



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 "MARVIN ULTIMATE CLAD" 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 AND THERMAL ENVELOPE SHALL COMPLY WITH MRC 2015 AND MUEC 2015 & 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 #d 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 Garages	50 psf (or 2000 lbs projected on 20 in 2)
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 7-10]	
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
	pf= 19.25 psf
Wind Loads [MRC R301.2.1, ASCE 7-10]	
Basic Wind Speed, V	V = 115mph
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 = 14.5psf

General Design Loads
Earthquake Design Data [MRC R301.2.2, ASCE 7-10]
Seismic Use Group
Seismic Use Group 1
Seismic Design Category A
Seismic Design Category A
Therefore, Seismic provisions are not required. [MRC R301.2.2]
Soil Considerations [MRC R401.4.1]
Confirmed Load-bearing Values
Silty sand and sandy clay
3,000 psf

1	COVER & GENERAL NOTES
2	LOWER LEVEL DEMO PLAN
3	MAIN LEVEL DEMO PLAN
4	UPPER LEVEL DEMO PLAN
5	PROPOSED LOWER LEVEL
6	PROPOSED MAIN LEVEL
7	PROPOSED UPPER LEVEL
8	ROOF PLAN
9	FOUNDATION PLAN
10	LOWER LEVEL ELECTRICAL PLAN
11	MAIN LEVEL ELECTRICAL PLAN
12	UPPER LEVEL ELECTRICAL PLAN
13	REAR & RIGHT ELEVATIONS
14	LEFT ELEVATION

GROSS SQUARE FOOTAGE CALCULATION

MAIN LEVEL EXISTING	2,305 SQ. FT.
MAIN LEVEL NEW	24 SQ. FT.
MAIN LEVEL TOTAL	2,329 SQ. FT.
UPPER LEVEL EXISTING	1,479 SQ. FT.
UPPER LEVEL NEW	297 SQ. FT.
UPPER LEVEL TOTAL	1,776 SQ. FT.
TOTAL FINISHED	4,105 SQ. FT.
*LANAI (OUTDOOR LIVING)	460 SQ. FT.
*PATIO (OUTDOOR LIVING)	284 SQ. FT.

PROPOSED RESIDENCE OF FRENKEL



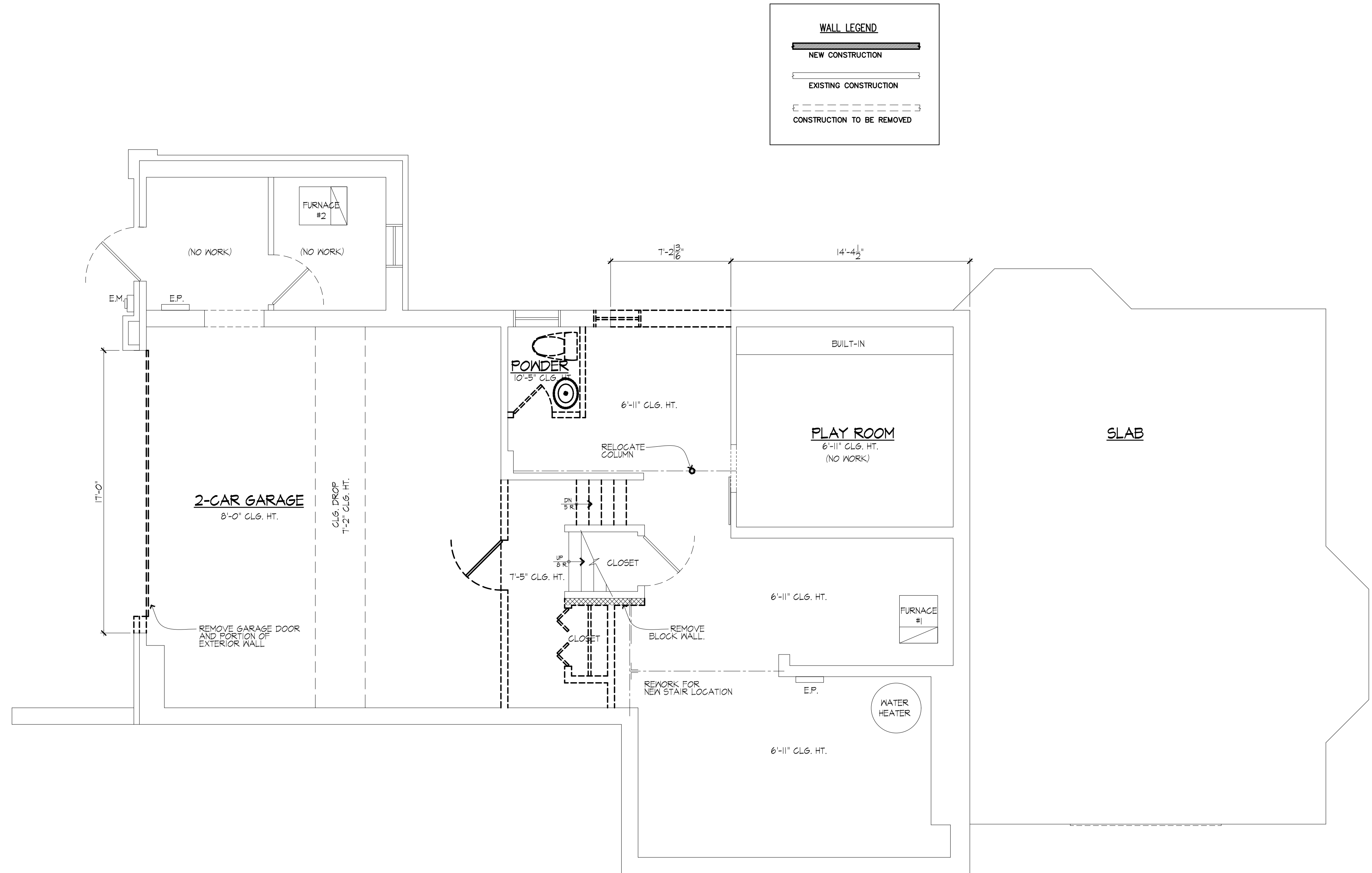
HELLER
& ASSOCIATES
7 SOUTH PERRY STREET - PONTIAC, MICHIGAN 48342 - OFFICE: (481) 322-8777 FAX: (481) 322-8222 - www.hellerhomes.net

FRENKEL RESIDENCE
8251 LINCOLN, HUNTINGTON WOODS, MI 48070

COVER SHEET
COPYRIGHT 2021

DRAWN BY:
B. HELLER
D. ABATE
REVISIONS:
07/14/2021

PAGE NO. #
10 OF 14



LOWER LEVEL DEMO PLAN

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



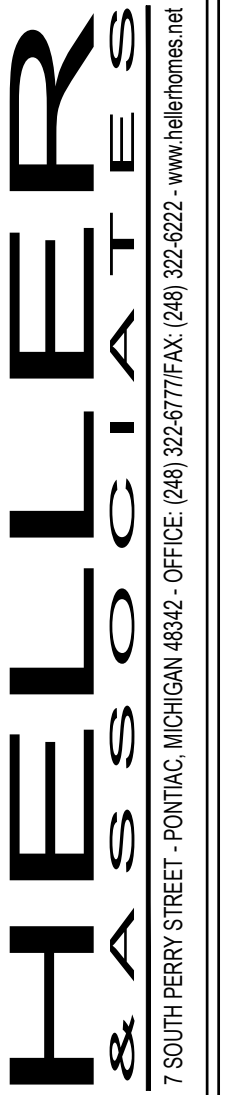
HELLER
& ASSOCIATES
7 SOUTH PERRY STREET - PONTIAC, MICHIGAN 48340 - OFFICE (248) 322-6222 - www.hellerhomes.net

