIA, PA 19116 15 WEST HIGHLAND AVENUE

PHILADELPHIA, PA 19118

CIVIL ENGINEERING CONSULTANT: RUGGIERO PLANTE LAND DESIGN 5900 RIDGE AVENUE PHILADELPHIA, PA 19128

STRUCTURAL ENGINEERING CONSULTANT: LARSEN & LANDIS STRUCTURAL ENGINEERS 11 W. THOMPSON STREET PHILADELPHIA, PA 19125

HVAC CONSULTANT: URBAN TECHNOLOGY, INC 715 TWINING ROAD, SUITE 106 DRESHER, PA 19025

PHONE: 267-255-7979	PHONE: 215-248-1244	PH	ONE: 215-508-3900	PHONE:	215-232-7207		PH	HONE: 21	5-336-0808				
GRAPHIC SYMBOLS LEGEND				ABBREVIATIONS LEGEND									
				A D(cont.) H(cont.) O S(cont.)									
ELEVATION TAG	DIRECTION OF VIEW ELEVATION NUMBER OR LETTER DRAWING SHEET NUMBER	INTERIOR 4	DESIGNATION OF INTERIOR VIEW OR VIEWS  A.X. 2	A.B. ABV. A.F.F. ALT. ALUM. &	air barrier above above finish floor alternate aluminum and at	DN. D.O. DR. DTL. DWG.	down door opening door detail drawing	HC HDR HORIZ. H.V.A.C. H.W.H.	handicapped header horizontal heating, ventilating and air conditioning hot water heater	O.C. OPG. OPP. OSB	on center opening opposite oriented strand board	SPEC. SQ. STL SPEC. SYM.	specification (s) square steel structural symmetry (ical)
SECTION TAG	DIRECTION OF VIEW SECTION NUMBER OR LETTER DRAWING SHEET NUMBER	ELEVATION DATUM	DRAWING SHEET NUMBER	B BB BD. BLDG. BLKG. B.O.	blue board board building blocking bottom of	E EA. E.C.J. E.F. E.J. EL. ELEC.	east each exposed ceiling joists exhaust fan expansion joint elevation electrical	I IN. INSUL. INT.	inch insulation interior	P.I.P. PL. PLY. PNL. PR. PREFAB PREFIN.	poured in place plaster plywood panel pair pre fabricated pre finished	T. T & G T.B.D. T.B.S. THKNS. T.O.	tread tongue and groove to be determined to be selected thickness top of
DETAIL TAG	DETAIL NUMBER  DRAWING SHEET NUMBER	WALL TYPE TAG	\$\ldots	B.O.S. BRG. BTW., BETW.	bottom of sill bearing between	ELEV. EQ. EQUIV. E.R.R. E.T.R.	elevator equal equivalent exposed roof rafters existing, to remain	K KIT.	kitchen	P.T. PTD. Q QTY.	pressure treated painted quantity	T.O.F.F. T.O.H. TYP.	top of finished floor top of head typical unless noted otherwise
DOOR TAG ①	DOOR DESIGNATION NUMBER REFER TO DOOR SCHEDULE	DETAIL BUBBLE	(_)—⊖	C. CAB. C.L. CLG.	course cabinet center line ceiling	EXIST. EXT. E.W.P.	existing exterior eastern white pine	LAV. L.C.C.	lavatory lead coated copper	R. R. R.D. RECPT.	riser roof drain receptacle	V.B. VERT. V.I.F.	vapor barrier vertical verify in field
EXISTING DOOR	EXISTING DOOR TO REMAIN (W/O DOOR TAG)	REVISION TAG		CLR. CLST. CMU CONC. CONSTR.	clear closet concrete masonry unit concrete construction	F.B.O. FLR. F.O. FTG. FURN.	furnished by others floor face of footing furniture	MAT. MAX. MECH. MIN. ML	material (s) maximum mechanic (al) minimum microllam	REF. REFR. REQD. RM. R.O.	reference refrigerator required room rough opening	W W W.	west wide, width
WINDOW TAG	WINDOW DESIGNATION NUMBER REFER TO WINDOW SCHEDULE	ROOM TAG	ROOM NUMBER OR NAME REFER TO ROOM SCHEDULE	CONT. CPT. C.T.	continuous carpet ceramic tile	FXTR. G G.C. GL.	fixture general contractor glass, glazing	MLWK. M.O. MTD. MTL.	millwork masonry opening mounted metal	R.S. RWC R.Y.P.	rough sawn rainwater conductor resawn yellow pine	WD. WDW. W/O W.P. WPT.	wood window without water proofing working point
COMPASSIT:  Method Niles Architect, fire, expressly reserves its common less copyright and all other shaboury and progresser rights in these plans. All develope, specifications and copies thereof are sed shall remain the property of Method Niles Architects. They are instrumented are served and be used until any strength to this higher fine plant and or any other project on the fire by analyzed to any other plant and to sell any less analyzed to the shall provide the developed to the strength of the shall provide the provide the sed and sell and the shall provide t				D. DBL. DEMO. DIA. DIM.	deep, depth double demolish, demolition diameter dimension	GR. GWB	grad (e), (ing) gypsum wall board high, height	N N.A. NOM. N.T.S.	north not applicable nominal not to scale	SECT. S.F. SIM S.I.P.	south section square foot similar structural insulated panel shinlan	WSCT. WWF Y.P.	wainscot welded wire fabric yellow pine

SO.1 SCHEDULES S1.0 FOUNDATION FRAMING PLAN S1.1 FIRST FLOOR FRAMING PLAN S1.2 SECOND FLOOR FRAMING PLAN S1.3 THIRD FLOOR FRAMING PLAN S1.4 FOURTH FLOOR FRAMING PLAN S1.5 ROOF FRAMING PLAN S1.6 PILOT HOUSE FRAMING PLAN S2.0 FOUNDATION DETAILS S3.0 STEEL /WOOD SECTION & DETAILS S3.1 STEEL/WOOD SECTION & DETAILS

COVER SHEET

AS NOTED 05/23/2025

### Summery of Work - Continued

systems; new electrical and plumbing systems; and new automatic fire protection sprinkler and fire alarm system -During construction, the Owner may wish to have work performed by other employees or contractors. The G.C. shall connerste with others doing work while the construction contract is in effect

### SITE PREPARATION

-Clear and grub only areas to be occupied by construction, or as designated on plans. Existing soils and vegetation to remain shall be protected to the maximum extent possible. All areas of the site that are not absolutely necessary to the construction shall be clearly delineated, and vehicular, storage and other uses shall be prohibited. Provide erosion and sediment control measures as noted.

-Prior to construction, verify with Architect trees to be removed at site. Provide tree protection (snow fencing or equiv.) around drip edge of any tree canopy within 25' of excavation or disturbance. Roots or branches damaged during construction shall be pruned cleanly. Tree limb removal, where necessary, shall be done flush with runk or main branct
-All necessary layout work shall be the responsibility of the G.C. and shall be approved on site by the Owner. Where required G.C. shall have surveyor confirm sethacks to the property line

-Do all excavating, filling and grading required to construct the new structure. Remove topsoil from areas to support foundation. Store for reuse on site.

-Foundation design assumes soil bearing capacity of 2,500 PSF; contact Architect at once if any questionable soil conditions are discovered. Structural fill required shall be clean, free of organic matter, and mechanically compacted in

I eave site raked and clean for landscaping by others. All disturbed areas shall receive seeding with grass to match

-Excavation shall be performed within OSHA guidelines, so as not to disturb existing adjacent buildings, streets, and utility lines. Prior to the start of work, the GC shall verify location of all underground utilities and facilities. Contact the state One-Call system at least 72 hours in advance of any excavation. Hand excavate around utilities, as required.

-All footings shall hear on soil having minimum safe hearing canacity of 2 500 PSE

-Elevations given correspond to computed top of footings and are minimum depths that shall not be construed as limiting in any way the deoths required to reach good bearing. The bottom of exterior footings shall be a minimum of three (3)

-No footings shall be placed in water or on frozen ground. After footings are placed, they shall be protected against frost. -Fill and backfill material shall be free of deleterious organic material -No fill or backfill shall be placed over or against work at such time or in such manner that would endanger the stability

or otherwise damage such work. Do not backfill against the basement walls until basement slat-or-grade and first floor framing and floor sheathings are in place, and foundation walls have attained 75% of the specified 28-day design

-Backfill shall be brought up equally on each side of the walls

### CONCRETE

-All concrete work shall conform to the latest edition of the ACI Building Code

- -Concrete shall be machine mixed with the following compressive strength at 28 days
- 3,000 psi for footings and underpinnings.
- 2. 4.500 psi for exterior walls, foundation walls, garage floor slabs, carport slabs, driveways, curbs, walks, patios porches, steps and other flatwork exposed to the weather.

  3. 4,000 psi for interior walls, piers, slabs on ground, elevated slabs and all other concrete work.
- -Ready Mix concrete shall comply with ACI-301, ACI-304 and ASTM C-94. It shall meet or exceed the following criteria Maximum time between introduction of water and placing to be 1-1/2 hours.
- 2. Minimum cement content shall be 470 pounds per cubic yard for 3,000 PSI concrete, and 520 pounds per cubic yard for 3.500 PSI concrete.
- Maximum water cement ratio shall be 0.51 for 3000 PSI concrete, and 0.47 for 3.500 PSI concrete.
- 4. Maximum slump of concrete shall be 4 inches as determined by ASTM C-143. Maximum slump of concrete shall be 3 inches: and 8" after addition of HRWR to site verified 3" slump for concrete containing HRWR admixture as determined
- 5 All concrete exposed to the ground or weather shall be air entrained between 4-5% as determined by ASTM C-231.
- 6 Do not load trucks above rated canacity
- High-Range Water-Reducing Admixture (Super Plasticizer) shall conform to ASTM C-494, Type F or G and contain not more than 0.1 percent chloride ions.

-Copies of ready-mix concrete transcripts including mix and strength data shall be provided to Architect. Prenare

concrete test cylinders from each day's pour as required by special inspections. Cylinders shall be properly cured, stored and tested. Submit results to Owner and Architect -Throughout construction the concrete work shall be adequately protected against damage due to excessive loading,

construction equipment, materials or methods incorrain show expessive heat and freezing temperatures -Early drying out of concrete, especially during the first 24 hours, shall be carefully guarded against. All surfaces shall be moist cured or protected using a membrane curing agent applied as soon as forms are removed. If membrane curing

agent is used, exercise care not to damage coating. -Bending, tack welding, cutting or substitute reinforcing other than as shown on the contract drawing is prohibited unless specific approval for each case is given by architect.

-Concrete shall be conveyed, placed and finished in a workmanlike manner

-Prior to making repairs, contractor shall obtain permission from architect to make patches for other than minor honevcombing.

Contractor to coordinate requirements of structural, architectural, mechanical and electrical drawing

-All materials shall be stored to protect them against the elements. -The Contractor shall place concrete when the ambient temperature is 40° F. or higher. This concrete shall not be

allowed to reach a temperature lower than 50° F. overnight. If the Contractor can't meet the temperature requirements,

the Contractor shall follow best practices for cold weather concreting. -Cold weather concreting shall be in accordance with ACI-306.

Concrete slabs as shown on drawings shall bear on soil having minimum canacity of 500 PSF.

Provide clean sand or gravel fill, 3/4" clean stone, where shown on drawings.

-Anchor bolts shall be ASTM A-307, Grade C, 1/2\* diameter, spaced and installed as shown on drawings. All anchor bolts, nuts, fasteners, and washers shall be galvanized to meet ASTM A153.

## REINFORCING

-All reinforcing bar details shall conform to the latest ACI code and detailing manual -Reinforcing bars shall be new, deformed billet steel, ASTM A-615, grade 60; sizes and locations as shown on drawings.

Grade 60 dowels shall not be bent in field after placing. Bending, tack welding, or substitute reinforcing is prohibited unless specifically approved by the structural engineer.

-Provide and schedule with the shop drawings all necessary accessories to hold reinforcing securely in position.
-Clearances of main reinforcing from adjacent surfaces, u.n.o. shall be:

- Unformed surfaces in contact with ground or exposed to the weather: 3"

conductor not smaller than 4 AWG.

 Formed surfaces in contact with ground or exposed to the weather #5 bars or smaller: 1-1/2" bars larger than #5: 2". 4. Exterior wall surfaces: 2", and in all cases, not less than the diameter of the bar.

-Where continuous bars are called for, they shall be continuous around corners, lapped at necessary splices, and hooked at discontinuous ends. Laps shall be 40 bar diameters, minimum. Bar laps may be offset to avoid control or

construction joints. -Welded wire febric (WWF) shall be ASTM A-185. I an welded wire febric two full mesh langths at enlines and wire together. Wire fabric shall be placed 2" below top of slab.

-Provide a grounding electrode system as required by NEC section 250-52(a). For a concrete-encased electrode. provide an electrode encased by at least 2" of concrete, within a portion of a concrete foundation or footing that is in direct contact with the earth, and consisting of at least 20' of one or more bare, zinc-galvanized or other electrically conductive coated steel reinforcing bars or rods not less than 1/2" diameter, or consisting of at least 20' of bare copper

-Provide a grounding electrode conductor or bonding jumper in accordance with the Electrical Code. See Electrical Specifications for more information.

Coordinate location and schedule with General Contractor, Electrical and Concrete and/or Masonry subcontractor

## MASONRY

Brick vaneer shall be standard modular size extruded clay face brick with sanded smooth, matte texture. Color/bland

shall be T.B.D. by Owner and Architect. Face brick by Belden Brick or equivalent manufacturer

-Cast stone coping, door and window sills shall be architectural pre-cast, through colored high density concrete in smooth, matte texture finish by Jersey Cast Stone or equivalent manufacturer. Final color and finish selections shall be

-Concrete block shall be normal weight aggregate, either hollow core, load-bearing ASTM C-90, Grade N-1, or solid -Horizontal joint reinforcement shall be 9 gage, hot-dip galvanized ladder type, ASTM A-185, Dur-O-Wal or equivalent,

at every other course. Lap 12" min. at splices. Provide prefabricated corners. -Vertical reinforcing shall be new deformed billet steel, ASTM A-615, grade 60: sizes and locations as shown or drawings. Splices shall have a min. lap of 50 bar diameters. Grout all cells, whether reinforced or not, in accordance with

the building code. Grout lifts shall not exceed 4'-0" in height. -Non-corrosive metal ties shall be provided as necessary to bond stone and brick to CMU in all areas -Waterproofing shall be fluid-applied, 100% rubber polymer membrane as sub-grade foundation waterproofing. All ane materials shall be 100% rubber polymer products that yield an asphalt free highly elastic seamless waterproofing membrane. All waterproofing membrane products shall be manufactured by Rubber Polymer Corporation

-Rub-R-Wall waterproofing membranes shall be applied only by applicators certified by RPC. The use of RPC products must be done so in strict accordance with RPC and standard waterproofing practices in order to maintain applicable warranties. Refer to application requirements of RPC for full requirements.

-Additional materials include Rub-R-Wall Mastic, a heavy-bodied rubber mastic for use prior to spraying. It is applied with a caulking gun or troweled for repair of minor imperfections and blemishes in concrete and block substrates such a form tie holes, minor honeycombs and minor cracks, and foam boards, sheetings and geotextiles as protective erings. All protective, insulation or drainage media which become an integral part of the membrane system mus meet approval and acceptance by RPC. Protection boards may be one of, or combination of several products such as the following: Standard closed-cell extruded poly-styren foam boards manufactured by Amoco, Dow, Foamular or other RPC-approved equal. These boards may not be used if thickness is ½" or less and are perforated.

-Mortar for concrete block shall meet ASTM C-270. Type M (2.500 psi). CMU shall be laid in a full bed of mortar. Interior stucco finish

Mortar for cast stone, brick, and fireplaces shall be equal parts white and gray portland cement, hydrated lime, and sand in a 1:1:3:9 ratio. Owner and Architect shall approve pointing sample for color and texture.

-Grout for cells shall conform to ASTM C476 and have a minimum 28-day compressive strength of 3.000 psi. Slump shall be 8 to 10 inches. Maximum aggregate size shall be 3/8". -Grout for leveling plates shall be non-shrink, non-metallic type; factory pre-mixed grout that is manufactured in

accordance with ASTM C109. F'c shall not be less than 5,000 psi. -Parging shall be 1/2" thick, 2-coat cementitious stucco, on reinforcing metal lath as necessary, as shown on drawings

Color and texture shall be determined by Owner and Architect.

## RAINSCREEN DRAINAGE PLANE SYSTEMS

Akron Ohio herein referred to as RPC or equivalent

The rainscreen drainage plane material shall be a vertically channeled matrix of a minimum of six millimeters thick and should not exceed 10 millimeters in thickness. The material shall be non-absorbent and shall resist compression The material shall consist of a two-ply design with a filter fabric (such as spun bonded polypropylene) to prevent the

scratch coat from clogging the drainage path.

-The rainscreen drainage plane material shall be rot and corrosion resistant.

