

DEVELOPMENT REVIEW APPLICATION

For Office Use Only		
STATUS CONTACT <i>PSPIR</i>	PROJECT No(s). <i>MJ -12-16</i>	
NON-REFUNDABLE FEE(S)	REFUNDABLE DEPOSIT(S) <i>1050-</i>	TOTAL <i>1050-</i>

Type of Review (Please check all that apply):

- | | | |
|---|--|---|
| <input type="checkbox"/> Annexation (ANX)
<input type="checkbox"/> Appeal and Review (AP) *
<input type="checkbox"/> Conditional Use (CUP)
<input type="checkbox"/> Design Review (DR)
<input type="checkbox"/> Easement Vacation
<input type="checkbox"/> Extraterritorial Ext. of Utilities
<input type="checkbox"/> Final Plat or Plan (FP)
<input checked="" type="checkbox"/> Flood Management Area
<input type="checkbox"/> Hillside Protection & Erosion Control | <input type="checkbox"/> Historic Review
<input type="checkbox"/> Legislative Plan or Change
<input type="checkbox"/> Lot Line Adjustment (LLA) */**
<input type="checkbox"/> Minor Partition (MIP) (Preliminary Plat or Plan)
<input type="checkbox"/> Non-Conforming Lots, Uses & Structures
<input type="checkbox"/> Planned Unit Development (PUD)
<input type="checkbox"/> Pre-Application Conference (PA) */**
<input type="checkbox"/> Street Vacation | <input type="checkbox"/> Subdivision (SUB)
<input type="checkbox"/> Temporary Uses *
<input type="checkbox"/> Time Extension *
<input type="checkbox"/> Variance (VAR)
<input type="checkbox"/> Water Resource Area Protection/Single Lot (WAP)
<input type="checkbox"/> Water Resource Area Protection/Wetland (WAP)
<input type="checkbox"/> Willamette & Tualatin River Greenway (WRG)
<input type="checkbox"/> Zone Change |
|---|--|---|

Home Occupation, Pre-Application, Sidewalk Use, Sign Review Permit, and Temporary Sign Permit applications require different or additional application forms, available on the City website or at City Hall.

Site Location/Address:
5650 RIVER ST, WEST LINN, OR.
Assessor's Map No.: *22E30AC01606*
Tax Lot(s):
Total Land Area: *OWN .44 ACRES*
Brief Description of Proposal: *3 SEPARATE ADDITIONS TO THE EXISTING RESIDENCE*
1 - 350 SQ. FT. ENTRY ADDITION
2 - 78 SQ. FT. - WEST ADDITION AT BEDROOM SIDE
3 - 65 SQ. FT. - EAST ADDITION AT GARAGE
Applicant Name: *PHILIP SYDOR*
(please print)
Phone: *503.528.9899*
Address: *INTEGRATE ARCHITECTURE + PLANNING*
1715 N. TERRY ST
Email: *PHILIP@INTEGRATEARCH.COM*
City State Zip: *PORTLAND, OR. 97217*
Owner Name (required): *TRENT + MI LYNN CROLLARD*
(please print)
Phone:
Address: *5650 RIVER ST*
Email:
City State Zip: *WEST LINN, OR 97064*
TRENTCROLLARD@MSN.COM
Consultant Name: *SAME AS APPLICANT*
(please print)
Phone:
Address:
Email:
City State Zip:

1. All application fees are non-refundable (excluding deposit). Any overruns to deposit will result in additional billing.
2. The owner/applicant or their representative should be present at all public hearings.
3. A denial or approval may be reversed on appeal. No permit will be in effect until the appeal period has expired.
4. Three (3) complete hard-copy sets (single sided) of application materials must be submitted with this application.
 One (1) complete set of digital application materials must also be submitted on CD in PDF format.
 If large sets of plans are required in application please submit only two sets.

* No CD required / ** Only one hard-copy set needed

The undersigned property owner(s) hereby authorizes the filing of this application, and authorizes on site review by authorized staff. I hereby agree to comply with all code requirements applicable to my application. Acceptance of this application does not infer a complete submittal. All amendments to the Community Development Code and to other regulations adopted after the application is approved shall be enforced where applicable. Approved applications and subsequent development is not vested under the provisions in place at the time of the initial application.

[Signature]
 Applicant's signature

11/08/12
 Date

[Signature]
 Owner's signature (required)

11/8/12
 Date

RECEIVED

NOV - 9 2012

PLANNING & BUILDING
 CITY OF WEST LINN
 INT. _____ TIME _____



November 9, 2012

Mr. Tom Soppe
Associate Planner
22500 Salamo Rd
West Linn, OR 97068

Subject: Flood Management Area permit - Written response to sections 27.060, 27.070, and 27.080 of West Linn's Community Development Code, ch. 27 – Flood Management Areas

Applicant: Integrate Architecture & Panning,
contact Philip Sydnor
1715 N. Terry Street, Portland, Oregon 97217
503.312.2561
phil@integratearch.com

