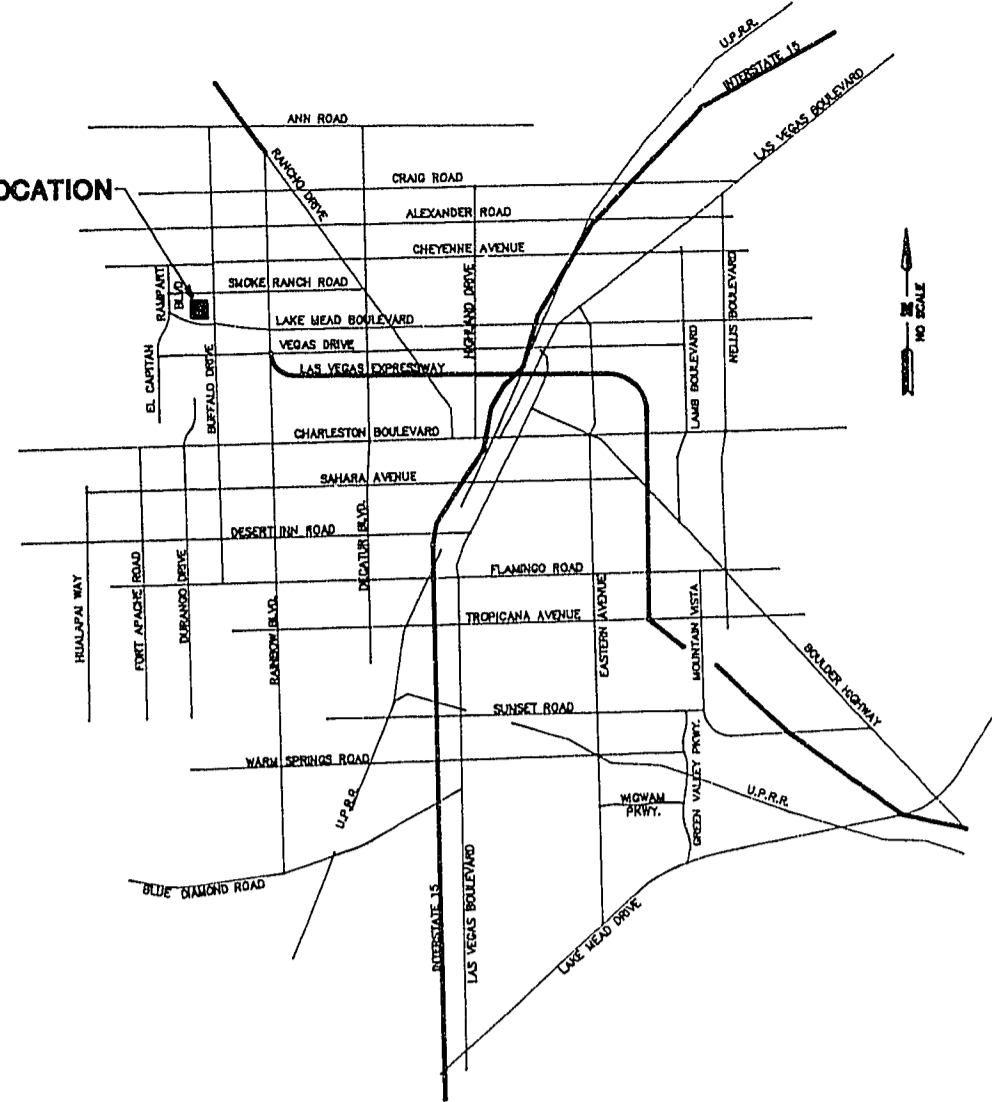


PROJECT LOCATION



VICINITY MAP

