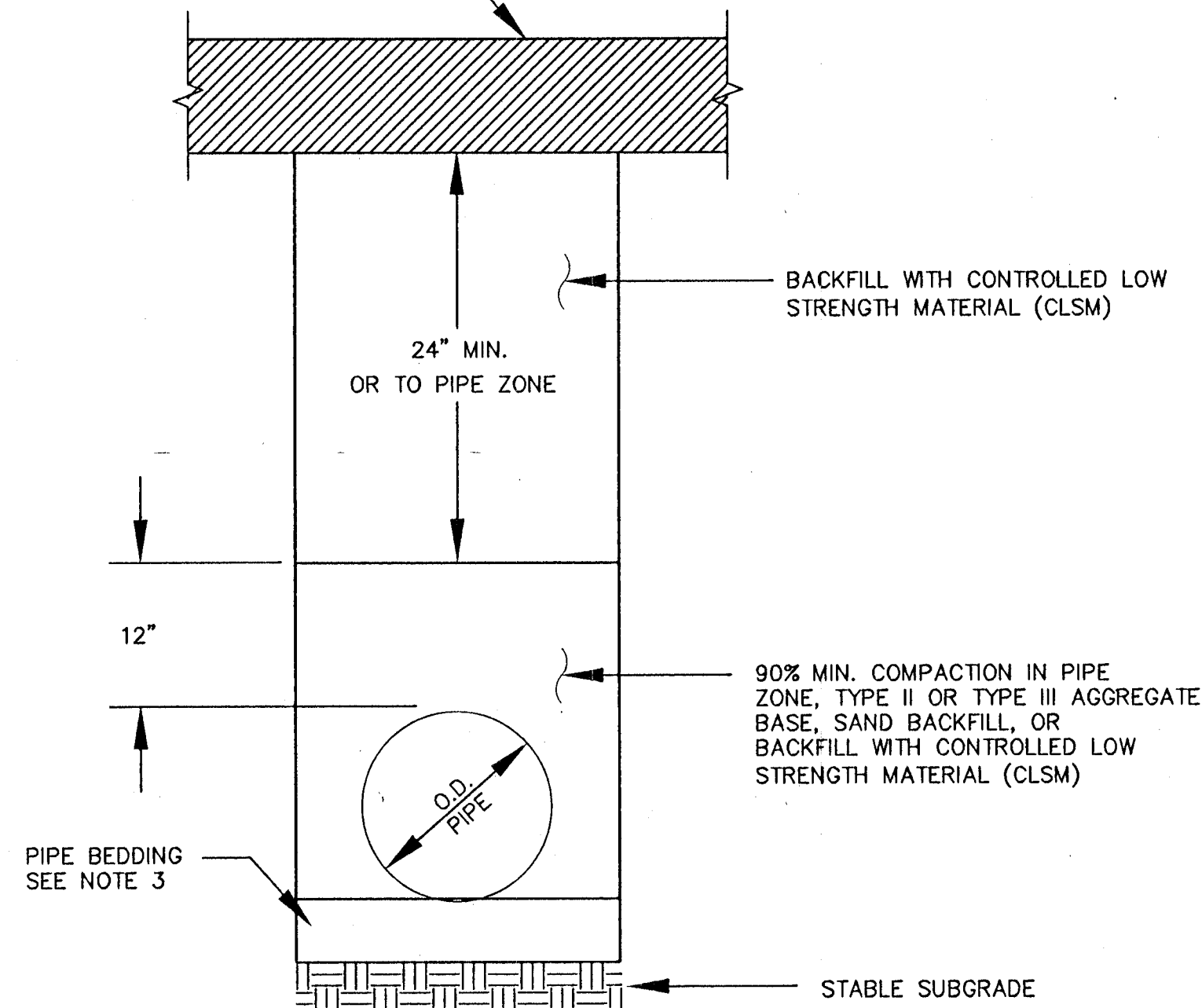


PROPOSED ROADWAY STRUCTURAL SECTION  
(SEE ROADWAY PLANS AND TY SHEETS)

