

DS #: 4980.3

APN: 137-22-000-017

PROJECT: Summerlin V23B Sky Vista Dr - Alta to Far Hills

SUBMITTAL: 7th

SCANNED BY/DATE:

CHECKED BY/DATE:



CITY OF LAS VEGAS		DATE:
INTER-OFFICE MEMORANDUM		February 6, 2020
TO: Land Development Services Department of Building & Safety		FROM: Albert Sung, P.E. Flood Control Project Engineer Department of Public Works
SUBJECT:	Drainage Study for:	COPIES TO:
	Summerlin V23B Sky Vista Dr - Alta to Far Hills – Update #3	GCW, Inc.
Cross Streets:	Sky Vista Drive from Alta to Far Hills	The Howard Hughes Company, LLC
File Number:	F:\Depot\DSMemos\DS4980H.doc	Bart Anderson, P.E., DevCo
Parcel Number:	137-22-000-017	CCRFCD
Zoning Action:	MDR-72841	
FEMA Flood Zone	YES NO X	
Proposed Storm Drain	YES X NO	

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1 st Submittal	4/11/2018	4/23/2018 & 5/3/2018	Not Approved	\$400.00	495088: \$400
2 nd Submittal	7/3/2018	7/20/2018 & 7/24/2018	Conditional Approval	\$400.00	497102: \$400
CCRFCD	8/20/2018	9/4/2018	Concurrence Recv'd	N/C	N/C
3 rd Submittal	12/20/2018	1/17/2019	Not Approved	\$100.00	501989: \$100
4 th Submittal	1/30/2019	2/13/2019	Approved	N/C	N/C
5 th Submittal	4/22/2019	5/9/2019	Approved	\$100.00	3099214: \$100
6 th Submittal	11/27/2019	12/17/2019	Not Approved	\$100.00	3658371: \$100
7 th Submittal	1/2/2020 & 1/30/2020	2/6/2020	See Comments Below	\$400.00	3694352: \$400
TOTAL FEES (LDDRS):				\$1,500.00	----

REMARKS:

6th & 7th Submittals: Update #3 and Addendum

5th Submittal: Update #2 to revise the size and slope of a stub at Station 363+05.60

3rd & 4th Submittals: Update & Supplement to connect the 2nd outfall pipe from DB5 to the Sky Vista Drive Storm Drain System and the Relocation of an existing stub

The Drainage Study for the subject project has been reviewed and:

	is approved subject to conformance to all City standards and the following conditions:
	must be resubmitted or supplemented including the following:
X	is conditionally approved subject to Clark County Regional Flood Control District concurrence.
	is conditionally approved subject to Clark County Public Works Department concurrence.

1. **This drainage update is acceptable in concept;** however, *City of Las Vegas* will not formally accept the study until the *Clark County Regional Flood Control District (CCRFCD)* has issued a letter of concurrence. The engineer should contact the CCRFCD to confirm that they have begun their review.

Please note that effective March 15, 2019, the CCRFCD adopted new requirements for drainage study concurrence submittal. Follow the link below for specific guidance.

<http://gustfront.ccrfcd.org/LandDev/LandDev.aspx>

The following comments are repeated until they are complete:

1. The project proposed to build temporary drainage facilities including drainage berms/ditches along predominantly the west side of the proposed *Sky Vista Drive*. Prior to the final plans approval, the developer must complete a **Maintenance & Liability Agreement** for the interim drainage improvements and post a minimum maintenance bond of \$50,000 or 50-percent of the construction cost for the improvements, whichever is greater. The engineer must submit an estimate of the quantities for constructing the facilities and an exhibit that adequately shows the location and limits of the drainage facilities to *City Flood Control Section* for approval. Once the drainage study is conditionally approved, the engineer/developer should contact *City Land Development Section* (702-229-6371) to begin the agreement process.

In order for the maintenance bond to be released in the future, a drainage update/letter will be required to justify that the berms/ditches are no longer necessary and can be removed.

2. Since the street and the associated storm drain facilities will eventually be dedicated to the **City of Las Vegas**, the engineer/developer must coordinate with *City of Las Vegas Streets & Sanitation Department* for their review and approval for maintenance issues prior to the final acceptance of the subject improvement plans.

NOTE: Any future changes to the proposed design (or design assumptions) as outlined in the approved drainage study and attached preliminary grading plan which affect drainage must be addressed in a Drainage Study Update and accepted by the *City of Las Vegas Flood Control Section*. Additionally, conditional acceptance of a drainage study is valid for a period of one (1) year. If the proposed construction has not been completed in that time period, the *City of Las Vegas* reserves the right to require additional conditions and/or submission and acceptance of a complete drainage study update prior to further construction of a project.

NOTE: Please be advised that all land surface area disturbances over 1 acre or any area adjacent to a water way must submit to the Nevada Division of Environmental Protection a "Notice of Intent" to discharge that certifies a stormwater pollution prevention plan has been developed and is maintained on site; for inclusion in the Stormwater General Permit No. NVR100000. A phased construction unit in a contiguous subdivision is considered under construction until all stripped or disturbed surface areas have been covered by paving, building construction or planting. For more information, including forms and applications see <http://ndep.nv.gov/bwpc/storm01.htm> or call (775) 687-9429.

END OF REMARKS
WSP/AYS

T/R/S: T20S/R59E/22
AREA K-22

**RESPONSE TO COMMENTS FOR
UPDATE #3 TO THE
TECHNICAL DRAINAGE STUDY
FOR
VILLAGE 23B SKY VISTA DRIVE
ALTA DRIVE TO FAR HILLS AVENUE**

62023B-240

January 2020

Prepared for:

**The Howard Hughes Company, LLC
10845 Griffith Peak Drive, Suite 160
Las Vegas, Nevada 89135
Phone: (702) 791-4300**

GCV
ENGINEERS \ SURVEYORS

62023B-240

January 2, 2020

Albert Y. Sung, PE
Flood Control Project Engineer
City of Las Vegas Land Development Services
Department of Public Works
333 N. Rancho Drive – 7th Floor
Las Vegas, NV 89106

**Subject: Response to Comments for Update #3 to the Technical Drainage Study for
Village 23B Sky Vista Drive – Alta Drive to Far Hills Avenue**

Dear Mr. Sung,

This letter is to certify that all documents provided in the Response to Comments for Update #3 to the Technical Drainage Study for Village 23B Sky Vista Drive – Alta Drive to Far Hills Avenue electronic submittal (CD) matches 100% the hardcopy version of the study.

Respectfully submitted,

Steve Jones, PE
GCW, Inc.



HYDROLOGIC CRITERIA AND DRAINAGE MANUAL
DRAINAGE STUDY INFORMATION FORM

Name of Development: Update #3 to Village 23B Sky Vista Drive Alta Drive to Far Hills Avenue Date: January 2020

Location of Development: a) Descriptive (Cross Streets) North/South: Sky Vista Drive

East/West: Alta Drive , Far Hills Avenue

b) Section: 22 Township: 20 S Range: 59 E

c) APN : 137-22-000-017

Name of Owner: The Howard Hughes Company, LLC

Telephone No.: (702) 791 - 4300 Fax No.: N/A E-Mail Address: chris.anderson@howardhughes.com

Address: 10845 Griffith Peak Drive, Suite 160, Las Vegas, NV 89135

Contact Person-Name: Steve Jones Telephone No.: (702) 804-2130

* E-Mail Address: sjones@gcwengineering.com Fax No.: (702) 804-2299

Firm: GCW, Inc.

Address: 1555 South Rainbow Blvd, Las Vegas, Nevada 89146

Type of Land Development/Land Disturbance Process:

☐	Rezoning	☐	Subdivision Map	☐	Clearing and Grading Only
☐	Parcel Map	☐	Planned Unit Development	☐	Other (Please specify below)
☐	Large Parcel Map	☒	Building Permit	☐	

1. Total Owned Land Area: At Site: +/- 12 Acres Being Developed/Disturbed: +/- 12 Acres

2. Is a portion or all of the subject property located in a designated FEMA Flood Hazard Area? ☐ Yes** ☒ No

3. Is the property bordered or crossed by an existing or proposed Clark County Regional Flood Control District Master Planned Facility? ☐ Yes** ☒ No

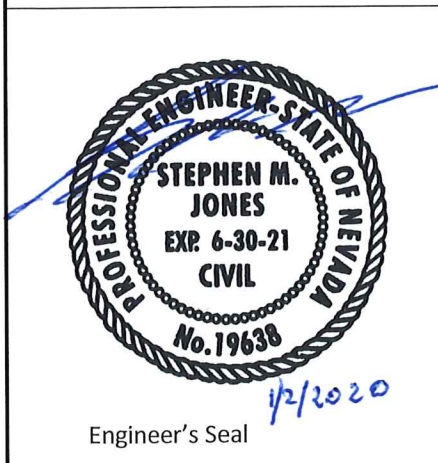
4. Proposed type of development (Residential, Commercial, Etc.): Road Improvement

5. Approximate upstream land area which drains to the subject site: +/- 4000 Acres

6. Has the site drainage been evaluated in the past? ☒ YES ☐ NO If yes, please identify documentation: The Conceptual Drainage Study for Summerlin Village 23B

7. If known, please briefly identify the proposed discharge point(s) of runoff from the site:
The flow generated by the proposed Sky Vista Drive storm drain conveyed by the Existing 10'X8' RCB

8. Briefly describe your proposed schedule for the subject project: ASAP



Submit this form as part of the required drainage study to the local entity which has jurisdiction over the subject property. This form may provide sufficient information to serve as the Conceptual Drainage Study.

***New Required Field**

****Review and concurrence of the Clark County Regional Flood Control District is required.**

Revision	Date

Local Entity File No. _____

REFERENCE:

STANDARD FORM 1

**RESPONSE TO COMMENTS FOR
UPDATE #3 TO THE
TECHNICAL DRAINAGE STUDY
FOR
VILLAGE 23B SKY VISTA DRIVE
ALTA DRIVE TO FAR HILLS AVENUE**

62023B-240

January 2020

Authored By:

Masih Edalat, PhD, EI

Prepared By:

**GCW, Inc.
1555 S. Rainbow Blvd.
Las Vegas, NV 89146
Phone: (702) 804-2000
Fax: (702) 804-2299**

62023B-240

January 2, 2020

Re: Response to City of Las Vegas Comments on Update #3 to the Technical Drainage Study for Village 23B Sky Vista Drive – Alta Drive to Far Hills Avenue (DS4980G)

This report addresses the City of Las Vegas review comments dated December 17, 2019 regarding the project in its entirety. Below are individual responses to each comment included in the review letter.

Comment 1:

It is understood that the original outfall pipe (60"-RCP) of DB5 has been capped and not functioning anymore. Explain why the 60"-lateral is not being replaced by a 24"-RCP because the total Q_{100} will be only 11cfs ($OF2=2cf + OF1A^*=9cfs$)?

Response:

The 60-inch lateral is already in place and therefore, it has not been replaced with a smaller pipe. Note that SDMH #12 has been changed to Type II-SD w/48" Type IA Riser for a better connection of the proposed 24-inch RCP to the existing 60-inch RCP.

Comment 2:

The site is adjacent to or crosses an existing or proposed *Clark County Regional Flood Control District* (CCRFCD) master planned facility. Therefore, CCRFCD concurrence is required prior to final approval of the drainage study.

Please note that effective March 15, 2019, the CCRFCD adopted new requirements for drainage study concurrence submittal. Follow the link below for specific guidance.

<http://gustfront.ccrfcd.org/LandDev/LandDev.aspx>

Response:

The CCRFCD concurrence requirement prior to final approval of the drainage study is acknowledged.

The following comments are repeated until they are complete:

Comment 1:

The project proposed to build temporary drainage facilities including drainage berms/ditches along predominantly the west side of the proposed Sky Vista Drive. Prior to the final plans approval, the developer must complete a **Maintenance & Liability Agreement** for the interim drainage improvements and post a minimum maintenance bond of \$50,000 or 50-percent of the construction cost for the improvements, whichever is greater. The engineer must submit an estimate of the quantities for constructing the facilities and an exhibit that adequately shows the location and limits of the drainage facilities to City Flood Control Section for approval. Once the drainage study is conditionally approved, the engineer/developer should contact City Land

Development Section (702- 229-6371) to begin the agreement process.

In order for the maintenance bond to be released in the future, a drainage update/letter will be required to justify that the berms/ditches are no longer necessary and can be removed.

Response:

The requirements for Maintenance & Liability Agreement prior to the final approval is acknowledged.

Comment 2:

Since the street and the associated storm drain facilities will eventually be dedicated to the City of Las Vegas, the engineer/developer must coordinate with City of Las Vegas Streets & Sanitation Department for their review and approval for maintenance issues prior to the final acceptance of the subject improvement plans.

Response:

The City of Las Vegas Streets & Sanitation Department approval requirement is acknowledged prior to the final acceptance of the subject improvement plans.

Comment 3:

All offsite interim flood control facilities such as but not limited to berms / ditches and temporary sumps are privately owned and to be privately maintained by the Howard Hughes Company.

Response:

The grading plans have a note showing flood control facilities such as but not limited to berms / ditches and temporary sumps are privately owned and to be privately maintained by the Howard Hughes Company.

If you have any questions or require additional information, please do not hesitate to contact me at 804-2127.

Respectfully,

GCW, INC.



Masih Edalat, PhD, EI
Flood Control Division

APPENDIX

CITY OF LAS VEGAS		DATE:
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Parcel Number:	137-22-000-017	
Zoning Action:	MDR-72841	
FEMA Flood Zone	YES	NO X
Proposed Storm Drain	YES X	NO
COPIES TO:		
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		The Howard Hughes Company, LLC
		Bart Anderson, P.E., DevCo
		CCRFC

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END OF REMARKS
WSP/AYS

T/R/S: T20S/R59E/22
AREA K-22

LEGEND	
	PROPOSED UTILITIES
	EXISTING UTILITIES
	FUTURE UTILITIES
	SECTION LINE
	RIGHT-OF-WAY LINE
	PROPERTY LINE
	CENTERLINE
	100 YR HYDRAULIC GRADE LINE (ULT)
	100 YR HYDRAULIC GRADE LINE (INT)
	PROPOSED UTILITY (BY OTHERS)
	FUTURE SEWER LINE W/MH
	EXISTING SEWER LINE W/MH
	GATE VALVE
	PROPOSED WATER LINE & GATE VALVE
	PROPOSED WATER LINE & GATE VALVE
	FUT WTR
	2" G
	2-6" E
	CATV
	TEL
	OHP
	PROPOSED STORM DRAIN W/MH
	EXISTING STORM DRAIN W/MH
	FUTURE STORM DRAIN W/MH
	EXISTING SIDEWALK AND RAMP
	CONSTRUCT CURB DEPRESSION FOR FUTURE HANDICAP RAMP
	VIEW FENCE
	NEW ABANDONED PIPE
	EXISTING ABANDONMENT
	SAWCUT
	STEEL CASING
	APPROXIMATE PAVEMENT RESTORATION
	TO BE ABANDONED PROFILE HATCH
	WATER STUB WITH BLOW-OFF
	FUTURE WATER STUB WITH BLOW-OFF
	SEWER STUB WITH CAP
	FUTURE SEWER STUB WITH CAP
	EDGE OF PAVEMENT
	OUTSIDE EDGE
	CUT LIMIT LINE
	FILL LIMIT LINE
	PROPOSED WATER METER
	PROPOSED WATER METER
	EXISTING TRAFFIC SIGNAL
	EXISTING TRAFFIC SIGNAL
	EXISTING FIRE HYDRANT
	FUTURE FIRE HYDRANT
	EXISTING UTILITY BOX
	EXISTING METER BOX
	EXISTING POLE
	PROPOSED CONTOUR
	EXISTING CONTOUR
	SPOT ELEVATION
	EXISTING SPOT ELEVATION
	ROAD SLOPE
	EXISTING CLARK COUNTY STREET LIGHT (STLT)
	EXISTING SUMMERLIN STREET LIGHT (STLT)
	PROPOSED SUMMERLIN STREET LIGHT (STLT)
	PROPOSED TRANSFORMER PAD
	PROPOSED SERVICE PEDESTAL
	PROPOSED PULLBOX
	RETAINING WALL
	STORM DRAIN MANHOLE (SEE PLAN FOR SIZE AND TYPE)

