

FOUNDATION NOTES:

- 1) PROVIDE NECESSARY SHEETING, SHORING, BRACING, ETC. AS REQUIRED DURING EXCAVATIONS TO PROTECT SIDES OF EXCAVATION.
- 2) SEE MECHANICAL, ELECTRICAL AND ARCHITECTURAL DRAWINGS FOR PIPE SLEEVE, PIPING, CONDUIT, HANDRAIL INSERTS AND EMBEDDED ITEMS PRIOR TO CONSTRUCTION.
- 3) DO NOT BACKFILL AGAINST FOUNDATION WALLS UNTIL FLOOR SLABS ARE IN PLACE OR PERMISSION IS OBTAINED FROM THE DESIGNER.
- 4) ALL SOIL SURROUND AND UNDER FOOTINGS SHALL BE PROTECTED FROM FROST ACTION AND FREEZING DURING THE COURSE OF CONSTRUCTION.
- 5) WHERE FOOTINGS ARE IN CLOSE PROXIMITY OF SEWERS, BOTTOM OF FOOTINGS SHALL BE AT LEAST 8" BELOW INVERT ELEVATION OF SEWERS.

CONCRETE:

- 1) ALL CONCRETE WORK, DETAILING, FABRICATION AND ERECTION OF STEEL REINFORCING BARS SHALL CONFORM TO THE LATEST A.C.I. SPECS AND DETAILING MANUAL.
- 2) ALL CONCRETE SHALL ATTAIN THE FOLLOWING 28 DAY COMPRESSIVE STRENGTHS:
 - FOOTINGS, PIERS, FOUNDATION WALLS: 3000 PSI
 - SLAB ON GRADE: 4000 PSI
 - EXPOSED CONCRETE LANAI SLAB: 4000 PSI WITH 6% +/- 1% ENTRAINED AIR AND LESS THAN 50% WATER TO CONCRETE RATIO.
- 3) ALL CONCRETE SHALL BE PORTLAND CEMENT CONFORMING TO ASTM C150 AND AGGREGATE CONFORMING TO ASTM C33.
- 4) CONCRETE ADMIXTURES SHALL BE USED TO FACILITATE CONCRETE PLACEMENT, AID DIFFICULT PLACING CONDITIONS OR ASSIST IN ATTAINING SPECIFIED CONCRETE QUALITIES. ADMIXTURES SHALL HAVE LESS THAN 0.05 PERCENT CHLORIDES IONS.
 - AIR ENTRAINMENT PER ASTM C260
 - WATER REDUCER PER ASTM C494, TYPE A OR B
 - ACCELERATOR PER ASTM C494, TYPE C, D OR E
 - SUPERPLASTICIZER PER ASTM C494, TYPE F OR G
- 5) ALL REINFORCING BARS, DOWELS, AND TIES SHALL CONFORM TO ASTM A615, GRADE 60. ALL REINFORCING STEEL SHALL BE CONTINUOUS.
- 6) REINFORCING STEEL SPLICES SHALL BE IN ACCORDANCE WITH ACI 318 SECTIONS 12.15, 12.16. PROVIDE CLASS B SPLICES FOR VERTICAL AND HORIZONTAL WALL STEEL AND LONGITUDINAL AND TRANSVERSE FOOTING STEEL. PROVIDE CORNER BARS TO MATCH ALL HORIZONTAL REINFORCING IN FOOTING.
- 7) REINFORCED CONCRETE WALLS AND TRENCH FOOTINGS SHALL HAVE CORNER BARS AT ALL INTERSECTIONS OF THE SAME SIZE AND SPACING OF THE MAIN HORIZONTAL REINFORCING.
- 8) PROVIDE 2 #5 BARS EACH SIDE OF ALL OPENINGS AND 2-#5 X 4'-0" DIAGONAL BARS AT CORNERS OF OPENINGS.
- 9) PROVIDE DOWELS BETWEEN ALL FOOTINGS, WALLS, AND PIERS TO MATCH SIZE AND SPACING OF VERTICAL REINFORCING.

