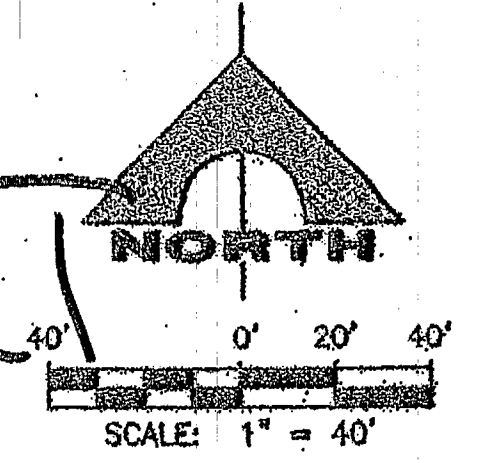


SEWER AS-BUILT



HIGH-PRESSURE GAS NOTE:
 CALL SOUTHWEST GAS AT 702-651-2111 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES.

- CONSTRUCTION NOTES**
- WATER**
- REMOVE CAP AND BLOWOFF PER UDACS PLATE #04, AND CONNECT TO EXISTING 8" STUB.
 - INSTALL 8" PVC WATER PIPE.
 - INSTALL CAP AND 2" BLOW-OFF VALVE PER UDACS PLATE NO. 38.
 - INSTALL 1" METERS PER UDACS PLATE NO. 4 (TYP).
 - INSTALL FIBRE HYDRANT ASSEMBLY W/ 8" x 8" TEE & 9" GATE VALVE PER UDACS PLATE NO. 30 & PLATE NO. 31.
 - SAWOUT AND MATCH EXISTING IMPROVEMENTS PER USD DOT, 600.3 & 600.4.
 - INSTALL 8" x 8" REDUCER PER UDACS PLATE NO. 30.
 - INSTALL 90 DEGREE BEND WITH THRUST BLOCKS PER UDACS PLATE NO. 31.
 - INSTALL 6" PVC WATER PIPE.
- SEWER**
- INSTALL 8" PVC SANITARY SEWER PIPE.
 - INSTALL 48" DIAMETER SANITARY SEWER MANHOLE PER DCSIS SD-1A (ALL NEW MANHOLES TO HAVE PRECAST BASES).
 - INSTALL 4" SEWER LATERAL PER DCSIS SD-23 (TYP).
- STRIPING**
- PAINT CURB RED (NO PARKING) 30" WIDE CENTERED ON HYDRANT.
- NOTE: SEE SHEET C2 FOR ABBREVIATIONS AND QUANTITIES

PRIVATE WELLS TO BE REMOVED FROM SERVICE

THE EXISTING PRIVATE WELL IS TO BE ABANDONED. THE DISTRICT WATER SERVICE WILL REMAIN IN THE OFF POSITION UNTIL THE WELL HAS BEEN ABANDONED (WELL MUST BE ACCOMPLISHED WITHIN 30 DAYS OF THE INSTALLATION OF THE DISTRICT SERVICE), OR PHYSICALLY DISCONNECTED FROM THE ON-SITE SYSTEM. AN INSPECTION OF THE ON-SITE SYSTEM WILL BE MADE BY THE DISTRICT'S INSPECTION DIVISION TO VERIFY THE WELL HAS NO LARGER FUNCTIONAL. THE STATE OF NEVADA DIVISION OF WATER RESOURCES (TELEPHONE NUMBER 702-486-2770) MAY BE CONTACTED FOR INFORMATION CONCERNING REQUIREMENTS AND PROCEDURES FOR ABANDONING WELLS.

COMPLETED BY:
 KNL CONSTRUCTION, LLC
 08/14/14
 Robert M Walker
 ROBERT M WALKER

DIMENSIONS ARE FROM P/L
 TO SEWER LATERAL AT B/L

FIRE FLOW CALCULATIONS

FIRE FLOW REQUIREMENT IS 2000 GALLON PER MINUTE AT 20 PSI RESIDUAL PRESSURE.

