



Historic Landmarks and Preservation Districts Commission

Report to the Committee

To: Old Louisville Architectural Review Committee
Thru: Robert Keesaer, AIA, NCARB, Planning & Design Supervisor
From: Savannah Darr, Historic Preservation Specialist
Date: October 6, 2016

Case No: 16COA1208
Classification: Committee Review

GENERAL INFORMATION

Property Address: 1366 S. Third Street

Applicant: Gregory M. Likins
Diversified Designs, Inc.
1366 S. Third Street
Louisville, KY 40208
502-592-9469
glikins@diversifieddesigns.com

Owner: same as applicant

Architect/Design: Brent Likins
CBL Construction Co.
1522 Goshen Lane
Goshen, KY 40026
502-821-1821
brentlikins@bellsouth.net

Estimated Project Cost: \$40,000

Description of proposed exterior alteration:

The applicant requests approval to construct an 864 square foot second floor addition on top of an existing one-story, three-car garage. The existing garage was constructed in 2014 (14COA1024). The walls are board and batten and the shed roof is covered with fiberglass shingles. The second floor addition will change the shed roof form to a 5/12 side gable roof to allow for the new dwelling unit. The west elevation (alley elevation) of the addition will contain two 2'-0" square casement windows and one 6'-0" square stationary window. The east elevation (yard elevation) of the addition will contain two 6'-0" by 7'-0" sliding glass doors with 12" transom windows and one 3'-0" by 7'-0" door with a 12" transom window.

The doors will lead to an 8'-0" deep wooden deck that will be covered by the main roof. The deck will also have a wood handrail and balusters with a stoop and stairs that lead to the ground on the side (north) elevation. A concrete pad will be poured below the deck at the ground surface. The north elevation will contain one 3'-0" by 4'-6" casement window as well as the stairs that lead down from the addition. A concrete pad will be poured at the bottom as a landing. The south elevation will have no doors or windows.

Communications with Applicant, Completion of Application

The application was received on September 8, 2016, and was determined to be complete and requiring committee review on September 12, 2016. The case is scheduled to be heard by the Old Louisville Architectural Review Committee on October 12, 2016 at 5:30 pm, at 444 South Fifth Street, Conference Room 101.

FINDINGS

Guidelines

The following design review guidelines, approved for the Old Louisville Preservation District, are applicable to the proposed exterior alteration: **Addition**. The report of the Commission Staff's findings of fact and conclusions with respect to these guidelines is attached to this report.

The following additional findings are incorporated in this report:

Site Context/Background

The site, zoned TNZD, is located on the west side of S. Third Street in the Traditional Neighborhood Form District. It is located on the sixth lot south of Park Avenue. The site contains a single family, three-story Queen Anne style masonry house surrounded by other two- and three-story Victorian era houses of varying architectural styles.

The existing 36'-0" by 24'-0" board and batten garage was constructed in 2014 with approval from the Old Louisville ARC (14COA1024).

Conclusions

The proposed addition generally meets the Old Louisville design guidelines for **Addition**. While full-floor additions and roof alterations are typically not allowed in the District, these alterations are proposed on a modern garage with no historic significance. Therefore, there is no historic fabric to be negatively impacted. South of the garage, there are several two-story carriage houses along the alley with both side gabled and hipped roofs. Immediate to the north of the garage, there are two one-story garages with side gabled and shed roofs. Further north down the block, there are several two-story carriage houses along the alley with a variety of roof configurations. Thus, there is a strong context for carriage houses on this alley.

Based on preliminary calculations, the applicant will need to apply for a private rear yard variance for the 8' covered deck portion of the addition that goes into the rear yard.

RECOMMENDATION

On the basis of the information furnished by the applicant, staff recommends the application for a Certificate of Appropriateness be **approved** with the following conditions:

1. The wood deck and stair elements shall be opaque stained or painted (see attached).
2. All new concrete shall be poured with historic concrete mix and finished to match the surrounding historic concrete (see attached).
3. The applicant shall apply for a private rear yard variance.
4. If the design changes, the applicant shall contact staff.

