

6330 Green Valley Circle # 301 Culver City CA 90230

Tel 310.410.0433

Mobile 310.874.8783

Fax 310.410.0433

e: [taylorlouden@earthlink.net](mailto:taylorlouden@earthlink.net) Ca license no. C-24087

**GTL | HA**

---

## HISTORICAL MEMORANDUM FOR THE RECORD

---

**Project:**

SolarMax Adaptive Reuse Design Assessment, 3080 12th Street, Riverside CA 92507

Memorandum Addendum No. 1 Issue date 19 March 2013

Historical Architectural Assessment and Adaptive Reuse Design consultation for proposed SolarMax reuse of the former FMC building complex, Riverside CA (Riverside Cultural Heritage Landmark #102)

---

Following the issuance of the Historical Memorandum for the Record (HMFR) on 20<sup>th</sup> February 2013 in support of the revised SolarMax application to be reviewed at the 20<sup>th</sup> March Cultural Heritage Commission hearing, there have been additions to and clarifications of the work proposed. GTL | MHA has been asked to supplement the 20 February HMFR Document with an Addendum. This Memorandum has assessed and evaluated proposed modifications or clarifications of the proposed work submitted, to determine potential impacts and project compliance with the Secretary of the Interior's Standards for Rehabilitation.

These revisions are summarized here as:

- 1 The selection of a paint color for the predominant areas of exterior surfaces;
- 2 The addition of decorative elements to the northern portion of the east façade, considered in the HMFR as a secondary façade;
- 3 Clarification of the work to be performed for the rehabilitation and repair of the exterior plaster surfaces, including removal of original deteriorated material where sandblasting painted plaster areas for new additions of plaster is required for performing repair;
- 4 Clarification of the scope of work and methods required for repainting exterior plaster surfaces.

These modifications have been reviewed and clarified with the engineer of record and contractor, additional research has been conducted, and the following documentation has been developed as an addendum to the HMFR previously submitted.

An initial review summary email was sent to Peter Wang, JW Associates, 10 PM on 12 March 2013; these numbered items are referenced in each topic and distinguished by this blue font.

Summarizing:

## 1 The selection of a paint color

Assessment:

---

The historical exterior color of Plant Number 2 was evaluated in the 20 February 21013 HMFR. Based on a color chronology assessment performed at a number of plaster areas, the original building color was determined to have been an unpainted, off-white integral color cement plaster throughout the period of significance, ending in 1958. The dark value, cold-grey color paint currently present on the plaster surfaces is believed to have painted within the last few decades.

The proposal to paint the building façades conforms to the Secretary of the Interior's Standards for Rehabilitation. Consideration should also be made to the color appearance of additional façade materials, namely concrete, concrete masonry units, and particularly the areas of existing corrugated metal panels, and areas where deteriorated corrugated panels are proposed to be reconstructed with an alternate material. These topics are covered in Section 4 of this Addendum Memo.

From the 20 February 2013 HMFR document issue:

### 4.2.1.1.>

*Exterior Plaster Wall Surfaces: One newer color strata was observed on what appears to otherwise be an unpainted, probably standard, white or light-colored integral color plaster.*

---

*Top layer, Grey paint, North façade:*

*Munsell color match to Hue/Value/Chroma: 4.65 GY/ 4.3/ 0.1; Light Reflecting Value 14  
Dunn-Edwards color match to "Boat Anchor", DE 6377*

---

*Top layer, Grey paint, West & South façade (presumed to represent a faded color of the North façade color:)*

*Munsell color match to Hue/Value/Chroma: 5.90 GY/ 5.3/ 0.1; Light Reflecting Value 23  
Dunn-Edwards color match to "Looking Glass", DE 6376*

---

*Second layer, Cement Plaster (presumed original color, present during period of significance:)*

*Munsell color match to Hue/Value/Chroma: 1.13 Y/ 8.9/ 1.2; Light Reflecting Value 76  
Dunn-Edwards color match to "Total Recall", DEW 312*