ABBREVIATIONS	
A	AIR
AC	ASPHALT CONCRETE, ACRE
ACP	ASBESTOS CEMENT PIPE
ADD'L	ADDITIONAL
AP	ANGLE POINT
APN	ASSESSOR'S PARCEL NUMBER
APPROX	APPROXIMATELY
AASHTO	AMERICAN ASSOCIATION OF STATE OFFICIALS
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AVE	AVENUE
AVAR	AIR VALVE, AIR RELEASE
AWWA	AMERICAN WATER WORKS ASSOCIATION
BC	BEGIN CURB RETURN
BLM	BUREAU OF LAND MANAGEMENT
BLVD	BOULEVARD
BM	BENCHMARK
BO	BLOW-OFF
BVCE	BEGIN VERTICAL CURVE ELEVATION
BVCS	BEGIN VERTICAL CURVE STATION
BVP	BEGIN VERTICAL POINT
BW	BACK OF SIDEWALK
C	CENTERLINE
C&G	CURB AND GUTTER
CATV	CABLE TELEVISION
CCBM	CLARK COUNTY BENCH MARK
CCPW	CLARK COUNTY PUBLIC WORKS
CCTV	CLOSED-CIRCUIT TELEVISION
COWRD	CLARK COUNTY WATER RECLAMATION DISTRICT
CFS	CUBIC FEET PER SECOND
CIP	CORRUGATED IRON PIPE
CIPM	CURED-IN-PLACE MANHOLE
CIPP	CURED-IN-PLACE PIPE
CIR	CIRCLE
CLR	CLEAR OR CLEARANCE
CLSM	CONTROLLED LOW STRENGTH MATERIAL
CLV	CITY OF LAS VEGAS
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY UNIT
CNVL	CITY OF NORTH LAS VEGAS
CO	CLEANOUT
CONC	CONCRETE
COND	CONDUIT
CONST	CONSTRUCT OR CONSTRUCTION
COORD	COORDINATE
COR	CORNER
CPEP	CORRUGATED POLYETHYLENE PIPE
CT	COURT
CY	CUBIC YARD(S)
Δ	DELTA
DBL	DOUBLE
DESIGN	DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEM (LATEST EDITION)
DEFL	DEFLECTION
DG	DESIGN GRADE
D/D.I.	DROP INLET
DIA. Ø	DIAMETER
DIP	DUCTILE IRON PIPE
DIST	DISTANCE
DR	DRIVE
DS	DOWNSPOUT
DTL	DETAIL
DW	DRAWING
EAST	EAST
ECR	END CURB RETURN
ELEV	ELEVATION
ELEV	ELEVATION
EOP	EDGE OF PAVEMENT
ESMT	EASEMENT
EVC	END VERTICAL CURVE
EVP	END VERTICAL POINT
EXIST, EX	EXISTING
EXP	EXPANSION JOINT
FC	FACE OF CURB
FFE	FINISH FLOOR ELEVATION
FG	FINISH GRADE
FL	FLOW LINE
FO	FIBER OPTIC
FRP	FIBERGLASS REINFORCED PLASTIC
FS	FINISH SURFACE
FTG	FOOT/FEET
FUT	FUTURE
G	GAS
GAGE	GAGE, GUY ANCHOR
GB	GRADE BREAK
GND	GROUND
GRD	GRADE, GROUND
H	HEIGHT
HGT	HEADWALL
HGL	HYDRAULIC GRADE LINE
HORIZ	HORIZONTAL
HP	HIGH POINT, HIGH PRESSURE
HPS	HIGH PRESSURE SODIUM
IBC	INTERNATIONAL BUILDING CODE
INV	INVERT
INT	INTERIM
JOINT	JOINT
LT	LENGTH
LN	LANE
LP	LOW OF GUTTER
LP	LOW POINT, LIGHT POLE
LSCP	LANDSCAPE
LWWD	LAS VEGAS VALLEY WATER DISTRICT
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MLCP	MORTAR LINED AND COATED PIPE
MLCTWP	MORTAR LINED & COATED TAPE WRAPPED PIPE
MP	MESA PARK
MOD	MODIFY/MODIFIED
MON	MONUMENT
MPH	MILES PER HOUR
N	NORTH
NAP	NOT A PART
NDOT	NEVADA DEPARTMENT OF TRANSPORTATION
NO	NUMBER
NOSHA	STATE OF NEVADA OCCUPATIONAL SAFETY AND HEALTH
NPC	NEVADA POWER COMPANY
NTS	NOT TO SCALE
NVE	NV ENERGY
OB	OVERBUILD
OC	ON CENTER
OHC	OVERHEAD COX COMMUNICATION
OHP	OVERHEAD POWER LINE
PB	PULL BOX
PBS	PLANTMIX BITUMINOUS SURFACE
PC	POINT OF CURVE, PRESSURE CLASS
PCC	POINT OF COMPOUND CURVE
PE	PROJECT ENGINEER OR PEDESTRIAN
PED	PEDESTRIAN
PGL	PROFILE GRADE LINE
PH	POT HOLE
PI	POINT OF INTERSECTION
PV	POST INDICATOR VALVE
PLCP	PROPERTY LINE
PMF	PAVEMENT MARKING FILM
POB	POINT OF BEGINNING
POC	POINT ON CURVE, POINT OF CONNECTION
POT	POINT ON TANGENT
PP	POWER POLE
PROP	PROPOSED
PRC	POINT OF REVERSE CURVE
PRVC	POINT OF REVERSE VERTICAL CURVE
PSI	POUNDS PER SQUARE INCH
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
PVI	POINT OF VERTICAL INTERSECTION
PVMT	PAVEMENT
PZ	PRESSURE ZONE
R	RAD
RT	RIGHT
RCB	REINFORCED CONCRETE BOX
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
RDMW	ROADWAY
REC	RECTANGULAR
REF	REFERENCE
REINF	REINFORCED
REQD	REQUIRED
RIM	TOP OF RIM ELEVATION
RND	ROUND
ROW, R/W	RIGHT OF WAY
RP	RADIUS POINT
RPM	RAISED PAVEMENT MARKERS
RSOV	RESILIENT SEAT GATE VALVE
S	SEWER, SOUTH
SCH	SCHEDULE
SD	STORM DRAIN
SDMH	STORM DRAIN MANHOLE
SECT	SECTION
SF	SQUARE FOOT/FEET
SHLDR	SHOULDER
SHT	SHEET
SIS	SUMMERLIN IMPROVEMENT STANDARDS
SL	STREET LIGHT
SP	SERVICE POINT
SQ	SQUARE
SR	SEWER RECLAIM MAIN
SS	SANITARY SEWER
SSMH	SANITARY SEWER MANHOLE
STA	STATION
STD	STANDARD
STL	STEEL
STRUCT	STRUCTURE
SV	SKY VISTA DRIVE
SW	SIGHT VISIBILITY ZONE
SW	SIDEWALK
SWG	SOUTHWEST GAS
T	TELEPHONE OR TOP
T	TANGENT
TB	TOP OF BERM
TC	TEMPORARY CONSTRUCTION ESMT
TELE	TELEPHONE
TEMP	TEMPORARY
TF	TOP OF FOOTING
TG	TOP OF GRATE
TMH	TOP OF MANHOLE
TOP	TOP OF PIPE
TP	TELEPHONE POLE
TRANS	TRANSITION
TRW	TOP OF RETAINING WALL
TS	TEST STATION
TS&V	TAPPING SLEEVE & VALVE
TW	TOP OF WALL
TYP, (TYP)	TYPICAL
UDACS	UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS (LATEST EDITION)
ULT	UNDERGROUND
ULT	ULTIMATE
USDC	UNIFORM STD. DRAWINGS FOR PUBLIC WORKS' CONSTRUCTION
USDCA	OFF-SITE IMPROVEMENTS CLARK COUNTY AREA, NEVADA (LATEST EDITION)
UT	UNDERGROUND TELEPHONE
VAR	VARIABLE/VARIES
VCP	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
VERT	VERTICAL
VOL	VOLUME
W	WATER, WEST
WMH	WATER MANHOLE
WS	WATER SUPPLY
WT	WEIGHT
WTR	WATER
XING	CROSSING
YD	YARD, YARD DRAIN
Z	PRESSURE ZONE

INDEX OF SHEETS		
NO.	DWG	DESCRIPTION
1	1	COVER SHEET
2	2	LEGEND AND ABBREVIATIONS
3	3	GENERAL NOTES
4	4	REMOVAL PLAN 1
5	5	REMOVAL PLAN 2
6	6	REMOVAL PLAN 3
7	7	HORIZONTAL CONTROL 1
8	8	HORIZONTAL CONTROL 2
9	9	MASTER UTILITY PLAN - WATER
10	10	MASTER UTILITY PLAN - STORM DRAIN
11	11	MASTER UTILITY PLAN - SEWER
12	12	PLAN AND PROFILE 1
13	13	PLAN AND PROFILE 2
14	14	PLAN AND PROFILE 3
15	15	PLAN AND PROFILE 4
16	16	PLAN AND PROFILE 5
17	17	PLAN AND PROFILE 6
18	18	PLAN AND PROFILE 7
19	19	PLAN AND PROFILE 8
20	20	PLAN AND PROFILE 9
21	21	PLAN AND PROFILE 10
22	22	PLAN AND PROFILE 11
23	23	PLAN AND PROFILE 12
24	24	DAYLIGHT GRADING 1
25	25	DAYLIGHT GRADING 2
26	26	DAYLIGHT GRADING 3
27	27	DAYLIGHT GRADING 4
28	28	LATERAL PROFILES 1
29	29	LATERAL PROFILES 2
30	30	LATERAL PROFILES 3
31	31	LATERAL PROFILES 4
32	32	LATERAL PROFILES 5
33	33	LATERAL PROFILES 6
34	34	LATERAL PROFILES 7
35	35	DETAILS 1
36	36	DETAILS 2
37	37	ROADWAY TYPICAL SECTIONS
38	38	CHANNEL TYPICAL SECTIONS
39	39	ROADWAY SIGNING AND STRIPING PLAN 1
40	40	ROADWAY SIGNING AND STRIPING PLAN 2
41	41	ROADWAY SIGNING AND STRIPING PLAN 3
42	42	ROADWAY SIGNING AND STRIPING PLAN 4
43	43	STREETLIGHT, CONDUIT, AND ELECTRICAL PLAN 1
44	44	STREETLIGHT, CONDUIT, AND ELECTRICAL PLAN 2
45	45	STREETLIGHT, CONDUIT, AND ELECTRICAL PLAN 3
46	46	STREETLIGHT, CONDUIT, AND ELECTRICAL PLAN 4
26A	26A	OFFSITE STORM DRAIN PLAN AND PROFILE

INDEX OF SHEETS FOR REVISION 3 ONLY		
NO.	DWG	DESCRIPTION
34A	34A	LATERAL PROFILES 8
41A	41A	ULTIMATE ROADWAY SIGNING AND STRIPING PLAN 1
42A	42A	ULTIMATE ROADWAY SIGNING AND STRIPING PLAN 2
42B	42B	ULTIMATE ROADWAY SIGNING AND STRIPING PLAN 3

LOCATION		
LYING WITHIN SECTIONS 27 & 34 TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA.		

BASIS OF BEARINGS		
NORTH 89°45'05" EAST BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 35, TOWNSHIP 20 SOUTH, RANGE 58 EAST, M.D.M., AS SHOWN BY MAP ON FILE IN FILE 91, PAGE 28 OF PARCEL MAPS IN THE CLARK COUNTY RECORDER'S OFFICE, CLARK COUNTY, NEVADA.		

BENCHMARK		
DESCRIPTION	NAVD 88 DATUM	NAVD 88 DATUM
RIVET AND PLATE IN TOP OF CURB @ NORTHEAST CORNER OF DESERT FOOTHILLS AND ALTA DRIVE	3304.45 (FEET)	1007.197 (METERS)
CLV BM NO. 5LV09 34NE6		

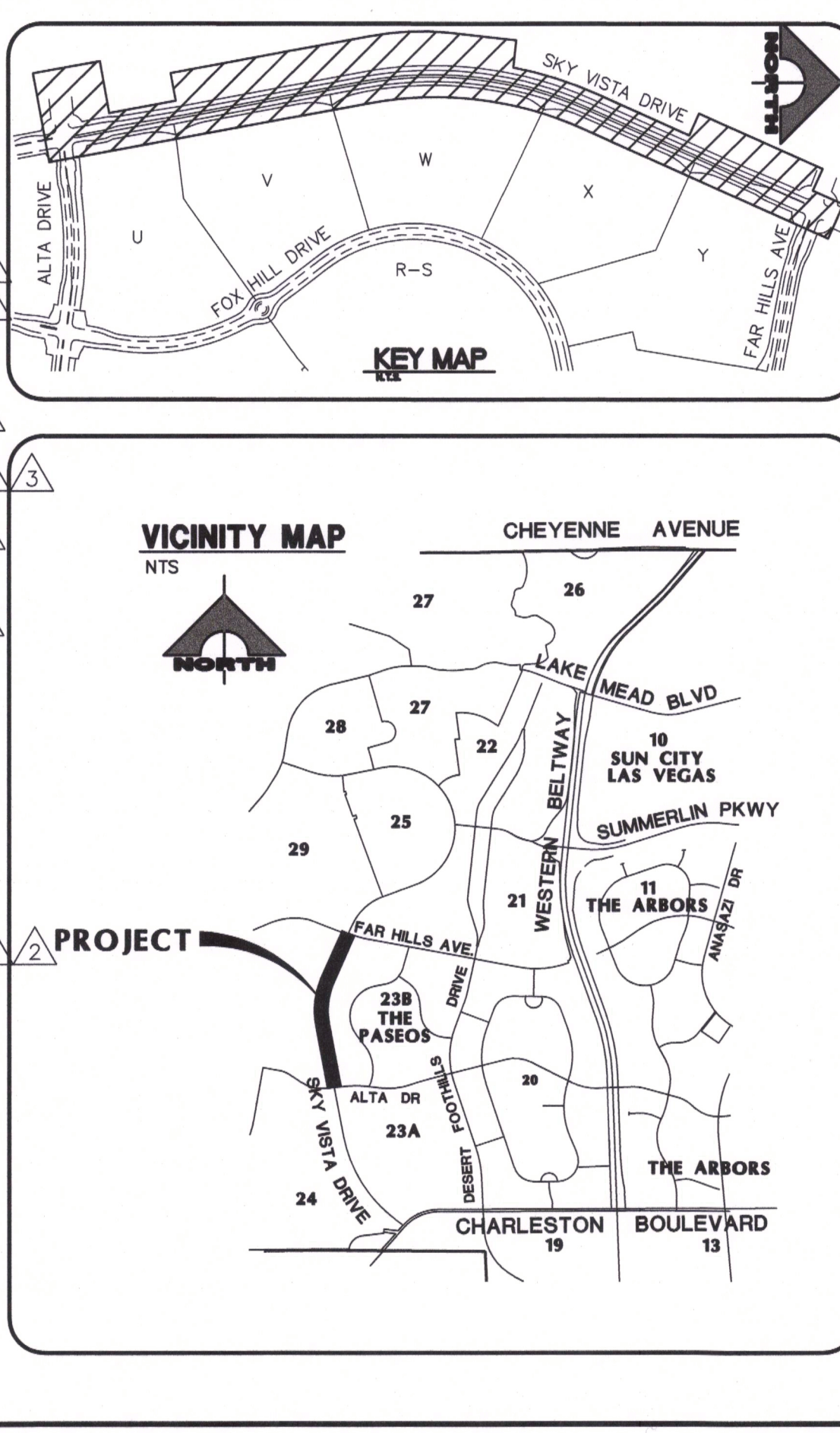
APPROVED FOR CONSTRUCTION		
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES		
PROJECT NO. 126398	FIRST APPROVED DATE:	10/22/18

STORM DRAIN QUANTITIES (PUBLIC)	
60" RCP	61 LF
60" RCP W/ 1" SACRIFICIAL CONCRETE	2,231 LF
54" RCP	964 LF
48" RCP	75 LF
42" RCP	95 LF
24" RCP	145 LF
18" RCP	406 LF
24" C900 PVC	119 LF
18" C900 PVC	297 LF
TYPE II MANHOLE	2 EA
TYPE II-SD MANHOLE	8 EA
TYPE III-SD MANHOLE	1 EA
5' TYPE "CM2" DROP INLET	11 EA
10.0' TYPE "CM2" DROP INLET	2 EA
12.5' TYPE "CM2" DROP INLET	1 EA
TYPE II-SD MANHOLE W/ 48" TYPE 1A RISER	1 EA
NDOT TYPE II DOUBLE GRATE INLET	1 EA
QUANTITIES ARE ESTIMATED ONLY. CONTRACTOR IS TO VERIFY DURING BIDDING PROCESS.	

SEWER QUANTITIES (PUBLIC)	
12" PVC	2,636 LF
12" C900	1,568 LF
8" PVC	200 LF
48" MANHOLE	4 EA
60" MANHOLE	12 EA
PIPE END CAPS	6 EA
8" C900	40 LF
QUANTITIES ARE ESTIMATED ONLY. CONTRACTOR IS TO VERIFY DURING BIDDING PROCESS.	

ROAD IMPROVEMENT QUANTITIES (PUBLIC)	
EXCAVATION & EMBANKMENT	93,798 CY
4 IN. AC PAVEMENT	33,500 SY
TYPE II AGGREGATE	3,750 CY
TYPE "L" CURB - 6"	10,097 LF
TYPE "A" CURB	9,772 LF
BUS TURNOUT	1,870 SF
PAVEMENT STRIPING-ARTERIAL	5,258 LF
BIKE LANE STRIPING	5,258 LF
PAVEMENT MARKERS	5,258 LF
SIGNAGE	5,258 LF
QUANTITIES ARE ESTIMATED ONLY. CONTRACTOR IS TO VERIFY DURING BIDDING PROCESS.	

WATER QUANTITIES (PUBLIC)	
6" PVC	427 LF
12" DIP	233 LF
12"x6" TEE & VALVE (FIRE HYDRANT)	3 EA
FIRE HYDRANT ASSEMBLY	10 EA
6" VALVE	2 EA
6" VERTICAL 45° BEND	20 EA
12" VERTICAL 45° BEND	10 EA
12"x6" REDUCER	2 EA
12" CAP AND BLOW-OFF	4 EA
6" END CAP PER UDACS PLATE NO. 31	1 EA
12"x12" TAPPING SLEEVE & VALVE (TS&V)	3 EA
12"x6" TAPPING SLEEVE & VALVE (TS&V)	3 EA
1-1/2" METER AND 1-1/2" RPPA	3 EA
12" PVC	45 LF
QUANTITIES ARE ESTIMATED ONLY. CONTRACTOR IS TO VERIFY DURING BIDDING PROCESS.	



