

THE DISTRICT CANNOT GUARANTEE A WATERTIGHT SHUTDOWN WHERE CONNECTIONS OR REPAIRS TO EXISTING FACILITIES ARE REQUIRED. THE CONTRACTOR SHALL ENSURE ALL LABOR AND EQUIPMENT IS AVAILABLE TO REMOVE FUGITIVE WATER THAT MAY IMPEDE CONSTRUCTION AT ALL TIMES. COORDINATION WITH INSPECTION DIVISION MUST TAKE PLACE PRIOR TO ANY TRIAL SHUTDOWN. CONTRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APPURTENANCES ARE AVAILABLE.

UTILITY CROSSING NOTE

ALL SEWER/STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.22 OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS OF POTABLE WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.

PRESSURE REDUCING VALVE

NO PRVs ARE REQUIRED

BACK WATER VALVE

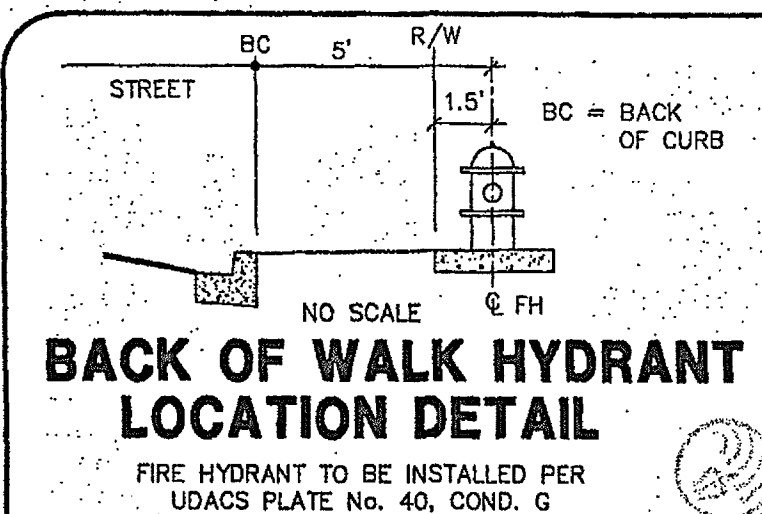
BACKWATER VALVES REQUIRED PER U.P.C., LATEST EDITION, SECTION 710.0.
THE FOLLOWING LOTS REQUIRE A BACKWATER VALVE:
LOT 4, LOT 11, LOT 16, LOT 19, AND LOT 22
TOTAL LOTS REQUIRING BACKWATER VALVES = 5

UTILITY APPURTENANCES

ALL ABOVE GROUND UTILITY APPURTENANCES SHALL CONFORM TO THE REQUIREMENTS OF TITLE 19.06 AND 19.08.

