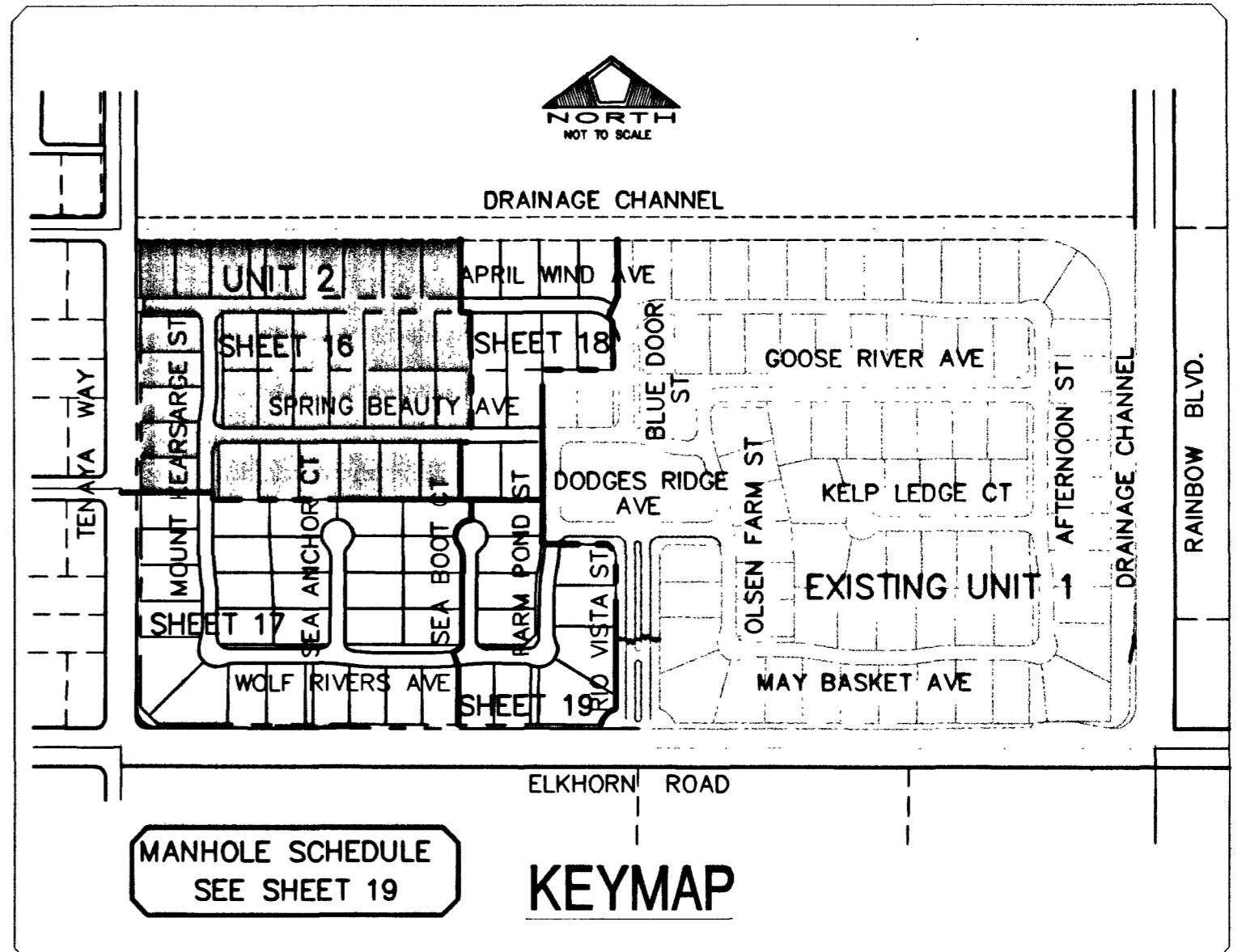


PROPOSED BELLA VISTA DEVELOPMENT BY OTHERS
APN 125-15-701-001

CONTRACTOR SHALL FIELD LOCATE AND PROTECT ALL SNWA/SNWS APPURTENANCES INCLUDING BUT NOT LIMITED TO A/V/AR ACCESS MAINWAYS AND CATHODIC PROTECTION SYSTEMS. ALL ABOVE GROUND STRUCTURES AND AT GRADE STRUCTURES MUST BE ADJUSTED TO NEW GRADE AT CONTRACTOR'S EXPENSE. CATHODIC PROTECTION TEST STATIONS, RECTIFIERS, AND A/V/AR'S MUST BE RELOCATED TO SIDEWALK PER SNWA STANDARDS AND AT CONTRACTOR'S EXPENSE. CONTRACTOR TO NOTIFY SOUTHERN NEVADA WATER AUTHORITY DEVELOPMENT PLAN REVIEW AT (702) 832-3444 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION ACTIVITY.

SOUTHERN NEVADA WATER AUTHORITY DATE
SNWA APPROVAL IS VALID FOR ONE (1) YEAR FROM SIGNATURE DATE. IF CONSTRUCTION WITHIN THE EASEMENT OR RESTRICTED PIPE SAFETY ZONE IS NOT COMPLETE, PLANS MUST BE RESUBMITTED TO SNWA FOR APPROVAL.



