

Location Survey of Lot 3 of "Westcliffe Manor"

Sheet 1 of 2 - Recorded Plat No. 3896

Situate in the 4th Election District

Howard County, Maryland

May 22, 1985 Scale: 1" = 50' Revised July 23, 1985

JAMES L. BUSHEY, JR. L.S. NO. 7687

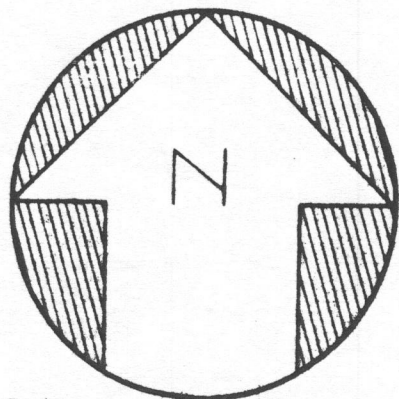
James L. Bushey, Jr.

5122 Bushey Road, Sykesville, Md. 21784

Phone 795-0931

Surveyor's Certificate:

I hereby certify that the improvements are located as shown hereon.

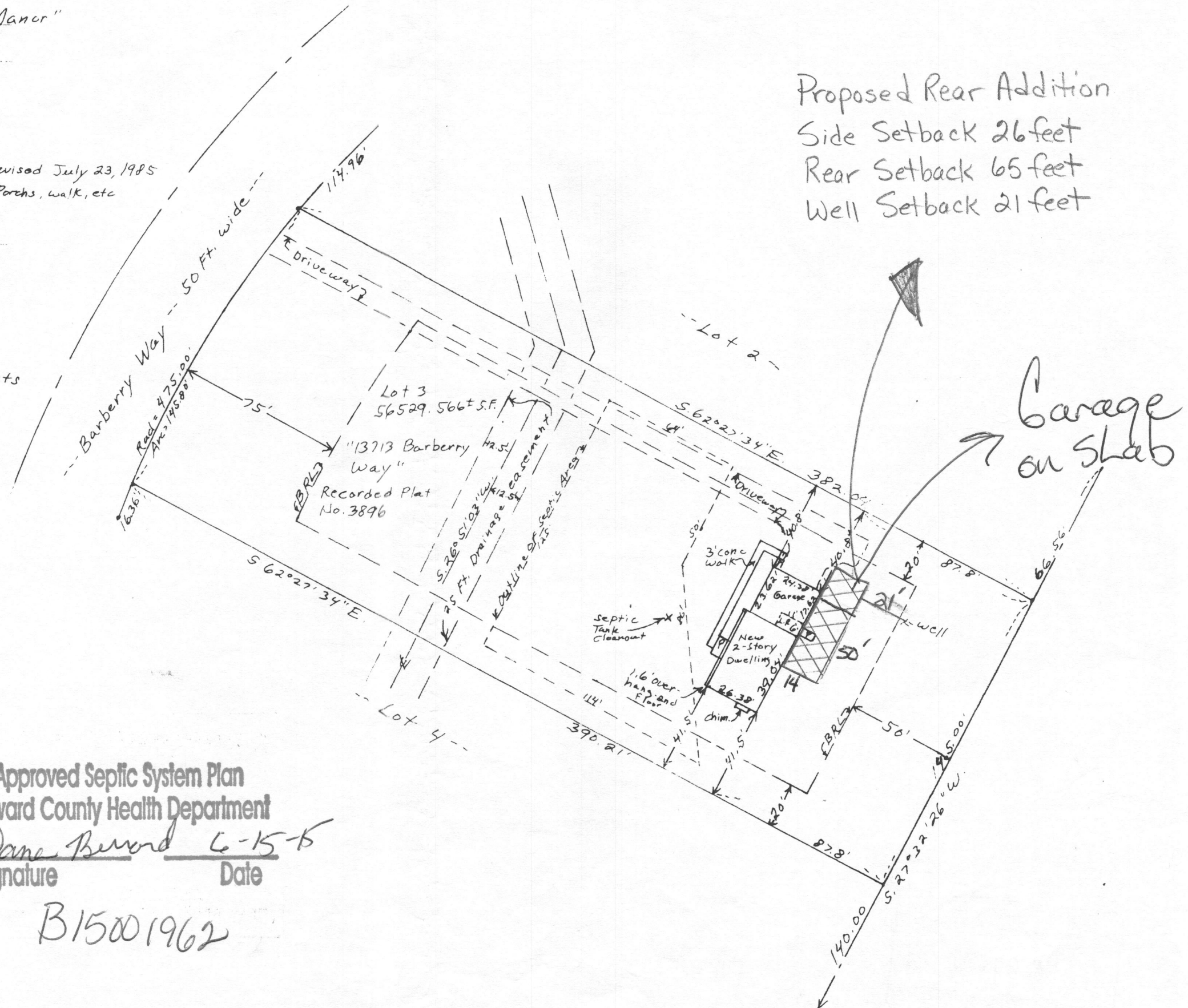


Subdivision Meridian

Approved Septic System Plan
Howard County Health Department

Dane Berard 6-15-85
Signature Date

B15001962



7/15/85
A.S.A.P.
WDT-7/18/85
BWP1
date 7-15-85
7-15-85
approved
stable

PERMIT

SEWAGE DISPOSAL SYSTEM

MARYLAND STATE DEPARTMENT OF HEALTH

HOWARD COUNTY
BUREAU OF ENVIRONMENTAL HEALTH
992-2330

04-338782

INDEXED

ELLICOTT CITY

DISTRICT 4th

DATE 7/9/85

Francis Bollinger

IS PERMITTED TO INSTALL ☒ ALTER

ADDRESS 1343 Bollinger Road, Westminster, Maryland 21157

PHONE

SUBDIVISION Westcliffe Manor

ROAD 13713 Barberry Way

LOT 3

PROPERTY OWNER

Robert Tisone

ADDRESS

IF GARBAGE GRINDER IS USED INCREASE SEPTIC TANK CAPACITY BY 50% AND ABSORPTION AREA BY 22%.

GARBAGE GRINDER? YES NO ☒

SEPTIC TANK CAPACITY 1250 GALLONS NUMBER OF BEDROOMS 4

TRENCHES - 180 sq. ft. per bedroom. Trench to be 2 feet wide. Inlet $3\frac{1}{4}$ feet below original grade. Bottom maximum depth $7\frac{1}{4}$ feet below original grade. Effective area begins at $3\frac{1}{4}$ feet below original grade. 4 feet of stone below distribution pipe. LOCATION: Place the distribution box 230 feet from the front lot line and 70 feet from the left lot line as seen when facing the property from Barberry Way. Run trenches along contour toward each side lot line. NOTE: No trench to exceed 100 feet in length. If more than one trench used, a distribution box is required. Call for inspection of trench(s) before and after gravel is installed. Provide 6" - 8" diameter cleanout and cap to grade or above on septic tank. *AKA*

PLANS APPROVED BY C. Williams

DATE 7/8/85

COVER NO WORK UNTIL INSPECTED AND APPROVED

NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM.

NOTE: IF TRENCH IS USED CALL FOR INSPECTION BEFORE AND AFTER PLACING GRAVEL IN TRENCH.

NOTE: NO DRY WELL SHALL EXCEED 15 FOOT IN DIAMETER. NO ABSORPTION TRENCH TO EXCEED 100 FEET IN LENGTH.

NOTE: ALL PIPE FROM HOUSE TO SEPTIC TANK MUST BE CAST IRON OR SCHEDULE 40 PVC OR ABS.

PERMIT VOID AFTER THREE YEARS.

NOTE: INSTALL STAND PIPE ON SEPTIC TANK AND DRY WELL. STAND PIPES MUST BE 6 INCHES IN DIAMETER, CAST IRON, CONCRETE OR TERRA COTTA, OR PVC OR ABS ACCEPTED. IF TOP OF SEPTIC TANK IS DEEPER THAN 3 FEET MANHOLE TO GRADE REQUIRED.

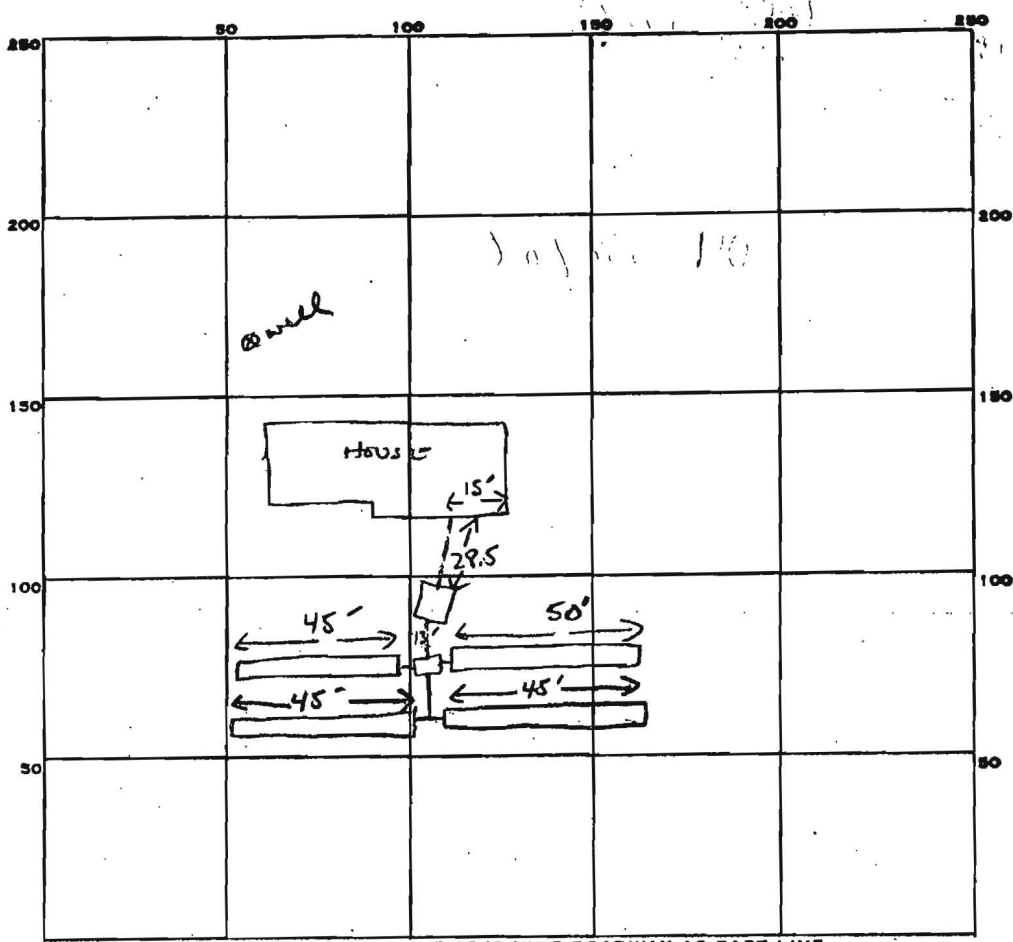
*INSTALLER IS RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT

*CALL 992-2330 FOR INSPECTION OF SEPTIC SYSTEMS

EH - 2-1082

A 26563

180
720



INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE.
Barberry way

PERMIT CARD ☒

SEPTIC TANK, LEVEL ☒

CLEANOUTS VST

DISTRIBUTION BOX, LEVEL ☒

TILE FIELD, DEPTH 7.5 7.5 FT. TRENCH WIDTH 2 FT. INLET 3.5

GRAVEL DEPTH 4 FT. TOTAL LENGTH 95 90 FT. TOTAL 185

NUMBER OF TRENCHES 4 OFF DB ONE SIDE WALL TOTAL BOTTOM AREA 740

SEEPAGE PITS, INSIDE DIAMETER FT. DEPTH BELOW INLET FT.

ABSORBENT AREA 740 SQ. FT.

REMARKS 7-15-85 OK TO ADD STONE/PIPE TO TRENCH ①②; DIS TRENCH ③④ ADD
ADD STONE; ST CO NEEDED + HOUSE CONNECTION; ST

DATE SYSTEM APPROVED 7-15-85 INSPECTOR SABUL

SUBDIVISION: WESTCLIFF MANOR

LOT NUMBER: 3

A _____

DRY WELL OR DRY WELL AND TRENCH

_____ sq. ft./bedroom

	<u>Septic Tank</u>	<u>Minimum Total square Feet</u>
3 bedroom	1000 gallon	_____
4 bedroom	1250 gallon	_____
5 bedroom	1500 gallon	_____

Inlet _____ feet below original grade.

Bottom maximum depth _____ feet below original grade.

Effective area begins at _____ feet below original grade.

NOTE: If trench is used to make up absorbent area, run the trench on level ground and leave a 5 foot earth buffer between dry well and trench. No trench is to exceed 100 feet in length. Trench inlet to be same as dry well, with _____ feet of stone below distribution pipe.

TRENCHES

180 sq. ft./bedroom

Trench to be 2 wide.

Inlet 3 1/2 feet below original grade.

Bottom maximum depth 7 1/2 feet below original grade.

Effective area begins at 3 1/2 feet below original grade.

4 feet of stone below distribution pipe.

- NOTE:
- (1) No trench to exceed 100 feet in length.
 - (2) If more than one trench used, a distribution box is required.
 - (3) Trenches to be installed on level ground.
 - (4) Call for inspection of trench before gravel is installed.
 - (5) Provide 6"-8" diameter cleanout and cap to grade or above on septic tank and drywell.
 - (6) If a Garbage disposal is used, increase septic tank capacity by 50% and increase absorbant sidewall area by 22%.

LOCATION: PLACE THE DISTRIBUTION BOX 230' FROM THE FRONT LOT LINE AND 70' FROM THE LEFT LOT LINE AS SEEN WHEN FACING THE PROPERTY FROM BARBERRY WAY. RUN TRENCHES ALONG CONTOUR TOWARD EACH SIDE LOT LINE.

7-8-85 CWL

7-15-85

PITLESS 5.5 FT BELOW GRADE

WELL LINE 5 - 5.5 FT BELOW GRADE

PRESSURE TANK WITH PRESSURE RELIEF VALVE INSTALLED

SAME

PRELIMINARY

APPLICATION

A 26563

SEWAGE DISPOSAL TESTING

P _____

STATE OF MARYLAND - DEPARTMENT OF HEALTH AND MENTAL HYGIENE

HOWARD COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH SERVICES

P. O. BOX 476, ELLICOTT CITY, MARYLAND 21043
TELEPHONE: 465-5000, EXT. 356

DISTRICT 4th

DATE 8/15/77

TO: THE COUNTY HEALTH OFFICER
ELLICOTT CITY, MARYLAND

I HEREBY APPLY FOR THE NECESSARY TEST IN ORDER TO CONSTRUCT (OR RECONSTRUCT) A SEWAGE DISPOSAL SYSTEM.

PROPERTY OWNER ~~G & B Partnership~~

Thomas E. Will & Others

ADDRESS 5632 Stevens Forest Rd., Apt. 254, Columbia 21045

Any questions call
Ron Carter - 837-0194

Westminster, Md 21157

PROPERTY LOCATION:

SUBDIVISION Westcliffe Manor

LOT NO. 3

ROAD AND DESCRIPTION off Underwood Road 13713 Barberray Way

SIZE OF LOT 57,250 sq. ft.

TYPE BLDG. 3 or 4 bedrooms

NUMBER OF BEDROOMS

IF NOT SINGLE RESIDENCE DESCRIBE

THE SYSTEM INSTALLED UNDER THIS APPLICATION IS ACCEPTABLE ONLY UNTIL PUBLIC FACILITIES BECOME AVAILABLE.

SIGNATURE OF APPLICANT /s/ Ron Carter

APPROVED BY *David J. D. Nand*

FOR *D. J. Will & O.*

DATE 10/10/77

REJECTED BY

FOR

(KIND OF SYSTEM)

DATE

HOLD PENDING FURTHER TESTS

DATE

REASONS FOR REJECTION OR HOLDING

BLDG. PERMIT SIGNED
AND RETURNED *8/15/77*

2-25-85
#63220

THIS IS NOT A PERMIT

3

Road 17

	119	120	③	
	116		60	
	120	120	②	
	120			

$$\frac{110 \times 8 \frac{1}{2}}{8}$$
2.31
2.3

INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME
			START	STOP	START	STOP	
8/31	15	9'	2:13	—	—	2:19	~3
	1	13'	2:13	2:19	2:17	2:24	4
	4/5	3 1/2'	2:15	2:15	2:18	2:23	5
	d	12 1/2'	2:15	2:18	2:18	2:22	4
	2	2-75'	good soil				
	3	4'	2:17	2:20	2:24	2:29	5
		1/3'	2:17	2:25	2:25	2:30	5

REMARKS _____

TYPE OF SOIL _____

TESTED BY R. J. Ray

ALSO PRESENT: _____

SEE PAGE 170, HOWARD CO. ROAD
CONSTRUCTION CODE AND
STANDARD SPECIFICATIONS

PARCEL TO BE CONVEYED
TO KATHERINE BARROW

20' DRAINAGE AND
SLOPE EASEMENT

605

W 18 N 53° 25' 37" E
89° 29'

DENSE

NON-BUILDABLE
UNTIL APPROVED BY
ES HOWARD
ALTH DEPT
PROX.

CONTOURS APPROX.

4100 BUILDING
RESTRICTION

N 4960

DENSE TREES
CONTOURS APPROX.

W208
60774

RECEIVED

EX. ENTRANCE

UNDERWOOD

611.5/

611 5

② 501415

□

1
2
3

2

10

10

7

1

1

Journal of Management Education

100

1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 2680, 26

1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 26

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Figure 1. Schematic representation of the experimental design. The subjects were divided into two groups: the control group and the experimental group. The control group was exposed to a standard 12-hour shift, while the experimental group was exposed to a 12-hour shift with a 4-hour break. The subjects were monitored for 24 hours, and the data were analyzed using a two-way ANOVA.