Property Owners: Trent and Mi Lynn Crollard
5650 River Street, West Linn, Oregon 97068

Property: 5650 River Street, West Linn, Oregon 97068

Project Description:

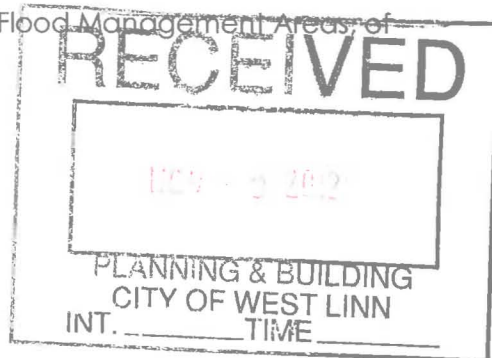
Provide three separate additions to the existing residence:

- A 65 sq. ft. addition at the front of the house and below the existing roof overhang and over the existing outdoor entry area to facilitate a new entryway.
- A 67 sq. ft. addition at the east side of the house, at the existing garage to facilitate additional garage space.
- A 78 sq. ft. addition on the west side of the house at the bedroom side to facilitate space for a larger master bathroom and closet.

List of permit approvals sought by the applicant:

Flood Management Area Permit

Response to sections 27.060, 27.070, and 27.080 Chapter 27, Flood Management Areas, of West Linn's Community Development Code:



27.060 Approval Criteria

A. Development, excavation, and fill shall be performed in a manner to maintain or increase flood storage and conveyance capacity and not increase design flood elevations.

Response: The proposed 78 sq. ft. bedroom side addition and the 35 sq. ft. entryway addition are to be located at the existing first floor elevation which is at an elevation of 49.26' and greater than 1' above the 100 year floodplain elevation of 48.00, based on NAVD 1988 datum. The garage addition is at an elevation of 48.09'. The only excavation required is for the new perimeter footings required for the additions. The new development will not increase design flood elevations.

B. No net fill increase in any floodplain is allowed. All fill placed in a floodplain shall be balanced with an equal amount of soil material removal. Excavation areas shall not exceed fill areas by more than 50 percent of the square footage. Any excavation below bankful stage shall not count toward compensating for fill.

Response: No fill is required. Approximately 65 sq. ft. of compacted gravel is required as a sub base below the newly proposed addition at the garage. This gravel will replace the existing top soil requiring removal. The addition at the front and on the east side will be above existing grade.

C. Excavation to balance a fill shall be located on the same parcel as the fill unless it is not reasonable or practicable to do so. In such cases, the excavation shall be located in the same drainage basin and as close as possible to the fill site, so long as the proposed excavation and fill will not increase flood impacts for surrounding properties as determined through hydrologic and hydraulic analysis.

Response: No work is required on any other parcels of land. The proposed additions are on a single family residential home and all three will be above existing grade. The minor excavation required for foundations will not increase flood impacts for surrounding properties. The proposed additions, 35 sq. ft. at the front, 78 sq. ft. at the west bedroom side, and 65 sq. ft. at the east garage side, result in small total increase to the existing footprint of the existing residence and have no impact to the surrounding properties.

D. Minimum finished floor elevations must be at least one foot above the design flood height or highest flood of record, whichever is higher, for new habitable structures in the flood area.

Response: The residence located at 5650 River Street is an existing residence. The proposed 35 sq. ft. addition at the front and 78 sq. ft. addition at the west bedroom side shall remain at the existing 49.26' finish floor elevation, greater than 1' above the 48.00' 100 year floodplain elevation. The, 65 sq. ft. addition at the garage side must remain at the existing garage elevation of 48.09'. This is not 1' above the 48.00' elevation however, this is non habitable space and matches the existing garage elevation.

E. Temporary fills permitted during construction shall be removed.

Response: No temporary fill is required during construction.

F. Prohibit encroachments, including fill, new construction, substantial improvements, and other development in floodways unless certification by a professional civil engineer licensed to practice in the State of Oregon is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.

Response: The total footprint for the new additions is 178 sq. ft. Each of the area meet all standard zoning requirements and will not encroach on any adjacent properties not have an effect on flood levels during the occurrence of the base flood discharge.

G. All proposed improvements to the floodplain or floodway which might impact the flood-carrying capacity of the river shall be designed by a professional civil engineer licensed to practice in the State of Oregon.

Response: No improvements are proposed to the floodplain or floodway and a civil engineer's services are not required.

H. New culverts, stream crossings, and transportation projects shall be designed as balanced cut and fill projects or designed not to significantly raise the design flood elevation. Such projects shall be designed to minimize the area of fill in flood management areas and to minimize erosive velocities. Stream crossings shall be as close to perpendicular to the stream as practicable. Bridges shall be used instead of culverts wherever practicable.

Response: No culverts, stream crossings, or transportation projects are part of the scope of work.

I. Excavation and fill required for the construction of detention facilities or structures, and other facilities, such as levees, specifically shall be designed to reduce or mitigate flood impacts and improve water quality. Levees shall not be used to create vacant buildable land.

