



Freeway bridge restoration

Meidi-Ya

Freeway bridge restoration

Overview:

- Freeway construction: Beam ends of bridge restoration
- Parking lot of the business district
- Failed coating and corrosion on girders and bolted joints
- **Objective(s):**
- Remove failing paint and apply new coating system



©2008 Sponge-Jet Inc. All rights reserved.

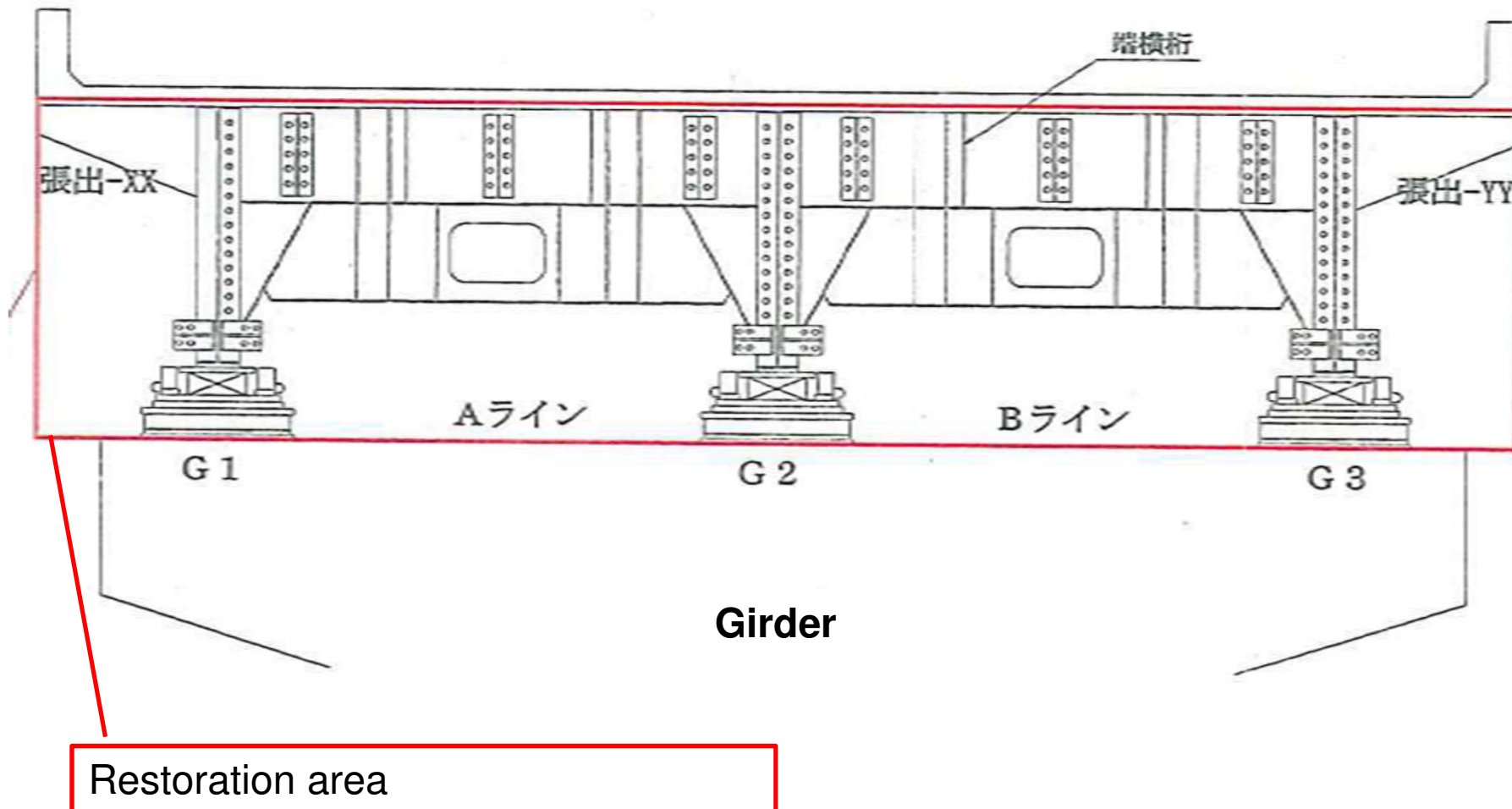
Freeway bridge restoration



©2008 Sponge-Jet Inc. All rights reserved.

Freeway bridge restoration

Cross section



Freeway bridge restoration

Substrate Type: Steel

Surface Condition: Corrosion and failing lead-based paint

Project Size: 114m²(1227ft²)

Specified Level of Cleanliness:

Near White Metal Blast

- NACE 2 / SP-10 / Sa-2.5

- **Specified Profile:**

- Under 80micron (3.2mil)

(Average±50micron (±2mil))

- **Considered:** Mist Blasting System

- Mist blasting must give exclusive cure to use the water. .

- Mist blasting may leak the water in the neighborhood.(Water might hit person and car).

- Mist blasting has difficult handling



©2008 Sponge-Jet Inc. All rights reserved.

Freeway bridge restoration

Used:

- (1) 100-HP Feed Units™
- Rough blasting : Silver 30 Sponge Media™ × (55) bags
- Finish blasting : Silver 80 Sponge Media™ × (27) bags
- Total ≠ 114m² ≠ 8.73kg/m² (Only Silver 30 Sponge Media)
- ≠ 3.22kg/m² (Only Silver 80 Sponge Media)
- Total ≠ 114m² ≠ 11.95kg/m²

Removal Rate:

2m²/hr.

Reasons for Sponge-Jet:

- low-dust and low-rebound.
- no necessary to wash after blasting
- There is little waste



©2008 Sponge-Jet Inc. All rights reserved.

Freeway bridge restoration

Location:

Noise (this bridge located close to residential area). To solve, use soundproof sheet for containment. (Inside : 120 dB / outside : 78-85dB)



©2008 Sponge-Jet Inc. All rights reserved.

Freeway bridge restoration



©2008 Sponge-Jet Inc. All rights reserved.

Freeway bridge restoration



©2008 Sponge-Jet Inc. All rights reserved.

Freeway bridge restoration

- **Outcome:** Conclusion
- It could finish on time. They had to paint (undercoat) everyday right after blasting by regulation and before they paint, the inspector must check surface condition.
- Sponge jet pass the inspection and finish every restoration on time.



©2008 Sponge-Jet Inc. All rights reserved.