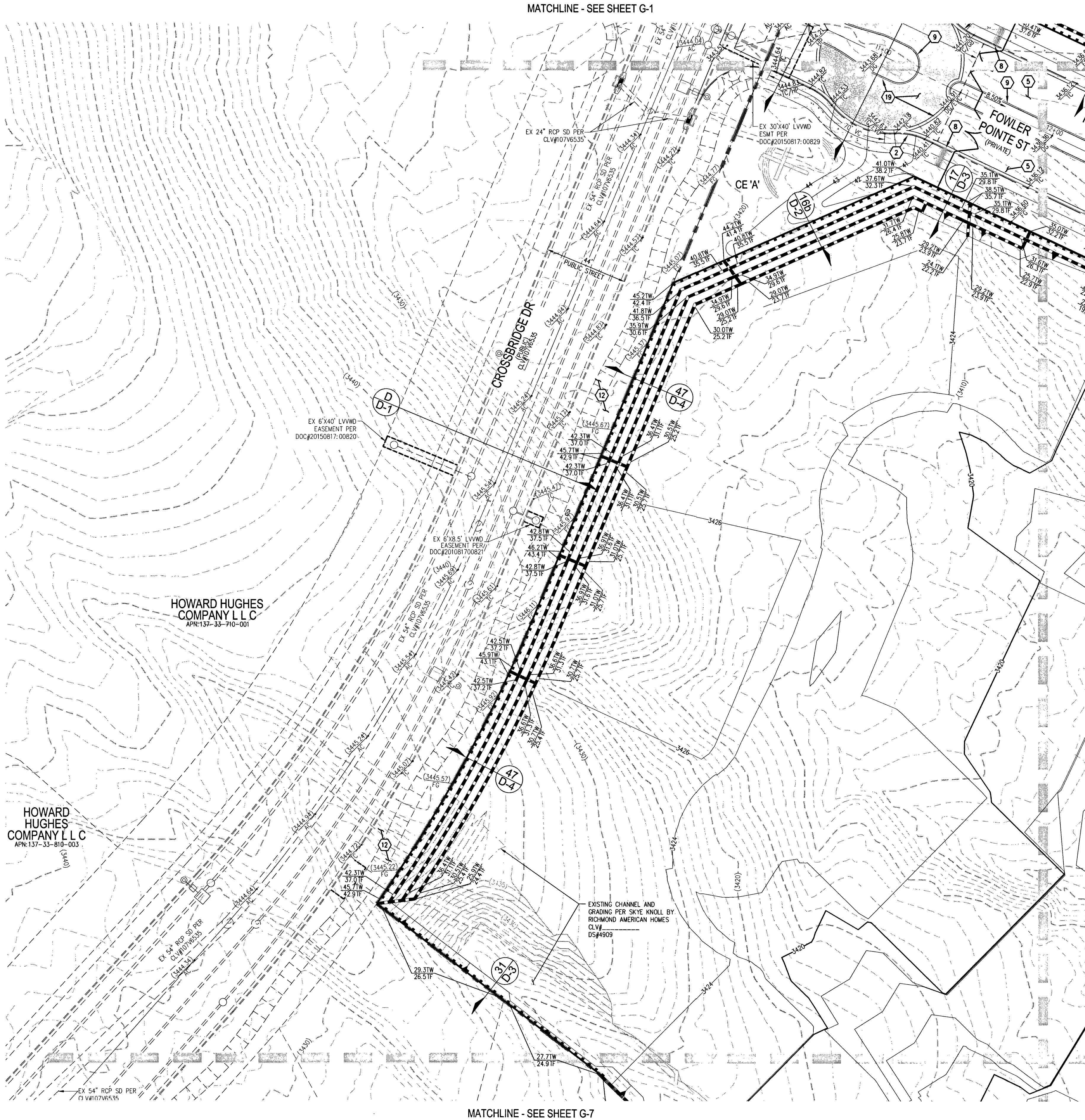


CALL SOUTHWEST GAS AT 702-651-2111 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES

SURVEY NOTE
OWNER RESPONSIBLE TO PROVIDE SURVEY MONUMENTATION AS SHOWN AND TO REPLACE ALL SURVEY MONUMENTATION DAMAGED, DISTURBED, DESTROYED, OR OBSOLETE DURING CONSTRUCTION.