MANHOLE SCHEDULE
SEE SHEET 19

Southern Nevada Water Authority (SNWA) facilities are located in the area of this project and it is required that they be included in the coordination and approval process PRIOR to District signature. If you have not already done so, you may contact SNWA at:
Southern Nevada Water Authority
1900 E. Flamingo Road, Suite 170
Las Vegas, NV 89199
(702) 862-3444 Fax (702) 862-3485 ESNR.038

FIRE FLOW CALCULATIONS

FIRE FLOW REQUIREMENTS IS 1,750 GALLONS PER MINUTE AT 20 PSI RESIDUAL PRESSURE

BASED ON:

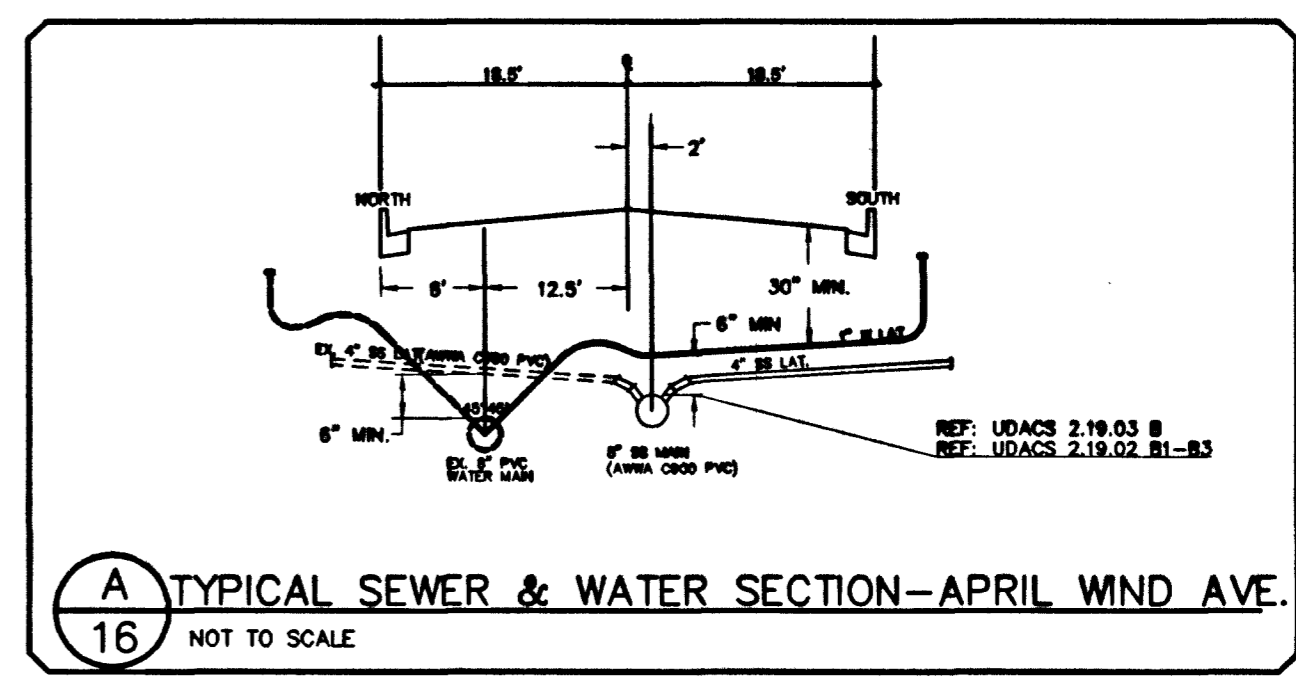
SQUARE FOOTAGE	4800 SF
LARGEST AREA BETWEEN 4-HOUR AREA SEPARATION WALLS	N/A
BUILDING HEIGHT	20' ±
NUMBER OF STORIES	ONE-STORY
TYPE OF CONSTRUCTION	TYPE 5 NR
OCCUPANCY	SINGLE-FAMILY
FULL AUTOMATIC FIRE SPRINKLER SYSTEM	NONE