Response: The project is includes only small additions to an existing single family residence. Detention facilities, levees, etc. are not in the scope of work.

J. The applicant shall provide evidence that all necessary permits have been obtained from those federal, State, or local governmental agencies from which prior approval is required. (Ord. 1522, 2005)

Response: The only other permit required is a building permit to be issued by the City of West Linn. No state or federal review is required for the project.

27.070 Construction Materials and methods

A. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage using methods and practices that minimize flood damage.

Response: The existing residence main floor is more than 1' the flood plain elevation of 48.00' which is based on the NAVD 1988 datum. All new construction below an elevation of

49.00' shall meet flood damage resistant material requirements including but not limited to pressure treated lumber and exterior grade plywood sheathing.

B. Electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

Response: All electrical and mechanical equipment will be designed and installed to prevent water from entering or accumulating within the components and to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding to the design flood elevation in compliance with the flood-resistant construction requirements of the building code." All new mechanical ductwork will be provided above the ceilings in the attic spaces, above the flood plain elevation.

C. New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.

Response: The existing residence utilizes the public utility system. No on-site supply systems are part of the scope. Improvements to the existing water supply system shall be installed so that floodwaters do not enter or accumulate within system components and to additionally ensure that floodwater does not contaminate the potable water supply system. Those systems shall be water tight. All new faucets shall be located above the flood plain.

D. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters.

Response: The existing residence utilizes the public sewer system. No on-site sewer systems are part of the scope. An existing toilet will be relocated from within the existing footprint to be within the new addition on the bedroom side of the home. All other plumbing fixtures will remain within the existing footprint. A back flow valve will be installed if required.

E. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

Response: The existing residence utilizes the public sewer system. No on-site sewer systems are part of the scope.

F. All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.

Response: All new walls at the proposed additions shall be anchored to the new foundations with holdowns to prevent foundation, collapse, or lateral movement of the structure. An Oregon licensed structural engineer shall determine all anchoring requirements.

27.080 RESIDENTIAL CONSTRUCTION

A. New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to at least one foot above the base flood elevation.

Response: The residence located at 5650 River Street is an existing residence, no substantial improvements are part of the scope. The proposed additions, 35 sq. at the front, 78 sq. ft. at the west bedroom side, and 65 sq. ft. at the east garage side must all remain at the same height as the existing floor elevation to allow for a functional layout. The west side addition and entryway addition shall match the existing finish floor which is greater than 1' above the 100 year floodplain elevation.

B. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must be certified by either a professional civil engineer or an architect licensed to practice in the State of Oregon, and must meet or exceed the following minimum criteria:

Response: Philip Sydnor, working under Integrate Architecture & Planning, p.c., is a licensed architect in the state of Oregon.

1. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.

Response: All new crawlspaces below the additions will meet or exceed the opening requirement with foundation vents.

2. The bottom of all openings shall be no higher than one foot above grade.

Response: The foundation vents will be located not more than 1' above grade

3. Openings may be equipped with screens, louvers, or other coverings or devices; provided, that they permit the automatic entry or exit of floodwaters.

Response: The foundation vents will be have screens to prevent rodents from entering but will not prevent the flow of water from exiting the crawlspace area.

4. Fully enclosed areas below the base flood elevation shall only be used for parking, access, and limited storage.

Response: No new enclosed areas other than crawlspaces are part of the proposed scope of work.

5. Service equipment (e.g., furnaces, water heaters, washer/dryers, etc.) is not permitted below the base flood elevation.

Response: No new furnaces, water heater, washer/ dryers etc., are part of the scope of the proposed additions.

6. All walls, floors, and ceiling materials located below the base flood elevation must be unfinished and constructed of materials resistant to flood damage.

Response: The residence located at 5650 River Street is an existing residence, no substantial improvements are part of the scope. The proposed additions, 35 sq. at the front, 78 sq. ft. at the west bedroom side, and 65 sq. ft. at the east garage side must all remain at the same height as the existing floor elevation and garage elevation to allow for a functional layout. All new structural materials and finish materials required at the proposed additions below an elevation of 49.00 shall meet the FEMA Flood damage resistant material requirements.

C. Crawlspaces. Crawlspaces are a commonly used method of elevating buildings in special flood hazard areas (SFHAs) to or above the base flood elevation (BFE), and are allowed subject to the following requirements:

1. The building is subject to the Flood-Resistant Construction provisions of the Oregon Residential Specialty Code.

Response: All parts of section 322, Flood Resistant Construction of the ORSSC Shall be met at the proposed additions.

2. They shall be designed by a professional engineer or architect licensed to practice in the State of Oregon to meet the standards contained in the most current Federal Emergency Management Agency's (FEMA) Technical Bulletin.

Response: Philip Sydnor, working under Integrate Architecture & Planning, p.c., is a licensed architect in the state of Oregon and shall provide the required specifications on the permit documents of the proposed additions which shall indicate the where and how the FEMA flood resistance requirements.

3. The building must be designed and adequately anchored to resist flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.

