

ZONING BOARD OF APPEALS

Town of Orangetown
26 Orangeburg Road
Orangeburg, New York 10962
(845) 359-8410 (ex. 4316)
Date: November 4, 2024

TO: OBAPAE

- | | |
|--|----------------------------------|
| ✓ NYS Dept of Environmental Conservation | ✓ Rockland County Drainage |
| New York State Dept. of Transportation | ✓ Rockland County Health |
| Palisades Interstate Park Commission | ✓ Rockland County Planning |
| NYS Thruway Authority | ✓ Rockland County Highway |
| ✓ ACOE | ✓ Rockland County Sewer Dstrt #1 |
| CSX | ✓ Orange and Rockland Utilities |
| | ✓ Veolia |

This matter is scheduled for: December 4, 2024

Review of Plans: Dowling/Shiwmandal, 214 Sickletown Road, Orangeburg, NY

Section: 69.08 Block: 1 Lot: R-40 zone

Chapter 43, R-40 District, Section 3.12, Group E, Column 4 (Max FAR: 15% permitted, with 17.5% proposed), and from Section 11 (Rear yard: 50' permitted, with 15.67' proposed), (existing non-conforming lot area: 40,000 square feet required, with 36,154.8 square feet proposed) for pavilion and garage additions, at a single-family residence. The premises are located at 214 Sickletown Road, Orangeburg, New York and identified on the Orangetown Tax Map as Section 69.08, Block 1, Lot 18 in the R-40 zoning district.

Please review the information enclosed and provide comments.
These comments may be mailed, or e-mailed to the Zoning Board Office.

If your Agency does not have any comments at this time, please respond to this office by sending back this sheet.

- US Postal: 26 Orangeburg Road, Orangeburg, NY 10962
- Email to Zoning Board: **KBettmann@orangetown.com**

Zoning Board Meeting Date: December 4, 2024

- () Comments attached
- () No Comments at this time. Please send future correspondence for review.
- () No future correspondence for this site should be sent to this agency. Plans reviewed and this agency does not have any further comments.
- () This project is out of the jurisdiction of this agency and has no further comments.

This project is before the **Zoning Board** on **Wednesday, December 4, 2024.**
Kindly forward your completed review to this office *BEFORE* December 4, 2024.

Reviewing Agency _____

Name: _____ Date: _____

Signature: _____

Thank you, **Katlyn Bettmann (EXT. 4316)**

Name of Municipality: TOWN OF ORANGETOWN

Date Submitted: 10/4/24

RECEIVED
OCT 22 2024
TOWN OF ORANGETOWN
LAND USE BOARDS

Please check all that apply:

Commercial
 Planning Board
 Zoning Board of Appeals

Residential
 Historical Board
 Architectural Board

Subdivision
 Number of Lots
 Site Plan
 Conditional Use

Consultation
 Pre-Preliminary/Sketch
 Preliminary
 Final
 Interpretation

Special Permit
 Variance
 Performance Standards Review
 Use Variance
 Other (specify): _____

PERMIT#: 51344
ASSIGNED
INSPECTOR: DOM

Referred from Planning Board: YES / NO
 If yes provide date of Planning Board meeting: _____

Dowling/Shivmanga

Project Name: DOWLING RESIDENCE GARAGE AND PAVILLION

Street Address: 214 SICKLETOWN RD, ORANGEBURG, NY 10962

Tax Map Designation:

Section: 69.08 Block: 1 Lot(s): 18
 Section: _____ Block: _____ Lot(s): _____

Directional Location:

On the NORTH side of SICKLETOWN RD, approximately 400 feet EAST of the intersection of SICKLETOWN RD + ABBEY RD, in the Town of ORANGETOWN in the hamlet/village of ORANGEBURG.

Acreage of Parcel .83 Zoning District R-40
 School District PEARL RIVER Postal District 10962
 Ambulance District PEARL RIVER Fire District PEARL RIVER
 Water District VEOLIA Sewer District MUNICIPAL

Project Description: (If additional space required, please attach a narrative summary.)
FACADE RENOVATION + GARAGE + PAVILLION

The undersigned agrees to an extension of the statutory time limit for scheduling a public hearing.
 Date: 10/4/24 Applicant's Signature: [Signature]

APPLICATION REVIEW FORM

FILL IN WHERE APPLICABLE.

(IF THE FOLLOWING DOES NOT APPLY PLEASE MOVE ON TO THE NEXT PAGE)

If subdivision:

- 1) Is any variance from the subdivision regulations required? _____
- 2) Is any open space being offered? ____ If so, what amount? _____
- 3) Is this a standard or average density subdivision? _____

If site plan:

- 1) Existing square footage 6333.5
- 2) Total square footage ~~2631.5~~ 6333.5
- 3) Number of dwelling units 1

If **special permit**, list special permit use and what the property will be used for.

Environmental Constraints:

Are there **slopes greater than 25%**? If yes, please indicate the amount and show the gross and net area _____

Are there **streams** on the site? If yes, please provide the names. _____

Are there **wetlands** on the site? If yes, please provide the names and type: _____

Project History:

Has this project ever been reviewed before? NO

If so, provide a narrative, including the list case number, name, date, and the board(s) you appeared before, and the status of any previous approvals.

List tax map section, block & lot numbers for all other abutting properties in the same ownership as this project.



OFFICE OF BUILDING, ZONING, PLANNING,
ADMINISTRATION AND ENFORCEMENT
TOWN OF ORANGETOWN

20 Greenbush Road
Orangeburg, N.Y. 10962

Jane Slavin, R.A.
Director

(845)359-8410

Fax: (845) 359-8526

REFERRAL TO THE ZONING BOARD OF APPEALS

Date: 6.21.24 Section: 69.08 Block: 1 Lot: 18

Applicant: Derek Dowling

Address: 214 Sickletown Rd, Orangetown, NY

RE: Application Made at: same

Referred For:

Chapter 43, Table 3.12, R-40 District, Column 4, Max FAR 15% w/ 17.5% proposed, Column 11 Min Rear Yd 50' w/ 15.67' proposed. Existing Non-Conforming Lot Area 40,000 sf required w/ 36,154.8 sf ENC

2 Variances required


Comments:

Pavilion & Garage additions

Dear Derek Dowling:

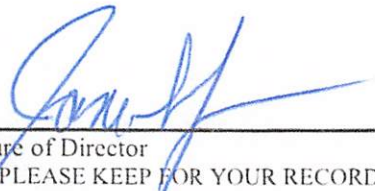
Please be advised that the Building Permit Application # 51344, which you submitted on 4.13.21, has been referred to the Town of Orangetown Zoning Board of Appeals. The Clerk to the Zoning Board of Appeals, Katlyn Bettmann can assist you in the preparation necessary to appear before the board. She can be reached at 845-359-8410 ext. 4316 or kbettmann@orangetown.com.

Sincerely,


Richard Oliver
Deputy Building Inspector

6/21/24




Signature of Director
NOTE: PLEASE KEEP FOR YOUR RECORDS
1-30-2023

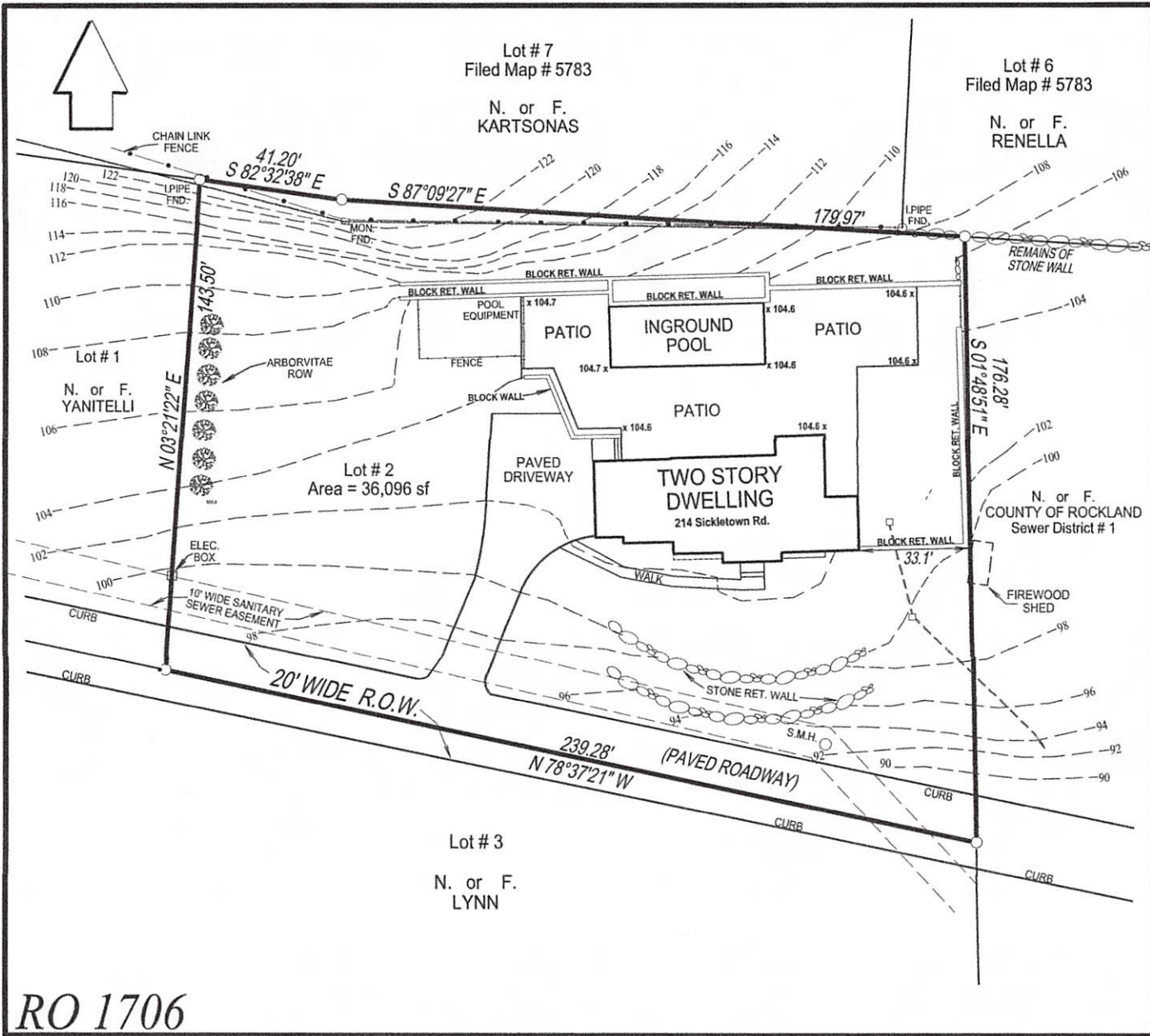
6/24/24
Date
CC: Liz DeCort
Debbie Arbolino

VIS	PRINT KEY	NAME	ADDRESS
2489	69.08-1-7	Rockland County Sewer Dist #1	4 Route 340,Orangeburg, NY 10962
2489	69.08-1-9	Rockland County Sewer Dist #1	4 Rt 340,Orangeburg, NY 10962
2489	69.08-1-10	Joseph Lynons	3 Abbey Rd,Orangeburg, NY 10962
2489	69.08-1-14	Alayne Wallace	7 Abbey Rd,Orangeburg, NY 10962
2489	69.08-1-15	Sherri Preston	8 Abbey Rd,Orangeburg, NY 10962
2489	69.08-1-16	James C O'Sullivan	1 Abbey Rd,Orangeburg, NY 10962
2489	69.08-1-17	Eleanor Kim	2 Abbey Rd,Orangeburg, NY 10962
2489	69.08-1-18	Derek Dowling	214 Sickletown Rd,Orangeburg, NY 10962
2489	69.08-1-19	Richard Yanitelli	216 Sickletown Rd,Orangeburg, NY 10962
2489	69.08-1-20	John Lynn	210 Sickletown Rd,Orangeburg, NY 10962
2489	69.08-1-21.1	Corwick Realty Corp Altus Group US Inc	P.O. Box 71970,Phoenix, AZ 85050
2489	69.08-1-21.2	Gregory Hustis	110 Fifth Ave,Orangeburg, NY 10962
2489	69.08-1-21.3	Corwick Realty Corp Altus Group US Group Inc	P.O. Box 71970,Phoenix, AZ 85050

RECEIVED

OCT 22 2024

TOWN OF ORANGETOWN
LAND USE BOARDS




RO 1706

ASBUILT SURVEY
 For
DOWLING & SHIWMANGAL
 Orangeburg
 Town of Orangetown Rockland County, NY
 Scale: 1" = 30' Area = 0.83 Ac.
 August 21, 2017
 February 5, 2024 - Asbuilt
 March 26, 2024 - Rev.

Tax Lot Desig.: Section 69.08 Block 1 Lot 18

Reference: map entitled "FINAL SUBDIVISION OF PROPERTY FOR COLOGERO", Filed in the Rockland County Clerks Office June 4, 1982 in book 98 page 53 as map # 5372.

NOTES:
 1. Existing Block Retaining wall has 6" drains installed as per Town Code.



Robert E. Sorace
 Lic. 49162
 Robert E. Sorace, PLS
 New City, NY 10956
 845-638-1498

Town of Orangetown
 MEETING OF:
 DEC 4 2024
 ZONING BOARD OF APPEALS

RECEIVED
 OCT 22 2024
 TOWN OF ORANGETOWN
 LAND USE BOARDS

CERTIFICATE OF OCCUPANCY

OFFICE OF BUILDING, ZONING AND PLANNING ADMINISTRATION AND ENFORCEMENT TOWN OF ORANGETOWN

Permit Type : Res. Shed - over 100 sqft Certificate # : 44951
Completion Date : 12/16/2015

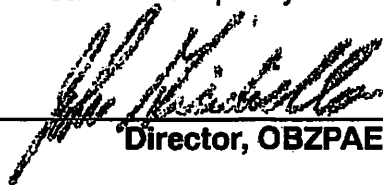
Location of Property : 214 Sickletown Rd
Sec - Blk - Lot : 69.08-1-18

Owner of Property : Robert Pedro/ Joanne Gambert
Address of Owner : 214 Sickletown Rd

Construction Type : Res. Shed - over 100 sqft

THIS CERTIFIES THAT PERMISSION is hereby granted for the OCCUPANCY of the premises herein described, situated on the above mentioned premises for the purposes specified as follows.

Use and designation for the structure or land and nature of work for which this C.O. is issued :
Certificate of occupancy for existing shed.



Director, OBZPAE

CERTIFICATE OF OCCUPANCY

OFFICE OF BUILDING, ZONING AND PLANNING ADMINISTRATION AND ENFORCEMENT TOWN OF ORANGETOWN

Permit Type : Res. Deck Certificate # : 44914
Completion Date : 12/16/2015

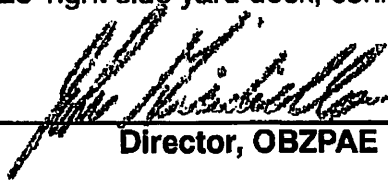
Location of Property : 214 Sickletown Rd
Sec - Blk - Lot : 69.08-1-18

Owner of Property : Robert Pedro/ Joanne Gambert
Address of Owner : 214 Sickletown Rd

Construction Type : Res. Deck

THIS CERTIFIES THAT PERMISSION is hereby granted for the OCCUPANCY of the premises herein described, situated on the above mentioned premises for the purposes specified as follows.

Use and designation for the structure or land and nature of work for which this C.O. is issued :
Erect 9.3' x 25' right side yard deck, connect to existing deck.



Director, OBZPAE

DOWLING RESIDENCE GARAGE & PAVILION

214 SICKLETOWN ROAD, ORANGEBURG, NEW YORK 10962

SECTION 69.08, BLOCK 1, LOT 18		
DISTRICT	GROUP	FOR USES LISTED BELOW
R-40	E	SINGLE-FAMILY DETACHED RESIDENCE

CURRENT FLOOR AREA	SQUARE FEET
FIRST FLOOR	2,044
FIRST FLOOR SOUTH FACADE	13
SECOND FLOOR	1,645
CURRENT SUB TOTAL AREA	3,702

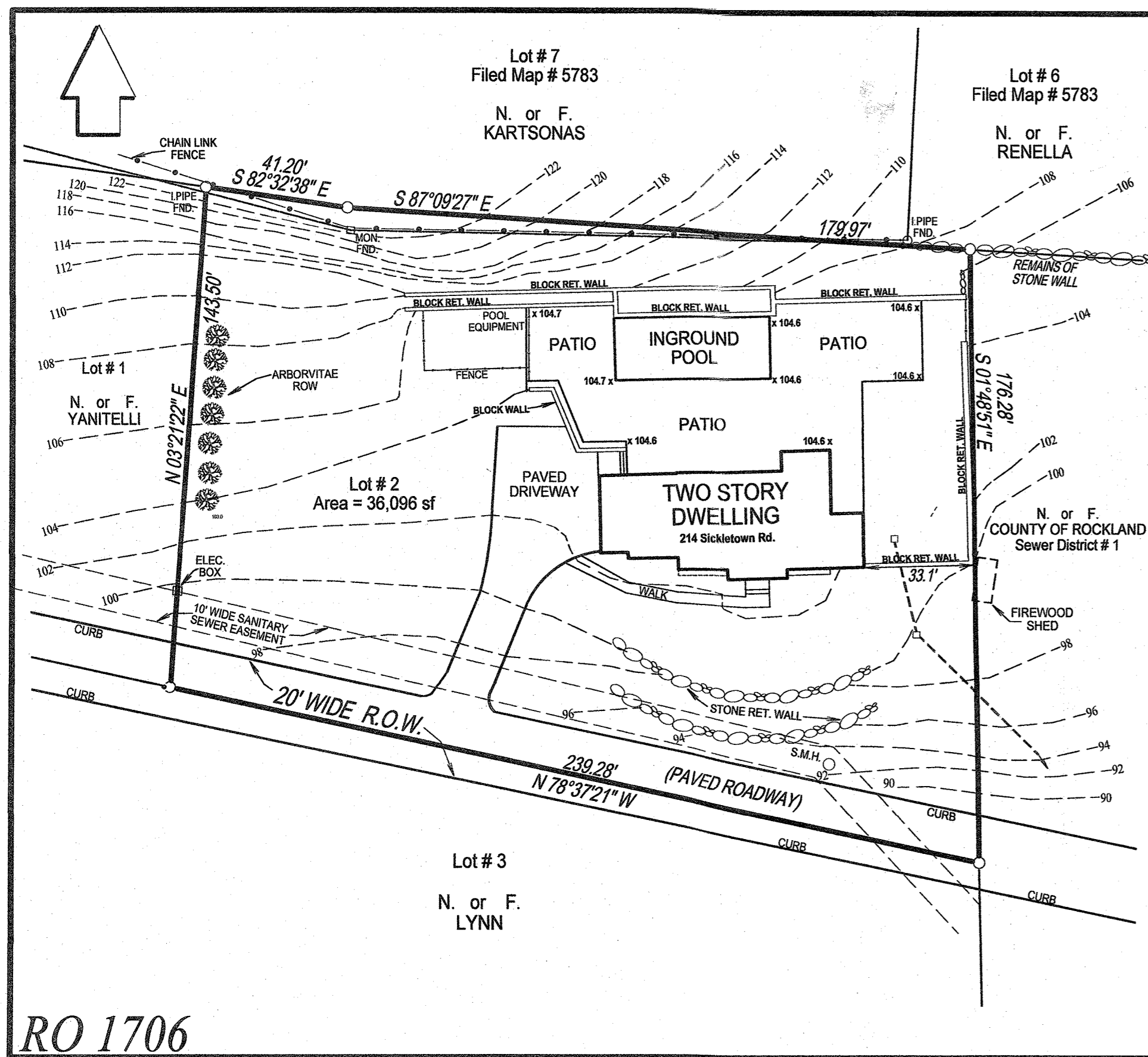
PROPOSED FLOOR AREA	SQUARE FEET
GARAGE FIRST FLOOR	1,269
GARAGE ATTIC (7')	896
PAVILION	466.5
PROPOSED SUB TOTAL AREA	2,631.5

	REQUIRED	EXISTING	PROPOSED	COMPLIES
MAXIMUM FLOOR AREA RATIO	0.15	0.10	0.175	NO
MINIMUM LOT AREA (Square Feet)	40,000	36,154.8	36,154.8	NO
MINIMUM LOT WIDTH (Feet)	150	239.28	239.28	YES
MINIMUM STREET FRONTAGE (Feet)	100	239.28	239.28	YES
REQUIRED FRONT YARD (Feet)	50	50	50	YES
REQUIRED SIDE YARD (Feet)	30	32	32	YES
TOTAL SIDE YARD (Feet)	80	151	82	YES
REQUIRED REAR YARD (Feet)	50	60	15.67	NO
MAXIMUM BUILDING HEIGHT	8 INCHES	33'-4"	19'-6 1/2"	YES

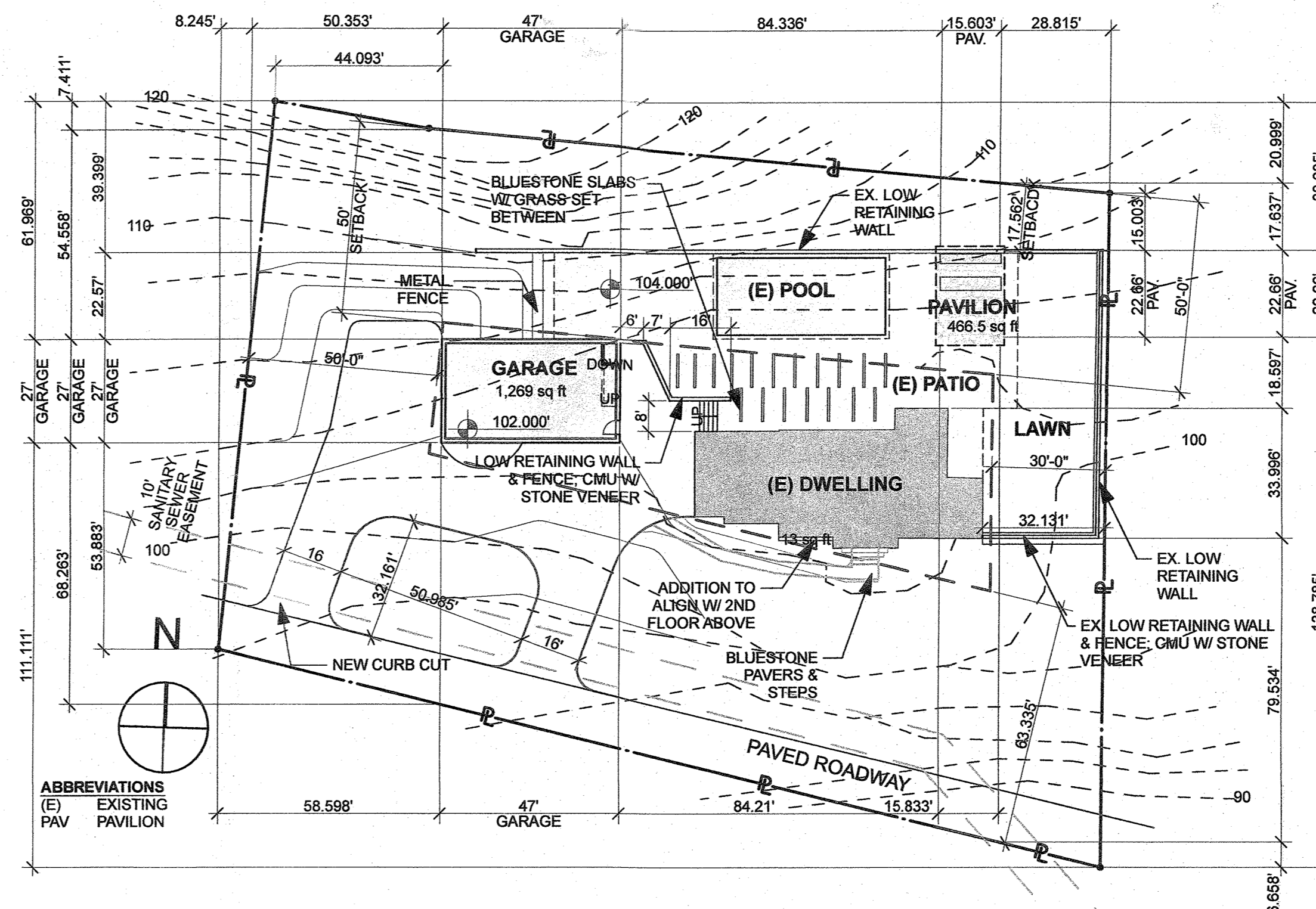
	SQUARE FEET
PROPOSED TOTAL AREA (CURRENT SUB TOTAL AREA + PROPOSED SUB TOTAL AREA)	6,333.5
MAXIMUM TOTAL AREA ALLOWED (0.83 AC x 0.15)	5,423.22
EXCEEDENCE	910.28

6,333.5 / 36,154.8 = 17.5%
MAXIMUM BUILDING HEIGHT DETERMINED BY NORTH ELEVATION

DRAWING LIST	
A-001	COVER SHEET
A-002	GRADE PLANE & NOTES
A-003	SCHEDULE & DETAILS
A-101	GARAGE PLANS
A-102	PAVILION PLANS
A-201	GARAGE + PAVILION ELEVATIONS
A-301	GARAGE + PAVILION SECTIONS
A-501	DETAILS
A-502	DETAILS
EN-001	ENERGY CODE NOTES
EN-002	AIR SEALING & PRODUCTS
EN-003	AIR SEALING, VAPOR BARRIER & FACADE PRODUCTS
EN-004	INSULATION PRODUCTS
EN-005	OPENING PRODUCTS



ASBLT SURVEY
For
DOWLING & SHIWMANGAL
Orangeburg
Town of Orangetown Rockland County, NY
Scale: 1" = 30' Area = 0.83 Ac.
August 21, 2017
February 5, 2024 - Asblt
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Tax Lot Desig.: Section 69.08 Block 1 Lot 18
Reference: map entitled "FINAL SUBDIVISION OF PROPERTY FOR COLOGERO", Filed in the Rockland County Clerks Office June 4, 1982 in book 98 page 53 as map # 5372.
NOTES:
1. Existing Block Retaining wall has 6" drains installed as per Town Code.
Robert E. Sorace, PLS
New City, NY 10956
845-638-1498
Lic. 49162



JMD 520 N Highland Ave
Nyack, NY 10960
(845) 480-5973

SEAL & SIGNATURE:

REVISION	DATE	DESCRIPTION
	06/05/2024	DOB COMMENTS
	05/14/2024	DOB COMMENTS
	10/02/2023	DOB COMMENTS
	09/20/2023	DOB COMMENTS
	04/07/2023	PERMIT SET

PROJECT: **GARAGE & PAVILION** 214 SICKLETOWN ROAD ORANGEBURG, NY 10962

TITLE: **COVER SHEET** Town of Orangetown MEETING OF: DEC 4 2024

DRAWN BY: STEPHEN SCALE: AS-NOTED DRAWING NO: BOARD OF APPEALS A-001

NOTE: THIS SURVEY WAS PROVIDED BY THE OWNER. IT IS INCLUDED IN THIS DOCUMENT SET FOR INFORMATION PURPOSES ONLY.

2020 RESIDENTIAL CODE OF NEW YORK STATE
 ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE 2020 RESIDENTIAL CODE OF NEW YORK STATE

SCOPE OF WORK:

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE 2020 RESIDENTIAL CODE OF NEW YORK STATE
2. NO CHANGE IN OCCUPANCY, USE, OR EGRESS.
3. ADDITION - NEW (4) CAR GARAGE AND PAVILION.
4. NEW CURB CUT AND DRIVEWAY.
5. NEW GRADES FOR DRIVEWAY.
6. SEE POOL APPLICATION AND PERMIT FOR POOL, TERRACE, & RETAINING WALLS.

ALTERATIONS & EXISTING CONDITIONS:

1. VERIFY ALL DIMENSIONS AND ELEVATIONS AT THE SITE.
2. DO ALL CUTTING & PATCHING BY HAND.
3. WHERE EXISTING WORK IS TO BE CUT, CONTRACTOR SHALL PROVIDE ALL REQUIRED SHORING, BRACING, WEDGING, & DRY-PACKING & SHALL BE RESPONSIBLE FOR THE SAFETY OF THE STRUCTURE DURING THIS OPERATION. WHERE APPLICABLE SUCH SEQUENCING & DETAILS ARE TO BE SIGNED & SEALED BY A LICENSED PROFESSIONAL HIRED BY THE GENERAL CONTRACTOR & THE OWNER IS RESPONSIBLE FOR THE 3RD PARTY INSPECTION AGENCY FOR STRUCTURAL STABILITY.
4. THE CONTRACTOR SHALL BE REQUIRED TO REPAIR & PATCH ANY AREAS THAT ARE ALTERED OR DAMAGED DURING THIS OPERATION.

DEMOLITION NOTES:

1. WORK CONSISTS IN PARTIAL DEMOLITION OPERATIONS LIMITED TO THE INTERIOR COMPONENTS OF THE BUILDING WHERE MECHANICAL DEMOLITION EQUIPMENT, OTHER THAN HANDHELD DEVICES, ARE NOT USED.
2. AFTER DEMOLITION & REMOVALS ARE COMPLETE, GENERAL CONTRACTOR IS TO NOTIFY ARCHITECT IN WRITING OF ANY CONDITIONS THAT ARE MADE EVIDENT THAT WILL CONFLICT WITH THE COMPLETION OF THIS PROJECT OR REQUIRE ADDITIONAL DEMOLITION TO MEET THE REQUIREMENTS OF THE NEW SCOPE OF WORK REQUIRED BY THE CONTRACT.
3. ITEMS LISTED AS EXISTING TO RELOCATE / RE-USE ARE TO BE PROTECTED & STORED PRIOR TO COMMENCEMENT OF DEMOLITION. REPAIR AS NEEDED PRIOR TO RE-INSTALLATION.
4. ALL ITEMS TO REMAIN THAT ARE DAMAGED DURING DEMOLITION ARE TO BE REPAIRED / REPLACED BY GENERAL CONTRACTOR.
5. GENERAL CONTRACTOR TO PATCH, REPAIR, & FEATHERDOWN EXISTING CONCRETE SLABS AS REQUIRED TO PROVIDE A LEVEL SURFACE FOR NEW FLOOR FINISHES.
6. ALL NEW & EXISTING PARTITIONS ARE TO ALIGN AND TO BE AS ONE CONTINUOUS INSTALLATION. THERE ARE TO BE NO CONTOUR LINES INDICATING EXISTING AREAS THAT HAVE CLOSED UP.
7. IT IS EXPECTED THAT ENOUGH LABOR WILL BE PROVIDED SO THAT ACTIVITY FOR ANY GIVEN TRADE WILL NOT BE LIMITED TO ONLY ONE PART OF THE TOTAL WORK AREA. EACH TRADE WILL BE EXPECTED TO WORK AS REQUIRED SO AS NOT TO DELAY OR HOLD UP TRADES FOLLOWING THEM.