B 1		8259		SEQUENCE NO. (WRA USE ONLY)		STATE OF MARYLAND WATER RESOURCES ADMINISTRATION TAWES STATE OFFICE BLDG., ANNAPOLIS, MARYLAND 21401 APPLICATION FOR PERMIT TO DRILL WELL		WRA PERMIT NUMBER HC-23-25-28	
DATE RECEIVED (WRA USE ONLY) 4/20/78 1:30 P.M.		OWNER Hobson + Sons Inc		COL 18 LAST NAME		FIRST NAME		COL 34	
STREET OR RFD 3606 Oxford Ct		COL 36		COL 38		COL 39		COL 40	
POST OFFICE Westminster Md		COL 57		COL 58		COL 59		COL 60	
B 2		CONTINUED		DRILLER INFORMATION		B 3		LOCATION OF WELL	
1 2 3 (SEQ. NO.) 6		DATE JAN 3 78		LICENSE NUMBER 77201		COUNTY Howard		SUBDIVISION West Hill	
FIRST NAME JOHN A		DRILLER GREENE		LAST NAME		SECTION 1		LOT 3	
SIGNATURE John A Greene		COL 57		COL 58		COL 59		COL 60	
B 2		WELL INFORMATION		B 4		DIRECTION FROM TOWN (CIRCLE APPROPRIATE BOX)		DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWN ROADS AND STREAMS WITH NORTH IN THE DIRECTION OF THE ARROW. AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION OR STREAM CROSSING SHOWN ON SKETCH. ALSO SHOW, BY MEANS OF AN "X", THE WELL LOCATION IN THE BOX BELOW AND THE BOX NUMBER FROM THE WELL LOCATION MAP.	
1 2 3 (SEQ. NO.) 6		MAXIMUM PUMPING RATE (GALLONS PER MINUTE) 5		AVERAGE DAILY QUANTITY NEEDED (GALLONS PER DAY) 500		N NORTH E EAST NE NORTHEAST SE SOUTHEAST S SOUTH W WEST NW NORTHWEST SW SOUTHWEST		NEARBY ROAD Barberry Way	
USE FOR WATER (CIRCLE APPROPRIATE BOX) <input checked="" type="checkbox"/> HOME (SINGLE OR DOUBLE HOUSEHOLD UNIT ONLY) <input type="checkbox"/> FARMING, AGRICULTURE, IRRIGATION <input type="checkbox"/> INDUSTRIAL, COMMERCIAL, STATE AND FEDERAL GOVERNMENT <input type="checkbox"/> MUNICIPAL WATER SUPPLY <input type="checkbox"/> PRIVATE WATER COMPANY <input type="checkbox"/> TEST		MUST HAVE STATE HEALTH DEPT. APPROVAL		ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) N NORTH S SOUTH E EAST W WEST		DISTANCE FROM ROAD (ENTER DISTANCE AND CIRCLE APPROPRIATE BOX) 30		DISTANCE FROM TOWN (ENTER O IF IN TOWN) 3	
APPROXIMATE DEPTH OF WELL 100		APPROXIMATE DIAMETER OF WELL 6		METHOD OF DRILLING USED (CIRCLE APPROPRIATE METHOD) BORED (OR AUGERED) JETTED DRIVEN 30-37 AIR-ROTARY AIR-PERCUSSION ROTARY (HYDRAULIC ROTARY) CABLE REVERSE-ROTARY DRIVE-POINT OTHER (DESCRIBE)		REPLACEMENT OR DEEPEINED WELLS (CIRCLE APPROPRIATE BOX) <input checked="" type="checkbox"/> THIS WELL WILL NOT REPLACE AN EXISTING WELL <input type="checkbox"/> THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED <input type="checkbox"/> THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY <input type="checkbox"/> THIS WELL WILL DEEPEIN AN EXISTING WELL PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEINED (IF AVAILABLE)		Sketch area with handwritten notes: 46 casing, 40 open & Roped, 9 bags, RAB 4/20/78, Barber R-L, Underwood	
NOT TO BE FILLED IN BY DRILLER (WRA USE ONLY)		APPROPRIATION PERMIT NUMBER		ENGINEER REVIEW DISTRICT NO.		BOX NUMBER E 800 N 540		NORTH COORDINATE 80 81 82 83 84 85	
FORCE		WRITE INITIALS IN BOX		CONDITIONS		EAST COORDINATE 87 88 89 90 91 92 93		ELEVATION AT WELL HEAD (FEET) 85 86 87 88	
B 4		CONTINUED		HEALTH DEPARTMENT APPROVAL		B 5		SPECIAL CONDITIONS B-63 (WRA USE ONLY)	
1 2 3 (SEQ. NO.) 6		DATE 1 05 78		APPROVED BY Donald Monahan, Sanitarian		COUNTY NAME Howard		COUNTY NO. 227414	
B 5		SPECIAL CONDITIONS B-63		WRA USE ONLY		COUNTY NAME		COUNTY NO.	

C 1 5737 SEQUENCE NO. (WRA USE ONLY)

1 2 3 (SEQ. NO.)
(THIS NUMBER IS TO BE PUNCHED
IN COLUMNS 30 ON ALL CARDS)STATE OF MARYLAND
WATER RESOURCES ADMINISTRATION
TAWES STATE OFFICE BLDG., ANNAPOLIS, MD. 21401
WELL COMPLETION REPORTTHIS REPORT MUST BE SUBMITTED WITHIN
30 DAYS AFTER WELL COMPLETION

FILL IN THIS FORM COMPLETELY

COUNTY
NUMBER W 27414DATE RECEIVED
(WRA USE ONLY)

DATE WELL COMPLETED

DEPTH OF WELL

PERMIT NO. FROM "PERMIT TO DRILL WELL"

28 29 30 31 32 33 34 35 36 37

DRILLERS IDENTIFICATION NO.

OWNER
LAST NAME

FIRST NAME

STREET OR RFD

POST OFFICE

WELL LOG

WELL DESCRIPTION

STATE THE KIND OF FORMATIONS PENETRATED, THEIR
COLOR, DEPTH, THICKNESS AND IF WATER BEARINGDESCRIPTION
(USE ADDITIONAL SHEETS
IF NECESSARY)

FEET

CHECK IF
WATER
BEARING

GROUTING RECORD

WELL HAS BEEN GROUTED
(CIRCLE APPROPRIATE BOX)

TYPE OF GROUTING MATERIAL (CIRCLE BOX)

CEMENT BENTONITE CLAY

NO. OF BAGS NO. OF POUNDS

GALLONS OF WATER

DEPTH OF GROUT SEAL (TO NEAREST FOOT)

FROM FT. TO FT.

(ENTER 0 IF FROM SURFACE)

CASING RECORD

Casing
Types
Insert
Appropriate
Code
Below

STEEL

CONCRETE

PLASTIC

OTHER

MAIN CASING TYPE

NOMINAL DIAMETER
TOP (MAIN) CASING
(NEAREST INCH)TOTAL DEPTH
OF MAIN CASING
(NEAREST FOOT)

OTHER CASING (IF USED)

DIAMETER (INCH)

DEPTH (FEET)

SCREEN TYPE
OR OPEN HOLE
Insert
Appropriate
Code
Below

STEEL

BRASS

OPEN HOLE

PLASTIC

OTHER

DEPTH (NEAREST WHOLE FOOT)

FROM TO

FROM TO

FROM TO

FROM TO

FROM TO

FROM TO

FROM TO

FROM TO

FROM TO

FROM TO

FROM TO

FROM TO

FROM TO

FROM TO

FROM TO

FROM TO

FROM TO

FROM TO

FROM TO

FROM TO

FROM TO

FROM TO

FROM TO

FROM TO

FROM TO

FROM TO

FROM TO

FROM TO

FROM TO

FROM TO

CIRCLE APPROPRIATE BOXES

A WELL WAS ABANDONED AND SEALED WHEN THIS
WELL WAS COMPLETED

E ELECTRIC LOG OBTAINED

P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT I HAVE COMPLIED WITH ALL
CONDITIONS STATED ON THE ABOVE-CAPTIONED "PERMIT
TO DRILL WELL", AND THAT INFORMATION CONTAINED
IN THIS REPORT IS TRUE, ACCURATE, AND COMPLETE
TO THE BEST OF MY KNOWLEDGE, INFORMATION AND
BELIEF.

DRILLERS NAME

(PLEASE PRINT) KEYSER-CARVER, INC.

SIGNATURE

DIAMETER OF SCREEN

FROM TO

GRAVEL PACK

IF WELL DRILLED WAS A
FLOWING WELL CIRCLE BOX

WRA USE ONLY (NOT TO BE FILLED IN BY DRILLER)

TELESCOPE CASING

LOG INDICATOR

OTHER DATA AVAILABLE

PUMP INSTALLED

TYPE OF PUMP (WRITE APPROPRIATE LETTER IN
BOX - SEE ABOVE: A, C, J, P, R, S, T, D)DRILLER WILL INSTALL PUMP
(CIRCLE APPROPRIATE BOX)

CAPACITY

GALLONS PER MINUTE
(TO NEAREST GALLON)

PUMP HORSE POWER

PUMP COLUMN LENGTH
(NEAREST FOOT)CASING HEIGHT (CIRCLE APPROPRIATE BOX
AND ENTER CASING HEIGHT)LAND SURFACE (NEAREST
FOOT)

LOCATION OF WELL ON LOT

SHOW PERMANENT STRUCTURE SUCH AS BUILDINGS,
SEPTIC TANKS, AND/OR OTHER LAND MARKS AND
INDICATE NOT LESS THAN TWO DISTANCES
(MEASUREMENTS TO WELL).



Office of the Health Officer

8930 Stanford Drive, MD 21045

Main: 410-313-6300 | Fax: 410-313-6303

TDD 410-313-2323 | Toll Free 1-866-313-6300

www.hchealth.org

Facebook: www.facebook.com/hocohealth

Twitter: HowardCoHealthDep

Maura J. Rossman, M.D., Health Officer

DATE: June 2, 2015

TO: OWINGS BROTHERS CONTRACTING

C/O Michael Owings

Via E-mail: MICHAEL@OWINGSBROTHERS.COM

RE: **Building Permit # B15001962**

13714 Barberry Way

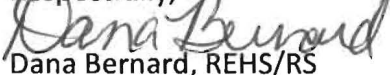
Sykesville, Maryland 21784

Mr. Michael Owings,

The review of your building permit has determined that your septic system must be upgrade to accommodate the new addition. Your system currently has a 1250 gallon tank and supports four bedrooms. And the review determined that the number of proposed bedrooms will be five and must be supported by a 1500 gallon tank. As of January 1, 2013, all new construction is required to use the "Best Available Technology" (BAT) for septic installation. Before building permit approval, a BAT site plan must be submitted.

Your building permit will be placed "on hold" until all Health Department requirements are met. If you have any questions or correspondence, I can be reached at the above address or by telephone at (410) 313-2775.

Respectfully,


Dana Bernard, REHS/RS

Environmental Specialist II

Bureau of Environmental Health

Well and Septic Program

Phone (410) 313-2775

E-mail: DBernard@howardcountymd.gov

cc: Well & Septic program file

Homeowners- Robert and Mary Ann Tisone

6-1-15 Spoke to Builder on 6-1-15

6-2-15 Reviewed plans. Tank capacity is for 4RR
NOT 5. Must upgrade tank prior to BP
release.

RESULTS OF REVIEW FOR FILE

DATE

FILE NOTES

LEGEND:

CS-MSP CONTINUOUS SHEATHING- WOOD
STRUCTURAL PANEL (-LENGTH)
CS-PF CONTINUOUS SHEATHED PORTAL FRAME
CS-G CONTINUOUS SHEATHING- GARAGE
DOOR OPENING
GB GYPSUM 2 SIDED
TIE DOWN DEVICE (-LBS)

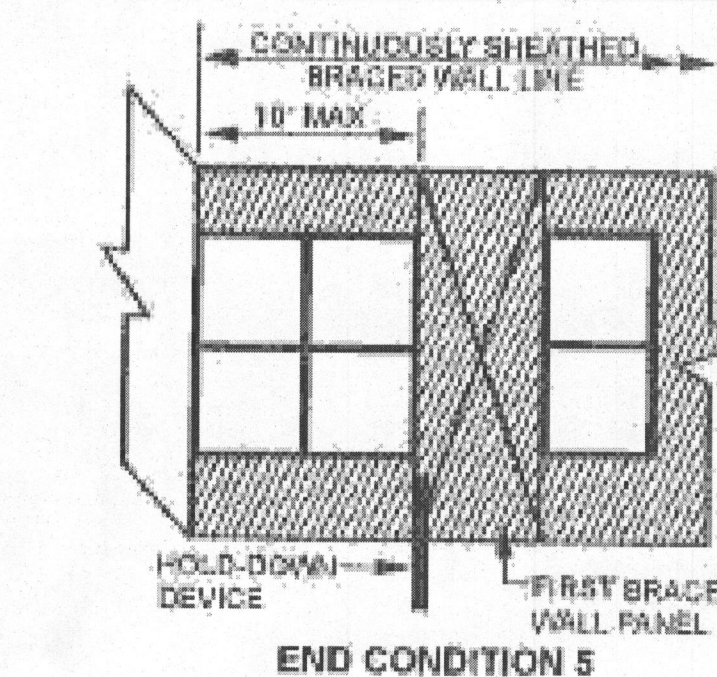
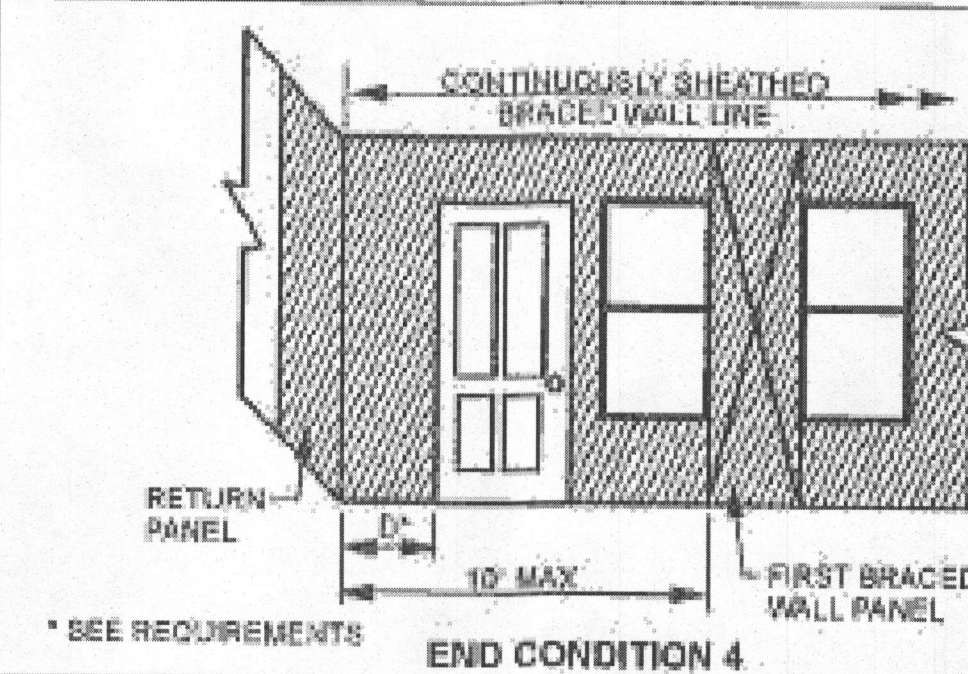
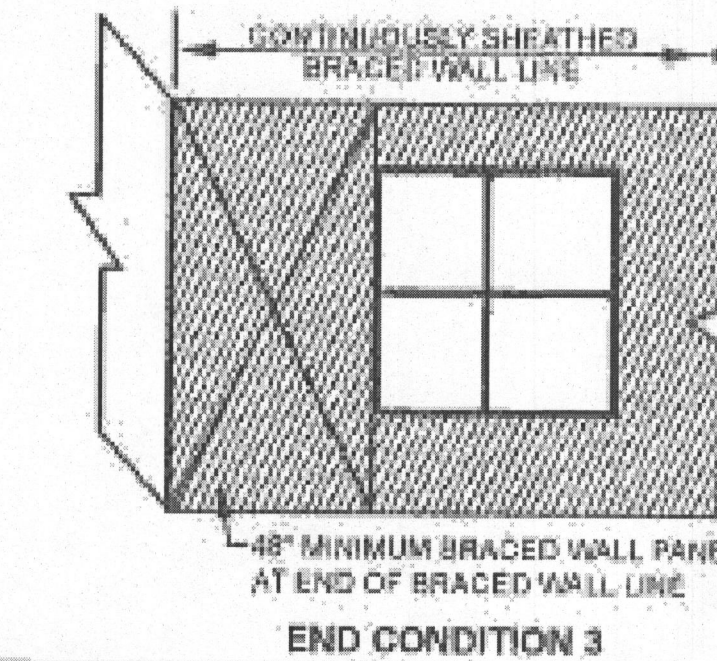
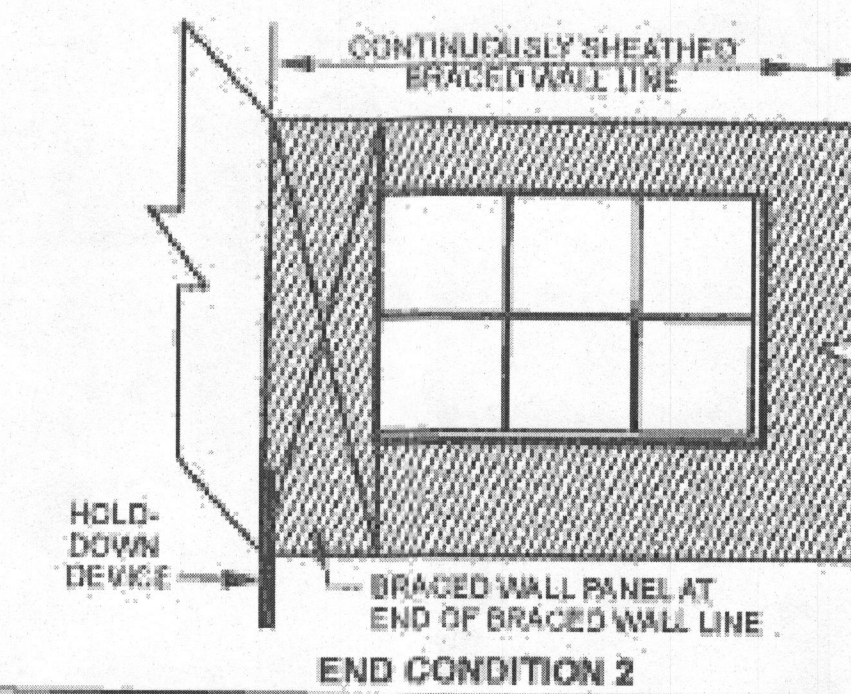
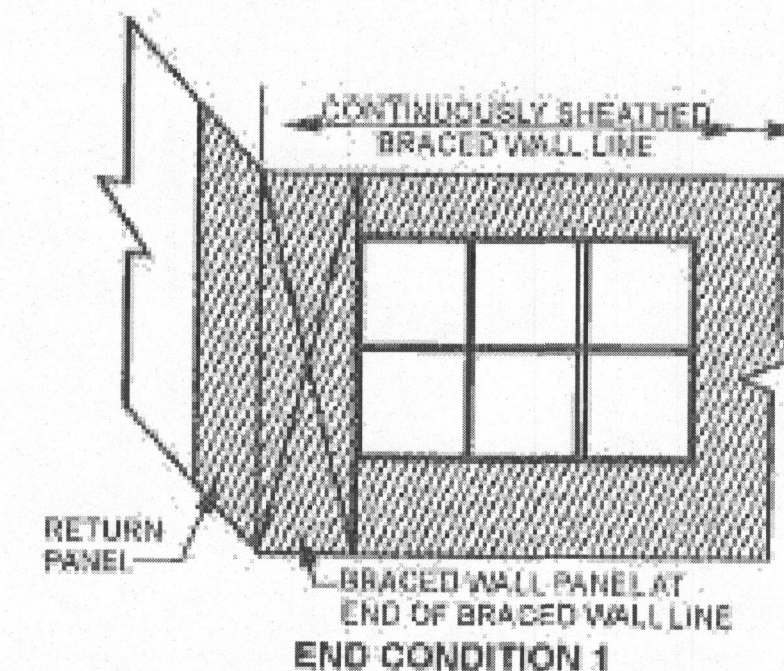
WALL BRACING DESIGN INFO:

LOCATION: HOWARD COUNTY, MARYLAND
SEISMIC CATEGORY: B
WIND SPEED: 90 MPH
METHOD 3 (WOOD SHEATHING)/ CONTINUOUS SHEATHING
METHOD 5 (GYPSUM BOARD)

*THESE DRAWINGS ARE LIMITED TO IRC WALL BRACING
REQUIREMENTS ONLY.

R602.10.4 CONTINUOUS SHEATHING. BRACED WALL LINES WITH CONTINUOUS
SHEATHING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THIS SECTION. ALL
BRACED WALL LINES ALONG EXTERIOR WALLS ON THE SAME STORY SHALL BE
CONTINUOUSLY SHEATHED.

HOLD-DOWN DEVICE: 800 lbs. CAPACITY FASTENED TO THE EDGE OF THE
BRACED WALL PANEL CLOSEST TO THE CORNER AND
TO THE FOUNDATION OR FLOOR FRAMING BELOW.
(R602.10)



REQUIREMENTS

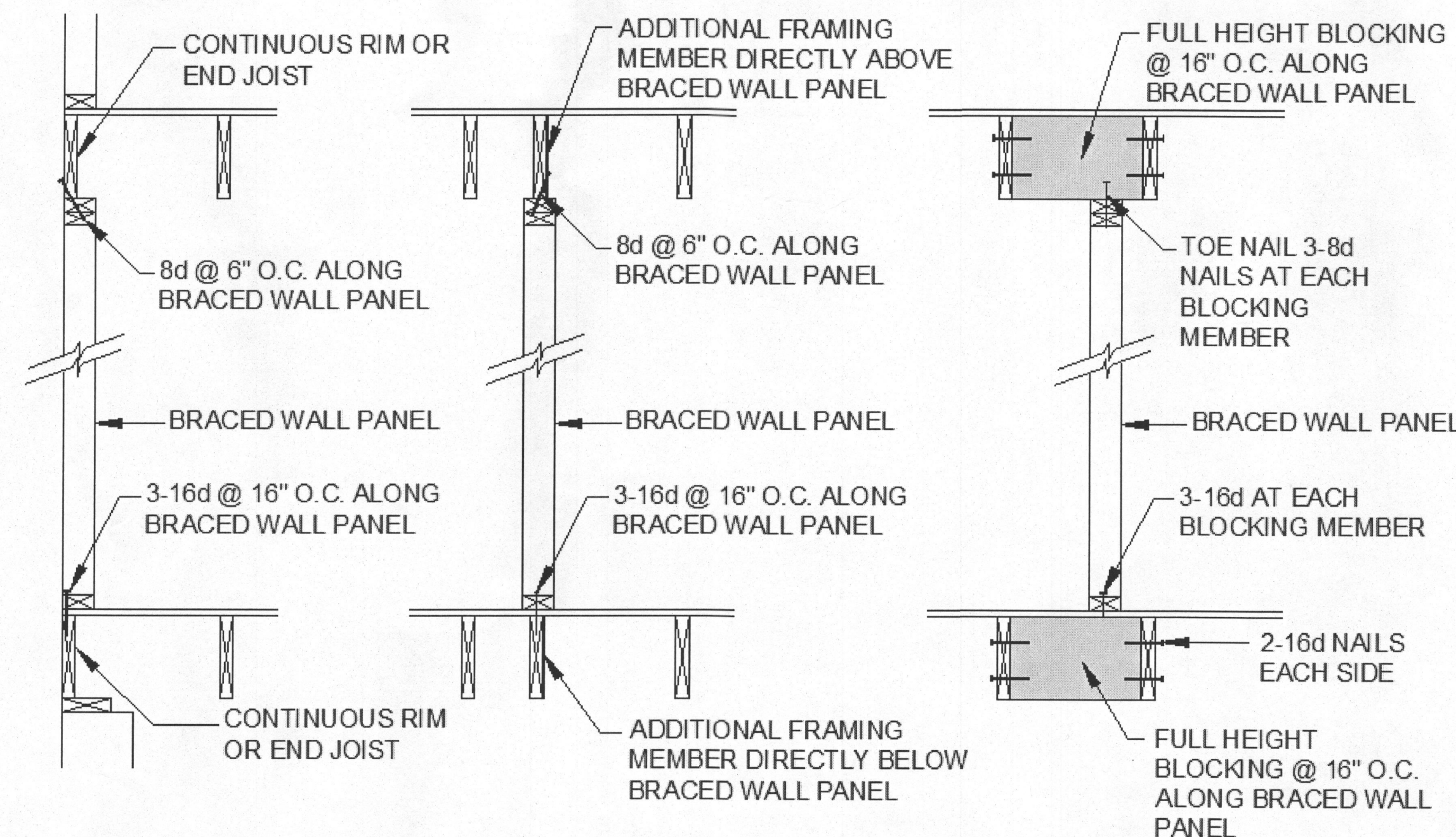
Return panel: 24" for braced wall lines sheathed with wood structural panels
32" for braced wall lines sheathed with structural fiberboard

Distance D: 24" for braced wall lines sheathed with wood structural panels
32" for braced wall lines sheathed with structural fiberboard

Hold-down device: 800 lbs capacity fastened to the edge of the braced wall panel closest to the corner and to the foundation or floor framing below

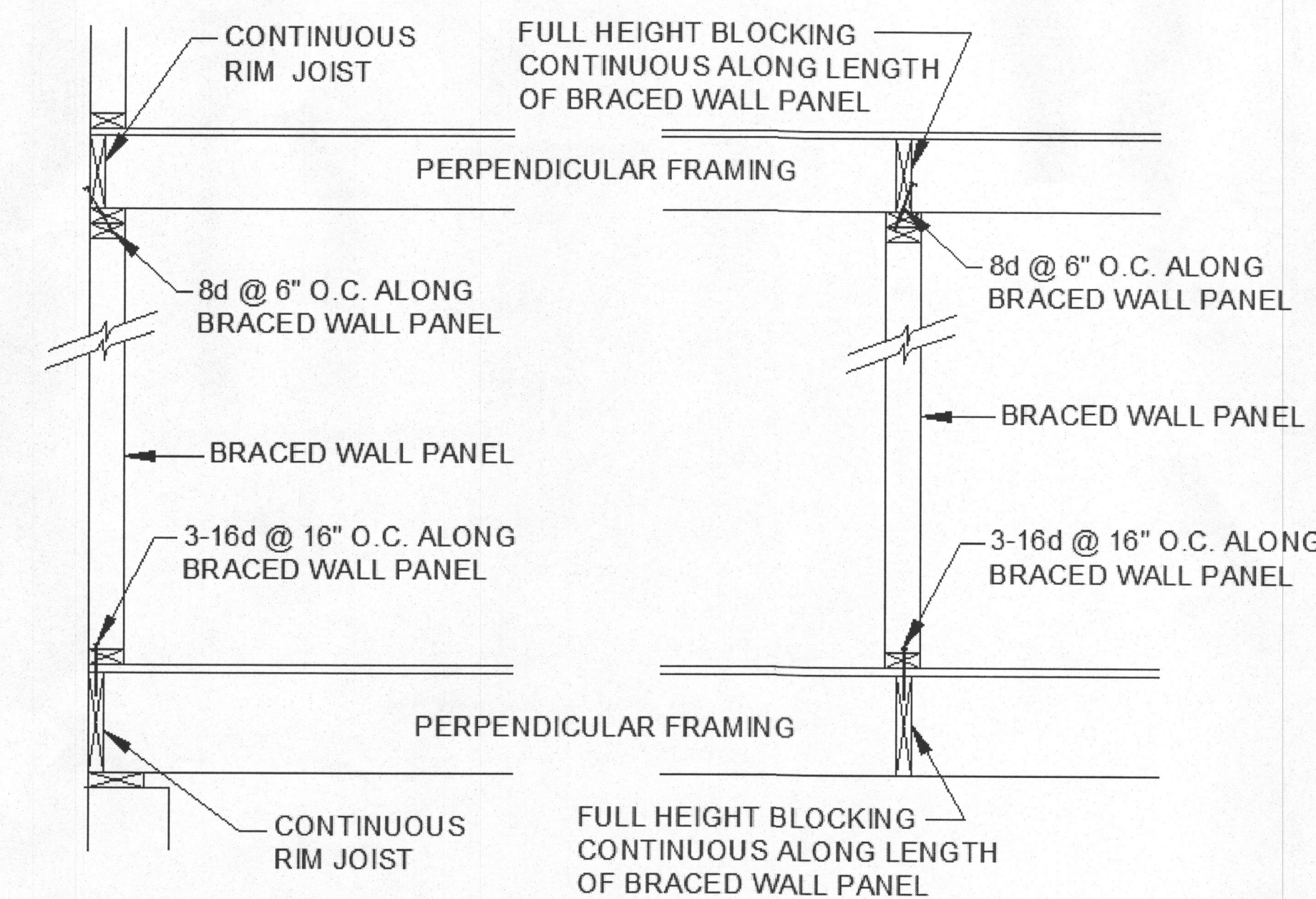
CORNER CONDITIONS

NOT TO SCALE



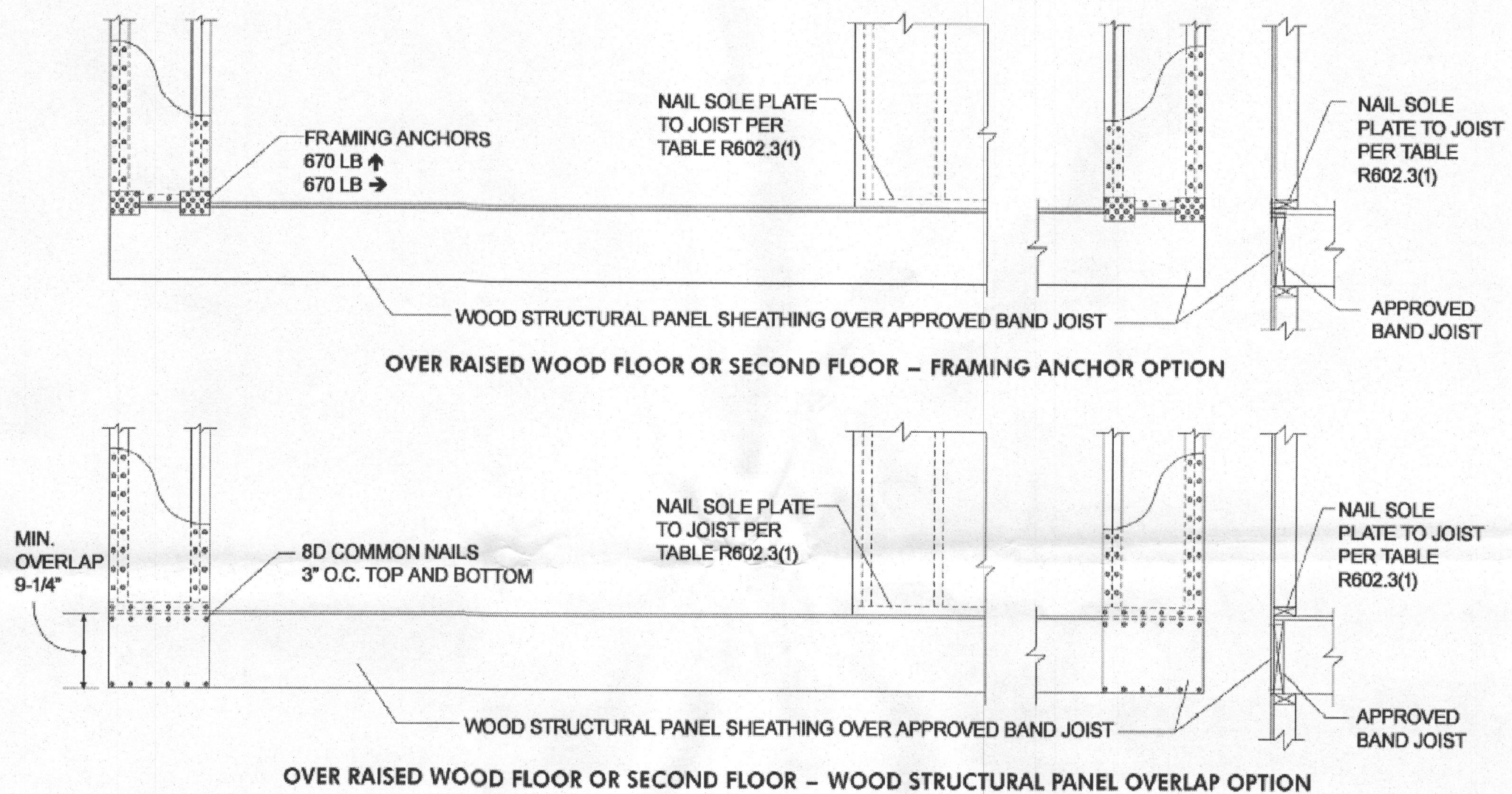
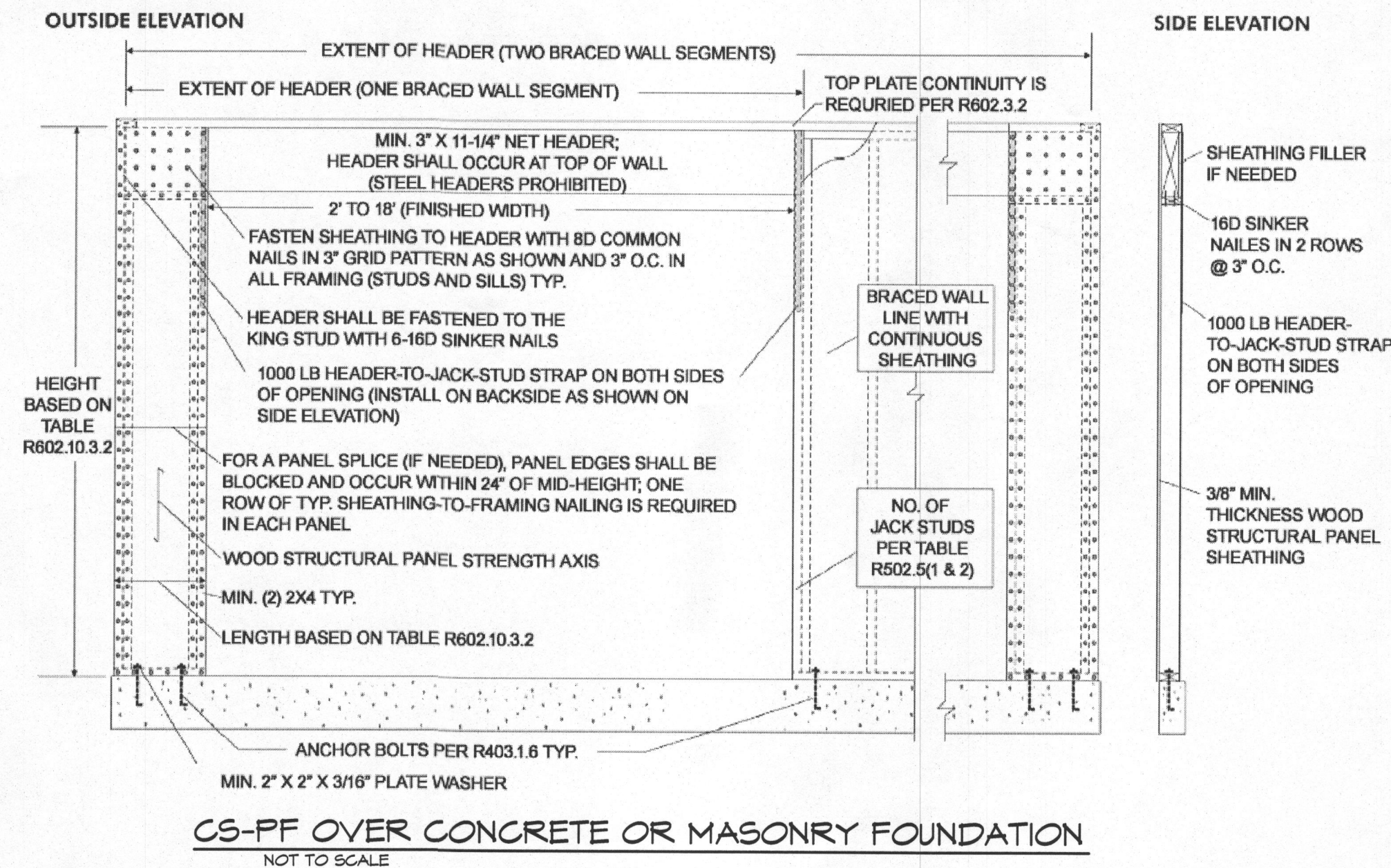
PARALLEL CONNECTIONS

