



# Staff Report

Infill Housing Design Review Committee

File Number: 10-A-21-IH

**Meeting:** 7/20/2022  
**Applicant:** Quinn Epperly QB Realty Team LLC  
**Owner:** Quinn Epperly QB Realty Team LLC

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## Property Information

**Location:** 1547 Ohio Ave. **Parcel ID** 81 | S 011  
**Zoning:** RN-2 (Single-Family Residential Neighborhood)  
**District:** Lonsdale Infill Housing Overlay District

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## Description of Work

Level III New Primary Structure

New primary residence fronting Ohio Avenue. Two-story, front-gable roof residence measures 17' wide by 33' long, with an 8' deep, full length front porch, which is partially recessed under the projecting second story. The house is proposed to be set approximately 26' from the front property line. The parking is proposed as a 10' wide driveway extending off Ohio Avenue to the left of the house and wrapping to a two-car parking area in the rear of the house.

The two-story, front-gable roof house features an 8' deep front porch, which is topped by a projecting shed roof and partially recessed under cantilevered interior space on the second story. The house is proposed to be clad in horizontal lap siding, with an asphalt shingle-clad roof and an exposed CMU foundation. The façade (southeast) is two bays wide, with two adjoining 30 x 60 double-hung windows followed by a Craftsman-style door. On the second story, there are three adjoining 30 by 50 double-hung windows. On the right elevation, there are three windows of varying size and placement, with two other window sizes on the left elevation. A secondary access is located on the rear elevation.

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## Applicable Design Guidelines

Heart of Knoxville Infill Housing Design Guidelines

### 1. Front Yards

- Consistent front yard space should be created along the street with the setback of a new house matching the older houses on the block.
- When several infill houses, porches and the habitable portion of each house should be about the same distance from the street as the original houses.
- A walkway should be provided from the sidewalk or street to the front door. Along grid streets, the walk should be perpendicular to the street.
- Healthy trees that are outside the building footprint should be preserved. The root area should be marked and protected during construction.

### 2. House Orientation and Side Yards

- New housing should be proportional to the dimensions of the lot and other houses on the block.
  - Side yard setbacks should be similar to older houses on the block, keeping the rhythm of spacing between houses
-

consistent.

### 3. Alleys, Parking, and Services

- Parking should not be in front yards.
- Alley access should be used for garage or parking pad locations.
- On streets without alleys, garages or parking pads should be at least 20' behind the front façade of the infill house with access limited to one lane between the street and the front façade.
- On those streets which have alleys, driveways should not be permitted from the front of the house.
- Alley oriented parking pads, garbage collection points, and utility boxes should be screened with a combination of landscaping and fencing.

### 4. Scale, Mass, and Foundation Height

- The front elevation should be designed to be similar in scale to the other houses along the street.
- The front façade of new houses should be about the same width as original houses on the block.
- If extensions or bays were typically part of the neighborhood's historic house design, such elements should be incorporated into infill housing.
- New foundations should be about the same height as the original houses in the neighborhood.

### 5. Porches and Stoops

- Porches should be part of the housing design in those neighborhoods where porches were commonplace.
- Porches should be proportional to original porches on the block, extending about 8-12' toward the street from the habitable portion of the house.
- Porches should extend into the front yard setback, if necessary, to maintain consistency with similarly sited porches along the street.
- Porch posts and railings should be like those used in the historic era of the neighborhood's development.

### 6. Windows and Doors

- When constructing new houses, the windows and door styles should be similar to the original or historic houses on the block.
- To respect the privacy of adjacent properties, consider the placement of side windows and doors.
- The windows and doors on the front façade of an infill house should be located in similar proportion and position as the original houses on the block.
- Attention should be paid to window placement and the ratio of solid (the wall) to void (the window and door openings).
- Contemporary windows such as "picture windows" should not be used in pre-World War II neighborhoods.

### 7. Roof Shapes and Materials

- New roofs should be designed to have a similar pitch to original housing on the block.
- More complex roofs, such as hipped roofs and dormers, should be part of new housing designs when such forms were historically used on the block.
- Darker shades of shingle were often used and should be chosen in roofing houses in Infill neighborhoods.

### 8. Siding Materials

- Clapboard-like materials should be used in constructing new housing where painted wood siding was traditionally used.
- Brick, wood shingle, and other less common material may be appropriate in some older neighborhoods, particularly those with a mix of architectural styles.
- Faced stone, vertical siding, and other non-historic materials should not be used in building new houses.

### 11. Landscape and Other Considerations

- One native or naturalized shade tree should be planted in the front and rear yards of infill lots with 25 feet or

more in depth to front of house.

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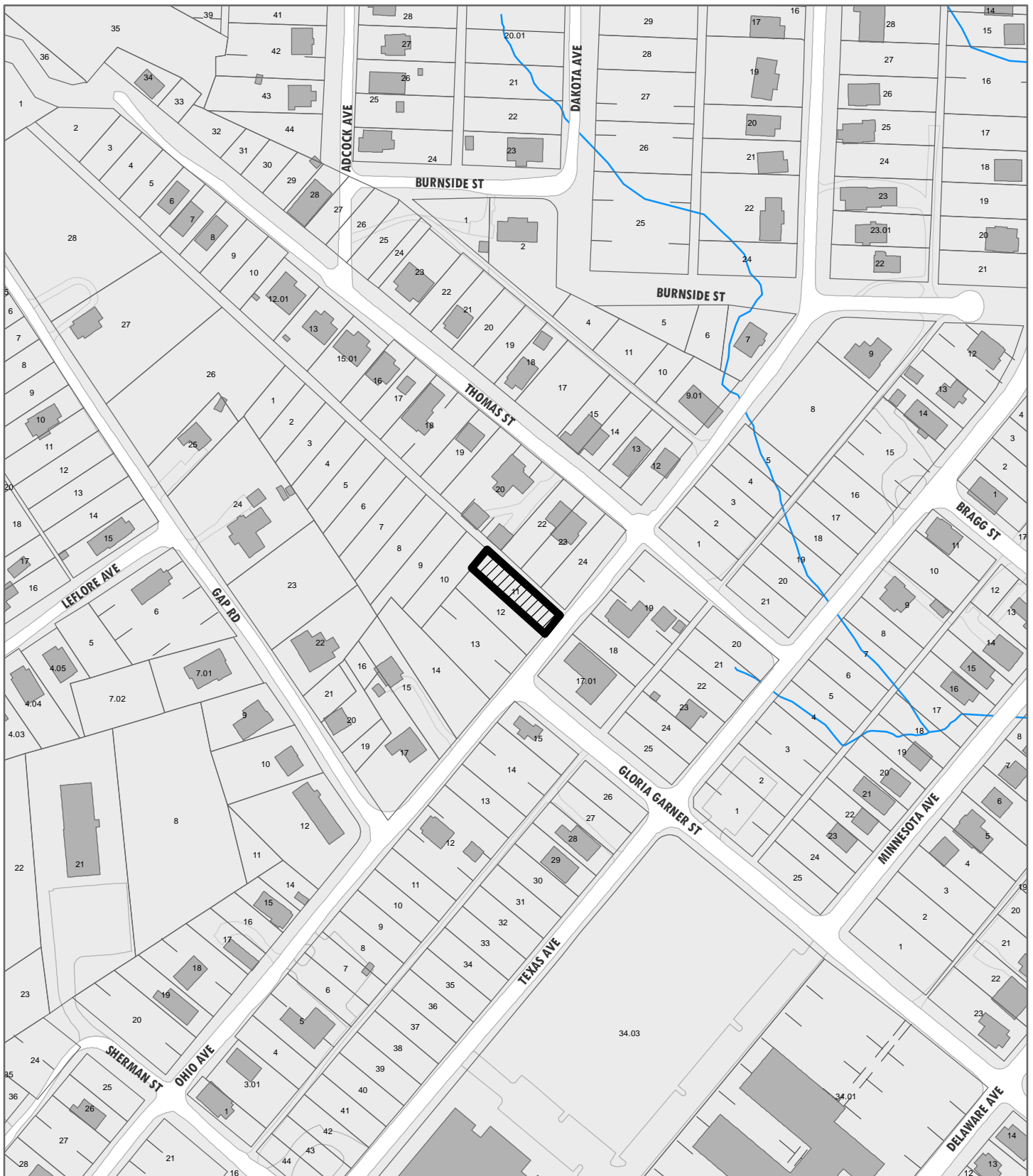
## Comments

1. The submitted site plan does not specifically call out the front setback measurement; the 8' deep front porch looks to be approximately 26' from the front property line. There is only one other house at the end of the block, set approximately 27' from the front property line. Overall, the proposed front setback should be confirmed to meet the RN-2 dimensional standards and the broader context of the neighborhood.
2. The subject block lacks significant context. Older houses on the block include modified Craftsman bungalows and a small shotgun house at 1700 Ohio Avenue. The narrow house is proportional to the dimensions of the lot, though the two-story, narrow form is not consistent with the broader neighborhood context.
3. The proposed parking meets the design guidelines by avoiding the front yard and placing the parking pad behind the house. The alley to the northeast of the site is not improved. Modifications to the site plan may be necessary to meet City Engineering standards, especially to address stormwater issue with a recently declassified stream on the site.
4. Guidelines note that "the front elevation should be designed to be similar in scale to the other houses on the street," and the "front façade of new houses should be about the same width as original houses on the block." The proposed house, at 17' wide and two stories tall, is not similar in scale or façade with nearby Craftsman bungalows or other Queen Anne cottages in the surrounding neighborhood. The foundation height is not clearly defined on the drawings.
5. The design includes an 8' deep front porch, partially recessed under a cantilevered interior space. The cantilevered section and porch roof do not reflect typical proportions from the context.
6. Guidelines state that "window and door styles should be similar to original or historic houses on the block," especially in "similar proportion and position" on the façade and paying attention to "window placement and ratio of solid to void." The proposed design includes six different window sizes and irregular placement. Window designs and proportions should be corrected to meet the design guidelines.
7. The 9/12 pitch, front-gable roof meets the design guidelines for slope; the shed roof on the porch incorporates additional roofline complexity.
8. The site plan incorporates trees in the front and rear yards.