-The rainscreen drainage plane shall be installed according to the manufacturer's instructions on the WRB with the polypropylene drainage plane against the building paper and the filter fabric facing the weather

-For stone or stucco, metal lath should be installed directly on the filter fabric and attached with either construction nails or a staple gun (to Code). A scratch coat is then applied to the metal lath before installing stone veneer or exterior

The reinscreen drainage plane material shall be Sure Cavity by Masonry Technology Inc., Home Slicker or Hydro Gan Drainable Housewrap (for siding), or Home Slicker Stone & Stucco (for stone and stucco) by Benjamin Obdyke, or

## FACTORY-BUILT FIREPLACES

-Factory-built firenlaces that consist of a fire chamber assembly, one or more chimney sections, a roof assembly and other parts as tested and listed as an assembly by an approved agency may be installed when complying with all of the

following provisions The fire chamber assembly is installed to provide clearance to combustible materials not less than set forth in the

 The chimney sections are installed to provide clearance to combustible materials not less than specified in the listing and if the fireplace chimney extends through floors and ceilings, factory-furnished firestops or firestop spacers shall be installed. Portions of chimneys that extend through rooms or closets shall be enclosed to avoid personal contact, contact of combustible material and damage to the chimney.

3. Hearth extensions shall not be less than 3/8" think hollow metal, stone, tile or other approved non-combustible material. Such hearth extension may be placed on combustible subflooring or finish flooring. The hearth extension shall

be readily distinguished from the surrounding floor.

. Hearth extensions shall extend not less than 16" in front of and at least 8" beyond both sides of the fireplace opening. 5. Factory-built fireplaces shall be installed in accordance with their listing and the manufacturer's installation

6. The supporting structure for a hearth extension shall be at the same level as the supporting structure for the fireplace

nit unless otherwise authorized by the listing. -Factory-built or masonry fireplaces shall equipped with an exterior air supply to assure proper fuel combustion. The exterior air intake shall be capable of providing all the combustion air from the exterior of the dwelling, or from spaces within the dwelling ventilated with outside air, such as crawl or attic space. The exterior air intake shall not be located within the garage of the dwelling. The exterior air intake shall be covered with a corrosion-resistant screen of 1/4" mesh. The combustion air passageway shall be a minimum of 6 square inches and not more than 55 square inches. The

exterior air inlet is permitted in the sides of the firebox chamber, or within 24" of the firebox opening on or near the floor. The inlet shall be closeable and designed to prevent burning material from dropping into conc -Chimneys shall extend at least 2' higher than any portion of the building within 10' but shall not be less than 3' above the point where the chimney passes through the roof.

-Firestonning shall be provided to cut off all concealed draft openings (both vertical and horizontal) and to form an effective fire barrier between stories, and between a top story and roof space. Provide firestopping at openings around vents, pipes, ducts, chimneys, and fireplaces at ceiling and floor levels, with noncombustible materials.

## FIRE BLOCKING and DRAFT STOPPING

-Provide effective fireblocking or draftstopping to prevent the free passage of flame and products of combustion through concealed spaces or openings in the event of a fire. The integrity of all fireblocking and draftstopping shall be continuously maintained and form an affective fire harrier hatween stories, and between a top story and the roof space -Fireblocking shall be installed in such a manner as to be securely retained in place. Fireblocking installed in portions of buildings required to be constructed of noncombustible materials shall consist of approved noncombustible materials or approved insulating materials. Fireblocking installed in portions of buildings permitted to be constructed of combustible materials shall consist of approved noncombustible materials or approved insulating materials, or of materials of 2 ickness of 1" lumber with broken lap-joint, or 1 thickness of %" wood structural panel with joints backed by %" wood structural panel, or of 2" lumber installed with tight joints.

Fireblocking shall be installed in the following locations; concealed spaces of stud walls and partitions, including furred or studded-off spaces of masonry or concrete walls, and at the ceiling and floor or roof levels; at all interconnections between vertical and horizontal spaces; at concealed spaces between stainway stringers at the top and bottom of the run; at all openings around vents, pipes, ducts, chimneys and fireplaces at ceiling and floor levels; within concealed spaces of exterior wall finish and other exterior architectural elements where permitted of combustible construction, or where erected with combustible frames, at maximum intervals of 20'; within concealed spaces behind interior

combustible trim and finish; and in concealed spaces formed by floor sleepers in areas of not more than 100 square feet -Draftstopping materials shall be not less than 1/4" gypsum board, 3/8" plywood, or other approved materials adequately

-Draftstopping shall be installed in buildings of Type 3, 4 or 5 construction in the following locations: where ceilings are suspended below solid wood joists or suspended or attached directly to the bottom of open-web wood floor joists, the space between the ceilling and floor above shall be divided into areas not greater than 1,000 square feet. Draftstopping shall divide the concealed space into approximately equal areas. Draftstopping shall be installed parallel to the main

-(IBC) Draftstopping shall be installed so that horizontal floor areas do not exceed 1,000 s.f. unless the building is equipped throughout with an automatic sprinkler system. Draftstopping shall be installed in attics and concealed roof spaces so that horizontal areas do not exceed 3,000 s.f. unless the building is equipped throughout with an automatic

### PENETRATIONS

Cables and wires without combustible jackets and noncombustible pipes, tubes, conduits and vents which penetrate a fireresistance rated wall assembly shall be tested in accordance with ASTM F119 as part of a fireresistance rated mbly, or shall be protected by an approved through-penetration firestop system.

-Cables and wires with combustible jackets and combustible pipes, tubes, conduits and vents which penetrate a fireresistance rated wall assembly shall be tested in accordance with ASTM E119 as part of a fireresistance rated assembly, or shall be protected by an approved through-penetration firestop system.

Where cleaves are installed, the cleaves shall be noncombustible and shall be securely factored to the assembly penetrated. All space around the combustible items contained in the sleeve and the sleeve itself shall be filled with an approved through-penetration firestop system.

-Combustible insulation and coverings on the penetrating item shall not pass through the assembly unless these materials are protected by an approved through-penetration firestop system.

The through-penetration firestop system shall be tested in accordance with ASTM E814 with a minimum positive pressure differential of 0.01 inch of water column. The penetration firestop system shall have an "F" rating of not less han the required rating of the assembly penetrated.

The annular space between the penetrating item and the fireresistance rated assembly being penetrated shall be protected with a material capable of preventing the passage of flame and hot gases sufficient to ignite cotton waste when subjected to the time-temperature fire conditions of ASTM E119, under a minimum positive pressure differential of 0.01 inch water column at the location of the penetration for the time period equivalent to the required fireresistance rating of the assembly penetrated.

-Penetration of concrete or masonry wall assemblies by a maximum 6" nominal diameter copper, iron or steel pine conduit or wires and cables with steel jackets shall be permitted provided that the maximum opening size is 144 square inches and the penetration is protected with concrete, grout or mortar for the full thickness of the assembly or the thickness required to provide a fireresistance rating equivalent to the required fireresistance rating of the assembly penetrated

Openings to accommodate noncombustible conduits, pipes and tubes through a single membrane that is an integral component of a fireresistance rated wall assembly shall be permitted, provided that the aggregate area of all such openings does not exceed 100 square inches in any 100 square feet of wall area and the openings are fireblocked with approved noncombustible materials.

Onening for steel electrical putlet have that do not exceed 16 square inches in area are nermitted. Outlet have on opposite sides of the assembly shall be separated by a horizontal distance of not less than 24

All structural steel details shall be designed in accordance with the latest issue of AISC "Specifications for Structural teel Buildings: Allowable Stress Design and Plastic Design". Connections shall be designed to develop the full strength of the member over the required span.

-Field connections shall be made with ASTM A325, Type 1, high-strength heavy hex steel structural bolts, heavy hex carbon-steel nuts, and hardened carbon-steel washers, uncoated unless noted otherwise, %" min. diameter, or welded as shown on drawings. Welding electrodes for field welding shall be E70-XX series. All welding shall be performed by certified welders and shall conform to AWS - Structural Welding Code. Gas cutting torches shall not be used to correct

fabrication errors without approval of Structural Engineer.

-All structural wide-flange shapes shall be ASTM A992, Grade 50. All other structural shapes and plates shall be ASTM

A-36 or A992. All steel pipe columns shall be ASTM A-500, Grade C, Fy = 46 ksi.

-Steel angles, beams and plates along with boths and washers, in direct contact with exterior finish masonry, and all
exposed structural steel, shall be hot-dipped galvanized per ASTM A123. All interior steel shall be painted with rust inhibitive primer, unless noted otherwise.

-All connections shall be "Framed Beam Connections" designed in accordance with Part 4 of the AISC Manual. The connections shall be designed for end reactions as indicated on Uniform Load Constants For Beams Laterally Supported Tables in Part 2 of the AISC Manual. Provide full depth double angle connections unless otherwise noted.

All carpentry shall be structurally sound and done in a workmanlike fashion. Level tolerance shall be 1/8" over 10'. Plumb tolerance shall be 1/8" on 8' wall. All fastening shall be in accordance with standard practice and IBC and NDS

National Design Standards for Wood Construction requirements.

-All framing members shall be generally free from warp that cannot be corrected by bridging or nailing, and free from knots that exceed 1/3 of its depth.

-In exterior walls of 3B construction, all wood structural framing and sheathing shall be fire retardant treated, typical -Base Design Values for roof/floor joist framing: Hem-Fir No. 2 or equivalent, minimum extreme fiber in bending Fb = 850 psi minimum modulus of elasticity E = 1 300 000 psi

scop psi, minimum modusus or elasticity E = 1,300,000 psi .

Base Besigni Yolak for wood studis and Marign; Hem Fir Stud, Minimum compression parallel to grain Fc =800 psi, minimum tension parallel to grain Ft = 400 psi, minimum compression perpendicular to grain Fc = 405 psi.

Wood framing mander Bell, (parallel studind umber), minimum extreme Beir in benoding, Fb = 290 psi; minimum protozottal shear, Fv = 200 psi; minimum modulus of elasticity, E = 2,000,000 psi. Refer to manufactures requirement to extreme the studies of the protostor destable, for extrained.

for bolting details for multiple PSL's. -Wood framing marked Weldwood 3000 Fb-1.8E LVL (laminated veneer lumber), minimum extreme fiber in bending, Fb = 3.000 psi; minimum horizontal shear. Fy = 350 psi; minimum modulus of elasticity. E = 1.800.000 psi. Refer to nanufactures requirements for bolting details for multiple LVL's.

 3/4" CDX tongue and groove plywood subfloor or AdvanTech engineered strand structural wood panel. 23/32" VIP+ ongue and groove subflooring with 8d nails 6" o.c. perimeter and 12" o.c. intermediate, where floor under

- plywood less than 1/2" thick, Homasote or cementitious underlayment. 1/2" CDX plywood (4-ply) at exterior side of walls with 8d nails 6" o.c. perimeter and 12" o.c. intermediate
- 3/4" CDX plywood (5-ply) at exterior side of roof with 8d nails 6" o.c. perimeter and 12" o.c. intermediate. . 3/4" non-combustible fire retardant treated plywood within 4'-0" distance of 1 hour rated fire barrier at pilot house roof
- areas. Reference UL assembly notes and details for fastening requirements. All plumond shall be rated for exterior use APA rated EXP Lor better unless noted otherwise

-All plywood subfloors shall be glued and nailed to joists. All subflooring, underlayment, ledgers, and built-up beams shall be glued with Contech PL-Premium (TM) construction adhesive or equivalent low VOC adhesive.

-All framing members in direct contact with earth, concrete, or masonry shall be ACQ or CA pressure treated lumber with a retention of .40 lbs/cubic foot and rated for ground contact by the American Wood Preservers' Association. a retention to Au discussion of an interior of ground contact by the American viscor Preserves's Association.

All metal hangers, Bies, straps, and mechanical anchors (Okis, nails) in contact with here residently pressure-freated woods (Alkaline Copper Custe ACQ-C ACQ-D, Copper Azole: CBA-A and CA-B, and non-DOT Borate woods) shall be hot-dipped aglivaries with a 1.85 oz. This to 2) minimum coating (G-185) per ASTM A533, batch/post hot-dipped galvariesed per ASTM A123 for connections and ASTM A153 for fasteners or mechanically galvarized fasteners per

galvanized per ASTM A123 ior co ASTM B695, Class 55 or greater. -All pressure treated lumber shall be Southern Pine No. 2 minimum, with Fb = 925 psi (single use) and E = 1,400,000 ps or better LINO

-All wood sill plates shall be anchored to grout filled CMU or concrete foundations with 1/2" diameter anchors at 48" o.c., minimum 2 anchors per member. Anchor bolts shall be embedded a minimum of 14" into mortar grout and 9" into

-Double all joists as indicated and under all partition walls parallel to the joists. Double all joists, headers, trimmers around all openings and under all partitions. Use Simpson or approved equivalent hanger or connector. Provide blocking or bridging between all floor joists and rafters that span more than 8 feet. -Floor systems having joists framing from opposite sides over a bearing support shall be tied together by lapping joists 3"

-Anchorage shall be strictly in accordance with this plan. There shall be a continuous tie from rafters to footings in all new and affected areas. Any deviation or substitution shall be approved in writing by the Architect. -Provide a minimum of 1-1/2" bearing on wood or metal to support all joists, u.n.o. Provide a minimum of 3" bearing on masonry to support joists, u.n.o. Provide a minimum of 3" bearing to support all beams or girders, u.n.o. Provide

min., or with a wood or metal splice, or by continuity of floor sheathing overlapping the ends of joists 3" min

minimum of one stud (1-1/2" bearing) to support all headers, u.n.o.

ions containing plumbing, heating, or other pipes shall be framed to give adequate clearance for the pipes and ducts. Holes bared in joists shall not be closer than 2" to the top or bottom and shall not exceed 1/3 the depth of the joist All nails used in framing shall be hot dipped galvanized -Provide blocking, cats, and grounds for cabinetry, trim, light fixtures, fire blocking, and elsewhere as required. See finish

\*\*Toruse blocking, case, any globules for Lawrency in in, ingrit houses, he blocking, and searmers as required, see schedules, plans, and interior elevations.

-Extend wood post continuous full height from foundation or transfer beams. Extend through floor or provide solid blocking of the same size and material as the post. Provide seated connections for all beams at top of posts.

-See the International Building Code for minimum bracing and fastening requirements.

-No structural member shall be cut or notched without approval by the Architect.

-No structural memore's ania se cut or noticed wimout approva by the Architect. Allembers framing to beams, headers, etc. shall be secured with Simpson Storog-Tie framing anchors or approved equal, unless otherwise noted or shown. Sufficiently in inhibitip 2x beams, girders, and posts so that load distributes equally. All posts at PSL and U.V. beams shall be a minimum size of 3-12"x width of PSL and U.V. beams for interior walls and 5-14"x width of PSL beam for exterior walls and the one sool fPSL memorates as minimum.

-All engineered lumber, including laminated veneer lumber (LVL) beams and wood I-beam joists and rafters shall meet PRI-400 criteria of the APA, Engineered Wood Association.

-Handling and installation shall be in strict accordance with the manufacturer's requirements -Provide engineered lumber as shown on drawings. Except for cutting to length, LVL or PSL beams and headers shall not be cut, drilled, or notched except as noted in manufacturer's instructions.

### INSULATION

-See drawings for sizes, types and locations. Maintain 1" minimum air space in vented rafter cavity using polyethylene baffles as necessary. Insulation shall meet or exceed 2018 International Energy Conservation Code requirements. Provide closed cell polygrethane from eill sealer under all wood eille in contact with foundation

-For spray-in insulation in open wall and ceiling or roof cavities, provide cost options for 2" thick polyisocyanurate spray foam insulation with batt insulation inside. -For batt insulation, provide formaldehyde-free fiberglass thermal and sound control insulation made with non-toxi acrylic thermosetting resin. Insulation shall be unfaced, high density batts that meet or exceed ASTM E84 flame spread

25 or less, smoke developed 50 or less, and ASTM C665 Type 1, Class A fire rating.

For rigid insulation being grade, provide expanded polystyrer (EPS) insulation. I an on-structural, closed cell, rigid board insulation. Provide Type 11 knustation: minimum compressive strength: 25 psi. Insulation shall be manufactured with a hydrocarbon blowing agent, with no ozone depletion potential. It shall have 15 year limited thermal performance warranty. Insulation shall be Styrofoam sheathing by Dow Chemical

shall nike to year wines with a special provide polyleocyanurate insulation, a non-structural, rigid board insulation consisting cf a glass-fiber-reinforced polyleocyanurate foam core laminated of a glass-fiber-reinforced polyleocyanurate foam core laminated depletion potential, shall have 15 year limited thermal performance warranty. Insulation shall be Thermax sheathing by

Dow Chemical Company or equivalent. -For spray insulation, provide HFC 365/227-blown, closed cell, polyurethane spray foam insulation. Insulation shall have manufacturer's standard limited lifetime warranty. Insulation shall be lovfoam Elite Closed Cell Foam Insulation by Icynene Inc or equivalent

Spray insulation shall meet the requirements of the following: ASTM E84: Test Method for Surface Burning Characteristics of Building Materials, ASTM E96: Standard Test Methods for Water Vapor Transmission of Materials, ASTM E119: Standard Test Methods for Fire Tests of Building Construction and Materials, and ASTM E219: Standard Test Method for Air Permeance of Building Materials.