GENERAL NOTES:

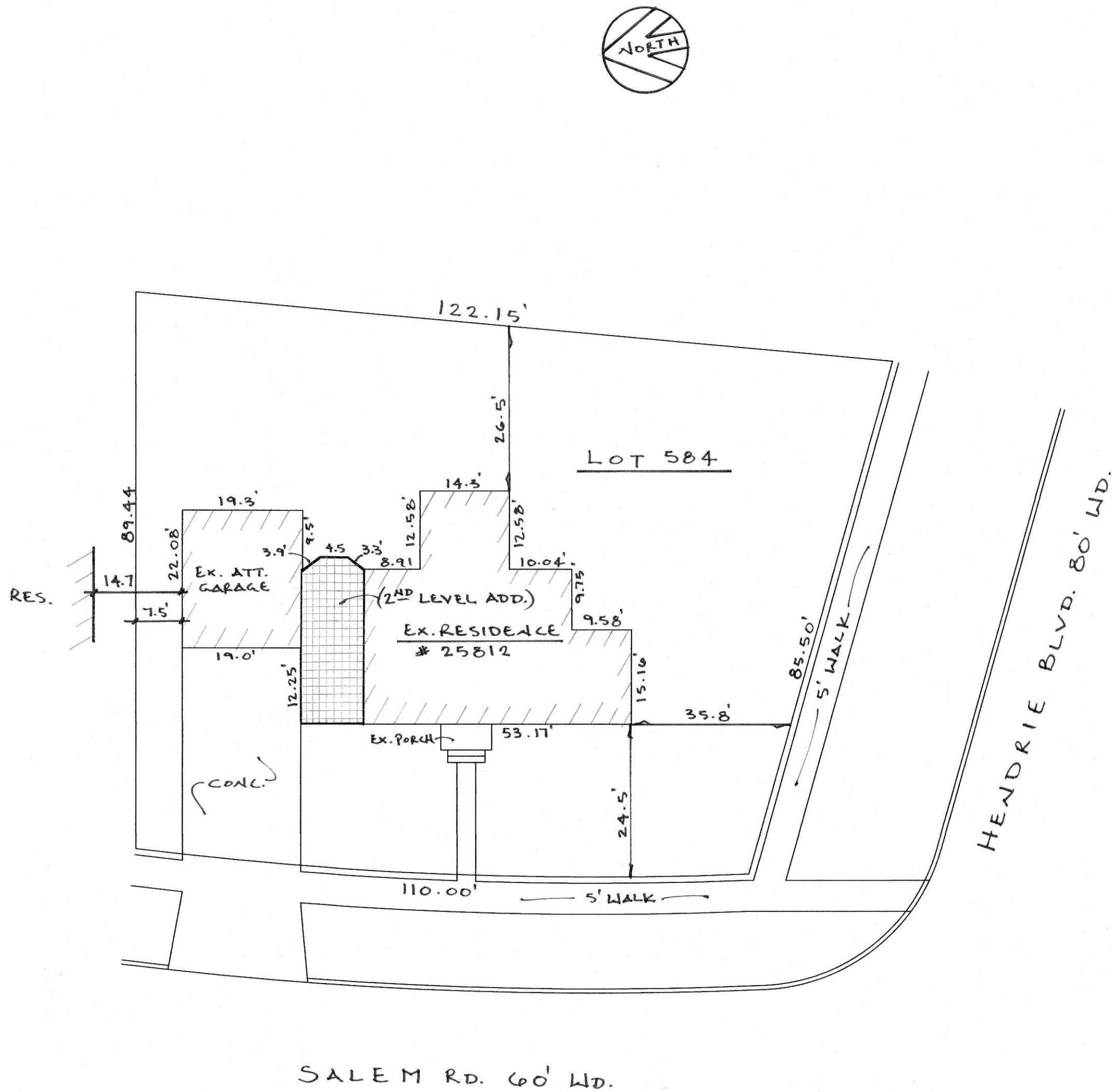
1. ALL FOOTINGS SHALL BE PLACED ON UNDISTURBED SOIL.
2. ALL STEEL FABRICATION AND ERECTION SHALL MEET ALL A.I.S.C. CODE
3. BRACE ALL WALLS PRIOR TO PLACING BACKFILL
4. HEADERS, JOISTS, AND RAFTERS SHALL BE #2 OR BETTER SPF MINIMUM
5. WINDOW ROUGH OPENINGS GIVEN ARE FOR "EAGLE WINDOW & DOOR" UNITS - VERIFY WITH SUPPLIER
6. ALL STAIRWAYS SHALL HAVE 6'-8" MIN. HEADROOM WITH 10" TREAD & MAX. 7 3/4" RISER
7. DOUBLE OR LADDER JOIST UNDER ALL PARALLEL PARTITIONS
8. APPROVED FIRESTOP MATERIALS SHALL BE PROVIDED IN ALL DROPS AND CHASES FOR ELECTRICAL, PLUMBING, AND HVAC
9. JOB SET OF PLANS FOR BUILDING MUST BE ON-SITE FOR ALL ROUGH FRAMING INSPECTIONS
10. ALL WORK COVERED WITHOUT INSPECTION WILL BE REQUIRED TO BE UNCOVERED AND INSPECTED
11. ALL ANGLES SHALL BE 45 DEGREES UNLESS OTHERWISE NOTED
12. DO NOT SCALE DRAWINGS - USE GIVEN DIMENSIONS
13. CONSTRUCTION OF BUILDING THERMAL ENVELOPE SHALL COMPLY WITH MRC 2015 CHAPTER 11 & ALL CERTIFICATIONS AND INSPECTIONS SHALL BE PROVIDED FOR TOWNSHIP APPROVAL.

