Ferdinand Building

Existing Exterior Conditions

Dudley Square, Roxbury, Massachusetts

September 2007

BCA

BUILDING CONSERVATION ASSOCIATES INC

Ferdinand Building

Existing Exterior Conditions

Dudley Square, Roxbury, Massachusetts

Prepared For
Jacobs Engineering Group
Two Center Plaza
Boston, MA 02108

Prepared By
Building Conservation Associates, Inc.
580 High Street
Dedham, Massachusetts 02026

BCA Team
Andrea Gilmore
Norah Mazar

September 2007

BCA

BUILDING CONSERVATION ASSOCIATES INC

Ferdinand Building: Exterior Conditions

Introduction

In the summer of 2007, Building Conservation Associates, Inc. (BCA) was contracted to survey the exterior conditions at the Ferdinand Building in Roxbury, Massachusetts. Utilizing an aerial lift, BCA was able to inspect the existing conditions of the masonry. The conditions of the building materials were recorded on elevation drawings of the building and through the use of digital photography. The photographs were keyed to elevation drawings. Rosa Castro-Krawiec of Jacobs Civil Inc. used the lift with BCA to assess the structural condition of the building.

This report summarizes the findings of BCA's survey and provides a general list of recommendations for treatment of the various building elements based on those findings. More specific recommendations will issued at the time that the building is being restored. Our evaluation of the condition of the building is based on a treatment approach guided by the Secretary of the Interior's Standards for the Treatment of Historic Properties, which can be found at http://www.nps.gov/history/hps/tps/standguide/.

The Ferdinand Building is a five story, Baroque Revival, wedge shaped building at Dudley Square, in Roxbury, Massachusetts. It is constructed of limestone, terra cotta, decorative brick, and granite, and has a copper cornice. Purpose built in 1895 as the Ferdinand's Blue Store, a large department store, it was designed by John Lyman Faxon. The angled intersection of Washington and Warren Streets in Roxbury creates a wedge shaped lot, which determined the building's shape. The curved corner of the Ferdinand Building is highly visible as you approach it going west on Washington Street, and the building is punctuated with six large oval windows at the corner and ends of the building. Accordion-paneled display windows surround the second floor, which would have allowed for maximum visibility of the merchandise within. The limestone is elaborately carved, and the terra cotta cast with an enormous amount of detail, making the Ferdinand Building quite intricately decorated. The brick which clads the 3rd and 4th floors is three different colors: cream, yellow and tan. The three colors of brick are ornamentally arranged, with the darker color recessed, in a radiating pattern surrounding the windows. The large ornamental cornice is copper, and includes cast lion heads.

Figure 1. Accordion-paneled windows.

Figure 2. Three colors of brick around windows.

The Ferdinand Building is a rare surviving example of the 19th century department store. Ferdinand's specialized in furniture, carpets, stoves, bedding and housewares. By the early 1900's, Ferdinand's was advertised as the "Largest Home Furnishings Establishment in the U.S." Sitting directly in front of the Dudley Transportation Station, the building is also important as a link between the rise in Dudley Square as a transportation hub, and therefore a commercial center. (The electronic trolley extended to Dudley Square in 1888, and the Boston Elevated Railroad linked Boston and Roxbury in 1901.) Shortly after the Ferdinand Building was built, the business expanded, necessitating an addition to the building on its Washington Street elevation.

Summary of Findings

The Ferdinand Building has been largely unused and unmaintained for over 30 years. As a result, water has been infiltrating the building through window openings and open masonry joints. This has caused a good deal of masonry deterioration in the form of cracked and spalled units, open joints, rust stains, and some biological growth. Considering the extreme deferred maintenance on this building, the masonry is actually in fairly good condition. While some of the cracking seems to be associated with structural movement the walls of the Ferdinand Building seem to be structurally sound. (With the exception of the elevator shaft which is structurally unsound.) See Appendix B of this report for our detailed condition notes on elevation drawings, and Appendix C for a photo key to the drawings.

The windows of the Ferdinand building did not fare quite as well. Exposure to weather after losing their protective coatings caused the wooden window frames to deteriorate beyond repair, and most are already partly gone.

Limestone

Limestone is used for cladding and trim at the 1st and 2nd floors, and for sills at 3rd and 4th floors. Both ashlar and intricately carved units are present. The limestone is moderately soiled, with areas of heavier soiling, rust staining and biological growth in the form of lichens. The most serious conditions associated with limestone at the Ferdinand Building are cracking and spalling. Water infiltration and building movement seem to be the main causes of these conditions, which are most pronounced at the building's curved corner where a wide open vertical crack is presently running the height of 4 stories. BCA recommends that a crack meter be installed at this location to monitor any future structural movement. The east elevation exhibits more limestone cracks than the north elevation. The limestone sills at the 3rd and 4th floors all exhibit at least one crack. Other conditions include old inappropriate patches made with material incompatible with limestone.

Figure 3. Wide crack in limestone at building corner.

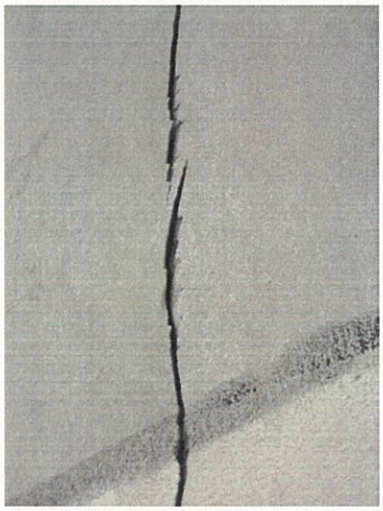


Figure 4. Shear crack in limestone.

Figure 5. Rust staining at limestone column.

Brick

Brick is used to clad the 3rd and 4th floors of the Ferdinand Building. Three colors of brick are used on the primary elevations: cream, yellow and tan. The brick was laid in a radiating pattern around the windows with the darkest brick recessed to accentuate the design. The Washington Street addition is built entirely of brick, and is only two colors: cream and yellow. All the brick is quite soiled, to the point that it is difficult to detect the multiple colors from the street, but it is in fairly good condition. The most common condition observed on the brick is cracking. Both step cracking (cracked joints) and through-brick cracks were noted. Cracked mortar joints will be discussed later in this report. Long vertical through-brick cracks were observed running the height of the 3rd and 4th floors on the Warren Street (east) elevation. On the Washington Street (north) elevation, cracking is more localized, and occurs mostly at that elevation's addition.

Figure 6. Soiling, open joints, cracked joints and staining at brick.

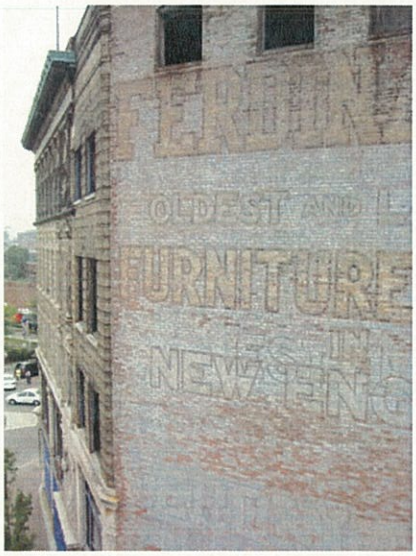


Figure 7. Full height painted wall sign.

Vertical cracking was noted adjacent to the junction between the original building and the addition on Washington Street. The entire height of the north-west-facing wall of the addition is painted as a large scale wall sign, with multiple paint campaigns visible proclaiming Ferdinand's as the "Oldest and Largest Furniture Store in New England." This wall would have faced the elevated train prior to its demolition. Another condition seen on the primary facades is brick spalling, due to the large amount of water entering the building and the resultant freeze/thaw cycling. Surface spalling was observed on the east elevation, where the only face of the brick has spalled off. A more serious condition was observed on the north elevation addition where ferrous metal window lintels have corroded and expanded, causing the brick at those locations to pop off. During the survey a piece of loose brick was easily removed by hand from this location, and all surrounding brick was checked to confirm that no other pieces were in imminent danger of falling off.

Figure 8. Spalled brick at site of iron corrosion/expansion.

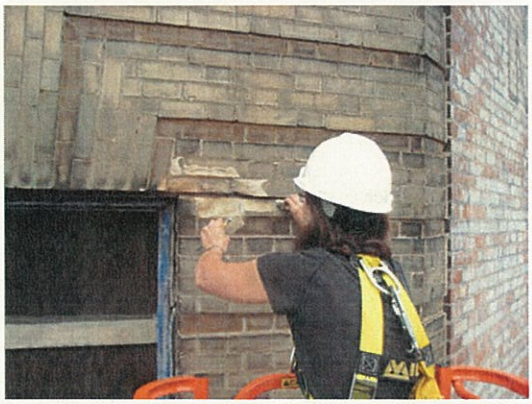


Figure 9. Removal of loose brick during survey.

