

0220-05642-0000

**TRANSMITTAL**

TO Council	DATE 7-19-19	COUNCIL FILE NO.
FROM Municipal Facilities Committee		COUNCIL DISTRICT

At its meeting held on June 27, 2019, the Municipal Facilities Committee (MFC) adopted the recommendations of the attached Department of General Services (GSD) report, as amended to:

1. Instruct staff to seek cost recovery from Special Fund sources; and,
2. Deleting report recommendation No. 3, relative to the proposed use of \$283,918 in Mobile Source Air Pollution Reduction Trust (MSAPRT) funds as these monies require additional approval by the Air Quality Management District (AQMD) and may not be utilized until project Phase II.

Adoption of the amended report would authorize GSD to initiate Phase I of a two-phased project to replace the existing Body Shop located at 2310 East Seventh Street. The Bureau of Engineering conducted an evaluation of the Seventh Street Body Shop, with findings that the "structural deficiency and non-compliance elements are overwhelming." As presented in the report, GSD has explored multiple options for remediating the various findings and determined that a full replacement is the most viable option.

The total project cost is estimated as \$7.79 million, which includes temporary accommodations (\$288,233) and construction of a new Body Shop (\$4.98 million) under Phase I, using \$5.02 million in prior-year encumbrances within the 2016-17 and 2017-18 Petroleum Products account that GSD has identified as available for repurposing. However, in the event any Special Fund sources are inadvertently included as part of the identified funding, GSD would be responsible for any future repayments.

Phase II costs are estimated at \$2.53 million to complete interior space build-out and comply with alternative fuel requisites, such as the installment of a methane detection system. GSD has advised that staff will need to utilize outdoor space to repair alternative fuel vehicles until Phase II improvements are complete. Initiation of Phase II will be subject to additional funding through the City Budget.

There is no additional impact on the General Fund in 2019-20 as monies previously budgeted in prior years are sufficient to fully fund current year expenses. However, there is an anticipated General Fund impact of up to \$2.53 million in 2020-21. This anticipated future-year General Fund impact would be reduced to the extent that staff are able to obtain cost recovery from Special Fund sources

  
 Richard H. Llewellyn, Jr.  
 City Administrative Officer  
 Chair, Municipal Facilities Committee

RHL:LJS:05200006



# CITY OF LOS ANGELES

CALIFORNIA

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June 27, 2019

Richard H. Llewellyn, Jr., Chair  
Municipal Facilities Committee  
200 N. Main Street, Room 1500  
Los Angeles, CA 90012

## **AUTHORIZE THE DEPARTMENT OF GENERAL SERVICES TO REPLACE THE EXISTING 7<sup>th</sup> STREET BODY SHOP**

### **Background**

The Department of General Services, for the last several years, has been attempting to secure funding to replace the 7<sup>th</sup> Street Body Shop located at 2310 E. 7<sup>th</sup> Street, Los Angeles 90023, due to age and poor condition of the existing facility which is 60 years old.

As part of the decision-making process to determine the best course of action, a number of options were considered and evaluated before concluding that replacement was the best option. As part of this evaluation process, GSD requested an investigative report from the Bureau of Engineering (BOE) (see Attachment 1) regarding a full cost evaluation of repairs and identification of items not code compliant. The BOE report, dated March 20, 2019, indicates that the deficiencies and non-compliant elements are "overwhelming" and therefore, it is not feasible to make repairs to the building. In fact, it is BOE's professional opinion that the existing building should be demolished and replaced.

### **Body Shop Operations and Impact to City Services**

The Body Shop provides collision repair services for all council controlled departments, City Council members and Motor Pool. Larger departments serviced are Bureau of Sanitation, Recreation and Parks, Department of Transportation, including Parking Enforcement, Street Services and Public Works Street Lighting. This service includes not only equipment damaged due to collision, but also repairs needed due to normal wear and tear of body components, such as door hinges, handles, latches and window regulators. The Body Shop typically repairs over 500 vehicles per year, including repairs to specialty vehicles such as street sweepers, sewer cleaning equipment, semi-truck tractors, construction equipment, specialized utility truck bodies and approximately 550 Parking Enforcement vehicles.

The Body Shop provides a critical service meeting the unique needs of the City. It should be noted that the Body Shop also plays a key role in assisting Fleet Services to maintain maximum availability of customer vehicles by completing timely repairs in a cost effective and efficient manner. The Body Shop also prepares collision damage estimates for all City vehicles involved in any type of collision for City Attorney documentation.



**Summary of BOE Observations and Recommendations**

BOE stated that structural deficiencies and non-compliant elements are overwhelming. The following are examples of items noted in their report:

- The existing moment frame, purlins and girts are corroded. The corrugated walls and roof of the building are rusted and dilapidated in many areas. Exterior doors are rusted and do not provide for proper egress per California Building Code. The roof leaks extensively and there is also evidence of water intrusion throughout the structure, possibly creating a hazardous situation with the current electrical equipment.
- Tie rods are missing and cut, which compromises the design seismic capacity of the building to resist lateral forces. Additionally, there are missing bolts on connections requiring immediate reinstallation.
- Main Electrical Service disconnects are not installed outside the building or inside the nearest point of service entrance conductors, an NEC violation and safety hazard, as well. If there is a fire, LAFD will not be able to turn off the power.
- Given the age of the building, some of the building materials most likely contain asbestos and the paint used throughout is probably lead based. Paint continuously flakes off from the ceiling and is found daily on the floor, as well as on vehicles parked therein.
- BOE recommends a HazMat Survey for the building.
- Original use of the structure was as storage only and a Change of Use Permit is needed to make the building legal and safe for the occupants to use as a repair shop. This permit will require full compliance with the most current building codes.
- Building is not equipped with a fire sprinkler system or fire alarm system.
- Chemical storage areas are not code compliant.
- Building is not alternative-fuel compliant.
- Building is not equipped with central ventilation or heating system.
- The height of the building is approximately (10) feet lower than a typical building with this type of use.
- Building interior layout does not meet ADA accessibility guidelines nor are there accommodations for disabled access. The same is true for building code and several OSHA safety requirements.

Again, based on their observations, BOE has concluded that the Body Shop Building should be replaced with a new repair facility designed to support the required loads and systems necessary for this use.

**Options Considered and Associated Costs**

One option considered was to repair and upgrade the existing Body Shop facility; however, based on the March 20, 2019, BOE Field Investigation Report, "it is not feasible to provide an estimate for each element that requires repairs as the list is large and the deficient elements may trigger repairs of other elements". BOE's professional opinion is that the existing building should be demolished and replaced.

The second option considered is to purchase or lease a suitable building or an existing body shop facility. GSD Real Estate Services provided GSD Fleet Services with a list of potential

sites currently up for sale. Working from this list, the Body Shop manager visited approximately (30) sites. None were found to be acceptable for City Body Shop operations as they could not accommodate all types and sizes of equipment repaired. Building space and height, as well as, parking requirements, were also inadequate.

Another option considered was to temporarily move the entire Body Shop operation into the existing GSD Fleet Services Tire Shop facility located on adjacent property. Accommodation of this option would not only require extensive structural modifications to the Tire Shop facility, but also the consolidation of their operation into a smaller area within the existing facility. The "Rough Order of Estimate" for this option provided by GSD Construction Forces Division on May 2, 2019, is \$4.9 million. The time to complete this temporary move option is 18 to 24 months. The tire inventory would also have to be relocated to another warehouse and/or storage containers. The cost for this relocation has not been included in the "Rough Order of Estimate." In addition to any costs associated with this option, undue hardship would be created for both the Body and Tire Shops.

The last option considered was to replace the existing Body Shop facility to be built on site adjacent to existing facility (see Site Plan Attachment 2).