WALL BRACING NOTES:

- 1) WALL BRACING TO BE CONTINUOUS TYPE
- 2) ALL EXTERIOR WALLS SHALL HAVE 7/16" OSB CONTINUOUS INSTALLED ON EXTERIOR SIDE OF STUD.
- 3) NAILING SHALL BE WITH 8d NAILS @ 12" IN THE FIELD AND 6" AT THE EDGES UNO.
- 4) ALL CORNERS SHALL BE CONSTRUCTED PER SK-8 CORNER DETAIL.
- 5) ALL INTERIOR GYPSUM SHALL BE ATTACHED BY THE FOLLOWING SCHEDULE:
 - Interior Wall Bracing Gypsum Fastening Schedule
 - Fasteners:
 - Nails
 - 13 gage, 1 3/8" long, 19/64 head
 - 0.098" diameter, 1 1/4" long annular-ringed, 5d cooler nail
 - 0.086" diameter, 1 5/8" long, 15/64" head
 - gypsum board nail, 0.086" diameter, 1 5/8" long, 9/32" head
 - Screws
 - Type S or W per ASTM C 1002 and to be 1 1/8" long min.
 - Maximum Spacing of Fasteners (max stud spacing 16" o.c.)
 - WITHOUT Adhesive
 - Nails 8" o.c.
 - Screws 16" o.c.
 - With Adhesive
 - Nails 16" o.c.
 - Screws 24" o.c.
- 6) REFERENCE SKETCHES FOR SPECIFIC DETAILS FOR ADDITIONAL BRACING

General Design Loads	
Live Loads	
Decks	40 psf
Fire Escapes	40 psf
Passenger Vehicle	50 psf (or 2000 lbs projected on 20 in 2)
Garages	
Attics w/o storage	10 psf
Attics w/ storage	20 psf
Rooms other than sleeping	40 psf
Sleeping Rooms	30 psf
Stairs	40 psf
Guard Rails and Hand Rails	200 lbs point ld. in any direction
Snow Loads [MRC R301.2.3, ASCE 7-98 Chapter 7.0]	
Ground snow load, pg	pg = 25 psf
Exposure Factor, Ce	Ce = 1.0
Thermal Factor, Ct	Ct = 1.1
Snow Load Importance Factor, Is	Is = 1.0
Flat Roof Snow Load, pf	pf = 0.7 Ce Ct Is pg = 0.7x1.0x1.1x1.0x25 = 19.25 psf
Wind Loads [MRC R301.2.1, ASCE 7-98 Chapter 6.0]	
Basic Wind Speed, V	V = 90mph
Exposure Factor, Iw	Iw = 1.0
Enclosure Classification	Enclosed
Wind Exposure Category	Exposure B
Internal Pressure Coefficient, GCpi	GCpi = +/- 0.18
Component and Cladding Pressure	Design pressure = 19.5psf

General Design Loads	
Earthquake Design Data [MRC R301.2.2, ASCE 7-98 Chapter 6.0]	
Seismic Use Group	
Seismic Use Group I	
Seismic Design Category A	
Seismic Design Category A	
Therefore, Seismic provisions are not required.	
[MRC R301.2.2] [ASCE 7-98 9.1.2.1.2 and 9.1.2.1.3]	
Soil Considerations [MRC R401.4.1]	
Presumptive Load-bearing Values	
Clay, Sandy Clay, Silty Clay, Clayey Silt, Silt and Sandy Silt (Cl, ML, MH and CH)	1,500 psf
Lateral Load due to Soils	
Poorly graded clean sands; gravelly sand mixtures; gravel-sand mixes	



DESCRIPTION:

LOT 584 HUNTINGTON WOODS, BEING A SUBDIVISION OF PART OF SECTION 21, T.14. N. R.11. E., ROYAL OAK TOWNSHIP & VILLAGE OF ROYAL OAK (NOW CITY OF HUNTINGTON WOODS), OAKLAND COUNTY, MICHIGAN.

