



# Annual Student Design Competition

## Trojan Build

*Sponsored by Home Builders Association of Monroe County &  
Kohler Architecture, Inc.*

1. Sponsor - The Home Builders Association of Monroe County and Kohler Architecture, Inc.
2. Eligibility - All junior high and senior high school students in the Monroe County School System, (grade 7 thru 12). Students do not have to be in a formal art, drafting or drawing course.
3. Deadline - All entries must be submitted by Friday, April 3, 2020 at 12:00 Noon, at the Office of Kohler Architecture, Inc. - 1118 W. Front St., Monroe, MI 48161. Contact Keith Kohler at 734-242-6880.
4. Project – **Trojan Build**
5. Judging - Will be done Friday, April 10, 2020 at 10:00 a.m. by members of the HBA and Kohler Architecture, Inc. Submittals will be judged in one category: Drawings Only.
6. Judging Guidelines - Will be based on the following point system (100 points total) for both categories:
  - a) Program Compliance - 1/3
  - b) Functional Design - 1/3
  - c) Presentation & Composition - 1/3

The highest overall score will receive 1st place; 2nd highest will receive 2nd place, etc.

7. Awards:
  - a) Individual Awards
    - 1st Place - Certificate & \$200 Cash
    - 2nd Place - Certificate & \$150 Cash
    - 3rd Place - Certificate & \$75 Cash
    - 4th Place - Certificate & \$50 Cash
    - 5th Place - Certificate & \$25 Cash

The judges have the option to disqualify any submittal if it does not meet the minimum program requirements or expected standards of quality. It will also be their discretion, to shift some or all of the awards into the other places, should there be a lack of qualifying submittals. Each student is limited to only one submittal. The same individual submittal will also be judged in the traveling trophy category.

- b) School Traveling Trophy

There are (2) traveling school trophies, which will be awarded to (2) different schools. The 1<sup>st</sup> winning school trophy will be awarded to the school of the 1<sup>st</sup> place student winner. The 2<sup>nd</sup> winning school trophy will go to a different school having the student winner closest to 1<sup>st</sup> place. No single school will receive both trophies. In the event only one school enters, the 2<sup>nd</sup> trophy will remain dormant. The trophies will be given to the instructor at the awards banquet and remain in the school's possession until the following year. At that time, it will be returned to the Home Builders Association for re-issuing to that year's winning school(s).

8. **Winning Design:**

This year's winning design will be built by the Monroe High School Building Construction Technology class. Please note that some assistance may be needed to make alterations to the winning design entry due to constructability, budget, zoning, building code compliances and marketability.

9. **Assistance:**

For purposes of explaining this year's program, answer any questions and give assistance, Members of the committee will be available. Contact Bob Polk (734-289-4053) or Keith Kohler (734-242-6880).

10. **Award Banquet:**

The winners will be invited to the Home Builder's Association for presentation of awards and public recognition. Tentatively set for Thursday, May 7, 2020 - verification of location and time for award events will be announced later.

11. **Entry Requirements** - Each student must submit the following drawings:

- a) **Drawing Media** - Drawings shall be done on white tracing/vellum or opaque/bond paper and secured to cardboard or foamcore board for rigidity (maximum cardboard size is 24" x 36"). Each drawing shall be secured to one board on one side only. One drawing/tracing allowed per board. Maximum number of boards shall be two.
- b) **Drawing Content** - Drawings shall be preliminary in nature, sufficient to explain the design and concept. Each submittal must contain:
  - (1) Site Plan at 1" = 20'-0" scale.
  - (2) First Floor & Basement Plan at 1/4" = 1'-0" scale
  - (3) (4) Exterior elevations at 1/4" = 1'-0" scale.
  - (4) Typical exterior wall section at 3/4" = 1'-0" scale.
  - (5) Full width building/cross section (*thru main entry and rear of house*) at 1/4" = 1'-0" scale.
  - (6) A narrative to describe your design concept (*see program requirements for clarification*)
  - (7) *The use of an exterior perspective drawing is encouraged, though not required.*
- c) **Dimensions/Square Footage** – **Fully dimensioned Site Plan, Floor Plan, Exterior Elevations and Wall Section, and Building Cross Section are required. Please note that room sizes are to be noted on floor plan.**
- d) **Identification** - Each entry shall include the following information in a plain sealed opaque envelope, taped to the back of each board:

**Name, Address, Telephone Number, School, Principal and/or Instructor.**
- e) **Designs** – All Instructors have been given last year's winning design for reference only, so that similar designs are not replicated and turned in. Students are encouraged to submit an original design that is marketable with a functional floor plan and an appealing street side elevation. Designs that look like past winning designs will not be evaluated for the Top 5 winning designs.