NOT TO SCALE



PERPENDICULAR CONNECTIONS

NOT TO SCALE



CS-PF OVER WOOD FLOOR

NOT TO SCALE

REMODELING & ADDITIONS TO THE TISONNE RESIDENCE

PROJECT ADDRESS:
19715 BARBERRY WAY
SYKESVILLE, MD 21784
HOWARD COUNTY, MD

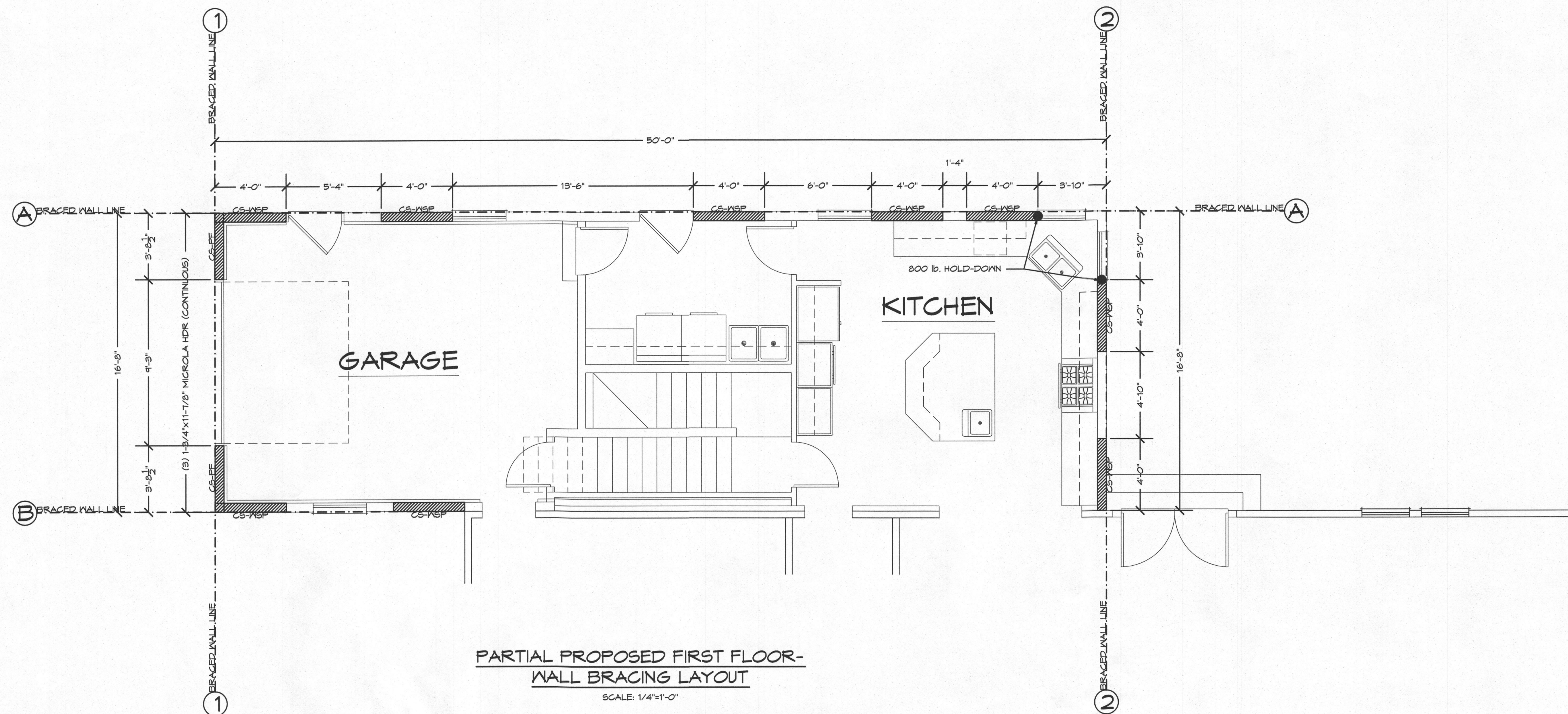
REVISED 4/13/2015

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

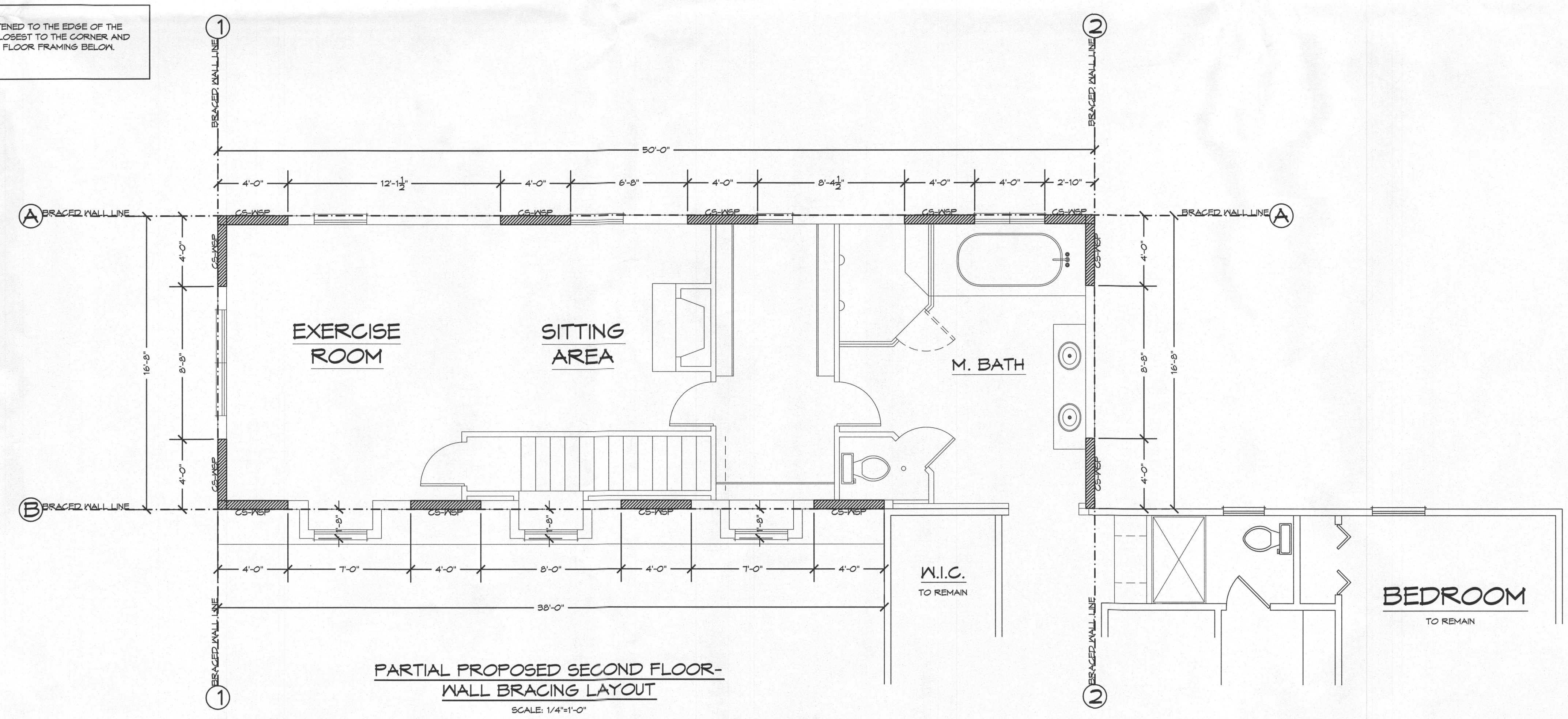
DATE: 2/20/15

SHEET NO.: 9

GBL CUSTOM HOME
DESIGN INC.
PO BOX 237 FINKSBURG, MD 21048
PHONE 410-833-8320



HOLD-DOWN DEVICE: 800 lbs. CAPACITY FASTENED TO THE EDGE OF THE BRACED WALL PANEL CLOSEST TO THE CORNER AND TO THE FOUNDATION OR FLOOR FRAMING BELOW. (R602.10)



REMODELING & ADDITIONS TO THE TISONNE RESIDENCE

PROJECT ADDRESS:
13719 BARBERRY WAY
SYKESVILLE, MD 21184
HOWARD COUNTY, MD

REVISED 4/19/2015

FILE: KRASA ADDITION

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

DATE: 2/2015

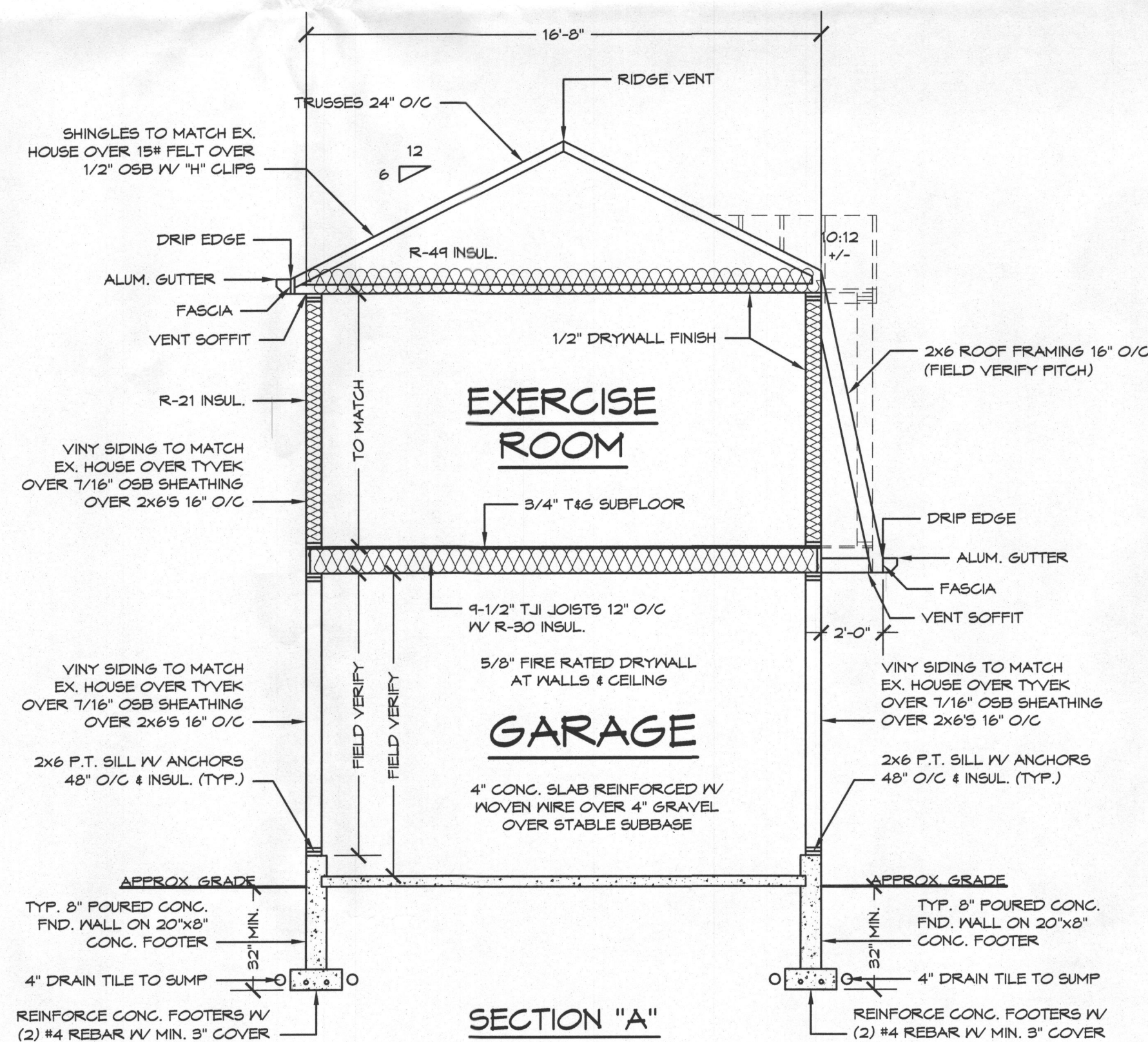
SHEET NO.: 8

GBL CUSTOM HOME
DESIGN INC.
PO BOX 237 FINKSEBURG, MD 21048
PHONE 410-833-8320



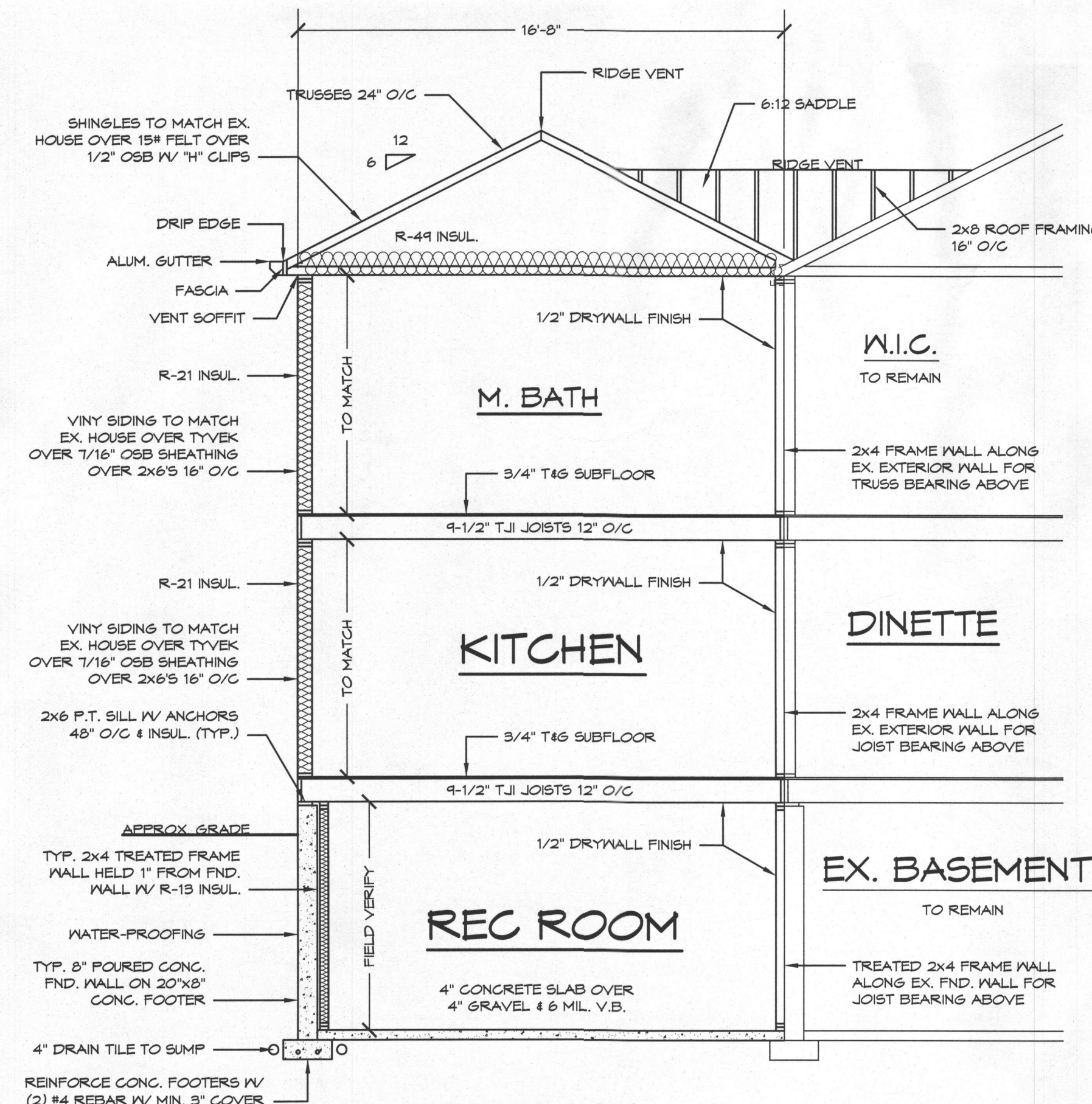
PROPOSED REAR ELEVATION

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



SECTION "A"