-Submittals: Contractor shall supply manufacturer's certificate certifying insulation provided meets or exceeds specified requirements, and installer's certificate showing the insulation installation certification

requirements; and installers is betilicate shrowing the installation installation certification: Spray installation shall be a Product produced in an ISO 9001 registered factory, and a single source product from one manufacturer. Spray insulation shall be low-emitting, contain no PBDEs, and contain no unear-formatichtycle. Comply with manufacturers written instructions for handling and protection prior to and during installation. Store both components in a temperature controlled area between 60 and 85 degrees F. Do not allow product to freeze. Use only those components that are supplied by the Manufacturer. Do not expose insulation components to suplight, except to extent necessary for period of installation and concealment

extent necessary for period of installation and concessment.
-Spray foam insulation shall conform to the following: thermal resistance (for 1 inch of material) (R-Value/inch @75 deg Fr. ASTM CS18; 7.1 hr.sq ft.degree F/BTU; air permeance (for 1 inch of material): ASTM E2178: less than 0.02 L/s.m<sup>2</sup> (@75 Pa; water vapor transmission (for 1.5 inches of material): ASTM E96; 0.97 perm; resistance to fungal growth ASTM C 1338: no growth; and Flame Spread and Smoke Developed Rating. ASTM E84, Flame Spread: 25 and Smoke Development: 300

-Examine substrates and conditions, under which work is to be performed. Do not proceed until unsatisfactory conditions have been corrected

Review placement area to determine final location will not be within 3 inches of any heat source where the temperature

valveure publishmis des to detellation for una bocassia van inche within in a botas of dry fisht source where une temperature will exceed 150 deg F per ASTM c411 or in accordance with authorities having justissies having justissies having justissies having justissies having justissies having justissies. C411 or in accordance with authorities having justissies having having justissies having having having having having having having having h insulation to substrates in compliance with manufacturer's written instructions. Apply first pass to maximum of Additional passes shall be 2" maximum. Apply insulation to produce thickness required for indicated R Value. Extend

Additional passes shall be first maximum. Apply insulation to produce thickness required for indicated K Value, Extend insulation indicates shall be a first s

-Protect installed insulation from damage due to harmful weather exposures, physical abuse, and other causes. Provide temporary coverings where insulation is subject to abuse. Insulate all exterior headers and corners closed in during framing. Fill all shim spaces around exterior doors and

windows with batt insulation air barrier. -Provide sound attenuation batt insulation in all hathroom and hadroom floors, walls and callings

-Non-combustible insulation shall be semi-rigid mineral wool insulation boards by Roxul or equivalent Insulate durts to R-8 minimum when located in non-conditioned spaces and when located outside of the building

-Roofing shall be smooth type, polyester scrim reinforced thermoplastic polyolefin membrane (TPO), for use as a single ply roofing membrane. TPO roofing shall meet or exceed the minimum requirements of ASTM D-6878 and shall be UL Listed Class A. FM Approved. Dade County Product Approval. Florida Building Code Approved.

Listed Lases A, Fix Applicioned, Laste County Product Applicant, Fortists Editioning Code Applicates.

Provide an installed roofing membrane and base flashing system that does not permit the passage of water and will withstand the design pressures calculated in accordance with the most current revision of ASCE 7.

For flat roofs (slope <11.2); provide this planted systems. Minimum ord slope shall be 1/4 per 12: For roof slopes greater than 1/4" up to and including 1/2" per 12", roofing system shall be installed with side laps installed parallel or perpendicular to the slope. Start the application of membrane plies at the low point of the roof or at the drains, so that the flow of water is over or parallel to, but never against the laps. Backwater laps are not allowed.

-System shall be GAF Everguard Extreme TPO, 60 mil thickness roofing system in White, or equivalent. Roofing system materials shall be from one manufacturer, including flashing, adhesives, sealants, primers, fasteners, and accessories etc. or be approved by the primary roofing manufacturer. -Certificates: Installer shall provide written documentation from the manufacturer of their authorization to install the roof system, and eligibility to obtain the warranty specified in this section.

-Warranty: Provide manufacturers standard 20 year quarantee. Manufacturer agrees to renair or replace the portion of roofing materials, which have resulted in a leak due to a manufacturing defect of defects caused by ordinary wear and

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2337-41 PENNSYLVANIA AVE

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156.03 ZGIERO PLANTE LAND LA IO RIDGE AVENUE LADELPHIA, PA 19128

RUCTURAL ENGINEERS W THOMESON STEPPT



THEW MILLAN RA-014879-B

SPECIFICATIONS

N.T.S. 05/23/2025

-Roof substrate shall be properly supported and secured; clean, dry, smooth, and free of sharp edges, loose or foreign

-root subsides that be plopenly supported an a sectione, cleant, ory, smooth, and line of shalp edges, tooler or loneing material, oil, grease, or other materials that may damage the membrane.
-Wood nailers shall be required at all roof edges, penetration pockets, and other locations required by manufacturer.
Wood nailers shall completely support all sheet metal.
-Insulation shall be closed only polyscoyarurate, tapered at a slope of 1/4" per foot. Insulation shall be EnergyGuard

Tapered Polyiso insulation by GAF, or equivalent. When installing multiple layers of insulation, stagger all joints betwee layers. Where insulation thickness is less than 1", provide 1 fastener and plate per 1 square foot, typ. Install only as much insulation as can be covered with roofing system and completed before the end of day's work or before the o

of inclement weather.

-Roof cover board shall be non-halogenated high-density polyisocyanurate cover board, with a coated glass facers

-Roof cover board shall be non-halogenated high-density polyisocyanurate description both major surfaces of the core foam containing no hazardous halogenated flame-retardant chemicals and meets ASTM C1289, Type II, Class 4, Grade 2. Cover board shall be EnergyGuard NH HD Polyiso insulation by GAF or equivalent. Separation sheet shall be fire resistant, non-woven fiberglass slip sheet used as a separation sheet over polystyrene

-Separation sheets sintle life resistant, in convent interglass says sheet used as a speciation sheet over polysylver foram insulation or beneath insulation over wood substrates providing a UL class A fire rating. -Fasteners shall be corrosion-resistant, and provide minimum pullout capacity of 200°s per fastener. Fastener size, type, and specing shall be provided as required by manufacturer. -Flashing: Where possible, provide a min. vertical design height of 8° for all flashing terminations. Flashing materials

shall be compatible with roofing system.

-Job Conditions: Proceed with roofing only when existing and forecasted weather conditions permit. Ambient

-Soc Ordinatories Protection with Tooling vary where instanting and unlessate weatered controls permits. Antibests therepretatures must be above 45°F when applying hot aspirat or water based adhesives. Deliver all roofing materials to the site in original containers, with factory seals intact. Store all pail goods in their original undamaged containers in a clean, dry location within their specified temperature range. Reference data sheets for product storage requirements. Do not expose materials to moisture in any form before, during or after delivery to the site. Reject delivery of materials that

-Installation - ADHERED MEMBRANE: All work surfaces should be clean, dry, and free of dirt, dust, debris, oils, loose and/or embedded gravel, un-adhered coatings, deteriorated membrane, and other contaminants that may result in a surface that is not sound or is uneven. Full-width rolls can be installed throughout the field and perimeter of the roof. Hall shaked size of the cooperation o drainage points. All exposed sheet corners must be rounded a minimum of 1\*. Use full-width rolls throughout the field and perimeter of the roof. Half sheets are not necessary. Membrane laps shall be heat-welded together. All welds shall be continuous, without voids or partial welds. Welds shall be free of burns and scorch marks. Weld shall be a minimum of 1" in width for automatic machine welding and a minimum 2" in width for hand welding. Roof membrane must be mechanically attached along the base of walls with screws and plates 6" on center. Adhesives should be applied to mechanicany statistical along the base of waits with screws and places of or center. Authensives should be appried to membrane at the rates listed on the pail. Use appropriate bonding adhesive for substrate surface, applied with a solvent-resistant roller, brush or squeegee. Adhere approximately one half of the membrane sheet at a time. One half of the sheet's length shall be folded back in turn to allow for adhesive application. Lay membrane into adhesive once the bonding adhesive is tacky to the touch. Roll membrane with a weighted roller to ensure complete bonding between adhesive and membrane. Prevent seam contamination by keeping the adhesive application a few inches back from the

-Clean-up; All work areas are to be kept clean, clear and free of debris at all times. Do not allow trash, waste, or debris to collect on the roof. These items shall be removed from the roof on a daily basis. All tools and unused materials must be collected at the end of each workday and stored properly off of the finished roof surface and protected from exposure to the elements. Dispose of or recycle all trash and excess material in a manner conforming to current EPA regulations and local laws. Properly clean the finished roof surface after completion, and make sure the drains and gutters are not clogged. Clean and restore all damaged surfaces to their original condition.

-Final Inspection:\*\*\*ONLY DIAMOND PLEDGE\*\*\* Manufacturer's representative shall provide a comprehensive final

inspection after completion of the roof system. All application errors shall be addressed and final punch list completed

-Waterproof roof underlayment (WRU) shall be Grace Ice and Water Shield by W.R. Grace, Weatherwatch by GAF, MoistureWrap by Tamko, or equivalent. All sidewall junctions, valleys, and changes in roof pitch shall be covered with WRU, extending 18" in each direction. Eaves shall be covered with WRU, extending 36" up roof from eave edge. Cap and base flashing, ridges, hips, chimney pans, and drip edge at perimeter of roof shall be 26 gauge aluminum, Bas course, through-wall, cricket, valley flashing, and roof penetrations shall be 30 gauge aluminum. -Provide flashing for mechanical equipment, sidewalls, and plumbing and roof vents as necessary. -Gutters and scuppers shall be a minimum of 5 inch square, aluminum box style and rain water conductors shall be 4' diameter smooth aluminum, in locations indicated on drawings. Provide necessary fittings, accessories and hangers, Provide continuous gutters where possible. Where not possible, provide expansion joints for runs over 40 feet. Provide

## FINISH CARPENTRY - EXTERIOR

-Trim: Fiber cement trim, Harditrim planks, smooth texture by James Hardie or equivalent. Trim shall be preprimed. See drawings for sizes and locations. Boral TruExterior poly-ash composite trim, with wood grain on one side and smooth surface on reverse or Azek are acceptable.

-Eaves/Soffits: see drawings. Soffit material shall be non-vented aluminum soffit by Pac-Clad or equivalent

manufacturer. All finish colors shall be confirmed by Owner & Architect.

gutter hangers at 3'-0" o.c. typical. Provide slope of 1/16" per 12" for gutters.

-All nails exposed on the exterior shall be stainless steel or aluminum and sized according to the manufacturers' specifications. Alternate nails shall be acceptable only if expressly specified and warranted by the materials supplier and

nanufacturer -House wrap shall be installed before window and door installation. House wrap shall be installed shingle style, fastened with 1" staples or roofing nails, 12"-18" o.c. minimum. Horizontal joints shall be shingle lapped by 4" minimum, and vertical joints shall be lapped 12" min. House wrap shall lap over all flashing and counterflashing, typical. All joints othe

than horizontal lap joints shall be sealed with tape approved for use by house wrap manufacturer. into include Tuyek or Tuyer For a sturce exterior wall finish, accentable products include 2 lawers of 28#, 30-minute Type D building paper, Tyvek Stuccowrap, or equivalent. Each layer shall be independently in

tested as installed in compliance with AAMA 508. -Static Water Penetration: Pass water penetration test under static pressure when tested in accordance with ASTM E331 at a differential of 10% of inward acting design load, with 15 psf

### METAL CIDING -Provide a dry joint, aluminum wall panel system with a tongue and groove system and concealed mechanical fasteners

pressure differences for at least 15 minutes with 5 gal per sf per hour of water applied. Dynamic Water Penetration:

Pass water penetration test under dynamic pressure of 6.24 psf in accordance with AAMA 501.1.-Structural: Provide systems tested in accordance with ASTM F330 and certified to be without permanent deformation or failure of structural bers.-Provide factory-formed, aluminum wall panels fabricated from single sheets of metal formed into profile for installation method indicated. Include attachment assembly components, panel stiffeners, and accessories required for weather tight system. Panel Depth: 0.75 inch. Thickness: 0.040 inch. Finish: Kynar 500 PVDF. -Panels shall be smooth surface. Onaline 8" OPE080 painted aluminum panels by ATAS, or equivalent. Refer to drawings for panel sizes. Architect and Owner shall select color from manufacturer's standard options.-Panel Accessories: Provide components required for a complete, weather tight panel system including trim, copings, fasciae mullions, sills, corner units, clips, flashings, sealants, gaskets, fillers, closure strips, and similar items. Match material and finish of metal panels unless otherwise indicated.-Flashing and Trim: Provide flashing and trim formed from same material as metal panels as required to seal against weather and to provide finished appearance. Locations include, but are not limited to, bases, drips, sills, jambs, corners, end walls, framed openings, rakes, fasciae, parapet caps, soffits, reveals, and fillers. Finish flashing and trim with same finish system as adjacent metal names. Panel Fasteners Self-tapping screws designed to withstand design loads. Provide exposed fasteners with heads matching color of metal panels by means of plastic caps or factory-applied coating. Provide EPDM, neoprene or PVC sealing washers for exposed fasteners.-Install metal panels according to manufacturer's written instructions in orientation, sizes, and locations indicated. Install panels perpendicular to supports unless otherwise indicated. Anchor metal panels and other

-Approved corrosion-resistant flashing shall be provided at top and sides of all exterior door and window openings in such a manner as to be leak proof. Similar flashing shall be installed at the intersection of chimneys or other masonry construction with roofs, or frame or stucco walls, with projecting lips on both sides under stucco copings; under and at the ends of masonry, wood or metal copings and sills; continuously above all wood trim; where exterior porches, decks or stairs attach to a wall or floor assembly of wood frame construction; at wall and roof intersections; under built-in

components of the Work securely in place, with provisions for thermal and structural movement

gutters; in all roof valleys and around all roof openings.

-At doors and windows, sill pan flashing shall be installed first, followed by jamb flashing and then head flashing. Head flashing shall be slipped under house wrap or equivalent air infiltration barrier. Tape the house wrap to the flashing membrane along the head of the window and out beyond the horizontal slit in the house wrap.

-Flashing shall extend minimum 8" up walls at roof junctions, minimum 4" up walls at window and door heads. resistant flashing shall be a flexible bituminous membrane such as Moistop. Future Flash, or Bituthene by WR Grace

-Sheet metal shall comply with "Architectural Sheet Metal Manual" by SMACNA for each category of metal work required. See drawings for materials and locations of flashing and sheet metal.

-Caulk all weather-exposed junctures of wood to masonry; caulk weather-exposed joints in exterior trim and around all lows, doors and other openings in exterior walls.

-Environmental Limitations: Do not proceed with installation of joint sealants when ambient and substrate temperature

conditions are outside limits permitted by joint sealant manufacturer or are below 40 deg F.

-Compatibility: Provide joint sealants, joint fillers, and other related materials that are compatible with one another and with joint substrates under service and application conditions.

-All nenetrations of concrete or maconny floors or walls shall be sealed to be air and water tight

-Au penetrations or concrete or masonry hors or walls shall be sealed to be all and water ught.

Caulking shall be OSI Sealants, VP-275, multi-purpose silicone sealant; Phenoseal, silicone base or equivalent. Tool joints concave. Sealant joint shall be minimum 3/8" wide. Provide round closed cell polyurethane foam backer rod that is rsized 30%-50% larger than joint width. Backer rod shall be compatible with sealant. Architectural sealants shall meet low-VOC limits of a maximum 250 o/l

scelarif for Use in Interior Joints in Ceramic Tile and Other Hard Surfaces in Kitchens and Toilet Rooms and Around Plumbing Fixtures shall be single-component, mildew-resistant silicone sealant, ASTM C 920, Type S, Grade NS, Class 25, Uses NT, G, A and C, formulated with fungicide.

-Acquistical caulk shall be non-hardening, resilient sound dampening sealant by Tremco or USG or equivalent

-Acoustical cask what be paintable more facilities sound samplering sealant by Tremoo or Usic of equivalent. Acoustical cask that be paintable more facilities and the paintable more statement. -Joint Sealant Backing: Provide sealant backings of material and type that are non-staining; are compatible with joint substrates, sealants, primers, and other joint filters; and are approved for applications indicated by sealant manufacture -Oylindrical sealant backings; ASTM C 1330, of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance -Bond-breaker tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer for preventing

alant from adhering to rigid, inflexible joint-filler materials or joint surfaces at back of joint. -For good adhesion, the joint interface shall be sound, clean, free of dust and dry. Any surface damage, dirt, dust, loose particles or other contaminants which may inhibit adhesion shall be removed from the surfaces prior to the application of the sealant. Maintain 55° F minimum temperature within building during and after installation.

## FINISH CARPENTRY - INTERIOR

Trim: Clear stain grade wood for standing and running trim, window and door casings, and baseboards. Wood species shall be approved by Owner. Poplar shall be used for painted finish. Finger-jointing is not acceptable, unless finish is

-Typical trim unless noted otherwise shall be:

-Base (including interior of closets): Confirm with Owner -Window: Confirm with Owner

-Door: Confirm with Owner

### -Stair trim: see drawings for size and type. STAIRS

-Stairways shall not be less than 3'-0" in clear width and provide 6'-8" minimum height of headroom. Handrails may

project from each side of the stairway a distance of 4-1/2" into the required width.

-In Use Group R-3 and within dwelling units in occupancies of Use Group R-2, riser height shall not exceed 8-1/4". Tread depth shall not be less than 9". The greatest difference in riser height or tread depth in a single flight of stairs shall not

-Nosings at treads, landing and floors of stairways shall have a radius not greater than 9/16" or a bevel not greater than 1/2". A nosing projection of a minimum 3/4" and a maximum of 1-1/4" shall be provided, except where tread depth is 1 or greater where a nosing projection is not required.

vide a handrail on at least one side of all stairways of four or more risers. The handrail shall be mounted between 34" and 38" high, measured vertically from the nosing of the treads.