Response: All new walls at the proposed additions shall be anchored to the new foundations with holdowns to resist flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy. An Oregon licensed structural engineer shall determine all anchoring requirements.

4. Flood vent openings shall be provided on at least two sides that equalize hydrostatic pressures by allowing for the automatic entry and exit of floodwaters. The total area of the flood vent openings must be no less than one square inch for each square foot of enclosed area. The bottom of each flood vent opening can be no more than one foot above the lowest adjacent exterior grade. For guidance on flood openings, see FEMA Technical Bulletin 1-93, Openings in Foundation Walls.

Response: All new crawlspaces below the additions will meet or exceed the opening size requirement with foundation vents. The foundation vents will not be more than 1' above grade.

5. Portions of the building below the BFE must be constructed with materials resistant to flood damage. This includes not only the foundation walls (studs and sheathing), but also any joists, insulation, or other materials that extend below the BFE. For more detailed guidance on flood-resistant materials see FEMA Technical Bulletin 2-93, Flood-Resistant Materials Requirements.

Response: All new structural materials and finish materials required at the proposed additions below an elevation of 49.00' (48.00' + 1') shall meet the FEMA Flood damage resistant material requirements through the use of concrete at foundations, pressure treated lumber and exterior grade plywood at framing and non paper faced gypsum wall board, and all other Flood damage material requirements.

6. Utility systems within the crawlspace must be elevated above BFE or designed so that floodwaters cannot enter or accumulate within the system components during flood conditions. Ductwork, in particular, must either be placed above the BFE or sealed from floodwaters. For further guidance on the placement of building utility systems in crawlspaces, see FEMA 348, Protecting Building Utilities From Flood Damage. Flood-resistant materials and utilities, access, and ventilation openings in crawlspaces are further addressed in this bulletin.

Response: No utility systems are required in any of the crawlspaces in the proposed additions.

7. The interior grade of a crawlspace below the BFE must not be more than two feet below the lowest adjacent exterior grade (LAG).

Response: No part of the interior grade within a crawlspace below the proposed additions will be more than 2' below the adjacent exterior grade.

8. The height of the below-grade crawlspace, measured from the interior grade of the crawlspace to the top of the crawlspace foundation wall, must not exceed four feet at any point. This limitation will also prevent these crawlspaces from being converted into habitable spaces.

Response: The highest clearance between grade and bottom of floor joists in the crawlspace of the proposed additions will not exceed 3', this is 1' below the maximum height allowed.

9. There must be an adequate drainage system that removes floodwaters from the interior area of the crawlspace. Possible options include natural drainage through porous, well-drained soils and drainage systems such as low-point drains, perforated pipes, drainage tiles, or gravel or crushed stone drainage by gravity.

Response: All open crawlspaces below the proposed additions shall be lined with ¾" minus crushed rock, and have perforated drain pipes at all foundations. A minimum of (2) Foundation vents will also be provided at all proposed crawlspaces which are fully enclosed.

10. The velocity of floodwaters at the site should not exceed five feet per second for any crawlspace. For velocities in excess of five feet per second, other foundation types should be used.

Response: The crawlspaces below the proposed additions shall be concrete stem walls over spread footings. Those foundation systems shall meet the requirements of ch. 4 of the ORSC as required by R322.2.3 – foundation design and construction of the Flood Resistant Construction section of the ORSC and shall be designed to resist the expected velocities at the site.

11. For more detailed information refer to FEMA Technical Bulletin 11-01 or the most current edition.

Response: The FEMA technical bulletin 11-01 has been reviewed and its requirements will be provided on the permit documents. All parts of the proposed additions below the elevation of 49.00' (48.00' + 1') shall meet those requirements.

12. The use of below-grade crawlspaces to elevate the building to one foot above the BFE may cause an increase in flood insurance premiums, which are beyond the control of the City.

