# SUMMERLIN VILLAGE 22
# IMPROVEMENT PLANS FOR:

# DESERT FOOTHILLS DRIVE

## SUNSET RUN DRIVE TO FLEET WING AVENUE
## FUTURE SID PROJECT
## APN 137-23-210-001

SUMMERLIN®

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## UTILITY NOTE

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 OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.

**CALL BEFORE YOU DIG: 1-800-642-2444**

THIS PROPERTY MAY HAVE STATIC WATER PRESSURE IN EXCESS OF 80 PSI. THE UNIFORM PLUMBING CODE REQUIRES THAT INDIVIDUAL, ON-SITE (PRIVATE) PRESSURE REDUCING VALVES BE INSTALLED WHENEVER THE PRESSURE EXCEEDS 80 PSI. PRV'S ARE THE DEVELOPER'S RESPONSIBILITY AND WILL NOTE BE INSPECTED OR INCLUDED IN THE ACCEPTANCE OF THE LAS VEGAS VALLEY WATER DISTRICT FACILITIES.

## NOTICE OF INTENT NOTE

NOTE: ALL LAND SURFACE AREA DISTURBANCES OVER 1 ACRE REQUIRE A STORMWATER DISCHARGE PERMIT ISSUED BY THE NEVADA DIVISION OF ENVIRONMENTAL PROTECTION (NDEP). A PHASED CONSTRUCTION UNIT IN A CONTIGUOUS SUBDIVISION IS CONSIDERED UNDER CONSTRUCTION UNTIL ALL STRIPPED SURFACE AREAS HAVE BEEN COVERED BY PAVING, BUILDING CONSTRUCTION OR PLANTING. A STORMWATER DISCHARGE PERMIT APPLICATION AND ASSOCIATED INFORMATION MAY BE DOWNLOADED FROM THE WEB SITE: HTTP://WWW.STATE.NV.US/BWPC/STORM01.HTM PROJECTS THAT DISTURB MORE THAN ONE ACRE OF LAND MUST SUBMIT TO NDEP A "NOTICE OF INTENT" FOR INCLUSION UNDER STORMWATER PERMIT NO. NVR100000 ALONG WITH APPROPRIATE FILLING FEE.

## NPDES PERMIT NOTE

THE ENGINEER SHOULD CONTACT THE NEVADA DIVISION OF ENVIRONMENTAL PROTECTION (NDEP) TO OBTAIN A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT PRIOR TO CONSTRUCTION. ALL CONSTRUCTION PROJECTS ONE ACRE OR LARGER MUST APPLY FOR THE PERMIT THROUGH NDEP. ALL QUESTIONS REGARDING THE NPDES PERMIT REQUIREMENTS SHOULD BE DIRECTED TO THE NDEP AT (775) 687-9429.

## FEMA FLOOD ZONE INFORMATION

THE PROJECT SITE IS LOCATED WITHIN A FEMA DESIGNATED ZONE X (UNSHADED) AS DEPICTED ON FLOOD INSURANCE RATE MAP (FIRM) PANEL 32003C2150E, DATED 9/27/2002. A ZONE X (UNSHADED) IS DESCRIBED AS AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN.

PROPOSED RIGHT-OF-WAY ACREAGE
3.54 AC.

PROPOSED DISTURBED AREA ACREAGE
8.60 AC.

GEOTECHNICAL ENGINEER
PREPARED BY: NOVA GEOTECHNICAL & INSPECTION SERVICES
4480 W. HACIENDA AVE. SUITE 104, LAS VEGAS, NV 89118
PHONE: 702-873-3478
PROJECT NO.: G-18-178
DATED: DECEMBER 3, 2018 & SUBSEQUENT LETTER DATED ON DECEMBER 30, 2019

## OWNER /DEVELOPER

### OWNER

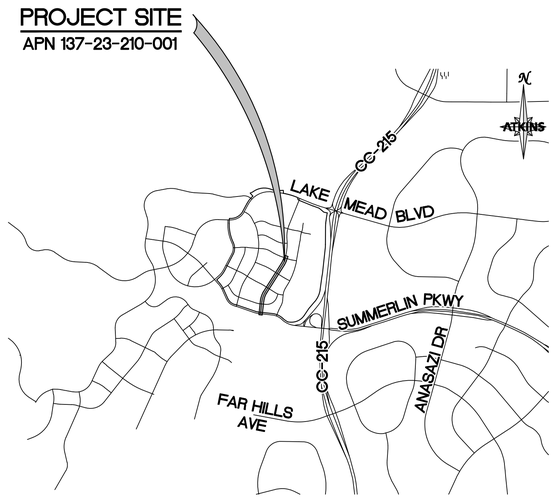
CONTACT: KEVIN ORROCK
HOWARD HUGHES COMPANY LLC, A DELAWARE LIMITED LIABILITY COMPANY
10845 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135

## ENGINEER / CONSULTANT

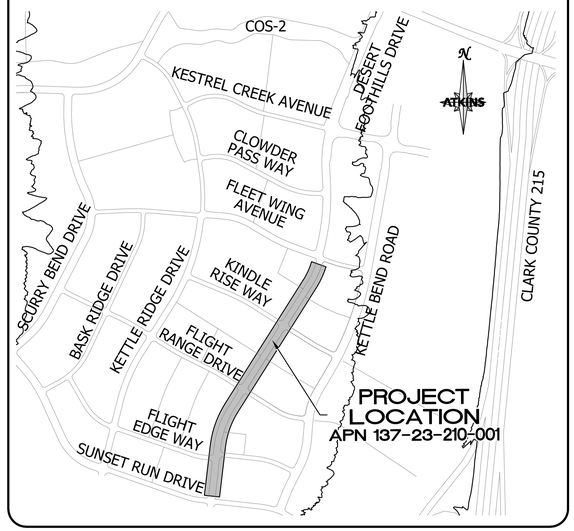
### CIVIL

CONTACT: DAVID WILSON P.E.
ATKINS
2270 CORPORATE CIRCLE SUITE 200
HENDERSON, NEVADA 89074
(702) 263-7275

## LOCATION MAP




## VICINITY MAP




## APPROVALS

HOWARD HUGHES COMPANY LLC, A DELAWARE LIMITED LIABILITY COMPANY

KEVIN T. ORROCK, VICE PRESIDENT — DATE

STEVEN FORD, P.E. #012175 — DATE
ACTING CITY ENGINEER

APPROVAL OF THESE PLANS IS LIMITED TO THOSE IMPROVEMENTS CONSTRUCTED IN THE DEDICATED RIGHT-OF-WAY AND OR/ DEDICATED EASEMENTS. THIS APPROVAL DOES NOT AUTHORIZE THE CONSTRUCTION OF ANY IMPROVEMENTS THAT DEVIATE FROM ADOPTED STANDARDS AND/OR SPECIFICATIONS, EXCEPT THOSE SPECIFICALLY LISTED UNDER DEVIATIONS FROM STANDARD. THE ENGINEER SHALL RESOLVE ANY DEVIATION OTHER THAN THOSE LISTED IN DEVIATIONS FROM STANDARDS IN FAVOR OF THE UNIFORM STANDARDS DRAWING AND SPECIFICATIONS CLARK COUNTY AREA, NEVADA.

CITY OF LAS VEGAS PLANNING DEPARTMENT — DATE

NOTE:
THIS PLAN CONFORMS TO THE APPLICABLE STANDARDS OF THE PLANNING DEPARTMENT.

LAS VEGAS FIRE AND RESCUE — DATE

CENTRAL TELEPHONE COMPANY d/b/a CENTURYLINK — DATE

THE AFFIXED CENTRAL TELEPHONE COMPANY d/b/a CENTURYLINK APPROVAL DOES NOT ASSUME OR GUARANTEE LIABILITY FOR KNOWN OR UNKNOWN CONFLICTS WITH EXISTING OR PROPOSED IMPROVEMENTS. RESOLUTION OF ANY CONFLICTS WILL BE ACCOMPLISHED PURSUANT TO LOCAL ORDINANCES, NEVADA REVISED STATUTES, AND/OR PUBLIC UTILITY COMMISSION RULES AND REGULATIONS.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT NO. 0000 FIRST APPROVED DATE: _____

SHEETS: _____

NV ENERGY — DATE

NV ENERGY HAS ACKNOWLEDGED WE HAVE RECEIVED YOUR PLANS AND WILL PROVIDE SERVICE TO ALL ELECTRICAL NEEDS ASSOCIATED WITH THIS PROJECT. NV ENERGY RESERVES THE RIGHT TO ADDRESS ANY EXISTING OR FUTURE CONFLICTS ONCE THE FINAL DESIGN IS COMPLETED. THE NEW SERVICE AND THE RESOLUTION OF ANY CONFLICTS WILL BE ACCOMPLISHED PURSUANT TO THE NEVADA UTILITY COMMISSION'S RULES AND REGULATIONS.

SOUTHWEST GAS CORPORATION — DATE

COX COMMUNICATIONS OF LAS VEGAS, INC — DATE

## BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

LINEAR UNIT: US SURVEY FOOT (FTUS)
DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00
SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)
ZONE: LAS VEGAS HIGH ELEVATION ZONE
PROJECTION: TRANSVERSE MERCATOR STANDARD PARALLEL (AND LATITUDE OF GRID ORIGIN): 36°15'00"N
LONGITUDE OF CENTRAL MERIDIAN: 114°58'00"W
NORTHING AT GRID OF ORIGIN: 400,000.00 M (1,312,333.3333 FTUS)
EASTING AT CENTRAL MERIDIAN: 300,000 M (984,250.0000 FTUS)
SCALE FACTOR ON CENTRAL MERIDIAN: 1.000135 (EXACT)
NOTES:

1. ALL DISTANCES AND BEARINGS SHOWN HEREON ARE PROJECTED (GRID) VALUES BASED ON THE PRECEDING PROJECTION DEFINITION. THE PROJECTION WAS DEFINED SUCH THAT PROJECTED (GRID) DISTANCES ARE EQUIVALENT TO "GROUND" DISTANCES IN THE PROJECTED AREA
2. GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

## BENCHMARK

PROJECT DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
CITY OF LAS VEGAS BENCHMARK: D368 (REVISED 2008)
NAVD88 ELEVATION: 989.574 METERS (3,246.63 FEET)
FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
T21S,R59E,S03

## LEGAL DESCRIPTION

BEING A PORTION OF LOT 2 AS SHOWN ON THE MAP THEREOF IN BOOK 125 OF PLATS, PAGE 15, OFFICIAL RECORDS, CITY OF LAS VEGAS CLARK COUNTY, NEVADA.

FAST Call before you UnderGround 1-702-432-5300 — PROTECTING OUR NATIONAL SYSTEM OF TRANSPORTATION

Call before you D g — AVOID CUTTING THE BURIED UTILITY LINES YOU DIG! Call 811 OR 1-800-642-2444

AVOID FATHOM OVERHEAD POWER LINES ITS COSTLY! CALL BEFORE YOU DIG OVERHEAD 1-702-227-2929

PROFESSIONAL ENGINEER-STATE OF NEVADA — NICOLAS A. BARGOS — EXP. 12-31-20 — CIVIL — No. 25673

10/6/2020

REVISIONS

| REV. | DESCRIPTION | BY | DATE | APPROVAL |
|---|---|---|---|---|
| | | | | |


ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200


SUMMERLIN®

SUMMERLIN VILLAGE 22
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

COVER SHEET

| | |
|---|---|
| DESIGNED BY: | B. MOCHTYAK |
| DRAWN BY: | L. SOSA |
| CHECKED BY: | P. BATES |
| HORIZ.: | NONE |
| VERT.: | NONE |
| XXXVXXXX. LXX-XXXXX. | |
| DATE: | OCTOBER, 2020 |
| DRAWING NO. | 1 / 46 |
| JOB NO. | 100066774 |

X:\Projects\SummWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)_Sheets\66774-01-TITL-C1.dwg LAYOUT: C-1 Oct 15, 2020 - 10:25AM

| | |
|---|---|
| @ | AT |
| # | NUMBER |
| AB | ABANDONED |
| AC | ASPHALTIC CONCRETE |
| ACP | ASBESTOS CEMENT PIPE |
| AGG | AGGREGATE |
| AIP | ABANDON IN PLACE |
| ALT | ALTERNATE |
| AP | ANGLE POINT |
| APPROX | APPROXIMATE |
| ASTM | AMERICAN SOCIETY FOR TESTING AND MATERIALS INTERNATIONAL |
| AV/AR | AIR VACUUM AIR RELIEF VALVE |
| BC | BACK OF CURB |
| BCR | BACK OF CURB RETURN |
| BLK | BLOCK |
| BLVD | BOULEVARD |
| BM | BENCHMARK |
| BO | BLOW OFF |
| BP | BOTTOM OF PIPE |
| BSW | BACK OF SIDEWALK |
| BVC | BEGIN VERTICAL CURVE |
| BVCE | BEGINNING OF VERTICAL CURVE ELEVATION |
| BVCS | BEGINNING OF VERTICAL CURVE STATION |
| BW | BOTTOM WIDTH |
| C&G | CURB AND GUTTER |
| C–C | CENTER TO CENTER |
| CATV | CABLE TELEVISION |
| CCAUSD | CLARK COUNTY AREA UNIFORM STANDARD DRAWING |
| CCRFCD | CLARK COUNTY REGIONAL FLOOD CONTROL DISTRICT |
| CCWRD | CLARK COUNTY WATER RECLAMATION DISTRICT |
| CF | CUBIC FOOT |
| CIP | CAST IRON PIPE OR CAST IN PLACE |
| CL | CENTERLINE |
| CLR | CLEAR |
| CLV | CITY OF LAS VEGAS |
| CM | CONSTRUCTION MANAGER |
| CMP | CORRUGATED METAL PIPE |
| CMU | CONCRETE MASONRY UNIT |
| CNDT | CONDUIT |
| CNLV | CITY OF NORTH LAS VEGAS |
| CO | CLEANOUT |
| COH | CITY OF HENDERSON |
| COL | COLUMN |
| CON'T | CONTINUATION |
| CONC | CONCRETE |
| CONST | CONSTRUCT OR CONSTRUCTION |
| COR | CORNER |
| COS | COMMUNITY OPEN SPACE |
| CPP | CORRUGATED PLASTIC PIPE |
| CSP | CORRUGATED STEEL PIPE |
| CU | CUBIC |
| CULV | CULVERT |
| CY | CUBIC YARD |
| D | DEPTH |
| DCSWCS | DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS |
| DET, DTL | DETAIL |
| DEPT | DEPARTMENT |
| DG | DESIGN GRADE |
| DI | DROP INLET |
| DIA | DIAMETER |
| DIAG | DIAGONAL |
| DIP | DUCTILE IRON PIPE |
| DOC | DOCUMENT |
| DW | DRIVEWAY |
| DWG | DRAWING |
| E | EAST |
| EA | EACH |
| EB | EASTBOUND |
| EC | END OF CURVE |
| ECR | END CURB RETURN |
| EF | EACH FACE |
| EG | EXISTING GROUND |
| ELEC | ELECTRICAL |
| ELEV | ELEVATION |
| EMBK | EMBANKMENT |
| EOP | EDGE OF PAVEMENT |
| EP | EDGE OF PAVEMENT ALIGNMENT END |
| EQ | EQUAL |
| ESMT | EASEMENT |
| EVC | END VERTICAL CURVE |
| EVCS | END VERTICAL CURVE STATION |
| EW | EACH WAY |
| EX, EXST | EXISTING |
| EXP, JT | EXPANSION JOINT |
| FA | FIRE ALARM |
| FC | FACE OF CURB |
| FF | FINISHED FLOOR ELEVATION |
| FH | FIRE HYDRANT |
| FL | FLOW LINE |
| FO | FIBER OPTIC |
| FT | FOOT OR FEET |
| G | GAS LINE |
| GALV | GALVANIZED |
| GB | GRADE BREAK |
| GL | GRATE LENGTH |
| GM | GAS METER |
| GUT | GUTTER |
| GV | GATE VALVE |
| H | HEIGHT |
| HDPE | HIGH DENSITY POLYETHYLENE PIPE |
| HDWL | HEADWALL |
| HE | HORIZONTAL ELLIPTICAL |
| HGL | HYDRAULIC GRADE LINE |
| HOA | HOMEOWNER'S ASSOCIATION |
| HOR | HORIZONTAL |
| HP | HIGH POINT |
| ID | INSIDE DIAMETER |
| IN | INCH(ES) |
| INT | INTERSECTION |
| INV | INVERT |
| IQAC | INTERAGENCY QUALITY ASSURANCE COMMITTEE |
| IRR | IRRIGATION |
| ISL | ISLAND |
| JB | JUNCTION BOX |
| JCT | JUNCTION |
| JT | JOINT |
| K | VERTICAL CURVE K VALUE |
| L | LENGTH |
| LB | POUND(S) |
| LF | LINEAR FEET |
| LIN | LINEAR |
| LIN # | CCWRD MANHOLE NUMBER |
| LOC | LENGTH OF CURVE |
| LOL | LAYOUT LINE |
| LP | LOW POINT |
| LS | LANDSCAPE |
| LT | LEFT |
| LVC | LENGTH OF VERTICAL CURVE |
| LVVWD | LAS VEGAS VALLEY WATER DISTRICT |
| MAS | MASONRY |
| MAX | MAXIMUM |
| MH | MANHOLE |
| MIN | MINIMUM |
| MON | MONOLITHIC, MONUMENT |
| MTL | MATERIAL |
| ME | MATCH EXISTING |
| MUE | MUNICIPAL UTILITY EASEMENT |
| N | NORTH |
| NAP | NOT A PART |
| NDOT | NEVADA DEPARTMENT OF TRANSPORTATION |
| NF | NEAR FACE |
| NG | NUMBER OF GRATES, NATURAL GRADE |
| NIC | NOT IN CONTRACT |
| No. | NUMBER |
| NTS | NOT TO SCALE |
| NVE | NV ENERGY |
| OC | ON CENTER |
| OD | OUTSIDE DIAMETER |
| OG | OPEN GRADE |
| OH | OVERHEAD |
| OHP | OVERHEAD POWER |
| OS | OFFSET |
| P | POWER |
| PB | PULL BOX |
| PBS | PLANTMIX BITUMINOUS SURFACE |
| PC | POINT OF CURVATURE |
| PCC | PORTLAND CEMENT CONCRETE OR POINT OF COMPOUND CURVATURE |
| PE | POLYETHYLENE |
| PG | PROPOSED GRADE |
| PGL | PROFILE GRADE LINE |
| PH | POT HOLE |
| PI | POINT OF INTERSECTION |
| PIP | PROTECT IN PLACE |
| PL | PROPERTY LINE |
| PLCS | PLACES |
| PMF | PAVEMENT MARKING FILM |
| POC | POINT OF CONNECTION |
| PP | POWER POLE |
| PRC | POINT OF REVERSE CURVATURE |
| PROP | PROPOSED |
| PSI | POUNDS PER SQUARE INCH |
| PT | POINT, POINT OF TANGENCY |
| PUE | PUBLIC UTILITY EASEMENT |
| PVC | POLYVINYL CHLORIDE |
| PVI | POINT OF VERTICAL INTERSECTION |
| PVMT | PAVEMENT |
| QTY | QUANTITY |
| (R) | RADIAL |
| R/W,ROW | RIGHT OF WAY |
| R | RADIUS |
| RC | REINFORCED CONCRETE |
| RCB | REINFORCED CONCRETE BOX |
| RCC | ROLLER COMPACTED CONCRETE |
| RCP | REINFORCED CONCRETE PIPE |
| RD | ROAD |
| REINF | REINFORCED OR REINFORCEMENT |
| RELOC | RELOCATE |
| REV | REVISION |
| RG | ROUGH GRADE |
| RP | RADIUS POINT |
| RPM | RAISED PAVEMENT MARKER |
| RR | RAILROAD |
| RT | RIGHT |
| SCHED | SCHEDULE |
| SD | STORM DRAIN |
| SDMH | STORM DRAIN MANHOLE |
| SF | SQUARE FOOT/SQUARE FEET |
| SHLD | SHOULDER |
| SHT | SHEET |
| SHP | STEEL HIGH PRESSURE PIPE |
| SMFO | SINGLE MODE FIBER OPTIC |
| SNWA | SOUTHERN NEVADA WATER AUTHORITY |
| SQ | SQUARE |
| SS | SANITARY SEWER OR SIDE SLOPE |
| SSD | SUMMERLIN STANDARD DRAWING |
| SST | STAINLESS STEEL |
| ST | STREET |
| STA | STATION |
| STD | STANDARD |
| STL | STEEL |
| STLT | STREETLIGHT |
| SDHW | STORM DRAIN HEADWALL |
| STRUCT | STRUCTURAL OR STRUCTURE |
| SUM # | CCWRD MANHOLE NUMBER |
| SURV | SURVEY |
| SVZ | SIGHT VISIBILITY ZONE |
| SW | SIDEWALK |
| SY | SQUARE YARD |
| T | TELEPHONE LINE |
| TAN | TANGENT |
| TB | TOP OF BOX |
| TBA | TO BE ADJUSTED |
| TBC | TOP OF BACK OF CURB |
| TBR | TO BE REMOVED |
| TC | TOP OF CURB |
| TCD | TRAFFIC CONTROL DEVICE |
| TDS | TECHNICAL DRAINAGE STUDY |
| TEL | TELEPHONE |
| TEMP | TEMPORARY |
| TF | TOP OF FOOTING |
| THK | THICK |
| THR | THRUST |
| THW | TOP OF HEADWALL |
| TOF | TOP OF FACE |
| TOP | TOP OF BANK |
| TW/TOW | TOP OF WALL |
| TP | TOP OF PIPE |
| TRANS | TRANSITION |
| TS | TRAFFIC SIGNAL |
| TSI | TRAFFIC SIGNAL INTERCONNECT |
| TW | TOP OF WALL |
| TYP | TYPICAL |
| UDACS | UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS |
| UG | UNDERGROUND |
| UGP | UNDERGROUND POWER |
| UIE | UPPER INVERT ELEVATION |
| UNO | UNLESS NOTED OTHERWISE |
| UPRR | UNION PACIFIC RAILROAD |
| USD | UNIFORM STANDARD DRAWING |
| UTACS | ULTRA THIN ASPHALT CONCRETE SURFACE |
| USTCDE | UTILITY, STREETLIGHT, TRAFFIC CONTROL DEVICE EASEMENT |
| V | VOLT |
| VAR | VARIABLE |
| VC | VERTICAL CURVE |
| VCP | VITRIFIED CLAY PIPE |
| VERT | VERTICAL |
| VG | VALLEY GUTTER |
| W | WEST, WATER |
| W/ | WITH |
| WB | WEST BOUND |
| WL | WATER LINE |
| WM | WATER METER |
| W/O | WITHOUT |
| WPJ | WEAKENED PLANE JOINT |
| WV | WATER VALVE |
| WW | WING WALL |
| YD | YARD(S) |

| | EXISTING | PROPOSED |
|---|---|---|
| DAYLIGHT LINE | | |
| FLOWLINE | | |
| CENTERLINE | | |
| PARCEL LINE | | |
| RIGHT OF WAY | | |
| PAVEMENT STRIPING | | |
| OVERHEAD POWER | —OHP— | —OHP— |
| UNDERGROUND POWER | —UGP— | —UGP— |
| SANITARY SEWER | —S— | 15" SS |
| WATER | | 24"W (3550) |
| STORM DRAIN | | |
| GAS | —G— | —G— |
| CABLE T.V. | —CATV— | —CATV— |
| TELEPHONE | —T— | —T— |
| STREETLIGHT CONDUIT | —STLT— | STLT |
| STOP BAR | | |
| CONCRETE ENCASEMENT | | |
| FENCE | | |
| BLOCK WALL | | |
| RETAINING WALL | | |
| SAWCUT PAVEMENT | | |
| CONTOUR | (3000) | 3005 |
| SPOT ELEVATION | x 3011.6 | x 3011.60 |
| CURB AND GUTTER | | |
| EDGE OF PAVEMENT | | |
| EASEMENT | | |
| MATCHLINE | | |
| SIGN | | |
| DOUBLE POST SIGN | | |
| STORM DRAIN MANHOLE | SD | |
| STORM DRAIN STRUCTURE | | |
| DROP INLET | | |
| BEEHIVE INLET | | OR |
| SEWER MANHOLE | S | S |
| FIRE HYDRANT | | |
| CAP AND BLOWOFF | | |
| GATE VALVE | | |
| REDUCER | | |
| STREETLIGHT | OR | |
| PULLBOX | | |
| SIGNAL POLE | | |
| ELEVATION | (0000.0) FG | 0000.00 FG |
| WATER PRESSURE ZONE BOUNDARY | | |
| WATER PRESSURE ZONE | | 3550 |
| | | FUTURE |
| HARDSCAPE | | |

## NOTE TO CONTRACTOR

- QUANTITIES SHOWN ARE ESTIMATES ONLY AND ARE INTENDED TO ILLUSTRATE SCOPE OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXACT QUANTITIES INVOLVED.

ROADWAY ALIGNMENT DESIGNATIONS

"DFD" = DESERT FOOTHILLS DRIVE
"FWA" = FLEET WING AVENUE
"KRW" = KINDLE RISE WAY
"FRD" = FLIGHT RANGE DRIVE
"FEW" = FLIGHT EDGE WAY
"SRD" = SUNSET RUN DRIVE

**APPROVED FOR CONSTRUCTION**

LAS VEGAS VALLEY WATER DISTRICT
PLANNING AND ENGINEERING SERVICES

PROJECT NO. 0000 FIRST APPROVED DATE: _____

LVVWD APPROVED FIRE FLOW 1500 GPM AT 20 PSI RESIDUAL

**BASIS OF BEARING**

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

**BENCHMARK**

CITY OF LAS VEGAS BENCHMARK: D368
(REVISED 2008)
NAVD88 ELEVATION: 989.574 METERS
(3,246.63 FEET)
FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
T21S,R59E,S03

FAST Call before you UnderGround 1-702-432-5300 NEVADA ONE CALL SYSTEM OF TRANSPORTATION

Call before you D g AVOID CUTTING ENCROACHING UTILITY LINES. ITS COURTLY. Call 811 OR 1-800-642-2444

AVOID HITTING OVERHEAD POWER LINES. ITS COURTLY. CALL BEFORE YOU DIG OVERHEAD 1-702-227-2929

UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTORS 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 OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.

PROFESSIONAL ENGINEER STATE OF NEVADA NICOLAS A. BARGOS EXP. 12-31-20 CIVIL No. 25673

10/6/2020

REVISIONS

| REV. | DESCRIPTION | BY | DATE | APPROVAL |
|---|---|---|---|---|
| | | | | |

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
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SUMMERLIN

SUMMERLIN VILLAGE 22
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

LEGEND AND ABBREVIATIONS

DESIGNED BY: B. WOCHTYAK
DRAWN BY: L. SOSA
CHECKED BY: P. BATES
HORIZ.: NONE
VERT.: NONE

XXXVXXXX
LXX–XXXXX
DATE: OCTOBER, 2020
DRAWING NO. 2/46
JOB NO. 100066774

X:\Projects\SummWest\Village 22\100066774 – V22 Desert Foothills (Sunset to Fleet Wing)_Sheets\66774–02–LGND–G2.dwg LAYOUT: G–2 Oct 15, 2020 – 4:28PM

## CITY OF LAS VEGAS GENERAL NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENTS, CLARK COUNTY AREA NEVADA", LATEST ISSUE; THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION, CLARK COUNTY AREA NEVADA", LATEST REVISED EDITION; THE "SUMMERLIN IMPROVEMENT STANDARDS" FOR WORK IN THE SUMMERLIN AREA; AND OTHER APPLICABLE APPROVED STANDARDS ISSUED BY THE CONTROLLING AGENCY; THE UNIFORM BUILDING CODE; AND ALL LOCAL CITY CODES AND ORDINANCES APPLICABLE, EXCEPT AS NOTED ON THIS SHEET AS "DEVIATIONS FROM STANDARDS".
2. THE EXISTENCE AND LOCATION OF ANY OVERHEAD OR UNDERGROUND UTILITY LINES, PIPES, OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A RESEARCH OF THE AVAILABLE RECORDS. EXISTING UTILITIES AS SHOWN FROM CLV PLANS LIBRARY ARE APPROXIMATE AND FOR RECORD PURPOSES. EXISTING UTILITIES ARE LOCATED ON PLANS ONLY FOR THE CONVENIENCE OF THE CONTRACTOR. EXISTING UTILITY SERVICE LATERALS MAY NOT BE SHOWN ON THE PLANS. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, LOCATE ALL UNDERGROUND AND OVERHEAD INTERFERENCE'S WHICH MAY AFFECT HIS OPERATION DURING CONSTRUCTION AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO SAME. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR OVERHEAD UTILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT, AND SHALL BE RESPONSIBLE FOR ALL COST AND LIABILITY IN CONNECTION THEREWITH.
3. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING UTILITY LINES, STRUCTURES AND STREET IMPROVEMENTS WHICH ARE TO REMAIN IN PLACE, FROM DAMAGE, AND ALL SUCH IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED SATISFACTORY TO THE CITY ENGINEER AND OWNING UTILITY COMPANY AT THE EXPENSE OF THE CONTRACTOR.
4. ALL CONSTRUCTION SHALL BE AS SHOWN ON THESE PLANS, ANY REVISIONS SHALL HAVE THE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER.
5. TYPE V CEMENT SHALL BE USED IN ALL OFF-SITE CONCRETE WORK. CONCRETE TO BE 3000 P.S.I. MINIMUM @ 28 DAYS. MIX DESIGNS TO BE APPROVED BY THE CITY, PRIOR TO THE USE ON THE PROJECT.
6. PERMITS ARE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL SECURE ALL PERMITS AND INSPECTIONS REQUIRED FOR THIS CONSTRUCTION.
7. EXPANSION JOINTS REQUIRED, MAXIMUM EVERY 300' IN EXTRUDED-TYPE CURB.
8. AC PAVEMENT TO BE ONE-HALF INCH (½") ABOVE LIP OF ALL GUTTERS AFTER COMPACTION, EXCEPT AT SIDEWALK RAMPS AND CROSS GUTTERS.
9. CURB AND GUTTER FOUND TO BE UNACCEPTABLE TO THE CITY OF LAS VEGAS SHALL BE REMOVED AND REPLACED PER STANDARD DRAWING 216.
10. SIDEWALK RAMPS SHALL BE CONSTRUCTED IN EACH QUADRANT OF AN INTERSECTION PER STANDARD DRAWING 235. EXACT LOCATION OF RAMPS MAY BE ADJUSTED IN THE FIELD BY A CITY INSPECTOR.
11. CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITIONS BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE FOR PROPER DRAINAGE AND FOR INGRESS AND EGRESS TO NEW CONSTRUCTION. THE EXTENT OF THE TRANSITIONS TO BE AS SHOWN ON PLANS.
12. ALL GRADING WORK SHALL CONFORM TO THE SOILS REPORT AS PREPARED BY THE (NOVA, G-18-176, 12/03/18) APPROVED BY THE CITY ENGINEER, AND AS SHOWN ON THESE PLANS.
13. EXACT LOCATION OF ALL SAWCUT LINES MAY BE ADJUSTED OR DETERMINED IN THE FIELD BY A CITY OF LAS VEGAS ENGINEER IF LOCATION ON PLANS IS NOT CLEARLY SHOWN, OR EXISTING PAVEMENT CONDITION REQUIRES RELOCATIONS.
14. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT EXISTING PERMANENT SURVEY MONUMENTS. ANY MONUMENTS DISTURBED SHALL BE REPLACED AND ADJUSTED PER AVAILABLE RECORDS IN ACCORDANCE WITH STATUTE NO. 625.380 & CITY OF LAS VEGAS TITLE 18, APPENDIX D.
15. UTILITY COMPANY METER BOXES, MANHOLE LIDS, VALVE COVERS, ETC., SHALL BE LOCATED OUT OF DRIVEWAYS, DRIVEWAY APRONS, FLOWLINES, AND CROSS GUTTERS UNLESS WRITTEN APPROVAL IS GRANTED BY THE UTILITY COMPANY AND THE CITY ENGINEER.

WALL NOTES:

16. ALL WALLS, NEW OR EXISTING, ARE ONLY SHOWN ON CIVIL PLANS FOR THE PURPOSE OF REVIEWING GRADING RELATIONSHIPS; FLOOD CONTROL AND SIGHT DISTANCE AT INTERSECTIONS. NEW WALLS REQUIRE A SEPARATE PERMIT AND INSPECTION BY THE BUILDING DEPARTMENT.
17. ASPHALT MIX DESIGN MUST BE SUBMITTED AND APPROVED BY THE CITY ENGINEER PRIOR TO THE PLACEMENT OF ASPHALT WITHIN CITY RIGHT OF WAY.
18. CONTRACTOR SHALL ADJUST ALL NEW AND EXISTING INLETS, VALVE BOXES, MANHOLE RIMS, AND SEWER CLEAN OUTS, ETC. TO FINISH GRADE AS APPLICABLE WHETHER OR NOT THEY ARE SHOWN ON THE PLANS.
19. MATERIALS, HANDLING AND PLACEMENT OF PORTLAND CEMENT CONCRETE SHALL BE IN ACCORDANCE WITH APPLICABLE SECTIONS OF NDOT OR THE CLARK COUNTY AREA SPECIFICATIONS (AS APPLICABLE) AND THE PLANS AND DETAILS SHOWN HEREON.
20. WHEN INSTALLING UNDERGROUND FACILITIES THAT REQUIRE UNDERGROUND LOCATING DEVICES SUCH AS MARKER BALLS, LOCATING RIBBON, ETC, THE CONTRACTOR SHALL PROVIDE WRITTEN DOCUMENTATION TO OFFSITE INSPECTION AND TESTING CERTIFYING THAT ALL DEVICES HAVE BEEN PLACED AND VERIFIED TO BE IN GOOD WORKING CONDITION PRIOR TO THE CONSTRUCTION OF ANY ROAD BASE.
21. SANITARY SEWER AND STORM DRAIN FINAL LOCATION MAP(S) SHALL BE PROVIDED TO THE CITY AND APPROVED PRIOR TO ACCEPTANCE OF FACILITY VIDEO INSPECTION. THE MAP(S) SHALL INCLUDE THE HORIZONTAL AND VERTICAL (INVERT) LOCATION OF PUBLIC SEWER MANHOLES, STORM DRAIN MANHOLES AND TRANSITION STRUCTURES, STORM DRAIN LATERALS AT THE CONNECTION TO THE STORM DRAIN MAIN AND AT THE CONNECTION TO A DROP INLET, THE CONNECTION OF SEWER SERVICE LATERALS TO THE SEWER MAIN AND WHERE THE SEWER SERVICE LATERALS EXIT THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MAIN ALIGNMENT, INCLUDING DEFLECTION POINTS. THE LOCATION SHALL BE DESCRIBED BY COORDINATES WHICH SHALL BE BASED ON THE OFFICIAL HORIZONTAL AND VERTICAL CONTROL NETWORKS OF THE CITY OF LAS VEGAS. FINAL LOCATION MAPS MUST BE SEALED AND CERTIFIED BY A NEVADA PROFESSIONAL LAND SURVEYOR TO HAVE POSITIONAL CERTAINTIES OF ± 0.09 METERS (± 0.3 FEET) HORIZONTALLY AND VERTICALLY. A SEPARATE ELECTRONIC COMMA DELIMITED FILE FOR THE SANITARY SEWER AND STORM DRAIN COORDINATES SHALL ALSO ACCOMPANY THE SANITARY SEWER AND STORM DRAIN FINAL LOCATION MAP(S).
22. CCTV VIDEO INSPECTION IS REQUIRED FOR ALL SEWER AND STORM DRAINS. THE CCTV VIDEO INSPECTIONS NEED TO BE PERFORMED PER THE DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS LATEST EDITION.
23. A SEPARATE BORING PERMIT IS REQUIRED FOR ALL BORING ACTIVITIES.

REVISED 06/04/2018

## CITY OF LAS VEGAS TRAFFIC NOTES

1. ALL CONSTRUCTION SIGNING, BARRICADING, AND TRAFFIC DELINEATION SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITION.
2. THE STREET SIGN CONTRACTOR SHALL OBTAIN DESERT FOOTHILLS DRIVE NAMES AND BLOCK NUMBERING FROM THE PLANNING DEPARTMENT PRIOR TO CONSTRUCTION.
3. BEFORE ANY WORK IS STARTED IN THE RIGHT-OF-WAY, THE CONTRACTOR SHALL INSTALL ALL ADVANCE WARNING SIGNS FOR THE CONSTRUCTION ZONE. THE CONTRACTOR SHALL INSTALL TEMPORARY STOP SIGNS AT ALL NEW STREET ENCROACHMENTS INTO EXISTING CITY STREETS WHERE WARRANTED IMMEDIATELY AFTER FIRST GRADING WORK IS ACCOMPLISHED, AND SHALL MAINTAIN SAID SIGNS UNTIL PERMANENT SIGNS ARE INSTALLED.
4. WHEN A DESIGNATED "SUGGESTED ROUTE TO SCHOOL" IS ENCROACHED UPON BY A CONSTRUCTION WORK ZONE AND PUBLIC WORKS STAFF IDENTIFIES A NEED FOR STUDENTS TO BE ASSISTED IN THE SAFE CROSSING THROUGH THAT WORK ZONE, THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE A QUALIFIED "CROSSING GUARD". THE GUARD SHALL BE PRESENT FOR THE FULL DURATION OF TIME THAT CHILDREN ARE LIKELY TO BE PRESENT.
5. 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 CITY TRAFFIC ENGINEER.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL PERMANENT SIGNS SHOWN ON THE PLANS. ALL NEW TRAFFIC SIGNS SHALL UTILIZE TYPE XI RETROREFLECTIVE SHEETING IN ACCORDANCE WITH CCAUSS 627 AND 716 AND SHALL HAVE AN ANTI-GRAFFITI PROTECTIVE OVERLAY FILM THAT IS A MATCHING COMPONENT TO, AND OF THE SAME MANUFACTURER AS THE RETROREFLECTIVE SHEETING TO WHICH IT IS APPLIED. DESERT FOOTHILLS DRIVE NAMES SIGNS SHALL CONFORM IN THEIR ENTIRETY TO CURRENT CITY STANDARDS. ALL OTHER SIGNS SHALL BE STANDARD SIZE UNLESS OTHERWISE SPECIFIED ON THE PLANS. ALL SIGN POSTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT CITY STANDARDS.
7. WHEN A PROPOSED STREET LIGHT STANDARD IS LOCATED WITHIN FIVE (5') FEET OF ANY PROPOSED SIGN SHOWN ON THE PLANS TO BE MOUNTED ON A SIGNPOST, THE SIGN SHALL BE MOUNTED ON THE STREET LIGHT STANDARD AND THE SIGNPOST SHALL BE ELIMINATED.
8. 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 HERE UNDER, REGARDLESS OF THE STATUS OF COMPLETION OF PAVING OR OTHER OFF-SITE IMPROVEMENTS CALLED FOR BY THESE PLANS.
9. STREET SIGNS AND STOP SIGNS SHALL BE INSTALLED PER CITY STANDARD SPECIFICATIONS FOR PLACEMENT OF DESERT FOOTHILLS DRIVE NAMES SIGNS.
10. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TRAFFIC CONTROL DEVICES AND FLAGGERS TO INSURE THE SAFETY OF THE PUBLIC IN OR AROUND THE WORK THE CONTRACTOR SHALL HAVE A CERTIFIED ATSSA TRAFFIC CONTROL TECHNICIAN OR IMSA WORK ZONE SAFETY SPECIALIST SET UP, MAINTAIN AND/OR REMOVE ALL TRAFFIC CONTROL DEVICES IN THE CITY OF LAS VEGAS RIGHT OF WAY.
11. WORK IN PUBLIC STREETS, ONCE BEGUN, SHALL BE EXPEDITED TO COMPLETION SO AS TO PROVIDE MINIMUM INCONVENIENCE TO ADJACENT PROPERTY OWNERS AND TO THE TRAVELING PUBLIC.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA (RTC). IF THE CONSTRUCTION INTERRUPTS OR RELOCATES A BUS STOP OR HAS AN ADVERSE EFFECT ON BUS SERVICE ON THAT STREET TO ARRANGE FOR TEMPORARY RELOCATION OF STOP.
13. GUARDS SHALL BE OBTAINED BY CONTACTING THE METROPOLITAN POLICE DEPARTMENT SPECIAL EVENTS UNIT (PHONE # 828-3442) WHO WILL PROVIDE OFFICERS PROPERLY TRAINED IN TRAFFIC CONTROL. FEES FOR THE USE OF THESE OFFICERS SHALL BE SET BY METRO AND WILL BE PAID BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR ALL ARRANGEMENTS WITH METRO.
14. ANY WORK WITHIN 300' OF A SIGNALIZED INTERSECTION WILL BE NIGHT WORK, UNLESS DIRECTED BY THE CITY OF LAS VEGAS TRAFFIC ENGINEER.
15. THE CONTRACTOR SHALL CONTACT THE TRAFFIC ENGINEERING DIVISION (TRANSPORTATION SECTION) THROUGH THE PROJECT'S OFFSITE INSPECTOR PRIOR TO INITIATING PAVING TO RECEIVE DIRECTION FOR ANY PERMANENT OR TEMPORARY MODIFICATIONS TO THE APPROVED DRAWINGS REGARDING FINAL PAVEMENT TRANSITIONS, MARKINGS AND SIGNING THAT ARE REQUIRED TO MATCH ADJACENT ROADWAY SEGMENTS. THE CONTRACTOR SHALL PROVIDE A DRAWING FOR APPROVAL BY THE TRAFFIC ENGINEERING DIVISION DEPICTING ANY ADJUSTMENTS TO THE FINAL PAVEMENT MARKINGS AND SIGNAGE, WHICH MAY INCLUDE OMITTING, ADDING OR MODIFYING PAVEMENT MARKINGS AND TRAFFIC CONTROL SIGNS SUCH THAT ADEQUATE TRANSITIONS AND LANE TERMINATIONS BETWEEN ADJACENT ROADWAY SEGMENTS ARE CONSTRUCTED.

REVISED JUNE 4, 2018

## CITY OF LAS VEGAS FIRE DEPARTMENT NOTES

1. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE LAS VEGAS FIRE AND RESCUE ADOPTED FIRE CODE ORDINANCE # 6631 FOR HYDRANT SPECIFICATIONS AND HYDRANT INSTALLATION SPECIFICATIONS.
2. ONLY FIRE HYDRANTS THAT ARE ON THE LAS VEGAS VALLEY WATER DISTRICT'S -APPROVED PRODUCTS LIST ARE ALLOWED TO BE INSTALLED.
3. A PERMIT IS REQUIRED FROM LAS VEGAS FIRE AND RESCUE FOR THE INSTALLATION OF ON-SITE WATER LINES AND FIRE HYDRANTS. THE PERMIT AND CONTRACTORS MATERIAL TEST CERTIFICATE FOR UNDERGROUND PIPING FORM SHALL BE OBTAINED FROM THE FIRE PROTECTION ENGINEER BEFORE COMMENCEMENT OF WORK. IFC § 105.6.15
4. ON ANY RESIDENTIAL OR COMMERCIAL INSTALLATIONS, FIRE HYDRANTS SHALL BE INSTALLED AND FIRE APPARATUS ACCESS ROADS SHALL BE MAINTAINED BEFORE COMMENCEMENT OF ANY COMBUSTIBLE CONSTRUCTION. ALL FIRE HYDRANTS SHALL BE IN GOOD WORKING ORDER AND SHALL BE CAPABLE OF DELIVERING THE REQUIRED FIRE FLOW. IFC § 3310, § 3312
5. TO IDENTIFY THE FIRE HYDRANT LOCATIONS, THE CONTRACTOR SHALL PLACE A BLUE REFLECTIVE MARKER AT THE CENTER LINE OF THE STREET ADJACENT TO THE FIRE HYDRANTS. IFC § 507.5.7.3
6. ALL UNDERGROUND INSPECTIONS, PRESSURE AND FLUSH VERIFICATIONS OF ALL FIRE HYDRANTS AND FIRE LINES, SHALL BE CONDUCTED BEFORE COVERING THE LINES. CENTER LOADING IS ACCEPTABLE FOR THE HYDRO TESTS WITH PRIOR FIRE PREVENTION APPROVAL. IFC § 106.3
7. ALL ON-SITE UNDERGROUND WATER MAINS AND MATERIALS SHALL BE U.L. LISTED, A.W.W.A APPROVED AND SHALL BE RATED FOR THE APPROPRIATE WORKING PRESSURE. IFC § 507.2.1, NFPA 24
8. PAINTING OF CURBS, FIRE HYDRANTS, PADS, PROTECTION OF FIRE HYDRANTS FROM PHYSICAL DAMAGE, AND ALL OTHER WORK NECESSARY PER PLANS SHALL BE COMPLETED BEFORE APPROVAL BY LAS VEGAS FIRE AND RESCUE, FIRE PREVENTION DIVISION. IFC § 507
9. PRIVATE HYDRANTS SHALL BE PAINTED RED. IFC § 507.5.7.1
10. PRIOR TO THE FINAL OCCUPANCY, A FIRE FLOW TEST SHALL BE WITNESSED BY LAS VEGAS FIRE AND RESCUE, FIRE PREVENTION DIVISION TO VERIFY AVAILABILITY OF THE REQUIRED FIRE FLOW. IFC § 507
11. FIRE HYDRANT SPACING SHALL BE AS FOLLOWS: IFC § C102
    * RESIDENTIAL -500 FT UNSPRINKLERED; 600 FT SPRINKLERED.
    * COMMERCIAL -300 FT UNSPRINKLERED; 400 FT SPRINKLERED.
12. WHERE THE WATER MAINS ARE EXTENDED ALONG STREETS OR NEW STREETS ARE INSTALLED WHERE FIRE HYDRANTS ARE NOT NEEDED FOR PROTECTION OF THE STRUCTURES, FIRE HYDRANTS SHALL BE INSTALLED AT A MAXIMUM OF 1000 FT SPACING, TO PROVIDE FOR TRANSPORTATION HAZARDS. WHERE STREETS ARE PROVIDED WITH MEDIAN DIVIDERS OR HAVE FOUR (4) OR MORE TRAFFIC LANES AND HAVE A TRAFFIC COUNT OF MORE THAN 30,000 PER DAY, HYDRANTS ARE REQUIRED ON EACH SIDE OF THE STREET SPACED AT 500 FT ON AN ALTERNATING BASIS. IFC § C102.8
13. NO FIRE HYDRANTS SHALL BE LOCATED WITHIN THE RADIUS OF A CUL-DE-SAC OR WITHIN 20 FT OF THE PERIMETER OF THE RADIUS OF THE CUL-DE-SAC.
14. NO FIRE HYDRANTS SHALL BE LOCATED WITHIN 6 FT OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREETLIGHT OR ANY OTHER OBSTRUCTION. IFC § C102.10
15. A MAXIMUM DISTANCE FROM A FIRE HYDRANT TO A ONE-TWO FAMILY DWELLING SHALL NOT EXCEED 300 FT, AS MEASURED BY AN APPROVED ROUTE. IFC § C102.4
16. THE MAXIMUM DISTANCE FROM A FIRE HYDRANT TO A FIRE DEPARTMENT CONNECTION (FDC) SHALL NOT EXCEED 100 FT, AS MEASURED BY AN APPROVED ROUTE. IFC § C102.7
17. THE MAXIMUM DISTANCE FROM A HYDRANT TO THE END OF A DEAD-END STREET SHALL NOT EXCEED 200 FT. IFC § C102.6
18. TWO (2) SOURCES OF SUPPLY ARE REQUIRED WHENEVER THERE IS 4 OR MORE FIRE HYDRANTS/SPRINKLER LEAD-INS ARE INSTALLED ON A SINGLE SYSTEM. FOR SYSTEMS REQUIRED TO HAVE TWO (2) SOURCES OF WATER SUPPLY, SECTIONAL CONTROL VALVES SHALL BE INSTALLED SO THAT NO MORE THAN 2 FIRE HYDRANTS AND/OR FIRE SPRINKLER LEAD-INS CAN BE OUT OF SERVICE DUE TO A SERVICE INTERRUPTION. FOR SYSTEMS PERMITTED TO HAVE ONE SOURCE OF WATER SUPPLY, SECTIONAL CONTROL VALVES SHALL BE INSTALLED SO THAT NO MORE THAN 3 FIRE HYDRANTS AND/OR FIRE SPRINKLER LEAD-INS CAN BE OUT OF SERVICE DUE TO A SERVICE INTERRUPTION. IFC § C104
19. ALL FIRE APPARATUS ACCESS ROADS SHALL BE PAVED TO PROVIDE ALL-WEATHER DRIVING CAPABILITIES, AND SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF THE FIRE APPARATUS. IFC § 503.2.3
20. THE GRADIENT FOR THE FIRE APPARATUS ACCESS ROADS SHALL NOT EXCEED 12%. ANGLES OF APPROACH AND ANGLES OF DEPARTURE SHALL NOT EXCEED 6% FOR 25 FT PRIOR TO OR AFTER THE GRADE CHANGE. ADJACENT TO THE STRUCTURES GRADIENT SHALL NOT EXCEED 6%. IFC § 503.2.7, § 503.2.8
21. THE TURNING RADIUS OF THE FIRE APPARATUS ACCESS ROADS SHALL BE NO LESS THAN 52 FT OUTSIDE AND 28 FT INSIDE TURNING IFC § 503.2.4
22. VERTICAL CLEARANCE OF ALL FIRE APPARATUS ACCESS ROADS SHALL NOT BE LESS THAN 13FT 6 INS. IFC § 503.2.1
23. FIRE DEPARTMENT ACCESS ROADS SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF NOT LESS THAN 33 FT WITH PARKING ON BOTH SIDES MEASURED TO FACE OF CURB. NOT LESS THAN 28 FT WIDE WITH PARKING RESTRICTED TO ONE SIDE MEASURED TO FACE OF CURB. NOT LESS THAN 24 FT WIDE WITH NO PARKING ON EITHER SIDE MEASURED TO FACE OF CURB. FIRE LANES THROUGH PARKING LOTS SHALL BE NOT LESS THAN 24 FT. IFC § 503.2.1.1
24. A FIRE APPARATUS ACCESS ROAD SHALL BE REQUIRED WHEN ANY PORTION OF AN EXTERIOR WALL OF THE FIRST STORY IS LOCATED MORE THAN 150 FT FROM A FIRE DEPARTMENT VEHICLE ACCESS. IFC § 503.1.1
25. APPROVED SECONDARY FIRE APPARATUS ACCESS SHALL BE PROVIDED FOR 200 OR MORE DWELLING UNITS, ROAD(S) WITH DEADENDS OR A SINGLE POINT OF ACCESS IN EXCESS OF 600 FT. CLV REGULATION AND MOU
26. ALL DEAD-END FIRE APPARATUS ROADS AND/OR FIRE LANES, PUBLIC OR PRIVATE, IN EXCESS OF 150 FT IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURN AROUND HAVING A MINIMUM DIAMETER OF 81 FT. CLV REGULATION
27. ALL FIRE APPARATUS ACCESS ROADS SHALL BE MARKED BY PLACING APPROVED SIGNS AT THE START OF THE DESIGNATED FIRE LANE, ONE SIGN AT THE END OF THE FIRE LANE AND WITH SIGNS AT INTERVALS OF 100 FT ALONG THE DESIGNATED FIRE LANES. SIGNS TO BE PLACED ON BOTH SIDES OF AN ACCESS ROADWAY IF NEEDED TO PREVENT PARKING ON EITHER SIDE. SIGNS TO BE INSTALLED NO HIGHER THAN 10 FT OR LESS THAN 6 FT FROM THE ROADWAY LEVEL. THE CURB ALONG OR ON THE PAVEMENT OR CEMENT (IF NO CURB IS PROVIDED) SHALL BE PAINTED WITH A RED WEATHER RESISTANT PAINT IN ADDITION TO THE SIGNS. IFC § 503.3
28. ELECTRICALLY CONTROLLED ACCESS GATES SHALL BE PROVIDED WITH AN APPROVED EMERGENCY VEHICLE DETECTOR/RECEIVER IFC § 503.6
29. WHERE STREETS ARE PROVIDED WITH MEDIAN DIVIDERS, OR HAVING FOUR OR MORE TRAVEL LANES AND A TRAFFIC COUNT OF MORE THAN 30,000 VEHICLES PER DAY, ALL HYDRANTS BEING UTILIZED TO DELIVER FIRE FLOW TO THE PROPOSED LOCATION SHALL BE LOCATED ON THE SAME SIDE OF THE STREET AS THE PROPOSED DEVELOPMENT. CLV REGULATION

## CITY OF LAS VEGAS GRADING NOTES

1. IN THE EVENT THAT ANY UNFORESEEN CONDITIONS NOT COVERED BY THESE NOTES ARE ENCOUNTERED DURING GRADING OPERATIONS, THE OWNER/ENGINEER SHALL BE IMMEDIATELY NOTIFIED FOR DIRECTION.
2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL NECESSARY CUTS AND FILLS WITHIN THE LIMITS OF THIS PROJECT AND THE RELATED OFF-SITE WORK, SO AS TO GENERATE THE DESIRED SUBGRADE, FINISH GRADES AND SLOPES SHOWN.
3. CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ALL EXCAVATION. ADEQUATE SHORING SHALL BE DESIGNED AND PROVIDED BY THE CONTRACTOR TO PREVENT UNDERMINING OF ANY ADJACENT FEATURES OR FACILITIES AND/OR CAVING OF THE EXCAVATION.
4. THE CONTRACTOR IS WARNED THAT AN EARTHWORK BALANCE WAS NOT NECESSARILY THE INTENT OF THIS PROJECT. ANY ADDITIONAL MATERIAL REQUIRED OR LEFTOVER MATERIAL FOLLOWING EARTHWORK OPERATIONS BECOMES THE RESPONSIBILITY OF THE CONTRACTOR.
5. THE GRADING CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH THE OWNER TO PROVIDE FOR THE REQUIREMENTS OF THE PROJECT STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND ASSOCIATED PERMIT.
6. CONTRACTOR SHALL GRADE TO THE LINES AND ELEVATIONS SHOWN ON THE PLANS WITHIN THE FOLLOWING HORIZONTAL AND VERTICAL TOLERANCES AND DEGREES OF COMPACTION, IN THE AREAS INDICATED:

| | HORIZONTAL | VERTICAL | COMPACTION |
|---|---|---|---|
| A. PAVEMENT AREA SUBGRADE | 0.1'+ | +0.0' TO -0.1' | SEE SOILS REPORT |
| B. ENGINEERED FILL | 0.5'+ | +0.1' TO -0.1' | SEE SOILS REPORT |

COMPACTION TESTING WILL BE PERFORMED BY THE OWNER OR HIS REPRESENTATIVE.