FRENKEL RESIDENCE
8251 LINCOLN, HUNTINGTON WOODS, MI 48070

LOWER LEVEL
DEMO PLAN
COPYRIGHT 2021

DRAWN BY:
B. HELLER
D. ABATE
REVISIONS:
07/14/2020

PAGE NO. #
2 of 14

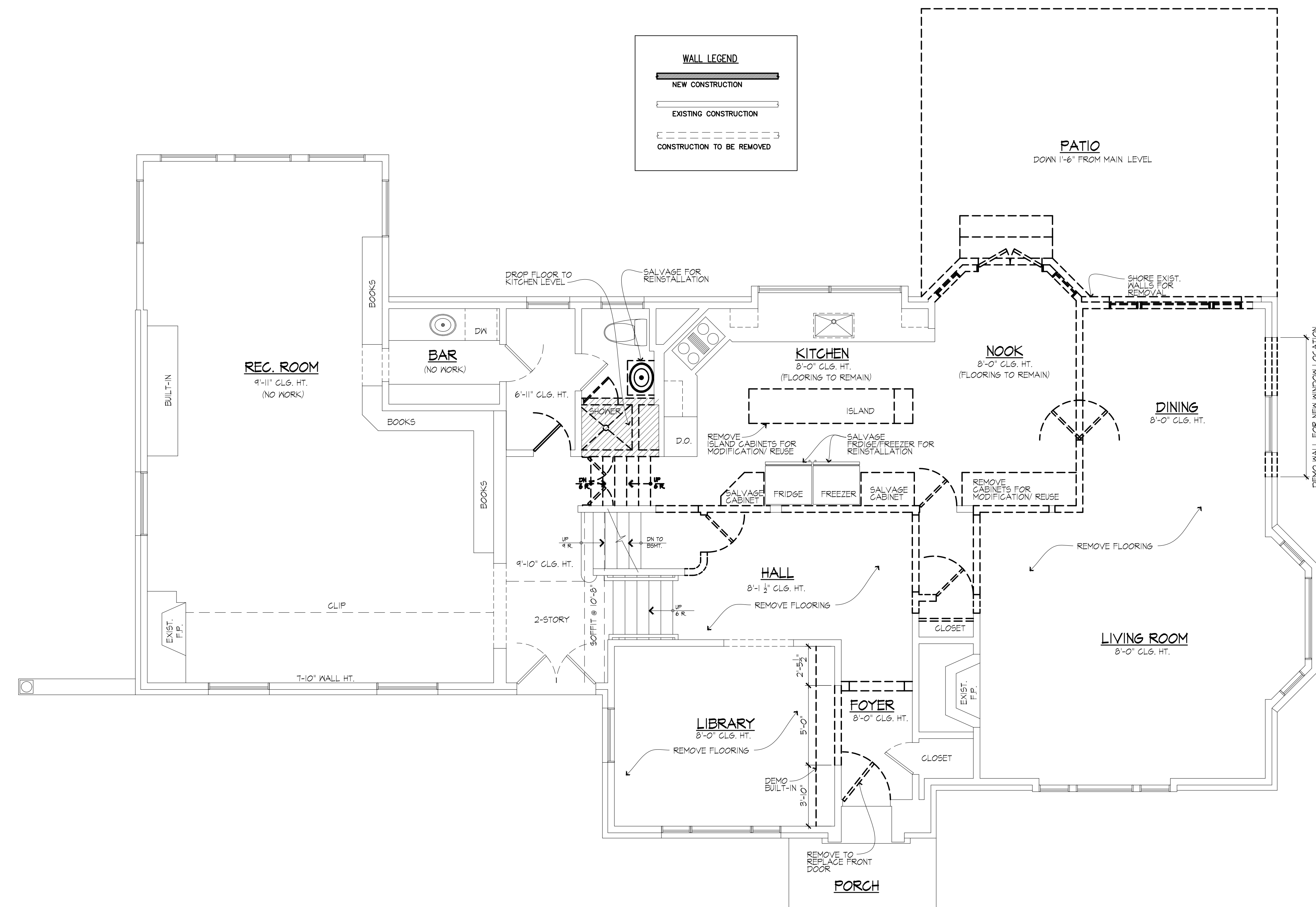


FRENKEL RESIDENCE
8251 LINCOLN, HUNTINGTON WOODS, MI 48070

MAIN LEVEL
DEMO PLAN
COPYRIGHT 2021

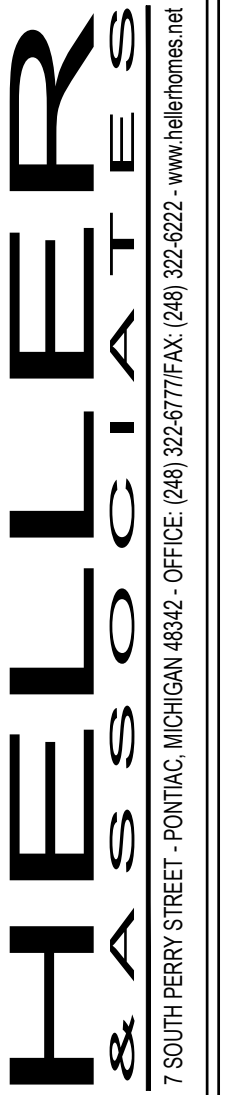
DRAWN BY:
B. HELLER
D. ABATE
REVISIONS:
07/14/2021