CAUTION- HIGH PRESSURE GAS!!
CALL SOUTHWEST GAS AT 702-400-1789 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES 48 HOURS PRIOR TO CONSTRUCTION.

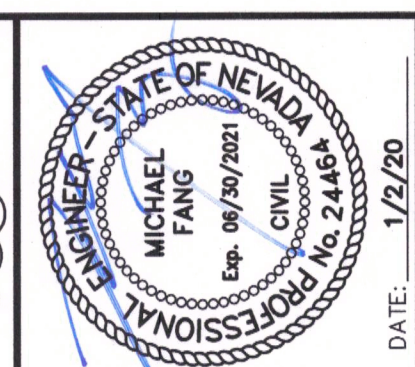
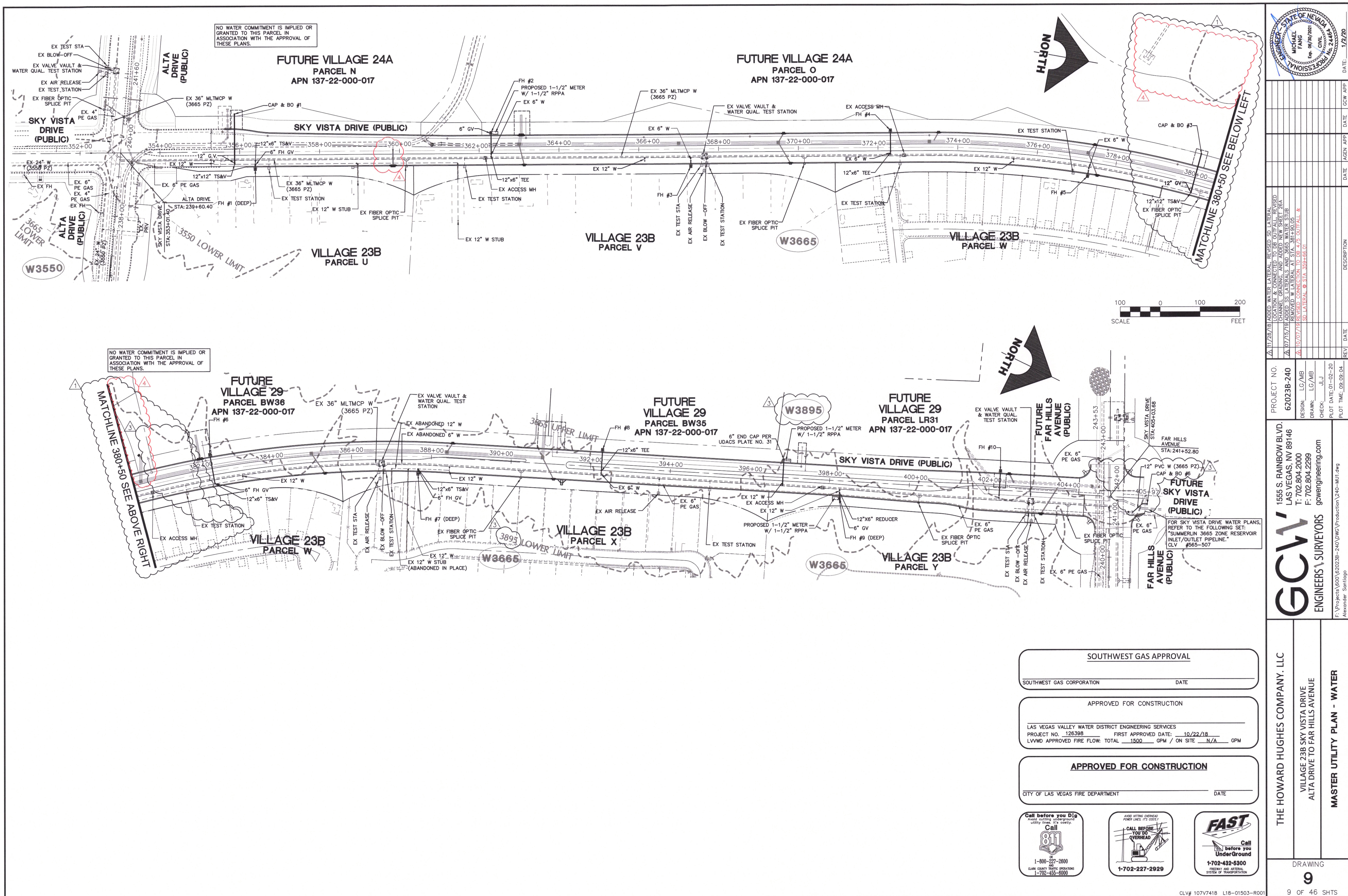
SOUTHWEST GAS CONSTRUCTION NOTES

- IN THE EVENT OF NATURAL GAS EMERGENCIES CALL 911 AND 1-877-860-6020
- THERE SHALL BE A MINIMUM HORIZONTAL AND VERTICAL CLEARANCE OF 12-INCHES BETWEEN NATURAL GAS FACILITIES AND ANY UNDERGROUND FACILITIES AND/OR STRUCTURES, INCLUDING BUT NOT LIMITED TO WATER, SEWER, STORM DRAIN, COMMUNICATIONS, AND ELECTRIC.
- FOR VALVE ADJUSTMENT CONTACT 702-668-6107 48 HOURS PRIOR TO CONSTRUCTION.
- IN THE EVENT OF A NATURAL GAS CONFLICT WITH PROPOSED UTILITIES AND/OR STRUCTURES CONTACT 702-365-2099.

PROJECT NO. 62023B-240
DESIGN: LG/MB
DRAWN: LG/MB
CHECK: JLL
PLOT DATE: 01-02-20
PLOT TIME: 09:08:19
REV: DATE DESCRIPTION

THE HOWARD HUGHES COMPANY, LLC
VILLAGE 23B SKY VISTA DRIVE
ALTA DRIVE TO FAR HILLS AVENUE
LEGEND AND ABBREVIATIONS

CLV# 107V7418 L18-01503-R001
2 OF 46 SHTS



PROJECT NO.	DATE	AGN APP	DATE	GCW APP	DATE
620238-240	10/22/18				
DESIGN: LG/MB	10/22/18				
DRAWN: LG/MB	10/22/18				
CHECK: JJJ	10/22/18				
DATE: 10-02-20					
PLOT TIME: 09:09:04					

PROJECT NO. 620238-240
DESIGN: LG/MB
DRAWN: LG/MB
CHECK: JJJ
DATE: 10-02-20
PLOT TIME: 09:09:04

1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gowerengineering.com

GCW
ENGINEERS & SURVEYORS

F:\Projects\620238-240\DWG\Production\240-MU1.dwg
Alexander Santiago

THE HOWARD HUGHES COMPANY, LLC
VILLAGE 23B SKY VISTA DRIVE
ALTA DRIVE TO FAR HILLS AVENUE
MASTER UTILITY PLAN - WATER

DRAWING 9
9 OF 46 SHTS

SOUTHWEST GAS APPROVAL

SOUTHWEST GAS CORPORATION _____ DATE _____

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 126398 FIRST APPROVED DATE: 10/22/18
LVWD APPROVED FIRE FLOW: TOTAL 1500 GPM / ON SITE N/A GPM

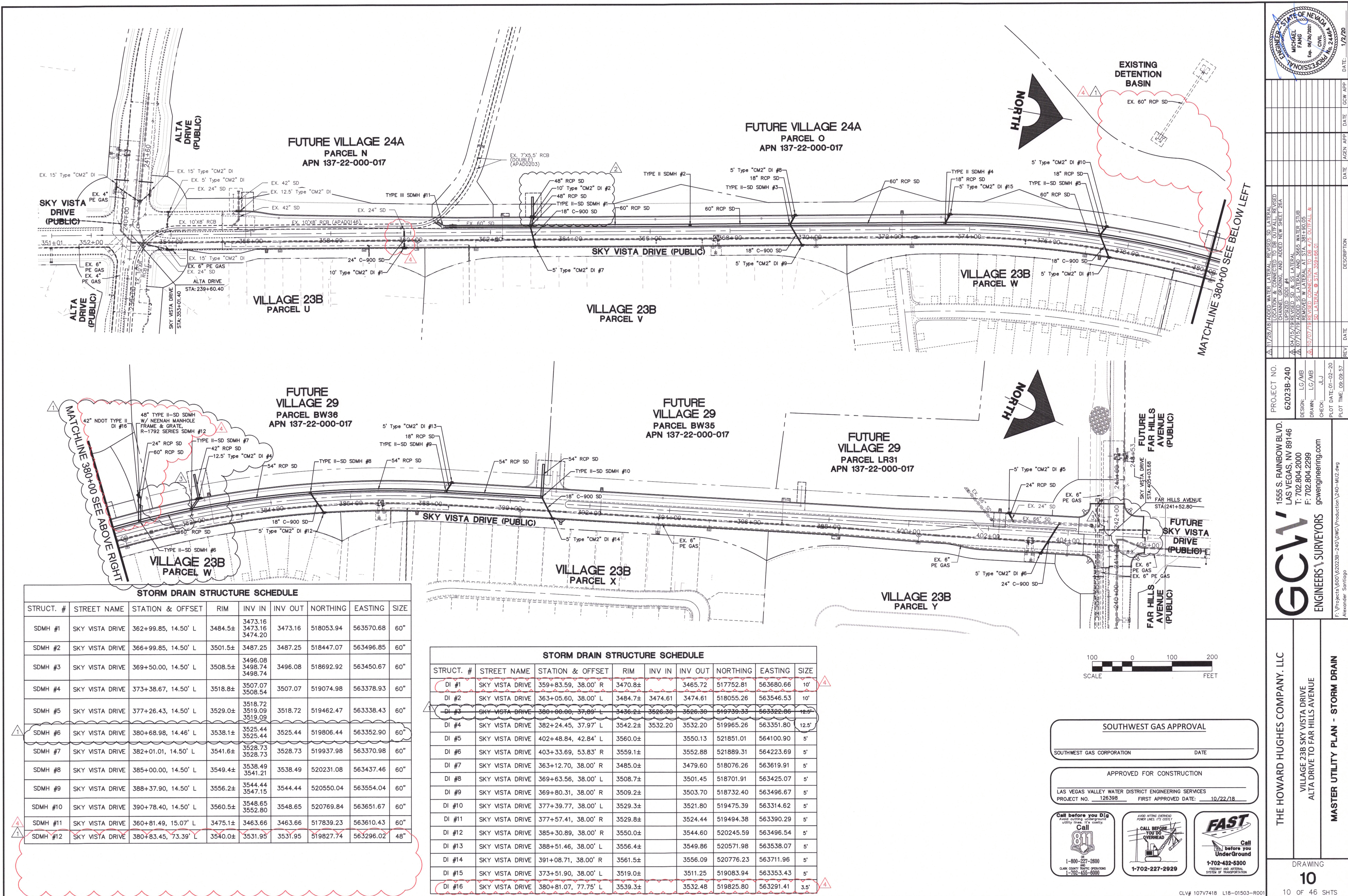
APPROVED FOR CONSTRUCTION

CITY OF LAS VEGAS FIRE DEPARTMENT _____ DATE _____

Call before you Dig
Avoid hitting overhead
utility lines. It's costly.
Call
811
1-800-227-2800
CLARK COUNTY TRAFFIC OPERATIONS
1-702-465-6000

AVOID HITTING OVERHEAD
POWER LINES. IT'S COSTLY.
**CALL BEFORE
YOU DO
OVERHEAD**
1-702-227-2929

FAST
Call before you
Underground
1-702-432-6300
FREEMAN AND ARTERIAL
SYSTEM OF TRANSPORTATION



STORM DRAIN STRUCTURE SCHEDULE								
STRUCT. #	STREET NAME	STATION & OFFSET	RIM	INV IN	INV OUT	NORTHING	EASTING	SIZE
SDMH #1	SKY VISTA DRIVE	362+99.85, 14.50' L	3484.5±	3473.16 3473.16 3474.20	3473.16	518053.94	563570.68	60"
SDMH #2	SKY VISTA DRIVE	366+99.85, 14.50' L	3501.5±	3487.25	3487.25	518447.07	563496.85	60"
SDMH #3	SKY VISTA DRIVE	369+50.00, 14.50' L	3508.5±	3496.08 3498.74 3498.74	3496.08	518692.92	563450.67	60"
SDMH #4	SKY VISTA DRIVE	373+38.67, 14.50' L	3518.8±	3507.07 3508.54	3507.07	519074.98	563378.93	60"
SDMH #5	SKY VISTA DRIVE	377+26.43, 14.50' L	3529.0±	3518.72 3519.09 3519.09	3518.72	519462.47	563338.43	60"
SDMH #6	SKY VISTA DRIVE	380+68.98, 14.46' L	3538.1±	3525.44 3525.44	3525.44	519806.44	563352.90	60"
SDMH #7	SKY VISTA DRIVE	382+01.01, 14.50' L	3541.6±	3528.73 3528.73	3528.73	519937.98	563370.98	60"
SDMH #8	SKY VISTA DRIVE	385+00.00, 14.50' L	3549.4±	3538.49 3541.21	3538.49	520231.08	563437.46	60"
SDMH #9	SKY VISTA DRIVE	388+37.90, 14.50' L	3556.2±	3544.44 3547.15	3544.44	520550.04	563554.04	60"
SDMH #10	SKY VISTA DRIVE	390+78.40, 14.50' L	3560.5±	3548.65 3552.80	3548.65	520769.84	563651.67	60"
SDMH #11	SKY VISTA DRIVE	360+81.49, 15.07' L	3475.1±	3463.66	3463.66	517839.23	563610.43	60"
SDMH #12	SKY VISTA DRIVE	380+83.45, 73.39' L	3540.0±	3531.95	3531.95	519827.74	563296.02	48"

STORM DRAIN STRUCTURE SCHEDULE								
STRUCT. #	STREET NAME	STATION & OFFSET	RIM	INV IN	INV OUT	NORTHING	EASTING	SIZE
DI #1	SKY VISTA DRIVE	359+83.59, 38.00' R	3470.8±	3465.72	3465.72	517752.81	563680.66	10'
DI #2	SKY VISTA DRIVE	363+05.60, 38.00' L	3484.7±	3474.61	3474.61	518055.26	563546.53	10'
DI #3	SKY VISTA DRIVE	360+00.00, 37.89' L	3436.2±	3526.30	3526.30	519739.33	563322.66	12.5'
DI #4	SKY VISTA DRIVE	382+24.45, 37.97' L	3542.2±	3532.20	3532.20	519965.26	563351.80	12.5'
DI #5	SKY VISTA DRIVE	402+48.84, 42.84' L	3560.0±	3550.13	3550.13	521851.01	564100.90	5'
DI #6	SKY VISTA DRIVE	403+33.69, 53.83' R	3559.1±	3552.88	3552.88	521889.31	564223.69	5'
DI #7	SKY VISTA DRIVE	363+12.70, 38.00' R	3485.0±	3479.60	3479.60	518076.26	563619.91	5'
DI #8	SKY VISTA DRIVE	369+63.56, 38.00' L	3508.7±	3501.45	3501.45	518701.91	563425.07	5'
DI #9	SKY VISTA DRIVE	369+80.31, 38.00' R	3509.2±	3503.70	3503.70	518732.40	563496.67	5'
DI #10	SKY VISTA DRIVE	377+39.77, 38.00' L	3529.3±	3521.80	3521.80	519475.39	563314.62	5'
DI #11	SKY VISTA DRIVE	377+57.41, 38.00' R	3529.8±	3524.44	3524.44	519494.38	563390.29	5'
DI #12	SKY VISTA DRIVE	385+30.89, 38.00' R	3550.0±	3544.60	3544.60	520245.59	563496.54	5'
DI #13	SKY VISTA DRIVE	388+51.46, 38.00' L	3556.4±	3549.86	3549.86	520571.98	563538.07	5'
DI #14	SKY VISTA DRIVE	391+08.71, 38.00' R	3561.5±	3556.09	3556.09	520776.23	563711.96	5'
DI #15	SKY VISTA DRIVE	373+51.90, 38.00' L	3519.0±	3511.25	3511.25	519083.94	563353.43	5'
DI #16	SKY VISTA DRIVE	380+81.07, 77.75' L	3539.3±	3532.48	3532.48	519825.80	563291.41	3.5'

SOUTHWEST GAS APPROVAL

SOUTHWEST GAS CORPORATION _____ DATE _____

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 126398 FIRST APPROVED DATE: 10/22/18

Call before you Dig

1-800-227-2800
CLARK COUNTY TRAFFIC OPERATIONS
1-702-455-0000

CALL BEFORE YOU GO OVERHEAD

1-702-227-2929

FAST

Call before you UnderGround

1-702-432-6300

ENGINEER

STATE OF NEVADA

MICHAEL PANG

Exp. 07/27/2021

CIVIL

1/2/20

PROJECT NO.