SITE PLAN

SCALE: 1/16" = 1'-0"

CHRIS MORGAN & ASSOCIATES, INC.
DESIGN-BUILD
4435 NEWCASTLE DR., CLARKSTON MI 48348 248-393-3462

GREENBERG/VARNER RESIDENCE
25812 SALEM, HUNTINGTON WOODS, MI 48070

SITE PLAN

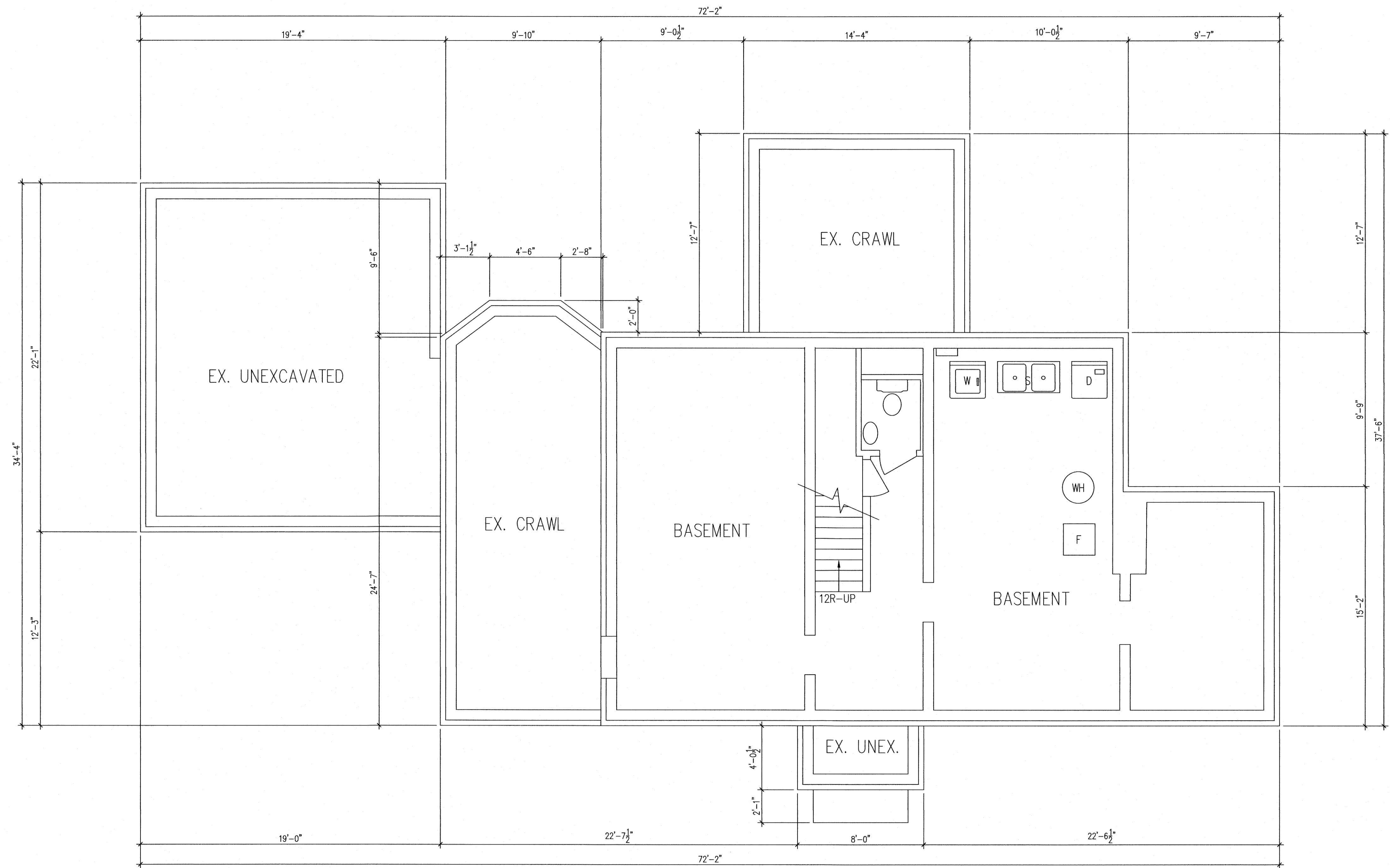
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BASEMENT & FOUNDATION PLAN

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

GREENBERG/VARNER RESIDENCE
25812 SALEM, HUNTINGTON WOODS, MI 48070

FOUNDATION
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WALL LEGEND

NEW WALL CONSTRUCTION

EXISTING WALLS

WALLS TO BE REMOVED

SQUARE FOOTAGE:

MAIN LEVEL : 1420 EXISTING

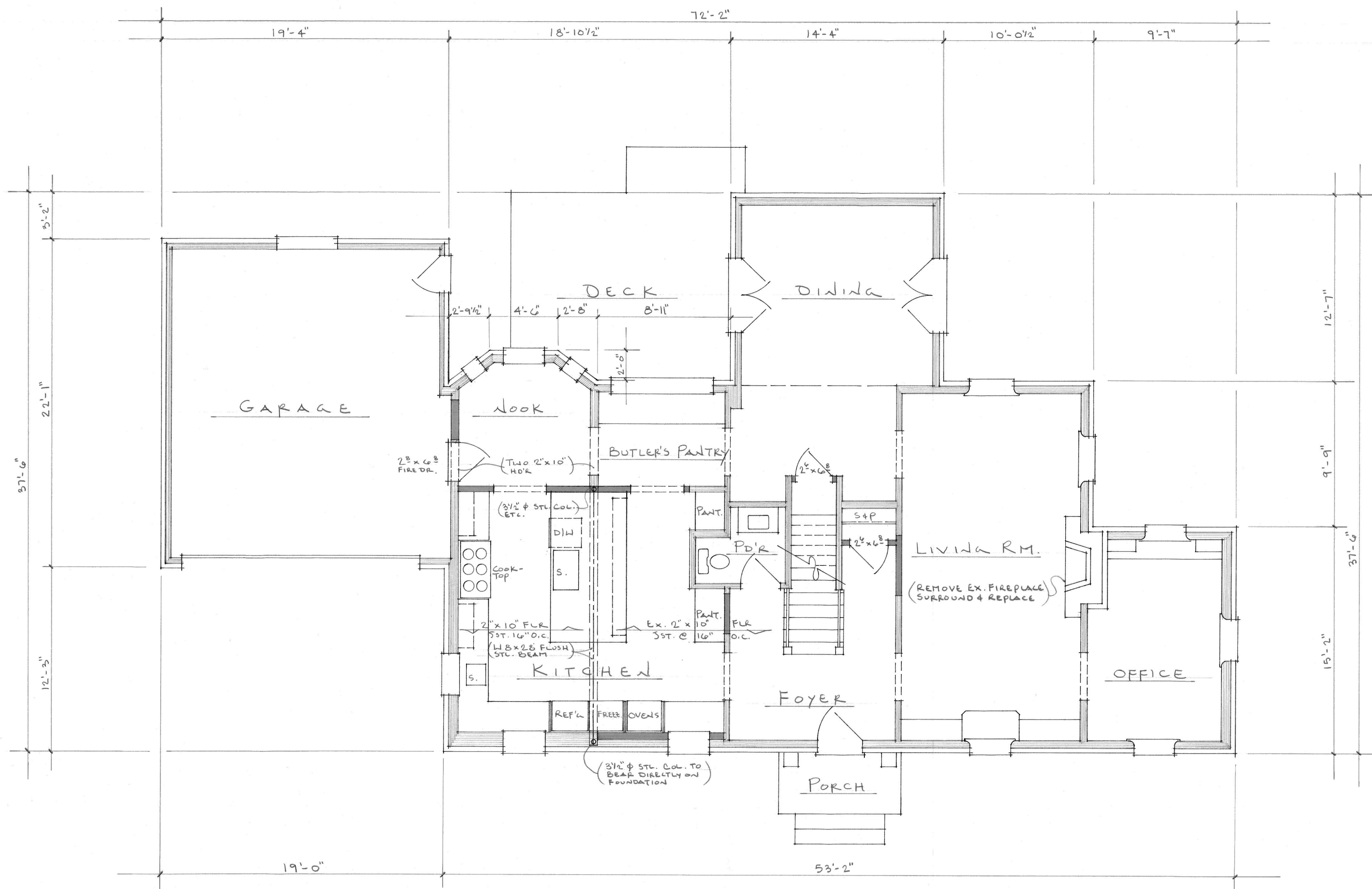
SEC. LEVEL : 941 EXISTING

THIRD LEVEL : 273 EXISTING

SEC. LEVEL : 2640 EXISTING