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

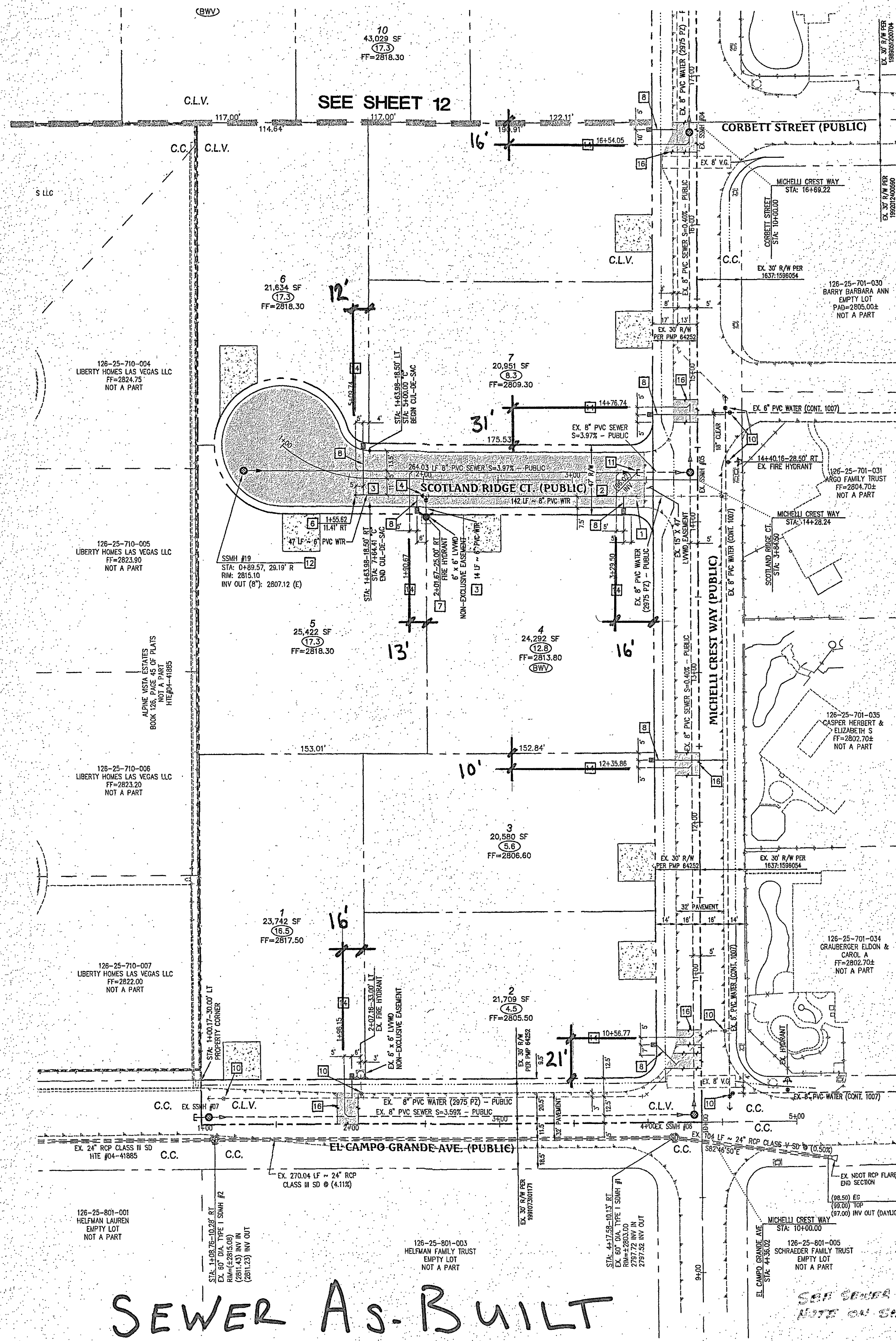
PVC PIPE SHALL BE DEFLECTED AT THE JOINT ONLY. THE MAXIMUM ALLOWABLE DEFLECTION SHALL BE ONE (1) DEGREE PER JOINT WITH A MAXIMUM RADIUS OF CURVATURE OF 1,150 FEET, PER UDACS 2.07.01 AND 2.07.02.
FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED.



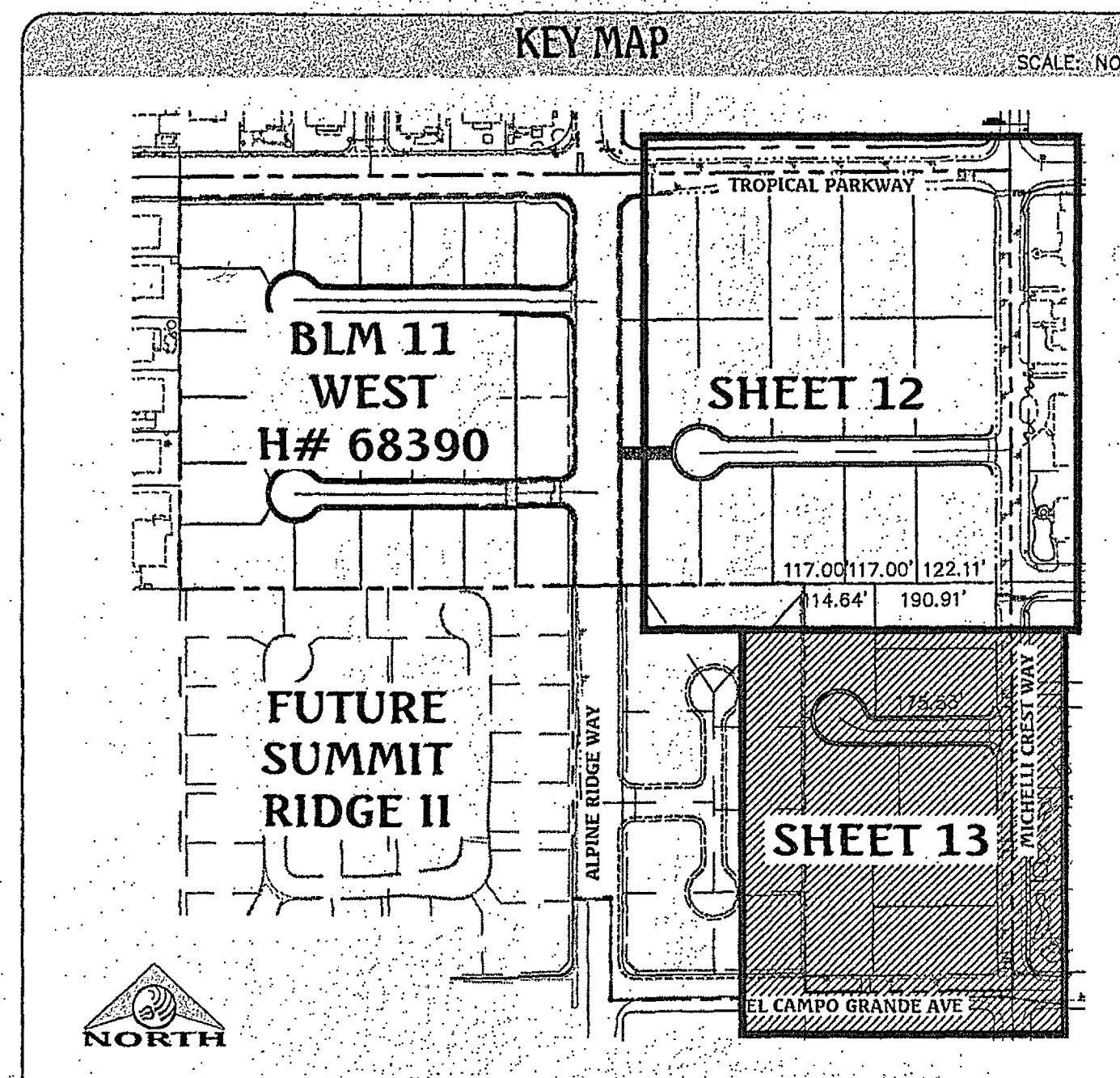
FAST
Call before you
Underground
1-702-432-5300