## PROGRAM REQUIREMENTS

### A. REQUIREMENTS

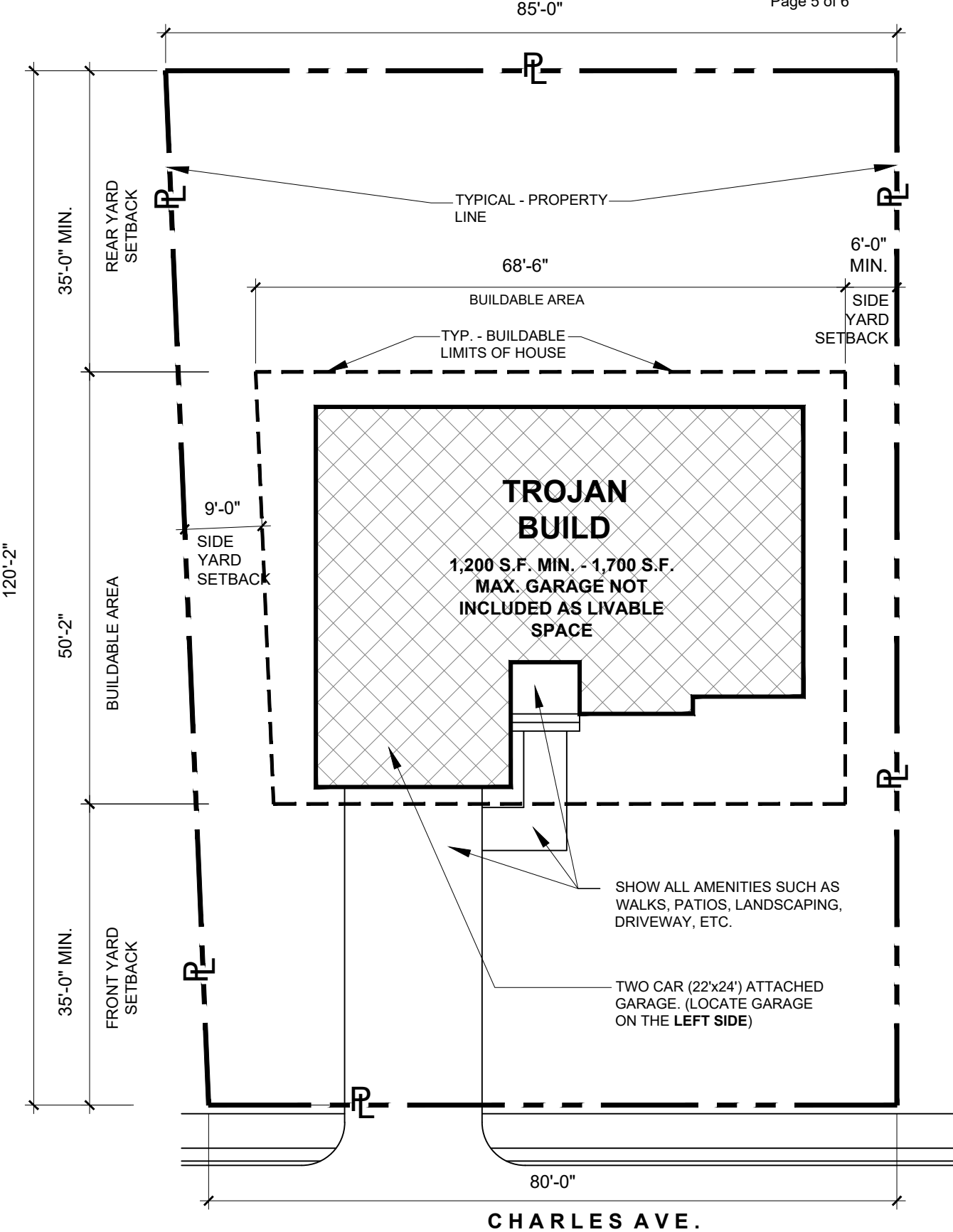
1. Site - See Site / Plot Plan on Page 5 showing property lines, building setbacks, road right-of-way, public utilities, etc. Show driveway, sidewalk, decks, stoops, landscaping, or other exterior related amenities. Location of home and garage must be shown as delineated on site plan (on left side of property) with "main" front entry on street side.
2. Size - The house is to be a single-family residence. Gross floor space is **1,400 S.F. min. to 1,700 S.F. max.** (*out to out exterior walls*). You as a designer, have the freedom and must use your best judgment to arrive at appropriate room sizes and space arrangements for all rooms unless noted otherwise in this program.
3. Construction - The design is **required** to be a 1 story residence, ranch style on full depth basement. Typical wall construction is to be 2x6 wood studs @ 16"o.c. and 1/2" OSB sheathing, Tyvek house wrap, and vinyl siding on the exterior. Insulate walls with R-21 batt insulation and 1/2" gypsum board on interior. The roof slope to be 5/12 to 6/12 pitch on main roof, up to 8/12 on reverse pitches, with trusses having an energy heel at bearing. Keep roof design simple – roof can be a combination of gable and hip design. Bay windows and skylights are acceptable.
4. Bedrooms - There must be (2) bedrooms and (1) master bedroom.
5. Bathrooms - Total of (3). There must be (1) full bath (water closet, lav, tub) to serve the (2) bedrooms, a half bath, and a master bath (water closet, walk-in shower, lav.) for the Master Bedroom.
6. Laundry Rm - Located on first floor. Indicate location of washer, dryer, and utility tub.
7. Basement - Include a space, centrally located, in the basement for a forced air furnace and a water heater. Indicate location on the basement plan. Provide a secondary means of egress with 3 FT x 3 FT clear window well (minimum 24" clear height x 20" clear width), located 44" above finished floor. Also provide 2 additional basement windows. Indicate on basement plan.
8. Other Rooms - Provide an open floor concept with a great/living, family, dining room, kitchen (all one room). No separate living room is needed. Mud room optional.
9. Garage - A simple two car (22'wx24'd) attached garage must be included in your final design. Locate on the left side.
10. Furniture - All floor plans must show counters, wall/base cabinets, plumbing fixtures and appliance in each room at the same scale as the floor plan.
11. Narrative - Include a descriptive statement of how you arrived at the solution you are submitting. This may be based on how the interior spaces are arranged, views to the exterior, architectural style that was chosen, materials, orientation, etc.