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



SECTION "B"

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

REMODELING & ADDITIONS TO THE TISONNE RESIDENCE

PROJECT ADDRESS:
19113 BARBERRY WAY
SYKESVILLE, MD 21784
HOWARD COUNTY, MD

REVISED 4/13/2015

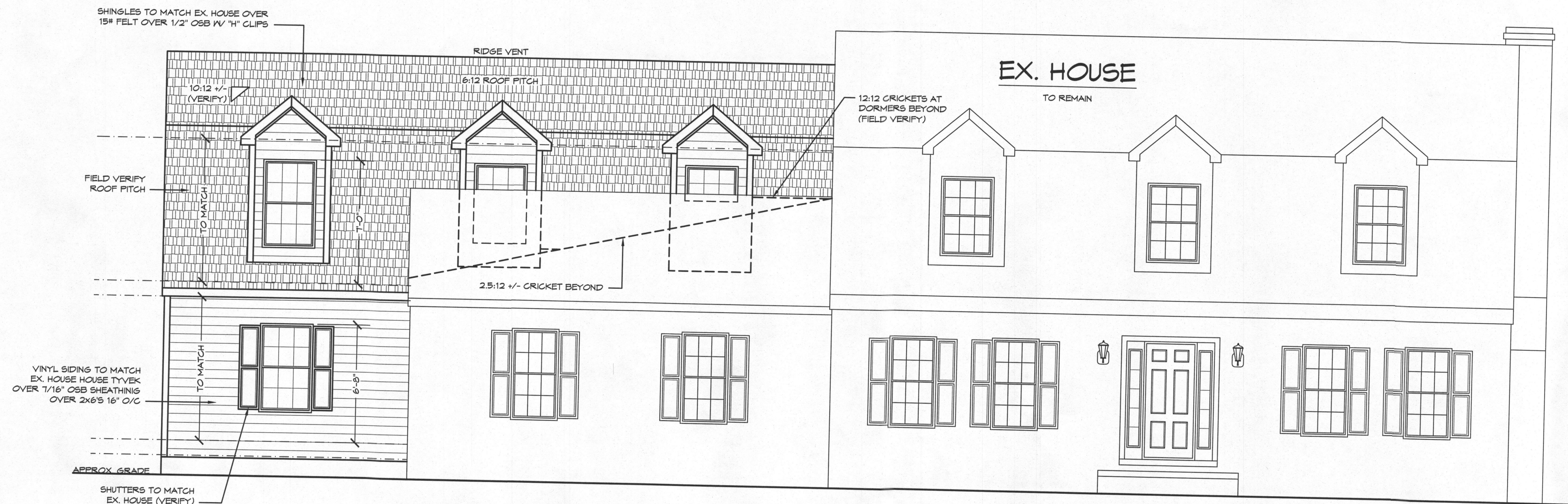
SCALE: 1/4" = 1'-0"

DATE: 2/2015

SHEET NO.: 7

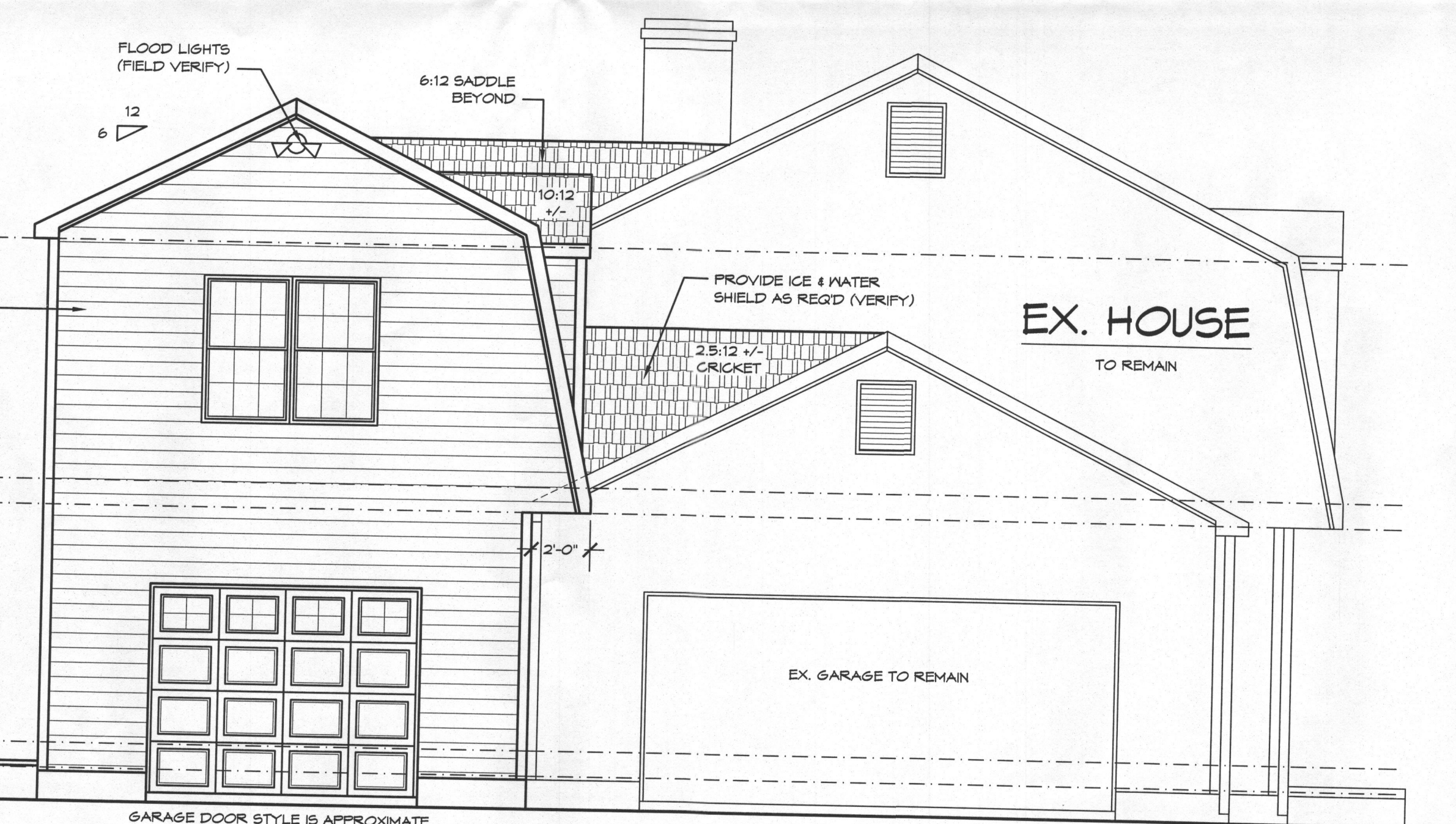
GBL CUSTOM HOME
DESIGN INC.
PO BOX 237 FINKSBURG, MD 21048
PHONE 410-833-8320

FILE: K005A-ADDITION



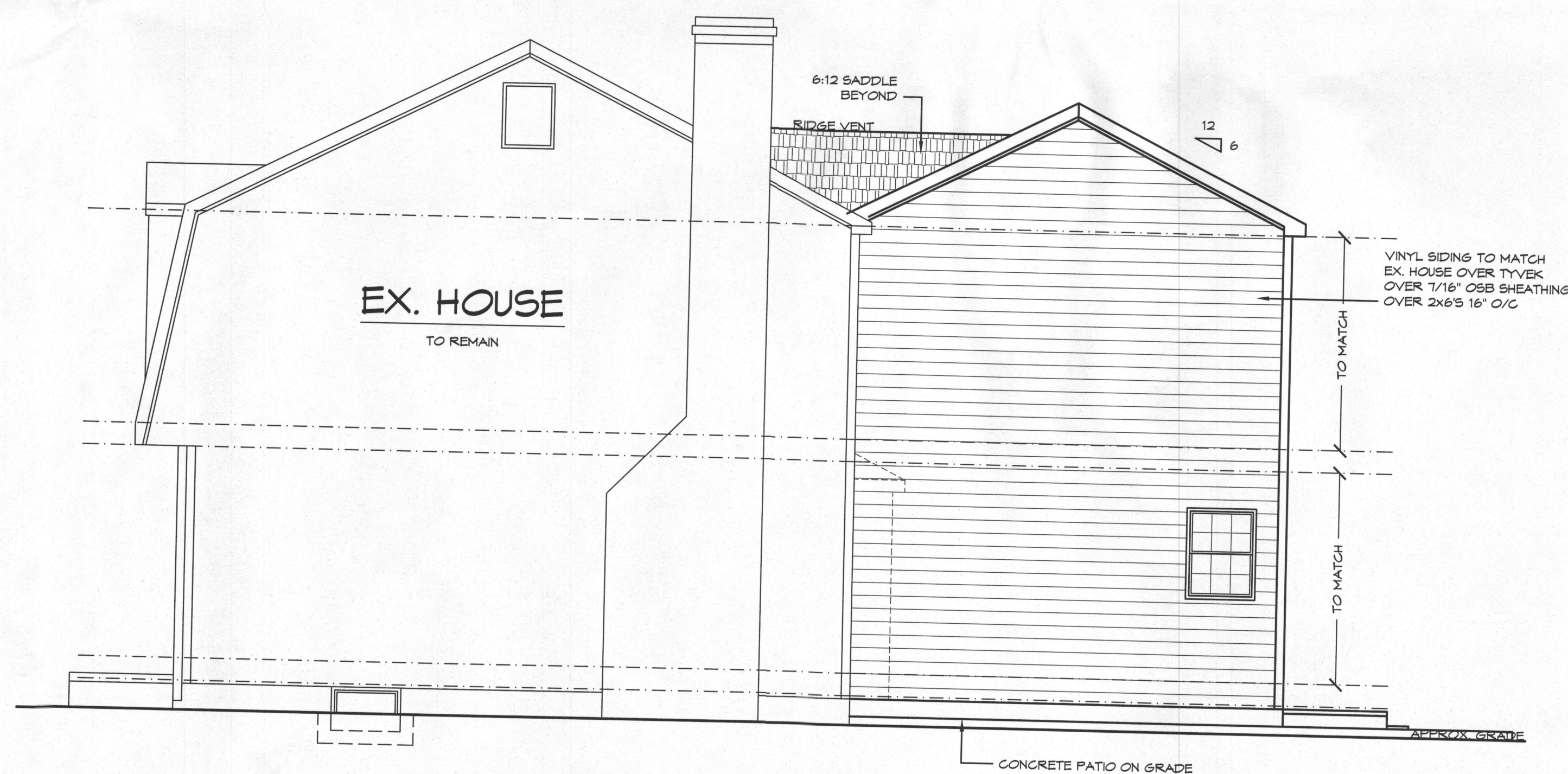
PROPOSED FRONT ELEVATION

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



PROPOSED LEFT SIDE ELEVATION

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



PROPOSED RIGHT SIDE ELEVATION

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

REMODELING & ADDITIONS TO THE TISONNE RESIDENCE

PROJECT ADDRESS:
13113 BARBERRY WAY
SYKESVILLE, MD 21154
HOWARD COUNTY, MD

REVISED 4/13/2015

FILE: KRASA ADDITION

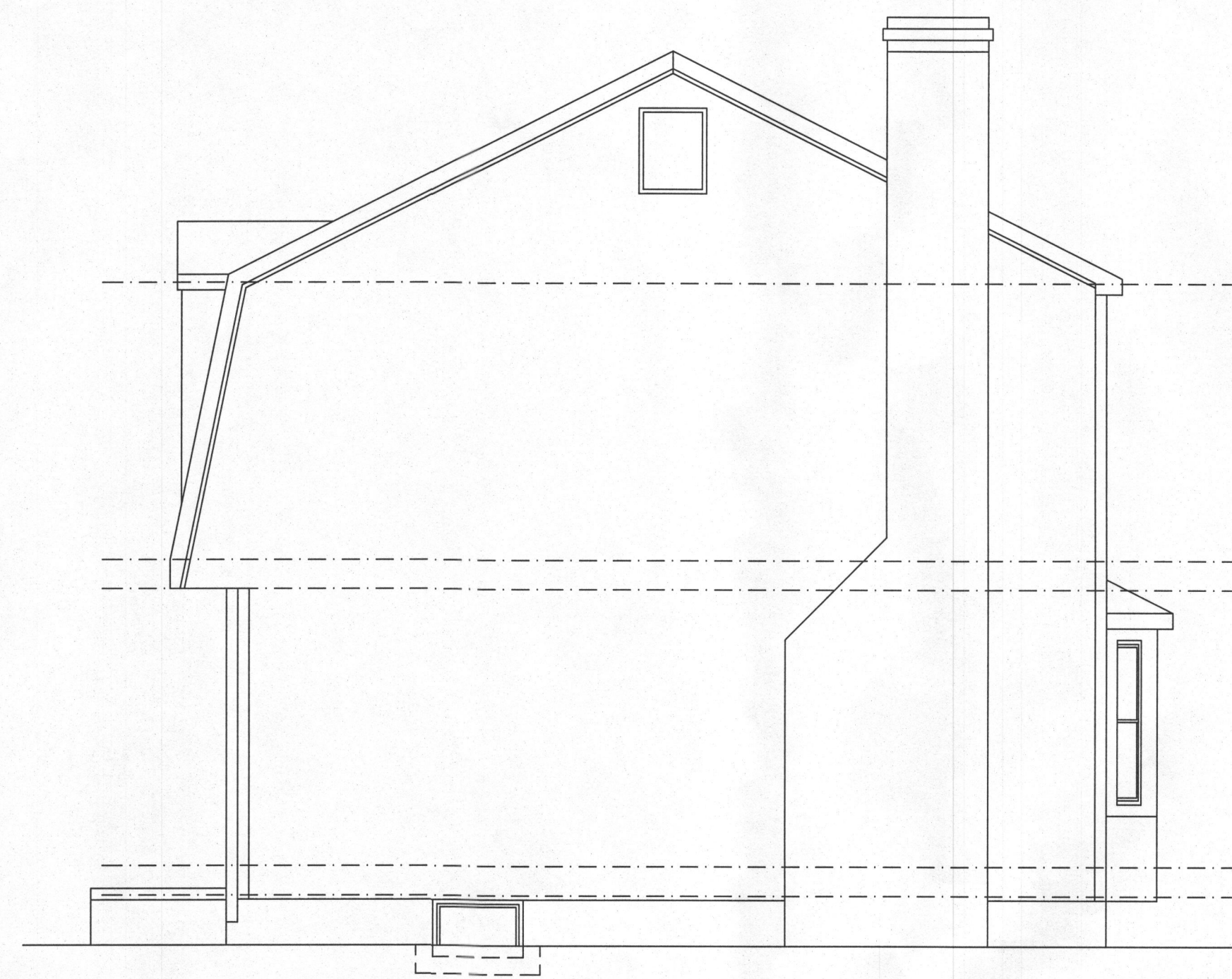
SCALE: 1/4" = 1'-0"
DATE: 2/20/15
SHEET NO.: 6

