

ADDRESS: 1631 ARCH ST

Proposal: Remove cornice rosettes

Review Requested: Final Approval

Owner: Verizon

Applicant: Matthew Mower, O'Donnell & Naccarato

History: 1915; Bell Telephone Building; John Windrim, architect

Individual Designation: 12/12/2008

District Designation: None

Staff Contact: Dan Shachar-Krasnoff, daniel.shachar-krasnoff@phila.gov

OVERVIEW:

This application proposes to remove terracotta rosettes from the cornice of the building at 1631 Arch Street. During recent façade work, one rosette fell onto scaffolding below and another two were found to be dislodged. Upon probing the fallen and removed rosettes, structural engineers found that the steel bars supporting the rosettes had been badly corroded. The property owner now proposes removing all of the rosettes and covering the resulting gaps in the cornice with lightweight weatherproof capping painted to match the surrounding terracotta.

SCOPE OF WORK:

- Remove terracotta rosettes and cap the resulting gaps in the cornice.

STANDARDS FOR REVIEW:

The Secretary of the Interior's Standards for the Treatment of Historic Properties and Guidelines include:

- *Standard 6: Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.*
 - The rosettes are character-defining elements of the cornice and should be repaired or replaced, perhaps with an alternate material, rather than simply removed.

STAFF RECOMMENDATION: Denial, pursuant to Standard 6.



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April 5, 2024

Philadelphia Historic Commission
1515 Arch Street
13th Floor
Philadelphia, PA 19102

**RE: Verizon – 1631 Arch Street Façade Repairs – Terra Cotta
Philadelphia, PA 19103
File No. 3168.0007.00**

A façade repair program is currently ongoing at the Verizon building located at 1631 Arch Street, Philadelphia PA. This repair program is in response to the previous façade assessment report prepared by our firm O'Donnell & Naccarato (O&N) and dated March 23, 2021. Overall views of the facades are depicted in (Photographs 1-3). The repair program is being performed under construction permit CP-2023-004342.

During the ongoing façade repairs O'Donnell & Naccarato (O&N) performed a review of the existing hung terra cotta flower units at the underside of the cornice at the sixteenth floor (See Photographs 4-6). During the ongoing façade repairs at the west elevation a hung terra cotta flower unit became dislodged from the cornice and fell onto the scaffold below. Upon further investigation and sounding of the units, O&N identified two additional terra cotta flower units at the west elevation that appeared to be dislodged. During the attempt to re-secure one of the dislodged units it became loose and required removal (See Photograph 7).

O&N and the contractor performed exploratory probes at the location of the two hung units that were removed. The unit is supported by a single 1/2" diameter by +/-14" long steel bar that bears on the adjacent terra cotta soffit detail units (See Photograph 8). The terra cotta hung flower units have two holes cored into the neck of the flower unit that the 1/2" diameter steel bar is slotted through (See Photograph 9). The terra cotta flower unit is filled with a concrete slurry that extends into the adjacent terra cotta soffit detail units. At both probe locations the existing steel bar was corroded with up to 50% section loss observed (See Photograph 10).

Based on the findings at the probe locations, O&N recommends that the hung terra cotta flower units be removed wholesale at each elevation. The terra cotta flower units are supported by a single steel bar that is experiencing significant corrosion and section loss. The condition of the steel bar at the remaining terra hung terra cotta units is unknown. While sounding of the remaining units at the west elevation was performed, O&N cannot guarantee that the remaining units will remain sound.

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PRINCIPALS

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Michael Miller, PE, SE
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Mark Orsini, PE, SE
Brian Rawlings, PE, SE
Douglas Wood, PE



It appears that replacement of the terra cotta hung flower units is not feasible without the de-construction and re-construction of the terra cotta cornice. Additionally, the original detail places the load of the hung flower unit on the joint between the terra cotta soffit units. O&N does not recommend re-installing the hung flower units utilizing the same or a similar original construction detail.

We are proposing the removal of the hung flower units and replacement with a lightweight weather protective cover, coated to match the existing surrounding terra cotta, be installed within the terra cotta soffit units at the location of the removed flower units (See SK-02).

If you should have any questions, please call our office.

O'DONNELL & NACCARATO, INC

Matthew Mowrer, PE
Associate

Attachments:

- Photographs 1-10
- Supplemental Detail SK-02

PHOTOGRAPHS



Photograph 1 – Overview of west elevation.



Photograph 2- Overview of south elevation.



Photograph 3 – Overview of east elevation.



Photograph 4 – Overview of terra cotta flower details from grade (zoomed in).



Photograph 5 – Overview of terra cotta flower units from 14th floor.



Photograph 6 – Close-up view of terra cotta flower units between dentil units.



Photograph 7 – Overview of removed/fallen terra cotta flower unit.