ELEVATION NOTE
ADD 3300 TO ALL SPOT GRADES WHERE THE HUNDREDS AND THOUSANDS PLACES ARE OMITTED FOR ACTUAL ELEVATION (I.E. 01.00 REPRESENTS 3301.00)

SOILS REPORT
SOILS REPORT BY GEOTEK RESIDENTIAL, LLC
PHONE: (702) 897-1424
PROJECT NO. 13566-LVR DATED AUGUST 7, 2017
UPDATED SOILS REPORT BY GEOTEK RESIDENTIAL, LLC
PHONE: (702) 897-1424
PROJECT NO. 13566-LVR DATED AUGUST 7, 2017

EARTHWORKS
EARTHWORK QUANTITIES (RAW):
CUT = 209,358 CU YDS
FILL = 607,410 CU YDS
EXPORTED MATERIAL TO BE DISPOSED OF AT AN APPROVED LICENSED DISPOSAL FACILITY OR AT A SITE WITH AN APPROVED AND ACTIVE GRADING PERMIT.

DISCLAIMER NOTE
1) EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.
2) FOR ROADWAY WIDENING AND HALF STREET IMPROVEMENTS THE CONTRACTOR SHALL VERIFY CROSS SLOPES FROM EXISTING PAVEMENT SAWCUT LINE TO PROPOSED GRADE OF PAVEMENT OR PROJECTED LIP OF CURB PRIOR TO SUBGRADE PREPARATION AND CONSTRUCTION OF PROPOSED CURB LINE. IF MINIMUM OR MAXIMUM CROSS SLOPES DO NOT MEET AGENCY STANDARDS THE CONTRACTOR SHALL NOTIFY THE ENGINEER.