7. ALL CUT AND FILL SLOPES SHALL BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN ESTABLISHED.
8. THE USE OF POTABLE WATER WITHOUT A SPECIAL PERMIT FOR BUILDING OR CONSTRUCTION PURPOSES INCLUDING CONSOLIDATION OF BACKFILL OR DUST CONTROL IS PROHIBITED. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION WATER.
9. THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS AND ALL OTHER PUBLIC RIGHT-OF-WAY IN A CLEAN, SAFE AND USABLE CONDITION. ALL SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE PUBLICLY OWNED PROPERTY DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. ALL ADJACENT PROPERTY, PRIVATE OR PUBLIC SHALL BE MAINTAINED IN A CLEAN, SAFE AND USABLE CONDITION.
10. IN THE EVENT THAT ANY TEMPORARY CONSTRUCTION ITEM IS REQUIRED THAT IS NOT SHOWN ON THESE DRAWINGS, THE OWNER AGREES TO PROVIDE AND INSTALL SUCH ITEM AT HIS OWN EXPENSE AND AT THE DIRECTION OF THE CITY ENGINEER. TEMPORARY CONSTRUCTION INCLUDES DITCHES, BERMS, ROAD SIGNS AND BARRICADES, ETC.

REVISED 04/15/10

## DEVIATIONS FROM STANDARDS

NONE.

## CITY OF LAS VEGAS SEWER NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS AND THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS' CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA, AS AMENDED. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BE AWARE OF THE CONTENTS OF THE ABOVE SPECIFICATIONS.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM CONSTRUCTION AS PER PLANS. ANY ADDITIONS, DELETIONS, OR CHANGES SHALL FIRST MEET WITH THE APPROVAL OF THE CITY ENGINEER.
3. CHISEL "S" OR "G" IN CURBS WHERE SEWER OR GAS LATERALS PASS UNDER THE CURB.
4. POLYVINYL (PVC) SEWER PIPE SHALL MEET ASTM D-3034 SDR 35 SPECIFICATIONS, INSTALLED WITH SAND BEDDING AND BACKFILL OF TYPE II AGGREGATE BASE.
5. ALL MANHOLES PAVED IN STREETS EIGHTY (80') FOOT R/W AND LARGER SHALL HAVE CONCRETE COLLARS. STREETS LESS THAN EIGHTY (80') FOOT R/W WILL REQUIRE RETROFIT IF PAVING DOES NOT CONFORM TO CITY STANDARDS AT THE MANHOLE.
6. TEE SADDLES SHALL BE USED TO CONNECT SEWER LATERALS TO EXISTING MAIN LINES UP TO TWELVE INCH (12") DIAMETER. CONNECTIONS TO FIFTEEN INCH (15") OR LARGER MAINS SHALL REQUIRE SPECIAL PROCEDURES. IN LINE "Y"'S SHALL BE USED ON LINES TWELVE INCHES (12") OR ABOVE.
7. WATER MAINS SHALL BE PROTECTED IN ACCORDANCE WITH LVVWD STANDARDS WHENEVER A SEWER MAIN CROSSES OVER A WATER MAIN OR THE SEWER IS LESS THAN EIGHTEEN INCH (18") UNDER A WATER MAIN.
8. ALL CONTRACTORS INSTALLING SEWER MAINS THAT WILL BE UNDER THE JURISDICTION OF THE CITY OF LAS VEGAS MUST BE STATE OF NEVADA CLASS "A" CONTRACTORS.
9. THE CITY OF LAS VEGAS WILL NOT ACCEPT ANY SEWER MAINS WHICH HAVE A VERTICAL DEFLECTION OF MORE THAN ONE TENTH (0.1) OF A FOOT FROM THE APPROVED CONSTRUCTION PLANS AT ANY LOCATION. SEWER MAINS FOUND TO EXCEED THIS TOLERANCE WILL HAVE TO BE REPAIRED OR REMOVED OR REPLACED TO THE SATISFACTION OF THE CITY ENGINEER PRIOR TO ACCEPTANCE BY THE CITY OF LAS VEGAS.
10. INSTALLATION OF CURVED SEWER REQUIRES THE USE OF C-900 PIPE WHICH ALLOWS FOR PIPE DEFLECTION AT THE JOINTS.

REVISED 04/15/10

## CITY OF LAS VEGAS STREET LIGHT NOTES

1. ALL STREET LIGHTING INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE STREET LIGHTING PLANS, THE "UNIFORM STANDARD SPECIFICATION FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA", LATEST REVISION (USS), AND THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA" (USD), LATEST REVISION.
2. DESIGN PROFESSIONAL AND CONTRACTOR SHALL VERIFY CITY'S LATEST LED FIXTURE SPECIFICATIONS AND APPROVED FIXTURES PER CLV WEBSITE, UNDER BUILDING AND SAFETY FORMS, PRIOR TO ORDERING MATERIALS.
3. NO DEVIATION OF STREET LIGHT, PULL BOX, CONDUITS, ETC., LOCATIONS SHALL BE PERMITTED WITHOUT WRITTEN APPROVAL OF THE TRAFFIC AND CITY ENGINEER. ANY DEVIATION FROM THE PLAN LOCATION WILL REQUIRE COMPLIANCE WITH SECTION 623 OF THE USS.
4. ALL EXISTING STREET LIGHTING SHALL REMAIN OPERATIONAL DURING CONSTRUCTION IN ACCORDANCE WITH SECTION 623 G.03.01 OF THE USS.
5. ALL EMPTY CONDUIT SHALL HAVE AT LEAST ONE GREEN NO. #8 AWG WIRE INSTALLED AS TRACER WIRE IN ACCORDANCE WITH SECTION 623 G.02.01 OF THE USS PRIOR TO BACKFILLING AND FINAL INSPECTION.
6. ANY STRUCTURE SUCH AS BLOCK WALLS, CHAIN LINK FENCES, RETAINING WALLS, SHALL LEAVE A MINIMUM CLEARANCE IN COMPLIANCE WITH USD NO. 320A WHEN POLE IS INSTALLED BEHIND SIDEWALK, AND SHALL AT NO TIME COMPLETELY ENCLOSE THE STREET LIGHTING POLE.
7. AS-BUILT DRAWINGS SHALL BE SUPPLIED TO THE TRAFFIC ENGINEERING DIVISION PRIOR TO ANY PRE-FINAL INSPECTION. THE AS-BUILT DRAWING NEEDS TO BE STAMPED AS-BUILT AND SIGNED BY THE PREPARER.
8. SERVICE POINTS SHALL BE COORDINATED WITH NV ENERGY, AND WHEREVER POSSIBLE, BE LOCATED NEAR THE CENTER OF THE CIRCUIT. SERVICEPOINTS SHALL BE SHOWN ON THE PLANS.
9. WHEREVER THERE IS AN OVERHEAD UTILITY THAT MAY CONFLICT WITH THE INSTALLATION OF STREETLIGHTING CIRCUITS AND/OR POLES, THESE CONFLICTS MUST BE RESOLVED BETWEEN THE DEVELOPER AND THE UTILITIES INVOLVED BEFORE STREETLIGHT BASES ARE INSTALLED. AT NO EXPENSE TO THE CITY OF LAS VEGAS.
10. THE CONTRACTOR SHALL FURNISH COMPLETE CONDUIT, WIRE, ETC. FROM SERVICE TO TRANSFORMERS AND CONTROL SYSTEMS IF REQUIRED ON THE PLANS.

REVISED 6/4/2018 (LD VERSION)

## LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDELINES

1. 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.
2. 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.
3. 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 NVR100000, SECTION III.A.5.
4. 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 ANY 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 NVR100000, SECTION III.A.12.
5. 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.

## SOUTHWEST GAS CORPORATION GENERAL NOTES

GENERAL NOTES

1. IN THE EVENT OF NATURAL GAS EMERGENCIES CALL 911 AND 1-877-860-6020
2. MINIMUM HORIZONTAL AND VERTICAL CLEARANCES BETWEEN NATURAL GAS FACILITIES AND ANY UNDERGROUND FACILITIES AND/OR STRUCTURES, INCLUDING BUT NOT LIMITED TO WATER, SEWER, STORM DRAIN, COMMUNICATIONS, AND ELECTRIC SHALL BE AT LEST 12-INCHES OR GREATER AS DICTATED BY LOCAL CODES AND STANDARDS
    A. ANY DEVIATION FROM SPECIFIED MINIMUM CLEARANCES MUST BE APPROVED BY ALL AFFECTED UTILITIES AND/OR MUNICIPALITIES
3. FOR VALVE ADJUSTMENT CONTACT 702-668-6107 48 HOURS PRIOR TO CONSTRUCTION
4. IN THE EVENT OF A NATURAL GAS CONFLICT WITH PROPOSED UTILITIES AND/OR STRUCTURES CONTACT 702-365-2099

ALL CIVIL IMPROVEMENT PLANS MUST INCLUDE SOUTHWEST GAS CORPORATION HIGH PRESSURE NOTES ON THE NOTES SHEET AND ALL SHEETS DEPICTING HIGH PRESSURE NATURAL GAS MAINS AS INDICATED BELOW:

**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 CORPORATION ____________ DATE

## GRADING NOTES

1. INDICATED GRADES OTHER THAN TC, FG & GUTTER FL ARE ROUGH GRADES.
2. THE ROUGH GRADING PLANS SHALL BE ON THE JOB SITE AT ALL TIMES. THE ROUGH GRADING SHALL BE FINISHED IN CONFORMANCE WITH THE LINES AND GRADES SHOWN ON THE PLANS. THE GRADING QUANTITIES ARE BASED ON THE ELEVATION AND DETAILS SHOWN ON THE PLANS. ANY DEVIATIONS FROM THE PLAN WILL RESULT IN QUANTITY CHANGES.
3. SOILS REPORT PREPARED BY: NOVA GEOTECHNICAL & INSPECTION SERVICES 4480 W. HACIENDA AVENUE, SUITE 104, LAS VEGAS, NV 89118, PHONE: 702-873-3478, PROJECT NO. : G-18-176, DATED: DATED: DECEMBER 3, 2018 & SUBSEQUENT LETTER DATED ON DECEMBER 30, 2019.
4. EARTHWORK QUANTITIES (RAW):

    -CUT = 17,900 CUBIC YARDS
    -FILL = 11,100 CUBIC YARDS

A. THE ABOVE QUANTITIES DO NOT REFLECT LOSSES DUE TO SUBSIDENCE OR SHRINKAGE.
B. THE ABOVE QUANTITIES DO REFLECT USING NATIVE MATERIAL IN LIEU OF TYPE 1 GRAVEL BASE MATERIAL FOR STREET SECTIONS.
C. THE ABOVE QUANTITIES DO NOT REFLECT ANY EARTHWORK WHICH MAY BE REQUIRED BY THE ENGINEER TO CONSTRUCT ADDITIONAL PROTECTIVE DITCHES OR BERMS NOT SHOWN ON THESE DRAWINGS.

## CONSTRUCTION CONCURRENCY NOTE

THE FOLLOWING SEPARATE VILLAGE 22 ROADWAY IMPROVEMENT PLANS ARE ASSUMED TO BE CONSTRUCTED CONCURRENTLY AND ARE SHOWN AS FUTURE (BY OTHERS):

1. FLEET WING AVENUE (KETTLE RIDGE DRIVE TO KETTLE BEND ROAD)
2. DESERT FOOTHILLS DRIVE (LAKE MEAD BOULEVARD TO FLEET WING AVENUE)
3. KINDLE RISE WAY (KETTLE RIDGE DRIVE TO KETTLE BEND ROAD)
4. FLIGHT RANGE DRIVE (KETTLE RIDGE DRIVE TO KETTLE BEND ROAD)
5. FLIGHT EDGE WAY (KETTLE RIDGE DRIVE TO KETTLE BEND ROAD)
6. SUNSET RUN DRIVE (KETTLE RIDGE DRIVE TO KETTLE BEND ROAD)

## GENERAL NOTES

1. THE CONTRACTOR SHALL NOTIFY ALL AFFECTED PUBLIC ENTITIES, THE PROJECT ENGINEER AND CITY OF LAS VEGAS AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF WORK.
2. ALL CONSTRUCTION SHALL BE AS SHOWN ON THESE CONTRACT DRAWINGS. ANY REVISIONS SHALL HAVE THE PRIOR WRITTEN APPROVAL OF THE PROJECT ENGINEER.
3. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA NEVADA", LATEST ISSUE; THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION, CLARK COUNTY AREA NEVADA", LATEST ISSUE; AND OTHER APPLICABLE APPROVED STANDARDS ISSUED BY THE CONTROLLING AGENCY; THE UNIFORM BUILDING CODE; AND ALL LOCAL CITY CODES AND ORDINANCES APPLICABLE.
4. LOCATIONS OF UNDERGROUND UTILITIES SHOWN ON THE DRAWINGS WERE OBTAINED FROM INFORMATION RECEIVED FROM THE APPLICABLE UTILITY COMPANIES. NEITHER THE OWNER NOR ENGINEER ASSUMES ANY RESPONSIBILITY FOR UTILITIES OR STRUCTURES NOT SHOWN, OR NOT IN THE LOCATION SHOWN ON THE DRAWINGS. CONTRACTOR TO VERIFY EXACT LOCATION OF UTILITIES PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR'S RESPONSIBILITY REGARDING UTILITIES SHALL BE AS REQUIRED UNDER SECTION 107.17 OF THE "UNIFORM STANDARD SPECIFICATIONS FOR CLARK COUNTY AREA, NEVADA" AND AS PROVIDED IN THE SPECIFICATIONS.
5. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES TO PROTECT EXISTING UTILITY LINES, STRUCTURES, AND STREET IMPROVEMENTS WHICH ARE TO REMAIN IN PLACE, FROM DAMAGE. ALL SUCH IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE COUNTY ENGINEER OR OWNING UTILITY COMPANY AT THE EXPENSE OF THE CONTRACTOR.
6. THE CONTRACTOR SHALL NOT REMOVE TREES, SHRUBS, LAWNS, WALLS, FENCES, SIGNS, STRUCTURES, LIGHTS, OR ANY OTHER EXISTING IMPROVEMENTS OUTSIDE OF STREET RIGHT-OF-WAY, EXCEPT WHERE REQUIRED TO DO SO BY THE CONTRACT DRAWINGS OR THE PROJECT ENGINEER. REPLACEMENT, RELOCATION OR RECONSTRUCTION OF ALL EXISTING IMPROVEMENTS INCLUDING SPRINKLER SYSTEMS, LAWNS, FENCES, WALLS, SIGNS, STEPS, SIDEWALKS, DRIVEWAYS, LAWN LIGHTS, AND ALL OTHER ITEMS APPLICABLE TO THIS CONTRACT SHALL BE REQUIRED BY THE PROJECT ENGINEER.
7. THE CONTRACTOR SHALL BACKFILL AND FINE GRADE ALL CUT OR FILL SLOPES TO MATCH EXISTING CONDITIONS TO THE SATISFACTION OF THE PROJECT ENGINEER. WHERE EXISTING LAWNS ARE DAMAGED BY THE CONTRACTOR'S OPERATIONS THE CONTRACTOR WILL SOD THE AFFECTED AREA TO A CONDITION EQUAL TO OR BETTER THAN THAT WHICH EXISTED PRIOR TO CONSTRUCTION.
8. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITIONS BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE FOR PROPER DRAINAGE AND FOR INGRESS AND EGRESS TO NEW CONSTRUCTION. THE EXTENT OF TRANSITIONS TO BE AS SHOWN PER CONTRACT DRAWINGS.
9. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT EXISTING PERMANENT SURVEY MONUMENTS. ANY MONUMENTS DISTURBED SHALL BE REPLACED AND ADJUSTED PER AVAILABLE RECORDS IN ACCORDANCE WITH N.R.S. STATUTE NO. 625.550.
10. THE ACTUAL LOCATIONS OF SAW CUT LINES, LIMITS OF COLD MILLING, LIMITS OF DRIVEWAY TRANSITIONS, AND LANDSCAPE REPAIR SHALL BE DETERMINED IN THE FIELD BY THE RESIDENT PROJECT REPRESENTATIVE.
11. THE ACTUAL LIMITS OF EXISTING OPEN GRADE REMOVAL AND UDACS APPLICATION SHALL BE DETERMINED IN THE FIELD BY THE RESIDENT PROJECT REPRESENTATIVE.
12. ALL STANDARD DRAWINGS REFERENCED IN THIS SET ARE BASED ON THE CURRENT "UNIFORM STANDARD DRAWINGS REVISION SET II-1997 RELEASE".
13. UNLESS OTHERWISE SHOWN ON THE CONTRACT DRAWINGS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OR RELOCATION OF ALL WATER SERVICES AND METERS WHICH INTERFERE WITH IMPROVEMENTS SHOWN ON THE CONTRACT DRAWINGS.
14. THE CONTRACTOR SHALL MAINTAIN AN ONGOING REMOVAL PROCESS OF ALL SPILLAGE OF EXCAVATION MATERIAL ON ALL PAVED STREETS.
15. CURB AND GUTTER OF 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.
16. THE CONTRACTOR SHALL VERIFY IN THE FIELD ALL DIMENSIONS, EXISTING CONDITIONS AND POINTS OF CONNECTION WITH ADJOINING PROPERTY (PUBLIC AND PRIVATE). ANY DISCREPANCIES SHALL BE CALLED TO THE ATTENTION OF THE PROJECT ENGINEER PRIOR TO PROCEEDING WITH THE WORK.
17. REMOVAL OR RELOCATION OF POWER POLES, TELEPHONE POLES, JOINTLY-OWNED POLES, AND APPURTENANCES WHICH INTERFERE WITH IMPROVEMENTS REQUIRED TO BE CONSTRUCTED UNDER THIS CONTRACT, SHALL BE THE RESPONSIBILITY OF THE RESPECTIVE UTILITY COMPANY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH THE UTILITY COMPANIES FAR ENOUGH IN ADVANCE SO AS TO NOT IMPACT THE SCHEDULE.
18. COX COMMUNICATIONS SHALL BE RESPONSIBLE FOR THE VERTICAL OR HORIZONTAL ADJUSTMENT OF ALL CATV FACILITIES WHICH INTERFERE WITH IMPROVEMENTS SHOWN ON THE CONTRACT DRAWINGS, UNLESS NOTED OTHERWISE.
19. NV ENERGY SHALL BE RESPONSIBLE FOR THE RELOCATION OF UNDERGROUND OR OVERHEAD POWER LINES THAT INTERFERE WITH THE REQUIRED IMPROVEMENTS AS SHOWN ON THE CONTRACT DRAWINGS.
20. EMBARQ SHALL BE RESPONSIBLE FOR THE VERTICAL OR HORIZONTAL ADJUSTMENT OF ALL TELEPHONE FACILITIES WHICH INTERFERE WITH IMPROVEMENTS SHOWN ON CONTRACT DRAWINGS, UNLESS NOTED OTHERWISE.

## LAS VEGAS VALLEY WATER DISTRICT (LVVWD) NOTES

LVVWD PROJECT #0000

1. NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN APPROVED FOR CONSTRUCTION BY THE LVVWD. FOLLOWING WATER PLAN APPROVAL, NOTICE SHALL BE GIVEN TO THE LVVWD COMMUNICATION SUPPORT CENTER (258-7171) TWO (2) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION. FOR FUTURE INSPECTIONS, NOTICE MUST BE GIVEN BY 2:00 P.M. THE BUSINESS DAY PRIOR TO THE REQUESTED LVVWD INSPECTION. **WHEN REQUESTING INSPECTIONS, PLEASE REFER TO THE PROJECT # IDENTIFIED ABOVE.**
2. ALL WORK SHALL CONFORM TO LVVWD STANDARD PLATES, DRAWINGS, AND SPECIFICATIONS, AND TO THE **2010** EDITION OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS). **THE LATEST EDITION OF UDACS SHALL SUPERCEDE ANY CONFLICTS CONTAINED IN THE APPROVED DRAWINGS AND/OR SPECIFICATIONS.**
3. ALL WORK, EXCEPT AS MODIFIED BY THESE PLANS OR BY NOTE 2 ABOVE, SHALL BE DONE IN ACCORDANCE WITH THE MOST RECENT DRAFT OR EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENT, CLARK COUNTY AREA.
4. A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVVWD.
5. ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE TYPE K COPPER TUBING WITH LVVWD APPROVED SERVICE SADDLES.
6. ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
7. ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEY AND CURB GUTTERS.
8. ALL WATER AND STORM DRAIN OR SANITARY SEWER CROSSINGS SHALL CONFORM TO SECTION 2.22 OF THE **2010** EDITION OF THE UDACS.
9. ALL WATER FACILITIES AND APPURTENANCES SHALL BE DISINFECTED, PRESSURE TESTED, AND HAVE AN ACCEPTABLE PASSING HEALTH WATER SAMPLE OBTAINED, PRIOR TO OPERATION AND USE.
10. THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES AND SMALLER FROM LVVWD CENTRAL STORES. TELEPHONE 258-3152 OR 258-3802 TWO (2) WORKING DAYS PRIOR TO METER PICKUP.
11. ANY INTERRUPTION OF SERVICE MUST BE PERFORMED IN ACCORDANCE WITH UDACS SECTION 3.14.01 AND APPROVED BY THE LVVWD INSPECTION DIVISION PRIOR TO SHUTDOWN. PROPER WRITTEN NOTIFICATION MUST BE GIVEN TO ALL AFFECTED CUSTOMERS.
12. ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE AS LISTED ON THE LVVWD APPROVED PRODUCT'S LIST FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS BY SUBMITTING SHOP DRAWINGS..
13. TELEPHONE "CALL BEFORE YOU DIG" AT "811" OR 1-800-227-2600.
14. THE INSTALLATION OF LAS VEGAS VALLEY WATER DISTRICT (LVVWD) MUNICIPAL WATER FACILITIES WITHIN ALL STREETS IS ASSUMED TO BE IN COMPLIANCE WITH THE UNIFORM STANDARD, INCLUDING THE PLACEMENT OF ASPHALT PAVING STREET SURFACES. ANY REPAIR WORK DONE BY THE LVVWD TO THE MUNICIPAL WATER FACILITIES WILL INCLUDE THE PLACEMENT OF AN APPROPRIATELY SIZED ASPHALT REPAIR PATCH ON THE STREET SURFACE.

    ANY DECORATIVE PAVING SURFACE WITHIN THE STREET IS THE RESPONSIBILITY OF THE OWNER'S ASSOCIATION, OR THE INDIVIDUAL PROPERTY OWNERS IF NO OWNER'S ASSOCIATION IS IN EXISTENCE, OR THE AGENCY HAVING JURISDICTION. DECORATIVE SURFACE MATERIALS PLACED WITHIN THE TEN FOOT EASEMENT ABUTTING A PUBLIC OR PRIVATE STREET, IF DISTURBED BY THE LVVWD DIRING THE REPAIR OR OPERATION OF ITS FACILITIES, WILL BE REPLACED BY LVVWD WITH AN APPROPRIATELY SIZED PLAIN FINISH CONCRETE PATCH. THE LVVWD WILL NOT RESTORE, AND WILL NOT BE RESPONSIBLE FOR THE RESTORATION OF, ANY DECORATIVE PAVING SURFACE WITHIN THE STREET. THE LVVWD WILL NOT ATTEMPT TO MATCH COLOR OR FINISH OF ANY ADJACENT MATERIALS.

15. **NO LEAD COMPLIANCE NOTE:**
    **TO COMPLY WITH THE FEDERAL SAFE DRINKING WATER ACT, ALL WATER WORKS BRASS PRODUCTS PROPOSED TO BE RELOCATED, OR INSTALLED AS NEW MUST BE INSTALLED WITH THE LEAD FREE APPROVED PRODUCT.THE OLD LEADED PRODUCT MAY NOT BE REUSED.**

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT NO. 0000 FIRST APPROVED DATE: ____________

PROFESSIONAL ENGINEER - STATE OF NEVADA
NICOLAS A. BARCOS
EXP. 12-31-20
CIVIL
No. 25673
10/6/2020

| REV. | DESCRIPTION | BY | DATE | APPROVAL |
|---|---|---|---|---|
| | | | | |

REVISIONS

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200

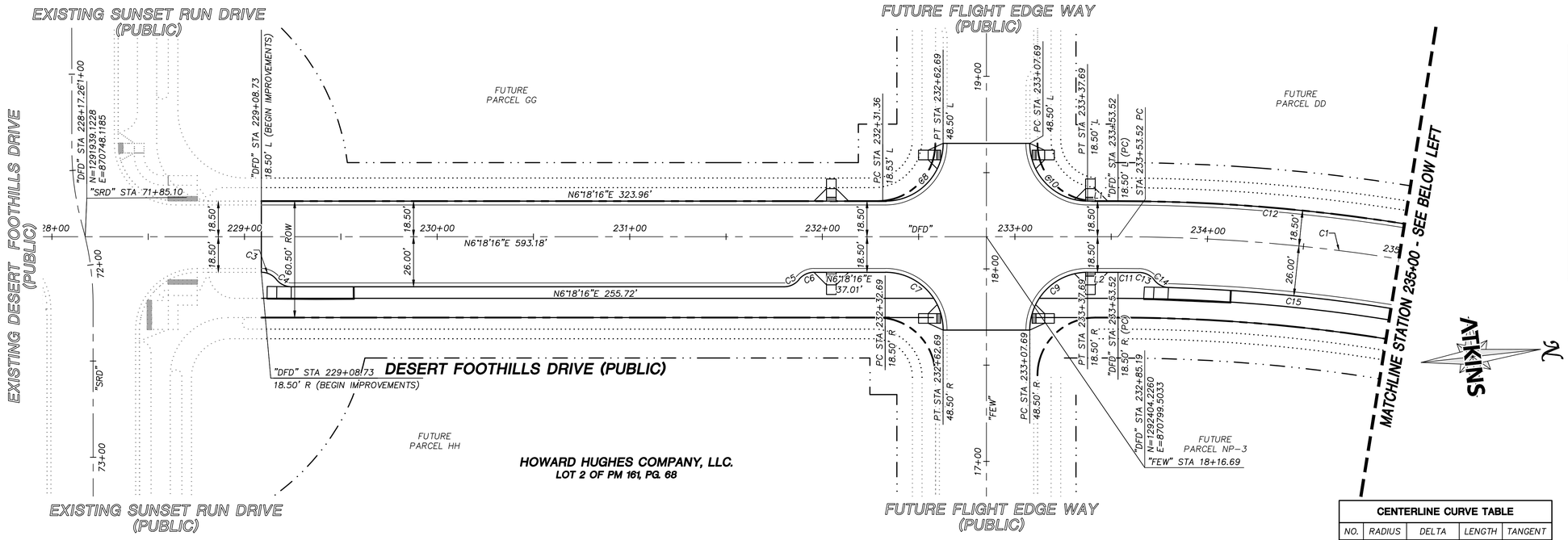
SUMMERLIN®

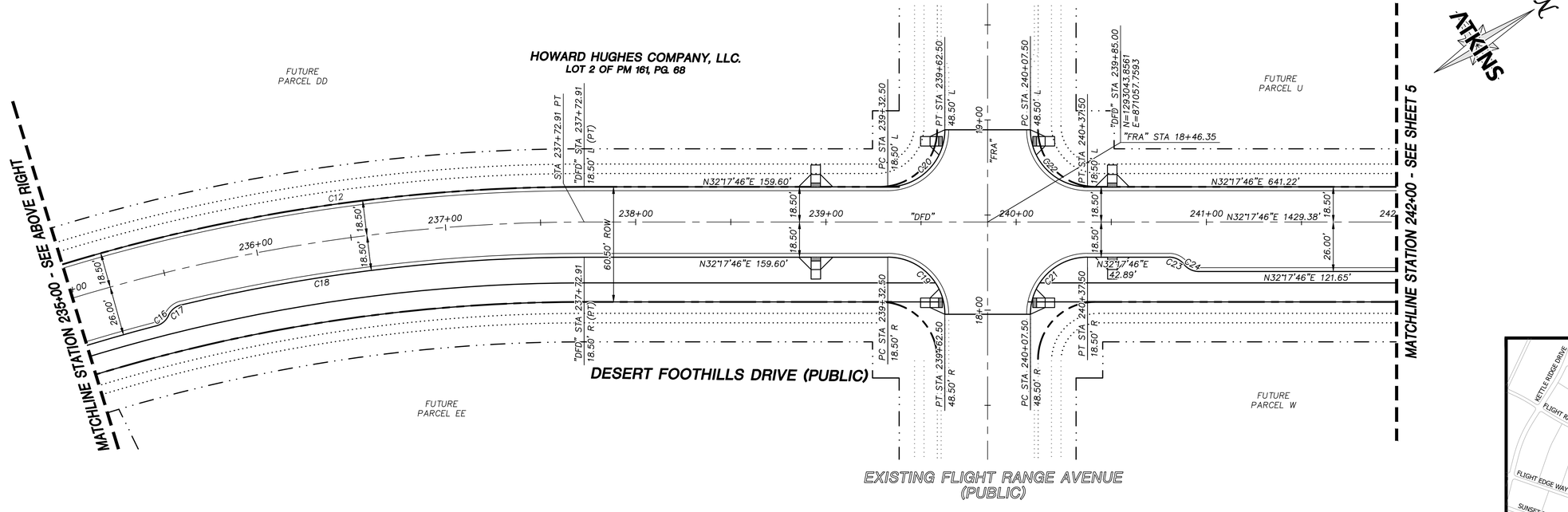
**SUMMERLIN VILLAGE 22**
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)
**GENERAL NOTES**

DESIGNED BY: N. BARCOS
DRAWN BY: L. MAMACLAY
CHECKED BY: P. BATES
HORIZ.: NONE
VERT.: NONE

XXXVXXXX
LXX-XXXXX
DATE: OCTOBER, 2020
DRAWING NO. 3/46
JOB NO. 100066774

X:\Projects\SummWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)_Sheets\66774-03-NOTE-C3.dwg LAYOUT: C-3 Oct 15, 2020 - 4:28PM




## SUMMARY OF QUANTITIES

| DESCRIPTION | QUANTITY | UNIT |
|---|---|---|
| ROADWAY | | |
| PLANTMIX BITUMINOUE PAVEMENT (3") | 11,019 | SY |
| TYPE II AGGREGATE BASE (ROAD) (4") | 3,673 | CY |
| TYPE II AGGREGATE BASE (CURB) (4") | 93 | CY |
| TYPE "L" CURB AND GUTTER | 5,000 | LF |

## ROADWAY NOTES

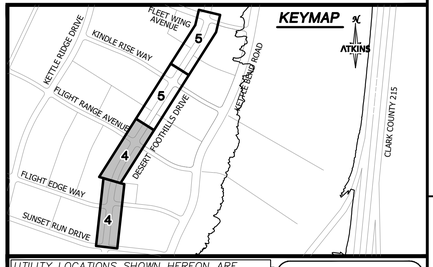
1. SEE SHEET 37 FOR TYPICAL SECTIONS, DETAILS
2. SEE SHEET 2 FOR ROADWAY ALIGNMENT ABBREVIATIONS

**CENTERLINE CURVE TABLE**

| NO. | RADIUS | DELTA | LENGTH | TANGENT |
|---|---|---|---|---|
| C1 | 924.50' | 25°59'30" | 419.39' | 213.37' |

**BACK OF CURB CURVE TABLE**

| NO. | RADIUS | DELTA | LENGTH | TANGENT |
|---|---|---|---|---|
| C3 | 10.00' | 51°19'04" | 8.96' | 4.80' |
| C4 | 10.00' | 51°19'04" | 8.96' | 4.80' |
| C5 | 10.00' | 51°19'04" | 8.96' | 4.80' |
| C6 | 10.00' | 51°19'04" | 8.96' | 4.80' |
| C7 | 30.00' | 90°00'00" | 47.12' | 30.00' |
| C8 | 30.00' | 90°00'00" | 47.12' | 30.00' |
| C9 | 30.00' | 90°00'00" | 47.12' | 30.00' |
| C10 | 30.00' | 90°00'00" | 47.12' | 30.00' |
| C11 | 906.00' | 0°41'47" | 11.01' | 5.51' |
| C12 | 943.00' | 25°59'30" | 427.78' | 217.64' |
| C13 | 10.00' | 51°48'55" | 9.04' | 4.86' |
| C14 | 10.00' | 50°49'26" | 8.87' | 4.75' |
| C15 | 898.50' | 9°47'55" | 153.66' | 77.02' |
| C16 | 10.00' | 50°49'26" | 8.87' | 4.75' |
| C17 | 10.00' | 51°48'55" | 9.04' | 4.86' |
| C18 | 906.00' | 13°30'50" | 213.69' | 107.34' |
| C19 | 30.00' | 89°59'58" | 47.12' | 30.00' |
| C20 | 30.00' | 90°00'02" | 47.12' | 30.00' |
| C21 | 30.00' | 90°00'02" | 47.12' | 30.00' |
| C22 | 30.00' | 89°59'58" | 47.12' | 30.00' |
| C23 | 10.00' | 51°19'04" | 8.96' | 4.80' |
| C24 | 10.00' | 51°19'04" | 8.96' | 4.80' |




GRAPHIC SCALE
30 0 15 30 60
HORIZONTAL: 1"= 30'

**BASIS OF BEARING**

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

**BENCHMARK**

CITY OF LAS VEGAS BENCHMARK: D368 (REVISED 2008)
NAVD88 ELEVATION: 989.574 METERS (3,246.63 FEET)
FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
1215,859E,S03

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

Call before you D g AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S SIMPLE. Call 811 OR 1-800-642-2444

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

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PROFESSIONAL ENGINEER - STATE OF NEVADA
NICOLAS A. BARCOS
EXP. 12-31-20
CIVIL
No. 25673
10/6/2020

REVISIONS

| REV. | DESCRIPTION | BY | DATE | APPROVAL |
|---|---|---|---|---|

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200

SUMMERLIN

# SUMMERLIN VILLAGE 22

DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

## HORIZONTAL CONTROL PLAN BEGIN TO STA 242+00

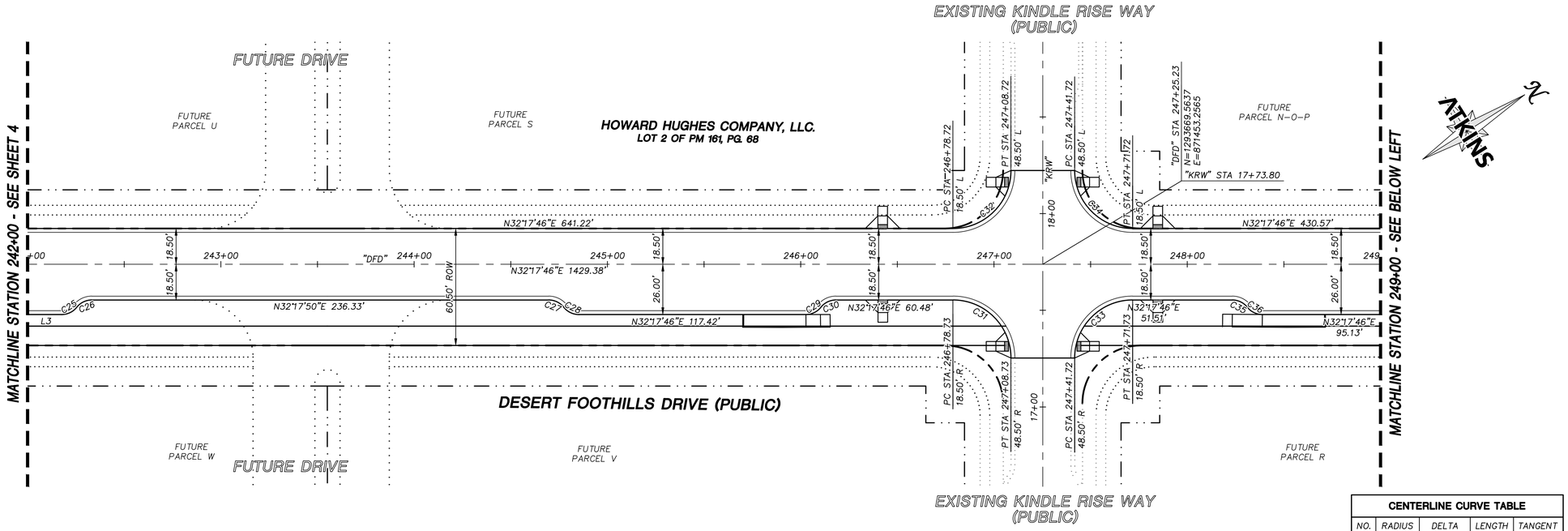
DESIGNED BY: B. MOCHTYAK
DRAWN BY: L. SOSA
CHECKED BY: P. BATES
HORIZ.: 1"=30'
VERT.: NONE

DATE: OCTOBER, 2020
DRAWING NO. 4/46

XXXYXXXX
LXX-XXXXX

JOB NO. 100066774

X:\Projects\SummWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)_Sheets\66774-04-HORIZ-H1.dwg LAYOUT: H-1 Oct 15, 2020 - 10:26AM




## SUMMARY OF QUANTITIES

| DESCRIPTION | QUANTITY | UNIT |
|---|---|---|
| ROADWAY | | |
| PLANTMIX BITUMINOUE PAVEMENT (3") | 11,019 | SY |
| TYPE II AGGREGATE BASE (ROAD) (4") | 3,673 | CY |
| TYPE II AGGREGATE BASE (CURB) (4") | 93 | CY |
| TYPE "L" CURB AND GUTTER | 5,000 | LF |

## ROADWAY NOTES

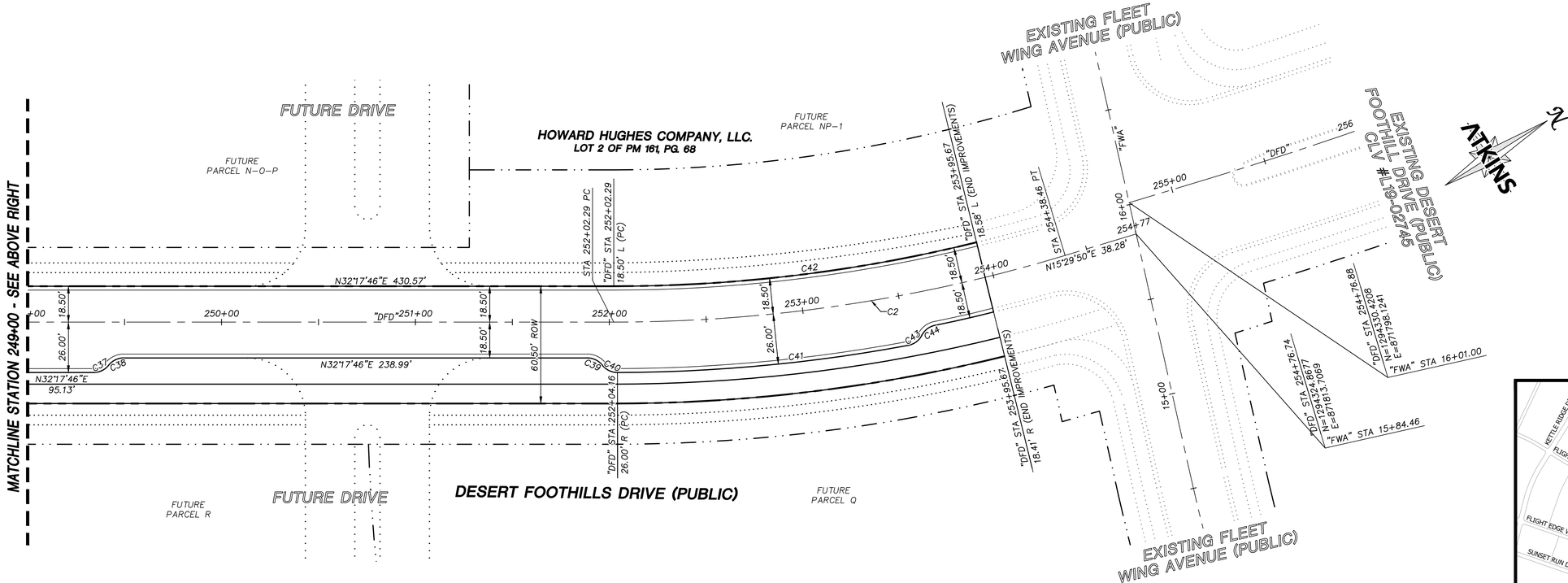
1. SEE SHEET 37 FOR TYPICAL SECTIONS, DETAILS
2. SEE SHEET 2 FOR ROADWAY ALIGNMENT ABBREVIATIONS

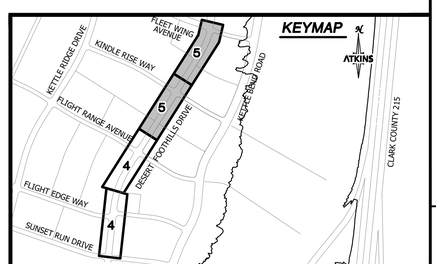
**CENTERLINE CURVE TABLE**

| NO. | RADIUS | DELTA | LENGTH | TANGENT |
|---|---|---|---|---|
| C2 | 805.50' | 16°47'56" | 236.17' | 118.94' |

**BACK OF CURB CURVE TABLE**

| NO. | RADIUS | DELTA | LENGTH | TANGENT |
|---|---|---|---|---|
| C25 | 10.00' | 51°19'04" | 8.96' | 4.80' |
| C26 | 10.00' | 51°19'04" | 8.96' | 4.80' |
| C27 | 10.00' | 51°18'10" | 8.95' | 4.80' |
| C28 | 10.00' | 51°18'26" | 8.95' | 4.80' |
| C29 | 10.00' | 51°19'41" | 8.96' | 4.80' |
| C30 | 10.00' | 51°19'21" | 8.96' | 4.80' |
| C31 | 30.00' | 89°59'58" | 47.12' | 30.00' |
| C32 | 30.00' | 90°00'02" | 47.12' | 30.00' |
| C33 | 30.00' | 90°00'02" | 47.12' | 30.00' |
| C34 | 30.00' | 89°59'58" | 47.12' | 30.00' |
| C35 | 10.00' | 51°19'04" | 8.96' | 4.80' |
| C36 | 10.00' | 51°19'04" | 8.96' | 4.80' |
| C37 | 10.00' | 51°19'04" | 8.96' | 4.80' |
| C38 | 10.00' | 51°19'04" | 8.96' | 4.80' |
| C39 | 10.00' | 51°18'35" | 8.96' | 4.80' |
| C40 | 10.00' | 51°26'33" | 8.98' | 4.82' |
| C41 | 831.50' | 10°23'23" | 150.78' | 75.60' |
| C42 | 780.91' | 13°51'44" | 188.93' | 94.93' |
| C43 | 10.00' | 51°51'37" | 9.05' | 4.86' |
| C44 | 10.00' | 50°46'46" | 8.86' | 4.75' |




GRAPHIC SCALE
30 0 15 30 60
HORIZONTAL: 1"= 30'

### BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

### BENCHMARK

CITY OF LAS VEGAS BENCHMARK: D368 (REVISED 2008)
NAVD88 ELEVATION: 989.574 METERS (3,246.63 FEET)
FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
T21S,R59E,S03

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PROFESSIONAL ENGINEER STATE OF NEVADA NICOLAS A. BABCOCK EXP. 12-31-20 CIVIL No. 25673
10/6/2020

REVISIONS

| REV. | DESCRIPTION | BY | DATE | APPROVAL |
|---|---|---|---|---|

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200

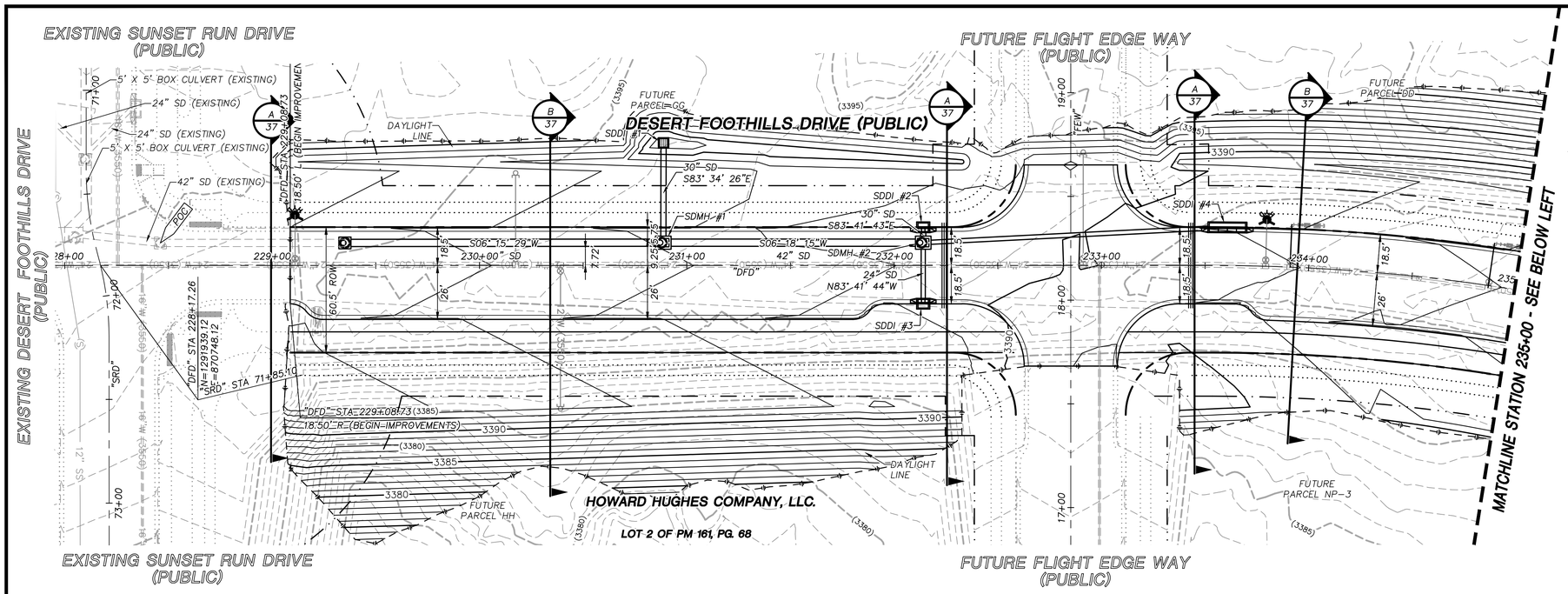
SUMMERLIN

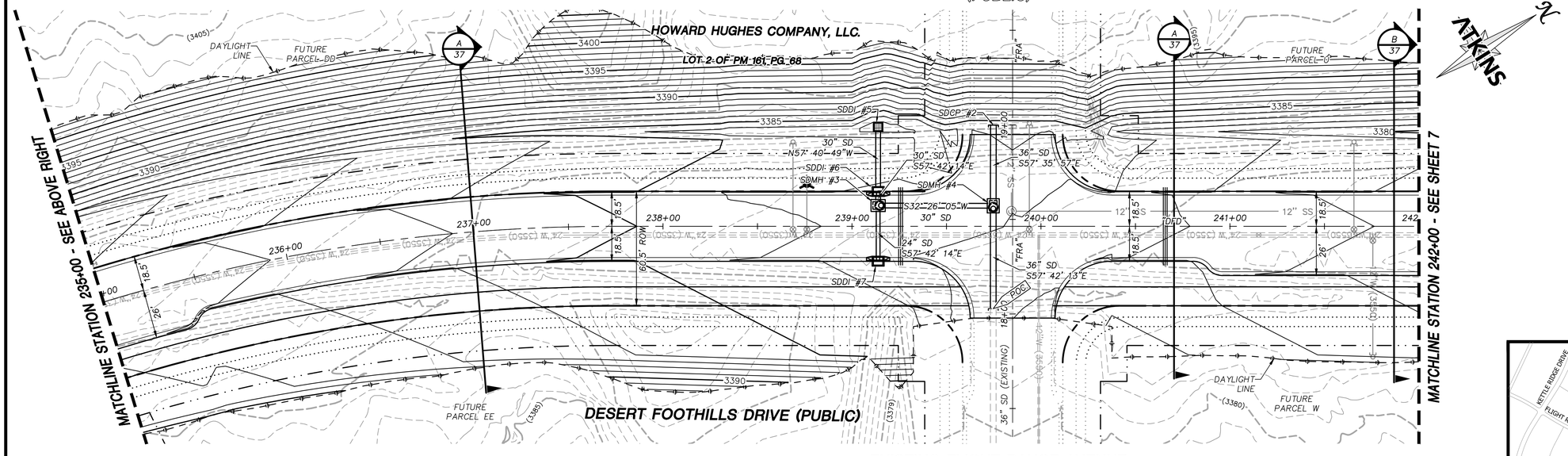
SUMMERLIN VILLAGE 22
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

HORIZONTAL CONTROL PLAN
STA 242+00 TO END

| | |
|---|---|
| DESIGNED BY: | B. WOCHTYAK |
| DRAWN BY: | L. SOSA |
| CHECKED BY: | P. BATES |
| HORIZ.: | 1"=30' |
| VERT.: | NONE |
| XXXVXXXX LXX-XXXXX | |
| DATE: | OCTOBER, 2020 |
| DRAWING NO. | 5/46 |
| JOB NO. | 100066774 |

X:\Projects\SummWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)_Sheets\66774-04-HORIZ-H1.dwg LAYOUT: H-2 Oct 15, 2020 - 10:26AM




## SUMMARY OF QUANTITIES

| DESCRIPTION | QUANTITY | UNIT |
|---|---|---|
| DRAINAGE | | |
| 24" RCP CLASS III | 273 | LF |
| 30" RCP CLASS III | 720 | LF |
| 36" RCP CLASS III | 97 | LF |
| 42" RCP CLASS III | 368 | LF |
| 5' TYPE CM2 SDDI | 8 | EA |
| 17.5' TYPE CM2 SDDI | 1 | EA |
| 2' X 2' NDOT TYPE 2 DROP INLET | 2 | EA |
| CAP | 4 | EA |
| TYPE II SDMH | 8 | EA |
| RIP-RAP (D50=8" THICKNESS=16") | 962 | CY |

### MASTER PLAN NOTE

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### STORM DRAIN NOTES

1. SEE ROADWAY PLAN AND PROFILE SHEETS FOR CONSTRUCTION DETAILS AND INFORMATION RELATED TO PIPE SIZE (INNER DIAMETER), MANHOLE BASE SIZE (I.D.) AND DROP INLET LENGTHS (CURB OPENING).
2. ALL STORM DRAIN MATERIAL TO BE CLASS III REINFORCED CONCRETE PIPE, UNLESS OTHERWISE NOTED IN PROFILES.
3. CONTRACTOR TO PROVIDE 6" MINIMUM OF CLEARANCE BETWEEN OUTSIDE OF PIPE TO INSIDE WALL OF STORM DRAIN STRUCTURES.

GRAPHIC SCALE
30 0 15 30 60
HORIZONTAL: 1"= 30'

### SOILS REPORT

BY NOVA
PROJECT NO. C-18-178
DATED 12/3/18 & 12/30/19
EARTHWORK QUANTITIES (RAW):
CUT= 17,900 CU YDS
FILL= 11,100 CU YDS

### GRADING PLAN CERTIFICATION

NICOLAS BARCOS PE#18723 DATE

CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE AT THE CITY OF LAS VEGAS FOR THIS PROJECT.

