
LOCAL HISTORIC DISTRICT: Dilworth

PROPERTY ADDRESS: 814 East Boulevard

SUMMARY OF REQUEST: Addition

OWNER: Matthew & Jill Wheelock

APPLICANT: Angie Lauer/ABL Architecture

Details of Proposed Request

Existing Conditions

Originally built as a single family home c. 1915, this structure currently houses a veterinary practice. It is a one story shingle style building with a full façade front porch that is enclosed with glass to accommodate the business use. The roof is a shallow end gable roof. As one of the original houses along East Boulevard, it sits in a section of East Boulevard that is a mixture of other original houses converted to office use and much later infill office construction. This building is listed as a contributing structure to the Dilworth National Register Historic District.

Proposal-Updated for September 11, 2013 Hearing

The project was reviewed by the HDC and approved in June 2012. In this case, the project was approved with cedar shake siding to match the existing façade as if it were a typical residential project. The plan reviewer for commercial projects noted the proposed siding material would not meet the fire rating requirement because of the building separation distance.

This application requests approval Nichiha siding in a cedar shake design on a portion of the left side elevation. The applicant is requesting an exception to the previous HDC approval by allowing a Non-Traditional Material based on commercial building code requirements that were unknown at the time of HDC review in 2012. The side elevation is not highly visible from the public street.

Policy & Design Guidelines for Materials, pages 48-49

Traditional Building Materials

1. The use of historically traditional building materials is strongly encouraged in all renovation, addition and new construction projects in Local Historic Districts.
2. Historic precedents in the visual context of any project indicate appropriate choices for building materials.
3. All building materials must match the character of the existing structure and/or the streetscape in design, texture and other visual qualities.

Non-Traditional Building Materials

1. The Historic District Commission considers substitute siding to be inappropriate for use in a designated Local Historic District, and does not allow its use on an historic structure within a Local Historic District.
2. The use of the following substitute siding materials is considered incongruous with the overall character of local historic districts, and is prohibited.
 - Vinyl
 - Aluminum or other metal sidings
 - Masonite
3. Cementitious board products are rarely considered appropriate for the main structure on a property. The Historic District Commission will consider these products on a case by case basis.
4. All proposals for the use of other non-traditional building materials for projects in Local Historic Districts will be judged on a case-by-case basis by the full Historic District Commission. The Commission will determine how well the proposed material and its proposed use are contextually appropriate in design, texture and other visual qualities.
5. The use of substitute or replacement building materials will not be considered as an alternative to routine maintenance.

Relevant Secretary of Interior's Standards for Historic Rehabilitation

(As cited in the Charlotte Zoning Ordinance Section 10.210)

- (i) New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
- (j) New additions and adjacent or new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

Staff Analysis

This proposal would extend the width of this existing building 8.5 feet to the left, as viewed from East Boulevard. It is in keeping with the overall architectural style of the house, and is not as wide front to back or as tall as the original structure. The addition is shown to match the house in detailing and materials, including the existing foundation, wood shake siding, windows, and window and eave trim.