REVIEWED BY: *Ruo* DATE: 6/10/03

- WATER FITTINGS LEGEND:**
- 8" TEE
 - 8" 45° BEND
 - 8"x6" REDUCER
 - 8" 90° BEND
 - 8" GATE VALVE
 - FIRE HYDRANT ASSY. PER UDACS PLATE 7 INCLUDING 6" G.V.
 - 2" BLOW-OFF ASSEMBLY W/CAP PER UDACS PLATE 4

BASIS OF BEARING

THE BASIS OF BEARING FOR THIS SURVEY IS THE WEST LINE OF THE SOUTHEAST QUARTER (SE 1/4) OF SECTION 15, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CLARK COUNTY, NEVADA, AS SHOWN IN



NOTE: INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING, PER MANUFACTURER INSTRUCTIONS.

ESTIMATE OF WATER QUANTITIES

6" PVC WATER MAIN	433 LF.
8" PVC WATER MAIN	3,265 LF.
3/4" WATER METER (FROM LVWVD)	85 EA.
W/ 1" COPPER SERVICE (UDACS PLATE 10)	
1" WATER METER (IRRIGATION)	5 EA.
W/ 1" COPPER SERVICE (UDACS PLATE 10)	
1" R.P.A. (IRRIGATION) (UDACS PLATE 11A)	1 EA.
2" BLOW-OFF ASSEMBLY W/CAP	2 EA.
8" TEE	3 EA.
8" x 6" REDUCER	2 EA.
STD. FIRE HYDRANT ASSEMBLY W/ 6" LATERAL, 6" GATE VALVE	9 EA.
8" GATE VALVE	4 EA.
45° BEND	4 EA.

NOTE: QUANTITIES ARE APPROXIMATE ONLY- CONTRACTOR TO VERIFY.

- UTILITY LEGEND**
- EX 8" W --- EXISTING WATER LINE W/SIZE
 - 8" W --- PROPOSED WATER LINE W/SIZE
 - PROPOSED WATER LATERAL
 - PROPOSED FIRE HYDRANT W/6" LATERAL & 6" G.V.
 - EX 8" S --- EXISTING SEWER LINE W/SIZE
 - 8" S --- PROPOSED SEWER LINE W/SIZE
 - PROPOSED SEWER LATERAL
 - EXISTING SEWER MANHOLE
 - PROPOSED SEWER MANHOLE
 - 0" LP DRIVEWAY
 - GATE VALVE
 - CONCRETE DRIVEWAY
 - 12" W --- 8" W --- WATER REDUCER
 - BWV --- REQUIRES BACKWATER VALVE
 - PRV --- REQUIRES PRESSURE REDUCER VALVE

PRIVATE STREET NOTE

NOTE: ALL PRIVATE STREETS ARE PUBLIC DRAINAGE EASEMENTS, CLV SEWER AND PUE EASEMENTS TO BE PRIVATELY MAINTAINED BY THE HOME OWNERS ASSOCIATION.