DSI#XXX-0000

### BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

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T21S,R59E,S03

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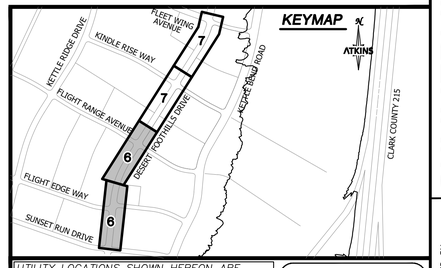
KEYMAP




NICOLAS A. BARCOS EXP. 12-31-20 CIVIL No. 25673 STATE OF NEVADA PROFESSIONAL ENGINEER
10/6/2020

REVISIONS

| REV. | DESCRIPTION | BY | DATE | APPROVAL |
|---|---|---|---|---|
| | | | | |

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200

SUMMERLIN

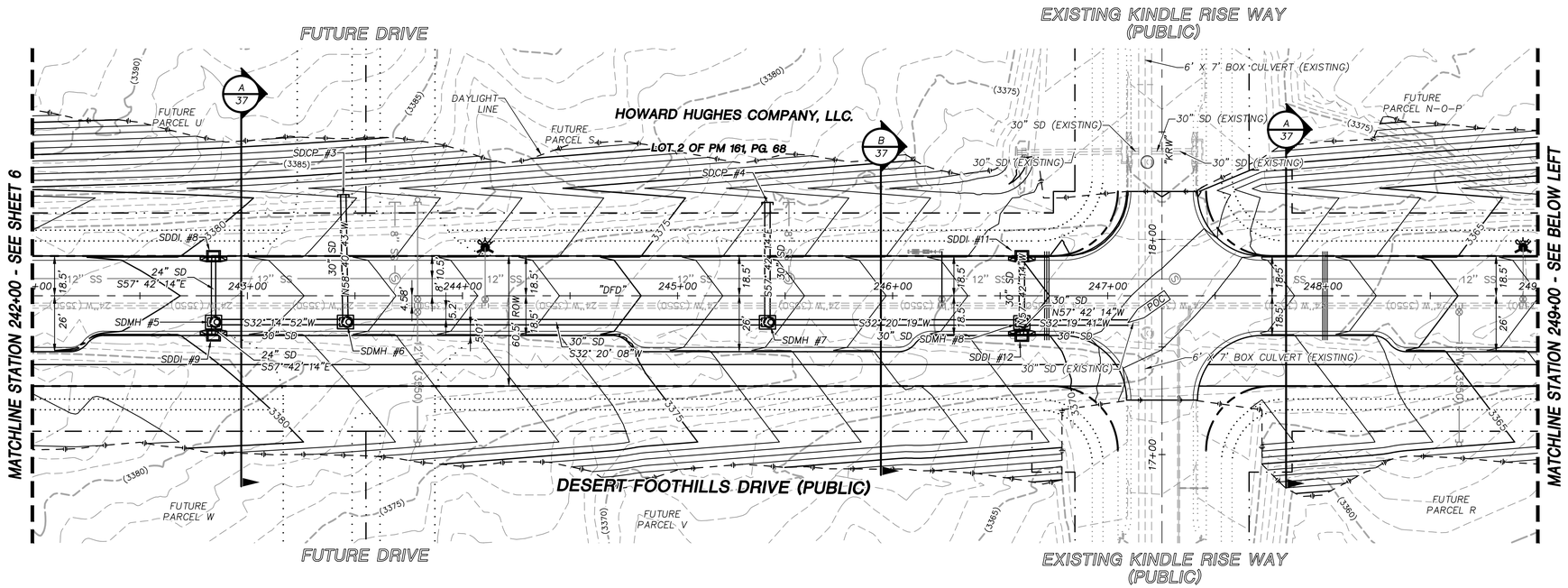
# SUMMERLIN VILLAGE 22
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

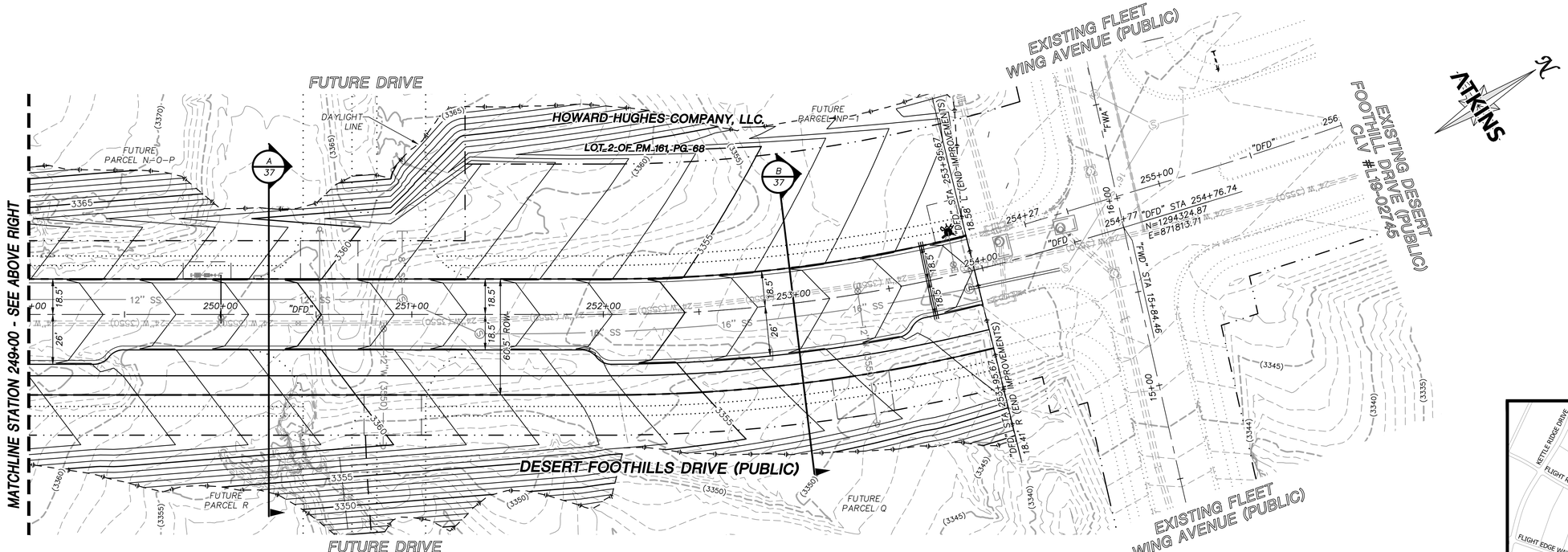
## MASTER DRAINAGE PLAN BEGIN TO STA 242+00

DESIGNED BY: B. MOCHTYAK
DRAWN BY: L. SOSA
CHECKED BY: P. BATES
HORIZ.: 1"=30'
VERT.: NONE

XXXYXXXX
LXX-XXXXX
DATE: OCTOBER, 2020
DRAWING NO. 6 /46
JOB NO. 100066774

X:\Projects\SummerWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)_Sheets\66774-06-STRM-SD1.dwg LAYOUT: SD-1 Oct 15, 2020 - 4:28PM

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GRAPHIC SCALE
30 0 15 30 60
HORIZONTAL: 1"= 30'

### SOILS REPORT

BY NOVA
PROJECT NO. C-18-178
DATED 12/3/18 & 12/30/19
EARTHWORK QUANTITIES (RAW):
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FILL= 11,100 CU YDS

### GRADING PLAN CERTIFICATION

NICOLAS BARCOS PE#18723 DATE

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DS#XXX-0000

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T21S,R59E,S03

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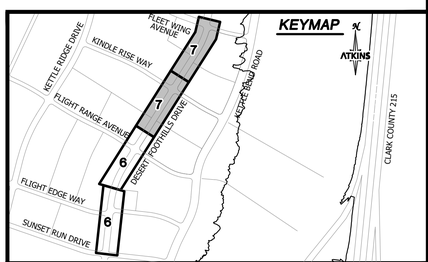


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PROFESSIONAL ENGINEER - STATE OF NEVADA
NICOLAS A BARCOS
EXP. 12-31-20
CIVIL
No. 25670
10/6/2020

REVISIONS

| REV. | DESCRIPTION | BY | DATE | APPROVAL |
|---|---|---|---|---|

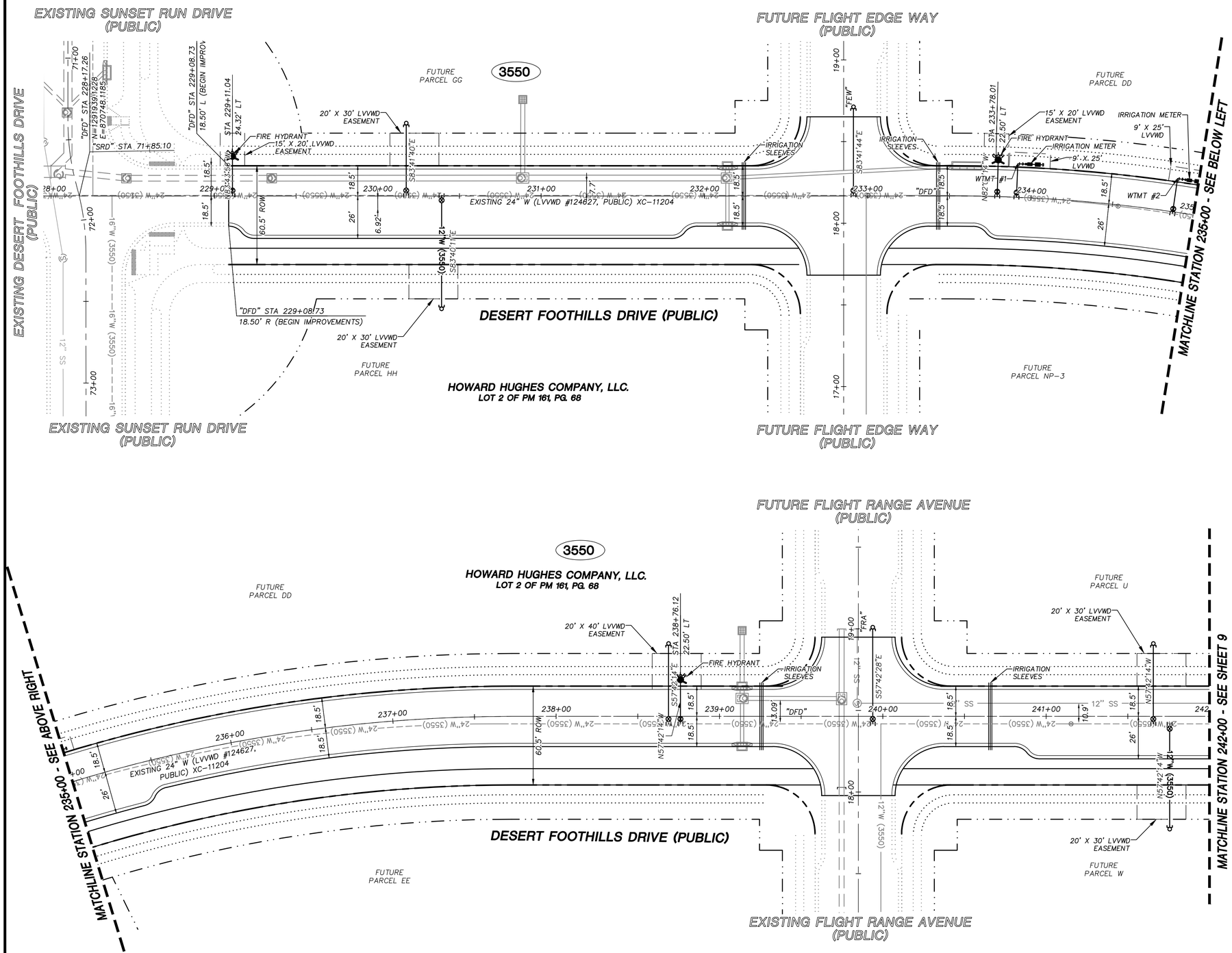
ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200

SUMMERLIN

**SUMMERLIN VILLAGE 22**
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)
**MASTER DRAINAGE PLAN**
**STA 242+00 TO END**

| | |
|---|---|
| DESIGNED BY: | B. MOCHTYAK |
| DRAWN BY: | L. SOSA |
| CHECKED BY: | P. BATES |
| HORIZ.: | 1"=30' |
| VERT.: | NONE |
| XXXYXXXX. LXX-XXXXX. | |
| DATE: | OCTOBER, 2020 |
| DRAWING NO. | 7 / 46 |
| JOB NO. | 100066774 |

X:\Projects\SummWest\Village 22\100066774 - Y22 Desert Foothills (Sunset to Fleet Wing)_Sheets\66774-06-STRM-SD1.dwg LAYOUT: SD-2 Oct 15, 2020 - 4:29PM







## SUMMARY OF QUANTITIES

| DESCRIPTION | QUANTITY | UNIT |
|---|---|---|
| WATER | | |
| 12" C-900 PVC PIPE | 742 | LF |
| 6" C-900 PVC PIPE | 148 | LF |
| 24" X 6" TEE | 6 | EA |
| 24" X 12" TEE | 13 | EA |
| 6" GATE VALVE | 6 | EA |
| 12" GATE VALVE | 13 | EA |
| CAP AND BLOWOFF ASSEMBLY | 13 | EA |
| FIRE HYDRANT ASSEMBLY | 6 | EA |
| 24" X 1.5" SERVICE SADDLE | 4 | EA |
| IRRIGATION SLEEVES | 246 | LF |
| 1.5" IRRIGATION METER | 4 | EA |

### MASTER PLAN NOTE

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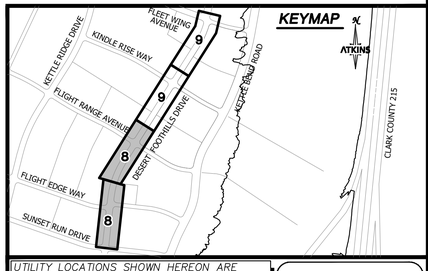
### WATER NOTES

1. SEE ROAD PLAN AND PROFILE SHEETS FOR CONSTRUCTION NOTES AND INFORMATION RELATED TO PIPE SIZE, LENGTH, AND SIZE OF FITTINGS.
2. ALL WATER PIPE MATERIAL TO BE WATER QUALITY RATED AWWA C-900, UNLESS OTHERWISE NOTED IN PROFILES.
3. INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING PER UDACS PLATE #15.
4. PROTECT IN PLACE AND ADJUST LVVWD EXISTING FACILITIES TO FINISHED GRADE. ALL LVVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.
5. SEE SHEET 40 FOR WATER DETAILS.
6. THRUST BLOCKS WILL BE PROVIDED AT EVERY CHANGE IN DIRECTION PER UDACS PLATES #30 & #31.
7. CONTRACTOR TO INSTALL PIPE BENDS AS NECESSARY IN ORDER TO ACHIEVE EQUIVALENT PIPE CENTERLINE RADIUS PER UDACS SECTION 2.07 WATER MAIN JOINT DEFLECTION.
8. ALL MEASUREMENTS ARE FROM CENTER OF FITTING TO CENTER OF FITTING.




GRAPHIC SCALE
30 0 15 30 60
HORIZONTAL: 1"= 30'

**APPROVED FOR CONSTRUCTION**

LAS VEGAS VALLEY WATER DISTRICT
PLANNING AND ENGINEERING SERVICES

PROJECT NO. 0000 FIRST APPROVED DATE: _____

LVVWD APPROVED FIRE FLOW 1500 GPM AT 20 PSI RESIDUAL

**BASIS OF BEARING**

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

**BENCHMARK**

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Call before you D ig AVOID CUTTING YOUR UNDERGROUND UTILITY LINES. IT'S COURTLY. Call 811 or 1-800-642-2444

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PROFESSIONAL ENGINEER-STATE OF NEVADA NICOLAS A. BARGOS EXP. 12-31-20 CIVIL No. 25673 10/6/2020

| REVISIONS | | | | |
|---|---|---|---|---|
| REV. | DESCRIPTION | BY | DATE | APPROVAL |

ATKINS
2270 Corporate Circle Suite 200
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SUMMERLIN

**SUMMERLIN VILLAGE 22**
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)
**MASTER WATER PLAN**
**BEGIN TO 242+00**

| | |
|---|---|
| DESIGNED BY: | B. MOCHIYAK |
| DRAWN BY: | L. SOSA |
| CHECKED BY: | P. BATES |
| HORIZ.: | 1"=30' |
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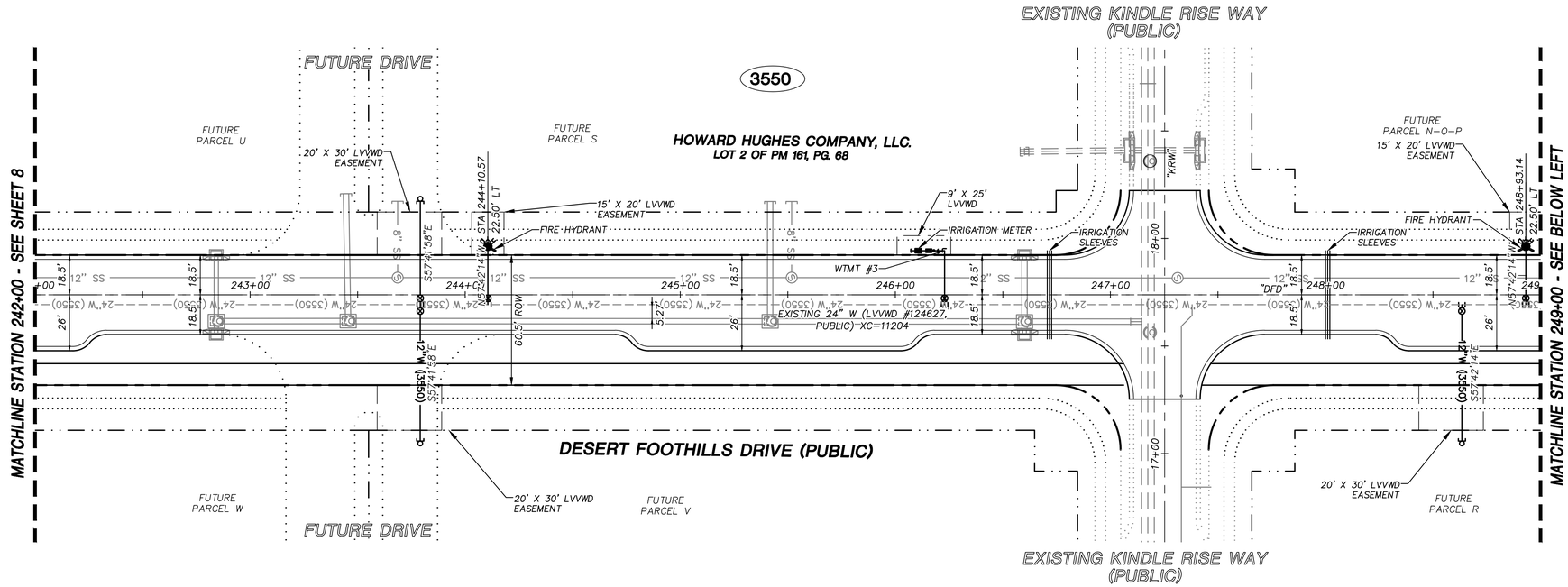
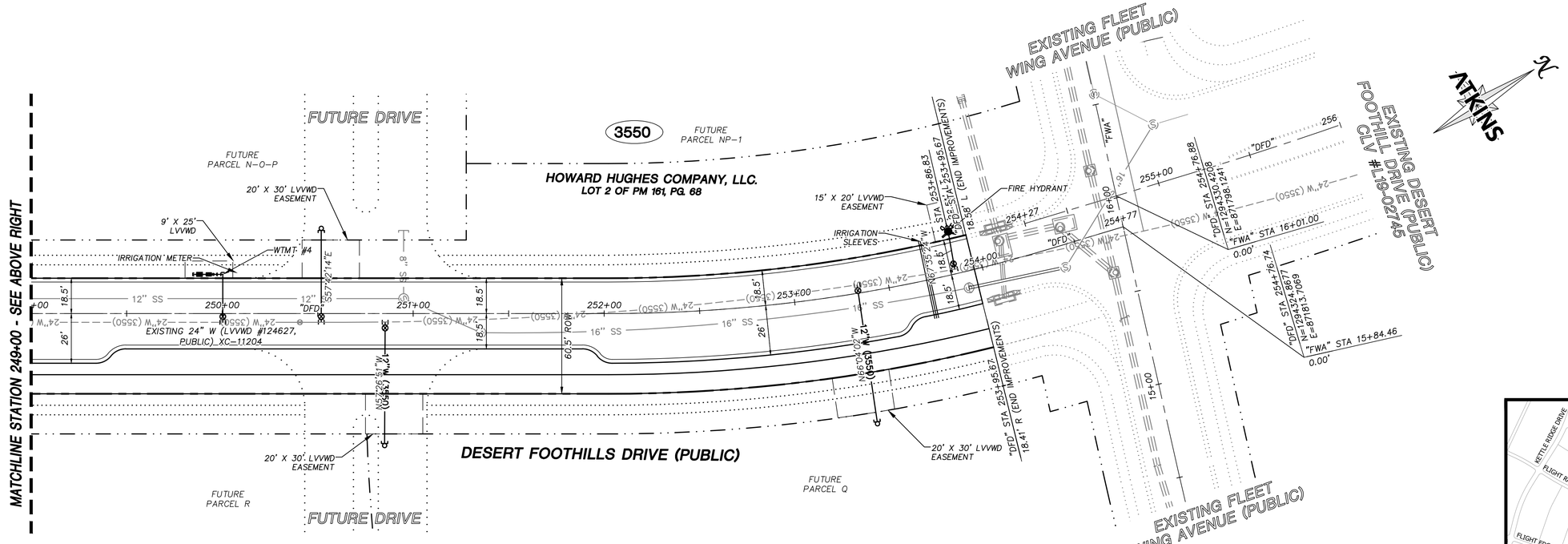
| XXXVXXXX | |
| LXX-XXXXX | |
| DATE | OCTOBER, 2020 |
| DRAWING NO. | 8 /46 |
| JOB NO. | 100066774 |

X:\Projects\SummitWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)_Sheets\66774-08-WATR-W1.dwg LAYOUT: W-1 Oct 15, 2020 - 4:30PM




GRAPHIC SCALE
30 0 15 30 60
HORIZONTAL: 1"= 30'

**APPROVED FOR CONSTRUCTION**

LAS VEGAS VALLEY WATER DISTRICT
PLANNING AND ENGINEERING SERVICES

PROJECT NO. 0000 FIRST APPROVED DATE: _____

LVVWD APPROVED FIRE FLOW 1500 GPM AT 20 PSI RESIDUAL

**BASIS OF BEARING**

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

**BENCHMARK**

CITY OF LAS VEGAS BENCHMARK: D368 (REVISED 2008)
NAVD88 ELEVATION: 989.574 METERS (3,246.63 FEET)
FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
T21S,R59E,S03

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

Call before you D g AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COURTLY. Call 811 OR 1-800-642-2444

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

**MASTER PLAN NOTE**

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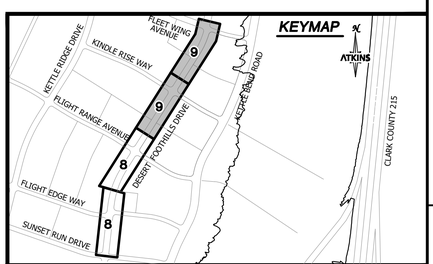
## WATER NOTES

1. SEE ROAD PLAN AND PROFILE SHEETS FOR CONSTRUCTION NOTES AND INFORMATION RELATED TO PIPE SIZE, LENGTH, AND SIZE OF FITTINGS.
2. ALL WATER PIPE MATERIAL TO BE WATER QUALITY RATED AWWA C-900, UNLESS OTHERWISE NOTED IN PROFILES.
3. INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING PER UDACS PLATE #15.
4. PROTECT IN PLACE AND ADJUST LVVWD EXISTING FACILITIES TO FINISHED GRADE. ALL LVVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.
5. SEE SHEET ## FOR WATER DETAILS.
6. THRUST BLOCKS WILL BE PROVIDED AT EVERY CHANGE IN DIRECTION PER UDACS PLATES #30 & #31.
7. CONTRACTOR TO INSTALL PIPE BENDS AS NECESSARY IN ORDER TO ACHIEVE EQUIVALENT PIPE CENTERLINE RADIUS PER UDACS SECTION 2.07 WATER MAIN JOINT DEFLECTION.
8. ALL MEASUREMENTS ARE FROM CENTER OF FITTING TO CENTER OF FITTING.

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PROFESSIONAL ENGINEER - STATE OF NEVADA - NICOLAS BARGAS - EXP. 12-31-20 - CIVIL - No. 25873 - 10/6/2020

REVISIONS

| REV. | DESCRIPTION | BY | DATE | APPROVAL |
|---|---|---|---|---|
| | | | | |

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200

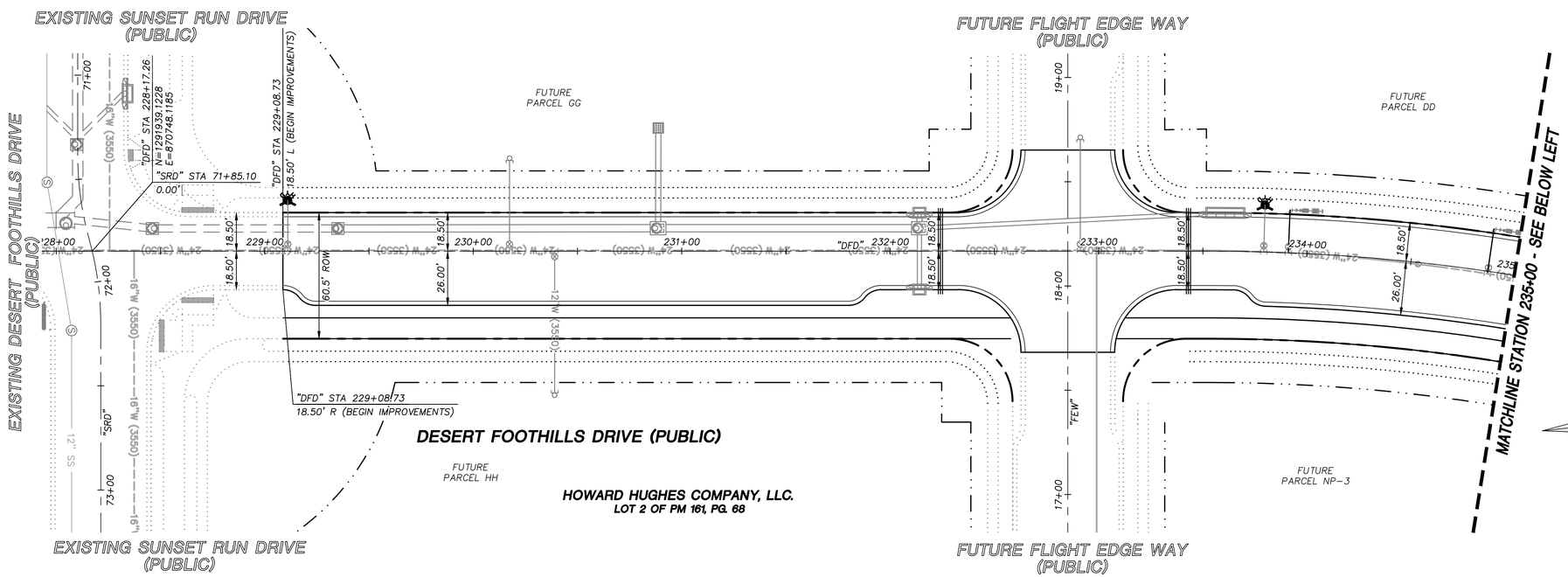
SUMMERLIN

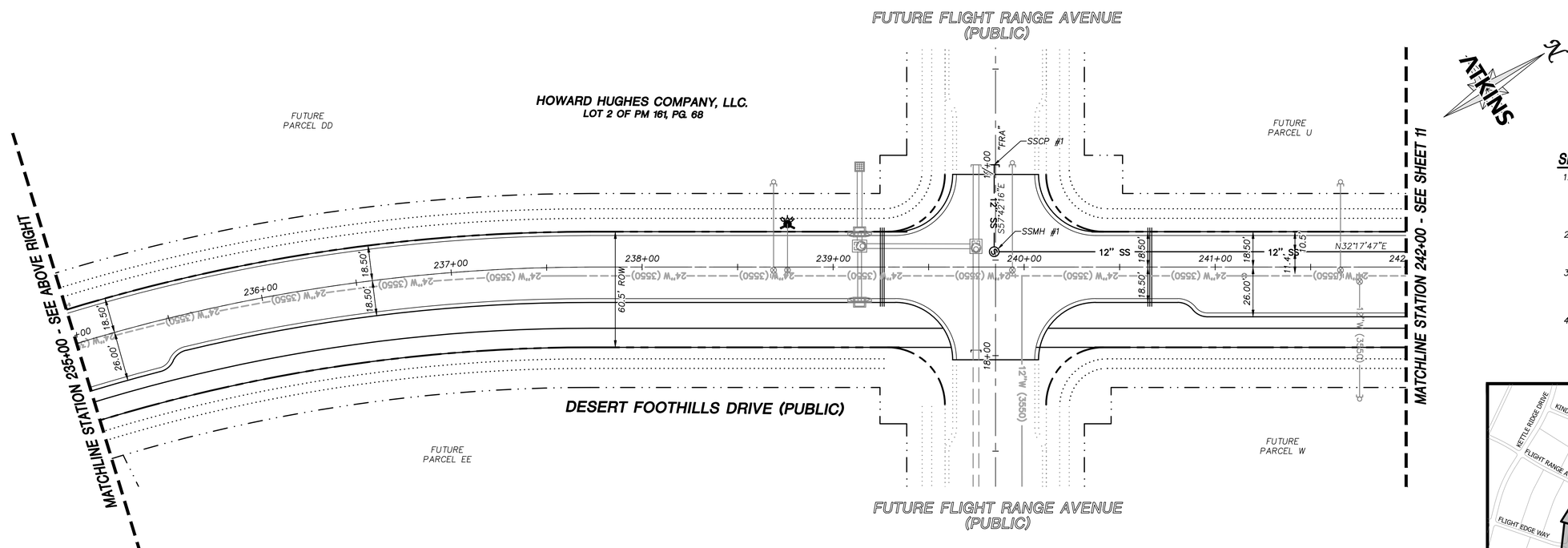
**SUMMERLIN VILLAGE 22**
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

**MASTER WATER PLAN**
**STA 242+00 TO END**

DESIGNED BY: B. MOCHTYAK
DRAWN BY: L. SOSA
CHECKED BY: P. BATES
DATE: OCTOBER, 2020
HORIZ.: 1"=30'
VERT.: NONE
DRAWING NO. 9/46
XXXVXXXX
LXX-YXXXX
JOB NO. 100066774

X:\Projects\SummWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)_Sheets\66774-08-WATR-W1.dwg LAYOUT: W-2 Oct 15, 2020 - 4:30PM




## SUMMARY OF QUANTITIES

| DESCRIPTION | QUANTITY | UNIT |
|---|---|---|
| SEWER | | |
| 16" C-900 PVC PIPE | 283 | LF |
| 12" C-900 PVC PIPE | 1,179 | LF |
| 8" C-900 PVC PIPE | 386 | LF |
| 48" SD-1 MANHOLE | 6 | EA |
| CAP AND BLOWOFF ASSEMBLY | 4 | EA |

### MASTER PLAN NOTE

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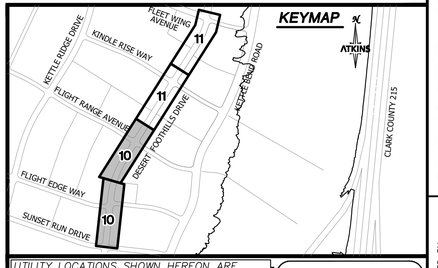
### SEWER NOTES

1. SEE ROADWAY PLAN AND PROFILE SHEETS FOR CONSTRUCTION NOTES AND INFORMATION RELATED TO PIPE SIZE, SLOPE, INVERT, RIM INFORMATION, AND MANHOLE BASE SIZE.
2. ALL SEWER PIPE MATERIAL TO BE WATER QUALITY RATED AWWA C-900, UNLESS OTHERWISE NOTED IN PROFILES.
3. ALL SEWER MANHOLES TO BE POLYMER LINED AND ALL JOINTS TO HAVE SIKAFLEX 2C NS SEALANT BETWEEN COMPONENTS.
4. ALL SEWER MANHOLES GREATER THAN 20' DEEP TO BE LINED WITH CORROSION PROTECTION PER DCSCWS STANDARD PLATE SD-1.




GRAPHIC SCALE
30 0 15 30 60
HORIZONTAL: 1"= 30'

### BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

### BENCHMARK

CITY OF LAS VEGAS BENCHMARK: D368 (REVISED 2008)
NAVD88 ELEVATION: 989.574 METERS (3,246.63 FEET)
FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
T21S,R59E,S03

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

Call before you D g AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY. Call 811 OR 1-800-642-2444

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

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PROFESSIONAL ENGINEER-STATE OF NEVADA NICOLAS A. BARCOS EXP. 12-31-20 CIVIL No. 25673 10/6/2020

| REV. | DESCRIPTION | BY | DATE | APPROVAL |
|---|---|---|---|---|
| | REVISIONS | | | |

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200

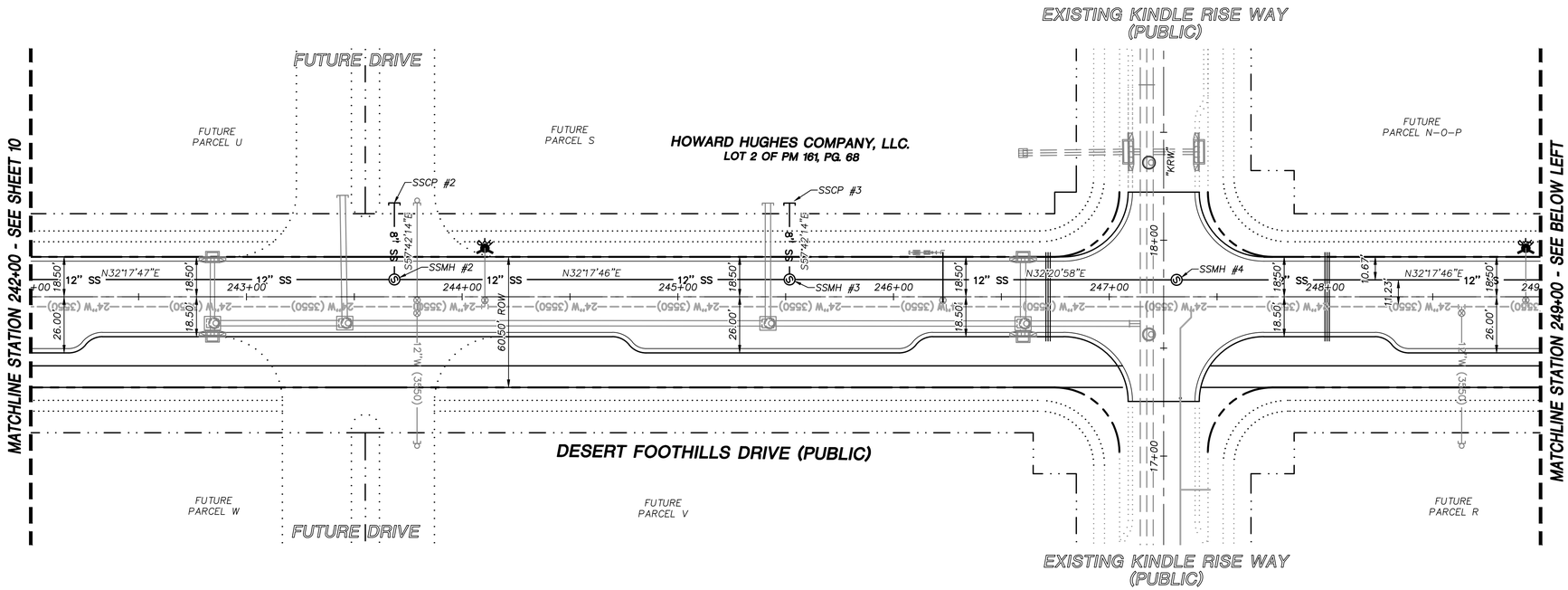
SUMMERLIN

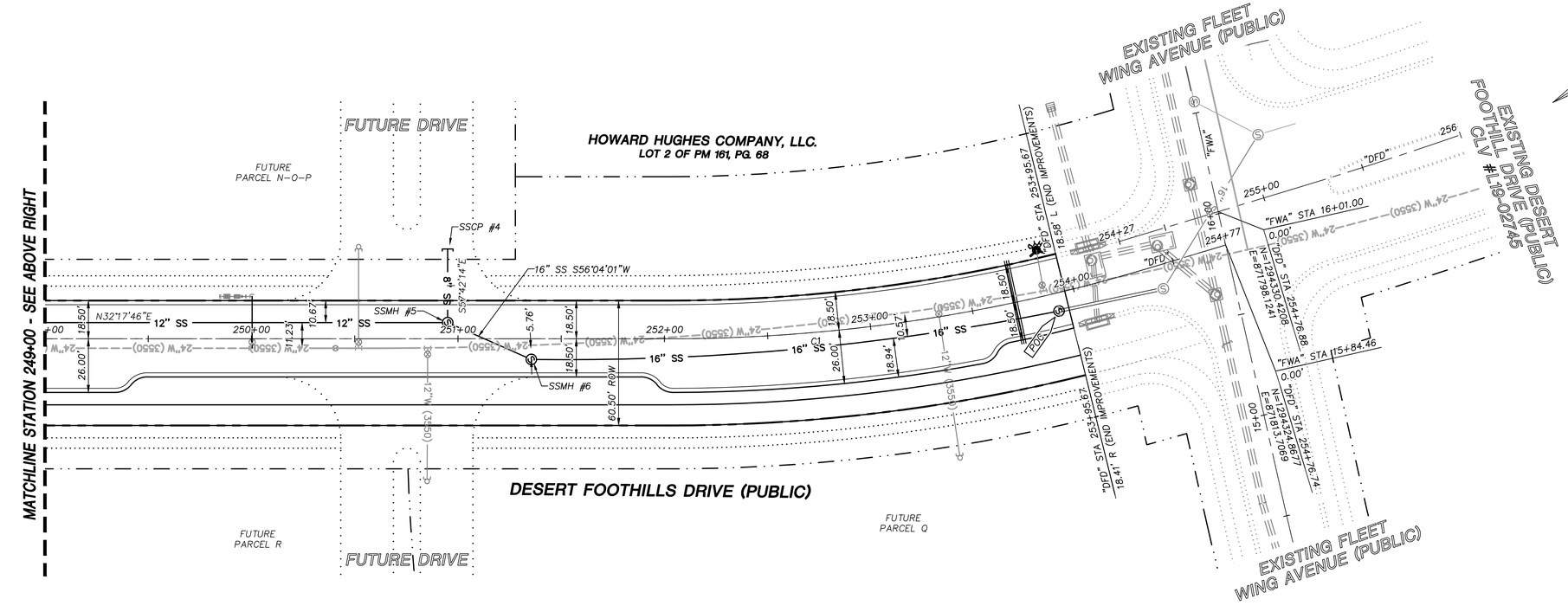
SUMMERLIN VILLAGE 22
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

MASTER SEWER PLAN
BEGIN TO STA 242+00

| | |
|---|---|
| DESIGNED BY: | N. BARCOS |
| DRAWN BY: | L. MAMACLAY |
| CHECKED BY: | P. BATES |
| HORIZ.: | 1"=30' |
| VERT.: | NONE |
| DATE: | OCTOBER, 2020 |
| DRAWING NO. | 10/46 |
| JOB NO. | 100066774 |
| XXXYXXXX LXX-XXXXX | |

X:\Projects\SummWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)_Sheets\66774-10-SEWER-SS1.dwg LAYOUT: SS-1 Oct 15, 2020 - 4:31PM




## SUMMARY OF QUANTITIES

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| SANITARY SEWER CURVE TABLE | | | | |
|---|---|---|---|---|
| NO. | RADIUS | DELTA | LENGTH | TANGENT |
| C1 | 1218.68' | 11°51'05" | 252.08' | 126.49' |

### SEWER NOTES

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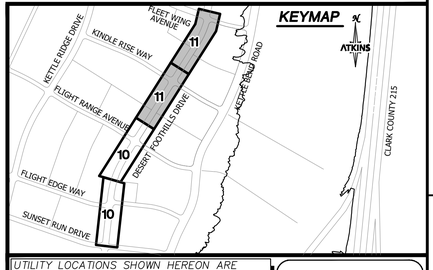


GRAPHIC SCALE
30 0 15 30 60
HORIZONTAL: 1"= 30'

### BASIS OF BEARING

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PROFESSIONAL ENGINEER - STATE OF NEVADA - NICOLAS A. BARCOS - EXP. 12-31-20 - CIVIL - No. 25973 - 10/6/2020

REVISIONS

| REV. | DESCRIPTION | BY | DATE | APPROVAL |
|---|---|---|---|---|

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200

SUMMERLIN

SUMMERLIN VILLAGE 22
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

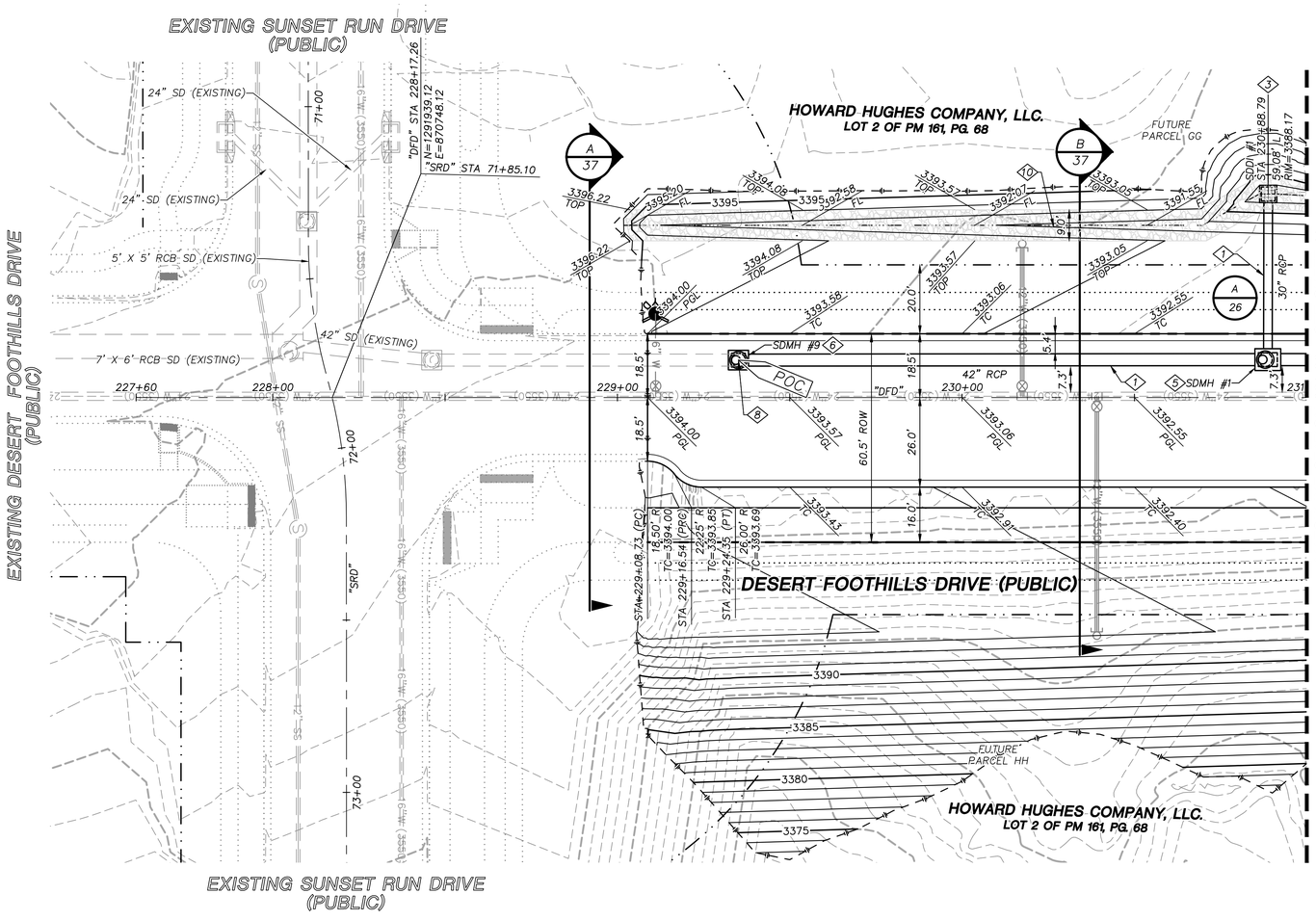
MASTER SEWER PLAN
STA 242+00 TO END

DESIGNED BY: N. BARCOS
DRAWN BY: L. MAMACLAY
CHECKED BY: P. BATES
HORIZ.: 1"=30'
VERT.: NONE

XXXVXXXX.
LXX-XXXXX
DATE: OCTOBER, 2020
DRAWING NO. 11/46

JOB NO. 100066774

X:\Projects\SummWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)_Sheets\66774-10-SEWER-SS1.dwg LAYOUT: SS-2 Oct 15, 2020 - 4:31PM

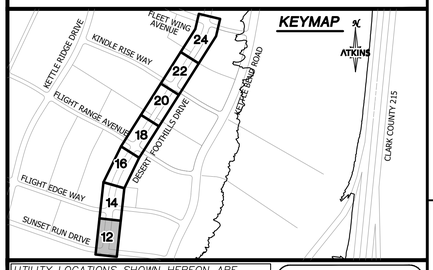



## STORM DRAIN CONSTRUCTION NOTES

1. INSTALL STORM DRAIN. SEE ROADWAY PLAN AND PROFILE SHEETS FOR ADDITIONAL STORM DRAIN NOTES AND INFORMATION.
2. INSTALL TYPE "CM2" DROP INLET PER CCAUSD #412.1 & #421
3. INSTALL NDOT TYPE II DROP INLET PER NDOT R-4.2.1 (SEE SHEET 39)
4. INSTALL TYPE I SD MANHOLE PER CCAUSD #403
5. INSTALL TYPE II SD MANHOLE PER CCAUSD #405.2
6. INSTALL TYPE III SD MANHOLE PER CCAUSD #406
7. INSTALL TYPE "A" DROP INLET PER CCAUSED #411 & #421
8. REMOVE CAP AND CONNECT TO EXISTING STORM DRAIN STUB
9. STUB & PLUG STORM DRAIN FOR FUTURE CONNECTION PER MANUFACTURER'S PLUG, OR APPROVED EQUAL
10. INSTALL RIP-RAP (D50=12", THICKNESS=24")
11. INSTALL TYPE "CM2" DROP INLET PER CCAUSD #412.1 & #421, AND DETAIL C SHEET 39

REVISIONS

| REV. | DESCRIPTION | BY | DATE | APPROVAL |
|---|---|---|---|---|
| | | | | |




GRAPHIC SCALE
20 0 10 20 40
HORIZONTAL: 1"=20'

### GRADING PLAN CERTIFICATION

NICOLAS BARCOS PE#25673 DATE

CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE AT THE CITY OF LAS VEGAS FOR THIS PROJECT.

DS#XXX-0000

### BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

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T21S,R59E,S03

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PROFESSIONAL ENGINEER-STATE OF NEVADA NICOLAS A. BARCOS EXP. 12-31-20 CIVIL No. 25673 10/6/2020

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200

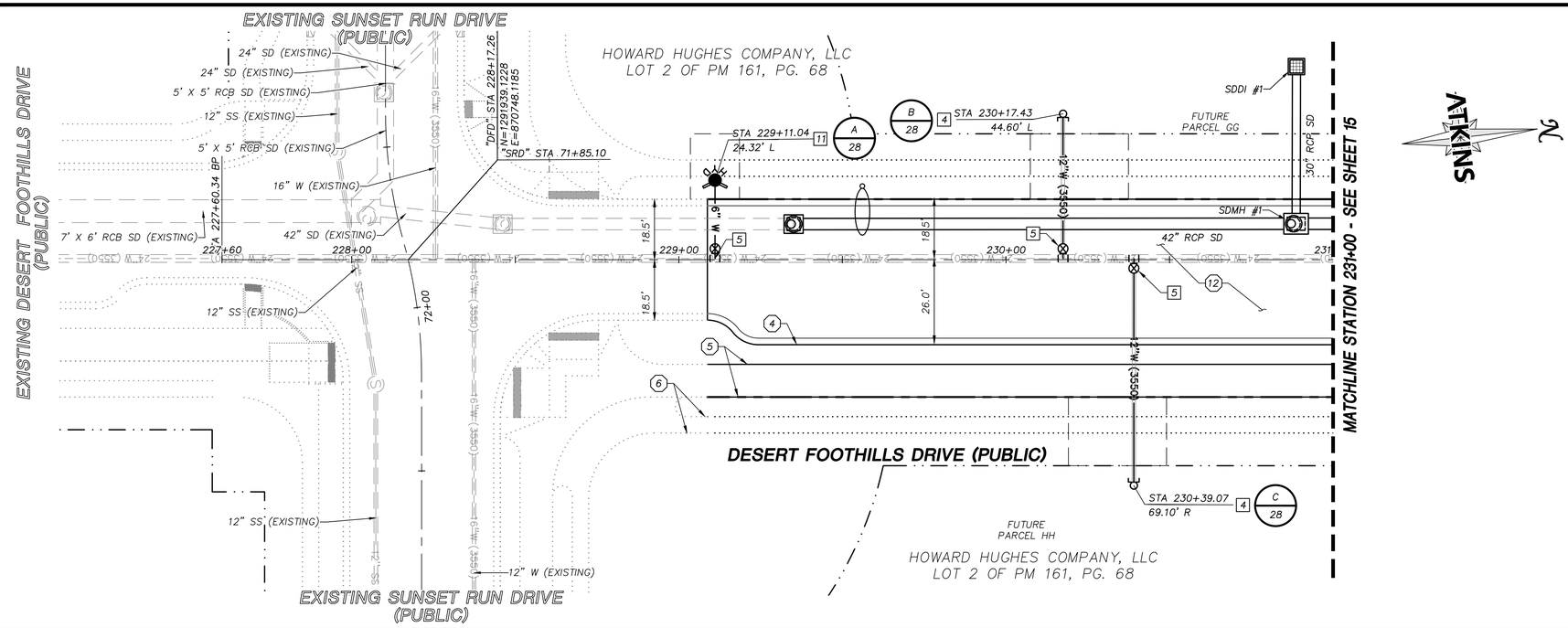
SUMMERLIN

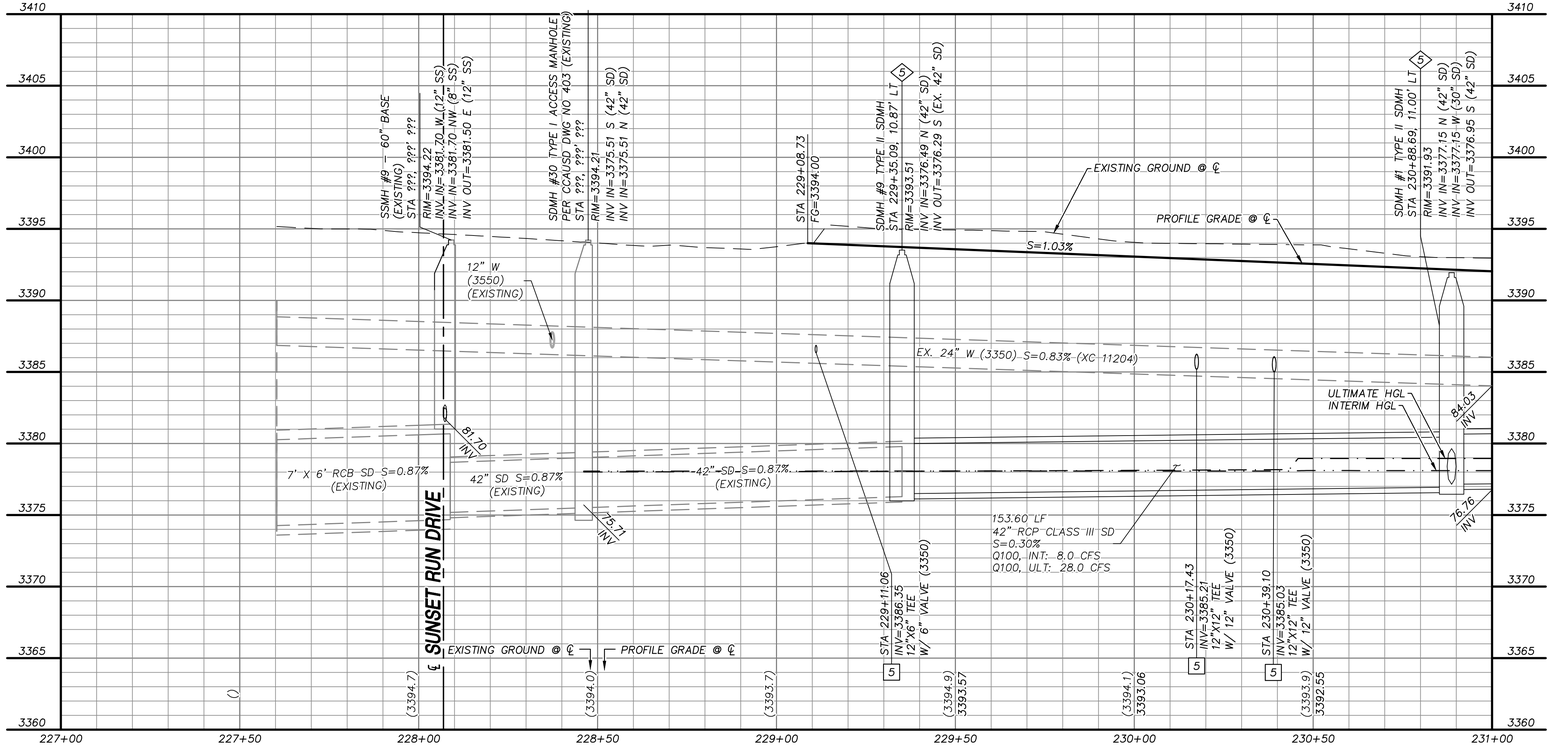
**SUMMERLIN VILLAGE 22**
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

**ROADWAY GRADING PLAN**
**BEGIN TO STA 231+00**

DESIGNED BY: B. MOCHTYAK
DRAWN BY: L. SOSA
CHECKED BY: P. BATES
HORIZ.: 1"=20'
VERT.: 1"=5'
DRAWING NO. 12/46
DATE OCTOBER, 2020
XXXVXXXX
LXX-XXXXX
JOB NO. 100066774

X:\Projects\SummWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)_Sheets\66774-12-GRAD-01.dwg LAYOUT: 12 ROADWAY GRADING PLAN Oct 15, 2020 - 11:34AM




## STORM DRAIN CONSTRUCTION NOTES

1. INSTALL STORM DRAIN. SEE ROADWAY PLAN AND PROFILE SHEETS FOR ADDITIONAL STORM DRAIN NOTES AND INFORMATION.
2. INSTALL TYPE "CM2" DROP INLET PER CCAUSD #412.1 & #421
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## SEWER CONSTRUCTION NOTES

1. INSTALL SEWER MANHOLE PER DCSWCS SD–1, AND SD–4
2. INSTALL SEWER MAIN PER DCSWCS SD–17
3. STUB AND CAP SEWER PIPE. PLACE MARKER BALL AND 4"X4" POST, DOUGLAS FIR, OVER END OF PIPE AND INSTALL THRUST BLOCK (1 CUBIC FT. MINIMUM).
4. REMOVE CAP AND CONNECT TO EXISTING SEWER STUB
5. ADJUST EXISTING MANHOLE TO GRADE PER DCSWCS SD–5.
6. PROTECT SEWER AT UTILITY CROSSING PER DCSWCS SD–19

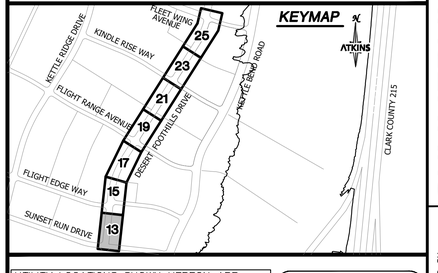
## WATERLINE CONSTRUCTION NOTES

1. INSTALL WATER MAIN PER UDACS PLATES #17 AND PLATE #19
2. INSTALL GATE VALVE PER UDACS PLATES #30 AND #39
3. INSTALL CROSS PER UDACS PLATE #31
4. INSTALL CAP AND 2" MANUAL BLOWOFF ASSEMBLY PER UDACS PLATE #36
5. INSTALL TAPPING SLEEVE TEE W/ VALVE AND LATERAL PER UDACS PLATES #17, #19, #30, #31 AND #39
7. INSTALL 1.5" SERVICE SADDLE PER UDASC PLATE #4
8. INSTALL 1–1/2" IRRIGATION METER WITH 1–1/2 RPPA PER UDASC PLATES #4 AND #8 WITH CURB STOP
9. INSTALL IN–LINE REDUCER PER UDACS PLATE #30
10. REMOVE CAP AND 2" BLOWOFF AND CONNECT TO EXISTING WATERLINE STUB
11. INSTALL FIRE HYDRANT WITH APPURTENANCES (CONCRETE PAD, LATERAL, VALVE, AND TEE) PER UDACS PLATES #30, #31, #39, AND #40

## ROADWAY CONSTRUCTION NOTES

2,3,7,&11 NOT USED

1. SAWCUT AND MATCH EXISTING
4. CONSTRUCT "L" TYPE CURB AND GUTTER PER CCAUSD #216
5. PROPOSED BIKE LANE
6. FUTURE SIDEWALK BY OTHERS
8. CONSTRUCT CURB RAMP, TYPE A, PER NDOT STANDARD PLAN R–5.2.1 (A=B=6.5').
9. CONSTRUCT 0" FLUSH CURB
10. TRANSITION CURB FROM FULL HEIGHT (6") TO FLUSH (0")
12. CONSTRUCT PLANTMIX BITUMINOUS SURFACE OVER TYPE II AGGREGATE BASE PER SOILS REPORT. SEE SHEET 37 FOR TYPICAL PAVEMENT SECTION.
13. INSTALL SCHEDULE 40 PVC IRRIGATION SLEEVES (2–4", 1–6") PER DETAIL ON SHEET 40




GRAPHIC SCALE
20 0 10 20 40
HORIZONTAL: 1"=20'
5 0 2.5 5 10
VERTICAL: 1"=5'

**APPROVED FOR CONSTRUCTION**

LAS VEGAS VALLEY WATER DISTRICT
PLANNING AND ENGINEERING SERVICES

PROJECT NO. 0000 FIRST APPROVED DATE: _____

LVVWD APPROVED FIRE FLOW 1500 GPM AT 20 PSI RESIDUAL

**BASIS OF BEARING**

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

**BENCHMARK**

CITY OF LAS VEGAS BENCHMARK: D368
(REVISED 2008)
NAVD88 ELEVATION: 989.574 METERS
(3,246.63 FEET)
FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
T21S,R59E,S03

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

Call before you D ◇ g AVOID CUTTING DAMAGING OR DISRUPTING UTILITY LINES. ITS COURTLY. Call 811 OR 1-800-642-2444

AVOID HITTING OVERHEAD POWER LINES. ITS COURTLY. CALL BEFORE YOU DIG OVERHEAD 1-702-227-2929

UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTORS 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 OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.