620238-240

DESIGN:

LG/MB

DRAWN:

LG/MB

CHECK:

JLJ

PLOT DATE:

01-02-20

PLOT TIME:

09:09:57

REVISION

DATE

DESCRIPTION

11/28/18

ADDED WATER LATERAL, REVISED SD LATERAL LOCATION & CONNECTED TO DB OUTFALL, REVISED CHANNEL GRADING, AND ADDED NEW SHEET 26A

04/15/19

REVISED SD LATERAL, REVISED SD LATERAL

07/15/19

ADDED SS LATERAL AND 3665 WATER SUB REMOVED W LATERAL AT STA. 381+50.05

10/07/19

REVISED CONNECTION TO DB 475 OUTFALL & SD LATERAL @ STA. 389+68.01

1555 S. RAINBOW BLVD.

LAS VEGAS, NV 89146

T: 702.804.2000

F: 702.804.2299

gowingengineering.com

THE HOWARD HUGHES COMPANY, LLC

VILLAGE 23B SKY VISTA DRIVE

ALTA DRIVE TO FAR HILLS AVENUE

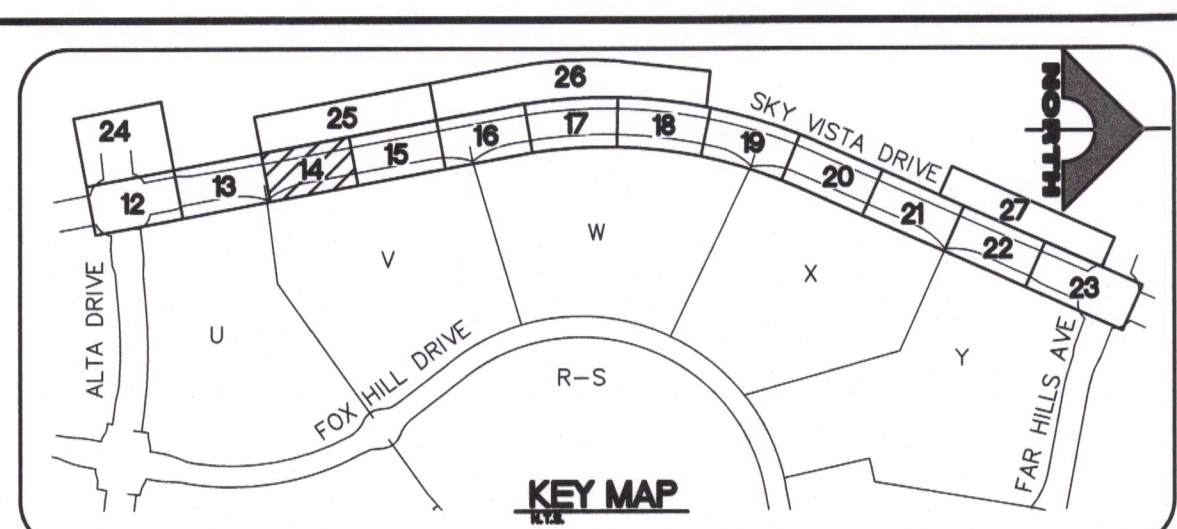
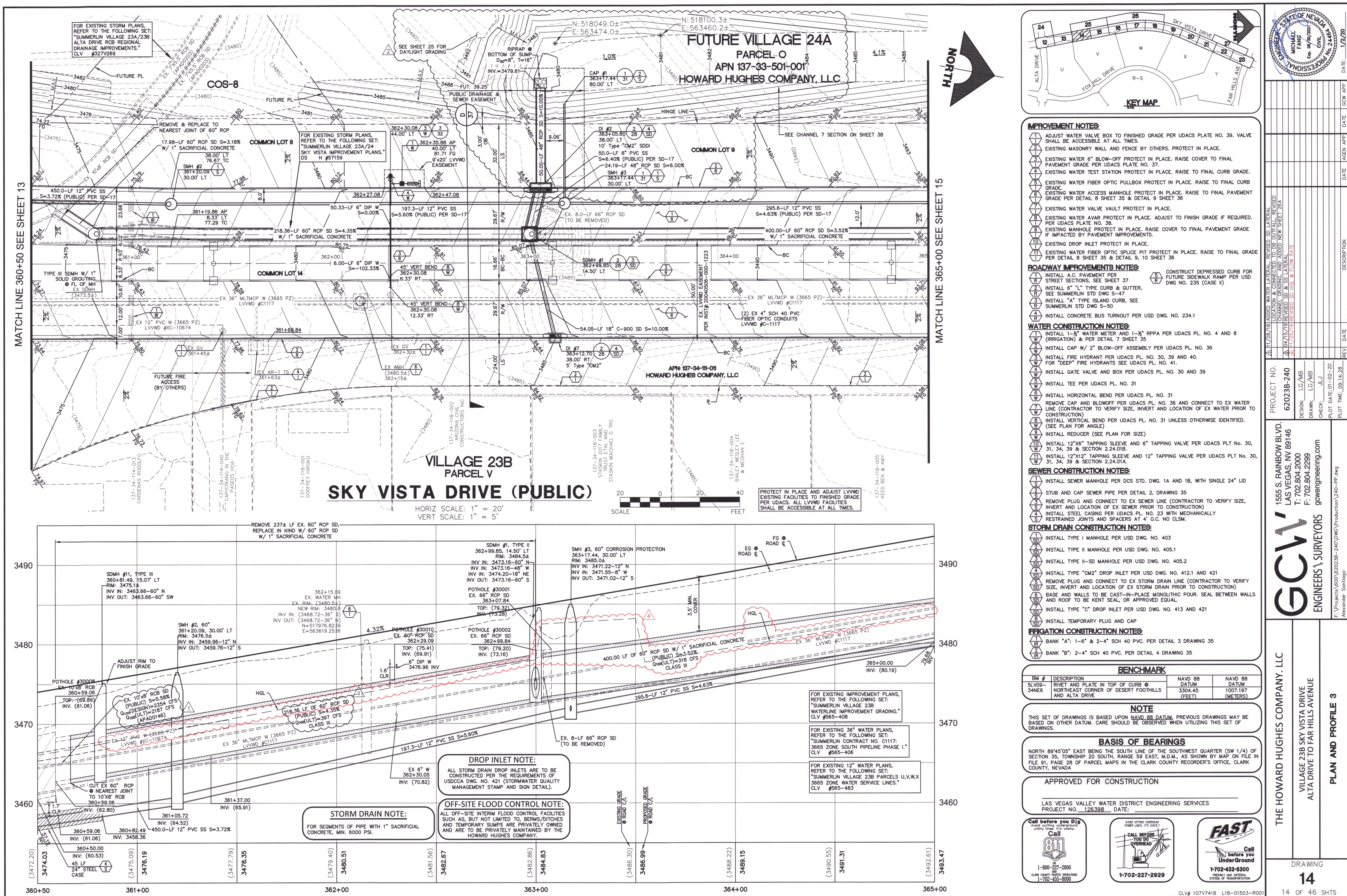
MASTER UTILITY PLAN - STORM DRAIN

DRAWING

10

10 OF 46 SHTS

CLV# 107V7418 L18-01503-R001



- IMPROVEMENT NOTES:**
- ADJUST WATER VALVE BOX TO FINISHED GRADE PER UDACS PLATE NO. 39. VALVE SHALL BE ACCESSIBLE AT ALL TIMES.
 - EXISTING MASONRY WALL AND FENCE BY OTHERS. PROTECT IN PLACE.
 - EXISTING WATER 6" BLOW-OFF PROTECT IN PLACE. RAISE COVER TO FINAL PAVEMENT GRADE PER UDACS PLATE NO. 37.
 - EXISTING WATER TEST STATION PROTECT IN PLACE. RAISE TO FINAL CURB GRADE.
 - EXISTING WATER FIBER OPTIC PULLBOX PROTECT IN PLACE. RAISE TO FINAL CURB GRADE.
 - EXISTING WATER ACCESS MANHOLE PROTECT IN PLACE. RAISE TO FINAL PAVEMENT GRADE PER DETAIL 8 SHEET 35 & DETAIL 9 SHEET 36.
 - EXISTING WATER VALVE VAULT PROTECT IN PLACE.
 - EXISTING WATER AVAL PROTECT IN PLACE. ADJUST TO FINISH GRADE IF REQUIRED. PER UDACS PLATE NO. 38.
 - EXISTING MANHOLE PROTECT IN PLACE. RAISE COVER TO FINAL PAVEMENT GRADE IF IMPACTED BY PAVEMENT IMPROVEMENTS.
 - EXISTING DROP INLET PROTECT IN PLACE.
 - EXISTING WATER FIBER OPTIC SPLICE PIT PROTECT IN PLACE. RAISE TO FINAL GRADE PER DETAIL 8 SHEET 35 & DETAIL 9, 10 SHEET 36.

- ROADWAY IMPROVEMENTS NOTES:**
- INSTALL A.C. PAVEMENT PER STREET SECTIONS, SEE SHEET 37.
 - INSTALL 6" L" TYPE CURB & GUTTER, SEE SUMMERLIN STD DWG S-47.
 - INSTALL "A" TYPE ISLAND CURB, SEE SUMMERLIN STD DWG S-50.
 - INSTALL CONCRETE BUS TURNOUT PER USD DWG. NO. 234.1.
 - CONSTRUCT DEPRESSED CURB FOR FUTURE SIDEWALK RAMP PER USD DWG NO. 235 (CASE II).
- WATER CONSTRUCTION NOTES:**
- INSTALL 1-1/2" WATER METER AND 1-1/2" RPPA PER UDACS PL. NO. 4 AND 8 (IRRIGATION) & PER DETAIL 7 SHEET 35.
 - INSTALL CAP W/ 2" BLOW-OFF ASSEMBLY PER UDACS PL. NO. 36.
 - INSTALL FIRE HYDRANT PER UDACS PL. NO. 30, 39 AND 40.
 - FOR "DEEP" FIRE HYDRANTS SEE UDACS PL. NO. 41.
 - INSTALL GATE VALVE AND BOX PER UDACS PL. NO. 30 AND 39.
 - INSTALL TEE PER UDACS PL. NO. 31.
 - INSTALL HORIZONTAL BEND PER UDACS PL. NO. 31.
 - REMOVE CAP AND BLOWOFF PER UDACS PL. NO. 36 AND CONNECT TO EX WATER LINE (CONTRACTOR TO VERIFY SIZE, INVERT AND LOCATION OF EX WATER PRIOR TO CONSTRUCTION) (SEE PLAN FOR ANGLE).
 - INSTALL REDUCER (SEE PLAN FOR SIZE).
 - INSTALL 12"x6" TAPPING SLEEVE AND 6" TAPPING VALVE PER UDACS PLT NO. 30, 31, 34, 39 & SECTION 2.24.01A.
 - INSTALL 12"x12" TAPPING SLEEVE AND 12" TAPPING VALVE PER UDACS PLT NO. 30, 31, 34, 39 & SECTION 2.24.01A.

- SEWER CONSTRUCTION NOTES:**
- INSTALL SEWER MANHOLE PER DCS STD. DWG. 1A AND 1B, WITH SINGLE 24" LID.
 - STUB AND CAP SEWER PIPE PER DETAIL 2, DRAWING 35.
 - REMOVE PLUG AND CONNECT TO EX SEWER LINE (CONTRACTOR TO VERIFY SIZE, INVERT AND LOCATION OF EX SEWER PRIOR TO CONSTRUCTION).
 - INSTALL STEEL CASING PER UDACS PL. NO. 23 WITH MECHANICALLY RESTRAINED JOINTS AND SPACERS AT 4' O.C. NO CLSM.
- STORM DRAIN CONSTRUCTION NOTES:**
- INSTALL TYPE I MANHOLE PER USD DWG. NO. 403.
 - INSTALL TYPE II MANHOLE PER USD DWG. NO. 405.1.
 - INSTALL TYPE II-SD MANHOLE PER USD DWG. NO. 405.2.
 - INSTALL TYPE "CM2" DROP INLET PER USD DWG. NO. 412.1 AND 421.
 - REMOVE PLUG AND CONNECT TO EX STORM DRAIN LINE (CONTRACTOR TO VERIFY SIZE, INVERT AND LOCATION OF EX STORM DRAIN PRIOR TO CONSTRUCTION).
 - BASE AND WALLS TO BE CAST-IN-PLACE MONOLITHIC POUR. SEAL BETWEEN WALLS AND ROOF TO BE KENT SEAL OR APPROVED EQUAL.
 - INSTALL TYPE "C" DROP INLET PER USD DWG. NO. 413 AND 421.
 - INSTALL TEMPORARY PLUG AND CAP.

- IRRIGATION CONSTRUCTION NOTES:**
- BANK "A": 1-6" & 2-4" SCH 40 PVC. PER DETAIL 3 DRAWING 35.
 - BANK "B": 2-4" SCH 40 PVC. PER DETAIL 4 DRAWING 35.

BENCHMARK

BM #	DESCRIPTION	NAVD 88 DATUM	NAVD 88 DATUM
5LV09-34NE6	RIVET AND PLATE IN TOP OF CURB @ NORTHEAST CORNER OF DESERT FOOTHILLS AND ALTA DRIVE	3304.45 (FEET)	1007.197 (METERS)

NOTE

THIS SET OF DRAWINGS IS BASED UPON NAVD 88 DATUM. PREVIOUS DRAWINGS MAY BE BASED ON OTHER DATUM. CARE SHOULD BE OBSERVED WHEN UTILIZING THIS SET OF DRAWINGS.

BASIS OF BEARINGS

NORTH 89°45'05" EAST BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 35, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., AS SHOWN BY MAP ON FILE IN FILE #91, PAGE 28 OF PARCEL MAPS IN THE CLARK COUNTY RECORDER'S OFFICE, CLARK COUNTY, NEVADA.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 126398 DATE: _____

Call before you Dig
Avoid cutting underground utility lines. IT'S THE ONLY WAY TO STAY SAFE.

Call before you Dig
Avoid hitting overhead power lines. IT'S THE ONLY WAY TO STAY SAFE.

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

PROJECT NO. 620238-240

DESIGN: LG/MB
DRAWN: LG/MB
CHECK: JLL

PLOT DATE: 01-02-20
PLOT TIME: 09:14:28

PROJECT LOCATION: 1555 S. RAINBOW BLVD., LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gowerengineering.com

THE HOWARD HUGHES COMPANY, LLC

VILLAGE 23B SKY VISTA DRIVE
ALTA DRIVE TO FAR HILLS AVENUE

PLAN AND PROFILE 3

DRAWING 14

14 OF 46 SHTS

MATCH LINE 369+60 SEE SHEET 15

MATCH LINE 374+00 SEE SHEET 17

PROTECT IN PLACE AND ADJUST LVVWD EXISTING FACILITIES TO FINISHED GRADE PER UDACS. ALL LVVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.

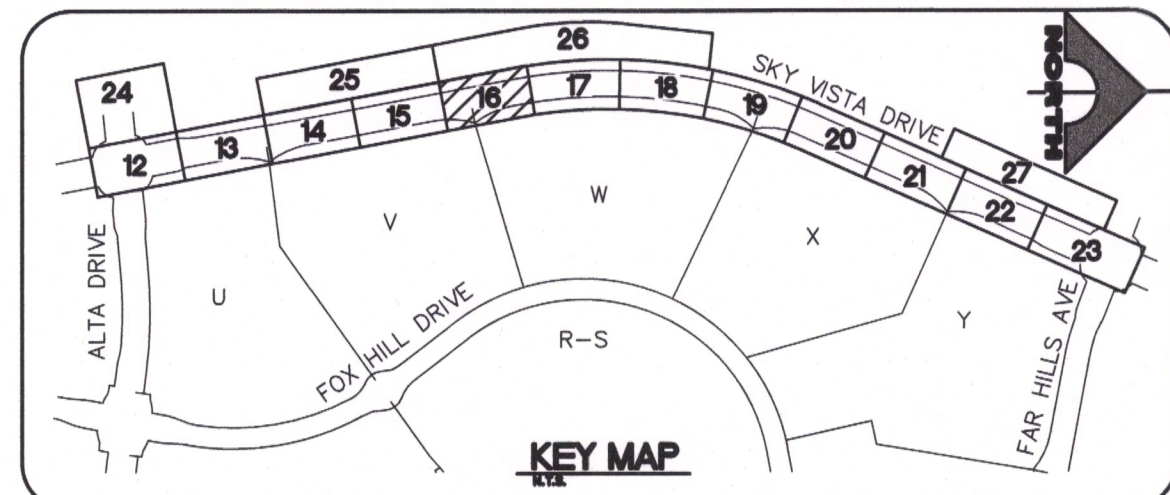
FOR EXISTING WATER PLANS, REFER TO THE FOLLOWING SET:
"SUMMERLIN CONTRACT NO. C1117;
3665 ZONE SOUTH PIPELINE PHASE I"
CLV #565-406

SKY VISTA DRIVE (PUBLIC)

HORIZ SCALE: 1" = 20'
VERT SCALE: 1" = 5'

SCALE 0 20 40 FEET

NORTH



- IMPROVEMENT NOTES:**
- ADJUST WATER VALVE BOX TO FINISHED GRADE PER UDACS PLATE NO. 39. VALVE SHALL BE ACCESSIBLE AT ALL TIMES.
 - EXISTING MASONRY WALL AND FENCE BY OTHERS. PROTECT IN PLACE.
 - EXISTING WATER 6" BLOW-OFF PROTECT IN PLACE. RAISE COVER TO FINAL PAVEMENT GRADE PER UDACS PLATE NO. 37.
 - EXISTING WATER TEST STATION PROTECT IN PLACE. RAISE TO FINAL CURB GRADE.
 - EXISTING WATER FIBER OPTIC PULLBOX PROTECT IN PLACE. RAISE TO FINAL CURB GRADE.
 - EXISTING WATER ACCESS MANHOLE PROTECT IN PLACE. RAISE TO FINAL PAVEMENT GRADE PER DETAIL 8 SHEET 35 & DETAIL 9 SHEET 36.
 - EXISTING WATER VALVE VAULT PROTECT IN PLACE.
 - EXISTING WATER AVAR PROTECT IN PLACE. ADJUST TO FINISH GRADE IF REQUIRED. PER UDACS PLATE NO. 38.
 - EXISTING MANHOLE PROTECT IN PLACE. RAISE COVER TO FINAL PAVEMENT GRADE IF IMPACTED BY PAVEMENT IMPROVEMENTS.
 - EXISTING DROP INLET PROTECT IN PLACE.
 - EXISTING WATER FIBER OPTIC SPLICE PIT PROTECT IN PLACE. RAISE TO FINAL GRADE PER DETAIL 8 SHEET 35 & DETAIL 9, 10 SHEET 36.