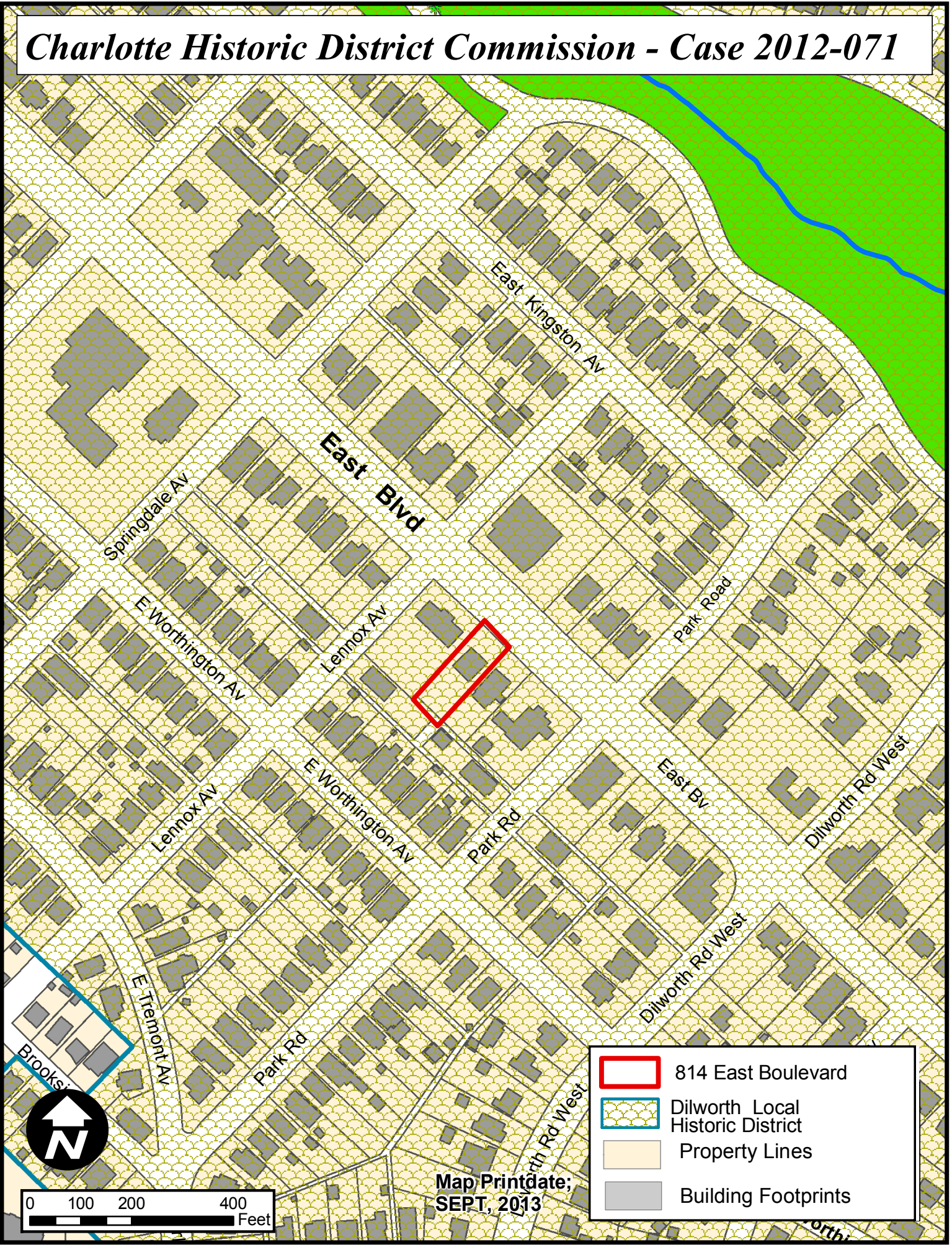
There is also a small front facing shed dormer, as well as a similar rear facing dormer. The existing second floor fire escape stairs and the HVAC compressors will be relocated from this side to the rear as shown on the site plan.

Overall, the addition taken by itself appears to meet all relevant HDC design guidelines. The existing building does have a very symmetrical façade design, however, and that symmetry will be somewhat lost with this addition. At the same time, the addition is subordinate to the original structure, which does help offset this issue, and in a way in keeping with the Secretary of Interior's Standards for Historic Rehabilitation by being distinguishable from the original construction.

Staff Analysis – Updated for September 11, 2013 Hearing

The Design Guidelines allow flexibility for material selection on a case by case basis. Though the building separation issue was not addressed initially it would remain a topic for discussion because of the commercial code conflicting with the Design Guidelines which are heavily based on residential construction. The type of material proposed has been common because of its resemblance to traditional materials. Based on the location of the addition, the type of siding being used and the uniqueness of this application staff believes the change in material is reasonable and within the intent of the Guidelines.

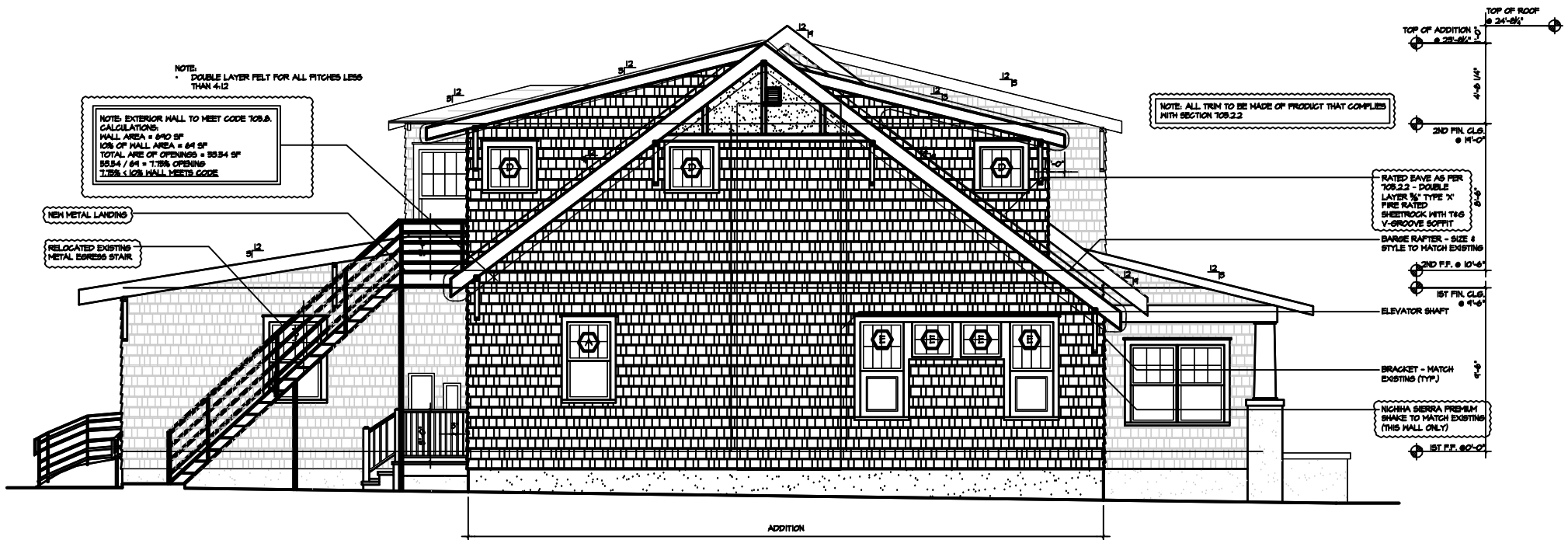
Charlotte Historic District Commission - Case 2012-071





