

MANHOLE SCHEDULE

M.H. #	TOP OF MH	N. INV. EL.	S. INV. EL.	E. INV. EL.	W. INV. EL.	NORTHING	EASTING	COMMENTS
1	2325.7±	2315.51	2315.51	---	2315.71	15432.1097	17694.666	PUBLIC
2	2325.5±	2316.25	---	2316.05	2316.25	15431.788	17608.3838	PUBLIC
3	2326.9±	---	2318.23	---	---	1606.3338	17607.8905	PUBLIC
4	2326.4±	2317.24	---	2317.04	2317.24	15431.2623	17411.3922	PUBLIC
5	2327.7±	---	2319.42	---	---	15608.7546	17410.8905	PUBLIC
6	2327.4±	2318.39	2318.39	2318.19	---	15430.697	17222.393	PUBLIC
7	2328.5±	2320.78	2320.58	---	---	15609.1854	17221.8885	PUBLIC
8	2329.2±	2322.20	---	---	---	15143.6981	17223.2042	PUBLIC
9	2328.1±	2322.13	2321.93	---	---	15430.052	17005.7106	PUBLIC
10	2328.9±	2320.88	2320.68	---	---	15219.3642	17006.3061	PUBLIC
11	2328.8±	2322.60	2322.60	---	---	15650.049	17005.0888	PUBLIC

DEPARTMENT OF DEVELOPMENT SERVICES

CIVIL ENGINEERING DIVISION NOTES

- INSPECTIONS ARE REQUIRED. CALL 24 HOURS IN ADVANCE, 455-4610 YOUR PERMIT APPROVED PLANS, AND BARRICADE PLANS FOR THIS WORK MUST BE ON THE JOB SITE AT ALL TIMES.
- EXACT LOCATION OF ALL SAW-CUT LINES SHALL BE DETERMINED IN THE FIELD BY A CLARK COUNTY INSPECTOR.
- CURB AND GUTTER WITH A GRADE OF LESS THAN 4/10 OF ONE PERCENT SHALL BE CONSTRUCTED BY FORMING. EACH JOINT SHALL BE CHECKED FOR GRADE PRIOR TO CONSTRUCTION AND WATER TESTED AS SOON AS POSSIBLE AFTER CONSTRUCTION.
- FINAL ASPHALTIC CONCRETE (AC) PAVEMENT SURFACES SHALL BE ONE-HALF (1/2) INCH ABOVE THE LIP OF THE GUTTER (INCLUDING OPEN GRADE).
- ALL OFF-SITE IMPROVEMENT CONSTRUCTION SHALL CONFORM TO THE UNIFORM STANDARDS SPECIFICATIONS AND STANDARD DRAWINGS CLARK COUNTY AREA NEVADA AND CLARK COUNTY SUPPLEMENT TO UNIFORM STANDARD DRAWINGS AND SPECIFICATIONS, LATEST REVISION.
- PRIVATE STREETS, CURBS & GUTTER AND VALLEY GUTTERS REFLECTED ON THESE PLANS ARE TO BE INSPECTED BY A CLARK COUNTY INSPECTOR.
- WHEEL CHAIR RAMPS SHALL BE CONSTRUCTED IN EACH QUADRANT OF AN INTERSECTION PER STANDARD DRAWING 235. EXACT LOCATION OF RAMPS BE DETERMINED IN THE FIELD BY A CLARK COUNTY INSPECTOR.
- PROPER SIGNS, BARRIERS, BARRICADES AND LIGHTS SHALL BE PLACED AND MAINTAINED IN ACCORDANCE WITH THE LATEST "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS". TRAFFIC SCHOOL OR STREET SIGNS OF ANY KIND ARE NOT TO BE MOVED FOR ANY REASON WITHOUT FIRST COORDINATING WITH THE DEPARTMENT OF DEVELOPMENT SERVICES, CIVIL ENGINEERING DIVISION INSPECTOR @ 455-4610.
- THIS PLAN DOES NOT AUTHORIZE CLOSURE OF ANY ROAD OR STREET.
- NO OPEN TRENCH SHALL BE ALLOWED ACROSS ANY STREET OR WITHIN TEN (10') OF ANY TRAVEL-WAY, EXCEPT WHEN WORK IS IN ACTUAL PROGRESS. AREAS COVERED BY ACCEPTABLE STEEL PLATE ARE NOT TO BE CONSIDERED AS A TRENCH. NO OPEN TRENCH IS PERMITTED IN EXCESS OF 500 FEET OR LENGTH NECESSARY TO ACCOMMODATE PIPE INSTALLATION IN A SINGLE DAY, WHICH EVER IS GREATER. ALL TRENCH CROSSINGS AND BACKFILL SHALL MEET THE STANDARD SPECIFICATION UNLESS OTHERWISE STATED.
- A TEMPORARY PATCH IS TO BE IN PLACE AT THE END OF EACH WORK DAY WHERE THE BACKFILL IN THE TRENCH HAS BEEN COMPLETED AND PRIOR TO OPENING THE WORK AREA BACK TO TRAFFIC AND IS TO BE MAINTAINED BY THE PERMITEE. A PERMANENT PATCH IS TO BE IN PLACE WITHIN THIRTY (30) DAYS AFTER THE INSTALLATION OF THE TEMPORARY PATCH.
- COMPACTION TESTS ARE REQUIRED.