NICHOLAS A. BADOS — No. 25673 — EXP. 12-31-20 — CIVIL — PROFESSIONAL ENGINEER — STATE OF NEVADA
10/6/2020

REVISIONS

| REV. | DESCRIPTION | BY | DATE | APPROVAL |
|---|---|---|---|---|

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200

SUMMERLIN

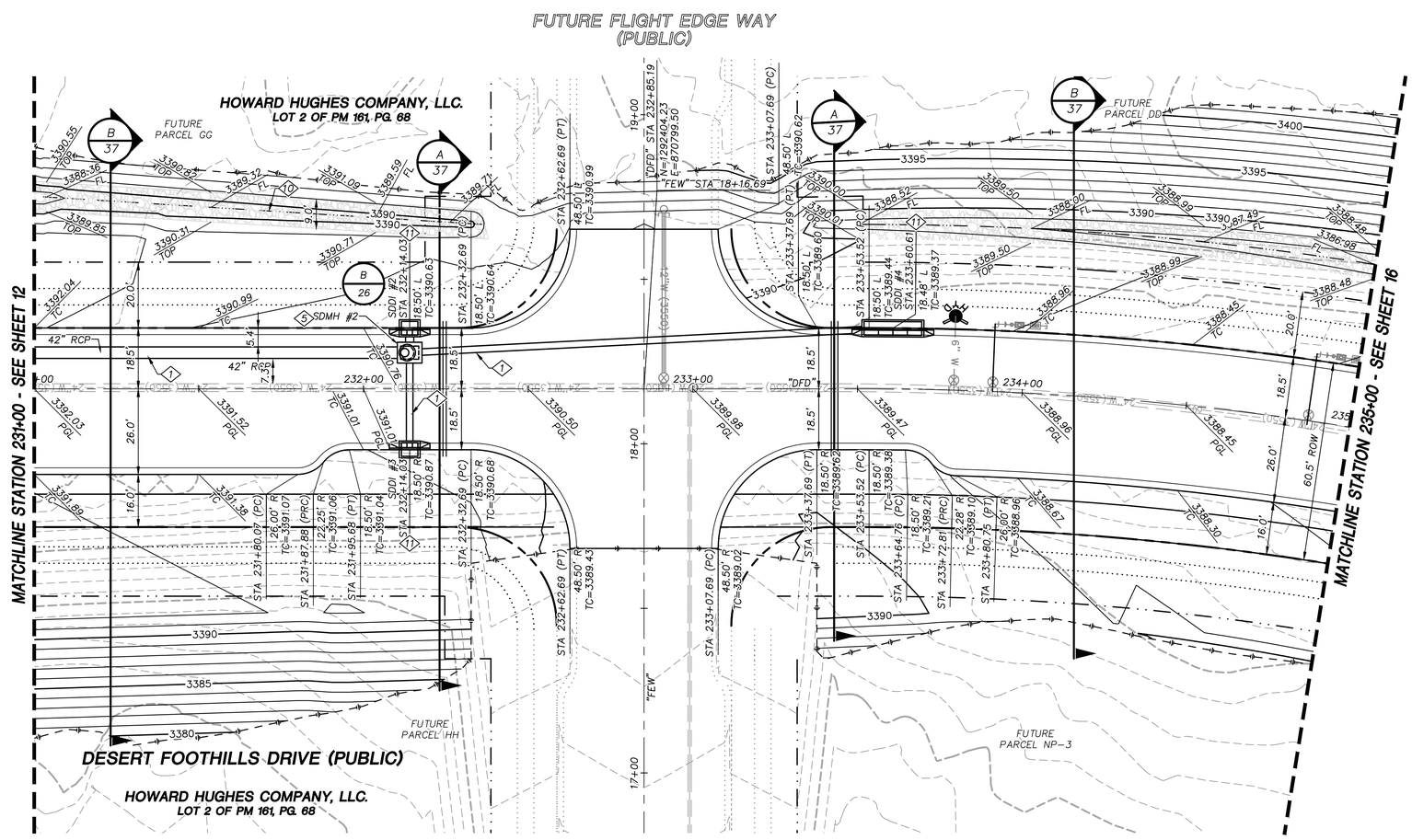
# SUMMERLIN VILLAGE 22

DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

## ROADWAY PLAN AND PROFILE
## BEGIN TO STA 231+00

| | |
|---|---|
| DESIGNED BY: | B. WOHTIAK |
| DRAWN BY: | L. SOSA |
| CHECKED BY: | P. BATES |
| HORIZ.: | 1"=20' |
| VERT.: | 1"=5' |
| XXXVXXXX LXX–XXXXX | |
| DATE: | OCTOBER, 2020 |
| DRAWING NO. | 13/46 |
| JOB NO. | 100066774 |

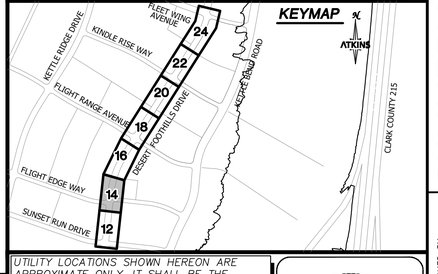
X:\Projects\SummWest\Village 22\100066774 – V22 Desert Foothills (Sunset to Fleet Wing)\...\Sheets\66774–13–PLAN–Fl.dwg LAYOUT: ROADWAY PLAN AND PROFILE 1 Oct 15, 2020 – 10:31AM




## STORM DRAIN CONSTRUCTION NOTES

1. INSTALL STORM DRAIN. SEE ROADWAY PLAN AND PROFILE SHEETS FOR ADDITIONAL STORM DRAIN NOTES AND INFORMATION.
2. INSTALL TYPE "CM2" DROP INLET PER CCAUSD #412.1 & #421
3. INSTALL NDOT TYPE II DROP INLET PER NDOT R-4.2.1 (SEE SHEET 39)
4. INSTALL TYPE I SD MANHOLE PER CCAUSD #403
5. INSTALL TYPE II SD MANHOLE PER CCAUSD #405.2
6. INSTALL TYPE III SD MANHOLE PER CCAUSD #406
7. INSTALL TYPE "A" DROP INLET PER CCAUSED #411 & #421
8. REMOVE CAP AND CONNECT TO EXISTING STORM DRAIN STUB
9. STUB & PLUG STORM DRAIN FOR FUTURE CONNECTION PER MANUFACTURER'S PLUG, OR APPROVED EQUAL
10. INSTALL RIP-RAP (D50=12", THICKNESS=24")
11. INSTALL TYPE "CM2" DROP INLET PER CCAUSD #412.1 & #421, AND DETAIL C SHEET 39

| REVISIONS | | | |
|---|---|---|---|
| REV. | DESCRIPTION | BY | DATE | APPROVAL |
| | | | |




GRAPHIC SCALE
20 0 10 20 40
HORIZONTAL: 1"=20'

### GRADING PLAN CERTIFICATION

NICOLAS BARCOS PE#25673 DATE

CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE AT THE CITY OF LAS VEGAS FOR THIS PROJECT.

DS#XXX-0000

### BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

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1215,859E,503

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

Call before you D g AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S CRIMINAL. Call 811 OR 1-800-642-2444

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

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PROFESSIONAL ENGINEER-STATE OF NEVADA NICOLAS A. BARCOS EXP. 12-31-20 CIVIL No. 25673
10/6/2020

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200

SUMMERLIN

# SUMMERLIN VILLAGE 22
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

## ROADWAY GRADING PLAN
## STA 231+00 TO STA 235+00

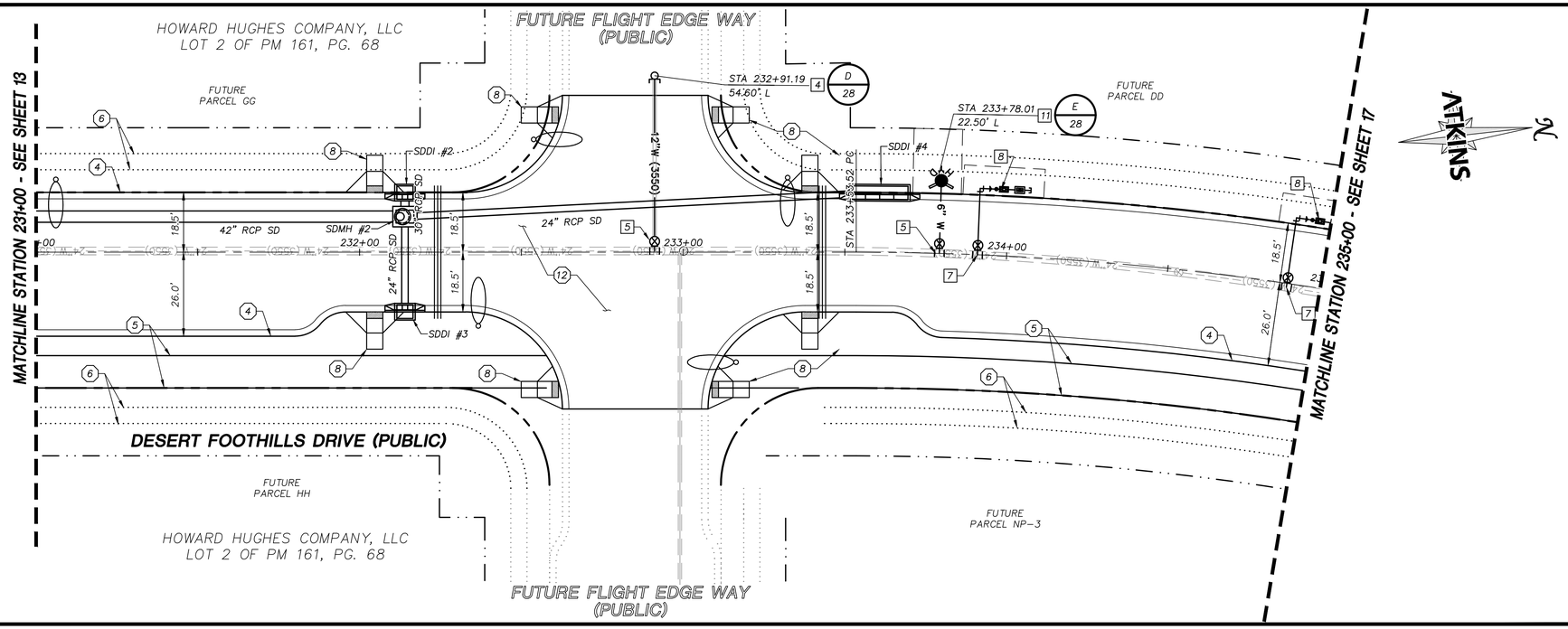
DESIGNED BY: B. MOCHTYAK
DRAWN BY: L. SOSA
CHECKED BY: P. BATES
HORIZ.: 1"=20'
VERT.: 1"=5'

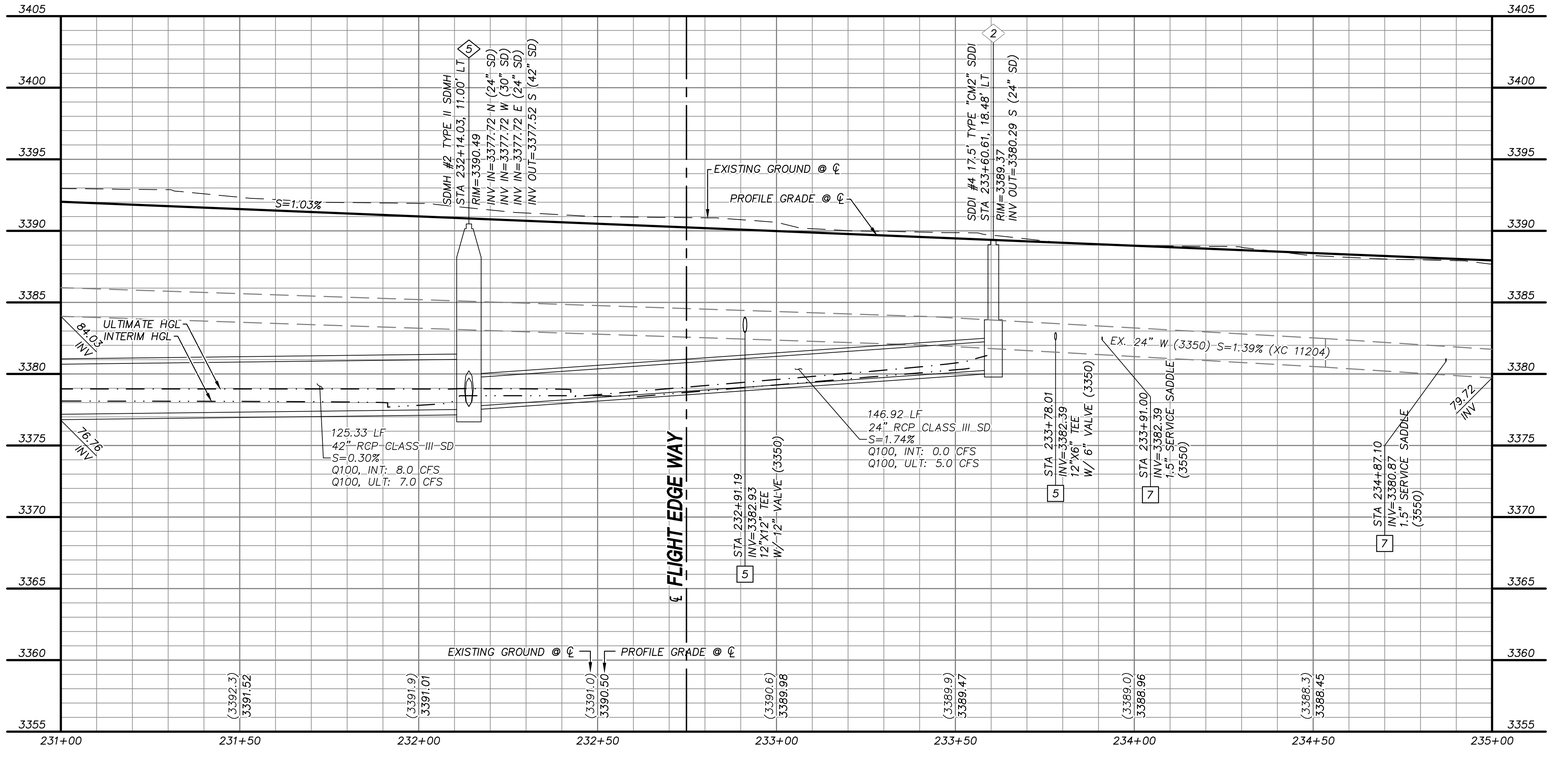
XXXYXXXX
LXX-XXXXX

DATE: OCTOBER, 2020
DRAWING NO. 14/46

JOB NO. 100066774

X:\Projects\SummWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)_Sheets\66774-12-GRAD-G1.dwg LAYOUT: G-2 Oct 15, 2020 - 11:34AM




GRAPHIC SCALE

20 0 10 20 40

HORIZONTAL: 1"=20'

5 0 2.5 5 10

VERTICAL: 1"=5'

**APPROVED FOR CONSTRUCTION**

LAS VEGAS VALLEY WATER DISTRICT
PLANNING AND ENGINEERING SERVICES

PROJECT NO. 0000 FIRST APPROVED DATE: _____

LVVWD APPROVED FIRE FLOW 1500 GPM AT 20 PSI RESIDUAL

**BASIS OF BEARING**

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

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T21S,R59E,S03

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## STORM DRAIN CONSTRUCTION NOTES

1. INSTALL STORM DRAIN. SEE ROADWAY PLAN AND PROFILE SHEETS FOR ADDITIONAL STORM DRAIN NOTES AND INFORMATION.
2. INSTALL TYPE "CM2" DROP INLET PER CCAUSD #412.1 & #421
3. INSTALL NDOT TYPE II DROP INLET PER NDOT R-4.2.1 (SEE SHEET 39)
4. INSTALL TYPE I SD MANHOLE PER CCAUSD #403
5. INSTALL TYPE II SD MANHOLE PER CCAUSD #405.2
6. INSTALL TYPE III SD MANHOLE PER CCAUSD #406
7. INSTALL TYPE "A" DROP INLET PER CCAUSED #411 & #421
8. REMOVE CAP AND CONNECT TO EXISTING STORM DRAIN STUB
9. STUB & PLUG STORM DRAIN FOR FUTURE CONNECTION PER MANUFACTURER'S PLUG, OR APPROVED EQUAL
10. INSTALL RIP-RAP (D50=12", THICKNESS=24")
11. INSTALL TYPE "CM2" DROP INLET PER CCAUSD #412.1 & #421, AND DETAIL C SHEET 39

## SEWER CONSTRUCTION NOTES

1. INSTALL SEWER MANHOLE PER DCSWCS SD-1, AND SD-4
2. INSTALL SEWER MAIN PER DCSWCS SD-17
3. STUB AND CAP SEWER PIPE. PLACE MARKER BALL AND 4"X4" POST, DOUGLAS FIR, OVER END OF PIPE AND INSTALL THRUST BLOCK (1 CUBIC FT. MINIMUM).
4. REMOVE CAP AND CONNECT TO EXISTING SEWER STUB
5. ADJUST EXISTING MANHOLE TO GRADE PER DCSWCS SD-5.
6. PROTECT SEWER AT UTILITY CROSSING PER DCSWCS SD-19

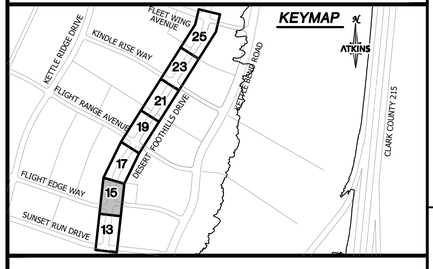
## WATERLINE CONSTRUCTION NOTES

1. INSTALL WATER MAIN PER UDACS PLATES #17 AND PLATE #19
2. INSTALL GATE VALVE PER UDACS PLATES #30 AND #39
3. INSTALL CROSS PER UDACS PLATE #31
4. INSTALL CAP AND 2" MANUAL BLOWOFF ASSEMBLY PER UDACS PLATE #36
5. INSTALL TAPPING SLEEVE TEE W/ VALVE AND LATERAL PER UDACS PLATES #17, #19, #30, #31 AND #39
7. INSTALL 1.5" SERVICE SADDLE PER UDASC PLATE #4
8. INSTALL 1-1/2" IRRIGATION METER WITH 1-1/2 RPPA PER UDASC PLATES #4 AND #8 WITH CURB STOP
9. INSTALL IN-LINE REDUCER PER UDACS PLATE #30
10. REMOVE CAP AND 2" BLOWOFF AND CONNECT TO EXISTING WATERLINE STUB
11. INSTALL FIRE HYDRANT WITH APPURTENANCES (CONCRETE PAD, LATERAL, VALVE, AND TEE) PER UDACS PLATES #30, #31, #39, AND #40

## ROADWAY CONSTRUCTION NOTES

2,3,7,&11 NOT USED

1. SAWCUT AND MATCH EXISTING
4. CONSTRUCT "L" TYPE CURB AND GUTTER PER CCAUSD #216
5. PROPOSED BIKE LANE
6. FUTURE SIDEWALK BY OTHERS
8. CONSTRUCT CURB RAMP, TYPE A, PER NDOT STANDARD PLAN R-5.2.1 (A=B=6.5').
9. CONSTRUCT 0" FLUSH CURB
10. TRANSITION CURB FROM FULL HEIGHT (6") TO FLUSH (0")
12. CONSTRUCT PLANTMIX BITUMINOUS SURFACE OVER TYPE II AGGREGATE BASE PER SOILS REPORT. SEE SHEET 37 FOR TYPICAL PAVEMENT SECTION.
13. INSTALL SCHEDULE 40 PVC IRRIGATION SLEEVES (2-4", 1-6") PER DETAIL ON SHEET 40

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PROFESSIONAL ENGINEER, STATE OF NEVADA
NICOLAS A. PAPROS
EXP. 12-31-20
CIVIL
No. 25673
10/6/2020

| REVISIONS | | | |
|---|---|---|---|
| REV. | DESCRIPTION | BY | DATE | APPROVAL |
| | | | | |

ATKINS
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SUMMERLIN

**SUMMERLIN VILLAGE 22**
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

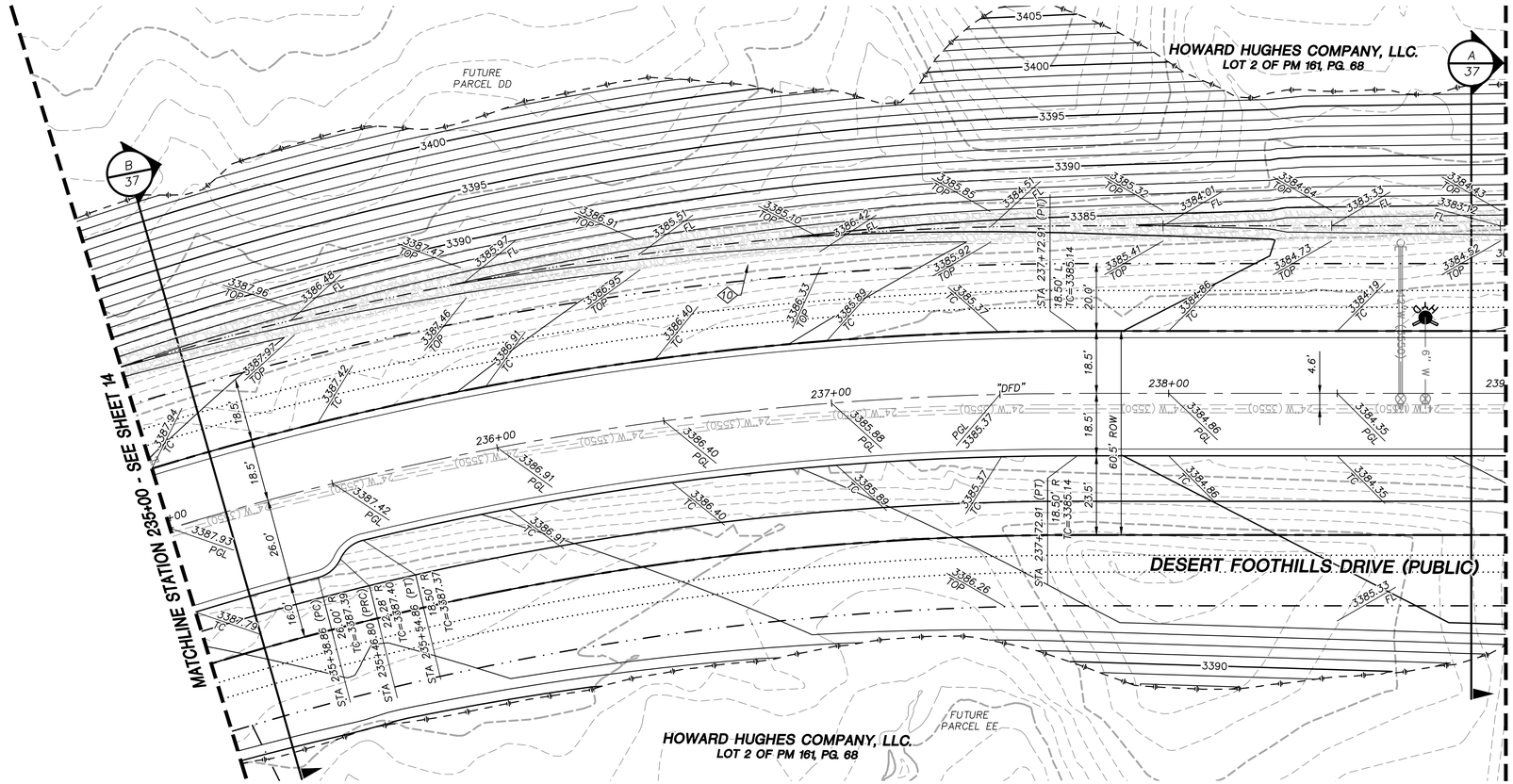
**ROADWAY PLAN AND PROFILE**
**STA 231+00 TO STA 235+00**

DESIGNED BY: B. MCCHTYAK
DRAWN BY: L. SOSA
CHECKED BY: P. BATES
HORIZ.: 1"=20'
VERT.: 1"=5'

XXVVXXX
LXX-XXXXX
DATE: OCTOBER, 2020
DRAWING NO. 15/46

JOB NO. 100066774

X:\Projects\SummWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)\...Sheets\66774-13-PLAN-P1.dwg LAYOUT: ROADWAY PLAN AND PROFILE 2 Oct 15, 2020 - 10:32AM

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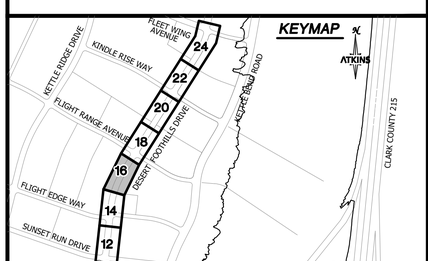
| REVISIONS | | | | |
|---|---|---|---|---|
| REV. | DESCRIPTION | BY | DATE | APPROVAL |




GRAPHIC SCALE
20 0 10 20 40
HORIZONTAL: 1"=20'

### GRADING PLAN CERTIFICATION

NICOLAS BARCOS PE#25673 DATE

CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE AT THE CITY OF LAS VEGAS FOR THIS PROJECT.

DS#XXX-0000

### BASIS OF BEARING

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T21S,R59E,S03

FAST Call before you UnderGround 1-702-432-5300 NEVADA'S ONE NATIONAL SYSTEM OF TRANSMISSION

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NICOLAS A. BARCOS EXP. 12-31-20 CIVIL No. 25673 PROFESSIONAL ENGINEER STATE OF NEVADA
10/6/2020

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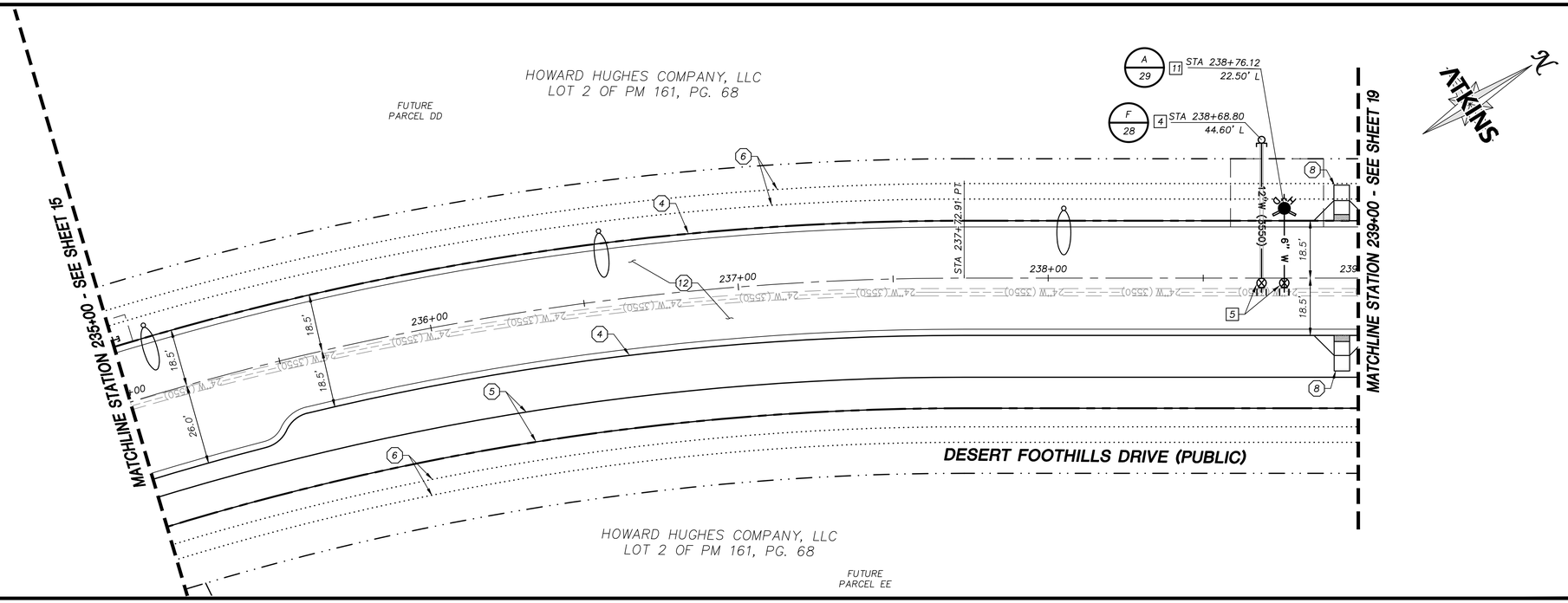
SUMMERLIN

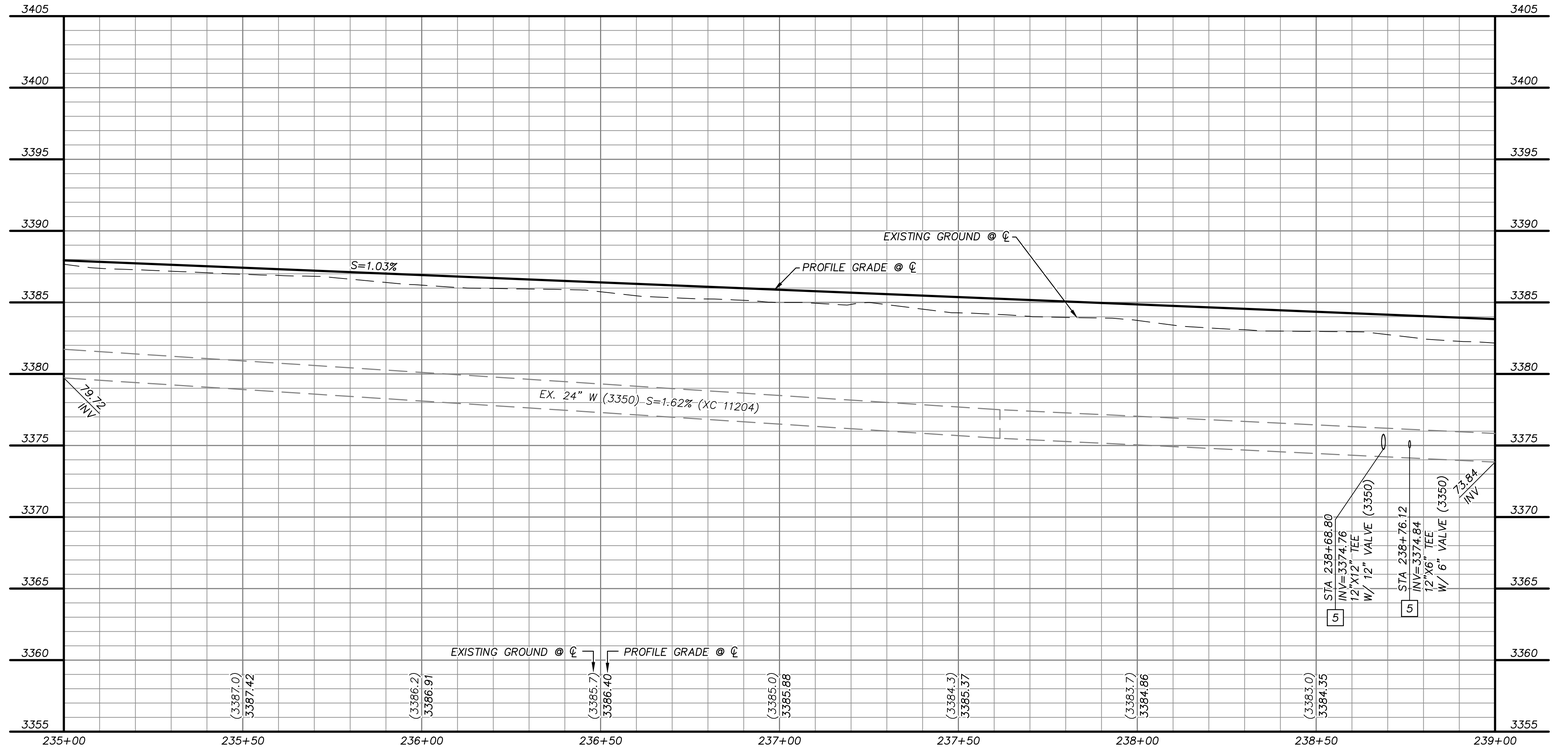
# SUMMERLIN VILLAGE 22
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

## ROADWAY GRADING PLAN
## STA 235+00 TO STA 239+00

DESIGNED BY: B. MOCHTYAK
DRAWN BY: L. SOSA
CHECKED BY: P. BATES
HORIZ.: 1"=20'
VERT.: 1"=5'
XXXVXXXX
LXX-XXXXX
DATE: OCTOBER, 2020
DRAWING NO. 16/46
JOB NO. 100066774

X:\Projects\SummWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)_Sheets\66774-12-GRAD-01.dwg LAYOUT: G-3 Oct 15, 2020 - 10:32AM




GRAPHIC SCALE

20 0 10 20 40

HORIZONTAL: 1"=20'

5 0 2.5 5 10

VERTICAL: 1"=5'

**APPROVED FOR CONSTRUCTION**

LAS VEGAS VALLEY WATER DISTRICT
PLANNING AND ENGINEERING SERVICES

PROJECT NO. 0000 FIRST APPROVED DATE: _____

LVVWD APPROVED FIRE FLOW 1500 GPM AT 20 PSI RESIDUAL

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4. REMOVE CAP AND CONNECT TO EXISTING SEWER STUB
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6. PROTECT SEWER AT UTILITY CROSSING PER DCSWCS SD-19

## WATERLINE CONSTRUCTION NOTES

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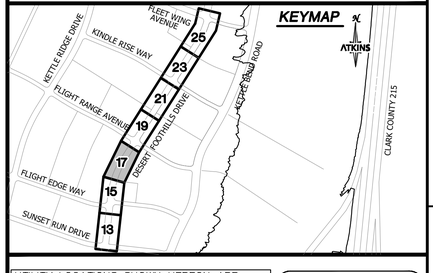
6. FUTURE SIDEWALK BY OTHERS
8. CONSTRUCT CURB RAMP, TYPE A, PER NDOT STANDARD PLAN R-5.2.1 (A=B=6.5').
9. CONSTRUCT 0" FLUSH CURB
10. TRANSITION CURB FROM FULL HEIGHT (6") TO FLUSH (0")
12. CONSTRUCT PLANTMIX BITUMINOUS SURFACE OVER TYPE II AGGREGATE BASE PER SOILS REPORT. SEE SHEET 37 FOR TYPICAL PAVEMENT SECTION.
13. INSTALL SCHEDULE 40 PVC IRRIGATION SLEEVES (2-4", 1-6") PER DETAIL ON SHEET 40

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PROFESSIONAL ENGINEER - STATE OF NEVADA
NICHOLAS A. BADOSA
EXP. 12-31-20
CIVIL
No. 25673
10/6/2020

| REVISIONS | | | |
|---|---|---|---|
| REV. | DESCRIPTION | DATE | APPROVAL |

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200

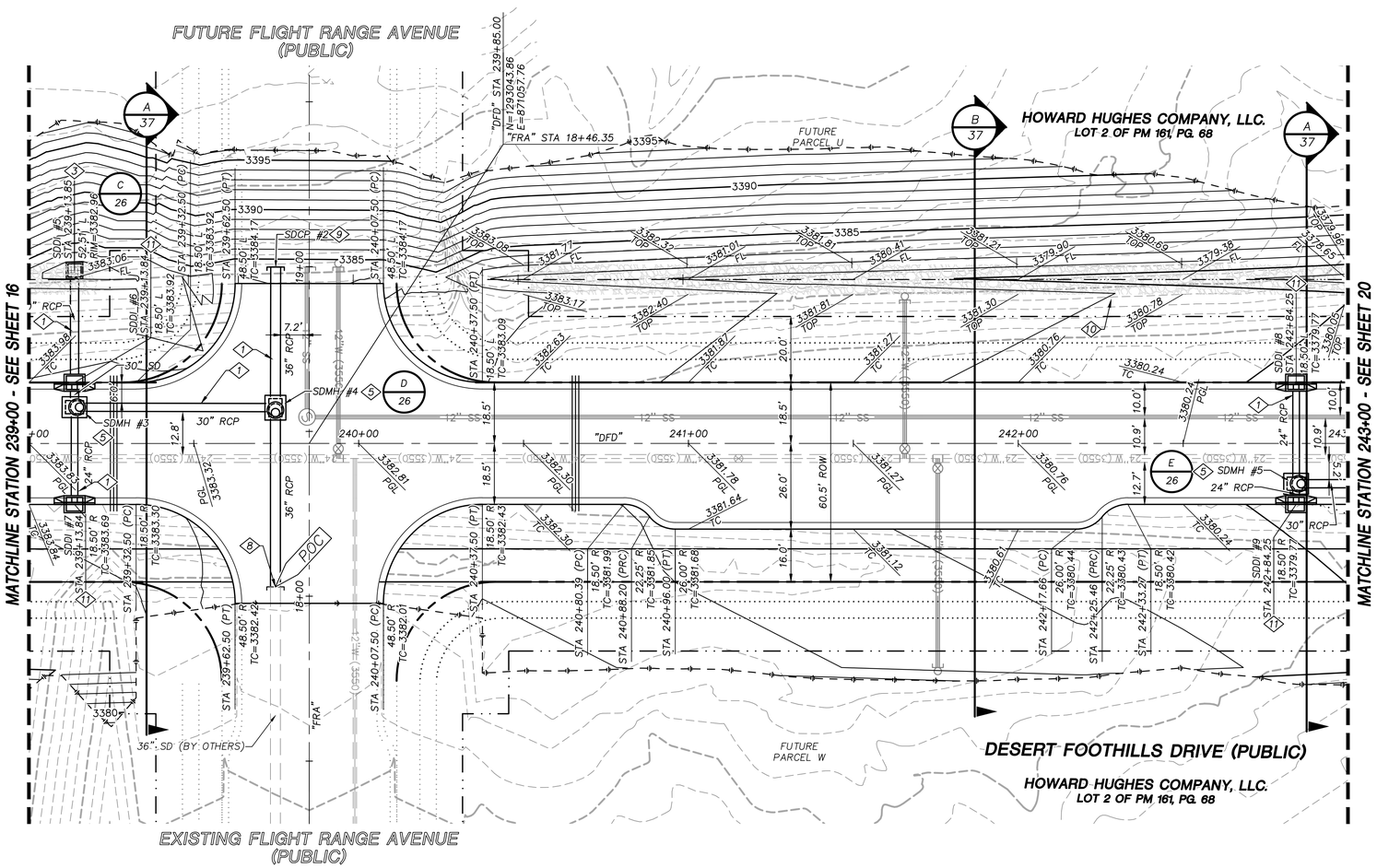
SUMMERLIN

**SUMMERLIN VILLAGE 22**
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

**ROADWAY PLAN AND PROFILE**
**STA 235+00 TO STA 239+00**

| | |
|---|---|
| DESIGNED BY: | B. WOHTYAK |
| DRAWN BY: | L. SOSA |
| CHECKED BY: | P. BATES |
| HORIZ.: | 1"=20' |
| VERT.: | 1"=5' |
| XXXVXXXX LXX-XXXXX | |
| DATE: | OCTOBER, 2020 |
| DRAWING NO. | 17/46 |
| JOB NO. | 100066774 |

X:\Projects\SummWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)_Sheets\66774-13-PLAN-FP1.dwg LAYOUT: ROADWAY PLAN AND PROFILE 3 Oct 15, 2020 - 10:32AM




GRAPHIC SCALE
20 0 10 20 40
HORIZONTAL: 1"=20'

## GRADING PLAN CERTIFICATION

NICOLAS BARCOS PE#25673 DATE

CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE AT THE CITY OF LAS VEGAS FOR THIS PROJECT.

DS#XXX-0000

## BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

## BENCHMARK

CITY OF LAS VEGAS BENCHMARK: D368 (REVISED 2008)
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FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
T21S,R59E,S03

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

Call before you D g AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY. Call 811 or 1-800-642-2444

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

## STORM DRAIN CONSTRUCTION NOTES

1. INSTALL STORM DRAIN. SEE ROADWAY PLAN AND PROFILE SHEETS FOR ADDITIONAL STORM DRAIN NOTES AND INFORMATION.
2. INSTALL TYPE "CM2" DROP INLET PER CCAUSD #412.1 & #421
3. INSTALL NDOT TYPE II DROP INLET PER NDOT R-4.2.1 (SEE SHEET 39)
4. INSTALL TYPE I SD MANHOLE PER CCAUSD #403
5. INSTALL TYPE II SD MANHOLE PER CCAUSD #405.2
6. INSTALL TYPE III SD MANHOLE PER CCAUSD #406
7. INSTALL TYPE "A" DROP INLET PER CCAUSED #411 & #421
8. REMOVE CAP AND CONNECT TO EXISTING STORM DRAIN STUB
9. STUB & PLUG STORM DRAIN FOR FUTURE CONNECTION PER MANUFACTURER'S PLUG, OR APPROVED EQUAL
10. INSTALL RIP-RAP (D50=12", THICKNESS=24")
11. INSTALL TYPE "CM2" DROP INLET PER CCAUSD #412.1 & #421, AND DETAIL C SHEET 39

REVISIONS

| REV. | DESCRIPTION | BY | DATE | APPROVAL |
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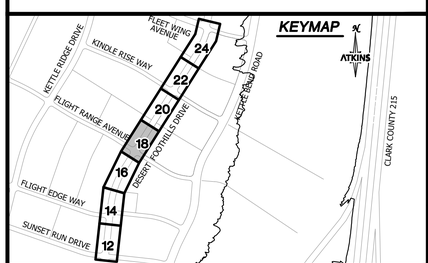
| | | | | |




ATKINS
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Telephone: +1.702.263.7275
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SUMMERLIN

SUMMERLIN VILLAGE 22
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

ROADWAY GRADING PLAN
STA 239+00 TO STA 243+00

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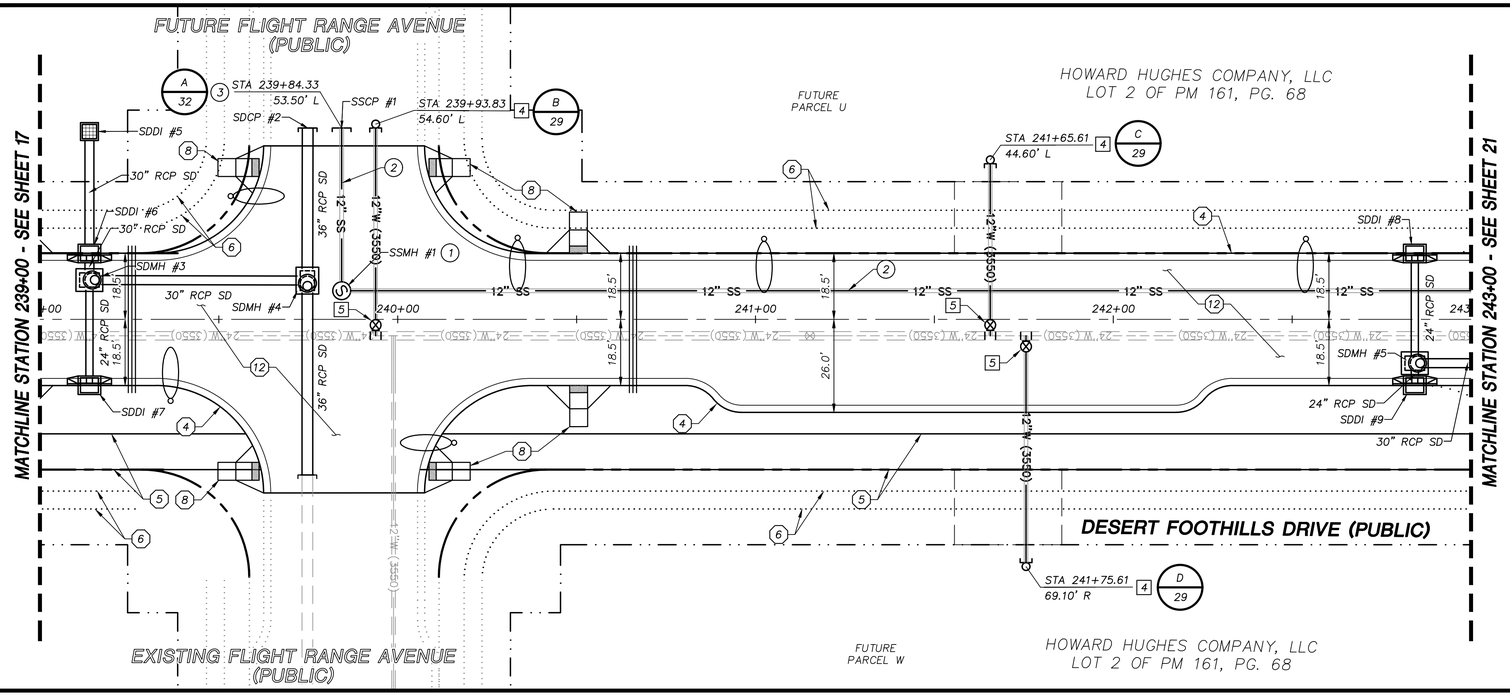
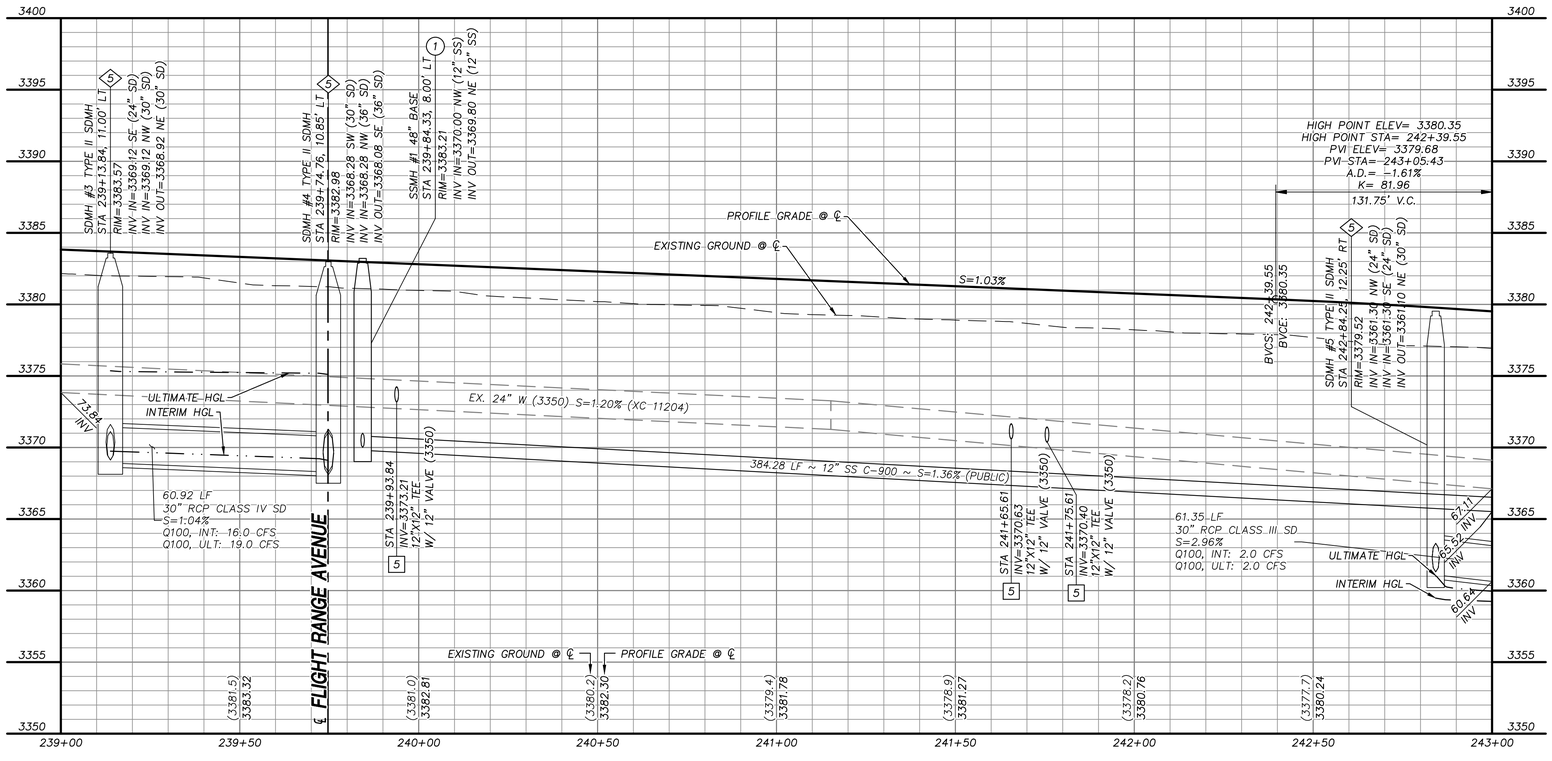
PROFESSIONAL ENGINEER - STATE OF NEVADA - NICOLAS A. BARCOS - EXP. 12-31-20 - CIVIL - No. 25673
10/6/2020

| | |
|---|---|
| XXXVXXXX | |
| LXX-XXXXX | |
| DATE: | OCTOBER, 2020 |
| DRAWING NO. | 18/46 |
| JOB NO. | 100066774 |

DESIGNED BY: B. MOCHTYAK
DRAWN BY: L. SOSA
CHECKED BY: P. BATES
HORIZ.: 1"=20'
VERT.: 1"=5'

K:\Projects\SummWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)_Sheets\66774-12-GRAD-G1.dwg LAYOUT: G-4 Oct 15, 2020 - 10:32AM

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4. REMOVE CAP AND CONNECT TO EXISTING SEWER STUB
5. ADJUST EXISTING MANHOLE TO GRADE PER DCSWCS SD-5.
6. PROTECT SEWER AT UTILITY CROSSING PER DCSWCS SD-19

## WATERLINE CONSTRUCTION NOTES

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2. INSTALL GATE VALVE PER UDACS PLATES #30 AND #39
3. INSTALL CROSS PER UDACS PLATE #31
4. INSTALL CAP AND 2" MANUAL BLOWOFF ASSEMBLY PER UDACS PLATE #36
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## ROADWAY CONSTRUCTION NOTES

2,3,7,&11 NOT USED

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4. CONSTRUCT "L" TYPE CURB AND GUTTER PER CCAUSD #216
5. PROPOSED BIKE LANE
6. FUTURE SIDEWALK BY OTHERS
8. CONSTRUCT CURB RAMP, TYPE A, PER NDOT STANDARD PLAN R-5.2.1 (A=B=6.5').
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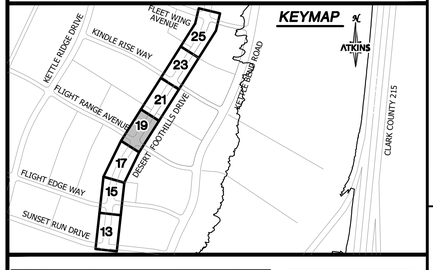


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NICHOLAS A. BARCUS — PROFESSIONAL ENGINEER — STATE OF NEVADA — EXP. 12-31-20 — CIVIL — No. 25673

10/6/2020

GRAPHIC SCALE
20 0 10 20 40
HORIZONTAL: 1"=20'
5 0 2.5 5 10
VERTICAL: 1"=5'

**APPROVED FOR CONSTRUCTION**

LAS VEGAS VALLEY WATER DISTRICT
PLANNING AND ENGINEERING SERVICES

PROJECT NO. 0000 FIRST APPROVED DATE: _____

LVVWD APPROVED FIRE FLOW 1500 GPM AT 20 PSI RESIDUAL

**BASIS OF BEARING**

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

**BENCHMARK**

CITY OF LAS VEGAS BENCHMARK: D368
(REVISED 2008)
NAVD88 ELEVATION: 989.574 METERS
(3,246.63 FEET)
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T21S,R59E,S03

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

Call before you D g — AVOID OUTAGE DISTRUPTION UTILITY LINES ITS CORTLY. Call 811 OR 1-800-642-2444

AVOID HITTING OVERHEAD POWER LINES ITS CORTLY. CALL BEFORE YOU DIG OVERHEAD 1-702-227-2929

| REV. | DESCRIPTION | BY | DATE | APPROVAL |
|---|---|---|---|---|

REVISIONS

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200

SUMMERLIN

**SUMMERLIN VILLAGE 22**
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

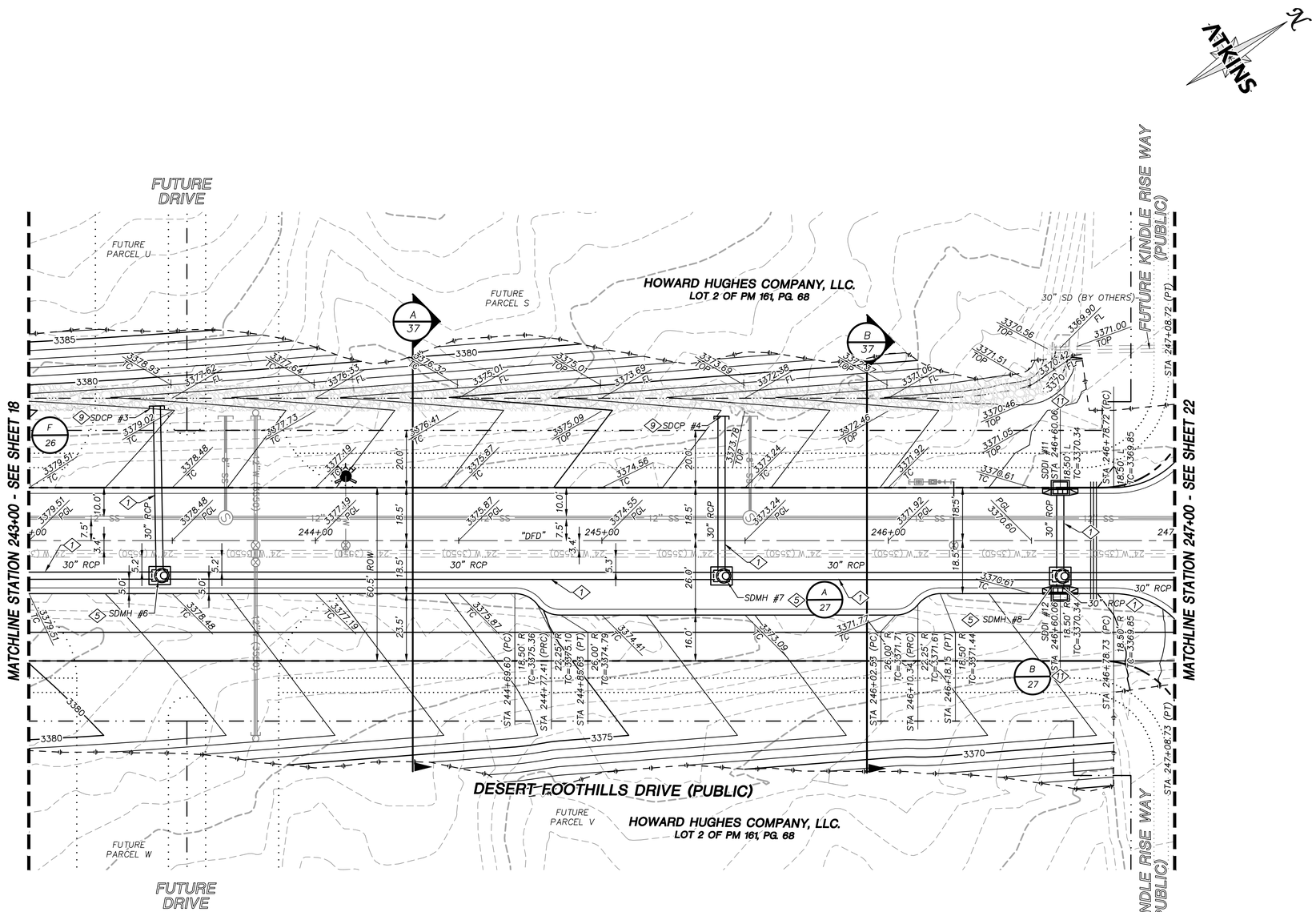
**ROADWAY PLAN AND PROFILE**
**STA 239+00 TO STA 243+00**

DESIGNED BY: B. MOCHTYAK
DRAWN BY: L. SOSA
CHECKED BY: P. BATES
HORIZ.: 1"=20'
VERT.: 1"=5'

XXXVXXXX
LXX-XXXXX
DATE: OCTOBER, 2020
DRAWING NO. 19/46

JOB NO. 100066774

X:\Projects\SummWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)\...\Sheets\66774-13-PLAN-FP1.dwg LAYOUT: ROADWAY PLAN AND PROFILE # Oct 15, 2020 - 10:33AM




GRAPHIC SCALE
20 0 10 20 40
HORIZONTAL: 1"=20'

## GRADING PLAN CERTIFICATION

NICOLAS BARCOS PE#25673 DATE

CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE AT THE CITY OF LAS VEGAS FOR THIS PROJECT.