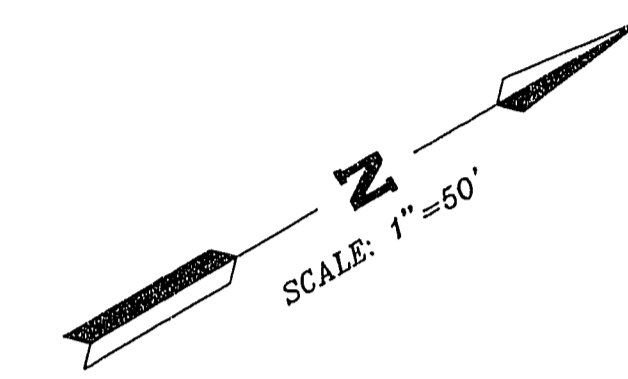
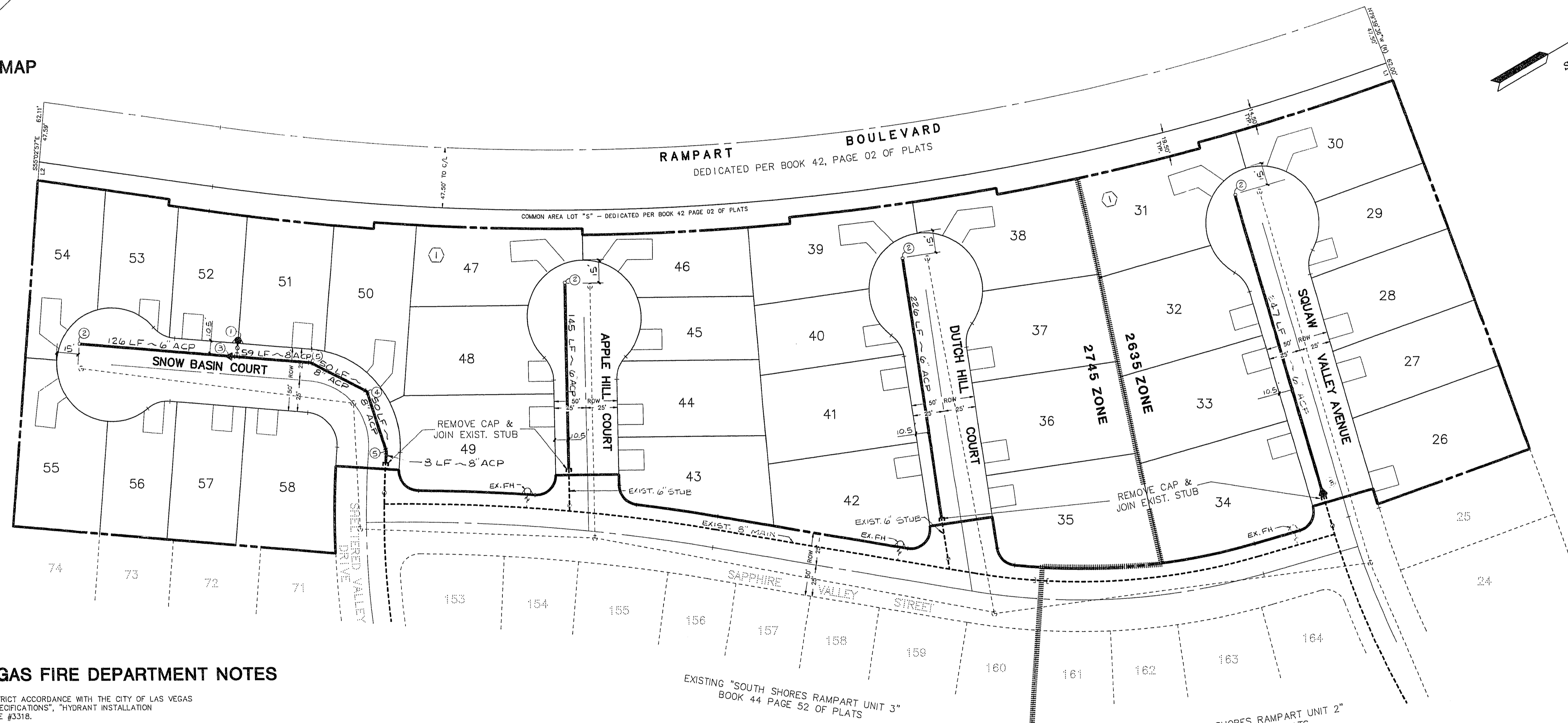
LAS VEGAS FIRE DEPARTMENT