CLARK COUNTY STREET AND TRAFFIC NOTES

- ALL PERMANENT TRAFFIC CONTROL DEVICES CALLED FOR HEREON SHALL BE IN PLACE AND IN FINAL POSITION PRIOR TO ALLOWING ANY PUBLIC TRAFFIC ONTO THE PORTIONS OF THE ROAD(S) BEING IMPROVED HEREUNDER, REGARDLESS OF THE STATUS OF COMPLETION OF PAVING OR OTHER OFF-SITE IMPROVEMENTS CALLED FOR BY THESE PLANS.
- BEFORE ANY WORK IS STARTED IN THE RIGHT-OF-WAY, THE CONTRACTOR SHALL INSTALL ALL ADVANCE WARNINGS FOR THE CONSTRUCTION ZONE. THE CONTRACTOR SHALL INSTALL TEMPORARY GROUND MOUNTED STOP SIGNS AT ALL NEW STREET ENCROACHMENTS INTO EXISTING COUNTY STREETS IMMEDIATELY AFTER FIRST GRADING WORK IS ACCOMPLISHED, AND SHALL MAINTAIN SAID SIGNS UNTIL PERMANENT SIGNS ARE INSTALLED.
- ALL CONSTRUCTION SIGNING, BARRICADE AND PAVEMENT MARKINGS SHALL CONFORM TO THE NEVADA WORK ZONE TRAFFIC CONTROL HANDBOOK - 1988 AND TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.
- IF THE IMPROVEMENTS NECESSITATE THE OBLITERATION, TEMPORARY OBSTRUCTION, TEMPORARY REMOVAL OR RELOCATION OF ANY EXISTING TRAFFIC PAVEMENT MARKING, SUCH PAVEMENT MARKING SHALL BE RESTORED OR REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE COUNTY TRAFFIC MANAGER.
- THE DEVELOPER SHALL BE RESPONSIBLE TO PROVIDE AND INSTALL ALL PERMANENT SIGNS SHOWN ON THE PLANS. STREET NAME SIGNS SHALL CONFORM IN THEIR ENTIRETY TO CLARK COUNTY AREA STANDARDS. ALL OTHER SIGNS SHALL BE STANDARD SIZE UNLESS OTHERWISE SPECIFIED ON THE PLANS. ALL SIGN POSTS SHALL BE INSTALLED IN ACCORDANCE WITH CLARK COUNTY AREA STANDARDS. ALL SIGNS SHALL USE TYPE III SHEETING.
- IF A PROPOSED STREET LIGHT STANDARD IS FIELD LOCATED TO WITHIN FIVE (5) FEET OF ANY SIGN SHOWN HEREON TO BE MOUNTED ON A SIGN POST, THEN CHANGE SIGN MOUNTING TO ONE ON THE STREETLIGHT STANDARD.
- PRIOR TO CONSTRUCTION, THE STREET SIGN CONTRACTOR SHALL OBTAIN STREET NAMES AND BLOCK NUMBERING FROM THE CURRENT PLANNING DIVISION OF THE DEPARTMENT OF COMPREHENSIVE PLANNING.
- ALL TRAFFIC SIGNAL POLE ASSEMBLIES, STEEL PEDESTALS FOR CABINETS, AND STREET LIGHT POLES SHALL BE GALVANIZED PER ASTM A123.
- ALL STREET LIGHTING INSTALLATIONS EXCEPT AS NOTED ON THE STREET LIGHTING PLANS SHALL CONFORM TO THE UNIFORM STANDARD DRAWINGS AND THE UNIFORM STANDARDS SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA.