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## Recommendation

Staff recommends postponement of Certificate 10-A-21-IH, so that a revised design can be submitted to the Board for further review, addressing items such as façade width, scale, porch proportions, and window placement, along with any stormwater issues which may exist on the site.



**10-A-21-IH**

**APPLICATION FOR CERTIFICATE OF APPROPRIATENESS**

**INFILL  
HOUSING  
REVIEW  
BOARD**

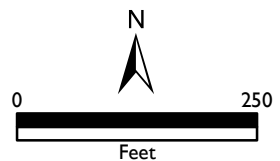


1547 Ohio Ave.  
Lonsdale Infill Housing Overlay District

Original Print Date: 7/6/2022  
Knoxville/Knox County Planning - Infill Housing Design Review Committee

Revised:

Applicant: Quinn Epperly QB Realty Team  
LLC





# DESIGN REVIEW REQUEST

- DOWNTOWN DESIGN (DK)
- HISTORIC ZONING (H)
- INFILL HOUSING (IH)

QB Realty Team LLC

Applicant

5/31/22

10-A-21-HZ

Date Filed

Meeting Date (if applicable)

File Number(s)

## CORRESPONDENCE

All correspondence related to this application should be directed to the approved contact listed below.

- Owner
- Contractor
- Engineer
- Architect/Landscape Architect

Quinn Epperly

QB Realty Team LLC

Name

Company

2042 Town Center Blvd, PMB 318

Knoxville

TN

37922

Address

City

State

Zip

8659638462

Qbrenovations@gmail.com

Phone

Email

## CURRENT PROPERTY INFO

Owner Name (if different from applicant)

Owner Address

Owner Phone

1547 Ohio Ave

081IS011

Property Address

Parcel ID

GILBERT BROOKS LAND

RN-2/IH

Neighborhood

Zoning

## AUTHORIZATION

*Lindsay Crockett*

Lindsay Crockett

9.10.21 // 6.17.22

Staff Signature

Please Print

Date

*[Signature]*

Applicant Signature

*Quinn Epperly*

Please Print

5/31/22

Date

# REQUEST

## DOWNTOWN DESIGN

**Level 1:**

- Signs     Alteration of an existing building/structure

**Level 2:**

- Addition to an existing building/structure

**Level 3:**

- Construction of new building/structure     Site design, parking, plazas, landscape

*See required Downtown Design attachment for more details.*

Brief description of work: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## HISTORIC ZONING

**Level 1:**

- Signs     Routine repair of siding, windows, roof, or other features, in-kind; Installation of gutters, storm windows/doors

**Level 2:**

- Major repair, removal, or replacement of architectural elements or materials     Additions and accessory structures

**Level 3:**

- Construction of a new primary building

**Level 4:**

- Relocation of a contributing structure     Demolition of a contributing structure

*See required Historic Zoning attachment for more details.*

Brief description of work: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## INFILL HOUSING

**Level 1:**

- Driveways, parking pads, access point, garages or similar facilities     Subdivisions

**Level 2:**

- Additions visible from the primary street     Changes to porches visible from the primary street

**Level 3:**

- New primary structure  
      Site built     Modular     Multi-Sectional

*See required Infill Housing attachment for more details.*

Brief description of work: 2 story, 2 bedroom, 1.5 bathroom vinyl siding craftsman home made to fit very skinny lot.  
 \_\_\_\_\_  
 \_\_\_\_\_

## STAFF USE ONLY

**ATTACHMENTS**

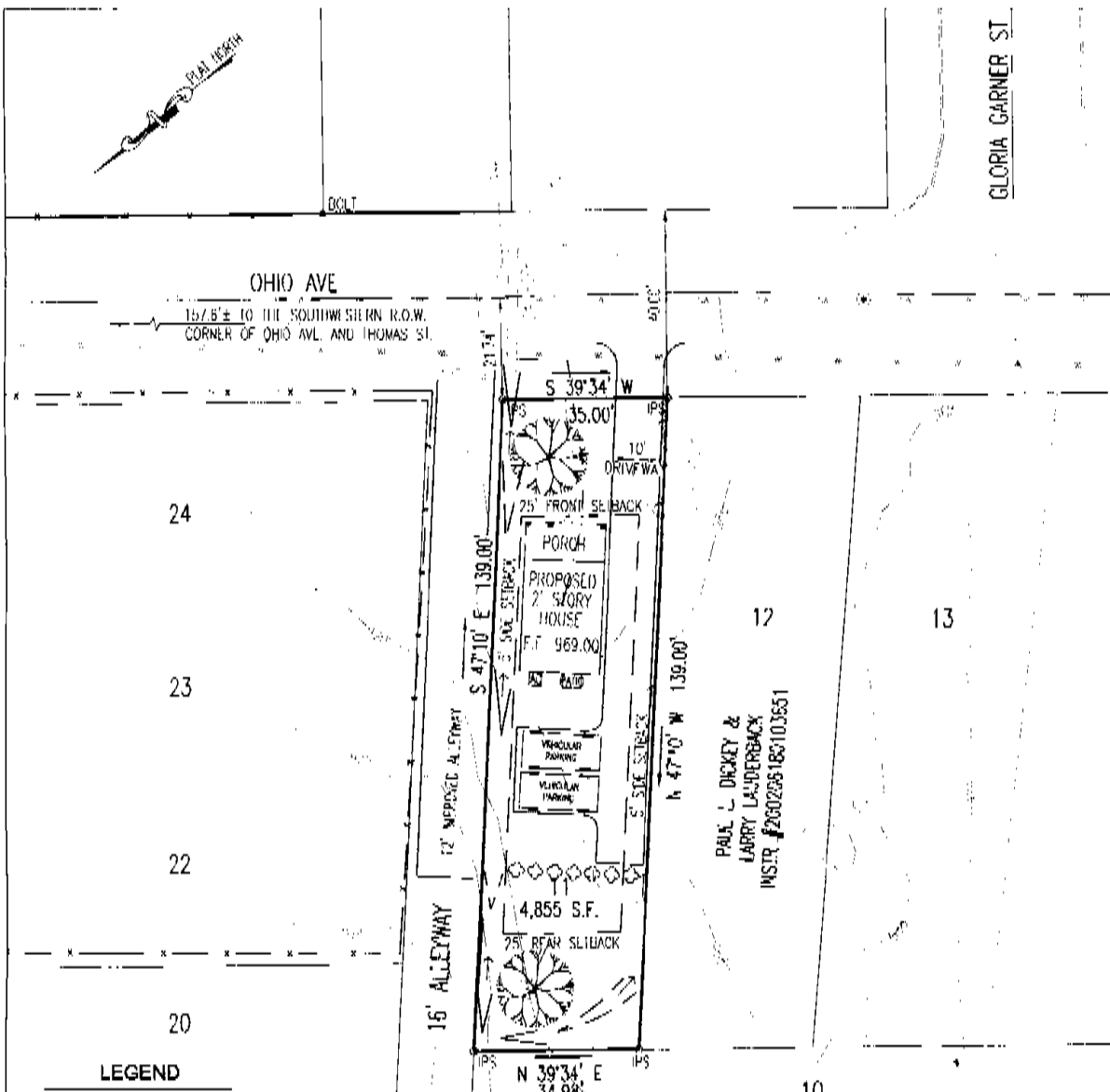
- Downtown Design Checklist  
 Historic Zoning Design Checklist  
 Infill Housing Design Checklist

**ADDITIONAL REQUIREMENTS**

- Property Owners / Option Holders

**Level 1:** \$50 • **Level 2:** \$100 • **Level 3:** \$250 • **Level 4:** \$500

<b>FEE 1:</b>		<b>TOTAL:</b>
<b>FEE 2:</b>		
<b>FEE 3:</b>		



**LEGEND**

- IP ● IRON NAIL FOUND
- IP ○ IRON PIN SET
- MHSA ● SANITARY SEWER MANHOLE
- x FENCE
- PROPOSED FLOW DIRECTION
- PROPOSED BUSH
- PROPOSED SHADE TREE

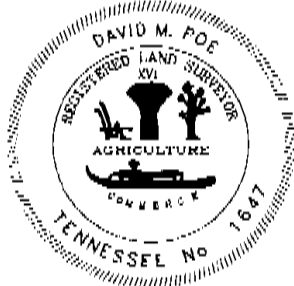
**OWNER:**  
 QB REALTY TEAM LLC.  
 9812 WESTLAND DRIVE  
 KNOXVILLE, TN 37922

**CONSTRUCTION & SUPPLY, LLC.**  
 INSTR #200/07260068797



**NOTES:**

1. IRON PINS FOUND (IP) SHOWN ON PLAT. ALL OTHERS SET BY DIN&P. UNLESS NOTED OTHERWISE ON PLAT.
2. THIS PROPERTY IS ZONED RN 2 (INFILL DISTRICT).
3. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND MAPS PROVIDED BY UTILITY COMPANIES. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED, ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED ALL UNDERGROUND UTILITIES.