PAGE NO. #
3 OF 14



PROPOSED MAIN LEVEL DEMO PLAN

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

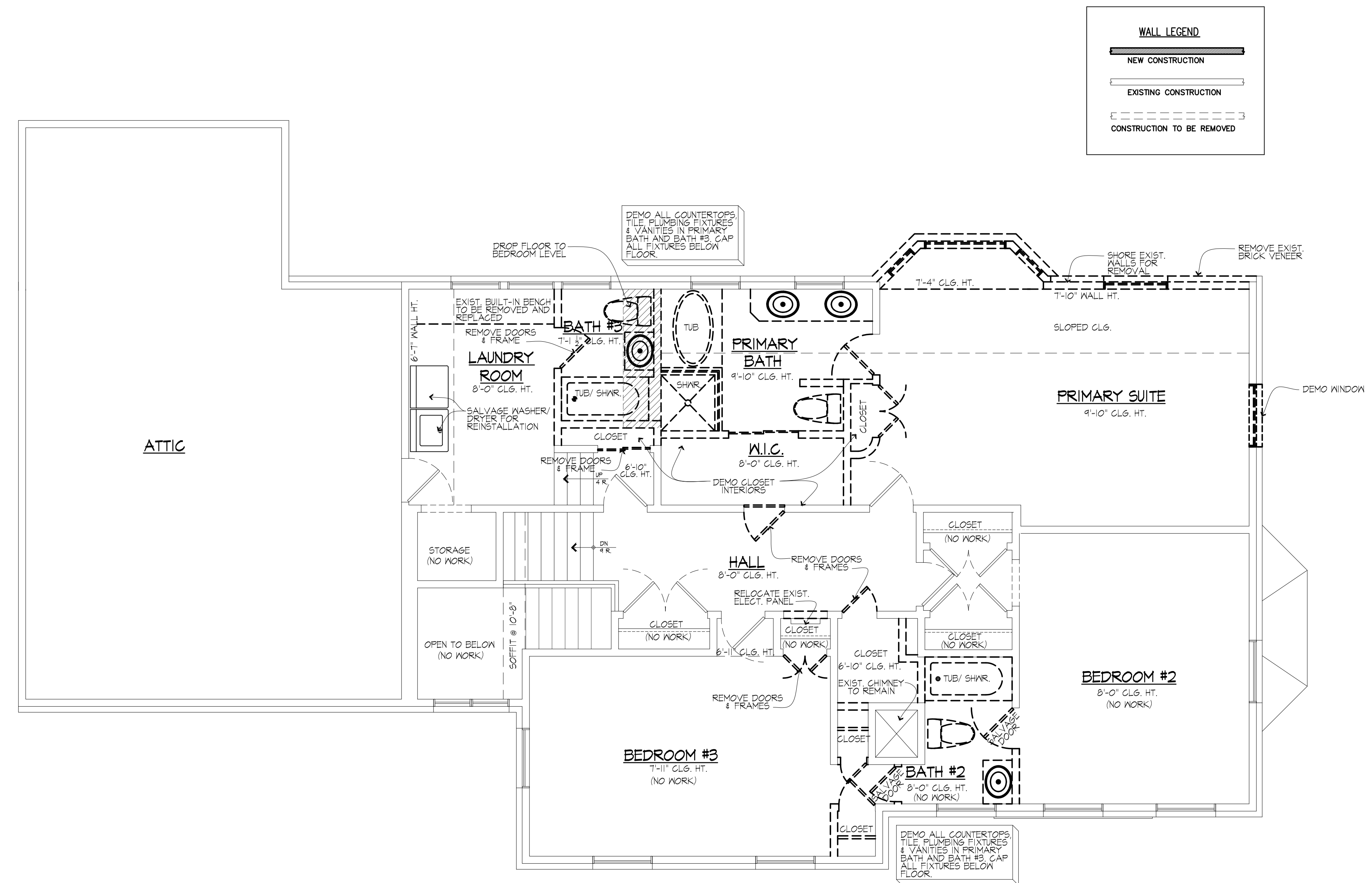


FRENKEL RESIDENCE
8251 LINCOLN, HUNTINGTON WOODS, MI 48070

UPPER LEVEL
DEMO PLAN
COPYRIGHT 2021

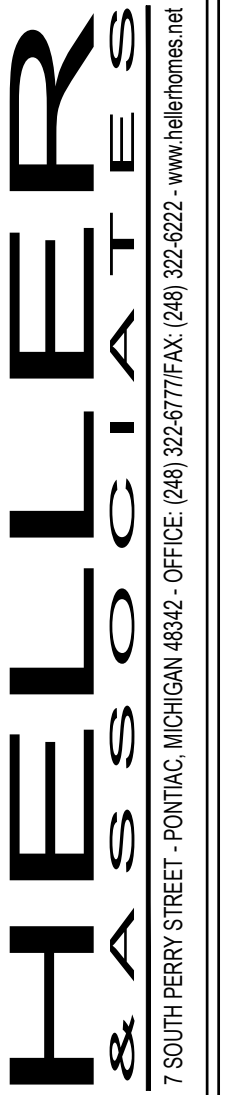
DRAWN BY:
B. HELLER
D. ABATE
REVISIONS:
07/14/2020

PAGE NO. #
4 OF 14



UPPER LEVEL DEMO PLAN

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

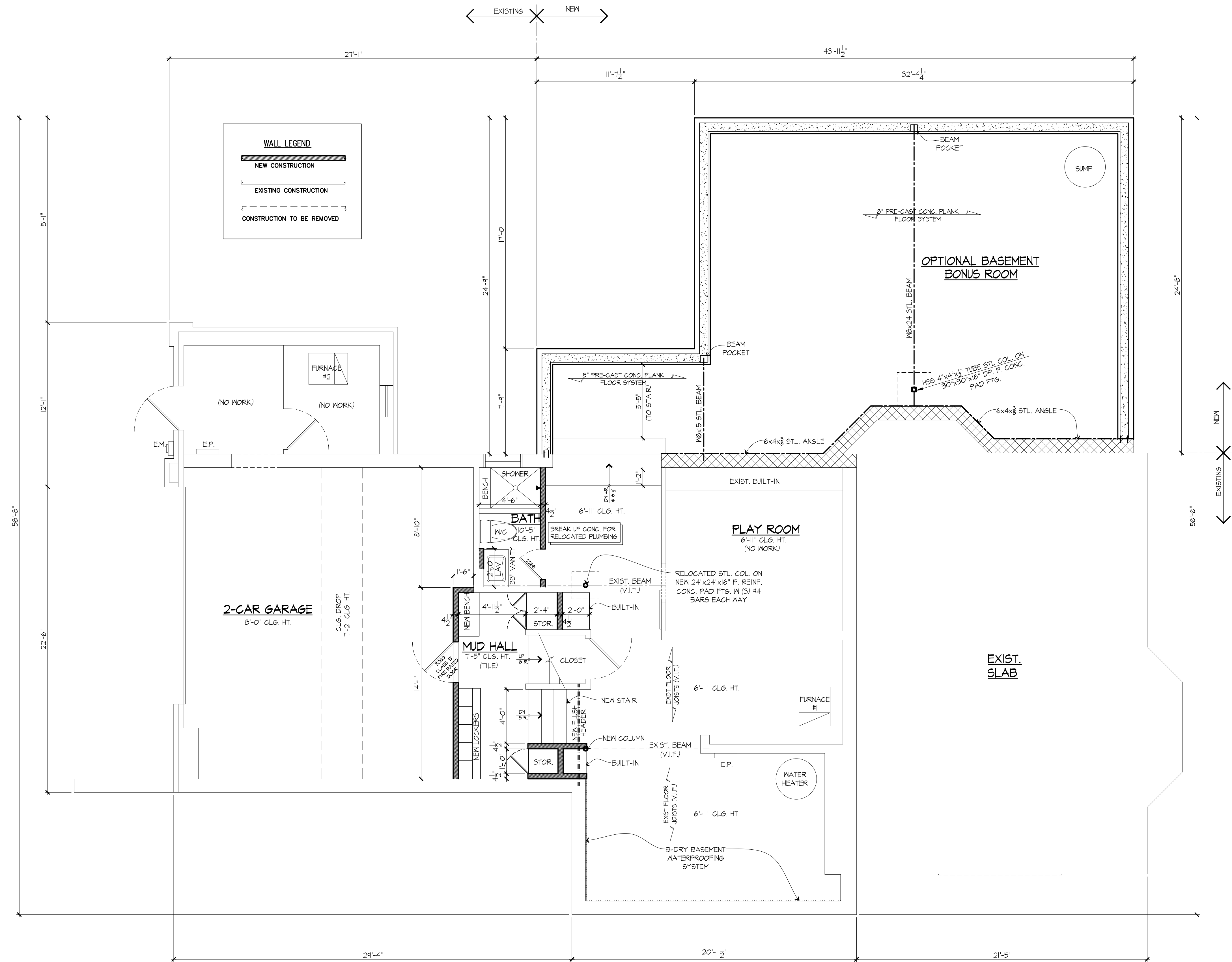


FRENKEL RESIDENCE
8251 LINCOLN, HUNTINGTON WOODS, MI 48070

LOWER LEVEL
PLAN

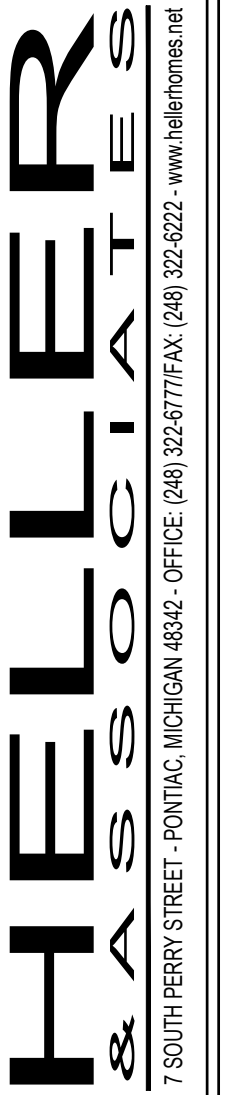
DRAWN BY:
B. HELLER
D. ABATE
REVISIONS:
07/14/2021