The foregoing information is hereby incorporated in the Certificate of Appropriateness as approved and is binding upon the applicant, his successors, heirs or assigns. This Certificate does not relieve the applicant of responsibility for obtaining the necessary permits and approvals required by other governing agencies or authorities.


Savannah Darr
Historic Preservation Specialist

10/6/16
Date

ADDITION

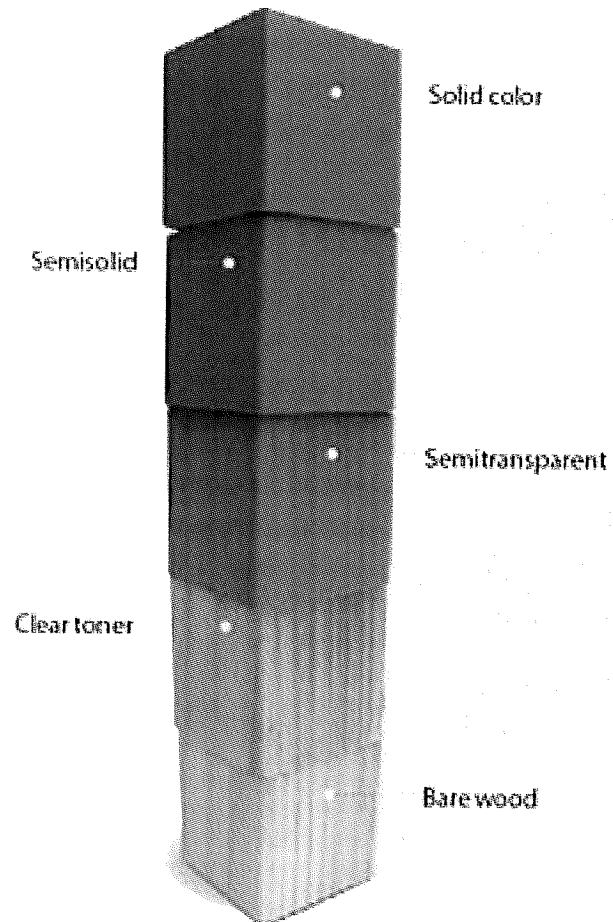
Design Guideline Checklist

- + Meets Guidelines
- Does Not Meet Guidelines
- +/- Meets Guidelines with Conditions as Noted
- NA Not Applicable
- NSI Not Sufficient Information

	Guideline	Finding	Comment
A1	Ensure that the design of any new addition is in proportion with the size and scale of the historic building and district.	+	This addition would be similar in size to other carriage houses on the block
A2	Design any addition so that it is subordinate to the original building. Generally, additions should not exceed half of the original building's total floor area or building footprint.	+/-	This is a modern garage building (circa 2014) not a historic structure
A3	Generally, additions should be attached to secondary elevations and should be set back from the front façade, so as not to damage or obscure character-defining features.	NA	This is a modern garage (circa 2014), so the addition would not damage any character-defining features.
A4	Use materials that are the same as or subordinate to the primary material of the original building. Wood is subordinate to brick, and brick and stucco are subordinate to stone.	+	Board and batten to be used to match garage

