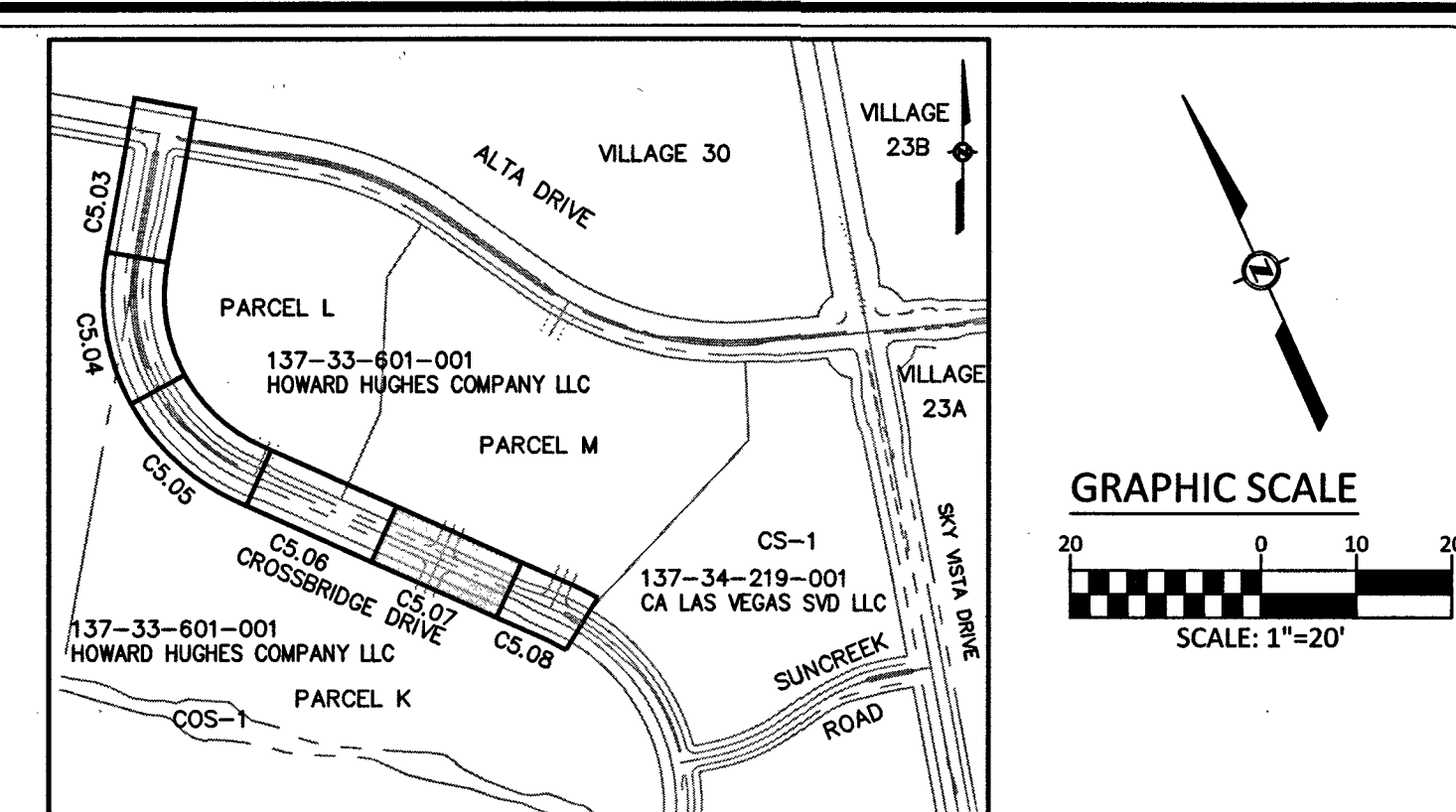