MATCHLINE - SEE SHEET 17

Call before you dig. 1-702-593-6111

Call before you dig. 1-800-227-2600

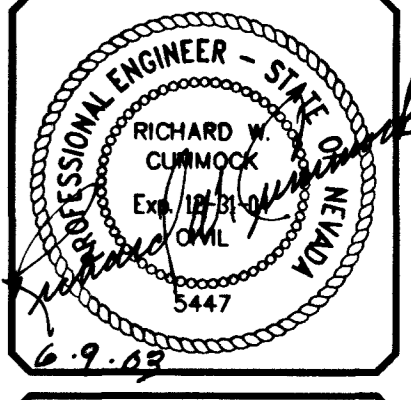
BENCHMARK

CITY OF LAS VEGAS BENCHMARK NO. 1LV90 11SW. RIVET AND PLATE IN TOP OF CURB, SOUTHEAST CORNER OF RAINBOW BLVD AND FLANAGAN DRIVE. ELEVATION = 724.3103 METERS (NAVD '88 PUBLISHED) ELEVATION = 2376.34 U.S. SURVEY FEET (NAVD '88 CALCULATED) PROJECT ELEVATION = 2376.52 U.S. SURVEY FEET

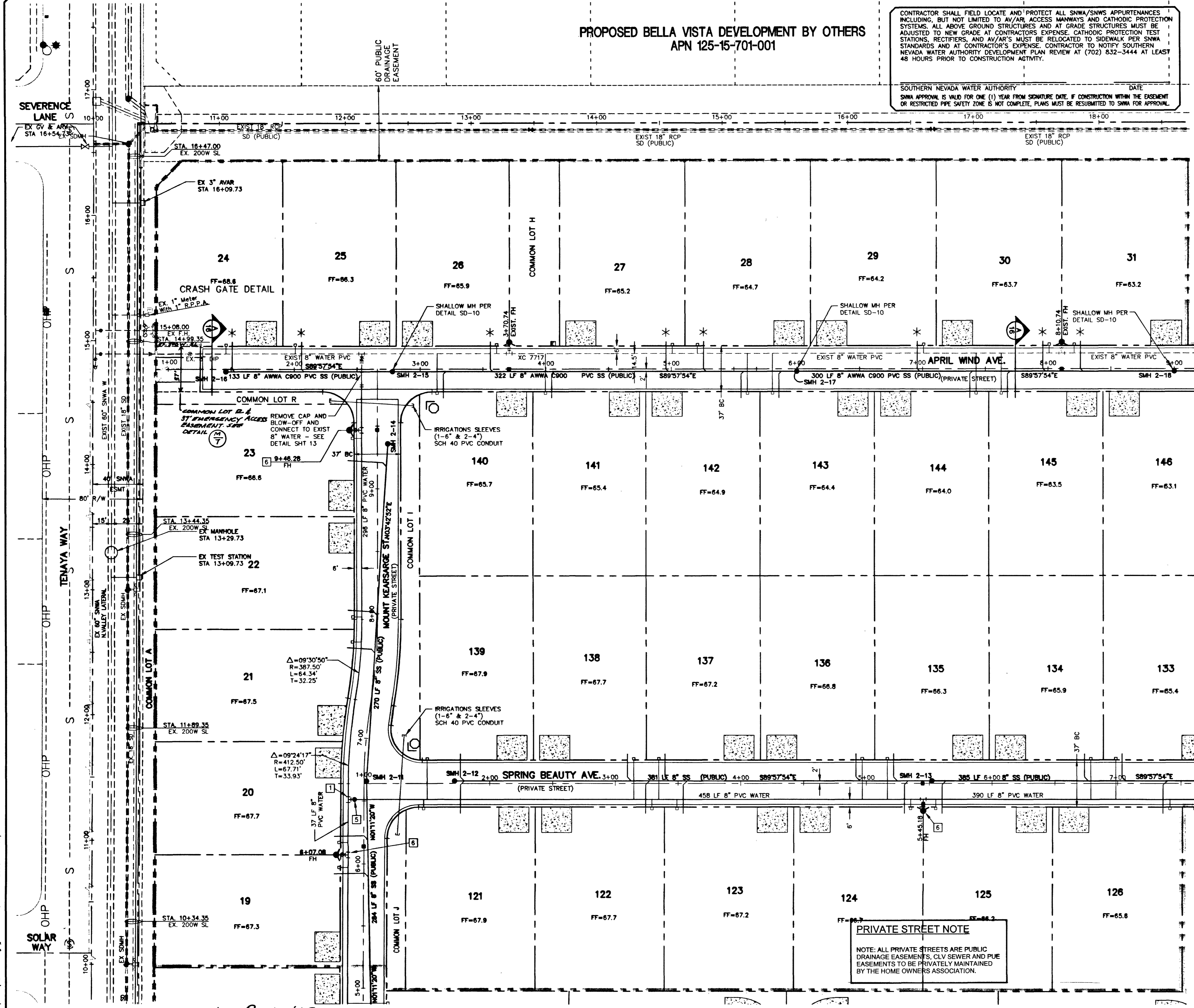
- TRAFFIC LEGEND**
- 9" D3 STREET NAME SIGN (PER STD DWG 250)
 - 30" STOP SIGN (R1-1) LOCATE AT BCR
 - BLUE REFLECTIVE MARKER
 - STREET SIGN AS NOTED PER PLAN