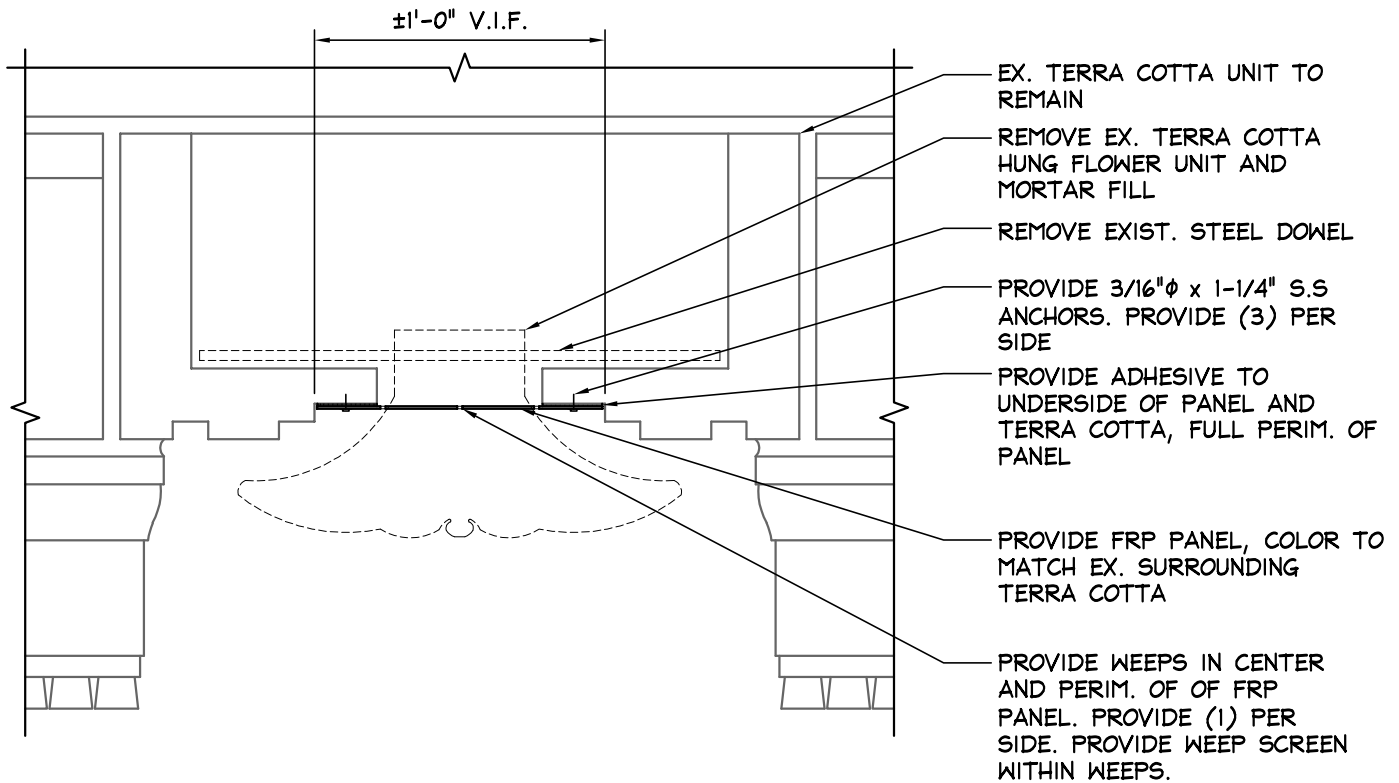
Photograph 8 – Overview of terra cotta flower unit support, steel bar shown with red arrow.



Photograph 9 – Cored hole in terra cotta flower unit and steel bar.



Photograph 10 – Corroded steel bar with 50% section loss.



HUNG TERRA COTTA FLOWER UNIT

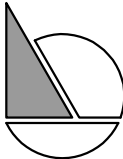
REMOVE TERRA COTTA UNIT & PATCH

1
SK02

SCALE: N.T.S.

NOTES:

1) REPAIR DETAIL FOR CONCEPT ONLY, CONFIRM ANCHORS, SUPPORT, STEEL FRAMING AND BACK-UP CONDITIONS w/ ENGINEER IN FIELD ONCE UNIT HAS BEEN REMOVED.

VERIZON 1631 ARCH STREET FACADE REPAIRS		Ref. Dwg.
 <p>O'DONNELL & NACCARATO STRUCTURAL ENGINEERS 701 MARKET STREET SUITE 6000 PHILADELPHIA, PENNSYLVANIA 19106-2524 TELEPHONE: (215) 925-3788 FAX: (215) 627-1051</p>	Date: 3/28/24	Drawn By: JJM
	Scale: AS NOTED	Checked By: MM
	Project No.3168.0007.00	Dwg. No.: SK-02