**BATSON, HIMES, NORVELL & POE**  
 REGISTERED ENGINEERS & LAND SURVEYORS  
 4334 PAPERMILL DRIVE  
 KNOXVILLE, TENNESSEE 37909  
 PHONE (865) 588 6472  
 FAX (365) 588 6473

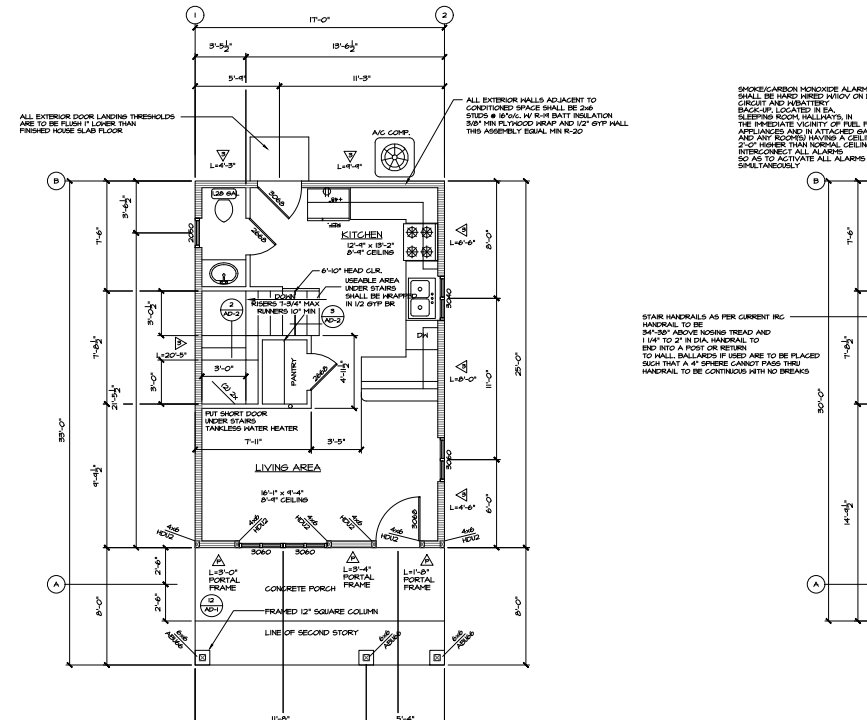
**CERTIFICATE OF CATEGORY AND ACCURACY OF SURVEY**  
 I CERTIFY THAT THIS IS A CATEGORY 1 SURVEY AND THE MAJOR PORTION OF THE UNADJUSTED SURVEY IS NOT LESS THAN 1:10,000.  
 REGISTERED LAND SURVEYOR  
 TENNESSEE REG. NO. \_\_\_\_\_

**PLOT PLAN FOR LOT 11,**

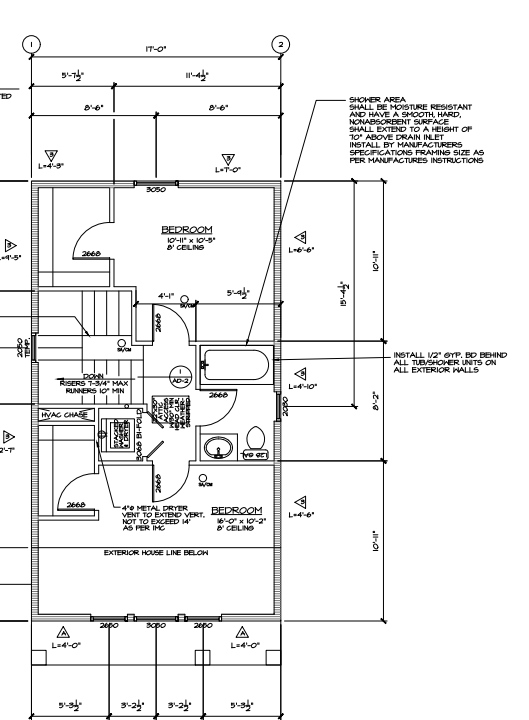
CL: TAX MAP NO. 081-H-S , PARCEL 011.00 , CITY BLOCK 19100  
 WARD NO.: 19 , CITY OF: KNOXVILLE , DISTRICT NO.: 5 , COUNTY: KNOX  
 LOT NO.: 11 , BLOCK NO.: ---  
 ADDRESS: 1547 OHIO AVE. , DEED INSTR. # 202009180022979 , PLAT REF: CABINET A, SLIDE 316-0  
 SCALE: 1"=30' , DATE: 07/01/2021 , REVISED: 05/12/2022  
 ORDERED BY: \_\_\_\_\_ , DWG NO.: 25308-PP

FLOOR PLAN NOTES:

- 1. 2 x 4 STUDS @ 12" O.C. @ ALL EXTERIOR WALLS WITH R-18 INSULATION UNO.
2. 2 x 4 STUDS @ 12" O.C. @ ALL INTERIOR WALLS UNO.
3. 2 x 6 STUDS @ 24" O.C. @ ALL PLUMBING WALLS.
...
34. GLASS BLOCK IS PROVIDED BY EXPANSION JOINTS ACROSS TOP AND SIDES. FREE OF MORTAR AND FILLED W/ RESILIENT MATERIAL SIZE OF EXPANSION JOINTS SHALL BE WATER TIGHT TO ADEQUATE SUPPORTING MEMBER. MEMBER DISPLACEMENTS BY SHALL BE A MINIMUM OF 3/8". GLASS BLOCK PANELS ARE REINFORCED PER IRC SECTION 210.



MAIN LEVEL



UPPER LEVEL

CONVENTIONAL WALL BRACING

- WOOD STRUCTURAL PANEL BRACING WITH A TRUSSING NOT LESS THAN 3/8" FOR 16' STUD SPACING AND NOT LESS THAN 3/8" FOR 24' STUD SPACING. OR 12" 2X SYSTEM STRUCTURAL WALL BRACING HAVING 6x6 STUDS, 12x12 FIELD OR 2XPSM BOARD BRACING (2" THICK BY 4" HIGH, HALFOLED OR VENEER BACK) (AT GARAGE WALLS USE 2X6 TYPE 7).
...
34. GLASS BLOCK IS PROVIDED BY EXPANSION JOINTS ACROSS TOP AND SIDES. FREE OF MORTAR AND FILLED W/ RESILIENT MATERIAL SIZE OF EXPANSION JOINTS SHALL BE WATER TIGHT TO ADEQUATE SUPPORTING MEMBER.

Tables for HDU HOLDDOWN SCHEDULE and STRAP HOLDDOWN SCHEDULE AT FLOOR FRAMING, including columns for Simpson's Anchor, Post, and Capacity.

- 1. NAIL SILL PLATE TO WOOD FLOOR (WHERE OCCURS) WITH 4-16d PER 16". ANCHOR SILL PLATE TO FOUNDATION WITH 1/2" DIAMETER ANCHOR BOLTS EMBEDDED 7" MIN. @ 6'-0" O.C. MAX. SPACING. USE A MINIMUM OF TWO BOLTS PER PIECE WITH 16" LOCATED WITHIN 12" OF EACH END.

ENERGY EFFICIENCY CERTIFICATE: A PERMANENT CERTIFICATE SHALL BE COMPLETED AND POSTED ON OR IN THE ELECTRICAL DISTRIBUTION PANEL BY THE CONTRACTOR.

NOTE: WINDOW FALL PROTECTION - IN DWELLING UNITS, WHERE THE TOP OF THE SILL OF AN OPERABLE WINDOW OPENING IS LOCATED LESS THAN 24" A.F.P. AND GREATER THAN 27" A.F.P. OR OTHER SURFACES BELONG ON THE EXTERIOR OF THE BUILDING...

