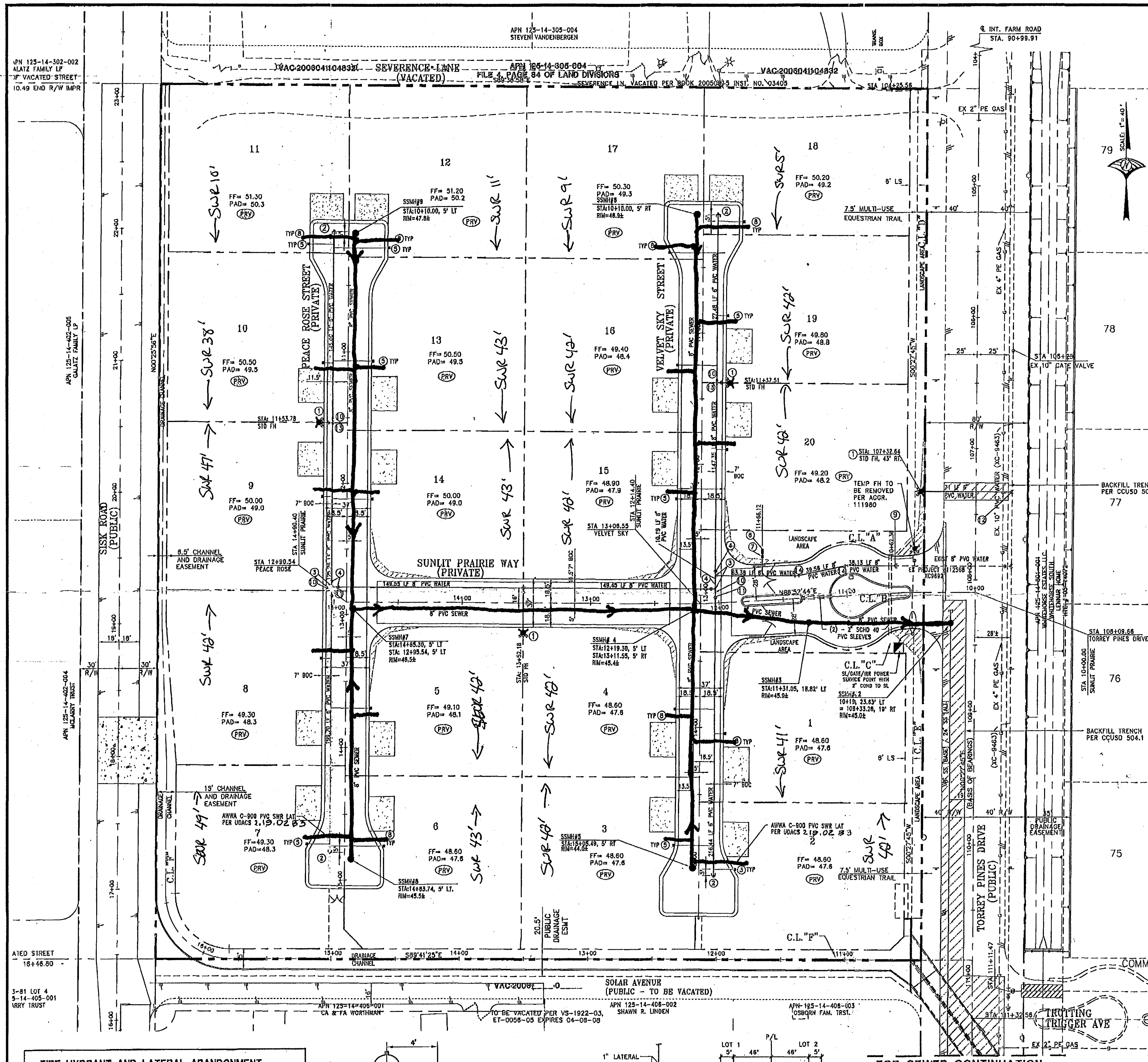


WATER MAIN JOINT DEFLECTION (PVC, 4'-24")
 PVC PIPE SHALL BE DEFLECTED AT THE JOINT ONLY. THE MAXIMUM ALLOWABLE DEFLECTION SHALL BE ONE (1) DEGREE PER JOINT WITH A MINIMUM RADIUS OF CURVATURE OF 1-1/2 FEET PER JOINTS 2-1/2 FEET. FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED.