12. Exterior - Provide an exterior design of your choice remembering to keep simple, economical and appealing. A covered porch, to protect against inclement weather, is optional. An exterior 3-D Perspective View is encouraged, though not required. Exterior materials to be vinyl siding, double hung windows, stacked stone with no brick ledge, asphalt shingles. Consideration of making the street side elevation marketable shall be given high priority when judging final designs.
  
13. Code - The following items must be complied with in the design as based upon the 2015 Michigan Residential Code (MRC): *Sleeping Room Egress, Natural Light/Ventilation and Stairs & Hall*

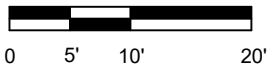
## **B. SUGGESTIONS**

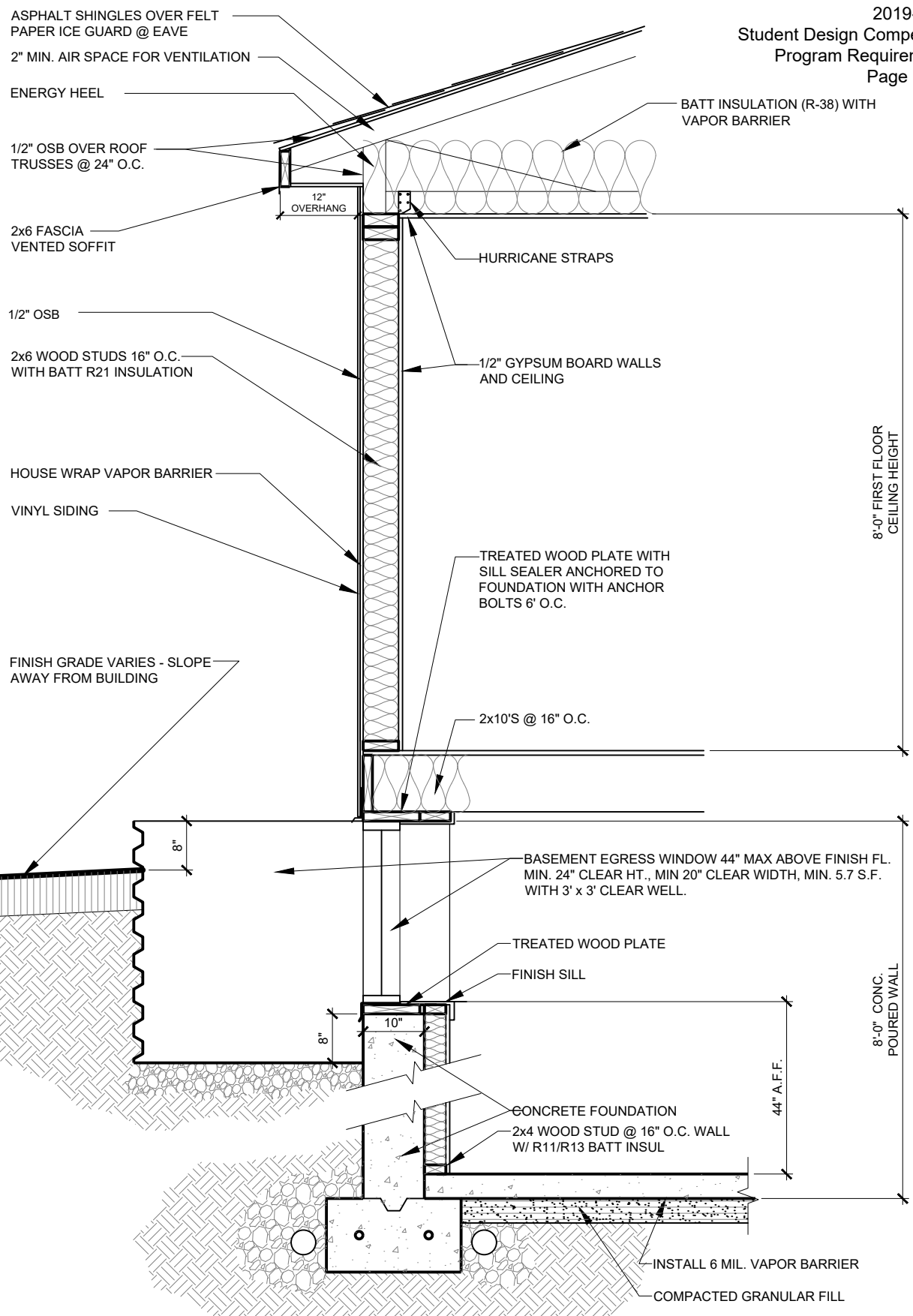
1. Floor plans should be efficient with minimum length of hallways and proper relationships between the living, sleeping, dining and entertaining functions of the home.
2. Room sizes should allow for their proper use, such as; bath plumbing fixtures must fit with sufficient user space.
3. The House shall have a minimum of (2) entrances/exits from the living spaces (not bedroom area) as distant apart as practical. Main / front entry must be shown on street side of home.
4. Remember to place your home within the designated area as shown / noted on the Site Plan. Please use the site plan as provided. You can adjust the shape of your residence as required to accommodate your design. Provide dimensions and locate the house where you want within the buildable area contained in the zoning setbacks.

\* \* \* GOOD LUCK \* \* \*



# SITE PLAN





### TYPICAL WALL SECTION