AIR LEAKAGE:

THE BUILDING THERMAL ENVELOPE SHALL BE CONSTRUCTED TO LIMIT AIR LEAKAGE ACCORDANCE WITH THE COMPONENT MANUFACTURER'S REPORT OF THE RESULTS OF THE TESTS SHALL BE SHOWN IN THE BUILDING OFFICIAL REPORT.

MECHANICAL VENTILATION:

MECHANICAL VENTILATION THAT COMPLETS TO CURRENT IRC MECHANICAL VENTILATION SHALL BE EQUIPPED WITH A MANUAL SHUT-OFF SWITCH, OUTDOOR AIR INTAKES AND EXHAUSTS SHALL HAVE AUTOMATIC OR Gravity DAMPERS THAT CLOSE WHEN THE SYSTEM IS NOT OPERATING.

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ALL NEW EXTERIOR WALLS SHALL BE SIDED WITH 3/8" 2X6 OR 1X4 PLYWOOD OR TRUSSER SUEA THAT NEW WALLS SHALL BE SIDED WITH 3/8" 2X6 OR 1X4 PLYWOOD OR TRUSSER SUEA THAT NEW WALLS SHALL BE SIDED WITH 3/8" 2X6 OR 1X4 PLYWOOD OR TRUSSER SUEA...

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ALL INTERIOR WALLS WITH FOUNDATIONS A TYPE 3 BE ALLOWED. ALL INTERIOR WALLS WITH FOUNDATIONS A TYPE 3 BE ALLOWED. ALL INTERIOR WALLS WITH FOUNDATIONS A TYPE 3 BE ALLOWED.

NOTE: ALL SMOKE DETECTOR/CARBON MONOXIDE ALARMS SHALL BE A MIN. OF 3/8" FROM ALL PAIRS, AIR HANDLING DEVICES, EXHAUSTS, VENTS AND SMOKE DETECTOR/CARBON MONOXIDE ALARMS SHALL BE LOCATED WITHIN 10 FEET OF THE IMMEDIATE VICINITY OF FUEL BURNING APPLIANCES AND IN ATTACHED GARAGE.

AIR LEAKAGE:

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MECHANICAL VENTILATION:

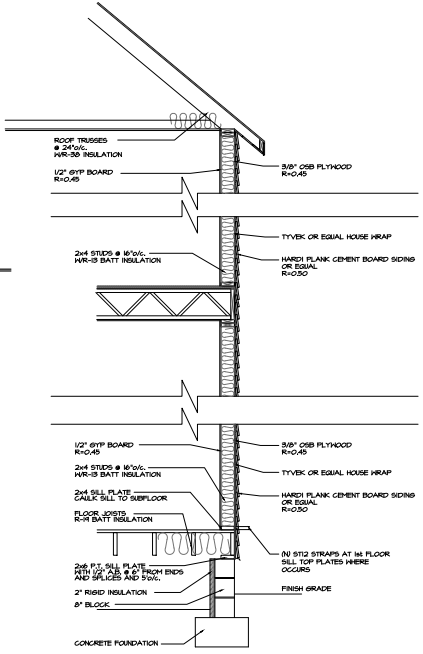
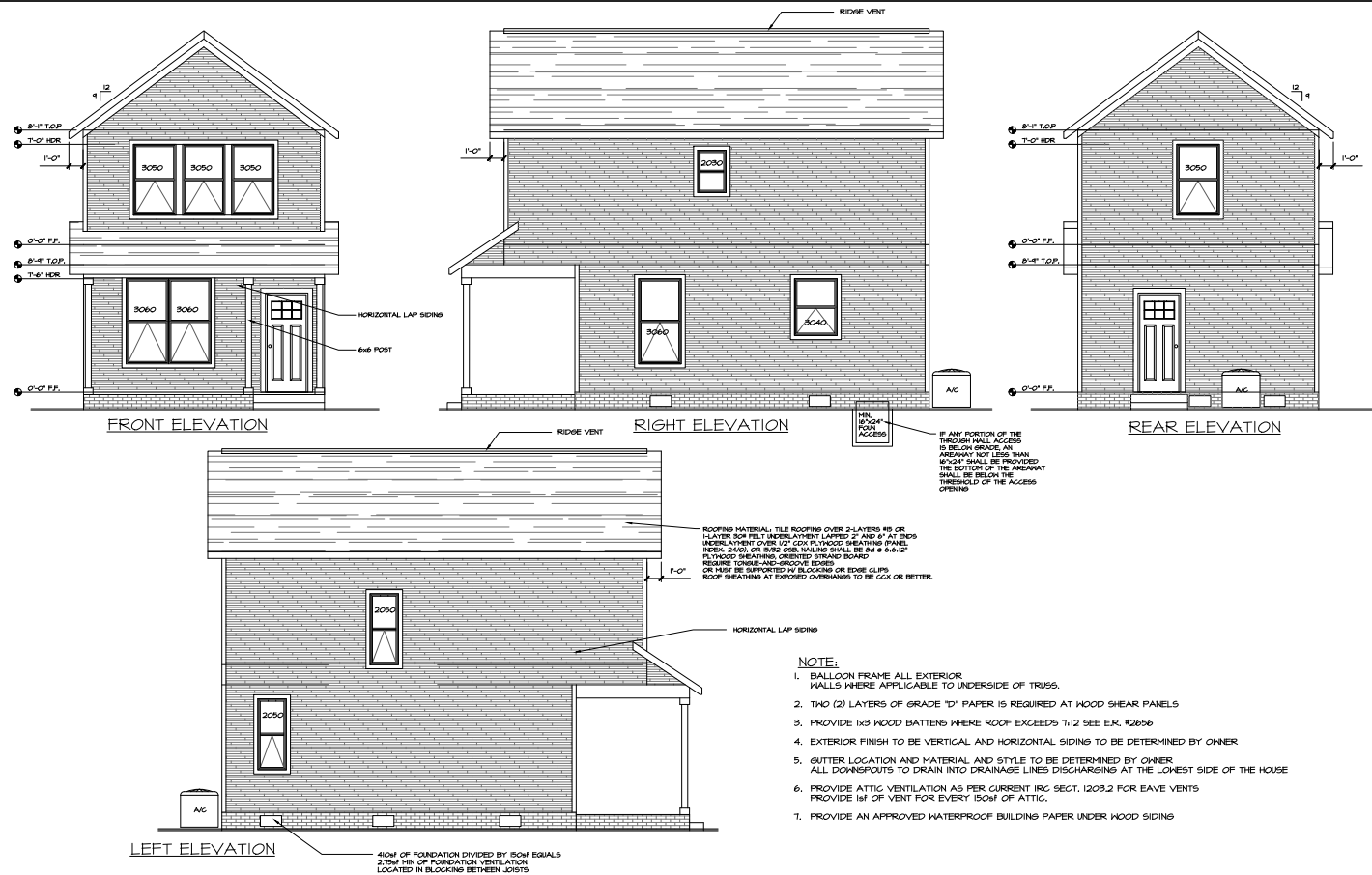
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Project information block including: PROJECT: QUINN DUPLEX 1547 OHIO AVE KNOXVILLE TN; A&R DESIGN & DRAFTING SERVICE; DATE: 6/15/2022; SCALE: 1/4"=1'-0"; DRAWN: R.J.; JOB: QD22093A; SHEET: A-1.





ENERGY ENVELOPE	
HALL WALL INSULATION	R-11
1/2\"/>	

WALL SECTION

ATTIC VENTS HOUSE  
 (NOTE FOR 50% OF THE AREA OF THE SPACE VENTILATED, PROVIDE A VAPOR RETARDER HAVING A TRANSMISSION RATE NOT TO EXCEED 1 PERH IN ACCORDANCE WITH ASTM E 96 IS INSTALLED ON THE WARM SIDE OF THE ATTIC INSULATION AND PROVIDED 50% OF THE REQUIRED VENTILATING AREA PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE SPACE TO BE VENTILATED AT LEAST 7' ABOVE EAVE)

GENERAL MECHANICAL NOTES:

- MECHANICAL CLOSET PROVIDE TWO VERTICAL DUCTS OR FLEXIBLES 1 1/2\"/>
- EXACT LOCATIONS & SIZE OF SUPPLY & RETURN REGISTERS TO BE DETERMINED BY THE HVAC CONTRACTOR.
- BACK DRAFT DAMPER REQUIRED ON EXHAUST FANS
- MECHANICAL VENTILATION FOR TOILET COMPARTMENTS, BATHROOMS AND LAUNDRY ROOMS SHALL BE COMPLY WITH CURRENT IRC APPENDIX E)
- MECHANICAL VENTILATION FOR OTHER HABITABLE ROOMS SHALL COMPLY WITH CURRENT IRC APPENDIX E)
- ALL DUCTS PENETRATING THE SEPARATION OF THE GARAGE ONE-HOUR FIRE WALL SHALL BE CONSTRUCTED OF NOT LESS THAN 20 GAUGE GALVANIZED STEEL AND BE CONTINUOUS WITHOUT OPENINGS OR NON-METALLIC CONNECTIONS
- VENT DRYER TO EXTERIOR 2\"/>
- ALL HVAC DUCTS SHALL HAVE R-8 INSULATION WRAPPINGS AND SHALL BE CONSTRUCTED AND INSTALLED PER CURRENT IRC SECTION E2 502.4
- NO GAS PIPING SHALL BE INSTALLED IN OR ON THE GROUND UNDER ANY BUILDING OR STRUCTURE AND ALL EXPOSED GAS PIPING SHALL BE KEPT 6\"/>
- MECHANICAL VENTILATION FOR OTHER HABITABLE ROOMS SHALL COMPLY WITH CURRENT IRC APPENDIX E)
- MECHANICAL VENTILATION FOR TOILET COMPARTMENTS, BATHROOMS AND LAUNDRY ROOMS SHALL BE COMPLY WITH CURRENT IRC APPENDIX E)
- VENTS TERMINATING IN TYPE \"B\" OR \"BH\" GAS VENTS WITH LISTED VENT CAPS SIZED 1/2\"/>
- FAU & WATER HEATERS WHICH GENERATE A SLOW FLAME OR SPARK LOCATED IN A GARAGE SHALL BE INSTALLED SUCH THAT THE IGNITION IS AT LEAST 18\"/>
- BUILDING CAVITIES AND FLEANS DEFINED OR CONSTRUCTED WITH MATERIALS OTHER THAN SEALED SHEET METAL DUCT BOARD OR FLEXIBLE DUCT SHALL NOT BE USED FOR CONVEYING CONDITIONED AIR. BUILDING CAVITIES MAY CONTAIN DUCTS.

NOTE:

- BALLOON FRAME ALL EXTERIOR WALLS WHERE APPLICABLE TO UNDERSIDE OF TRUSS.
- THO (2) LAYERS OF GRADE \"D\" PAPER IS REQUIRED AT HOOD SHEAR PANELS
- PROVIDE 1x3 HOOD BATTENS WHERE ROOF EXCEEDS 7:12 SEE ER. #2656
- EXTERIOR FINISH TO BE VERTICAL AND HORIZONTAL SIDING TO BE DETERMINED BY OWNER
- GUTTER LOCATION AND MATERIAL AND STYLE TO BE DETERMINED BY OWNER ALL DOWNSPOUTS TO DRAIN INTO DRAINAGE LINES DISCHARGING AT THE LOWEST SIDE OF THE HOUSE PROVIDE 1/4\"/>
- PROVIDE AN APPROVED WATERPROOF BUILDING PAPER UNDER HOOD SIDING

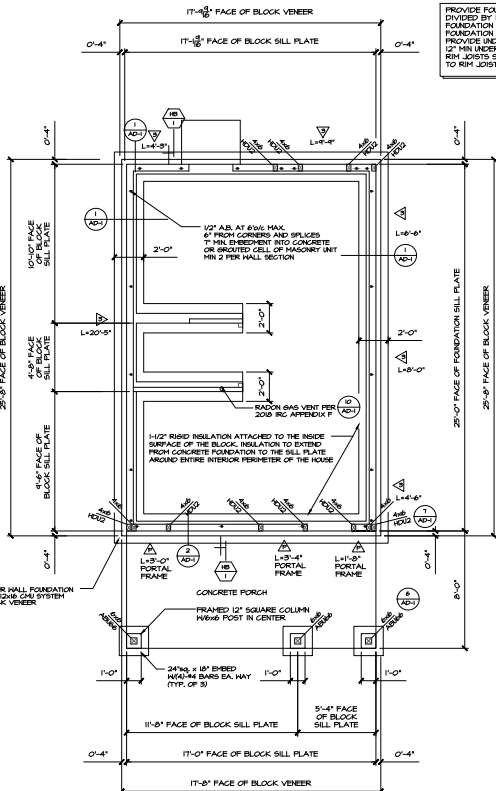
REVISIONS	BY

PROJECT: QUINN DUPLEX 1547 OHIO AVE KNOXVILLE TN

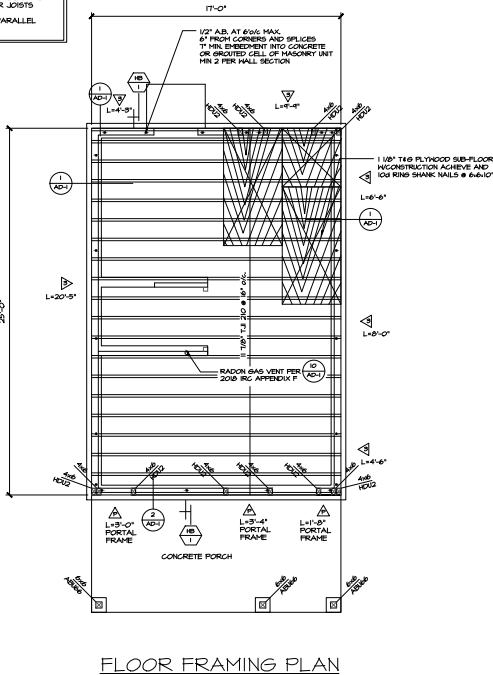
DATE: 6/15/2022  
 SCALE: 1/4\"/>

DRAWN: R.J.  
 JOB: QU122023  
 SHEET: A-2

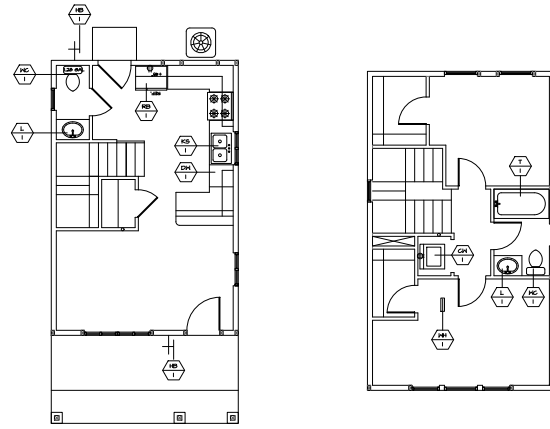
CONTRACTOR NOTES: THESE CONTRACTOR NOTES AND SPECIFICATIONS ARE PART OF THE CONTRACT AND SHALL BE READ AND UNDERSTOOD BY ALL CONTRACTORS BEFORE THE COMMENCEMENT OF ANY WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES AND STRUCTURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ADJACENT PROPERTIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ADJACENT PROPERTIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ADJACENT PROPERTIES.



PROVIDE FOUNDATION VENTS AS PER 2008 IRC. FOUNDATION AREA 425W DIVIDED BY 60W, EQUALS 7 SQUARE FOOTAGE OF VENTILATION REQUIRED. FOUNDATION VENTS MAY NOT BE LOCATED WITHIN A BRACED WALL PANEL. FOUNDATION ACCESS SHALL BE 18" WIDE BY 24" MINIMUM AS PER 2008 IRC. PROVIDE UNDERFLOOR CLEARANCE PER 2008 IRC. 18" MIN UNDER JOISTS. 12" MIN UNDER ORDERS. RIM JOISTS SHALL BE DOUBLED WHERE BEARING WALLS ARE PARALLEL TO RIM JOISTS.



FLOOR FRAMING PLAN



FIRST FLOOR PLUMBING PLAN

SECOND FLOOR PLUMBING PLAN

### FOUNDATION PLAN

NOTE: ANY AND ALL POSTS THAT EXTEND FROM THE FOUNDATION TO TOP OF THE TRUSSES OR ROOF RAFTERS SHALL HAVE M1660 STRAP AT SECOND FLOOR SPLICE

ALL EXTERIOR WALLS TO BE BRAISED WITH 3/8" PLYWOOD OR 1/2" ZIP SYSTEM. BRACING ALL EXTERIOR WALLS AT TYPE #5 BRACED WALL SYSTEM

ALL INTERIOR WALLS WITH FOUNDATIONS ARE TO 1/2" GYP. BOARD. MACING ALL INTERIOR WALLS WITH FOUNDATIONS AT TYPE #5 BRACED WALL SYSTEM

BUILDING INSPECTOR TO FIELD VERIFY ACTUAL PENETRATION U-VALUES

ALL 3" x 3" x 0.224" STEEL PLATE MEMBERS IN CONTACT WITH THE PRESSURE TREATED SILL PLATES ARE TO BE HOT DIP GALVANIZED. ALL SIPHON PASTERS IN CONTACT WITH THE PRESSURE TREATED SILL PLATES ARE TO BE 7" MAX GALVANIZED PROTECTED.

