

OBTAINED FROM THE

(ASTM D 698).

INITIAL BACKFILL CEMENT

LIFT THICKNESS = 12"

STABILIZED SAND THOROUGHLY

RODDED AND COMPACTED MAX

BEDDING & HAUNCHING- CEMENT

STAB. SAND THOROUGHLY RODDED

AND COMPACTED TO 95% OF THE

MAX. DRY DENSITY AS OBTAINED

FROM THE STANDARD PROCTOR

TEXT (ASTM D 698)

6" FOR PIPES LESS

THAN 18". 12" FOR

PIPES GREATER

THAN 18".

SANITARY SEWER TRUNK MAIN (24"-30") GRAVITY

LINE BEDDING & BACKFILL FOR DRY STABLE TRENCH

STANDARD PROCTOR TEST

INITIAL BACKFILL CEMENT

BEDDING & HAUNCHING-

THOROUGHLY RODDED AND

COMPACTED TO 95% OF THE

PROCTOR TEST (ASTM D 698)

12"

24"

UNDER 18" 18" TO 30"

OVER 30" 36"

MAX. DENSITY AS OBTAINED

CEMENT STAB. SAND

FROM THE STANDARD

LIFT THICKNESS = 6"

STABILIZED SAND THOROUGHLY

MAX RODDED AND COMPACTED

INITIAL BACKFILL CEMENT STABILIZED SAND

THOROUGHLY RODDED AND

BEDDING & HAUNCHING- CEMENT

RODDED AND COMPACTED TO 95%

OF THE MAX. DRY DENSITY AS

OBTAINED FROM THE STANDARD

PROCTOR TEXT (ASTM D 698)

CRUSHED STONE FOUNDATION

(WHEN NEEDED FOR SEEPAGE DRAINAGE. 6" MIN DEPTH. (SEE

SPECIFICATIONS).

SCALE: N.T.S.

6" FOR PIPES LESS THAN 18".
12" FOR PIPES
GREATER THAN 18".

STAB. SAND THOROUGHLY

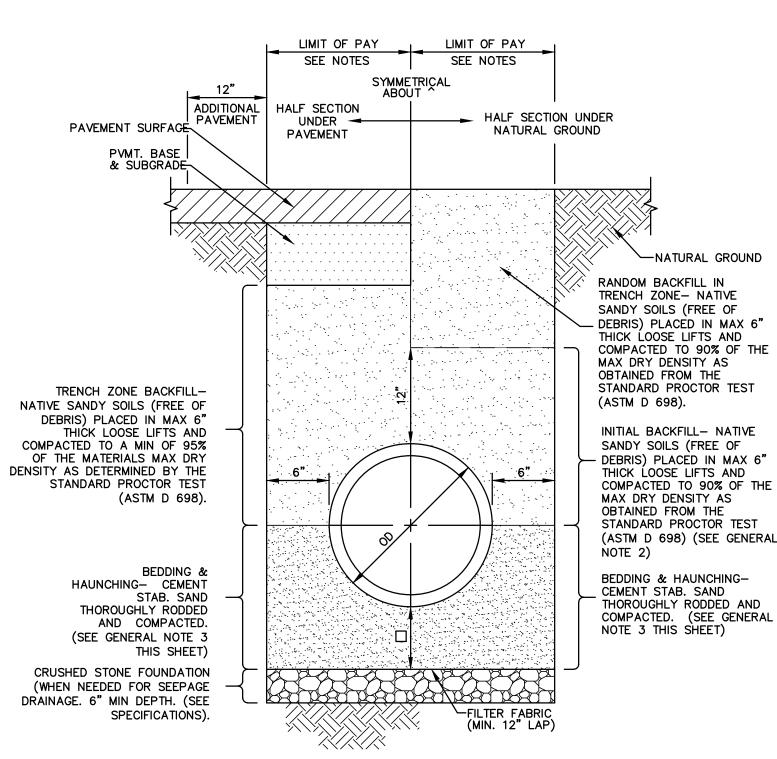
COMPACTED MAX LIFT

THICKNESS = 6"

## LIMIT OF PAY LIMIT OF PAY SEE NOTES SEE NOTES **ADDITIONAL** HALF SECTION HALF SECTION UNDER PAVEMEN1 UNDER -PAVEMENT SURFACE-NATURAL GROUND PAVEMENT & SUBGRADE -─NATURAL GROUND RANDOM BACKFILL IN TRENCH ZONE- NATIVE SANDY SOILS (FREE OF DEBRIS) PLACED IN MAX 6" THICK LOOSE LIFTS AND COMPACTED TO 90% OF THE MAX DRY DENSITY AS OBTAINED FROM THE TRENCH ZONE BACKFILL-STANDARD PROCTOR TEST NATIVE SANDY SOILS (FREE OF (ASTM D 698). DEBRIS) PLACED IN MAX 6" THICK LOOSE LIFTS AND INITIAL BACKFILL- NATIVE COMPACTED TO A MIN OF 95% SANDY SOILS (FREE OF OF THE MATERIALS MAX DRY DEBRIS) PLACED IN MAX 6" DENSITY AS DETERMINED BY THE THICK LOOSE LIFTS AND STANDARD PROCTOR TEST COMPACTED TO 90% OF THE (ASTM D 698). MAX DRY DENSITY AS OBTAINED FROM THE STANDARD PROCTOR TEST (ASTM D 698) (SEE GENERAL NOTE 2) BEDDING & HAUNCHING- CEMENT BEDDING & HAUNCHING-STAB. SAND CEMENT STAB. SAND THOROUGHLY RODDED THOROUGHLY RODDED AND AND COMPACTED. COMPACTED. (SEE GENERAL (SEE GENERAL NOTE 3 NOTE 3 THIS SHEET) THIS SHEET)