SINGLE METER BOX-ARMOR CAST
 BOX
 LD
 - P6000485T
 - A6000484T

(PRV) ALL LOTS WHITEHORSE WEST
 THIS PROPERTY MAY HAVE STATIC WATER PRESSURE IN EXCESS OF 80 PSI. THE UNIFORM PLUMBING CODE REQUIRES THAT INDIVIDUAL ON-SITE (PRIVATE) PRESSURE REDUCING VALVES BE INSTALLED WHENEVER THE PRESSURE EXCEEDS 80 PSI. PRV'S ARE IN THE DEVELOPER'S RESPONSIBILITY, AND WILL NOT BE INSPECTED OR INCLUDED IN THE ACCEPTANCE OF LIVING FACILITIES.

WATER ESTIMATE OF QUANTITIES

8" PVC WATER MAIN	717 LBS
8" PVC WATER MAIN	755 LBS
STD. FIRE HYD. W/ASSY.	4 EA
3/4" WATER METER (IRRIGATION)	1 EA
1" WATER METER (DOMESTIC)	20 EA
1" RPPA	1 EA
2" BLOW-OFF ASSEMBLY	4 EA
8" GATE VALVE	4 EA
10" x 8" TAPPING W/ 3/4" TAPPING VALVE	1 EA
8" x 8" TEE	3 EA
8" x 8" REDUCER	4 EA
8" GATE VALVE	2 EA
8" x 8" TEE	2 EA
11.5" ELBOW	2 EA

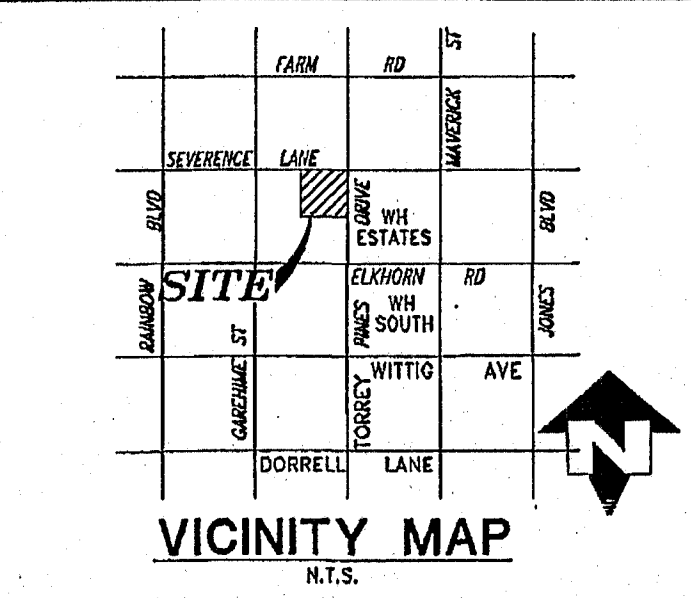
- WATER/SEWER NOTES**
- INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE 1/2" HORIZONTAL ELBOW FITTING, PER UDACS PLATE NO. 1.
 - ALL SEWER/STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.19 OF UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.
 - ALL PRIVATE STREETS ARE CLV SEWER & PUBLIC DRAINAGE EASEMENTS TO BE PRIVATELY MAINTAINED.

REDUCED PRESSURE PRINCIPLE ASSEMBLY (1) - 1'
 APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED PER THE UDACS PLATE NO. 11A. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE REDUCED PRESSURE PRINCIPLE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY THE LVDO.

ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S) TO ALLOW THE DISTRICT DIRECT ACCESS FROM THE ADJACENT RIGHT OF WAY.

EASEMENT(S) SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

- WATER CONSTRUCTION NOTES**
- STD. FIRE HYD. W/ASSY. PER UDACS PLATE 7
 - CAP AND 2" BLOW OFF ASSEMBLY PER UDACS PLATE 1A
 - 8" x 8" TEE PER UDACS PLATE 5
 - 8" GATE VALVE PER UDACS PLATE 8
 - INSTALL 1" TYPE "K" COPPER SERVICE W/ 1" METER PER UDACS PLATE 1D
 - INSTALL 1" RPPA PER UDACS PLATE 11A
 - INSTALL 1" SERVICE W/ 3/4" METER FOR IRRG. PER UDACS PLATE 1D
 - INSTALL 4" SANITARY SEWER LATERAL
 - REMOVE CAP AND BLOWOFF AND CONNECT TO EXISTING 8" WATER STUB
 - 8" x 8" REDUCER PER UDACS PLATE 3
 - 8" GATE VALVE PER UDACS PLATE 8 & 3
 - INSTALL 10" x 8" TAPPING SLEEVE AND TAPPING VALVE PER UDACS PLATES 3, 8, AND 22.
 - 8" x 8" TEE PER UDACS PLATE 5
 - INSTALL 8" 11.25" BEND PER UDACS PLATE 5