PAGE NO. #
5 OF 14



PROPOSED LOWER LEVEL FLOOR PLAN

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



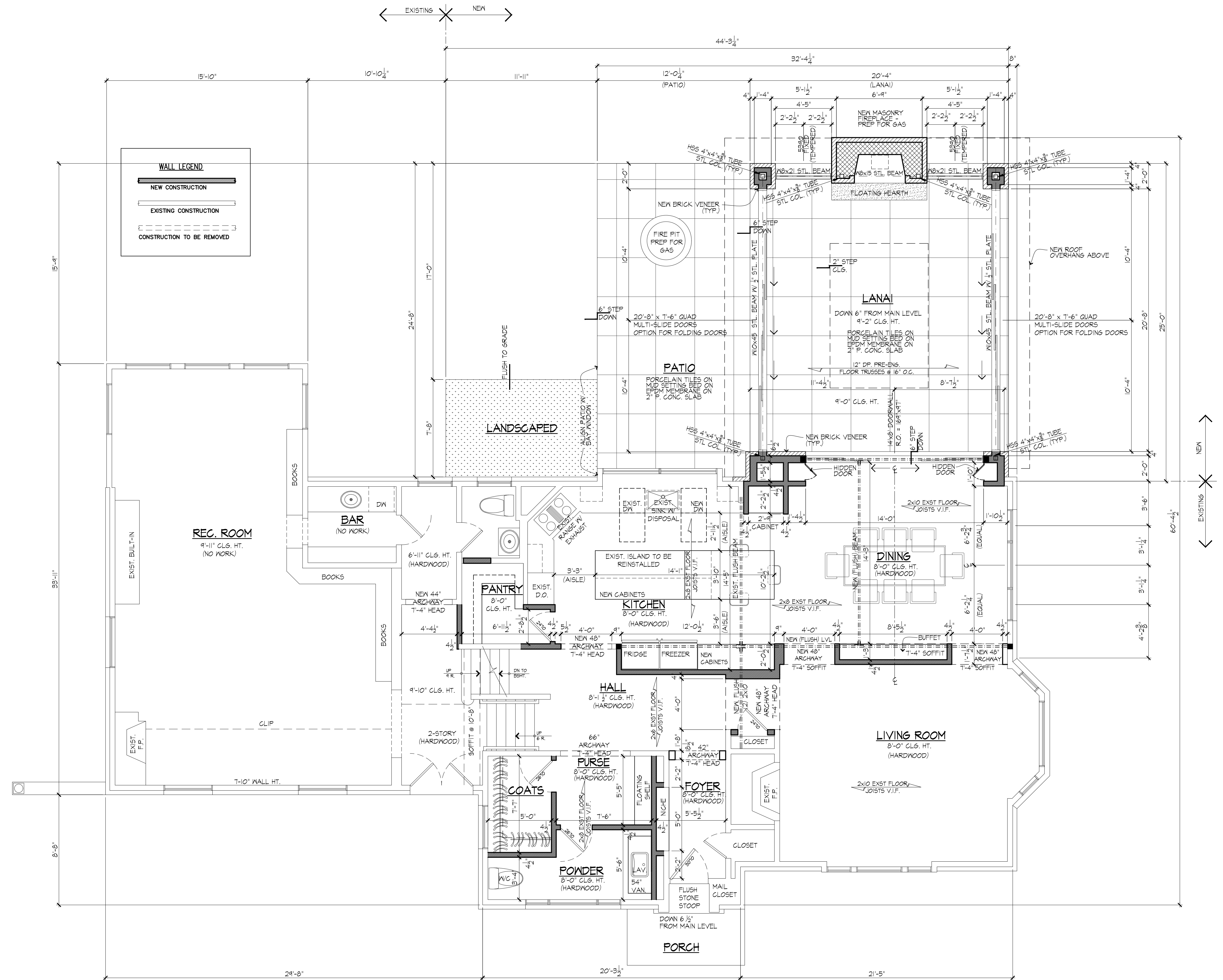
FRENKEL RESIDENCE
8251 LINCOLN, HUNTINGTON WOODS, MI 48070

MAIN LEVEL PLAN

COPYRIGHT 2021

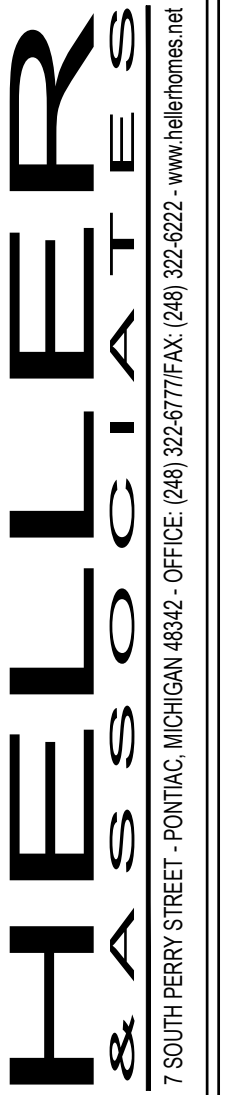
DRAWN BY:
B. HELLER
D. ABATE
REVISIONS:
07/14/2021

