# CITY OF LAS VEGAS GENERAL NOTES

1. 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 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. A.C 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 222.
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 WESTERN TECHNOLOGIES. DATED FEBRUARY 9, 2017 PROJECT NO. 4126JD030, 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 N.R.S. 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 DIVISION.
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 OF SEWER SERVICE LATERALS AT THE PROPERTY LINE TO THE SEWER MAIN AND WHERE THE SEWER SERVICE LATERALS EXIT THE PUBLIC RIGHT-OF-WAY, 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 ADDITION.
23. A SEPARATE BORING PERMIT IS REQUIRED FOR ALL BORING ACTIVITIES.

# CITY OF LAS VEGAS STREETLIGHT NOTES

1. ALL STREET LIGHTING INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE STREET LIGHTING PLANS, THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA", LATEST REVISION, AND THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA", LATEST REVISION.
2. NO DEVIATION OF STREET LIGHT, PULL BOX, CONDUITS (ETC.) LOCATIONS SHALL BE PERMITTED WITHOUT WRITTEN APPROVAL OF THE TRAFFIC/ELECTRICAL FIELD OPERATIONS DIVISION AND THE CITY ENGINEER. ANY DEVIATION FROM THE PLAN LOCATION WILL REQUIRE COMPLIANCE WITH SECTION 623.LO.03 (E) OF THE SPECIFICATIONS.
3. ALL EXISTING STREET LIGHTING SHALL REMAIN OPERATIONAL DURING CONSTRUCTION. 4. ALL EMPTY CONDUIT SHALL HAVE PULL STRINGS INSTALLED PRIOR TO FINAL INSPECTION.
5. ANY STRUCTURE SUCH AS BLOCK WALLS, CHAIN LINK FENCES, RETAINING WALLS, ETC., SHALL LEAVE A MINIMUM CLEARANCE OF EIGHTEEN INCHES (18") TO THE FACE OF STREET LIGHTING POLE ON ALL SIDES WHEN STREETLIGHT IS INSTALLED BEHIND SIDEWALK, AND SHALL AT NO TIME COMPLETELY ENCLOSE THE STREET LIGHTING POLE. 6. AS-BUILT DRAWINGS SHALL BE SUPPLIED TO THE ELECTRICAL SERVICES SECTION PRIOR TO ANY PRE-FINAL INSPECTION. THE AS-BUILT DRAWING NEEDS TO BE STAMPED AS-BUILT AND SIGNED BY THE PREPARER.
7. SERVICE POINT SHALL BE COORDINATED WITH NEVADA POWER COMPANY, AND WHEREVER POSSIBLE, BE LOCATED NEAR THE CENTER OF THE CIRCUIT. SERVICE POINTS SHALL BE SHOWN ON THE PLANS.
8. IT SHALL BE ASSUMED THAT IN THE ABSENCE OF AN EXISTING, WORKABLE CIRCUIT TO ATTACH TO, ALL INSTALLATIONS SHALL REQUIRE A NEW SERVICE FOR OPERATION OF THE CIRCUIT.
9. WHEREVER THERE IS AN OVERHEAD UTILITY THAT MAY CONFLICT WITH THE INSTALLATION OF STREET LIGHTING 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 SERVICE TO TRANSFORMERS AND CONTROL SYSTEMS IF REQUIRED ON PLANS.
11. THE DEVELOPER/OWNER WILL BE REQUIRED TO SUPPLY POWER TO ALL NEW PUBLIC STREET LIGHTS INSTALLED UNDER THIS DESIGN PRIOR TO BOND RELEASE OR PROJECT COMPLETION. THE DEVELOPER/OWNER WILL BE RESPONSIBLE FOR ALL ITEMS ASSOCIATED WITH THE INSTALLATION, CONSTRUCTION, ENERGIZING, MAINTENANCE AND OPERATIONAL COST OF SAID STREETLIGHTS PRIOR TO PROJECT COMPLETION. REFER TO THE PLAN FOR ANY NEW SERVICE REQUIREMENTS. THE TRANSFER OF OWNERSHIP FROM THE DEVELOPER/OWNER TO THE THE CITY OF LAS VEGAS FOR ALL NEW PUBLIC STREET LIGHT/S AND/OR SERVICE/S INSTALLED UNDER THIS PLAN DESIGN WILL BE IN CONJUNCTION WITH THIS PROJECT COMPLETION. COORDINATE ALL MAINTENANCE AND OPERATIONAL TRANSFERS WITH THE CITY OF LAS VEGAS TRAFFIC ENGINEERING DEPARTMENT (TEFO) AT (702) 229-6331.