GBL CUSTOM HOME
DESIGN INC.
PO BOX 237 FINKSBURG, MD 21048
PHONE 410-833-8320



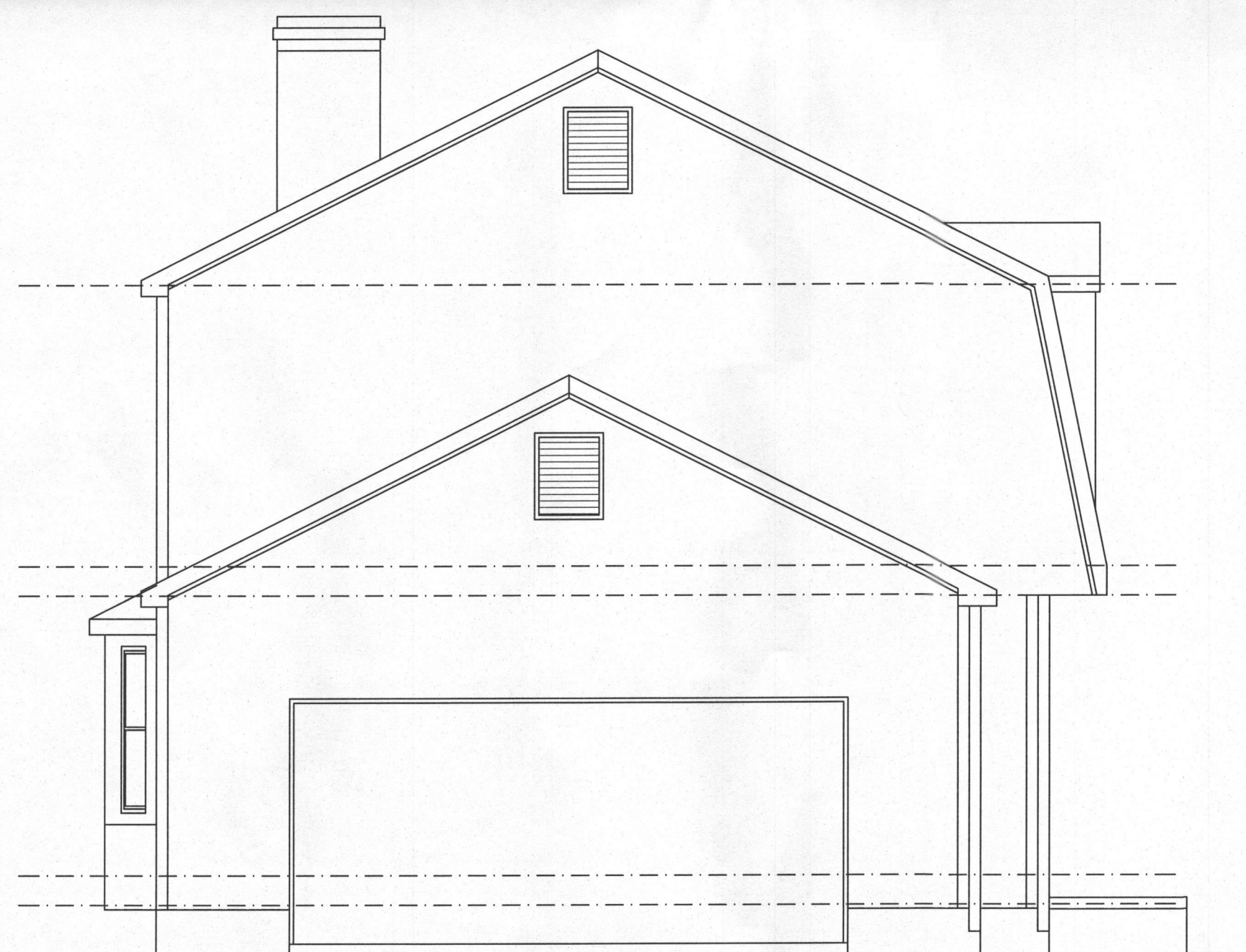
EXISTING FRONT ELEVATION

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



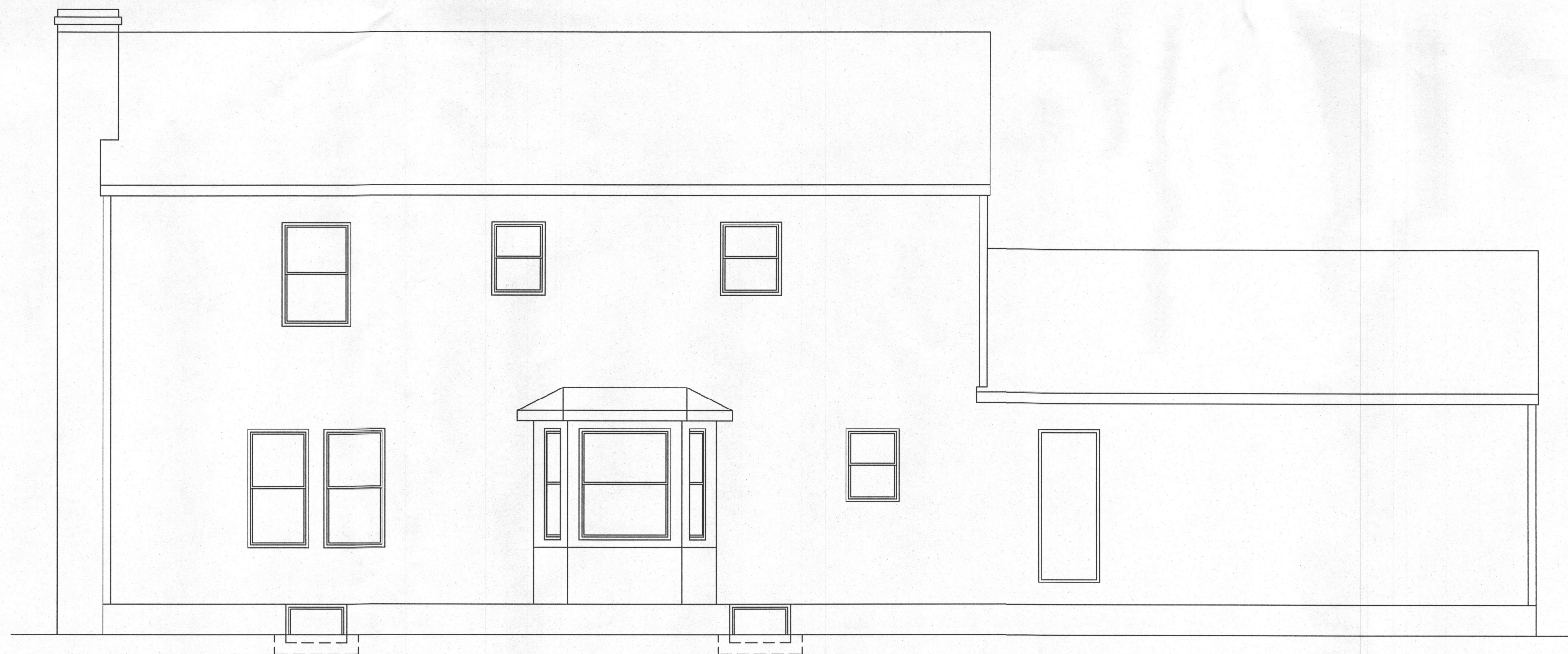
EXISTING RIGHT SIDE ELEVATION

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



EXISTING LEFT SIDE ELEVATION

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



EXISTING REAR ELEVATION

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

FILE: KRASA-ADDITION

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

DATE: 2/2015

SHEET NO.: 5

GBL CUSTOM HOME
DESIGN INC.
PO BOX 237 FINKSBURG, MD 21048
PHONE 410-833-8320

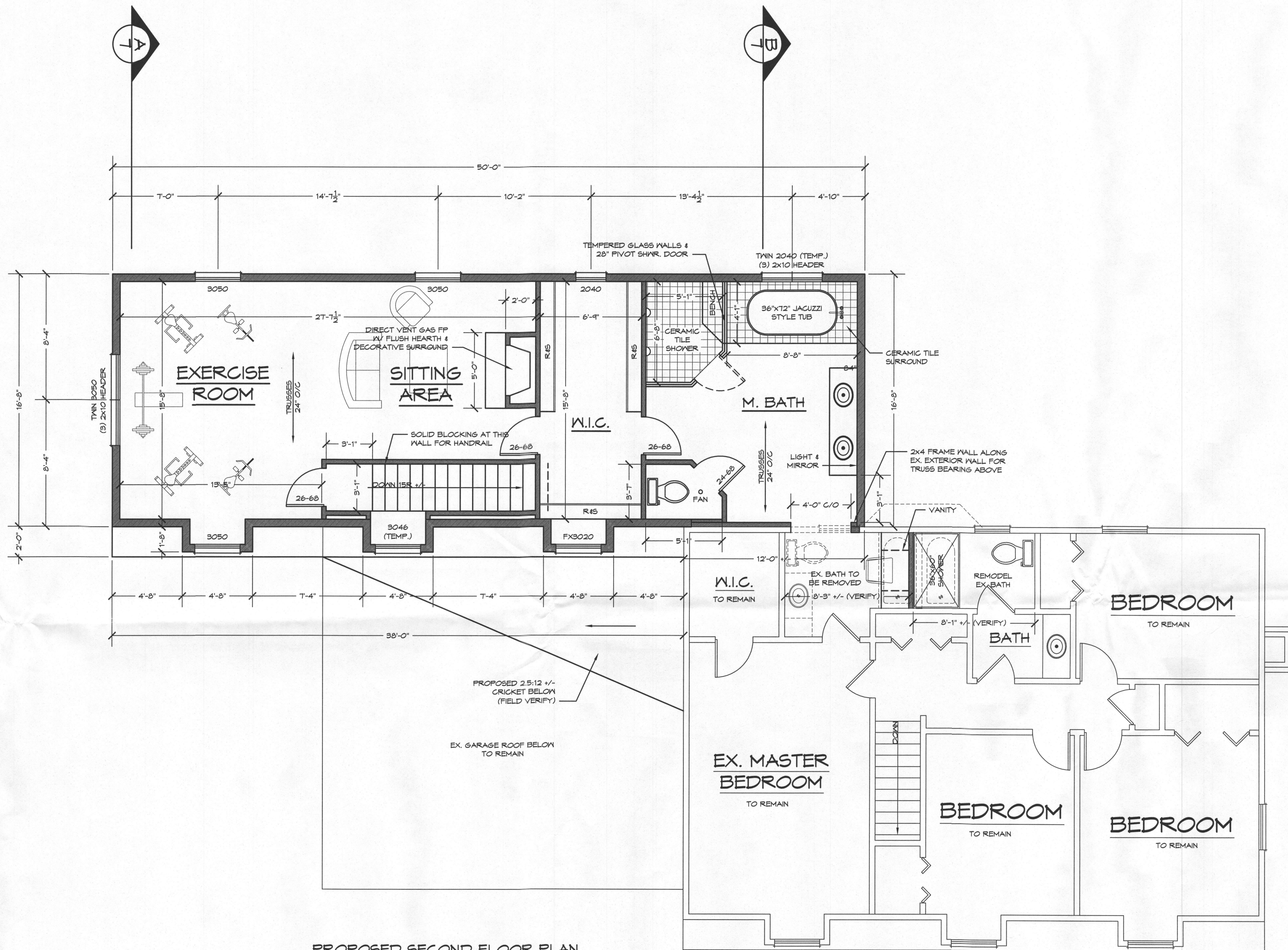
PROJECT ADDRESS:
19115 BARBERRY WAY
SYKESVILLE, MD 21184
HOWARD COUNTY, MD

REVISED 4/13/2015

REMODELING & ADDITIONS TO THE TISONNE RESIDENCE

2012 IECC CODE COMPLIANCE

- R301.1 CLIMATE ZONE 4
- R401.2 COMPLIANCE METHOD:
MANDATORY AND PRESCRIPTIVE PROVISIONS
- R402.1.1 ATTIC INSULATION: RAISED HEEL TRUSSES:
R-49
- R402.1.1 WOOD FRAME WALL:
R-20 OR R19-RS CONTINUOUS INSULATION
- R402.1.1 BASEMENT WALL INSULATION:
R-19/R-10 FOIL FACED CONTINUOUS, UNINTERRUPTED BATTS
FULL HEIGHT.
- R402.1.1 CRAWL SPACE WALL INSULATION:
R-19/R-10 FOIL FACED CONTINUOUS BATTS FULL HEIGHT EXTENDING
FROM FLOOR ABOVE TO FINISH GRADE LEVEL AND THEN
VERTICALLY OR HORIZONTALLY AN ADDITIONAL 2'-0".
- R402.1.1 FLOOR INSULATION OVER UNCONDITIONED SPACE:
R-19 BATT INSULATION
- R402.1.1 WINDOW U-VALUE / SHGC
.35 (U-VALUE)
.40 (SHGC)
- R402.2.9 SLAB ON GRADE FLOORS LESS THAN 12" BELOW GRADE:
R-10 RIGID FOAM BOARD UNDER SLAB EXTENDING
EITHER 2'-0" HORIZONTALLY OR 2'-0" VERTICALLY.
- R402.2.4 ATTIC ACCESS:
ATTIC ACCESS SCUTTLE WILL BE WEATHERSTRIPPED
AND INSULATED R-49.
- R402.4 BUILDING THERMAL ENVELOPE (AIR LEAKAGE):
EXTERIOR WALLS AND PENETRATIONS WILL BE SEALED
PER THIS SECTION OF THE 2012 IECC WITH CAULK, GASKETS,
WEATHERSTRIPPING OR AN AIR BARRIER OF SUITABLE MATERIAL.
- R402.4.1 BUILDING ENVELOPE TIGHTNESS TEST:
BUILDING ENVELOPE TIGHTNESS AND INSULATION INSTALLATION
MUST MEET THE INSULATION CRITERIA LISTED IN TABLE 402.4.1.2.
A "BLOWER DOOR AIR INFILTRATION TEST" SHALL BE PERFORMED
IN ALL UNITS. SEE ALSO SECTION R303.4 OF THE 2012 IRC.
- R402.4.2 FIREPLACES:
ALL WOOD BURNING MASONRY FIREPLACES WILL HAVE TIGHT-
FITTING FLUE DAMPERS AND OUTDOOR COMBUSTION AIR.
FIREPLACES SHALL HAVE GASKETED DOORS.
- R402.4.4 RECESSED LIGHTING:
RECESSED LUMINAIRES INSTALLED IN THE BUILDING THERMAL
ENVELOPE SHALL BE SEALED TO LIMIT AIR LEAKAGE.
- R403.1.1 THERMOSTAT:
ALL DWELLING UNITS WILL HAVE AT LEAST (1) PROGRAMMABLE
THERMOSTAT FOR EACH SEPARATE HEATING AND COOLING SYSTEM
PER 2012 IECC SECTION 403.1.
- WHERE A HEAT PUMP SYSTEM HAVING SUPPLEMENTARY ELECTRIC
RESISTANCE HEAT IS USED THE THERMOSTAT SHALL PREVENT THE
SUPPLEMENTARY HEAT FROM COMING ON WHEN HEAT PUMP CAN
MEET HEATING LOAD.
- R403.2.1 MECHANICAL DUCT INSULATION:
SUPPLY DUCTS IN ATTIC R-8 MINIMUM
SUPPLY DUCTS OUTSIDE OF CONDITIONED SPACES R-8 MINIMUM
ALL OTHER DUCTS EXCEPT THOSE LOCATED COMPLETELY INSIDE
THE BUILDING THERMAL ENVELOPE R-6 MINIMUM. DUCTS LOCATED
UNDER CONCRETE SLABS MUST BE R-6 MINIMUM.
- R403.2.2 DUCT SEALING:
ALL DUCTS, AIR HANDLERS, FILTER BOXES WILL BE SEALED. JOINTS
AND SEAMS WILL COMPLY WITH SECTION M1601.4.1 OF THE IRC.
- A DUCT TIGHTNESS TEST ("DUCT BLASTER" DUCT TOTAL LEAKAGE
TEST) WILL BE PERFORMED ON ALL HOMES AND SHALL BE VERIFIED
BY EITHER A POST CONSTRUCTION TEST OR A ROUGH-IN TEST.
DUCT TIGHTNESS IS NOT REQUIRED IF THE AIR HANDLER AND
ALL DUCTS ARE LOCATED WITHIN THE CONDITIONED SPACE.
- R403.5 MECHANICAL VENTILATION:
OUTDOOR (MAKE-UP) AIR WILL BE BROUGHT INTO THE HOME
THRU A DUCT WITH AN AUTOMATIC OR GRAVITY DAMPER.
- R403.6 EQUIPMENT SIZING SHALL COMPLY WITH R403.6.
- R404.1 LIGHTING EQUIPMENT:
A MINIMUM OF 75% OF ALL LAMPS (LIGHTS) MUST BE
HIGH-EFFICACY LAMPS.
- WATER HEATER:
MINIMUM EFFICIENCY ESTABLISHED BY NAECA
- MECHANICAL TESTING:
ALL MECHANICAL TESTING TO BE PERFORMED BY CONTRACTOR.
THIS CONTRACTOR ALSO RESPONSIBLE FOR GENERATING
CERTIFICATE OF COMPLIANCE AND AFFIXING TO ELECTRICAL PANEL.



PROPOSED SECOND FLOOR PLAN

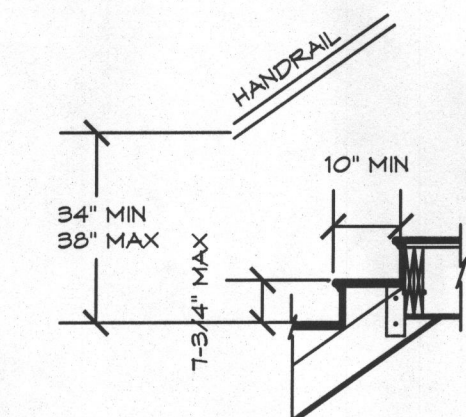
SCALE: 1/4"=1'-0"

PROPOSED WINDOWS SHOWN ARE ANDERSEN 200 SERIES

- EXISTING FRAME WALL TO REMAIN
- EXISTING FRAME WALL TO BE REMOVED
- PROPOSED FRAME WALL

R613.2 WINDOW SILLS
ALL WINDOWS WHERE THE OPERABLE
OPENING IS LOCATED MORE THAN 12"
ABOVE FINISHED GRADE OR SURFACE
BELOW, THE LOWEST PART OF THE CLEAR
OPENING SHALL BE A MIN. OF 24" ABOVE
THE FINISHED FLOOR OF THE ROOM IN
WHICH THE WINDOW IS LOCATED. GLAZING
BETWEEN THE FLOOR AND 24" SHALL BE
FIXED OR HAVE OPENINGS THROUGH
WHICH A 4" DIA. SPHERE CANNOT PASS.

EXCEPTIONS:
1. WINDOWS WHOSE OPENINGS WILL NOT
ALLOW A 4" DIA. SPHERE TO PASS THROUGH
THE OPENING WHEN THE OPENING IS IN ITS
LARGEST OPENED POSITION
2. OPENINGS THAT ARE PROVIDED WITH
WINDOW GUARDS THAT COMPLY WITH
ASTM F 2006 OF F 2090



TYPICAL STAIR SECTION

NOT TO SCALE

NOTE: ALL STAIRS SHALL BE
CONSTRUCTED IN ACCORDANCE WITH
IRC 2012 SECTION R314

REMODELING & ADDITIONS TO
THE TISON RESIDENCE

PROJECT ADDRESS:
19719 BARBERRY WAY
SYKESVILLE, MD 21154
HOWARD COUNTY, MD

REVISED 4/13/2015

FILE KRASA ADDITION

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

DATE: 2/20/15

SHEET NO.: 4

G.B.L. CUSTOM HOME
DESIGN INC.

PO BOX 237 FINKSBURG, MD 21048

PHONE 410-833-8320

GENERAL STRUCTURAL NOTES

1. GENERAL

A. ALL CONSTRUCTION SHALL CONFORM WITH THE PROVISIONS OF THE 2012 INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS.