#### **Temporary Accommodations during Construction of New Facility**

In order for Body Shop operations to continue, the following arrangements will be necessary:

- Acquire a mobile office building to be used as an office, lunch room, change room and restroom.
- Acquire (4 to 5) large storage containers to house Body Shop Technician tool boxes, as well as shop equipment, supplies and vehicle parts.
- Acquire large temporary awning.
- Relocate Auto Paint unit to the Major Truck repair building. This will require slight modification to this building to protect integrity of painting process.

The cost to purchase and install a trailer for the temporary accommodation is \$181,698 (see Attachment 3), and will take 10-13 weeks. Additionally a temporary awning will need to be erected to provide a covered work space outside the current body shop at a cost of \$106,535 (see Attachment 4). The total cost for the trailers and the awning is \$288,233.

#### **Proposed Project, Cost/Cash Flow and Timeframe**

The following is the estimated cost for the construction of Phase I of a new Body Shop that is completely operational but is not alternative fuel compliant (see Table 1 below). Phase I construction will include additional electrical, and plumbing work that will allow for the Phase II upgrade of the building to alternative fuel compliance when additional funding becomes available. The estimate for the construction of Phase I is broken down by cost of major project components, is \$4,984,000. The construction cost of \$4,984,000 plus the temporary accommodation cost of \$288,233 result in a total cost for Phase I of \$5,272,233.

The estimate is based on information currently available and is contingent on no unusual circumstances being found once construction begins, such as soil conditions, etc.

Thus far, GSD and the CAO have identified \$5.3 million available to fund Phase I of the project. Funding sources include \$5,029,132 million in prior years (FY16-17 and FY17-18) GSD Petroleum Products account and \$283,918 in Mobile Source Air Pollution Reduction Trust Fund account these funds will be required in 2019-20. Phase II of the project will cost an additional \$2,526,000 and can be allocated in 2020-21, subject to approval of additional funding through

the City Budget process. The total cost of Phase I and II will be \$7,798,233. If Phase I and II are not completed concurrently, there will be additional costs for remobilization.

The estimated time for project completion is 18 to 24 months, assuming needed resources and staff is in place and ready to start.

**GSD Fleet Services – New Body Shop Estimated Costs Phase I & II (Table 1)**

<b>Building Element</b>	<b>PHASE I: Basic Building</b>	<b>PHASE II: (Body Shop Equip. Alt Fuel Compliant)</b>	<b>TOTALS</b>
Design & Permitting	\$200,000	\$0	\$200,000
Shoring & Excavation	\$500,000	\$0	\$500,000
Metal Building (walls, roof & doors)	\$300,000	\$0	\$300,000
Backfill & Compaction	\$300,000	\$0	\$300,000
Concrete (foundation & slab)	\$300,000	\$0	\$300,000
Electrical & Communication	\$1,000,000	\$0	\$1,000,000
Mechanical & Plumbing	\$800,000	\$0	\$800,000
Roll-Up Doors	\$80,000	\$0	\$80,000
Fire Sprinkler System	\$300,000	\$0	\$300,000
Methane Detection System		\$400,000	\$400,000
Interior Office, Bath, and Breakroom		\$1,500,000	\$1,500,000
5-Ton Bridge Crane		\$80,000	\$80,000
Spray Booth		\$200,000	\$200,000
In-Ground Lift		\$100,000	\$100,000
Parking Lot Resurfacing & Striping	\$30,000	\$0	\$30,000
Demo of Existing Body Shop		\$110,000	\$110,000
<b>BUILDING TOTAL</b>	<b>\$3,810,000</b>	<b>\$2,390,000</b>	<b>\$6,200,000</b>
<b>Allowances</b>			
LEED Requirements (assumed @ 5%)	\$174,000	\$136,000	\$310,000
Storm water Requirements*	\$1,000,000	\$0	\$1,000,000
<b>ALLOWANCES TOTAL</b>	<b>\$1,174,000</b>	<b>\$136,000</b>	<b>\$1,310,000</b>
* Estimated based on previous project costs			
<b>Interim Temporary Facilities</b>			
Shade Work Structure 30x105	\$106,535	\$0	\$106,535
Temp Office Facilities (Trailers)	\$181,698	\$0	\$181,698
<b>TEMP FACILITIES TOTAL</b>	<b>\$288,233</b>	<b>\$0</b>	<b>\$288,233</b>
<b>PROJECT TOTALS</b>			
Building	\$3,810,000	\$2,390,000	\$6,200,000
Allowances	\$1,174,000	\$136,000	\$1,310,000
Temp Facilities	\$288,233	\$0	\$288,233
<b>GRAND TOTAL</b>	<b>\$5,272,233</b>	<b>\$2,526,000</b>	<b>\$7,798,233</b>

**Recommendations**

- 1) Authorize the General Services Department to proceed with construction of Phase I of a replacement facility for the existing Seventh Street Body Shop estimated at a total cost of \$5.27 million, by repurposing a total of \$5.31 million in existing funds, due to the structural deficiencies and non-compliant elements cited by the Bureau of Engineering in the March 2019 Field Investigation Report and the inability to repair the existing facility in a cost-effective manner, with initiation of Phase II currently estimated at an additional cost of \$2,426,000, to be subject to receipt of sufficient funding through future City budgets.
- 2) Authorize the Controller to implement the early reversion of liquidated encumbrances totaling \$5,029,132 within the General Services 2016-17 and 2017-18 Petroleum Products accounts for various vendors, to the Reserve Fund and appropriate therefrom in the same amount, to a new account within the Capital Improvement Expenditure Program (CIEP), entitled the 'Seventh Street Body Shop,' as follows:

From:	2016-17 Petroleum Products account	\$1,725,391
	2017-18 Petroleum Products account	<u>3,303,741</u>
		<b>Total - \$5,029,132</b>

To: CIEP (100/54/TBD – Seventh Street Body Shop) - \$5,029,132
- 3) Authorize the Controller to transfer up to \$283,918 in Mobile Source Air Pollution Reduction Trust Fund reimbursement 528/94/94261R to the project account established within the CIEP, Fund 100, Department 54, Account TBD - Seventh Street Body Shop.
- 4) Authorize the Bureau of Engineering to provide design assistance with project.

For additional information you may contact Fleet Services Director Richard Coulson at (323) 526-9200.



Tony M. Royster  
General Manager

Attachments: 1 – BOE Investigation Report  
2 – Site Plan  
3 – Design Space Quote  
4 – Sprung Structure Quote



City of Los Angeles  
 Department of Public Works  
 Bureau of Engineering  
 Architectural Division

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### SUMMARY OF FIELD INVESTIGATION

Subject: 7<sup>th</sup> Street Body Shop

Location: 2310 E. 7th Street, Building D, Los Angeles, CA

Requested by: Angela Sherick, Assistant General Manager  
 General Services Department

Date of Investigations: January 24, 2019, February 12, 2019

In Attendance: BOE-Architectural Division – Joanne Zhang, Karthick Kumar Bhaskaran, Julio Jonathan Martinez, Bill Lee, Seda Yeghiyan, Steve Murata, Brandon McKnight;  
 BOE- Structural Engineering Division - Manan Bhalja, Armen Dermenjian;

Contact: Joanne Zhang, Civil Engineer, (213) 485-4553, or  
 Bill Lee, Senior Architect, (213) 485-4275

Architectural Division: Neil Drucker, Interim Architectural Division Manager 

Date of Report: March 20, 2019

Cc: Central File  
 Department of General Services - Angela Sherick;  
 BOE: Attendees, Neil Drucker, Celso Del Poso, Saro Dersarolian, Melvin Agagas, Shailesh Patel;

#### **Background:**

The Department of General Services (GSD) requested an investigation report from Bureau of Engineering (BOE) regarding a full cost evaluation for repairs. BOE was asked to highlight items that are not code compliant.