GENERAL STRUCTURAL NOTES:

1. GARAGE LVL, RIDGE, RAFTER, & VALLEY DESIGN BY LUMBER SUPPLIER.
2. PAVILION MEMBER SIZES ENGINEERED BY MANUFACTURER.
3. GARAGE PRECAST LINTEL ENGINEERING BY MANUFACTURER.
4. GARAGE WOOD-TO-CMU CONNECTIONS AND WOOD-TO-WOOD CONNECTIONS BY SIMPSON STRONG-TIE.

GENERAL NOTES:

1. CONTRACTOR SHALL VERIFY EXISTING FIELD DIMENSIONS & ON SITE CONDITIONS. SHOULD THERE BE ANY DISCREPANCIES THE CONTRACTOR SHALL NOTIFY THE ARCHITECT / ENGINEER OF RECORD FOR CLARIFICATION.
2. CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS ON THE JOB AND ARCHITECTS OFFICE MUST BE NOTIFIED OF ANY VARIATION FROM THE DIMENSIONS SHOWN BY THESE DRAWINGS.
3. ALL CONSTRUCTION DIMENSIONS AND DETAILS SHALL CONCUR WITH AND BE DETERMINED FROM THESE DRAWINGS ONLY.
4. ALL MATERIALS AND CONSTRUCTION TO BE INCORPORATED IN THE WORK SHALL BE IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE ASTM SPECIFICATIONS APPLICABLE, AND TO CONFORM TO THE STANDARDS AND RECOMMENDATIONS OF THE VARIOUS TRADE INSTITUTES (A.C.I., A.I.S.C., ETC.) WHERE APPLICABLE. ALL MATERIALS INCORPORATED INTO THE WORK SHALL BE NEW.
5. CONTRACTORS SHALL BE RESPONSIBLE FOR ADEQUATELY BRACING AND PROTECTING ALL WORK DURING CONSTRUCTION AGAINST DAMAGE, BREAKAGES, COLLAPSE, DISTORTIONS AND OFF-ALIGNMENT ACCORDING TO APPLICABLE CODES, STANDARDS, AND GOOD PRACTICE.
6. CONSTRUCTION SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL CODES, ORDINANCES, RULES AND REGULATIONS PERTAINING TO LABOR AND MATERIALS.
7. ALL NOTES HEREIN MENTIONED WITH THOSE ON THE VARIOUS DRAWINGS, SHALL APPLY TO ALL DRAWINGS AND FORM PART OF THE CONTRACT.
8. EACH CONTRACTOR WILL BE HELD STRICTLY RESPONSIBLE FOR HIS WORK. ANY DISCREPANCIES IN THE PLANS OR DETAILS SHALL BE CALLED TO THE ATTENTION OF THE ARCHITECT.
9. THE FOLLOWING ITEMS OF WORK SHALL BE SUBJECT TO CONTROLLED INSPECTION, MADE AND WITNESSED BY OR UNDER THE DIRECT SUPERVISION OF AN ARCHITECT OR ENGINEER RETAINED BY THE OWNER AND ACCEPTABLE TO ARCHITECT OF RECORD. TEST REPORTS AND CERTIFICATE OF INSPECTION SHALL BE FILED WITH THE BUILDING.
 - A. CONCRETE MATERIALS FOR STRUCTURAL ELEMENTS PROPORTIONED ON THE BASIS OF CALCULATED STRESSES 20% OR GREATER OF BASIC ALLOWABLE VALUE.
 - B. PLACING OF CONCRETE. (POURED CONCRETE)
10. ALL MATERIALS, ASSEMBLIES AND METHODS OF CONSTRUCTION REGULATED BY THE CODE AND NOT LISTED ABOVE SHALL BE SUBJECT TO SEMI-CONTROLLED INSPECTION BY THE PERSON SUPERINTENDING THE CONSTRUCTION. SIGNED COPIES OF ALL TEST AND INSPECTION REPORTS SHALL BE FILED THROUGH THE ARCHITECT WITH THE DEPARTMENT OF BUILDINGS.
11. ALL MATERIALS AND ASSEMBLIES REQUIRED TO HAVE A FIRE RESISTANCE RATING SHALL COMPLY WITH ONE OF THE FOLLOWING:
 - A. IT SHALL CONFORM WITH NFPA 251 "FIRE RESISTANCE RATINGS" OR,
 - B. IT SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ASTM E-119-2000, "STANDARD METHODS OF FIRE TESTS OF BUILDING CONSTRUCTION AND MATERIALS", OR
 - C. IT SHALL HAVE BEEN ACCEPTABLE PRIOR TO THE EFFECTIVE DATE OF THE CODE.
12. ALL EXITS SHALL BE KEPT READILY ACCESSIBLE AND UNOBSTRUCTED AT ALL TIMES.
13. STAIRWAYS PER R311.7
14. ALL INTERIOR TOILETS SHALL BE MECHANICALLY VENTILATED IN ACCORDANCE WITH SECTION IRC M1505 OF THE BUILDING CODE.
15. EQUIPMENT USE PERMITS, INSPECTIONS, AND TESTS PERMITS SHALL BE OBTAINED FOR USE OF THE FOLLOWING EQUIPMENT:
 - A. AIR CONDITIONING AND VENTILATION SYSTEMS
16. INSPECTION DURING PROGRESS OF WORKS
 - A. THE COMMISSIONER MAY ACCEPT SIGNED STATEMENTS BY ARCHITECTS AND ENGINEERS AND SUPPORTING INSPECTIONS AND TESTS REPORTS WITHOUT VERIFYING INSPECTION OR TEST BY DEPARTMENT INSPECTORS PER ARTICLE 116.
17. ALL PERMITS ISSUED BY THE DEPARTMENT OF BUILDINGS SHALL BE POSTED IN A CONSPICUOUS PLACE OPEN TO THE PUBLIC INSPECTION FOR THE ENTIRE TIME OF THE PROSECUTION OF THE WORK OF THE USE AND OPERATION OF THE EQUIPMENT OR UNTIL THE EXPIRATION OF THE PERMIT.
18. FIREPROOFING
 - A. THE OCCUPANCY CLASSIFICATION OF THE BUILDING IS OCCUPANCY GROUP (O.G.) R-3 AND CONSTRUCTION TYPE III-B.
19. WOOD REQUIRED TO BE FIRE-RETARDANT-TREATED SHALL BE TESTED IN ACCORDANCE WITH ASTM E84-2001.
20. TOILET ROOM SIDE OF PARTITIONS SHALL BE CEMENT BOARD.
21. ENERGY CONSERVATION CODE NOTES: R50101 ADDITIONS, ALTERATIONS, OR REPAIRS TO AN EXISTING BUILDING, BUILDING SYSTEM OR PORTION THEREOF SHALL COMPLY WITH SECTION R502, R503, OR R504. UNALTERED PORTIONS OF THE EXISTING BUILDING OR BUILDING SUPPLY SYSTEM SHALL NOT BE REQUIRED TO COMPLY WITH THIS CODE.
22. LIST OF SPECIAL INSPECTIONS:
CONCRETE CONSTRUCTION

TABLE R301.2(1) CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA													
GROUND SNOW LOAD ^a	WIND DESIGN				SEISMIC DESIGN CATEGORY ^f	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP ^g	ICE BARRIER UNDERLAYMENT REQUIRED ^h	FLOOD HAZARDS ^g	AIR FREEZING INDEX ⁱ	MEAN ANNUAL TEMP ^j
	Speed ^d (mph)	Topographic effects ^k	Special wind region ^l	Windborne debris zone ^m		Weathering ^a	Frost line depth ^b	Termite ^c					
30 lb/ft ²	115	NO	YES	NO	B	SEVERE	48 INCHES	MODERATE TO HEAVY	15	PER MANUFACTURER	NO	1500 OR LESS	52.2

DEFLECTION LIMITS				MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS, L ₀ , AND MINIMUM CONCENTRATED LIVE LOADS ^a			BASIC DESIGN WIND SPEEDS, V, FOR RISK CATEGORY II BUILDINGS AND OTHER STRUCTURES	
CONSTRUCTION	L or L _r	S or W ^f	D + L ^{d, g}	LIVE LOADS	UNIFORM (psf)	CONCENTRATED (pounds)	WIND LOAD ^a	
Roof members	l/360	l/360	l/240	Residential, All other areas	40	-	115	
Floor members	l/360	-	l/240	Ordinary pitched roofs	20	300 ^f		
Exterior walls	-	l/360	-	Stairs	40	300 ^f		
Interior partitions ^b	l/360	-	-	Handrails and guards	-	200		
				Grab bars, shower seats	-	250		
				Interior walls and partitions	5 horizontal load	-		
				GROUND SNOW LOAD ^a	30	-		

TABLE 1604.5 RISK CATEGORY OF BUILDINGS AND OTHER STRUCTURES	
RISK CATEGORY	NATURE OF OCCUPANCY
II	Buildings and other structures except those listed in Risk Categories I, III and IV.

TABLE R301.6 MINIMUM ROOF LIVE LOADS IN POUNDS-FORCE PER SQUARE FOOT OF HORIZONTAL PROJECTION			
ROOF SLOPE	TRIBUTARY LOADED AREA IN SQUARE FEET FOR ANY STRUCTURAL MEMBER		
	0 to 200	201 to 600	Over 600
Flat or rise less than 4 inches per foot (1:3)	20	16	12
Rise 4 inches per foot (1:3) to less than 12 inches per foot (1:1)	16	14	12

TABLE R401.4.1 PRESUMPTIVE LOAD-BEARING VALUES OF FOUNDATION MATERIALS ^a	
CLASS OF MATERIAL	LOAD-BEARING PRESSURE (pounds per square foot)
Clay, sandy, silty clay, clayey silt, silt and sandy silt/clay (CL, ML, MH and CH)	1,500

TABLE R402.2 MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF CONCRETE	
TYPE OR LOCATION OF CONCRETE CONSTRUCTION	MINIMUM SPECIFIED COMPRESSIVE STRENGTH ^a (f' _c)
	Weathering Potential ^b
Basement walls, foundation walls, exterior walls and other vertical concrete work exposed to the weather	3,000 ^d
	Severe
Porches, carport slabs and steps exposed to the weather, and garage floor slabs	3,500 ^{d, e, f}

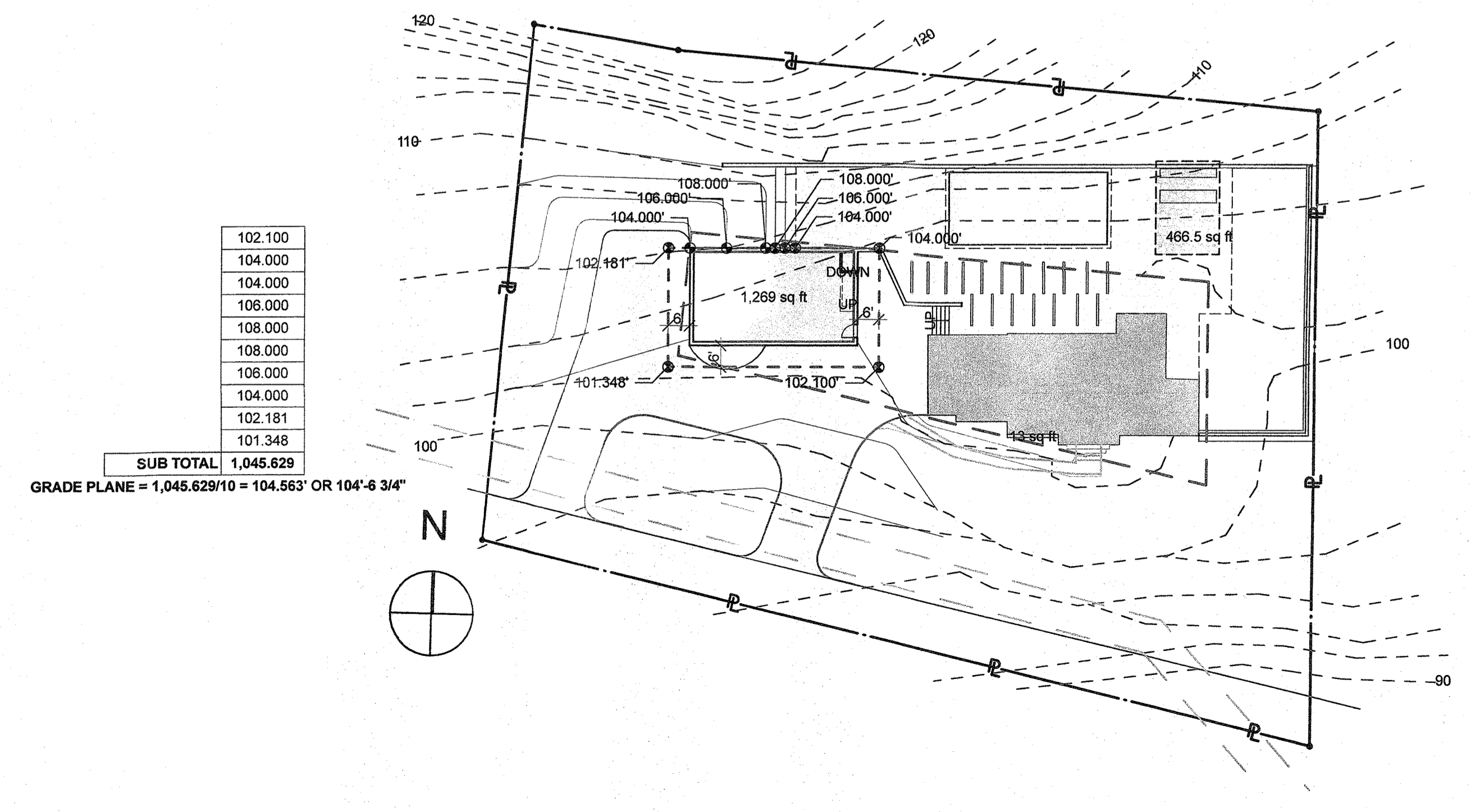
R402.4 Masonry
Masonry systems shall be designed and installed in accordance with this chapter and shall have a minimum specified compressive strength of 1,500 psi (10.3 MPa).

**TABLE R403.1(3)
MINIMUM WIDTH AND THICKNESS FOR CONCRETE FOOTINGS WITH CAST-IN-PLACE CONCRETE OR FULLY GROUTED MASONRY WALL CONSTRUCTION (inches)^{a, b}**

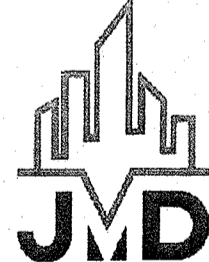
SNOW LOAD OR ROOF LIVE LOAD	STORY AND TYPE OF STRUCTURE WITH CMU	LOAD-BEARING VALUE OF SOIL (psf)
30 psf	2 story—slab-on-grade	24 x 7

R502.1.2 Prefabricated Wood I-Joists
Structural capacities and design provisions for prefabricated wood I-joists shall be established and monitored in accordance with ASTM D5055.

R502.1.3 Structural Glued Laminated Timbers
Glued laminated timbers shall be manufactured and identified as required in ANSI A190.1, ANSI 117 and ASTM D3737.

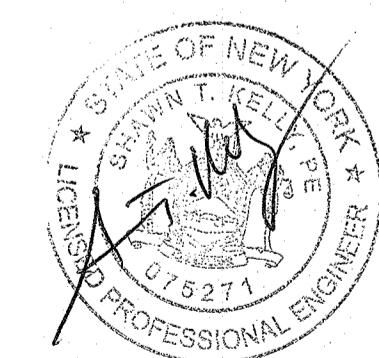


1 GRADE PLANE CALCULATION
SCALE: 1" = 30'



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SEAL & SIGNATURE:



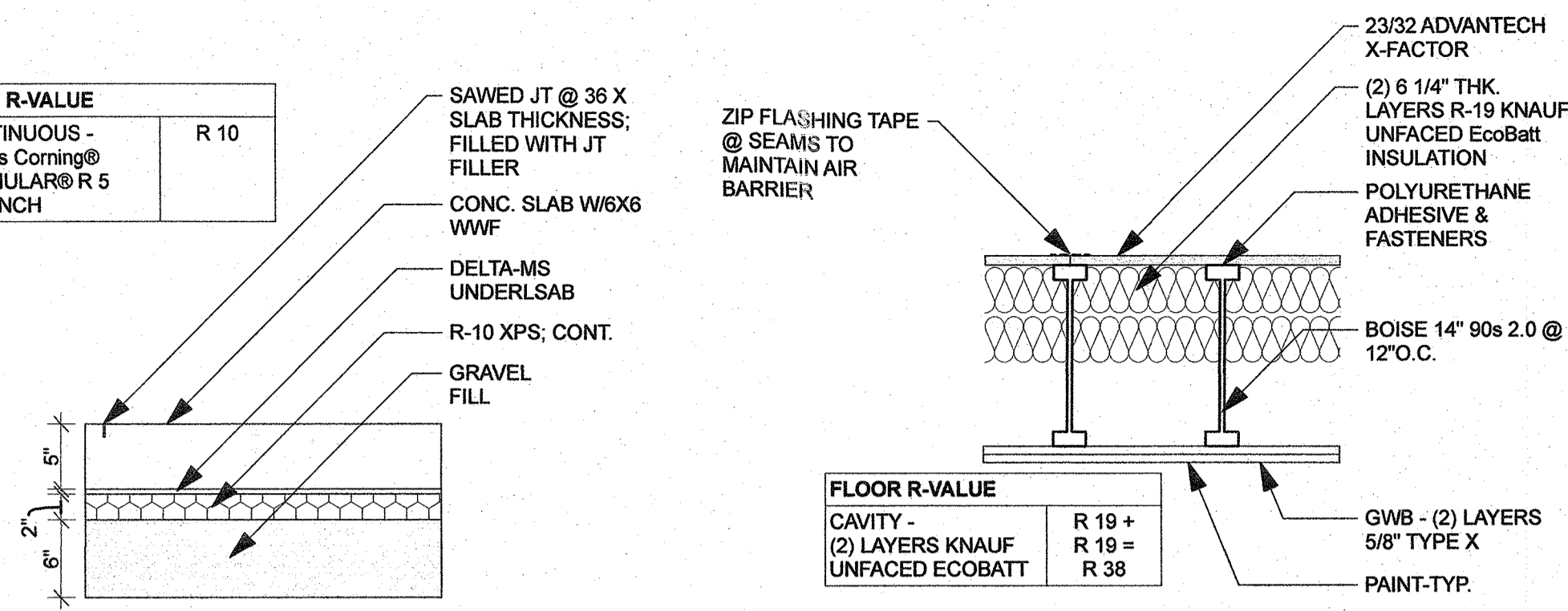
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	06/05/2024	DOB COMMENTS
	05/14/2024	DOB COMMENTS
	10/02/2023	DOB COMMENTS
	09/20/2023	DOB COMMENTS
	04/07/2023	PERMIT SET

PROJECT: **GARAGE & PAVILION** 214 SICKLETOWN ROAD
ORANGEBURG, NY 10962

TITLE: **GRADE PLANE & NOTES**

DRAWN BY: STEPHEN	SCALE: AS-NOTED	DRAWING NO: A-002
PROJECT NO:		

SLAB R-VALUE	
CONTINUOUS - Owens Corning® FOAMULAR® R 5 PER INCH	R 10



FLOOR R-VALUE	
CAVITY - (2) LAYERS KNAUF UNFACED ECOBATT	R 19 + R 19 = R 38

5 SLAB ON GRADE SCALE: 1" = 1'-0"

6 ATTIC FLOOR SCALE: 1" = 1'-0"

7 STAIR LANDING SCALE: 1" = 1'-0"

8 DOOR LEGEND SCALE: 1" = 1'-0"

9 WINDOW LEGEND SCALE: 1" = 1'-0"

DOOR LEGEND				
TYPE	Flush	No Grid	Glass Panel 1	Style 5
VIEW				
DIMENSIONS	3'-0" x 6'-8"	3'-0" x 6'-8"	3'-0" x 6'-8"	18'-0" x 7'-0"
NOTES	D-05	D-04	D-01	D-02

WINDOW LEGEND		
WINDOW TYPE	Casement	Casement
VIEW		
DIMENSIONS	2'-6" x 5'-0"	5'-0" x 5'-0"
NOTES	W-01	W-02

TYPICAL DETAIL REINFORCING FOR NON-LOAD BEARING MASONRY WALLS																
INTERIOR & EXTERIOR WALLS																
RATING (HR)	INTERIOR	EXTERIOR	NOMINAL CMU THICKNESS	ACTUAL CMU THICKNESS	ACTUAL CMU LENGTH	ZONE	VERTICAL REBAR	LINTEL REBAR	JAMB OPENING	WALL ENDS, E.J.'S, CORNERS	HORIZONTAL REINFORCING	MAXIMUM HEIGHT (FT)	DOWELS	TOP ANCHOR	GROUT	GROUT PSI
2	EXTERIOR	EXTERIOR	8"	7 5/8"	17 5/8"	-	#5 @ 27"	SEE SCH.	(2) #5	(2) #5	9 GA. 120 TRUSS-MESH @ 16" O.C.	15'-0"	SAME AS VERTICAL BARS	NA	PARTIAL	3000
2	EXTERIOR	EXTERIOR	12"	11 5/8"	17 5/8"	-	#5 @ 27"	SEE SCH.	(2) #5	(2) #5	9 GA. 120 TRUSS-MESH @ 16" O.C.	20'-0"	SAME AS VERTICAL BARS	NA	PARTIAL	3000

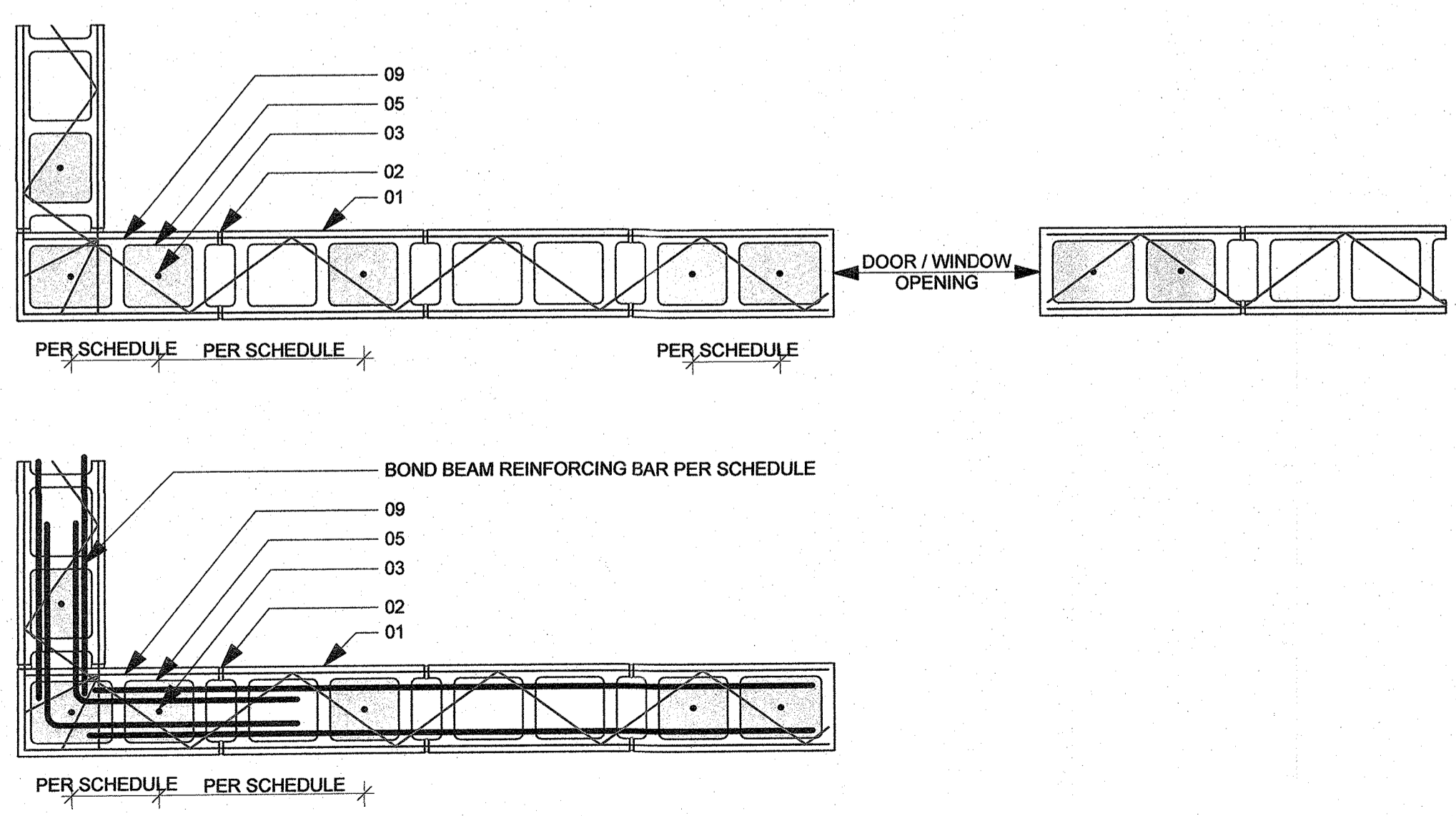
MASONRY SPLICE LENGTH	
DOWEL SIZE	LENGTH (FT)
#4	3'-0"
#5	3'-9"
#6	4'-6"

MASONRY DOWEL LENGTH			
DOWEL SIZE	LENGTH (FT)	HOOK LENGTH (FT)	EMBED LENGTH (IN)
#4	2'-6"	0'-7"	+ 0'-4"
#5	3'-0"	0'-9"	+ 0'-4"
#6	3'-6"	0'-10"	+ 0'-4"

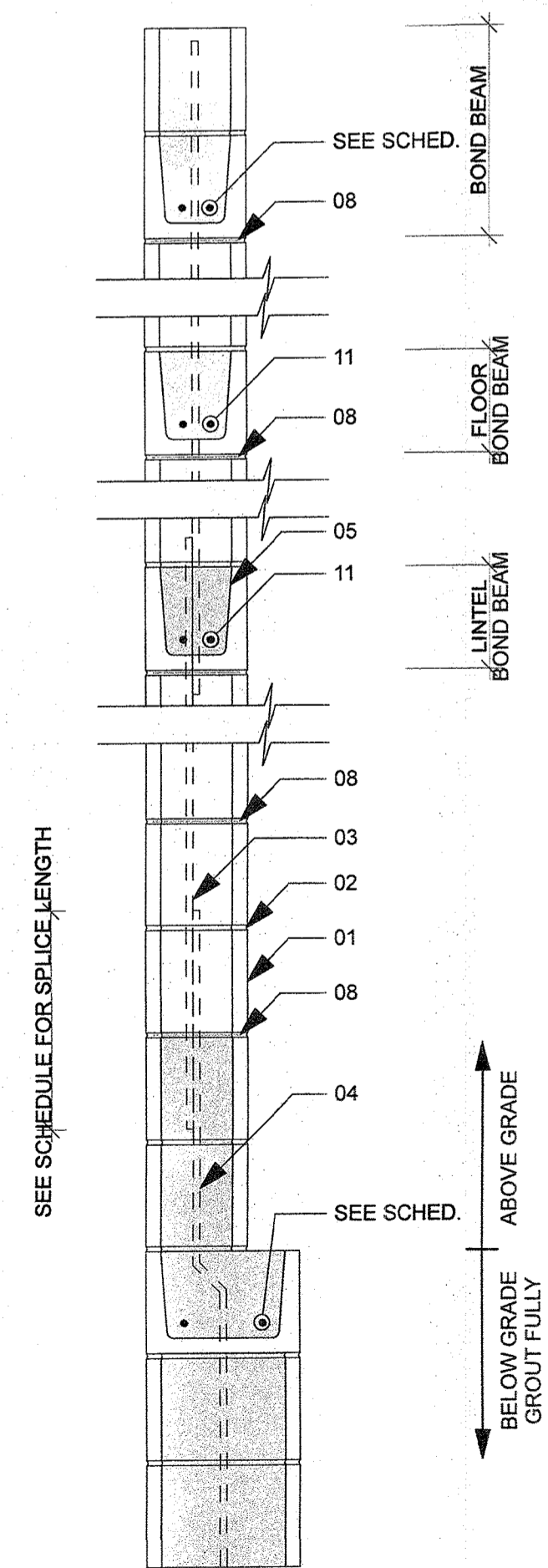
LINTEL SCHEDULE					
LINTEL SECTION NOMINAL SIZE	BOTTOM REINFORCING MAX CLEAR SPAN				
	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"
6X8	(1) #4	(2) #4	(2) #5	N/A	N/A
6X16	-	-	(1) #4	(2) #5	(2) #5
8X8	(2) #3	(2) #4	(2) #4	(2) #5	N/A
8X16	-	-	-	(2) #4	(2) #5
10X16	-	-	-	(2) #5	N/A
10X32	-	-	-	(2) #4	(2) #5

- MASONRY DETAIL LEGEND**
- 01 MASONRY BLOCK
 - 02 TYPE S MORTAR | TYPE M MORTAR BELOW GRADE
 - 03 VERTICAL REBAR PER SCHEDULE
 - 04 DOWEL PER SCHEDULE
 - 05 GROUT PER SCHEDULE
 - 06 CLOSED CELL NEOPRENE SPONGE
 - 07 BACKER ROD
 - 08 SERIES ES ELASTOMERIC SEALANT
 - 09 JOINT REINFORCEMENT PER SCHEDULE
 - 10 TOP ANCHOR PER SCHEDULE
 - 11 AC100+ GOLD ADHESIVE
 - 12 LINTEL REBAR PER SCHEDULE
 - 13 EXISTING STRUCTURE
 - 14 DOVETAIL TIE

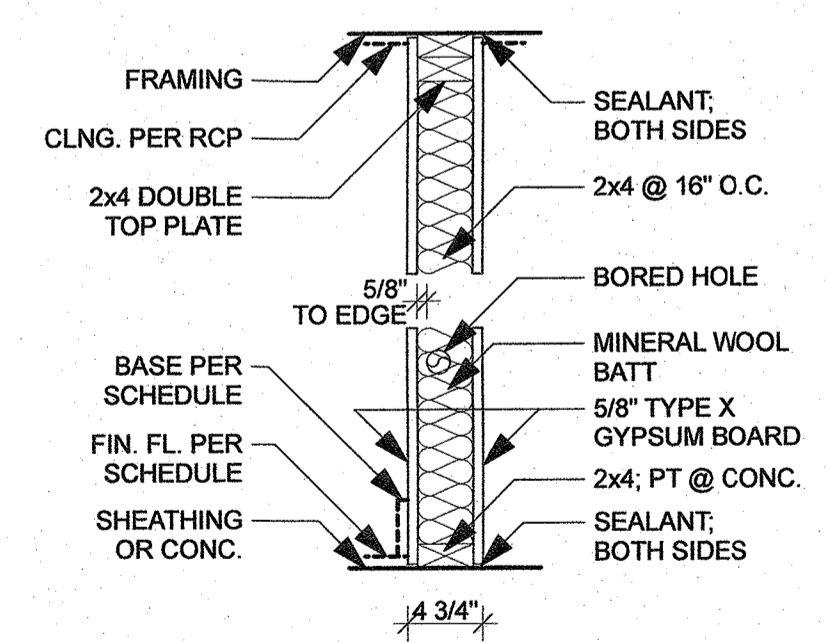
4 CMU SCHEDULE



1 CMU PLAN DETAILS SCALE: 1" = 1'-0"



2 CMU PARTITION SCALE: 1" = 1'-0"



INTERIOR PARTITION	01
UL	U305
FIRE RATING	1 HOUR
SYSTEM STC	34

NOTE:
 1. Studs shall be a minimum No. 3, standard or stud grade lumber.
 2. Bored hole max. diameter 40% stud depth.

