Basis FOR Analysis

- Compliance with the Clean Water Act as set forth in a Consent Decree approved by the U.S. District Court of Guam in February 2004

- Layon site selected by Government of Guam and approved by the U.S. Environmental Protection Agency and the Guam Environmental Protection Agency.

- DPW Highways Division in conformance with the Consent Decree is to provide necessary roadway improvements to Route 4 between Route 10 and the Municipal Solid Waste Landfill turnoff
Communications

- Communications between Receiver Gershman, Brickner & Bratton, Inc. (GBB) and the Government of Guam Department of Public Works (DPW):
  - Route review and improvements consistent with Consent Decree
  - Completion of improvements to meet new landfill opening date of September 2010
  - Transfer truck specifications
  - Schedule and cost for completion of improvements to meet Consent Decree
  - Planning and funding of improvements to Layon Municipal Solid Waste Landfill Haul Route

Haul Vehicle Review and Analysis

- Vehicle used for analysis
  - Kenworth T800 Tractor
  - 45 foot Long Mac Transfer Trailer
  - 40 foot centerline tractor axle to centerline trailer axle
  - 102” max trailer width
  - Approximately 13 hauls per day
  - Type 3S2 36 Tons

- Confirmed with local solid waste collection company (Mr. Rubbishman) that 45 ft long Mac Transfer Trailers will be used
Route 4 (Route 10 to MSWLF Turnoff)

• Route Features
  - Pago Bridge
  - Ylig Bridge
  - Togcha Bridge
  - Talofofo Bridge
  - Asalonso Area
  - 11 Route Miles
  - 2 lane to 4 lane roads
  - Speed limit varies from 25 mph to 35 mph

Pago Bridge
  - Single Span Girder Bridge
  - 70 ft Long & 69 ft Wide
  - Constructed in 1984
  - Load Rating per FHWA 2004 Inspection Reports
    - Type 3S2 45 Tons (Normal Traffic)
    - Type 3S2 75 Tons (Maximum Load)

Ylig Bridge
  - Three Span Beam Bridge
  - 144 ft Long & 33 ft Wide
  - Constructed in 1968
  - Load Rating per FHWA 2004 Inspection Reports
    - Type 3S2 10 Tons (Normal Traffic)
    - Type 3S2 16 Tons (Maximum Load)
Route 4 (Route 10 to MSWLF Turnoff)

• **Togcha Bridge**
  - Single Span Tee Beam Bridge
  - 46 ft Long & 46 ft Wide
  - Constructed in 1972
  - Load Rating per FHWA 2004 Inspection Reports
    - Type 3S2 51 Tons (Normal Traffic)
    - Type 3S2 86 Tons (Maximum Load)

• **Talofofo Bridge**
  - Three Span Girder/Beam Bridge
  - 160 ft Long & 38 ft Wide
  - Constructed in 1979
  - Load Rating per FHWA 2004 Inspection Reports
    - Type 3S2 41 Tons (Normal Traffic)
    - Type 3S2 69 Tons (Maximum Load)

Route 4 (Route 10 to MSWLF Turnoff)

• **Asalonso Area**
  - Typhoon Damage
  - Earthquake Damage
  - Roadway & Embankment Repair
  - Channel Bank Restoration/Protection
Route 4 (Route 10 to MSWLF Turnoff)

- **Roadway Horizontal Geometry**
  - Widening at curves to prevent off-tracking
  - Widening to provide shy distance to guardrail

Layon Landfill Haul Route Improvements

- **Route 4 Improvements**
  - Based on transfer truck length, roadway geometry improvements required on Northern segment of Route 4
  - Ylig bridge has insufficient load carry capacity and needs to be replaced
  - Roadway embankment stabilization and channel slope protection required at Asalonso area to prevent failure of roadway

- ** Analyzed improvements, but deemed unnecessary**
  - Climbing lanes for stretches of road north and south of Talofofo and Asalonso area
    - Posted speed limit is 25 mph & trips required by the transfer trucks do not warrant the addition of climbing lanes.
    - Pago, Togcha and Talofofo bridges have sufficient load carrying capacity. Upcoming inspections will reassess these structures and determine required repairs if necessary.
Schedule for Improvements

Projects Funding

- Territorial Transportation Improvement Plan (TTIP), year FY2009
  - Project No. GU-NH-0001(011)
    - Route 4, Ylig Bridge Replacement
    - Construction Cost – $6.2 Mil, FY’09
  - Project No. GU-NH-0004(012)
    - Route 4 Widening, Ylig Bridge to Pago Bay
    - Construction Cost - $1.27 Mil, FY’09
  - Project No. GU-ER-GQ02(001) & GQ-ER-22(016)
    - Route 4, Asalonso Area Typhoon and Earthquake Repair
    - Construction Cost - $5.72 Mil, FY’09
  - Project No. GU-NH-NBIS(007)
    - Island wide Bridge Inspection/Structure Evaluation
    - Cost - $1.0 Mil, FY’08
Summary

- In compliance with the US District Court Consent Decree...
  - The Layon Landfill Haul Route (LLHR) has been established
  - The scope of work (Projects) necessary to establish the LLHR have been identified
  - The Projects have been scheduled for completion consistent with Receiver GBB late opening date of September 2010
  - Funding of the Projects have been identified in the Territorial Transportation Improvement Plan

Next Steps

- Clear all archaeological, environmental, right-of-way and utility issues
- Complete bridge inspections...Pago, Togcha, Asalonso and Talofofo...and institute corrective measures as necessary
- Finalize engineering analysis and design basis for Layon Landfill Haul Route
- Complete environmental/archaeological activities and award design contract to DBC for the replacement of Ylig Bridge
- Prepare, procure and award design-build contract for roadway improvements
- Asalonso project is in final design with DBC and currently addressing ROW issues.
### Contacts and Resources

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