TRENCH SHIELD TABULATED DATA

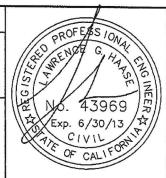
Shield Model Number MCB-1040

4' High x 32' Long x 20' Max Width <u> Maximum Allowable Side Pressure = 1040</u>

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Manufacturer: Speed Shore Corporation Houston, Texas for McBratney Company Murrieta, CA (951) 677-0263

Drawing No. MCB-1040.2 Sheet 1 of 1 Date: 9/21/11



DESIGN CRITERIA:

- 1. All steel plate and beams shall be ASTM A-572, Fy = 50 ksi.
- 2. All structural steel tubing shall be ASTM A-500 Grade B, Fy = 46 ksi.
- 3. Allowable stresses per the "AISC Manual of Steel Construction" increased 33% for temporary loading.
- 4. All welds shall be made with E70 electrodes with matching weld metal per AWS D1.1.

TABULATED DATA: Soil Type Maximum (per OSHA) Depth Type "A" Type "B" 38'* 21.5'* Type "C" 16.1' Type "C-80" 12.1' Note: Maximum depth is total depth

including adjacent

slopes above, if any

This shield data shall be implemented by a competent person as defined by Title 8, Chapter 4, Section 1504(a) of the State of California Safety Orders.

2. The maximum depth tabulated shall include any slopes above.

*3. Depths over 20 feet require a site specific design by a registered professional engineer.

4. This trench shield shall be used according to the manufacturers recommendations and governing safety orders at all times.

NOTES:

GUIDELINES FOR TRENCH SHIELD USAGE

1. This shield and tabulated data shall only be implemented by a competent person as defined by Title 8, Chapter 4, Section

1504(a) of the State of California Safety Orders adopted 9/25/91.

2. This tabulated data has been prepared by a registered professional engineer in accordance with the provisions of Title 8. Chapter 4, Section 1541.1(c)(2) of the State of California Safety Orders adopted 9/25/91 and Federal OSHA Safety and Health Standard 29 CFR Part 1926, Subpart P.

3. This shield shall be used in accordance with the State of California Administrative Code, Title 8, Chapter 4, Section

1541.1(g) at all times.

4. The soil types "A", "B", and "C" are as defined in Appendix A of the OSHA Standard, Section 1541.1 "Soil Classification" with the exception of soils which are saturated, wet, or submerged in water. Under these wet conditions, use the soil classification of "C-80" or consult a registered professional engineer.

5. This shield is designed to withstand a uniform horizontal pressure as indicated above. Lateral pressure loads from sheeting or sheel plates against the steel pipe spreaders is not permitted without further analysis by a licensed professional

6. The surcharge load included in this tabulated data is a normal traffic and construction surcharge of 72 psf. Spoil piles, large heavy equipment or other factors may produce higher surcharge pressures. Actual pressure surcharges should be investigated prior to use to ensure that the maximum capacity of the shield is not exceeded.

7. Trench shields will not provide stability to adjacent buildings or other structures susceptible to lateral movement of

supporting soils.

8. No modifications shall be made to this shield design

without written approval of the Design Engineer.

9. This shield tabulated data is for a shield installed in a continuous trench condition only. End plating or sheeting used to shore across the ends of the shield requires investigation by a registered professional engineer.

10. The maximum rated pressure for this shield is based upon the shield in structurally sound condition. The shield shall be inspected prior to use for damage or deterioration and repairs

made if necessary.