B. DESIGN LIVE LOADS:

ROOF..... 30 PSF
FLOORS..... 40 PSF
SLEEPING AREAS..... 30 PSF

2. FOUNDATIONS

A. FOOTINGS ARE DESIGNED FOR AN ALLOWABLE SOIL BEARING CAPACITY OF 2000 PSF. FOOTINGS SHALL BEAR ON NATURAL UNDISTURBED SOIL, 1'-0" BELOW ORIGINAL GRADE. THE BOTTOM OF EXTERIOR FOOTINGS SHALL BE A MINIMUM OF 2'-6" BELOW FINISHED GRADE. CONTRACTOR TO VERIFY THE ALLOWABLE SOIL PRESSURE IN THE FIELD. IF FOUND TO BE LESS THAN 2000 PSF, THE FOOTINGS WILL HAVE TO BE REDESIGNED.

3. CAST IN PLACE CONCRETE

A. ALL CONCRETE WORK SHALL CONFORM TO THE LATEST APPROVED (BY LOCAL GOVERNMENT) EDITIONS OF THE FOLLOWING A.C.I. AND A.S.T.M. DOCUMENTS:

ACI-301 SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS
ACI-318 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE

B. ALL CONCRETE, EXCEPT AS NOTED, SHALL BE (F_c=3,000 PSI) STONE AGGREGATE CONCRETE AT 28 DAYS. ALL CONCRETE EXPOSED TO THE WEATHER SHALL BE AIR ENTRAINED.

C. SLABS ON GROUND SHALL BE 4" THICK CONCRETE REINFORCED WITH 6"x6" W1.4XW1.4 WAF OVER 6 MIL POLYETHYLENE VAPOR BARRIER AND 4" WASHED GRAVEL UNLESS OTHERWISE NOTED.

4. MASONRY

A. ALL MASONRY CONSTRUCTION AND MATERIALS USED THEREIN (CONCRETE MASONRY, CLAY MASONRY, MORTAR, GROUT AND STEEL REINFORCEMENT) SHALL CONFORM TO BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES' (ACI 530-1-12/ASCE 6-12/TMS 602-12) AND 'SPECIFICATIONS FOR MASONRY STRUCTURES' (ACI 530.1-12/ASCE 6-12/TMS 602-12) IN ALL RESPECTS.

B. MASONRY BEARING WALLS SHALL CONSIST OF STANDARD HOLLOW UNITS CONFORMING TO ASTM C 90 UNLESS OTHERWISE NOTED. WHERE SOLID UNITS ARE REQUIRED, PROVIDE UNITS CONFORMING TO ASTM C 145.

C. ALL MORTAR SHALL CONFORM TO THE REQUIREMENTS FOR PROPORTIONS, MIXING, STRENGTH AND APPLICATION FOR PORTLAND CEMENT/LIME TYPE 'S' MORTAR AS DESCRIBED IN ACI 530-12.

D. ALL GROUT FILL IN MASONRY WALLS SHALL CONFORM TO ASTM C 476. SLUMP RANGE 8-11". PLACE GROUT IN 5'-0" MAXIMUM POUR HEIGHTS AND CONSOLIDATE BY MECHANICAL VIBRATION.

E. PROVIDE 8" DEPTH OF 100 % SOLID MASONRY BELOW ALL JOIST OR SLAB BEARING LINES. PROVIDE 16" HIGH X 16" LONG 100 % SOLID MASONRY BELOW ALL LINTELS AND BEAMS UNLESS NOTED OTHERWISE.

F. ALL MASONRY WALLS SHALL BE REINFORCED WITH NO. 4 GAGE TRUSS TYPE GALVANIZED DUR-O-WALL SPACED VERTICALLY AT 16" O.C. U.N.O. LAP ALL DUR-O-WALL 6" MINIMUM. PROVIDE CORNER AND TEE PIECES AT ALL INTERSECTIONS.

G. LOOSE LINTELS FOR MASONRY WALLS SHALL BE FOR EACH 4" WIDTH OF MASONRY ONE STEEL ANGLE AS FOLLOWS:

0'-0" TO 3'-0" 3-1/2" X 3-1/2" X 5/16"
3'-1" TO 5'-0" 4" X 3-1/2" X 5/16"
5'-1" TO 6'-0" 5" X 3-1/2" X 3/8"
6'-1" TO 8'-0" 6" X 3-1/2" X 3/8"

ALL ANGLES SHALL HAVE THEIR SHORT LEGS OUTSTANDING AND 6" MINIMUM BEARING.

5. STRUCTURAL STEEL

A. ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM SPECIFICATION A-36 (LATEST LOCAL APPROVED). ALL STEEL SHALL BE DETAIL, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE AISC MANUAL, AISC SPECIFICATION AND AISC CODE OF STANDARD PRACTICE.

B. ALL WELDED CONNECTIONS SHALL BE DONE WITH E70XX ELECTRODES. SHOP AND FIELD WELDS SHALL BE MADE BY APPROVED CERTIFIED WELDERS AND SHALL CONFORM TO THE AMERICAN WELDING SOCIETY CODE FOR BUILDINGS AND D1.1. WELDS SHALL DEVELOP THE FULL STRENGTH OF MATERIALS BEING WELDED UNLESS OTHERWISE NOTED.

6. WOOD

A. STRUCTURAL SOLID WOOD RAFTERS, JOISTS, BEAMS AND STUDS SHALL BE HEM FIR #2 OR SPRUCE PINE FIR #2 SURFACED DRY AT A MAXIMUM OF 14 % MOISTURE CONTENT. ALL LUMBER EXPOSED TO WEATHER SHALL BE PRESSURE TREATED SOUTHERN PINE #2. ALL FABRICATION, ERECTION, OTHER PROCEDURES, AND MINIMUM UNIT STRESSES SHALL CONFORM TO THE CURRENT NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION.

B. WOOD TRUSSES SHALL BE DESIGNED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION (ANSI/TPI 1) AND COMMENTARY AND RECOMMENDATIONS FOR HANDLING, INSTALLING AND BRACING METAL PLATE CONNECTED WOOD TRUSSES (HIB-91) AS PUBLISHED BY THE TRUSS PLATE INSTITUTE AND IN ACCORDANCE WITH THE 1991 EDITION OF THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION.

C. WOOD TRUSSES AND ENGINEERED FLOOR JOISTS ARE TO BE DESIGNED BY THE SUPPLIER. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER/ARCHITECT FOR REVIEW. ALL TRUSSES AND JOISTS SHALL BE DESIGNED TO LIMIT THE BEARING STRESS TO 425 psi WHEN MEMBERS BEAR ON STUD WALLS. PROVIDE MEMBERS OF ADEQUATE WIDTH OR METAL CONNECTIONS TO LIMIT STRESSES TO THE SPECIFIED VALUE.

D. ALL LAMINATED VENEER LUMBER (LVL) OR PARALLEL STRAND LUMBER (PSL) SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: F_b=2600psi, F_v=285psi, E=1,900,000psi, F_c=2510psi(PARALLEL), F_c=150psi(PERPENDICULAR).

E. ALL DOUBLE MEMBERS SHALL BE NAILED TOGETHER WITH 2 ROWS OF 16d NAILS SPACED AT 12" O.C. ALL TRIPLE MEMBERS SHALL BE NAILED TOGETHER WITH 3 ROWS OF 16d NAILS SPACED AT 12" O.C. NAILED FROM EACH SIDE.

F. PROVIDE DOUBLE JOISTS AT PARALLEL PARTITIONS WHERE PARTITION LENGTH EXCEEDS 1/3 JOIST SPAN.

G. ALL NAILS ARE TO BE COMMON WIRE NAILS. NAILING OF ALL FRAMING SHALL BE AS SPECIFIED IN THE CONTRACT DOCUMENTS BUT IN NO CASE SHALL BE LESS THAN THE RECOMMENDED NAILING SCHEDULE CONTAINED IN THE 2000 INTERNATIONAL RESIDENTIAL CODE. ALL MULTIPLE STUD POSTS ARE TO BE NAILED TOGETHER WITH 12d NAILS @ 6" O.C. STAGGERED.

H. PROVIDE BRIDGING SPACED AT 48" O.C. IN FIRST TWO JOIST, RAFTER OR TRUSS SPACES WHEN FRAMING IS PARALLEL TO EXTERIOR WALL. NAIL SHEATHING (FLOOR, CEILING OR ROOF) TO BRIDGING AND NAIL BRIDGING TO EXTERIOR WALL PLATE. PROVIDE ONE ROW OF BRIDGING BETWEEN ALL FLOOR AND ROOF JOISTS FOR EACH 8'-0" OF SPAN. PROVIDE SOLID BLOCKING OR A CONTINUOUS RIM JOIST AT THE BEARING OF JOISTS, RAFTERS OR TRUSSES ON WOOD PLATES.

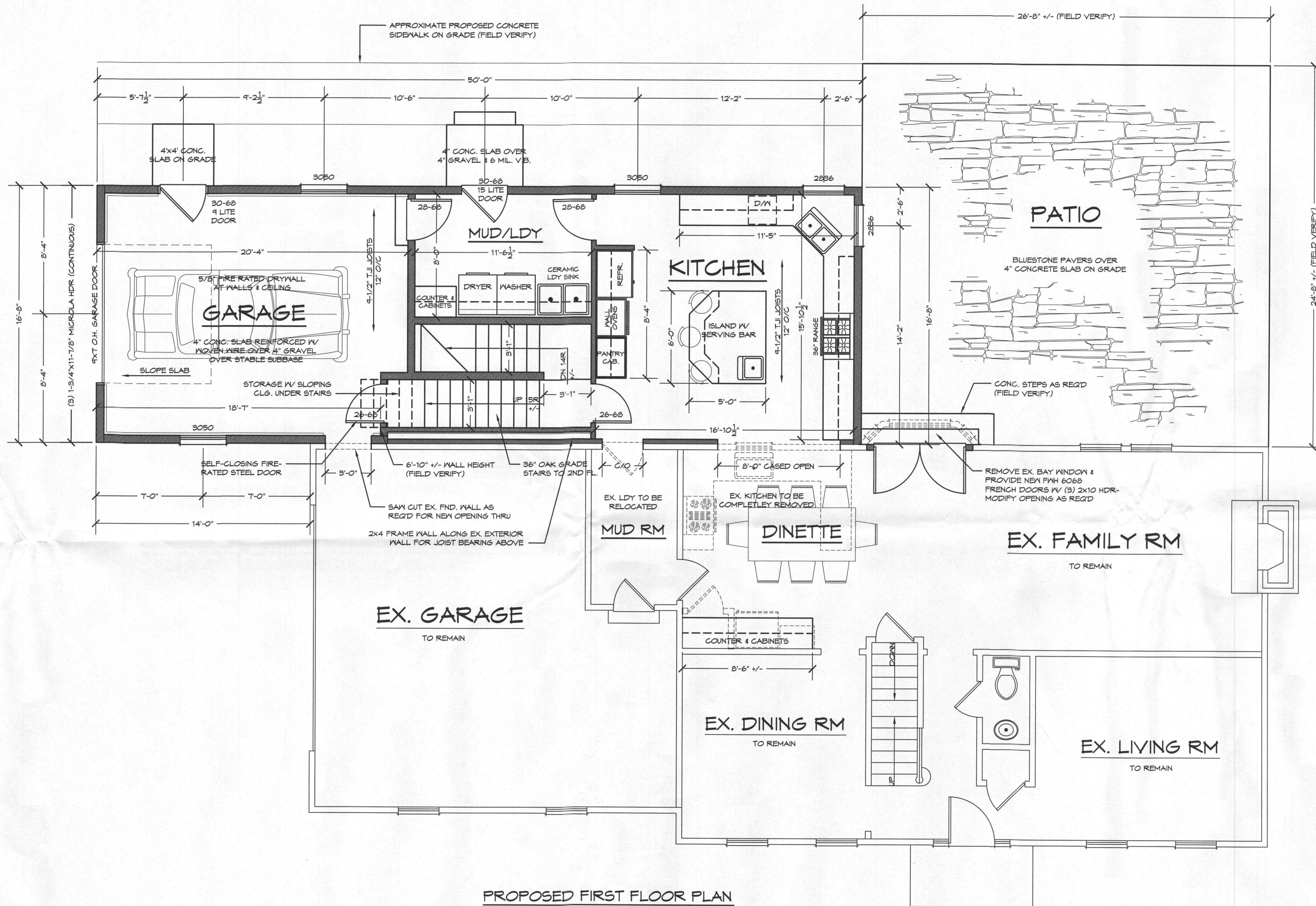
I. PROVIDE THE FOLLOWING JAMB STUDS AT ALL BEARING WALL OPENINGS UNLESS NOTED OTHERWISE:

0'-3" OPENING 1 JACK STUD, 1 KING STUD
3'-1" - 6'-0" OPENING 2 JACK STUDS, 1 KING STUD
6'-1" - 9'-0" OPENING 2 JACK STUDS, 2 KING STUDS

PROVIDE DOUBLE STUDS AT ALL CORNERS AND BENEATH ALL GIRDER TRUSSES AND WOOD BEAMS UNLESS NOTED OTHERWISE ON PLANS. WOOD BEAMS, GIRDER TRUSSES AND HEADERS SHALL BEAR THE FULL DEPTH OF POSTS AND JACK STUDS.

J. ALL POSTS (MULTIPLE STUDS OR SOLID POST) SUPPORTING BEAMS, WALL HEADERS OR GIRDER TRUSSES, SHALL BE BLOCKED SOLID FOR THE FULL LENGTH AND WIDTH OF POSTS AT ALL INTERSECTIONS WITH FLOORS AS REQUIRED TO PROVIDE CONTINUOUS SUPPORT TO TOP OF FOUNDATION WALLS OR BEAMS. POSTS SHOWN ON UPPER LEVELS FLOORS SHALL ALSO BE INSTALLED ON THE LOWER LEVELS IN LINE WITH THE POST ABOVE DOWN TO FOUNDATION WALLS OR BEAMS.

K. ALL FLUSH JOIST TO BEAM OR BEAM TO BEAM CONNECTIONS SHALL BE MADE WITH JOIST OR BEAM HANGERS TO SUPPORT THE LOAD CAPACITY INDICATED ON THE PLANS OR THE FULL CAPACITY OF THE JOIST OR BEAM. HANGERS SHALL BE PROVIDED BY SIMPSON STRONG TIE OR USP LUMBER CONNECTORS. THE SUPPLIER SHALL DESIGN ALL HANGERS FOR THE CAPACITY STATED. INSTALL ALL HANGERS IN STRICT CONFORMANCE TO THE MANUFACTURER'S INSTRUCTIONS. FILL ALL NAIL OR BOLT HOLES USING THE SPECIFIED NAILS AND BOLTS ONLY.

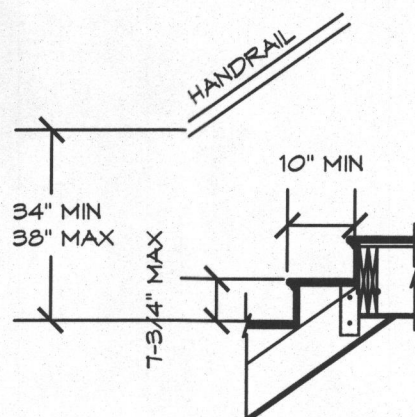


PROPOSED FIRST FLOOR PLAN

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

PROPOSED WINDOWS SHOWN ARE ANDERSEN 200 SERIES

EXISTING FRAME WALL TO REMAIN
EXISTING FRAME WALL TO BE REMOVED
PROPOSED FRAME WALL



TYPICAL STAIR SECTION

NOT TO SCALE

NOTE: ALL STAIRS SHALL BE CONSTRUCTED IN ACCORDANCE WITH IRC 2012 SECTION R314

REMODELING & ADDITIONS TO
THE TISON RESIDENCE

PROJECT ADDRESS:
13115 BARBERRY WAY
SYKESVILLE, MD 21154
HOWARD COUNTY, MD

REVISED 4/13/2015

FILE KRASA ADDITION

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

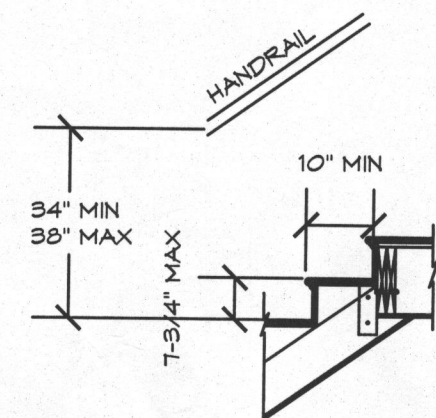
DATE: 2/20/15

SHEET NO.: 9

GBL CUSTOM HOME
DESIGN INC.