Per GSD, the existing facility is used as a body and repair shop for all collision repairs, vandalism, theft, normal wear & tear, fabrication, painting, welding, mechanical and glass installation. These repairs were made on Hybrid, Electric, CNG, LNG, light duty, medium duty, heavy duty trucks, diesel commercial trucks, and construction equipment. The shop services an average of 45 vehicles a month, with 8 employees.

The building is approximately 10,450 square feet and was built in the 1960s or earlier. The one-story steel structure is a gable-frame steel structure and measures to approximately 100 ft. in the North-South direction and 113 ft. in the East-West direction. It consists of six (6) moment frames spaced roughly 20 ft. apart in the North-South direction. The structure was built utilizing a pre-fabricated moment frame system with bolted connections. Monoslope (Lean-To) structures were later added to three (3) sides of the building to provide additional office, work and storage space. Corrugated metal is



used for the exterior wall cladding, roof diaphragm and roof drainage systems. The building has an interior wood framed structure that has been positively attached to the main building's steel frame.

The East end of the building has an overhead (approximately ½ ton) hoist crane system used to lift heavy vehicle parts into place. The overhead hoist crane is supported by columns attached to the two moment frames of the easterly most bay (Figure B). The structure has large sliding gate doors at the North and South building faces.

The moment frames resist North-South seismic loads. The middle bay is cross braced with tension rods horizontally at the roof diaphragm and vertically between moment frames to resist East-West seismic loads (Figures C and D). The gravity system for the building is comprised of a system of "Z" shaped purlins and girts spaced approximately 3 ft. on center running perpendicular to the supporting six (6) moment frames. The corrugated metal sheets are screwed into purlins and girt. The three (3) monoslope structures are gravity support systems only and rely on the main gable structure for lateral support. (Figure E)

#### **Summary of Observations and Recommendations:**

The following is a summary of observations. It is important to note that the investigation is only limited to visual observation. It is recommended that additional full-depth inspections are requested to have a more comprehensive assessment of the facility.

Immediately, GSD needs to discontinue servicing CNG and LNG vehicles. The facility is not designed for the current use. The building will have to be upgraded, if GSD wants to continue using the building as a repair shop. Additional upgrades beyond what is recommended in the report are required to be able to service LNG and CNG vehicles.

The structural investigation showed that tie rods were missing and cut, which compromises the design seismic capacity of the building to resist lateral forces. In addition, there were missing bolts on connections. These items need to be reinstalled in kind immediately.

There is no main service disconnects installed outside the building or inside the nearest point of service entrance conductors which is not only a violation of NEC Section 230.70 but also a safety hazard. If there is a fire, LAFD will not be able to turn off the power.

There is no fire sprinkler system or fire alarm system. In addition, BOE was informed by GSD that the roof leaks. The leaks may create a hazardous situation, because the electrical equipment is not rated to be protected against wet and damp locations.

There are chemical storage areas which need to be code compliant. There is no central ventilation or heating system in the facility. If CNG and LNG cars are serviced, a monitoring and gas detection system is also required. There was a spray paint shop which is classified as hazardous and does not meet the NEC code for hazardous locations. Locations classified as hazardous shall be provided with seal-offs and hazardous rated electrical equipment, conduit, lighting fixtures, and wiring.



The building does not meet accessibility guidelines and there are no accommodations for disabled access. The office building does not comply with OSHA.

There are many deficiencies in the building and any repair would require extensive re-design. Therefore, it is not feasible to give a cost breakdown for repairs.

The deficiencies and non-compliant elements are overwhelming. It is not feasible to make repairs to the building. It is our professional opinion that the existing building should be demolished and replaced with a new repair shop designed to support the required loads and systems necessary for this use. It is estimated that the Total Project Cost of a new code-compliant repair shop may be approximately \$20,000,000. However, this is a rough order of magnitude number, as Size of the Building has not been determined, Programming with the Clients is incomplete, Site has not been identified, nor the parameters of that Site, and this does not include escalation.

#### **ARCHITECTURAL:**

**Permits:** GSD did not provide permits.

**As-built drawings:** GSD did not provide as-built drawings for this investigation. BOE also searched the plan room and did not find as-built drawings.

**Site Observation:** Based on a visual observation of the existing metal building at 2312 East 7<sup>th</sup> Street on January 24th, 2019 at 1:30pm, the following conditions were discovered:

- The corrugated walls and roof of the building are rusted and dilapidated in many areas. GSD reported that the roof leaks extensively and there are evidence throughout the structure of water intrusion. The existing moment frame, purlins and girts are also corroded. The height of the building is approximately 21 ft. at its highest point, which is about 10 ft. lower than a typical building with this type of use. The exterior doors are rusted and do not have proper means of egress per the California Building Code.
- The interior of the structure consists of an office, single-sex restroom, break room, locker room, paint storage room, spray paint area, and a parts storage mezzanine located above the office and break room. There is no dedicated path-of-travel from the public right of way into the building. Existing door widths and doorway clearances at the office, break room, restroom, locker room and other locations in the building do not meet ADA clearances and turning space requirements. The existing single-sex restroom and locker room facilities are undersized, do not comply with plumbing code requirements for men's and women's accommodations and are not accessible. The locker room does not have accessible lockers and is not private; there is no door. The break room counter area does not comply with reach distances or changes in level as required by code. The exit door from the break room is not a proper means of egress. The mezzanine does not meet the required ceiling height clearance per code and has uneven floors. The existing stairs to access the mezzanine do not comply with the minimum width, height and depth requirements for treads and risers, or meet handrail requirements. Also, the handrail does not have an intermediate rail, or equivalent intermediate member, as required by the CBC and OSHA to prevent falls. The break room and paint storage rooms have barn door style sliding doors which are not ADA compliant.



- **Hazardous Materials:** Given the age of the building, some of the building materials used during this period most likely contain asbestos. Original paint used throughout the building is likely lead-based paint.
- **Finishes:** In general, both interior and exterior finishes are corroded and deteriorated. In the mezzanine, the painted plywood ceiling, walls and shelving have water damage from the leaking roof. The shelving metal supports are also rusted. The wall, ceiling and partition paint in the restroom is peeling off, and in terrible condition. Except for the ceramic tile by the urinal, the finishes in the restroom are not smooth and non-absorbent as is required by code. The painted ceiling in the office appears to be in good condition. The wood wall panels, wall bases and the VCT floor tiles in the office are very worn. The break room floors are also very worn. The painted walls in the break room are peeling in some areas, but overall in clean condition.

**Historical:** The Building is not designated as a Historical Cultural Monument.

**Parking:** Per LAMC Sec. 12.21.4.c.1, the un-permitted 3,841 SF addition made to the existing building requires (8) parking spaces in addition to the spaces required for the existing building.

**Record Investigation:** Based on a Certificate of Occupancy issued in 1965 for an addition of 2,542 SF of space to the existing 4,067 SF storage building, it's apparent that the original use of the structure was as Storage only. There were no records found for other additions made to the building since 1965, including the mezzanine area, which show that they are legally permitted. Based on these finding, in order to make the building legal and safe for the occupants to use as a repair shop, a Change of Use Permit is needed. The Change of Use Permit will require full compliance with the most current building code(s).