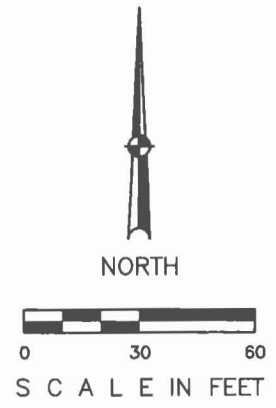
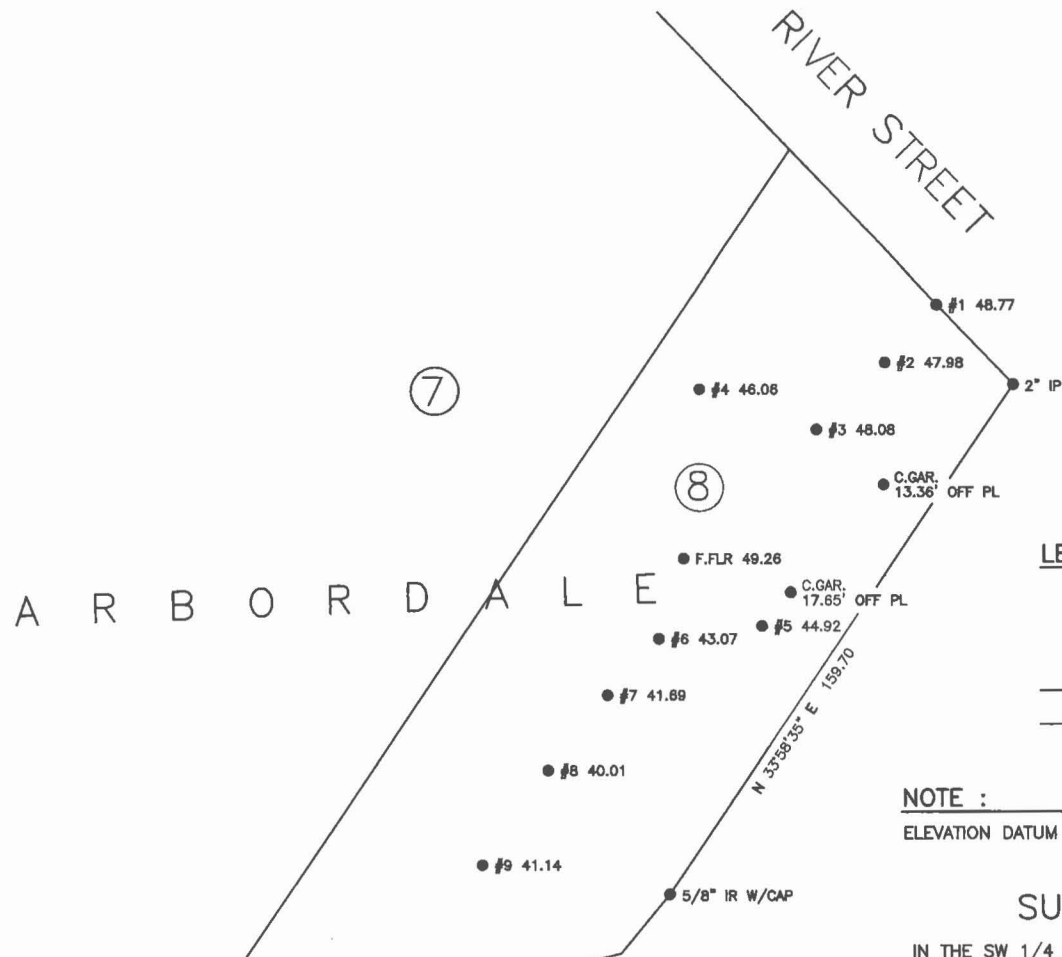
Response: The home owners currently have flood insurance and shall coordinate directly with their provider when necessary.

D. A poured slab placed over fill can be used to elevate the lowest floor of a structure above the base flood elevation. However, when a building site is filled, it is still in the floodplain and no basements are permitted.

Response: No basements are part of the scope of work. A new slab will be provided over structural fill at the proposed addition at the garage side of the home. Ch. 4 of the ORSC shall be met for those foundation systems.

E. Placing a structure on piers, piles, and posts is allowed provided supporting members are designed to resist hydrostatic and hydrodynamic forces. (Ord. 1565, 2008)

Response: Perimeter footings shall be used at the additions.



- LEGEND :**
- DENOTES MONUMENT FOUND, AS NOTED
 - IP IRON PIPE
 - IR IRON ROD
 - DENOTES LOT LINE
 - DENOTES BOUNDARY LINE - SUBJECT PROPERTY

NOTE :
 ELEVATION DATUM = NAVD 88

SURVEY OF ELEVATIONS
 LOT 8, ARBORDALE
 IN THE SW 1/4 OF THE NE 1/4 OF SECTION 30, T.2S., R.2E., W.M.
 CITY OF WEST LINN, CLACKAMAS COUNTY, OREGON