---

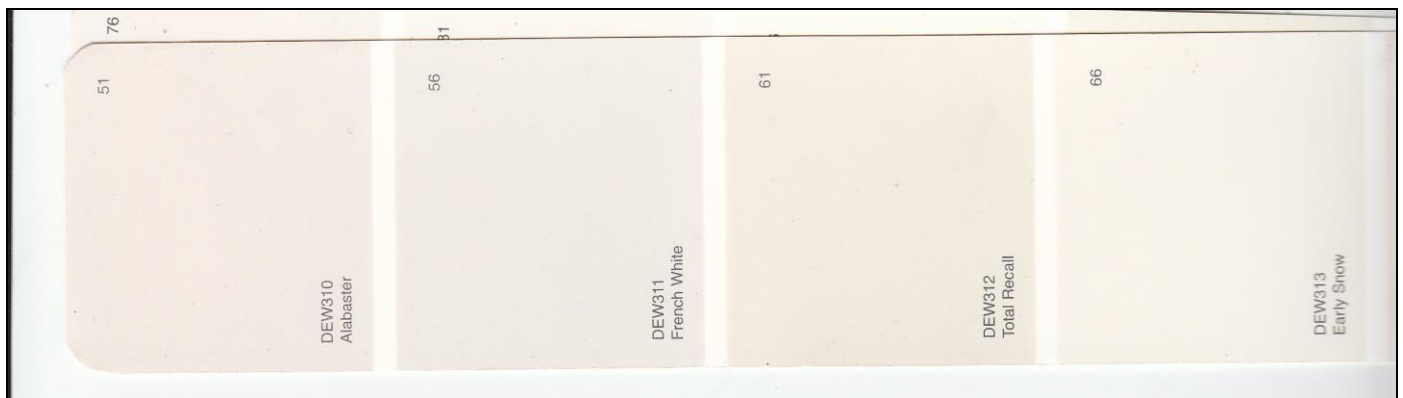
A paint color proposal was forwarded from JW Associates to Planner Brian Norton on 14 March. It was forwarded to GTL|HA by Norton, who identified the selection proposed as Sherwin Williams' color # SW 7666, "Fleur de Sel." According to Norton, "it is fairly light grey in color."

A paint color was secured from the manufacturer, shown here for comparison with the color sample matched to the cement plaster:



Exterior plaster: proposed new plaster color to match original plaster finish from JWL Associates.  
Matte finish.

Sherwin Williams color match proposed: SW 7666, "Fleur se Sel"



| selected color |

Exterior plaster: color matched to original plaster material; matte finish.

Dunn Edwards/ Munsell color match: DEW 312, "Total Recall"; Munsell 1.13Y/8.9/1.2

It should be noted that digitized reproductions of color chip cards are inexact at best. Colors must be matched by actual painted surfaces on sample boards. Review of these colors suggests that the minimally invasive, least-impact approach would be to repaint a similar color to that present in the original cement plaster.

## 1b The selection of a paint color

### Recommendations/Conclusions:

At the very least, paint color is one of the more reversible project approaches that are proposed. It is in the preparation that the issues on conformance with the intent of the Rehabilitation Standards arise. This topic is covered in greater detail in Section 4 of this Addendum Memo.

It is NOT generally recommended to use invasive processes such as sand blasting for the purpose of removing an applied paint color. It is recommended that the exterior cement plaster be retained where sound with the existing paint color removed only. If the removal of paint requires sandblasting, it is recommended that minimally invasive procedures be used to limit the need for finish plaster removal. Testing sample areas is highly recommended for review of the means and methods employed. It is recommended for mitigation that one structural bay, or minimally a half bay, be retained as an example of the original material finish, repainted the proposed color with sufficient primer to conceal the existing color.

New construction methods should conform materially to the Secretary of the Interior's Standards referenced:

- 1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.*
- 2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.*
- 5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.*
- 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.*
- 7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used. (Author's note: it is important to note that as non-prescriptive as the Secretary's Standards can be read and interpreted, the language of no. 7 is clearly prohibiting damages by treatments with the definitive "WILL NOT BE USED.")*
- 9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.*

It is recommended to repaint the exterior plaster surfaces throughout as the color forwarded to Planning by JWL Associates: Sherwin – Williams color number SW 7666, color name "Fleur de Sel" This color is fairly close to the original exterior integral-color plaster used historically. The light reflective value (LRV) given for this color is 72 on a 100 scale; the color match established in the HMFR color match is 76 on a 100 scale. A lighter color value is preferable in this instance; these are close. The Sherwin – Williams samples do not indicate a Munsell number. This recommendation is conditional upon review of an actual paint sample against the exposed areas of extant original plaster color.

It is recommended that additional façade materials, namely concrete, concrete masonry units, areas of

existing corrugated metal panels, and areas where deteriorated panels are proposed to be reconstructed with an alternate material be painted the same color.

These items are specifically addressed in item 4 of this Addendum Memorandum.