- **California Building Code (CBC):** The repair shop does not meet the CBC 406.8 requirements for Repair Garages, as well as CBC Ch. 11B Accessibility requirements.
  - Per CBC 406.8.6, the repair garage shall have an automatic sprinkler system.
  - Per CBC 406.8.2, the repair garage shall have the proper mechanical ventilation system in order to service the type of vehicles currently being repaired at the shop.
  - Per CBC 406.8.4, the heated air ducted equipment must be installed in accordance with the California Mechanical Code.
  - Per CBC 406.8.5, the repair garage is used for repair of CNG and LNG fueled vehicles and is not provided with a flammable gas detection system.
  - Per CBC 11B-206.2.1, an accessible route must be provided from an accessible parking space and accessible passenger loading zone, as well as public street and sidewalk, to an accessible entrance at the building and accessible restrooms.
  - Per CBC 11B-206.2.3, an elevator must be provided for vertical access to the mezzanine.
  - Per CBC 11B-213.3.1, wheelchair accessible toilet compartment(s) must be provided in the building.
  - The stairs used for access to the mezzanine must meet the requirements of CBC 504 and 505.
  - Per CBC 505.2, the clear ceiling height above the mezzanine floor shall be not less than 7 feet.
  - Per CBC Ch. 10 and Section 1009, the building must have proper and accessible means of egress.



- Per CBC 1210.2, walls, floors, and partitions in the restrooms shall have smooth, hard, nonabsorbent surfaces.
- 

**Recommendations:**

- The structure will need to be raised about 10 ft. to accommodate mechanical ventilation and fire sprinkler systems required to be incorporated into the building to be used legally as a repair shop.
- The original structure of the building may not be adequate to support additional load for new mechanical equipment, for ducts and fire sprinkler systems.
- The lunch room area does not comply with ADA requirements. The change in level in front of the counters must be removed, and the counters must be replaced to comply with the Code.
- The locker room and restroom facilities are inadequate for employee use and do not comply with ADA requirements. They will need to be replaced with code compliant men's and women's locker rooms and restrooms, which will require more area.
- The ceiling height of the mezzanine is insufficient for use as a room and will need to be raised.
- **Hazardous Material Assessment:** A HazMat Survey is strongly recommended for the building.

**Cost Analysis:** It is not feasible to provide an estimate for each element that requires repairs, as the list is large and the deficient elements may trigger repairs of other elements. It is our professional opinion that the existing building should be demolished and replaced with a new repair shop designed to support the required loads and systems necessary for this use.



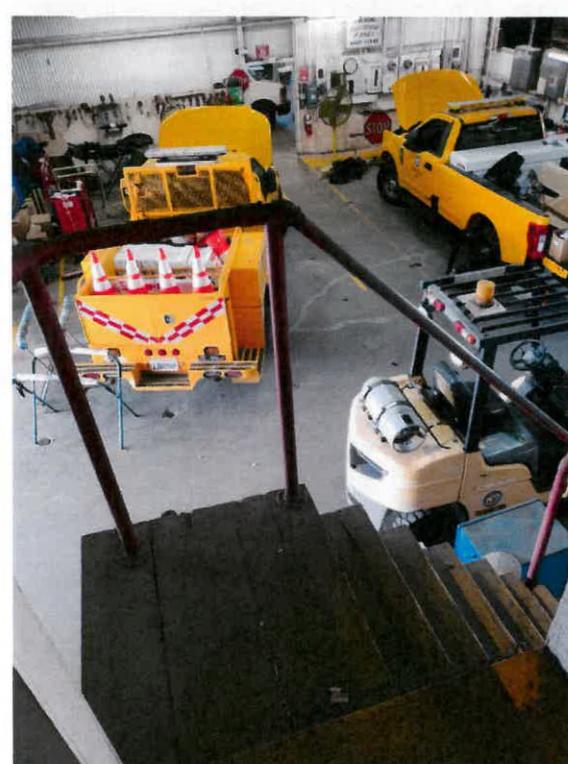
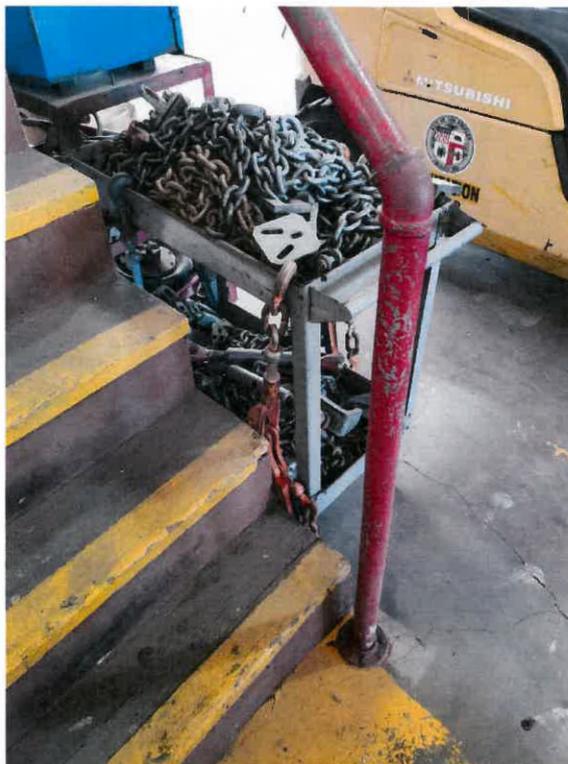
Above: Existing Body Shop interior. Below: Existing Body Shop exterior.





Above: Non-compliant office, restroom, and lunch room doors. Below: Inadequate and inaccessible restroom facility.





Above: Non-compliant mezzanine stairs. Below: Non-compliant stair handrail.



Above: Non-compliant vertical clearance in mezzanine storage area. Below: Inaccessible lunch room storage and appliances, and non-compliant change in level.





#### **STRUCTURAL:**

- Refer attached Structural Division Memo, dated 3/7/19.

#### **MECHANICAL:**

- Office has a half to three-quarter ton wall mounted window type A/C unit.<sup>1</sup> Lunchroom has a 2 ton split system A/C unit.<sup>2</sup> Replace these units with more energy efficient units.
- Parts storage area on mezzanine level has an inoperative evaporative cooler. Area lacks ventilation. Controls are in lunchroom.<sup>3</sup>
- Restroom has a wall mounted exhaust fan with no make-up air. Exhaust fan outlet termination violates mechanical code requirements.<sup>4</sup>
- Body shop repair areas have ceiling hung gas operated infra-red heaters and are not allowed in certain locations depending on the work performed.<sup>5</sup>
- Room where auto body parts are prepped for painting has a ceiling hung fan coil unit to provide ventilation and heating. Unit is not in working condition.<sup>6</sup>
- No central ventilation system in body shop areas. Large industrial fans are being used instead.
- Chemical storage areas need to comply with Building, Fire, or Mechanical codes.
- With various activities such as grinding, welding, prepping of auto body parts for painting, painting, and chemical storage, location specific ventilation systems are required.
- A central ventilation and heating system is required for the facility.
- For efficiency and to reduce heating and cooling loads, the building should be insulated.

#### **PLUMBING**

- The only restroom in the building is a men's restroom. It consists of one wall mounted urinal with flush valve, two floor mounted tank type water closets, and wall mounted wash basin with two faucets.<sup>7</sup> Floor drain is required per plumbing code. Plumbing fixtures do not meet the latest City Ordinance for water flow (gpm) requirements. Restroom is not accessible.
- Emergency eye washes drains into a large plastic barrel. Access to some of the eye washes are blocked.<sup>8</sup>
- Electric water heater is mounted high next to the parts storage on the mezzanine level.<sup>9</sup> There is no expansion tank installed.

#### **FIRE SPRINKLER**

There is no fire sprinkler system.