A5	Respect original roof forms when designing an addition. Additions should complement existing forms, not overwhelm them.	+/-	This is a modern garage (circa 2014), but the addition would change the roof from a shed to side gable form.
A6	Do not undertake any full-floor additions in residential preservation districts (adding an additional full floor on top of a building).	+/-	This is a modern garage building (circa 2014) not a historic residence
A7	Generally, the original orientation of a building should not be altered when constructing a new addition. An addition should not turn a secondary façade into primary façade.	+	
A8	Design any new addition so that the first-floor height is equal to or slightly lower than the original building. The floor-to-floor heights should be equal to or up to 10 percent less than the original building. In no case should the floor heights exceed those of the original building.	NA	Second floor addition
A9	Design additions to have the same relationship of solids (wall surfaces) to voids (window and door openings) as the historic portion.	+/-	This is a modern garage building not a historic residence, but there is a similar pattern
A10	Design additions so that there are subtle distinguishing characteristics between the historic portion and the new alteration. This may include simplifying details, changing materials, or slightly altering proportion.	NA	This is a modern garage (circa 2014)
A11	Set back additional stories from the historic wall plane of commercial or institutional structures when such an approach is required for a new use. The construction of additional stories should be as inconspicuous as possible and not damage or destroy character-defining features.	NA	
A12	Do not design additions to appear older than the original building.	NA	This is a modern garage (circa 2014)
A13	Comply with the Kentucky building code in such a way that a historic building's character-defining features are preserved.	NA	
A14	Do not radically change or damage a building's character-defining features when adding a new code-required stairway or elevator. Any such addition should be compatible with the materials and scale of the historic structure.	NA	
A15	Install fire escapes only on secondary elevations. Respect the locations of original doors and windows and do not cause undue damage to historic materials. They should preferably be painted to match the color of the wall.	NA	
A16	Do not construct a deck on a front or side façade. Decks should be of wood construction and be either painted or finished with an opaque stain. Use the railing detail developed by the Landmarks Commission or other approved detail.	+	Rear façade/yard façade of garage
A17	Design rear decks so that they do not extend beyond the side walls of the house and are not visible from the street.	+/-	The stairs do extend from side of garage, but are necessary to access apartment. This is an accessory structure and not a main residence.
A18	Wood fire stairs should be painted or stained and should be kept to a minimum functional size.	+	

An opaque stain should make the wood have a monolithic look helping to cover knot holes and variances in color. In the photo below, we are looking for the semitransparent look pictured here.



Historic Concrete Mix A

This formula contains pea gravel and is designed to accommodate light maintenance vehicles.

PROVIDE AND INSTALL HISTORIC MIX CONCRETE WHERE INDICATED ON THE PLANS. CONTRACTOR SHALL SUPPLY ONE THREE FOOT SQUARE TEST SAMPLE OF THE HISTORIC MIX CONCRETE FOR THE OWNER'S APPROVAL PRIOR TO POURING THE CONCRETE. SPRAY HISTORIC MIX WITH RETARDER AND LIGHTLY WASH TO MATCH EXISTING HISTORIC MIX WALKS IN THE PARK. ALL HISTORIC MIX CONCRETE SHALL BE 4,000 PSI @ 28 DAYS W/ 5% AIR (+/- 1-INCH), A 0.51 WATER/CEMENT RATIO AND A 4-INCH SLUMP (+/- 1-INCH) WITH A MIX DESIGN AS FOLLOWS:

MATERIAL	QUANTITY/(C.Y.)	VOLUME (C.F.)
TYPE I/II PORTLAND CEMENT	470 lb.	2.39
CLASS C FLY ASH	100 lb.	0.59
3/8" PEA GRAVEL	781 lb.	4.74
CONCRETE SAND	2,196 lb.	13.48
CITY WATER	290 lb.	4.65
AIR ENTRAINMENT	0.60 oz./cwt	0.00
WATER REDUCER	2.00 oz./cwt	0.01
TOTAL	3,837 lb.	27.20 C.F.

**Based on Shawnee Dream Playground Specifications 2010
Metro Parks*

Historic Concrete Mix B

This formula is useful in matching existing historic concrete walks.

SAND-GROUT CONCRETE MIX DESIGN

MIX ID: 6-1/2 BAG GROUT - 4,000 PSI

WEIGHTS PER CUBIC YARD (SATURATED SURFACE-DRY)

TYPE I PORTLAND CEMENT
CLASS F FLY ASH (LBS.)
CLASS A SAND (LBS.)
WATER (GAL. LBS.)
TOTAL AIR (%)

YIELD, CU. FT.
3.21
0.70
17.02
4.73
1.35
TOTAL 21.00 CU. FT.

630
140
2723
295
5.0±10

ADD MIXTURE
RUSS TECH FINISHEASE NO. (OZ.)