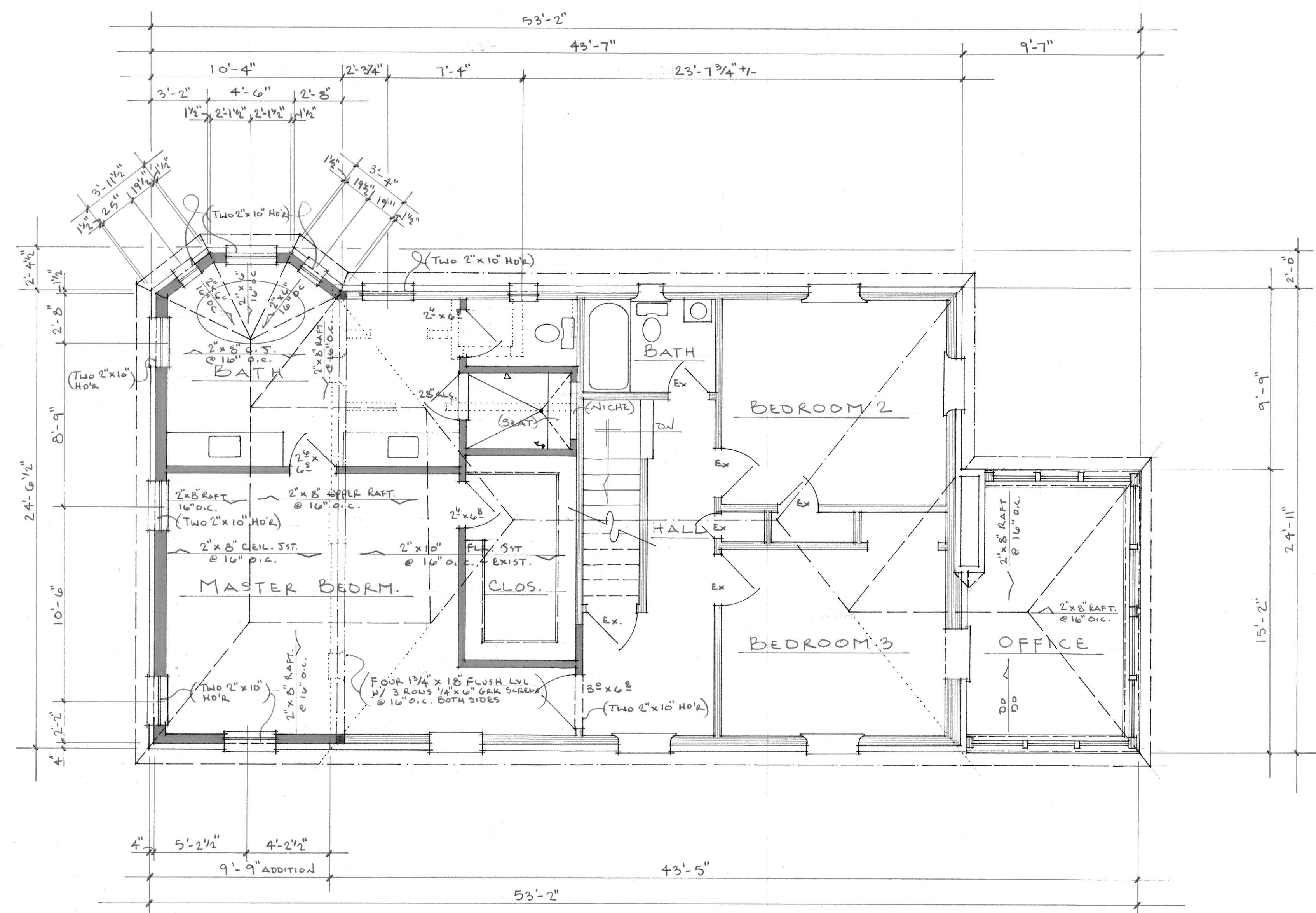
SEC. LEVEL : 251 ADDITION

TOTAL : 2897



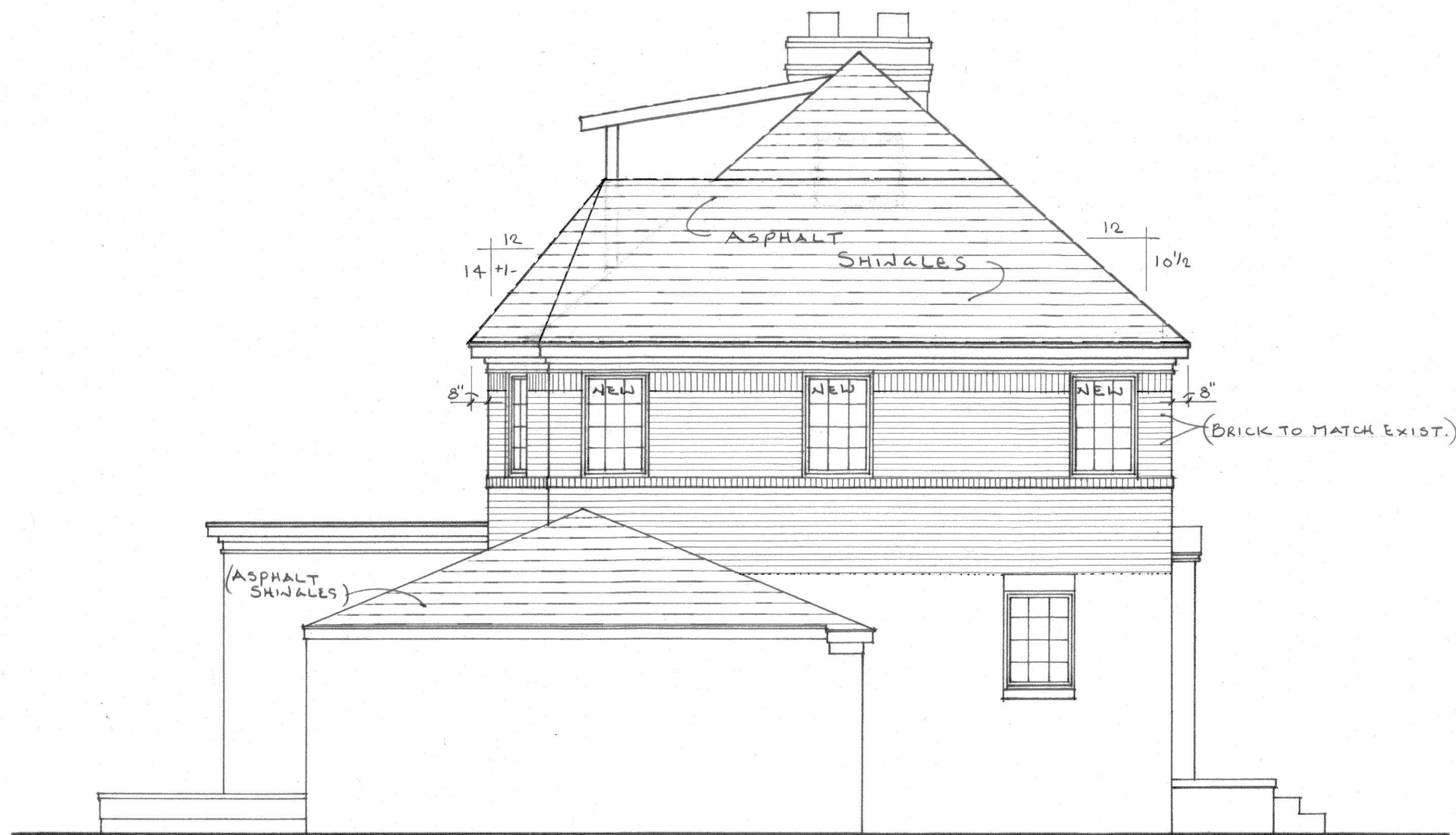
MAIN LEVEL FLOOR PLAN