Call before you
Overhead
1-702-227-2929

Call before you Dig
Avoid cutting underground
utility lines. It's costly.
811
OR
1-800-227-2600



SEWER AS-BUILT



WATER & SEWER CONSTRUCTION NOTES

- POC (2975 P2) - REMOVE EXISTING BLOW OFF W/ CAP PER UDACS PLATE No. 38 AND EXTEND 8" PVC WATER PIPE PER UDACS PLATE No. 17.
- INSTALL 8" PVC WATER PIPE PER UDACS PLATE No. 17.
- INSTALL 8" PVC WATER PIPE PER UDACS PLATE No. 17.
- INSTALL 8"x6" REDUCER PER UDACS PLATE No. 30.
- INSTALL 8"x6" TEE PER UDACS PLATE No. 31.
- INSTALL 2" BLOW OFF ASSEMBLY WITH CAP PER UDACS PLATE No. 36.
- INSTALL FIRE HYDRANT ASSEMBLY WITH 6" GATE VALVE AND 6"x6" TEE PER UDACS PLATE No. 40.
- INSTALL 1" COPPER WATER SERVICE W/ 3/4" METER PER UDACS PLATE No. 3.
- EX. 4" BLOW OFF, PROTECT IN PLACE, ADJUST RIM PER UDACS PLATE No. 37.
- EX. WATER GATE VALVE, PROTECT IN PLACE, ADJUST/REPLACE CONCRETE COLLAR PER UDACS PLATE No. 39.
- POC - REMOVE CAP AND THRUST BLOCK, CONNECT TO EXISTING SEWER STUP AND EXTEND 8" PVC SEWER PIPE PER PER DCSWCS SD-16.
- INSTALL 48" MANHOLE PER DCSWCS SD-1A, SD-1B, SD-4 WITH PRECAST BASE, WITH SINGLE COVER.
- INSTALL 8" PVC SEWER PIPE PER DCSWCS SD-16.
- INSTALL 4" PVC SEWER LATERAL WITH MARKER BALL & CURB MARKING, PER DCSWCS SD-22 AND SD-25.
- EX. SEWER MANHOLE, PROTECT IN PLACE, ADJUST RIM PER DCSWCS SD-4 & SD-5 IF APPLICABLE.
- SAWCUT AND MATCH EXISTING ASPHALT.

PROTECT IN PLACE AND ADJUST LVWD EXISTING FACILITIES TO FINISHED GRADE. ALL LVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.
ESN. 078 01/05/15

WATER SERVICE CONNECTION NOTE

SERVICE LATERALS FOR LOTS 1-3, 7-8 WILL BE TAPPED ON EXISTING MAIN BY OWNER'S CONTRACTOR UNDER DIRECTION OF THE LVWD.



(IN FEET)
1 inch = 40 ft.

