

Diagram illustrating the cross-section of a trench backfill structure. The diagram shows a trench with a trench width and undisturbed earth above and below. The backfill consists of granular or earth backfill (see specification for requirements) and a warning tape. A tracer wire is shown within the backfill. The trench is lined with PVC. The backfill is granular fill (3/4" minus). Dimensions include a maximum height of 6'-0" and a minimum height of 3'-0", a trench width of 18", and a trench depth of 10'.

Labels and dimensions:

- TRENCH WIDTH
- UNDISTURBED EARTH
- GRANULAR OR EARTH BACKFILL (SEE SPECIFICATION FOR REQUIREMENTS)
- WARNING TAPE
- TRACER WIRE
- 10'
- 18"
- MAX = 6'-0"
- MIN = 3'-0"
- PVC
- GRANULAR FILL (3/4" MINUS)
- PIPE DIA.

TYPICAL TRENCH SECTION
FOR PVC PIPE
NOT TO SCALE
DETAIL "A"
PAGE 1 OF 2

A cross-sectional diagram of a trench. The trench is filled with granular earth backfill. Above the trench is undisturbed earth. The trench width is indicated at the top. The backfill is labeled 'GRANULAR OR EARTH BACKFILL (SEE SPECIFICATION FOR REQUIREMENTS)'. A 'WARNING TAPE' and 'TRACER WIRE' are shown within the backfill. The trench bottom is labeled 'EARTH TRENCH BOTTOM WHERE SUITABLE FOR SEEDING'. Below the trench bottom is a '6" ADDITIONAL EXCAVATION & BACKFILL FOR ROCK OR OTHER UNSUITABLE MATERIAL'. The pipe is labeled 'PIPE DIA.' and 'DIP'. The backfill at the bottom is labeled 'GRANULAR FILL (3/4" MINUS)'. Dimensions include 'MAX = 6'-0"', 'MIN = 3'-6"', and '18"'. The trench width is labeled 'TRENCH WIDTH'.

TRENCH WIDTH

UNDISTURBED EARTH

GRANULAR OR EARTH BACKFILL (SEE SPECIFICATION FOR REQUIREMENTS)

WARNING TAPE

TRACER WIRE

EARTH TRENCH BOTTOM WHERE SUITABLE FOR SEEDING

6" ADDITIONAL EXCAVATION & BACKFILL FOR ROCK OR OTHER UNSUITABLE MATERIAL

PIPE DIA.

DIP

GRANULAR FILL (3/4" MINUS)

MAX = 6'-0"
MIN = 3'-6"
18"

TYPICAL TRENCH SECTION
FOR DUCTILE IRON PIPE
NOT TO SCALE
DETAIL "A"
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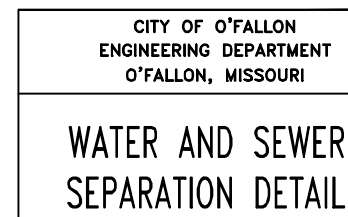


Diagram illustrating the installation of a fire hydrant connection to a ductile iron pipe, showing the following components and specifications:

- FACE STEAMER NOZZLE TOWARD STREET
- M.J. FIRE HYDRANT
- 3" MIN.
- FINISH GRADE
- M.J. X FLANGED VALVE
- MECHANICAL JOINT WITH METAL GASKET
- 0.5 CUBIC YARDS (MIN.) COARSE UNIFORM GRAVEL
- FOR DEAD END MAINS PROVIDE 2"x2" CONCRETE THRUST BLOCKING. DO NOT ENCASE DRAIN HOLE IN HYDRANT
- 2"x4"x8" CONCRETE BLOCK (TYP.)
- 4"x8"x16" CONCRETE BLOCK (TYP.)
- UNDISTURBED EARTH AT BOTTOM OF TRENCH
- 6" DUCTILE IRON PIPE

6" PIPES BETWEEN TEE AND VALVE AND BETWEEN VALVE AND FIRE HYDRANT SHALL BE D.I. "ANCHOR LOKS" OR DUCTILE IRON PIPE WITH "MEGALUG" RESTRAINER FOLLOWER GLANDS ON ALL M.J. JOINTS.

12" MIN.

12" MIN.

A

M.J. TEE

SEE NOTE FOR 6" PIPING

PLAN VIEW
NOT TO SCALE

Diagram illustrating the installation of a fire hydrant. The hydrant is shown with a face steamer nozzle pointing toward the street. The hydrant is connected to a main line (M.J.) valve. The hydrant is installed in a trench, with the bottom of the trench being undisturbed earth. The hydrant is surrounded by coarse uniform gravel, with a minimum depth of 3 inches. The hydrant is supported by a 2"x4"x8" concrete block (typ.) and a 4"x8"x16" concrete block (typ.). The hydrant is also surrounded by 0.5 cubic yards (min.) of coarse uniform gravel for dead end mains providing thrust blocking. The hydrant is installed in a trench, with the bottom of the trench being undisturbed earth. The hydrant is connected to a main line (M.J.) valve. The hydrant is installed in a trench, with the bottom of the trench being undisturbed earth. The hydrant is surrounded by coarse uniform gravel, with a minimum depth of 3 inches. The hydrant is supported by a 2"x4"x8" concrete block (typ.) and a 4"x8"x16" concrete block (typ.). The hydrant is also surrounded by 0.5 cubic yards (min.) of coarse uniform gravel for dead end mains providing thrust blocking. The hydrant is installed in a trench, with the bottom of the trench being undisturbed earth. The hydrant is connected to a main line (M.J.) valve. The hydrant is installed in a trench, with the bottom of the trench being undisturbed earth. The hydrant is surrounded by coarse uniform gravel, with a minimum depth of 3 inches. The hydrant is supported by a 2"x4"x8" concrete block (typ.) and a 4"x8"x16" concrete block (typ.). The hydrant is also surrounded by 0.5 cubic yards (min.) of coarse uniform gravel for dead end mains providing thrust blocking.

FIRE HYDRANT LOCATION
NOT TO SCALE