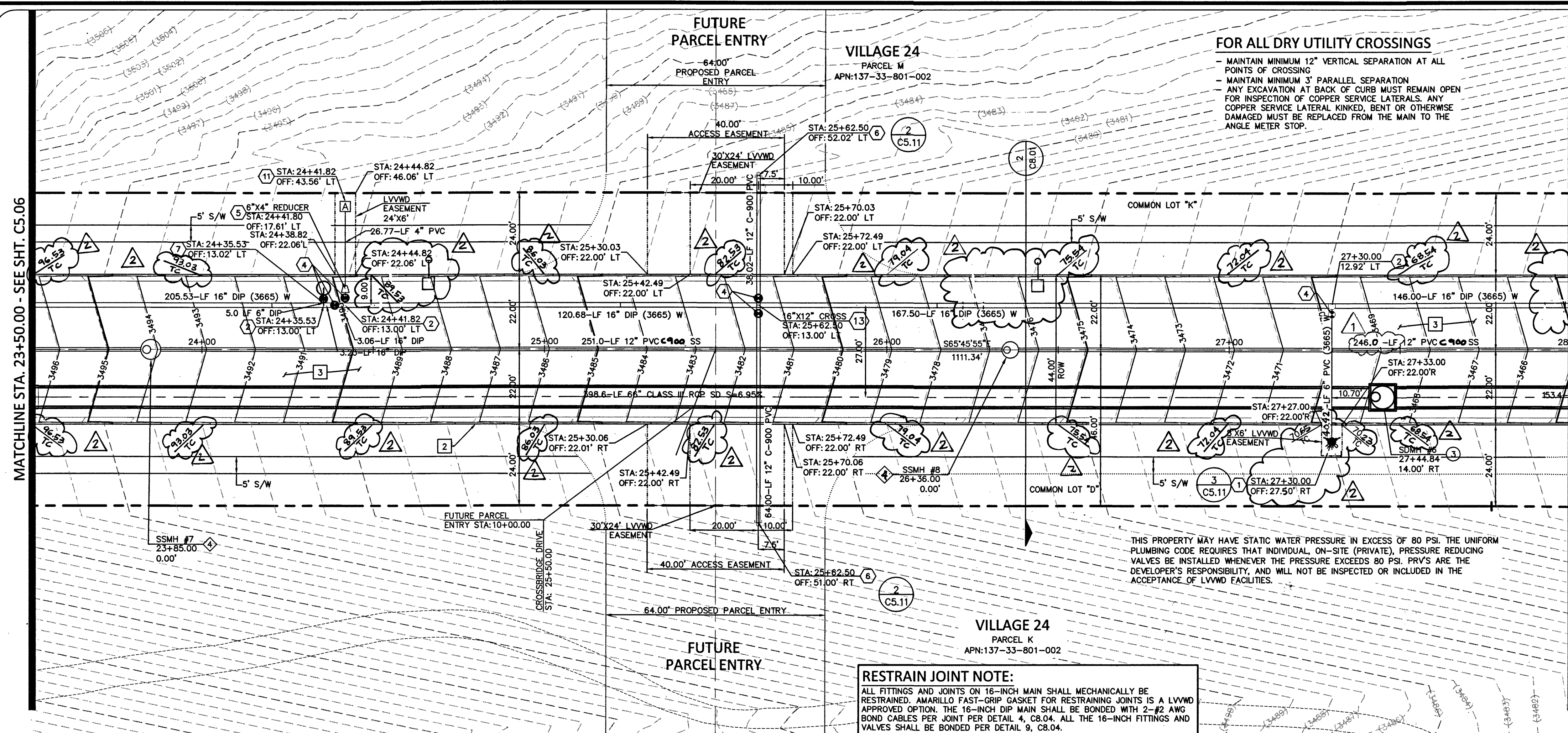