PAGE NO. #
6 OF 14



PROPOSED MAIN LEVEL FLOOR PLAN

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



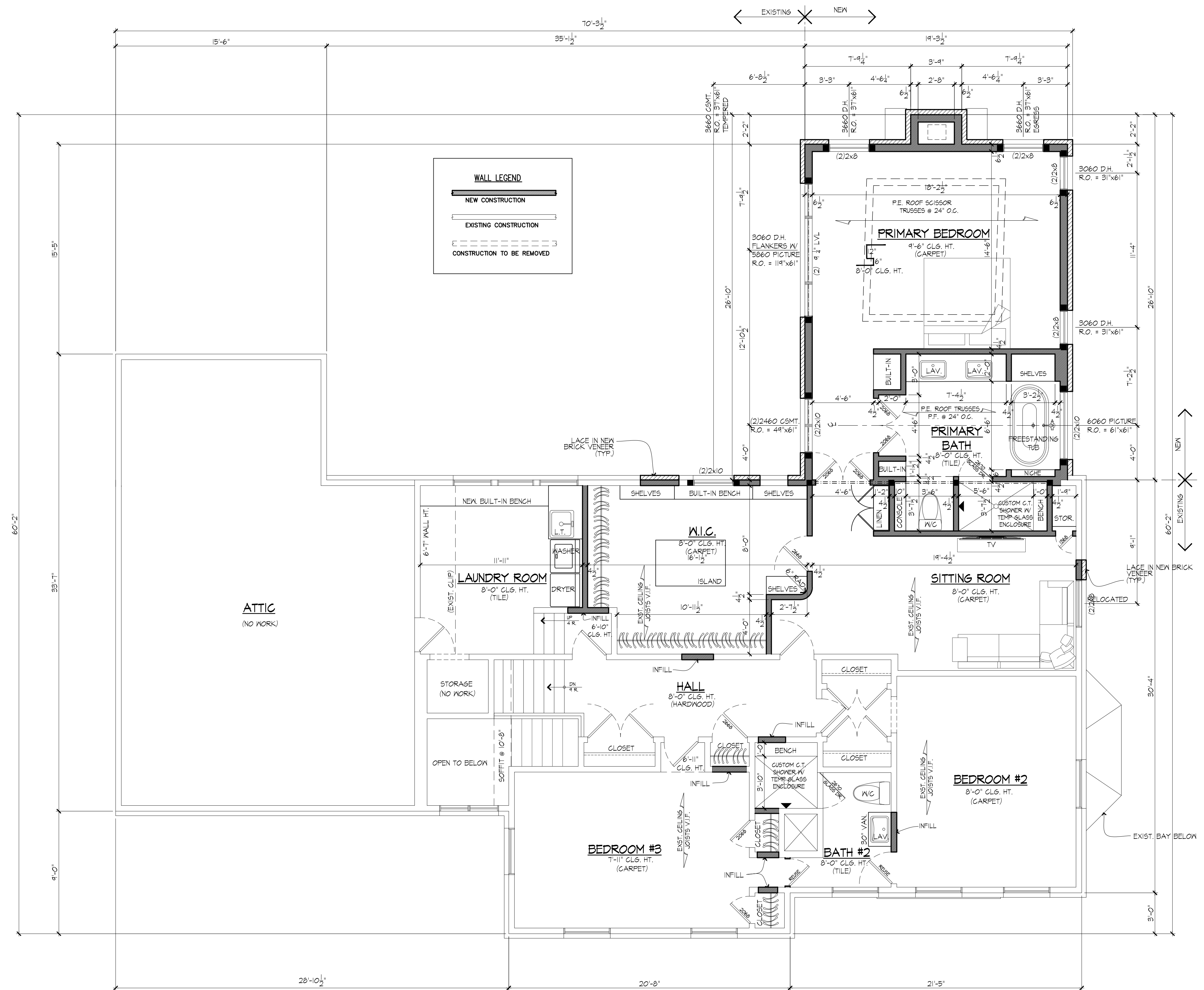
FRENKEL RESIDENCE
8251 LINCOLN, HUNTINGTON WOODS, MI 48070

UPPER LEVEL
PLAN

COPYRIGHT 2021

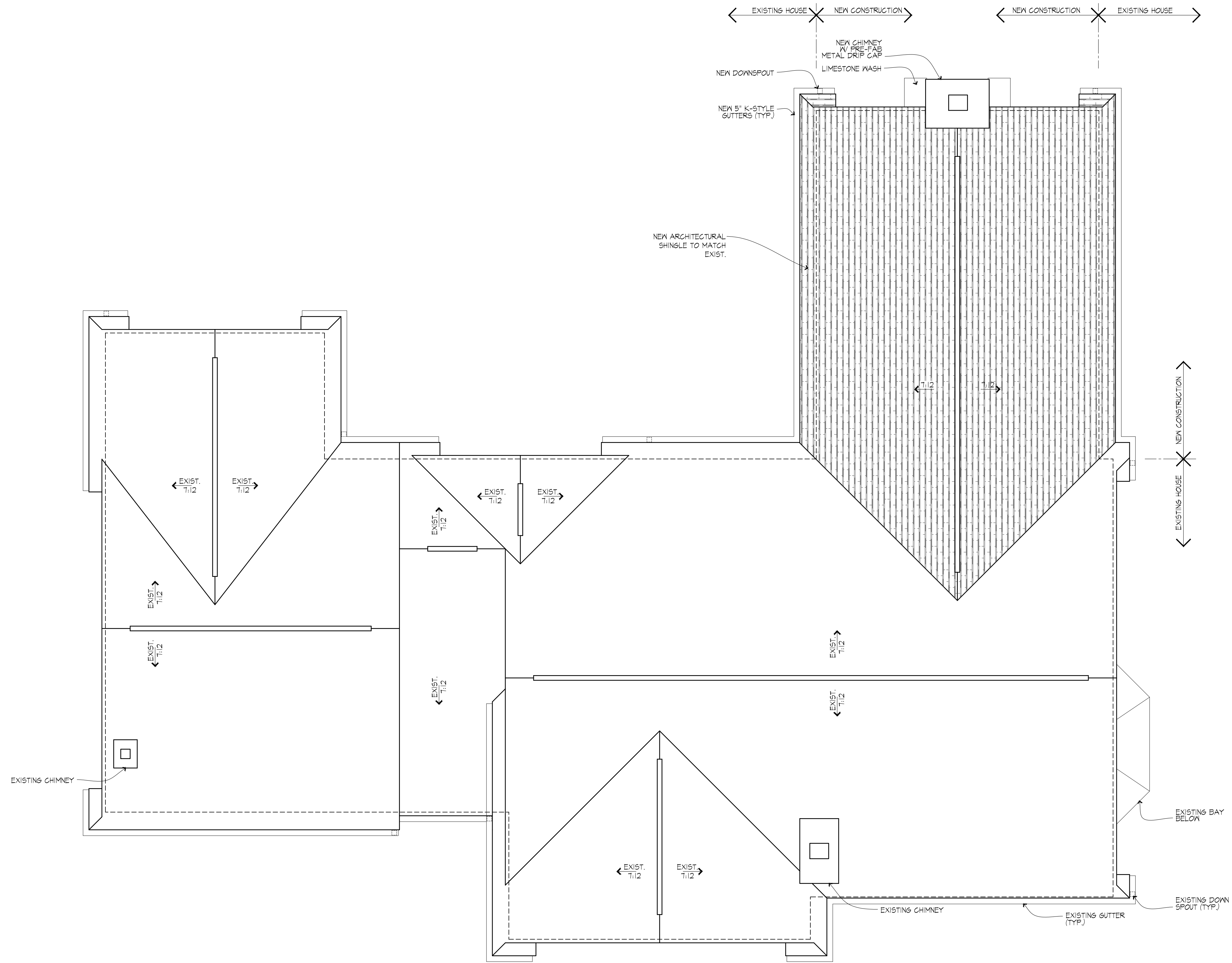
DRAWN BY:
B. HELLER
D. ABATE
REVISIONS:
07/14/2021

PAGE NO. #
7 OF 14



PROPOSED UPPER LEVEL FLOOR PLAN

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



PROPOSED ROOF PLAN

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



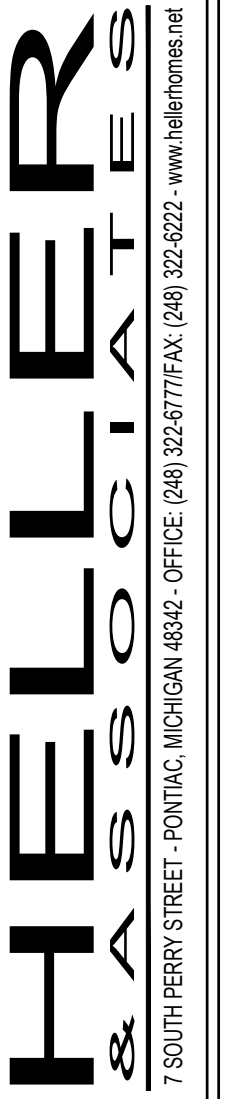
HELLER
& ASSOCIATES
DESIGN + BUILD
7 SOUTH PERRY STREET - PONTIAC, MICHIGAN 48302 - OFFICE (248) 322-6222 - www.hellerhomes.net