## TYPICAL SANITARY SEWER (6"-15") GRAVITY LINE BEDDING & BACKFILL FOR DRY STABLE TRENCH SCALE: N.T.S.

1. MIN TRENCH WIDTH SHALL BE PIPE OD PLUS MINIMUM 12". 2. MAX TRENCH WIDTH SHALL NOT BE GREATER THAN MIN TRENCH WIDTH PLUS 24 INCHES, UNLESS OTHERWISE NOTED.



(ASTM D 698).

THICKNESS = 6"

INITIAL BACKFILL CEMENT

BEDDING & HAUNCHING-

THOROUGHLY RODDED AND

COMPACTED TO 95% OF THE

MAX. DENSITY AS OBTAINED

PROCTOR TEST (ASTM D 698)

CEMENT STAB. SAND

FROM THE STANDARD

FILTER FABRIC

SANITARY SEWER TRUNK MAIN (24"-30") GRAVITY LINE

CRUSHED STONE FOUNDATION FOR WET STABLE TRENCH

(MIN. 12" LAP)

STABILIZED SAND THOROUGHLY

RODDED AND COMPACTED MAX LIFT

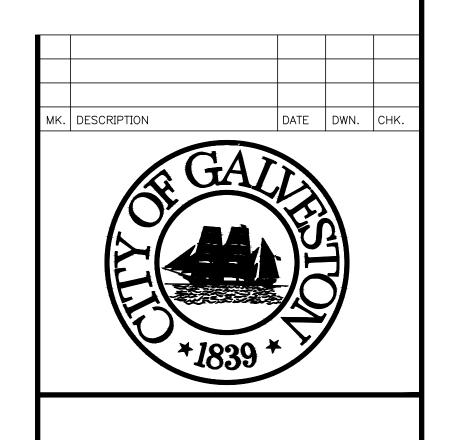
TYPICAL SANITARY SEWER (6"-15") GRAVITY LINE CRUSHED STONE FOUNDATION FOR WET STABLE TRENCH

NOTES:

- 1. THIS DETAIL MAY BE USED ONLY FOR DRY STABLE TRENCH CONDITIONS.
- 2. MIN TRENCH WIDTH SHALL BE PIPE OD PLUS MINIMUM 12".
- 3. MAX TRENCH WIDTH SHALL NOT BE GREATER THAN MIN TRENCH WIDTH PLUS 24 INCHES, UNLESS OTHERWISE

## **GENERAL NOTES:**

- 1. TRENCH EXCAVATION, BEDDING & BACKFILL COSTS ARE INCIDENTAL TO PIPE INSTALLATION AND ARE BASED ON THE LIMITS SHOWN IN THESE DETAILS. ANY COSTS INCURRED FOR AREAS EXCAVATED AND OR REQUIRING BACKFILL BEYOND THESE LIMITS RESULTING FROM CONTRACTORS FAILURE TO CONTROL THESE LIMITS SHALL BE BORNE BY THE CONTRACTOR.
- 2. WHERE PROPOSED SANITARY SEWERS CROSS PROPOSED OR EXISTING WATER LINES, INITIAL BACKFILL FOR 10' EACH SIDE OF CROSSING SHALL BE CEMENT STABILIZED SAND (UNDER NATURAL GROUND OR UNDER PAVEMENT).
- THE ABILITY TO OBTAIN SPECIFIED COMPACTION DENSITIES W/ THE USE OF NATIVE MATERIALS, CONTRACTOR MAY OMIT CEMENT STABILIZED SAND FOR BEDDING AND HAUNCHING OF TRENCH FOR 6"-15" PIPE SIZES ONLY. OWNERS REPRESENTATIVE SHALL MAKE FINAL DECISION FOR APPROVING THIS



City of Galveston, Texas

Department of Public Works

Water Line and Sanitary Sewer Line Construction Details

IEET No.:	Scale: HORZ : <b>NTS</b>	SHEET
ATE: JULY, 2011	VERT : NTS	
VN BY:	ONE INCH  IF ABOVE MARK DOES NOT	
IKD BY:	MEASURE ONE INCH, THEN THIS DWG. NOT TO SCALE	OF