KEY MAP

CONSTRUCTION NOTES:

- NO. ITEM: USDOCA: UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
- [1] INSTALL "A" TYPE ISLAND CURB PER USD DWG NO. 219
- [2] INSTALL "L" TYPE CURB & GUTTER PER USD DWG NO. 216
- [3] INSTALL A.C. PAVEMENT PER TYPICAL STREET SECTION DETAILS
- [4] INSTALL HANDICAP RAMP CURB DEPRESSION (BY OTHERS)
- [5] VERIFY LOCATION AND ELEVATION OF EXISTING IMPROVEMENT. IF DISCREPANCY EXISTS, NOTIFY ENGINEER PRIOR TO CONSTRUCTION

WATER CONSTRUCTION NOTES:

- NO. ITEM: UDACS: PLATE NO. PER UNIFORM DESIGN AND CONSTRUCTION STANDARD FOR WATER DISTRIBUTION SYSTEMS.
- [1] INSTALL FIRE HYDRANT & ASSEMBLY (TEE & 6" CV) PER UDACS PLT. NO. 40 OR 41
- [2] INSTALL TEE PER UDACS PLT. NO. 31 (*)
- [3] INSTALL BEND PER UDACS PLT. NO. 31. (SEE PLAN FOR L) (*)
- [4] INSTALL GATE VALVE PER UDACS PLT. NO. 30 AND 39 (*)
- [5] INSTALL REDUCER PER UDACS PLT. NO. 30 (*)
- [6] INSTALL CAP W/ 2" BLOW-OFF ASSY PER UDACS PLT. NO. 36 (*)
- [7] INSTALL 6" MANUAL BLOW OFF ASSY PER UDACS PLT. NO. 37
- [8] CLSM CLASS 1 BACKFILL IN THE TRENCH ZONE PER UDACS PLATE NO. 17 & 19
- [9] INSTALL VERT. 45° BEND PER UDACS PLT. NO. 31 (WITH RESTRAINED JOINTS)
- [10] REMOVE CAP & BLOWOFF PER UDACS PLT. NO. 36 AND CONNECT TO EXISTING WATER LINE
- [11] INSTALL 4" COMBINATION AIR VALVE PER UDACS PLT. NO. 38
- [12] INSTALL 1 1/2" METER & RPPA PER UDACS PLT. NO. 4 & 8 & DETAIL SHEET C5.02 (BRASS BETWEEN METER & RPPA)
- [13] INSTALL CROSS PER UDACS PLT. NO. 31 (*)

* SEE PLANS AND NOTE ATTACHED PIPE SIZE FOR TEE, BEND, GATE VALVE, REDUCER AND CAP SIZES

SEWER CONSTRUCTION NOTES:

- NO. ITEM: DCSWCS DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS.
- [1] INSTALL 48" SEWER MANHOLE WITH SINGLE LID **NOT USED**
- [2] INSTALL 60" SEWER MANHOLE WITH SINGLE LID
- [3] INSTALL 48" SEWER MANHOLE W/CORROSION PROTECTION WITH SINGLE LID
- [4] INSTALL 60" SEWER MANHOLE W/CORROSION PROTECTION WITH SINGLE LID
- [5] INSTALL TEMPORARY PLUG AND CAP SEWER STUB
- [6] INSTALL ELASTOMERIC JOINT SEALANT AT ALL MANHOLE JOINTS PER DCSWCS 4.9.7
- [7] REMOVE EXISTING PLUG AND CONNECT TO EXISTING SEWER LINE

STORM DRAIN CONSTRUCTION NOTES:

- NO. ITEM: UDACS: PLATE NO. PER UNIFORM DESIGN AND CONSTRUCTION STANDARD FOR WATER DISTRIBUTION SYSTEMS.
- [1] INSTALL TYPE 2 MODIFIED "CM2" DROP INLET PER USDOCA DWG. NO. 412.1 AND 421
- [2] NOT USED
- [3] INSTALL CAST-IN-PLACE MANHOLE PER DETAIL 7 SHEET C8.02
- [4] INSTALL JUNCTION STRUCTURE
- [5] INSTALL PRECAST MANHOLE TEE W/ 48" RISER
- [6] INSTALL PRECAST MANHOLE TEE W/ 60" RISER
- [7] INSTALL PRECAST ELBOW (SEE PLAN FOR L)
- [8] INSTALL TEMPORARY PLUG AND CAP STORM DRAIN LINE
- [9] NOT USED
- [10] INSTALL WATER TIGHT ELASTOMERIC JOINTS PER UDACS 2.22.02
- [11] **NOT USED**
- [12] REMOVE EXISTING PLUG AND CONNECT TO EXISTING STORM DRAIN LINE