3 INT PARTITION SCALE: 1" = 1'-0"

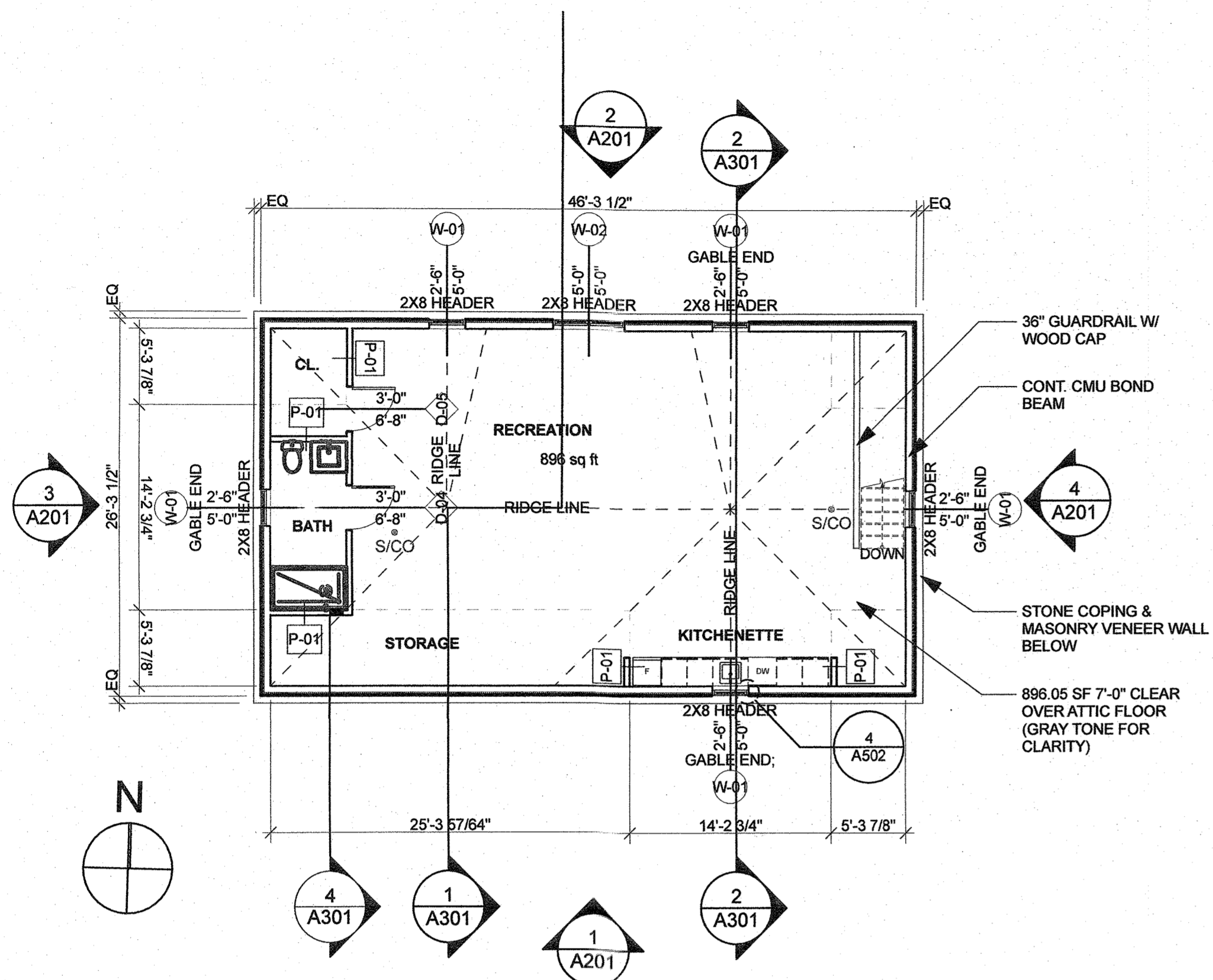
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 (845) 480-5973

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06/05/2024		DOB COMMENTS
05/14/2024		DOB COMMENTS
10/02/2023		DOB COMMENTS
09/20/2023		DOB COMMENTS
04/07/2023		PERMIT SET

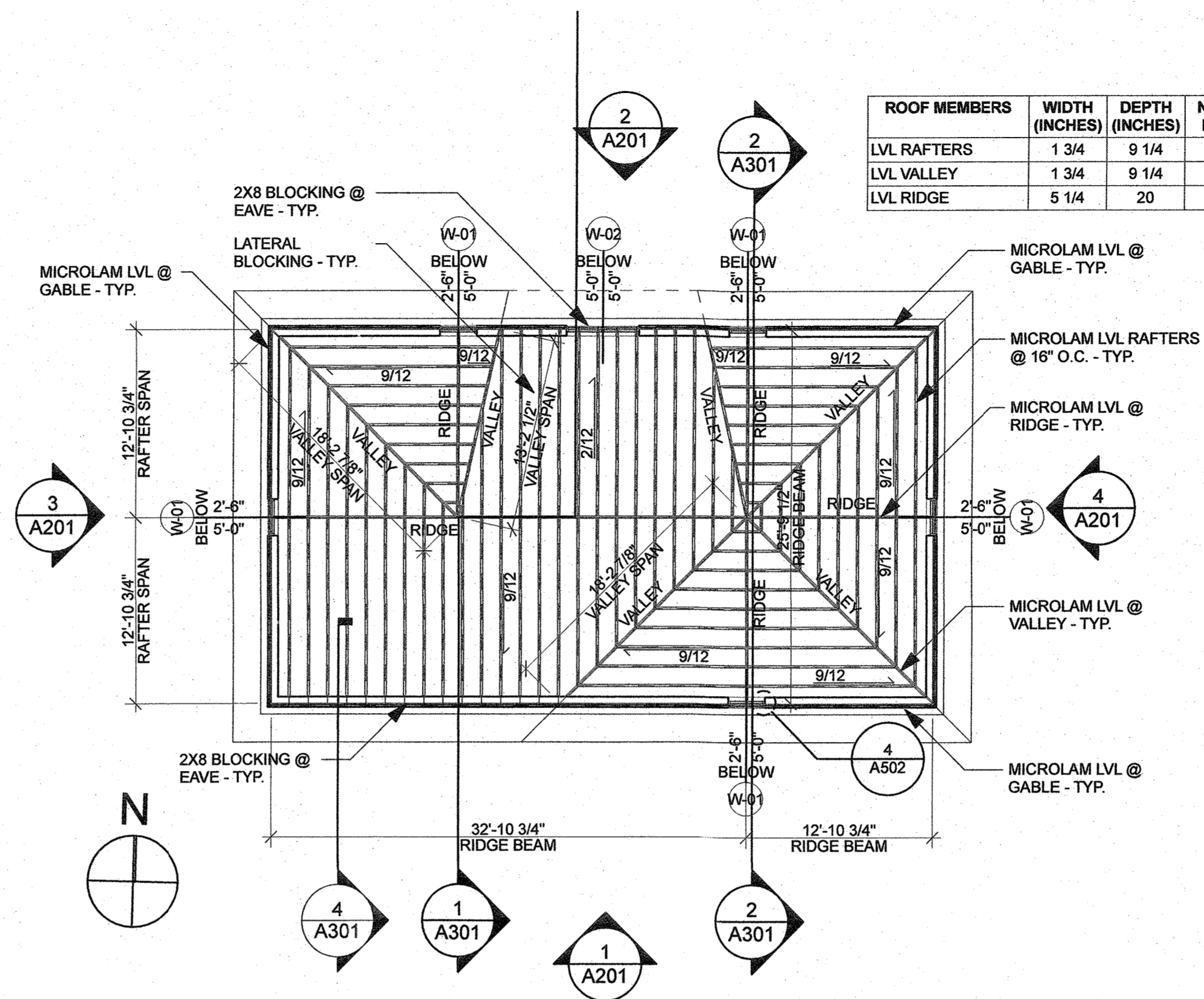
PROJECT: **GARAGE & PAVILION** 214 SICKLETOWN ROAD ORANGEBURG, NY 10962

TITLE: **SCHEDULES & DETAILS**

DRAWN BY: STEPHEN SCALE: AS-NOTED DRAWING NO: **A-003**



NOTE: GARAGE SECOND FLOOR PLAN NOT TO BE USED AS DWELLING UNIT.



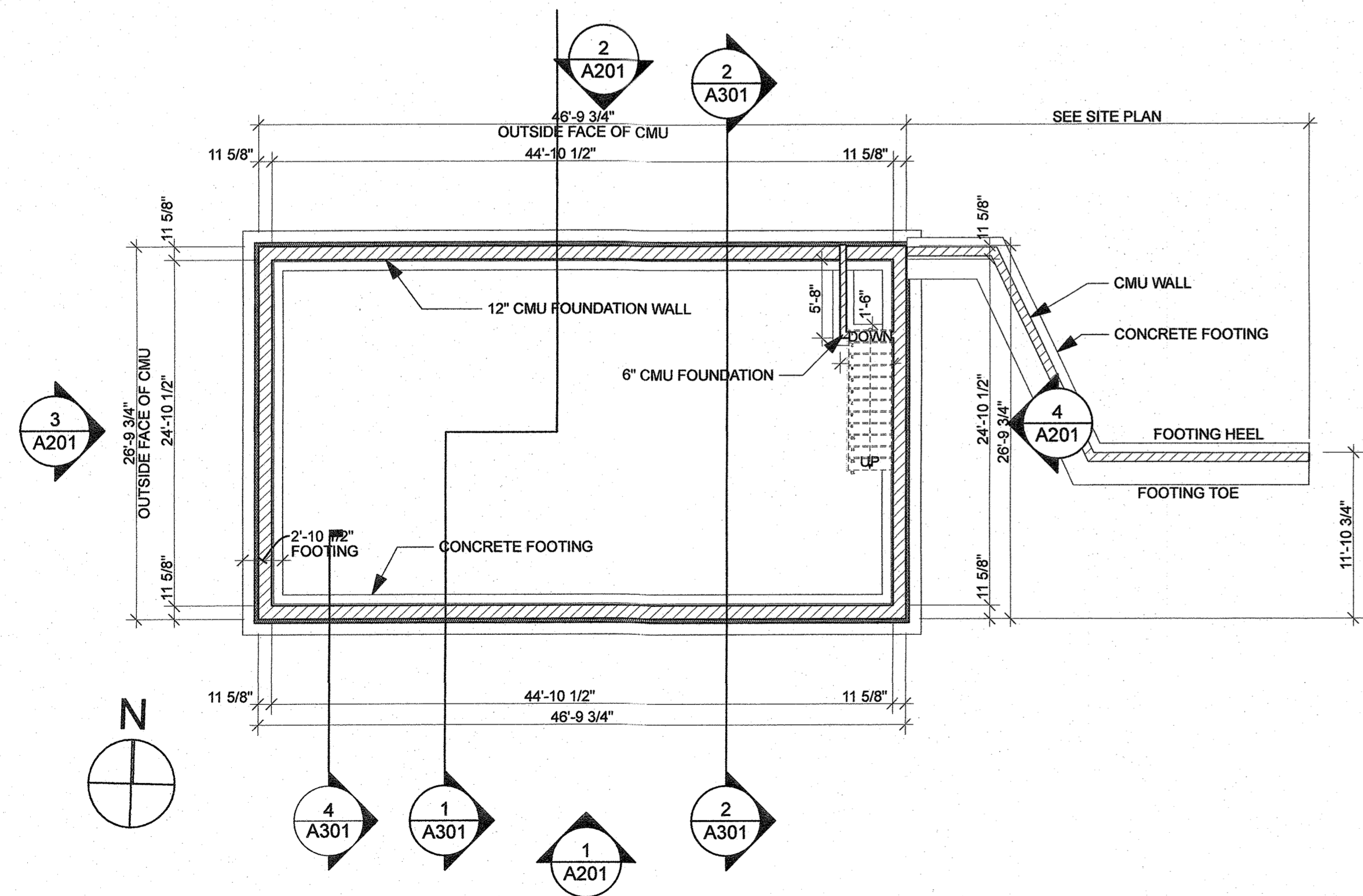
LEGEND

HD Heat detection rated for the ambient outdoor temperatures shall be listed in accordance with UL 521 or UL 539

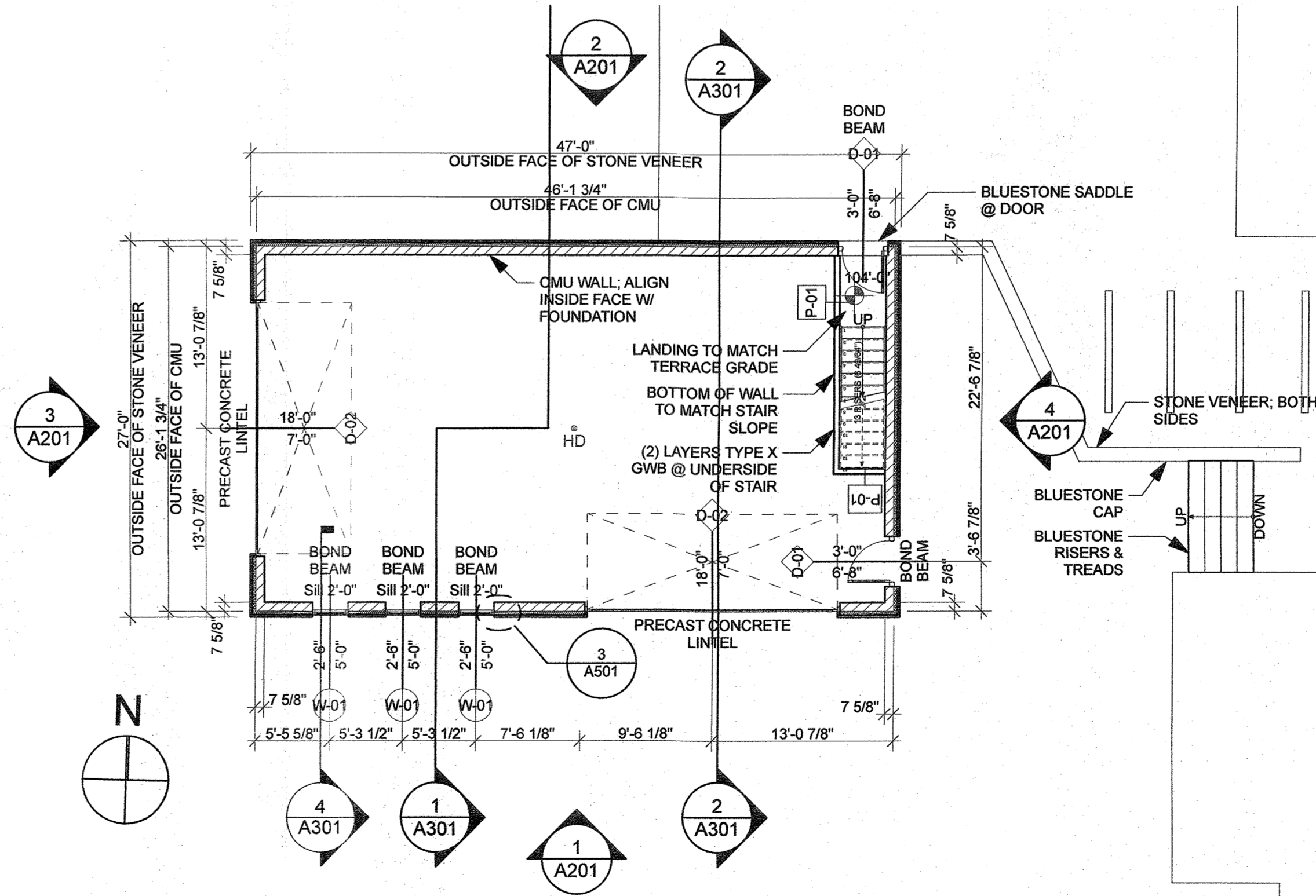
S/CO Combination smoke and carbon monoxide alarms shall be listed in accordance with UL 217 and UL 2034

3 GARAGE SECOND FLOOR PLAN
SCALE: 1/8" = 1'-0"

4 GARAGE ROOF PLAN
SCALE: 1/8" = 1'-0"



1 GARAGE FOUNDATION
SCALE: 1/8" = 1'-0"



2 GARAGE FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"

JMD 520 N Highland Ave
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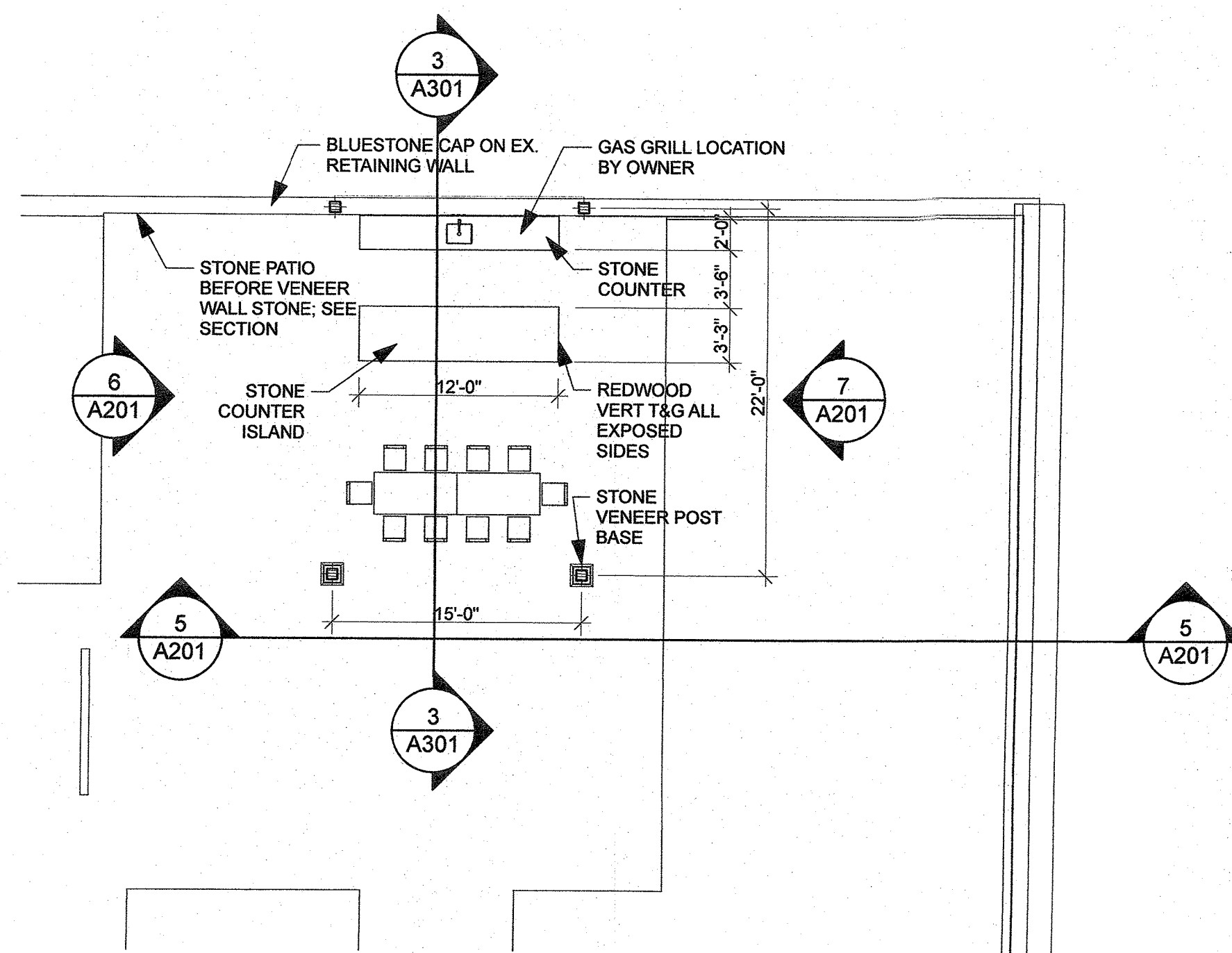
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06/05/2024	DOB COMMENTS	
05/14/2024	DOB COMMENTS	
10/02/2023	DOB COMMENTS	
09/20/2023	DOB COMMENTS	
04/07/2023	PERMIT SET	
REVISION	DATE	DESCRIPTION

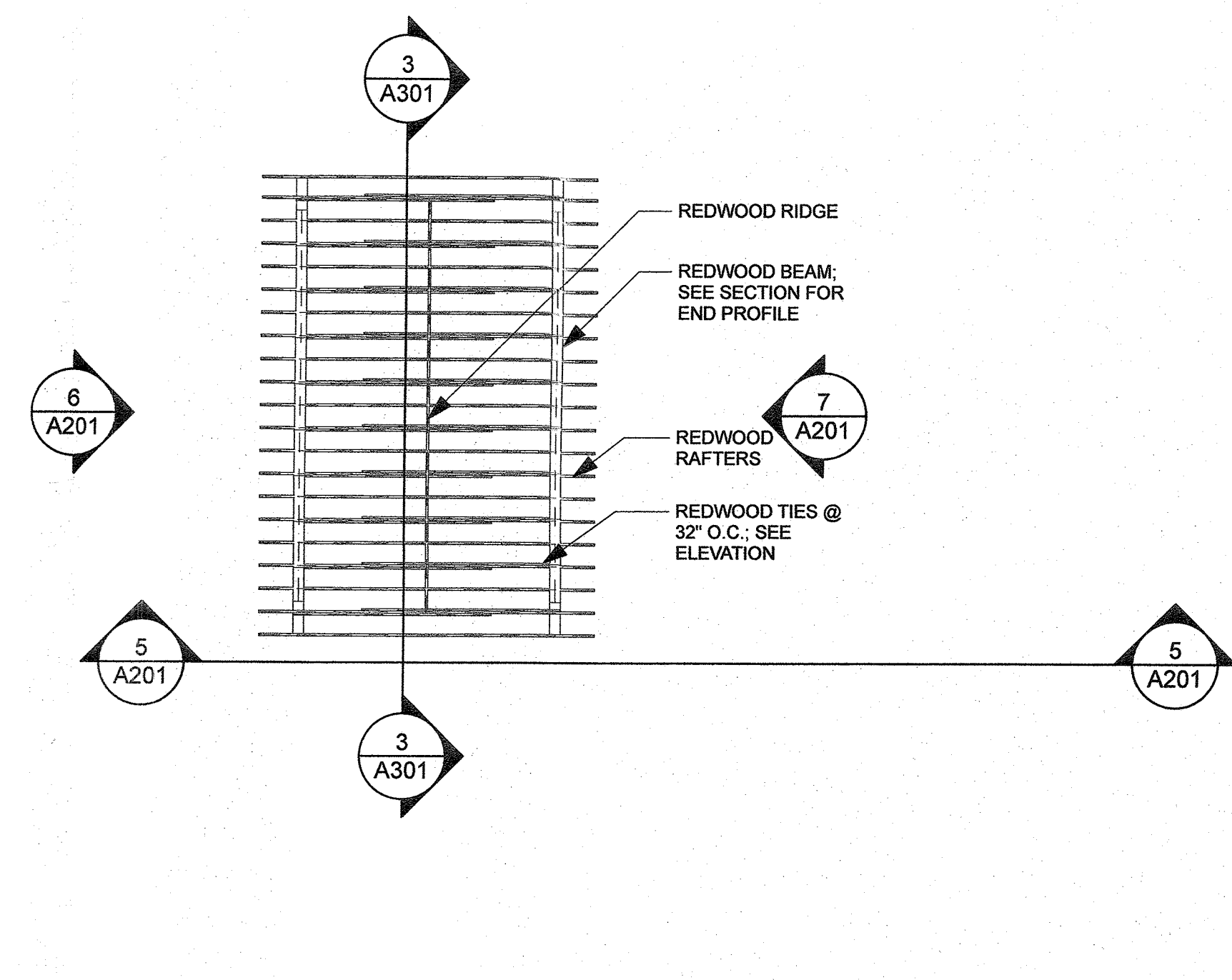
PROJECT: **GARAGE & PAVILION** 214 SICKLETOWN ROAD
ORANGEBURG, NY 10962

TITLE: **GARAGE PLANS**

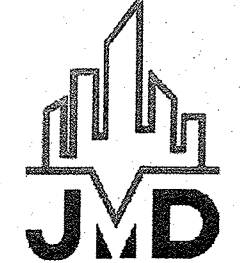

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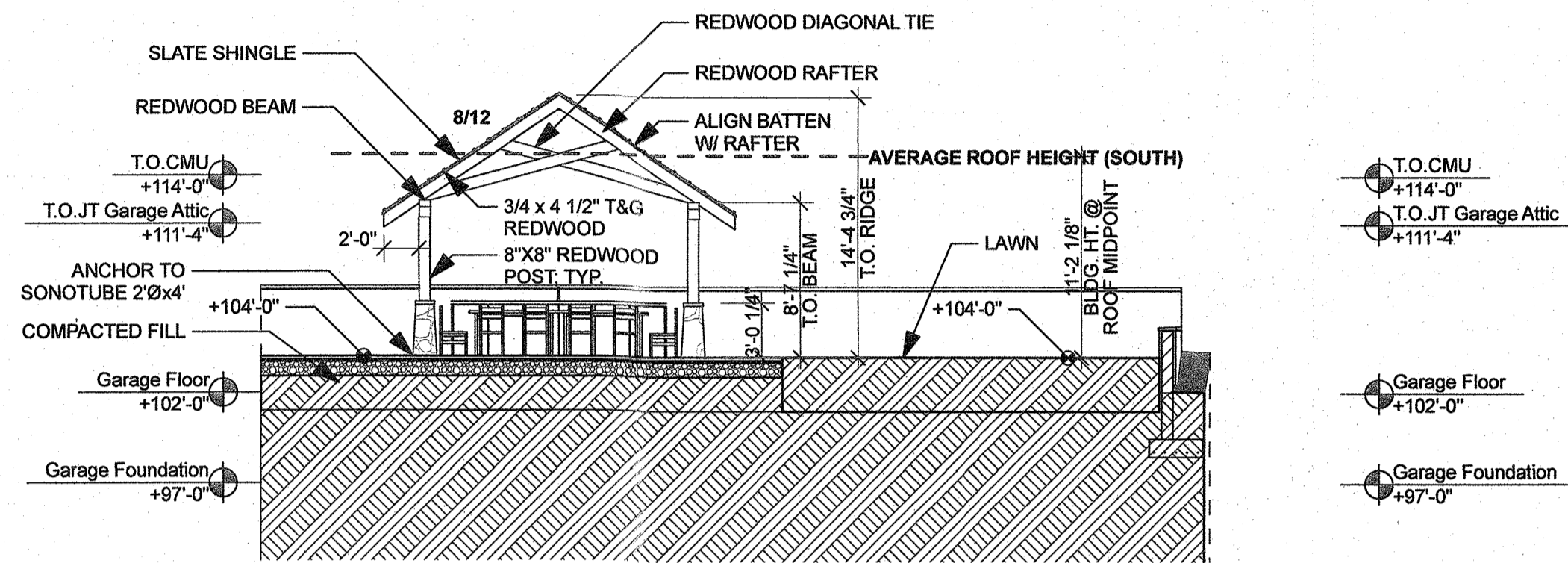


