AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY
Call before you Dig.
1-800-227-2600
UNDERGROUND SERVICE (USA)

AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY
CALL BEFORE YOU DIG OVERHEAD
1-702-593-6111

FIRE FLOW CALCULATIONS

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

BASED ON:
SQUARE FOOTAGE: 4,000 SQUARE FEET
LARGEST AREA BETWEEN 4-HOUR AREA SEPARATION WALLS: N/A SQUARE FEET
BUILDING HEIGHT: 30 FEET
NUMBER OF STORIES: 2 FEET
TYPE OF CONSTRUCTION: V-N
OCCUPANCY: SF
FULL AUTOMATIC FIRE SPRINKLER SYSTEM: ☐ YES ☒ NO

REVIEWED BY: LAS VEGAS FIRE DEPT. DATE: 8.25.05

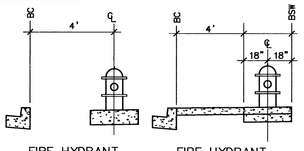
WATERLINE DATA TABLE

◇	BEARING	LENGTH
6	N35°07'22"E	12.12'
7	N22°34'04"E	12.12'
8	N54°52'38"W	20.00'
9	N48°14'49"E	85.34'
10	N36°59'49"E	213.74'
11	N25°44'49"E	11.81'
12	N25°44'49"E	34.05'
13	N25°44'49"E	3.44'
14	N25°44'49"E	167.65'
15	N14°29'49"E	67.74'
16	N14°29'49"E	26.62'
17	N75°30'11"W	20.00'
18	N64°15'11"W	52.14'
19	N18°20'00"E	141.94'
20	N06°25'54"E	67.67'
21	N06°25'54"E	121.79'
22	N06°09'37"E	134.36'

WATER MAIN JOINT DEFLECTION (PVC, 4"-24")

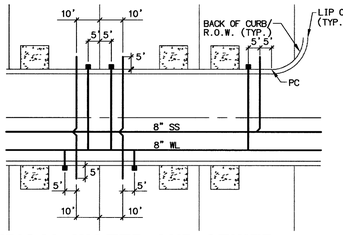
PVC PIPE SHALL BE DEFLECTED AT THE JOINT ONLY. THE MAXIMUM ALLOWABLE DEFLECTIONSHALL BE ONE (1) DEGREE PER JOINT WITH A MINIMUM RADIUS OF CURVATURE OF 1,150 FEET, PER UDACS 2.06.01 AND 2.06.02

FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED.