-Porches, balconies or raised floor surfaces located more than 30" above the floor or grade below shall have guardrails

-Required guardrails or handrails on open sides of stairs shall have intermediate balusters or ornamental closures which do not allow passage of an object 4" or more in diameter.

-Handrails adjacent to wall shall have a minimum clear space of 1-1/2" between the wall and handrail.

Wall and callings - 5/8\* thick gyneum hoard, typical unless noted otherwise

All baths - 5/8" thick, water-resistant gypsum board. Water resistant gypsum board shall be glass-mat, water resistant backing board and shall comply with ASTM C1178/C1178M, with manufacturer's standard edges. -All tubs and shower areas - 5/8" thick, "Durock" cement board behind all tile work. Tile backing panels shall be cementitious backer boards and shall comply with ANSI A118.9 and ASTM C1288 or C1325, with manufacturer's

-In garages and over furnace areas - 5/8" thick, type "X" fire rated gypsum board.

-In Basements and other damp areas: 5/8" thick, paperless, moisture resistant gypsum board, with coated glass mat

Exterior gypsum board shall be glass-mat gypsum sheathing board. Exterior gypsum board shall comply with ASTM C1177/C1177M, with fiberglass mat laminated to both sides and with manufacturer's standard edges. Exterior gypsum sGlass sheathing by Georgia-Pacific Gypsum or equivalent.

-Moisture and Mold-Resistant Assemblies: Provide and install moisture- and mold-resistant glass-mat gypsum wallhoard oducts with moisture-resistant surfaces complying with ASTM C1658 and ASTM C1177 where indicated on Drawings and in all locations which might be subject to moisture exposure during construction. Mold Resistance shall comply with ASTM D3273, score of 10 as rated according to ASTM D3274.

-Fire-Resistance-Rated Assemblies: For fire-resistance-rated assemblies, provide materials and construction identical to those tested in assembly indicated according to ASTM E119 by an independent testing agency.

-STC-Rated Assemblies: For STC-rated assemblies, provide materials and construction identical to those tested in assembly indicated according to ASTM E90 and classified according to ASTM E413 by an independent testing agency -Gypsum board ends shall be square cut, long end shall be tapered. All wall and ceiling boards shall be installed with religanized ecrews. Gyneum hoard shall be finished with tane, 3 coats of joint compound, and prepared for a pointed finish. Provide Level 4 finish, except for in Bathrooms and Kitchens which shall receive Satin or Semigloss paint, provide Level 5 finish INSTALLATION

-Installation shall comply with ASTM CR40

Examine panels before installation. Reject panels that are wet, moisture damaged, and mold damaged -Isolate perimeter of gypsum board applied to non-load-bearing partitions at structural abutments, except floors, Provide 1/4" to 1/2" wide spaces at these locations and trim edges with edge trim where edges of panels are exposed. Seal joints between edges and abutting structural surfaces with acoustical sealant.

Install trim with back flanges intended for fasteners, attach to framing with same fasteners used for panels. Otherwise, attach trim according to manufacturer's written instructions.

-Control Joints: Install control joints according to ASTM C840 and in specific locations approved by Architect for visual

-Prefill open joints, rounded or beveled edges, and damaged surface areas

-Apply joint tape over gypsum board joints, except for trim products specifically indicated as not intended to receive tape. -Gynsum Board Finish Levels: Finish panels to levels indicated below and according to ASTM C840: Level 1: Ceiling plenum areas, concealed areas, and where indicated.

Level 2: Panels that are substrate for tile, panels that are substrate for acoustical tile, and where indicated on Drawings. Level 3: Utility Room.

Level 4: At panel surfaces that will be exposed to view unless otherwise indicated.

Level 5: Bathrooms or other rooms to receive egashell or higher sheen paint finish.

-Texture Finish Application: Prepare and apply primer to gypsum panels and other surfaces receiving texture finishes. Mix and apply finish using powered spray equipment, to produce a uniform texture matching approved mockup and free of starved spots or other evidence of thin application or of application patterns.

-Protect adjacent surfaces from drywall compound and texture finishes and promptly remove from floors and other non-drywall surfaces. Repair surfaces stained, marred, or otherwise damaged during drywall application. -Remove and replace panels that are wet, moisture damaged, and mold damaged.

-Non-vitreous ceramic tile shall meet or exceed the requirements of ANSI A137 1-1988. -Provide Class 1 or better tile for interior walls, and Class 2 or better tile for interior floors as per PEI test received. by ASTM

-See drawings for sizes. Color shall be selected by Owner.

-Installation: Maintain 50° F temperature minimum during installation and for 7 days after completion. Protect tile from

traffic during this period

## PAINTING

-Back priming: All exterior and interior wood against masonry shall receive one coat oil base paint before setting. A exterior wood not to receive natural or stained finish shall be primed front and back prior to installation

-Schedule of painting for new surfaces: adjust as necessary per color selections by Owner

Exterior Woodwork and Siding:

If stained: 2 coats semi-transparent alkyd stain If painted: 1 coat exterior latex primer

2 coats exterior soft gloss latex top coat. 2. Interior Woodwork painted

1 coat interior latex primer

2 coats interior semigloss latex topcoat Interior Wood Sheathing:

1 cost semi-transparent alkyd stain

Gypsum Drywall: Flat finish for all surfaces except baths and laundry:

1 coat interior latex primer.

Gypsum Drywall: Semi-gloss for baths and laundry: 1 coat interior latex primer

2 coats interior semigloss latex topcoat

6. Exterior metal, to be exposed 1 coat rust inhibiting primer, shop applied.

2 coats polyamide epoxy topcoat, spray application unless area to be covered is small.

-Preparation and cleaning of substrates shall be performed in accordance with coating manufacturer's recommendations for each substrate. Substrate shall be clean, dry and free of oil, grease and other contaminants.

Inspect all surfaces to be finished under this specification. If a surface to be finished cannot be put in proper condition or finishing by customary preparation methods, the painting contractor shall notify the General Contractor or Architect in writing or else assume responsibility for and correct any defects resulting from unsatisfactory finish love and protect hardware, accessories, fixtures and other items placed prior to painting. Replace after painting.

-Closely follow manufacturers' recommendations for use of product. No interior painting or finishing shall be permitted until the building has thoroughly dried out by natural or artificial heat. Commencement of the work shall imply acceptance of the surface. -Protect work of other trades. Correct any painting-related damage by cleaning, repairing or replacing, and refinishing as

directed by Architect

### PAINTING

-Back priming: All exterior and interior wood against masonry shall receive one coat oil base paint before setting. All exterior wood not to receive natural or stained finish shall be primed front and back prior to installation Paint and stain colors shall be selected by Owner.

-Schedule of painting for new surfaces: adjust as necessary per color selections by Owner

Exterior Woodwork and Siding:

If stained: 2 coats semi-transparent alkyd stain If painted: 1 coat exterior latex primer

2 coats exterior soft gloss latex top coat. 2 Interior Woodwork painted:

1 coat interior latex primer

2 coats interior semigloss latex topcoat.

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 Gypsum Drywall: Flat finish for all surfaces except baths and laundry: 1 coat interior latex primer.

2 coats interior flat latex topcoa

Gypsum Drywall: Semi-gloss for baths and laundry:

1 coat interior latex primer. 2 coats interior semigloss latex topcoat.

6. Exterior metal, to be exposed

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acceptance of the surface. -Protect work of other trades. Correct any painting-related damage by cleaning, repairing or replacing, and refinishing as directed by Architect

## EXTERIOR DOORS

-See drawings for sizes, locations, model numbers and manufacturer of exterior and interior doors. -Provide tempered plazing in all hazardous locations as required in IBC. Section 2406.

Exterior doors by Therma-Tru or equivalent shall be 6-9/16\* frame, U.N.O. Panel faces shall be laminated to thermally broken, trimmable stiles and rails. Bottom edge of door shall be manufactured from a moisture and decay resistant composite. Panel faces shall be wood grained and shall be ready to accept paint or stain finish. Provide tempered

insulating Low E class with simulated divided lites of 7/8" muntips on interior and exterior. Prehung door systems shall ide jambs, weatherstripping, hinges, door bottom and sill. Finish choices shall be selected from stands Owner and Architect Garage doors shall be insulated overhead door with embossed steel cladding on exterior and interior. Provide 2° heavy duty, 15" radius track hardware and complete weather strip package. Provide low headroom hardware kit if necessary at

garage. Garage doors shall be Classica Collection, paint or stain grade model by Amarr or equivalent: final style and color shall be chosen by Architect and Owner.

## INTERIOR WOOD DOORS

-Submittals: Provide samples for factory-finished doors. -Quality Standard shall meet WDMA I S 1-A

-Fire-Rated Wood Doors shall be labeled by a testing and inspecting agency acceptable to authorities having jurisdiction based on testing per NEPA 252 at atmospheric pressure

Interior Solid-Core Doors shall be paint grade with multi-ply, structural composite lumber cores by Trustile or equivalent manufacturer

ide structural composite lumber cores for doors with closers, exit devices and kick plates -Fire-Rated Solid-Core Doors: Core construction shall provide fire rating indicated, faces and grade to match

non-fire-rated doors. Provide composite blocking where required to eliminate through-bolting hardware. Provide formed-steel edges and astragals for pairs of fire-rated doors. -FABRICATION AND FINISHING: Factory fit doors to suit frame-opening sizes indicated and to comply with referenced

quality standard. Comply with NFPA 80 for fire-resistance-rated doors. Factory machine doors for hardware that is not surface applied. Out and trim openings to comply with referenced standards. Trim light openings with moldings indicated. Factory install louvers in prepared openings. Factory finish doors indicated for transparent finish with stain and manufacturer's standard finish comparable to AWI System TR.4

-INSTALLATION: Comply with WDMA's "How to store, handle, finish, install, and maintain wood doors," Install fire-rated doors to comply with NFPA 80.

-Align and fit doors in frames with uniform clearances and bevels. Machine doors for hardware. Seal cut surfaces after tting and machining. Repair, refinish or replace factory-finished doors damaged during installation as directed b

## DOOR HARDWARE

-Submittals: Provide hardware schedule

-Deliver keys to Owner. For fire-rated openings, provide hardware tested and listed by UL or EMG (NEPA 80). On exidevices, provide UL or FMG label indicating "Fire Exit Hardware HARDWARE

-Hinges: Provide stainless-steel or brass/bronze hinges with stainless-steel pins for exterior. Provide non-rem hinge pins for exterior and public interior exposure. Provide hall-bearing hinges for doors with closers and entry doors ovide two hinges for 1-3/8" thick wood doors and three hinges for 1-3/4" thick doors 90" or less in height; four hinges for doors more than 90" in height

J orkeste and I atchests: RHMA A156.2. Series 4000. Grade 1 for horsel locks and latches. RHMA A156.3. Grade 1 for exit devices. BHMA A156.5, Grade 2 for auxiliary locks. BHMA A156.12, Series 5000, Grade 1 for interconnected locks and latches. BHMA A156.13. Series 1000. Grade 1 for mortise locks and latches. Provide lever handles on locksets and latchsets. Provide trim on exit devices matching locksets. Key locks to Owner's master-key system. Provide cylinders with five-nin tumblers and removable cores

-Provide key control system. Closers: Mount closers on interior side (mom side) of door opening. Provide regular-arm, parallel-arm, or top-jamb-mounted closers as necessary.

-Provide wall stops or floor stops for doors without closers.

Provide hardware finishes as follows: Hinges: Matching finish of lockset/latchset. Locksets, Latchsets, and Exit Devices Satin chrome plated. Closers: Matching finish of lockset/latchset.

Other Hardware: Matching finish of lockset/latchset.

-INSTALLATION: Mount hardware in locations recommended by the Door and Hardware Institute, unless otherwise

### GI AZING

-Submittals: Provide Product Data and 8" square Samples.
-Safety Glass: Category II materials shall comply with testing requirements in 16 CFR 1201 and ANSI 297.1. -Insulating-Glass Certification Program: Insulating glass shall be permanently marked with certification label of Insulating Glass Certification Council or Associated Laboratories. Inc.

 Clear Annealed Float Glass: ASTM C 1036, Type I, Class 1 (clear), Quality-Q3.

- Clear Annealed Float Glass: ASTM C 1048, Kind FT (fully tempered), Condition A (uncoated) unless otherwise indicated, Type I, Class 1 (clear), Quality-Q3. ed, Type I, Class 1 (clear), Quality-Q3.

Fire Rated Fully Glass: Fire protective, safety rated, specialty tempered, and radiant heat

reducing glazing material for 20-60 minute interior and exterior applications

insueurly claiss.

— Insulating-Glass Units: Factory-assembled units consisting of sealed lites of glass separated by a dehydrated interspace, qualified according to ASTM £2190.

— Sealing System: Dual seal, with manufacturer's standard primary and secondary

Spacer: Manufacturer's standard spacer material and construction Desiccant: Molecular sieve or silica gel, or a blend of both.

Insulated Glass:

-Comply with combined recommendations of manufacturers of glass, sealants, gaskets, and other glazing materials,

-See drawings for sizes, locations and model numbers of all windows. Rough opening dimensions are provided for convenience of contractor. Contractor and window supplier shall be responsible for verifying R.O. dimensions prior to framing. Any discrepancies shall be communicated to Architect ASAP

-Provide tempered glazing in all hazardous locations as defined in IBC. Section 2406.

-Windows shall be Andersen Series 400 windows with clad exterior, treated bare wood on interior; venting (if operable). Provide High Performance tempered glazing (insulating, argon, Low E) with simulated divided lites of 7/8" munts on interior and exterior. Provide extensions jambs for 6-9/16" frame U.N.O. Hardware shall be corrosion-resistant. Exterior color of cladding shall be chosen from standard colors. All hardware, screens and balances shall be chosen from standard finishes. All finish selections shall be confirmed by Owner & Architect.

-Provide all labor, materials, services, and equipment necessary for a complete and operable plumbing system, Items necessary for installation and functioning of system not indicated on drawings or specifications shall be included at no extra cost. All materials shall be new and shall be installed in a neat manner, consistent with the best trade practices and

in accordance with the manufacturers' reco--All work shall conform to IBC, state and local codes and ordinances, but not less than Philadelphia County Plumbing and Health Codes

-Plumbing Contractor (hereafter Contractor) shall be responsible for properly laying out the Work and for any damage that may occur to the work of any other trade due to their inaccuracy. Plumbing Contractor shall do all necessary cutting n connection with the execution of his work. No structural member shall be cut or notched so as to impair the strength of the member. Holes bared in joists shall not be closer than 2" to the top or bottom and shall not exceed 1/3 the death of

-Contractor shall provide riser diagram prior to application for sanitary permits

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SPECIFICATIONS

N.T.S. 05/23/2025

### Plumbing - Continued

## CLEANING TESTING and ADJUSTING

-Before acceptance of this Work, the Contractor shall adjust the equipment to assure correct operation. Care shall be taken during construction to protect the finished material from damage and undue dirt. At completion of Work, the Contractor shall clean equipment and shall replace any damaged equipment. At completion, the Contractor shall ren all debris and leave the area broom clean

-At the completion of the Work, the Contractor shall instruct the Owner or a representative of the Owner in the complete care and operation of all parts of the system. The Contractor shall furnish to the Owner one copy of a bound service ual, which shall include each major piece of equipment.

-The Contractor, together with the manufacturers, shall guarantee all material and equipment installed under this Contract against defective material and poor workmanship for a period of one (1) year from the date of acceptance. The Contractor shall provide one (1) year of free service from the date of acceptance

-Provide the plumbing equipment as indicated on the drawings. To maximum extent possible, all plumbing shall be installed on interior walls. All fixtures shall be furnished with service valves. Exposed valves and piping shall match the finish of the plumbing fixtures in each room, U.N.O.

-Hot water distribution shall be by manifold type system, with minimal sized lines running directly to each fixture from a

-Toilets shall be water conserving type, 1.6 gallons maximum per flush. Shower heads shall be 2.5 gpm. All faucets

-Exterior water supply, i.e. hose bibbs, outdoor showers, etc., shall be provided with frost-proof spinot and shut off as

--DHW heater shall be high efficiency, gas-fired, storage tank water heater, with an internally insulated tank of minimum 60 gal. capacity. Appliance shall meet ENERGY STAR criteria: Energy Factor >=0.67, first hour rating >=67 gallons/hour and minimum 6 year warranty on sealed system.

-Supply piping shall be copper or polybutylene above ground and flexible PVC below grade. All hot water supply piping shall be insulated; cold water supply piping installed in non-conditioned spaces conducive to condensation shall be insulated. Sanitary piping shall be schedule 40 PVC, as permitted by Code. Vents shall be DWV or PVC as permitted by

### HEATING, VENTILATION, and AIR CONDITIONING

vide all labor, materials, services, and equipment necessary for a complete and operable HVAC system, including a multi-zoned heating and cooling system, equipment and temperature controls, and bath, kitchen, and attic vents. Items necessary for installation and functioning of system not indicated on drawings or specifications shall be included at no extra cost. All materials shall be new and shall be installed in a neat manner, consistent with the best trade practices and in accordance with the manufacturers' recommendations.

-All work shall conform to IBC, ASHRAE, state and local codes and ordinances.