1 PAVILION PLAN
SCALE: 1/8" = 1'-0"

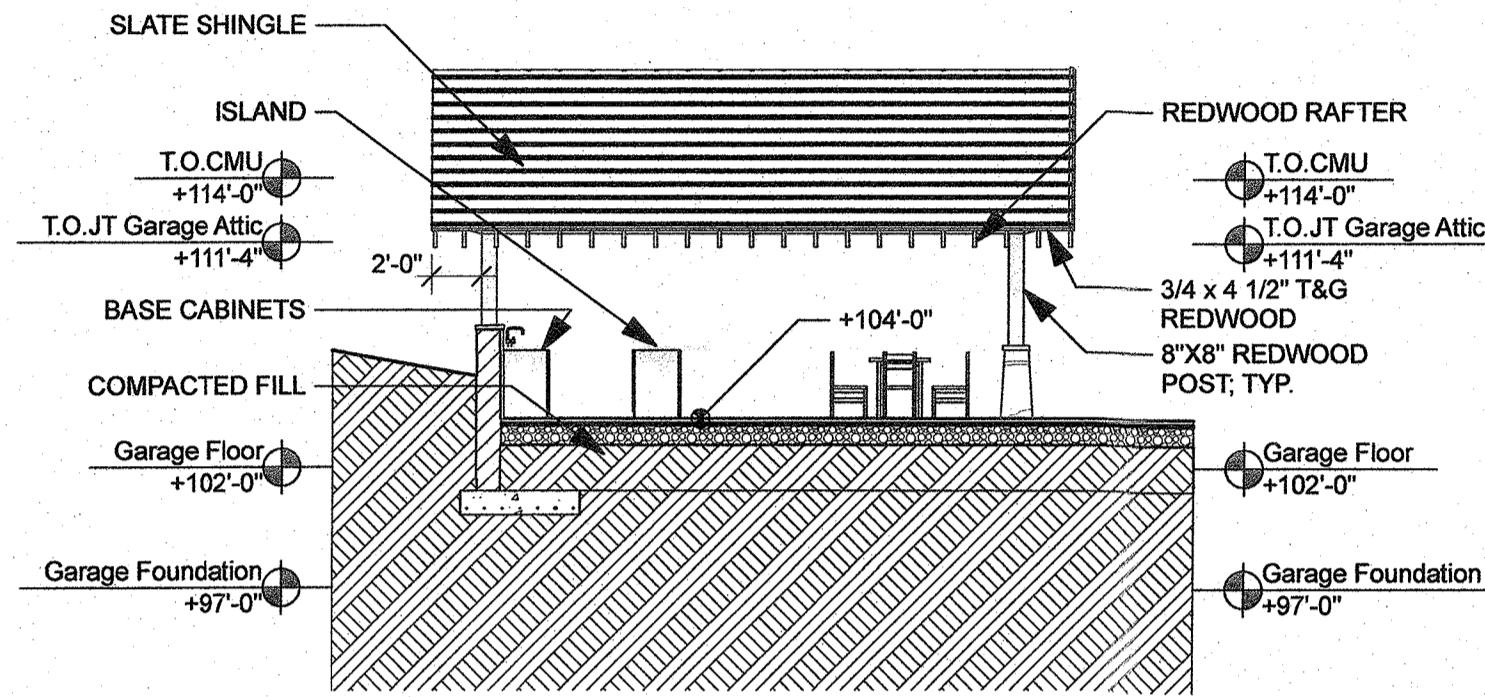


2 PAVILION ROOF PLAN
SCALE: 1/8" = 1'-0"

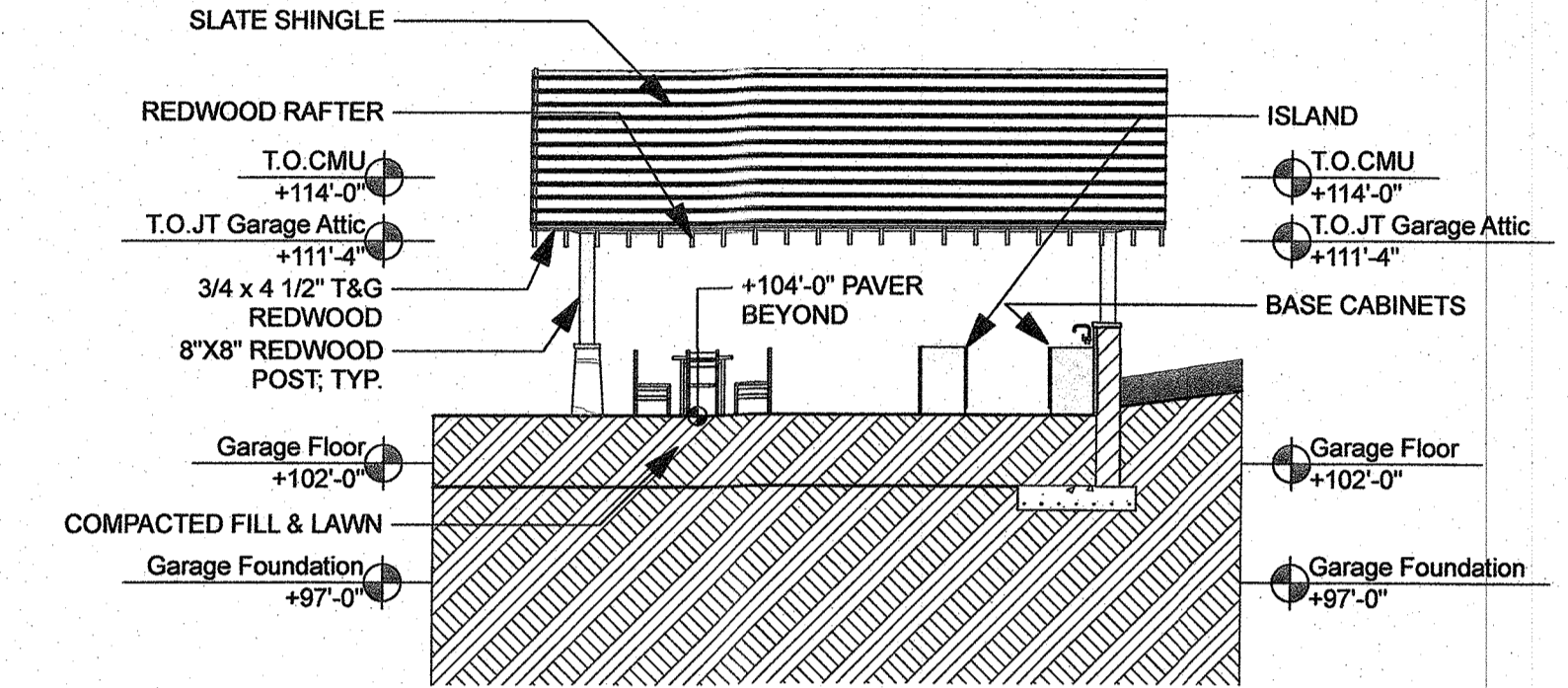
 520 N Highland Ave Nyack, NY 10960 (845) 480-5973		
SEAL & SIGNATURE:		
		06/05/2024 DOB COMMENTS
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		10/02/2023 DOB COMMENTS
		09/20/2023 DOB COMMENTS
		04/07/2023 PERMIT SET
REVISION	DATE	DESCRIPTION
PROJECT:		
GARAGE & PAVILION		214 SICKLETOWN ROAD ORANGEBURG, NY 10962
TITLE:		
PAVILION PLANS		
DRAWN BY: STEPHEN	SCALE:	DRAWING NO:
PROJECT NO:	AS-NOTED	A-102



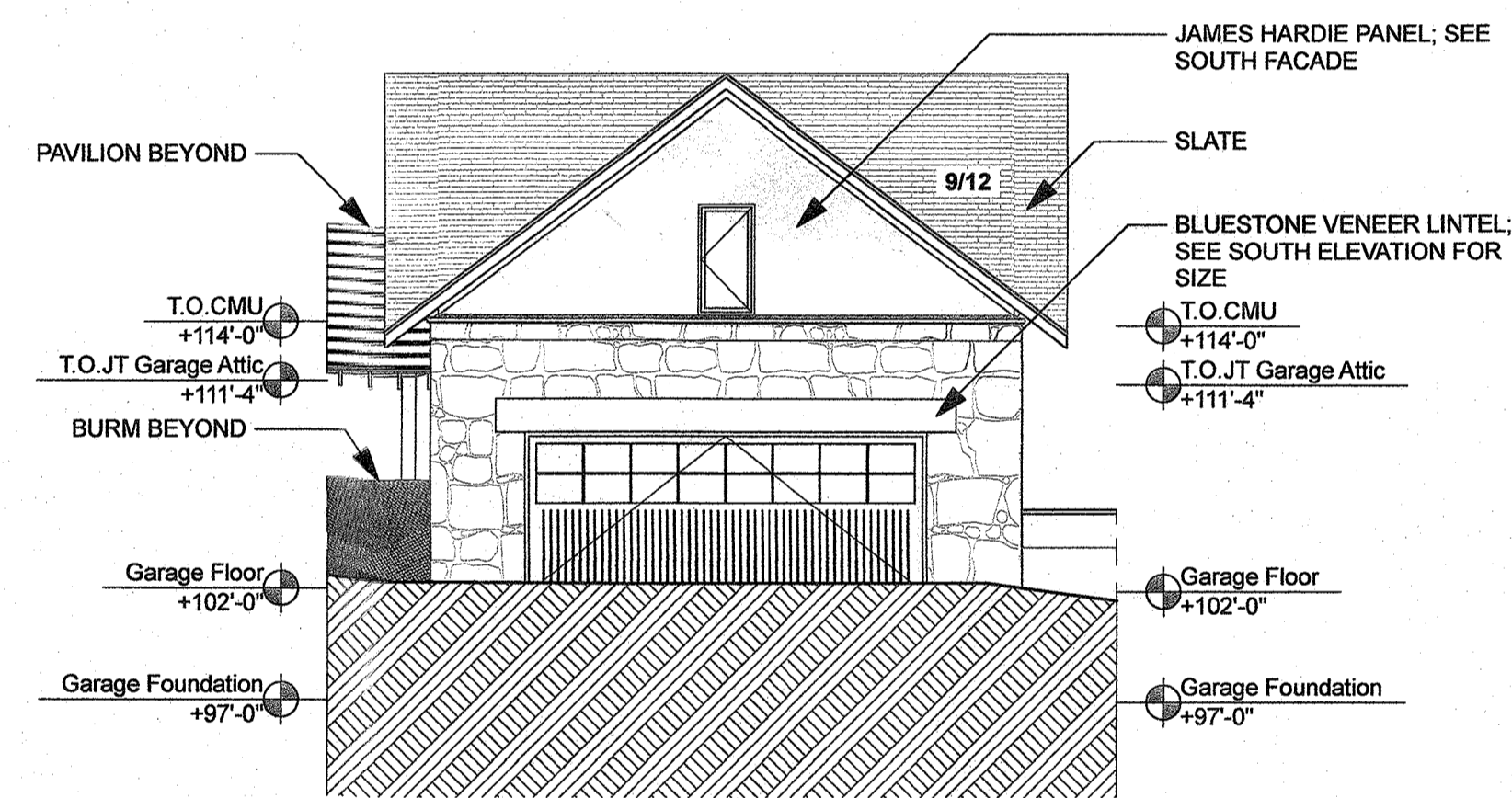
5 PAVILION SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



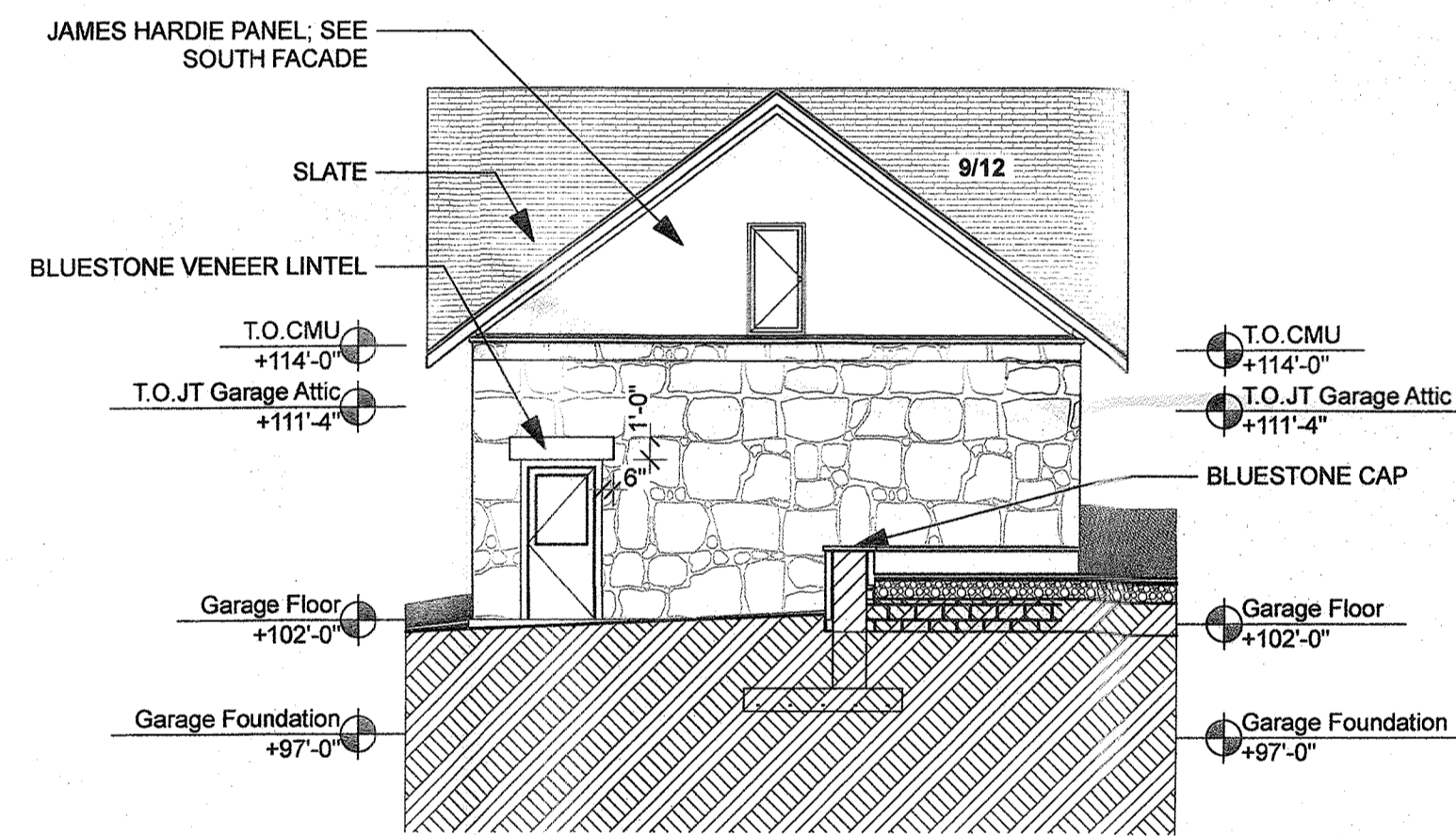
6 PAVILION WEST ELEVATION
SCALE: 1/8" = 1'-0"



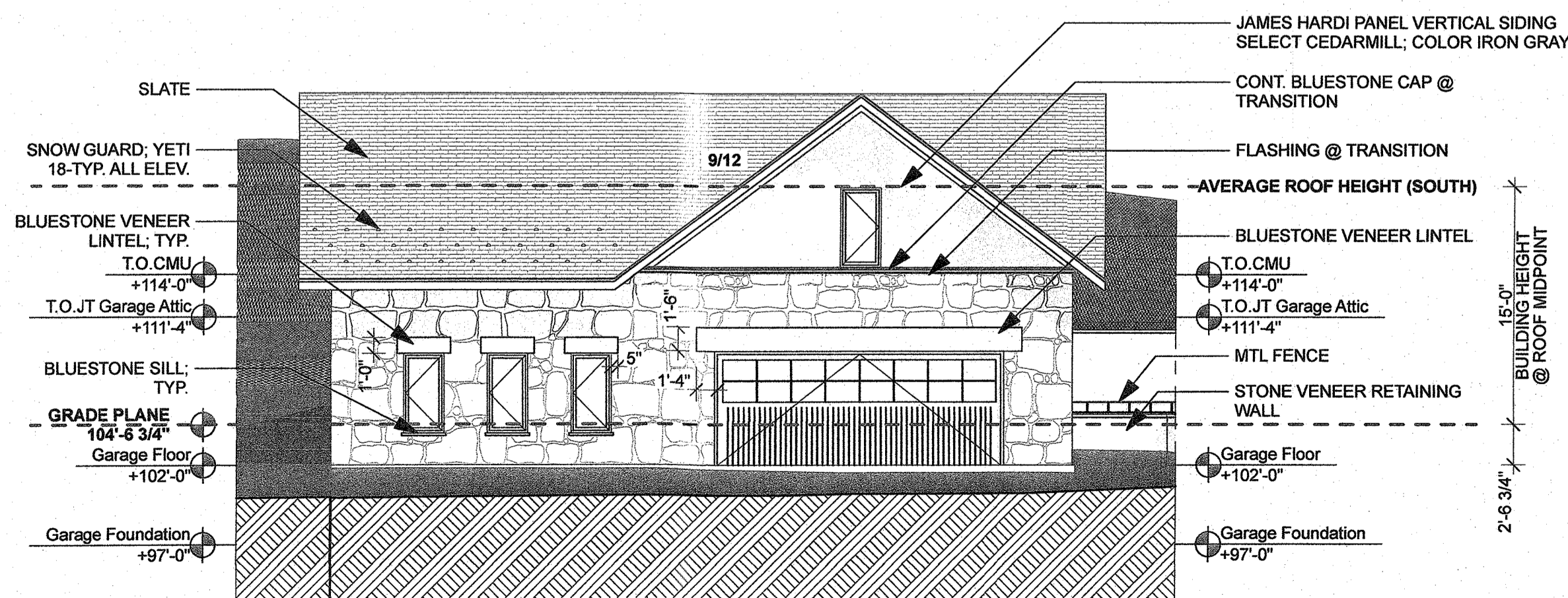
7 PAVILION EAST ELEVATION
SCALE: 1/8" = 1'-0"



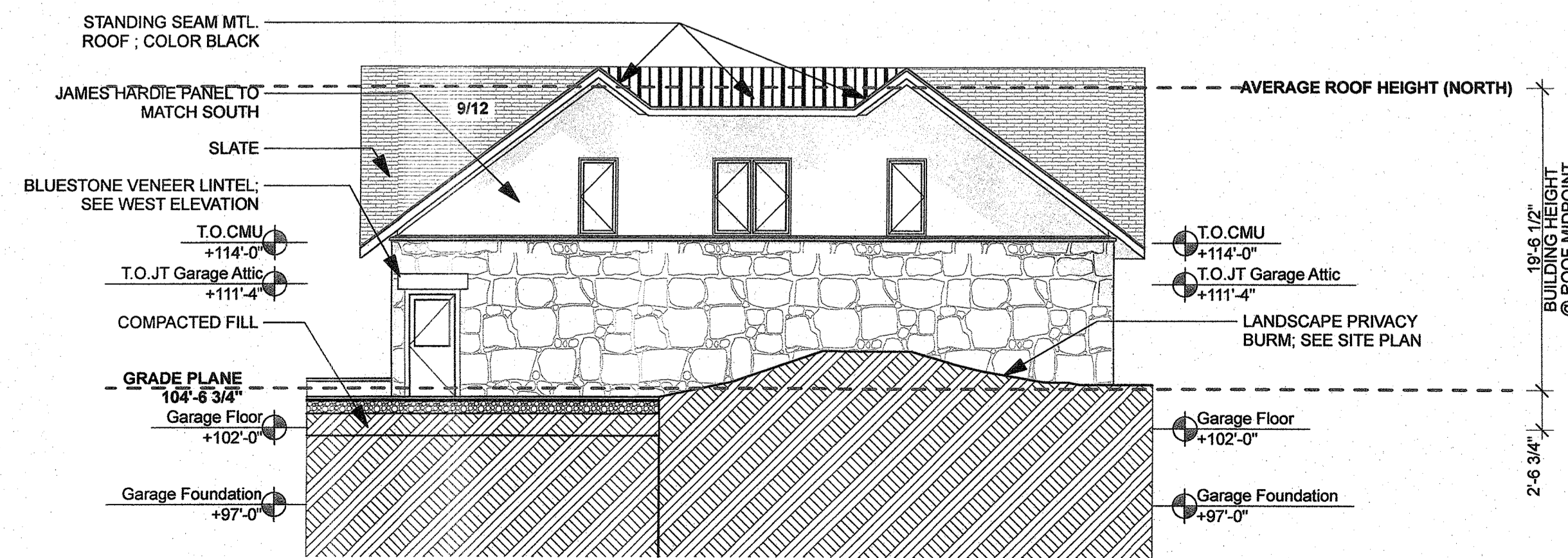
3 GARAGE EAST ELEVATION
SCALE: 1/8" = 1'-0"



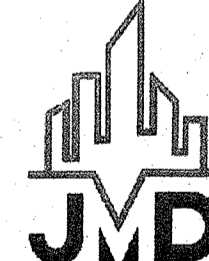
4 GARAGE WEST ELEVATION
SCALE: 1/8" = 1'-0"



1 GARAGE SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



2 GARAGE NORTH ELEVATION
SCALE: 1/8" = 1'-0"



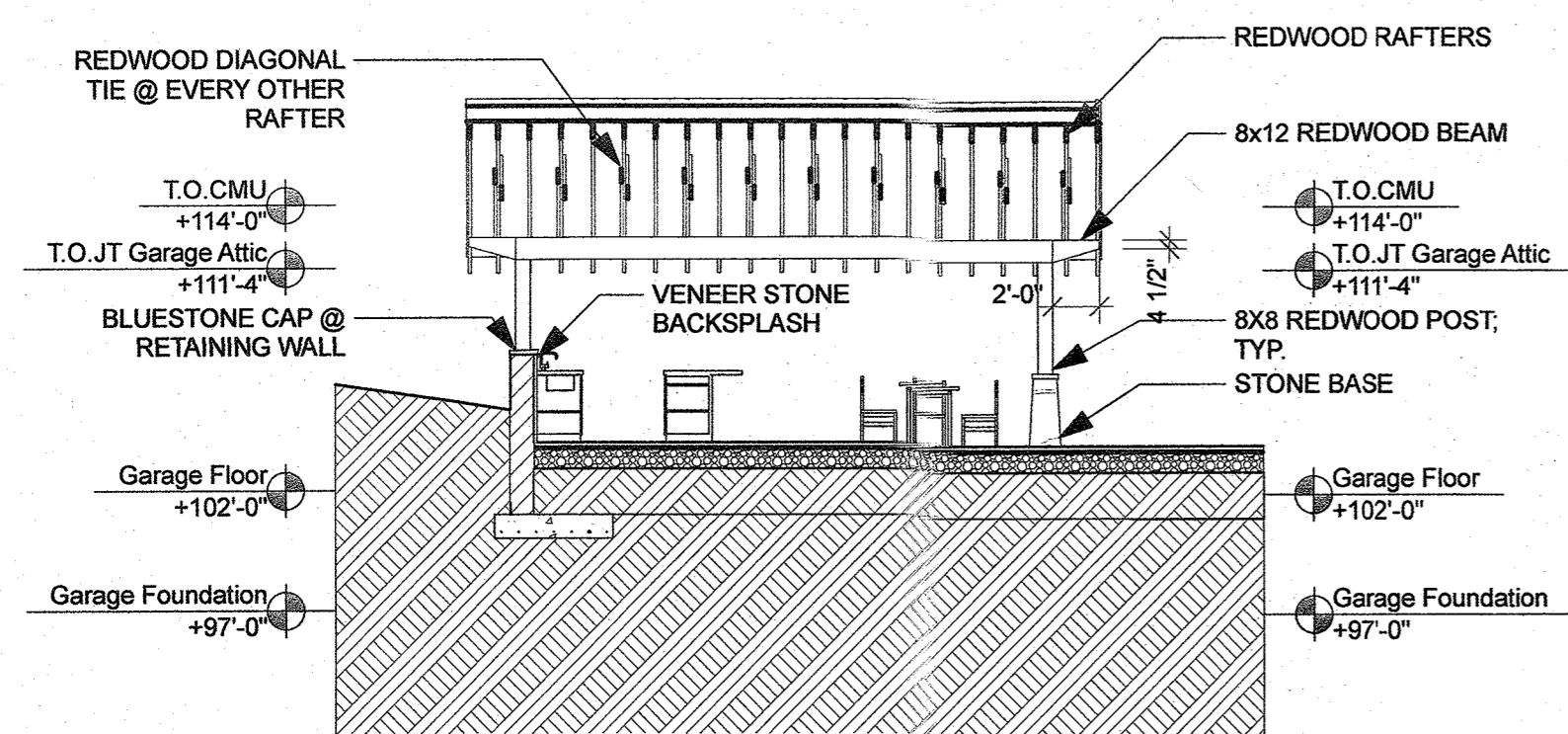
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REVISION	DATE	DESCRIPTION
	06/05/2024	DOB COMMENTS
	05/14/2024	DOB COMMENTS
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	09/20/2023	DOB COMMENTS
	04/07/2023	PERMIT SET

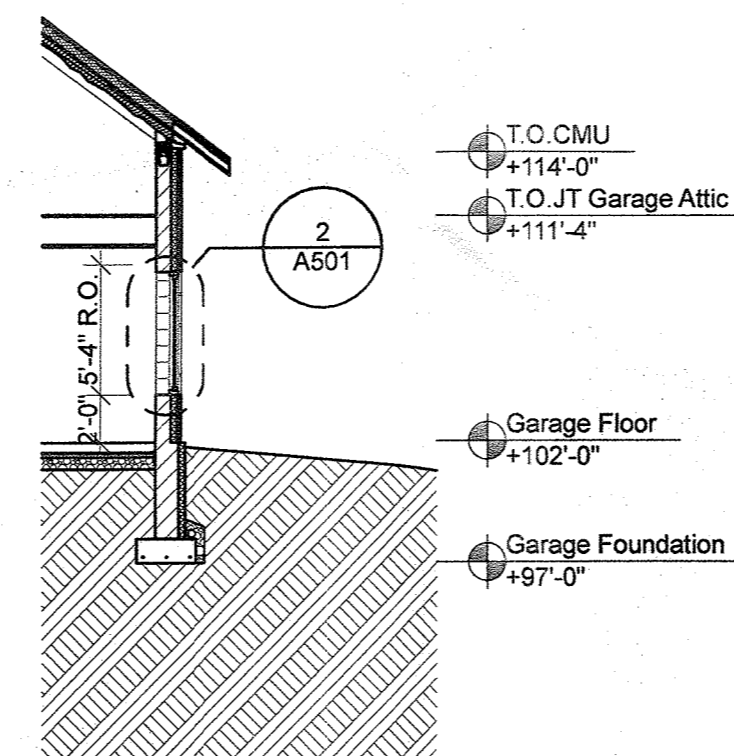
PROJECT: **GARAGE & PAVILION** 214 SICKLETOWN ROAD ORANGETOWN, NY 10962

TITLE: **GARAGE + PAVILION ELEV.**

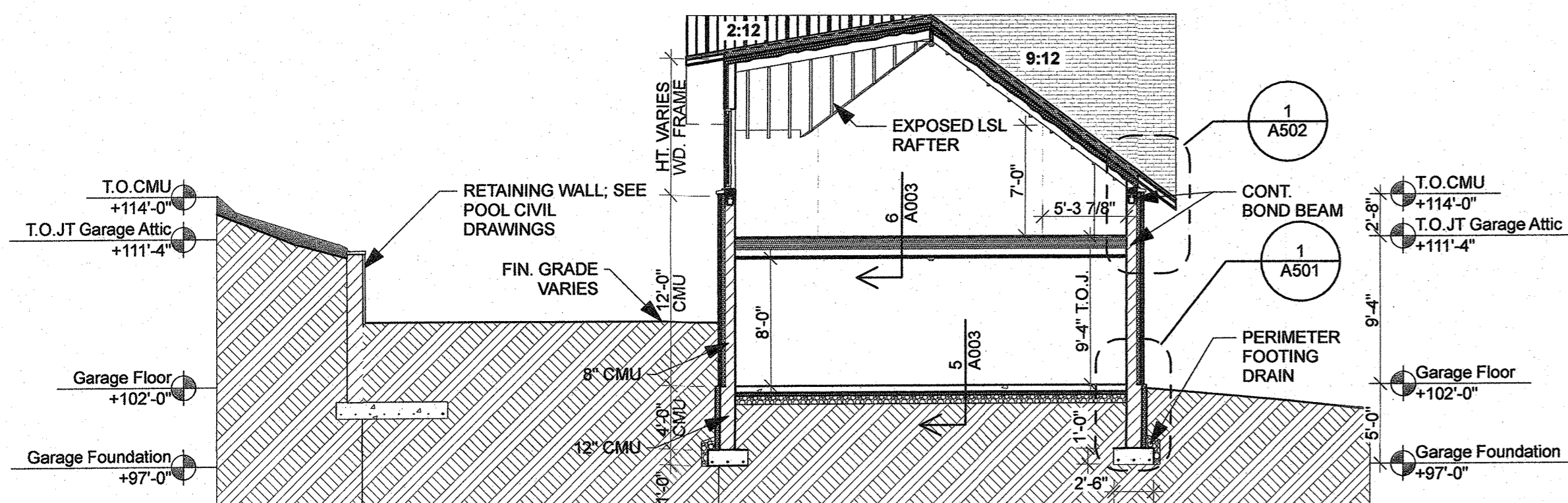
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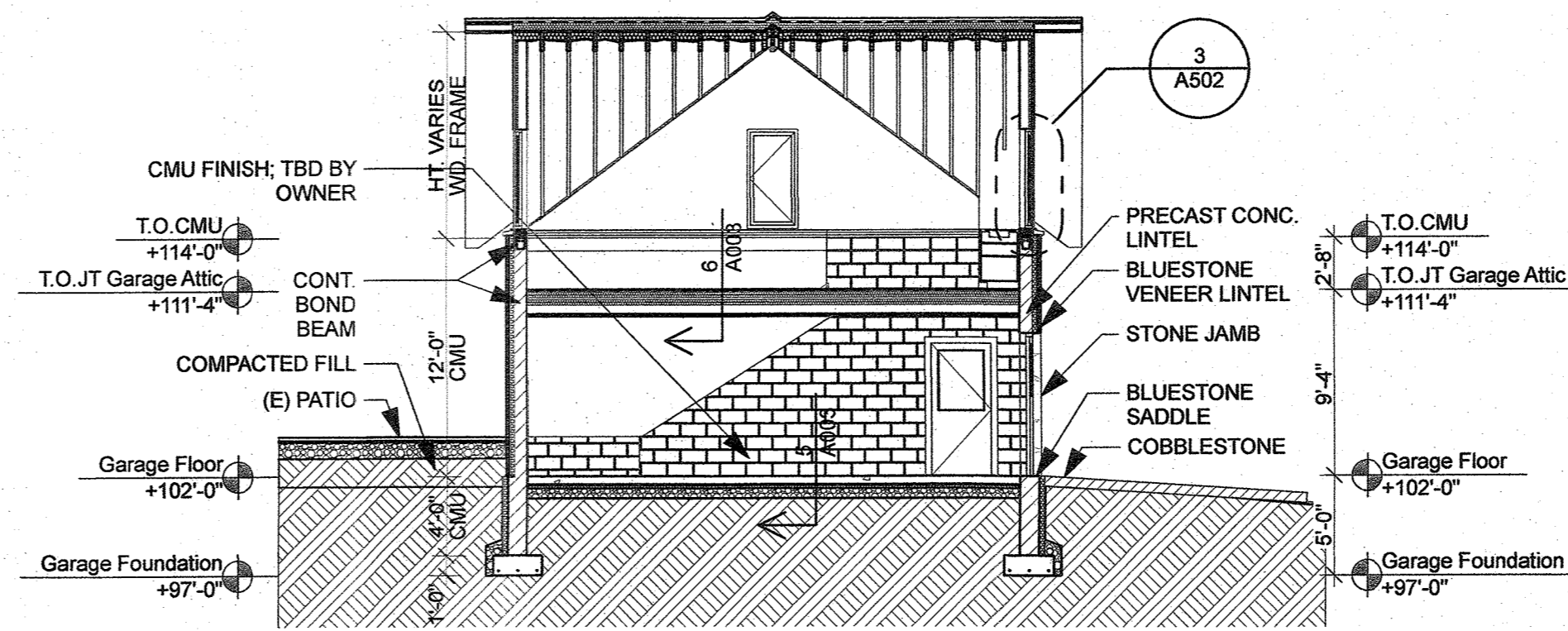
3 PAVILION LONGITUDINAL SECTION
SCALE: 1/8" = 1'-0"