At the upper levels of the Washington Street addition, the brick coursing is bowing outward. It is unclear what is causing this condition, which should be further investigated by a structural engineer. Brick conditions at the south elevations are very different. The brick at the south elevation is red, and this wall seems to be a party wall exposed after the demolition of the annex that abutted the back of the Ferdinand Building. Open joist pockets are visible in the wall, and water infiltration has had its worst effect here. There is much loose mortar and brick at the south elevation, especially above lintels and surrounding joist pockets. There are large areas of spalled brick, as well as localized areas of brick loss. Remnants of a painted wall sign remain above the roof line of the demolished annex.

Figure 10. Bowing brick courses at addition.

Figure 11. South elevation brick deterioration.

Figure 12. The brick parapet wall above the cornice was formerly covered in copper. It is in good condition.

Terra Cotta

The 5th floor of the Ferdinand Building is clad in terra cotta, which is cast to mimic intricately carved limestone, including an elaborate frieze. Terra Cotta is also used for trim at the 3rdand 4th floors. The terra cotta is generally in good condition with most of its glaze intact. As with brick, the most common condition observed at the terra cotta is cracking. This includes open cracks as well as hairline cracks. Cracking is problematic in terra cotta because when water enters the bisque of the unit, it can freeze and expand and cause the protective glazed exterior to spall off, leading to further deterioration of the material. Some units of terra cotta have multiple cracks, especially on the east elevation of the building. Also observed is crazing, which are superficial cracks in the glaze. These are normal. Multiple terra cotta spalls were noted, but none of them was particularly large. Another condition noted is the loss of mortar in many of the joints, which also allows for water entry.

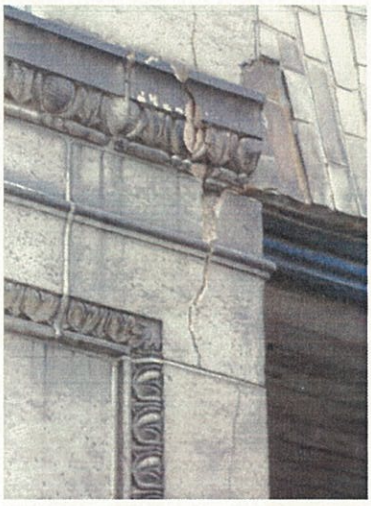


Figure 13. Cracking and spalling.

Figure 14. Extreme soiling and soot deposition on cream-colored terra cotta.

The terra cotta is extremely soiled, especially at the garland band which runs below the 5th story windows. The cream colored terra cotta is so soiled that it looks black. Beyond aesthetics, this soot deposition on the terra cotta is also detrimental to the material as it holds moisture against the surface of the terra cotta, allowing it easier entry into the unit. Rust staining was also observed at the terra cotta. During the survey, steel T-angles were visible behind the terra cotta cladding, tying it into the structure. The steel was noted to be in good condition. At the fifth floor, to the left of the corner oval window, a terra cotta pilaster is bowing outward. The five units that make up the column are not loose, but should be pinned in place to prevent further movement.

Figure 15. Bowing terra cotta units in right pilaster.

Figure 16. Large spall in terra cotta.

Marble

Marble is used at the Ferdinand Building for decorative medallions above the 5th floor windows. The marble is in very good condition, and is moderately soiled. Only three cracks were noted in the marble medallions, as well as some limited surface sugaring. The presence of marble medallions at the upper most story of the building further underscores the attention to detail, materials and design at the Ferdinand Building.

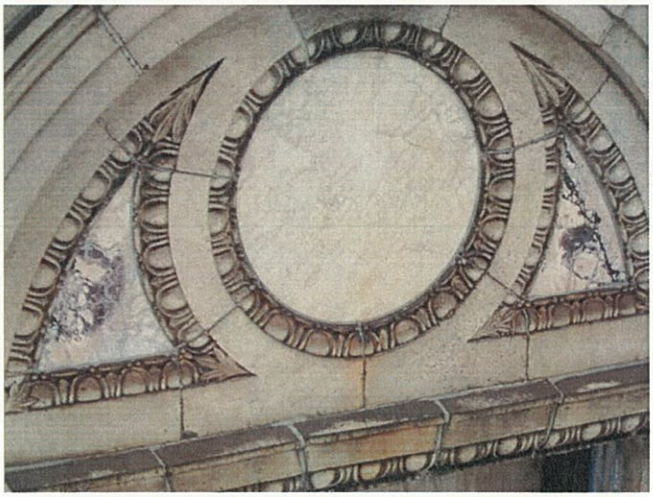


Figure 17. Marble medallion.

Granite

The column bases at the ground floor of the Ferdinand Building are constructed of grey granite. In some locations the lower half of the granite is painted, perhaps to cover the graffiti which is present on several columns. The granite is generally in very good condition, except for several spalls. Most of the spalls are at the main entry, and are probably the result of mechanical damage.

Figure 18. Granite spalls at main entry, building corner.

Copper

The cornice at the Ferdinand Building is made of copper. The large cornice is made up of pressed copper, comprised of lion's heads and brackets. It seems there were elements between the lion's heads that have since been partially lost. Earlier this year a large piece of copper cornice from the south east corner of the building was removed because it was hanging loose. Otherwise, the cornice is in fairly good condition, and where the interior bracing was visible, it looked stable.

Figure 19. Interior bracing at cornice end (area of removal).

Figure 20. Copper cornice. Note missing element between the lions.

Sheet Metal

Some of the signage, trim and panels above 1st and 2nd story windows is made of sheet metal, as are the accordion window surrounds at the second floor. Some of this metal is prone to corrosion, and has been rusting and staining the masonry below. There are areas where portions of the signage or metal trim has been lost.

Figure 21. Deteriorated ferrous metal trim.

Figure 22. Corroding metal trim has stained limestone at first floor.

Elevator Shaft

On the south end of the east (Warren Street) elevation there is an old brick elevator shaft which remains from the demolished annex. It was not part of the original 1895 building, and is structurally unsound. There is serious brick loss, mortar loss and cracking, and the elevator shaft structure does not seem to be well-tied in to the main Ferdinand Building.

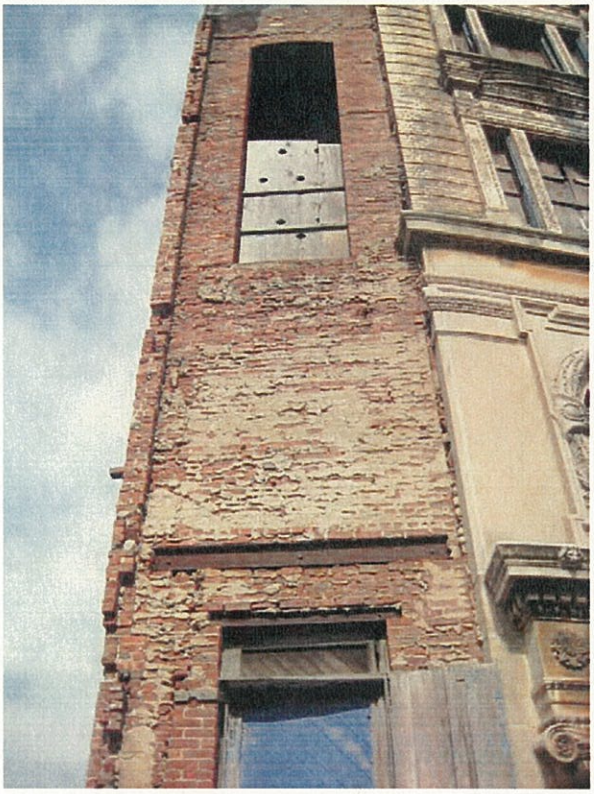


Figure 23. Elevator shaft.

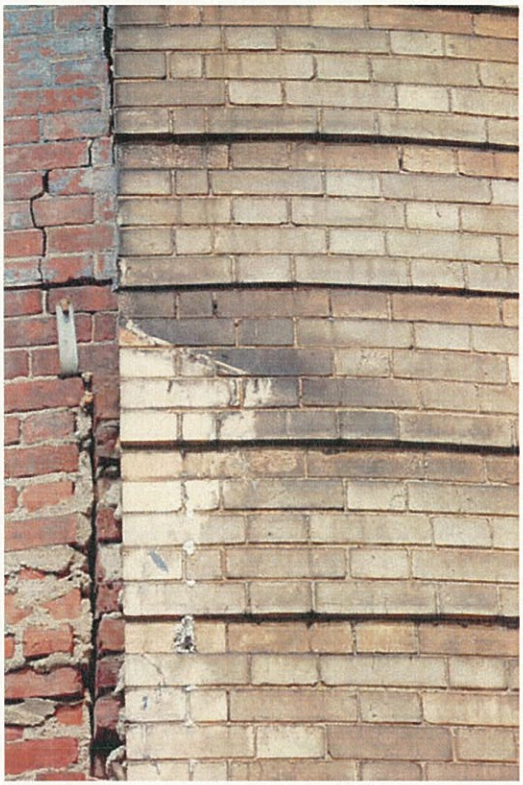


Figure 24. Joint between building and elevator shaft.