PRESERVATIVE TREATMENT, TREAT ALL WOOD BELOW A HEIGHT OF 8" THAT IS IN DIRECT CONTACT WITH OR EMBEDDED IN CONCRETE OR MASONRY, INCLUDING SILL NAILERS, LEDGERS, HOOD BRACKETS, BUSHINGS AND OTHER WOOD WITH CHLORPATE OR APPROVED EQUAL IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND ALL SILL NAILERS, SHIELDING AND STEEL PLATES ARE TO BE HOT DIP GALVANIZED (TYP). PRESURE TREATED LUMBER IS CORROSIVE TO STEEL PRODUCTS. ALL NAILING HOLDING AND STEEL PLATES ARE TO BE HOT DIP GALVANIZED. ALL SHEET METAL FASTENERS ARE TO BE HOT DIP GALVANIZED. PRESURE TREATED LUMBER IS TO BE NAILING AND CONNECTORS ARE NOT REQUIRED IF SILL PLATES WITH THROUGH OR ORBITAL PENETRATIONS (DOT) PRESURE TREATING CHEMICALS ARE USED - COORDINATE WITH THE PROJECT STRUCTURAL ENGINEER. IF DOT TREATED SILL PLATES ARE TO BE USED.

### FOUNDATION NOTES:

- PROVIDE FOUNDATION VENTS AS PER CURRENT IRC. FOUNDATION AREA SHALL BE THE SQUARE FOOTAGE OF VENTILATION PER SQUAD OF GRAB SPACE
- FOUNDATION VENTS MAY NOT BE LOCATED WITHIN A BRACED WALL PANEL
- FOUNDATION ACCESS SHALL BE 18" WIDE BY 24" MINIMUM AS PER CURRENT IRC SECTION
- PROVIDE UNDERFLOOR CLEARANCE PER 2008 IRC. 18" MIN UNDER JOISTS. 12" MIN UNDER ORDERS
- CONTINUOUS INTERIOR FOOTINGS SHALL HAVE ACCESS GRAB SPACE BETWEEN AREAS 18" x 24" MIN. NO AREA OF THE FOUNDATION SHALL NOT BE ACCESSIBLE.
- RIM JOISTS SHALL BE DOUBLED WHERE BEARING WALLS ARE PARALLEL TO RIM JOISTS
- ALL HOLDINGS AND FOUNDATION ANCHORS SHALL BE TIED INTO PLACE PRIOR TO THE FOUNDATION INSPECTION.
- CONTINUOUS RIM JOIST AT ALL ENDS.
- ALL CONCRETE TO HAVE COMPRESSIVE STRENGTH OF 2500 PSI AT 28 DAYS
- ALL WOOD IN CONTACT WITH CONCRETE SHALL BE P.T.D.P.
- ALL WOOD FRAMING MEMBERS SHALL BE D.P., H.O.C. OR BETTER.
- SUBFLOOR TO BE 1 1/2" x 8" PLYWOOD SHEET 4 NAILED WITH 1/4" I24 NAILS @ 6" O.C. EDGE & 10" O.C. FIELD.
- CONNECTORS TO BE 'SIMPSON' OR EQUAL.
- SEE FLOOR PLAN FOR SHEARWALL LOCATIONS AND ANCHOR BOLTS
- FOUNDATION PLATES OR SILLS SHALL BE BOLTED 1/2" MIN x 10" ANCHOR BOLTS @ 6'-0" MAX. AND EMBEDDED IN THE CONCRETE A MIN. OF 7" x 3" SILL PLATE. 1/2" x 3" x 3/4" SILL PLATE MASHER MINIMUM SILL BOLT END DISTANCE SHALL BE 7-BOLT DIAMETERS. PROVIDE MINIMUM TWO SILL BOLTS PER PIECE. MAXIMUM SILL BOLT END DISTANCE SHALL BE 12"
- PROVIDE MINIMUM OF 20 GALV. GALVANIZED FLASHING. KEEP SCORED AT FOUNDATION PLATE LINE AT LEAST 4" ABOVE GRADE OR 2" ABOVE CONCRETE OR PAVING.
- MATERIAL OVERSHE GRACE FOR REINFORCING BAR (MIN. 40)
- THE CONTRACTOR SHALL VERIFY THE LOCATION OF ANY OUTLETS OR DUCTWORK IN THE SLAB PRIOR TO THE START OF CONSTRUCTION
- USE 3/4" SILL PLATE AS INDICATED ON PLANS AND SHEAR WALL SCHEDULE
- THE HEIGHT OF THE SHEARWALL IN THE GARAGE SHALL BE 6" WHEN USING HOLDINGS OR STRIPS
- ALL HEADERS AT BEARING POINTS SHALL HAVE MIN OF (2) 2x4 OR 4x4 KING POSTS. (TYP) WINDOW HEADERS TO HAVE 2x4 TRIMMER AND 2x4 KING (TYP) WINDOW HEADERS INSIDEWALL TO HAVE 2x4 TRIMMER AND 4x4 KING
- LOCATE AND EXPOSE ALL PROPERTY CORNERS PRIOR TO CALLING FOR FOUNDATION INSPECTION.
- ALL WATER PIPE AND GAS PIPE SHALL BE BONDED AS PER NEC 250-41
- CONTRACTOR TO PROVIDE EXTERIOR ACCESS TO RAISED HOUSE FOUNDATION AREA

### PLUMBING SCHEDULE

ITEM	FIXTURE	SOIL OR WASTE	VENT	COLD WATER	HOT WATER	WASTE FU
101	WATER CLOSET (1/2 GAL. FLUSH)	3"	2"	3/4"	-	3
102	BATHROOM LAVATORY SERVICE SINK	2"	1 1/2"	1/2"	1/2"	1
103	KITCHEN SINK	2"	1 1/2"	1/2"	1/2"	2
104	BATH TUB, MASTER TUB MASTER SHOWER	2"	1 1/2"	3/4"	3/4"	2
105	WATER HEATER	-	-	3/4"	3/4"	-
106	HOSE BIB W/ BACK-FLOW PREVENTORS	-	-	3/4"	-	-
107	CLOTHES WASHER	2"	2"	3/4"	3/4"	3
108	REFRIGERATOR BIB	-	-	1/2"	-	-
109	DISHWASHER	-	-	-	-	-
INDIRECT WASTE TO KITCHEN SINK						

### GENERAL PLUMBING NOTES:

- HOT WATER HEATER TO BE INSTALLED WITHING ELEMENTS & SWITCHES 18" MIN A.F.F. (IPC 501.8) HOT WATER HEATER IN STORAGE ROOM SHALL BE STOPPED TO HALL PASSAGE AS REQUIRED BY RV. 501.2 PROVIDE TEMPERATURE & PRESSURE RELIEF VALVE AND DISCHARGE TO THE EXTERIOR (IPC 409.5) PROVIDE EXHAUST FLOW THROUGH ROOF
- PROVIDE THE SHOWER & TUB/SHOWER COMBO, IF APPLICABLE, INDIVIDUAL CONTROL VALVES PER CURRENT IPC SECT 411
- HOSEBIBS AND LAUN SPRINKLER SYSTEMS SHALL BE EQUIPPED WITH APPROVED BACK FLOW PREVENTION DEVICES AS PER CURRENT IPC SECT 409.3.1
- ALL WATER HEATERS SHALL HAVE R-22 BLANKET WRAP.
- PROVIDE EXHAUST VENTING OF WATER HEATERS PER CURRENT IPC SECTION 502
- SHOWER VALVES SHALL BE AN INDIVIDUAL CONTROL VALVE OF THE PRESSURE BALANCE OR THERMOSTATIC MIXING VALVE TYPE. HANDLE POSITION STOPS SHALL BE PROVIDED ON SUCH VALVES TO LIMIT THE MIXED WATER TO A MAXIMUM TEMPERATURE OF 120° FAHRENHEIT. PER IPC 409.3
- ALL HORIZONTAL DRAINAGE PIPING TO HAVE A MINIMUM OF A 2% SLOPE.
- THE HOUR RATING OF THE WATER HEATER AS SPECIFIED IN IPC TABLE SOIL SECTION 501.8 (SEE) & 501.9 SHALL BE A MINIMUM OF 90 GALLONS.
- PRESSURE ABSORBING DEVICES OR APPROVED MECHANICAL DEVICES ARE REQUIRED ON WATER LINES LOCATED AS CLOSE AS POSSIBLE TO QUICK ACTING VALVES THAT WILL ABSORB HIGH PRESSURES RESULTING FROM THE QUICK CLOSING OF QUICK-ACTING VALVES (E.G. CLOTHES AND DISHWASHER) (IPC SECTION SOIL)
- PLUMBING MATERIALS IN COMMON FIRE HALL SHALL BE CAST IRON OR OTHER APPROVED MATERIAL. NO PLASTIC PIPING.
- ALL DOMESTIC WATER VALVES UP TO AND INCLUDING 2" IN SIZE SHALL BE MADE OF BRASS OR OTHER APPROVED MATERIAL AND COLOR TO BE WHITE. METAL PARTS WITH MOVING PARTS OF NON-CORROSIVE MATERIALS AS PER IPC SECTION 504.1
- ALL HOT WATER LINES AND MAINS 3/4" AND LARGER SHALL BE INSULATION WRAPPED.
- NO WATER CLOSET AND OR BIB SHALL BE SET CLOSER THAN 18" FROM ITS CENTER TO ANY SURE WALL OR OBSTRUCTION. THE CLEAR SPACE IN FRONT SHALL BE 24" MIN.
- ALL WATER CLOSETS SHALL HAVE A MAX. FLSHING CAPACITY OF 120 GALLONS.
- PLUMBING FIXTURES TO BE DETERMINED BY THE OWNER.
- ALL PLUMBING SHALL BE INSTALLED AS PER CURRENT IPC
- NO WATER CLOSET AND OR BIB SHALL BE SET CLOSER THAN 18" FROM ITS CENTER TO ANY SURE WALL OR OBSTRUCTION. THE CLEAR SPACE IN FRONT SHALL BE 24" MIN.
- ALL SINKER EQUIPMENTS SHALL HAVE A MIN. 6" CLR. FLOOR SPACE OF 102 1/2" x 10" CAPABLE OF ENCOMPASSING A 30" CIRCLE.
- ALL WATER CLOSETS SHALL BE ELONGATED STYLE AND COLOR TO BE WHITE UNLESS OTHERWISE NOTED BY OTHER SCHEDULES TO BE AMERICAN STANDARDS OR PRICE PFFISTER. METAL INCLUDING FINISH EXPOSED IN GARAGE
- ALL PRINIP PENETRATING THE SEPARATION OF THE GARAGE ONE-HOUR FIRE HALL SHALL BE METAL INCLUDING FINISH EXPOSED IN GARAGE
- BATHROOM FIXTURES MAX. FLOOR RATE OF 1.5 GALLONS PER MIN. BATHROOM FIXTURES MAX. FLOOR RATE OF 1.5 GALLONS PER MIN.
- SHOWER HEADS MAX. FLOOR RATE OF 2.0 GALLONS PER MIN.
- SLEEVES SHALL BE PROVIDED TO PROTECT ALL PIPING THROUGH CONCRETE AND MASONRY WALLS AND CONCRETE FLOORS, EXCEPTION, SLEEVES SHALL NOT BE REQUIRED WHERE OPENINGS ARE DRILLED OR BORED.