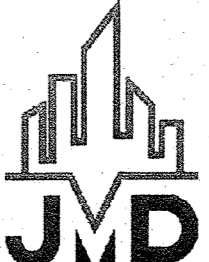
4 WALL SECTION
SCALE: 1/8" = 1'-0"



1 GARAGE CROSS SECTION
SCALE: 1/8" = 1'-0"



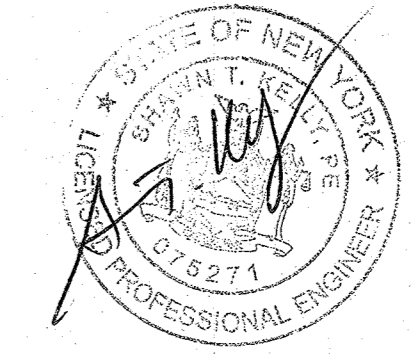
2 GARAGE CROSS SECTION
SCALE: 1/8" = 1'-0"



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10/02/2023		DOB COMMENTS
09/20/2023		DOB COMMENTS
04/07/2023		PERMIT SET

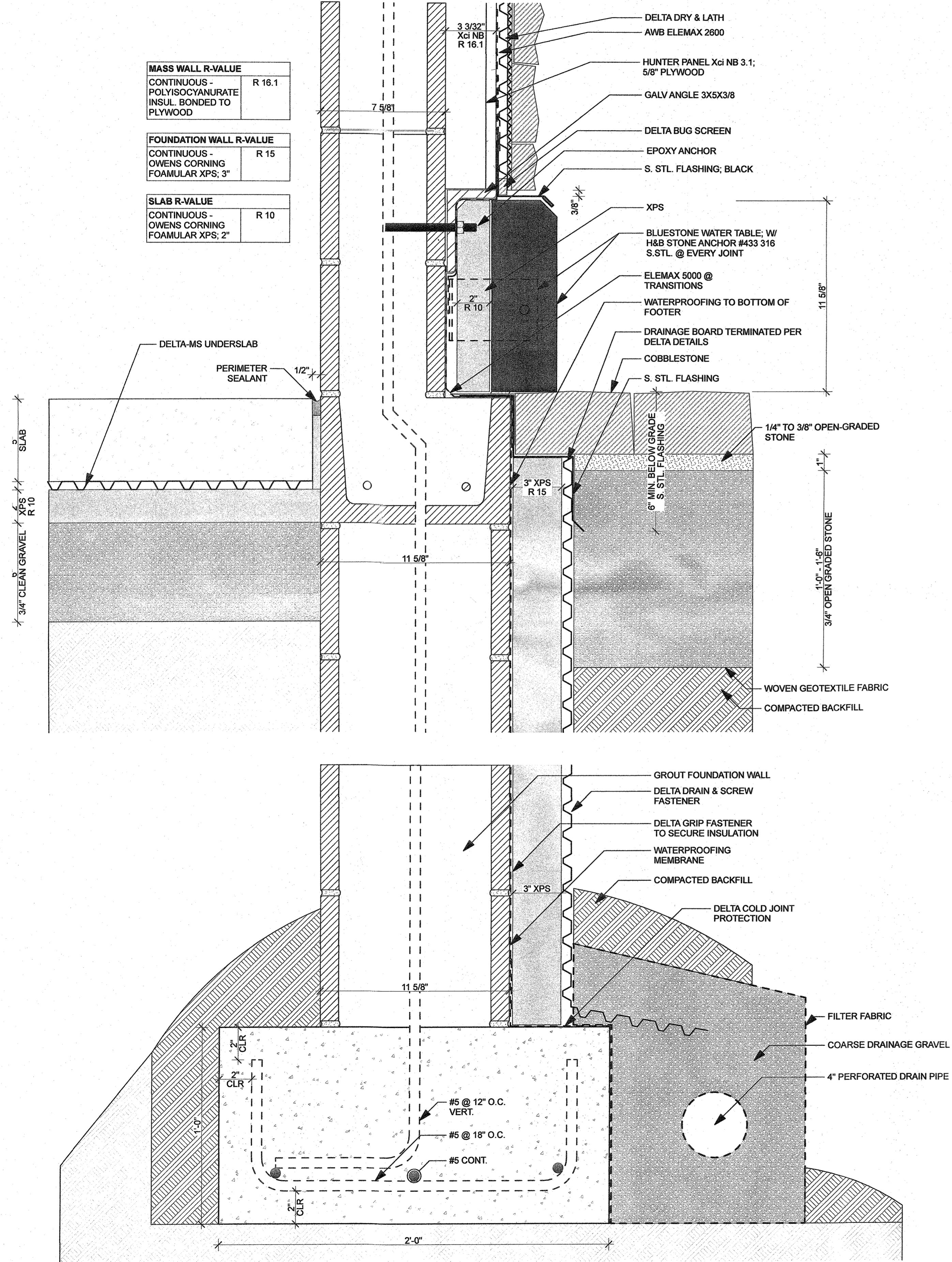
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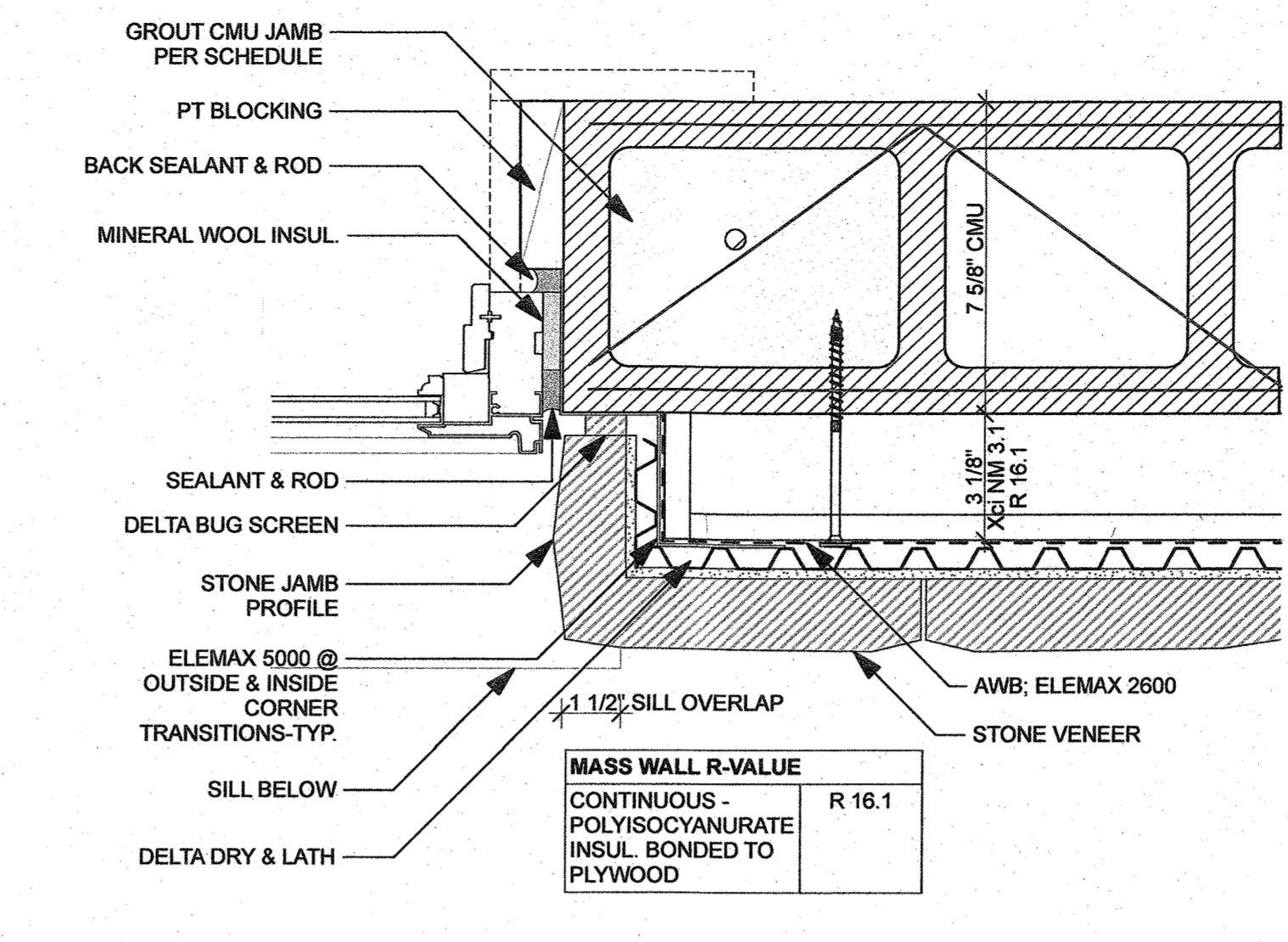
PROJECT: **GARAGE & PAVILION** 214 SICKLETOWN ROAD
ORANGEBURG, NY 10962

TITLE: **GARAGE + PAVILION SECT.**

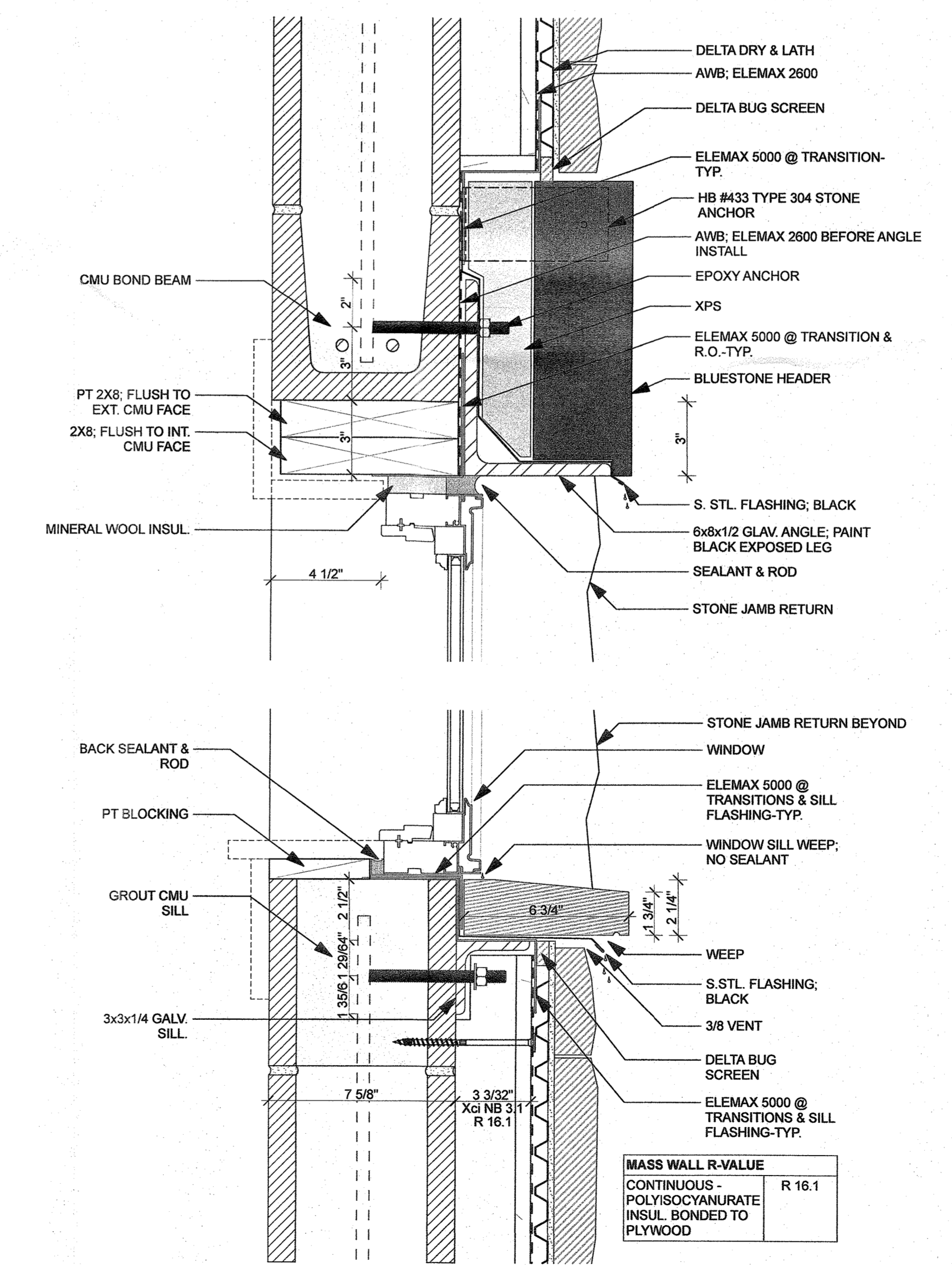
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PROJECT NO:		



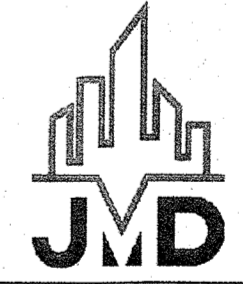
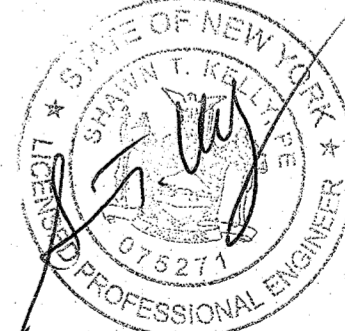
1 GARAGE BASE & FOOTING
SCALE: 3" = 1'-0"

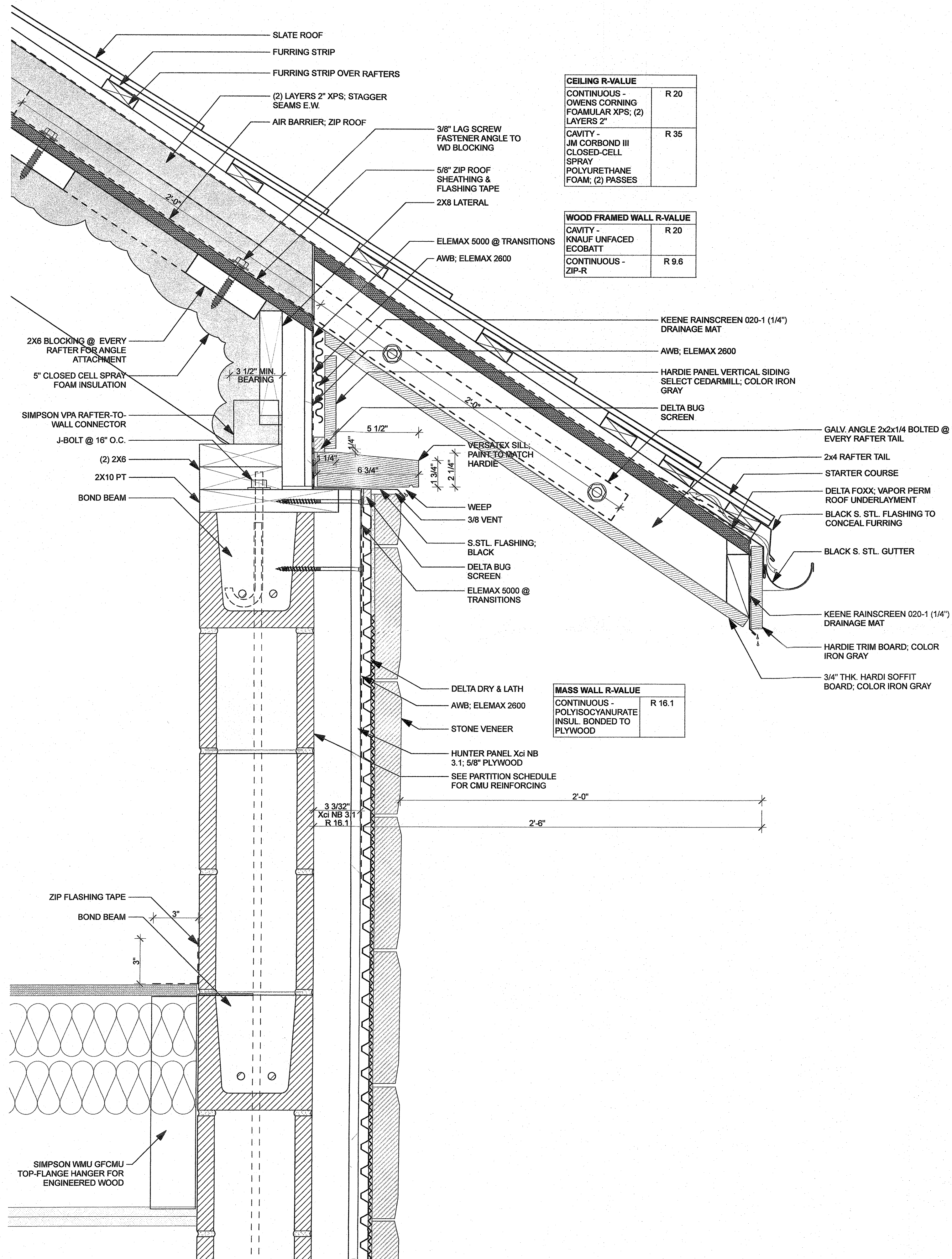


3 GARAGE WINDOW STONE JAMB
SCALE: 3" = 1'-0"



2 GARAGE WINDOW STONE SILL & HEAD
SCALE: 3" = 1'-0"

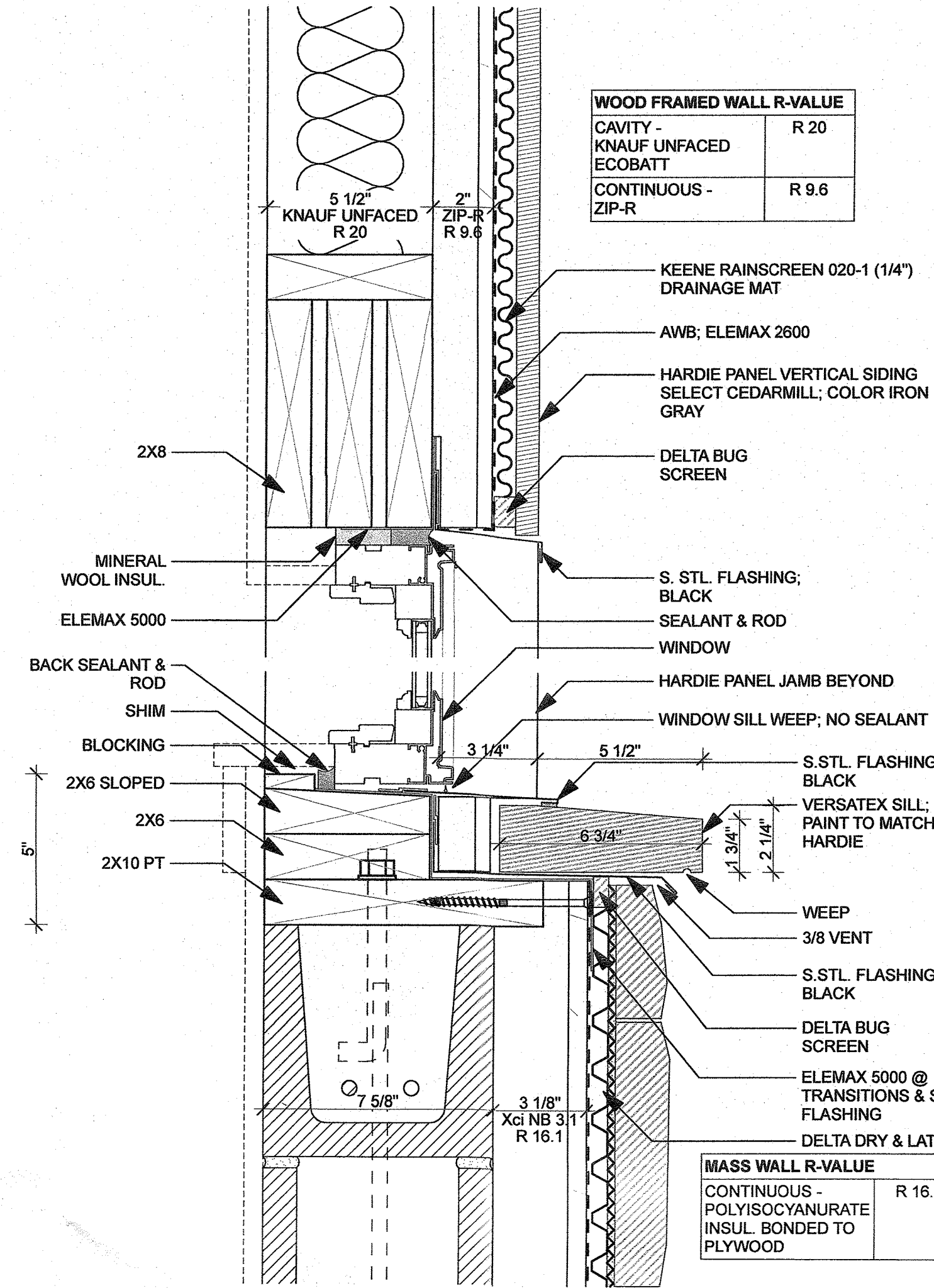
 520 N Highland Ave Nyack, NY 10960 (845) 480-5973		
SEAL & SIGNATURE:		
		
REVISION	DATE	DESCRIPTION
	06/05/2024	DOB COMMENTS
	05/14/2024	DOB COMMENTS
	10/02/2023	DOB COMMENTS
	09/20/2023	DOB COMMENTS
	04/07/2023	PERMIT SET
PROJECT:		214 SICKLETOWN ROAD
GARAGE & PAVILION		ORANGEBURG, NY 10962
TITLE:		
DETAILS		
DRAWN BY: STEPHEN	SCALE:	DRAWING NO:
PROJECT NO:	AS-NOTED	A-501



CEILING R-VALUE	
CONTINUOUS - OWENS CORNING FOAMULAR XPS; (2) LAYERS 2"	R 20
CAVITY - JM CORBOND III CLOSED-CELL SPRAY POLYURETHANE FOAM; (2) PASSES	R 35

WOOD FRAMED WALL R-VALUE	
CAVITY - KNAUF UNFACED ECOBATT	R 20
CONTINUOUS - ZIP-R	R 9.6

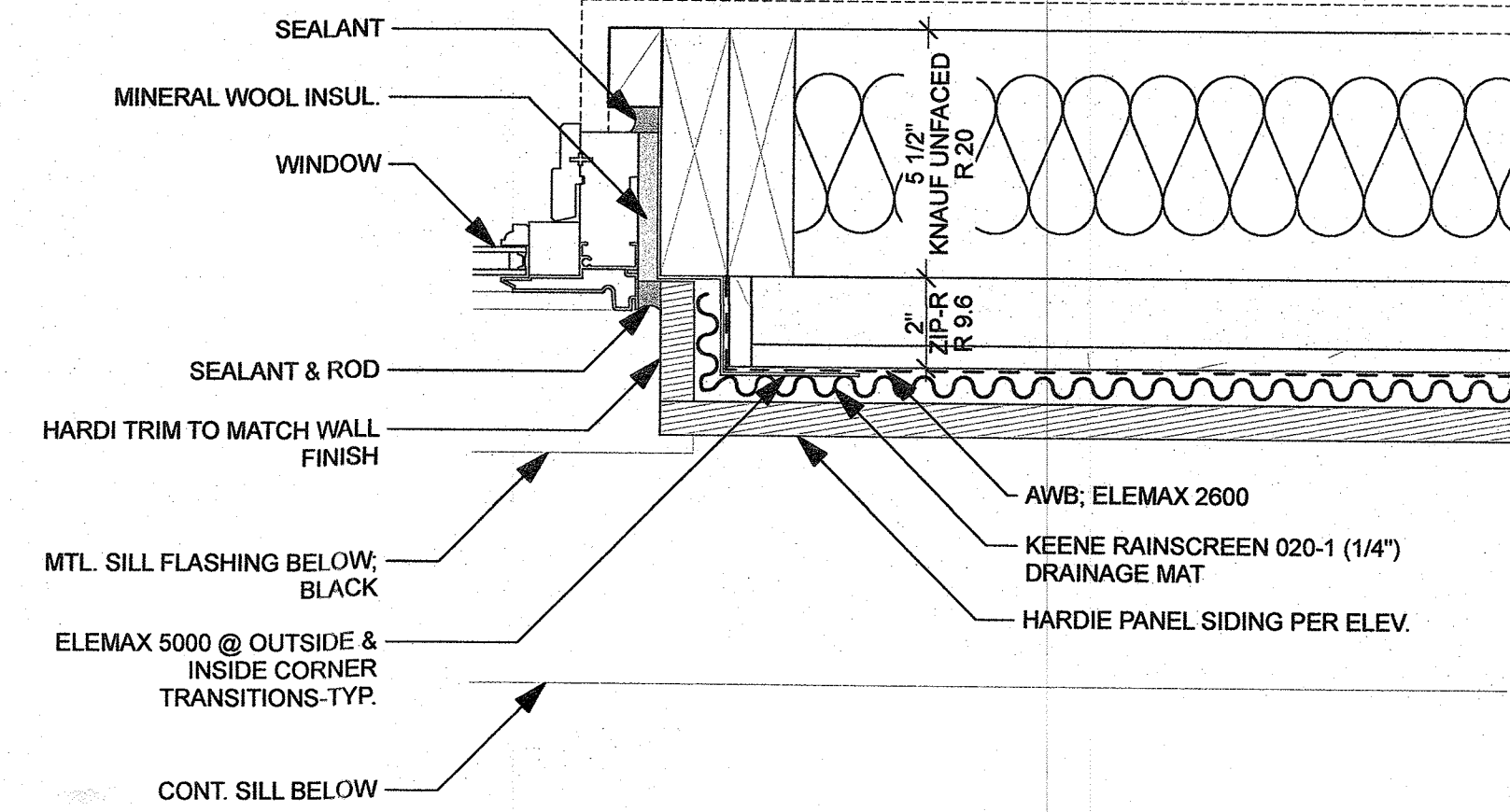
MASS WALL R-VALUE	
CONTINUOUS - POLYISOCYANURATE INSUL. BONDED TO PLYWOOD	R 16.1



WOOD FRAMED WALL R-VALUE	
CAVITY - KNAUF UNFACED ECOBATT	R 20
CONTINUOUS - ZIP-R	R 9.6

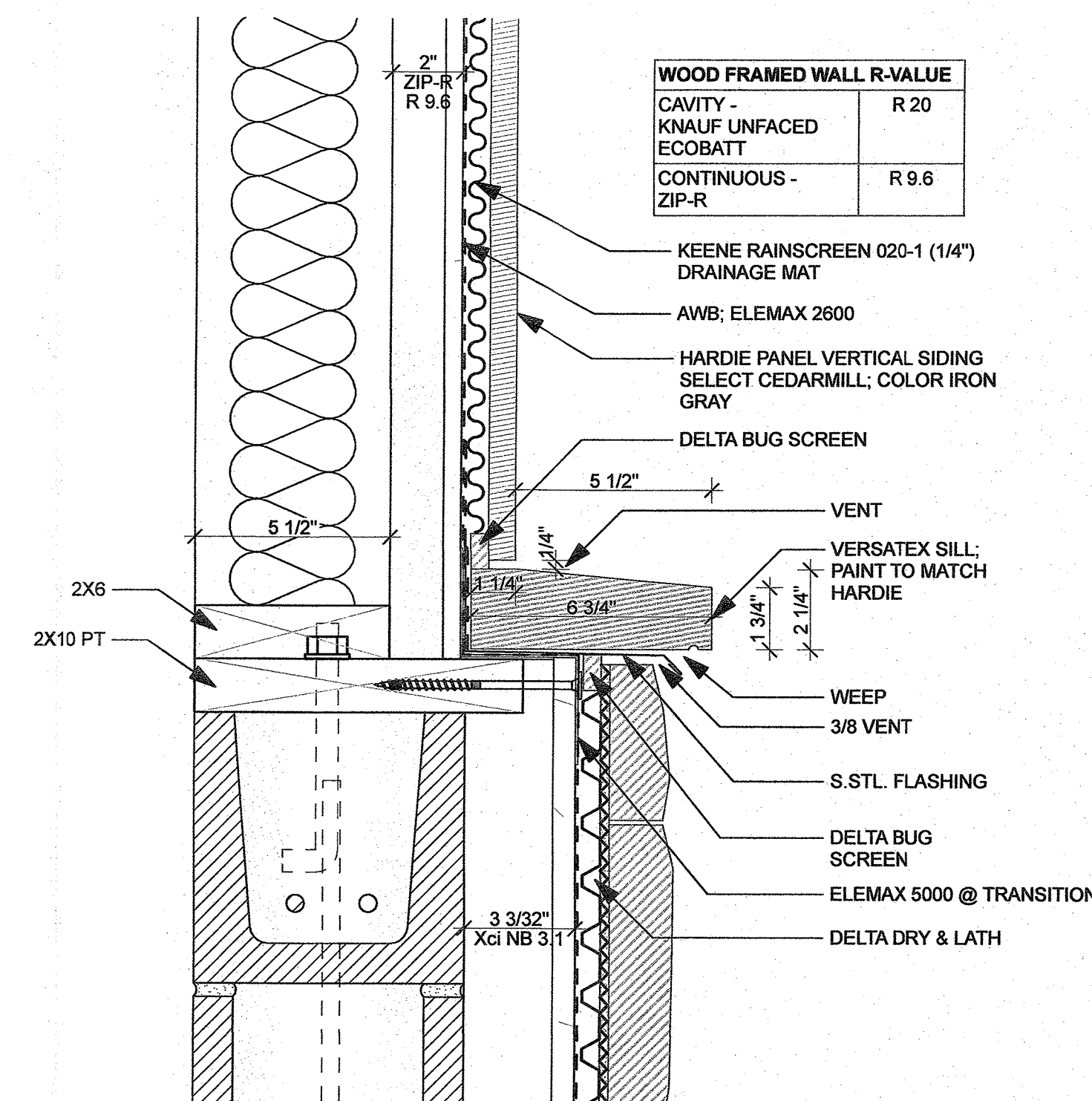
WOOD FRAMED WALL R-VALUE	
CAVITY - KNAUF UNFACED ECOBATT	R 20
CONTINUOUS - ZIP-R	R 9.6

MASS WALL R-VALUE	
CONTINUOUS - POLYISOCYANURATE INSUL. BONDED TO PLYWOOD	R 16.1



3 GARAGE GABLE WINDOW SILL
SCALE: 3" = 1'-0"

4 GARAGE GABLE WINDOW JAMB
SCALE: 3" = 1'-0"



WOOD FRAMED WALL R-VALUE	
CAVITY - KNAUF UNFACED ECOBATT	R 20
CONTINUOUS - ZIP-R	R 9.6

2 GARAGE STONE / HARDIE TRANSITION @ GABLE
SCALE: 3" = 1'-0"

1 GARAGE EAVE
SCALE: 3" = 1'-0"

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	10/02/2023	DOB COMMENTS
	09/20/2023	DOB COMMENTS
	04/07/2023	PERMIT SET

PROJECT: **GARAGE & PAVILION** 214 SICKLETOWN ROAD ORANGEBURG, NY 10962

TITLE: **DETAILS**

DRAWN BY: STEPHEN SCALE: AS-NOTED DRAWING NO: **A-502**

PROJECT NO:

NYStretch Energy Code 2020, IECC—Residential Provisions

Section R105 Inspections

R105.2 Required Inspections
The code official or his or her designated agent, upon notification, shall make the inspections set forth in Sections R105.2.1 through R105.2.5.