---

## 2a The addition of decorative elements to the northern portion of the east façade

Assessment:

---

*From an initial review summary email to Peter Wang, JWL Associates, 12 March 2013:*

Item 2>To address your closing statement first, yes there is a potential impact to the historical landmark. The problem, as you reference the historical character, is that the massiveness of the building is one of the primary character defining features of this structure. This was identified as such by all of the previous historical assessments.

3> I do concur with your previously submitted design proposal that a major alteration of the east façade was acceptable, as that in my opinion the east façade is definable as a “secondary” façade. However the manner in which you are proposing to additionally “enliven” the east façade presents several issues that may pose problems with project conformance with the Secretary’s Standards.

4>Two things I am researching now is the reversibility of the proposed sandblasting, and the cutting in of the plaster to create a new joint.

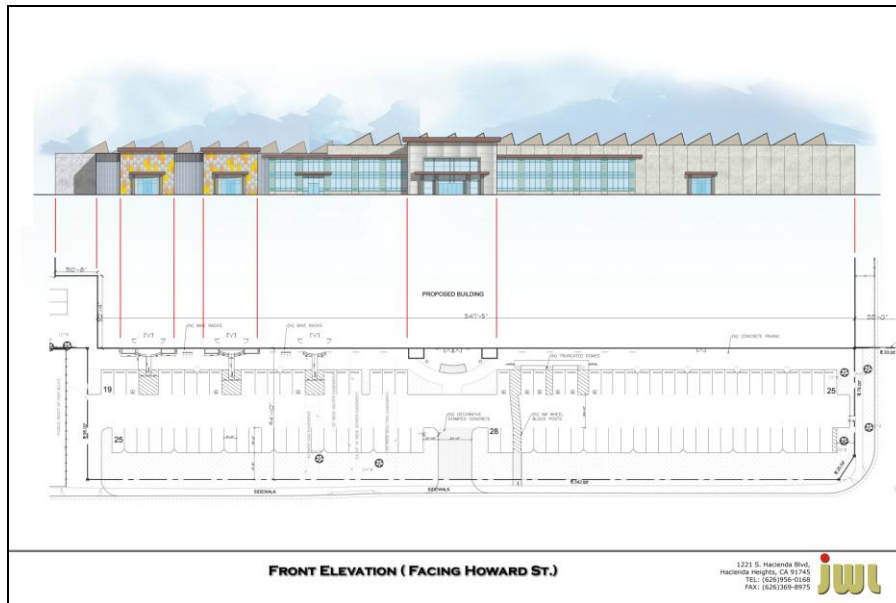
6>The added joints appear to be purely an aesthetic request, and one that may be difficult to justify as detailed. So much of the secondary façade has already been “decorated”, and while the joints may be considered as not as large an impact as the massive new entrance feature, it does compromise the one remaining “large” building original identify that remains. The fact that it was retaining SOME of the planar, blank façade appearance is what in my opinion allowed the decorative devices employed elsewhere to be deemed acceptable.

7>The real problem and direct, unjustified impact is in cutting the wall for the proposed scoring appearance. This will in fact reduce the viability of the original plaster wall surface, by creating effectively three joints. Two are along the cut lines at the sides of the joints, where the trim width would need to be accommodated. Then there would be the narrow joint itself. Old plaster to new plaster interactions effectively are difficult to achieve as shrinkage cracks occur where the new material has dried, and will present the probability that new cracks would be created as the integrity of the plaster walls has been compromised. These also pose risks for water penetration. If a lively appearance is desired I would Strongly Recommend NOT utilizing non-recoverable/reversible detailing strategies. I would consider that painting these lines would accomplish the same objectives as the client has, and not be detrimental to the original integrity of the landmark.

Per the Secretary of the Interior’s Standards for Rehabilitation: *10. New additions and adjacent or related new construction will 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.*

As initially proposed this non-reversible detail is not conforming to these standards, and was recommended by GTL|MHA to be reconsidered as a more appropriate re

As this detail has been further considered since the initial emailed response, the initial request for irreversibly damaging the historical fabric by slicing the façade at ten-foot centers was withdrawn. Below is the proposed façade color and vertical markings as received for review on 03-14-



As this detail has been considered, it uses a reversible approach to best comply with the intent of the Secretary of the Interior's Standards for Rehabilitation.