<sup>1</sup> Photo of office A/C unit



<sup>2</sup> Photo of lunchroom A/C unit





<sup>3</sup> Photo of mezzanine evaporative cooler unit

<sup>3</sup> Photo of mezzanine evaporative cooler duct

<sup>4</sup> Photo of restroom exhaust fan





<sup>5</sup> Photo of gas operated infra-red heaters



<sup>6</sup> Photo of prep room ceiling hung fan coil



7 Photo of restroom plumbing fixtures



7 Photo of restroom plumbing fixtures



<sup>8</sup> Photo of emergency eye wash station



<sup>9</sup> Photo of electric water heater



## **ELECTRICAL**

### **Building DWP Electrical Services:**

Building DWP Electrical Services are provided by overhead lines from a nearby power pole connection that enters the building through the roof. An underground conduit was noted to enter an unidentified pull box on the outside wall of the building before it entered the building. At about 25 feet away, there were 2 service meters; a 200A, 240V, 3Phase, 3Wire service & a 200A, 120/240V, 1Phase, 3Wire service located inside of the building. There were no main service disconnects installed outside of the building or inside the nearest point of service entrance conductors which is a major violation of NEC section 230.70. The 3-phase service was used mostly for 3-phase motor loads. The 1-phase service was used for lighting & smaller loads. The electrical services equipment are outdated with old fused disconnects. Labeling on some of the panels and disconnect switches were not present, or deteriorated, which do not meet the NEC code section 110.21.

There is no clear path or accessible path to the electrical service equipment. There are many portable shop equipment found in front of the electrical panels.

### **Occupancy Classification:**

There was a spray paint shop which was classified as hazardous but does not meet the NEC code for hazardous locations. Those locations that were classified as hazardous shall be provided with seal-offs and hazardous rated electrical equipment, conduit, lighting fixtures, and wiring. All receptacles in commercial garages are required to be ground fault circuit interrupter type per NEC code Sections 511.12, 210.8 b.

### **Power, Data, Conduits, Panels, & Wire Ways:**

There were many power outlets in the building supplying compressors, body shop equipment, hardware, power tools, vehicle lift bay, computers for office, printers, refrigerator, micro wave, fans, cook top, television, and miscellaneous small power devices. The inside shop also contained various ceiling surface mounted heaters that were plugged into ceiling mounted receptacles. An exhaust fan was noted in the restroom to be plug in type with no accessible controls.

An exposed data cable was mounted alongside a conduit inside the office area.



Throughout the facility there were only exposed surface mounted conduits and at some locations the conduit straps were falling apart. On the outside of the building, there was a j-box that had a missing cover with exposed wires.

Due to many equipment being stored throughout the facility, there was not enough working clearance required per code in front of and around the electrical equipment. Large electrical shop equipment were not secured permanently to the floor and were missing labels.

There were additional panels located inside the shop area and inside the office space. Some panels were noted to share various types of loads, for instance lighting and power loads. If a new service is installed, then the loads to the new panels have to be disaggregated per Title 24.

#### **Lighting:**

The fluorescent light fixtures were original with inefficient T-12 lamps. Some were missing lenses, not working at all, and all were plug in type connected to the ceiling surface mounted receptacles. Area lighting controls were not complying with T24 requirements because they were not present nor accessible. There were some outdoor security lights on the top of the building. An outdoor panel labeled "Canopy" found near the vehicle lift bay, fed from the single-phase service which provided power to the outdoor lights, equipment loads, and a parking lot light pole. There were emergency bug eye type light fixtures inside the body shop as well.

#### **Security panel:**

Security panel seems updated. There were a few number of security devices found throughout the site.

#### **Miscellaneous:**

We were told by the employees that the roof leaks. The leaks may create a hazardous situation due to the electrical equipment not rated to be protected against wet and damp locations.

There were no illuminated exit signs, there were only few exit sign labels throughout the building. Required exit signs may be internally or externally illuminated as required per Section 1011.3 of LABC. Also noted is an old speaker Public Address (PA) system outside and throughout the inside of the building.

#### **Fire Alarm Panel:**

There was no fire alarm system in the building.



**Recommendations:**

Recommend a service upgrade because the existing one is very old and is in poor condition. All Electrical Panels need to be properly labeled and secured. Additional labels are required for panels near hazardous locations. All panels need to have enough working clearance in front per code.

The lighting would need to be updated since the existing is original and there were notable areas that did not have proper illumination. Recommend a new LED lighting system for the entire facility to save energy over time. In addition, a new lighting controls complying with title 24 shall be installed.

Low voltage data cables would need to be inside its own conduit. Illuminated exit signs with battery back-up shall be installed in order to clearly identify the egress path in case of emergency.

The facility would benefit from having a new fire alarm system for additional safety of building occupants in case of a fire.

**Reference Images:**



Figure 1: Utility entry point through the roof of the building.



Figure 2: Underground utility entry point.



Figure 3: Inside location of electrical panels & meters.



Figure 4: Utility service meters, main fuse disconnects, panels, and wire ways.

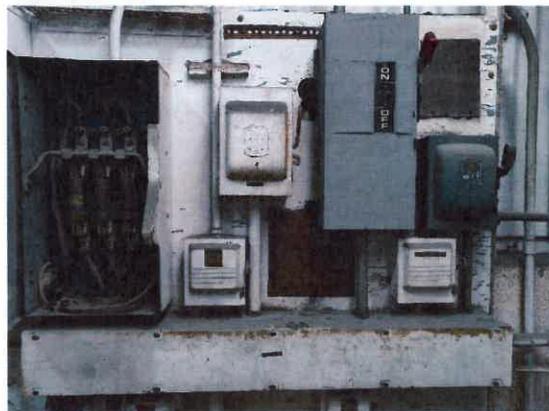


Figure 5: Dusty condition of fuse disconnects and wire way.



Figure 6: Exposed unsecured wires on the side of a stair case.



Figure 7: Exit to back of building is not illuminated properly nor is there a bug eyes light fixture.



Figure 8: Exit inside lunch/ lounge/ gym room is not illuminated properly nor is there a bug eyes light fixture.



Figure 10: All fluorescent light fixtures are Plug in type.



Figure 9: Not all fluorescent light fixtures are working.



Figure 12: Communication server rack has unsecured exposed conduit going down into the floor below.



Figure 11: Unsecured large equipment.

**CITY OF LOS ANGELES**  
INTERDEPARTMENTAL CORRESPONDENCE

Date: March 7, 2019

To: Neil Drucker, Interim Division Head  
Architectural Division

Attention: Joanne Zhang, P.E.

From:  Shailesh "Sunny" Patel, S.E., Division Engineer  
Structural Engineering Division

Subject: **7<sup>th</sup> STREET BODY SHOP – STRUCTURAL EVALUATION**  
**2310 E 7<sup>th</sup> STREET LOS ANGELES CA, 90023**  
WO: EXX11161

## INTRODUCTION

At the request of the Architectural Division (ARC), on February 13, 2019, Structural Engineering Division (SED) staff performed a visual structural observation of the 7<sup>th</sup> Street Body Shop's Building "D" used by General Services Division (GSD) to repair damaged city vehicles (Photo A). The steel structure was constructed circa 1960.

The objective of the site visit was to visually assess the structural integrity of the building to ensure that the structure is adequate for its continued use and that it poses no immediate threat of collapse.

## PROJECT SCOPE

SED's scope of work was to perform a structural evaluation of the building by conducting a visual observation only, note any visible structural deficiencies and to provide a preliminary report based on our findings for structural repair. This report outlines recommendations based only on visual observations conducted, as there are no 'As-Built' drawings available and no existing permits have been obtained from LADBS records.

## PROJECT DESCRIPTION

The one-story steel structure is a gable-frame steel structure and measures to approximately 100 ft. in the North-South direction and 113 ft. in the East-West direction. It consists of six (6) moment frames spaced roughly 20 feet apart in the North-South direction.

The structure was built utilizing an engineered moment frame system with bolted connections. Monoslope (Lean-To) structures were later added to three (3) sides of the building to provide additional office, work and storage space. Corrugated metal panels are used as the exterior wall cladding, roof system and roof drainage systems. The building has an interior wood framed structure that has been positively attached to the main building's steel frame.