- THE FOLLOWING CLARK COUNTY UNDERGROUND FACILITIES MAY BE LOCATED IN YOUR PROJECT AREA: STREET LIGHTING, TRAFFIC SIGNALS, THE FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION (F.A.S.T.) INTERCONNECT CABLE. YOU MUST CONTACT CLARK COUNTY TRAFFIC MANAGEMENT DIVISION, OPERATIONS UNIT AT 455-7511 FOR LOCATIONS AT LEAST 48 HOURS PRIOR TO WORKING IN THE AREA. CLARK COUNTY IS NOT A MEMBER OF CALL BEFORE YOU DIG (UNDERGROUND SERVICE ALERT), AND A CALL TO THAT ORGANIZATION DOES NOT RELIEVE YOU OF LIABILITY FOR CLARK COUNTY FACILITIES.
- F.A.S.T. INTERCONNECT CABLE POLICY IS IN EFFECT. INTERCONNECT CABLE MUST BE MAINTAINED AT ALL TIMES. DEVELOPER/CONTRACTOR SHALL PROVIDE TEMPORARY OVERHEAD INTERCONNECT CABLE, WHILE PERMANENT CABLE IS BEING RELOCATED. TEMPORARY AERIAL INSTALLATION MUST BE ACCEPTABLE TO THE COUNTY TRAFFIC MANAGER AND TO F.A.S.T. ANY DAMAGE TO THIS CABLE IS DEEMED AN EMERGENCY BY F.A.S.T., CITY OF LAS VEGAS, CLARK COUNTY AND NDOT AND MUST BE REPAIRED IMMEDIATELY TO F.A.S.T. ACCEPTANCE. \$2,500 PER DAY DAMAGES MAY BE ASSESSED AFTER 24 HOURS HAS ELAPSED FROM TIME OF BREAK OR DAMAGE.
- ALL NEW OR REPLACEMENT TRAFFIC SIGNAL LOOPS SHALL BE INSTALLED USING CABLE-IN-DUCT WIRING, SHALL HAVE INDEPENDENT LEAD-IN WIRES FOR EACH LOOP FROM THE CONTROLLER TO THE PULL-BOX, AND EACH LEAD-IN SHALL BE INDIVIDUALLY TAGGED.
- TRAFFIC SIGNAL PEDESTRIAN HEADS SHALL BE THE L.E.D. TYPE.
- ELECTRICAL POWER SERVICE POINT LOCATION(S) FOR STREET LIGHTING AND TRAFFIC SIGNALS MUST BE INDICATED ON THE PLANS. IF CONNECTING TO AN EXISTING CIRCUIT, INDICATE LOCATION OF EXISTING SERVICE POINT FOR EACH CIRCUIT.
- WHEN STREET LIGHTS ARE TO BE CONNECTED TO AN EXISTING CIRCUIT, THE ENGINEER MUST CERTIFY THAT THE EXISTING CIRCUIT IS CAPABLE OF HANDLING THE ADDITIONAL CIRCUIT LOAD.
- CLARK COUNTY RESERVES THE RIGHT TO REJECT STREET LIGHT AND TRAFFIC SIGNAL POLES AND ASSEMBLIES WHICH HAVE A "STRIPED" APPEARANCE.
- PRIOR TO BEGINNING OF CONSTRUCTION, MODIFICATION, OR RELOCATION OF ANY TRAFFIC SIGNAL SYSTEM, WRITTEN NOTICE SHALL BE SUBMITTED TO THE CLARK COUNTY TRAFFIC MANAGEMENT DIVISION OF THE DATE THAT WORK WILL BEGIN.
- THREE (3) NORMAL WORKING DAYS PRIOR TO TURN-ON OR COMPLETION OF MODIFICATION(S) TO A TRAFFIC SIGNAL SYSTEM, WRITTEN NOTICE SHALL BE SUBMITTED TO THE CLARK COUNTY TRAFFIC MANAGEMENT DIVISION THAT WORK IS BEING COMPLETED AND AND THE PROPOSED DATE OF COMPLETION.