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



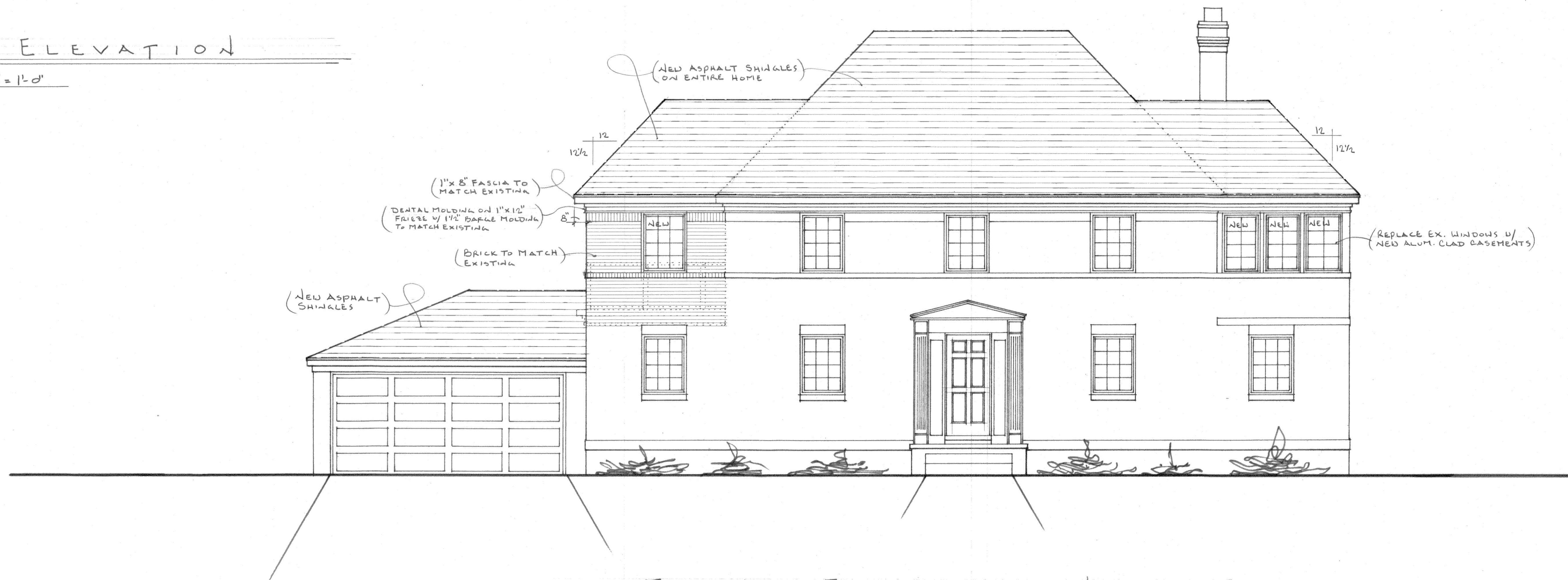
SECOND LEVEL FLOOR PLAN

SCALE: 1/4" = 1'-0" 257 +/- ADDED SQ. FT.