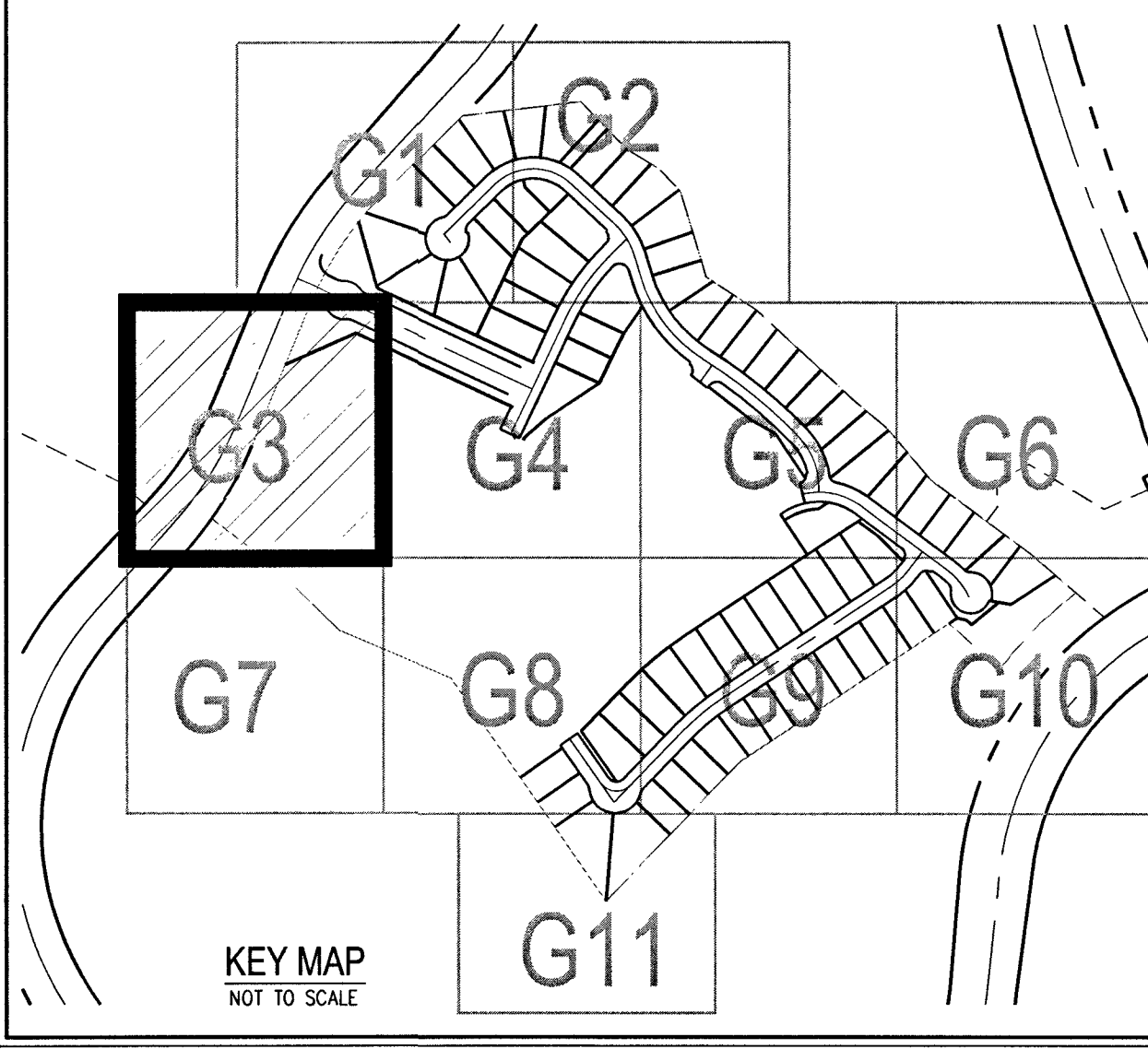
- GRADING NOTES**
- FINAL GRADES ADJACENT TO STRUCTURES SHALL BE IN CONFORMANCE WITH IBC 2012, SECTION 2304.11.2.2.
 - THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND REPORT ALL DISCREPANCIES TO THE ENGINEER.
 - ALL IMPROVEMENTS TO BE PROTECTED FROM EROSION BY SWPPP.
 - MAXIMUM/MINIMUM SLOPES AND MINIMUM STREET SECTIONS NOT TO EXCEED THAT SHOWN ON GEOTECH REPORT.
 - SEE DETAIL SHEET FOR STREET SECTIONS AND DETAILS.
 - ALL PUBLIC AND PRIVATE DRAINAGE IMPROVEMENTS TO BE BONDED FOR AND INSPECTED.
 - CONSTRUCTION OF BLOCK WALLS REQUIRES A SEPARATE BUILDING PERMIT AND APPROVAL BY THE CITY OF LAS VEGAS BUILDING DEPARTMENT.
 - CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF EXISTING UTILITY STRUCTURES AND FACILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. CONTRACTOR TO PROTECT IN PLACE DURING CONSTRUCTION. ENGINEER/OWNER SHALL BE NOTIFIED OF PRIOR DAMAGE TO EXISTING FACILITIES PRIOR TO CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR REPAIR/REPLETING FACILITIES IF ENGINEER/OWNER IS NOT NOTIFIED OF EXISTING DAMAGE PRIOR TO CONSTRUCTION COMMENCING.
 - NO STRUCTURE, VEGETATION, OR OBJECTS OF ANY KIND IS PERMITTED OVER TWENTY-FOUR (24) INCHES IN HEIGHT (MEASURED FROM THE TOP OF THE ADJACENT CURB IF CURB EXISTS) WITHIN THE SIGHT VISIBILITY ZONES.

- LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDELINES**
(REQUIRED FOR ALL SITES GREATER THAN 1 ACRE (43,560 SQ.FT.))
- THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO, OR ACCUMULATED IN, THE PUBLIC RIGHTS OF WAY OF CLARK COUNTY AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM.
 - ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED OF THE OWNER AND HIS OR HER AGENTS DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT MEET THE PERFORMANCE STANDARDS SPECIFIED IN CLARK COUNTY TITLE 24.40 AND IN THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
 - TEMPORARY OR PERMANENT STABILIZATION PRACTICES WILL BE INSTALLED ON DISTURBED AREAS AS SOON AS PRACTICABLE AND NO LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. SOME EXCEPTIONS MAY APPLY. REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVRI00000, SECTION III.A.5.
 - AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS, AREAS USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT LOCATIONS, AND ALL BMPs WEEKLY, AND WITHIN 24 HOURS AFTER A RAIN EVENT OF 0.5 INCHES OR MORE. THE CONTRACTOR OR HIS AGENT SHALL UPDATE OR MODIFY THE STORMWATER POLLUTION PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVRI00000, SECTION III.A.12.
 - ACCUMULATED SEDIMENT IN BMPs SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORMWATER RUNOFF EVENT OR PRIOR TO THE NEXT ANTICIPATED STORM EVENT, WHICHEVER IS EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.

FLOOD ZONE
THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE "X" (UNSHADED), AREA OUTSIDE THE 0.2% ANNUAL CHANCE (500 YEAR) FLOODPLAIN, PER THE FEMA FIRM PANELS 32003C1750E DATED SEPTEMBER 27, 2002.

PRIVATE STREET NOTE
ALL PRIVATE STREETS ARE P.U.E. - PUBLIC SEWER EASEMENTS AND PUBLIC DRAINAGE EASEMENTS TO BE PRIVATELY MAINTAINED BY HOA

FAST
Call Before you Dig
UnderGround
1-702-432-5300
FREEWAY & ARTERIAL SYSTEM OF TRANSPORTATION (F.A.S.T.)



- GRADING NOTES**
- CONSTRUCT 30" ROLL CURB AND GUTTER PER CCAUSD NO. 217.S1. CURB LINES LESS THAN 0.00% GRADE SHALL BE WATER TESTED. ANY CURB THAT DOES NOT FLOW SHALL BE REMOVED AND REPLACED AT NO COST TO THE CITY.
 - INSTALL 4" TYPE CURB AND GUTTER PER CCAUSD #216
 - INSTALL 4" WIDE CONCRETE SIDEWALK (5" THICK OVER 6" TYPE II AGGREGATE BASE) PER CCAUSD #234
 - INSTALL MODIFIED 8-FT WIDE CROSS GUTTER PER DETAIL E ON SHEET D-1
 - INSTALL 2" ASPHALT PAVEMENT OVER 4" TYPE II AGGREGATE BASE
 - INSTALL 60" TYPE III SDMH PER CCAUSD #406
 - CONSTRUCT 10" TRANSITION FROM 1" CURB TO ROLL CURB PER DETAIL A ON SHEET D-4
 - INSTALL SIDEWALK DRAIN PER CCAUSD #236
 - INSTALL 4" TYPE ISLAND CURB PER CCAUSD NO. 219
 - INSTALL 5" WIDE CONCRETE SIDEWALK (5" THICK OVER 6" TYPE II AGGREGATE BASE) PER CCAUSD #234
 - CONSTRUCT SIDEWALK RAMP USING ARMOR TILE TRUNCATED DOMES OR EQUIVALENT PER CCAUSD NO. 235, CASE 1
 - LANDSCAPE TO BE DESIGNED AND MAINTAINED BY MASTER DEVELOPER HOA
 - CONNECTION TO TRAIL DESIGN AND MAINTENANCE BY MASTER DEVELOPER HOA
 - INSTALL WROUGHT IRON FENCE (AND PEDESTRIAN GATES WHERE SHOWN ON PLANS) PER SUMMERLIN DESIGN STANDARDS
 - INSTALL 4.5" THICK CRUSHED ROCK
 - INSTALL 4" THICK CONCRETE PAD OVER 6" THICK TYPE II AGGREGATE BASE
 - INSTALL REMOVABLE BOLLARD PER DETAIL C ON SHEET D-1 AT 4-FT CENTER TO CENTER EACH WAY
 - INSTALL 24" WIDE GATE PER CCAUSD DWG NO. 425.S1
 - INSTALL PAVERS AND CONCRETE BAND PER LANDSCAPE PLANS BY OTHERS
 - INSTALL 18" CLASS III RCP STORM DRAIN
 - INSTALL 24" CLASS III RCP STORM DRAIN
 - INSTALL 36" CLASS III RCP STORM DRAIN
 - INSTALL 60" TYPE I SDMH PER CCAUSD #403
 - INSTALL TYPE "CM2" DROP INLET PER CCAUSD #412.1 AND #421 (SIZE PER PLANS)
 - INSTALL TYPE II SDMH PER CCAUSD #405
 - INSTALL TYPE 30" CLASS III RCP STORM DRAIN

