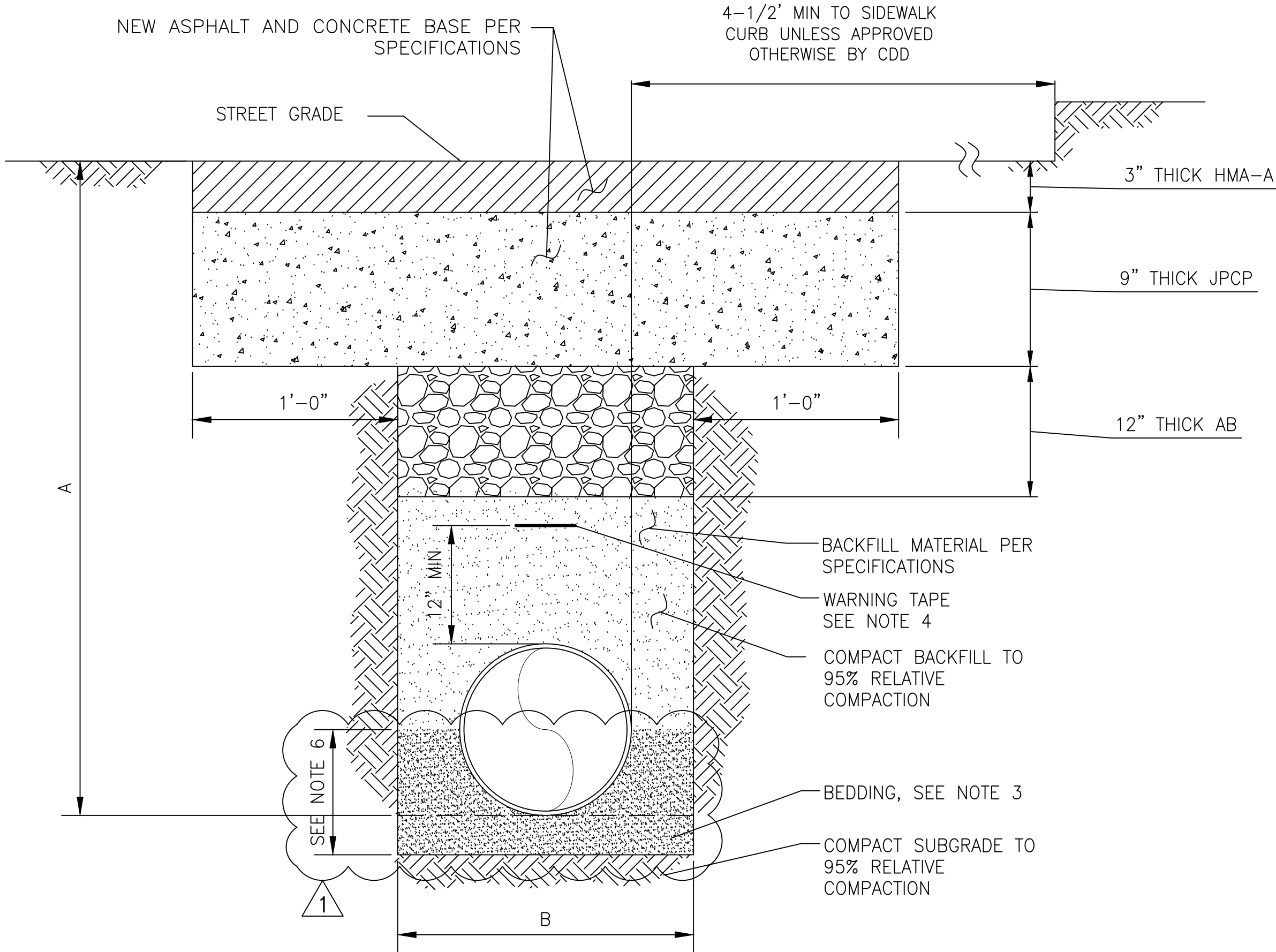


PLOT: EXTEND
SCALE: 1:1
BORDER:
22,34
COLOR: No.
RED 0.70MM
YELLOW 0.20MM
GREEN 0.25MM
CYAN 0.40MM
BLUE 0.50MM
MAGENTA 0.20MM
WHITE 0.35MM
GRAY 0.15MM
9 0.15MM
10 1.00MM
100 0.70MM
210 0.60MM



NOMINAL PIPE DIAMETER	MINIMUM TRENCH DEPTH A	MINIMUM TRENCH WIDTH B
1", 2"	24"	12"
4", 6", 8"	36"	18"
12"	44"	24"
16"	54"	30"
20"	54"	38"
24"	55"	44"
36"	72"	60"
48"	84"	72"

NOTES:

- MINIMUM TRENCH DEPTHS AND TRENCH WIDTHS MUST BE ADHERED TO UNLESS APPROVED OTHERWISE BY THE CITY DISTRIBUTION DIVISION.
- TRENCH CONSTRUCTION SHALL CONFORM TO OSHA AND CAL OSHA.