BASIS OF BEARING
 NORTH 89°30'01" WEST, BEING THE BEARING OF THE NORTH LINE OF THE SOUTHEAST QUARTER (NE 1/4) OF THE SOUTHEAST QUARTER (SE 1/4) OF SECTION 14, TOWNSHIP 19 SOUTH, RANGE 50 EAST, MON. CLARK COUNTY, NEVADA, AS SHOWN ON THAT CERTAIN MAP ON FILE IN THE CLARK COUNTY RECORDER'S OFFICE.

BENCHMARK
 CITY OF LAS VEGAS BENCHMARK 91V90 14C4
 A RIVET AND PLATE IN A CONCRETE PAD (POWER) AT THE SOUTHWEST CORNER OF FARM ROAD AND TORREY PINES DRIVE.
 ELEVATION=717.2224 METERS (NAVD'83)
 ELEVATION=2353.09 U.S. SURVEY FEET (NAVD'83)

SEWER CONTRIBUTION
 SINGLE FAMILY, ERU = 1.0, P. F. CURVE 0
 AVG. 250 UNITS X 250 GPD X 1 ERU = 57,500 GPD
 57,500 GPD = 0.0375 MGD
 PEAK FACTOR = 3.5 FROM TABLE C
 PEAK FLOW CONTRIBUTION: 0.0375 x 3.5 = 0.2013 MGD

FIRE FLOW DATA
 FIRE FLOW REQUIREMENT IS 2250 GALLONS PER MINUTE AT 20 PSI RESIDUAL PRESSURE.

BASED ON:
 SQUARE FOOTAGE: 7,3782 SQ. FT.
 LARGEST AREA BETWEEN 4-HOUR AREA
 SEPARATION WALLS: N/A
 BUILDING HEIGHT: 28 FT.
 NUMBER OF STORIES: 2
 TYPE OF CONSTRUCTION: V-B
 OCCUPANCY: R-1
 FULL AUTOMATIC FIRE SPRINKLER SYSTEM: N/A

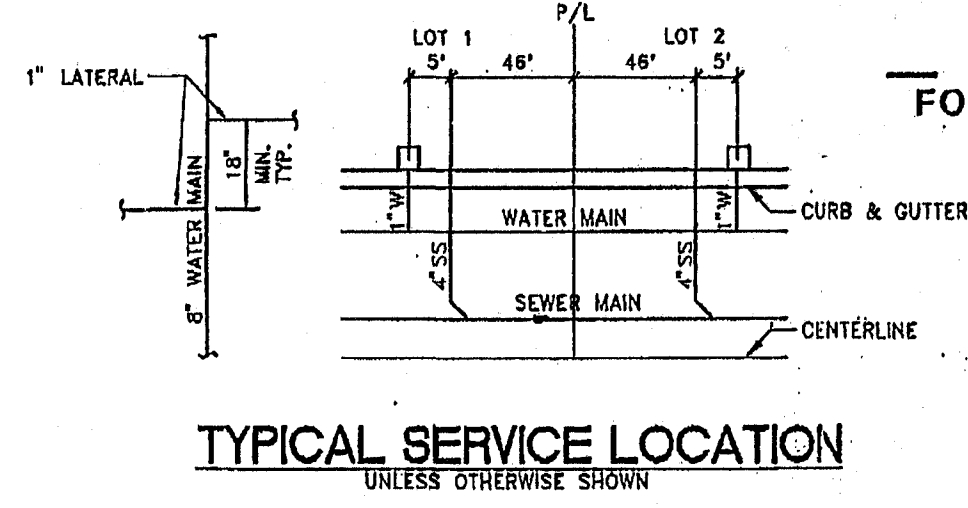
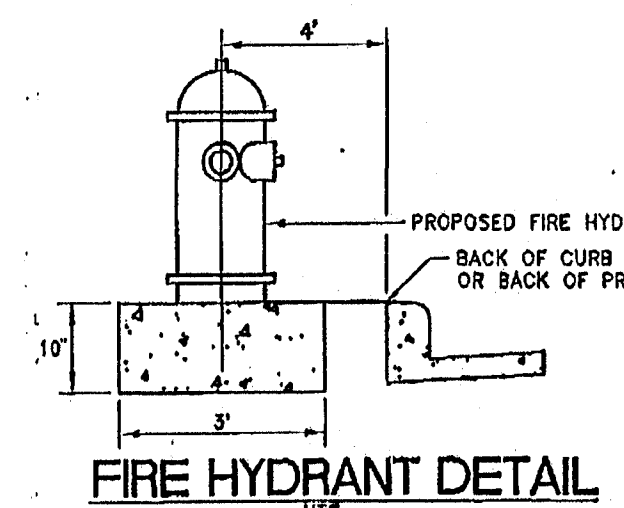
REVIEWED: [Signature]
 DATE: 4-12-27