OWNER/DEVELOPER
GREYSTONE NEVADA, LLC
RYLAND HOMES NEVADA, LLC
9275 WEST RUSSELL ROAD, SUITE #400
LAS VEGAS, NV 89148
PH: 702-840-2700
FX: 702-840-2760

ENGINEER
SLATER HANIFAN GROUP, INC.
5740 S. ARVILLE STREET, SUITE 216
LAS VEGAS, NV 89118
PH: (702) 284-5300
FX: (702) 284-5399
CONTACT: JERRY SLATER

BENCHMARK
USDA BRASS CAP ON AN IRON PIPE, 140' SOUTHWEST OF TELEPHONE POLE #26994T, SOUTHWEST CORNER OF THE U.S. 95/KYLE CANYON TURNOFF.
ELEVATION = 2817.62 FEET, 858.813 METERS
N.A.V.D. 88
PER THE CLARK COUNTY VERTICAL CONTROL LAST REVISED 2003

BASIS OF BEARINGS
SOUTH 00°09'59" WEST, BEING THE BEARING OF THE EAST LINE OF THE SOUTHEAST QUARTER (SE 1/4) OF SECTION 12, TOWNSHIP 19 SOUTH, RANGE 59 EAST, N.M.D., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN BY MAP THEREOF IN BOOK 147, PAGE 71 OF PLATS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA.

BONDABLE DRAINAGE QUANTITIES (PRIVATE)

18" RCP CLASS III STORM DRAIN	LF	203
24" RCP CLASS III STORM DRAIN	LF	692
30" RCP CLASS III STORM DRAIN	LF	830
36" RCP CLASS III STORM DRAIN	LF	400
TYPE "CM2" DROP INLET (SIZE PER PLANS)	EA	8
60" TYPE III STORM DRAIN MANHOLE	EA	3
60" TYPE I STORM DRAIN MANHOLE	EA	9
60" TYPE II STORM DRAIN MANHOLE	EA	6
8" WIDE CONCRETE VALLEY GUTTER W/10" TYPE I AGGREGATE BASE	SF	2833

FLOOD CERTIFICATION
I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED TECHNICAL DRAINAGE STUDY ON FILE AT CITY OF LAS VEGAS DS #4917 FOR THE SUBJECT PROJECT.
JERRY J. SLATER, P.E. 14167
DATE 7-13-18

SLATER HANIFAN GROUP
CONSULTING ENGINEERS & PLANNERS
5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
PHONE (702) 284-5300 FAX (702) 284-5399

GREYSTONE NEVADA, LLC
SUMMERLIN VILLAGE 24 PARCEL D PHASE 1
GRADING PLAN - III

DATE: 7/13/18
DRAFTER: DNP
DESIGNER: BCC
CHECKED: BCC
PROJECT NO.: CAL1701-000

PROFESSIONAL ENGINEER - STATE OF NEVADA
JERRY J. SLATER
06/10/2020
No. 14167
7-13-18

G-3
SHEET 6 OF 41
L18-0808
107Y5083-1