PREPARED FOR :
TRENT AND MI LYNN CROLLARD
 5650 RIVER STREET
 WEST LINN, OREGON 97068

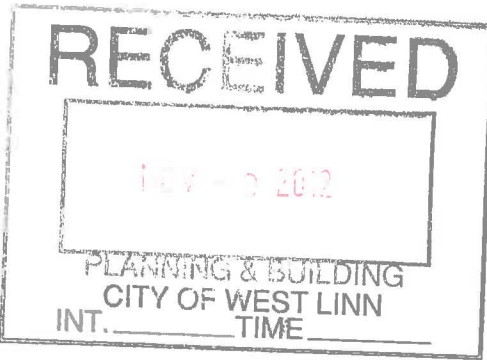
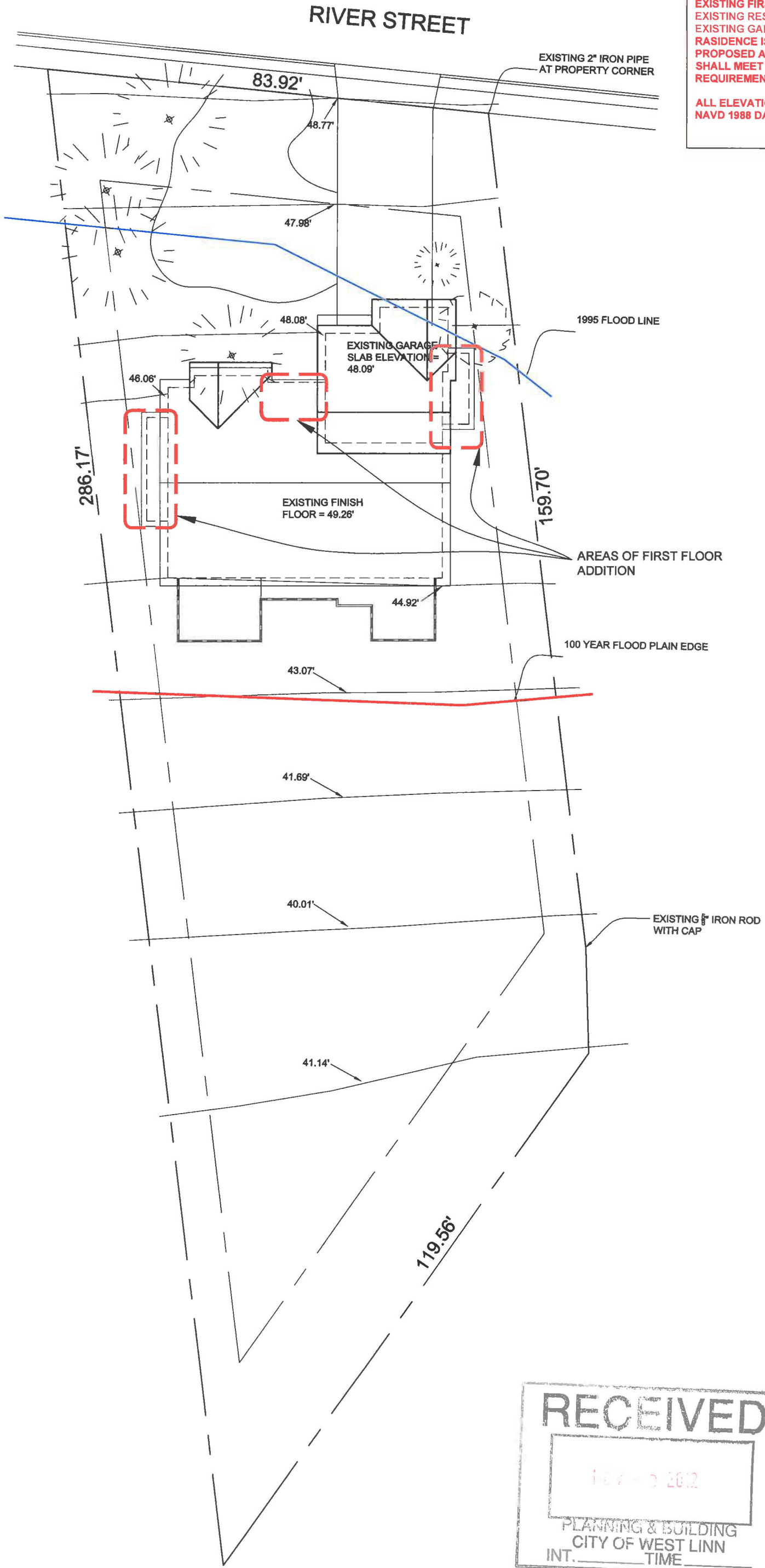
CIVIL ENGINEERS LAND SURVEYORS
BUFORD ASSOCIATES, INC.
 415 NORTH STATE STREET LAKE OSWEGO, OREGON 97034 (503) 635-3511

REC NO. L1620.13 (LOT8U.DWG) NOVEMBER 8, 2012

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 NOV 13 2012
 PLANNING & BUILDING
 CITY OF WEST LINN
 TIME

NOTE:
 THE 100 YEAR FLOODPLAIN ELEVATION AT THE EXISTING SITE LOCATED AT 5650 RIVER STREET IS 48.00' PER NAVD 1988. THIS ELEVATION IS BASED ON THE FEMA FLOOD UNSURANCE RATE MAP, MAP NUMBER 41005C0276D. THE EXISTING FIRST FLOOR FINISH ELEVATION AT THE EXISTING RESIDENCE IS 49.26' PER NAVD (1988). THE EXISTING GARAGE SLAB ELEVATION AT THE EXISTING RESIDENCE IS 48.09'. ALL NEW CONSTRUCTION FOR THE PROPOSED ADDITIONS BELOW AN ELEVATION OF 49.00' SHALL MEET FLOOD DAMAGE RESISTANT MATERIAL REQUIREMENTS.