Mortar Joints

The mortar in the joints of the Ferdinand Building is, for the most part, the original lime-based pointing mortar. There are areas where some smear repointing has been done, with a hard grey Portland cement mortar. This repointing mortar is incompatible with the more porous, lime-rich original mortar as it prevents moisture from exiting the masonry through the mortar joints; forcing it instead into the masonry units themselves. Once in the masonry, the water can freeze and expand in the pores, or conduct harmful salts through the masonry.

Most of the masonry joints at the Ferdinand Building are either open, or cracked. These conditions are significant contributors to the deterioration of the masonry in the building. Complete repointing would ensure that the building envelope functions properly and is weather tight.

The vertical joint between the original building and the addition on Washington Street is cracked from top to bottom. (There are also intermittent vertical cracks in the masonry on either side of the joint.) This is clear evidence of structural movement, and a crack monitor should be installed at this location to determine if the movement is ongoing.

Figure 25. Joint between buildings.

Figure 26. Cracked and open brick joints.

Figure 27. Portland cement repointing mortar in limestone joints. Under stress, this hard mortar causes the stone to crack because it is harder than the limestone.

Wood Windows

The fenestration of the Ferdinand Building is unique and very much defines the design of the building. Large display windows existed at the street level, with accordion paneled windows at the second floor that would have been visible from multiple angles. Massive oval windows punctuate the curved corner of the building at the 2nd and 5th stories, as well as at the ends of those floors. A large part of the remainder of the building is made up of large rectangular and square windows, as well as tri-part windows. All the windows are framed in wood, and all the wood sash is gone. The remaining wood frames are extremely deteriorated, and much of the material is lost. The lack of maintenance caused the protective paint to deteriorate completely, leaving the wood vulnerable to deterioration.

Figure 28. Deteriorated wood frame and missing sash at corner tri-part window.

Recommendations

Masonry

- Clean all masonry to remove general soiling, carbon deposits, rust, biological growth and staining.
- Repoint all mortar joints 100%.
- Repair all cracked stone using epoxy injection or by routing and filling with composite patching material to match surrounding stone.
- Repair all cracked terra cotta using epoxy injection or by routing and filling with composite patching material and coating with glaze to match surrounding terra cotta.
- Repair single cracked bricks with epoxy injection or by routing and filling with composite patching material to match surrounding brick. Replace bricks with cracks running through multiple courses with new brick to match existing.
- Remove loose brick, reinstall or replace with sound brick.
- Repair spalled brick with composite patching material to match surrounding brick.
- Repair spalled terra cotta with composite patching material and glaze to match surrounding terra cotta.
- Repair the sources of water penetration that are creating deterioration.
- Repair areas of stone loss with composite patching materials or stone dutchman repairs.
- Reset and pin individual stone units.
- Remove paint from limestone and granite at base.
- Preserve painted wall sign at north-west elevation.

Windows

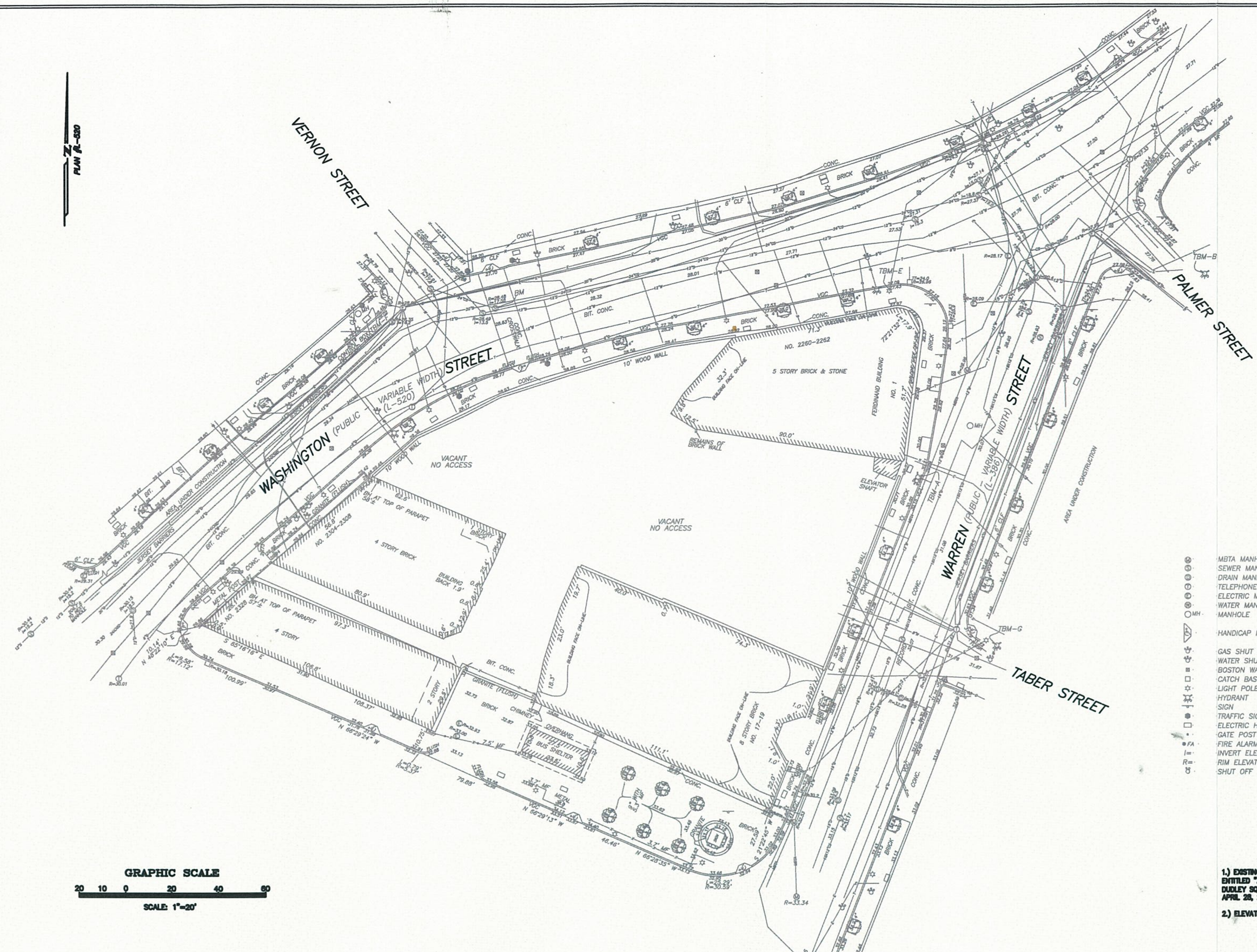
- Replace wood window frames and sash with new wooden elements to match original.
- Provide and install new glazing.
- Remove corroding lintels, replace with non-ferrous metal.

Cornice

- Fabricate and install copper elements where losses exist.
- Verify that interior bracing and support is structurally sound.

APPENDIX A

SITE PLAN



LEGEND:

ⓜ	MBTA MANHOLE	(symbol)	DECIDUOUS TREE
Ⓢ	SEWER MANHOLE	N/F	NOW OR FORMERLY
Ⓓ	DRAIN MANHOLE	TBM	TEMPORARY BENCH MARK
Ⓣ	TELEPHONE MANHOLE	TT	TOP OF TRAP
Ⓔ	ELECTRIC MANHOLE	N.V.P.	NO VISIBLE PIPES
Ⓦ	WATER MANHOLE	BH	BUILDING HEIGHT
○MH	MANHOLE	FPA	FOOTPRINT AREA
(symbol)	HANDICAP RAMP	T.	TOP
(symbol)	GAS SHUT OFF	B.	BOTTOM
(symbol)	WATER SHUT OFF	BIT.	BITUMINOUS
■	BOSTON WATER VALVE	CONC.	CONCRETE
□	CATCH BASIN	VGC	VERTICAL GRANITE CURB
☼	LIGHT POLE	CLF	CHAIN LINK FENCE
(symbol)	HYDRANT	MF	METAL FENCE
(symbol)	SIGN	—X—	FENCE
●	TRAFFIC SIGNAL	—S—	SEWER
▭	ELECTRIC HANDHOLE	—D—	DRAIN
•	GATE POST	—CS—	COMBINED SEWER
●FA	FIRE ALARM	—W—	WATER
I=	INVERT ELEVATION	—G—	GAS
R=	RIM ELEVATION	—E—	ELECTRIC
(symbol)	SHUT OFF	—M—	MBTA
		—T—	TELEPHONE

NOTES:

1.) EXISTING CONDITIONS FROM PLAN PREPARED BY HARRY R. FELDMAN, INC. ENTITLED "ALTA/ACSM LAND TITLE SURVEY AND EXISTING CONDITIONS PLAN, DUDLEY SQUARE, BOSTON (ROXBURY DISTRICT), MASS" SCALE: 1"=20', DATED APRIL 28, 2005.