DS#XXX-0000

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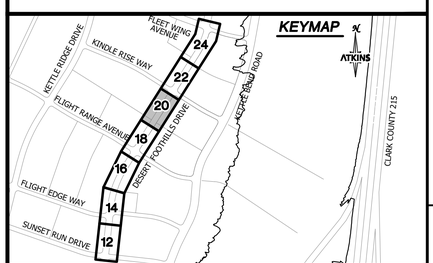


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PROFESSIONAL ENGINEER - STATE OF NEVADA - NICOLAS A. BARCOS - EXP. 12-31-20 - CIVIL - No. 25673
10/6/2020

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ROADWAY GRADING PLAN
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DRAWN BY: L. SOSA
CHECKED BY: P. BATES
HORIZ.: 1"=20'
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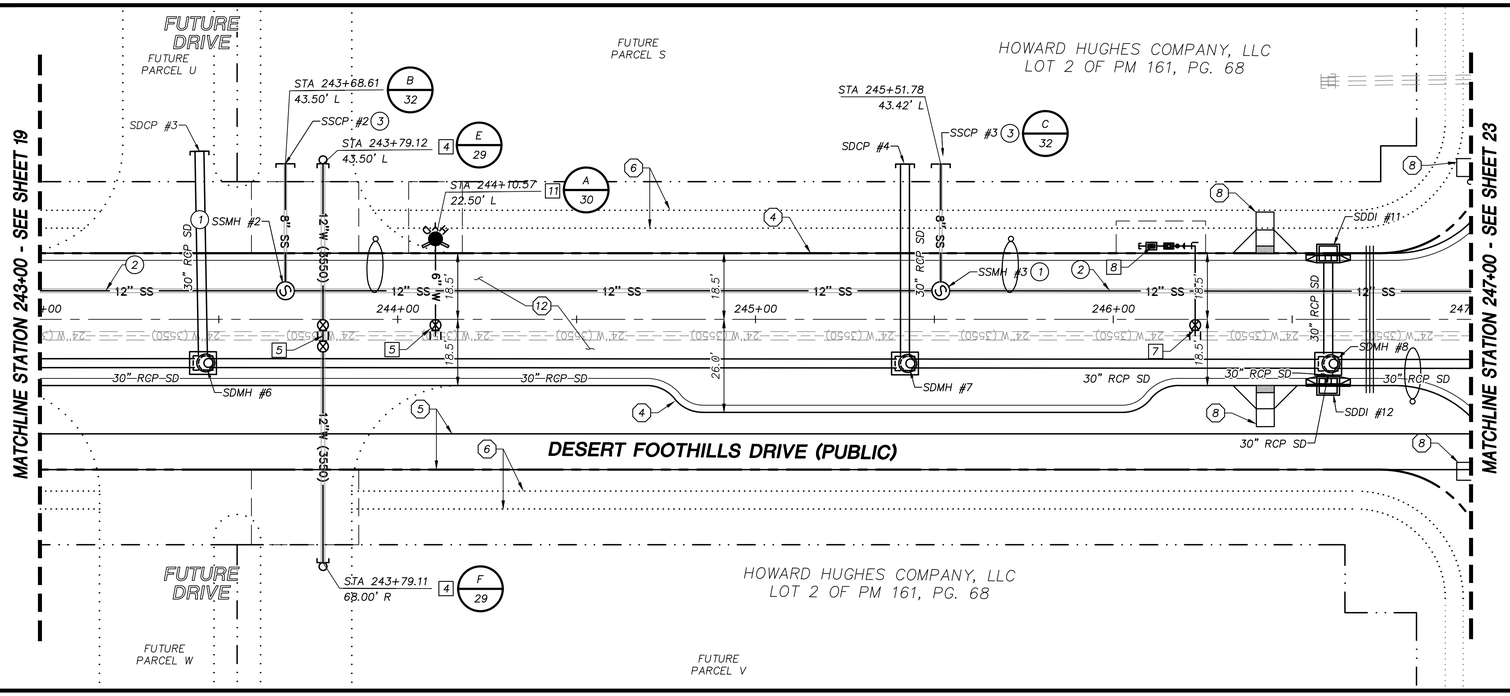


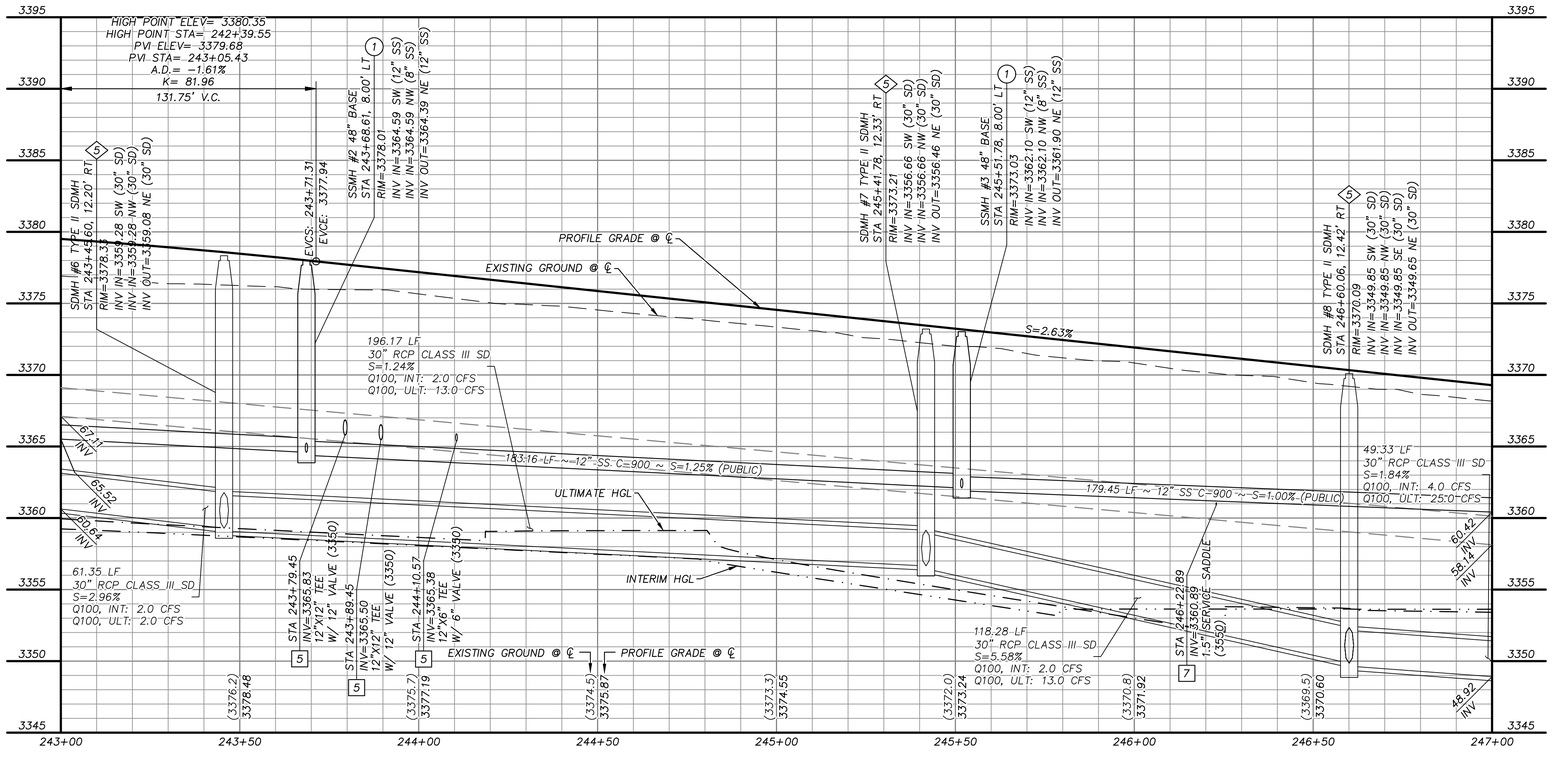


GRAPHIC SCALE

HORIZONTAL: 1"=20'

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**APPROVED FOR CONSTRUCTION**

LAS VEGAS VALLEY WATER DISTRICT
PLANNING AND ENGINEERING SERVICES

PROJECT NO. 0000 FIRST APPROVED DATE: _____

LVVWD APPROVED FIRE FLOW 1500 GPM AT 20 PSI RESIDUAL

**BASIS OF BEARING**

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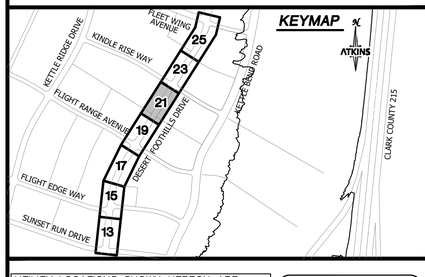


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NEVADA PROFESSIONAL ENGINEER - STATE OF NEVADA - NICOLAS BARGAS - EXP. 12-31-20 - CIVIL - No. 25873

10/6/2020

| REVISIONS | | | |
|---|---|---|---|
| REV. | DESCRIPTION | DATE | APPROVAL |
| | | | |

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200

SUMMERLIN

**SUMMERLIN VILLAGE 22**
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

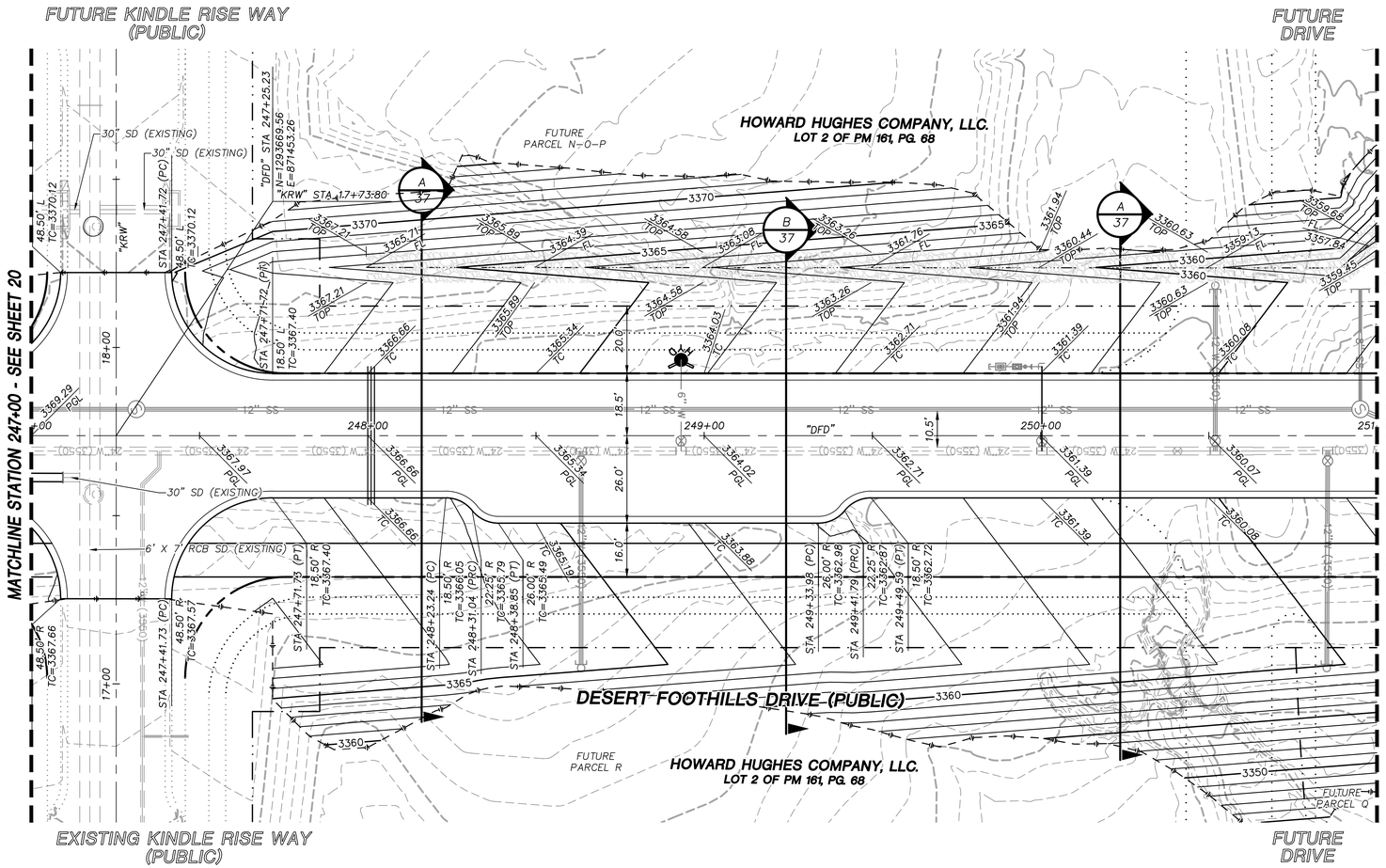
**ROADWAY PLAN AND PROFILE**
**STA 243+00 TO STA 247+00**

DESIGNED BY: B. WOCHTYAK
DRAWN BY: L. SOSA
CHECKED BY: P. BATES
HORIZ.: 1"=20'
VERT.: 1"=5'

XXXVXXXX
LXX-YXXXXX
DATE: OCTOBER, 2020
DRAWING NO. 21/46

JOB NO. 100066774

K:\Projects\SummWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)\...\Sheets\66774-13-PLAN-PF.dwg LAYOUT: ROADWAY PLAN AND PROFILE 5 Oct 15, 2020 - 10:33AM




## STORM DRAIN CONSTRUCTION NOTES

1. INSTALL STORM DRAIN. SEE ROADWAY PLAN AND PROFILE SHEETS FOR ADDITIONAL STORM DRAIN NOTES AND INFORMATION.
2. INSTALL TYPE "CM2" DROP INLET PER CCAUSD #412.1 & #421
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9. STUB & PLUG STORM DRAIN FOR FUTURE CONNECTION PER MANUFACTURER'S PLUG, OR APPROVED EQUAL
10. INSTALL RIP-RAP (D50=12", THICKNESS=24")

GRAPHIC SCALE
20 0 10 20 40
HORIZONTAL: 1"=20'

### GRADING PLAN CERTIFICATION

NICOLAS BARCOS PE#25673 DATE

CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE AT THE CITY OF LAS VEGAS FOR THIS PROJECT.

DS#XXX-0000

### BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

### BENCHMARK

CITY OF LAS VEGAS BENCHMARK: D368 (REVISED 2008)
NAVD88 ELEVATION: 989.574 METERS (3,246.63 FEET)
FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
T21S,R59E,S03

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

Call before you D g AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY. Call 811 or 1-800-642-2444

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

REVISIONS

| REV. | DESCRIPTION | BY | DATE | APPROVAL |
|---|---|---|---|---|

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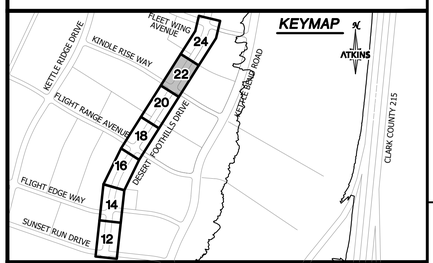
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

ROADWAY GRADING PLAN
STA 247+00 TO STA 251+00

KEYMAP
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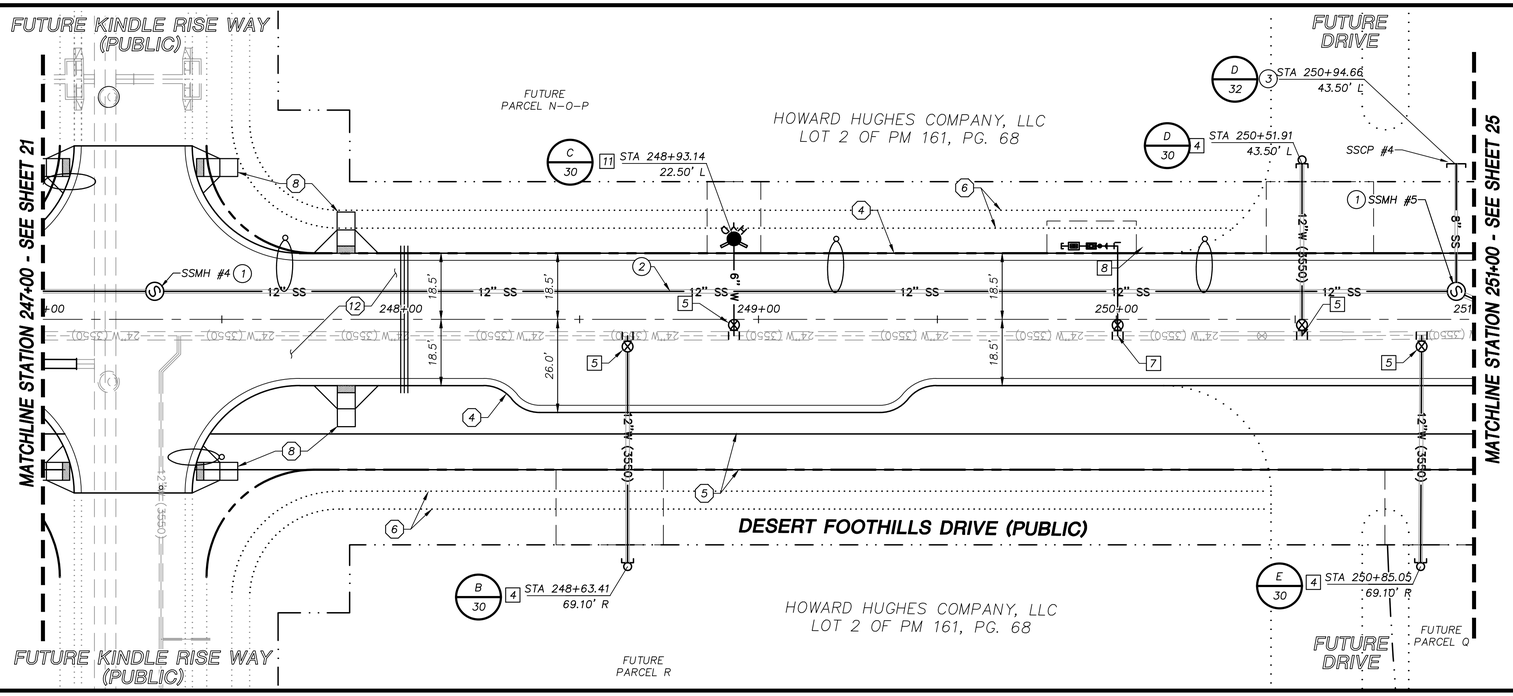
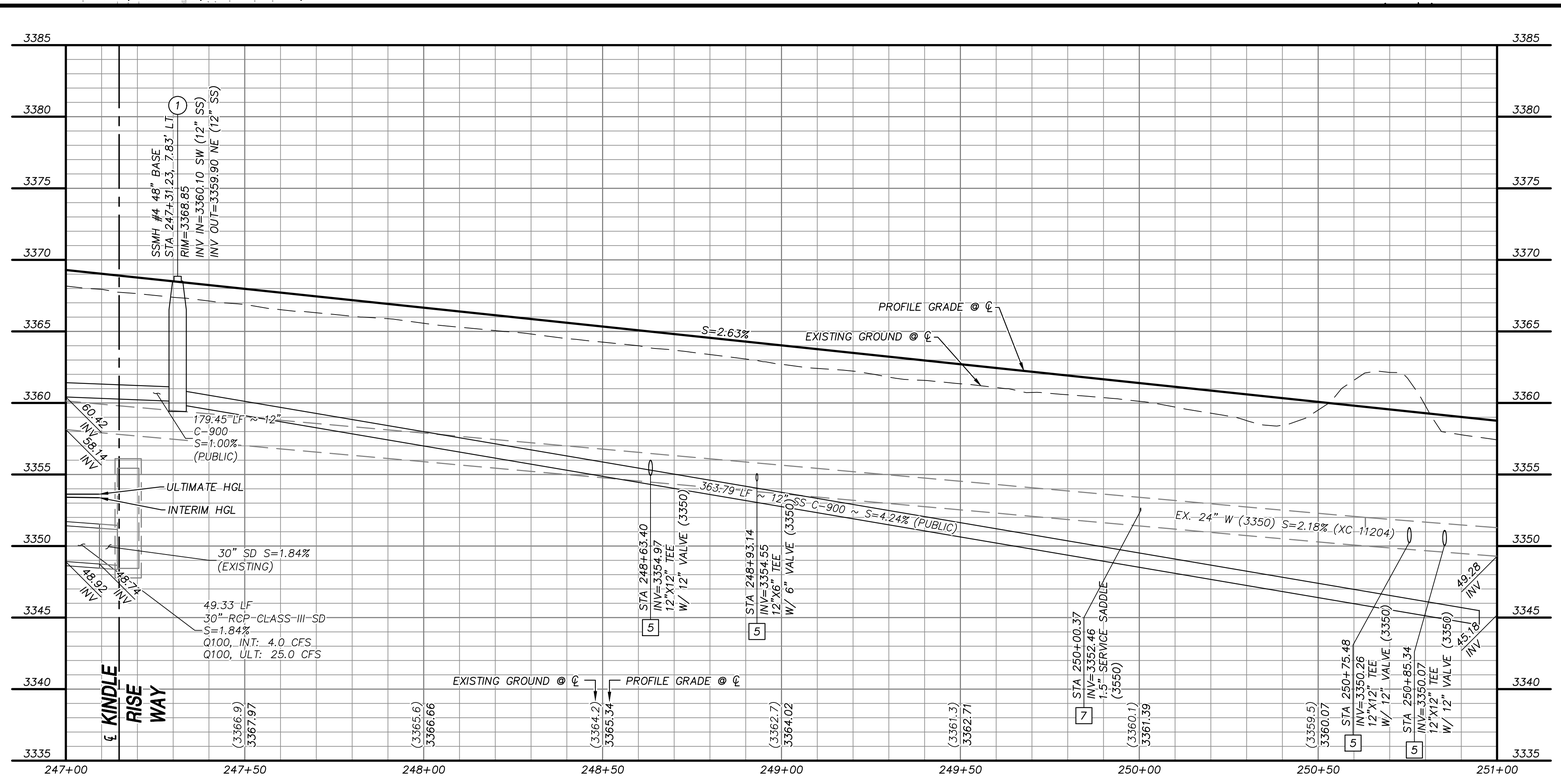
PROFESSIONAL ENGINEER - STATE OF NEVADA - NICOLAS A. BARCOS - EXP. 12-31-20 - CIVIL - No. 25673
10/6/2020

DESIGNED BY: B. WOCHTYAK
DRAWN BY: L. SOSA
CHECKED BY: P. BATES
HORIZ.: 1"=20'
VERT.: 1"=5'
XXXVXXXX
LXX-YXXXX
DATE: OCTOBER, 2020
DRAWING NO. 22/46
JOB NO. 100066774

X:\Projects\SummitWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)_Sheets\66774-12-GRAD-G1.dwg LAYOUT: G-6 Oct 15, 2020 - 10:34AM




GRAPHIC SCALE

HORIZONTAL: 1"=20'

VERTICAL: 1"=5'

**APPROVED FOR CONSTRUCTION**

LAS VEGAS VALLEY WATER DISTRICT
PLANNING AND ENGINEERING SERVICES

PROJECT NO. 0000 FIRST APPROVED DATE: _____

LVVWD APPROVED FIRE FLOW 1500 GPM AT 20 PSI RESIDUAL

## BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

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2. INSTALL SEWER MAIN PER DCSWCS SD-17
3. STUB AND CAP SEWER PIPE. PLACE MARKER BALL AND 4"X4" POST, DOUGLAS FIR, OVER END OF PIPE AND INSTALL THRUST BLOCK (1 CUBIC FT. MINIMUM).
4. REMOVE CAP AND CONNECT TO EXISTING SEWER STUB
5. ADJUST EXISTING MANHOLE TO GRADE PER DCSWCS SD-5.
6. PROTECT SEWER AT UTILITY CROSSING PER DCSWCS SD-19

## WATERLINE CONSTRUCTION NOTES

1. INSTALL WATER MAIN PER UDACS PLATES #17 AND PLATE #19
2. INSTALL GATE VALVE PER UDACS PLATES #30 AND #39
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5. INSTALL TAPPING SLEEVE TEE W/ VALVE AND LATERAL PER UDACS PLATES #17, #19, #30, #31 AND #39
7. INSTALL 1.5" SERVICE SADDLE PER UDASC PLATE #4
8. INSTALL 1-1/2" IRRIGATION METER WITH 1-1/2 RPPA PER UDASC PLATES #4 AND #8 WITH CURB STOP
9. INSTALL IN-LINE REDUCER PER UDACS PLATE #30
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11. INSTALL FIRE HYDRANT WITH APPURTENANCES (CONCRETE PAD, LATERAL, VALVE, AND TEE) PER UDACS PLATES #30, #31, #39, AND #40

## ROADWAY CONSTRUCTION NOTES 2,3,7,&11 NOT USED

1. SAWCUT AND MATCH EXISTING
4. CONSTRUCT "L" TYPE CURB AND GUTTER PER CCAUSD #216
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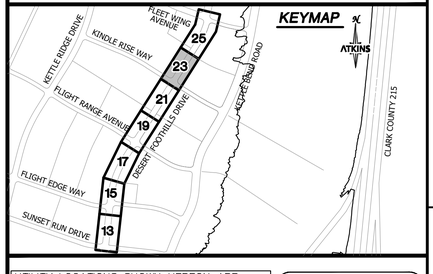
9. CONSTRUCT 0" FLUSH CURB
10. TRANSITION CURB FROM FULL HEIGHT (6") TO FLUSH (0")
12. CONSTRUCT PLANTMIX BITUMINOUS SURFACE OVER TYPE II AGGREGATE BASE PER SOILS REPORT. SEE SHEET 37 FOR TYPICAL PAVEMENT SECTION.
13. INSTALL SCHEDULE 40 PVC IRRIGATION SLEEVES (2-4", 1-6") PER DETAIL ON SHEET 40

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NICHOLAS A. BADDOUR EXP. 12-31-20 CIVIL No. 25673 PROFESSIONAL ENGINEER - STATE OF NEVADA

10/6/2020

| REVISIONS | | | |
|---|---|---|---|
| REV. | DESCRIPTION | BY | DATE | APPROVAL |

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200

SUMMERLIN

**SUMMERLIN VILLAGE 22**
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SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

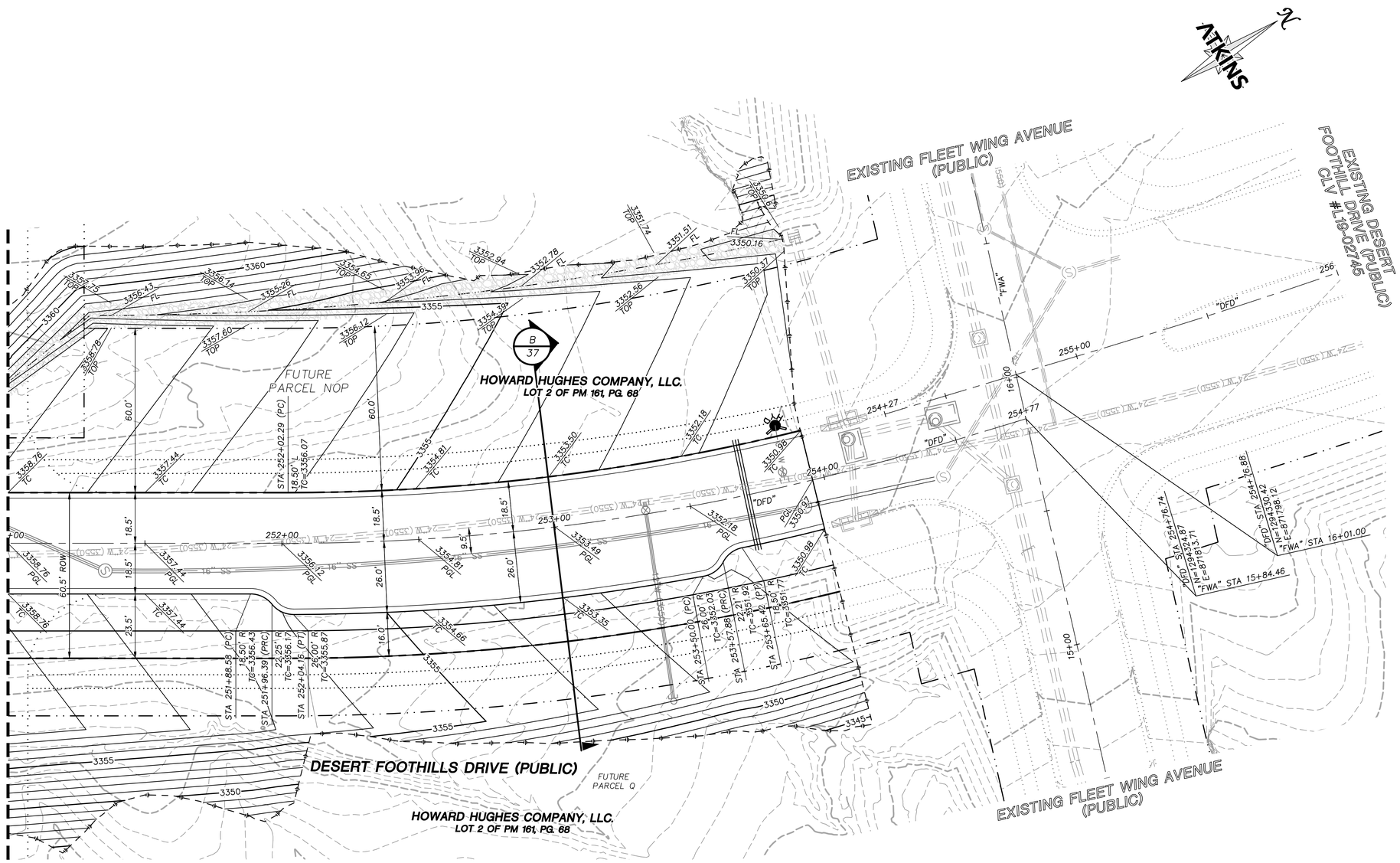
**ROADWAY PLAN AND PROFILE**
**STA 247+00 TO STA 251+00**

DESIGNED BY: B. WOCHTIAK
DRAWN BY: L. SOSA
CHECKED BY: P. BATES
HORIZ.: 1"=20'
VERT.: 1"=5'

XXXVXXXX
LXX-XXXXX
DATE: OCTOBER, 2020
DRAWING NO. 23/46

JOB NO. 100066774

X:\Projects\SummWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)\...\Sheets\66774-13-PLAN-P1.dwg LAYOUT: ROADWAY PLAN AND PROFILE 6 Oct 15, 2020 - 10:34AM




GRAPHIC SCALE

20 0 10 20 40

HORIZONTAL: 1"=20'

## GRADING PLAN CERTIFICATION

NICOLAS BARCOS PE#25673 DATE

CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE AT THE CITY OF LAS VEGAS FOR THIS PROJECT.

DS#XXX-0000

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REVISIONS

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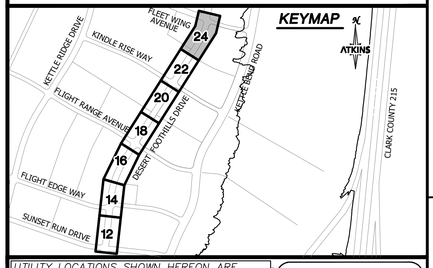


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PROFESSIONAL ENGINEER-STATE OF NEVADA NICOLAS A. BARCOS EXP. 12-31-20 CIVIL No. 25673 10/6/2020

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Fax: +1.702.263.7200

SUMMERLIN

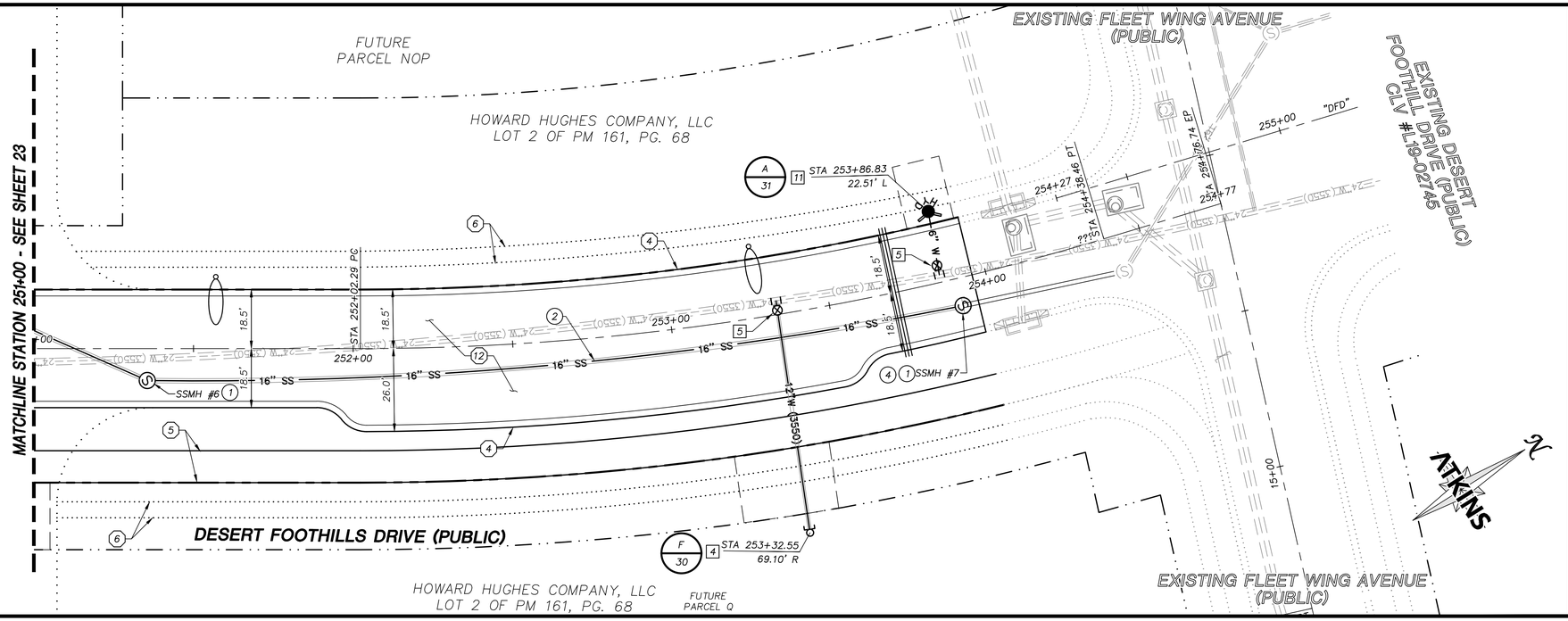
# SUMMERLIN VILLAGE 22

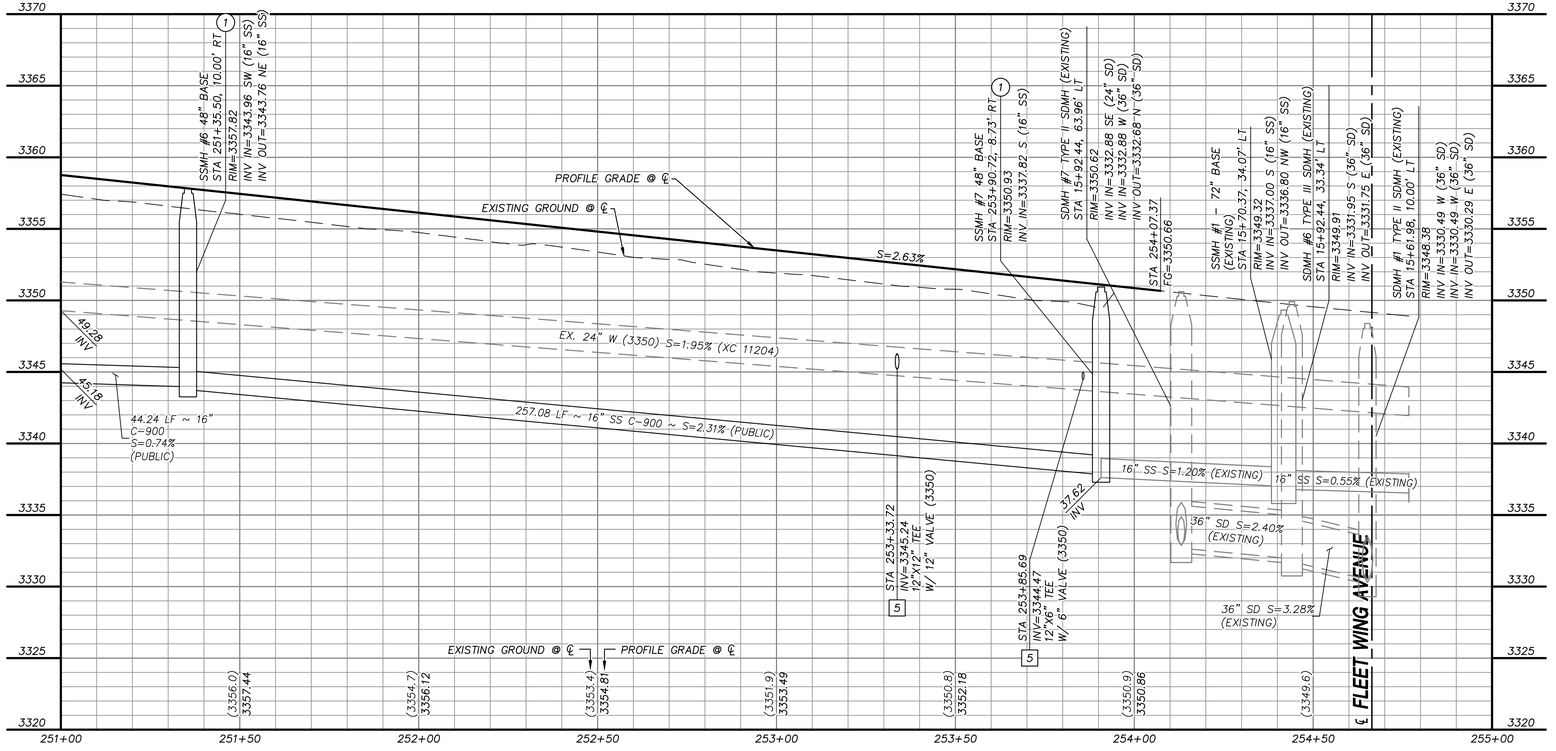
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

## ROADWAY GRADING PLAN STA 251+00 TO END

| | |
|---|---|
| DESIGNED BY: | N. BARCOS |
| DRAWN BY: | L. MAMACLAY |
| CHECKED BY: | P. BATES |
| HORIZ.: | 1"=20' |
| VERT.: | 1"=5' |
| XX.XXXXXXX. LXX-XXXXX. | |
| DATE | OCTOBER, 2020 |
| DRAWING NO. | 24/46 |
| JOB NO. | 100066774 |

X:\Projects\SummitWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)_Sheets\66774-12-GRAD-61.dwg LAYOUT: G-7 Oct 15, 2020 - 10:34AM

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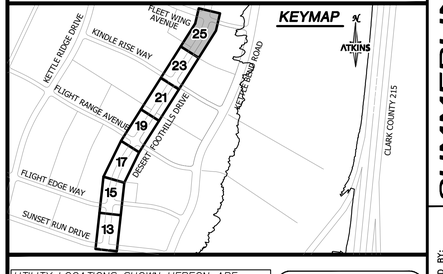


GRAPHIC SCALE
20 0 10 20 40
HORIZONTAL: 1"=20'
5 0 2.5 5 10
VERTICAL: 1"=5'

**APPROVED FOR CONSTRUCTION**

LAS VEGAS VALLEY WATER DISTRICT
PLANNING AND ENGINEERING SERVICES

PROJECT NO. 0000 FIRST APPROVED DATE: _____

LVVWD APPROVED FIRE FLOW 1500 GPM AT 20 PSI RESIDUAL

**BASIS OF BEARING**

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PROFESSIONAL ENGINEER - STATE OF NEVADA - NICHOLAS A. BARCUS - EXP. 12-31-20 - CIVIL - No. 25673 - PROFESSIONAL

10/6/2020

| REVISIONS | | | | |
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SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

**ROADWAY PLAN AND PROFILE**
**STA 251+00 TO END**

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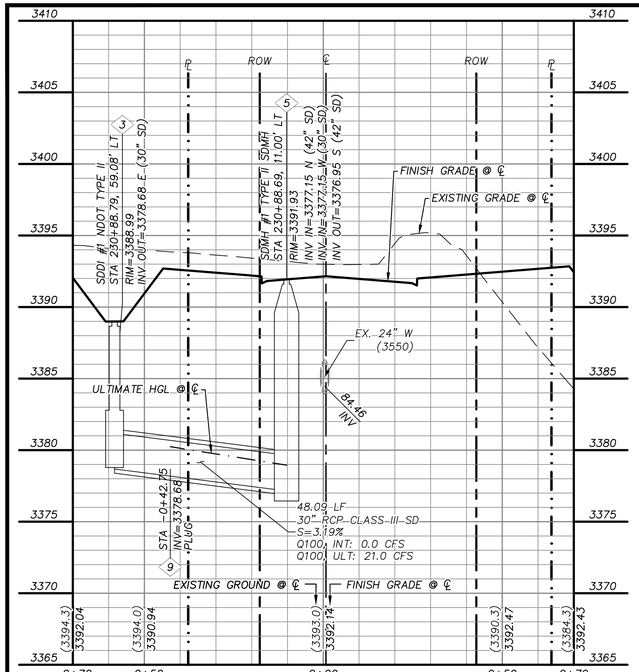
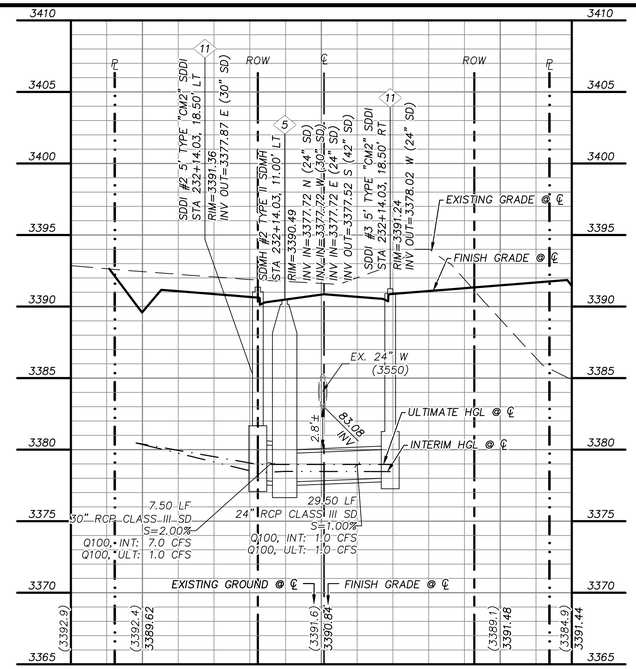



## STORM DRAIN LATERAL 1

"DFD" STA. 230+88.69 SEE SHEET 12

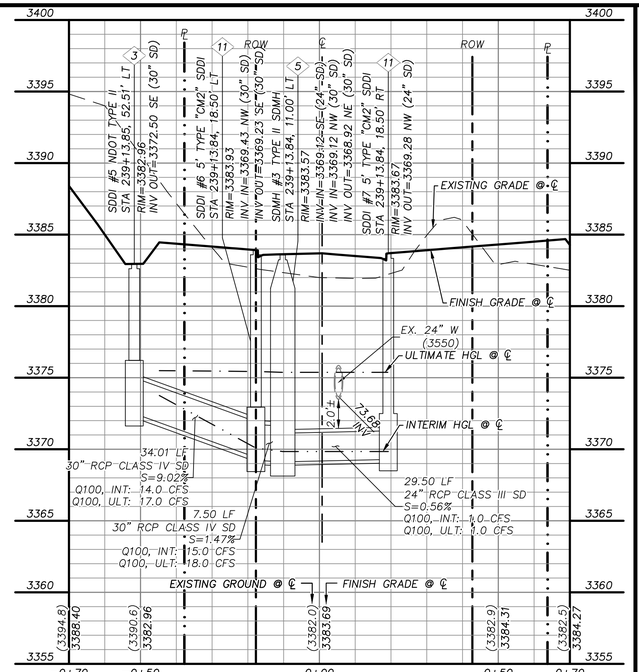
A 26




## STORM DRAIN LATERAL 2

"DFD" STA. 232+28.90 SEE SHEET 14

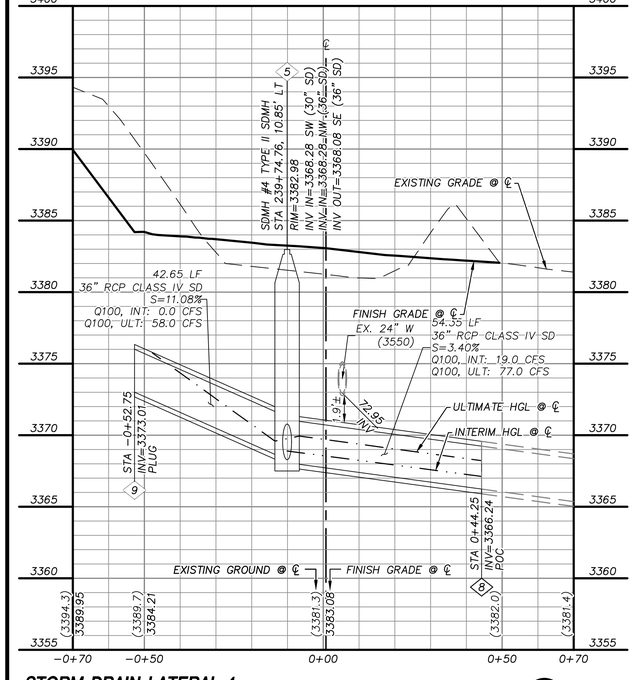
B 26




## STORM DRAIN LATERAL 3

"DFD" STA. 239+15.12 SEE SHEET 17

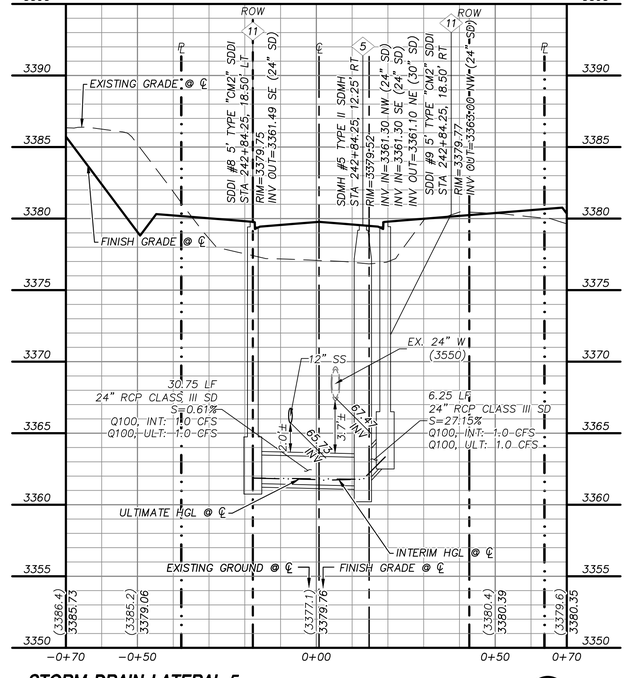
C 26




## STORM DRAIN LATERAL 4

"DFD" STA. 239+74.76 SEE SHEET 18

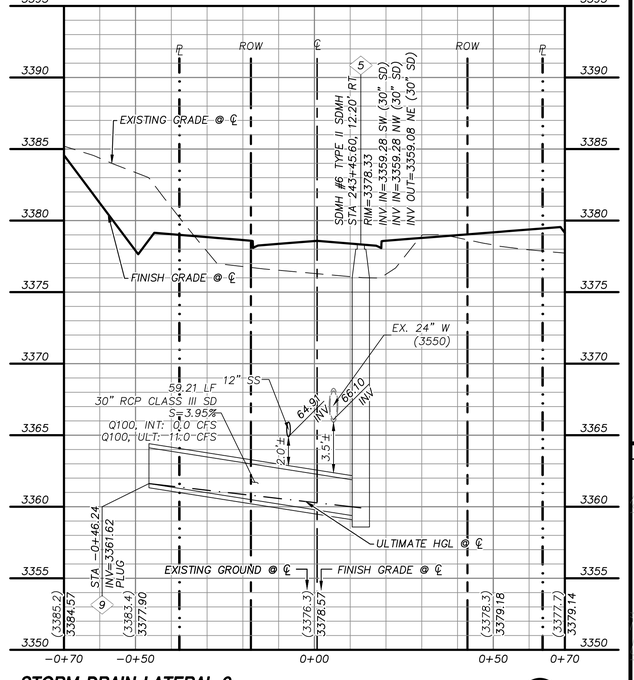
D 26




## STORM DRAIN LATERAL 5

"DFD" STA. 242+84.25 SEE SHEET 18

E 26




## STORM DRAIN LATERAL 6

"DFD" STA. 243+45.60 SEE SHEET 20

F 26

GRAPHIC SCALE

20 0 10 20 40

HORIZONTAL: 1"= 20'

5 0 2.5 5 10

VERTICAL: 1"= 5'

## BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

## BENCHMARK

CITY OF LAS VEGAS BENCHMARK: D368
(REVISED 2008)
NAVD88 ELEVATION: 989.574 METERS
(3,246.63 FEET)
FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
T21S,R59E,S03

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

Call before you D ig AVOID BURYED INTERFERENCE UTILITY LINES. ITS SIMPLY. Call 811 OR 1-800-642-2444

AVOID HITTING OVERHEAD POWER LINES. ITS SIMPLY. CALL BEFORE YOU DO OVERHEAD 1-702-227-2929

## STORM DRAIN CONSTRUCTION NOTES

1. INSTALL STORM DRAIN. SEE ROADWAY PLAN AND PROFILE SHEETS FOR ADDITIONAL STORM DRAIN NOTES AND INFORMATION.
2. INSTALL TYPE "CM2" DROP INLET PER CCAUSD #412.1 & #421
3. INSTALL NDOT TYPE II DROP INLET PER NDOT R−4.2.1 (SEE SHEET 39)
4. INSTALL TYPE I SD MANHOLE PER CCAUSD #403
5. INSTALL TYPE II SD MANHOLE PER CCAUSD #405.2
6. INSTALL TYPE III SD MANHOLE PER CCAUSD #406
7. INSTALL TYPE "A" DROP INLET PER CCAUSED #411 & #421
8. REMOVE CAP AND CONNECT TO EXISTING STORM DRAIN STUB
9. STUB & PLUG STORM DRAIN FOR FUTURE CONNECTION PER MANUFACTURER'S PLUG, OR APPROVED EQUAL
10. INSTALL RIP−RAP (D50=12", THICKNESS=24")
11. INSTALL TYPE "CM2" DROP INLET PER CCAUSD #412.1 & #421, AND DETAIL C SHEET 39

## SEWER CONSTRUCTION NOTES

1. INSTALL SEWER MANHOLE PER DCSWCS SD−1, AND SD−4
2. INSTALL SEWER MAIN PER DCSWCS SD−17
3. STUB AND CAP SEWER PIPE. PLACE MARKER BALL AND 4"X4" POST, DOUGLAS FIR, OVER END OF PIPE AND INSTALL THRUST BLOCK (1 CUBIC FT. MINIMUM).
4. REMOVE CAP AND CONNECT TO EXISTING SEWER STUB
5. ADJUST EXISTING MANHOLE TO GRADE PER DCSWCS SD−5.
6. PROTECT SEWER AT UTILITY CROSSING PER DCSWCS SD−19

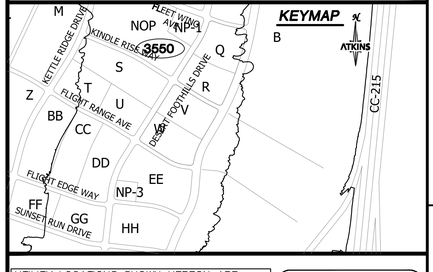
## WATERLINE CONSTRUCTION NOTES

1. INSTALL WATER MAIN PER UDACS PLATES #17 AND PLATE #19
2. INSTALL GATE VALVE PER UDACS PLATES #30 AND #39
3. INSTALL CROSS PER UDACS PLATE #31
4. INSTALL CAP AND 2" MANUAL BLOWOFF ASSEMBLY PER UDACS PLATE #36
5. INSTALL TAPPING SLEEVE TEE W/ VALVE AND LATERAL PER UDACS PLATES #17, #19, #30, #31 AND #39
7. INSTALL 1.5" SERVICE SADDLE PER UDASC PLATE #4
8. INSTALL 1−1/2" IRRIGATION METER WITH 1−1/2 RPPA PER UDASC PLATES #4 AND #8 WITH CURB STOP
9. INSTALL IN−LINE REDUCER PER UDACS PLATE #30
10. REMOVE CAP AND 2" BLOWOFF AND CONNECT TO EXISTING WATERLINE STUB
11. INSTALL FIRE HYDRANT WITH APPURTENANCES (CONCRETE PAD, LATERAL, VALVE, AND TEE) PER UDACS PLATES #30, #31, #39, AND #40

## ROADWAY CONSTRUCTION NOTES

2,3,7,&11 NOT USED

1. SAWCUT AND MATCH EXISTING
4. CONSTRUCT "L" TYPE CURB AND GUTTER PER CCAUSD #216
5. PROPOSED BIKE LANE
6. FUTURE SIDEWALK BY OTHERS
8. CONSTRUCT CURB RAMP, TYPE A, PER NDOT STANDARD PLAN R−5.2.1 (A=B=6.5').
9. CONSTRUCT 0" FLUSH CURB
10. TRANSITION CURB FROM FULL HEIGHT (6") TO FLUSH (0")
12. CONSTRUCT PLANTMIX BITUMINOUS SURFACE OVER TYPE II AGGREGATE BASE PER SOILS REPORT. SEE SHEET 37 FOR TYPICAL PAVEMENT SECTION.
13. INSTALL SCHEDULE 40 PVC IRRIGATION SLEEVES (2−4", 1−6") PER DETAIL ON SHEET 40




UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTORS 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 OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.