The East end of the building has an overhead (1 ton) hoist crane system used to lift heavy vehicle parts into place. The overhead hoist crane is supported by columns attached to the two moment frames of the easterly most bay (Photo B). The structure has large sliding gate doors at the North and South building faces.

The moment frames resist North-South seismic loads. The middle bay is cross braced with tension rods horizontally at the roof diaphragm system and vertically between moment frames to resist East-West seismic loads (Photos C and D). The gravity system for the building is comprised of a system of "Z" shaped purlins and girts spaced approximately 3 ft. on center running perpendicular to the supporting six (6) moment frames. The corrugated metal sheets are screwed into purlins and girt. The three (3) monoslope structures are gravity support systems only and rely on the main gable structure for lateral support. (Photo E)

## **SITE OBSERVATIONS**

Based on a visual observation only, the foundation appears to either be a grade beam system with thickened slab or a mat foundation. Foundation slab cracks were visible; however, no settlement of the foundation was noticed.

The following were noticed during the site visit:

1. Rusting at Z purlin connections. (Photo F)
2. Rusting at moment frame connections. (Photo G)
3. Rusting at other gravity system connection points. (Photo H)
4. Cut and missing (E-W) direction tension braces. (Photos I, J, K and L)
5. Bent moment frame flanges. (Photo L)
6. Interior wood framed office/storage structure. (Photo M)
  - a. Excessive floor vibrations and deflections.
  - b. Substandard stair case structure.
7. Damaged corrugated metal sheathing at roof. (Photo N)
8. Missing bolt(s) at moment frame ridge connection. (Photo O)
9. Possible roof system discontinuity for lateral resistance as bracing rods are removed. (Photo P)
10. Cracked slab-on-grade. (Photo Q)

## **OPTIONS**

Options for ensuring the building's structural integrity include the following:

Option 1: Perform Immediate structural repairs necessary to continue operations per site observations -

- Repair bent flanges.
- Replace missing bolts in kind.
- Fill foundation cracks with epoxy grout.
- Bracing where removed, to be reinstalled immediately.
- Remove rust, coat with rust proof premier and paint.
- For maintenance - Install adequate waterproofing at roof or replace localized roof panels.

Option 2: Perform Full Scale Structural Evaluation & Retrofit –

- Evaluate structure to meet current codes.
- Provide structural calculations and plans for LADBS review to obtain Ready to Issue (RTI) permit.
- New bracing systems and respective connections.
- New foundations as required.
- Re-roofing as necessary.
- Retrofit connections as necessary.
- Perform evaluation of indoor storage/office space structure due to excess vibrations and retrofit as required.
- Remove rust, coat with rust proof premier and paint.
- Exploratory Investigation and site measurements. (i.e. concrete testing, steel coupons testing, etc.)

## **CONCLUSION**

Based on a visual observation, the building would be structurally adequate for its continued use if the recommended repairs outlined in Option 1 be performed.

Option 2 is recommended if the occupancy of the building change, to meet current code requirements.

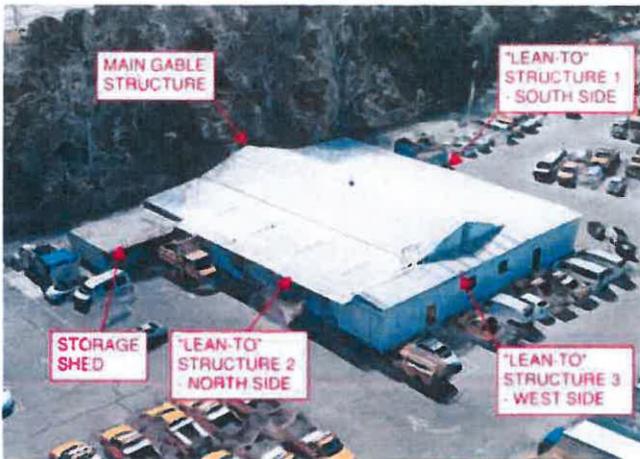
If you have any questions, please contact Manan Bhalja of my staff at (213) 485-5363.

SP/SM/MA

Attachments

cc: Site visit photos (total 17) SED File

# 7<sup>th</sup> STREET BODY SHOP – STRUCTURAL EVALUATION



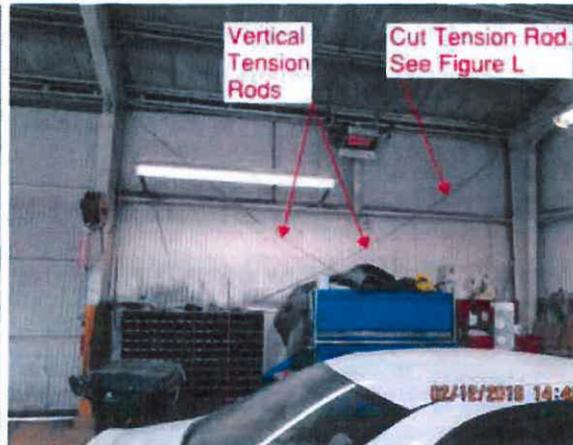
(Photo A – Building Ariel View)



(Photo B – Sliding Lift System)



(Photo C – Horizontal Tension Rods)



(Photo D – Diagonal Tension Rods)



(Photo E – Monoslope - South Side)

**7<sup>th</sup> STREET BODY SHOP – STRUCTURAL EVALUATION**



(Photo F - Rust at Z purlins)



(Photo G - Moment Frame Rusting)



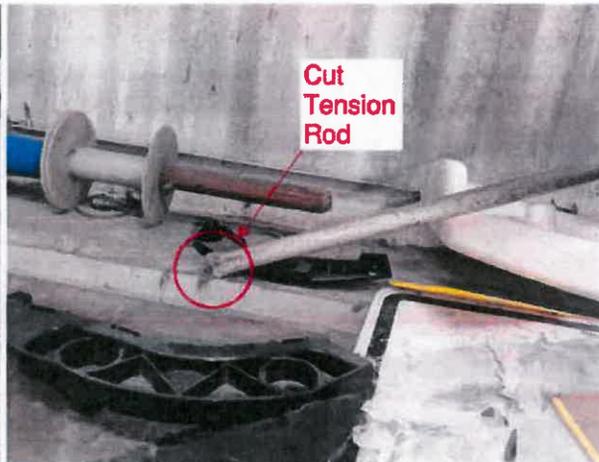
(Photo H - Gravity System Rusting)



(Photo I - Missing Tension Rod)



(Photo J - Missing Tension Rod)



(Photo K - Tension Rod Cut)

7<sup>th</sup> STREET BODY SHOP – STRUCTURAL EVALUATION



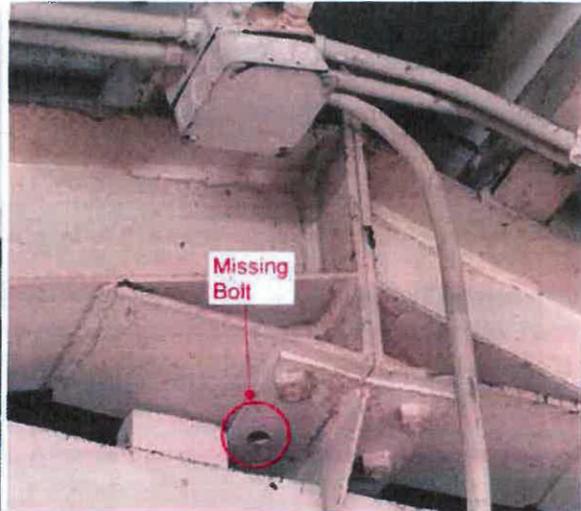
(Photo L – Damaged Column Flanges)



(Photo M – Interior Wood Structure)