FIRE HYDRANT WITHOUT SIDEWALK — FIRE HYDRANT WITH SIDEWALK

FIRE HYDRANT LOCATION DETAIL



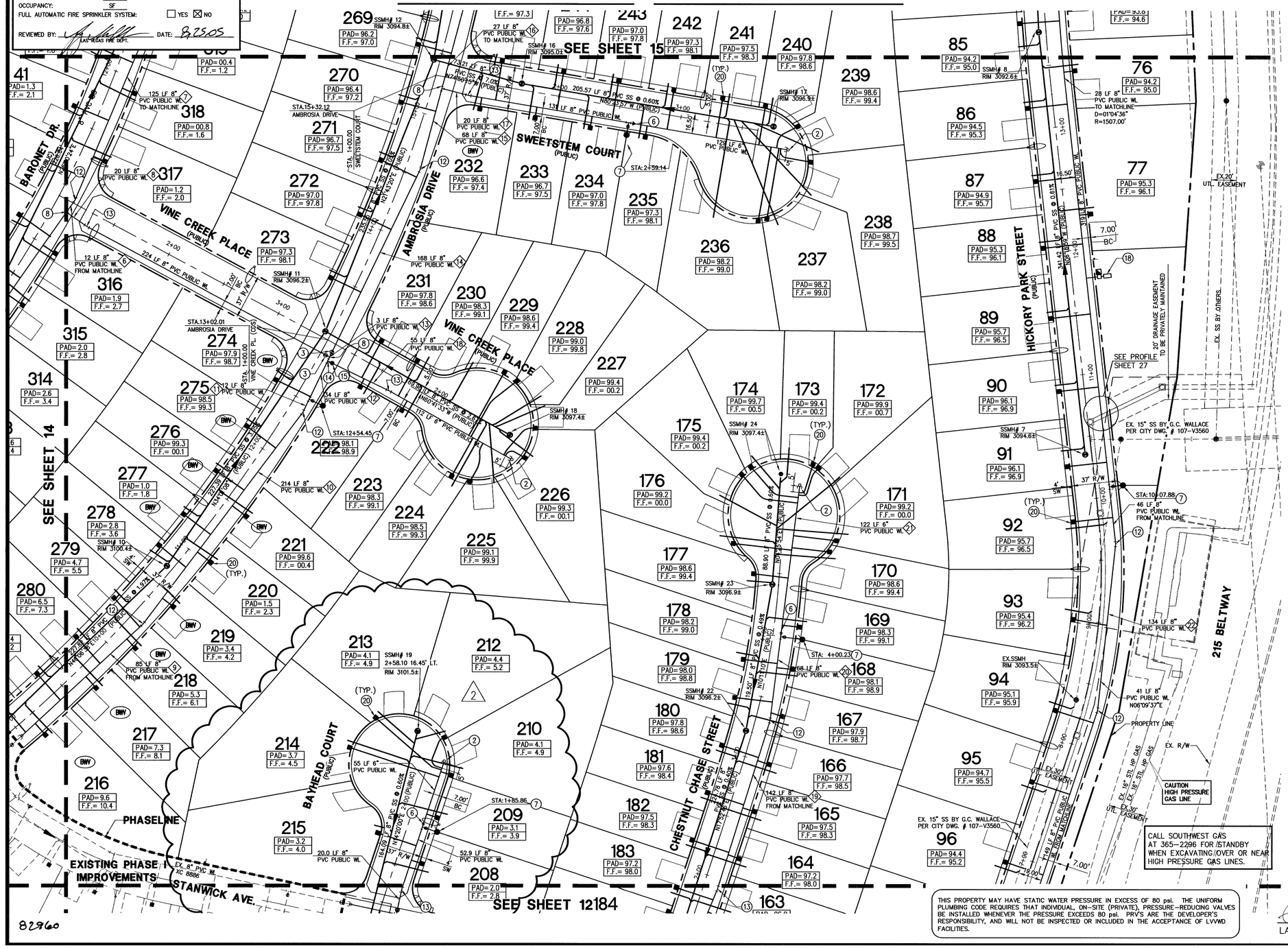
TYPICAL WATER AND SEWER SERVICE LOCATIONS

NOTE:
INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING, PER UDACS PLATE NO. 27.

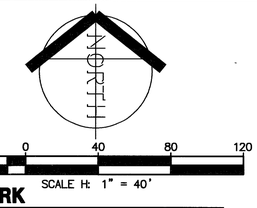
REDUCED PRESSURE PRINCIPLE ASSEMBLY (2) – 1" RPPA
APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED PER THE UDACS PLATE NO. 11A. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE REDUCED PRESSURE PRINCIPLE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY THE LVVWD. 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 SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

ESTIMATED SEWER CONTRIBUTION:

215 UNITS X 250 GPD/UNIT = 53,750 GPD
TOTAL AVERAGE CONTRIBUTION = 53,750 GPD = .053750 MGD
TOTAL PEAK FLOW = .053750 MGD X 3.3 (PEAK FACTOR) = 0.177375 MGD



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 THE DEVELOPER'S RESPONSIBILITY, AND WILL NOT BE INSPECTED OR INCLUDED IN THE ACCEPTANCE OF LVVWD FACILITIES.



BENCHMARK

RIVET AND PLATE IN TOP OF CURB AT NW CORNER OF PAVILION CENTER AND PALO BREA DR (NO. OLV09 36W4)

3030.95 NAVD 1988 DATUM (923.834 M)

BASIS OF BEARINGS

NORTH 89°45'05" EAST BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 35, TOWNSHIP 20, RANGE 59 EAST, M.D.M. AS SHOWN BY MAP ON FILE IN FILE 91, PAGE 28 OF PARCEL MAPS IN THE CLARK COUNTY RECORDER'S OFFICE, CLARK COUNTY, NEVADA.