Left Side Elevation





Andrew Stout

From: "POSSE" <posse@mecklenburgcountync.gov>
Date: Thursday, August 08, 2013 9:52 AM
To: "Andrew Stout" <asalb@bellsouth.net>
Subject: Notes for disapproved checklists on project 333517

Checklist Commercial Building - 1) Sheet APB: Rehab code shall apply to existing building only. New addition shall comply with 2012 NC State Building Code; List sq. ft. of basement, but do not include in total building area; On Fire Protection Requirements, Per Table 602, exterior East wall shall be one hour rated and per 705.5, wall shall be rated from both sides; Indicate that a one hour rating is required and provided at new elevator shaft; On Energy Summary: Climate Zone is 3; Provide roof assembly with compliance information; For exterior walls, provide R value for 2" rigid insulation or U value of total assembly; For floors over unconditioned space, provide R value for insulation or U value of total assembly.

2) Sheet A-1: Table R302.1 does not apply. Use Section 705.2 of NCSBC.

3) Sheet A-8: Per Section 1209.2, Provide min 24" x 18" access to crawl space; Provide documentation that shows elevator complies with Chapter 30 of Building Code and Section 407 of A117.1; Per Table 602 and 705.5, exterior wall shall be one hour fire rated from both sides with limited to a maximum of 10% (Table 705.8) of the wall area for unprotected openings; All walls of elevator shaft shall be one hour rated; Provide documentation for stair landing, stairs and handrails; Gate cannot be locked from inside, must provide free egress.

4) Sheet A-9: Table R302.1 does not apply. Use Section 705.2 of NCSBC; Per Table 602 and 705.5, exterior wall shall be one hour fire rated from both sides with limited to a maximum of 10% (Table 705.8) of the wall area for unprotected openings; All walls of elevator machine room shall be 1 hour fire rated and door 205 shall be 45 minute rated with smoke seals and appropriate hardware.

5) Sheet A-11 & A-12: Interior wall and ceiling finishes shall comply with Table 803.9 and floor finishes shall comply with Section 804.

6) Sheet A-13 & A-14: Table R302.1 does not apply. Use Section 705.2 of NCSBC; Per Table 602 and 705.5, exterior wall shall be one hour fire rated from both sides with limited to a maximum of 10% (Table 705.8) of the wall area for unprotected openings.

7) Sheet A-15: Insulation in new floor shall be a minimum of R-30 and insulation in new roof/attic shall be minimum of R-38; Top of elevator shaft shall be one hour rated; Provide documentation for stair landing, stairs and handrails.

8) Sheet SNG: Project shall be designed under the NC Building Code not Residential Code; Revise loads so as to be compliant with occupancy #25 on Table 1607.1; Loads shall be compliant with Table 1607.1 with concentrated elevator machine room load of 3,000 lbs and Section 1607.8 for impact load.

9) Sheet SD1: Provide evidence that header/girder can bear on brick curtain wall and that brick is tied to piers.

10) Sheet S-1: What is foundation for new tube steel for new 5'-3" x 4'-4" deck and steps and relocated exterior exit stairs?

11) Sheet S-1 & S-2: Revise structural framing as necessary to comply with revised live loads imposed.

Checklist item Appendix B (0204.3.4.0) - Fire protection table must be completely filled out for all projects

Appendix B information is incomplete and/or incorrect

Checklist item Shaft Continuity (0706.5.0.0) - The shaft is not continuous from rated assembly to rated assembly or from floor to roof deck

Checklist item Shaft Enclosures (0707.0.0.0) - Shaft must be capped at the top

2. The column flange width does not exceed 16 inches (400 mm); or
3. The beam or column web depth does not exceed 16 inches (400 mm).
4. The average and minimum bond strength values shall be determined based on a minimum of five bond tests conducted in accordance with ASTM E 736. Bond tests conducted in accordance with ASTM E 736 shall indicate a minimum average bond strength of 80 percent and a minimum individual bond strength of 50 percent, when compared to the bond strength of the SFRM as applied to clean uncoated $\frac{1}{8}$ -inch-thick (3 mm) steel plate.