ALL ELEVATIONS NOTED ON SITE PLAN ARE BASED ON NAVD 1988 DATUM



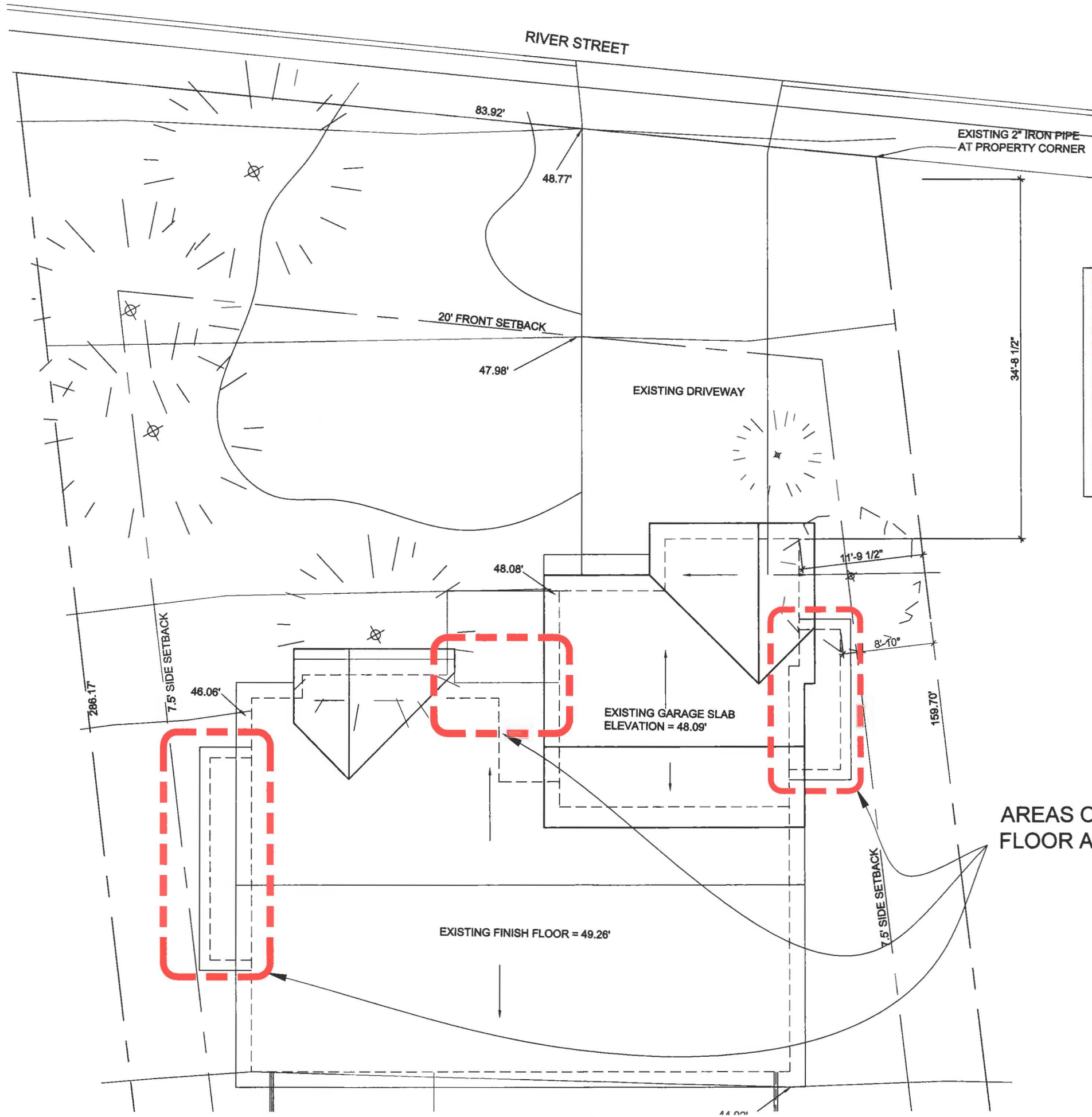
SITE PLAN
 FLOOD MANAGEMENT
 PERMIT SET
 November, 2012
 Crollard Residence -
 remodel & addition

A1.1

INTEGRATE
 ARCHITECTURE
 & PLANNING, P.C.

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1 OVERALL SITE PLAN
 3/32" = 1'-0"



NOTE:
 THE 100 YEAR FLOODPLAIN ELEVATION AT THE EXISTING SITE LOCATED AT 5650 RIVER STREET IS 48.00' PER NAVD 1988. THIS ELEVATION IS BASED ON THE FEMA FLOOD UNSURANCE RATE MAP, MAP NUMBER 41005C0276D. THE EXISTING FIRST FLOOR FINISH ELEVATION AT THE EXISTING RESIDENCE IS 49.26' PER NAVD (1988). THE EXISTING GARAGE SLAB ELEVATION AT THE EXISTING RESIDENCE IS 48.09'. ALL NEW CONSTRUCTION FOR THE PROPOSED ADDITIONS BELOW AN ELEVATION OF 49.00' SHALL MEET FLOOD DAMAGE RESISTANT MATERIAL REQUIREMENTS.