## 2b The addition of decorative elements to the northern portion of the east façade

### Recommendations/Conclusions:

With this detail now reconsidered and proposed as added vertical elements created with an alternate paint color in contrast to the typical field paint color, it now uses a reversible approach to best comply with the intent of the Secretary of the Interior's Standards for Rehabilitation. Minimizing permanent alterations to the building is recommended.

It is recommended to paint the stripes a color consistent with the extant darker grey color. Its color value will read as a shadowline, consistent with the client's intent to modify the uniform appearance of the historical façade.

*(Top layer, Grey paint, North façade, and at painted vertical reveal lines at the east façade:  
Munsell color match to Hue/ Value / Chroma: 4.65 GY/ 4.3/ 0.1; Light Reflecting Value 14  
Dunn-Edwards color match to "Boat Anchor", DE 6377) -from the HMFR, 20 February 2013*

From the 20 February HMFR, Summary of Recommendations, section 7.4:

- *The limited extent of additions planned are considered to embody the “reversibility” concept, where the structural demands of the alterations and additions will not impact the essential form, nor the material and physical integrity of this structure.*
- *The proposed main entrance façade modification will be detailed so that the impact on original historical material is limited.*

The concept of reversibility does apply if the desired vertical emphasis is created by the use of a painted stripe. Impact to the essential form and material integrity is not affected. There would be no permanent alteration to one of the primary character defining features.

From the 20 February HMFR, Distinctive Exterior Character-Defining features, per CEQA Criterion (C), section 6.2:

6.2.3.>

From Jones & Stokes' Technical Report, Draft #3, Page 25: *The long, blank façade of this east elevation is a character-defining feature of Plant 2, as it was originally built for the construction of 'Water Buffalo' landing vehicles for World War II.*

While the purpose-built concept was relevant for tank production, or relevant to the ample precedents locally of the packing house building form is arguable, the nature of this *“long, blank façade”* is what is character-defining. To create a physical panelization will only serve to weaken the in-plane strength of the plaster walls themselves, leading to increased likelihood of cracking and failure. These exterior plaster walls are considered in this Addendum Memo to represent a significant feature themselves as an example of material and construction technique because of their sheer size and expanse. Minimizing permanent alterations to the building is recommended.

Therefore it is recommended that a conservation-focused approach be taken on the historical-era plaster wall constructions. These surfaces are considered to have significance for their usually large size, for the construction type of a +/- 3/4” thick plaster on lath over wood stud wall.

From the perspective of visually not counteracting the character-defining feature of the *“long, blank façade,”* the spacing of the paint-applied reveals was studied. The elevation provided by JWL Associates appears to show an alignment of the spacing of every second reveal with the sawtooth roof elements above and set back from the façade. This creates a denser spacing than is evident anywhere else at Plant No. 2, and the parapet height extensions with the set back does not allow this relationship to be understood from typical vantage point views. It is recommended to reference a more understandable relationship that was also employed in the spacing of the louvre screen wall additions at the southern part of this façade: the column spacing behind the plaster walls.

Therefore is recommended to widen the distance between paint-applied reveal spacing to approximately 20 feet 9 inch in width, aligning with centerlines of the columns.

It is recommended to retain the existing plaster wall surfaces to the greatest extent possible.

Should structural work be required to be performed within any given bay, the installations shall be from the interior side so as to protect the more significant exterior surfaces. Such structural work shall be clarified as the structural design is more developed for historical review.

---

### **3a Clarification of the work to be performed for the rehabilitation and repair of the exterior plaster surfaces**

#### **Assessment:**

---

From an initial review summary email to Peter Wang, JWL Associates, 12 March 2013:

4>Two things I am researching now is the reversibility of the proposed sandblasting, and the cutting in of the plaster to create a new joint.

As has been documented elsewhere in this Memo, the exterior plaster facades and most exterior surfaces are proposed to be repainted. As part of the non-invasive, visual survey conducted as part of the Building No. 2 site survey work, most exterior plaster surfaces appeared to be in average or better condition.

During site reconnaissance and on-site discussions for the HMFR in February, the concept forwarded was that plaster surface removal was planned solely at areas of damaged or lost original material. Where such loss exists, the use of sand - blasting to remove loose and failed material is not uncommon in typical, new plaster construction. In historically significant structures or surfaces, the use of shell-blasting for the same purpose is more commonplace. Reducing nozzle pressure of the applicator is also an established and recommended method to avoid stripping off too great a depth of the historical material surface.

