## STATE OF OHIO DEPARTMENT OF TRANSPORTATION SUPPLEMENTAL SPECIFICATION 857

## ASPHALT CONCRETE WITH GILSONITE

## April 15, 2005

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**857.01 Description.** This work consists of constructing an asphalt concrete surface or intermediate course of aggregate, Gilsonite asphalt modifier, and asphalt binder mixed in a central plant and spread and compacted on a prepared surface.

The requirements of 441 apply, except as modified by this specification.

**857.02 Materials.** Use a modified binder composed of 92 percent PG 64-22 asphalt binder and 8 percent Gilsonite. Provide certified test data that the Gilsonite meets the following specification requirements:

Granular Solid Softening Point, ASTM E 28-51T	330° - 350°F (166°-177°C)
Specific Gravity	1.045 +/- 0.015
Penetration @ 77°F(25°C), 3.5 oz(100 g), 5 sec.	0
Color	Black
Flash Point, COC	550°F (288°C), min.

Only certifications less than three months old will be accepted.

**857.03 Composition.** Design the mixture composition to incorporate the Gilsonite.

Type 1H is required if heavy traffic is specified, except PG 70-22M requirements of 702.01 are not applicable.

A maximum of 10 percent reclaimed pavement is permitted. If reclaimed pavement is used, include it in the mix design.

**857.04 Mixing.** Add the Gilsonite to the asphalt concrete using one of the following methods:

A. Blend it into the liquid asphalt cement in an mechanically agitated tank heated to a minimum temperature of 345°F (174° C).

- B. Add it in to the batch plant pug mill during the dry cycle and increase the mix time by 15 to 20 seconds per batch.
- C. Add it to a dryer drum plant through the recycle ring or dry mineral feeder.

**857.05** Acceptance. Use Item 446 if the total mixture quantity is 250 tons (250 metric tons) or greater, then 446 shall apply. Use Item 448 if the total mixture quantity is less than 250 tons (250 metric tons).

**857.06 Basis of Payment.** The Department will pay for accepted quantities at the contract prices as modified in 857.05 as follows:

Item	Unit	Description
857	Cubic Yard (Cubic Meter)	Asphalt Concrete with Gilsonite, Surface Course, Type 1
857	Cubic Yard (Cubic Meter)	Asphalt Concrete with Gilsonite, Intermediate Course, Type 2