ALL ELEVATIONS NOTED ON SITE PLAN ARE BASED ON NAVD 1988 DATUM



AREAS OF FIRST FLOOR ADDITION

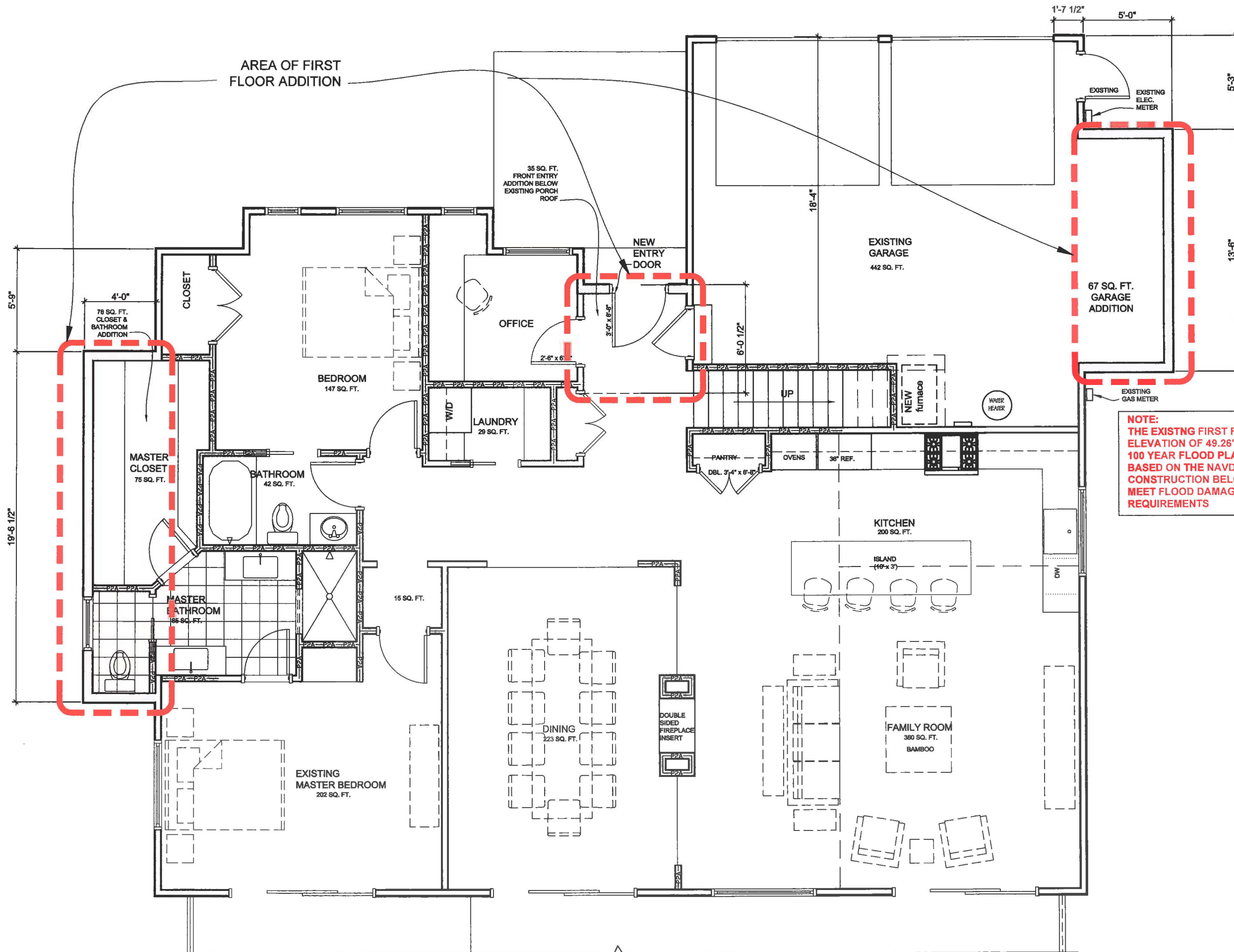
1 PARTIAL SITE PLAN
 3/32" = 1'-0"

SITE PLAN
 FLOOD MANAGEMENT PERMIT SET
 November, 2012
 Crollard Residence - remodel & addition

A1.2

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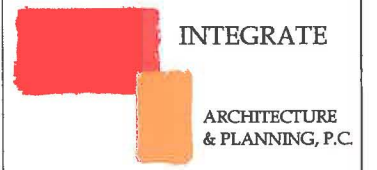


NOTE:
 THE EXISTING FIRST FLOOR RESIDENCE IS AT AN ELEVATION OF 49.26' WHICH IS MORE THAN 1' ABOVE THE 100 YEAR FLOOD PLAIN ELEVATION OF 48.0' WHICH IS BASED ON THE NAVD (1988) DATUM. ALL NEW CONSTRUCTION BELOW AN ELEVATION OF 49.00' SHALL MEET FLOOD DAMAGE RESISTANT MATERIAL REQUIREMENTS



FLOOR PLAN
 FLOOD MANAGEMENT
 PERMIT SET
 November, 2012
 Crollard Residence -
 remodel & addition

A2.1



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1 FIRST FLOOR PLAN
 3/16" = 1'-0"