FRENKEL RESIDENCE
8251 LINCOLN, HUNTINGTON WOODS, MI 48070

UPPER LEVEL
PLAN
COPYRIGHT 2021

DRAWN BY:
B. HELLER
D. ABATE
REVISIONS:
07/14/2021

PAGE NO. #
8 OF 14



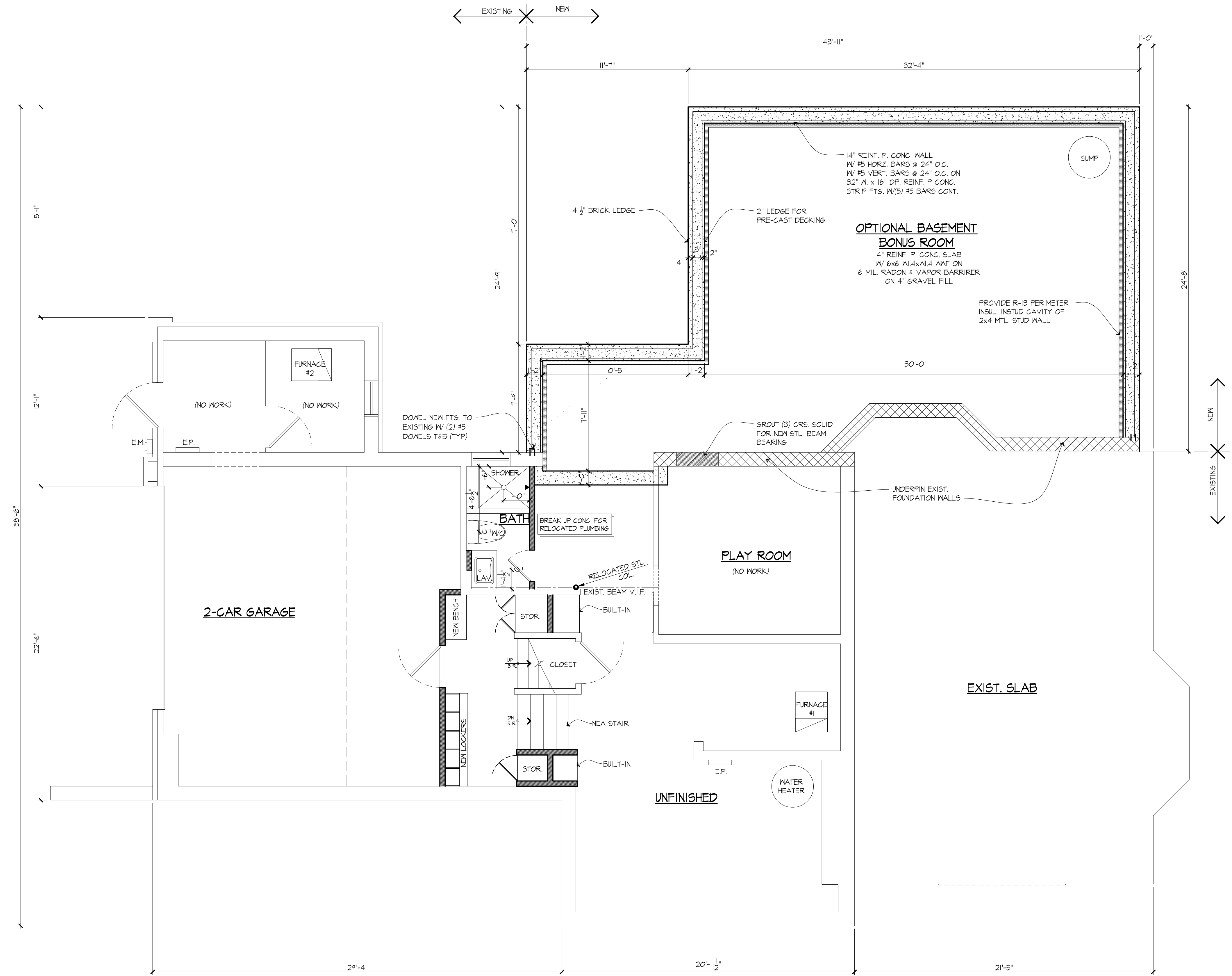
FRENKEL RESIDENCE
8251 LINCOLN, HUNTINGTON WOODS, MI 48070

FOUNDATION
PLAN

COPYRIGHT 2021

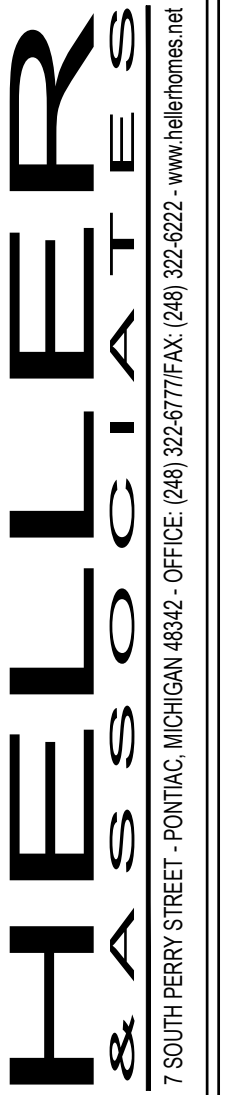
DRAWN BY:
B. HELLER
D. ABATE
REVISIONS:
07/14/2021

PAGE NO. #
9 OF 14



PROPOSED FOUNDATION FLOOR PLAN

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



FRENKEL RESIDENCE
8251 LINCOLN, HUNTINGTON WOODS, MI 48070

LOWER LEVEL
ELECTRICAL PLAN

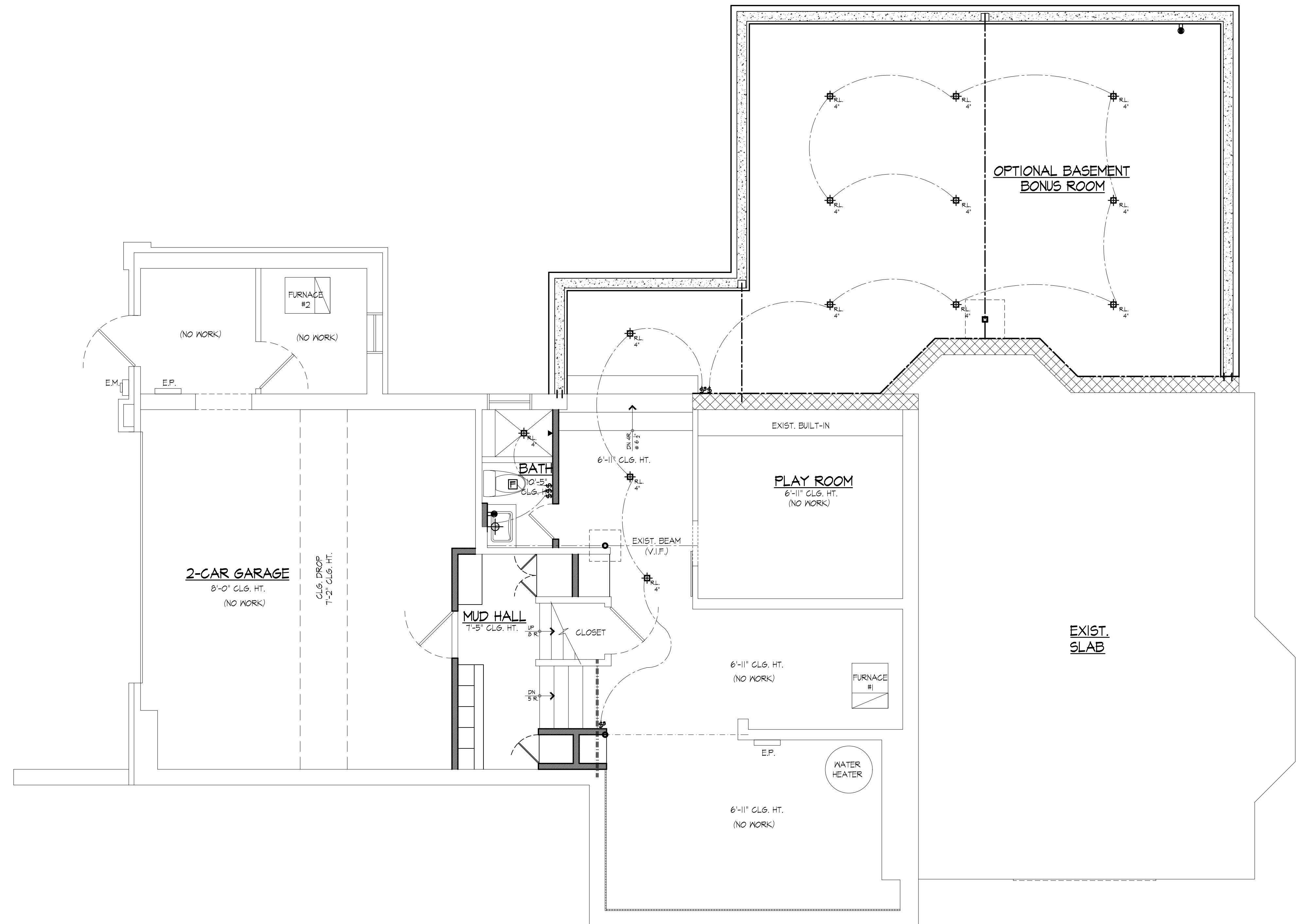
COPYRIGHT 2021

DRAWN BY:
B. HELLER
D. ABATE
REVISIONS:
07/14/2021

PAGE NO. #
10 OF 14

TYPICAL OF ALL DRAWINGS.

- | | |
|---|---|
|  | WALL SCONCE LIGHT FIXTURE. |
|  | RECESSED LIGHT FIXTURE (# INCH). |
|  | RECESSED DIRECTIONAL LIGHT FIXTURE (# INCH). |
|  | SURFACE MOUNTED LIGHT FIXTURE. |
|  | WATERPROOFED CEILING LIGHT FIXTURE. |
|  | PULL CHAIN LIGHT FIXTURE. |
|  | CLOSET LIGHT FIXTURE. |
|  | LED STRIP LIGHTING FIXTURE. |
|  | DUPLEX OUTLET. |
|  | GFCI OUTLET. |
|  | DUPLEX OUTLET IN FLOOR (TYP. FLUSH W/ FINISH FLR). |
|  | SMOKE DETECTORS, INTERCONNECTED
w/ BATTERY BACKUP. |
|  | CARBON MONOXIDE DETECTORS, w/ BATTERY BACKUP. |
|  | SINGLE POLE SWITCH. |
|  | THREE POLE SWITCH. |
|  | BATHROOM EXHAUST FAN, VENTED TO THE EXTERIOR. |
|  | BATHROOM EXHAUST FAN, w/ LIGHT VENTED TO THE
EXTERIOR. |
|  | EXTERIOR FLOOD LIGHT(S). |
|  | I.R. HEATER. |
|  | CEILING FAN. |
|  | CEILING FAN (w/ LIGHT FIXTURE). |
|  | 2x4 FLUSH MOUNTED FLUORESCENT FIXTURE. |
|  | MOTION DETECTOR SENSOR. |