29.60

AIR ENTRAIN

RUSS TECH RSA-10 (OZ.-US)

5.9

WATER/CEMENT RATIO (LBS.)

0.40

SLUMP (IN.)

4.00

CONCRETE UNIT WEIGHT (LBS./CU. FT.)

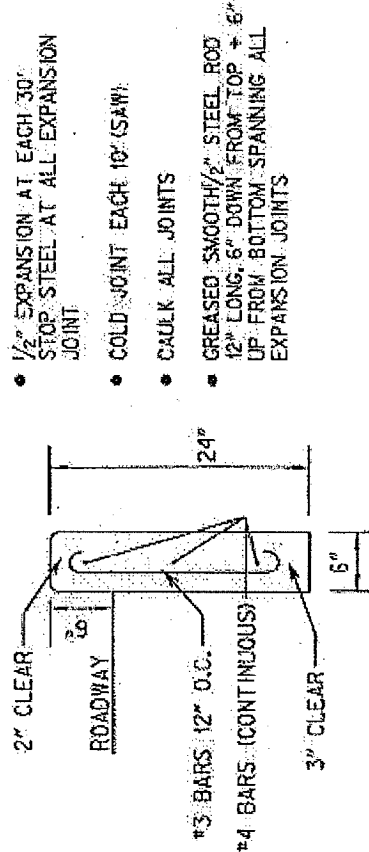
139.4

COMPENSATION FOR THE FREE AND NEGATIVE MOISTURE
WILL BE MADE AT THE TIME OF BATCHING.

CONSTRUCTION TYPE: GENERAL
PLACEMENT: HANDS ON

THE KEY TO THE FINAL IS THE PRODUCT OF THE LIGHT SPRAY
WASH (WATER) UNDERTAKEN AT THE PROPER TIME - A FIELD
DECISION (NO RETARDENT)

SAMPLES PREPARED FOR WALKWAY AND CURB CONSTRUCTION
WITH ST. JAMES COURT, LOUISVILLE, KENTUCKY.



SIMULATED LIMESTONE
HEADER CURB

WHAT ARE THE MIX PROPORTIONS?

MIX PROPORTIONS WILL VARY DEPENDING ON LOCAL MATERIALS AND
DESIRED STRENGTH REQUIREMENTS. SHOWN BELOW AS EXAMPLE ONLY,
ARE MIXES FROM THREE SOURCES:

AMERICAN CONCRETE PAVEMENT ASSOCIATION - "MUNICIPAL CONCRETE
PAVEMENT MANUAL - GUIDE SPECIFICATIONS AND DESIGN STANDARDS.
FLOWABLE LOW-STRENGTH MORTAR BACKFILL"

QUANTITIES OF DRY MATERIALS PER CUBIC YARD
CEMENT 100 LBS. 2800 LBS.
FLY ASH 250 LBS. 500 LBS.
FINE AGGREGATE GRADATIONS
SIEVE SIZE 7/8" PASSING 100 0-10
200

IOWA DEPARTMENT OF TRANSPORTATION - "SUPPLEMENTAL SPECIFICATIONS
FOR FLOWABLE MORTAR" SS 1053, JANUARY 19, 1988

QUANTITIES OF DRY MATERIALS PER CUBIC YARD
CEMENT 100 LBS. 2600 LBS.
FLY ASH 300 LBS. 70 GAL.
FINE AGGREGATE GRADATIONS
SIEVE SIZE 7/8" PASSING 100 0-10
200

OHIO DEPARTMENT OF TRANSPORTATION - "LOW STRENGTH MORTAR BACKFILL
MATERIAL" PROPOSAL NOTE NO. 220, REV. NOVEMBER 3, 1987, CLASS LSM-100

TRIAL MIX PER CUBIC YARD
CEMENT 100 LBS. 2580 LBS.
FLY ASH 250 LBS. 500 LBS.
SAND GRADATION
SIEVE SIZE 7/8" INCH 100
NO. 4 90-100
NO. 8 65-100
NO. 16 40-85
NO. 30 20-60
NO. 50 7-40
NO. 100 0-20
NO. 200 0-10

NOTE: IT IS INTENDED THAT THE SAND BE A FINE SAND THAT WILL STAY IN
SUSPENSION IN THE MIXTURE TO THE EXTENT REQUIRED TO OBTAIN A
FLOWABLE CONSISTENCY.