-HVAC Contractor (hereafter Contractor) shall be responsible for properly laying out the Work and for any damage that may occur to the work of any other trade due to their inaccuracy. HVAC Contractor shall do all necessary cutting in connection with the execution of his work. No structural member shall be cut or notched so as to impair the strength of the member. Holes bored in joists shall not be closer than 2" to the top or bottom and shall not exceed 1/3 the depth of the joist.

-Location of all exposed ducting, registers and thermostats shall be reviewed in field on walk-through with Architect and/or Owner prior to rough-in.

-Provide new heating and cooling system capable of meeting the following performance criteria: Maintain 72 F and 50% relative humidity on a 10 F day with a 15 MPH wind in heating mode, and maintain a temperature difference of 25 F between inside and outside and 50% relative humidity when outside temperature is 100 F in cooling mode. -Provide mechanical schematic and full equipment specification for review

-Provide accurate heat loss and gain calculations on a room by room basis before ordering equipment and preparing the schematic layout drawings. Provide mechanical schematic and full equipment specification for review. Drawings shall indicate piping sizes and radiator sizes and locations.

-Air conditioning equipment shall have SEER greater than or equal to 15.0. Central air conditioning heat pumps shall

have a SEER greater than or equal to 15.0 and a HSPF greater than or equal to 10.0. -Heating system shall consist of propane gas-fired boiler and hydronic in-floor radiant tube delivery system

-Furnace shall be natural gas fired, with an efficiency rating greater than or equal to 86%.

-Provide zone controls for approximately 2 zones. Proposed zones include: T.B.D. with Owner

-Exhaust fans shall be sized to move an appropriate quantity of air for the room served. Provide a minimum of LxWx1.1 CFM for Bathrooms, LxWx2 CFM for Kitchens, and LxWx0.8 CFM for Utility or Laundry Rooms. See drawings for enerific CEM requirements or fan model numbers. All fans shall have extra quiet operation; maximum 0.3 sones for 50 CFM, 0.6 sones for 80 CFM, and 1.5 sones for 110 CFM.

-Ductwork installed in non-conditioned spaces shall be insulated to R-8 minimum. AC supply ducts installed in non-conditioned spaces shall be installed with insulation and a vapor barrier with max. permeance of 0.05 perm, or 2 mil aluminum foil facing.

-Joints of duct systems shall be made substantially airtight by means of tapes, mastics, or gasketing. Provide rough-in duct tightness test. Total leakage shall be less than or equal to 6 cfm/100 sf of conditioned floor area when tested at pressure differential of 0.1\* w.g. (25 Pa) across roughed-in system, including manufacturer's air handler end closure. Register boots shall be taped or otherwise sealed during the test. Building framing cavities shall not be used as supply

## CLEANING TESTING and ADJUSTING

-Before acceptance of this Work, the Contractor shall adjust and balance the systems and each piece of equipment to assure the correct air delivery and operation. Care shall be taken during construction to protect the finished material from damage and undue dirt. At completion of Work, the Contractor shall clean each piece of equipment and ducts and shall replace any damaged equipment

## AUTOMATIC TEMPERATURE CONTROL

-Provide system of programmable automatic temperature control compatible with the HVAC unit manufacturer. After completion of installation, all temperature control equipment shall be placed in good operating condition. Provide all wiring and installation of all temperature control components; with all interlock control wiring required for a complete and operable system. All power wiring shall be supplied under the "Electrical" section of the plans.

At the completion of the Work, the Contractor shall instruct the Owner or a representative of the Owner in the complete care and operation of all parts of the system. The Contractor shall furnish to the Owner one copy of a bound service manual, which shall include each major piece of equipment, showing in detail the operation and maintenance requirements, parts list, and where to obtain the same. The manual shall contain the control diagrams.

## HYDRONIC IN-FLOOR RADIANT HEATING

HYDRONIC IN-FLOOR RADIANT HEATING

The radiant healing manufacturer shill provide a complete and final design of the hydronic floor heating system including CAD layouts showing tabling patterns, manifold locations, appropriate cross-sections, and installation techniques. The radiant heating manufacturer shall provide CAD generated control schematics, showing layout of controls and all major mechanical system components. (Note: control schematics are conceptual and not to be used as final mechanical lavouts)

-Tubing shall be type black PEXc (electronically cross-linked high-density polyethylene) tubing for areas requiring radian heating. The manufacturer, in accordance with the design requirements shall determine tubing diameter. Steel, copper, polybutylene, polypropylene, nitrile, polyester, rayon, neoprene and rubber piping are not acceptable for floor heating. -Tubing shall be electronically cross-linked by means of a high-energy electron beam. Tubing shall be rated with a -1-tubing shall be electronic plant prose-shied by pressens of a high-energy electron beam. Itubing shall be rade with a maximum operating being bein

-Tubing shall be rated with the highest resistance to stress cracking according to ASTM D 1693 and chemical solvents (water additives, antifreeze solutions, concrete additives) with the thermal coefficient of linear expansion no greater than 0.00078 in/in/°F, the tubing shall have a tensile strength of at least 3338 psi according to DIN 53455 and high form stability, suitable for high resistance to abrasion and to deformation.

COMPONENTS

-INJECTION STATION: Injection station shall be pre-assembled (ready for wall mounting and suitable for direct boiler connection), pressure tested and supplied with the following components; Return and supply stock shall be bronze and

shall be fitted with; 2-injection valves, 2-purge valves, 2-ball valves, supply sensor well, temperature gauge, pump, and

III mounting processes.
MIXING VALVES (2/A - 1-1/2 Inch): Mixing value material shall be greving est iron with sweet connections with resekets. with a chromium-plated plug. Maximum permissible pressure shall be 125 paig with maximum operating temperature of 230°F. The angular adjustment shall be 90°. The moving parts of the valve, which are in contact with the hot water, shall be be treated with special heat resistant grease, which is insoluble in water. Maximum differential pressure shall be 0.94 psi.

-MIXING VALVES (2 - 4 Inch): Mixing valve material shall be grev cast iron with flange connections as per DIN 2531 -MILVIEW VALVES (2 - 4 m/m), mixing viave materials shall be grey cast from with materials connections as per UNI 2531. Maximum permissable pressure shall be 125 psig with a maximum operating temperature of 250°F. The angular adjustment shall be 90°. The moving parts of the valve, which are in contact with the hot water, shall be treated with special heat resistant grease, which is insoluble in water.

-1" MANIFOLD & MANIFOLD ACCESSORY SET: Manifold header stock shall be 1" brass. The supply header is fitted

with balancing valves. The return header is fitted with shut off valves, which are suitable to receive optional 24V powerheads for thermostatic control. The supply and return headers both have outlets, which are suitable for all SVC nections. End connections shall be 1" NPT. Manifold accessory set shall include 2-1" NPT end caps. 1-air vent. 1-air

manifold accessory set to manifold.

-In applications where balancing and/or isolation are needed between circuits, manifold manufacturer shall provide rcuit flow meters and circuit hall valves

-MANIFOLD FITTINGS: Fittings shall be brass and shall be supplied by the piping manufacturer. Manifold fittings to be compression style with split compression ring or press style with stainless steel sleeve.

## HOT WATER SUPPLY & RETURN MAINS

-Supply and return piping to the distribution station shall be steel, non-ferrous copper or cross-linked polyethylene tubing. Cross-linked polyethylene may be used when approved by the local authority having jurisdiction.

-Fittings shall be compatible to the piping material used. Fittings used with the cross-linked polyethylene tubing shall not

-Piping shall be installed in one continuous piece with no splices being allowed in the piping between the supply and

### INSTALLATION:

INDITION DESCRIPTION.

The minimum bending radius for the tubing at ambient temperatures of 50°F or lower shall not be less than 8 times the tubing outside diameter. The minimum bending radius for the tubing at ambient temperatures 68°F or higher shall not be less than 5 times the tubing outside diameter.

-PEXc tubing shall be secured to a welded wire fabric, rebar, or approved equal fabric (by others), with nylon ties, or other plastic fastening system, provided by the tubing manufacturer

4' of perimeter insulation (R-5 minimum) shall be provided (by others) below radiant slab supplied N.B. DO NOT USE METAL FASTENERS

Aspacing of features shall be a maximum of 24" for straight lengths and a minimum of 3 ties per 180" turn. Centractor is to provide labor for PEXc looping and tie down. Tubing shall be protected at all slab penerations and joints. Bend supports shall be used for exiting radiant slab.

Sleeving (PE or PVC) shall be used at all joints in the radiant slab.

-Supplier shall instruct and supervise contractor of the installation of the manifolds and PEXc piping.

-Contractor shall prepare the site for installation of tubing, prior to arrival of suppliers' representa

-Contractor shall prepare the size for installation of tuping, prior to arrival or suppliers representative. In list includes preparation of trenches for manifolds and installation of view meah.
-Schedule pouring of concrete floor no later than 7 days after installation of piping and during successful pressure and leak testing. Contracts afail supply field coordination and supervision of the pressure testing of the PEXc tubing.
-In the event of adverse weather, the contractor shall protect the system from freezing. Do not expose PEXc tubing to UV light for more than 7 days on job site.

-The G.C. shall supply field co-ordination and supervision of the pressure testing of the field piping by the mechanical

## PRESSURE TESTING:

The system shall be pressure tested to 80 psi, for a minimum of 24 hours, prior to, and during the concrete pour, and until the concrete has adequately cured. Test equipment to be supplied and installed by the mechanical contractor. A water test is preferred, but the test can be conducted using compressed air, especially during cold weather. installations to prevent possible freeze-ups.

## MADDANTY

The radiant system manufacturer shall provide the following limited warranty for the twenty-five year period following the date of the installation for the Pextron tubing, and eighteen months on electrical components. Pextron fittings, and

## FLECTRIC

of the joist.

-Provide all labor, materials, services, and equipment necessary to install a complete and operable electrical system. Items necessary for installation and functioning of system not indicated on drawings or specifications shall be included at no extra cost. All materials shall be new and shall be installed in a neat manner, consistent with the best trade practices

and in accordance with the manufacturers' recommendations. -Provide the electrical wiring and fixtures as indicated on the drawings

-All work must conform to 2018 ICC Electric Code, any state, municipal and local codes or regulations, and the local utility company's regulations. In case of conflict, the most restrictive rule shall be binding. Where applicable, all materials

-Electrical Contractor (hereafter Contractor) shall be responsible for properly laying out the Work and for any damage hat may occur to the work of any other trade due to their inaccuracy. Electrical Contractor shall do all necessary cu in connection with the execution of his Work. No structural member shall be cut or notched so as to impair the strength of the member. Holes bored in joists shall not be closer than 2" to the top or bottom and shall not exceed 1/3 the depti

-l ocations of all lights, switches, recentacles, telephone jacks, smoke detectors, and other electrical devices an approximate. Exact locations shall be determined during walk-through with Architect and Owner prior to rough-in wiring.

## CLEANING, TESTING, and ADJUSTING

-Before acceptance of this Work, the Contractor shall adjust the equipment to assure correct operation. Care shall be aken during construction to protect the finished material from damage and undue dirt. At completion of Work, th Contractor shall clean equipment and shall replace any damaged equipment. At completion, the Contractor shall remove all debris and leave the area broom clean.

-At the completion of the Work, the Contractor shall instruct the Owner or a representative of the Owner in the complete care and operation of all parts of the system. The Contractor shall furnish to the Owner one copy of a bound se manual, which shall include each major piece of equipment.

-The Contractor, together with the manufacturers, shall guarantee all material and equipment installed under this Contract against defective material and poor workmanship for a period of one (1) year from the date of acceptance. The Contractor shall provide one (1) year of free service from the date of acceptance

## GROLINDING ELECTRODE SYSTEM

-Electrical Contractor shall provide grounding electrode system as required by NEC section 250-52(a). For concrete-encased electrodes, coordinate work with Concrete and/or Masonry subcontractor and General Contractor. Grounding electrical conductor shall be unspliced and shall run to any convenient grounding electrode. Grounding electrode conductor shall be secured and protected against physical damage. Bare aluminum or copper clad aluminum grounding conductors shall not be used where in direct contact with masonry or the earth or where subject to corrosive

-The grounding or binding conductor shall be connected to the grounding electrode by exothermic welding, listed lugs listed pressure connectors, listed clamps or other listed means. Ground clamps shall be listed for the materials of the grounding electrode and the grounding electrode conductor and, where used on pipe, rod or other buried electrodes,

The Work includes, but is not limited to: Connection of main service entry and breaker panel for electrical system to local power company's power grid; light and power wiring, including power wiring and connections for equipment by other trades and the Owner, and fire alarm system. All electrical equipment furnished under other Contractors shall be furnished with full complement of control equipment necessary for operation. The electrical contractor shall provide disconnects for the HVAC equipment as required by the NEC. This contractor shall complete all electrical connections except on factory assembled equipment.

-Panel boards shall be suitable for the electrical characteristics specified on the drawings, and the existing conditions.

Panel boards shall be UL listed and furnished with main breaker. Molded case branch circuit breakers shall be plug-in, thermal-magnetic type. Double and triple breakers shall be common trip with a single handle

Switches shall be Leviton, white toggle or dimmer, white plastic cover plate as required, u.n.o. Outlets shall be white duplex receptacles with white plastic cover plates, u.n.o. Floor outlets for wood floors shall be decorator duplex receptacle floor box kits including steel box, flange and hinged door cover assembly with 15A 125V tamper-resistant duplex receptacle in solid brass with clear lacquer finish, Hubbell RF515BR or equivalent

-Outlets shall be provided in numbers and types according to Code, but not less than to 12 feet o.c. at perimeter walls of ach room, or more as shown on electrical drawings. All outlets shall be installed 18" above finished floor to centerline of box u.n.o. All switches shall be installed 42" above finished floor to centerline of box u.n.o.

ovide ground-fault circuit-interrupter receptacles in the following locations: Bathrooms, garages, exterior rec and receptacles within 6 feet of a bar or kitchen sink.

Provide dedicated circuits for the following: Furnace, HVAC equipment, security system, appliances, and as required by manufacturers.

Smoke detectors shall be installed in each senarate sleening area in the immediate vicinity of the hadrooms and on each additional story of the dwelling, including basements and cellars, but not including crawl spaces and uninhabitable enance. All detectors shall be interconnected such that the actuation of one glarm shall actuate all the glarms in the individual dwelling and shall provide an alarm that shall be audible in all sleeping areas. Required smoke detectors shall receive their primary power from the building wiring when such wiring is served from a commercial source, and when the primary power is interrupted, shall receive power from a battery. In renovation of existing spaces, smoke detectors shall be allowed to receive primary power from a battery and need not be interconnected in cases where connection to building power and interconnection is a hardship.

For new construction, an approved carbon monoxide alarm shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms in dwelling units that have fuel-fired appliances and in dwelling units that have attached garages. Carbon monoxide alarms shall be installed in existing dwellings when work requiring a building permit is required and the existing dwellings have attached garages or have fuel-fired appliances. Single station carbon monoxide alarms shall be listed and comply with UL 2034 and shall be installed in accordance with the codes and manufacturer's installation instructions

All wiring within building shall be concealed, u.n.o. and may be type NM with solid copper conductors, except wiring #6 and larger may be stranded aluminum conductors, conforming to UL standards. Where interior wiring must be exposed, it shall be installed in wiremold or conduit, with the routing approved by the Architect. Exterior and below grade wiring shall be in schedule 40 PVC conduit. All splicing shall be done in outlet and junction boxes made with approved ss connectors. Splices shall be insulated with Scotch plastic tape. No splices in wire #6 and larger shall be made between electrical panel and terminal junction boxes.