NICOLAS A. BADOS — EXP. 12-31-20 — CIVIL — No. 25673 — PROFESSIONAL ENGINEER, STATE OF NEVADA

10/6/2020

| REVISIONS | | | |
|---|---|---|---|
| REV. | DESCRIPTION | BY | DATE | APPROVAL |

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200

SUMMERLIN

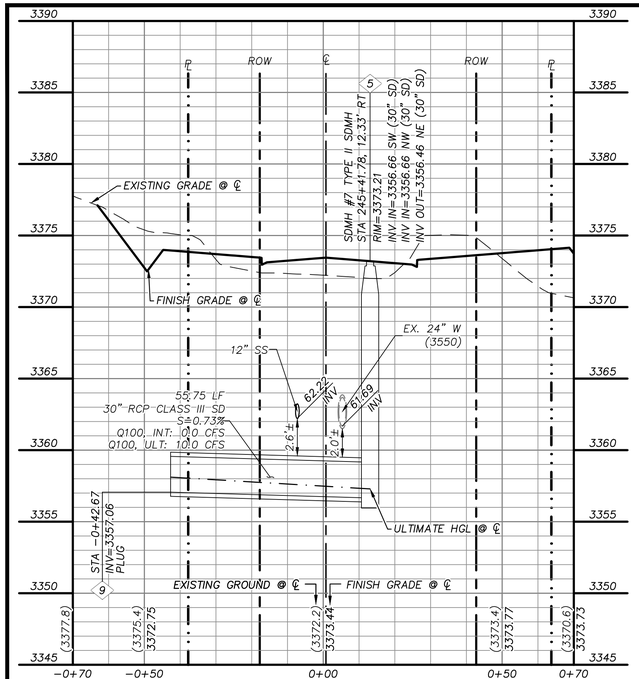
SUMMERLIN VILLAGE 22
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

STORM DRAIN LATERAL PROFILES

| | |
|---|---|
| DESIGNED BY: | B. MOCHTYAK |
| DRAWN BY: | B. MOCHTYAK |
| CHECKED BY: | P. BATES |
| HORIZ.: | 1"=20' |
| VERT.: | 1"=5' |
| XXVVXXX | |
| LXX−XXXXX | |
| DATE: | OCTOBER, 2020 |
| DRAWING NO. | 26/46 |

JOB NO. 100066774

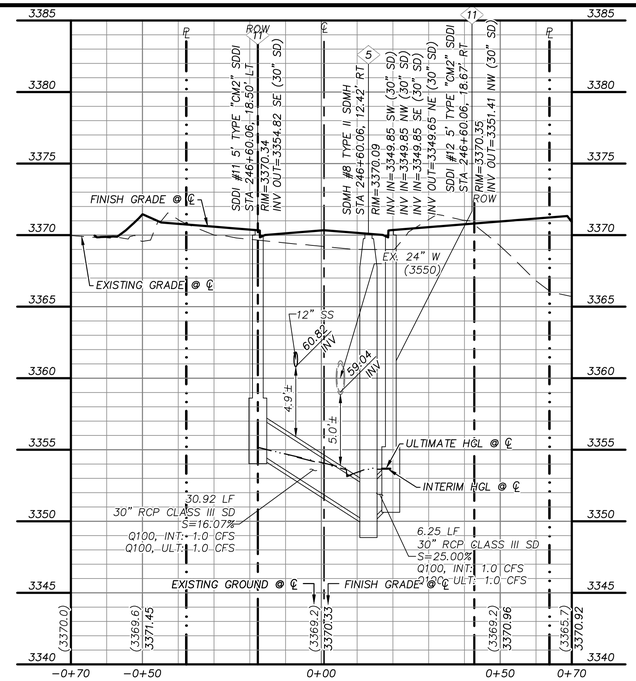
X:\Projects\SummWest\Village 22\100066774 − V22 Desert Foothills (Sunset to Fleet Wing)\...Sheets\66774−26−LATL−SD1.dwg LAYOUT: 26 STORM DRAIN LATERAL PROFILES Oct 15, 2020 − 10:36AM




## STORM DRAIN LATERAL 7

"DFD" STA. 245+41.78 SEE SHEET 20

A 27




## STORM DRAIN LATERAL 8

"DFD" STA. 246+69.53 SEE SHEET 20

B 27

GRAPHIC SCALE

20 0 10 20 40

HORIZONTAL: 1"= 20'

5 0 2.5 5 10

VERTICAL: 1"= 5'

## BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

## BENCHMARK

CITY OF LAS VEGAS BENCHMARK: D368
(REVISED 2008)
NAVD88 ELEVATION: 989.574 METERS
(3,246.63 FEET)
FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
T21S,R59E,S03

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

Call before you D g AVOID CUTTING UNDERGROUND UTILITY LINES, IT'S COSTLY. Call 811 or 1-800-642-2444

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

## STORM DRAIN CONSTRUCTION NOTES

1. INSTALL STORM DRAIN. SEE ROADWAY PLAN AND PROFILE SHEETS FOR ADDITIONAL STORM DRAIN NOTES AND INFORMATION.
2. INSTALL TYPE "CM2" DROP INLET PER CCAUSD #412.1 & #421
3. INSTALL NDOT TYPE II DROP INLET PER NDOT R-4.2.1 (SEE SHEET 39)
4. INSTALL TYPE I SD MANHOLE PER CCAUSD #403
5. INSTALL TYPE II SD MANHOLE PER CCAUSD #405.2
6. INSTALL TYPE III SD MANHOLE PER CCAUSD #406
7. INSTALL TYPE "A" DROP INLET PER CCAUSED #411 & #421
8. REMOVE CAP AND CONNECT TO EXISTING STORM DRAIN STUB
9. STUB & PLUG STORM DRAIN FOR FUTURE CONNECTION PER MANUFACTURER'S PLUG, OR APPROVED EQUAL
10. INSTALL RIP-RAP (D50=12", THICKNESS=24")
11. INSTALL TYPE "CM2" DROP INLET PER CCAUSD #412.1 & #421, AND DETAIL C SHEET 39

## SEWER CONSTRUCTION NOTES

1. INSTALL SEWER MANHOLE PER DCSWCS SD-1, AND SD-4
2. INSTALL SEWER MAIN PER DCSWCS SD-17
3. STUB AND CAP SEWER PIPE. PLACE MARKER BALL AND 4"X4" POST, DOUGLAS FIR, OVER END OF PIPE AND INSTALL THRUST BLOCK (1 CUBIC FT. MINIMUM).
4. REMOVE CAP AND CONNECT TO EXISTING SEWER STUB
5. ADJUST EXISTING MANHOLE TO GRADE PER DCSWCS SD-5.
6. PROTECT SEWER AT UTILITY CROSSING PER DCSWCS SD-19

## WATERLINE CONSTRUCTION NOTES

1. INSTALL WATER MAIN PER UDACS PLATES #17 AND PLATE #19
2. INSTALL GATE VALVE PER UDACS PLATES #30 AND #39
3. INSTALL CROSS PER UDACS PLATE #31
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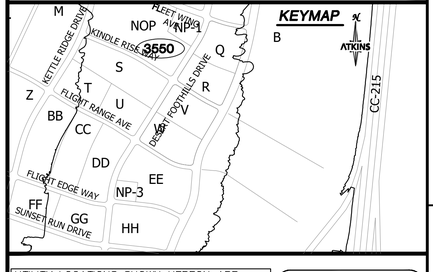
13. INSTALL SCHEDULE 40 PVC IRRIGATION SLEEVES (2-4", 1-6") PER DETAIL ON SHEET 40

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PROFESSIONAL ENGINEER-STATE OF NEVADA NICOLAS A BARGOS No. 26078 EXP. 12-31-20 CIVIL

10/6/2020

REVISIONS

| REV. | DESCRIPTION | BY | DATE | APPROVAL |
|---|---|---|---|---|
| | | | | |

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200

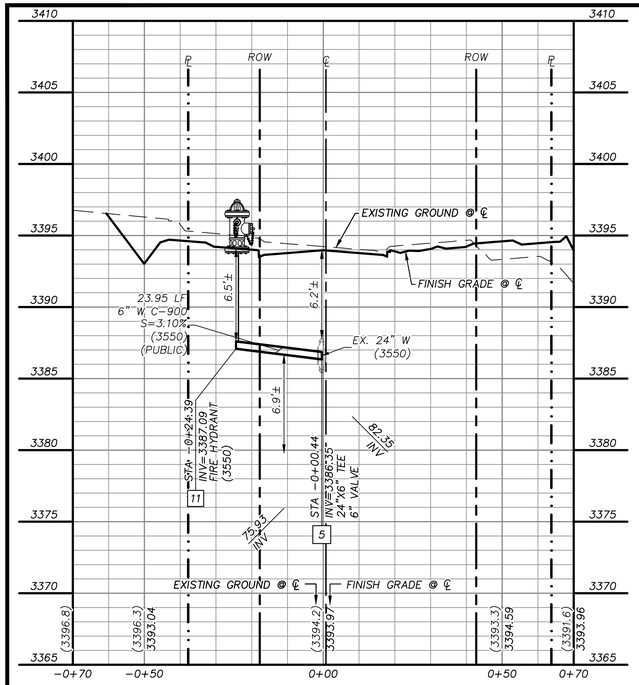
SUMMERLIN

SUMMERLIN VILLAGE 22
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

STORM DRAIN LATERAL PROFILES

| | |
|---|---|
| DESIGNED BY: | B. MOCHTYAK |
| DRAWN BY: | B. MOCHTYAK |
| CHECKED BY: | P. BATES |
| HORIZ.: | 1"=20' |
| VERT.: | 1"=5' |
| XXXVXXXX. LXX-XXXXX | |
| DATE: | OCTOBER, 2020 |
| DRAWING NO. | 27/46 |
| JOB NO. | 100066774 |

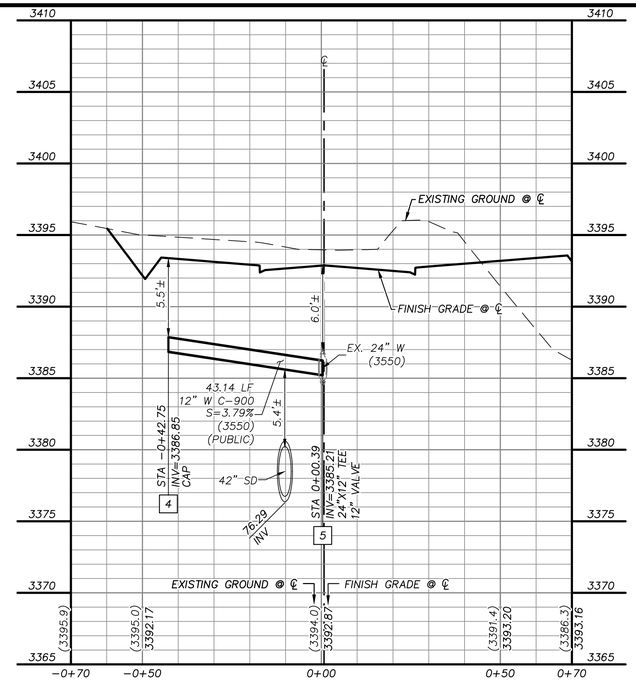
X:\Projects\SummitWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)_Sheets\66774-26-LATL-SD1.dwg LAYOUT: 27 STORM DRAIN LATERAL PROFILES Oct 15, 2020 - 10:36AM




## WATER LATERAL 1

"DFD" STA. 228+86.26 SEE SHEET 13

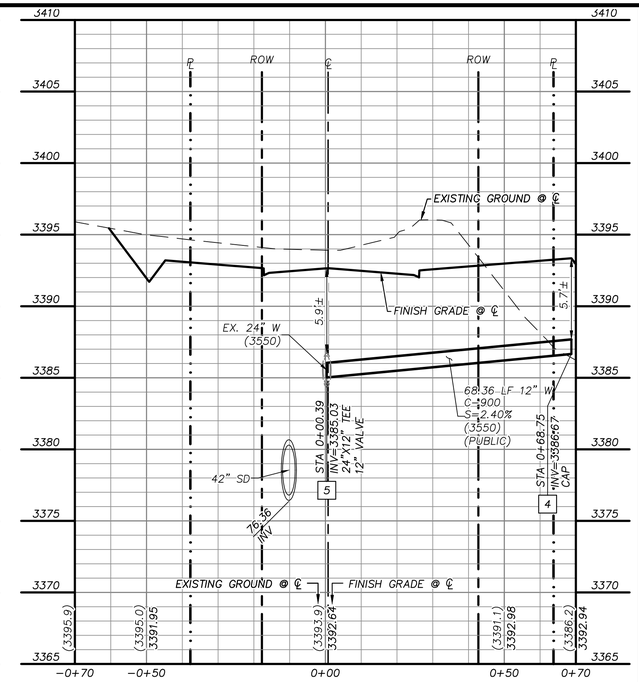
A 28




## WATER LATERAL 2

"DFD" STA. 230+17.43 SEE SHEET 13

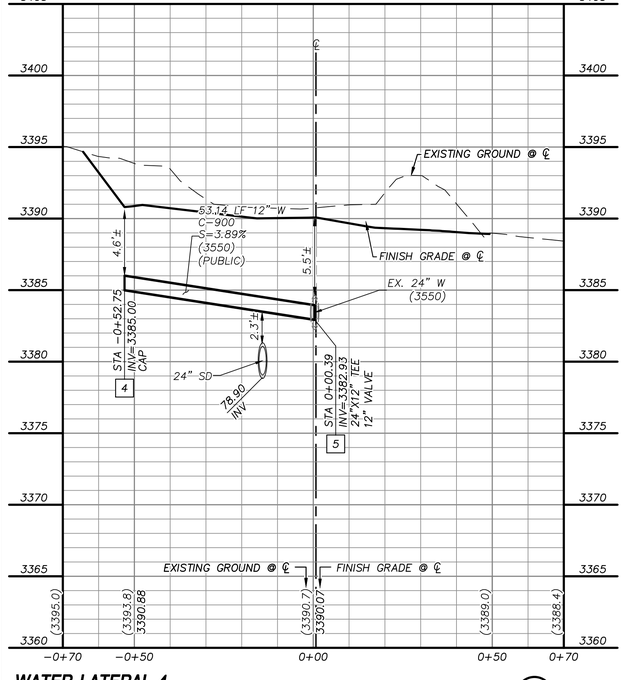
B 28




## WATER LATERAL 3

"DFD" STA. 230+39.07 SEE SHEET 13

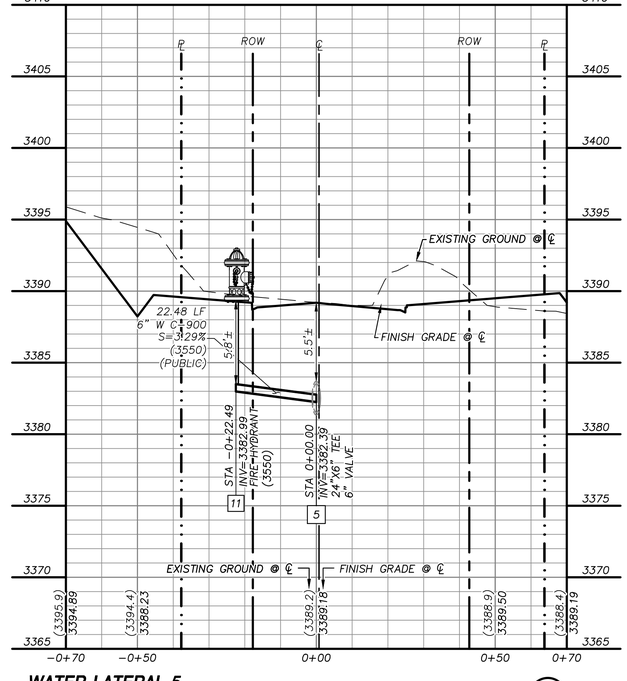
C 28




## WATER LATERAL 4

"DFD" STA. 232+91.19 SEE SHEET 15

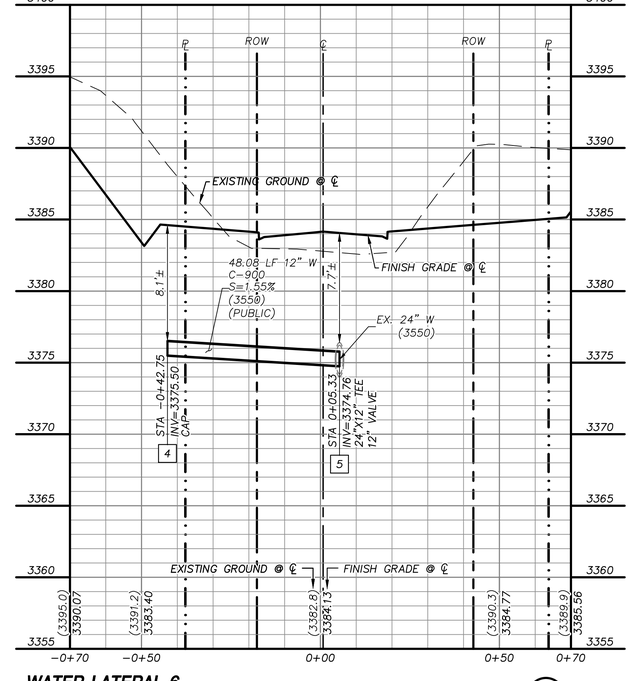
D 28




## WATER LATERAL 5

"DFD" STA. 233+69.21 SEE SHEET 15

E 28




## WATER LATERAL 6

"DFD" STA. 238+68.80 SEE SHEET 17

F 28

GRAPHIC SCALE

20 0 10 20 40

HORIZONTAL: 1"= 20'

5 0 2.5 5 10

VERTICAL: 1"= 5'

## BASIS OF BEARING

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9. STUB & PLUG STORM DRAIN FOR FUTURE CONNECTION PER MANUFACTURER'S PLUG, OR APPROVED EQUAL
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## SEWER CONSTRUCTION NOTES

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2. INSTALL SEWER MAIN PER DCSWCS SD-17
3. STUB AND CAP SEWER PIPE. PLACE MARKER BALL AND 4"X4" POST, DOUGLAS FIR, OVER END OF PIPE AND INSTALL THRUST BLOCK (1 CUBIC FT. MINIMUM).
4. REMOVE CAP AND CONNECT TO EXISTING SEWER STUB
5. ADJUST EXISTING MANHOLE TO GRADE PER DCSWCS SD-5.
6. PROTECT SEWER AT UTILITY CROSSING PER DCSWCS SD-19

## WATERLINE CONSTRUCTION NOTES

1. INSTALL WATER MAIN PER UDACS PLATES #17 AND PLATE #19
2. INSTALL GATE VALVE PER UDACS PLATES #30 AND #39
3. INSTALL CROSS PER UDACS PLATE #31
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6. FUTURE SIDEWALK BY OTHERS
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9. CONSTRUCT 0" FLUSH CURB
10. TRANSITION CURB FROM FULL HEIGHT (6") TO FLUSH (0")
12. CONSTRUCT PLANTMIX BITUMINOUS SURFACE OVER TYPE II AGGREGATE BASE PER SOILS REPORT. SEE SHEET 37 FOR TYPICAL PAVEMENT SECTION.
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PROFESSIONAL ENGINEER, STATE OF NEVADA — NICOLAS A. PADDOCK — EXP. 12-31-20 — CIVIL — No. 25673

10/6/2020

| REVISIONS | | | |
|---|---|---|---|
| REV. | DESCRIPTION | DATE | APPROVAL |

ATKINS
2270 Corporate Circle Suite 200
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Telephone: +1.702.263.7275
Fax: +1.702.263.7200

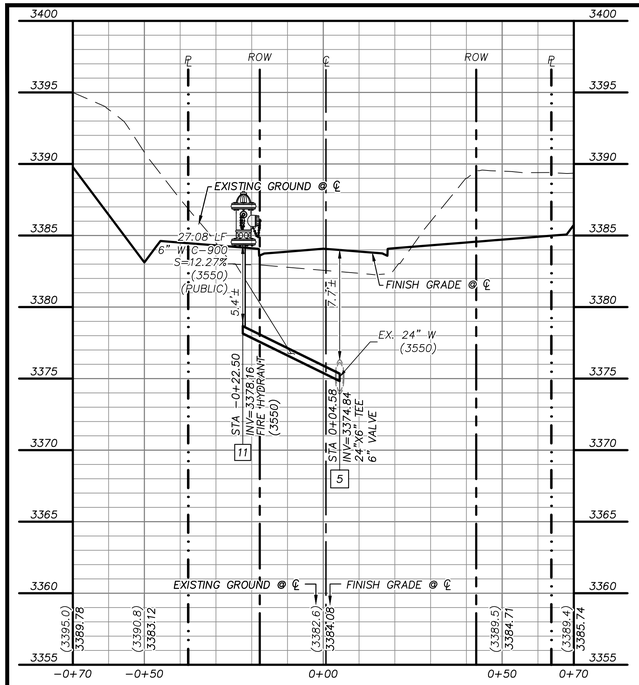
SUMMERLIN

**SUMMERLIN VILLAGE 22**
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

**WATER LATERAL PROFILES**

| | |
|---|---|
| DESIGNED BY: | B. MOCHTYAK |
| DRAWN BY: | B. MOCHTYAK |
| CHECKED BY: | P. BATES |
| HORIZ.: | 1"=20' |
| VERT.: | 1"=5' |
| XXVVXXX LXX-XXXXX | |
| DATE: | OCTOBER, 2020 |
| DRAWING NO. | 28/46 |
| JOB NO. | 100066774 |

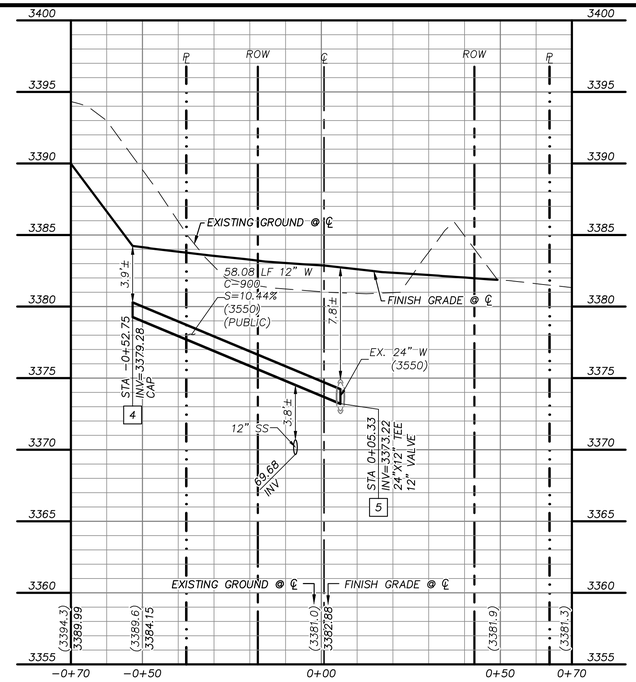
X:\Projects\SummWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)\...\Sheets\66774-28-LATL-WI.dwg LAYOUT: 28 WATER LATERAL PROFILES Oct 15, 2020 - 10:37AM




## WATER LATERAL 7

"DFD" STA. 238+76.12 SEE SHEET 17

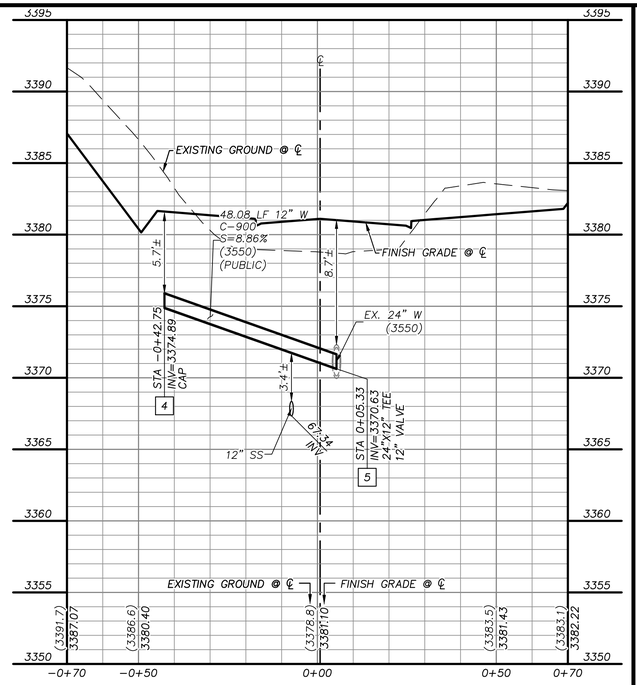
A 29




## WATER LATERAL 8

"DFD" STA. 239+93.83 SEE SHEET 19

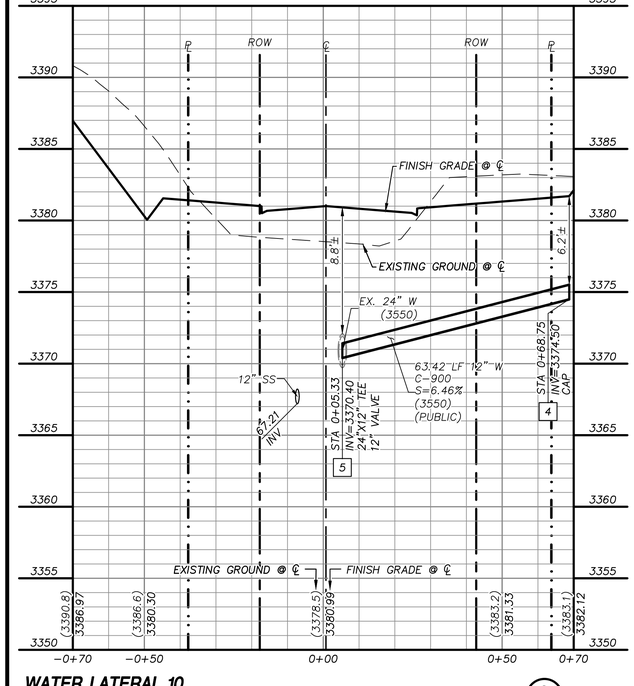
B 29




## WATER LATERAL 9

"DFD" STA. 241+65.61 SEE SHEET 19

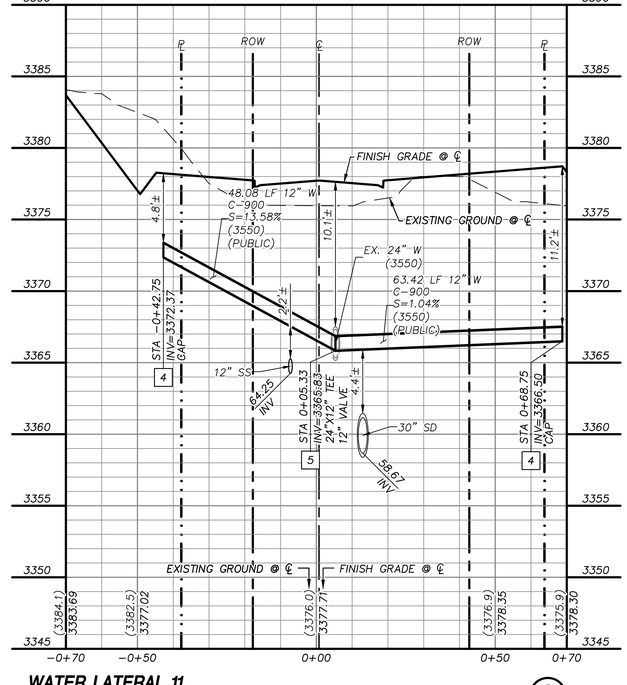
C 29




## WATER LATERAL 10

"DFD" STA. 241+75.61 SEE SHEET 19

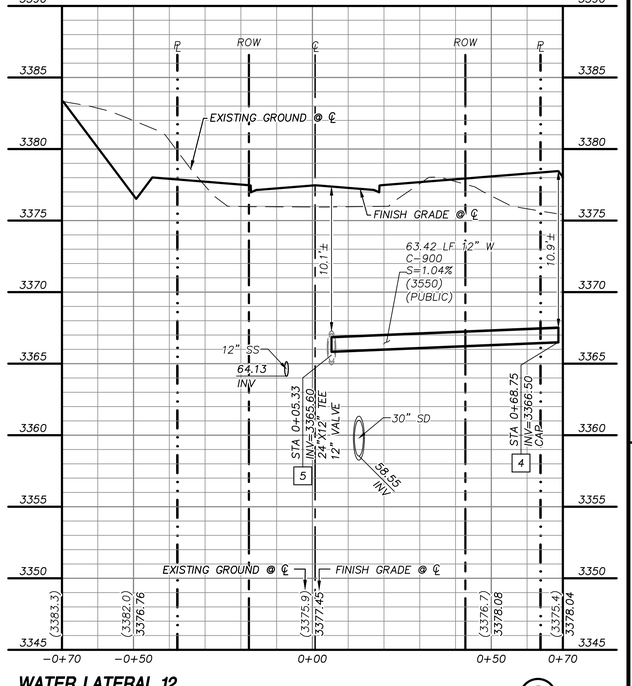
D 29




## WATER LATERAL 11

"DFD" STA. 243+79.12 SEE SHEET 21

E 29




## WATER LATERAL 12

"DFD" STA. 243+89.45 SEE SHEET 21

F 29

## BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

## BENCHMARK

CITY OF LAS VEGAS BENCHMARK: D368
(REVISED 2008)
NAVD88 ELEVATION: 989.574 METERS
(3,246.63 FEET)
FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
T21S,R59E,S03

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

Call before you D ig AVOID CUTTING INTERRUPTION UTILITY LINES. ITS COSTLY. Call 811 OR 1-800-642-2444

AVOID HITTING OVERHEAD POWER LINES. ITS COSTLY. CALL BEFORE YOU DO OVERHEAD 1-702-227-2929

## STORM DRAIN CONSTRUCTION NOTES

1. INSTALL STORM DRAIN. SEE ROADWAY PLAN AND PROFILE SHEETS FOR ADDITIONAL STORM DRAIN NOTES AND INFORMATION.
2. INSTALL TYPE "CM2" DROP INLET PER CCAUSD #412.1 & #421
3. INSTALL NDOT TYPE II DROP INLET PER NDOT R−4.2.1 (SEE SHEET 39)
4. INSTALL TYPE I SD MANHOLE PER CCAUSD #403
5. INSTALL TYPE II SD MANHOLE PER CCAUSD #405.2
6. INSTALL TYPE III SD MANHOLE PER CCAUSD #406
7. INSTALL TYPE "A" DROP INLET PER CCAUSED #411 & #421
8. REMOVE CAP AND CONNECT TO EXISTING STORM DRAIN STUB
9. STUB & PLUG STORM DRAIN FOR FUTURE CONNECTION PER MANUFACTURER'S PLUG, OR APPROVED EQUAL
10. INSTALL RIP−RAP (D50=12", THICKNESS=24")
11. INSTALL TYPE "CM2" DROP INLET PER CCAUSD #412.1 & #421, AND DETAIL C SHEET 39

## SEWER CONSTRUCTION NOTES

1. INSTALL SEWER MANHOLE PER DCSWCS SD−1, AND SD−4
2. INSTALL SEWER MAIN PER DCSWCS SD−17
3. STUB AND CAP SEWER PIPE. PLACE MARKER BALL AND 4"X4" POST, DOUGLAS FIR, OVER END OF PIPE AND INSTALL THRUST BLOCK (1 CUBIC FT. MINIMUM).
4. REMOVE CAP AND CONNECT TO EXISTING SEWER STUB
5. ADJUST EXISTING MANHOLE TO GRADE PER DCSWCS SD−5.
6. PROTECT SEWER AT UTILITY CROSSING PER DCSWCS SD−19

## WATERLINE CONSTRUCTION NOTES

1. INSTALL WATER MAIN PER UDACS PLATES #17 AND PLATE #19
2. INSTALL GATE VALVE PER UDACS PLATES #30 AND #39
3. INSTALL CROSS PER UDACS PLATE #31
4. INSTALL CAP AND 2" MANUAL BLOWOFF ASSEMBLY PER UDACS PLATE #36
5. INSTALL TAPPING SLEEVE TEE W/ VALVE AND LATERAL PER UDACS PLATES #17, #19, #30, #31 AND #39
7. INSTALL 1.5" SERVICE SADDLE PER UDASC PLATE #4
8. INSTALL 1−1/2" IRRIGATION METER WITH 1−1/2 RPPA PER UDASC PLATES #4 AND #8 WITH CURB STOP
9. INSTALL IN−LINE REDUCER PER UDACS PLATE #30
10. REMOVE CAP AND 2" BLOWOFF AND CONNECT TO EXISTING WATERLINE STUB
11. INSTALL FIRE HYDRANT WITH APPURTENANCES (CONCRETE PAD, LATERAL, VALVE, AND TEE) PER UDACS PLATES #30, #31, #39, AND #40

## ROADWAY CONSTRUCTION NOTES 2,3,7,&11 NOT USED

1. SAWCUT AND MATCH EXISTING
4. CONSTRUCT "L" TYPE CURB AND GUTTER PER CCAUSD #216
5. PROPOSED BIKE LANE
6. FUTURE SIDEWALK BY OTHERS
8. CONSTRUCT CURB RAMP, TYPE A, PER NDOT STANDARD PLAN R−5.2.1 (A=B=6.5').
9. CONSTRUCT 0" FLUSH CURB
10. TRANSITION CURB FROM FULL HEIGHT (6") TO FLUSH (0")
12. CONSTRUCT PLANTMIX BITUMINOUS SURFACE OVER TYPE II AGGREGATE BASE PER SOILS REPORT. SEE SHEET 37 FOR TYPICAL PAVEMENT SECTION.
13. INSTALL SCHEDULE 40 PVC IRRIGATION SLEEVES (2−4", 1−6") PER DETAIL ON SHEET 40

UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTORS 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 OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.

PROFESSIONAL ENGINEER, STATE OF NEVADA — NICOLAS A. PAPROS — EXP. 12-31-20 — CIVIL — No. 25673 — 10/6/2020

| REVISIONS | | | | |
|---|---|---|---|---|
| REV. | DESCRIPTION | BY | DATE | APPROVAL |

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200

SUMMERLIN

**SUMMERLIN VILLAGE 22**
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

**WATER LATERAL PROFILES**

| | |
|---|---|
| DESIGNED BY: | B. MOCHTYAK |
| DRAWN BY: | B. MOCHTYAK |
| CHECKED BY: | P. BATES |
| HORIZ.: | 1"=20' |
| VERT.: | 1"=5' |
| XXVVXXX LXX−XXXXX | |
| DATE: | OCTOBER, 2020 |
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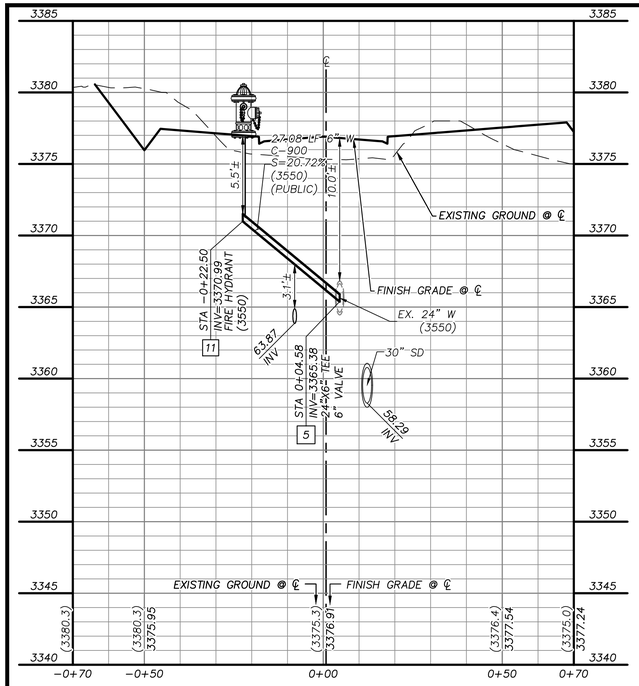
| JOB NO. | 100066774 |

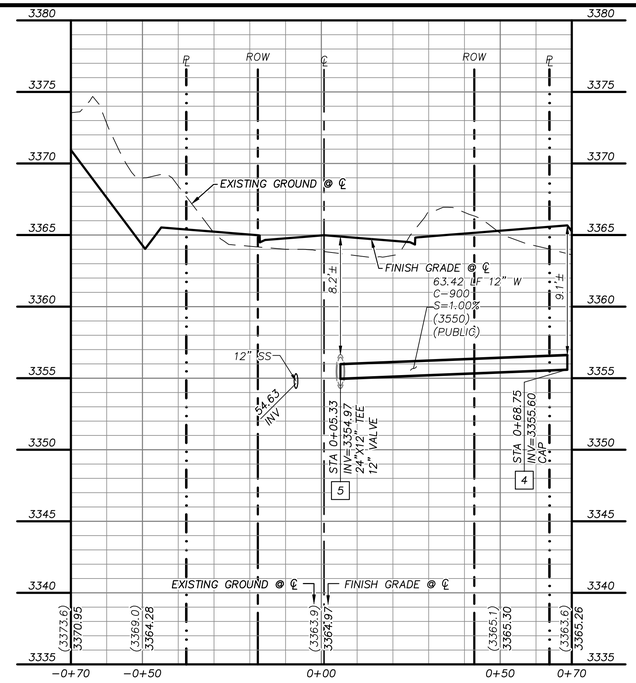
X:\Projects\SummWest\Village 22\100066774 − V22 Desert Foothills (Sunset to Fleet Wing)\...Sheets\66774−28−LATL−WL.dwg LAYOUT: 29 WATER LATERAL PROFILES Oct 15, 2020 − 10:37AM




## WATER LATERAL 13

"DFD" STA. 244+10.57 SEE SHEET 23

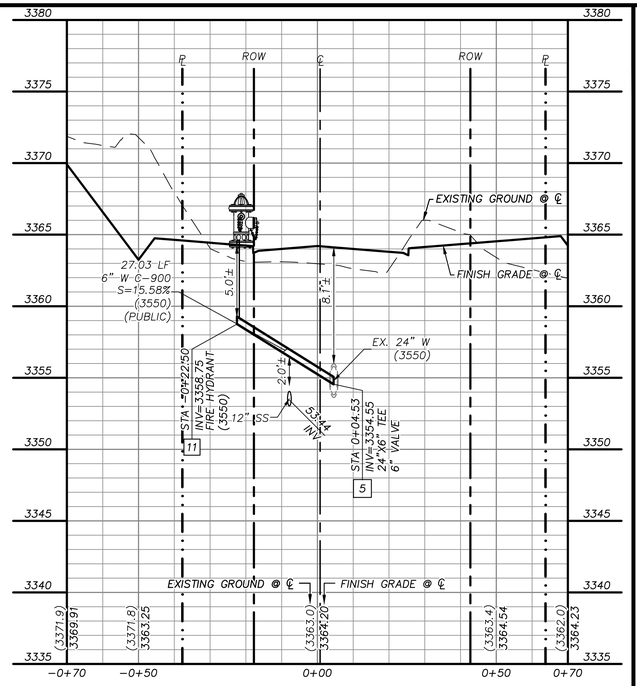
(A / 30)




## WATER LATERAL 14

"DFD" STA. 248+63.41 SEE SHEET 23

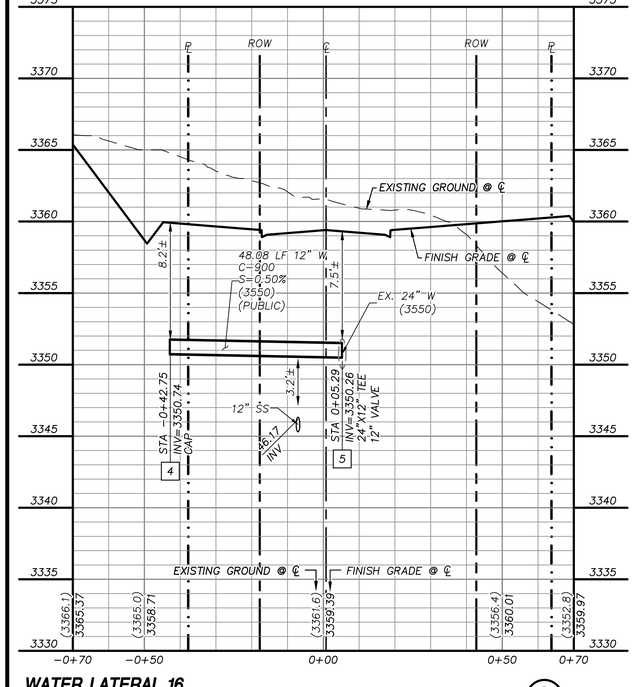
(B / 30)




## WATER LATERAL 15

"DFD" STA. 248+93.14 SEE SHEET 23

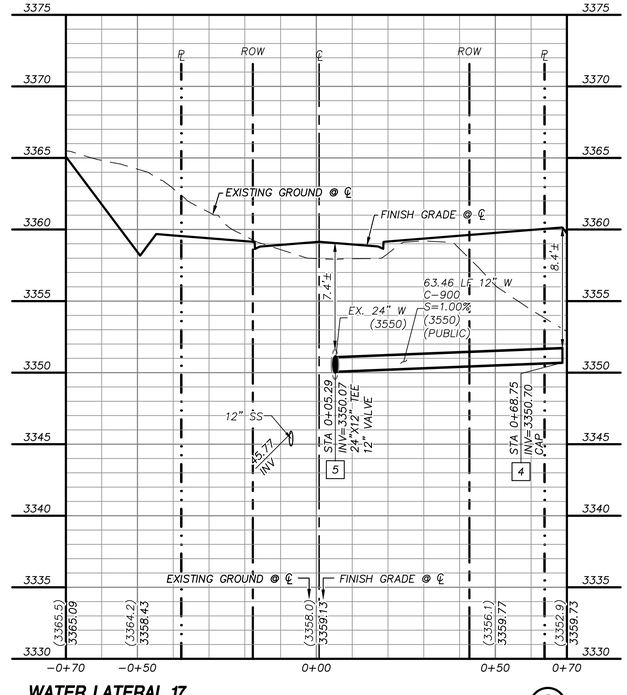
(C / 30)




## WATER LATERAL 16

"DFD" STA. 250+75.19 SEE SHEET 23

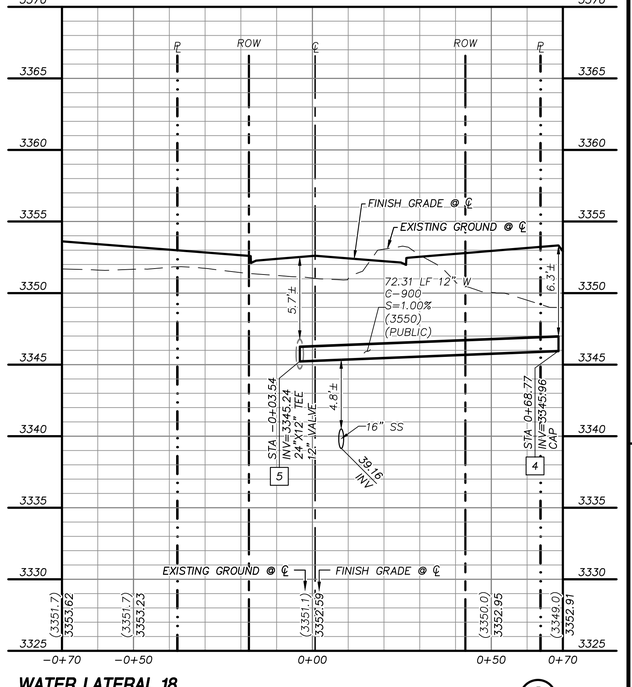
(D / 30)




## WATER LATERAL 17

"DFD" STA. 250+85.05 SEE SHEET 25

(E / 30)




## WATER LATERAL 18

"DFD" STA. 253+32.55 SEE SHEET 25

(F / 30)

GRAPHIC SCALE

20 0 10 20 40

HORIZONTAL: 1"= 20'

5 0 2.5 5 10

VERTICAL: 1"= 5'

## BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

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(3,246.63 FEET)
FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
T21S,R59E,S03

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Call before you D ☐ g AVOID CUTTING A GAS LINE AND/OR UTILITY LINE. IT'S COSTLY. Call 811 or 1-800-642-2444

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NICOLAS A. BARCOS — EXP. 12-31-20 — CIVIL — No. 25673 — PROFESSIONAL ENGINEER — STATE OF NEVADA

10/6/2020

| REVISIONS | | | |
|---|---|---|---|
| REV. | DESCRIPTION | DATE | APPROVAL |

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200

SUMMERLIN

**SUMMERLIN VILLAGE 22**
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

**WATER LATERAL PROFILES**

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| DRAWN BY: | B. MOCHTYAK |
| CHECKED BY: | P. BATES |
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| XXVVXXXX LXX-XXXXX | |
| DATE: | OCTOBER, 2020 |
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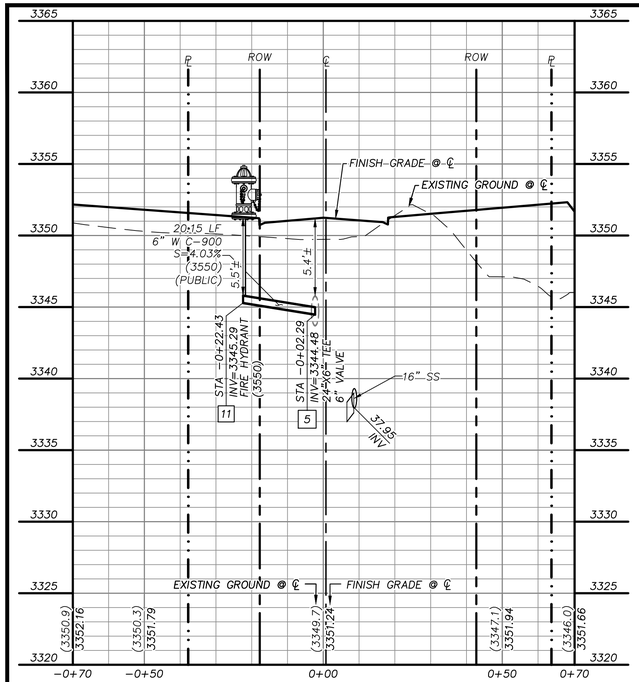


## WATER LATERAL 18

"DFD" STA. 253+86.83 SEE SHEET 25

A
30

GRAPHIC SCALE

20 0 10 20 40

HORIZONTAL: 1"= 20'

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4. REMOVE CAP AND CONNECT TO EXISTING SEWER STUB
5. ADJUST EXISTING MANHOLE TO GRADE PER DCSWCS SD-5.
6. PROTECT SEWER AT UTILITY CROSSING PER DCSWCS SD-19

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2,3,7,&11 NOT USED

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NOTICE TO CONTRACTOR: NOWELL DOUGLAS A BARGER EXP. 12-31-20 CIVIL No. 25873 STATE OF NEVADA

10/6/2020

REVISIONS

| REV. | DESCRIPTION | BY | DATE | APPROVAL |
|---|---|---|---|---|
| | | | | |

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200

SUMMERLIN

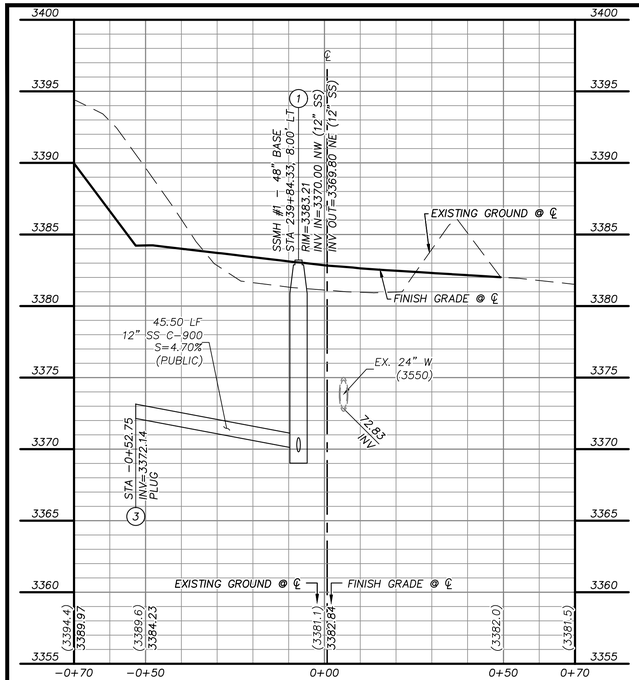
SUMMERLIN VILLAGE 22
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

WATER LATERAL PROFILES

| | | | |
|---|---|---|---|
| DESIGNED BY: B. MOCHTYAK | DRAWN BY: B. MOCHTYAK | CHECKED BY: P. BATES | HORIZ.: 1"=20' VERT.: 1"=5' |
| XXXVXXXX LXX-YXXXX | DATE: OCTOBER, 2020 | DRAWING NO. | 31/46 |

JOB NO. 100066774

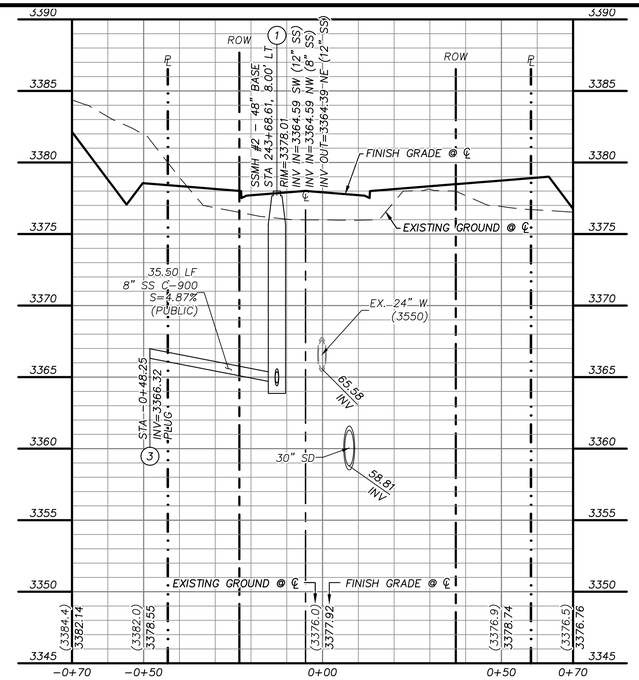
X:\Projects\SummWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)_Sheets\66774-28-LATL-W1.dwg LAYOUT: 31 WATER LATERAL PROFILES Oct 15, 2020 - 10:38AM




## SANITARY SEWER LATERAL 2

"DFD" STA. 239+84.33 SEE SHEET 19

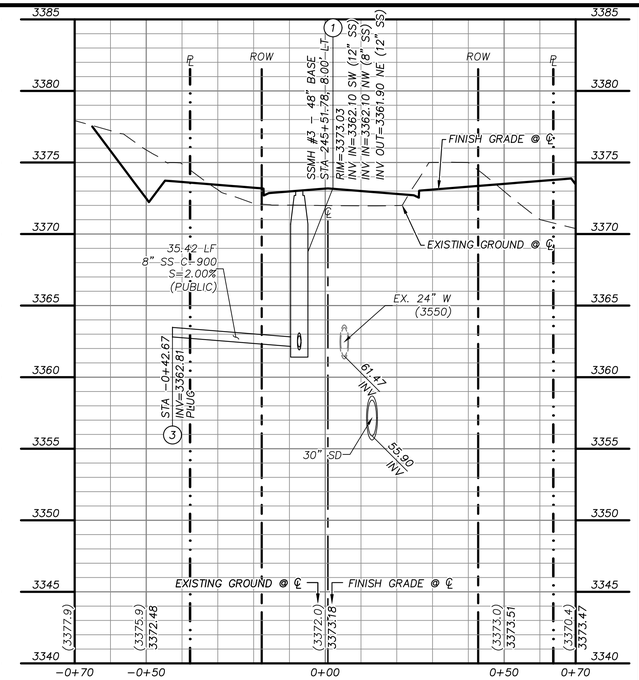
A 32




## SANITARY SEWER LATERAL 3

"DFD" STA. 243+68.61 SEE SHEET 18

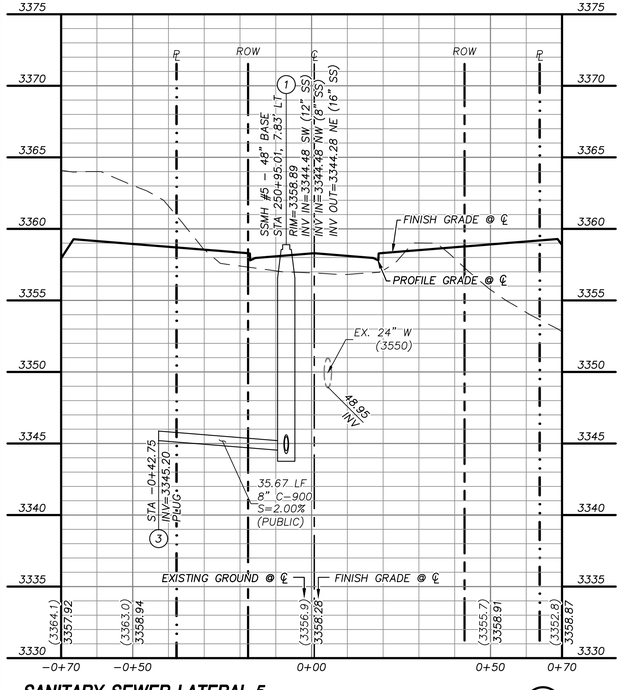
B 32




## SANITARY SEWER LATERAL 4

"DFD" STA. 245+51.78 SEE SHEET 21

C 32




## SANITARY SEWER LATERAL 5

"DFD" STA. 251+17.51 SEE SHEET 25

D 32

GRAPHIC SCALE

20 0 10 20 40

HORIZONTAL: 1"= 20'