USE/OCCUPANCY	SINGLE FAMILY
TYPE OF CONSTRUCTION (CSD)	TYPE 1-5
AUTOMATIC FIRE SPRINKLERS	NO
SOURCE FOOTING	< 5000
LARGEST AREA BETWEEN 4 HOUR WALLS	N/A
BUILDING HEIGHT	5.0
NO. OF STORIES INCLUDING BASEMENT	1
HIGH PRESSURE STORAGE	NO
NO. OF HYDRANTS INSTALLED	2

ESTIMATED AVERAGE DAILY SEWER CONTRIBUTIONS

11 UNITS x 280 GPD/UNIT = 3080 GPD = 0.0028 MGD
 TOTAL PEAK FLOW = 4.82 (PEAK FACTOR) * 0.0028 = 0.0127 MGD

WATER MAIN JOINT DEFLECTION (WALD # 247)

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 SURVIVANCE OF 1,500 FEET, PER UDACS 2.02.01 AND 2.02.02.

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

CONTRACTOR SHALL REMOVE, SHIELD, OR PROTECT EXISTING UTILITIES, STRUCTURES, OR DECORATIVE ROCKS, BLOCK WALLS, OR FENCES. THREE SHIELDS OR DECORATIVE ROCKS AND ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE REMOVED AND CONSTRUCTION SHALL BE COMPLETED TO ALLOW THE DISTRICT DIRECT ACCESS TO THE VALVES, BACKFLOW ASSEMBLIES, AND PIPES FROM THE ADJACENT RIGHT-OF-WAY.

- GENERAL NOTES**
- REPLACE ALL TRAFFIC CONTROL DEVICES (SIGNS AND/OR PAVERS) DAMAGED BY CONSTRUCTION. EXISTING TRAFFIC CONTROL DEVICES DAMAGED BY TRUCKING ACTIVITIES TO CLIMB COUNTY'S SATISFACTION. ALL MATERIAL USED SHALL MEET CLARK COUNTY'S SPECIFICATIONS OR WILL BE AN APPROVED EQUIVALENT.
 - IN THE EVENT THAT THE TRAFFIC SIGNAL CONDUIT LOOP DETECTORS OR ASSOCIATED EQUIPMENT ARE DAMAGED BY CONTRACTOR, THE CONTRACTOR WILL HAVE AN EQUAL LEVEL OF ELECTRICAL CONTRACTOR TO MAKE REPAIRS PER UNIFORM SPECIFICATION NO. 623.01.02.
 - ALL SEWER STORM GRABBS CROSSING WATER LINES MUST CONFORM TO SECTION 222 OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.
 - THE CONTRACTOR IS TO VERIFY THE ACTUAL FIELD CONDITIONS OF ALL LOTS AND INSTALL SEWER CHECK VALVES WHERE REQUIRED PER THE LATEST EDITION OF THE UNIFORM PLUMBING CODE.
 - FITTINGS SHALL NOT FALL UNDER CURBS, OUTLETS OR SIDEWALKS.

ALL NEW MANHOLES TO HAVE PRE-CAST BASES

INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING PER UDACS PLATE NO. 15.

CONTRACTOR NOTE:

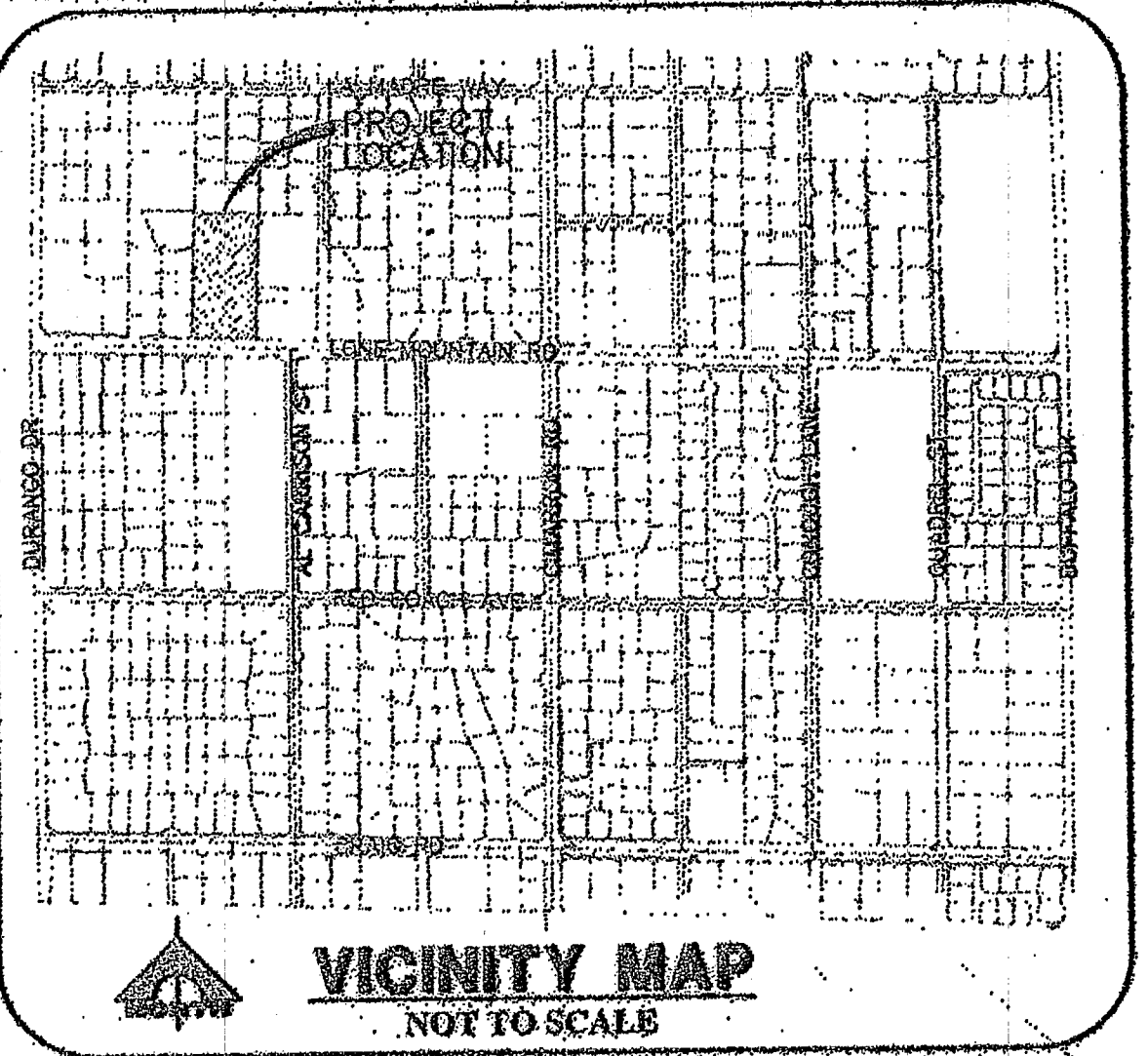
O.G. WALLACE, INC. ASSUMES NO RESPONSIBILITY FOR EXISTING UTILITIES SHOWN OR NOT SHOWN. THE UTILITIES SHOWN ON THIS DRAWING HAVE BEEN PLOTTED FROM RECORD INFORMATION AND ARE FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION AND DEPTH OF ALL RELEVANT UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION. IF A CONFLICT OR DISCREPANCY IS DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING IMMEDIATELY.

CLARK COUNTY DEPARTMENT OF PUBLIC WORKS DEVELOPMENT REVIEW

ACCEPTANCE OF PLANS FOR FILING

BY _____

ACCEPTANCE OF THESE PLANS FOR FILING SHALL NOT BE CONSIDERED TO BE AN ENDORSEMENT OR APPROVAL OF ANY VIOLATION OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS AND/OR SPECIFICATIONS CLARK COUNTY SHALL BE HELD FREE FROM DAMAGES WHICH MAY RESULT FROM THE CONSTRUCTION OF THE IMPROVEMENTS FROM THE ENGINEERING DESIGN DETICED HEREIN. NOTE: LOWER POLES AND/OR OTHER EXISTING FACILITIES NOT IN PROPER LOCATION BASED ON PREVIOUS IMPROVEMENTS SHOWN HEREON WILL BE RELOCATED AT NO EXPENSE TO CLARK COUNTY.



LEGAL DESCRIPTION

THE LAND REFERRED TO IN THIS COMMITMENT IS SITUATED IN THE COUNTY OF CLARK, STATE OF NEVADA, AND IS DESCRIBED AS FOLLOWS:

A SOUTH HALF (S 1/2) OF THE FOLLOWING DESCRIBED PARCEL:

A PORTION OF THE SOUTH HALF (S 1/2) OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 33, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.B. & M., CLARK COUNTY, NEVADA AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST (SW) CORNER OF SAID SECTION 33;

THENCE NORTH 117°53' EAST, A DISTANCE OF 50.00 FEET;

THENCE SOUTH 88°05'31" EAST, A DISTANCE OF 858.49 FEET TO THE TRUE POINT OF BEGINNING;

THENCE CONTINUING SOUTH 88°05'31" EAST, A DISTANCE OF 345.22 FEET;

THENCE NORTH 117°55' EAST, A DISTANCE OF 1263.42 FEET;

THENCE NORTH 88°32'49" WEST, A DISTANCE OF 345.20 FEET;

THENCE SOUTH 117°55' WEST, A DISTANCE OF 1260.42 FEET TO THE TRUE POINT OF BEGINNING.