LOUISVILLE METRO PUBLIC WORKS
444 5th Street, Louisville, Kentucky 40202

TRANSITIONAL CURB

REVISIONS

APPROVED BY: *[Signature]* DATE: 6/1/88
STANDARD DRAWING NO. 201-2
2 OF 2

This Document modifies the "2015 Standard Specifications for Road and Bridge Construction" prepared by Louisville Metro Public Works. All other provisions in the manual remain in full force and effect.

Replace Section 02400 – Curb & Gutter, Driveway & Sidewalks - Part 2.2 Historic Concrete Mix with the following sections attached hereto.

2.2 HISTORICAL CONCRETE MIX

2.2.1 DESCRIPTION

This work shall consist of constructing sidewalks, driveways and median strip, except sidewalk driveways and median strip that is integrally a part of a structure, constructed of "historic mix" concrete, at the locations and to the dimensions, lines, grades, and cross section indicated on the Plans or as directed by the Engineer, and in conformity with the provisions and requirements set out in these Specifications.

2.2.2 MATERIALS

Materials used in this construction shall meet the following requirements:

Historic Concrete Mix Properties		
Properties	Specification	Requirements
Compressive Strength	KYTC 601	3,500 psi, minimum
Cement Type	KYTC 601	Type I
Cement Content	KYTC 601	564 lb/cy, minimum
Fly Ash Substitution	KYTC 601	20%, maximum
Water-Cement Ratio	KYTC 601	0.49, maximum
Air Content	KYTC 601	6.0 +/- 2.0%
Slump	KYTC 601	2 - 4 inches
Concrete Admixtures	KYTC 802	N/A
Fine Aggregate	KYTC 804	Concrete Sand
Course Aggregate	KYTC 805	#67 Gravel or River Gravel

The following Historic Concrete Mix Design may be used as a reference:

Historic Concrete Mix Design – 3,500 psi		
	Weights/Volumes per Cubic Yard (Saturated, Surface-Dry)	Yield (cu. ft.)
Type 1 Portland Cements (lb.)	553	2.81
Class F Fly Ash (lb.)	98	0.58
Fine Aggregate - Class A Sand (lb.)	2,149	13.25
Course Aggregate - #67 Gravel or River Gravel (lb.)	716	4.42
Water (lb.)	270	4.33
Air Content (%)	6.0	1.62
Total		27.0
Air Entrainment		
Grace Darex II (oz./100wt.) or Engineer approved equal	0.2	
Concrete Admixture		
Grace Zyla 630 (oz./100 wt.) or Engineer approved equal	3.0	
Water/Cement Ratio (lb.)	0.42	
Slump (inches)	4.0	
Concrete Unit Weight (lb./cu ft.)	140.2	

Compensation for free and negative moisture will be made at the time of batching.

Concrete Surface Retarder: Super Tard – S, or Engineer approved equal per AASHTO M 194.

2.2.3 EXECUTION

Construction shall meet the requirements of the *Louisville Metro Standard Drawings* and Section 505 of the *KYTC Standard Specifications for Road and Bridge Construction, 2012* or latest revision.

Complete floating and troweling until all the surface bleed water disappears. Using an ordinary, low-pressure garden sprayer, uniformly apply retarder to the surface without puddling.

Cover the treated surface with plastic sheeting (preferably black) or continuously-wetted burlap until the cement matrix is to be removed.

To expose the aggregate, direct a jet of water over the surface while scrubbing with a coarse floor brush to remove the cement matrix. Power washing is more efficient and should be used when possible.

Test a small area to determine the depth of retardation before proceeding with the rest of the surface. If the depth is excessive, wait before proceeding with the removal of the cement matrix.