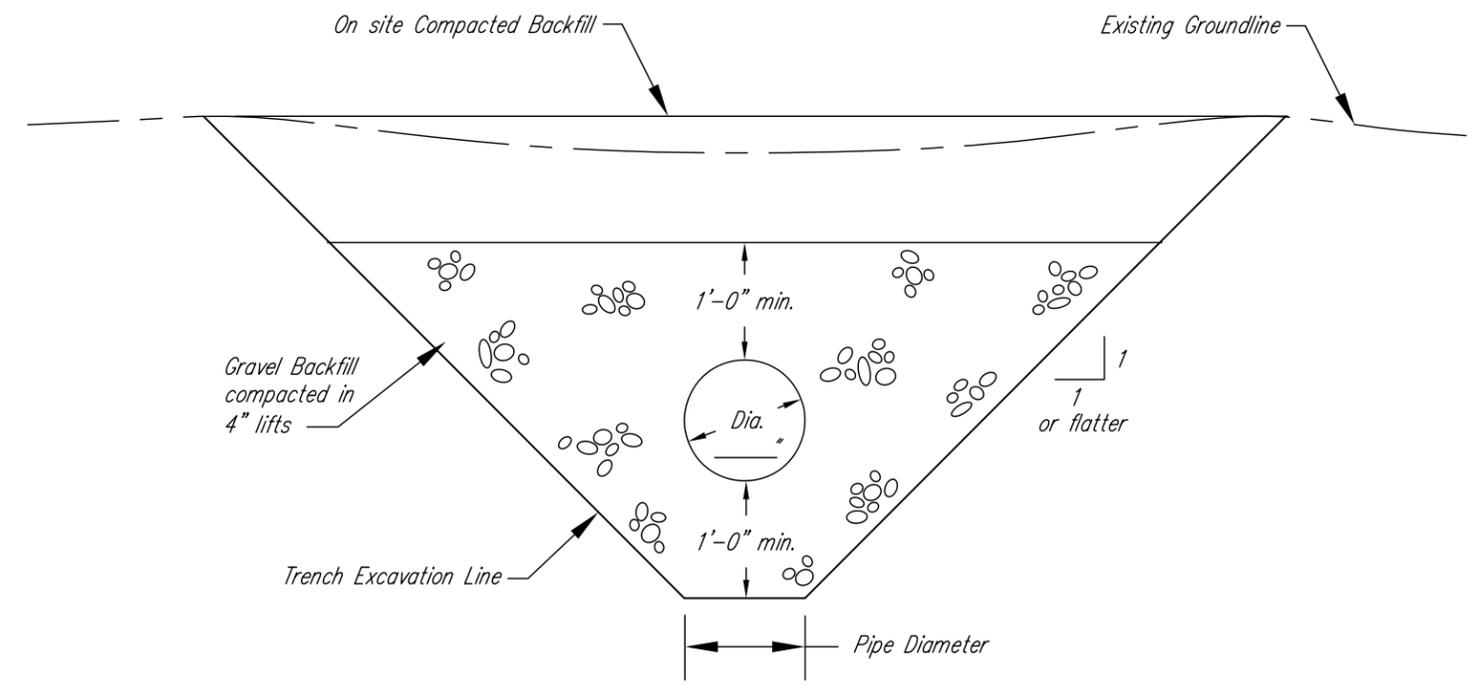


PROFILE



TYPICAL CROSS SECTION

GRAVEL MATERIAL QUANTITIES

Pipe Dia. (In.)	Cu. Yd./Ft. of Pipe
8	0.32
10	0.36
12	0.42
15	0.50
18	0.58

ESTIMATE OF MATERIALS

- Excavation Cu. Yds.
- Earthfill Cu. Yds.
- CPP or CMP with coupling bands Lin. Ft.
- Flared Inlet Each
- Gravel Cu. Yds.
- Non-woven Geotextile Sq. Ft.
- Rock Riprap Cu. Yds.

DRAWING LIMITATIONS

- Gravel backfill may be used in lieu of a drainage diaphragm if the following conditions exist:
1. Structure is for surface water inlet.
 2. Total head is 6' or less.
 3. Corrugated pipe dia. is 18" or less.
 4. The designer has evidence that pipes in similar soil and site conditions have functioned satisfactorily without drainage diaphragms.

MICHIGAN ENGINEERING STANDARD DRAWING	
FILE NAME	MI-185-B 7-11.dwg
STANDARD DWG. NO.	MI-185-B
DATE	7-11
SHEET	1 OF 1

This standard drawing may only be used where it is part of site-specific construction drawings approved by a person authorized through federal or state law to approve engineering drawings. Generic approval of this standard drawing by NRCS noted in the lower left hand corner is NOT an endorsement of its use at a specific site.

Dimensions in inches or feet-inches

Not To Scale

Date	
Designed	
Drawn	
Checked	
Approved	

DETAILS OF SIDE INLET WITH GRAVEL BACKFILL

Co., Michigan
Township, T. -R., Sec.



File Name	
Drawing Name	MI-185-B
Sheet	of