REVISIONS BY

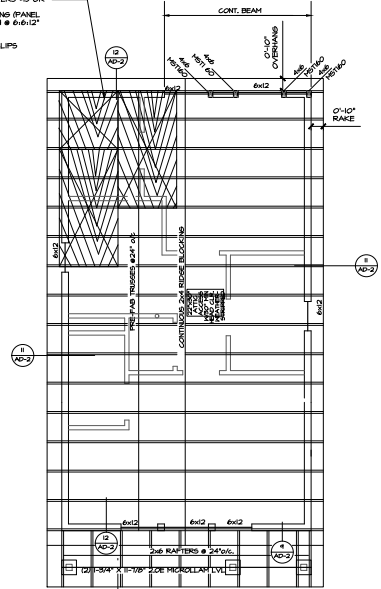
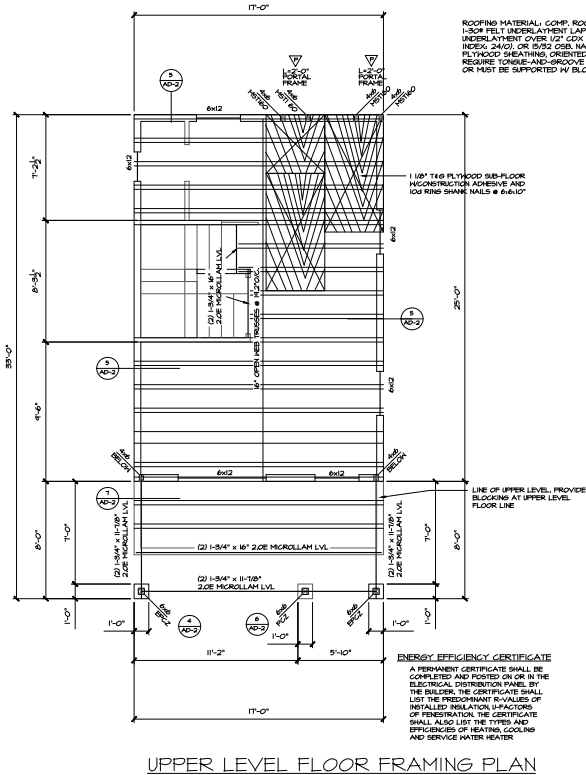
QUINN DUPLEX  
1547 OHIO AVE  
KNOXVILLE TN

PROJECT: FOUNDATION FRAMING PLUMBING PLANS

A & R DESIGN & DRAFTING SERVICE INC.  
1609 COTT. TENNESSEE 37112  
(615) 599-9405

DATE: 6/15/2022  
SCALE: 1/4"=1'-0"  
DRAWN: R.J.  
JOB: QJ122035  
SHEET: A-3

COMPONENT NOTES AND SPECIFICATIONS: THESE CONTRACTORS SHALL VERIFY THE PROPERTY IS NOT BE OCCUPIED BY AN UNLICENSED OCCUPANT AT THE PROJECT LOCATION. ONE CONTRACTOR AT ANY ONE OF THE PROJECTS SHALL NOT BE ALLOWED TO PERFORM ANY TRADE OR SERVICE AT ANY OTHER PROJECT WITHOUT THE WRITTEN AND CONSENT OF A&R DESIGN & DRAFTING INC.



**ROOF FRAMING NOTES:**

1. ROOFING MATERIAL: COMP. ROOFING OVER 2-LAYERS #5 OR #6 FIBREGLASS FELT UNDERLAYMENT LAPPED 2" AND 4" AT RIDGE UNDERLAPMENT OVER 1/2" CDX PLYWOOD SHEATHING (PANEL 24/0) OR 5/32" OSB. NAILING SHALL BE 6" @ 6" @ 6" ON PLYWOOD SHEATHING, ORIENTED STRAND BOARD REQUIRES TORX-AND-GROOVE EDGES OR MUST BE SUPPORTED BY BLOCKING OR EDGE CLIPS
2. NOT USED
3. ROOF FRAMING: PRE-ENGINEERED ROOF TRUSSES @ 24" @ C. MAX.
4. PROVIDE 2x4 B.L.G.S. AT ENDS OF RAFTERS AND AT ALL BEARING WALLS.
5. USE 'SIMPSON' (TC24) CLIPS AT ONE END OF SCISSOR TRUSS OR SLOPED TRUSS TO ALLOW FOR LATERAL DISPLACEMENT.
6. PROVIDE 2x4 OUTRIGGERS OR OUTLOOKS @ 24" @ C. AT GABLE ENDS TO SUPPORT FASCIA BOARD.
7. PROVIDE FULL HEIGHT STUDS TO BOTTOM CHORD OF RAFTERS
8. PROVIDE 3x4 CONTIGUOUS LATERAL BRACING @ 8' @ C. WITH CROSS BRACING @ 16' @ C. TO PROVIDE ADEQUATE LATERAL BRACING OF TRUSSES.
9. LUMBER GRADE SHALL BE DFPS OR BETTER.
10. FILL FRAMING: PROVIDE 2x (SEE PLAN) 8" @ R. RAFTERS @ 24" @ C. TO 2x FLAT VALLEY. PROVIDE INTERMEDIATE BRACING TO ALTERNATE TRUSSES BELOW FILL FRAMING AREA.
11. PLYWOOD SHEATHING SHALL BE RUN UNDERNEATH ALL FILL FRAMING AREAS WITH EDGE NAILING AS REQUIRED.
12. PROVIDE ATTIC VENTILATION WITH ADEQUATE CROSS-VENTILATION IN ACCORDANCE WITH THE CURRENT IRC. SEC. 1205
13. FIRE BLOCKING AND DRAFT STOPS SHALL BE INSTALLED AS PER CURRENT IRC SEC. 117.
14. CALIFORNIA FRAMING TO BE 2x8 @ 24" @ C. N2410 RIDGE BEAM RUN PLYWOOD UNDER FILL.
15. USE 2x10 RIDGE AND 2x10 RAFTERS @ 24" @ C.
16. USE 2x10 RIDGE AND 2x10 RAFTERS @ 24" @ C.
17. USE 2x10 RIDGE AND 2x10 RAFTERS @ 24" @ C.