NOTE TO CONTRACTOR

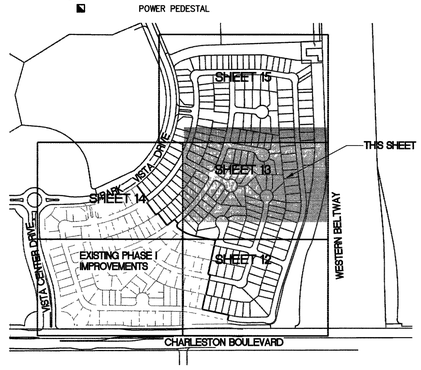
PRIOR TO CONSTRUCTION: THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES, WHETHER OR NOT THEY ARE DEPICTED ON THESE PLANS. THE CONTRACTOR WILL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS.

CONSTRUCTION NOTES

1. INSTALL 12" GATE VALVE
2. INSTALL CAP & 2" BLOW OFF ASSEMBLY PER U.D.A.C.S. PLATE 4A
3. INSTALL 8" GATE VALVE
4. INSTALL (2) 4" PVC SLEEVE FOR IRRIGATION WATERLINE
5. INSTALL 12" X 8" REDUCER
6. INSTALL 8" X 6" REDUCER
7. INSTALL FIRE HYDRANT ASSEMBLY PER U.D.A.C.S. PLATE 7 NOTE: SEE LEGEND
8. INSTALL 8" TEE
9. INSTALL 90° BEND
10. INSTALL 45° BEND
11. INSTALL 22.5° BEND
12. INSTALL 11.25° BEND
13. INSTALL 5° BEND W / RESTRAINED JOINTS
14. INSTALL 8" x 6" TEE
15. INSTALL 6" GATE VALVE
16. INSTALL 12" x 6" TEE
17. INSTALL 12" x 12" x TEE
18. 1" WATER SERVICE WITH 1" WATER METER (IRRIGATION) & 1" RPPA (IRRIGATION) PER UDACS PLATE NO. 1D AND 11A AND POWER PEDESTAL
19. INSTALL 6" GATE VALVE
20. 1" WATER SERVICE WWITH 3/4" WATER METER DOMESTIC PER UDACS PLAT 1B
21. INSTALL PVC IRRIGATION SLEEVES QUANTITY AND SIZE ON PLANS

LEGEND

XX LF 8" PUBLIC WL	WATER LINE
8" PUBLIC SS	SEWER LINE
	FIRE HYDRANT ASSEMBLY (INCLUDES ALL MATERIALS FROM THE MAIN TO THE HYDRANT NECESSARY FOR A COMPLETE AND OPERABLE UNIT)
	6" SEWER LATERAL
	GATE VALVE
	CAP AND 2" BLOW OFF ASSEMBLY
	REDUCER
	SEWER MANHOLE
	1" WATER SERVICE WITH 3/4" WATER METER (DOMESTIC) PER UDACS PLATE 1B
(8" PUBLIC SS)	EXISTING SEWER
(12" PUBLIC WL)	EXISTING WATER
	1" WATER SERVICE WITH 1" WATER METER (IRRIGATION) & 1" RPPA (IRRIGATION) PER UDACS PLATE NO. 1D AND 11A
BWV	BACKWATER VALVE REQUIRED
	POWER PEDESTAL



KEY MAP

NOT TO SCALE

1st App'd. 8/31/05

LAS VEGAS VALLEY WATER DISITRICT–PROJ. NO. 110523 DATE 8/25/05
1074836-2

REV.	DATE	BY	DESCRIPTION	APPROVE	DATE
1	8-12-05	TLK	REVISED CUL-DE-SAC, REV. WL & SS, ADD. PAD GRADES, RE-CURB & PAD GRADES.	KLS	8/30/05
			ELIMINATED LOT 231, RELOCATED FH AT LOT 209		

SUMMERLIN

RBF CONSULTING — PLANNING ■ DESIGN ■ CONSTRUCTION
8335 WEST FLAMINGO ROAD
LAS VEGAS, NEVADA 89147-4134
702.804.0180 • FAX 702.364.0189 • www.RBF.com

SHEET: KINGWOOD - PHASE II UTILITY PLAN 2

TITLE: VILLAGE 20 AT SUMMERLIN PARCEL E,F & G

DRAWN BY: TLK	8/12/05	
DESIGNED BY: TLK	8/12/05	
CHECKED BY: MWJ	8/12/05	
PROJECT NO. 50-100450	SCALE: 1" = 40'	

SEAL: PROFESSIONAL ENGINEER — STATE OF NEVADA — MARK W. JOHNSON — Exp: 6/30/07 — CIVIL — No. 12729

SHEET 13 OF 39 SHEETS