R105.2.1 Footing and Foundation Inspection
Inspections associated with footings and foundations shall verify compliance with the code as to R-value, location, thickness, depth of burial and protection of insulation as required by the code and approved plans and specifications.

R105.2.2 Framing and Rough-In Inspection
Inspections at framing and rough-in shall be made before application of interior finish and shall verify compliance with the code as to: types of insulation and corresponding R-values and their correct location and proper installation; fenestration properties such as U-factor and SHGC and proper installation; and air leakage controls as required by the code; and approved plans and specifications.

R105.2.3 Plumbing Rough-In Inspection
Inspections at plumbing rough-in shall verify compliance as required by the code and approved plans and specifications as to types of insulation and corresponding R-values and protection, and required controls.

R105.2.4 Mechanical Rough-In Inspection
Inspections at mechanical rough-in shall verify compliance as required by the code and approved plans and specifications as to installed HVAC equipment type and size, required controls, system insulation and corresponding R-value, system air leakage control, programmable thermostats, dampers, whole-house ventilation, and minimum fan efficiency.

R105.2.5 Final Inspection
The building shall have a final inspection and shall not be occupied until approved. The final inspection shall include verification of the installation of all required building systems, equipment and controls and their proper operation and the required number of high-efficacy lamps and fixtures.

R105.5 Inspection Requests
It shall be the duty of the holder of the permit or their duly authorized agent to notify the code official when work is ready for inspection. It shall be the duty of the permit holder to provide access to and means for inspections of such work that are required by this code.

Section R301 Climate Zones
New York, 5A Rockland, Moist

TABLE R301.3(2) INTERNATIONAL CLIMATE ZONE DEFINITIONS		
ZONE NUMBER	THERMAL CRITERIA	
	IP Units	SI Units
5	5400 < HDD65°F ≤ 7200	3000 < HDD18°C ≤ 4000

Section R302 Design Conditions

R302.1 Interior Design Conditions
The interior design temperatures used for heating and cooling load calculations shall be a maximum of 72°F (22°C) for heating and minimum of 75°F (24°C) for cooling.

Section R303 Materials, Systems and Equipment

R303.1 Identification
Materials, systems and equipment shall be identified in a manner that will allow a determination of compliance with the applicable provisions of this code.

R303.1.1 Building Thermal Envelope Insulation
An R-value identification mark shall be applied by the manufacturer to each piece of building thermal envelope insulation that is 12 inches (305 mm) or greater in width. Alternatively, the insulation installer shall provide a certification that indicates the type, manufacturer and R-value of insulation installed in each element of the building thermal envelope. For blown-in or sprayed fiberglass and cellulose insulation, the initial installed thickness, settled thickness, settled R-value, installed density, coverage area and number of bags installed shall be indicated on the certification. For sprayed polyurethane foam (SPF) insulation, the installed thickness of the areas covered and the R-value of the installed thickness shall be indicated on the certification. For insulated siding, the R-value shall be on a label on the product's package and shall be indicated on the certification. The insulation installer shall sign, date and post the certification in a conspicuous location on the job site.

Exception: For roof insulation installed above the deck, the R-value shall be labeled as required by the material standards specified in Table 1508.2 of the International Building Code or Table R306.2 of the International Residential Code, as applicable.

R303.1.2 Insulation Mark Installation
Insulating materials shall be installed such that the manufacturer's R-value mark is readily observable at inspection.

R303.1.3 Fenestration Product Rating
U-factors of fenestration products such as windows, doors and skylights shall be determined in accordance with NFRC 100.

Exception: Where required, garage door U-factors shall be determined in accordance with either NFRC 100 or ANSI/DASMA 105.

U-factors shall be determined by an accredited, independent laboratory, and labeled and certified by the manufacturer.

Products lacking such a labeled U-factor shall be assigned a default U-factor from Table R303.1.3(1) or R303.1.3(2). The solar heat gain coefficient (SHGC) and visible transmittance (VT) of glazed fenestration products such as windows, glazed doors and skylights shall be determined in accordance with NFRC 200 by an accredited, independent laboratory, and labeled and certified by the manufacturer. Products lacking such a labeled SHGC or VT shall be assigned a default SHGC or VT from Table R303.1.3(3).

TABLE C303.1.3(1) DEFAULT GLAZED WINDOW, GLASS DOOR AND SKYLIGHT U-FACTORS				
FRAME TYPE	WINDOW AND GLASS DOOR		SKYLIGHT	
	Single	Double	Single	Double
Metal	1.20	0.80	2.00	1.30
Metal with Thermal Break	1.10	0.65	1.90	1.10
Nonmetal or Metal Clad	0.95	0.55	1.75	1.05
Glazed Block	0.60			

TABLE C303.1.3(2) DEFAULT OPAQUE DOOR U-FACTORS	
DOOR TYPE	OPAQUE U-FACTOR
Uninsulated Metal	1.20
Insulated Metal (Rolling)	0.90
Insulated Metal (Other)	0.60
Wood	0.50
Insulated, nonmetal edge, max 45% glazing, any glazing double pane	0.35

	TABLE C303.1.3(3) DEFAULT GLAZED FENESTRATION SHGC AND VT				GLAZED BLOCK
	SINGLE GLAZED		DOUBLE GLAZED		
	Clear	Tinted	Clear	Tinted	
SHGC	0.8	0.7	0.7	0.6	0.6
VT	0.6	0.3	0.6	0.3	0.6

R303.2 Installation
Materials, systems and equipment shall be installed in accordance with the manufacturer's instructions and the International Building Code or the International Residential Code, as applicable.

Section R402 Building Thermal Envelope

R402.1 General (Prescriptive)
The building thermal envelope shall comply with the requirements of Sections R402.1.1 through R402.1.5.

R402.1.2 Insulation and Fenestration Criteria
The building thermal envelope shall meet the requirements of Table R402.1.2, based on the climate zone specified in Chapter 3.

TABLE R402.1.2 INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT*			
CLIMATE ZONE	REQUIRED	PROPOSED	COMPLIES
GARAGE			
FENESTRATION U-FACTOR ^a	0.27	0.26	YES
SKYLIGHT U-FACTOR ^b	0.50	-	-
GLAZED FENESTRATION SHGC ^{a,b}	NF	-	-
CEILING R-VALUE	49	49	YES
WOOD FRAMED WALL ^{a,c} R-VALUE	21 int. or 20+5 or 13+10	20+9.6	YES
MASS WALL ^d R-VALUE ^e	15/20	16.1	YES
FLOOR R-VALUE	30 ^f	39	YES
BASEMENT ^g WALL R-VALUE	15/19	-	-
SLAB ^h WALL R-VALUE & DEPTH	10, 4 ft	10, FULL	YES
CRAWL SPACE ^h WALL R-VALUE	15/19	-	-

a. R-values are minimums. U-factors and SHGC are maximums. Where insulation is installed in a cavity that is less than the label or design thickness of the insulation, the installed R-value of the insulation shall be not less than the R-value specified in the table.

b. int. (intermediate framings) denotes standard framing 16 inches on center. Headers shall be insulated with a minimum of R-10 insulation.

c. The first value is cavity insulation, the second value is continuous insulation. Therefore, as an example, "13+10" means R-13 cavity insulation plus R-10 continuous insulation.

d. Mass walls shall be in accordance with Section R402.2.5. The second R-value applies when more than half the insulation is on the interior of the mass wall.

e. 15/19 means R-15 continuous insulation on the interior or exterior of the home or R-19 cavity insulation at the interior of the basement wall.

f. R-10 continuous insulation shall be provided under the full slab area of a heated slab in addition to the required slab edge insulation R-value for slabs as indicated in the table. The slab edge insulation for heated slabs shall not be required to extend below the slab.

g. Alternatively, insulation sufficient to fill the framing cavity and providing not less than an R-value of R-19.

h. The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration.

R402.2.5 Mass Walls
Mass walls where used as a component of the building thermal envelope shall be one of the following:
1. Above-ground walls of concrete block, concrete, insulated concrete form, masonry cavity, brick but not brick veneer, adobe, compressed earth block, rammed earth, solid timber or solid logs.

R402.2.8 Floors
Floor framing-cavity insulation shall be installed to maintain permanent contact with the underside of the subfloor decking.

R402.3 Fenestration (Prescriptive)
In addition to the requirements of Section R402, fenestration shall comply with Sections R402.3.1 through R402.3.5.

R402.3.1 U-factor
An area-weighted average of fenestration products shall be permitted to satisfy the U-factor requirements.

R402.2.10 Slab-on-Grade Floors
Slab-on-grade floors with a floor surface less than 12 inches (305 mm) below grade shall be insulated in accordance with Table R402.1.2. The insulation shall extend downward from the top of the slab on the outside or inside of the foundation wall. Insulation located below grade shall be extended the distance provided in Table R402.1.2 by any combination of vertical insulation, insulation extending under the slab or insulation extending out from the building. Insulation extending away from the building shall be protected by pavement or by not less than 10 inches (254 mm) of soil. The top edge of the insulation installed between the exterior wall and the edge of the interior slab shall be permitted to be cut at a 45-degree (0.79 rad) angle away from the exterior wall. Slab-edge insulation is not required in jurisdictions designated by the code official as having a very heavy termite infestation.

R402.2.12 Masonry Veneer
Insulation shall not be required on the horizontal portion of a foundation that supports a masonry veneer.

R402.3.1 U-factor
An area-weighted average of fenestration products shall be permitted to satisfy the U-factor requirements.

R402.4.1 Building Thermal Envelope
The building thermal envelope shall comply with Sections R402.4.1.1 and R402.4.1.2. The sealing methods between dissimilar materials shall allow for differential expansion and contraction.

TABLE R402.4.1.1 AIR BARRIER AND INSULATION INSTALLATION*		
COMPONENT	AIR BARRIER CRITERIA	INSULATION INSTALLATION CRITERIA
General requirements	A continuous air barrier shall be installed in the building envelope. The exterior thermal envelope contains a continuous air barrier. Breaks or joints in the air barrier shall be sealed.	Air-permeable insulation shall not be used as a sealing material.
Ceiling/attic	The air barrier in any dropped ceiling or soffit shall be aligned with the insulation and any gaps in the air barrier shall be sealed. Access openings, drop down stairs or knee wall doors to unconditioned attic spaces shall be sealed.	Air-permeable insulation shall not be used as a sealing material.
Walls	The junction of the foundation and sill plate shall be sealed. The junction of the top plate and the top of exterior walls shall be sealed. Knee walls shall be sealed.	Cavities within corners and headers of frame walls shall be insulated by completely filling the cavity with a material having a thermal resistance, R-value, of not less than R-3 per inch. Exterior thermal envelope insulation for framed walls shall be installed in substantial contact and continuous alignment with the air barrier.
Windows, skylights and doors	The space between framing and skylights, and the jambs of windows and doors, shall be sealed.	
Rim joists	Rim joists shall include the air barrier.	Rim joists shall be insulated.
Floors, including cantilevered floors and floors above garages	The air barrier shall be installed at any exposed edge of insulation.	Floor framing cavity insulation shall be installed to maintain permanent contact with the underside of subfloor decking. Alternatively, floor framing cavity insulation shall be in contact with the top side of sheathing, or continuous insulation installed on the underside of floor framing; and shall extend from the bottom to the top of all perimeter floor framing members.
Crawl space walls	Exposed earth in inverted crawl spaces shall be covered with a Class 1 vapor retarder with overlapping joints taped.	Crawl space insulation, where provided instead of floor insulation, shall be permanently attached to the walls.
Shafts, penetrations	Duct shafts, utility penetrations, and flue shafts opening to exterior or unconditioned space shall be sealed.	
Narrow cavities		Batts to be installed in narrow cavities shall be cut to fit or narrow cavities shall be filled with insulation that on installation readily conforms to the available cavity space.
Garage separation	Air sealing shall be provided between the garage and conditioned spaces.	
Recessed lighting	Recessed light fixtures installed in the building thermal envelope shall be sealed to the finished surface.	Recessed light fixtures installed in the building thermal envelope shall be air tight and IC rated.
Plumbing and wiring		In exterior walls, batt insulation shall be cut neatly to fit around wiring and plumbing, or insulation, that on installation readily conforms to available space, shall extend behind piping and wiring.
Shower/tub on exterior wall	The air barrier installed at exterior walls adjacent to showers and tubs shall separate the wall from the shower or tub.	Exterior walls adjacent to showers and tubs shall be insulated.
Electrical/phone box on exterior walls	The air barrier shall be installed behind electrical and communication boxes. Alternatively, air-sealed boxes shall be installed.	
HVAC register boots	HVAC supply and return register boots that penetrate building thermal envelope shall be sealed to the subfloor, wall covering or ceiling penetrated by the boot.	
Concealed sprinklers	Where required to be sealed, concealed fire sprinklers shall only be sealed in a manner that is recommended by the manufacturer. Caulking or other adhesive sealants shall not be used to fill voids between fire sprinkler cover plates and walls or ceilings.	

R402.4.1.2 Testing
The building or dwelling unit shall be tested and verified as having an air leakage rate not exceeding five air changes per hour in Climate Zones 1 and 2, and three air changes per hour in Climate Zones 3 through 8. Testing shall be conducted in accordance with RESNET/ACC 380, ASTM E 779 or ASTM E 1827 and reported at a pressure of 0.2 inch w.g. (50 Pascals). Where required by the code official, testing shall be conducted by an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the code official. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope.

During testing:
1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weatherstripping or other infiltration control measures.
2. Dampers including exhaust, intake, makeup air, backdraft and flue dampers shall be closed, but not sealed beyond intended infiltration control measures.
3. Interior doors, where installed at the time of the test, shall be open.
4. Heating and cooling systems, where installed at the time of the test, shall be turned off.
5. Supply and return registers, where installed at the time of the test, shall be fully open.

R402.4.5 Recessed Lighting
Recessed luminaires installed in the building thermal envelope shall be sealed to limit air leakage between conditioned and unconditioned spaces. Recessed luminaires shall be IC-rated and labeled as having an air leakage rate of not greater than 2.0 cfm (0.944 L/s) when tested in accordance with ASTM E 283 at a pressure differential of 1.57 psf (75 Pa). Recessed luminaires shall be sealed with a gasket or caulked between the housing and the interior wall or ceiling covering.

R403.1 Controls (Mandatory)
Not less than one thermostat shall be provided for each separate heating and cooling system.

R403.1.1 Programmable Thermostat
The thermostat controlling the primary heating or cooling system of the dwelling unit shall be capable of controlling the heating and cooling system on a daily schedule to maintain different temperature set points at different times of the day. This thermostat shall include the capability to set back or temporarily operate the system to maintain zone temperatures of not less than 55°F (13°C) to not greater than 85°F (28°C). The thermostat shall be programmed initially by the manufacturer with a heating temperature setpoint of not greater than 70°F (21°C) and a cooling temperature setpoint of not less than 78°F (26°C).

R403.3.5 Building Cavities (Mandatory)
Building framing cavities shall not be used as ducts or plenums.

R403.4 Mechanical System Piping Insulation (Mandatory)
Mechanical system piping capable of carrying fluids greater than 105°F (41°C) or less than 55°F (13°C) shall be insulated to an R-value of not less than R-3.

R403.4.1 Protection of Piping Insulation
Piping insulation exposed to weather shall be protected from damage, including that caused by sunlight, moisture, equipment maintenance and wind. The protection shall provide shielding from solar radiation that can cause degradation of the material. Adhesive tape shall be prohibited.

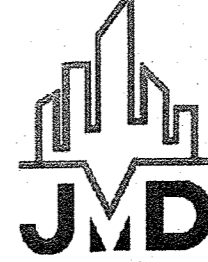
R403.5.3 Hot Water Pipe Insulation (Prescriptive)
Insulation for hot water piping with a thermal resistance, R-value, of not less than R-3 shall be applied to the following:
1. Piping 3/4 inch (19.1 mm) and larger in nominal diameter.
2. Piping serving more than one dwelling unit.
3. Piping located outside the conditioned space.
4. Piping from the water heater to a distribution manifold.
5. Piping located under a floor slab.
6. Buried piping.
7. Supply and return piping in recirculation systems other than demand recirculation systems.

Section R404 Electrical Power and Lighting Systems

R404.1 Lighting Equipment (Mandatory)
Not less than 50 percent of the permanently installed lighting fixtures shall use lamps with an efficacy of at least 65 lumens per watt or have a total luminaire efficacy of at least 45 lumens per watt.

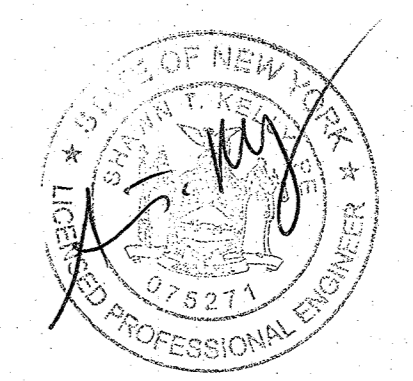
ENERGY CODE COMPLIANCE STATEMENT

TO THE BEST OF MY KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THE PLANS AND SPECIFICATIONS FOR THIS PROJECT ARE IN COMPLIANCE WITH THE LATEST EDITION OF THE NEW YORK STATE STRETCH ENERGY CODE 2020.



**520 N Highland Ave
Nyack, NY 10960
(845) 480-5973**

SEAL & SIGNATURE:



REVISION	DATE	DESCRIPTION
	06/05/2024	DOB COMMENTS
	05/14/2024	DOB COMMENTS
	10/02/2023	DOB COMMENTS
	09/20/2023	DOB COMMENTS
	04/07/2023	PERMIT SET

PROJECT:
GARAGE & PAVILION

214 SICKLETOWN ROAD
ORANGEBURG, NY 10962

TITLE:
ENERGY CODE NOTES

DRAWN BY: STEPHEN
PROJECT NO:

SCALE:
AS-NOTED

DRAWING NO:
EN-001

Elemax™ 2600

Silicone Air and Water-Resistive Barrier Coating

Product Description

Elemax 2600 silicone air and water-resistive barrier (AWB) is a solvent free, fluid-applied, 100% silicone coating for AWB applications to coat and seal above-grade wall assemblies. Elemax 2600 silicone AWB coating provides long-term air and water protection from a variety of elements: temperature extremes, sunlight / UV radiation, rain and snow.

Key Features and Typical Benefits

- Building Code Compliant** – ICC ESR-3983 evaluation report confirms compliance with IRC, IRC, IECC and green code(s) requirements for use as both an air barrier and a water resistive barrier.
- Seamless, Monolithic Air Barrier** – Fluid application of the all silicone product / system creates a seamless, monolithic air barrier.
- Simple Installation** – Straightforward system design, easy application and compatibility with adjacent building components eases installation.
- Performance**
 - Reduced Energy Consumption** – Elemax AWB systems control the flow of air and water through the building envelope and create a contiguous barrier that can reduce energy consumption in a building as much as 35% and guard against water-related issues such as mold, rot and rust.
 - 100% Silicone Durability** – Long-term resistance to natural weathering and extreme temperatures with negligible change in elasticity, for sustained performance during the life of the building.
 - UV Resistant** – Exposure for 20+ years without measurable change in properties or performance. Excellent product for use behind open joint and ventilated rain screen claddings.
 - Self-Sealing** – Passes water penetration standards for nails and fasteners when tested at system film thickness. Fastener self-sealing ensures that the AWB performs optimally, after the building is fully clad.
 - Fire Characteristics** – NFPA 285 Pass- Acceptable for use in multiple wall assemblies. Meets 2015 IBC exemptions for water-resistive barriers. ASTM E84: Class A Flame Spread and Smoke Generation.
 - Elastomeric** – Cures to form a permanently flexible continuous membrane virtually unaffected by temperature extremes.

- Vapor Permeable** – Allows moisture vapor to pass yet prohibits the passage of liquid water.
- Application**
 - Seamless, Breathable Membrane** – Prevents water and air from entering the building, while allowing moisture vapor to escape.
 - Simple One-Coat Application** – Elemax 2600 silicone AWB coating can be applied by spray, power roller or brush, and saves labor cost, resulting in a high value versus installed cost.
 - Primerless Adhesion** – Bonds strongly to many typical substrates without the need of a primer.
 - Extended Temperature Range** – Application range of 0°F to 150°F (-18°C to 66°C) and in-use temperature range of -40°F to 300°F (-40°C to 149°C) for any cladding / wall assembly design. Viscosity of product is minimally affected by temperature and does not require heating in cold climates.
 - Rain Ready** – Can be exposed to a medium to heavy rain in as little as 30 minutes.
 - Fast Cure** – For quick re-coat time and ease of touch-up during the life of the building.
 - Application to Various Substrates** – Elemax 2600 silicone AWB coating can be installed over various exterior wall substrates including poured concrete, CMU, glass mat gypsum sheathing, cement board, plywood, OSB and exterior gypsum sheathing.
 - Silicone Compatibility** – Compatible with windows, doors, joints and features sealed using silicone.
 - Solvent Free** – Low VOC formula; Clean Air Gold certification states conformance to ANSI/BIFMA e3 standard credits 7.6.1, 7.6.2 and/or credit 7.6.3, which includes California Department of Public Health (CDPH) Standard Method v1.2.01350 (2017), as well as conformance to low-emitting materials for WELL and LEED.

NOTE: PER MANUFACTURER BELOW GRADE INSTAL PERMITTED WHEN PROTECTED WITH DRAIN BOARD

Elemax™ 5000

Liquid Flashing

Product Description

Elemax 5000 Liquid Flashing is a trowel-grade, one-component, solvent free, low-sag silicone liquid flashing material. It is used in the Elemax silicone air and water barrier (AWB) system to flash rough openings, seams, gaps, fastener heads, board joints, penetrations, and transitions.

Key Features and Typical Benefits

- Seamless and Monolithic Application:** Liquid-applied flashing allows for a seamless, monolithic application when used as part of the Elemax silicone AWB system.
- Compatibility:** Rough openings flashed with Elemax 5000 Liquid Flashing provide a suitable and sound surface for adhesion and compatibility with common silicone installation sealants used around doors and windows.
- Performance**
 - Silicone Durability** – Cured silicone rubber exhibits excellent long-term resistance to natural weathering including: extreme temperatures, ultraviolet radiation, rain and snow, with negligible change in elasticity.
 - Elastomeric** – Cures to form a permanently flexible continuous membrane virtually unaffected by temperature extremes.
 - Self-Sealing** – Passes water penetration standards for nails and fasteners.
 - Vapor Permeable** – Allows moisture vapor to pass yet prohibits the passage of liquid water. Thus making the Elemax silicone AWB system vapor permeable even at rough openings.

- Application**
 - Primerless Adhesion** – Bonds strongly to many typical substrates without the need of a primer.
 - All Season Application** – Can be applied in cold temperatures allowing for work to continue through winter months.

Packaging

- Elemax 5000 Liquid Flashing is currently available in the following configurations:
 - 2 Gallon Pail
 - 20 fl oz (591.5 ml) foil sausage packs

Colors

- Elemax 5000 Liquid Flashing is currently available in black and gray.

Installation

Refer to Elemax 2600 Liquid Flashing AWB current specifications, installation guidelines and details for application instructions in conjunction with this document.