BASIS OF BEARING

NORTH 89°27'31" EAST, BEING THE BEARING OF THE NORTH LINE OF THE NORTHWEST QUARTER (NW1/4) OF THE SOUTHEAST QUARTER (SE1/4) OF SECTION 25, TOWNSHIP 19 SOUTH, RANGE 59 EAST, M.D.M., AS SHOWN IN FILE 196, PAGE 87 OF SURVEYS ON FILE AT THE CLARK COUNTY, NEVADA RECORDER'S OFFICE.

BENCHMARK

BENCHMARK # 10992555W6
RIVET AND SQUARE ALUMINUM PLATE IN NORTHEAST CORNER OF A CONCRETE BASE FOR LARGE POWER POLE (#40-8) AT THE WEST END OF ANN ROAD
ELEVATION = 880.365 METERS (NAV80)
ELEVATION = 2,888.33 U.S. FEET (NAV80)

UTILITY LEGEND

EX. GAS	EXISTING GAS
EX. 10"S	EXISTING SEWER MAIN
8"S	PROPOSED SEWER MAIN
EX. 36"SD	EXISTING STORM DRAIN
36"SD	PROPOSED STORM DRAIN
EX. 8"W	EXISTING WATER MAIN
8"W	PROPOSED WATER MAIN
EX. 3/4" METER	EXISTING UTILITY MANHOLE
3/4" METER	PROPOSED UTILITY MANHOLE
EX. VALVE	EXISTING VALVE
VALVE	PROPOSED VALVE
EX. REDUCER	PROPOSED REDUCER
REDUCER	PROPOSED STANDARD FIRE HYDRANT WITH 6" LATERAL, 6" GATE VALVE AND TEE
EX. BACK WATER VALVE	BACK WATER VALVE
BACK WATER VALVE	PRESSURE REDUCING VALVE
EX. STREET LIGHT	EXISTING STREET LIGHT
STREET LIGHT	FUTURE STREET LIGHT
EX. 100W HPS STREET LIGHT	PROPOSED 100W HPS STREET LIGHT
100W HPS STREET LIGHT	PROPOSED 150W HPS STREET LIGHT
EX. 200W HPS STREET LIGHT	PROPOSED 200W HPS STREET LIGHT
200W HPS STREET LIGHT	PROPOSED 250W HPS STREET LIGHT
EX. 400W HPS STREET LIGHT	PROPOSED 400W HPS STREET LIGHT
400W HPS STREET LIGHT	PROPOSED CONCRETE DRIVEWAY

FIRE FLOW CALCULATIONS

THE FIRE FLOW REQUIREMENT IS: 1,750 GALLONS PER MINUTE 20 PSI RESIDUAL PRESSURE.
BASED ON:
SQUARE FOOTAGE: 4,800 SQUARE FEET
LARGEST AREA BETWEEN 4-HOUR AREA SEPARATION WALLS: N/A SQUARE FEET
BUILDING HEIGHT: 25 FEET-4 INCHES
NUMBER OF STORIES: 2 FLOORS
TYPE OF CONSTRUCTION: V-NON RATED
OCCUPANCY: RESIDENTIAL
FULL AUTOMATIC FIRE HOMES GREATER THAN 4,800 SF - YES*
SPRINKLER SYSTEM - HOMES LESS THAN 4,800 SF - NO
* HOMES WITH SQUARE FOOTAGES GREATER THAN 4,800 S.F. ARE EQUIPPED WITH FULL AUTOMATIC FIRE SPRINKLER SYSTEM (NFA 130) WHICH ALLOWS REDUCTION IN REQUIRED FIRE FLOW TO A FLOW RATE BELOW THE REQUIRED 1,750 GPM SHOWN ABOVE.

FIRE DEPARTMENT APPROVAL

APPROVAL BY THE FIRE DEPARTMENT HAVING JURISDICTION IS REQUIRED PRIOR TO OBTAINING FINAL APPROVAL FROM THE LVWD.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY-WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: 4/10/17 PROJECT No.: 1255228
LVWD APPROVED FIRE FLOW 1,750 GPM @ 20 PSI RESIDUAL

APPROVALS

2 OF 2
LAS VEGAS FIRE AND RESCUE
DATE: 4/10/17

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DR HORTON
BLM SITE 11 EAST
ON-SITE IMPROVEMENT PLANS
UTILITY PLAN II
SEWER AS-BUILT

PROFESSIONAL ENGINEER-STATE OF NEVADA
JAMES M. PEARCE
Exp. 12-31-17
No. 9552

SHEET 13 OF 15
C.L.V. DWG.# 68388