From the National Park Service, The Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings; Hume & Weeks, 1990:

Building Exterior / Masonry Recommendations, including stucco:

Recommended: *Identifying, retaining and preserving masonry features that are important in defining the overall historical character of the building such as walls...coating and color.*

Not Recommended:

*Removing or radically changing masonry features which are important in defining the overall historic character of the building so that, as a result, the character is diminished.*

*Replacing or rebuilding a major portion of exterior masonry walls that could be repaired so that, as a result, the building is no longer historic and is essentially new construction.*

*Applying high-pressure water cleaning methods that will damage historic masonry and the mortar joints.*

*Removing paint that is firmly adhering to, and thus protecting, masonry surfaces.*

*Using methods of removing paint which are destructive to masonry, such as sandblasting, application of caustic solutions, or high pressure water-blasting.*

*Failing to take adequate measures to assure the preservation of masonry features.*



Sandblasting generally should not be considered or recommended as an option due to the extent of loss of exterior surface material layers. This has the strong potential to eliminate all material integrity, specifically for losses of surface color, finish, surface textures, and setting. In no way should this method be employed to remove the later paint in order to create a different visual appearance. Given that the building is proposed to be painted, such full-scale materials removal represents an unnecessary expense at least. Significantly, they are not recommended as conforming to the Secretary of the Interior's Standards for Rehabilitation, particularly number 5 and 7. The relevant standards are listed in the Recommendations/Conclusions section that follows.

### **3b Clarification of the work to be performed for the rehabilitation and repair of the exterior plaster surfaces**

#### **Recommendations/Conclusions:**

---

It is recommended to repair and retain original historical material to the greatest extent feasible, in accord with the Secretary of the Interior's Standards for Rehabilitation. This maintains the historical integrity of the property, allowing the original character of the building to be preserved. Relevant standards (emphasized by underlining) that support this practice include:

Per the Secretary of the Interior's Standards for Rehabilitation:

1. *A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.*
2. *The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.*
5. *Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.*
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.*
7. *Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used. (Author's note: it is important to note that as non-prescriptive as the Secretary's Standards can be read and interpreted, the language of no. 7 is clearly prohibiting damages by treatments with the definitive "WILL NOT BE USED."*
9. *New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.*
10. *New additions and adjacent or related new construction will 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.*

It is NOT generally recommended to use invasive processes such as sand blasting for the purpose of removing an applied paint color. It is recommended that the exterior cement plaster be retained where sound with the existing paint color removed only. If the removal of paint requires sandblasting, it is recommended that minimally invasive procedures be used to limit the need for finish plaster removal. Testing sample areas is highly recommended for review of the means and methods employed. It is recommended for mitigation that one structural bay, or minimally a half bay, at the northern end of the east façade be retained as an example of the original material finish, repainted the proposed color with sufficient primer to conceal the existing color.

Minimizing permanent alterations to the building is recommended.

It is recommended to document the extent of damages observed, and forward a specific scope and work plan for the removals and rehabilitation of the original historical material.

It is recommended to remove plaster only when there is lost or un-repairable deterioration. Minimizing permanent alterations to the building is recommended.

It is recommended to establish the exact procedure – the materials and methods proposed to be used – that will replicate as closely as possible the original surface in texture, grain, appearance, feeling, and association.

---

#### **4a Clarification of the scope of work required for the repainting**

##### **Assessment:**

---

*From an initial review summary email to Peter Wang, JWL Associates, 12 March 2013:*

5>The sandblasting may be posed as compatible with one of the basic natures of the material itself – sand. Based on the email I received from Planner Brian Norton, I believe it is part of the concern. I understand some of the plaster requires repair. But the extent of the repair required, and how the later paint would be removed, is not yet defined as I understand. As the building is proposed to be repainted (as it was last described to me, anyway) the removal of all the paint is unnecessary and of questionable merit.

This clarification is issued primarily to identify and assess the nature and extent of the deterioration. There have also been no structural clarifications made for exactly where shear wall panels or similar structural repairs are required to be made, or if any. Per the Secretary of the Interior's Standards for Rehabilitation, numbers 2, 5, and 7 in particular, limiting the encroachment of the historical material is the primary objective.

These are plaster walls of sizable dimensions. With the exception of the parking-car-inflicted damages, there are relatively few areas exhibiting cracking or noticeable offset displacements. It is recommended to remove only the loose areas of paint required to obtain an acceptable substrate for painting.

Clarification should be made that the remainder of the exterior façade exposures and surfaces be identified by issuing a finish schedule and material specifications planned for use, thus to document the proposed refinishing and repainting strategy. These materials and features include corrugated metal surfaces, at the southeast corner wall surfaces.