## 2337-41 PENNSYLVANIA AVE

2337-41 PENNSYLVANIA AVE

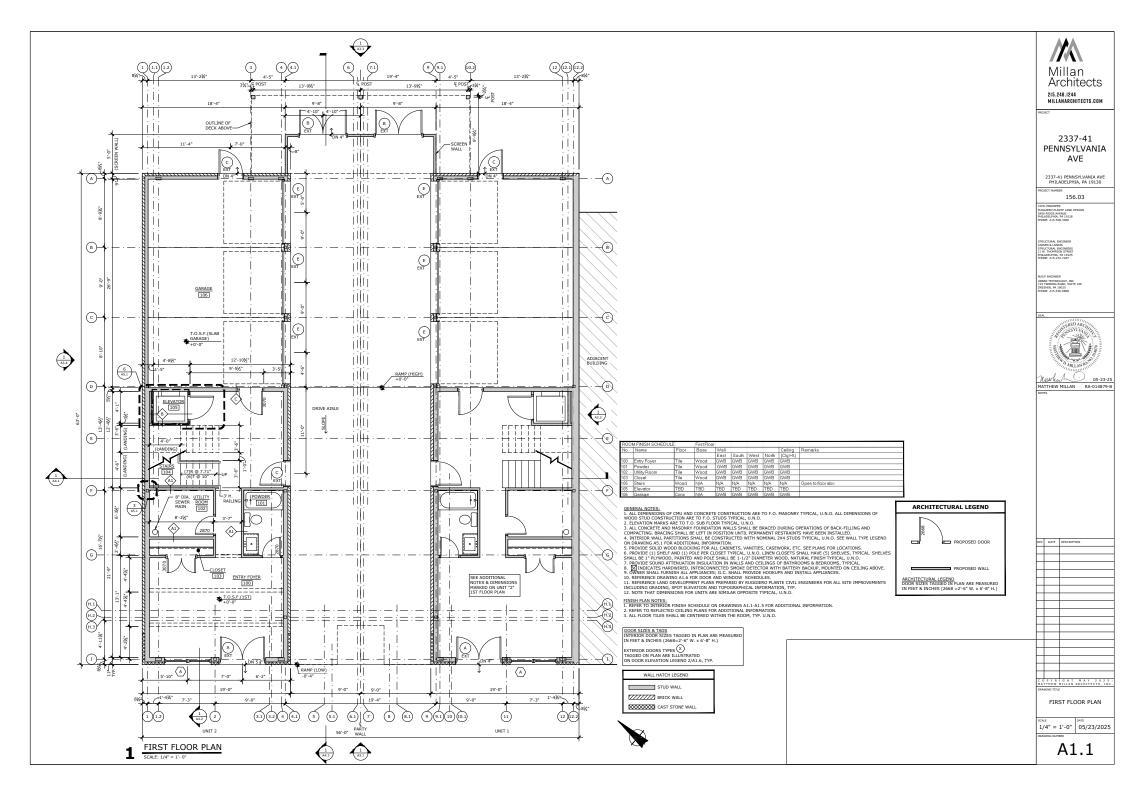
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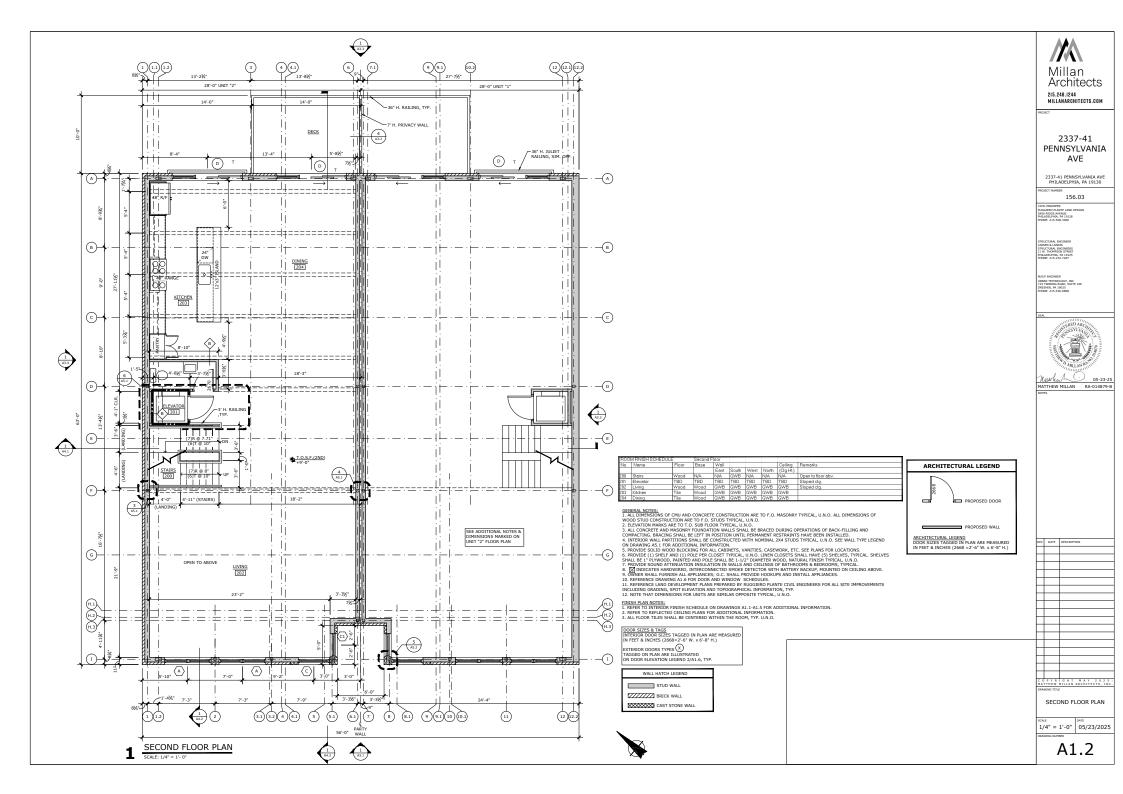
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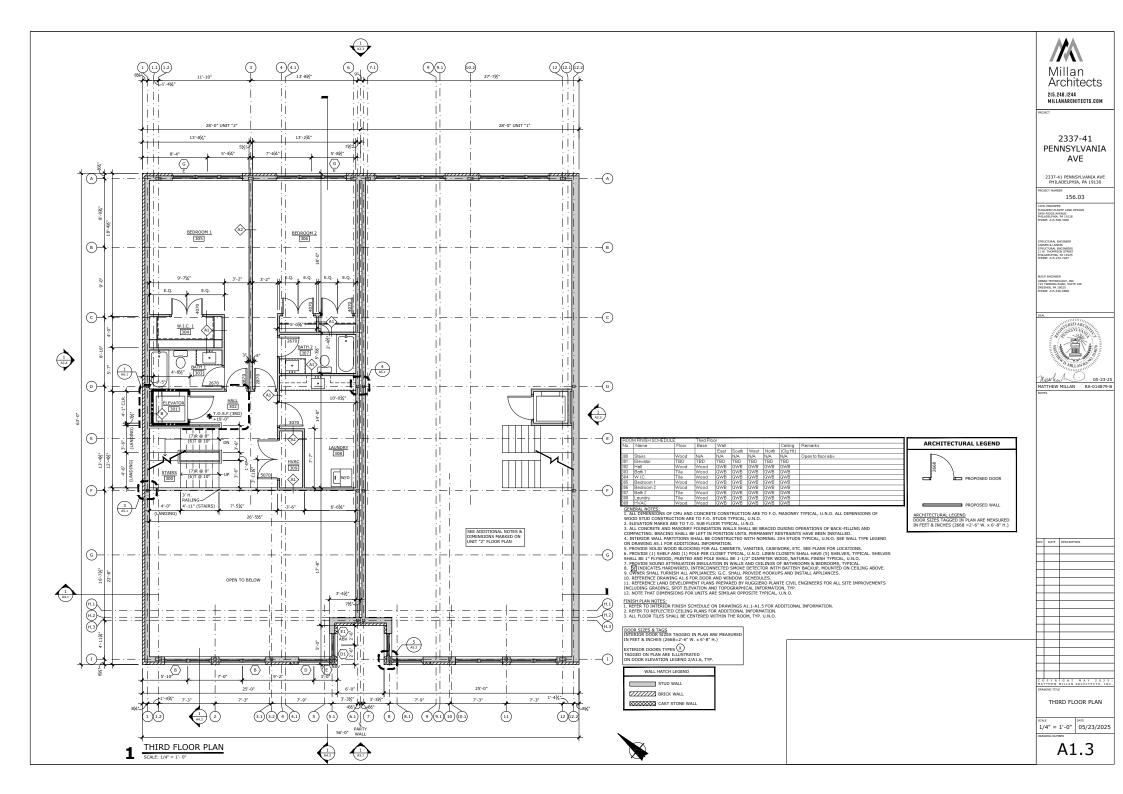


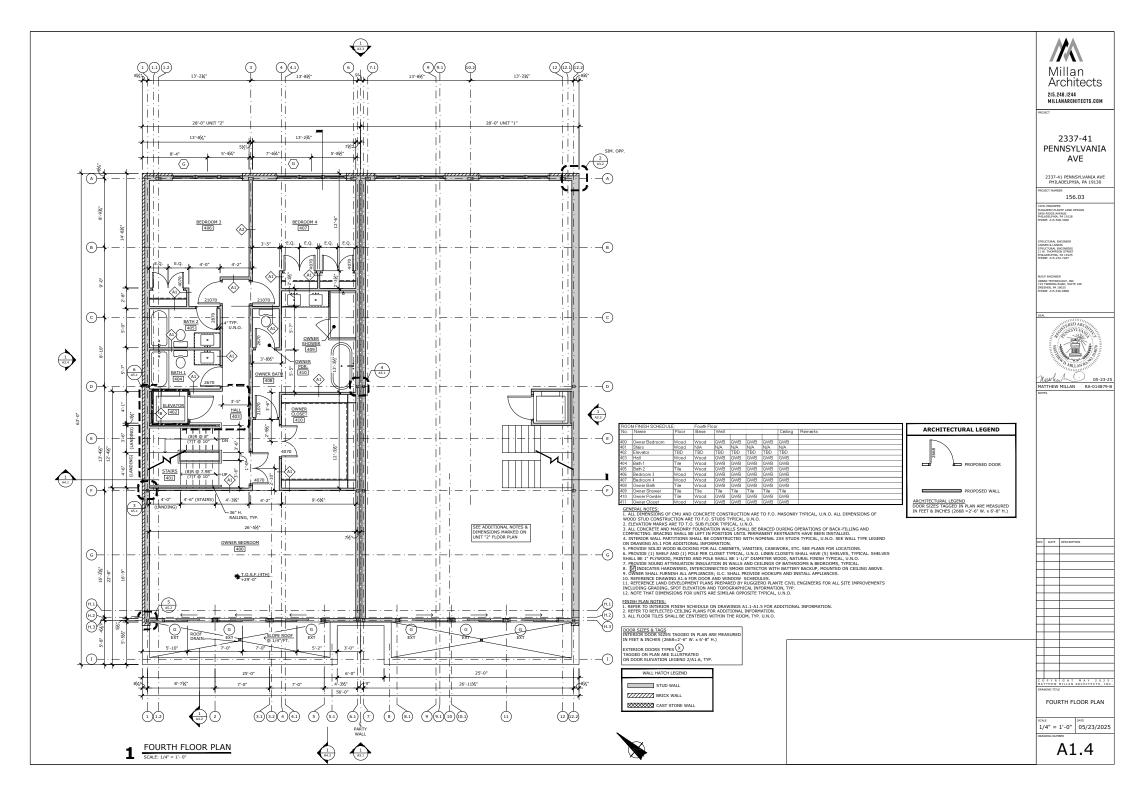
SPECIFICATIONS

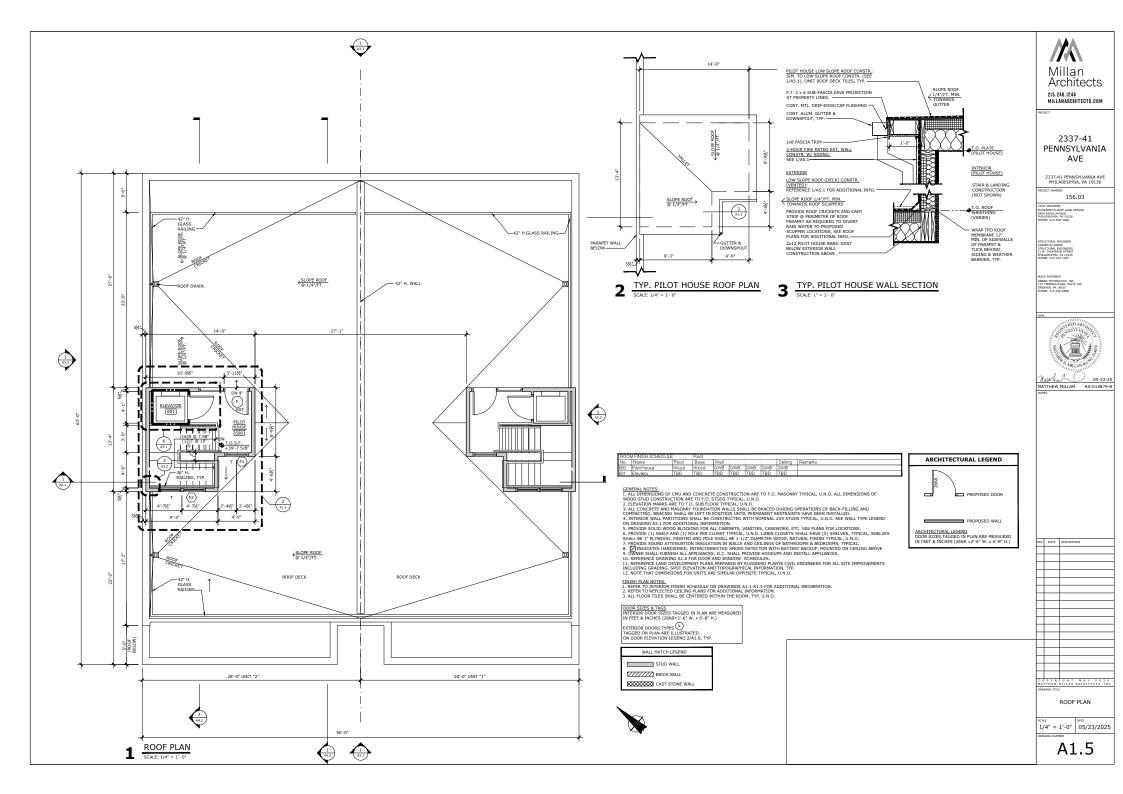
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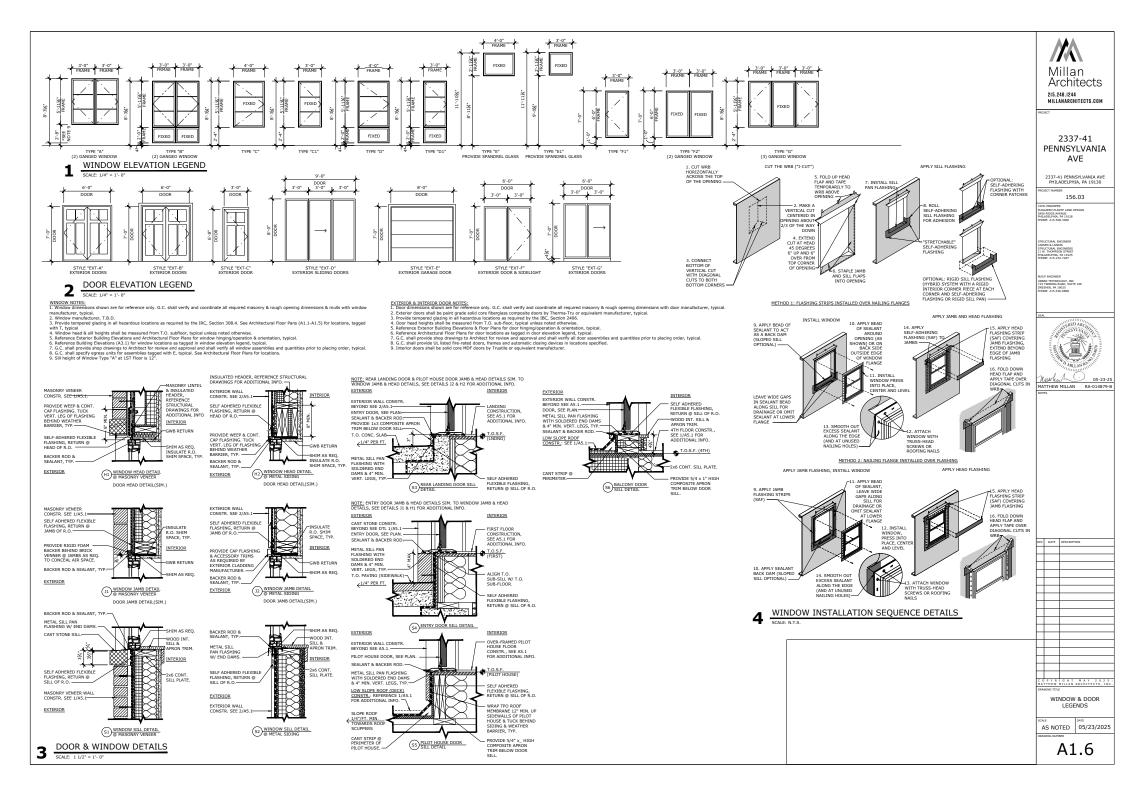






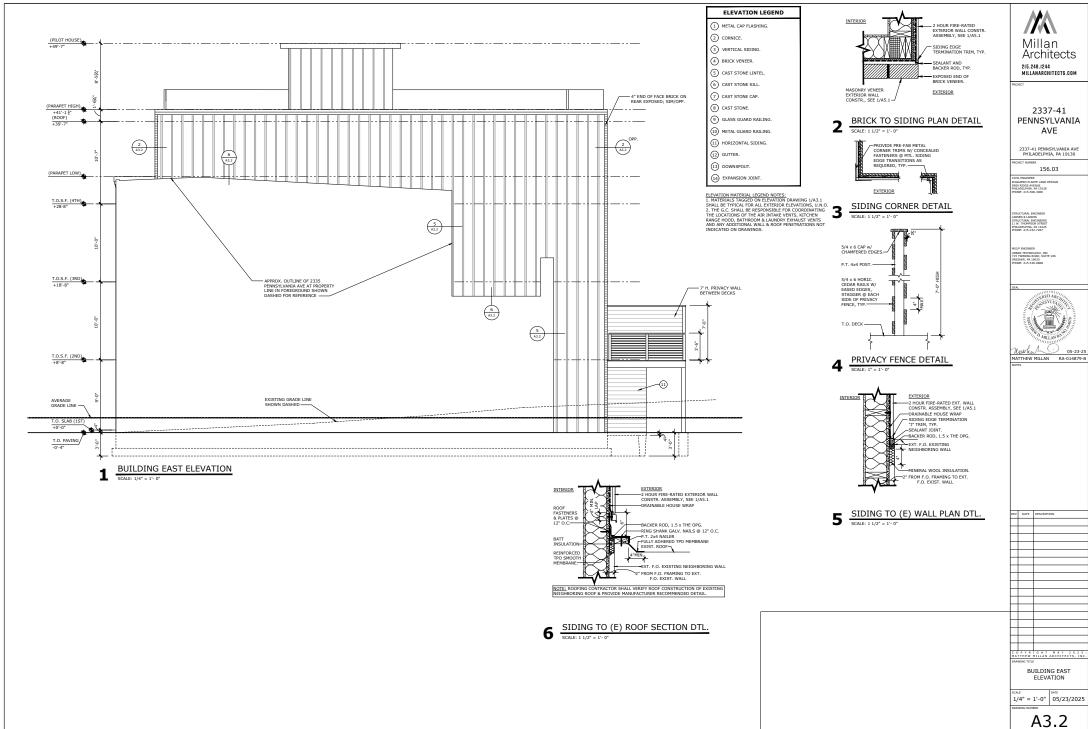














BUILDING NORTH ELEVATION
SCALE: 1/4\* = 1'- 0\*

ELEVATION LEGEND

1 METAL CAP FLASHING.

2 CORNICE.

3 VERTICAL SIDING.

 BRICK VENEER. 5 CAST STONE LINTEL.