PO BOX 237 FINKSBURG, MD 21048

PHONE 410-833-8320



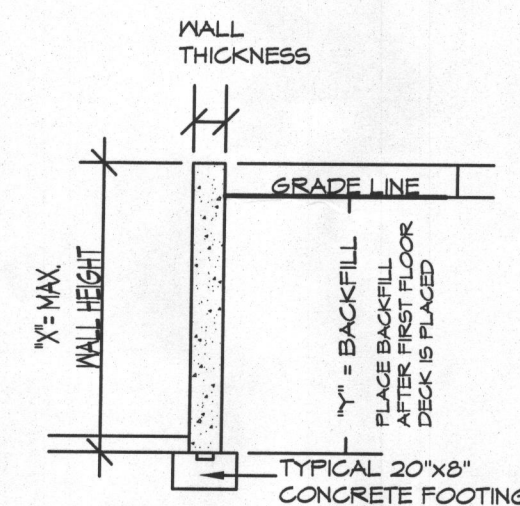
TYPICAL STAIR SECTION
NOT TO SCALE

NOTE: ALL STAIRS SHALL BE
CONSTRUCTED IN ACCORDANCE WITH
IRC 2012 SECTION R314

TABLE R404.1.1(5) PER IRC 2006
CONCRETE FOUNDATION WALLS

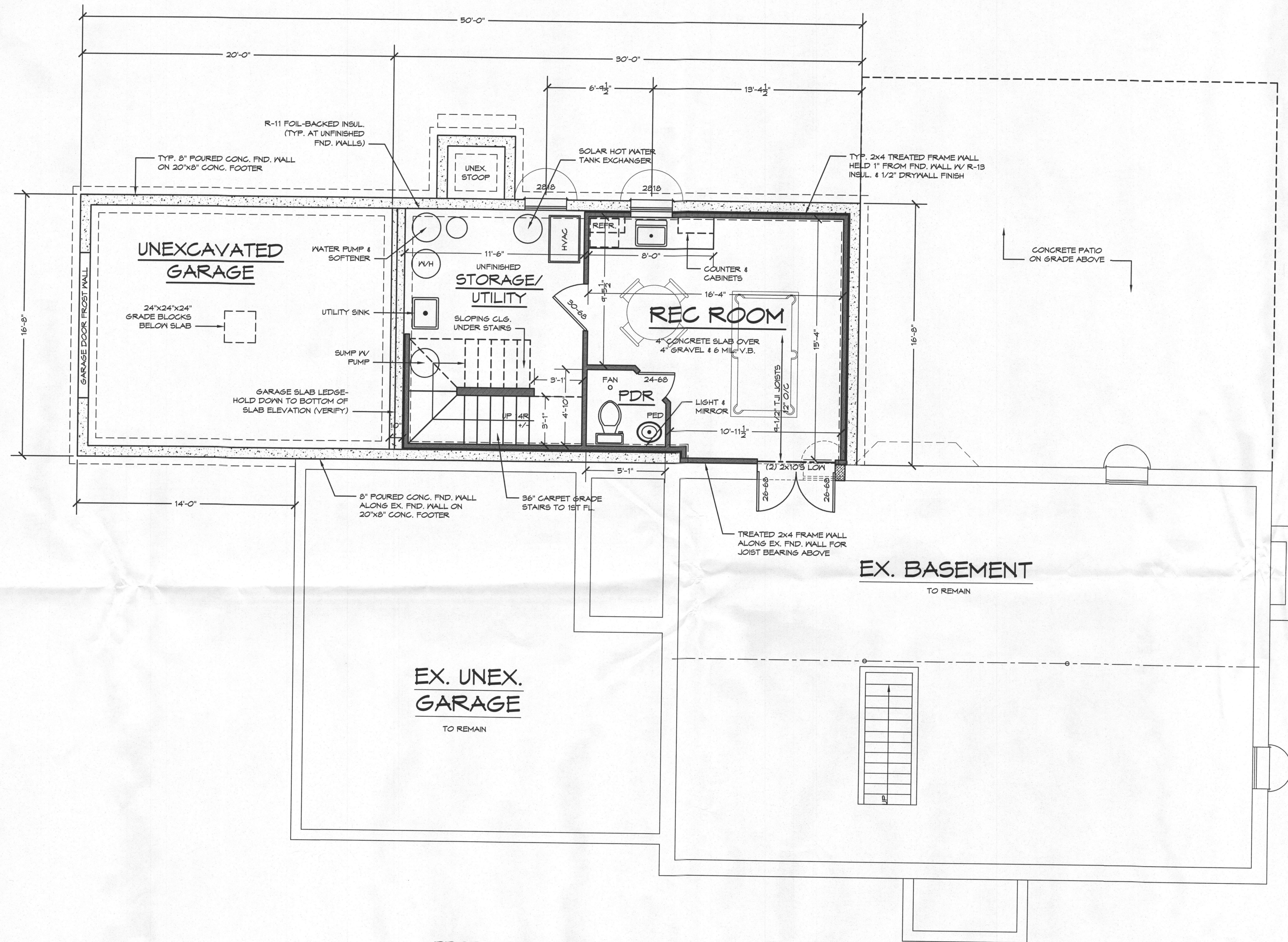
MAXIMUM WALL HEIGHT "X" (FEET)	MAXIMUM UNBALANCED BACKFILL HEIGHT "Y" (FEET)	MINIMUM VERTICAL REINFORCEMENT SIZE & SPACING			
		SOIL CLASS & DESIGN LATERAL SOIL (PSF PER FOOT OF DEPTH) SM, GC, SM, SM-SC, & ML			
		MIN. WALL THICKNESS "T" (INCHES)			
9	4	PC	PC	PC	PC
	5	#4@35"	PC	PC	PC
	6	#6@34"	PC	PC	PC
	7	#6@34"	#5@37"	PC	PC
	8	#6@33"	#6@35"	#5@37"	PC
	9	#6@32"	#7@41"	#6@41"	PC

FOUNDATION WALL DESIGN DATA
NOT TO SCALE



PROPOSED FOUNDATION PLAN
SCALE: 1/4"=1'-0"

- EXISTING FRAME WALL TO REMAIN
- EXISTING FRAME WALL TO BE REMOVED
- PROPOSED FRAME WALL



REMODELING & ADDITIONS TO THE TISONE RESIDENCE

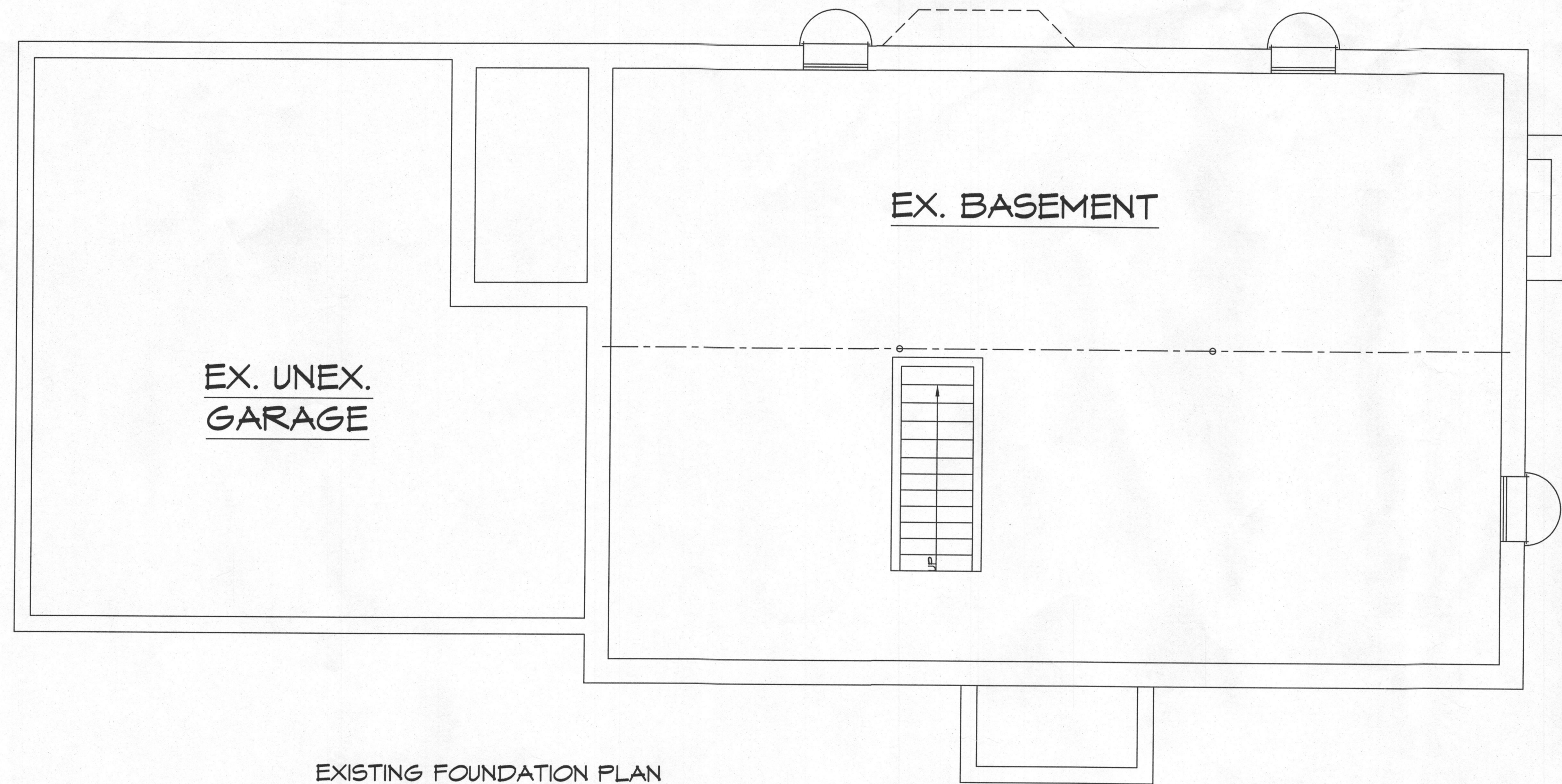
PROJECT ADDRESS:
19719 BARBERRY WAY
SYKESVILLE, MD 21184
HOWARD COUNTY, MD

REVISED 4/13/2015

FILE: KRAGA ADDITION

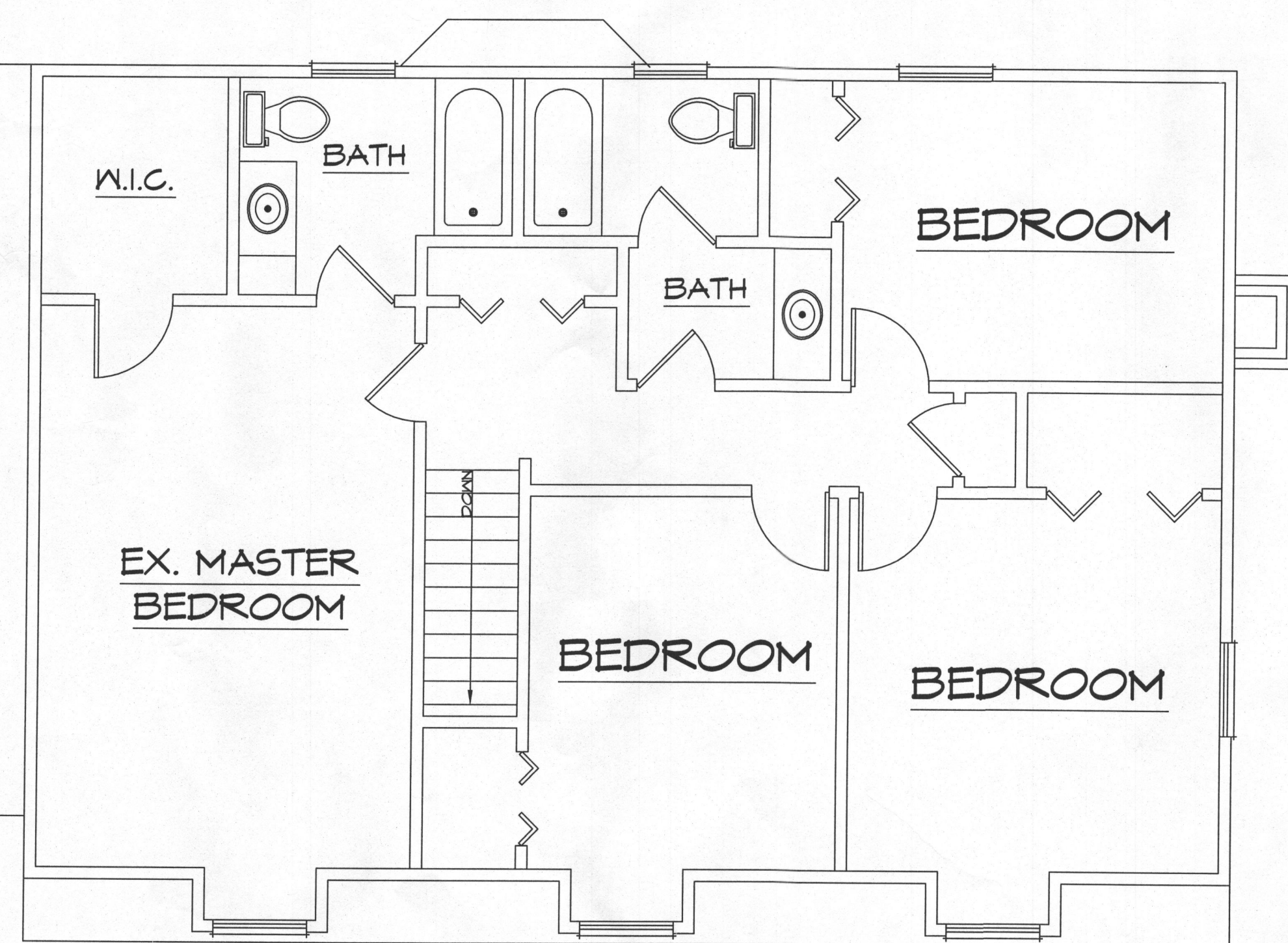
SCALE: 1/4" = 1'-0"
DATE: 2/20/15
SHEET NO.: 2

GBL CUSTOM HOME
DESIGN INC.
PO BOX 237 FINKSBURG, MD 21048
PHONE 410-833-8320



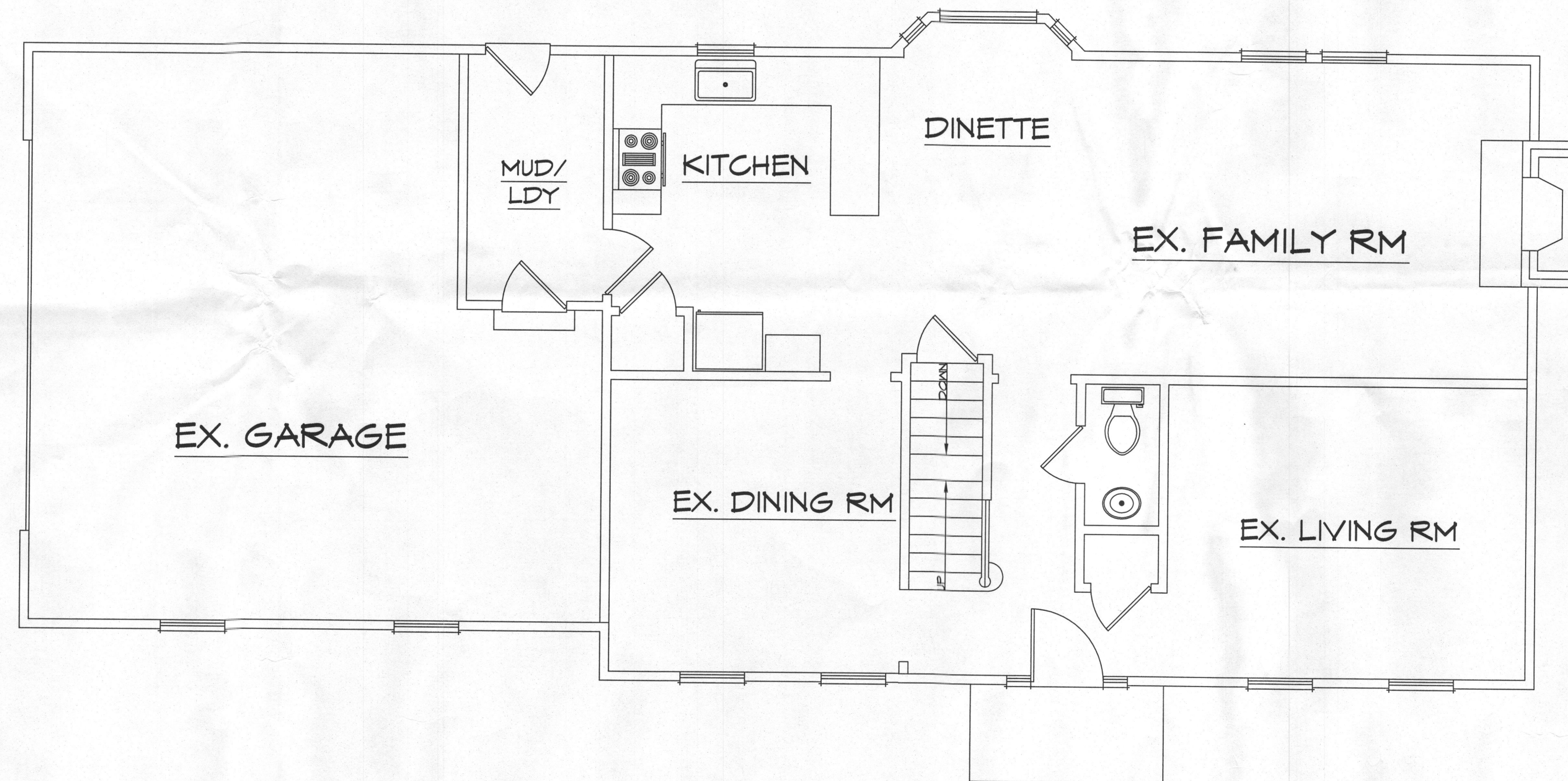
EXISTING FOUNDATION PLAN

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



EXISTING SECOND FLOOR PLAN

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



EXISTING FIRST FLOOR PLAN

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

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REMODELING & ADDITIONS TO THE TISONNE RESIDENCE

PROJECT ADDRESS:
18118 BARBERRY WAY
SYKEVILLE, MD 21154
HOWARD COUNTY, MD

REVISED 4/13/2015

FILE: KRASA ADDITION

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

DATE: 2/20/15

SHEET NO.: 1

GBL CUSTOM HOME
DESIGN INC.
PO BOX 237 FINKSBURG, MD 21048
PHONE 410-833-8320