- ROADWAY IMPROVEMENTS NOTES:**
- INSTALL A.C. PAVEMENT PER STREET SECTIONS, SEE SHEET 37.
 - INSTALL 6" "L" TYPE CURB & GUTTER, SEE SUMMERLIN STD DWG S-47.
 - INSTALL "A" TYPE ISLAND CURB, SEE SUMMERLIN STD DWG S-50.
 - INSTALL CONCRETE BUS TURNOUT PER USD DWG. NO. 234.1.
- WATER CONSTRUCTION NOTES:**
- INSTALL 1-1/2" WATER METER AND 1-1/2" RPPA PER UDACS PL. NO. 4 AND 8 (IRRIGATION) & PER DETAIL 7 SHEET 35.
 - INSTALL CAP W/ 2" BLOW-OFF ASSEMBLY PER UDACS PL. NO. 36.
 - INSTALL FIRE HYDRANT PER UDACS PL. NO. 30, 39 AND 40.
 - FOR "DEEP" FIRE HYDRANTS SEE UDACS PL. NO. 41.
 - INSTALL GATE VALVE AND BOX PER UDACS PL. NO. 30 AND 39.
 - INSTALL TEE PER UDACS PL. NO. 31.
 - INSTALL HORIZONTAL BEND PER UDACS PL. NO. 31.
 - REMOVE CAP AND BLOWOFF PER UDACS PL. NO. 36 AND CONNECT TO EX WATER LINE (CONTRACTOR TO VERIFY SIZE, INVERT AND LOCATION OF EX WATER PRIOR TO CONSTRUCTION).
 - INSTALL VERTICAL BEND PER UDACS PL. NO. 31 UNLESS OTHERWISE IDENTIFIED. (SEE PLAN FOR ANGLE).
 - INSTALL REDUCER (SEE PLAN FOR SIZE).
 - INSTALL 12"x6" TAPPING SLEEVE AND 6" TAPPING VALVE PER UDACS PLT No. 30, 31, 34, 39 & SECTION 2.24.01B.
 - INSTALL 12"x12" TAPPING SLEEVE AND 12" TAPPING VALVE PER UDACS PLT No. 30, 31, 34, 39 & SECTION 2.24.01A.

- SEWER CONSTRUCTION NOTES:**
- INSTALL SEWER MANHOLE PER DCS STD. DWG. 1A AND 1B, WITH SINGLE 24" LID.
 - STUB AND CAP SEWER PIPE PER DETAIL 2, DRAWING 35.
 - REMOVE PLUG AND CONNECT TO EX SEWER LINE (CONTRACTOR TO VERIFY SIZE, INVERT AND LOCATION OF EX SEWER PRIOR TO CONSTRUCTION).
 - INSTALL STEEL CASING PER UDACS PL. NO. 23 WITH MECHANICALLY RESTRAINED JOINTS AND SPACERS AT 4' O.C. NO CLSM.
- STORM DRAIN CONSTRUCTION NOTES:**
- INSTALL TYPE I MANHOLE PER USD DWG. NO. 403.
 - INSTALL TYPE II MANHOLE PER USD DWG. NO. 405.1.
 - INSTALL TYPE II-SD MANHOLE PER USD DWG. NO. 405.2.
 - INSTALL TYPE "CM2" DROP INLET PER USD DWG. NO. 412.1 AND 421.
 - REMOVE PLUG AND CONNECT TO EX STORM DRAIN LINE (CONTRACTOR TO VERIFY SIZE, INVERT AND LOCATION OF EX STORM DRAIN PRIOR TO CONSTRUCTION).
 - BASE AND WALLS TO BE CAST-IN-PLACE MONOLITHIC POUR. SEAL BETWEEN WALLS AND ROOF TO BE KENT SEAL, OR APPROVED EQUAL.
 - INSTALL TYPE "C" DROP INLET PER USD DWG. NO. 413 AND 421.
 - INSTALL TEMPORARY PLUG AND CAP.

- IRRIGATION CONSTRUCTION NOTES:**
- BANK "A": 1-6" & 2-4" SCH 40 PVC. PER DETAIL 3 DRAWING 35.
 - BANK "B": 2-4" SCH 40 PVC. PER DETAIL 4 DRAWING 35.

- BENCHMARK**
- | BM # | DESCRIPTION | NAVD 88 DATUM | NAVD 88 DATUM |
|-------------|--|----------------|-------------------|
| SLV09-34NE6 | RIVET AND PLATE IN TOP OF CURB @ NORTHEAST CORNER OF DESERT FOOTHILLS AND ALTA DRIVE | 3304.45 (FEET) | 1007.197 (METERS) |
- NOTE**
- THIS SET OF DRAWINGS IS BASED UPON NAVD 88 DATUM. PREVIOUS DRAWINGS MAY BE BASED ON OTHER DATUM. CARE SHOULD BE OBSERVED WHEN UTILIZING THIS SET OF DRAWINGS.
- BASIS OF BEARINGS**
- NORTH 89°45'09" EAST BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 35, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., AS SHOWN BY MAP ON FILE IN FILE 91, PAGE 28 OF PARCEL MAPS IN THE CLARK COUNTY RECORDER'S OFFICE, CLARK COUNTY, NEVADA.

- APPROVED FOR CONSTRUCTION**
- LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 126398 DATE: _____

Call before you Dig
Avoid cutting underground utility lines. IT'S COSTLY.

Call before you Dig
Avoid hitting overhead power lines. IT'S COSTLY.

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

Call before you Dig
Avoid cutting underground utility lines. IT'S COSTLY.

Call before you Dig
Avoid hitting overhead power lines. IT'S COSTLY.

Call before you Dig
Avoid cutting underground utility lines. IT'S COSTLY.



PROJECT NO.	DATE	AGN APP	DATE	DESCRIPTION
620238-240				
DESIGN: LG/MB				
DRAWN: LG/MB				
CHECK: JLL				
PLOT DATE: 01-02-20				
PLOT TIME: 09:16:38				

PROJECT NO. 620238-240
DESIGN: LG/MB
DRAWN: LG/MB
CHECK: JLL
PLOT DATE: 01-02-20
PLOT TIME: 09:16:38

1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gownengineering.com

GCW
ENGINEERS & SURVEYORS
Alexander Santiago

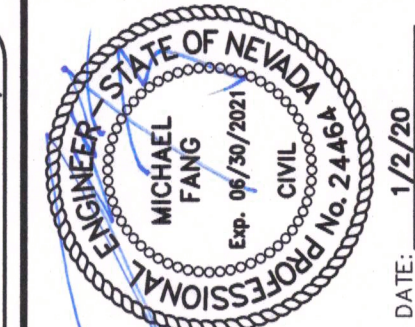
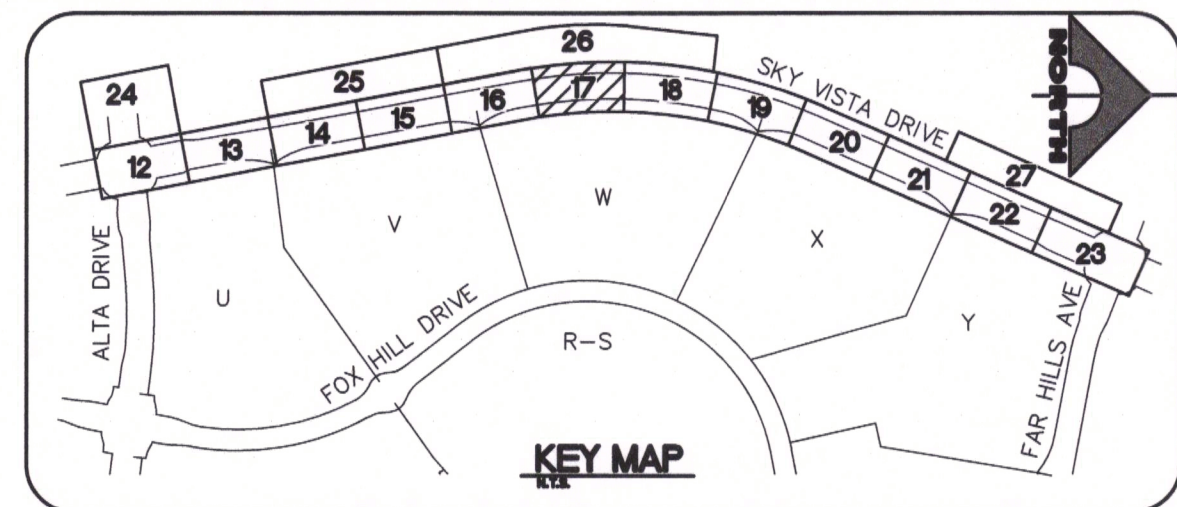
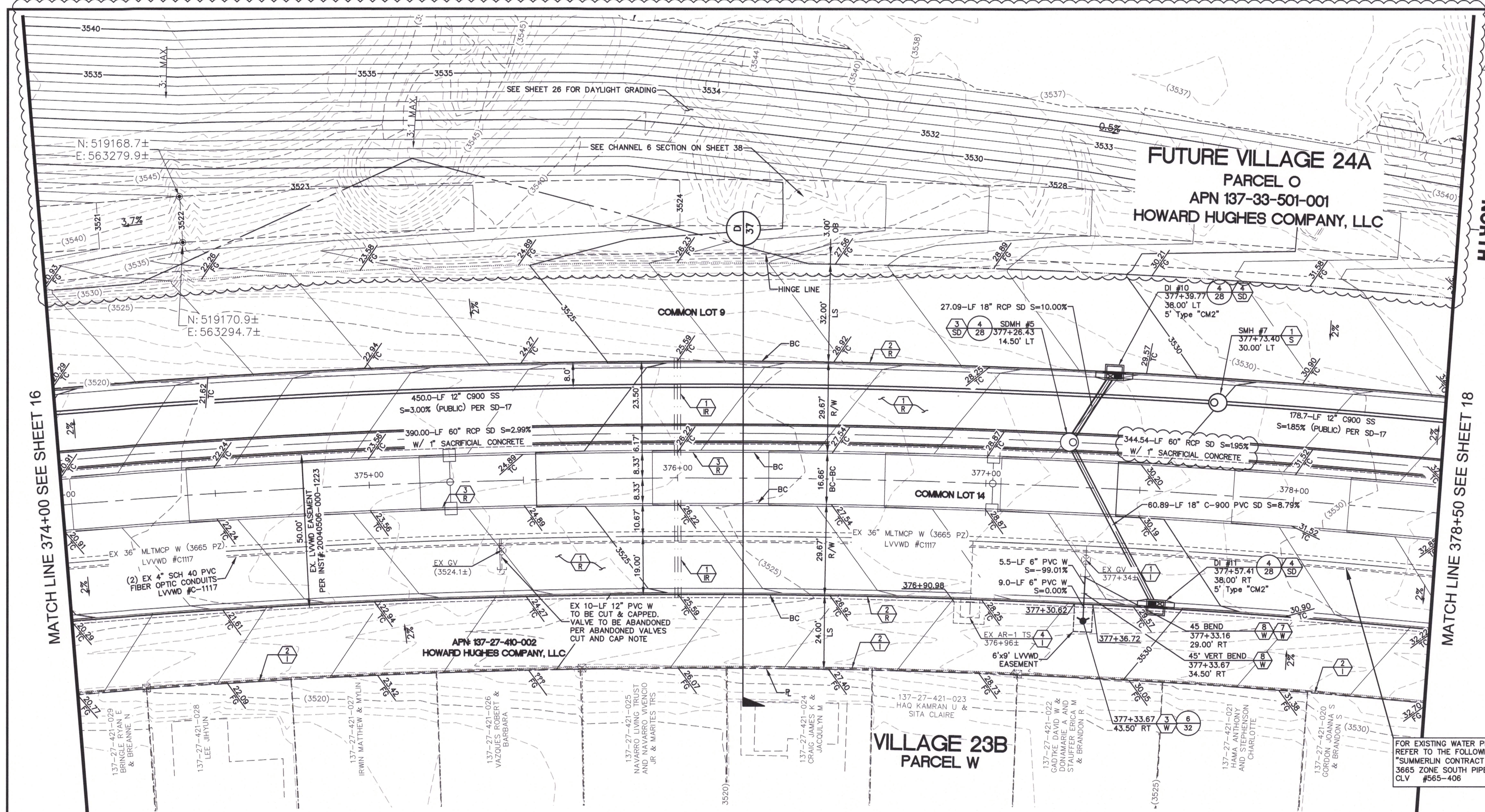
THE HOWARD HUGHES COMPANY, LLC
VILLAGE 23B SKY VISTA DRIVE
ALTA DRIVE TO FAR HILLS AVENUE

PLAN AND PROFILE 5

DRAWING 16

16 OF 46 SHTS

CLV# 107V7418 L18-01503-9001



- IMPROVEMENT NOTES:**
- ADJUST WATER VALVE BOX TO FINISHED GRADE PER UDACS PLATE NO. 39. VALVE SHALL BE ACCESSIBLE AT ALL TIMES.
 - EXISTING MASONRY WALL AND FENCE BY OTHERS. PROTECT IN PLACE.
 - EXISTING WATER 6" BLOW-OFF PROTECT IN PLACE. RAISE COVER TO FINAL PAVEMENT GRADE PER UDACS PLATE NO. 37.
 - EXISTING WATER TEST STATION PROTECT IN PLACE. RAISE TO FINAL CURB GRADE.
 - EXISTING WATER FIBER OPTIC PULLBOX PROTECT IN PLACE. RAISE TO FINAL CURB GRADE.
 - EXISTING WATER ACCESS MANHOLE PROTECT IN PLACE. RAISE TO FINAL PAVEMENT GRADE PER DETAIL 8 SHEET 35 & DETAIL 9 SHEET 36
 - EXISTING WATER VALVE VAULT PROTECT IN PLACE.
 - EXISTING WATER AVAR PROTECT IN PLACE. ADJUST TO FINISH GRADE IF REQUIRED. PER UDACS PLATE NO. 38
 - EXISTING MANHOLE PROTECT IN PLACE. RAISE COVER TO FINAL PAVEMENT GRADE IF IMPACTED BY PAVEMENT IMPROVEMENTS.
 - EXISTING DROP INLET PROTECT IN PLACE.
 - EXISTING WATER FIBER OPTIC SPLICE PIT PROTECT IN PLACE. RAISE TO FINAL GRADE PER DETAIL 8 SHEET 35 & DETAIL 9, 10 SHEET 36

- ROADWAY IMPROVEMENTS NOTES:**
- INSTALL A.C. PAVEMENT PER STREET SECTIONS, SEE SHEET 37
 - INSTALL 6" "L" TYPE CURB & GUTTER, SEE SUMMERLIN STD DWG S-47
 - INSTALL "A" TYPE ISLAND CURB, SEE SUMMERLIN STD DWG S-50
 - INSTALL CONCRETE BUS TURNOUT PER USD DWG. NO. 234.1
- WATER CONSTRUCTION NOTES:**
- INSTALL 1-1/2" WATER METER AND 1-1/2" RPPA PER UDACS PL. NO. 4 AND 8 (IRRIGATION) & PER DETAIL 7 SHEET 35
 - INSTALL CAP W/ 2" BLOW-OFF ASSEMBLY PER UDACS PL. NO. 36
 - INSTALL FIRE HYDRANT PER UDACS PL. NO. 30, 39 AND 40.
 - FOR "DEEP" FIRE HYDRANTS SEE UDACS PL. NO. 41.
 - INSTALL GATE VALVE AND BOX PER UDACS PL. NO. 30 AND 39
 - INSTALL TEE PER UDACS PL. NO. 31
 - INSTALL HORIZONTAL BEND PER UDACS PL. NO. 31
 - REMOVE CAP AND BLOWOFF PER UDACS PL. NO. 36 AND CONNECT TO EX WATER LINE (CONTRACTOR TO VERIFY SIZE, INVERT AND LOCATION OF EX WATER PRIOR TO CONSTRUCTION)
 - INSTALL VERTICAL BEND PER UDACS PL. NO. 31 UNLESS OTHERWISE IDENTIFIED. (SEE PLAN FOR ANGLE)
 - INSTALL REDUCER (SEE PLAN FOR SIZE)
 - INSTALL 12"x8" TAPPING SLEEVE AND 6" TAPPING VALVE PER UDACS PLT No. 30, 31, 34, 39 & SECTION 2.24.01B.
 - INSTALL 12"x12" TAPPING SLEEVE AND 12" TAPPING VALVE PER UDACS PLT No. 30, 31, 34, 39 & SECTION 2.24.01A