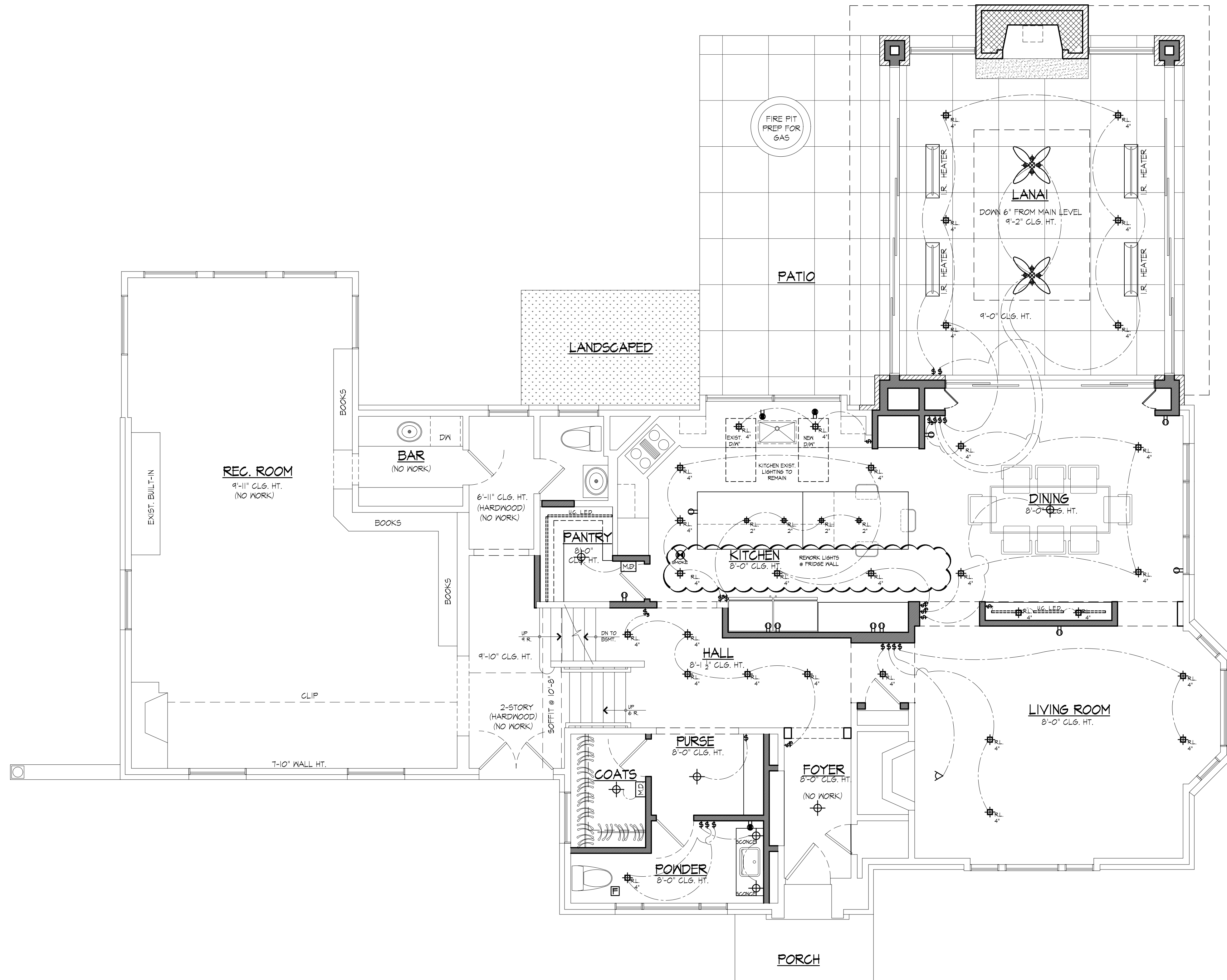
PROPOSED LOWER LEVEL ELECTRICAL PLAN

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

- ELECTRICAL PLAN -

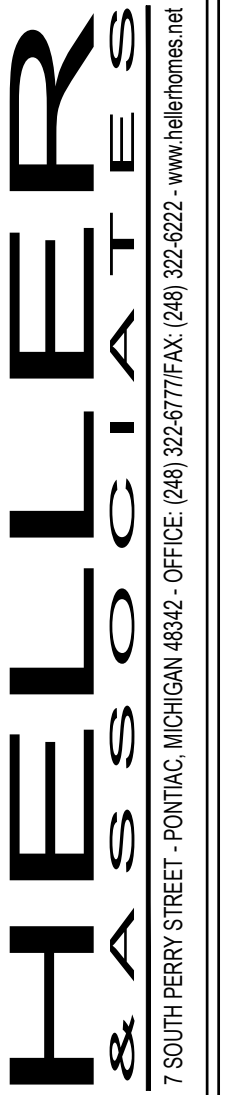
TYPICAL OF ALL DRAWINGS.

- WALL SCONCE LIGHT FIXTURE.
RECESSED LIGHT FIXTURE (# INCH).
RECESSED DIRECTIONAL LIGHT FIXTURE (# INCH).
SURFACE MOUNTED LIGHT FIXTURE.
WATERPROOFED CEILING LIGHT FIXTURE.
FULL CHAIN LIGHT FIXTURE.
CLOSET LIGHT FIXTURE.
LED STRIP LIGHTING FIXTURE.
DUPLEX OUTLET.
GFCI OUTLET.
DUPLEX OUTLET IN FLOOR (TYP. FLUSH W/ FINISH FLR.)
SMOKE DETECTORS, INTERCONNECTED
W/ BATTERY BACKUP.
CARBON MONOXIDE DETECTORS, W/ BATTERY BACKUP.
SINGLE POLE SWITCH.
THREE POLE SWITCH.
BATHROOM EXHAUST FAN, VENTED TO THE EXTERIOR.
BATHROOM EXHAUST FAN, W/ LIGHT VENTED TO THE
EXTERIOR.
EXTERIOR FLOOD LIGHT(S).
I.R. HEATER
CEILING FAN.
CEILING FAN (W/ LIGHT FIXTURE).
2x4 FLUSH MOUNTED FLUORESCENT FIXTURE.
MOTION DETECTOR SENSOR.