704.13.4 Temperature. A minimum ambient and substrate temperature of 40°F (4.44°C) shall be maintained during and for a minimum of 24 hours after the application of the SFRM, unless the manufacturer's installation instructions allow otherwise.

704.13.5 Finished condition. The finished condition of SFRM applied to structural members or assemblies shall not, upon complete drying or curing, exhibit cracks, voids, spalls, delamination or any exposure of the substrate. Surface irregularities of SFRM shall be deemed acceptable.

704.14 Soffit in Group R. In Group R buildings of combustible construction the soffit material shall be securely attached to framing members and shall be constructed using either noncombustible soffit material, fire-retardant-treated soffit material, vinyl soffit installed over $\frac{3}{4}$ -inch (19.05 mm) wood sheathing or $\frac{5}{8}$ -inch (15.88 mm) gypsum board, or aluminum soffit installed over $\frac{3}{4}$ -inch (19.05 mm) wood sheathing or $\frac{5}{8}$ -inch (15.88 mm) gypsum board. Venting requirements shall apply to both soffit and underlayment and shall be in accordance with Section 1203.2.

SECTION 705 EXTERIOR WALLS

705.1 General. Exterior walls shall comply with this section.

705.2 Projections. Cornices, eave overhangs, exterior balconies and similar projections extending beyond the exterior wall shall conform to the requirements of this section and Section 1406. Exterior egress balconies and exterior exit stairways shall also comply with Sections 1019 and 1026, respectively. Projections shall not extend beyond the distance determined by the following three methods, whichever results in the lesser projection:

1. A point one-third the distance from the exterior face of the wall to the lot line where protected openings or a combination of protected and unprotected openings are required in the exterior wall.
2. A point one-half the distance from the exterior face of the wall to the lot line where all openings in the exterior wall are permitted to be unprotected or the building is equipped throughout with an automatic sprinkler system installed under the provisions of Section 705.8.2.
3. More than 12 inches (305 mm) into areas where openings are prohibited.

Buildings on the same lot and considered as portions of one building in accordance with Section 705.3 are not required to comply with this section.

705.2.1 Type I and II construction. Projections from walls of Type I or II construction shall be of noncombustible materials or combustible materials as allowed by Sections 1406.3 and 1406.4.

705.2.2 Type III, IV or V construction. Projections from walls of Type III, IV or V construction shall be of any approved material.

705.2.3 Combustible projections. Combustible projections located where openings are not permitted or where protection of openings is required shall be of at least 1-hour fire-resistance-rated construction, Type IV construction, fire-retardant-treated wood or as required by Section 1406.3.

Exception: Type V construction shall be allowed for R-3 occupancies.

705.3 Buildings on the same lot. For the purposes of determining the required wall and opening protection and roof-covering requirements, buildings on the same lot shall be assumed to have an imaginary line between them.

Where a new building is to be erected on the same lot as an existing building, the location of the assumed imaginary line with relation to the existing building shall be such that the exterior wall and opening protection of the existing building meet the criteria as set forth in Sections 705.5 and 705.8.

Exception: Two or more buildings on the same lot shall either be regulated as separate buildings or shall be considered as portions of one building if the aggregate area of such buildings is within the limits specified in Chapter 5 for a single building. Where the buildings contain different occupancy groups or are of different types of construction, the area shall be that allowed for the most restrictive occupancy or construction.

705.4 Materials. Exterior walls shall be of materials permitted by the building type of construction.

705.5 Fire-resistance ratings. Exterior walls shall be fire-resistance rated in accordance with Tables 601 and 602 and this section. The required fire-resistance rating of exterior walls with a fire separation distance of greater than 10 feet (3048 mm) shall be rated for exposure to fire from the inside. The required fire-resistance rating of exterior walls with a fire separation distance of less than or equal to 10 feet (3048 mm) shall be rated for exposure to fire from both sides.

705.6 Structural stability. The wall shall extend to the height required by Section 705.11 and shall have sufficient structural stability such that it will remain in place for the duration of time indicated by the required fire-resistance rating.

705.7 Unexposed surface temperature. Where protected openings are not limited by Section 705.8, the limitation on the rise of temperature on the unexposed surface of exterior walls as required by ASTM E 119 or UL 263 shall not apply. Where protected openings are limited by Section 705.8, the limitation on the rise of temperature on the unexposed surface of exterior walls as required by ASTM E 119 or UL 263 shall not apply.