5 0 2.5 5 10

VERTICAL: 1"= 5'

## BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

## BENCHMARK

CITY OF LAS VEGAS BENCHMARK: D368
(REVISED 2008)
NAVD88 ELEVATION: 989.574 METERS
(3,246.63 FEET)
FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
T21S,R59E,S03

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

Call before you D g AVOID CUTTING BURIED AND UTILITY LINES. IT'S COSTLY. Call 811 OR 1-800-642-2444

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

## STORM DRAIN CONSTRUCTION NOTES

1. INSTALL STORM DRAIN. SEE ROADWAY PLAN AND PROFILE SHEETS FOR ADDITIONAL STORM DRAIN NOTES AND INFORMATION.
2. INSTALL TYPE "CM2" DROP INLET PER CCAUSD #412.1 & #421
3. INSTALL NDOT TYPE II DROP INLET PER NDOT R-4.2.1 (SEE SHEET 39)
4. INSTALL TYPE I SD MANHOLE PER CCAUSD #403
5. INSTALL TYPE II SD MANHOLE PER CCAUSD #405.2
6. INSTALL TYPE III SD MANHOLE PER CCAUSD #406
7. INSTALL TYPE "A" DROP INLET PER CCAUSED #411 & #421
8. REMOVE CAP AND CONNECT TO EXISTING STORM DRAIN STUB
9. STUB & PLUG STORM DRAIN FOR FUTURE CONNECTION PER MANUFACTURER'S PLUG, OR APPROVED EQUAL
10. INSTALL RIP-RAP (D50=12", THICKNESS=24")
11. INSTALL TYPE "CM2" DROP INLET PER CCAUSD #412.1 & #421, AND DETAIL C SHEET 39

## SEWER CONSTRUCTION NOTES

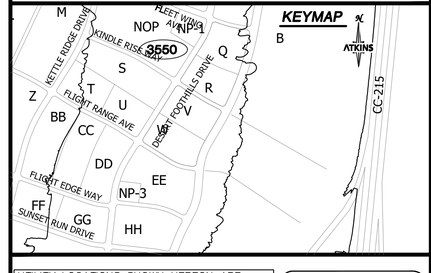
1. INSTALL SEWER MANHOLE PER DCSWCS SD-1, AND SD-4
2. INSTALL SEWER MAIN PER DCSWCS SD-17
3. STUB AND CAP SEWER PIPE. PLACE MARKER BALL AND 4"X4" POST, DOUGLAS FIR, OVER END OF PIPE AND INSTALL THRUST BLOCK (1 CUBIC FT. MINIMUM).
4. REMOVE CAP AND CONNECT TO EXISTING SEWER STUB
5. ADJUST EXISTING MANHOLE TO GRADE PER DCSWCS SD-5.
6. PROTECT SEWER AT UTILITY CROSSING PER DCSWCS SD-19

## WATERLINE CONSTRUCTION NOTES

1. INSTALL WATER MAIN PER UDACS PLATES #17 AND PLATE #19
2. INSTALL GATE VALVE PER UDACS PLATES #30 AND #39
3. INSTALL CROSS PER UDACS PLATE #31
4. INSTALL CAP AND 2" MANUAL BLOWOFF ASSEMBLY PER UDACS PLATE #36
5. INSTALL TAPPING SLEEVE TEE W/ VALVE AND LATERAL PER UDACS PLATES #17, #19, #30, #31 AND #39
7. INSTALL 1.5" SERVICE SADDLE PER UDASC PLATE #4
8. INSTALL 1-1/2" IRRIGATION METER WITH 1-1/2 RPPA PER UDASC PLATES #4 AND #8 WITH CURB STOP
9. INSTALL IN-LINE REDUCER PER UDACS PLATE #30
10. REMOVE CAP AND 2" BLOWOFF AND CONNECT TO EXISTING WATERLINE STUB
11. INSTALL FIRE HYDRANT WITH APPURTENANCES (CONCRETE PAD, LATERAL, VALVE, AND TEE) PER UDACS PLATES #30, #31, #39, AND #40

## ROADWAY CONSTRUCTION NOTES 2,3,7,&11 NOT USED

1. SAWCUT AND MATCH EXISTING
4. CONSTRUCT "L" TYPE CURB AND GUTTER PER CCAUSD #216
5. PROPOSED BIKE LANE
6. FUTURE SIDEWALK BY OTHERS
8. CONSTRUCT CURB RAMP, TYPE A, PER NDOT STANDARD PLAN R-5.2.1 (A=B=6.5').
9. CONSTRUCT 0" FLUSH CURB
10. TRANSITION CURB FROM FULL HEIGHT (6") TO FLUSH (0")
12. CONSTRUCT PLANTMIX BITUMINOUS SURFACE OVER TYPE II AGGREGATE BASE PER SOILS REPORT. SEE SHEET 37 FOR TYPICAL PAVEMENT SECTION.
13. INSTALL SCHEDULE 40 PVC IRRIGATION SLEEVES (2-4", 1-6") PER DETAIL ON SHEET 40

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PROFESSIONAL ENGINEER-STATE OF NEVADA NICOLAS A. BARCOS EXP. 12-31-20 CIVIL No. 25673 10/6/2020

| REV. | DESCRIPTION | BY | DATE | APPROVAL |
|---|---|---|---|---|
| | | | | |

REVISIONS

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200

SUMMERLIN

# SUMMERLIN VILLAGE 22

DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

## SEWER LATERAL PROFILES

DESIGNED BY: B. MOCHTYAK
DRAWN BY: B. MOCHTYAK
CHECKED BY: P. BATES
HORIZ.: 1"=20'
VERT.: 1"=5'

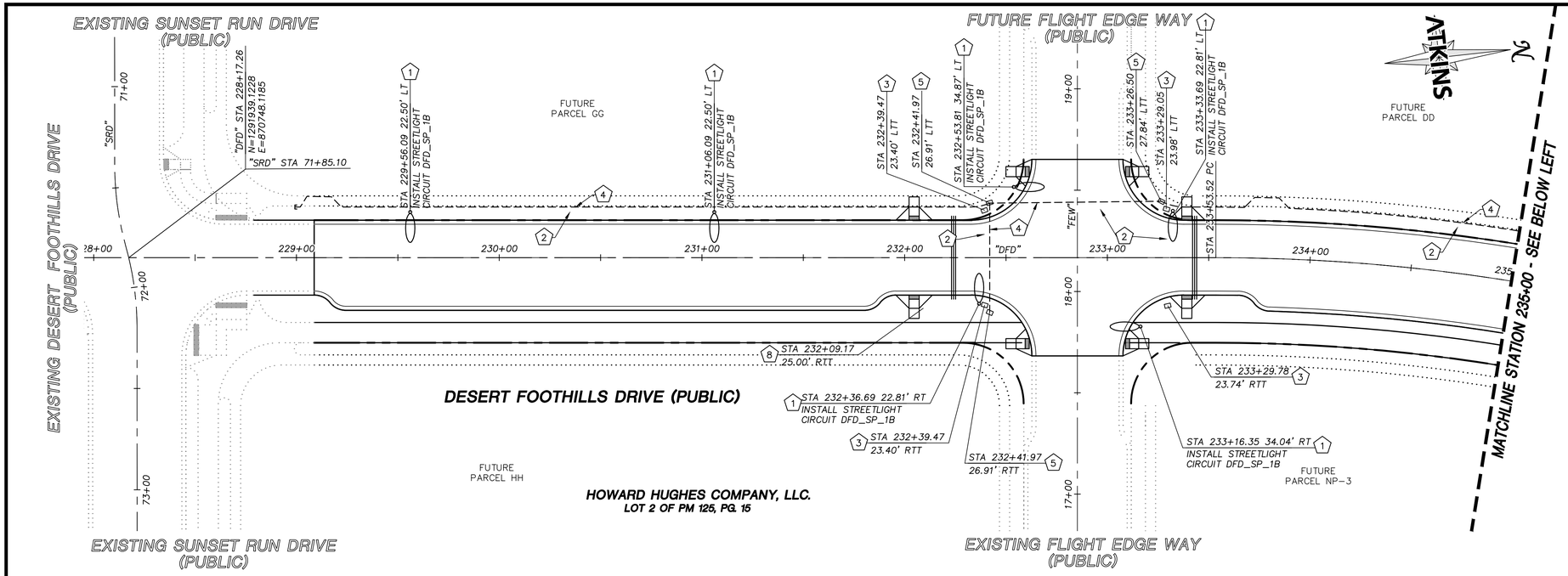
XXVVXXXX
LXX-XXXXX

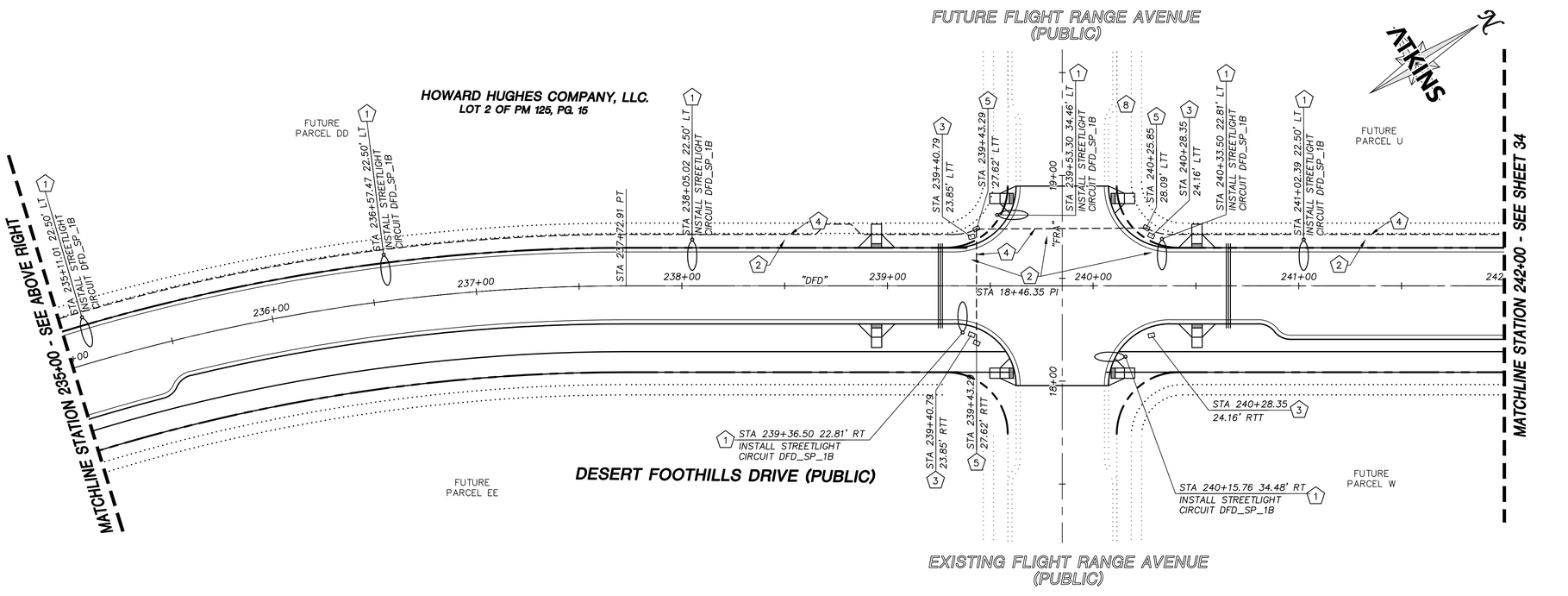
DATE: OCTOBER, 2020

DRAWING NO. 32/46

JOB NO. 100066774

X:\Projects\SummWest Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)_Sheets\66774-31-LATL-SS1.dwg LAYOUT: 32 SEWER LATERAL PROFILES Oct 15, 2020 - 10:39AM



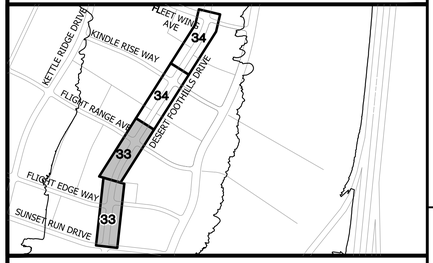

## STREET LIGHTING CONSTRUCTION NOTES

1. INSTALL TYPE 2 LED SINGLE STREETLIGHT WITH 8' MAST ARMS AND LSI LUMINAIRE FIXTURE XGBM-LED-26L-SIL-2-UNV-DIM-27-70-NR-4397-SMBRKT WITH A 2700k COLOR TEMPERATURE PER APPROVED LED LIGHTING ANALYSIS. REFER TO SUMMERLIN STD DWG E-2, SEE SHEET 39 FOR TYPICAL LOCATION, AND CCAUSD #311.1, #316, AND #320
2. INSTALL 1-1/4" STREETLIGHT CONDUIT WITH (2) #4 AND (1) #8 PER CCAUSD #501
3. INSTALL NO. 3-1/2 PULL BOX MARKED "STREETLIGHT" PER CCAUSD #705
4. INSTALL 4" CONDUIT WITH PULL STRING AND 6 PAIR PE39 NO. 22 AWG INTERCONNECT CABLE
5. INSTALL P30 PULL BOX MARKED "FIBER OPTIC (FAST)" PER CCAUSD #761
6. STUB AND CAP CONDUIT 5' PAST EDGE OF CONSTRUCTION
7. INSTALL 200 AMP STREETLIGHT SERVICE PEDESTAL PER CCAUSD #332.S2, #331, #335.S2, #336, AND #730
8. INSTALL PEDESTRIAN CROSSWALK FLASHING BEACON ASSEMBLY PER DETAILS B, C, AND D, ON SHEET 41

## SUMMARY OF QUANTITIES

| DESCRIPTION | QUANTITY | UNIT |
|---|---|---|
| STREETLIGHTING | | |
| TYPE 4 SINGLE ARM STREET LIGHT POLE ASSEMBLY | 24 | EA |
| 1 1/4" STREET LIGHT CONDUIT WITH ALL WIRING | 2,972 | LF |
| NO 3 1/2 PULL BOX | 13 | EA |
| 4" FAST CONDUIT WITH 6 PAIR PE39 NO 22 AWG | 2,854 | LF |
| P30 PULL BOX "FIBER OPTIC" (FAST) | 11 | EA |
| CROSSWALK FLASHING BEACON ASSEMBLY | 8 | EA |

| REV. | DESCRIPTION | BY | DATE | APPROVAL |
|---|---|---|---|---|
| | REVISIONS | | | |




GRAPHIC SCALE
30 0 15 30 60
HORIZONTAL: 1"= 30'

## STREET LIGHTING NOTES

1. SEE SHEET 41 FOR DETAILS & USD'S FOR STREETLIGHTING

## BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

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T21S,R59E,S03

FAST Call before you UnderGround 1-702-432-5300 INTERNET AND INTERNAL SYSTEM OF TRANSPORTATION

Call before you D g AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S SAFE AND CORRECT. Call 811 or 1-800-642-2444

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PROFESSIONAL ENGINEER - STATE OF NEVADA
NICOLAS A BARCOS
EXP. 12-31-20
CIVIL
No. 25673
10/6/2020

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200

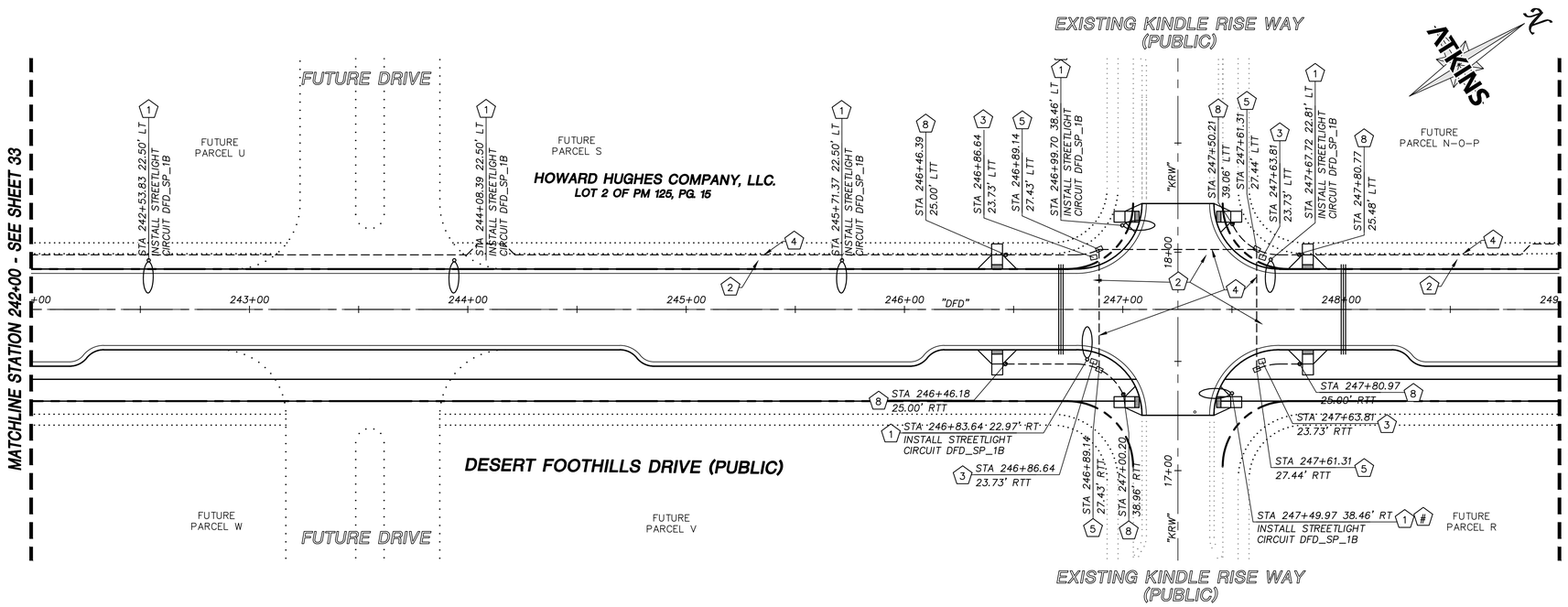
SUMMERLIN

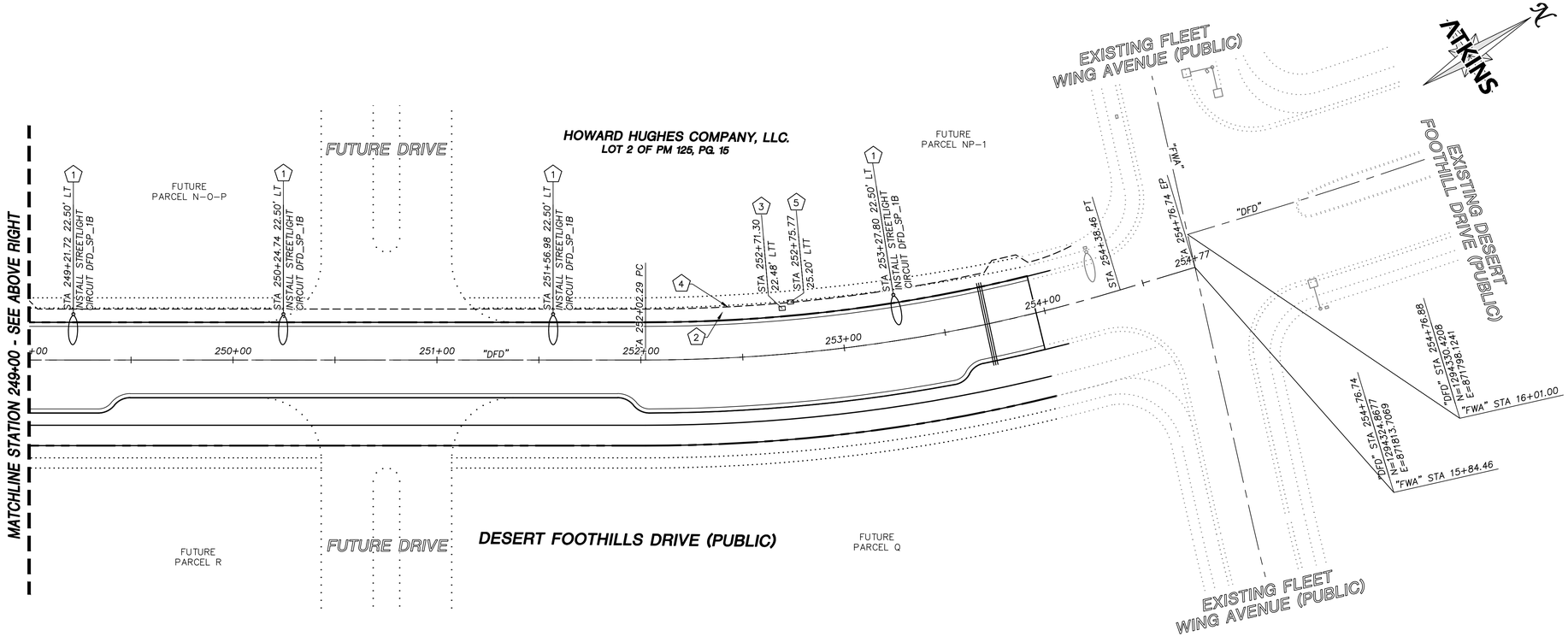
**SUMMERLIN VILLAGE 22**
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

**STREET LIGHT PLAN**

| | |
|---|---|
| DESIGNED BY: | B. WOCHYAK |
| DRAWN BY: | R. MEILLEUR |
| CHECKED BY: | P. BATES |
| HORIZ.: | 1"=30' |
| VERT.: | NONE |
| XXXVXXXX LXX-XXXXX | |
| DATE: | OCTOBER, 2020 |
| DRAWING NO. | 33/46 |
| JOB NO. | 100066774 |

X:\Projects\SummitWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)_Sheets\66774-32-STLT-SLI.dwg LAYOUT: 32 STREET LIGHT PLAN Oct 15, 2020 - 10:40AM




## STREET LIGHTING CONSTRUCTION NOTES

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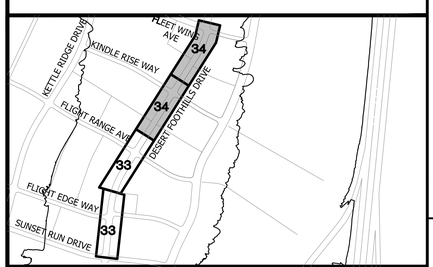
8. INSTALL PEDESTRIAN CROSSWALK FLASHING BEACON ASSEMBLY PER DETAILS B, C, AND D, ON SHEET 41




GRAPHIC SCALE
30 0 15 30 60
HORIZONTAL: 1"= 30'

## STREET LIGHTING NOTES

1. SEE SHEET 41 FOR DETAILS & USD'S FOR STREETLIGHTING

## BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

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PROFESSIONAL ENGINEER - STATE OF NEVADA - NICOLAS A. BARCOS - EXP. 12-31-20 - CIVIL - No. 25673 - 10/6/2020

| REV. | DESCRIPTION | BY | DATE | APPROVAL |
|---|---|---|---|---|
| | | | | |

REVISIONS

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200

SUMMERLIN

SUMMERLIN VILLAGE 22
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

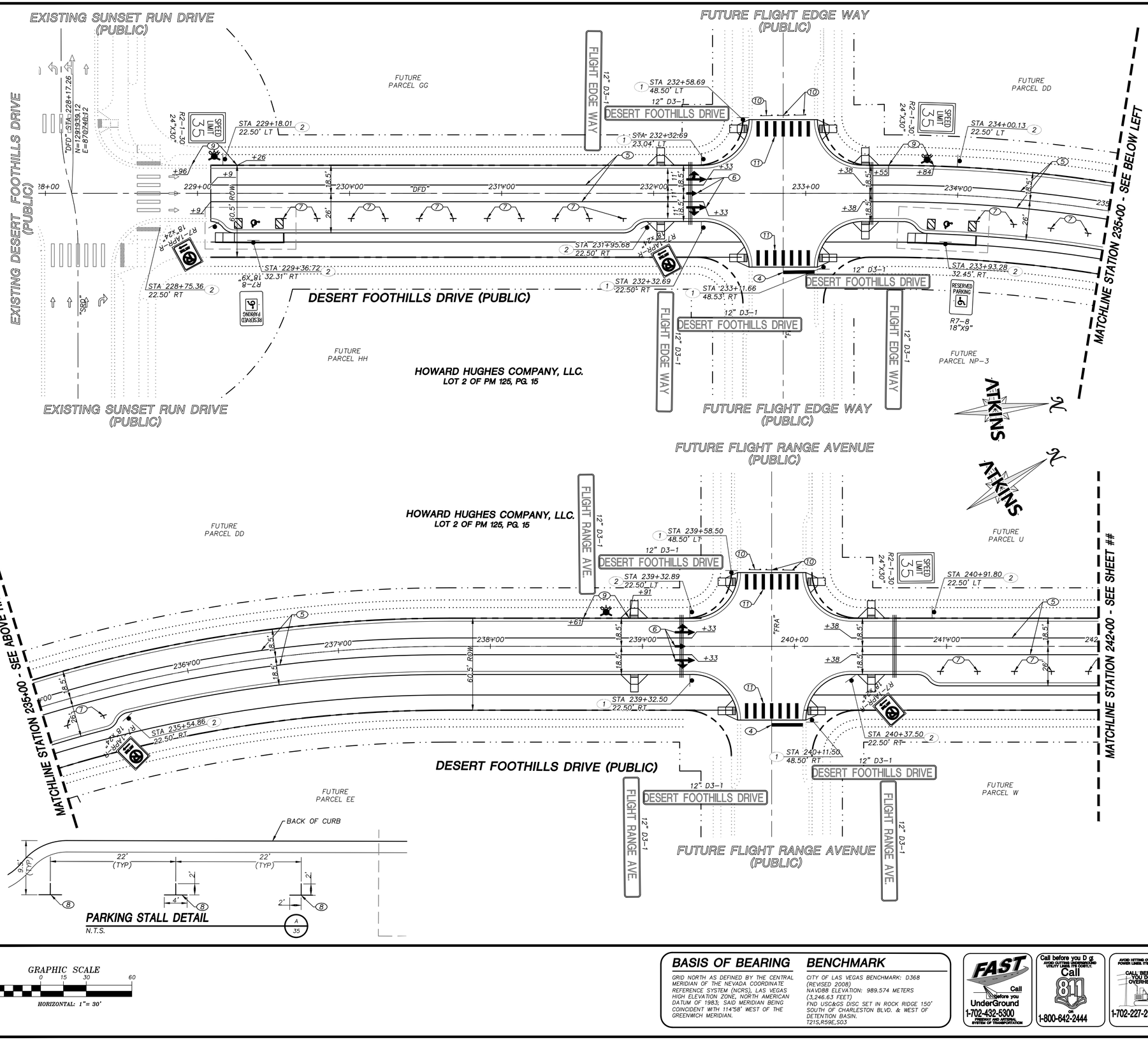
STREET LIGHT PLAN

DESIGNED BY: B. MOCHTYAK
DRAWN BY: R. MEILLEUR
CHECKED BY: P. BATES
HORIZ.: 1"=30'
VERT.: NONE

XXXVXXXX
LXX-XXXXX
DATE: OCTOBER, 2020
DRAWING NO. 34/46

JOB NO. 100066774

X:\Projects\SummWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)_Sheets\66774-32-STLT-SL1.dwg LAYOUT: 33 STREET LIGHT PLAN Oct 15, 2020 - 10:40AM



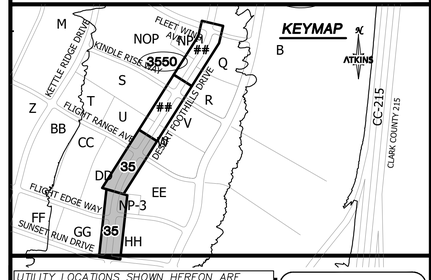

## STRIPING AND SIGNAGE CONSTRUCTION NOTES

1. INSTALL SIGN(S) ON STREETLIGHT POLE
2. INSTALL SIGN(S) ON POST PER CCAUSD #249.1
3. INSTALL MEDIAN NOSE MARKER PER CCAUSD #248 WITH R-71 AND TYPE C MARKING ALONG THE MEDIAN ISLAND
4. INSTALL 24" SOLID WHITE LINE PER CCAUSD #254 (TYPE 2 PMF)
5. INSTALL TYPE 4 LANE LINE USING RAISED PAVEMENT MARKERS PER CCAUSD #246
6. INSTALL WHITE LANE USE ARROW (TYPE 2 PMF) PER MUTCD FIGURE 3B-24
7. INSTALL TEMPORARY PARKING STALLS PER DETAIL THIS SHEET, TO BE MAINTAINED BY SUMMERLIN HOA.
8. INSTALL 6" SOLID WHITE LINE PER CCAUSD #244.9 (POLUREA LPM)
9. PAINT CURB 15' EITHER DIRECTION OF FIRE HYDRANT (30' MINIMUM) & PLACE BLUE REFLECTIVE PAVEMENT MARKER IN MIDDLE OF ADJACENT DRIVE LANE NEAREST TO HYDRANT
10. INSTALL TYPE IIIA BARRICADE PER CCAUSD #601 WITH OM4-1 END ON ROAD MARKER
11. INSTALL 24" WIDE SOLID WHITE CROSSWALK LINES USING TYPE 1 PAVEMENT MARKINGS PER CCAUSD #254

## SUMMARY OF QUANTITIES

| DESCRIPTION | QUANTITY | UNIT |
|---|---|---|
| SIGNAGE AND STRIPING | | |
| TYPE 1 CENTERLINE | 4,302 | LF |
| 6" WHITE STRIPE (PARKING STALL) | 312 | LF |
| 24" WHITE STRIPE (STOP BAR) | 70 | LF |
| 24" WHITE STRIPE (CROSS WALK) | 380 | LF |
| TYPE 2 PMF WHITE LANE USE ARROW | 9 | EA |
| RED PAINTED CURB (FIRE HYDRANT) | 150 | LF |
| STREET SIGNS | 39 | EA |
| CCAUSD 601 BARRICADE | 9 | EA |

| REV. | DESCRIPTION | BY | DATE | APPROVAL |
|---|---|---|---|---|
| | REVISIONS | | | |




**BASIS OF BEARING**

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

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FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
T21S,R59E,S03

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PROFESSIONAL ENGINEER - STATE OF NEVADA
NICOLAS A. BARCOS
EXP. 12-31-20
CIVIL
No. 25673
10/6/2020

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200

SUMMERLIN

**SUMMERLIN VILLAGE 22**
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)
**SIGNAGE AND STRIPING PLAN**

DESIGNED BY: B. WOCHTYAK
DRAWN BY: R. MEILLEUR
CHECKED BY: P. BATES
HORIZ.: 1"=30'
VERT.: NONE

XXXXXXXX
LXX-XXXXX
DATE: OCTOBER, 2020
DRAWING NO. 35/46
JOB NO. 100066774

X:\Projects\SummWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)_Sheets\66774-33-TRAF-11.dwg LAYOUT: 34 SIGNAGE AND STRIPING PLAN Oct 15, 2020 - 10:41AM

## STRIPING AND SIGNAGE CONSTRUCTION NOTES

1. INSTALL SIGN(S) ON STREETLIGHT POLE
2. INSTALL SIGN(S) ON POST PER CCAUSD #249.1
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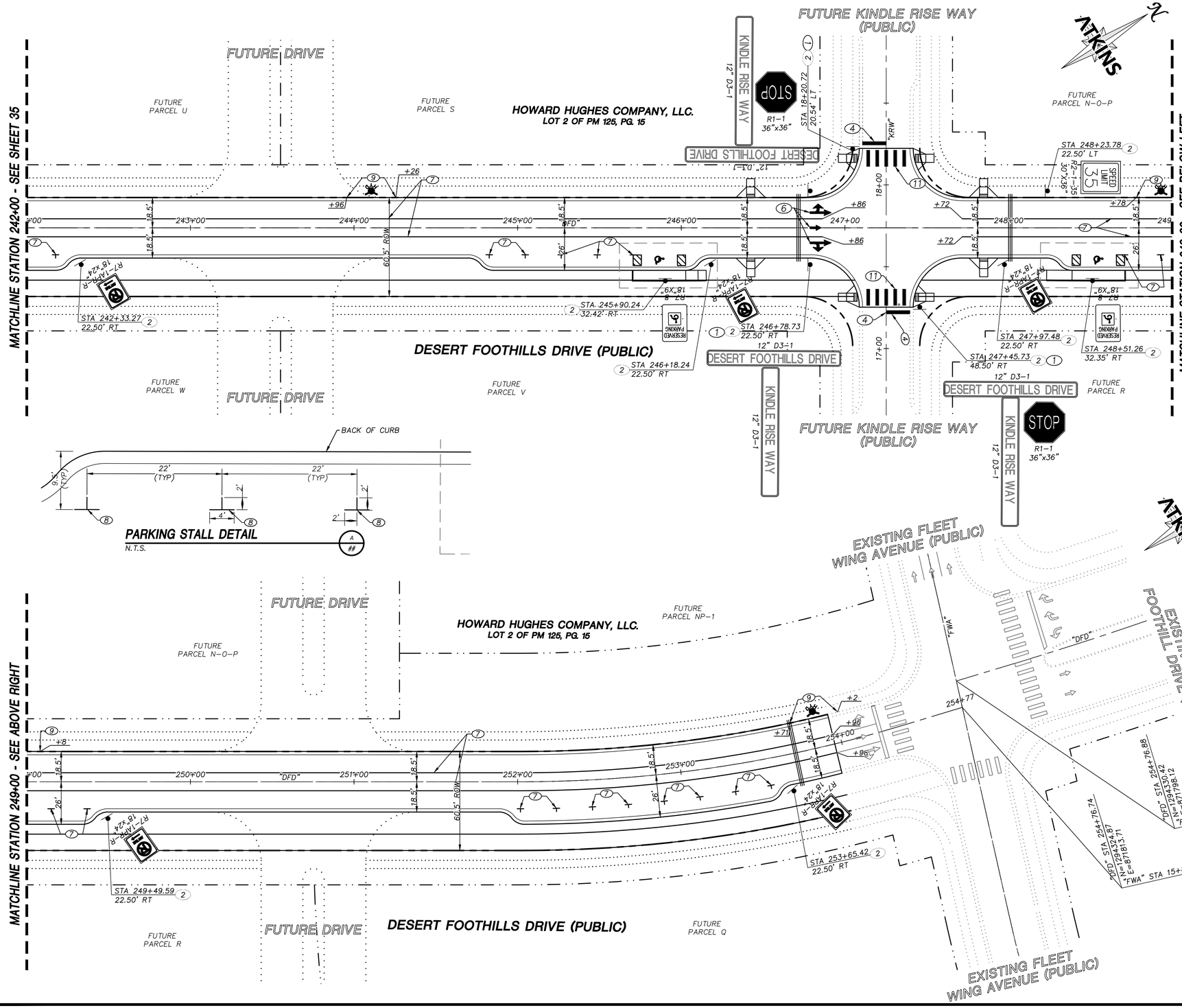
7. INSTALL TEMPORARY PARKING STALLS PER DETAIL THIS SHEET, TO BE MAINTAINED BY SUMMERLIN HOA.
8. INSTALL 6" SOLID WHITE LINE PER CCAUSD #244.9 (POLUREA LPM)
9. PAINT CURB 15' EITHER DIRECTION OF FIRE HYDRANT (30' MINIMUM) & PLACE BLUE REFLECTIVE PAVEMENT MARKER IN MIDDLE OF ADJACENT DRIVE LANE NEAREST TO HYDRANT
10. INSTALL TYPE IIIA BARRICADE PER CCAUSD #601 WITH OM4-1 END ON ROAD MARKER
11. INSTALL 24" WIDE SOLID WHITE CROSSWALK LINES USING TYPE 1 PAVEMENT MARKINGS PER CCAUSD #254

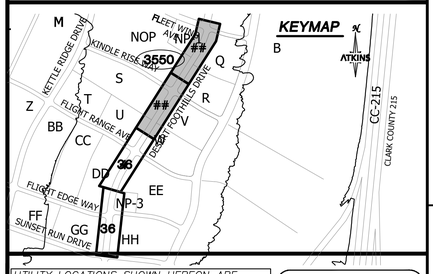
| REVISIONS | | | |
|---|---|---|---|
| REV. | DESCRIPTION | BY | DATE | APPROVAL |










GRAPHIC SCALE
30 0 15 30 60
HORIZONTAL: 1"= 30'

### BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

### BENCHMARK

CITY OF LAS VEGAS BENCHMARK: D368
(REVISED 2008)
NAVD88 ELEVATION: 989.574 METERS
(3,246.63 FEET)
FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
T21S,R59E,S03

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

Call before you D g AVOID OUTSIDE UNDERGROUND UTILITY LINES. IT'S COURTLY. Call 811 or 1-800-642-2444

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

UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTORS 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 OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.

PROFESSIONAL ENGINEER - STATE OF NEVADA
NICOLAS A. BARROS
EXP. 12-31-20
CIVIL
No. 25673
10/6/2020


ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200

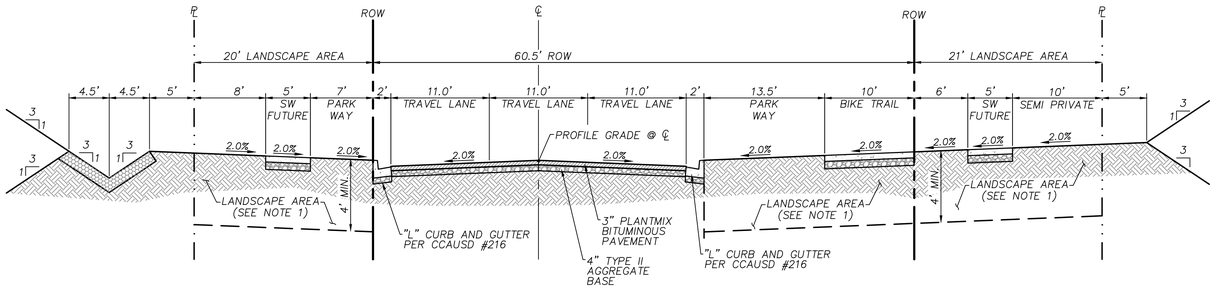

SUMMERLIN

# SUMMERLIN VILLAGE 22
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

## SIGNAGE AND STIPING PLAN

| | |
|---|---|
| DESIGNED BY: | B. MOCHTYAK |
| DRAWN BY: | R. MEILLEUR |
| CHECKED BY: | P. BATES |
| HORIZ.: | 1"=30' |
| VERT.: | NONE |
| XXXVXXXX LXX-XXXXX | |
| DATE: | OCTOBER, 2020 |
| DRAWING NO. | ##/46 |
| JOB NO. | 100066774 |

K:\Projects\SummWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)_Sheets\66774-33-TRAF-11.dwg LAYOUT: 35 SIGNAGE AND STIPING PLAN Oct 15, 2020 - 10:41AM



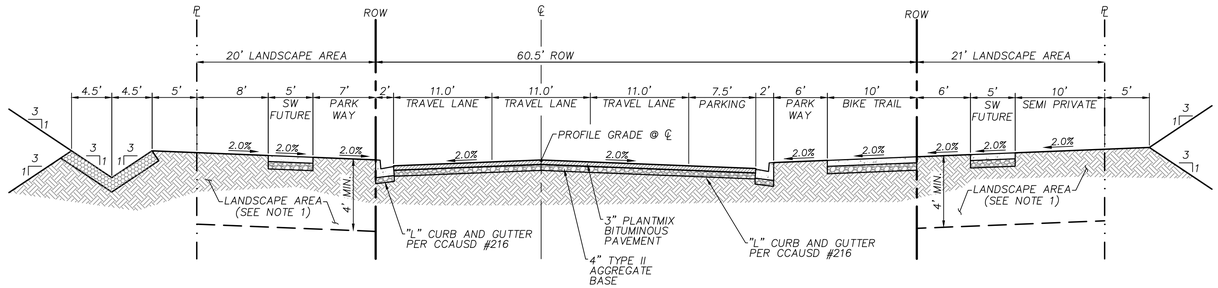

**NOTES:**

1. EXCAVATE BOTH SIDES TO DEPTH INDICATED PRIOR TO STREET IMPROVEMENTS. SIFT/SCREEN OUT ROCK AND DEBRIS GREATER THAN 6" FROM EXCAVATED MATERIAL, THEN BACKFILL TO 85% COMPACTION. FILL AS NECESSARY TO 2" BELOW THE FINISHED GRADE.

## DESERT FOOTHILLS DRIVE

N.T.S.

A / 37

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## DESERT FOOTHILLS DRIVE

N.T.S.

B / 37

**BASIS OF BEARING**

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

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T21S,R59E,S03

FAST Call before you UnderGround 1-702-432-5300 REGIONAL AND NATIONAL SYSTEMS OF TRANSPORTATION

Call before you D g. AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S CORTLY. Call 811 or 1-800-642-2444

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

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PROFESSIONAL ENGINEER-STATE OF NEVADA NICOLAS A BARCOS EXP. 12-31-20 CIVIL No. 25973 10/6/2020

REVISIONS

| REV. | DESCRIPTION | BY | DATE | APPROVAL |
|---|---|---|---|---|

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200

SUMMERLIN

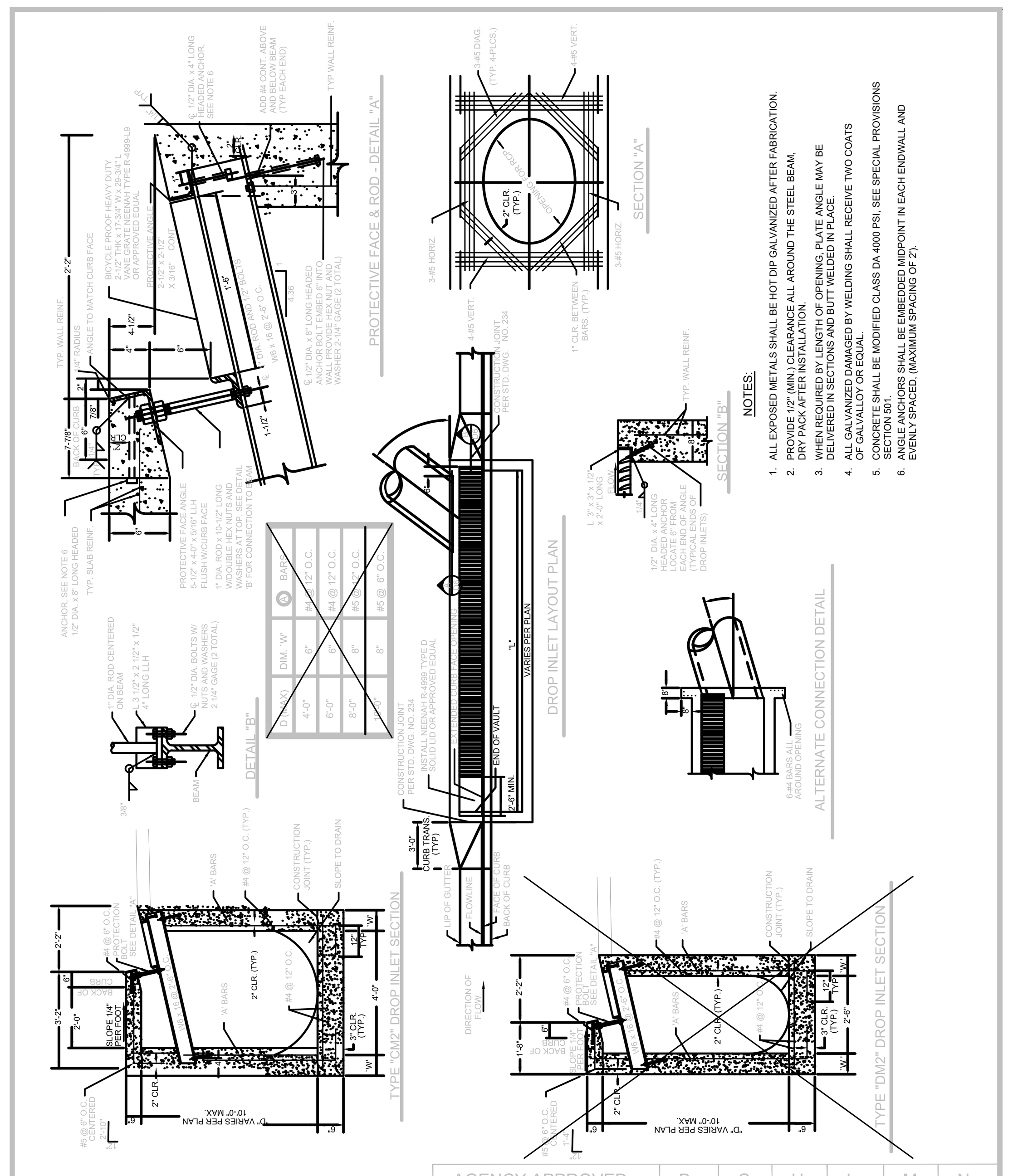
SUMMERLIN VILLAGE 22
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

TYPICAL SECTIONS

DESIGNED BY: B. MOCHTYAK
DRAWN BY: L. SOSA
CHECKED BY: P. BATES
HORIZ.: NONE
VERT.: NONE

XXXVXXXX.
LXX-XXXXX
DATE: OCTOBER, 2020
DRAWING NO. 37/46
JOB NO. 100066774

X:\Projects\SummWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)_Sheets\66774-36-DETL-01.dwg LAYOUT: 37 TYPICAL SECTIONS Oct 15, 2020 - 10:41AM

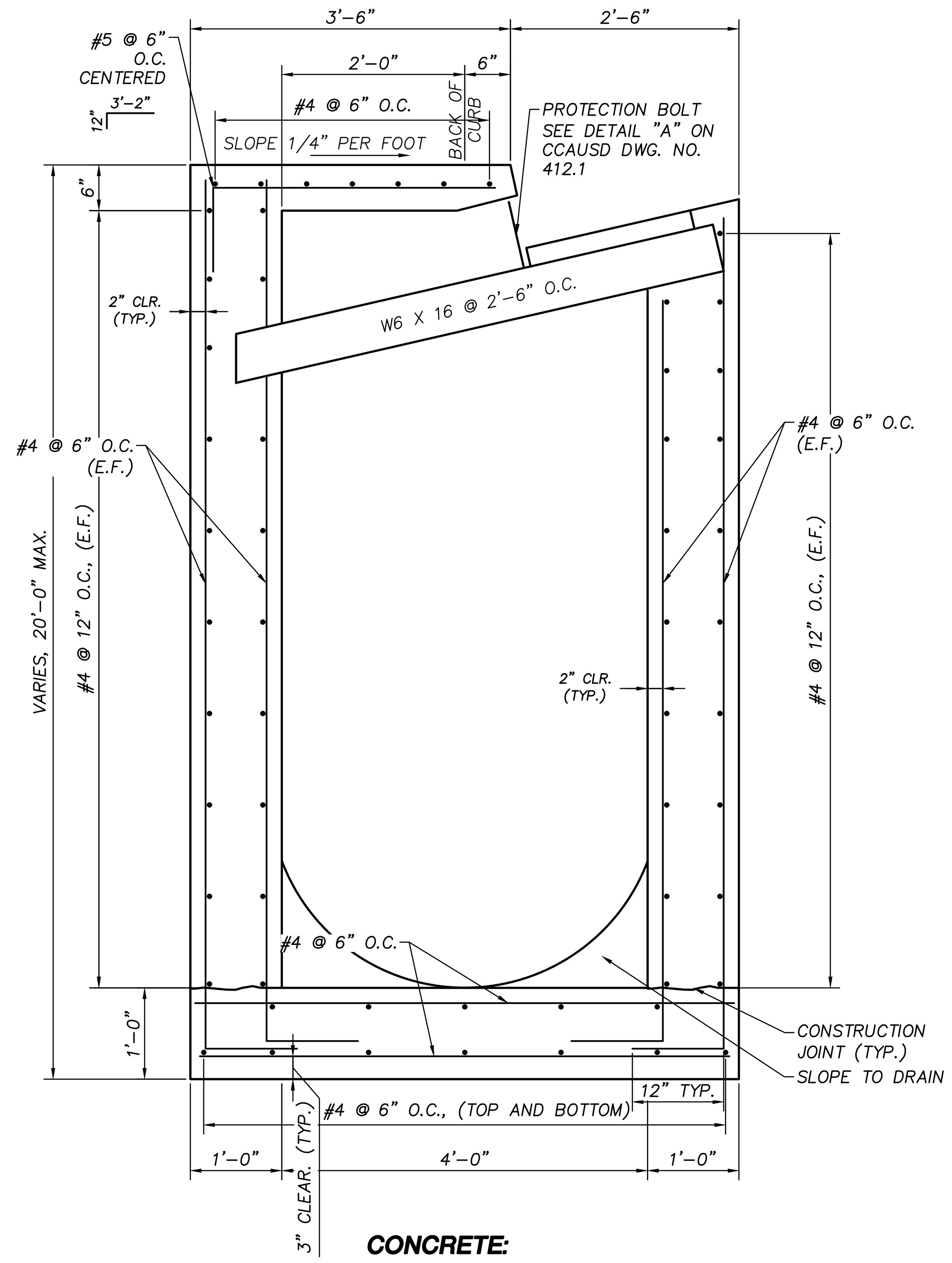



| SPECIFICATION REFERENCE | |
|---|---|
| 501 | CONCRETE |
| 501 | CONCRETE STRUCTURES |
| 501 | REINFORCING STEEL |
| 501 | STEEL |
| | |
| • | |

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TYPE "C-D" MODIFIED
DROP INLET

DATE 9-14-06 DWG. NO. 412.1




**CONCRETE:**

CONCRETE SHALL BE MODIFIED CLASS DA 4500 PSI, SEE SPECIAL PROVISIONS SECTION 501.

NOTE:

THIS DETAIL IS MEANT TO MODIFY THE TYPE "CM2" DROP INLET SECTION PER CCAUSD DWG. NO. 412.1 FOR STRUCTURES WITH DEPTHS GREATER THAN 10'. ALL OTHER INFORMATION OF THE STANDARD DRAWING STILL APPLY UNLESS OVERWRITTEN BY THIS DETAIL.

## SUPPLEMENT TO "CM2" DROP INLET (D>10')

N.T.S.

C / 38

| REV. | DESCRIPTION | BY | DATE | APPROVAL |
|---|---|---|---|---|
| | | | | |

REVISIONS

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200

SUMMERLIN

# SUMMERLIN VILLAGE 22

DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

## STORM DETAILS

DESIGNED BY: B. MOCHTYAK
DRAWN BY: B. MOCHTYAK
CHECKED BY: P. BATES
HORIZ.: NONE
VERT.: NONE

XXXVXXXX
LXX-XXXXX
DATE: OCTOBER, 2020
DRAWING NO. 38/46

JOB NO. 100066774

PROFESSIONAL ENGINEER - STATE OF NEVADA
NICOLAS A. BARCOS
EXP. 12-31-20
CIVIL
No. 25673
10/6/2020

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Call before you Dig. AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY. Call 811 OR 1-800-642-2444
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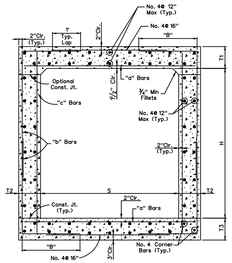
X:\Projects\SummWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)_Sheets\66774-37-DETL-STRM.dwg LAYOUT: 38 STORM DETAILS Oct 15, 2020 - 10:42AM



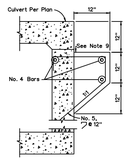

TYPICAL SECTION

NOTES:

1. DESIGN SPECIFICATIONS: "AASHTO LRFD Bridge Design Specifications 2012"
2. CONSTRUCTION SPECIFICATIONS: "State of Nevada Department of Transportation Standard Specifications for Road and Bridge Construction 2014"
3. LIVE LOADS:
   HS-93 Design Truck (32.0 KIP Axle)
   HL-93 Design Tandem (Two 25.0 KIP Axles Spaced 4 Feet Apart)
   (Live Load Impact Factor for Top Slab is 33% up to 2 Feet of Cover)

   LATERAL LIVE LOAD PRESSURE:
   Equivalent to 2 Feet of Earth Surcharge Applied Horizontally = 240 PSF

   DEAD LOADS:
   Soil Unit Weight = 120 PCF
   Max Lateral Earth Pressure = 30 PCF
   Min Lateral Earth Pressure = 60 PCF
4. CONCRETE: Class DA Modified (Mejor) F'C=4,500 PSI @ 28 Days. (Class D in Clark County)
5. REINFORCING STEEL: All reinforcing steel to be ASTM A615 grade 60 or A706. Dimension relating to bar spacing are center to center.
6. DESIGNATION: Box culverts are shown on plans as span times height times length (10' x 8' x 190' RCB).
7. Where traffic loads will be placed directly on the top slab of the culvert with less than 2 feet of fill, increase top slab thickness by 1/2 inch and cover for top reinforcement from 2 inches to 2 1/2 inches. Provide epoxy coated reinforcement in top slab (except in Clark County). Decrease spacing of top slab bottom longitudinal bars (**A**) @ 12" to 6" inch spacing. Use EA Modified Mejor concrete (Class E in Clark County) in lieu of Class DA. Adjust quantities accordingly.
8. Provide 2 foot wide Type 1 or Type 2 drain backfill wrapped in Class 1 or Class 2 non-woven geotextile along full height of each culvert exterior wall face.
9. Provide paving notch when top slab is exposed and when pavement is concrete. Adjust quantities accordingly.
10. For additional notes, see sheet B-20.1.1




PAVING NOTCH DETAIL

BENT BARS

SHEET 1 OF 2

STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION

RCB CULVERTS
SINGLE

| B-20.1.2 | (502,505) | Signed Original On File |
|---|---|---|
| ADOPTED: 11/70 | REVISED: 10/95 | CHIEF BRIDGE ENGR. |

## RCB DETAILS PER NDOT

N.T.S.