USAGE RATE - Elemax 5000 Liquid Flashing

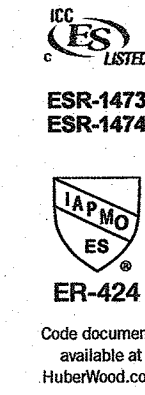
- When used for sheathing joint treatment, apply 20-40 mils (508-1016 µ) thick troweled to nominal 1/2" (38 mm) width centered on joint. The following calculated estimates do not take into consideration factors such as: joint gap width, substrate texture, material waste, or other factors. Values are based on maximum yield at 20 mil (508 µ) thickness:
 - One sausage foil yields approximately 100 lf (30 m)
 - One 2-gallon pail yields approximately 1288 lf (392 m)
- When used for rough opening treatment or general detailing, apply at 20-40 mils (508-1016 µ) thick x 6" (152 mm) width trowel application. The following calculated estimates do not take into consideration factors such as: Construction geometry, substrate texture, material waste, or other factors. Values based on maximum yield at 20 mil (508 µ) thickness:
 - One sausage foil yields approximately 25 lf (8 m)
 - One 2-gallon pail yields approximately 322 lf (98 m)

4 AWB ELEMEX 5000

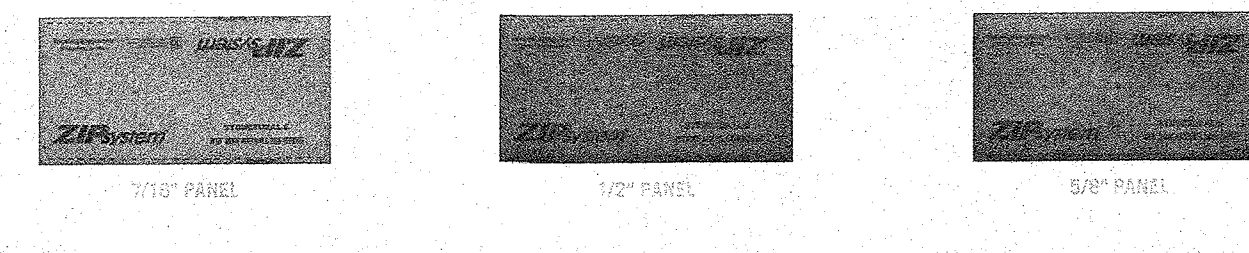
NOTE: THICKNESS PROVIDED ON DRAWINGS

WATER, AIR & STRUCTURAL PERFORMANCE FOR ANY JOB

PERFORMANCE CATEGORY	7/16", 1/2" AND 5/8" ZIP SYSTEM® SHEATHING			VAPOR TRANSMISSION OF WRB LAYER	AIR BARRIER
	PANEL SIZE	PANEL COUNT	PS-2 SPAN RATING		
7/16"	4' x 8'	80	24/16 Structural 1 ⁴⁴	12-16 perm ASTM E 96 Procedure B	ASTM E 2178 ≤ 0.02 L/s-m ² @ 75 Pa
1/2"	4' x 8'	70	32/16 Structural 1		
5/8"	4' x 8'	55	40/20 Structural 1		



COLOR CODED FOR THICKNESS RECOGNITION ON THE JOBSITE



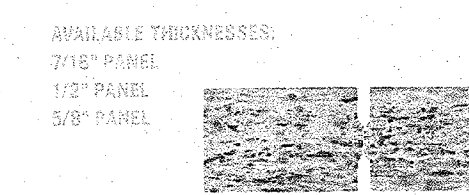
LOAD SPAN TABLE

SPAN RATING	THICKNESS (INCHES)	LOAD GOVERNED BY	STRENGTH AXIS (CENTER-TO-CENTER OF SUPPORTS, INCHES)		
			16	19.2	24
24/16	7/16"	L/360	128	70	34
		L/240	191	106	51
		L/180	255	140	68
		Bending	180	125	80
		Shear	207	169	133
		L/360	188	103	50
32/16	1/2"	L/240	282	154	75
		L/180	376	206	100
		Bending	209	145	93
		Shear	228	186	147
		L/360	368	201	98
		L/240	552	302	146
40/20	5/8"	L/180	736	403	195
		Bending	352	244	156
		Shear	283	232	182
		Continuous Spans	3-Span	3-Span	3-Span

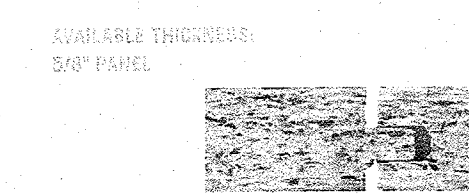
AVAILABLE EDGE PROFILES

TONGUE & TONGUE

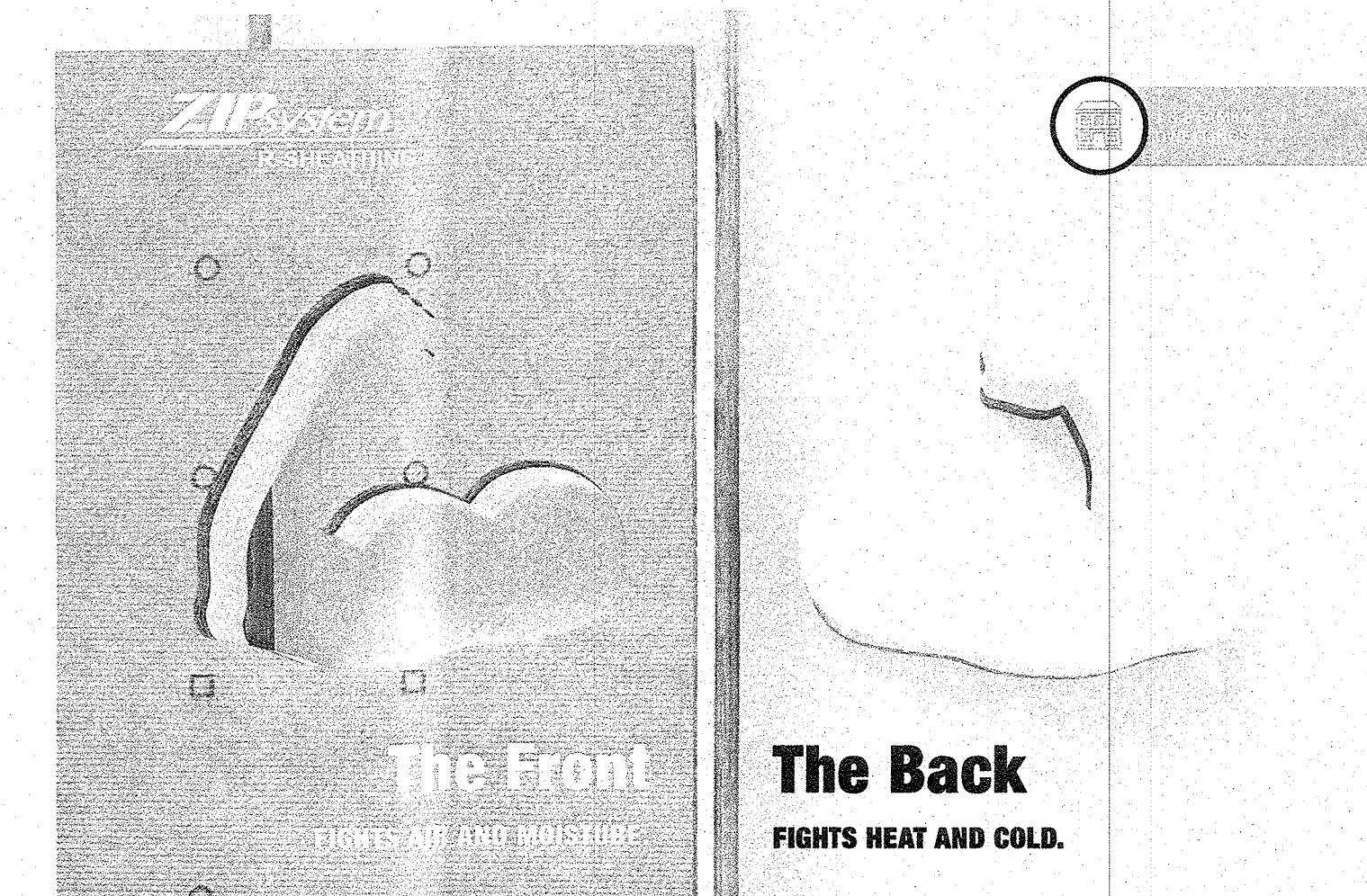
Eliminate the hassle and need for H-clips.⁴



TONGUE & GROOVE

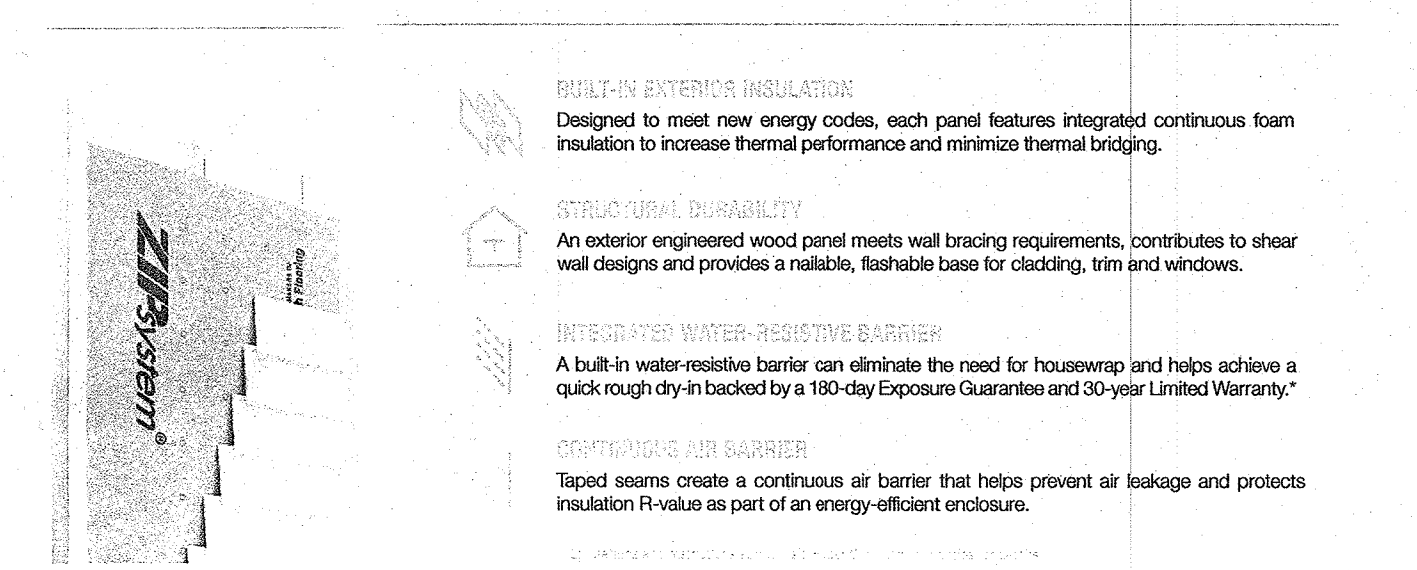


⁴ H-clips are required in roof applications for ZIP System 7/16" panels where roof framing is greater than 16" on center.



TOGETHER, THEY KNOCK OUT THE ELEMENTS.

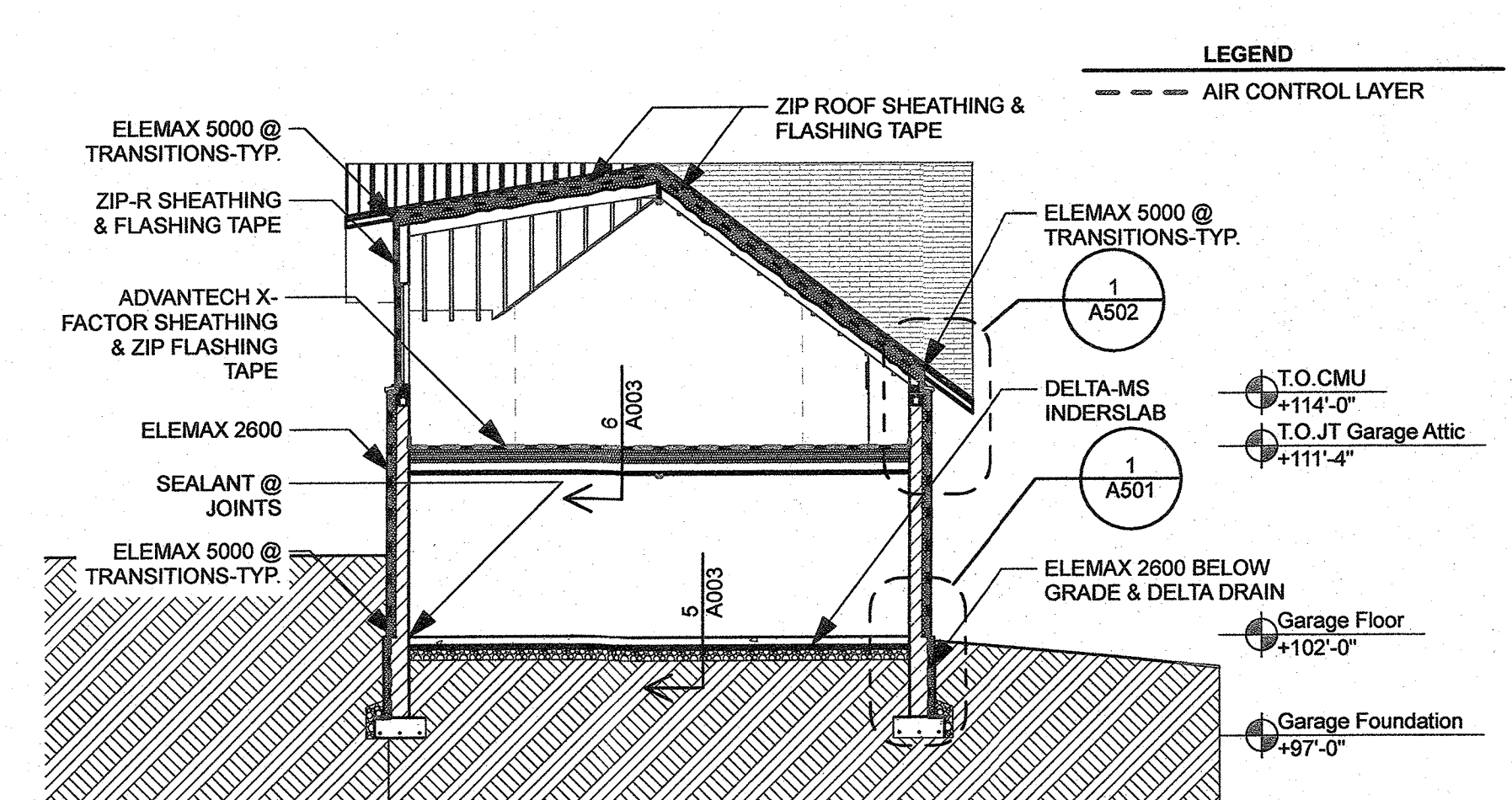
ZIP System® R-sheathing is the simple all-in-one structural panel with built-in exterior insulation. Featuring integrated moisture, air and thermal protection, ZIP System R-sheathing completely reimagines traditional wall assemblies by streamlining exterior water, air and thermal management. Learn how to protect your next project at InsulateYourBuild.com.



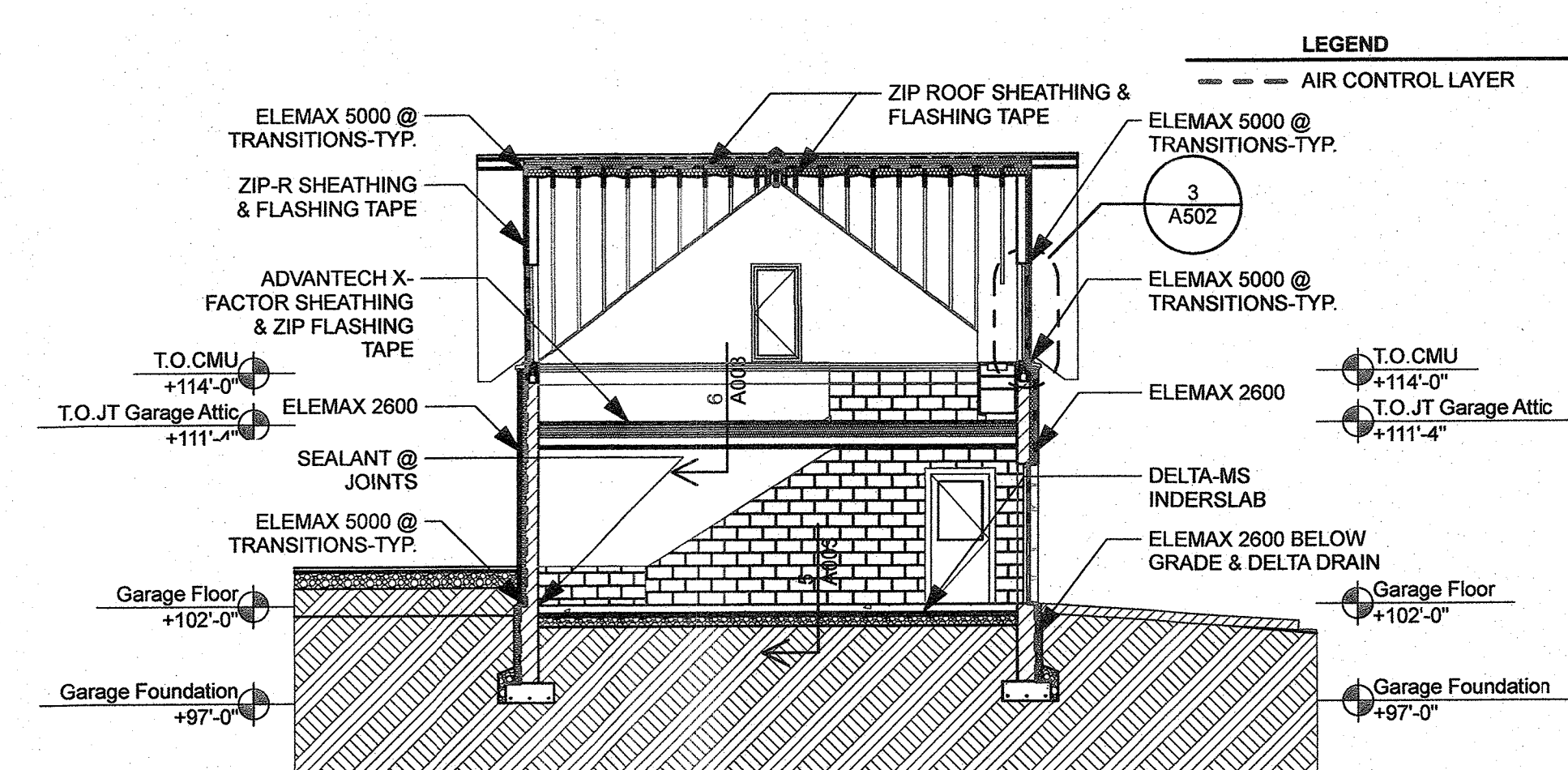
6 ZIP SYSTEM R-SHEATHING

3 AWB ELEMEX 2600

5 ZIP SYSTEM ROOF SHEATHING



1 GARAGE CROSS SECTION-1 AIR SEALING SCALE: 1/8" = 1'-0"



2 GARAGE CROSS SECTION-2 AIR SEALING SCALE: 1/8" = 1'-0"

520 N Highland Ave
Nyack, NY 10960
(845) 480-5973

REVISION	DATE	DESCRIPTION
06/05/2024	DOB COMMENTS	
05/14/2024	DOB COMMENTS	
10/02/2023	DOB COMMENTS	
09/20/2023	DOB COMMENTS	
04/07/2023	PERMIT SET	

PROJECT: **GARAGE & PAVILION** 214 SICKLETOWN ROAD ORANGEBURG, NY 10962

TITLE: **AIR SEALING & PRODUCTS**

DRAWN BY: STEPHEN	SCALE: AS-NOTED	DRAWING NO: EN-002
PROJECT NO:		

DELTA

HIGH PERFORMANCE AIR & MOISTURE BARRIERS

TECHNICAL DATA SHEET

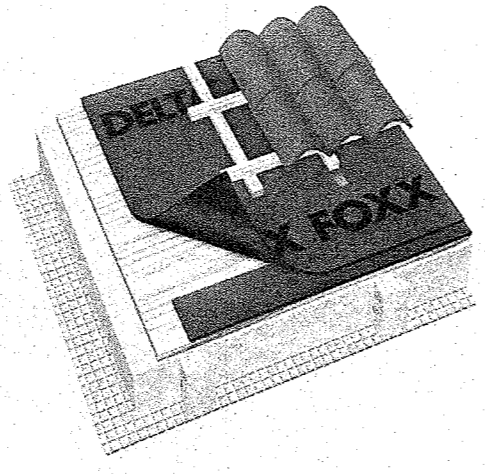
DELTA®-FOXX / PLUS

Highly Vapor Permeable Roof Underlayment

MATERIAL
Special, extremely tear-resistant polyester non-woven substrate with a highly vapor permeable and watertight acrylic dispersion coating.

PROPERTIES
The high vapor permeability of this roof underlayment allows any moisture within the roof enclosure to escape safely by diffusion. A water-repellent dispersion coating makes DELTA®-FOXX permanently waterproof. This highly scuff and tear-resistant membrane makes a firm and safe walking surface when laid on top of solid sheathing. The self-glaze coating eliminates reflection, even in extreme sunlight. This membrane withstands the rigors of jobsites, as well as tough wind and weather. Its performance is unaffected by surfactants.

APPLICATION
DELTA®-FOXX is installed on the roof deck prior to the application of the final cladding system. DELTA® Accessories complement the roof underlayment installation. DELTA®-FOXX is also available in the PLUS version with a self-adhesive edge.



For technical support, call our technical support team at 1-888-4DELTA4 (1-888-433-5824) extension 326, or visit www.dorken.com

Dörken Systems Inc. 4655 Delta Way Beaverton, Ontario L0R 1B4
1-888-4 DELTA 4, (905) 563-3255 Fax: (905) 563-5582
info@dorken.com, www.dorken.com
A company of the DÖRKENGROUP

Product name	DELTA®-FOXX	
Color	red-brown	
Water vapor transmission	3763 g/m ² /24 h	ASTM E96-05, Proc. B
Vapor permeance	530 perms (grams/m ² /in Hg)	ASTM E96-05, Proc. B
Breaking load	MD 104 lb/2in (461 N/50 mm) CD 62 lb/2in (279 N/50 mm)	ASTM D5035-06
Elongation at break	MD 37 % CD 48 %	ASTM D5035-06
Tear resistance	MD 1916 g CD 2564 g	ASTM D1922-06a
Trapezoid tensile strength	MD 23 lb (103 N) CD 16 lb (71 N)	ASTM D4533-04
Fastener pull-through force	211 N	ASTM D3462-03
Water penetration resistance	104 cm	CAN/CSG9-42 R26-3-95
Water impact penetration resistance	no water passing	AIACC 42-2000
Water permeability	no water passing	CSA A220.1-06
Long term sag	no sag	CSA A220.1-06
Flame spread	5 NFPA Class A: UBC Class I	ASTM E84-09
Smoke developed	170 NFPA Class A: UBC Class I	ASTM E84-09
Air permeance	< 0.69 l/s/m ² @ 75 Pa	ASTM E2178
Temperature range	-40 °F to +176 °F (-40 °C to +80 °C)	
Mass per unit area	> 7.3 oz/yd ² (270 g/m ²)	CSA A220.1-06 4.4.4
Roll weight	approx. 44 lb (20 kg)	
Roll length	164' (50 m)	
Roll width	4' 11" (1.5 m)	
Maximum UV (sunlight) exposure	Always cover as soon as possible. Maximum exposure 16 week.	
DELTA® Accessories	DELTA®-MULTI BAND 7" x 23' (0.21 m x 23 m) DELTA®-FLEX-BAND 4" x 33' (0.10 m x 10 m) DELTA®-SEAL 310 ml cartridge	

ICC ESR-2625 DELTA® Synthetic Roofing Underlayments

4 DELTA-FOXX / PLUS

DELTA

HIGH PERFORMANCE AIR & MOISTURE BARRIERS

TECHNICAL DATA SHEET

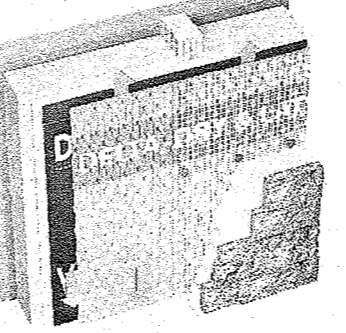
DELTA®-DRY & LATH

Ventilated Rainscreen with Pre-installed Glass Lath for Manufactured Stone and Conventional Stucco Claddings.

MATERIAL
DELTA®-DRY & LATH is a 3-dimensional rainscreen membrane made out of a special high-density polyethylene. It provides two-sided drainage and ventilation through its unique dimple and groove design. DELTA®-DRY & LATH has a pre-installed glass lath which makes it ideal for absorptive claddings. The alkali-resistant (AR) glass lath replaces the wire lath for the application of the scratch coat.

PROPERTIES
The structured membrane provides drainage and ventilation, as well as a complete capillary break behind the cladding. It protects the building enclosure from bulk water intrusion (i.e. wind-driven rain), and manages incidental water leakage through the cladding. As well, DELTA®-DRY & LATH captures and drains transient moisture migrating through the wall structure. DELTA®-DRY & LATH provides an air-gap on the interior and exterior side of the membrane for drainage and ventilation. It allows water vapor, driven from the interior to the exterior of the structure, to escape through the ventilated air space between the sheathing and the membrane. At the same time, DELTA®-DRY & LATH minimizes the potential for condensation that could cause damage within the building enclosure. The membrane provides drying potential through ventilation behind any approved exterior cladding. DELTA®-DRY & LATH impedes solar-driven moisture towards the interior of the structure as occurs with absorptive cladding materials like adhered manufactured stone veneer and conventional stucco. DELTA®-DRY & LATH reduces labor costs when used with claddings requiring a scratch coat. The 3-dimensional membrane and the glass lath are placed in a single installation procedure. The pre-installed AR glass lath is in compliance with ICC-ES AC 275.

APPLICATION
DELTA®-DRY & LATH is installed outboard of the water-resistant barrier over sheathing. The material cuts easily with a utility knife. Glass lath is overlapped at joints. Manufactured stone and conventional stucco are installed as per manufacturer's instructions.



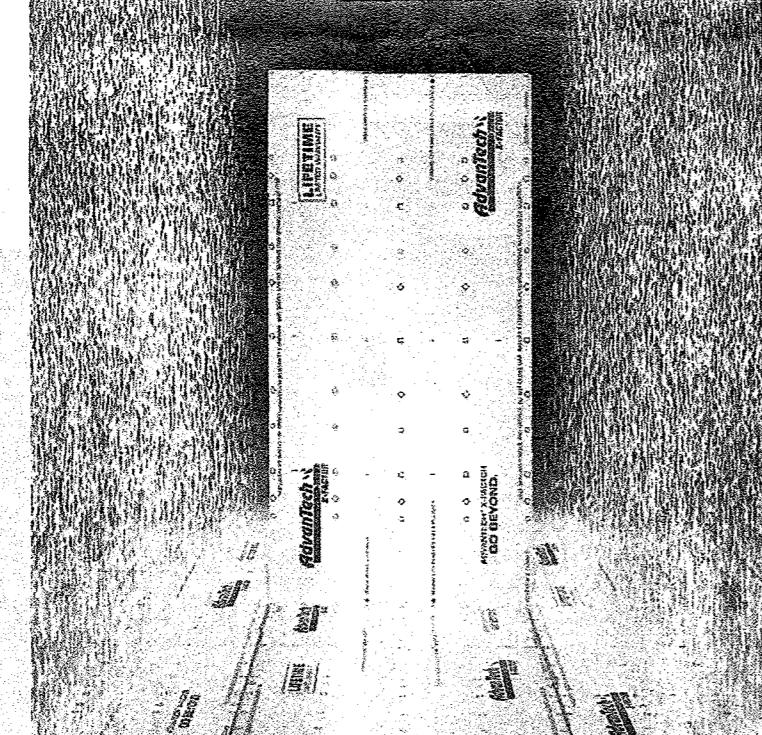
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A DÖRKENGROUP company

Product name	DELTA®-DRY & LATH	
Color	Grey	
Material	High-density polyethylene, stabilized (oxidation & UV), with alkali-resistant woven glass lath	
Dimple height	approx. 2.9" (76.5 mm)	ASTM D1777-06
Compressive strength	93 kPa (1.646 psi) @ 8 % strain	ASTM D6384-06
Drainage efficiency	approx. 96%	ASTM E2775-03
Fungus resistance	Does not support fungal growth	ASTM C1338
Fire resistance	B2	EN 14102
Flame spread	210	CANULC-S102.2
Smoke developed	105-190	CANULC-S102.2
Water penetration resistance	813 kPa (118 psi) Watertight	AIACC 127
Water vapor transmission	22 ng/(Pa·m ²)	ASTM E96, Method A
Vapor permeance	0.14 perms (grams/m ² /in Hg)	ASTM E96, Method A
Contact surface of rainscreen to WRB	less than 20% greater than 60% open	
Chemical properties	excellent chemical resistance, not-pool	
Toxicity	non-toxic, non-polluting	
Transverse load	Exceeds code prescribed wire lath system requirements	ICC-ES AC 11 System Combination
Attachment	> 48 lbs	ICC-ES AC 275 System Combination
Fastener attachment	> 85 lbs	ICC-ES AC 275 System Combination
Embedment	> 0.12"	ICC-ES AC 275 System Combination
Tensile strength (glass lath only)	Minimum 120 lbs	ICC-ES AC 275
Temperature range	-30°C to +80°C (-22°F to +176°F)	
Roll weight	approx. 11.8 kg (26 lbs)	
Roll length	14 m (46 ft)	
Roll width	1.8 m (5' 7")	
Service life expectancy	> 25 years (at pH between 4 and 9). Do not expose to UV light for more than 30 days.	

ICC ESR-2625 DELTA® Synthetic Roofing Underlayments

5 DELTA-DRY & LATH

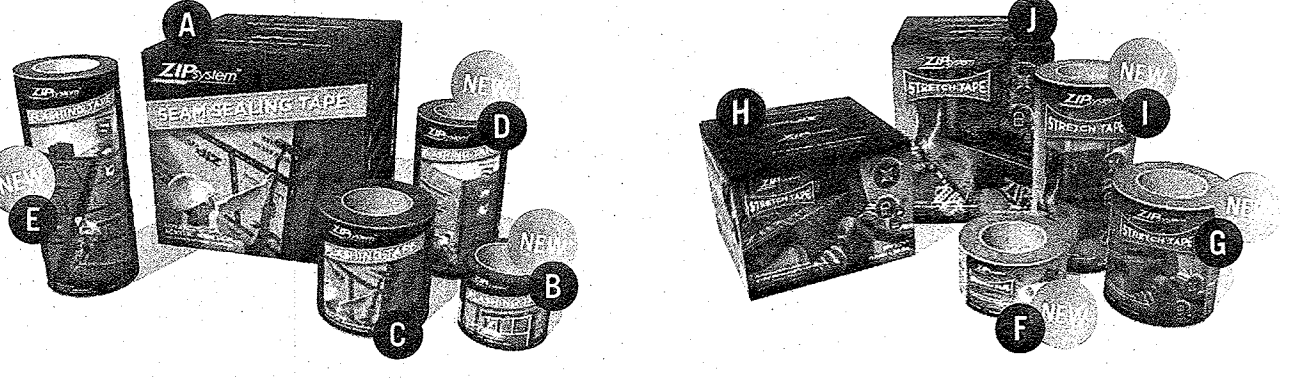


NOTE: PER MANUFACTURER AIR BARRIER ACHIEVED WITH ZIP SYSTEM FLASHING TAPE AT SEAMS AND TERMINATIONS

ZIP SYSTEM™ FLASHING & STRETCH TAPES: NEW TAPE WIDTHS TO MEET YOUR NEEDS

SEAL TOUGH JOBS IN A FLASH.
An integral part of ZIP System™ roof and wall assemblies, ZIP System™ flashing tapes feature pressure-activated advanced acrylic adhesive. When used with ZIP System™ panels, ZIP System flashing tapes help form a strong, weather-resistant, continuous barrier backed by a 30-year Limited Warranty and 180-day Exposure Guarantee!

SINGLE PIECE INSTALLATION STRETCHES, CURVES, STICKS AND SEALS.
ZIP System™ stretch tape easily stretches to fit sils, curves and corners with a single piece without having to piece tape segments together. Made of a high-performance composite acrylic, the tape conforms to challenging applications and locks out moisture even over mismatched surfaces.



MANUFACTURER
Huber Engineered Woods LLC
18025 David Taylor Drive, Suite 300, Charlotte, NC 28262
1.800.653.9220 | Technical Service: 1.800.393.9220 ext 2716
HuberWoods.com

AVAILABLE SIZES AND RATINGS
X-Factor flooring panels are available in nominal 4' x 8' sheets* in the following DCC/P&S 2 sheathing span ratings and performance categories. Panels are Exposure 1 rated.

