

PACKER
ENGINEERING^{INC}

June 30, 1994

First Class Mail

Mr. Ted Meyers
Tuf-Tite Corporation
1125 Old Rand Road
Wauconda, IL 60084

Re: Tuf-Tite Testing
PE File No. N51717

Dear Mr. Meyers:

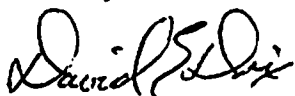
This letter report will summarize my inspection and testing conducted at your facility on June 13, 1994.

A truck wheel load test was conducted on a section of TR1 Tuf-Tite trench drain. The trench drain was mounted in the concrete ramp adjacent to a loading dock. The trench drain had hollow wall support. The height of the drain grate from the bottom of the drain was measured before, during and after the truck wheel loading test. Ambient air temperature was 89°F at the time of testing.

H-20 loading conditions are described as truck wheel loading from a 20 ton truck with a dual wheel rear axle. This loading distributes 8,000 pounds on the front axle and 32,000 pounds on the dual wheel rear axle, and produces individual wheel loads of 4,000 lbs per wheel on the front tires and 8,000 lbs per wheel on the rear tires.

Testing at Tuf-Tite by Packer Engineering was conducted using a truck weighing 56,000 lbs. The front axle weight was 21,500 lbs, or 10,750 lbs per front wheel, which exceeds H-20 loading. The front tire was a Goodyear G178 445/65R22.5 with a tread width of 13 inches. This wheel loading condition produced a 0.25 inch deflection under load, and a permanent deflection of 0.05 inch of the trench drain grate. No failure of the TR1 Tuf-Tite trench drain was observed during this testing.

Sincerely,



David E. Dix, P.E.
Staff Consultant