- SEWER CONSTRUCTION NOTES:**
- INSTALL SEWER MANHOLE PER DCS STD. DWG. 1A AND 1B, WITH SINGLE 24" LID
 - STUB AND CAP SEWER PIPE PER DETAIL 2, DRAWING 35
 - REMOVE PLUG AND CONNECT TO EX SEWER LINE (CONTRACTOR TO VERIFY SIZE, INVERT AND LOCATION OF EX SEWER PRIOR TO CONSTRUCTION)
 - INSTALL STEEL CASING PER UDACS PL. NO. 23 WITH MECHANICALLY RESTRAINED JOINTS AND SPACERS AT 4' O.C. NO CLSM.
- STORM DRAIN CONSTRUCTION NOTES:**
- INSTALL TYPE I MANHOLE PER USD DWG. NO. 403
 - INSTALL TYPE II MANHOLE PER USD DWG. NO. 405.1
 - INSTALL TYPE II-SD MANHOLE PER USD DWG. NO. 405.2
 - INSTALL TYPE "CM2" DROP INLET PER USD DWG. NO. 412.1 AND 421
 - REMOVE PLUG AND CONNECT TO EX STORM DRAIN LINE (CONTRACTOR TO VERIFY SIZE, INVERT AND LOCATION OF EX STORM DRAIN PRIOR TO CONSTRUCTION)
 - BASE AND WALLS TO BE CAST-IN-PLACE MONOLITHIC POUR. SEAL BETWEEN WALLS AND ROOF TO BE KENT SEAL, OR APPROVED EQUAL.
 - INSTALL TYPE "C" DROP INLET PER USD DWG. NO. 413 AND 421
 - INSTALL TEMPORARY PLUG AND CAP

- IRRIGATION CONSTRUCTION NOTES:**
- BANK "A": 1-6" & 2-4" SCH 40 PVC. PER DETAIL 3 DRAWING 35
 - BANK "B": 2-4" SCH 40 PVC. PER DETAIL 4 DRAWING 35

- BENCHMARK**
- | BM # | DESCRIPTION | NAVD 88 DATUM | NAVD 88 DATUM |
|-------------|--|----------------|-------------------|
| SLV09-34NE6 | RIVET AND PLATE IN TOP OF CURB @ NORTHEAST CORNER OF DESERT FOOTHILLS AND ALTA DRIVE | 3304.45 (FEET) | 1007.197 (METERS) |
- NOTE**
- THIS SET OF DRAWINGS IS BASED UPON NAVD 88 DATUM. PREVIOUS DRAWINGS MAY BE BASED ON OTHER DATUM. CARE SHOULD BE OBSERVED WHEN UTILIZING THIS SET OF DRAWINGS.
- BASIS OF BEARINGS**
- NORTH 89°45'05" EAST BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 35, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., AS SHOWN BY MAP ON FILE IN FILE 91, PAGE 28 OF PARCEL MAPS IN THE CLARK COUNTY RECORDER'S OFFICE, CLARK COUNTY, NEVADA

APPROVED FOR CONSTRUCTION 1ST APPROVED 10/22/18

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 126398 DATE:

Call before you Dig
Avoid hitting underground utility lines. It's costly.

Call before you Overhead
Avoid hitting overhead power lines. It's costly.

FAST
Call before you UnderGround
1-702-432-5300
FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION

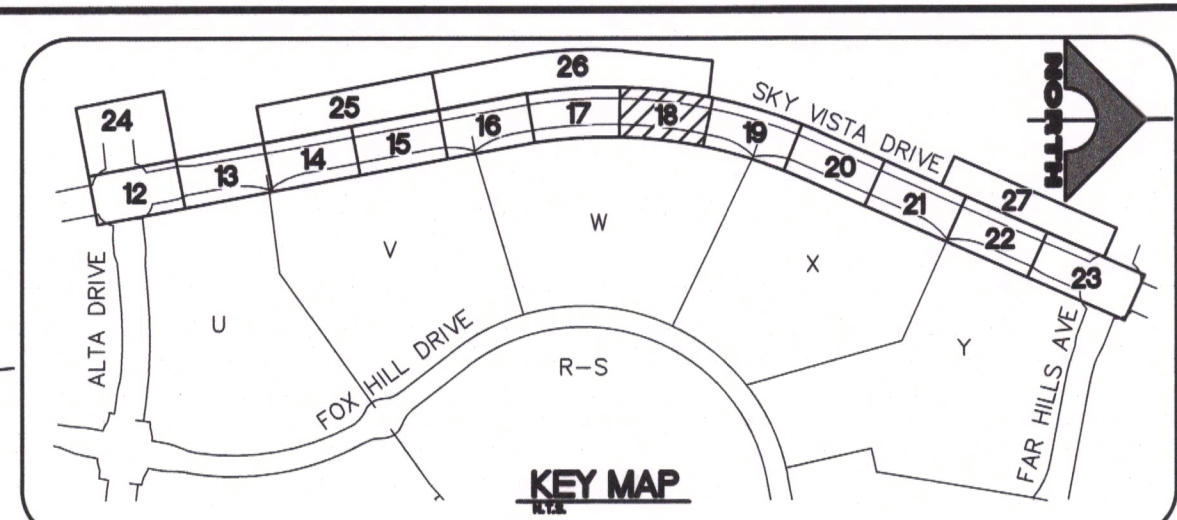
THE HOWARD HUGHES COMPANY, LLC
VILLAGE 23B SKY VISTA DRIVE
ALTA DRIVE TO FAR HILLS AVENUE

PLAN AND PROFILE 6

DRAWING 17

CLV# 107V7418 L18-01503-R001

17 OF 46 SHTS



IMPROVEMENT NOTES:

1	ADJUST WATER VALVE BOX TO FINISHED GRADE PER UDACS PLATE NO. 39. VALVE SHALL BE ACCESSIBLE AT ALL TIMES.
2	EXISTING MASONRY WALL AND FENCE BY OTHERS. PROTECT IN PLACE.
3	EXISTING WATER 6" BLOW-OFF PROTECT IN PLACE. RAISE COVER TO FINAL PAVEMENT GRADE PER UDACS PLATE NO. 37.
4	EXISTING WATER TEST STATION PROTECT IN PLACE. RAISE TO FINAL CURB GRADE.
5	EXISTING WATER FIBER OPTIC PULLBOX PROTECT IN PLACE. RAISE TO FINAL CURB GRADE.
6	EXISTING WATER ACCESS MANHOLE PROTECT IN PLACE. RAISE TO FINAL PAVEMENT GRADE PER DETAIL 8 SHEET 35 & DETAIL 9 SHEET 36
7	EXISTING WATER VALVE VAULT PROTECT IN PLACE.
8	EXISTING WATER AVER PROTECT IN PLACE. ADJUST TO FINISH GRADE IF REQUIRED. PER UDACS PLATE NO. 38.
9	EXISTING MANHOLE PROTECT IN PLACE. RAISE COVER TO FINAL PAVEMENT GRADE IF IMPACTED BY PAVEMENT IMPROVEMENTS.
10	EXISTING DROP INLET PROTECT IN PLACE.
11	EXISTING WATER FIBER OPTIC SPLICE PIT PROTECT IN PLACE. RAISE TO FINAL GRADE PER DETAIL 8 SHEET 35 & DETAIL 9, 10 SHEET 36

ROADWAY IMPROVEMENTS NOTES:	
1 R	INSTALL A.C. PAVEMENT PER STREET SECTIONS, SEE SHEET 37
2 R	INSTALL 6" "L" TYPE CURB & GUTTER, SEE SUMMERLIN STD DWG S-47
3 R	INSTALL "A" TYPE ISLAND CURB, SEE SUMMERLIN STD DWG S-50
4 R	INSTALL CONCRETE BUS TURNOUT PER USD DWG. NO. 234.1
5 R	CONSTRUCT DEPRESSED CURB FOR FUTURE SIDEWALK RAMP PER USD DWG NO. 235 (CASE II)

WATER CONSTRUCTION NOTES:

- 1
W INSTALL 1- $\frac{1}{2}$ " WATER METER AND 1- $\frac{1}{2}$ " RPPA PER UDACS PL. NO. 4 AND 8 (IRRIGATION) & PER DETAIL 7 SHEET 35
- 2
W INSTALL CAP W/ 2" BLOW-OFF ASSEMBLY PER UDACS PL. NO. 36
- 3
W INSTALL FIRE HYDRANT PER UDACS PL. NO. 30, 39 AND 40.
FOR "DEEP" FIRE HYDRANTS SEE UDACS PL. NO. 41.

4
W
INSTALL GATE VALVE AND BOX PER UDACS PL. NO. 30 AND 39

5
W
INSTALL TEE PER UDACS PL. NO. 31

6
W
INSTALL HORIZONTAL BEND PER UDACS PL. NO. 31

7
W
REMOVE CAP AND BLOWOFF PER UDACS PL. NO. 36 AND CONNECT TO EX WATER LINE (CONTRACTOR TO VERIFY SIZE, INVERT AND LOCATION OF EX WATER PRIOR TO CONSTRUCTION)

8	INSTALL VERTICAL BEND PER UDACS PL. NO. 31 UNLESS OTHERWISE IDENTIFIED. (SEE PLAN FOR ANGLE)
9	INSTALL REDUCER (SEE PLAN FOR SIZE)
10	INSTALL 12"x6" TAPPING SLEEVE AND 6" TAPPING VALVE PER UDACS PLT No. 30, 31, 34, 39 & SECTION 2.2.4.01B.
11	INSTALL 12"x12" TAPPING SLEEVE AND 12" TAPPING VALVE PER UDACS PLT No. 30, 31, 34, 39 & SECTION 2.2.4.01A

SEWER CONSTRUCTION NOTES:

1. INSTALL SEWER MANHOLE PER DCS STD. DWG. 1A AND 1B, WITH SINGLE 24" LID
2. STUB AND CAP SEWER PIPE PER DETAIL 2, DRAWING 35
3. REMOVE PLUG AND CONNECT TO EX SEWER LINE (CONTRACTOR TO VERIFY SIZE, INVERT AND LOCATION OF EX SEWER PRIOR TO CONSTRUCTION)
4. INSTALL STEEL CASING PER UDACS PL. NO. 23 WITH MECHANICALLY RESTRAINED JOINTS AND SPACERS

STORM DRAIN CONSTRUCTION NOTES:

1 SD	INSTALL TYPE I MANHOLE PER USD DWG. NO. 403
2 SD	INSTALL TYPE II MANHOLE PER USD DWG. NO. 405.1
3 SD	INSTALL TYPE II-SD MANHOLE PER USD DWG. NO. 405.2

4 SD	INSTALL TYPE "CM2" DROP INLET PER USD DWG. NO. 412.1 AND 421
5 SD	REMOVE PLUG AND CONNECT TO EX STORM DRAIN LINE (CONTRACTOR TO VERIFY SIZE, INVERT AND LOCATION OF EX STORM DRAIN PRIOR TO CONSTRUCTION)
6 SD	BASE AND WALLS TO BE CAST-IN-PLACE MONOLITHIC POUR. SEAL BETWEEN WALLS AND ROOF TO BE KENT SEAL, OR APPROVED EQUAL.
7 SD	INSTALL TYPE "C" DROP INLET PER USD DWG. NO. 413 AND 421
8 SD	INSTALL TEMPORARY PLUG AND CAP

REFRIGERATION CONSTRUCTION NOTES:	
1 IR	BANK "A": 1-6" & 2-4" SCH 40 PVC. PER DETAIL 3 DRAWING 35
2 IR	BANK "B": 2-4" SCH 40 PVC. PER DETAIL 4 DRAWING 35

BENCHMARK			
BM #	DESCRIPTION	NAVD 88 DATUM	NAVD 88 DATUM
5LV09- 34NE6	RIVET AND PLATE IN TOP OF CURB @ NORTHEAST CORNER OF DESERT FOOTHILLS AND ALTA DRIVE	3304.45 (FEET)	1007.197 (METERS)

NOTE

THIS SET OF DRAWINGS IS BASED UPON NAVD 88 DATUM, PREVIOUS DRAWINGS MAY BE BASED ON OTHER DATUM. CARE SHOULD BE OBSERVED WHEN UTILIZING THIS SET OF DRAWINGS.

BASIS OF BEARINGS

NORTH 89°45'05" EAST BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 35, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., AS SHOWN BY MAP ON FILE IN FILE 91, PAGE 28 OF PARCEL MAPS IN THE CLARK COUNTY RECORDER'S OFFICE, CLARK COUNTY, NEVADA

APPROVED FOR CONSTRUCTION 1ST APPROVED 10/22/18

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 126398 DATE: _____

Call before you Dig
Avoid cutting underground utility lines. It's costly.

Call 811

AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY

CALL BEFORE YOU DO OVERHEAD

FAST

Call

 OR 1-800-227-2600 AND CLARK COUNTY TRAFFIC OPERATIONS 1-702-456-6000	 1-702-227-2929	 before you UnderGround 1-702-432-5300 FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION
---	--	--

REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP
Δ 11/28/18		ADDED WATER LATERAL, REVISED SD LATERAL LOCATION & CONNECTED TO DB OUTFALL, REVISED CHANNEL GRADING, AND ADDED NEW SHEET 26A UPSIZED SDOI #4				
Δ 07/15/19		RELOCATED IRRIGATION SLEEVE ADDED WATER LATERAL AT STA. 381+40.05 ADDED SS LATERAL				
Δ 11/23/19		REVISED CONNECTION TO DB 4/5 OUTFALL & SD RGL				

PROJECT NO.	
62023B-240	
DESIGN: LG/MB	
RAWN: LG/MB	
CHECK: JLLJ	
LOT DATE: 01-02-20	
LOT TIME: 09:18:40	

BOW BLVD.
NV 89146
000
999
ng.com

GCV
ENGINEERS & SURVEYORS

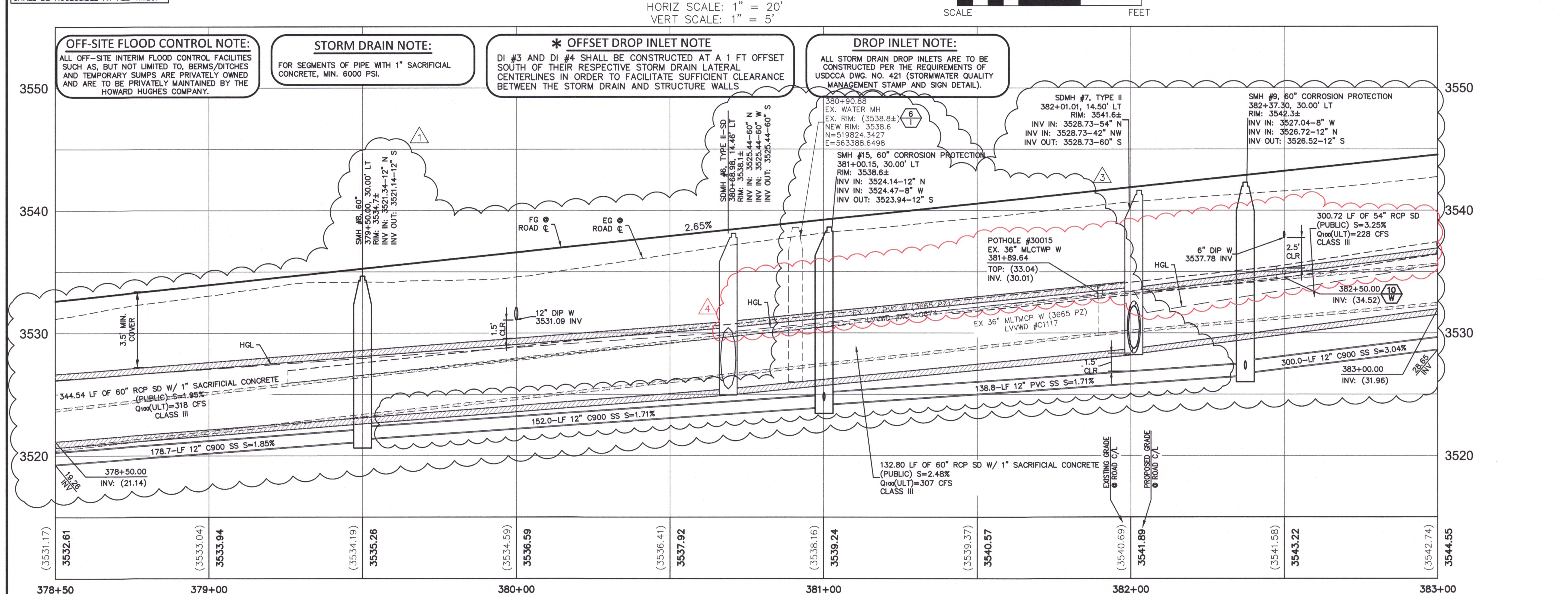
1555 S. RAINBOW
LAS VEGAS, NV
T: 702.804.2020
F: 702.804.2222
gowngineering.com