2.) ELEVATIONS REFER TO BOSTON CITY BASE (BCB).

Nitsch Engineering
www.nitscheng.com
186 Lincoln Street, Suite 200
Boston, MA 02111-2403
T: (617) 338-0063
F: (617) 338-6472

- Civil Engineering
- Land Surveying
- Transportation Engineering
- Planning
- GIS Services

PROJECT # 6302
FILE: 6302_TOP01_072307.dwg
SCALE: 1"=20'
DATE: JULY 23, 2007
PROJECT MANAGER: AJA
FIELD BOOK: 401
DRAFTED BY: PAR
CHECKED BY: AJA

REV.	COMMENTS	DATE
	REVISIONS	

EXISTING CONDITIONS

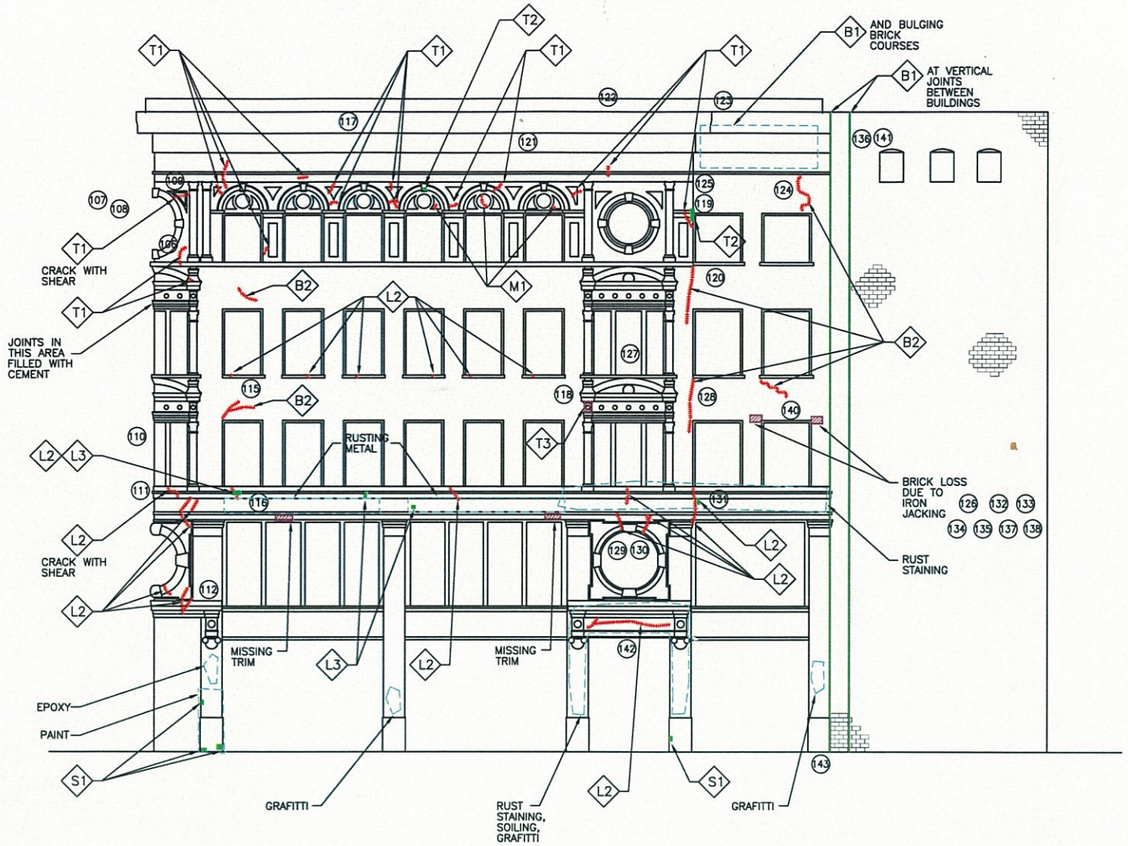
DUDLEY SQUARE, BOSTON (ROXBURY), MASSACHUSETTS

PREPARED FOR:
JACOBS ENGINEERING GROUP, INC.
TWO CENTER PLAZA, BOSTON, MASSACHUSETTS 02108

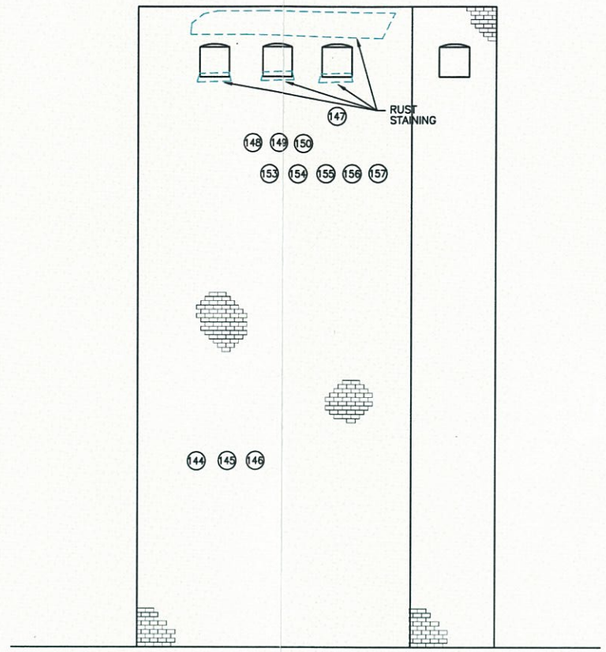
SHEET: EX-1
OF 1
REV.

APPENDIX B

EXISTING CONDITIONS DRAWINGS



NORTH ELEVATION
N.T.S.



WEST ELEVATION
N.T.S.

EXITING CONDITIONS:
NOTES

GENERAL NOTES:
G1 ALL MASONRY SURFACES ARE VERY SOILED.
G2 LINTELS AT WASHINGTON STREET ADDITION ARE CORRODING.
G3 50% MASONRY JOINTS ARE OPEN OR CRACKED

TERRA COTTA:
T1 TERRA COTTA CRACK
T2 TERRA COTTA SPALL
T3 TERRA COTTA LOSS

BRICK:
B1 OPEN BRICK JOINT
B2 BRICK CRACK
B3 BRICK SPALL
B4 BRICK LOSS

LIMESTONE:
L1 OPEN LIMESTONE JOINT
L2 LIMESTONE CRACK
L3 LIMESTONE SPALL

GRANITE:
S1 GRANITE SPALL
S2 GRANITE CRACK

MARBLE:
M1 MARBLE CRACK

CRACK
SPALL
OPEN JOINT
LOSS
CONDITION AREA
(35) PHOTO KEY NUMBER, SEE APPENDIX C OF BCA REPORT.

BCA

EXISTING BUILDING INFORMATION:
EXISTING BUILDING DRAWINGS ARE COMPILED FROM VARIOUS INFORMATION. BUILDING EXTERIOR SURVEYED BY HARRY R. FELDMAN, INC. ON APRIL 28 2005. BUILDING INTERIOR DEVELOPED BY JACOBS. BRA AND/OR THEIR AGENTS DO NOT GUARANTEE THE ACCURACY OF THESE RECORD DRAWINGS.