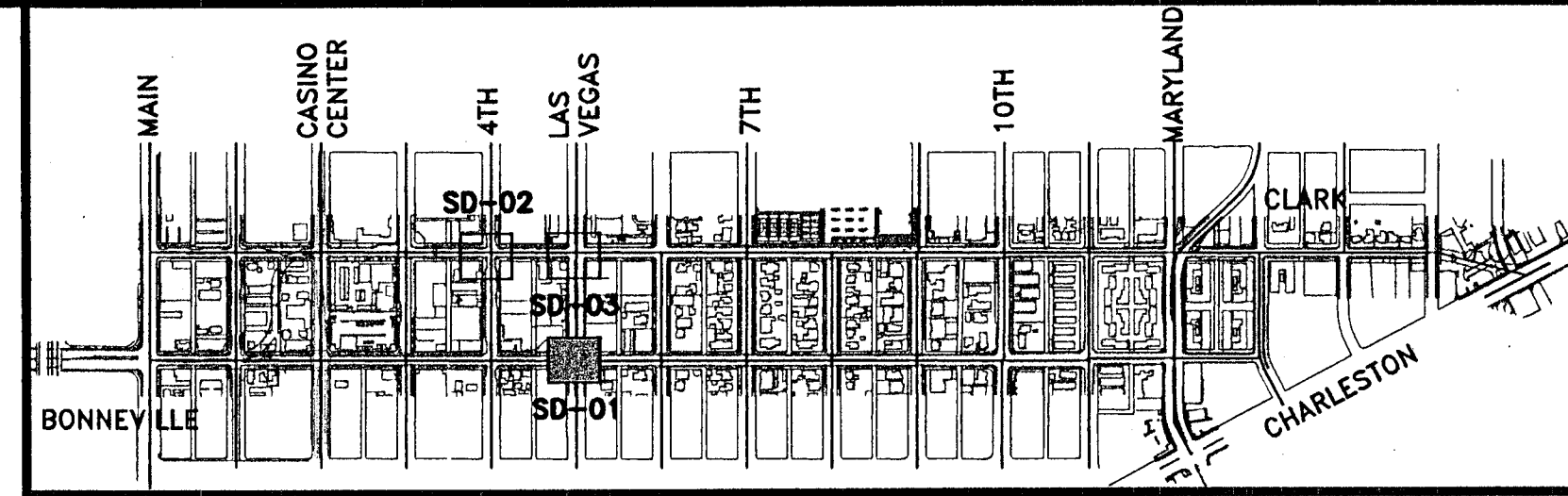
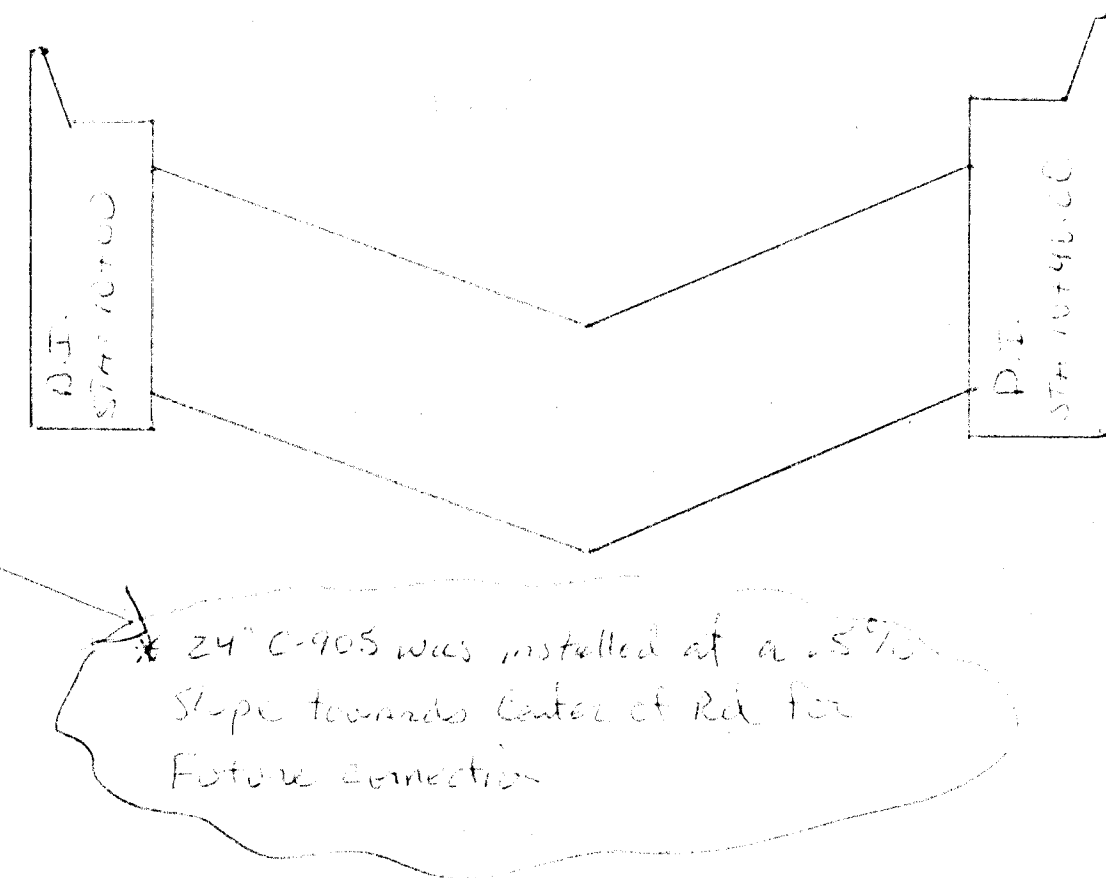