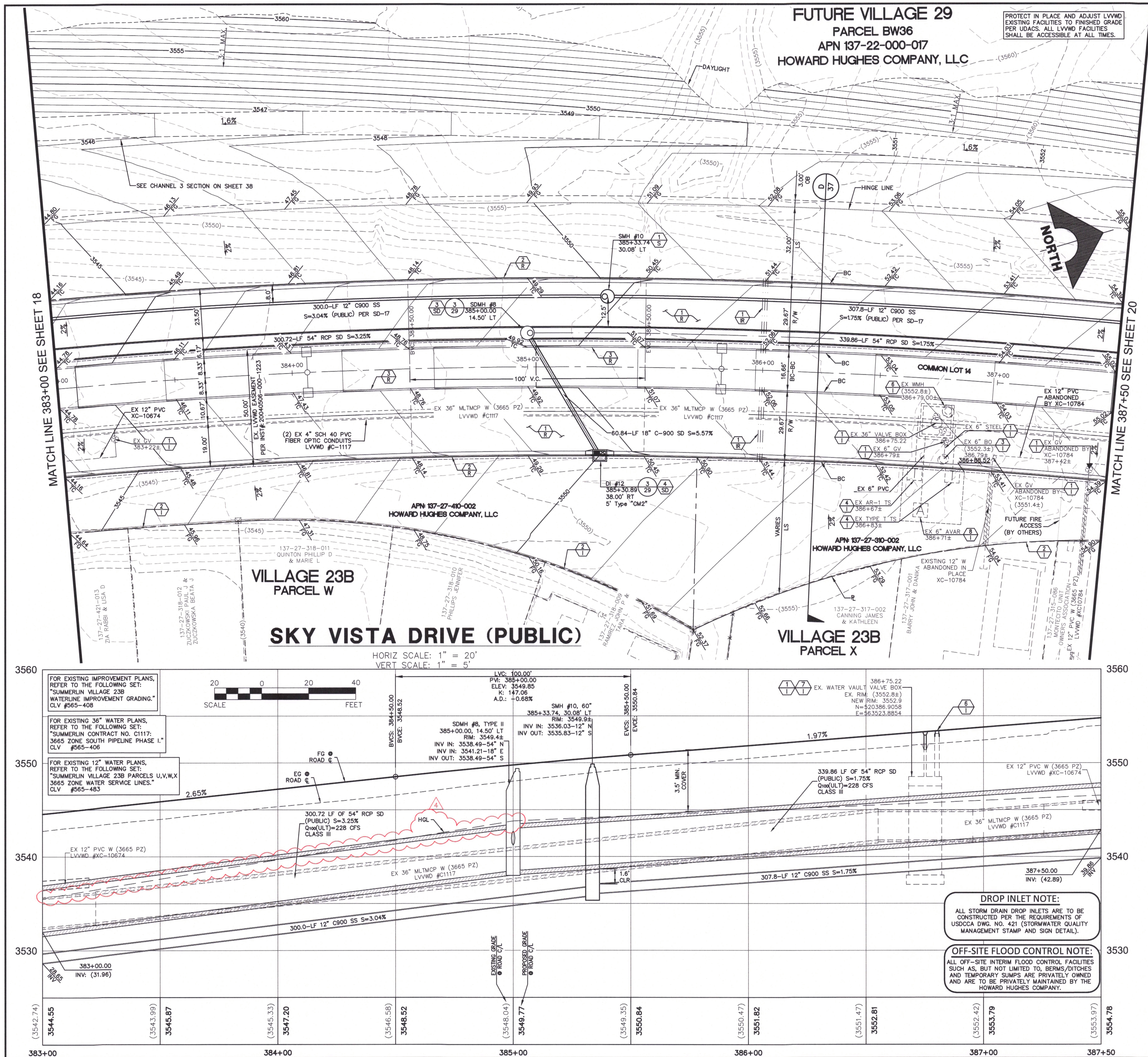
F: Projects 600 | 62023B-240 | UMG | Production 240-PP dwg
Alexander Santiago

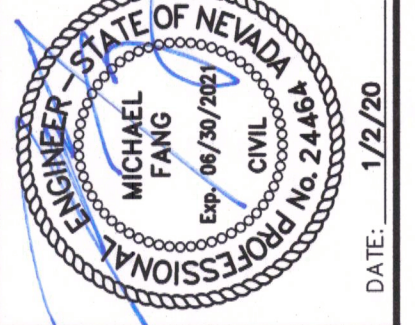
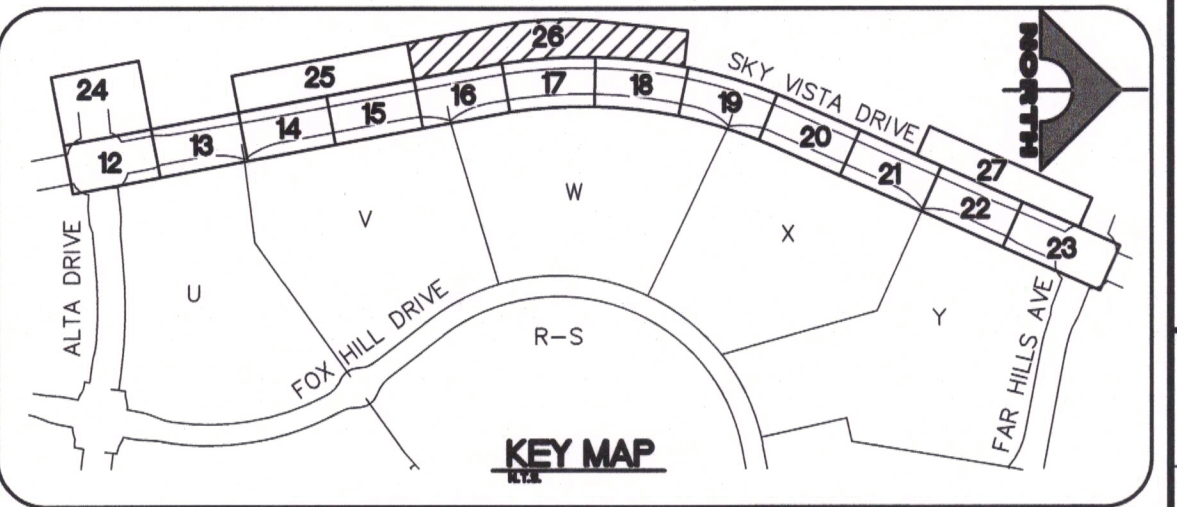
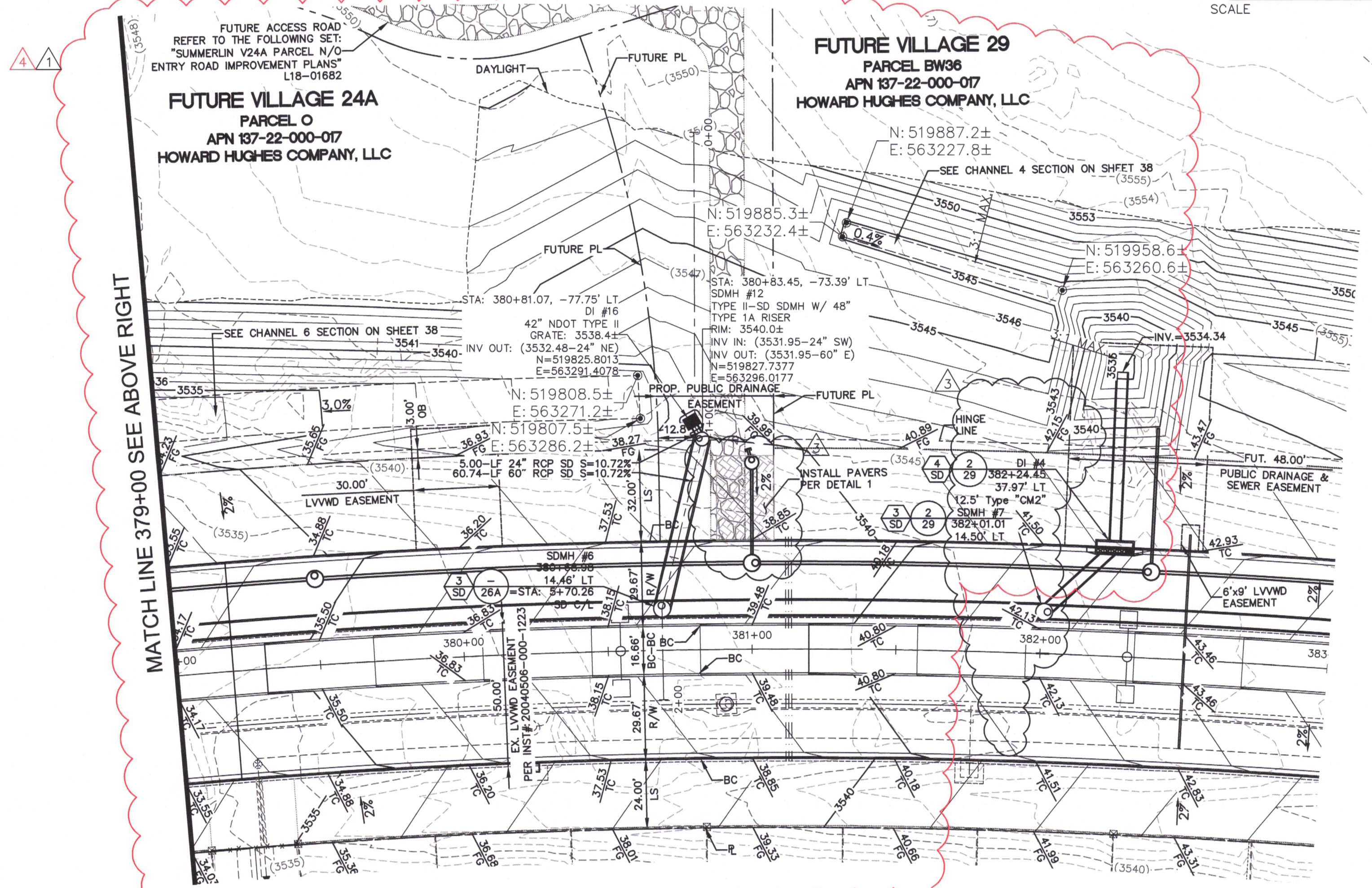
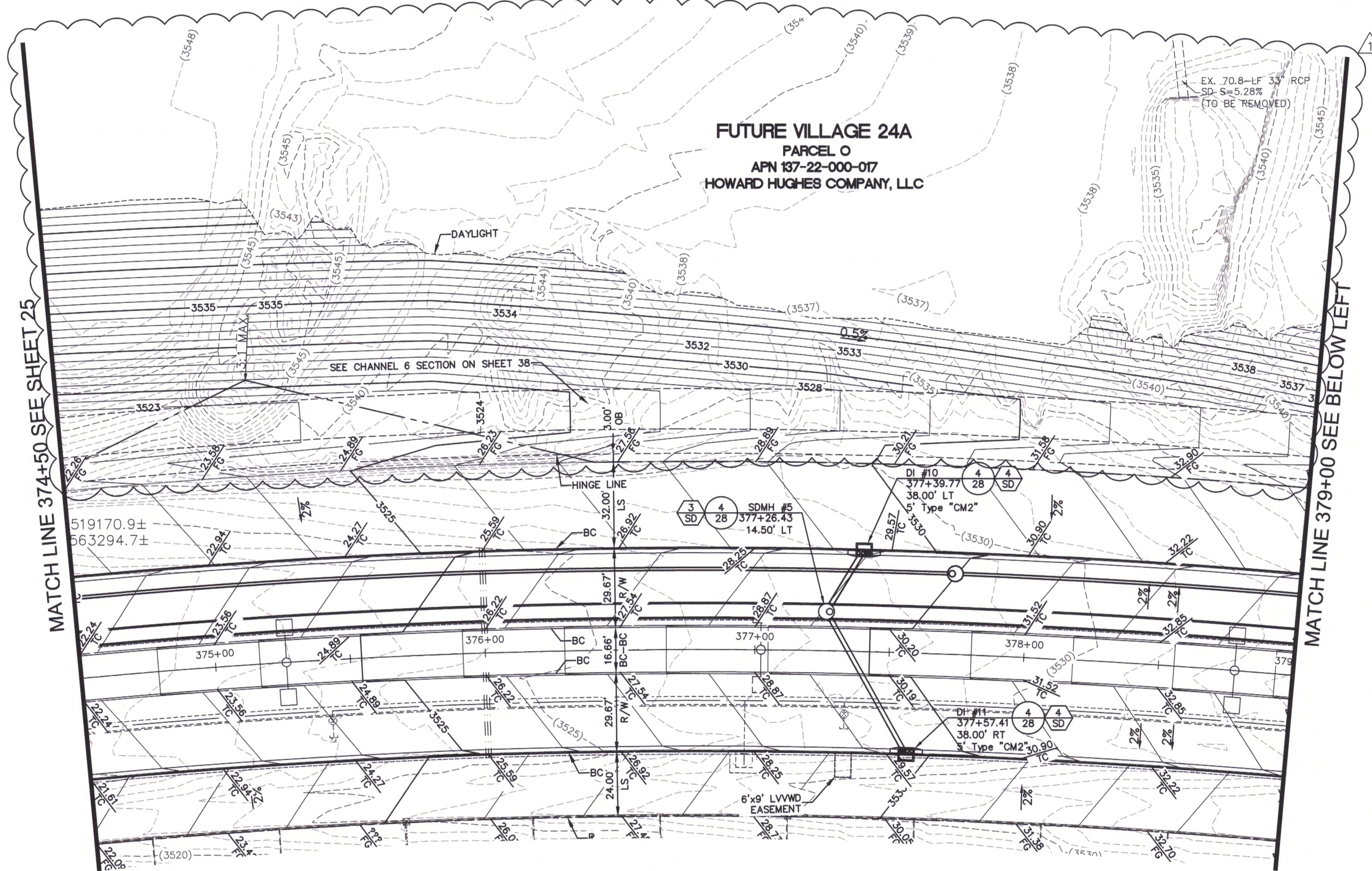
LC		

WARD HUGHES COMPANY, L.P.
PAGE 23B SKY VISTA DRIVE
DRIVE TO FAR HILLS AVENUE
PLAN AND PROFILE 7

THE HOWARD	VILLAGE ALTA D	PI
DRAWING		
18		







REV	DATE	DESCRIPTION
1	01/28/18	ADDED WATER LATERAL, REVISED SB LATERAL LOCATION & CONNECTED TO DB OUTFALL, REVISED CHANNEL GRADING, AND ADDED NEW SHEET 26A
2	08/26/18	UPDATED SIDI #4 - ADDED AT STA. 381+00.05
3	08/26/18	SHOW NEW SEWER LATERAL @ STA. 381+00.15
4	10/07/19	REVISED CONNECTION TO DB 4/5 OUTFALL

PROJECT NO.	62023B-240
DESIGN:	LG/MB
DRAWN:	LG/MB
CHECK:	JLJ
PLOT DATE:	01-02-20
PLOT TIME:	09:21:44

GCM
ENGINEERS' SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcmengineering.com

THE HOWARD HUGHES COMPANY, LLC
VILLAGE 23B SKY VISTA DRIVE
ALTA DRIVE TO FAR HILLS AVENUE
DAYLIGHT GRADING 3
DRAWING
26
26 OF 46 SHTS

BENCHMARK			
BM #	DESCRIPTION	NAVD 88 DATUM	NAVD 88 DATUM
5LV09-34NE6	RIVET AND PLATE IN TOP OF CURB @ NORTHEAST CORNER OF DESERT FOOTHILLS AND ALTA DRIVE	3304.45 (FEET)	1007.197 (METERS)

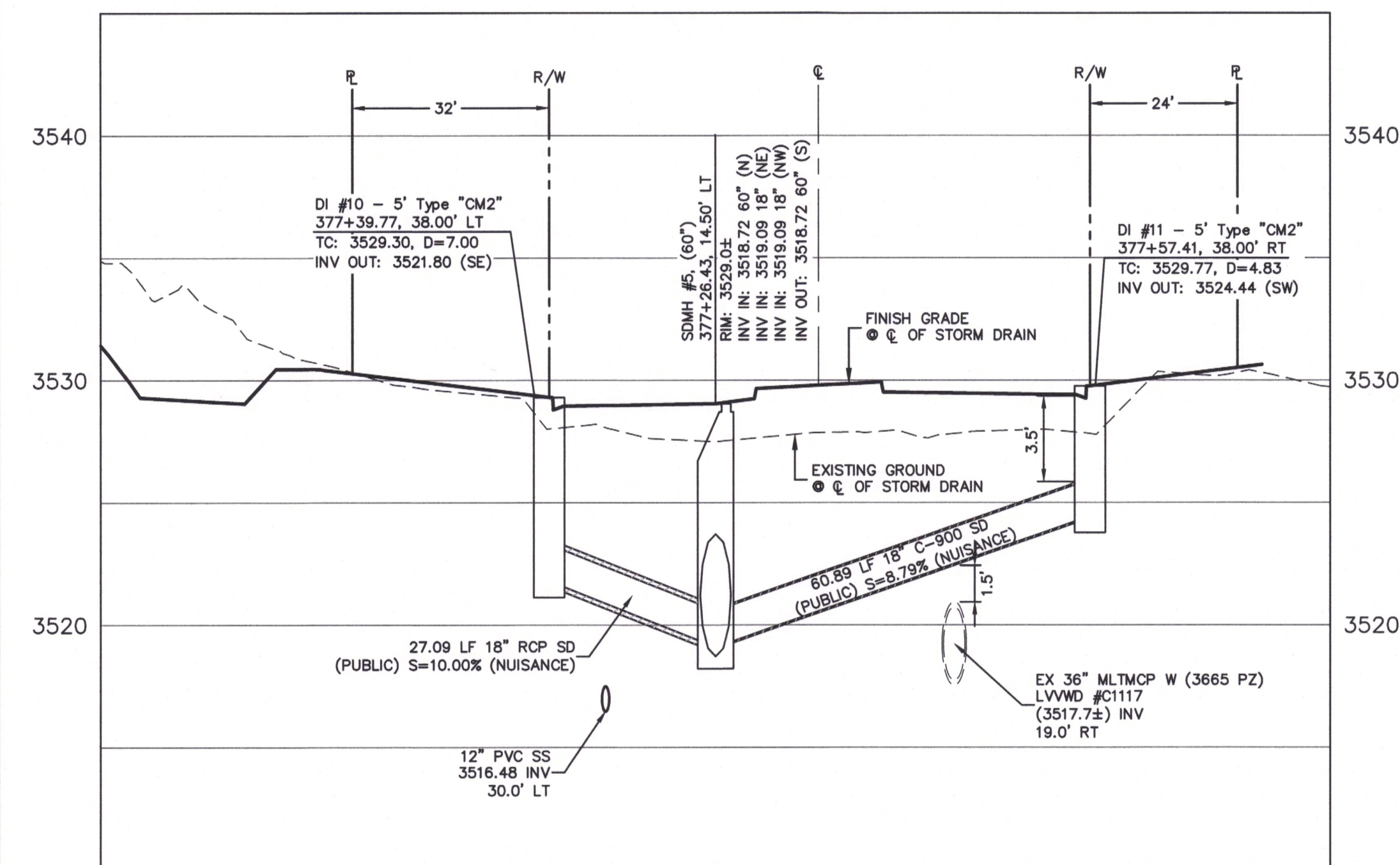
NOTE
THIS SET OF DRAWINGS IS BASED UPON NAVD 88 DATUM. PREVIOUS DRAWINGS MAY BE BASED ON OTHER DATUM. CARE SHOULD BE OBSERVED WHEN UTILIZING THIS SET OF DRAWINGS.