P:\BCA AutoCAD Files\07-PROJECTS\Dudley Square\Ferdinand\BCA\Ferdinand Building Elevation.dwg (North & West) Plotted Sep 19, 2007 at 3:33pm by BCA

BOSTON REDEVELOPMENT AUTHORITY
BOSTON'S PLANNING AND ECONOMIC DEVELOPMENT OFFICE
Thomas M. Menino, Mayor

PROFESSIONAL STAMP

JACOBS ENGINEERING GROUP
TWO CENTER PLAZA, BOSTON MA 02108
617-742-8060

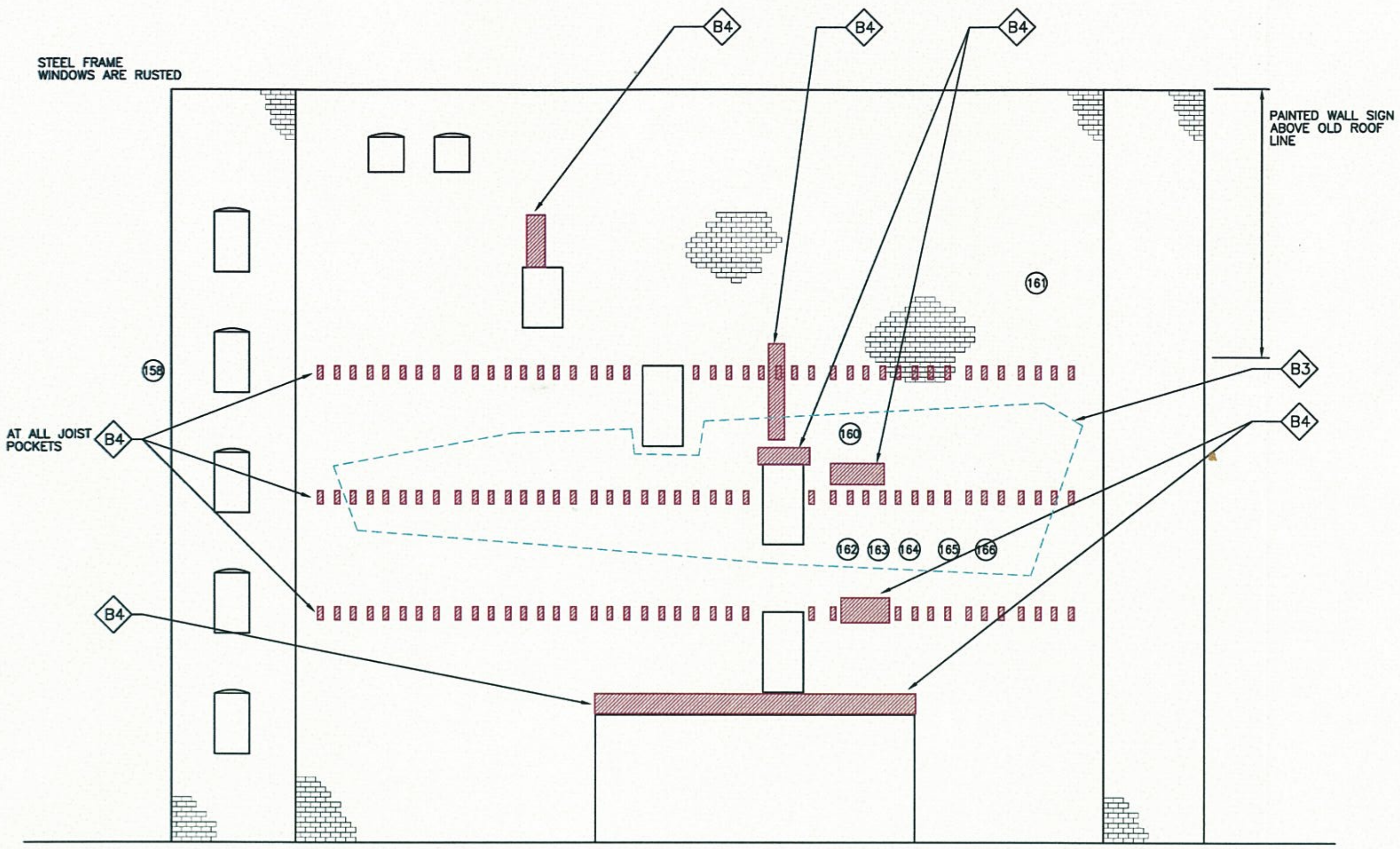
BUILDING CONSERVATION ASSOCIATES, INC.
RESTORATION CONSULTANT
580 HIGH STREET DEDHAM, MA 02026

FERDINAND BUILDING, DUDLEY SQUARE
ROXBURY

EXISTING CONDITIONS- NORTH AND WEST ELEV.

DES. BY:	DRN. BY:	SCALE:	DATE:
JOHN LYMAN FAXON	N. MAZAR	NOT TO SCALE	SEPTEMBER 21, 2007

DWG. NO. R-01
CONTRACT NO. 5076
SHEET 1 OF 2



SOUTH ELEVATION
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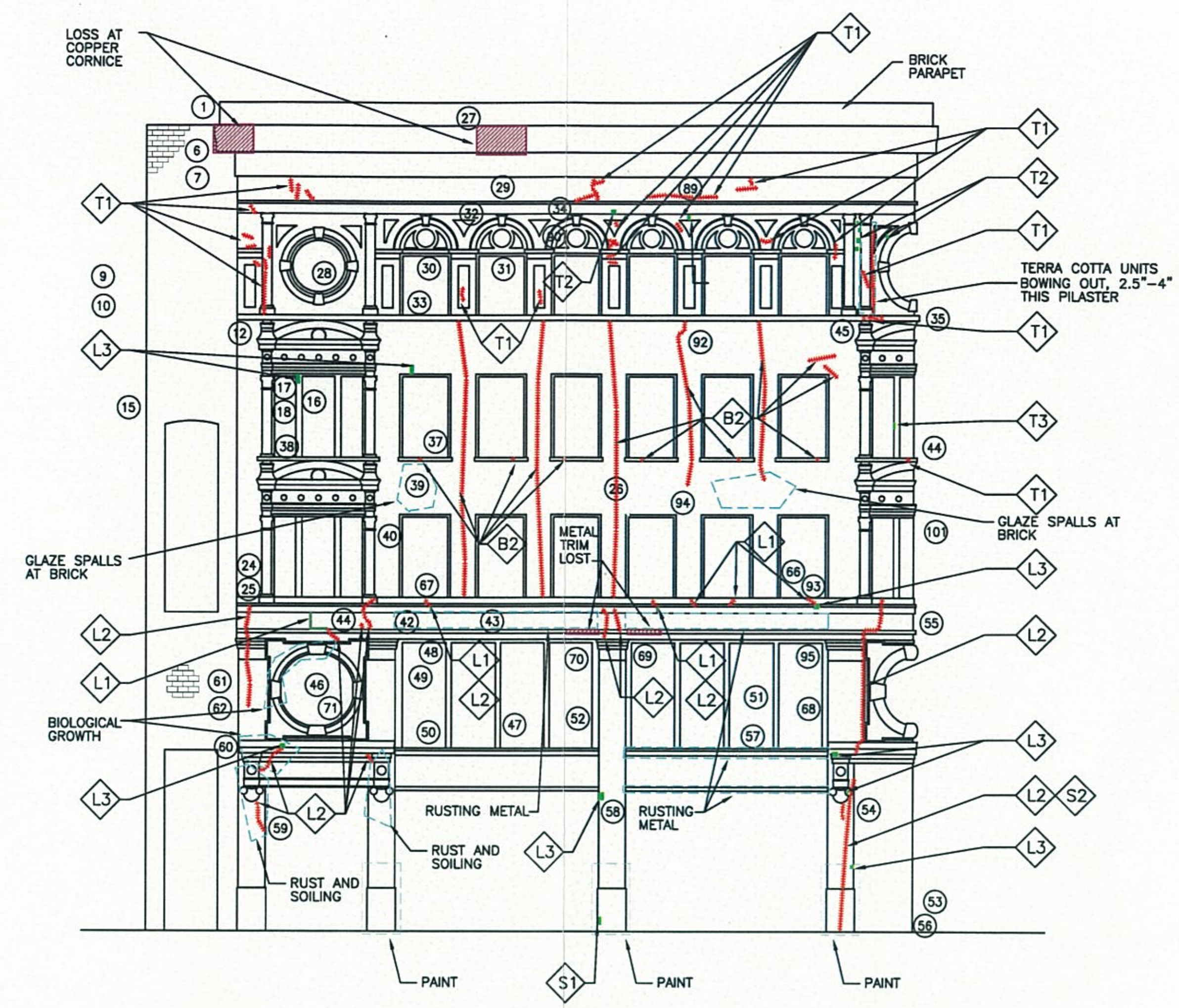

EAST ELEVATION
N.T.S.

EXITING CONDITIONS:
NOTES

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G2 LINTELS AT WASHINGTON STREET ADDITION ARE CORRODING.
G3 50% MASONRY JOINTS ARE OPEN OR CRACKED

TERRA COTTA:
T1 TERRA COTTA CRACK
T2 TERRA COTTA SPALL
T3 TERRA COTTA LOSS

BRICK:
B1 OPEN BRICK JOINT
B2 BRICK CRACK
B3 BRICK SPALL
B4 BRICK LOSS

LIMESTONE:
L1 OPEN LIMESTONE JOINT
L2 LIMESTONE CRACK
L3 LIMESTONE SPALL

GRANITE:
S1 GRANITE SPALL
S2 GRANITE CRACK

MARBLE:
M1 MARBLE CRACK

CRACK
SPALL
OPEN JOINT
LOSS
CONDITION AREA
(35) PHOTO KEY NUMBER, SEE APPENDIX C OF BCA REPORT.