(Photo N – Damaged Roof Sheathing)



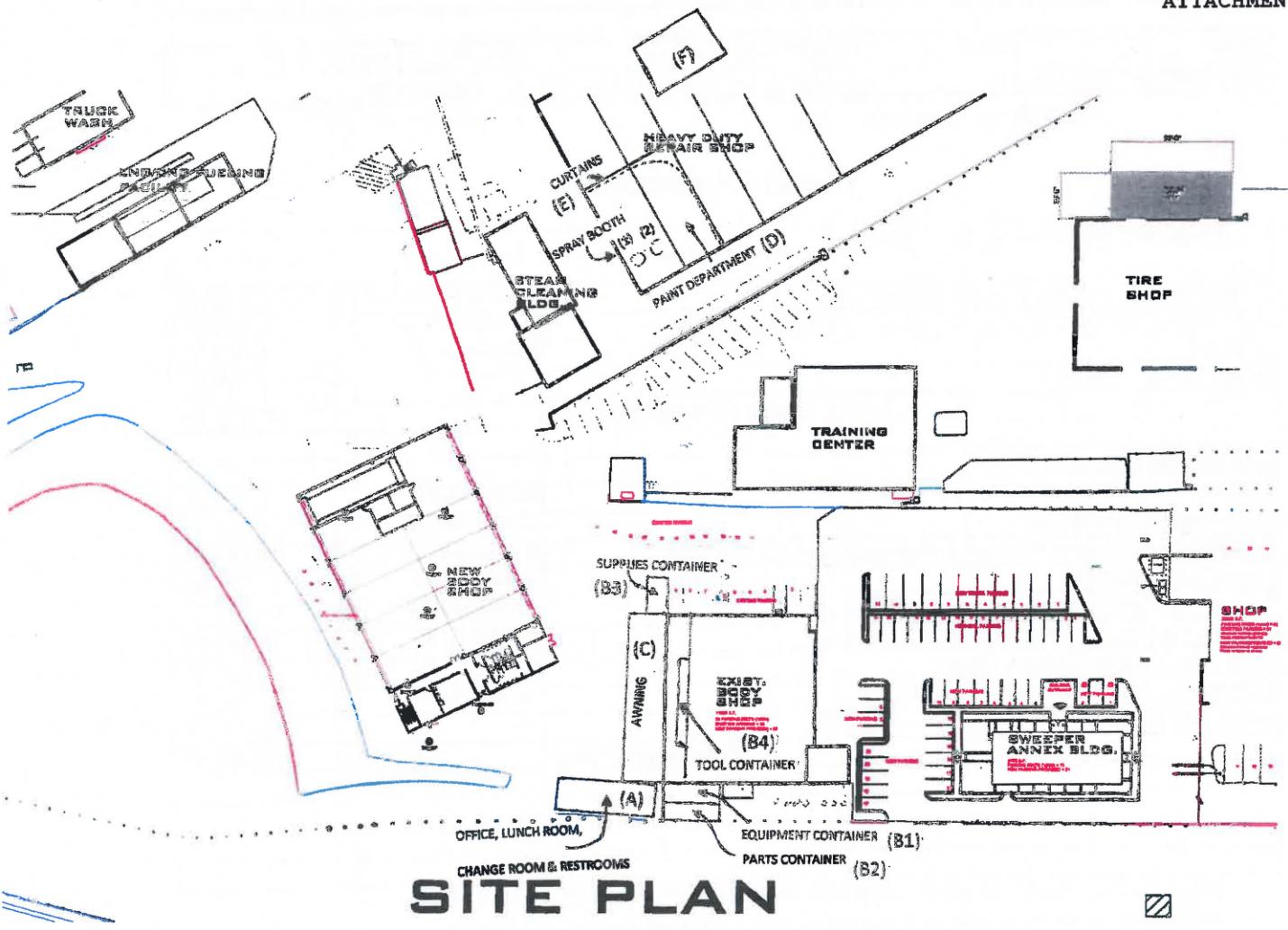
(Photo O – Missing Bolt)



(Photo P – Possible Diaphragm Discontinuity)



(Photo Q – Cracked Slab)



# SITE PLAN



10631 Banana Avenue  
Fontana, CA 92337  
Phone: 909-349-2800

### Quotation

<b>Customer:</b>	City of Los Angeles - General Services - Fleet 0 Los Angeles, CA	<b>Ship To:</b>	0 2310 E. 7th Street Los Angeles, CA
<b>Attention:</b>	David Ly		
<b>Phone #:</b>	323-526-9200	<b>Fx:</b>	david.ly@lacity.org

<b>Date:</b>	6/4/19	<b>Terms:</b>	Upon Invoice	<b>Ship Via:</b>	Common Carrier
<b>Salesperson:</b>	Jose Aguilar	Quotation good for 30 days, subject to availability			

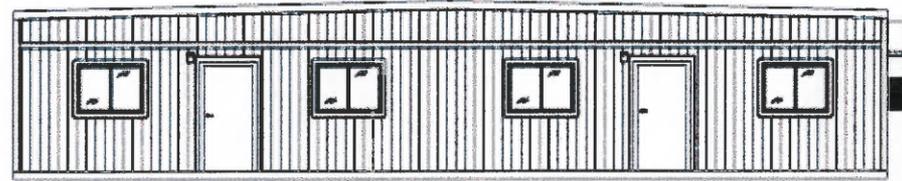
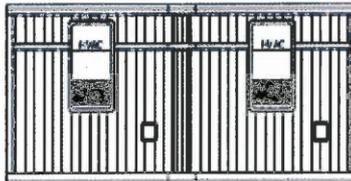
[jaguilar@designspacemod.com](mailto:jaguilar@designspacemod.com)

909-264-0373 Cell

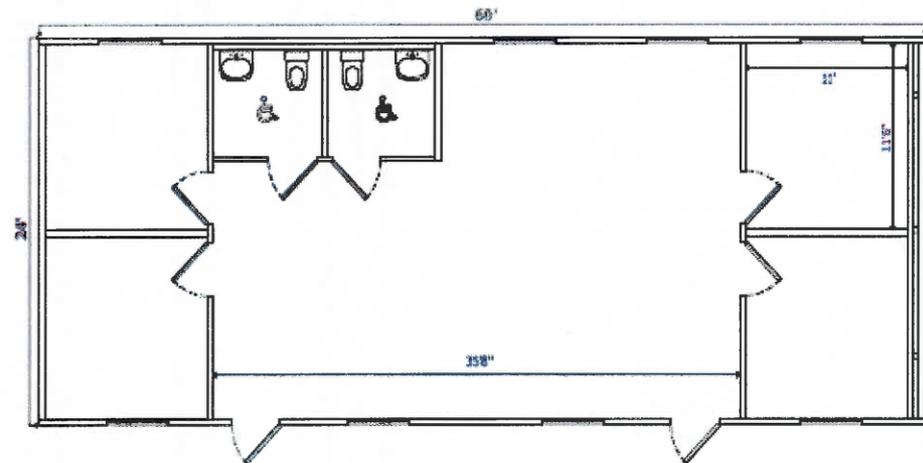
### PRICING & DESCRIPTION

(1) 24x60 Mobile Office w/ Restroom:		
New 24'x60' Trailer per plan on page 2	Contract line #18	\$ 103,438.00
ADA Ramp: 30' switchback with landing, Step set at 2nd door	Contract line #23	\$ 23,560.00
Title fee	Contract line #89	\$ 2,000.00
Sales Tax @ 9.50%		\$ 12,064.81
<b>Total Building &amp; Ramp/Ste Cost:</b>		<b>\$ 141,062.81</b>
<b>Installation Charges</b>		
Delivery:	Contract line #13	\$ 6,370.00
Foundation Engineering:	Contract line #13	\$ 1,100.00
Installation: Excluding Plumbing, Electrical, & Data Hook Up	Contract line #13	\$ 8,385.00
Foundation Material	Contract line #31	\$ 1,680.00
Recommended Seismic Anchors; w/ State approved system	Contract line #31	\$ 10,206.00
Skirting Installed and hitch removed: (168 lf)	Contract line #13	\$ 5,760.00
Door and Window Security Bars	Contract line #13	\$ 3,450.00
Deliver and Install Ramp and Landings:	Contract line #23	\$ 1,680.00
Sales Tax on Materilas @ 9.50%		\$ 2,004.12
<b>Total Install Cost:</b>		<b>\$ 40,635.12</b>