# DEVIATION FROM STANDARDS

NONE

# NOTE TO CONTRACTOR:

1. CONTRACTOR IS REQUIRED TO NOTIFY THE ARCHITECT, ENGINEER AND OWNER IN WRITING BY RFI OF ANY TYPED, HANDWRITTEN, STAMPED OR LABELLED PLAN CHECK COMMENTS ON THE PERMITTED PLANS WITHIN 7 DAYS OF RECEIPT OF THE PERMITTED PLANS. FAILURE TO PROVIDE WITHIN 7 DAYS INDICATES CONTRACTOR HAS INCLUDED ALL COSTS WITHIN HIS BASE BID TO COMPLY WITH FEDERAL, STATE AND LOCAL CODES AND SHALL PERFORM THE WORK AT NO ADDITIONAL COST.
2. GENERAL CONTRACTOR SHALL INCLUDE CONTACTING, COORDINATING PERMITS, SCHEDULING AND SUPERVISING ALL WORK TO BE PERFORMED BY NVE, SOUTHWEST GAS, CENTURYLINK, COX CABLE OR OTHER UTILITY PURVEYOR WORK PRIOR TO AND DURING CONSTRUCTION INCLUDING BARRICADING PLANS, BARRICADE DESIGNS, PERMITS AND BARRICADE WORK.
3. GENERAL CONTRACTOR SHALL CONTACT AND MEET ONSITE WITH ALL UTILITY PURVEYORS FOR SCHEDULING AND COORDINATION PURPOSES AT LEAST 30 DAYS PRIOR TO INSTALLATION OF UTILITY WORK.
4. GENERAL CONTRACTOR SHALL PROVIDE AND PAY FOR ALL BARRICADING PLANS, APPROVALS AND BARRICADING WITHIN THE RIGHT OF WAY AS WELL AS ANY CHANGES REQUIRED BY THE GOVERNING AUTHORITY IN THE PERFORMANCE OF CONTRACTOR'S WORK.
5. THE OWNER AND/OR HIS CONSULTANTS ARE NOT RESPONSIBLE FOR DELAYS CAUSED BY CONTRACTOR'S FAILURE TO PROVIDE NOTIFICATIONS IN A TIMELY MANNER.
6. PROJECT CONSULTANTS SHALL RESPOND TO RFIS OR OTHER CONTRACTOR QUERIES WITHIN 5 BUSINESS DAYS.

# LAS VEGAS VALLEY WATER DISTRICT (LVVWD) STANDARD NOTES

LVVWD PROJECT # 125896

1. NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN APPROVED FOR CONSTRUCTION BY THE LVVWD. FOLLOWING WATER PLAN APPROVAL, NOTICAL SHALL BE GIVE 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 PM 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 THE UDACS SHALL SUPERCEDE ANY CONFLICTS CONTAINED IN THE APPROVED DRAWINGS AND/OR SPECIFICATIONS.
3. ALL WORK, EXCEPT AS MODIFIED BY THESE PLANS OR 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 SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED AND AN ACCEPTABLE WATER SAMPLE OBTAINED, PRIOR TO CONNECTION TO THE LVVWD DISTRIBUTION SYSTEM.
10. THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES OR 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 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 LISTED ON THE LVVWD PRE-APPROVED MATERIALS AND MANUFACTURER'S LISTING FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS.
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 STANDARDS, INCLUDING THE PLACEMENT OF ASPHALT PAVING STREET SURFACES. ANY REPAIR WORK BY THE LVVWD TO THE MUNICIPAL WATER FACILITIES WILL INCLUDED THE PLACEMENT OF 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 DURING THE REPAIR OR OPERATION OF ITS FACILITIES, WILL BE REPLACED BY LVVWD WITH AN APPROPRIATELY SIZED PLAIN FINISH CONCRETE PATCH. THE LVVWD 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.

APPROVED FOR CONSTRUCTION
4/12/17
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT-NO. 125896 FIRST APPROVED DATE: 12/21/17

# SWPPP NOTES

1. CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVED ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO, OR ACCUMULATED IN, THE DRAINAGE SYSTEM OF THE CITY OF LAS VEGAS AND/OR THE STATE OF NEVADA 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 THE CITY OF LAS VEGAS AND THE LAS VEGAS VALLEY CONSTRUCTION SITE BEST MANAGEMENT PRACTICES 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 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 ACTUAL 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 INSPECTION MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO 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.