BCA

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BOSTON REDEVELOPMENT AUTHORITY BOSTON'S PLANNING AND ECONOMIC DEVELOPMENT OFFICE Thomas M. Menino, Mayor	PROFESSIONAL STAMP	JACOBS ENGINEERING GROUP TWO CENTER PLAZA, BOSTON MA 02108 617-742-8060 BUILDING CONSERVATION ASSOCIATES, INC. RESTORATION CONSULTANT 580 HIGH STREET DEDHAM, MA 02026	FERDINAND BUILDING, DUDLEY SQUARE ROXBURY EXISTING CONDITIONS– SOUTH AND EAST ELEV. DES. BY: N/A; DRN. BY: C. BAISLY; SCALE: NOT TO SCALE; DATE: 9/2007	DWG. NO. R-02 CONTRACT NO. 5076 SHEET 2 OF 2

Appendix C

Photo Key

Ferdinand - 1

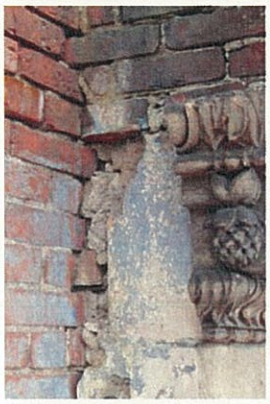
Ferdinand - 2

Ferdinand - 3

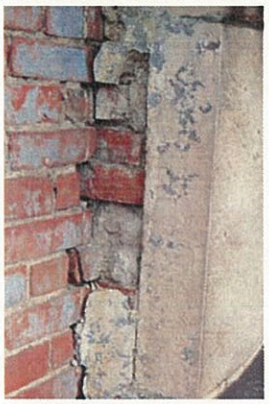
Ferdinand - 4

Ferdinand - 5

Ferdinand - 6



Ferdinand - 7



Ferdinand - 8

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Ferdinand - 10

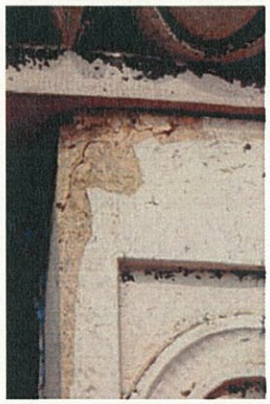
Ferdinand - 11

Ferdinand - 12

Ferdinand - 13

Ferdinand - 14

Ferdinand - 15



Ferdinand - 16

Ferdinand – 17

Ferdinand – 18

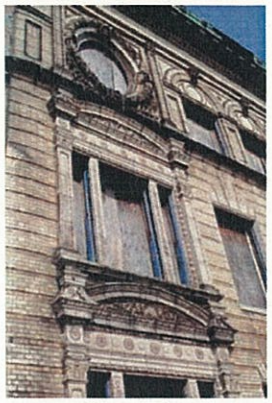
Ferdinand – 19

Ferdinand – 20

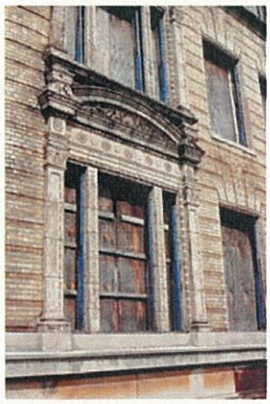
Ferdinand – 21

Ferdinand – 22

Ferdinand – 23

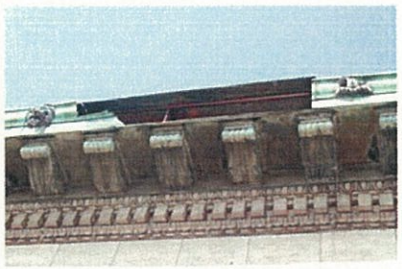


Ferdinand – 24



Ferdinand – 25

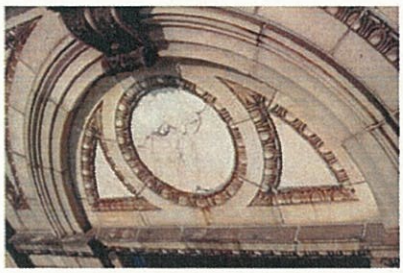
Ferdinand – 26



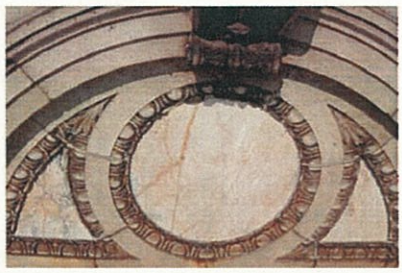
Ferdinand – 27

Ferdinand – 28

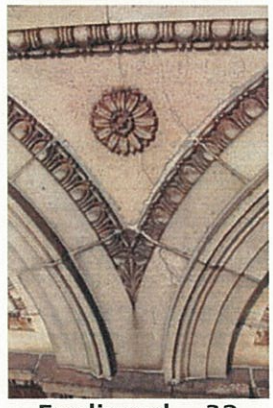
Ferdinand – 29



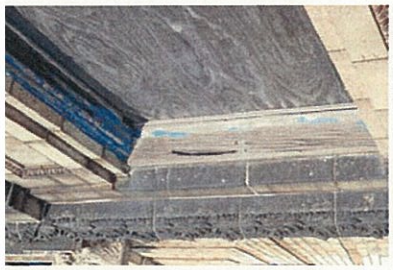
Ferdinand – 30



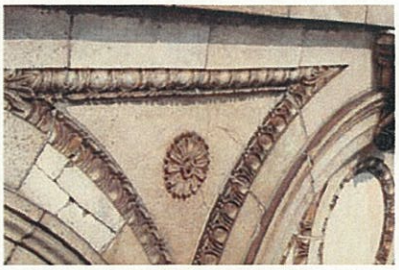
Ferdinand – 31



Ferdinand – 32



Ferdinand - 33

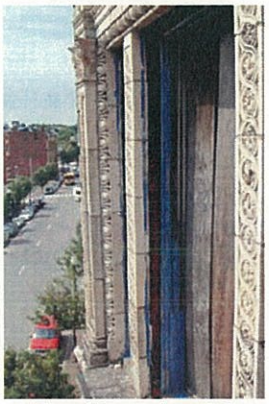


Ferdinand - 34

Ferdinand - 35

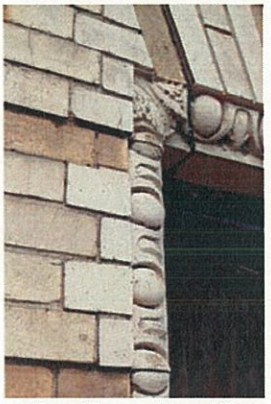
Ferdinand - 36

Ferdinand - 37



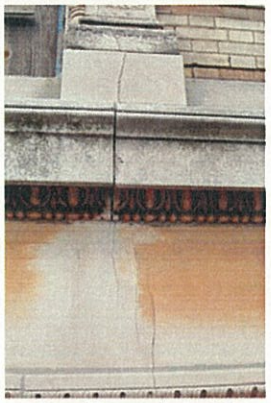
Ferdinand - 38

Ferdinand - 39



Ferdinand - 40

Ferdinand - 41



Ferdinand - 42

Ferdinand - 43

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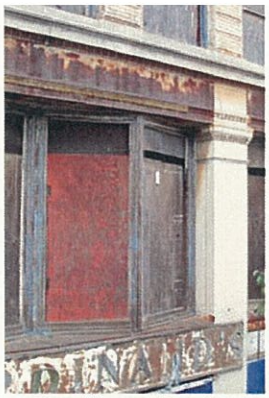
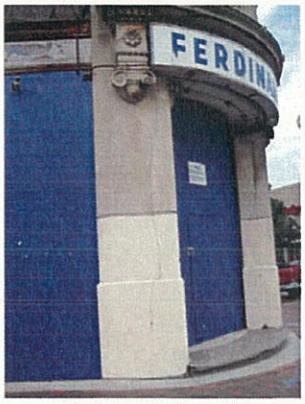
Ferdinand – 51