**NOTES:**

1. NO STONES OR LUMPS GREATER THAN 3" PERMITTED IN TRENCH 2' OR LESS IN WIDTH.
2. TRENCH WIDTH, BEDDING, SUBGRADE AND PIPE ZONE REQUIREMENTS FOR UTILITY INSTALLATIONS SHALL CONFORM TO CITY OF LAS VEGAS REQUIREMENTS.
3. CRUSHED ROCK MAY BE USED FOR PIPE BEDDING ONLY IF MATERIAL USE HAS BEEN SPECIFICALLY APPROVED BY THE GOVERNING AGENCY. SEE STANDARD DRAWING NO. 505 FOR PIPE BEDDING METHODS.
4. LAS VEGAS VALLEY WATER DISTRICT REQUIRES PIPE BEDDING AND BACKFILL WITHIN THE PIPE ZONE TO BE OF SAME MATERIAL.

**TRENCH BACKFILL PAVED AREAS  
DETAIL**

(REFERENCE CCAUSD No. 503 - MODIFIED) N.T.S.



**KEY MAP**

**STORM DRAIN NOTES**

1. REMOVE EXISTING DROP INLET.
2. CONNECT PROPOSED IMPROVEMENTS TO EXISTING STORM DRAIN PIPE.
3. CONSTRUCT 60 INCH TYPE III MANHOLE PER CCAUSD No. 406.
4. CONSTRUCT TYPE "CM2" DROP INLET (L=5.0') PER CCAUSD No. 412A.
5. CONSTRUCT TYPE "CM2" DROP INLET (L=15.0') PER CCAUSD No. 412A.
6. INSTALL 24" C-905 PVC PIPE. SEE TRENCH DETAIL SHEET SD-1. STORM PIPE SHALL BE A MINIMUM 6" VERTICAL ABOVE WATER CROSSINGS.
7. CONSTRUCT 24" REINFORCED CONCRETE PIPE CLASS III.
8. CONSTRUCT 18" REINFORCED CONCRETE PIPE CLASS III.
9. REMOVE OR ABANDON EXISTING STORM DRAIN LATERAL IF ABANDON, CUT AND CAP PIPE, BACKFILL WITH CONCRETE SLURRY.
10. CONNECT PROPOSED RCP STORM DRAIN TO EXISTING 48" MANHOLE. PROTECT EXISTING MANHOLE IN PLACE.
11. SAWCUT EXISTING 18" RCP STORM DRAIN 6" FROM EXISTING DROP INLET AND PROTECT EXISTING RCP IN PLACE. CONNECT PROPOSED 18" RCP TO EXISTING 18" RCP WITH CONCRETE PIPE COLLAR PER DETAIL "A" THIS SHEET. SEE TRENCH DETAIL SHEET SD-1.
12. CONSTRUCT TYPE "CM2" DROP INLET (L=10.0') PER CCAUSD No. 412A.