A / 39

BILL OF MATERIALS (RCP HDPE CMP)

| PIPE SIZE (INCH) | SINGLE (ONE GRATE) ● CONCRETE (CY)† | ADD QUAN. (H MIN.) | ● REINF. (LB.)† ADD RATE (CY/FT) | STR STEEL (LB) | DOUBLE (TWO GRATES) ● CONCRETE (CY)† | ADD QUAN. (H MIN.) | ● REINF. (LB.)† ADD RATE (LB/FT) | STR STEEL (LB) | TRIPLE (THREE GRATES) ● CONCRETE (CY)† | ADD QUAN. (H MIN.) | ● REINF. (LB.)† ADD RATE (LB/FT) | STR STEEL (LB) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ≤15 | 0.71 | 0.19 | 36 | 10 | 211 | 1.06 | 0.26 | 50 | 13 | 397 | 1.41 | 0.33 | 70 | 17 | 583 |
| 18 | 0.89 | 0.20 | 40 | 10 | 306 | 1.31 | 0.28 | 56 | 13 | 574 | 1.72 | 0.35 | 77 | 18 | 842 |
| 24 | 1.08 | 0.22 | 58 | 12 | 349 | 1.56 | 0.30 | 80 | 15 | 652 | 2.04 | 0.37 | 105 | 20 | 956 |
| 30 | 1.28 | 0.24 | 63 | 12 | 390 | 1.83 | 0.31 | 86 | 16 | 729 | 2.38 | 0.39 | 113 | 20 | 1068 |
| 36 | 1.50 | 0.26 | 67 | 13 | 524 | 2.11 | 0.33 | 92 | 16 | 980 | 2.72 | 0.41 | 120 | 21 | 1435 |
| 42 | 1.71 | 0.28 | 90 | 15 | 575 | 2.39 | 0.35 | 120 | 18 | 1073 | 3.07 | 0.43 | 154 | 22 | 1571 |
| 48 | 1.94 | 0.30 | 95 | 15 | 707 | 2.68 | 0.37 | 127 | 18 | 1329 | 3.42 | 0.44 | 163 | 23 | 1951 |

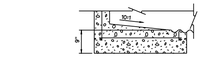
*The Concrete And Reinforcing Quantities Are Based On The H Min. Shown, Increase The Concrete And Reinforcing Base Quantity By The Corresponding Add Rate (Per Foot Of Increase) Hi If The H Specified Is Larger Than H Min.

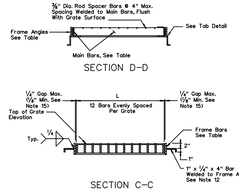
TABLE OF DIMENSIONS (RCP HDPE CMP)

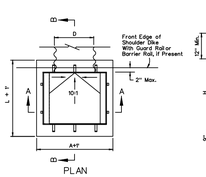
| PIPE SIZE (INCH) | A | H Min. (FT) | MAIN BARS (INCH) | FRAME ANGLES (INCH) | FRAME BARS (INCH) | L (FT) SINGLE GRATE | DOUBLE GRATE | TRIPLE GRATE |
|---|---|---|---|---|---|---|---|---|
| ≤ 15 | 2" | 2.50 | 3½ x ⅜ | 4 X 3 X ⅜ | 4 X ⅜ | 2' | 4' | 6' |
| 18 | 2'-6" | 3.00 | 4½ x ⅜ | 5 X 3 X ⅜ | 5 X ⅜ | 2' | 4' | 6' |
| 24 | 3" | 3.50 | 4½ x ⅜ | 5 X 3 X ⅜ | 5 X ⅜ | 2' | 4' | 6' |
| 30 | 3'-6" | 4.00 | 4½ x ⅜ | 5 X 3 X ⅜ | 5 X ⅜ | 2' | 4' | 6' |
| 36 | 4" | 4.50 | 5½ x ⅜ | 6 X 3½ x ⅜ | 6 X ⅜ | 2' | 4' | 6' |
| 42 | 4'-6" | 5.00 | 5½ x ⅜ | 6 X 3½ x ⅜ | 6 X ⅜ | 2' | 4' | 6' |
| 48 | 5" | 5.50 | 5½ x ⅜ | 6 X 3½ x ⅜ | 6 X ⅜ | 2' | 4' | 6' |

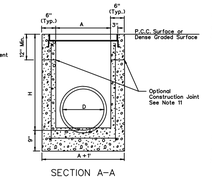
NOTES:

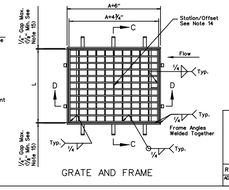
1. All concrete shall be class A or AA.
2. Reinforcing steel shall be No.4 bars with maximum spacing at 18 inch centers, wired tightly at all intersections and embedded 2 inches clear of all concrete surfaces.
3. Exposed edges of concrete shall be chamfered 1 inch.
4. Dimensions may be varied to fit local conditions if ordered by the engineer.
5. Commercial prefabricated gratings approved by the bridge division may be used in lieu of the field-welded grating shown.
6. Extreme low cover situations to be reviewed by hydraulics engineer.
7. Slope catch basin there 10:1 from all directions toward grate. Flat basin is used as to junction with pipe line(s) to outlet pipe and provide a 10:1 slope to flow line(s).
8. See sheet R-2.9.1 for details if connecting HDPE pipe.
9. A single Type 2 drop inlet shall be constructed unless a double or triple is specified.
10. Single grate configuration shown for clarity. Outside dimensions of each grate shall measure 2 feet by A+4"x".
11. Run rebar continuous thru construction joint. Joint must be a minimum of 3 inches from horizontal bars.
12. Weld one tab on ℄ of grate and remaining two tabs 6 inches from edge of frame. Six tabs per inlet, three tabs on each side
13. Weld tabs 6 inches from edge of frame. Four tabs per grate, two on each side.
14. For multiple grate installations, the station/offset is to the center of the concrete drop inlet structure.
15. Grate is to fit in the frame and be easily removed. If the gap between the grate and frame is greater than ¼" on each side of the grate, the grate and frame shall be removed and reconstructed to the tolerances specified or, with approval of the engineer, a steel plate ¼" thick may be welded from the grate to the top of the frame to reduce the gap to a maximum of ½".
16. Additional pipe penetrations may be placed in any wall. Pipe penetrations are to be to the center of the structure wall unless specified otherwise.




STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION

DROP INLET
TYPE 2

| R-4.2.1 | (609) | Signed Original On File |
|---|---|---|
| ADOPTED: 11/70 | REVISED: 10/95 | CHIEF HYDRAULICS ENGR. |

## DROP INLET TYPE 2 PER NDOT

N.T.S.

B / 39




| PIPE Ø | CONTROL Ø | PLUG OUTSIDE Ø | PLUG THK | WEIGHT (TONS) |
|---|---|---|---|---|
| 18"Ø | 22 1/8"Ø | 23"Ø | 12" | 0.25 |
| 24"Ø | 28 3/4"Ø | 30"Ø | 12" | 0.38 |
| 30"Ø | 35 5/8"Ø | 37"Ø | 12" | 0.58 |
| 36"Ø | 42 3/8"Ø | 44"Ø | 12" | 0.82 |
| 42"Ø | 49 3/8"Ø | 51"Ø | 12" | 1.10 |
| 48"Ø | 55 3/8"Ø | 58"Ø | 12" | 1.42 |
| 54"Ø | 61 3/8"Ø | 65"Ø | 12" | 1.79 |
| 60"Ø | 67 3/8"Ø | 72"Ø | 12" | 2.19 |
| 66"Ø | 73 3/8"Ø | 79"Ø | 12" | 2.64 |
| 72"Ø | 79 3/8"Ø | 86"Ø | 12" | 3.13 |

NOTES:

1) FOR ADDITIONAL PLUG / PIPE DETAIL INFORMATION CONTACT RINKER MATERIALS REPRESENTATIVE.
2) SEE CONTRACT BID ITEM SUMMARY FOR SIZE & QUANTITY REQUIRED.
3) MINIMUM CONCRETE STRENGTH (F'c) = 4,000 PSI.

Rinker MATERIALS® A CEMEX® COMPANY
6560 LANGFIELD RD., BLDG. 3
HOUSTON, TEXAS 77092
PHONE #: 832-590-5300

FOR APPROVAL
SCALE: N. T. S.

| REV. NO. | DESCRIPTION | BY: | DATE: |
|---|---|---|---|
| REVISIONS | | | |

DRAWN BY: E. JACKSON DATE: JUNE 7, 2018
CHECKED BY: T. LOPEZ

GENERAL R.C. PLUG DETAIL (18"Ø TO 72"Ø)

PROJECT: LAS VEGAS AREA
LOCATION: NEVADA
CONTRACTOR:

DRAWING NO: A200-CE-731
SHEET NO.: END PLUG
REV:

## TYPICAL STORM DRAIN CAP

N.T.S.

C / 39

| REVISIONS | | | |
|---|---|---|---|
| REV. | DESCRIPTION | BY | DATE |
| | | | |

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200

SUMMERLIN

SUMMERLIN VILLAGE 22
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

STORM DETAILS

DESIGNED BY: B. MOCHITYAK
DRAWN BY: B. MOCHITYAK
CHECKED BY: P. BATES
HORIZ.: NONE
VERT.: NONE

XXXVXXXX
LXX-XXXXX
DATE: OCTOBER, 2020
DRAWING NO. 39/46
JOB NO. 100066774

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PROFESSIONAL ENGINEER-STATE OF NEVADA
NICOLAS A. BARCOS
EXP. 12-31-20
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No. 25673
10/6/2020

X:\Projects\SummWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)_Sheets\66774-37-DETL-STRM2.dwg LAYOUT: 39 STORM DETAILS Oct 15, 2020 - 10:42AM

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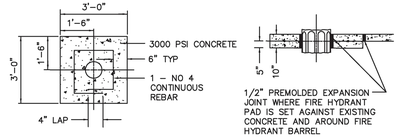
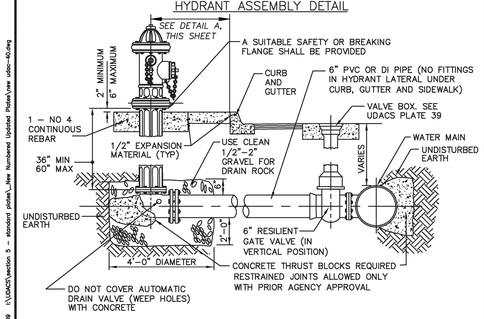
# UNIFORM DESIGN STANDARDS FOR WATER DISTRIBUTION SYSTEMS

## PAD DETAIL




NOTE
SEE SHEET 2 FOR LOCATION OF FIRE HYDRANTS, AND FIRE HYDRANT PADS.

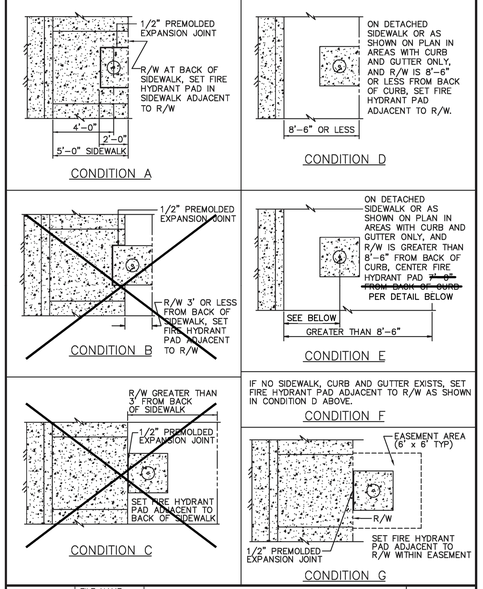
## HYDRANT ASSEMBLY DETAIL




| NOT TO SCALE | FILE NAME: UDACS–40 DRAWN BY: SDM CHECKED BY: SPM | FIRE HYDRANT INSTALLATION | UDACS PLATE NO. 40 SHEET 1 OF 3 |
|---|---|---|---|

15:28 Plot ● 03/10/09 I:\UDACS\section 5 – standard plates_New Numbered Updated Plates\new udacs–40.dwg

# UNIFORM DESIGN STANDARDS FOR WATER DISTRIBUTION SYSTEMS



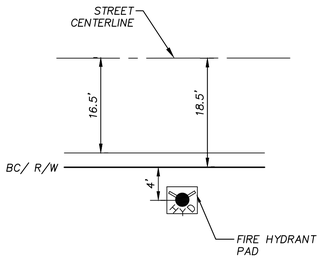

| NOT TO SCALE | FILE NAME: UDACS–40 DRAWN BY: SDM CHECKED BY: SPM | FIRE HYDRANT INSTALLATION | UDACS PLATE NO. 40 SHEET 2 OF 3 |
|---|---|---|---|

# UNIFORM DESIGN STANDARDS FOR WATER DISTRIBUTION SYSTEMS

NOTES

1. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE REQUIREMENTS AND APPROVED FIRE HYDRANT INSTALLATION GUIDES OF THE FIRE DEPARTMENT HAVING JURISDICTION.
2. NO HYDRANT SHALL BE LOCATED WITHIN 25 FEET OF ANY STRUCTURE OR 6 FEET OF A DRIVEWAY, POWER POLE, LIGHT STANDARD, OR ANY OTHER OBSTRUCTION. FOR WALLS, FENCE, AND PLANTER LOCATIONS, A PERIMETER AROUND THE HYDRANT MEASURING A MINIMUM OF 3 FEET FROM ITS CIRCUMFERENCE SHALL BE MAINTAINED CLEAR OF ALL OBSTRUCTIONS AT ALL TIMES. HYDRANTS MUST BE LOCATED A MINIMUM OF 6 FEET AWAY FROM THE BEGINNING OF A TURNING RADIUS.
3. 6" FIRE HYDRANT LATERAL SHALL BE THE SAME PRESSURE CLASS AS THE DISTRIBUTION MAIN.
4. DUCTILE IRON PIPE TO BE ENCASED WITH TWO LAYERS EIGHT MILS THICK POLYETHYLENE FILM. DO NOT ENCASE FIRE HYDRANT BARREL.
5. ALL FIRE HYDRANTS SHALL BE REPAINTED AS REQUIRED IF DAMAGED DURING INSTALLATION.
6. USE OF FIRE HYDRANT BARREL EXTENSIONS MUST HAVE PRIOR AGENCY APPROVAL.
7. MAXIMUM FIRE HYDRANT LATERAL DEFLECTION SEE UDACS SECTIONS 2.07 AND 3.11
8. ADDITIONAL CLEARANCE FROM THE FRONT OF FIRE HYDRANT TO BACK OF CURB MAY BE REQUIRED BY THE AGENCY.

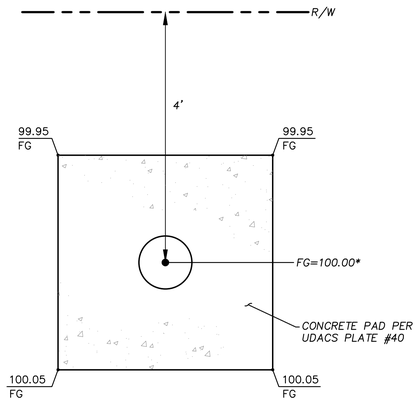
| NOT TO SCALE | FILE NAME: UDACS–40 DRAWN BY: SDM CHECKED BY: SPM | FIRE HYDRANT INSTALLATION | UDACS PLATE NO. 40 SHEET 3 OF 3 |
|---|---|---|---|




## FIRE HYDRANT LOCATION DETAIL

N.T.S.

A 40




*NOTE: THE GRADES SHOWN IN THIS DETAIL ARE RELATIVE NOT ACTUAL, 100.00 IS THE REFERENCE GRADE FOR THE CENTER OF PAD ELEVATION. SEE P–SHEETS FOR ACTUAL FINISHED GRADE FOR CENTER OF PAD. CALCULATE THE CORNER GRADES PER SHEET 9 FINISHED GRADE.

## FIRE HYDRANT PAD GRADING DETAIL

N.T.S.

B 40

NOTES:

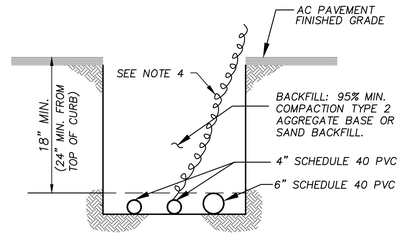
1 SLEEVES AND CONDUITS SHALL BE INSTALLED 18" BELOW FINISHED GRADE AND SHALL EXTEND 5' BEYOND BACK OF CURBS, WALLS AND PAVING.

2 CONTRACTOR SHALL RECORD LOCATIONS OF INSTALLED SLEEVES: A COPY OF THE FILED NOTES SHALL BE GIVEN TO SUMMERLIN'S ENGINEER FOLLOWING CONSTRUCTION.

3 HORIZONTAL LOCATION OF SLEEVES SHOWN ON P–SHEETS.

4 THE CONTRACTOR TO PROVIDE A WIRE THROUGH THE SLEEVE TO GRADE LEVEL (FOR FUTURE SLEEVE LOCATION).

5 CONTRACTOR TO IDENTIFY SLEEVE LOCATION ON TOP OF CURB.




## IRRIGATION SLEEVES DETAIL

N.T.S.

C 40

FAST Call before you UnderGround 1-702-432-5300 NEVADA AND NATIONAL SYSTEM OF TRANSPORTATION

Call before you Dig AVOID CUTTING UNDERGROUND UTILITY LINES IT'S COSTLY. Call 811 OR 1-800-642-2444

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

PROFESSIONAL ENGINEER STATE OF NEVADA NICOLAS A. BARCOS EXP. 12-31-20 CIVIL No. 25673 10/6/2020

REVISIONS

| REV. | DESCRIPTION | BY | DATE | APPROVAL |
|---|---|---|---|---|

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200

SUMMERLIN

SUMMERLIN VILLAGE 22
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

WATER DETAILS

DESIGNED BY: B. MOCHTYAK
DRAWN BY: B. MOCHTYAK
CHECKED BY: P. BATES
HORIZ.: NONE
VERT.: NONE

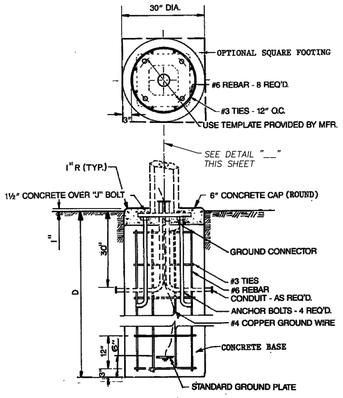
XXXVXXXX
LXX–XXXXX
DATE: OCTOBER, 2020
DRAWING NO. 40/46

JOB NO. 100066774

X:\Projects\SummWest\Village 22\100066774 – V22 Desert Foothills (Sunset to Fleet Wing)\...Sheets\66774–38–DETL–WATR.dwg LAYOUT: 40 WATER DETAILS Oct 15, 2020 – 10:42AM

Xref ..\ Xrefs\68105–XR–BR.dwg

## STREET LIGHT POLE FOUNDATIONS




| | DEPTH "D" | ANCHOR BOLT |
|---|---|---|
| TYPE 1 | 6'6" | 1¼" x 44" x 4" |
| TYPE 2 | 5'6" | 1" x 36" x 4" |
| TYPE 3 | 4'4" | 1" x 36" x 4" |
| TYPE 4 | 4'0" | 1" x 30" x 4" |

**NOTE:**

1. ALL CONCRETE SHALL BE TYPE V CONCRETE CLASS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA.
2. PLACE CONCRETE AGAINST UNDISTURBED EARTH OR 95% COMPACTED BACKFILL (10' MIN. RADIUS AROUND FOUNDATION)
3. CALCULATION SHEETS AND DETAILS WILL BE SUBMITTED, SIGNED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER. TO CCPW FOR REVIEW AND APPROVAL FOR FOUNDATION DESIGNS OTHER THAN SHOWN PER THIS STANDARD.

| REVISED | APPROVALS (INITIALS) | | |
|---|---|---|---|
| DATE | HHP | GCW | CLV |
| 6-10-98 | | | |
| 2/2/93 | | | |

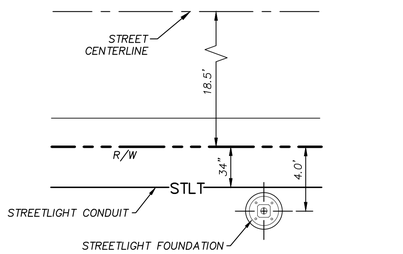
RECOMMENDED BY: DAVID H. MALPASS 7445 R.P.E.

APPROVED BY: C.L.V. CITY ENGINEER R.P.E.# 7569

SUMMERLIN STANDARD DRAWINGS

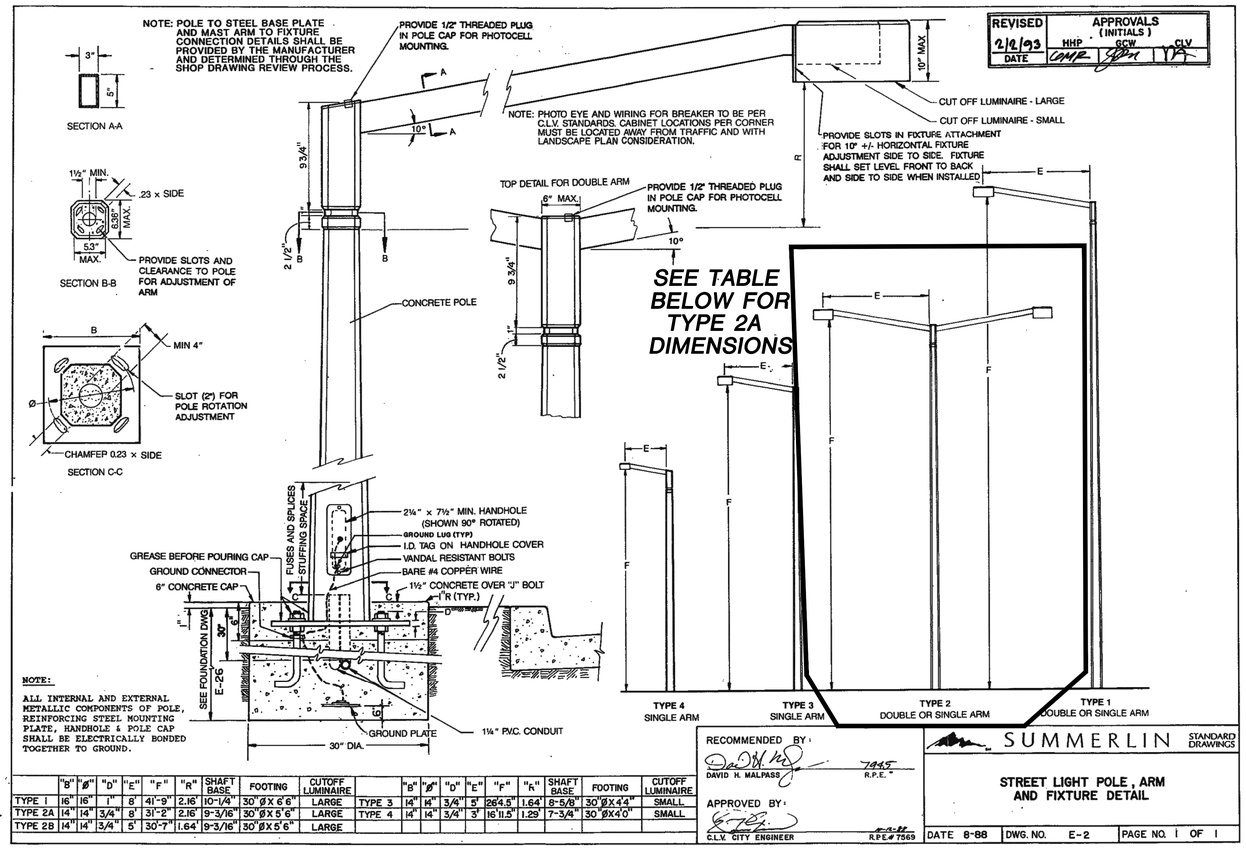
FOUNDATION

DATE 8-88 | DWG. NO. E-26 | PAGE NO. 1 OF 1




### STREETLIGHT FOUNDATION LOCATION DETAIL (A 41)

N.T.S.




**NOTE:**

ALL INTERNAL AND EXTERNAL METALLIC COMPONENTS OF POLE, REINFORCING STEEL MOUNTING PLATE, HANDHOLE & POLE CAP SHALL BE ELECTRICALLY BONDED TOGETHER TO GROUND.

| | "B" | "B" | "D" | "E" | "F" | "R" | SHAFT BASE | FOOTING | CUTOFF LUMINAIRE |
|---|---|---|---|---|---|---|---|---|---|
| TYPE 1 | 16" | 16" | 1" | 8' | 41'-9" | 2.16' | 10'-1/4" | 30"Ø X 6'6" | LARGE |
| TYPE 2A | 14" | 14" | 3/4" | 8' | 31'-2" | 2.16' | 9'-3/16" | 30"Ø X 5'6" | LARGE |
| TYPE 2B | 14" | 14" | 3/4" | 5' | 30'-7" | 1.64' | 9'-3/16" | 30"Ø X 5'6" | LARGE |

| | "B" | "B" | "D" | "E" | "F" | "R" | SHAFT BASE | FOOTING | CUTOFF LUMINAIRE |
|---|---|---|---|---|---|---|---|---|---|
| TYPE 3 | 14" | 14" | 3/4" | 5' | 264.5" | 1.64' | 8-5/8" | 30"Ø X 4'4" | SMALL |
| TYPE 4 | 14" | 14" | 3/4" | 3' | 16'11.5" | 1.29 | 7'-3/4" | 30"Ø X 4'0" | SMALL |

| REVISED | APPROVALS (INITIALS) | | |
|---|---|---|---|
| DATE | HHP | GCW | CLV |
| 2/2/93 | | | |

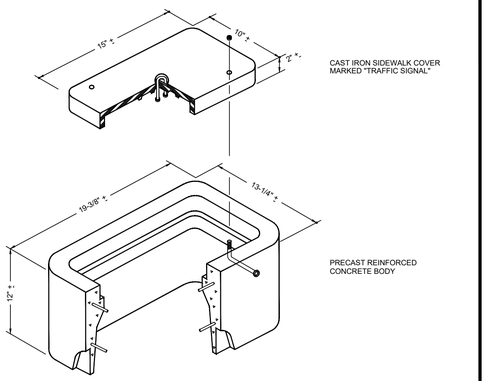
RECOMMENDED BY: DAVID H. MALPASS 7445 R.P.E.

APPROVED BY: C.L.V. CITY ENGINEER R.P.E.# 7569

SUMMERLIN STANDARD DRAWINGS

STREET LIGHT POLE, ARM AND FIXTURE DETAIL

DATE 8-88 | DWG. NO. E-2 | PAGE NO. 1 OF 1




NOTES:

1. THIS PULL BOX SHALL NOT BE USED IN TRAFFIC OR PARKING LANES.
2. ALL DIMENSIONS ARE NOMINAL.

| SPECIFICATION REFERENCE | |
|---|---|
| | |
| | |
| | |
| | |
| | |
| * | |

AGENCY APPROVED | B | C | H | L | M | N

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

NO. 3 1/2 PULL BOX

DATE | DWG. NO. 705

| REVISIONS | | | |
|---|---|---|---|
| REV. | DESCRIPTION | BY | DATE APPROVAL |


ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200


SUMMERLIN

**SUMMERLIN VILLAGE 22**
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

**STREET LIGHT DETAILS**

DESIGNED BY: B. MOCHTYAK
DRAWN BY: B. MOCHTYAK
CHECKED BY: P. BATES
HORIZ.: NONE
VERT.: NONE

XXXVXXXX
LXX-XXXXX

DATE: OCTOBER, 2020

DRAWING NO. 41/46

JOB NO. 100066774

PROFESSIONAL ENGINEER - STATE OF NEVADA - NICOLAS A. BARROS - EXP. 12-31-20 - CIVIL - No. 25673 - 10/6/2020

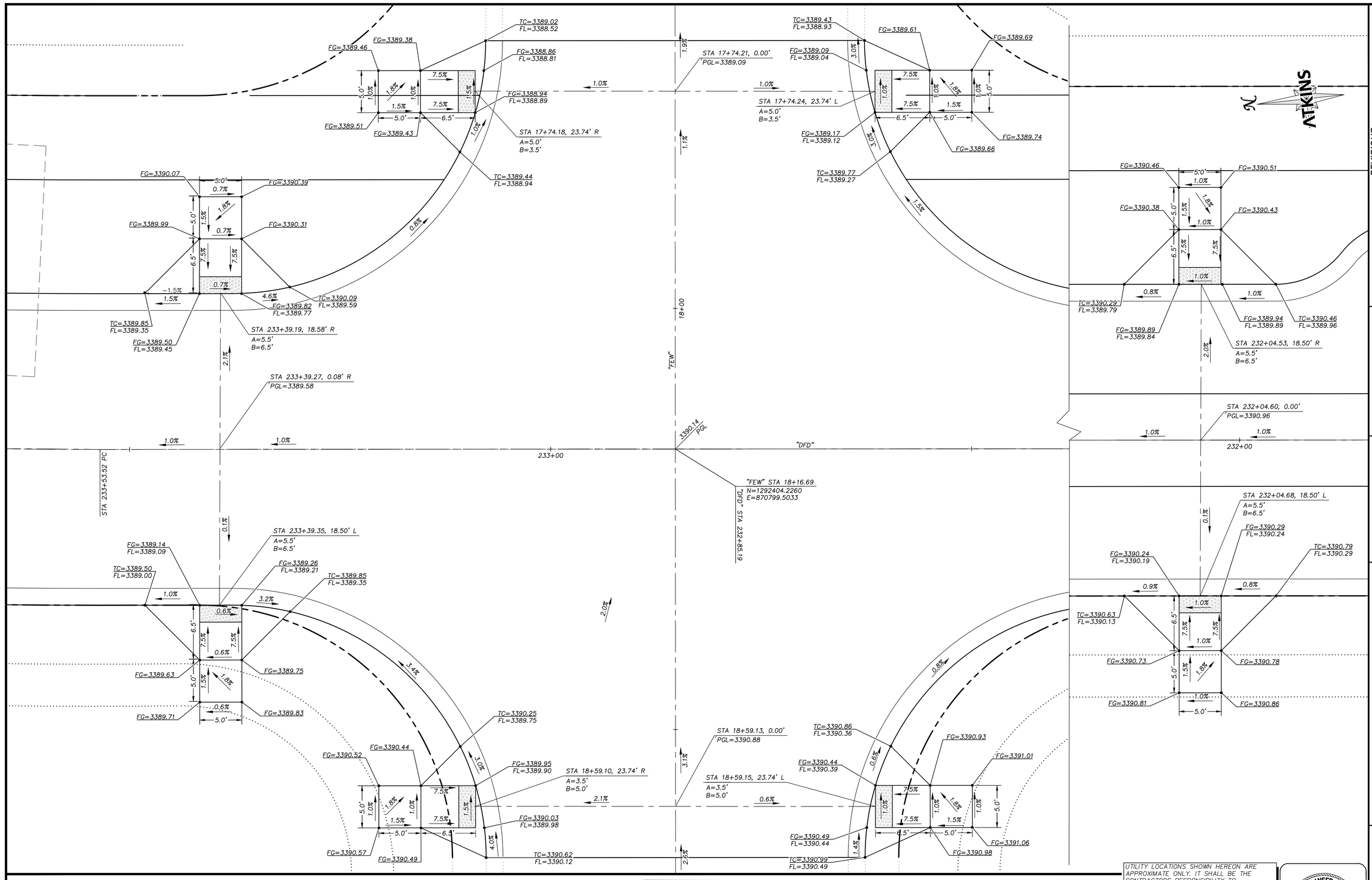
FAST Call before you UnderGround 1-702-432-5300 FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION

Call before you D g AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY. Call 811 OR 1-800-642-2444

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

X:\Projects\SummitWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)_Sheets\66774-39-DETL-STLT.dwg LAYOUT: 34 STREET LIGHT DETAILS Oct 15, 2020 - 10:43AM

Xref ..\ Xrefs\68105-XR-BR.dwg




GRAPHIC SCALE

5 0 2.5 5 10

HORIZONTAL: 1"= 5'

## BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

## BENCHMARK

CITY OF LAS VEGAS BENCHMARK: D368
(REVISED 2008)
NAVD88 ELEVATION: 989.574 METERS
(3,246.63 FEET)
FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
T21S,R59E,S03

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

Call before you D g AVOID CUTTING ENCROACHING UTILITY LINES. ITS COURTLY. Call 811 OR 1-800-642-2444

AVOID HITTING OVERHEAD POWER LINES. ITS COURTLY. CALL BEFORE YOU DO OVERHEAD 1-702-227-2929

UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTORS 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 OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.

PROFESSIONAL ENGINEER STATE OF NEVADA NICOLAS A. BARCOS EXP. 12-31-20 CIVIL No. 25673

10/6/2020

REVISIONS

| REV. | DESCRIPTION | BY | DATE | APPROVAL |
|---|---|---|---|---|

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200

SUMMERLIN

SUMMERLIN VILLAGE 22
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

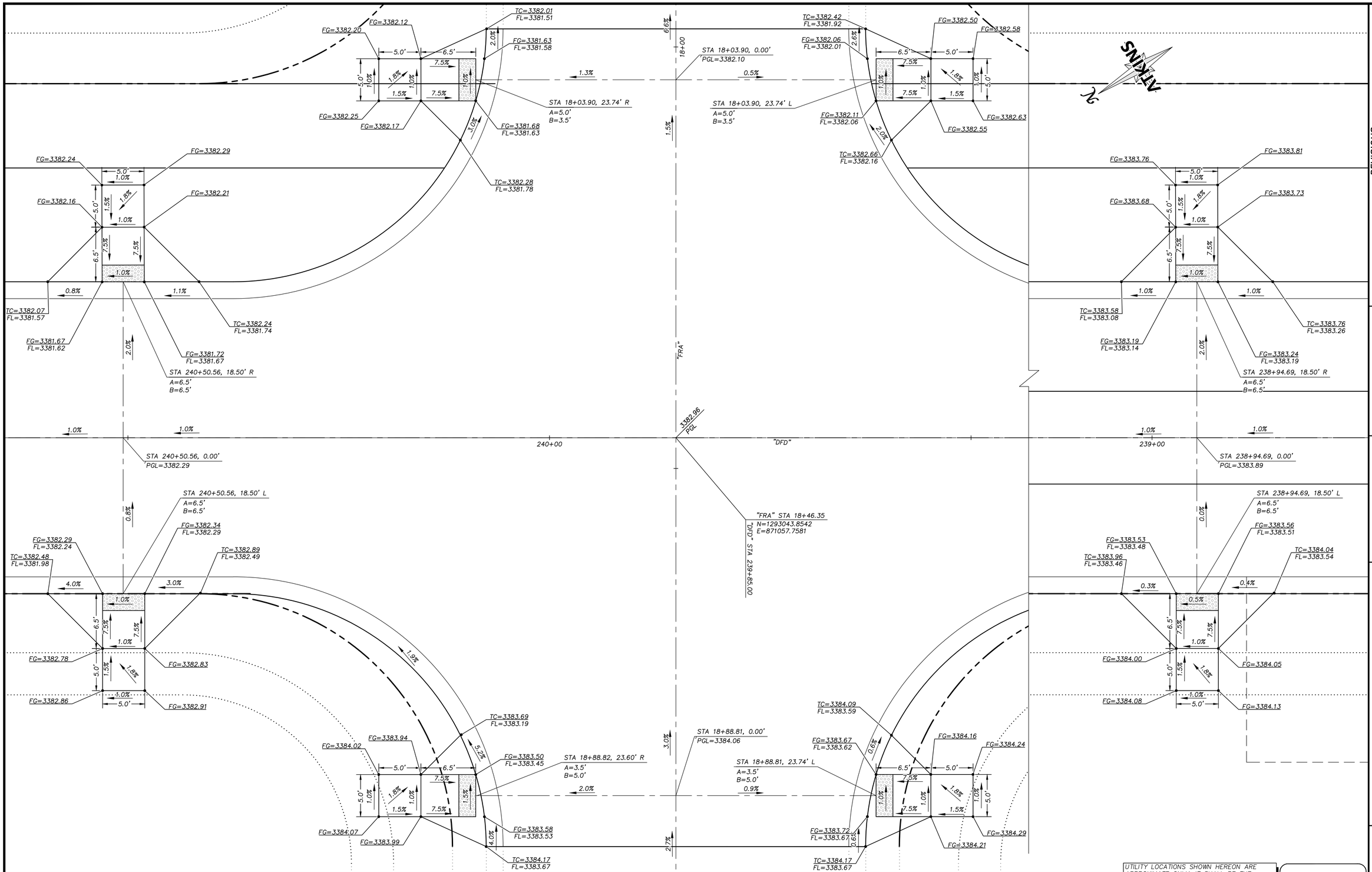
FEW INTERSECTION DETAILS

DESIGNED BY: B. WOCHTYAK
DRAWN BY: R. MELLEUR
CHECKED BY: P. BATES
HORIZ.: 1"=5'
VERT.: NONE

XXXVXXXX
LXX-XXXXX
DATE: OCTOBER, 2020
DRAWING NO. 42/46

JOB NO. 100066774

X:\Projects\SummWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)\...Sheets\66774-30-INT-IN11.dwg LAYOUT: 42 FEW INTERSECTION DETAILS Oct 15, 2020 - 10:43AM




GRAPHIC SCALE

5 0 2.5 5 10

HORIZONTAL: 1"= 5'

## BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

## BENCHMARK

CITY OF LAS VEGAS BENCHMARK: D368
(REVISED 2008)
NAVD88 ELEVATION: 989.574 METERS
(3,246.63 FEET)
FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
T21S,R59E,S03

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

Call before you D g
AVOID CUTTING EXCAVATION OR UTILITY LINES. IT'S COSTLY.
Call 811 or 1-800-642-2444

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

UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTORS 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 OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.

PROFESSIONAL ENGINEER, STATE OF NEVADA
NICOLAS A. BADEDO
EXP. 12-31-20
CIVIL
No. 25673
10/6/2020

REVISIONS

| REV. | DESCRIPTION | BY | DATE | APPROVAL |
|---|---|---|---|---|
| | | | | |

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200

SUMMERLIN

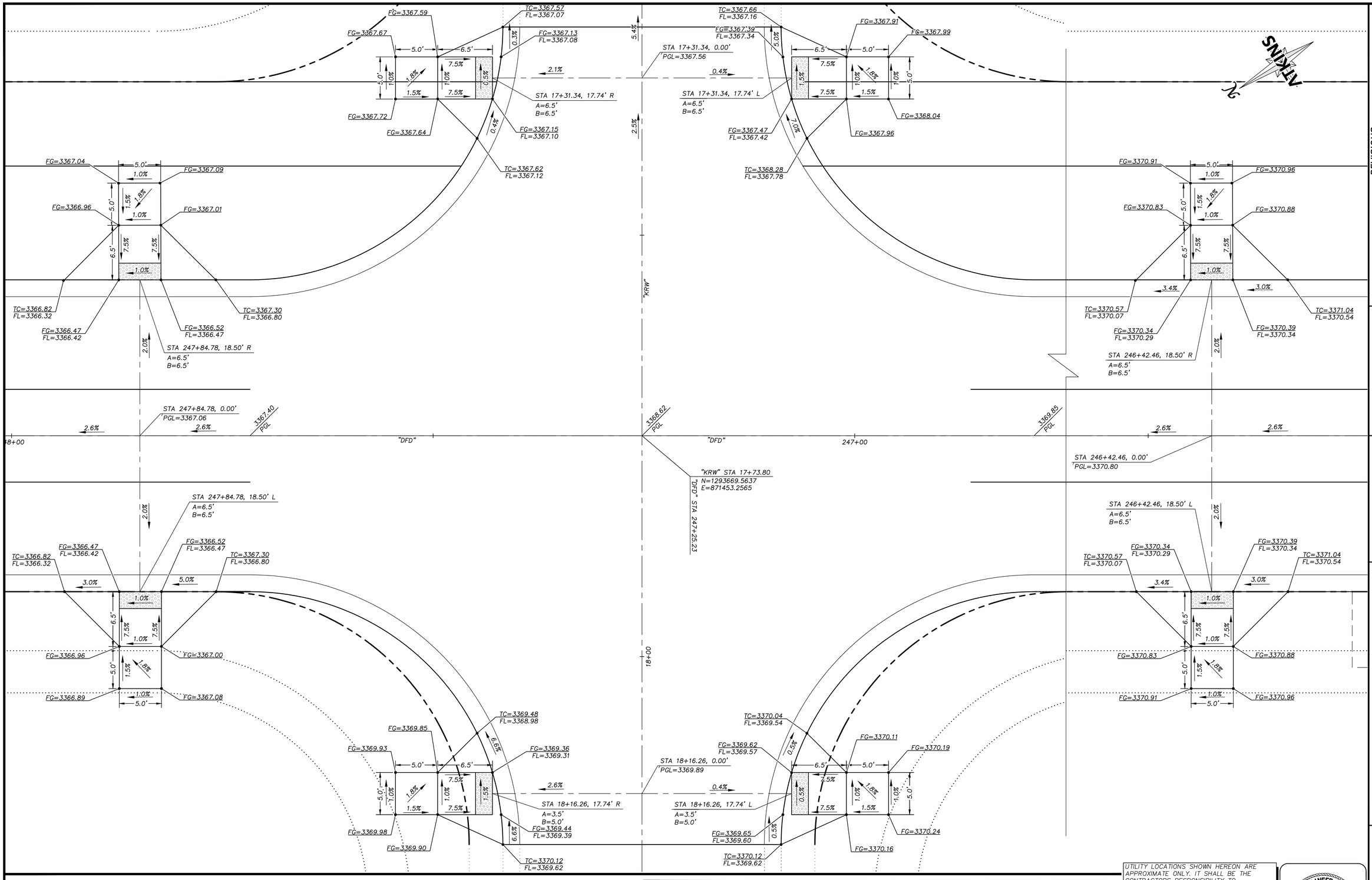
# SUMMERLIN VILLAGE 22

DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

## FRA INTERSECTION DETAILS

DESIGNED BY: B. MOCHITYAK
DRAWN BY: R. MEILLEUR
CHECKED BY: P. BATES
HORIZ.: 1"=5'
VERT.: NONE
DATE: OCTOBER, 2020
DRAWING NO. 43/46
XXVVXXXX
LXX-XXXXX
JOB NO. 100066774

X:\Projects\SummWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)_Sheets\66774-30-INT-INTL.dwg LAYOUT: 43 FRA INTERSECTION DETAILS Oct 15, 2020 - 10:43AM




GRAPHIC SCALE

5 0 2.5 5 10

HORIZONTAL: 1"= 5'

## BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

## BENCHMARK

CITY OF LAS VEGAS BENCHMARK: D368
(REVISED 2008)
NAVD88 ELEVATION: 989.574 METERS
(3,246.63 FEET)
FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
T21S,R59E,S03

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

Call before you D g AVOID CUTTING EXPOSED AND UTILITY LINES. IT'S COSTLY. Call 811 OR 1-800-642-2444

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

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PROFESSIONAL ENGINEER-STATE OF NEVADA NICOLAS A. BARCOS EXP. 12-31-20 CIVIL No. 25673

10/6/2020

REVISIONS

| REV. | DESCRIPTION | BY | DATE | APPROVAL |
|---|---|---|---|---|

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200

SUMMERLIN

# SUMMERLIN VILLAGE 22

DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

## KRW INTERSECTION DETAILS

DESIGNED BY: B. MOCHTYAK
DRAWN BY: R. MEILLEUR
CHECKED BY: P. BATES
HORIZ.: 1"=5'
VERT.: NONE

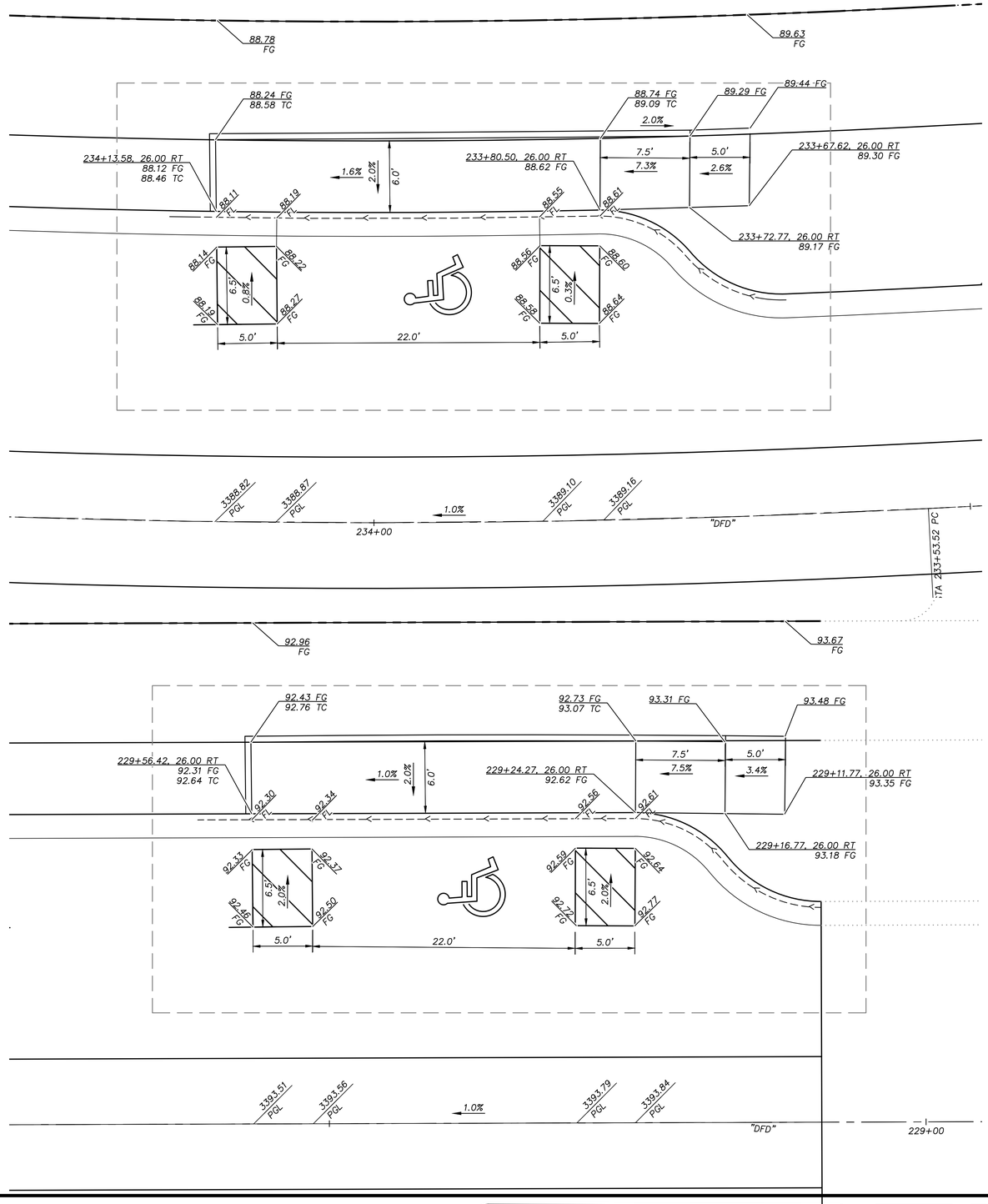
XXVVXXXX
LXX-XXXXX

DATE: OCTOBER, 2020

DRAWING NO. 44/46

JOB NO. 100066774

X:\Projects\SummWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)_Sheets\66774-30-INT-INTI.dwg LAYOUT: 44 KRW INTERSECTION DETAILS Oct 15, 2020 - 10:44AM




GRAPHIC SCALE

5 0 2.5 5 10

HORIZONTAL: 1"= 5'

## BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

## BENCHMARK

CITY OF LAS VEGAS BENCHMARK: D368
(REVISED 2008)
NAVD88 ELEVATION: 989.574 METERS
(3,246.63 FEET)
FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
T21S,R59E,S03

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

Call before you D g AVOID CUTTING ENTANGLING OR UTILITY LINES ITS COSTLY. Call 811 OR 1-800-642-2444

AVOID HITTING OVERHEAD POWER LINES ITS COSTLY. CALL BEFORE YOU DO OVERHEAD 1-702-227-2929

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PROFESSIONAL ENGINEER STATE OF NEVADA NICOLAS A. BARCOS EXP. 12-31-20 CIVIL No. 25673

10/6/2020

ATKINS

N

REVISIONS

| REV. | DESCRIPTION | BY | DATE | APPROVAL |
|---|---|---|---|---|
| | | | | |

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200

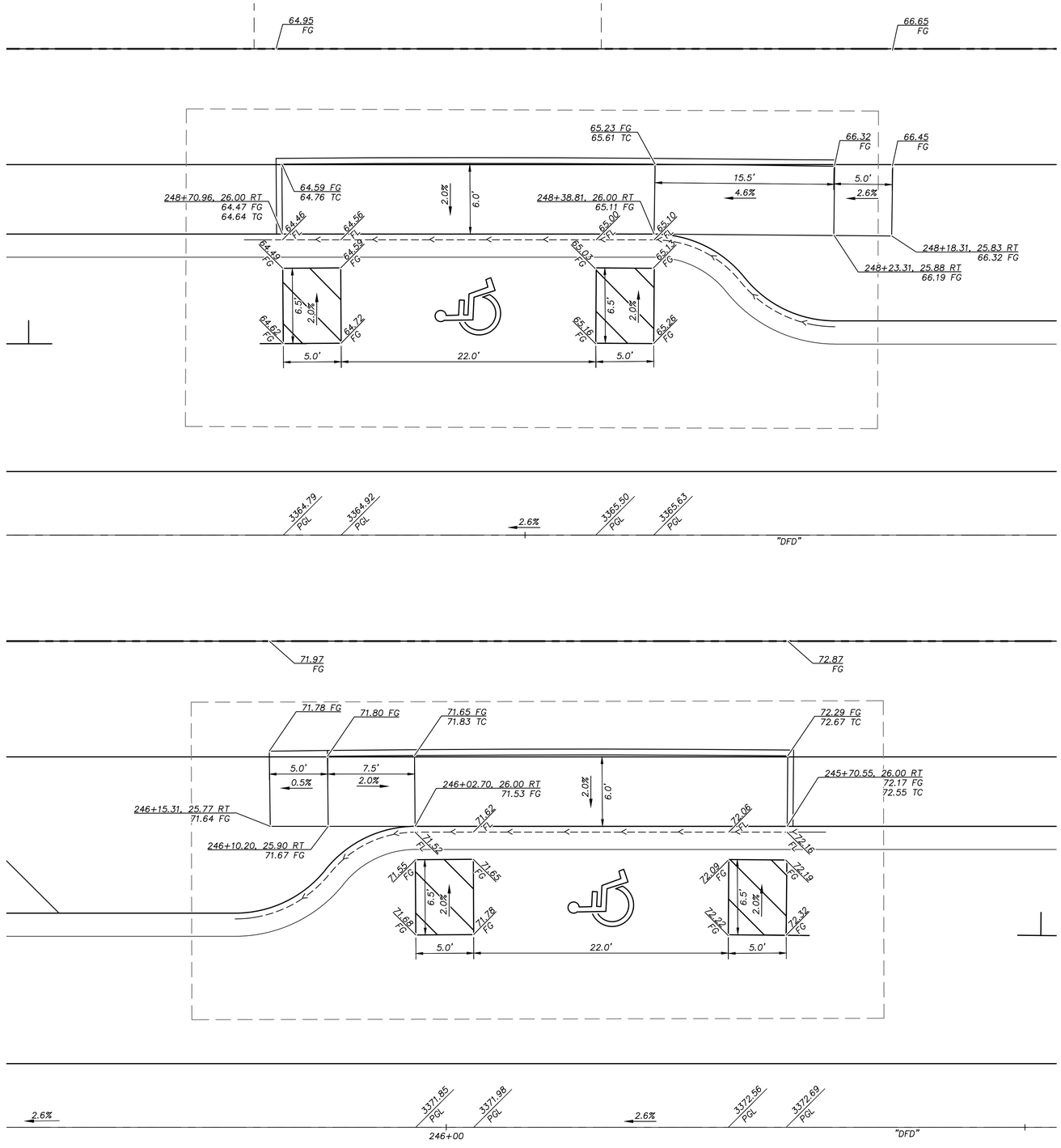
SUMMERLIN

SUMMERLIN VILLAGE 22
DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

HANDICAP GRADING DETAILS

| | |
|---|---|
| DESIGNED BY: | B. WOCHTYAK |
| DRAWN BY: | R. MELLEUR |
| CHECKED BY: | P. BATES |
| HORIZ.: | 1"=5' |
| VERT.: | NONE |
| XXXVXXXX LXX-XXXXX | |
| DATE: | OCTOBER, 2020 |
| DRAWING NO. | 45/46 |
| JOB NO. | 100066774 |

X:\Projects\SummWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)\...Sheets\66774-44-DET-HDCP1.dwg LAYOUT: 45 HANDICAP GRADING DETAILS Oct 15, 2020 - 10:44AM




GRAPHIC SCALE

5 0 2.5 5 10

HORIZONTAL: 1"= 5'

## BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

## BENCHMARK

CITY OF LAS VEGAS BENCHMARK: D368
(REVISED 2008)
NAVD88 ELEVATION: 989.574 METERS
(3,246.63 FEET)
FND USC&GS DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD. & WEST OF DETENTION BASIN.
T21S,R59E,S03

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

Call before you D g AVOID CUTTING ENTRANCING UTILITY LINES. ITS COSTLY. Call 811 OR 1-800-642-2444

AVOID HITTING OVERHEAD POWER LINES. ITS COSTLY. CALL BEFORE YOU DIG OVERHEAD 1-702-227-2929

UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTORS 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 OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.

PROFESSIONAL ENGINEER STATE OF NEVADA
NICOLAS A. BARCOS
EXP. 12-31-20
CIVIL
No. 25673
10/6/2020

REVISIONS

| REV. | DESCRIPTION | BY | DATE | APPROVAL |
|---|---|---|---|---|
| | | | | |

ATKINS
2270 Corporate Circle Suite 200
Henderson, Nevada 89074
Telephone: +1.702.263.7275
Fax: +1.702.263.7200

SUMMERLIN

# SUMMERLIN VILLAGE 22

DESERT FOOTHILLS DRIVE
SUNSET RUN DRIVE TO FLEET WING AVENUE (STREET G)

## HANDICAP GRADING DETAILS

DESIGNED BY: B. WOCHTYAK
DRAWN BY: R. MELLEUR
CHECKED BY: P. BATES
HORIZ.: 1"=5'
VERT.: NONE

XXXVXXXX
LXX-YXXXXX
DATE: OCTOBER, 2020
DRAWING NO. 46/46

JOB NO. 100066774

X:\Projects\SummWest\Village 22\100066774 - V22 Desert Foothills (Sunset to Fleet Wing)_Sheets\66774-44-DET-HDCP1.dwg LAYOUT: 46 HANDICAP GRADING DETAILS Oct 15, 2020 - 10:44AM