**CONTRACTOR TO VERIFY SIZE, INVERT, AND LOCATION OF EXISTING STORM DRAIN LINE

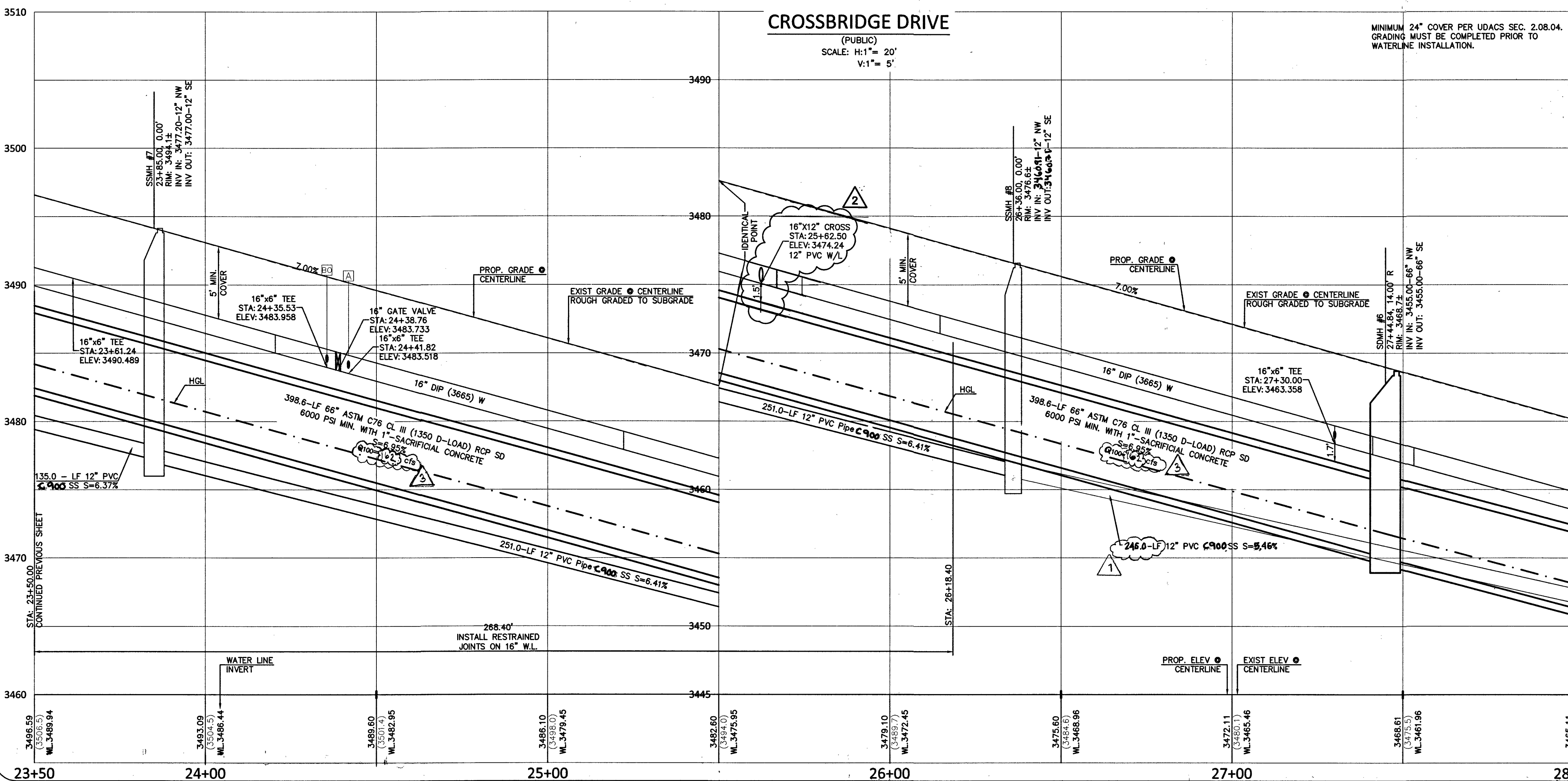
SEWER CONNECTION NOTE:

ONE OR MORE SEGMENTS OF THE DOWNSTREAM SEWER SYSTEM THAT WILL SERVE THIS PROJECT HAS NOT BEEN COMPLETED AND OR ACCEPTED FOR MAINTENANCE BY THE CITY OF LAS VEGAS. ANY WORK DONE ON THIS PROJECT PRIOR TO THE COMPLETION AND OR ACCEPTANCE OF THE DOWNSTREAM SEWER SYSTEMS SHALL BE DONE AT THE DEVELOPER'S OWN RISK. THE CITY OF LAS VEGAS RESERVES THE RIGHT TO PREVENT THE PHYSICAL CONNECTION OF THIS PROJECT INTO THE DOWNSTREAM SEWER SYSTEM UNTIL ALL SEGMENTS HAVE BEEN COMPLETED AND ACCEPTED FOR MAINTENANCE OR UNTIL SUCH TIME AS THEY ARE DEEMED AVAILABLE FOR SERVICE.

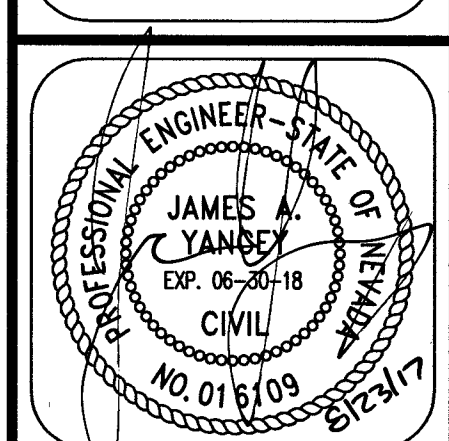
WATER MAIN JOINT DEFLECTION (DIP 14"-24")

DIP PIPE SHALL BE DEFLECTED AT JOINT ONLY, FOR PUSH-ON AND MECHANICAL TYPE DIP JOINTS. MAXIMUM DEFLECTION SHALL BE (1.5) DEGREES PER JOINT WITH A MINIMUM RADIUS OF CURVATURE OF 690 FEET FOR 18 FEET OF PIPE LENGTHS AND 785 FEET FOR 20 FEET PIPE LENGTHS. PER UDACS 2.07.03. FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED.

APPROVED FOR CONSTRUCTION
 LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
 DATE 8/31/17 PROJECT NO. 124806
 LVWD APPROVED FIRE FLOW 1500 GPM AT 20 PSI RESIDUAL



COLLINS ENGINEERS
 3130 S. DURANGO DR., SUITE 404
 LAS VEGAS, NV 89117
 PHONE: (702) 248-8000
 FAX: (702) 248-8070
 www.collinsengr.com



IMPROVEMENT PLANS FOR
THE HOWARD HUGHES COMPANY, LLC
APN: 137-33-601-001
UTILITY PLAN & PROFILE
STA. 23+50.00 TO 28+00.00
 SUMMERLIN VILLAGE 24 CROSSBRIDGE DRIVE UNIT 3
 CITY OF LAS VEGAS

NO.	DATE	DESIGN BY	DESCRIPTION
1	12/21/17	LM	DESIGNED
2	02/12/18	LM	REVISED FOR LOCATION ADJUSTED ST. LIMITS
3	05/08/18	LM	ADDED TO ELEV. AND PLUG SP.

CEI PROJECT: 9106
 DESIGN BY: J. SALDIVAR
 DRAWN BY: J. SALDIVAR
 CHECKED BY: K. YAMADA
 DATE: 04/2017
 SCALE: 1" = 20'
 SHEET NUMBER: C5.07
 1077063
 SHEET 12 OF 26
 H65270