18. BLOCKING AT ALL LEAVES.
19. FRONT AND BACK PORCH COVERED PATIO SHALL BE ENCLOSED SOFFIT TYPE. FILLING MATERIALS SHALL BE 2x4 @ 24" @ C. AT HOUSE ATTACH TO LEDGERS. ROOFING IS NAILED ATTACH LEDGER TO HOUSE W/16 @ 12" @ C. STAGGERED.
20. ROOF OVERHANGS SHALL NOT EXCEED 16"
21. TRUSS MANUFACTURE SHALL FIELD VERIFY TRUSSES PRIOR TO FABRICATION. AIR DESIGN TO BE HELD HAZARDOUS FOR INCORRECT TRUSSES TRUSS MANUFACTURE SHALL PROVIDE TO AIR DESIGN COMPLETE TRUSS CALCULATIONS PRIOR TO FABRICATION OF TRUSSES
22. MISC. METAL CONNECTORS: ALL SHEET METAL CONNECTORS USED FOR CONNECTING STRUCTURAL WOOD MEMBERS SHALL HAVE GBC APPROVAL AND BE 'SIMPSON STRONG-TIE' CONNECTORS OR APPROVED EQUAL. ALL CONNECTORS SHALL BE GALVANIZED OR PROVIDED WITH APPROVED CORROSION PROTECTION PAINT. ALL CONNECTORS OR FASTENERS USED THAT ARE TO BE IN CONTACT WITH THE PRESSURE TREATED PLATES ARE TO BE 1/2" MAX GALVANIZED.
23. ROOF SHEET METAL VALLEY FLASHING WITH A 56" NIDE UNDERLAYMENT DIRECTLY UNDER FLASHING AND OVER NORMALLY REQUIRED UNDERLAYMENT PER IRC 1507

COMPLETE SET OF TRUSSES CALCS NEED TO BE SUPPLIED TO AIR DESIGN FOR VERIFICATION OF POINT LOADS AND FOOTING SIZES PRIOR TO START OF ANY CONSTRUCTION



NOTE:  
THE DESIGN AND SPECIFICATION OF ALL TRUSS TO TRUSS HANGERS IS THE RESPONSIBILITY OF THE TRUSS MANUFACTURE PER CURRENT IRC SECTION 2303.4 AND ANNE 111 2002 VERSION. SECTION 2.2 FOR TRUSS TO TRUSS HANGERS - REFER TO THE TRUSS MANUFACTURE DRAWINGS.

REVISIONS	BY
QU22095A_I	
PROJECT	
QUINN DUPLEX 1547 OHIO AVE KNOXVILLE TN	
SECOND FLOOR ROOF FRAMING PLANS	
A & R DESIGN & DRAFTING SERVICE INCORPORATED 2020 W. WILSON ST LENOIR CITY, TENNESSEE 37125 (615) 999-8657 ROETTING@A&R.COM	
DATE	6/15/2022
SCALE	1/4" = 1' = 0"
DRAWN	R.J
JOB	QU22095A
SHEET	A-4



**Hydrologic Determination Field Data Sheet**  
 Tennessee Division of Water Resources, Version 1.5 (Fillable Form)

Named Waterbody:		Date/Time:
Assessors/Affiliation:		Project ID :
Site Name/Description:		
Site Location:		
HUC (12 digit):	Latitude:	
Previous Rainfall (7-days) :	Longitude:	
Precipitation this Season vs. Normal :		
Source of recent & seasonal precip. data :		
Watershed Size :	County:	
Soil Type(s) / Geology :	Source:	
Surrounding Land Use :		
Degree of historical alteration to natural channel morphology & hydrology (select one & describe fully in Notes) :		

**Primary Field Indicators Observed**

Primary Indicators	NO	YES
1. Hydrologic feature exists solely due to a process discharge		WWC
2. Defined bed and bank absent, vegetation composed of upland and FACU species		WWC
3. Watercourse dry anytime during February through April 15th, under normal precipitation / groundwater conditions		WWC
4. Daily flow and precipitation records showing feature only flows in direct response to rainfall		WWC
5. Presence of multiple populations of obligate lotic organisms with ≥ 2 month aquatic phase		Stream
6. Presence of fish (except <i>Gambusia</i> )		Stream
7. Presence of naturally occurring ground water table connection		Stream
8. Flowing water in channel and 7 days since last precip >0.1" in local watershed		Stream
9. Evidence watercourse has been used as a supply of drinking water		Stream

**NOTE: If any Primary Indicators 1-9 = "Yes", then no further investigation is necessary. However, assessors may choose to score secondary indicators as supporting evidence.**

In the absence of a primary indicator, or other definitive evidence, complete the secondary indicator table on page 2 of this sheet, and provide score below.

Guidance for the interpretation and scoring of both the primary & secondary indicators is provided in *TDEC-DWR Guidance For Making Hydrologic Determinations, Version 1.5*

<b>Overall Hydrologic Determination =</b> <b>Secondary Indicator Score (if applicable) =</b>
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**Justification / Notes :**

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## Secondary Field Indicator Evaluation

A. Geomorphology (Subtotal =	Absent	Weak	Moderate	Strong	
1. Continuous bed and bank	0	1	2	3	
2. Sinuous channel	0	1	2	3	
3. In-channel structure: riffle-pool sequences	0	1	2	3	
4. Sorting of soil textures or other substrate	0	1	2	3	
5. Active/relic floodplain	0	0.5	1	1.5	
6. Depositional bars or benches	0	1	2	3	
7. Braided channel	0	1	2	3	
8. Recent alluvial deposits	0	0.5	1	1.5	
9. Natural levees	0	1	2	3	
10. Headcuts	0	1	2	3	
11. Grade controls	0	0.5	1	1.5	
12. Natural valley or drainageway	0	0.5	1	1.5	
13. At least second order channel on existing USGS or NRCS map	0	1	2	3	

B. Hydrology (Subtotal =	Absent	Weak	Moderate	Strong	
14. Subsurface flow/discharge into channel	0	1	2	3	
15. Water in channel and >48 hours since sig. rain	0	1	2	3	
16. Leaf litter in channel	1.5	1	0.5	0	
17. Sediment on plants or on debris	0	0.5	1	1.5	
18. Organic debris lines or piles (wrack lines)	0	0.5	1	1.5	
19. Hydric soils in channel bed or sides of channel	No = 0		Yes = 1.5		

C. Biology (Subtotal =	Absent	Weak	Moderate	Strong	
20. Fibrous roots in channel bed <sup>1</sup>	3	2	1	0	
21. Rooted plants in the thalweg <sup>1</sup>	3	2	1	0	
22. Crayfish in stream (exclude in floodplain)	0	1	2	3	
23. Bivalves/mussels	0	1	2	3	
24. Amphibians	0	0.5	1	1.5	
25. Macrobenthos (record type & abundance)	0	1	2	3	
26. Filamentous algae; periphyton	0	1	2	3	
27. Iron oxidizing bacteria/fungus	0	0.5	1	1.5	
28. Wetland plants in channel bed <sup>2</sup>	0	0.5	1	1.5	

<sup>1</sup> Focus is on the presence of terrestrial plants.

<sup>2</sup> Focus is on the presence of aquatic or wetland plants.

Total Points = \_\_\_\_\_

*Under Normal Conditions, Watercourse is a Wet Weather Conveyance if Secondary Indicator Score < 19 points*

**Notes :**

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**STATE OF TENNESSEE  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
KNOXVILLE ENVIRONMENTAL FIELD OFFICE  
DIVISION OF WATER POLLUTION CONTROL**

**3711 MIDDLEBROOK PIKE  
KNOXVILLE, TN 37921**

**PHONE 865-594-6035 STATEWIDE 1-888-891-8332 FAX 865-594-6105**

December 6, 2021

Mr. Quinn Epperly  
1547 Ohio Ave  
Knoxville, TN

**RE: HYDROLOGIC DETERMINATION (CONCURRENCE)**  
1547 Ohio Ave. Knox Co.

Dear Mr. Epperly:

Thank you for contacting the Division and requesting a hydrologic determination regarding a drainage assessment at 1547 Ohio Ave. located in Knox County.

Division personnel, (TDEC) observed and concur with the following determinations:

- The drainage feature located at (35.98463, -83.96046) was deemed to be a Wet Weather Conveyance (WWC) at the determination point.

Alterations to Wet Weather conveyances must comply with coverage under the General Permit for Alteration of Wet Weather Conveyances. A copy of this coverage is available on the TDEC website at <http://tn.gov/environment/article/permit-water-aquatic-resource-alteration-list-of-general-permits>. Alterations to any streams, wetlands or other waters determined to be jurisdictional by the U.S. Army Corps of Engineers (USACE) will require an Aquatic Resource Alteration Permit/§401 Certification. Additionally, the alteration of some features may require authorization of an ARAP even if the feature does not require a USACE permit.

If you have any questions concerning this correspondence, please contact me at (865) 364-9505 or by email at [Michael.Swanger@tn.gov](mailto:Michael.Swanger@tn.gov).

Sincerely,

A handwritten signature in blue ink that reads "Michael Swanger".

Michael Swanger, Environmental Scientist III  
Division of Water Resources

Ecopy: Quinn Epperly, Owner, [qbrenovations@gmail.com](mailto:qbrenovations@gmail.com)