FIRE FLOW REQUIREMENT IS 1500 GALLONS PER MINUTE AT 20 POUNDS PER SQUARE INCH RESIDUAL BASED ON:
 AREA SEPARATION FIRE WALLS MUST BE IDENTIFIED.
 SQUARE FOOTAGE 1600 - 2000
 LARGEST AREA BETWEEN AREA SEPARATION WALLS 2000
 HEIGHT 1 - 2 STORY
 TYPE OF CONSTRUCTION CLASS 1
 EXPOSURES 10' MIN.
 SPRINKLER SYSTEM NA
 OCCUPANCY RESIDENTIAL
 ROOF CONSTRUCTION CONCRETE TILE
 REVIEWED BY: _____
 DATE: _____
 _____ GPM REQUIRED WITHIN 500 FT. OF ALL BUILDING AREAS.

QUANTITY ESTIMATE

NOTE: THESE QUANTITIES ARE ONLY ESTIMATES, CONTRACTOR TO VERIFY.

| | | |
|---|---------------------------|----------|
| ① | FIRE HYDRANT W/ASSEMBLY | 1 EA. |
| ② | 2" BLOWOFF | 4 EA. |
| ③ | 8" x 6" REDUCER | 2 EA. |
| ④ | 45° ELBOW | 1 EA. |
| ⑤ | 22 1/2° ELBOW | 2 EA. |
| | 8" ACP WATER MAIN | 167 L.F. |
| | 6" ACP WATER MAIN | 744 L.F. |
| | 3/4" SERVICE | 33 EA. |
| | 3/4" METERS BY L.V.V.W.D. | 33 EA. |



CITY OF LAS VEGAS FIRE DEPARTMENT NOTES

- ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE CITY OF LAS VEGAS FIRE DEPARTMENT "HYDRANT SPECIFICATIONS", "HYDRANT INSTALLATION SPECIFICATIONS" AND ORDINANCE #3318.
- AUTHORIZED HYDRANTS FOR THIS PROJECT ARE:
 A - KENNEDY GUARDIAN
 B - MUELLER A-421 CENTURION
 C - CLOW MODEL 2546 MEDALLION
- ON ANY NEW HOME OR BUILDING CONSTRUCTION, ACCESSIBLE FIRE HYDRANTS SHALL BE INSTALLED BEFORE COMBUSTIBLE CONSTRUCTION COMMENCES AND SAID FIRE HYDRANTS SHALL BE IN GOOD WORKING ORDER WITH AN ADEQUATE WATER SUPPLY.
- CONTRACTOR SHALL PLACE A GREEN REFLECTIVE MARKER AT CENTERLINE OF STREET ADJACENT TO FIRE HYDRANTS.
- A FLOW TEST MUST BE WITNESSED BY THE FIRE DEPARTMENT FOR VERIFICATION OF ON-SITE WATER SUPPLY.
- PAINTING OF THE CURBS AND HYDRANTS AND ANY WORK NECESSARY FOR PROTECTION OF HYDRANTS FROM PHYSICAL DAMAGE PER ORDINANCE #3318 SHALL BE COMPLETED BEFORE APPROVAL BY THE CITY OF LAS VEGAS FIRE DEPARTMENT.
- FIRE HYDRANT SPACING:
 RESIDENTIAL 600 FEET MAXIMUM
 COMMERCIAL 500 FEET MAXIMUM.
 FIRE HYDRANTS SHALL BE LOCATED WITHIN 500 FEET OF ANY CONSTRUCTION OR COMBUSTIBLE OPEN STORAGE.
- NO FIRE HYDRANT SHALL BE LOCATED WITHIN 8 FEET OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREET LIGHT OR ANY OTHER OBSTRUCTION.
- NO FIRE HYDRANT SHALL BE LOCATED WITHIN THE REQUIRED RADIUS OF A CUL-DE-SAC OR WITHIN 20 FEET OF THE PERIMETER OF THE RADIUS OF THE CUL-DE-SAC.
- A PERMIT IS REQUIRED FROM THE FIRE DEPARTMENT FOR WATER LINE AND FIRE HYDRANT INSTALLATIONS ON THE PRIVATE SIDE OF THE METER.
- ENSURE THAT FIRE HYDRANTS ARE CONNECTED TO A DEPENDABLE WATER SUPPLY CAPABLE OF SUPPLYING THE REQUIRED FIRE FLOW.
- ALL ON-SITE FIRE MAIN MATERIALS MUST BE U.L. LISTED AND F.M. APPROVED.