SAID PARCEL BEING FURTHER DESCRIBED AS THE SOUTH HALF (S 1/2) OF PARCEL THREE (3) OF THAT CERTAIN PARCEL MAP BY FILE NO. 13, PAGE 10, RECORDED MAY 5, 1978, AS DOCUMENT NO. 842696.

CONTAINING 5.50 ACRES MORE OR LESS.

FLOOD ZONE

NO PORTION OF THE SITE FALLS WITHIN A FEMA DESIGNATED SPECIAL FLOOD HAZARD AREA. A SITE VISIT ON PARCEL 330304000000, DATED NOVEMBER 18, 2011, THIS PANEL SHOWS THAT THE PROJECT IS LOCATED WITHIN A ZONE X AND NOT LOCATED WITHIN A FEMA DESIGNATED 100-YEAR ZONE A OR SPECIAL FLOOD HAZARD AREA.

BASIS OF BEARING

NORTH 001°47'40" WEST, BEING THE BEARING BETWEEN FOUND MONUMENTS ON DURANGO DRIVE AT THE INTERSECTIONS OF RED COACH AVENUE AND LONE MOUNTAIN ROAD, AS SHOWN BY MAP THEREOF ON FILE IN FILE 154, PAGE 80 OF SURVEYS IN THE COUNTY RECORDER'S OFFICE, CLARK COUNTY, NEVADA.

BENCHMARK

BM NO. 040004010
 ELEVATION = 2389.5 FEET
 CITY OF LAS VEGAS RIVET AND ALUMINUM PLATE IN TOP OF CURB, NORTHEAST CORNER OF DURANGO DRIVE AND RED COACH AVENUE NEAR THE PT OF DURANGO DRIVE (NAD83).

CLARK COUNTY WATER RECLAMATION DISTRICT

CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL RELEVANT UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION. IF A CONFLICT OR DISCREPANCY IS DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING IMMEDIATELY.

COUNTY OF CLARK FIRE DEPARTMENT APPROVED

BY *John DeBenedictis* 2/19/14
 APPROVAL OF THESE PLANS SHALL NOT BE CONSIDERED TO BE A PERMIT FOR, OR AN APPROVAL OF, ANY VIOLATION OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS. FIRE FLOW 2000 GPM AT 20 PSI RESIDUAL. CIVIL 13-45134

APPROVED FOR CONSTRUCTION

BY *Robert M Walker* 2-28-14
 CLARK COUNTY WATER RECLAMATION DISTRICT ENGINEERING SERVICES MANAGER
 PROJECT NO. 121348 DATE 2-28-14
 LWAD APPROVED FIRE FLOW 2000 GPM AT 20 PSI RESIDUAL

Call before you Dig
 811
 1-800-227-2000
 CLARK COUNTY WATER RECLAMATION DISTRICT
 1-702-227-2929

FAST
 Call before you UnderGround.
 702-432-5300
 4# 52144

STATE OF NEVADA
 COUNTY OF CLARK
 PROJECT NO. 764-A05
 DESIGN: SH
 DRAWING: HS
 CHECKED: WJP
 PLOT DATE: 02-18-14
 PLOT TIME: 10:37:44 AM
 PROJECT LOCATION: 330304000000
 PROJECT DESCRIPTION: SEWER AS-BUILT

G.C. WALLACE COMPANIES
 ENGINEERS | PLANNERS | SURVEYORS
 6855 RAINBOW BOULEVARD - LAS VEGAS, NV 89148
 702.735.2200 • FAX 702.735.2209 • WWW.GCWALLACE.COM

FULTE HOMES
 NORTH-STAR
 UTILITY PLAN

1 OF 1
 DRAWING
 30TV1081
 UT
 7 OF 9 SHEETS
 HTE #13-43383