- Sales Tax is charged on all the materials and the monthly pricing including DOH fee's.
- If buildings need to be rolled or nosed into place there will be additional costs.
- Please add \$105 for each additional tiedown; if required. If site is un-level or tires, axles & hitches need to be removed additional costs will apply.
- Set-up cost based on 1,500 p.s.f. soil bearing capacity.
- Pricing is based upon others providing all permits, fees, taxes, licenses, utility connections and preparation of a level (to within 6"), compact and accessible site. **Pricing based upon prevailing wage.**



- 1,440 square feet of open office space provides generous office space for up to 13 people.
- Four private offices and two restrooms.
- Central heating and air conditioning
- Upgraded interior wall coverings and wood siding provides a professional appearance.
- Constructed with a steel chassis
- Our buildings are completely insulated
- Commercial carpet for a quiet and productive office.



*Note: Dimensions, and door & window locations shown are nominal. Actual dimensions, layout, and roof slope may vary depending on model or model year selected.*

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909.264.0373

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## High Performance Building Solutions



June 12, 2019

Ernie Emuslan **Non-Insulated**  
 City of Los Angeles, Department of General Service  
 200 N Spring St  
 Los Angeles, CA 90012

Telephone 2139783785  
 Email ernie.emuslan@lacity.org

Dear Mr. Emuslan

We are pleased to submit the following quotation for a Sprung Structure to be located at your site in Los Angeles, California. Sprung is the inventor of the stressed membrane structure which has been patented worldwide. With over 130 years of experience, Sprung offers an innovative, cost effective building alternative which dramatically accelerates construction time lines while providing complete flexibility for the future.

**STRUCTURE DESCRIPTION:** SIGNATURE SERIES 30 feet wide by 105 feet long, measured by maximum width by maximum length including the following accessories:

- 1 - City of Los Angeles, Department of General Services Graphic Logo at Entrance
- 2 - Engineered Flat End(s), each c/w 1 bay of cable bracing
- 2 - Turbo Ventilator(s) - 24"
- 20 - Earth Anchors
- 20 - Interior Suspension Eyenuts Maximum Load 75 LBS
- 270 - Pressure Plate and Cap c/w backing spreader
  - Conduit Holes Set as per diagram provided by Sprung
  - Engineered Stamped Drawings
  - Perimeter Flat Bar

**ARCHITECTURAL MEMBRANE:** Polyurethane opaque membrane, complete with daylight panels.

**AVAILABILITY:** Normally from inventory.

**INTERIOR HANGING DETAILS:** Sprung Instant Structures offers a large selection of brackets and hangers which can be utilized for the hanging of lighting, HVAC and any other items that may need to be suspended from the interior of the structure. The type and size in each case will depend on weight and proposed position. Please contact your Sprung representative for diagrams and further details.

**ERECTION:** We will supply a Technical Consultant on site to provide information about structure assembly and erection and will supply hand tools for your use, at no charge. The Technical Consultant is not authorized to perform any other services. Customer is responsible for supervision of and safety compliance in structure location, assembly and erection.

Recommended equipment and manpower:

- a) Scaffolding or manlifts
- b) Appropriate fall protection (body harness and life line).
- c) Electrical power to site.
- d) Estimated 4 workmen for approximately 9, 8 hour working days, approximately half of which should be manlift qualified.
- e) A supervisor with construction experience.

**PICKER:** We request that you supply a picker with operator and rigger to assist in raising the free span aluminum beams during the erection sequence. It will be needed for approximately 7 hours.

**HAND TOOLS:** Although specialized hand tools are supplied for your use at no charge, you are responsible for the tools while they are at your site and until picked up by Sprung following completion of the erection of the structure.

**ANCHORAGE:** Earth anchors, in connection with drift pins may only be used providing adequate soil conditions exist. Base reactions will be provided where required. A compressor complete with 90 lb jack hammer, will be needed to install these anchors. In order to optimize the erection time for the structure, earth anchors should be installed prior to delivery of the structure and prior to arrival of the technical consultant. The time to install these anchors is not included in the time estimate above. A detailed drawing will be provided by Sprung showing anchor locations. Perimeter aluminum flat bar will be supplied to secure the architectural membrane to the asphalt pad. The quality of the asphalt will determine the effectiveness of this procedure. It should also be noted that flat bar will not stop surface water from migrating into the structure since there is no means of ensuring a water tight seal when attaching flat bar to asphalt.

**DISMANTLING:** Rented structures will require our Technical Consultant for dismantling. The same terms as outlined above under the heading "Erection" and "Technical Consultant" will apply. It will be your responsibility to return the structure and tools, prepaid, to the depot in Salt Lake City, Utah.

**PERMITS, LICENSES AND TAXES:** It will be your responsibility to obtain all permits, licenses and pay all applicable taxes. This structure is designed to meet the CBC 2016.

**GUARANTEE:** To demonstrate our confidence in the quality and longevity of the Sprung Structure, our product comes with a 50 year pro-rata guarantee on the aluminum substructure and an architectural membrane pro-rata guarantee, in accordance with the attached Guarantee Certificate.

**NOTE:** This quotation is valid for 60 days.

RENTAL PRICING	
<b>12 MONTH FIRM RENTAL FOR STRUCTURE PAYABLE MONTHLY IN ADVANCE:</b> F.O.B. Salt Lake City, Utah, USA, sales and/or use taxes extra.	\$4,987.00 / month
<p style="text-align: center;"><b>PURCHASE OPTION:</b>                      The Renter has the option to purchase the structure as follows:</p>	

If all rental payments have been made on time during the first three months of the rental period, 100% of these payments will be credited towards the purchase price, or alternatively

For the 12 Month Rental Option: If all rental payments have been made on time during the first twelve months of the rental period, 70% of all twelve payments will be credited towards the purchase price

Any purchase option can only be exercised by presentation of Renter's check for the full purchase price, less the applicable credit.

<b>PURCHASE PRICE</b>	
<b>STRUCTURE AND ACCESSORIES AS ABOVE: F.O.B. Salt Lake City, Utah, USA, sales and/or use taxes extra.</b>	<b>\$99,665.00</b>
<b>TERMS, O.A.C:</b> 50% with order; balance upon delivery of the structure.	

<b>ADDITIONAL CHARGES</b>	
<b>TECHNICAL CONSULTANT:</b> Although the Technical Consultant is supplied, his travel, accommodation and meals will be charged to you at a fixed cost of	\$3,980.00
<b>Delivery:</b> On your behalf, we can arrange for delivery of this structure by commercial carrier to your site in Los Angeles, California at the fixed cost shown. This structure is sold F.O.B. Utah. Sprung will maintain responsibility for the shipment and will insure the shipment up until the point of delivery. Customer is responsible to receive and unload freight in a timely manner.	\$2,890.00

Thank you for the opportunity to submit this quotation and we look forward to being of service to you in the future.

Yours very truly,  
 Kurt Lundell  
 kurt.lundell@sprung.com  
 Business Development Manager  
 SPRUNG INSTANT STRUCTURES, INC.  
 KL/ap #24427