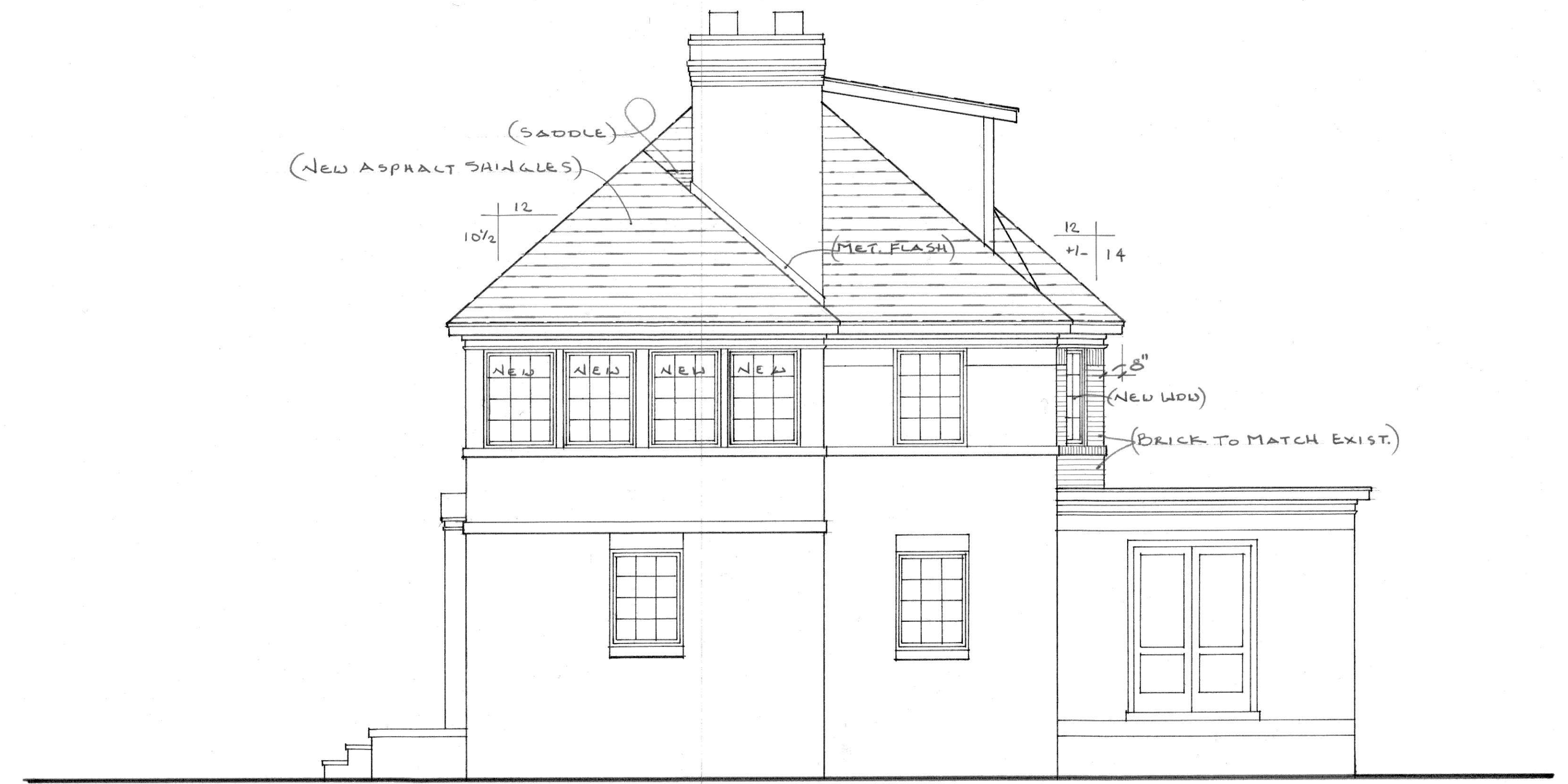
LEFT SIDE ELEVATION

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



FRONT ELEVATION

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



RIGHT SIDE ELEVATION

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



REAR ELEVATION

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