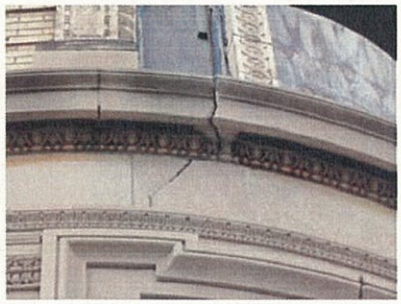


Ferdinand – 52



Ferdinand – 53

Ferdinand – 54



Ferdinand – 55

Ferdinand – 56

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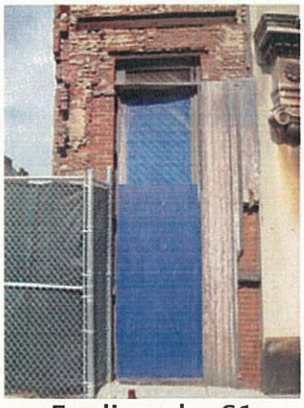
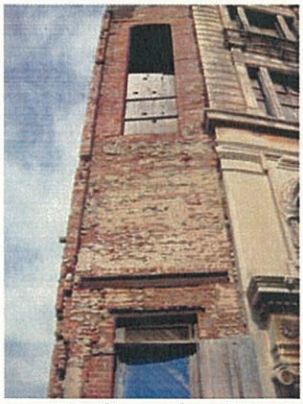
Ferdinand – 59

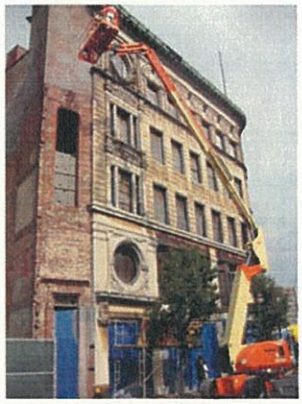
Ferdinand – 60



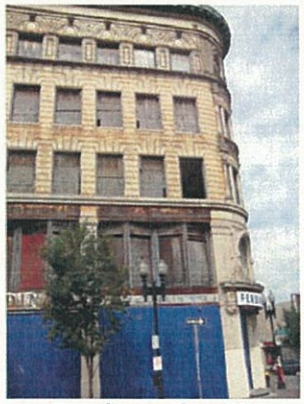
Ferdinand – 61



Ferdinand – 62



Ferdinand – 63

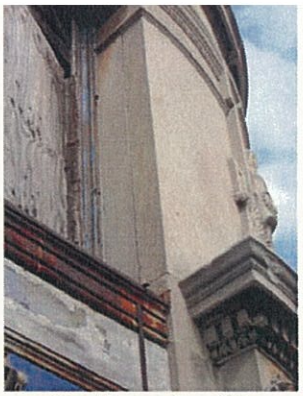


Ferdinand – 64

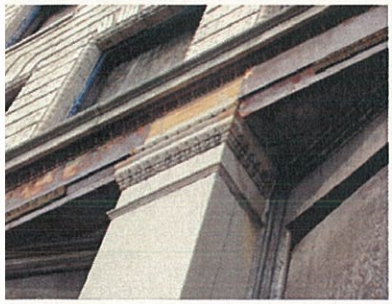
Ferdinand – 65

Ferdinand – 66

Ferdinand – 67



Ferdinand – 68



Ferdinand – 69

Ferdinand – 70

Ferdinand – 71

Ferdinand – 72

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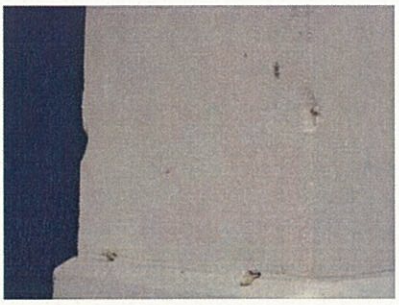
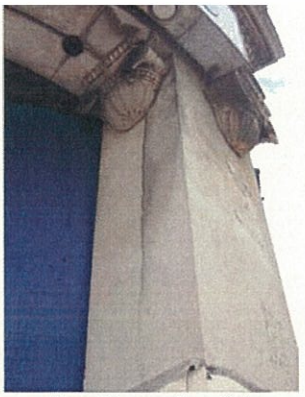
Ferdinand – 80