3. OVEREXCAVATING FOR BEDDING IS NOT REQUIRED UNLESS:

- BOTTOM OF TRENCH EXCAVATION IS IN BEDROCK, WHERE BEDDING SHALL BE 6" THICK.
- FOR 20" AND 24" DIA. PIPE, WHERE BEDDING SHALL BE 4" THICK.
- FOR 36" AND 48" DIA. PIPE, WHERE BEDDING SHALL BE 6" THICK.
- REQUIRED BY THE CITY REPRESENTATIVE.

BEDDING SHALL BE THE SAME AS BACKFILL MATERIAL PER SPECIFICATIONS AND SHALL BE COMPACTED TO 95% RELATIVE COMPACTION.

4. WARNING TAPE SHALL BE 6" WIDE, BLUE COLORED FOR LPW AND PURPLE FOR RW, NON-DETECTABLE TYPE. INSCRIPTION MESSAGE, USING 1.5" MINIMUM HEIGHT BLACK TEXT, SPACED AT 3-FT MAXIMUM INTERVALS, SHALL READ "CAUTION: WATER LINE BELOW" FOR LPW AND "CAUTION: RECYCLED WATER LINE BELOW" FOR RW. WARNING TAPE SHALL OVERLAP 12" MINIMUM AT SPLICES.

5. AREAS UNDER THE ADDITIONAL 1' PAVEMENT TO BE REMOVED FOR THE T-TRENCH RESTORATION SHALL BE SCARIFIED, RESHAPED, AND COMPACTED TO THE REQUIRED DENSITY PRIOR TO FURTHER CONSTRUCTION.

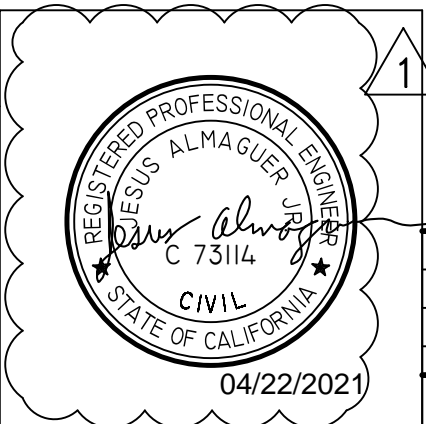
6. ONLY FOR 36" DIA PIPE, BACKFILL SHALL BE CONTROLLED LOW STRENGTH MATERIAL (CLSM) FROM BOTTOM OF TRENCH TO SPRINGLINE OF PIPE. CLSM SHALL HAVE A MAX 100 PSI COMPRESSIVE STRENGTH AT 28-DAYS.

STANDARD TRENCH DETAIL
NTS

FOR THE SOLE USE OF THE DOCUMENT RECIPIENT
- DO NOT CITE, COPY, OR CIRCULATE WITHOUT
THE EXPRESSED PERMISSION OF THE SFPUC.

REFERENCES
GATE BOOK PAGES, PLANS,
SURVEY NOTES, ETC., USED

CCSF 2013
NAVD88



NO.	DATE	DESCRIPTION	BY	APPR'D
1	03/10/21	PCO #3 - REVISE NOTE 6	IC	JA
REVISIONS				

WATER CONTRACT NO. WD-2775
CONTRACT NO. 2652J

CITY AND COUNTY OF SAN FRANCISCO PUBLIC UTILITIES COMMISSION INFRASTRUCTURE DIVISION ENGINEERING MANAGEMENT BUREAU			
INSTALLATION OF 16-INCH AND 36-INCH, AND RELOCATION OF 8-INCH DUCTILE IRON WATER MAINS AT VARIOUS LOCATIONS ON 19TH AVENUE FROM HOLLOWAY AVENUE TO LINCOLN WAY			
WATER TRENCH DETAIL FOR CALTRANS RIGHT OF WAY			
CHECKED / APPROVED	BY / EC	DRAWN	AS SHOWN
SECTION MANAGER	T. LEE	DESIGNED	OCT 2018
APPROVED	<i>[Signature]</i>		APPROVED
MANAGER, ENGINEERING MANAGEMENT BUREAU	PLAN NO.		MANAGER, CITY DISTRIBUTION DIVISION
SHEET	WD-2775-13	DRAWING NO.	REVISION NO.
. OF .	E-31382		