6 CAST STONE SILL.

7 CAST STONE CAP.

CAST STONE.

GLASS GUARD RAILING.

(10) METAL GUARD RAILING.

(11) HORIZONTAL SIDING.

12 GUTTER.

13 DOWNSPOUT. (14) EXPANSION JOINT.

ELEVATION MATERIAL LEGEND NOTES:

1. MATERIALS TAGGED ON ELEVATION ELAVATION (1/3.1)

2. THE G. S. HALL BE RESPONSIBLE FOR COORDINATION, INDICATION OF THE ARE INTAKE VERTS, KITCHEN SHARED NOTES OF THE ARE INTAKE VERTS, KITCHEN SHARED NOTES OF THE ARE INTAKE VERTS, KITCHEN SHARED NOTES OF THE AREA OF THE A

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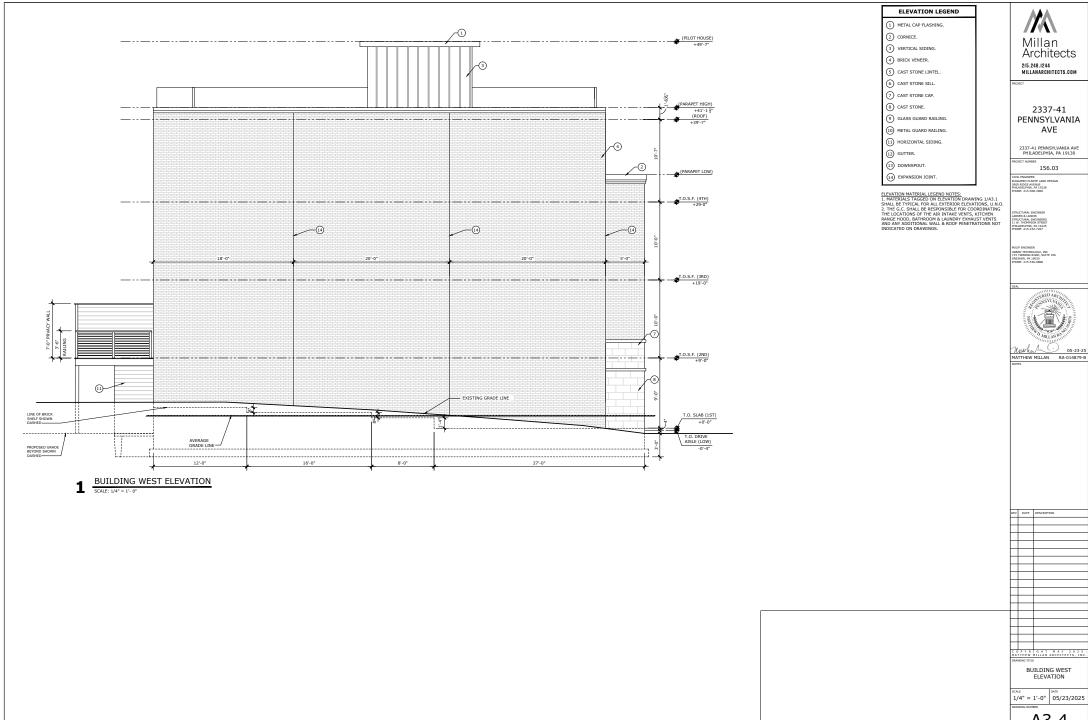
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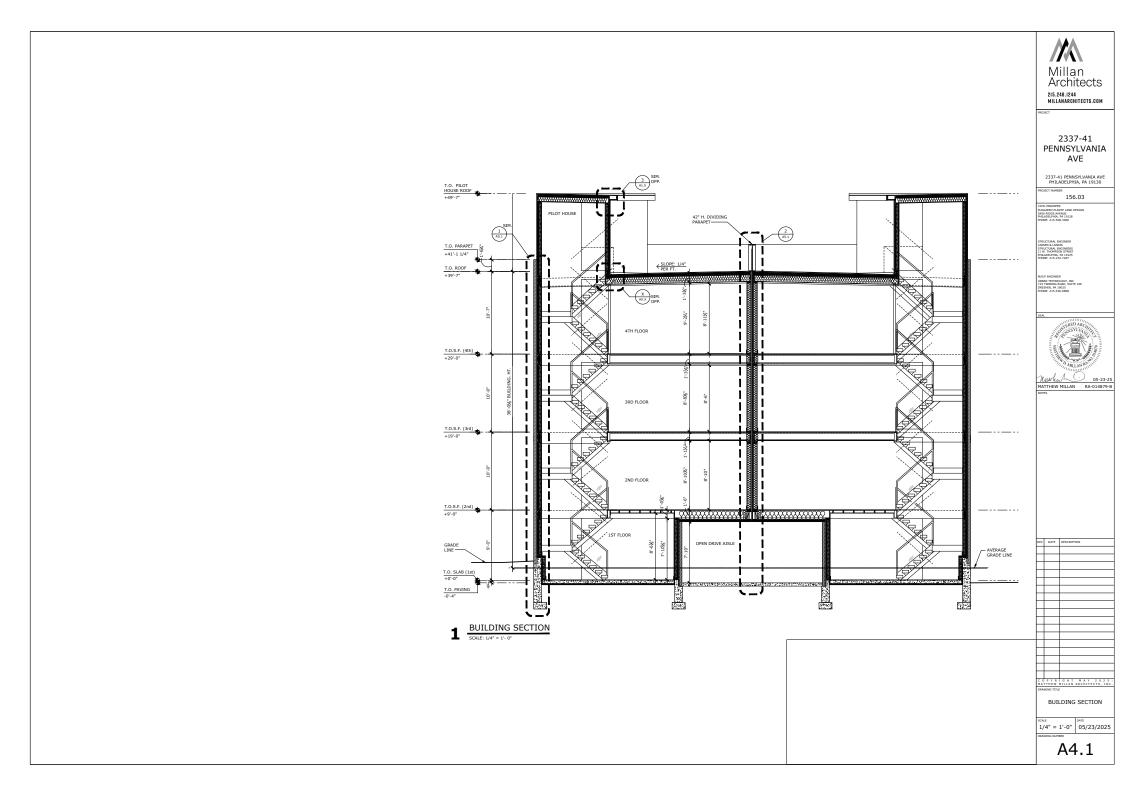
ELEVATION