Ferdinand - 81

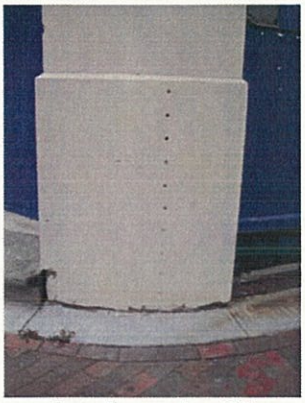
Ferdinand - 82



Ferdinand - 83



Ferdinand - 84



Ferdinand - 85

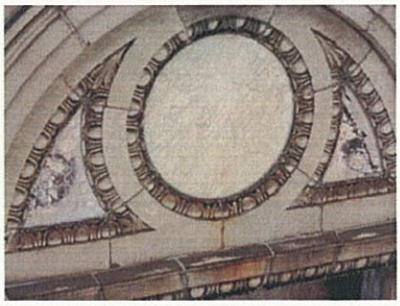
Ferdinand - 86

Ferdinand - 87

Ferdinand - 88

Ferdinand - 89

Ferdinand - 90

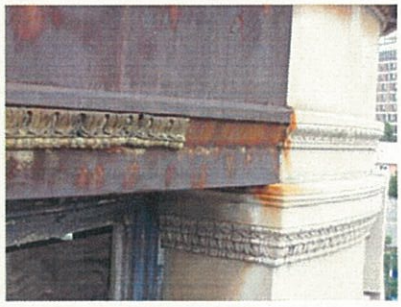


Ferdinand - 91

Ferdinand - 92

Ferdinand - 93

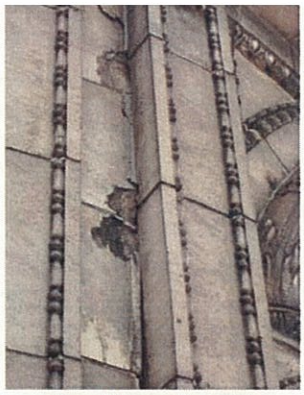
Ferdinand - 94



Ferdinand - 95

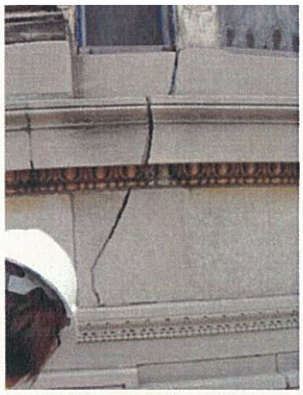
Ferdinand - 96

Ferdinand - 97

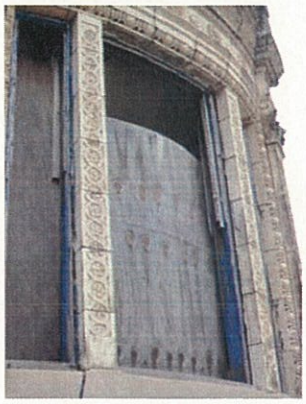


Ferdinand - 98

Ferdinand - 99

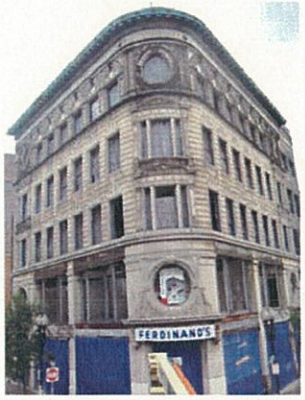


Ferdinand - 100



Ferdinand - 101

Ferdinand - 102

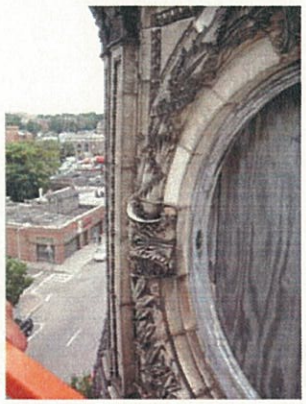


Ferdinand - 103

Ferdinand - 104

Ferdinand - 105

Ferdinand - 106



Ferdinand - 107

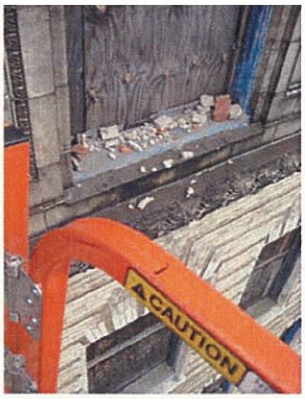
Ferdinand - 108

Ferdinand - 109

Ferdinand - 110

Ferdinand - 111

Ferdinand - 112



Ferdinand - 113

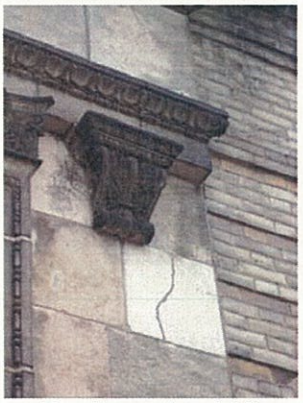

Ferdinand - 114


Ferdinand - 115


Ferdinand - 116


Ferdinand - 117


Ferdinand - 118


Ferdinand - 119


Ferdinand - 120


Ferdinand - 121


Ferdinand - 122

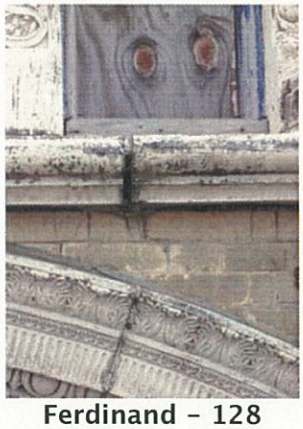

Ferdinand - 123

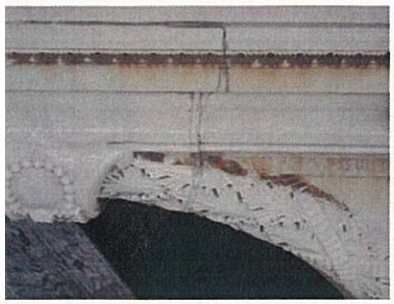

Ferdinand - 124


Ferdinand - 125


Ferdinand - 126

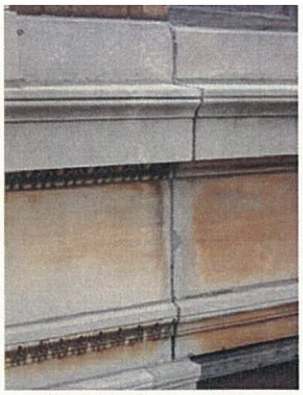

Ferdinand - 127


Ferdinand - 128

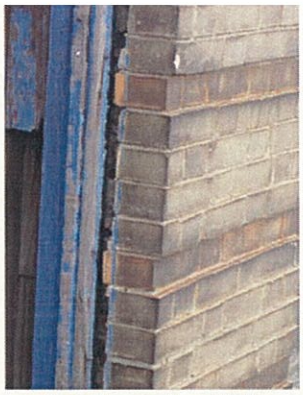


Ferdinand - 129

Ferdinand - 130



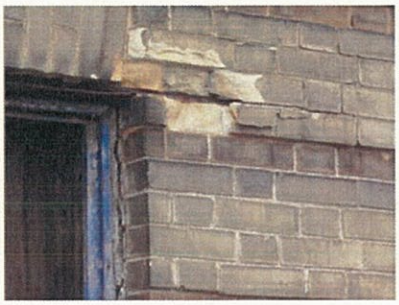
Ferdinand - 131



Ferdinand - 132

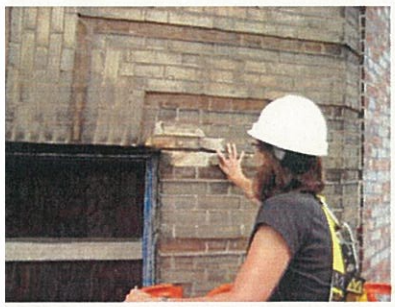
Ferdinand - 133

Ferdinand - 134



Ferdinand - 135

Ferdinand - 136



Ferdinand - 137

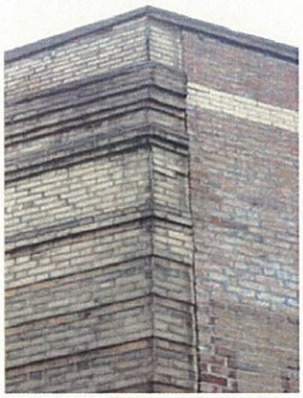
Ferdinand - 138

Ferdinand - 139

Ferdinand - 140

Ferdinand - 141

Ferdinand - 142

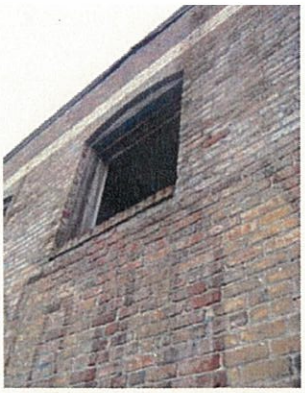


Ferdinand - 143

Ferdinand - 144

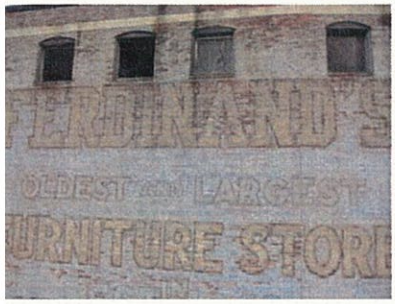
Ferdinand – 145

Ferdinand – 146



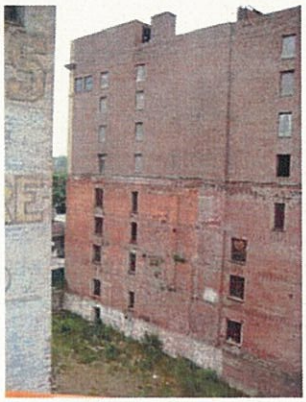
Ferdinand – 147

Ferdinand – 148



Ferdinand – 149

Ferdinand – 150



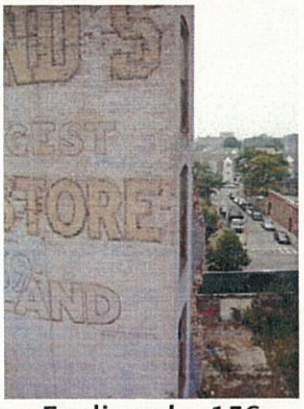
Ferdinand – 151

Ferdinand – 152

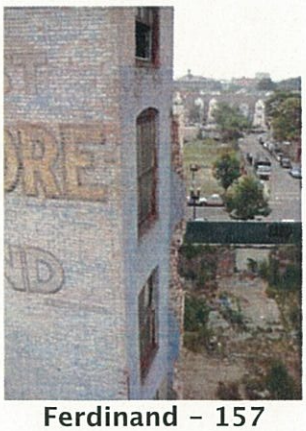
Ferdinand – 153

Ferdinand – 154

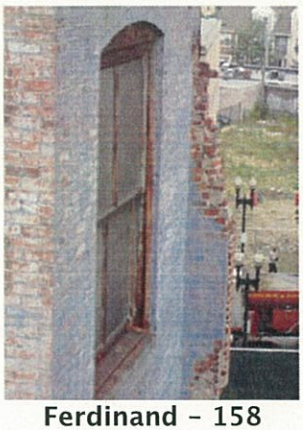
Ferdinand – 155



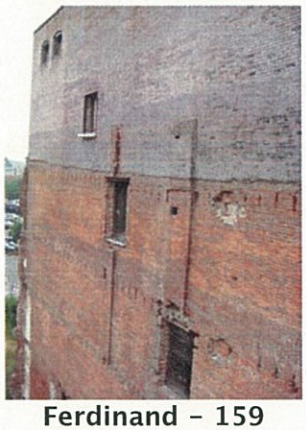
Ferdinand – 156



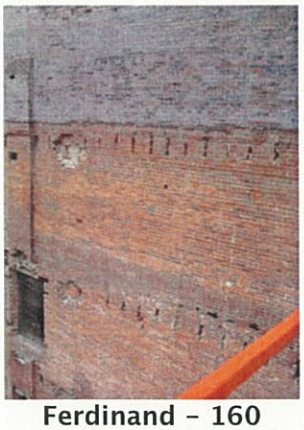
Ferdinand – 157



Ferdinand – 158



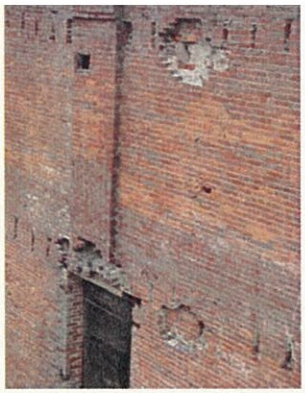
Ferdinand – 159



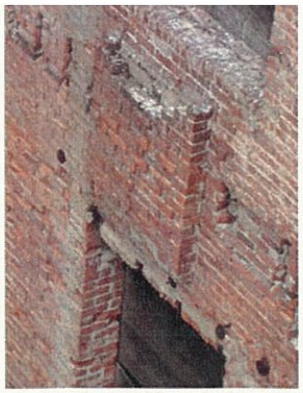
Ferdinand – 160

Ferdinand - 161

Ferdinand - 162

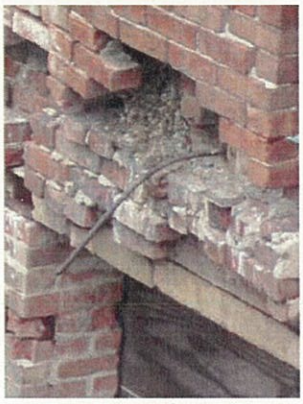


Ferdinand - 163



Ferdinand - 164

Ferdinand - 165



Ferdinand - 166

Ferdinand - 167

Ferdinand - 168

Ferdinand - 169