APPROVALS
 [Signature] 21 MAR 2007
 CLARK COUNTY FIRE DEPARTMENT
 APPROVAL OF THESE PLANS SHALL NOT BE CONSTRUED TO BE A PERMIT FOR, OR AN APPROVAL OF, ANY VIOLATION OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS. REQUIRED FIRE FLOW = 2250 GPM. AT 20 P.S.I. RESIDUAL. ALL BUILDINGS ARE LESS THAN 7700 TOTAL SQUARE FEET.

APPROVED FOR CONSTRUCTION
 [Signature] 4-12-27
 LAS VEGAS VALLEY WATER DISTRICT PROJ. 109705 DATE SHEETS 1 & 5

CLV SEWER
 JORGE A. CERVANTES, P.E. #13977, P.T.O.E. DATE CITY ENGINEER
 APPROVAL OF THESE PLANS IS LIMITED TO THOSE IMPROVEMENTS CONSTRUCTED IN THE DEDICATED RIGHT-OF-WAY AND/OR DEDICATED EASEMENTS. THIS APPROVAL DOES NOT AUTHORIZE THE CONSTRUCTION OF ANY IMPROVEMENTS THAT DEVIATE FROM ADOPTED STANDARDS AND/OR SPECIFICATIONS, EXCEPT THOSE SPECIFICALLY LISTED UNDER DEVIATIONS FROM STANDARDS. THE ENGINEER SHALL RESOLVE ANY DISCREPANCY OTHER THAN THOSE LISTED IN DEVIATIONS FROM STANDARDS IN FAVOR OF THE UNIFORM STANDARD DRAWINGS AND SPECIFICATIONS CLARK COUNTY AREA, NEVADA.

FIRE HYDRANT AND LATERAL ABANDONMENT
 WHERE SHOWN ON THE DRAWING, THE CONTRACTOR SHALL ABANDON THE EXISTING FIRE HYDRANT(S) BY REMOVING BOTH THE UPPER AND LOWER FIRE HYDRANT BARRELS SO THAT NO PORTION OF THE REMAINING FIRE HYDRANT ASSEMBLY IS CLOSER THAN TWO (2) FEET TO THE EXISTING GRADE. THE EXISTING HYDRANT SHALL BE DELIVERED TO THE DISTRICT. THE EXISTING VALVE SHALL BE ABANDONED IN A CLOSED POSITION, UNLESS SHOWN OTHERWISE, BY REMOVING A MINIMUM OF THE TOP TWENTY-FOUR (24) INCHES OF THE VALVE BOX AND THEN FILLING THE BOTTOM OF THE BOX WITH A MINIMUM OF EIGHT (8) INCHES OF SAND OR TYPE 1 AGGREGATE BASE. THE REMAINING PORTION OF THE VALVE BOX SHALL BE FILLED WITH CONCRETE HAVING A COMPRESSIVE STRENGTH OF AT LEAST TWO-THOUSAND (2000) PSI. THE REMAINING PORTION OF THE LATERAL SHALL BE CUT WITHIN THREE (3) FEET OF THE ABANDONED VALVE OR AS SHOWN ON PLANS, AND CAPPER. THE EXISTING CONCRETE HYDRANT PAD SHALL BE REMOVED.



FOR SEWER CONTINUATION
 SEE SHEET 9

Call before you Dig

1-800-227-2600

Call before you OVERHEAD

1-702-227-2929

WOOD RODGERS
 ENGINEER
 [Signature]
 DATE: 4-12-27
 HTE# 06-27884
 CLV # 307V996

IMPROVEMENT PLANS FOR
SEWER ABANDONMENT WHITEHORSE WEST
 UTILITY PLAN
 CLARK COUNTY
 PROJECT NO. 1891.001
 DRAWING 5
 SHT. 5 OF 15

SEWER AS BUILT