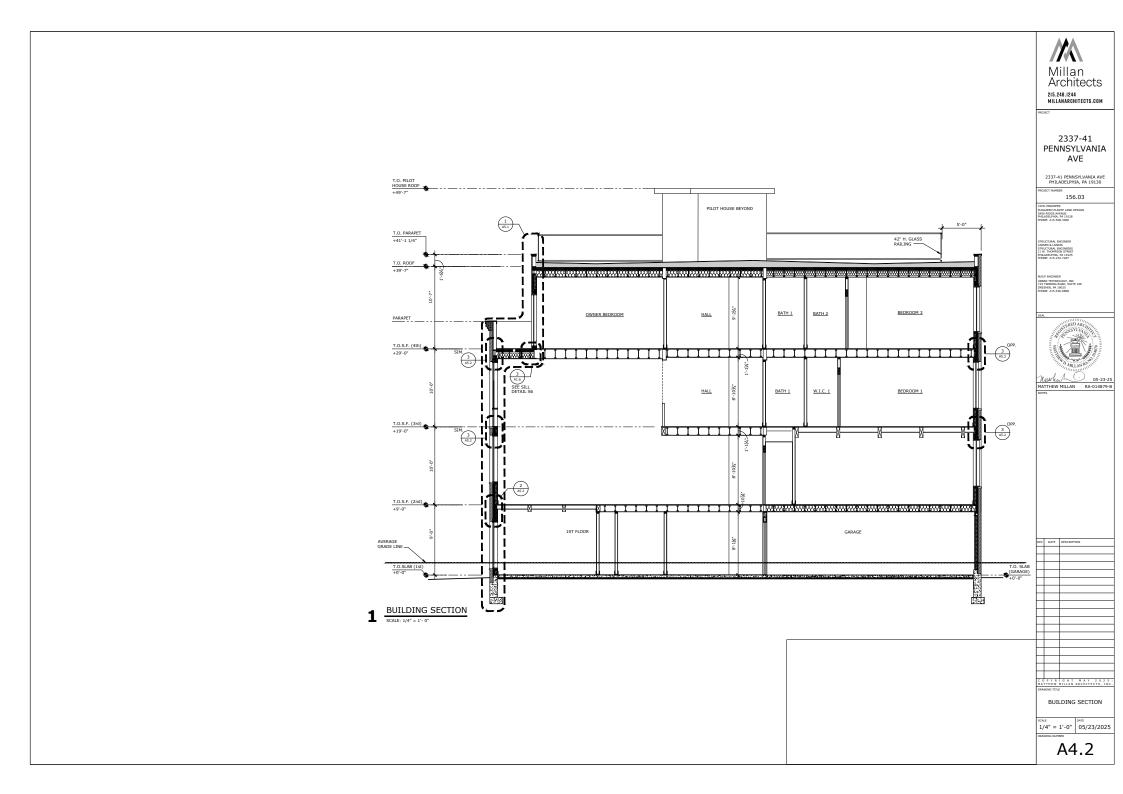
1/4" = 1'-0" 05/23/2025

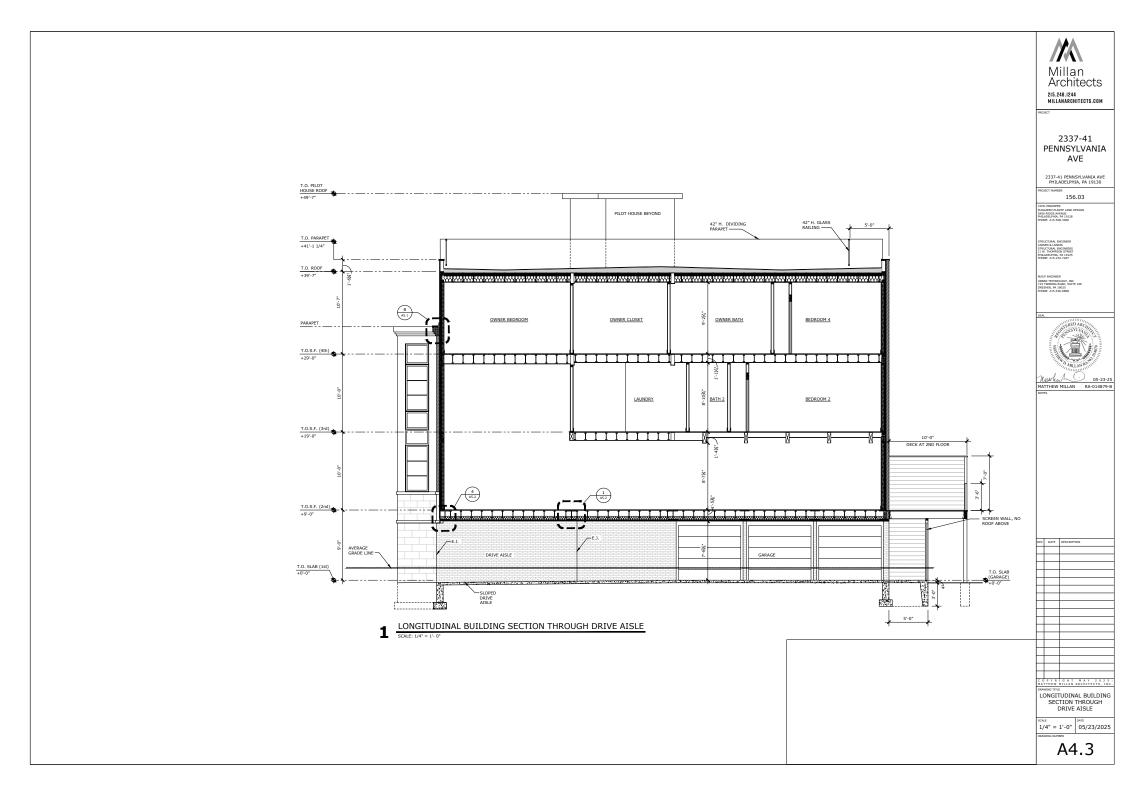
A3.3

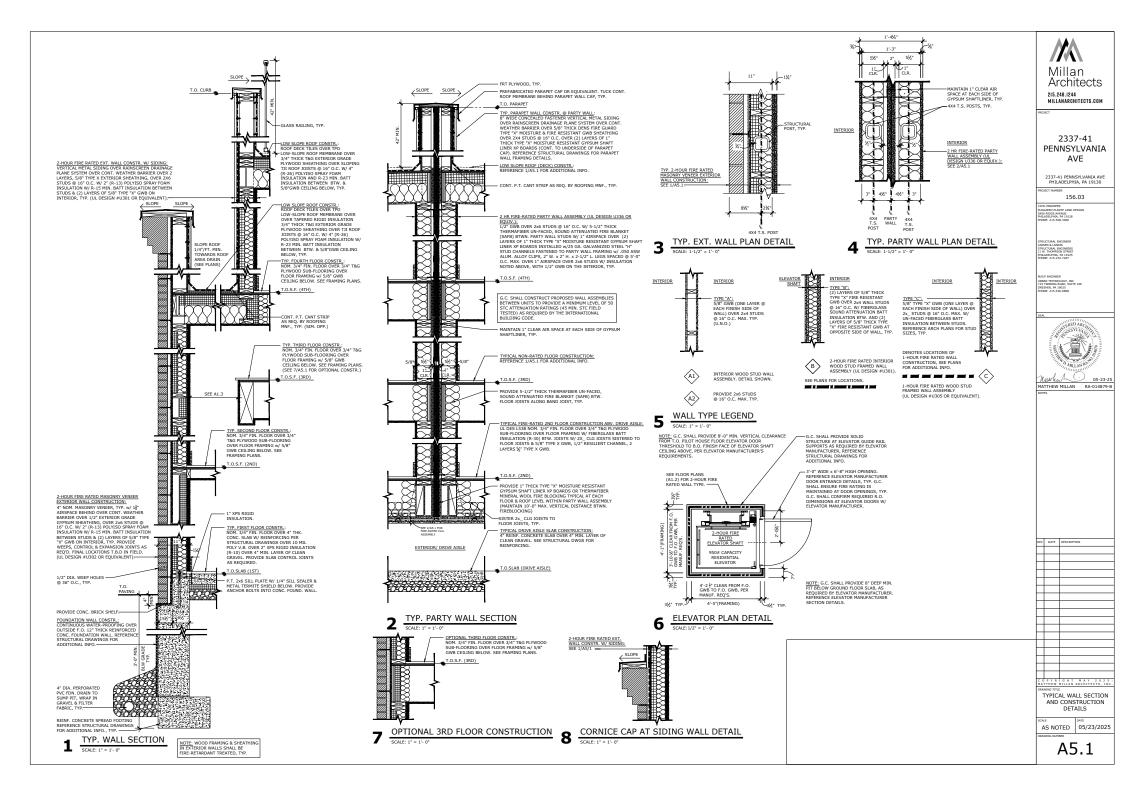


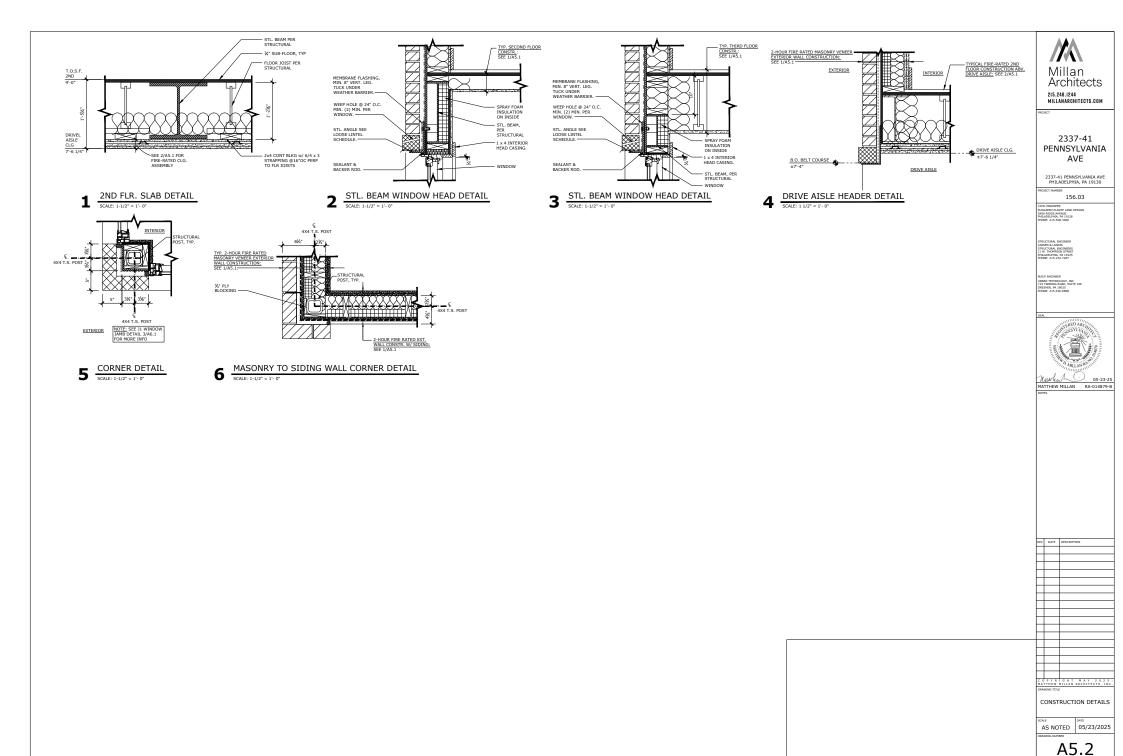
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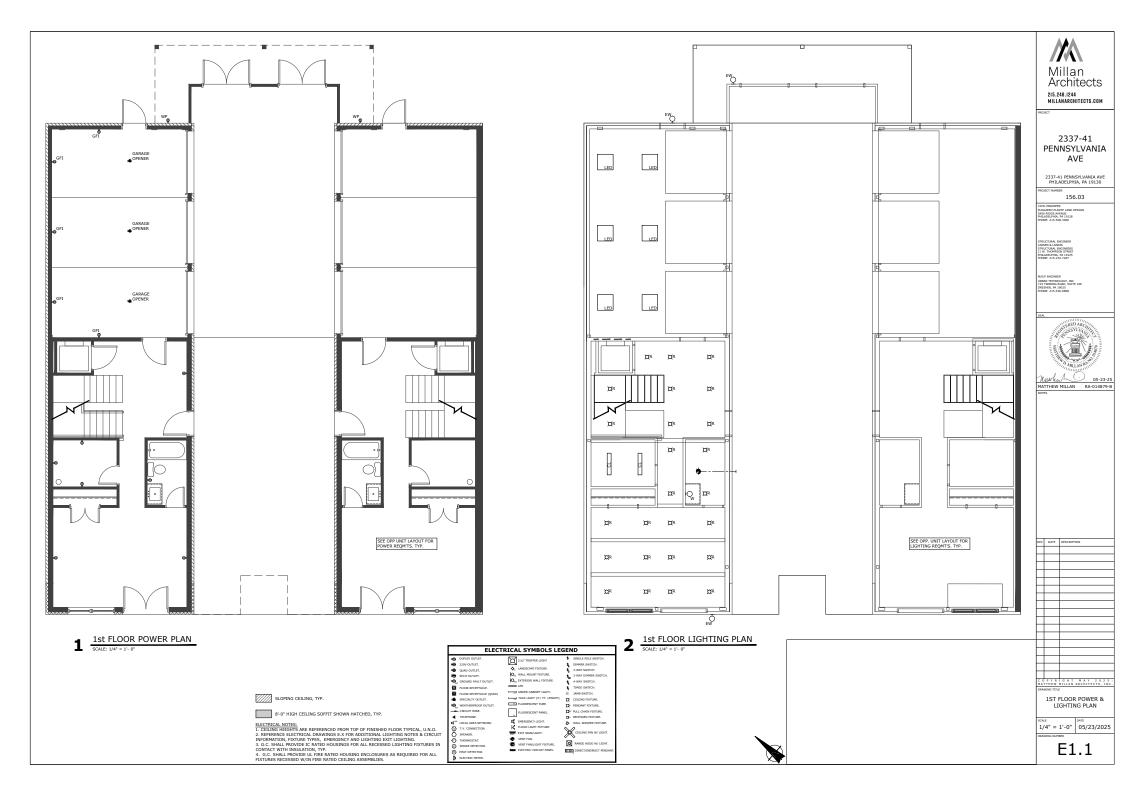


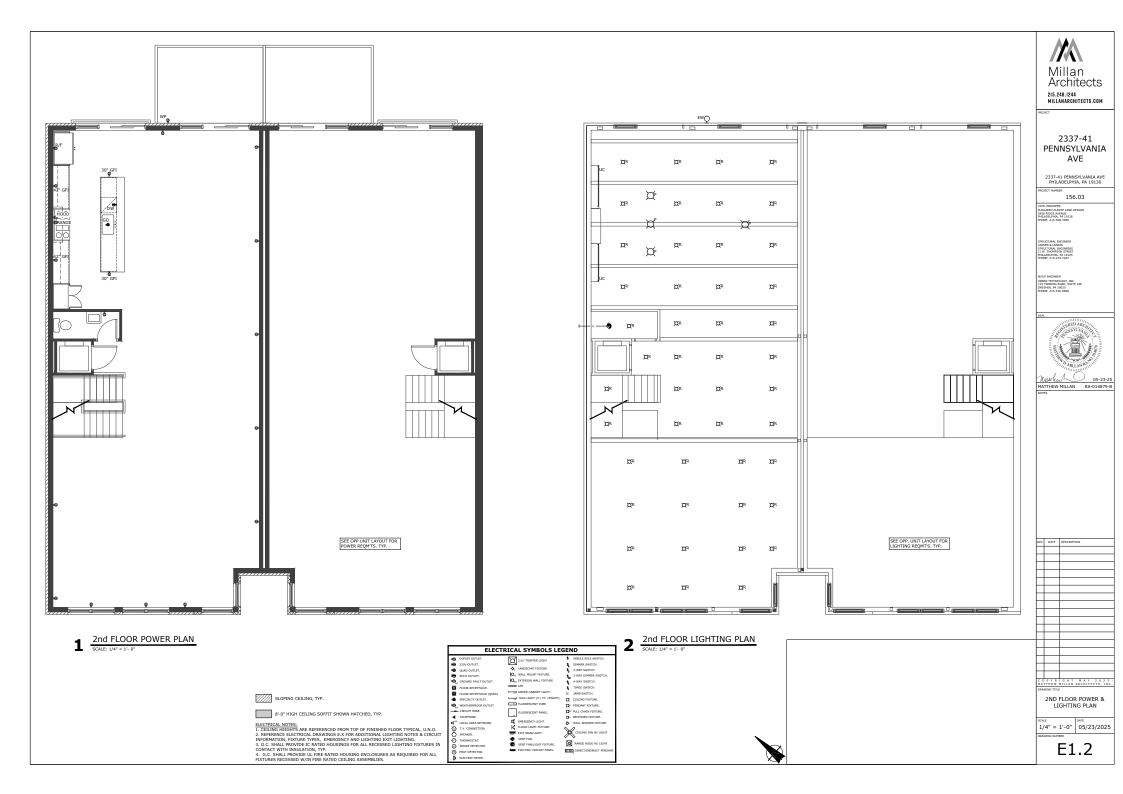


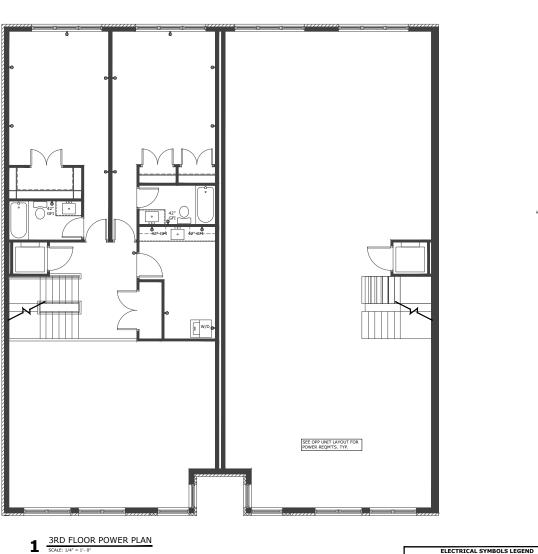


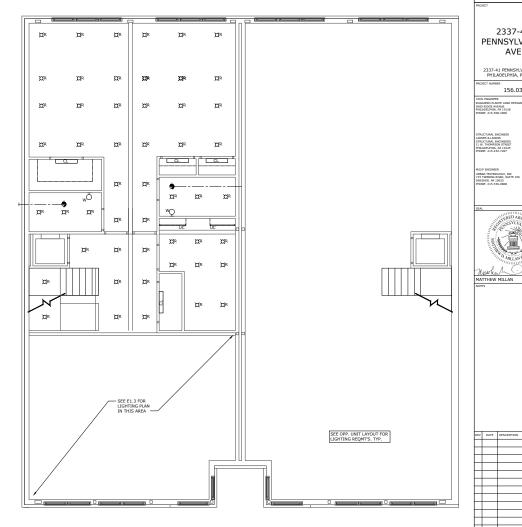












3RD FLOOR POWER PLAN
SCALE: 1/4" = 1'-0"

SLOPING CEILING, TYP.

8'-0" HIGH CEILING SOFFIT SHOWN HATCHED, TYP.

EECTRICAL NOTES:

1. ELLING HER SEE REFERENCED FROM TOP OF FINISHED FLOOR TYPICAL, U.N.O.

1. ELLING HER SEE REFERENCED DRAWINGS EX FOR ADDITIONAL LIGHTING NOTES & CIRCUIT
INFORMATION, FUTURE TYPES, BREESERCH AND LIGHTING EXTL LIGHTING.

3. G. C. SHALL PROVIDE IC RATED HOUSINGS FOR ALL RECESSED LIGHTING FUTURES IN
CONTACT WITH INSLAUTION, IPP.

4. PARTICLE SEED SEED SEED SEED TO SEED TO

4-WAY SWITCH.
TIMED SWITCH.
IS JAMB SWITCH.
CELLING FOXTURE. D- PENDANT FOXTURE

CEILING FAN W/ LIGHT.

200 CUTLET.

QUAD OUTLET.

SPLIT OUTLET.

GROUND FAULT OUTLET.

FLOOR RECEPTAGLE.

FLOOR RECEPTAGLE (QUAD)

SPECIALTY OUTLET.

GROUNT WINE.

LANDSCAPE FIXTURE.

 Out WALL MOUNT FIXTURE.

 Out EXTERIOR WALL FIXTURE.

LED

TACK LIGHT (#= PT. LENGT

EMERGENCY LIGHT.

FLOOD LIGHT FIXTURE.

EXT SAGN/LIGHT.

VENT FAN.

VENT FAN.

LIGHT FIXTURE.

ELECTRIC CIRCUIT FANEL

UNDER CABINET LIGHT

RANGE HOOD W/ LIGHT. DIRECT/INDIRECT PENDA

3RD FLOOR LIGHTING PLAN

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

3RD FLOOR POWER & LIGHTING PLAN

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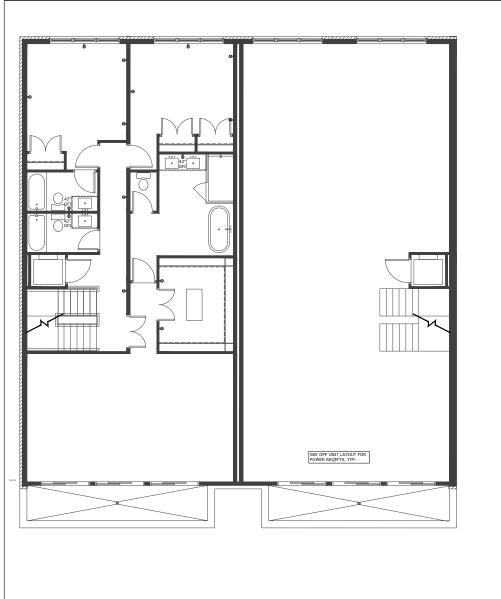
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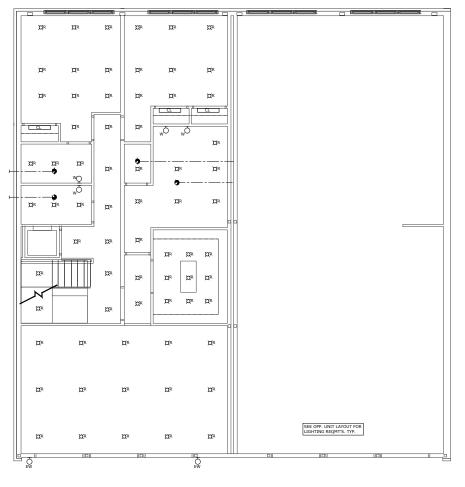
PENNSYLVANIA AVE 2337-41 PENNSYLVANIA AVE PHILADELPHIA, PA 19130

156.03

SCALE 1/4" = 1'-0" 05/23/2025

E1.3







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156.03

RUGGIERO PLANTE LAND DI 5900 RIDGE AVENUE PHEADELPHIA, PA 19128 PHONE: 215-508-3900



4TH FLOOR POWER PLAN
SCALE: 1/4" = 1'- 0"

SLOPING CEILING, TYP.

8'-0" HIGH CEILING SOFFIT SHOWN HATCHED, TYP.

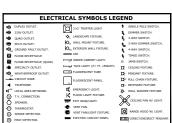
EECTRICAL NOTES:

1. ELLING HER SEE REFERENCED FROM TOP OF FINISHED FLOOR TYPICAL, U.N.O.

1. ELLING HER SEE REFERENCED DRAWINGS EX FOR ADDITIONAL LIGHTING NOTES & CIRCUIT
INFORMATION, FUTURE TYPES, BREESERCH AND LIGHTING EXTL LIGHTING.

3. G. C. SHALL PROVIDE IC RATED HOUSINGS FOR ALL RECESSED LIGHTING FUTURES IN
CONTACT WITH INSLAUTION, IPP.

4. PARTICLE SEED SEED SEED SEED TO SEED TO



CEILING FAN W/ LIGHT. RANGE HOOD W/ LIGHT.

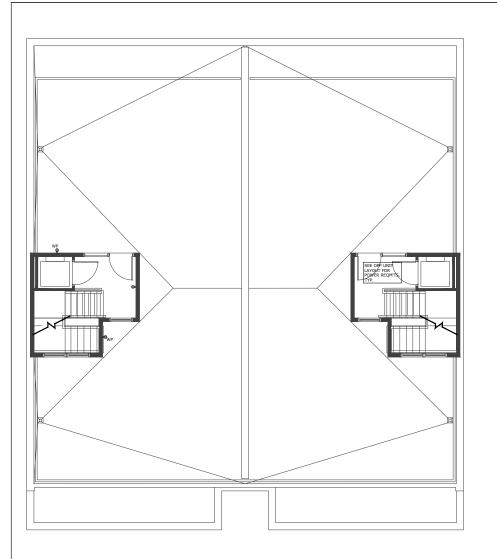
DIRECT/INDIRECT PENDA

4TH FLOOR LIGHTING PLAN
SCALE: 1/4" = 1'- 0"

LIGHTING PLAN

1/4" = 1'-0" 05/23/2025

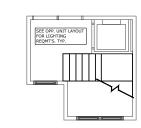
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2 PILOT HOUSE LIGHTING PLAN

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



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156.03



PILOT HOUSE POWER & LIGHTING PLAN

1/4" = 1'-0" DATE 05/23/2025

E1.5

PILOT HOUSE POWER PLAN
SCALE: 1/4" = 1'- 0"

SLOPING CEILING, TYP.

8'-0" HIGH CEILING SOFFIT SHOWN HATCHED, TYP.

LETTING MOTES.

CENTRY CHIEF SARE REFERENCED FROM TOP OF FINISHED FLOOR TYPICAL, U.N.O.

ZERIBER ENTERIS ARE REFERENCED FROM TOP OF FINISHED FLOOR TYPICAL, U.N.O.

Z. REFRENCE ELECTRICAL DRAWINGS EX TOR ADDITIONAL LIGHTING MOTES IS CIRCUIT
INFORMATION, FIFTURE PYPES, EMPRESON'CA MOLITIME STEP LIGHTING ESTIL CHIEF.

Z. G.C. SHALL PROVIDE IC REFEATED HOUSINGS FOR ALL RECESSED LIGHTING FIXTURES IN

CA. G.C. SHALL ROVIDED IC REFEATED HOUSING FACULOURIES AS REQUIRED FOR ALL
FIXTURES RECESSED WIN FIRE RATED CICLING ASSEMBLIES.

ELECTRICAL SYMBOLS LEGEND DUPLEX CUTLET.

DUPLEX CUTLET.

DUPLEX COUNTRY.

SHAT CUTLET.

SHAT CUTLET.

FOR PROCEPHALE (QUAD)

SHAT CUTLET.

RESPECTATION COUNTRY.

SHAT COUNTRY CUTLET.

COUNTRY CUTLET.

COUNTRY CUTLET.

TO SHAT COUNTRY.

TO SHAT COUNTRY. LANDSCAPE FIXTURE.

 Out WALL MOUNT FIXTURE.

 Out WALL FIXTURE.

 LED

 UNDER CABINET LIGHT. 4-WAY SWITCH.
TIMED SWITCH.
IS JAMB SWITCH.

CELLING FORTURE. CESLING FAN W/ LIGHT. RANGE HOOD W/ LIGHT. DIRECT/INDIRECT PENDA