**TAND, INC.**  
**AS-BUILT**

DATE: 11-21-11  
DANIEL MEYER

**BASIS OF BEARING**

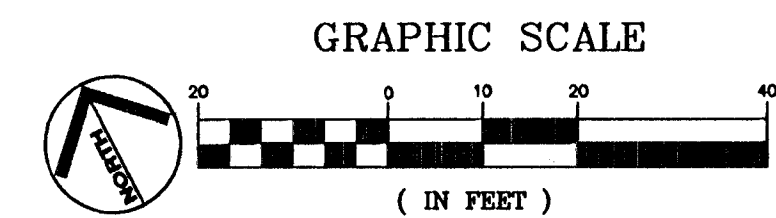
THE BASIS OF BEARINGS FOR THIS SURVEY IS GRID NORTH AS DEFINED BY THE NORTH AMERICAN DATUM OF 1983 (NAD 83), NEVADA STATE PLANE EAST (2701) ZONE. SAID BEARINGS WERE DETERMINED BY STATIC GLOBAL POSITIONING SYSTEM (GPS) MEASUREMENTS PROCESSED BY THE NATIONAL GEODETIC SURVEY DIVISION OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION USING THE ON-LINE POSITIONING USER SERVICE (OPUS). THE REFERENCE FRAME USED WAS NAD83 (GORS98) WITH AN EPOCH OF 2002.0000. ALL DISTANCES SHOWN HEREON ARE GROUND VALUES.

**BENCHMARK**

CITY OF LAS VEGAS VERTICAL CONTROL POINT "BC01 34SW6", BEING A RIVET & PLATE IN TOP OF CURB ON THE EAST SIDE OF MAIN BETWEEN BONNEVILLE & GARCES @ LIGHT POLE.

ELEVATION: 2027.08 (FEET)  
617.8544 (METERS)

CITY OF LAS VEGAS VERTICAL CONTROL DATED 06/2002 BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

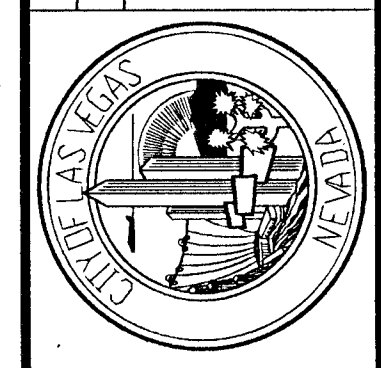


APPROVED FOR CONSTRUCTION  
*Dan Meade*  
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER  
DATE: 06/11/10 PROJECT No. 115404 ESN 018

**811**  
Call before you dig  
SAFETY ALERT  
Call before you dig  
Underground  
Call before you dig  
1-702-227-2829

REVISIONS	DATE
1	6/21/10

DATE: FEBRUARY 2010  
CHECKED BY: PM/AM  
DESIGNED BY: TEA  
SCALE (H): 1" = 20'  
SCALE (V): 1" = 2'  
DRAWN BY: TEA  
**Kimley-Horn and Associates, Inc.**  
Engineering, Planning, and Environmental Consultants  
5050 E. Flamingo Road, Suite 210  
Las Vegas, NV 89119  
PH: (702) 734-4249  
FAX: (702) 734-4249



DEPARTMENT OF PUBLIC WORKS  
PROJECT: BONNEVILLE/CLARK  
ONWAY COUPLER PHASE 1  
IMPROVEMENT PLANS

SHEET: STORM DRAIN SHEET

ENGINEER'S SEAL  
DANIEL MEYER  
CIVIL  
Exp: 12/31/11  
SHEET 39 OF 91  
DRAWING NO. 107V5201

Apr 25, 2010 - 5:08pm - USER: peter.meyerhofer  
L:\MPP\Projects\LV\_Pub\Trns\092256\G19 Bonneville-Clark\_2008\CADD\2560193d-01\_03.dwg

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