Span Rating	AT-Series	TECHO Grade†	Nominal Panel Thickness
24 OC	AT 1.05	Structural 1 Floor Span	23/32 inch

Third-party independent compliance testing of X-Factor flooring performed by Timberco Inc. (TECO).

*Area face dimensions are approximately 47 1/2" x 95 7/8".

Span Rating	AT-Series	TECHO Grade†	Nominal Panel Thickness
24 OC	AT 1.05	Structural 1 Floor Span	23/32 inch

Bending Stiffness, EI (64-in⁴)
AdvantTech: 383,800
OSB Ply: 300,000 – 330,000

Bending Strength, FbS (24-in²)
AdvantTech: 1,250
OSB Ply: 770

*For 23/32-inch-thick panels, primary strength axis. For design capacities, section properties, and equivalent specific gravity values of X-Factor, refer to ICC-ES ESR-1786. For OSB and equivalent values, refer to 2012 NDS Wood Design Specifications.

Superior Design Strength
Provides a quality, stiff floor

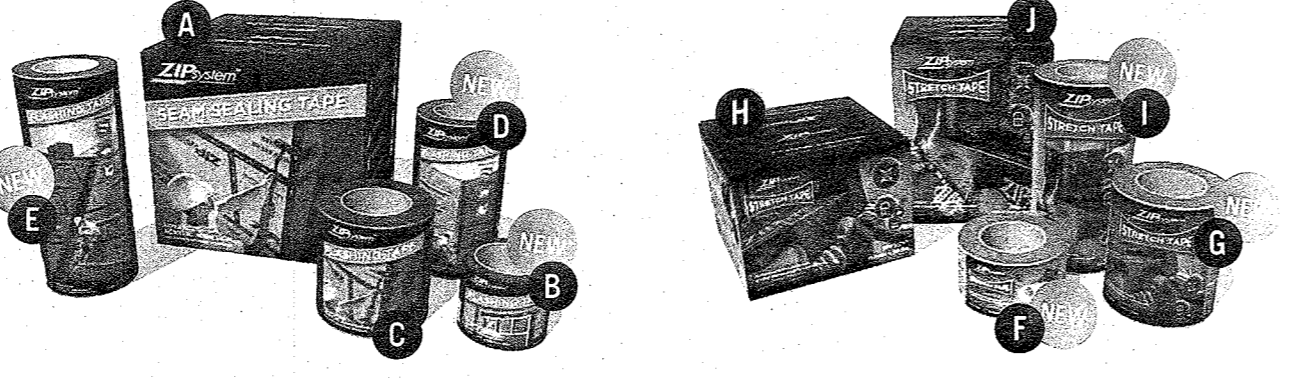
Superior Design Stiffness
Outperforms plywood and commodity OSB sheathing to minimize floor bounce and squeaks

Superior Moisture Resistance
Minimizes swelling, warping, cupping and delamination

Higher Density
Greater nail- and screw-holding power

1.800.653.9220 | AdvantTech-Performs.com

1 ZIP SYSTEM ADVANTECH X-FACTOR



ZIP SYSTEM™ FLASHING TAPE

- S-13773** ZIP System™ flashing tape 3' x 4' x 30'
- S-2000P** ZIP System™ flashing tape 3' x 4' x 30'
- S-2000B** ZIP System™ flashing tape 6' x 75'

ZIP SYSTEM™ STRETCH TAPES

- S-2002Z** ZIP System™ stretch tape 3' x 20'
- S-2002E** ZIP System™ stretch tape 6' x 20'
- S-2001D** ZIP System™ stretch tape 10' x 75'
- S-2000B** ZIP System™ stretch tape 6' x 75'

FLASHING TAPE	STRETCH TAPE	Acrylic	COLD TEMPERATURE APPLICATION
3'-3/4" x 30'	3" x 20'	ESR 2227 AMA 711 Pass	180 Days
6" x 75'	6" x 20'	ER 365 AMA 711 Pass	0°F – 120°F
9" x 50'	9" x 20'		
12" x 50'	12" x 20'		
12" x 50'	12" x 20'		
12" x 50'	12" x 20'		
12" x 50'	12" x 20'		
12" x 50'	12" x 20'		

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Dörken Systems Inc. 4655 Delta Way - Beaverton, ON - L3J 0T6 - Canada
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2 ZIP SYSTEM FLASHING TAPE

DELTA

HIGH PERFORMANCE AIR & MOISTURE BARRIERS

TECHNICAL DATA SHEET

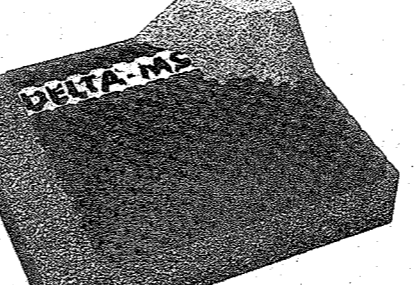
DELTA®-MS UNDERSLAB

Sub-Base Course & Vapor Retarder.

MATERIAL
DELTA®-MS UNDERSLAB is manufactured with an exclusive co-extrusion process, utilizing 60% recycled high-density polyethylene (HDPE) from municipal recycling programs in the middle, and two thin layers of a special virgin HDPE on the outside. The encapsulation of the recycled HDPE ensures that DELTA®-MS UNDERSLAB is protected against degradation caused by oxidation and environmental influences, like acidic soils or alkalinity (concrete). DELTA®-MS UNDERSLAB, equipped with highly effective additive packages, provides high compressive strength, impact resistance, and chemical and environmental stress crack resistance.

PROPERTIES
DELTA®-MS UNDERSLAB is a dimpled membrane, impermeable to water and water vapor. The dimple pattern creates an air-gap between the membrane and the foundation wall. This allows any incidental water getting past the dimpled membrane to flow freely to the perimeter footing drain. The air-gap provides a safe separation and full capillary break between the concrete floor slab and any ground moisture. DELTA®-MS UNDERSLAB is available in many sizes to cover any foundation with a minimum of overlaps and seams. DELTA®-MS UNDERSLAB may be installed over gravel, compacted soil, undisturbed soil, and on (in place of) working (mud) concrete slabs.

APPLICATION
Used as sub-base course, DELTA®-MS UNDERSLAB provides crucial advantages: Quick installation time, no equipment, no additional excavation. The product is available in many convenient roll sizes, making installation very easy. Foot traffic and wheelbarrow traffic will not damage DELTA®-MS UNDERSLAB.



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A DÖRKENGROUP company

Product name	DELTA®-MS UNDERSLAB	
Color	charcoal brown	
Material	Recycled high-density polyethylene, encapsulated between two layers of special virgin HDPE	
Dimple height	5/16" (8 mm)	ASTM D6384-06
Compressive strength	approx. 2,200 psi (250 MPa)	ASTM D6384-06
Flow rate / unit width at high. grad.	10.4 gal/min/ft (132 l/min/m)	ASTM D4716-08
Flow rate / unit width at high. grad.	3 gal/min/ft (37.8 l/min/m)	ASTM D4716-08
Flow rate / unit width at high. grad.	0.11 gal/min/ft (1.32 l/min/m)	ASTM D4716-08
Air-gap volume between dimples	approx. 0.13 gal/ft ² (5.3 l/m ²)	ASTM D4716-08
Water penetration resistance	> 120 psi (815 kPa) Watertight	AIACC 127-1995
Water vapor transmission	< 22 ng/(Pa·m ²)	ASTM E96, Method A
Vapor permeance	< 0.3 perms (grams/m ² /in Hg)	ASTM E96, Method A
Temperature range	-22°F to +176°F (-30°C to +80°C)	ASTM D5261-92
Chemical properties	Excellent chemical resistance, resistant to root penetration, not-pool	
Toxicity	non-toxic, non-polluting	
Roll length	60' (20 m)	
Roll width / weight	2' (1.8 m) 38 lbs (17.2 kg) 3' (2.7 m) 41 lbs (18.6 kg) 4' (3.6 m) 44 lbs (20.0 kg) 5' (4.5 m) 47 lbs (21.3 kg) 6' (5.4 m) 50 lbs (22.7 kg) 7' (6.3 m) 53 lbs (24.0 kg) 8' (7.2 m) 56 lbs (25.3 kg) 9' (8.1 m) 59 lbs (26.6 kg)	
Service life expectancy	> 25 years (at pH between 4 and 9, and temperature below 77°F / 25°C). Do not expose to UV light for more than 30 days.	

3 DELTA-MS UNDERSLAB



**520 N Highland Ave
Nyack, NY 10960
(845) 480-5973**

SEAL & SIGNATURE:



REVISION	DATE	DESCRIPTION
	06/05/2024	DOB COMMENTS
	05/14/2024	DOB COMMENTS
	10/02/2023	DOB COMMENTS
	09/20/2023	DOB COMMENTS
	04/07/2023	PERMIT SET

PROJECT: GARAGE & PAVILION 214 SICKLETON ROAD
ORANGEBURG, NY 10962

TITLE: AIR SEALING, VAPOR BARRIER & FACADE & ROOF PRODUCTS

DRAWN BY: STEPHEN SCALE: AS-NOTED DRAWING NO: EN-003

PROJECT NO:

1 ZIP SYSTEM ADVANTECH X-FACTOR

2 ZIP SYSTEM FLASHING TAPE

3 DELTA-MS UNDERSLAB

DESCRIPTION
JM Corbond® III closed-cell spray polyurethane foam (SPF) is a premium, two-component, medium-density, Class 1 rated, insulation system designed for commercial, residential and industrial applications. Its high yield, superior thermal and moisture performance, and exceptional sprayability and adhesion make it an ideal choice for high-performing energy efficient buildings.

RECOMMENDED USES

- Walls (exterior and interior)
- Floors
- Ceilings

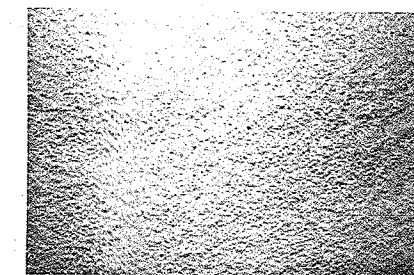
PERFORMANCE ADVANTAGES

- Improves Energy Efficiency
- Provides an Effective Air Barrier
- Increases Racking Strength
- Exceptional Adhesion
- Minimizes Sound Transmission

• Unvented Attics
• Vented Attics
• Crawl Spaces

INSTALLER ADVANTAGES

- Superior Sprayability
- High Yield
- Wide Processing Window
- Low Application Odor
- Excellent Adhesion



APPLICABLE / COMPLIANCE

- 2021, 2018, 2015, 2012, 2009 International Building Code (IBC) Types I - V Construction
- 2021, 2018, 2015, 2012, 2009 International Residential Code (IRC)
- 2021, 2018, 2015, 2012, 2009 International Energy Conservation Code (IECC)
- IAFMO ES #0146
- ASTM C109, Standard Specification for Spray-Applied Rigid Cellular Polyurethane Thermal Insulation
- Appendix X approval for application in unoccupied attics and crawl spaces without a prescriptive ignition barrier or coating
- Air Barrier Association of America Evaluated Material (IECC ASCE 7 Acceptance Criteria for Spray-Applied Foam Plastic Insulation)
- GREENGUARD and GREENGUARD GOLD VOC Emission Testing Compliance
- JM Corbond III has zero Ozone Depletion Potential (ODP) and less than 750 Global Warming Potential (GWP)

RECOMMENDATIONS

- All occupants must vacate the building or the spray area must be cordoned off and remain separated from the occupied space for 24 hours after application.
- The application area should be properly ventilated during application and for 24 hours post application.
- Re-entry time for non-SPF trade workers: 12 hours
- Re-entry time for building occupants: 24 hours

PURCHASE/USAGE

- 56 Gallon Drum (1,000 lbs per set)
- 250 Gallon Tote (5,000 lbs per set)

FLAMMABILITY CHARACTERISTICS**

Property	Test Method	Value
Surface Burning at 4"	Class 1	
Flame Spread Index	ASTM E84	Flame Spread Index < 25
Smoke Developed Index	ASTM E84	Smoke Developed Index < 450
Commercial Fire Resistance	NFPA 285	Assembly Passed
IRC Thermal Barrier	NFPA 286	Assembly Passed
ICC 215 Thermal Barrier	NFPA 286	Assembly Passed
Attics & Crawl Space Walls & Roof Uncoated Thickness	AC307 Appendix X	Roof 7.5" min thickness Wall 5.5" min thickness

HEALTH AND SAFETY
For information on Health and Safety, refer to Johns Manville Safety Data Sheets and the Spray Polyurethane Foam Alliance Health and Safety guidance documents at <https://www.spraypolyurethane.com>.

Visit our website at www.jm.com or call 800-654-3103 | Building Insulation Division P.O. Box 5108 | Loveland, CO 80217-5108

DATA SHEET

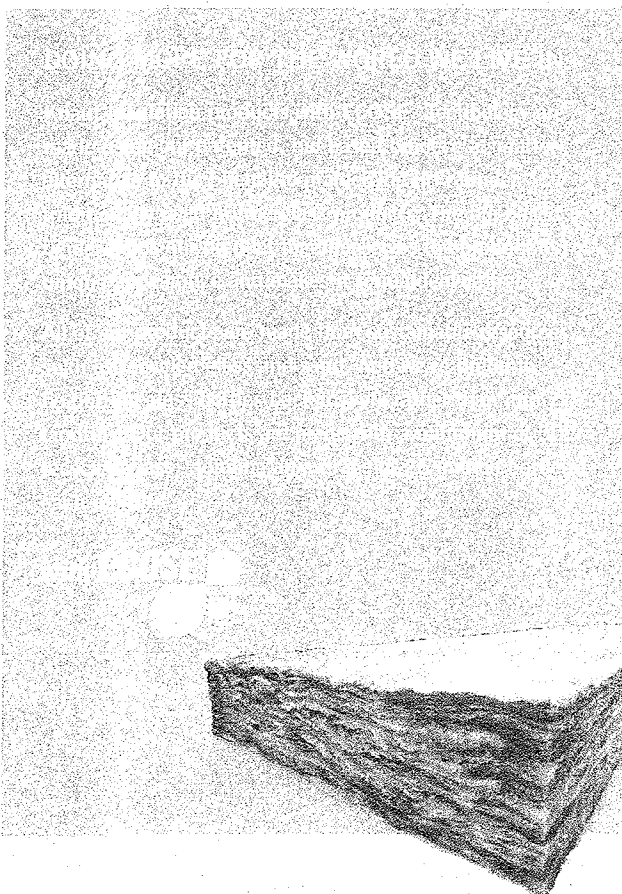
EcoBatt® Insulation
with ECOSE® Technology

EcoBatt batt insulation is a cost-effective thermal and acoustical barrier for energy-efficient construction. EcoBatt insulation products can be used in new and retrofit wood and metal frame applications in residential, commercial and manufactured housing structures. High Density (HD) batts are available where optimal thermal performance is required and space is limited. Staple-free batt insulation is flangeless kraft-faced batts that friction fit between 16" on center wood studs, eliminating the need to staple.

- Cavity walls, exterior and partition walls, floors, ceilings, attics, basements and crawlspaces
- ASTM C665 (facing):
 - Type I, Class A, (Unfaced)
 - Type II, Class C, Category 1 (Kraft)
 - Type III, Class A, Category 1 (FSK-25 foil)
 - Type III, Class B, Category 1 (Foil)
- California Energy Commission
- MEA #499-90-M
- State of Minnesota

- UL Environment
 - GREENGUARD Certified
 - GREENGUARD Gold Certified
 - Validated to be Formaldehyde-Free
- EUCB Certified

CONTRACTOR:
JOB:
DATE:



Property (Unit)	Test	Performance
Corrosion	ASTM C1617	Pass
Thermal Value	ASTM C518	See Forms Available chart
Water Vapor Permeance	ASTM E96	Kraft Faced: 1.0 perms or less; FSK-25 and Foil Faced: 0.05 perms
Water Vapor Sorption (by weight)	ASTM C1104	Less than 5%
Combustibility	ASTM E136	Non-combustible (unfaced only)
Mold Growth	ASTM C1338	Pass
Surface Burning Characteristics (flame spread/smoke developed)	ASTM E84	Unfaced and flangeless FSK facings: 25/00 Kraft facing will burn and should not be left exposed.

Wood Frame Construction						
R-Value	Thickness	Unfaced	Kraft	FSK-25	Standard Foil	Staple-Free
R-11	3 1/2"	11", 15 1/4", 19", 23 1/4"	15", 23"	-	-	-
R-13	3 1/2"	11", 15", 23"	11", 15", 23"	-	-	15 1/4"
R-15 HD	3 1/2"	19", 23"	19", 23"	-	-	15 1/4"
R-19	6 1/4"	12", 15", 19 1/4", 19", 23 1/4"	11", 15", 19", 23"	-	-	15 1/4"
R-20	5 1/2"	15"	15"	-	-	-
R-21 HD	5 1/2"	15", 23"	15", 23"	-	-	15 1/4"
R-22	6 1/4"	23"	15"	-	-	-
R-23 HD	5 1/2"	15"	-	-	-	-
R-25	8"	16", 24"	15", 23"	-	-	-
R-30	10"	16", 19 1/4", 24"	12", 16", 19", 24"	-	-	-
R-30 HD	8 1/4"	15", 23"	15", 23"	-	-	-
R-38	12"	16", 19", 24"	16", 19", 24"	-	-	-
R-38 HD	10 1/4"	15", 23"	15", 23"	-	-	-
R-49	13 1/4"	16", 24"	16", 19", 24"	-	-	-

Metal Frame Construction						
R-Value	Thickness	Unfaced	Kraft	FSK-25	Standard Foil	Staple-Free
R-8	2 1/2"	16", 24"	-	-	-	-
R-11	3 1/4"	16", 24"	16", 24"	16"	16"	-
R-13	3 1/4"	16", 24"	16", 24"	16"	16"	-
R-15 HD	3 1/4"	16"	16", 24"	-	-	-
R-19	6 1/4"	16", 24"	16", 24"	16", 24"	16", 24"	-
R-21 HD	5 1/4"	16", 24"	16"	16"	-	-
R-22	6 1/4"	16"	-	-	-	-
R-30	10"	-	-	24", 24" E.F.	24"	-
R-38	12"	-	-	16", 24"	-	-

Manufactured Housing Rolls						
R-Value	Thickness	Unfaced	Kraft	FSK-25	Standard Foil	Staple-Free
R-7	1 1/2"	15", 16", 42", 48", 90", 96"	-	-	-	-
R-11	3 1/4"	15", 48", 72", 84", 90", 96"	15"	-	-	-
R-13	3 1/4"	15"	15"	-	-	-
R-14	3 1/4"	72"	-	-	-	-
R-19	6 1/4"	15", 48", 91 1/2"	15", 23"	-	-	-
R-22	7"	84"	-	-	-	-

HD = High Density, E.F. = Extended Flange
This table is meant as a quick reference guide as product availability varies by region. Please check with your Territory Manager for a full product offering in your region.

4 INSULATION JOHNS MANVILLE CLOSED-CELL SPRAY FOAM

NOTE: THICKNESS PROVIDED ON DRAWINGS

INTERNATIONAL ENERGY CONSERVATION CODE (IECC) CLIMATE

WOOD FRAMED WALLS R-VALUE REQUIREMENTS

Climate Zone	1	2	3	4	5	6	7
Unfaced	13	15	17	19	21	23	25
Foam-faced	10	12	14	16	18	20	22

Learn how ZIP System Insulated R-sheathing can streamline your next project at www.zipinsulation.com

ZIP SYSTEM® R-SHEATHING FASTENING REQUIREMENTS FOR PRESCRIPTIVE BRACING^{1,2} AND ENGINEERED SHEAR WALL DESIGN³

Climate Zone	1	2	3	4	5	6	7
R-3	2x4@4	2x	0.121" shear nails	4/12	1.5	540	3-5
R-5	2x4@4	2x	0.121" shear nails	3/18	1.5	580	2-30
R-6	2x4@4	16	16G staples, 7 1/8" long	2" length	1.5	670	2-24
R-7	2x4@4	2x	0.131" shear nails	4/12	1.5	620	2-24
R-8	2x4@4	2x	16G staples, 7 1/8" long	2" length	1.0	640	1-6
R-9	2x4@4	2x	0.121" shear nails	3/12	1.5	650	3-5
R-10	2x4@4	2x	0.121" shear nails	3/12	1.5	640	3-20
R-12	2x4@4	2x	0.131" shear nails	3/12	1.5	610	3-5

ZIP System R-SHEATHING

1 ZIP SYSTEM R-SHEATHING (1)

5 INSULATION KNAUFF ECOBATT

Hunter Panels Xci NB
Polyisocyanurate Insulation Bonded to OSB or Plywood for Exterior Wall Applications in Type V Construction

Xci NB Thermal Values with 5/8" Plywood

Thickness (inches)	Thickness (mm)	R-Value
1.5	41	6.8
2.1	53	9.8
2.6	66	12.2
3.1	79	16.1
3.6	91	19.3
4.1	104	22.5
4.6	117	25.8

Xci NB Thermal Values with 7/16" OSB

Thickness (inches)	Thickness (mm)	R-Value
1.5	38	6.6
2.0	51	9.6
2.5	64	12.7
3.0	76	15.9
3.5	89	19.1
4.0	102	22.3
4.5	114	25.6

Description
Xci NB is an energy efficient rigid insulation panel composed of a closed cell polyisocyanurate foam core bonded to a premium performance coated glass face on one side and 5/8" OSB or plywood on the other. It is designed for use in Type V commercial and residential wall applications to provide both continuous insulation and a cladding attachment substrate within the building envelope.

Features and Benefits

- Polyiso offers increased R-value per inch vs mineral fiber, XPS or EPS options
- Designed for use in continuous insulation to assist in meeting the most current ASHRAE 90.1, IECC, IRC and RSI standards
- A superior combination of high insulating properties and reliable surface
- Provides improved dimensional stability and fire performance
- Manufactured with NextGen Chemistry: Zero Ozone Depleting Potential (ODP); Contains no CFCs, HCFCs or HFCs; Virtually zero Global Warming Potential (GWP); Use of Xci products helps reduce the carbon footprint of buildings.
- Incorporates APA-TECO Rated Exposure 1 OSB or Plywood
- Approved component of the Xci AEGIS Wall System

Applications

- Provides continuous insulation (ci) for standard wood frame, FRT wood frame, steel stud, CMU and concrete exterior wall constructions
- Suitable substrate for numerous claddings/finishes including fiber cement siding, masonry, metal, composite cladding systems, wood clapboards, wood shingles and vinyl siding
- Suitable for new construction and retrofit on commercial and residential exterior walls

15 Franklin St, Portland, Maine 04101 | 888.746.1114 | Fax 877.775.1789 | www.hunterpanels.com

2 INSULATION HUNTER PANELS Xci NB

6 INSULATION OWENS CORNING FOAMULAR XPS

FOAMULAR® & FOAMULAR® NGX® THERMAPINK® 25
EXTRUDED POLYSTYRENE (XPS) RIGID FOAM INSULATION

Physical Properties*

PROPERTY	TEST METHOD	VALUE
Thermal Resistance: R-Value, heft/Ft@100 (OSB, Cont'W)	ASTM C518	5.0 (0.88)
@ 25°F (4°C) mean temperature		5.4 (0.93)
@ 40°F (4.4°C) mean temperature		5.6 (0.99)
@ 25°F (4.9°C) mean temperature		5.6 (0.99)
Long-Term Thermal Resistance, LTR (heft/Ft@100) (RSB, 10-yr/FW)	CAN/ULC S770-03	5.0 (0.88)
@ 25°F (4.9°C) mean temperature		5.2 (1.72)
Floures Strength, minimum psi (kPa)	ASTM D1621	25 (172)
Floures Strength, minimum psi (kPa)	ASTM D2032	52 (345)
Water Absorption, maximum % by volume (90/90/90)	ASTM D272	0.3
Water Vapor Permeance, maximum perm (90/90/90)	ASTM E96	1.5 (86)
Dimensional Stability, maximum % linear change	ASTM D2126	2.0
Flame Spread**	ASTM E84	10
Smoke Developed**	ASTM E84	175
Oxygen Index, minimum % by volume	ASTM D2883	24
Service Temperature, maximum °F (°C)	-	165 (74)
Linear Coefficient of Thermal Expansion, in/in/°F (mm/m/°C)	ASTM E228	8.5 x 10 ⁻⁶ (6.3 x 10 ⁻⁶)

Standards, Codes Compliance

- Meets ASTM C578 Type IV (THERMAPINK® 25 Insulation)
- UL (Underwriters Laboratories) Roof Deck Constructions, tested in accordance with UL 1256, Standard for Fire Test of Roof Deck Constructions*
- UL Classified, a copy of UL Classification Certificate U-197 is available at www.owenscorning.com
- See UL E8811-01 at UL.com
- Factory Mutual (FM) Class 1 Roof Decks
- ASTM E108 Fire Classified Assemblies
- ASTM E119 Fire Resistance Rated Roof/Ceiling Assemblies
- UL and FM Wind Uplift Rated Assemblies
- Meets California Quality Standards and HUD UM #71a

Energy and Atmosphere

- 160 Chapter 26 and IRC section R310
- California Code of Regulations, Title 24, Insulation Quality Standard License #71-1420
- California Bureau of Furnishings and Home Information
- UL Classified for use in Canada
- Refer to UL Director of Products Certified for Canada for more details

Structural
Hunter Xci NB, up to 2.7" total thickness, can be used as structural insulating sheathing when applied to wood studs. Please contact Hunter Panels for shear values, wind loads and attachment requirements.

Material Resources

- 9% Pre-consumer Recycled Content
- Construction and Demolition Waste Management
- Indoor Environmental Quality
- Thermal Comfort

APPROVED CREDITS FOR LEED CERTIFICATION

- Energy and Atmosphere
- Materials
- Building Life-Cycle Impact Reduction
- Environment Product Declaration
- Material Reuse
- 9% Pre-consumer Recycled Content
- Construction and Demolition Waste Management
- Indoor Environmental Quality
- Thermal Comfort

3 INSULATION OWENS CORNING FOAMULAR XPS

JMD 520 N Highland Ave
Nyack, NY 10960
(845) 480-5973

SEAL & SIGNATURE:

REVISION	DATE	DESCRIPTION
	06/05/2024	DOB COMMENTS
	05/14/2024	DOB COMMENTS
	10/02/2023	DOB COMMENTS
	09/20/2023	DOB COMMENTS
	04/07/2023	PERMIT SET

PROJECT:
GARAGE & PAVILION 214 SICKLETOWN ROAD
ORANGEBURG, NY 10962

TITLE:
INSULATION PRODUCTS

DRAWN BY: STEPHEN **SCALE:** AS-NOTED **DRAWING NO.:** EN-004

PROJECT NO.:



Garage Doors

Overview

2- Layer Construction
 Note: 1/2" x 1/2" x 1/2" composite.

Flux Wood-Glue Composite

Flux wood composite glazing and door materials are designed to meet the needs of customers who desire the natural texture and color of wood. The result is a realistic, long-lasting composite that mimics the look of real wood.

Decorative Construction

Decorative construction features optional window and door designs. Available in a variety of colors and finishes. Customizable to meet your needs.

Insulation

Insulation is available in a variety of R-values.

Clearance

Clearance is available in a variety of R-values.

Construction

Construction details are shown in the accompanying drawings.

Intellisure® Insulation

Intellisure® insulation is available in a variety of R-values.

Additional Features

Additional features include optional window and door designs.

KEY

KEY:
 R-Value = 1/2" Factor
 SHGC = Solar Heat Gain Coefficient
 VLT = Visible Light Transmission
 U = High Airflow Glass
 IS = Insulated Glass
 ER = Canadian Energy Rating

Climate Zones

Climate zones are shown on the map.

Rev. 1/10/23

NOTE: PER MANUFACTURER R-VALUE PROVIDED HEREIN INCLUDES GLAZING



Fiberglass and Steel Entry Doors

Glazing Performance - Fiberglass

1 Find panel type and size. Note category A, B, C or D.

Panel Style	Glazing	U-Value	SHGC	VLT	U-Value	SHGC	VLT
Full Light	Any	Any	Any	Any	Any	Any	Any
Flush Glazed Full Light	Any	Any	Any	Any	Any	Any	Any
3/4 Light	56	Any	Any	Any	56	Any	Any
Flush Glazed 3/4 Light	56	Any	Any	Any	56	Any	Any
3/4 Light	50	Any	Any	Any	50	Any	Any
Flush Glazed 3/4 Light	50	Any	Any	Any	50	Any	Any
Flush Glazed 3/4 Light	50	34	Any	Any	50	34	Any
3 Light Equal	Any	Any	Any	Any	Any	Any	Any
1/2 Light 1 Panel	56	Any	Any	Any	56	Any	Any
1/2 Light 1 Panel Flank	Any	Any	Any	Any	Any	Any	Any
1/2 Light 2 Panel	56	Any	Any	Any	56	Any	Any
Flush Glazed 1/2 Light	56	Any	Any	Any	56	Any	Any

2 Cross reference thermal table below with matrix in Step 1.

Glass Thickness	Type of Glazing	NFRC Certified Product #	Gap Fill	U-Value	SHGC	VLT %	Shaded Areas Meet ENERGY STAR® Performance Criteria in Zones Shown	
							U.S.	Canada
1/4"	1" IG Low-E 52 (IG)	PEL-M-258-4794-00001	Argon	0.25	0.16	0.26	N	SC
1/4"	1" IG Low-E 52 Low-E (IG)	PEL-M-258-4794-00001	Argon	0.27	0.16	0.26	N	SC
1/4"	1" IG Low-E 52 Fixed Glaze (IG)	PEL-M-258-4828-00001	Argon	0.25	0.14	0.25	N	SC
1/4"	1" IG Low-E 52 Fixed Glaze (IG)	PEL-M-258-4828-00001	Argon	0.27	0.14	0.25	SC	
1/4"	1" IG Low-E 52 SGL (IG)	PEL-M-258-5104-00001	Argon	0.25	0.13	0.21	N	SC
1/4"	1" IG Low-E 52 SGL (IG)	PEL-M-258-5104-00001	Argon	0.27	0.13	0.21	SC	
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