LAS VEGAS VALLEY WATER DISTRICT NOTES

- ALL WORK TO CONFORM TO LAS VEGAS VALLEY WATER DISTRICT LATEST STANDARD PLATES AND SPECIFICATIONS.
- ALL WORK, EXCEPT AS MODIFIED HEREON OR BY NOTE 1, SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT DRAFT OR EDITION OF UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS CLARK COUNTY AREA.
- NOTICE TO BE GIVEN TO THE ENGINEERING DEPARTMENT OF THE LAS VEGAS VALLEY WATER DISTRICT 48 HOURS PRIOR TO ACTUAL CONSTRUCTION.
- SERVICE SADDLES OR TAPPED COLLARS WILL BE REQUIRED ON ALL 3/4" AND 1" SERVICE LATERALS. SERVICE SADDLES ONLY WILL BE PERMITTED ON 1 1/2" AND 2" SERVICE LATERALS. DOUBLE TAPPED COLLARS ARE NOT PERMITTED.
- ALL LINES TO BE PRESSURE TESTED TO 200 PSI.
- DEFLECTION ANGLE SHALL NOT EXCEED 2 1/2 DEGREES PER 13 FOOT SECTION OF PIPE FOR PIPE SIZES SMALLER THAN 14 INCHES, AND SHALL NOT EXCEED 2 DEGREES FOR PIPE SIZES BETWEEN 14" AND 16".
- ALL METERS SHALL BE LOCATED OUTSIDE OF DRIVEWAYS.
- DETECTOR TAPE REQUIRED IN ACCORDANCE WITH STANDARD PLATE NO. 27 WHERE INDICATED AND AS FOLLOWS:
 A. OVER ALL MAINS NOT INSTALLED AT 6 FEET FROM BACK OF CURB.
 B. OVER ALL SERVICE LATERALS NOT INSTALLED AT RIGHT ANGLES TO MAINS.
- CALL BEFORE YOU DIG - 1-800-227-2600.

BENCHMARK

TOP OF B.L.M. BRASS CAP E. 1/16 ON CHEYENNE 1/4 MILE WEST OF BUFFALO
 ELEVATION = 2388.62 FEET

APPROVAL

David A. Donnelly 5/16/90
 LAS VEGAS VALLEY WATER DISTRICT DATE

Edmund [Signature] 5/11/90
 CL.V. FIRE DEPARTMENT DATE

Call before you Dig.
 1-800-227-2600
 UNDERGROUND SERVICE (USA)

| REV | DATE | BY | REVISION |
|-----|---------|----|---|
| 1 | 5-4-90 | TB | ADD PRELIMINARY ZONE BOUNDARY, REVISE 1 REV PER LAYOUT. |
| 2 | 5-11-90 | TB | REMOVE FIRE HYDRANT FROM VALLEY AVENUE (COURTNEY VALLEY AVENUE) |

ESI ENGINEERS & SURVEYORS INC.
 4/12/90
 SUBMITTED BY: *[Signature]*

MASTER WATER PLAN
SOUTH SHORES RAMPART UNIT NO. 4

| | |
|-------------|----------|
| WO NO. | 5334 |
| BY | BURCH |
| DATE | 4/90 |
| SCALE | 1" = 50' |
| SHEET | 6 |
| OF 7 SHEETS | |