APPROVALS

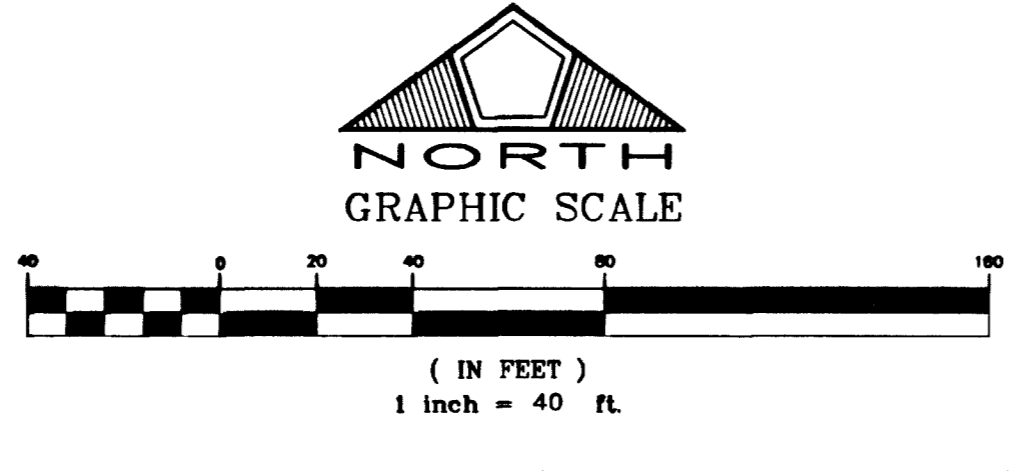
Robert Bell
QTY FIRE MARSHAL
LAS VEGAS VALLEY WATER DISTRICT



SHEET 16 OF 20



PROJECT NAME: *Wyeth Ranch Unit 2*
SHEET: *9/10/13/16/20* Part 2 of 7
This project water plan complies with the Las Vegas Valley Water District's technical requirements. However, this water plan is **NOT APPROVED FOR CONSTRUCTION** at this time and this signature does not provide or imply a water commitment.
LVWVD DATE: 6/10/03 ESN.062



SEWER AVERAGE DAILY FLOWS = 0.021 MGPD
PEAK FLOWS = 0.060 MGPD