PROPOSED MAIN LEVEL ELECTRICAL PLAN

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



FRENKEL RESIDENCE
8251 LINCOLN, HUNTINGTON WOODS, MI 48070

UPPER LEVEL
ELECTRICAL PLAN

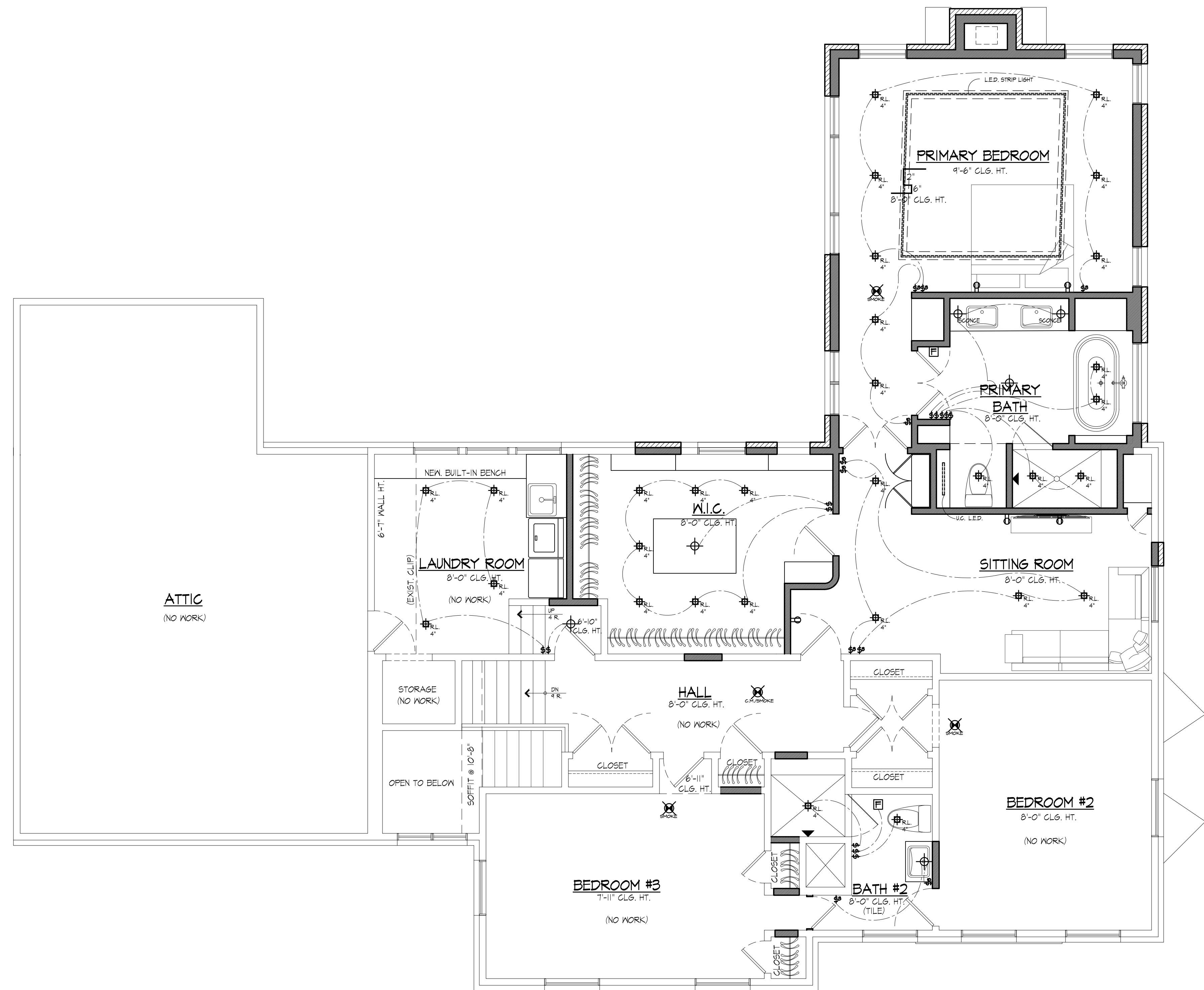
COPYRIGHT 2021

DRAWN BY:
B. HELLER
D. ABATE
REVISIONS:
07/14/2021

PAGE NO. #
12 OF 14

TYPICAL OF ALL DRAWINGS.

- | | |
|---|---|
|  | WALL SCONCE LIGHT FIXTURE. |
|  | RECESSED LIGHT FIXTURE (# INCH). |
|  | RECESSED DIRECTIONAL LIGHT FIXTURE (# INCH). |
|  | SURFACE MOUNTED LIGHT FIXTURE. |
|  | WATERPROOFED CEILING LIGHT FIXTURE. |
|  | PULL CHAIN LIGHT FIXTURE. |
|  | CLOSET LIGHT FIXTURE. |
|  | LED STRIP LIGHTING FIXTURE. |
|  | DUPLEX OUTLET. |
|  | GFCI OUTLET. |
|  | DUPLEX OUTLET WITH FINISH PLATE (TYP. FLUSH W/ FINISH PLATE). |
|  | SMOKE DETECTOR, INTERCONNECTED W/ BATTERY BACKUP. |
|  | CARBON MONOXIDE DETECTOR, W/ BATTERY BACKUP. |
|  | SINGLE POLE SWITCH. |
|  | THREE POLE SWITCH. |
|  | BATHROOM EXHAUST FAN, VENTED TO THE EXTERIOR. |
|  | BATHROOM EXHAUST FAN, W/ LIGHT VENTED TO THE EXTERIOR. |
|  | EXTERIOR FLOOD LIGHT(S). |
|  | IR HEATER |
|  | CEILING FAN. |
|  | CEILING FAN (W/ LIGHT FIXTURE). |
|  | 2x4 FLUSH MOUNTED FLUORESCENT FIXTURE. |
|  | MOTION DETECTOR SENSOR. |



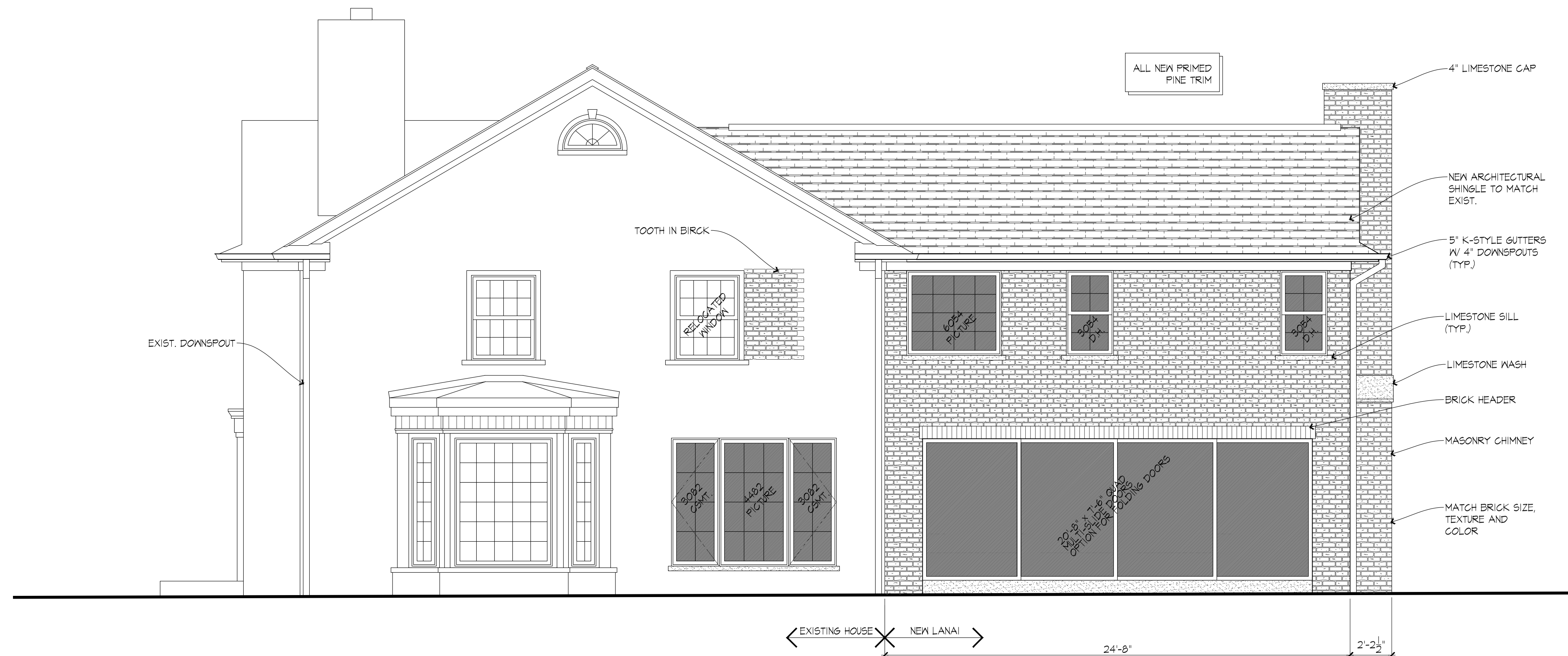
PROPOSED UPPER LEVEL ELECTRICAL PLAN

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



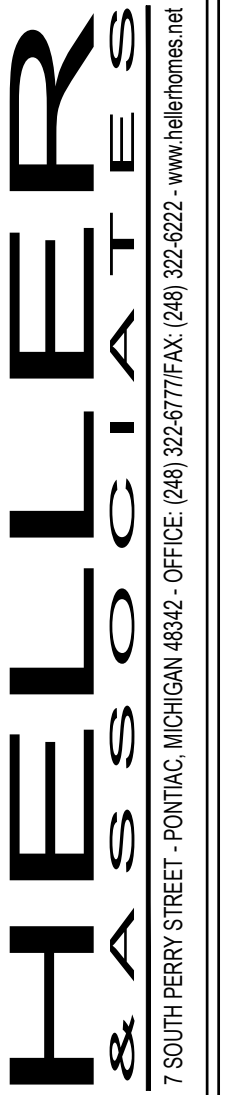
PROPOSED LEFT SIDE ELEVATION

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



PROPOSED FRONT ELEVATION

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



FRENKEL RESIDENCE
8251 LINCOLN, HUNTINGTON WOODS, MI 48070

PROPOSED
ELEVATIONS

COPYRIGHT 2021

DRAWN BY:
B. HELLER
D. ABATE
REVISIONS:
07/14/2021

PAGE NO. #
14 OF 14



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



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