BASIS OF BEARINGS
NORTH 89°45'06" EAST BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 35, TOWNSHIP 20 SOUTH, RANGE 58 EAST, M.D.M., AS SHOWN BY MAP ON FILE IN FILE 91, PAGE 28 OF PARCEL MAPS IN THE CLARK COUNTY RECORDER'S OFFICE, CLARK COUNTY, NEVADA

OFF-SITE FLOOD CONTROL NOTE:
ALL OFF-SITE INTERIM FLOOD CONTROL FACILITIES SUCH AS, BUT NOT LIMITED TO, BERMS/DITCHES AND TEMPORARY SUMPS ARE PRIVATELY OWNED AND ARE TO BE PRIVATELY MAINTAINED BY THE HOWARD HUGHES COMPANY.

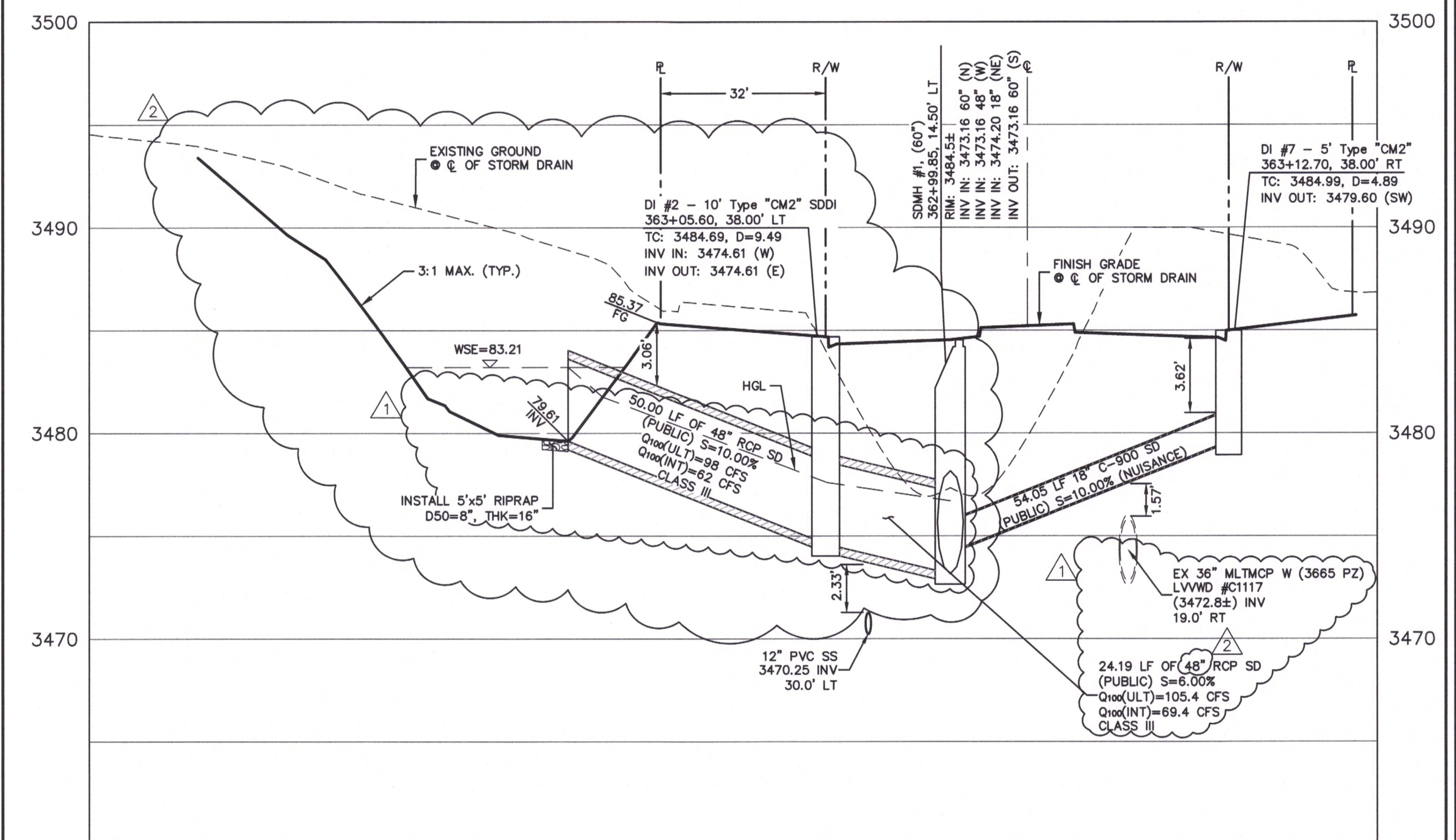
FOR EXISTING IMPROVEMENT PLANS, REFER TO THE FOLLOWING SET:
"SUMMERLIN VILLAGE 23B WATERLINE IMPROVEMENT GRADING," CLV #565-408





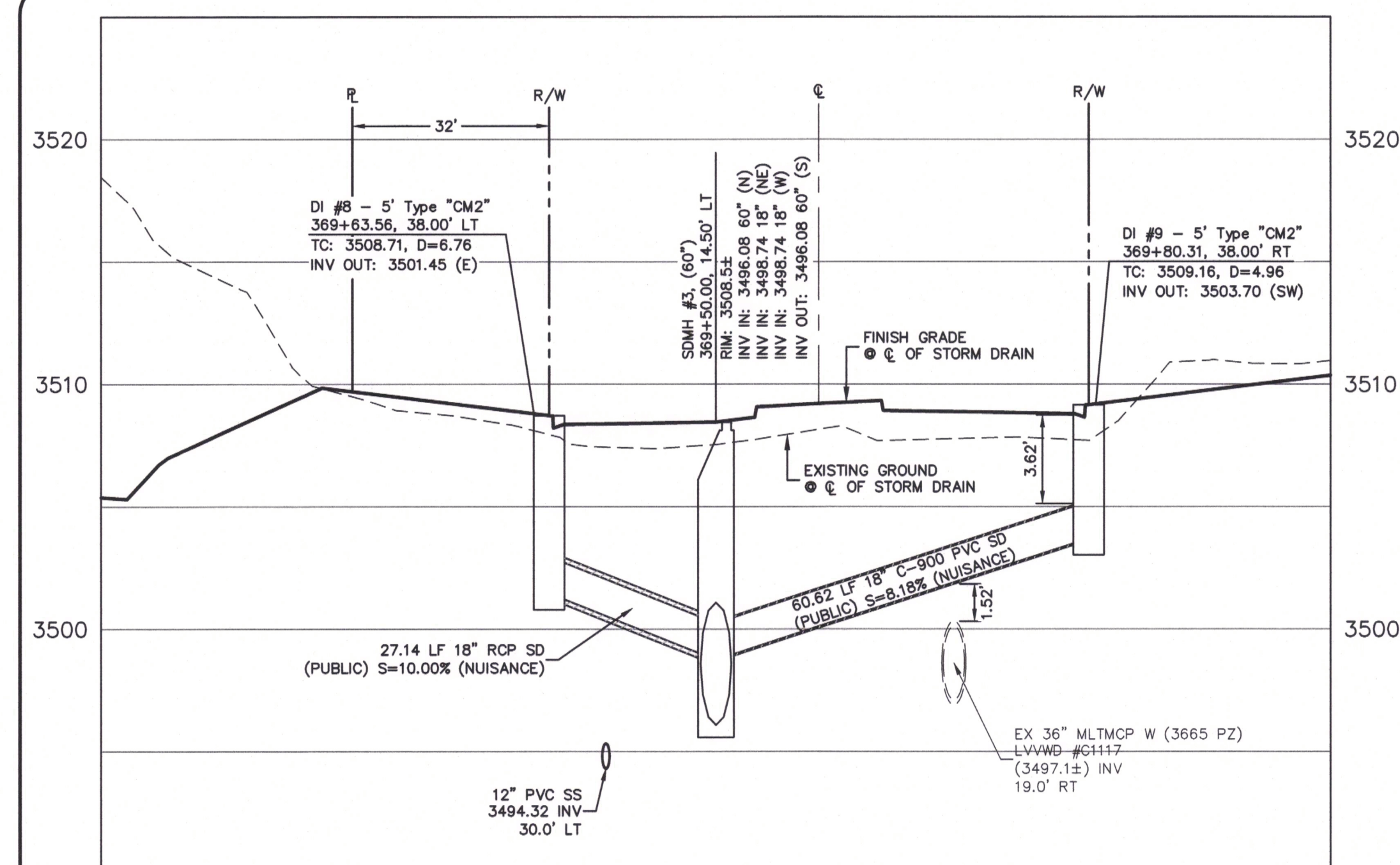
SKY VISTA DRIVE
STORM DRAIN PROFILE @ 377+26.43

SCALE: HORIZ. 1"=20', VERT. 1"=5'
SEE DRAWING 17



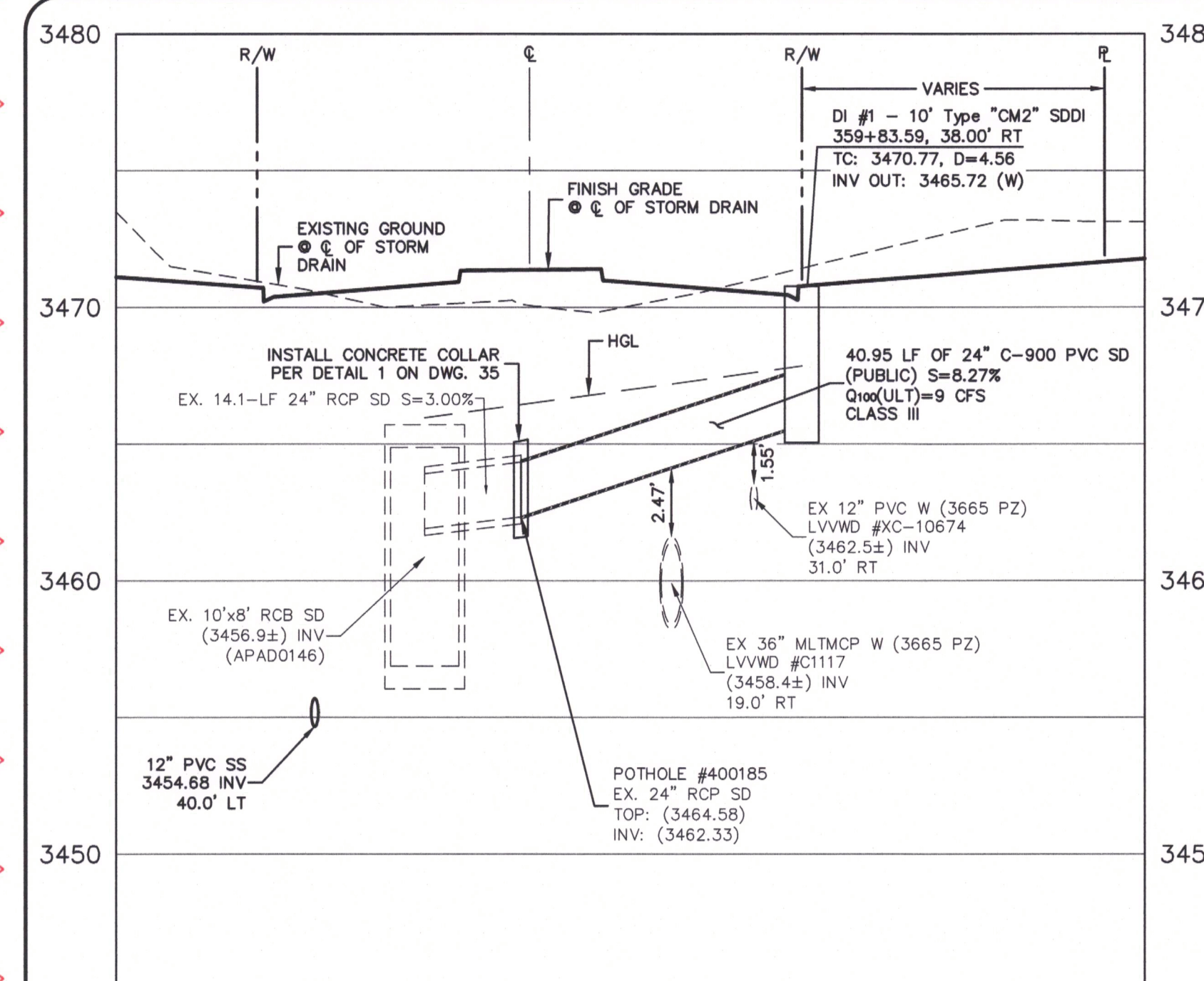
**SKY VISTA DRIVE
STORM DRAIN PROFILE @ 362+99.85**

SCALE: HORIZ. 1"=20', VERT. 1"=5'
SEE DRAWING 14



SKY VISTA DRIVE
STORM DRAIN PROFILE @ 369+50.00

SCALE: HORIZ. 1"=20', VERT. 1"=5'
SEE DRAWING 15



SKY VISTA DRIVE
STORM DRAIN PROFILE @ 359+83.59

SCALE: HORIZ. 1"=20', VERT. 1"=5'
SEE DRAWING 13

NOTE

IN AREAS WHERE THE EXCAVATION OR GROUND ELEVATION IS LESS THAN THREE (3) FEET, FROM THE TOP OF THE LVVMD TRANSMISSION MAIN, NO EXCAVATION EQUIPMENT, OTHER THAN HAND HELD EQUIPMENT WILL BE ALLOWED WITHIN TEN (10) FEET OF THE PIPELINE IN THESE AREAS. THE CONTRACTOR IS TO PLACE A CONCRETE BARRIER, I.E. JERSEY RAIL, TO IDENTIFY AND PROTECT THE "NO EQUIPMENT ZONE".

DROP INLET NOTE

WHERE 10 FEET PARALLEL SEPARATION IS NOT PRACTICABLE:
CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP BETWEEN
SLAB AND WALLS. BASE, WALLS AND TOP TO BE CONSTRUCTED
WITH WATERSTOPS, CENTER BULB OR FLAT STRIP. (VINYLEX,
GREENSTREAK PLASTIC PRODUCTS OR APPROVED EQUAL)

DROP INLET NOTE:

ALL STORM DRAIN DROP INLETS ARE TO BE
CONSTRUCTED PER THE REQUIREMENTS OF
USDCCA DWG. NO. 421 (STORMWATER QUALITY
MANAGEMENT STAMP AND SIGN DETAIL).

OFF-SITE FLOOD CONTROL NOTE:
ALL OFF-SITE INTERIM FLOOD CONTROL FACILITIES SUCH AS, BUT NOT LIMITED TO, BERMS/DITCHES AND TEMPORARY SUMPS ARE PRIVATELY OWNED AND ARE TO BE PRIVATELY MAINTAINED BY THE HOWARD HUGHES COMPANY.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 126398 FIRST APPROVED DATE

CLV# 107V7418 L18-01503-R001

11/20/19			LOCATION & CONNECTED TO DB OUTFALL, REVISED SD LATERAL
			CHANNEL GRADING, AND ADDED NEW SHEET 26A
04/15/19	Δ		REVISED SD & SS LATERAL & CHANNEL GRADING
10/07/19	Δ		REVISED SD LATERAL LOCATION

PROJECT NO.
62023B-240

SIGN:	LG/MB
DRAWN:	LG/MB
CHECK:	JLJ

OT DATE: 01-02-20
OT TIME: 09:23:25

GCW
ENGINEERS & SURVEYORS

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LAS VEGAS, NV 89146
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THE HOWARD HUGHES COMPANY, LLC

VILLAGE 23B SKY VISTA DRIVE
A DRIVE TO FAR HILLS AVENUE

LATERAL PROFILES 1

DRAWING
28

28 OF 46 SHTS