#### 4b Clarification of the scope of work required for the repainting Recommendations/Conclusions:

---

Per the Secretary of the Interior's Standards for Rehabilitation, number 6, the material replaced must match or replicate existing material: *the new feature will match the old in design, color, texture, and, where possible, materials.*

It is recommended to remove the most minimal extent of material surrounding damaged or lost surfaces.

Per the Secretary of the Interior's Standards for Rehabilitation: *1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.*

Where corrugated metal panels are employed as a roof surface, it is recommended to retain the silver-colored appearance of the galvanized materials, and / or the roofing product materials previously used. Where corrugated metal panels are employed as a decorative frieze at the southeast corner façades, they are proposed to remain unpainted; however a protective coating of a clear lacquer product (to be identified) is strongly suggested in order to stabilize their existing surface color and appearance. Where archived-in-place metallic equipment such as the ventilator towers and exterior access ladders are retained, it is recommended that they remain unpainted. Conservation principles should be applied where necessary to stabilize these items, beyond the scope of work as currently understood.

It is recommended that the following materials or surfaces receive the treatment and paint color indicated:

- plaster walls, per Section 1 of this Addendum Memo; SW-7666
- corrugated metal panels, either repaired or replicated in an alternate material, at the southeast façade corner including the south wall return; SW-7666
- corrugated metal, salvaged existing panels used as a frieze at the southeast façade corner ; ARCHIVAL TREATMENT TO BE IDENTIFIED
- corrugated metal surfaces, at the roofs visible at the west elevation; ROOFING PRODUCT TO BE IDENTIFIED
- miscellaneous metal fabrications, such as access ladders, steel roof framing, and railings; SW-7666
- salvaged/archived non functioning equipment, such as the ventilating tower at the west façade and the driveway entrance gate; ARCHIVAL TREATMENT TO BE IDENTIFIED
- recesses at removed vehicle doors; COLOR TBD
- metal and wood window frames; COLOR TBD
- exterior doors and vehicle doors and jambs; COLOR TBD
- decorative reveal lines, at the east façade northern section; COLOR TBD

Referencing the 20 February 2013 HMFR:

7.3.1.10.>

*It is recommended per Secretary of the Interior's Standards number 2, 3, and 4, to repair and retain original-era windows and doors, even if they are non-operational (e.g., the site entrance gate.) Where later openings are filled in, articulating this new wall to match adjacent plaster walls is suggested. The recess of the new wall should match the depth of the door fenestration removed, at approximately eleven inches. If possible these new surfaces should be painted a slightly different color, serving to further delineate the modification.*

**CONCLUSION RECOMMENDATIONS:**

It is recommended to consider that the revisions and clarifications made since the 20 February 2013 submittal of the HMFR do not materially impact the recommendations made within that document submittal.

There are details that remain to be resolved, specifically in terms of repairs to character-defining features such as the west façade base reconstruction, the corrugated panels required to be removed and reinstalled, and the structural requirements for the east façade.

As recommended in the HMFR, **7.3.3 Project assessment conclusions::**

*Per the Secretary of the Interior's Standards numbers 6 and 9, alternate materials that replicate the material visual appearance are acceptable for restoration of degraded materials that have lost their integrity. The historical consultant will review panel by panel if there are any corrugated metal panels that appear to have sufficient material integrity to warrant their removal for reinstallation, and if they would survive such repurposing.*

*Exteriors and interiors throughout Plant No. 2 have been remodeled and subdivided numerous times, with the consequence that there are few apparent surviving elements with integrity of place, association and setting from either the original condition of the structure, or from later in the proposed defined period of significance dating from 1942 through 1958. However, the ability of this structure to convey its significance at a large scale remains intact. An excellent opportunity to renew this innovative example of a vernacular industrial structure with a new, related, and compatible use is possible. The details by which these processes as described in this Memo occur do matter.*

The recommended approach remains to optimally preserve character-defining features of this City - Landmarked building, ensuring proposed materials are compatible with the building, while incorporating new construction in a way so as to avoid creating a false sense of history. GTL | MHA has consultations throughout the construction process incorporated into their consulting agreement, and looks forward to participating in a project process that is fully conforming to the Secretary of the Interior's Standards for Rehabilitation.

---

End of Historical Record Memo for the Record  
Document Issue date 19 March 2013

George Taylor Louden AIA  
Historical Architect  
Historical Architecture Consultant