QUANTITY ESTIMATE - SEWER

ITEM #	DESCRIPTION	QUANTITY	
		PUBLIC	PRIVATE
1	48" DIA MANHOLE	11 EA	---
2	8" SEWER MAIN	1,758 LF	---
3	6" CLEANOUT	---	---
4	4" PVC SEWER LATERAL	---	1,800 LF
5	SEWER BACK WATER VALVE	---	7 EA

QUANTITY ESTIMATE - WATER WATER QUANTITIES

ITEM #	DESCRIPTION	QUANTITY	
		PUBLIC	PRIVATE
1	INSTALL FIRE HYDRANT ASSEMBLY PER UDACS STD. PLATE NO. 7	6 EA	---
2	5/8" METER AND 1" TYPE K COPPER LATERAL PER UDACS STD. PLATE NO. 1B	50 EA	---
3	3/4" IRRIGATION METER PER UDACS PLATE NO. 1D 1" RPPA PER UDACS PLATE NO. 11A	5 EA	---
4	6" CAP AND 2" BLOWOFF ASSEMBLY PER UDACS STD. PLATE NO. 4A	3 EA	---
5	8" CAP AND 2" BLOWOFF ASSEMBLY PER UDACS STD. PLATE NO. 4A	2 EA	---
6	8" GATE VALVE PER UDACS STD. PLATE NO. 8	9 EA	---
7	8"x8" MJ TAPPING SLEEVE WITH 8" TAPPING VALVE PER UDACS STD. PLATE NO. 22	1 EA	---
8	8" TEE PER UDACS STD. PLATE NO. 5	4 EA	---
9	8"x6" TEE PER UDACS STD. PLATE NO. 5	1 EA	---
10	8"x6" REDUCER PER UDACS STD. PLATE NO. 3	3 EA	---
11	8" 45° BEND PER UDACS STD. PLATE NO. 5	2 EA	---
12	8" 90° BEND PER UDACS STD. PLATE NO. 5	2 EA	---
13	8"x8" CROSS PER UDACS STD. PLATE NO. 3	1 EA	---
14	12"x8" REDUCER PER UDACS STD. PLATE NO. 3	2 EA	---
15	90° BRASS ELBOW	1 EA	---
16	6" PVC WATERLINE	618 LF	---
17	8" PVC WATERLINE	2,153 LF	---
18	8" D.I.P. WATERLINE	73 LF	---
18	12" PVC WATERLINE	147 LF	---

QUANTITY ESTIMATE - STREET IMPROVEMENTS

ITEM #	DESCRIPTION	QUANTITY	
		PUBLIC	PRIVATE
1	"L" TYPE CURB AND GUTTER	796 LF	2,812 LF
2	CROSS GUTTER	---	1,843 SF
3	4" SIDEWALK	6,676 SF	---
4	HANDICAP RAMP	3 EA	---
5	2" ASPHALTIC CONCRETE PAVING	---	982 SY
6	4" ASPHALTIC CONCRETE PAVING	453 SY	---
7	5" ASPHALTIC CONCRETE PAVING	---	---
8	TYPE I AGGREGATE BASE	340 CY	---
9	TYPE II AGGREGATE BASE	151 CY	1964 CY
10	POWER TO LOTS	58 EA	---
11	TELEPHONE TO LOTS	58 EA	---
12	STREETLIGHT	5 EA	---
13	GAS TO LOTS	58 EA	---
14	CABLE TO LOTS	58 EA	---

Call before you Dig
1-800-227-2600
Underground Service Alert

Call before you Overhead
1-702-227-2929
Nevada Power Corporation
Safety Services Department

Call before you Dig
1-702-227-2929
Underground Service Alert

BASIS OF BEARING
THE BASIS OF BEARINGS FOR THIS SURVEY IS SOUTH 89°13'48" WEST, BEING THE SOUTH LINE OF THE SOUTHEAST QUARTER (SE 1/4) OF SECTION 27, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., BEING THE CENTERLINE OF ANN ROAD AS RECORDED IN BOOK 68 OF PLATS, AT PAGE 1, OF OFFICIAL RECORDS OF CLARK COUNTY, NEVADA.

BENCHMARK
CITY OF LAS VEGAS VERTICAL CONTROL POINT "8190 34NES", BEING A RIVET AND PLATE IN THE TOP OF CURB AT THE SOUTHWEST CORNER OF ANN ROAD AND RAINBOW.
ELEVATION: 2325.54 (FEET)
708.8256 (METERS)
CITY OF LAS VEGAS VERTICAL CONTROL v.2002 BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

REVISIONS

NO.	DATE	BY	REVISION
5	12/15/04	THOMASON	REMOVE IRRIGATION METER AND RZTA

SCALE: _____

PROJECT NO. 001.04020

DATE: 12/15/04

THOMASON CONSULTING ENGINEERS

3161 E. WARM SPRINGS ROAD, SUITE 200
LAS VEGAS, NEVADA 89120
702-932-6125 FAX: 702-932-6129

RICHMOND AMERICAN HOMES ANN / RAINBOW - PHASE I

QUANTITIES AND MANHOLE SCHEDULE AND CLARK COUNTY NOTES

Professional Engineer Seal
KURT R. JOHANSEN
Exp. 6-30-11
CIVIL
No. 10088

Professional Engineer Seal
JOSEPH D. THOMASON
Exp. 6-30-08
CIVIL
No. 11901

SHEET **C4** OF 16
DRAWING NO. 10744895-1