# 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.

# LAS VEGAS FIRE & RESCUE GENERAL NOTES

1. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE LAS VEGAS FIRE AND RESCUE ADOPTED FIRE CODE ORDINANCE #6325 FOR HYDRANT SPECIFICATIONS AND HYDRANT INSTALLATION SPECIFICATIONS.
2. ONLY FIRE HYDRANTS THAT ARE ON THE LAS VEGAS VALLEY WATER DISTRICTS-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 105.7.12]
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 WATER PRESSURE AND FLUSH CERTIFICATIONS 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 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 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 FEET UNSPRINKLERED; 600 FEET SPRINKLERED
COMMERCIAL-300 FEET UNSPRINKLERED; 400 FEET 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 FEET 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 FEET 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 FEET OF THE PERIMETER OF THE RADIUS OF THE CUL-DE-SAC.
14. NO FIRE HYDRANTS SHALL BE LOCATED WITHIN 6 FEET OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREETLIGHT OR ANY OTHER OBSTRUCTION. [IFC C102.12]
15. A MAXIMUM DISTANCE FROM A FIRE HYDRANT TO A ONE-TWO FAMILY DWELLING SHALL NOT EXCEED 300 FEET, 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 FEET, 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 FEET. [IFC C102.6]
18. TWO (2) SOURCES OF WATER ARE REQUIRED WHENEVER THERE ARE FOUR (4) OR MORE FIRE HYDRANTS/SPRINKLER LEAD-INS ARE INSTALLED ON A SINGLE SYSTEM. SECTIONAL CONTROL VALVES SHALL BE INSTALLED SO THAT NO MORE THAN TWO (2) FIRE HYDRANTS CAN BE OUT OF SERVICE DUE TO A BREAK IN A WATER MAIN. [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 FEET 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 FEET OUTSIDE AND 28 FEET INSIDE TURNING RADIUS. [IFC 503.2.4]
22. VERTICAL CLEARANCE OF ALL FIRE APPARATUS ACCESS ROADS SHALL NOT BE LESS THAN 13 FEET 6 INCHES. [IFC 503.2.1]
23. FIRE DEPARTMENT ACCESS ROADS SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF NOT LESS THAN 40 FEET FLOW LINE TO FLOW LINE WITH NO PARKING ALLOWED ON EITHER SIDE. FIRE LANES WITH NO PARKING ON BOTH SIDES. NOT LESS THAN 32 FEET WIDE, FLOW-LINE TO FLOW-LINE, WHERE PARKING IS PERMITTED ONLY ON ONE SIDE OF THE FIRE APPARATUS ACCESS ROAD. NOT LESS THAN 24 FEET WIDE, FLOW-LINE TO FLOW-LINE, WHERE NO PARKING IS PERMITTED ON EITHER SIDE. FIRE LANES THROUGH PARKING LOTS SHALL BE NOT LESS THAN 24 FEET. [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 FEET FROM A FIRE DEPARTMENT VEHICLE ACCESS. THIS DISTANCE COULD BE INCREASED TO 250 FEET IF THE BUILDING IS SPRINKLERED. [IFC 501.1.1]
25. APPROVED SECONDARY FIRE APPARATUS SHALL BE PROVIDED FOR 100 OR MORE DWELLING UNITS, ROAD(S) WITH DEAD-ENDS OR WITH A SINGLE POINT OF ACCESS IN CLARK COUNTY. FOR COMMERCIAL AND INDUSTRIAL DEVELOPMENTS WHERE

## CONSTRUCTION QUANTITIES

| | | UNIT | PUBLIC | PRIVATE |
|---|---|---|---|---|
| 1 | CONSTRUCT "L" TYPE CURB & GUTTER PER CCAUSD NO. 216 | LF | – | 939 |
| 2 | CONSTRUCT "A" TYPE CURB PER CCAUSD NO. 219 | LF | – | 5,702 |
| 3 | CONSTRUCT 4" SIDEWALK PER CCAUSD NO. 234 | SF | – | 19,899 |
| 4 | CONSTRUCT STANDARD AC PAVEMENT PER SOILS REPORT BY WESTERN TECHNOLOGIES INC. SEE DETAIL "1" ON SHEET D3 | SY | – | 11,366 |
| 5 | CONSTRUCT HEAVY AC PAVEMENT PER SOILS REPORT BY WESTERN TECHNOLOGIES INC. SEE DETAIL "2" ON SHEET D3 | SY | – | 12,045 |
| 6 | CONSTRUCT PCC PAVEMENT PER PER SOILS REPORT BY WESTERN TECHNOLOGIES INC. DETAIL "3" ON SHEET D3 | SF | – | 2,547 |
| 7 | CONSTRUCT PIPE PENETRATION PER DETAIL "4" ON SHEET D3 | LF | 1 | – |
| 8 | CONSTRUCT TRASH ENCLOSURE PER SEPARATE ARCHITECTURAL PLANS & DETAILS (BY OTHERS) | EA | – | 8 |
| 9 | CONSTRUCT 0" CURB | LF | – | 646 |
| 10 | TRANSITION FROM 6" CURB TO 0" CURB PER DETAIL "5" ON SHEET D3 | LF | – | 270 |
| 11 | CONSTRUCT ON-SITE ADA RAMP CASE I PER DETAIL "6" ON SHEET D3 | EA | – | 1 |
| 12 | CONSTRUCT 3.0' WIDE VALLEY GUTTER PER DETAIL "16" ON SHEET D3 | EA | – | 450 |
| 13 | CONSTRUCT ON-SITE ADA RAMP CASE II WITH HANDRAILS WHERE APPLICABLE PER DETAIL "7" ON SHEET D3 | EA | – | 15 |
| 15 | INSTALL 18" RCP CLASS III STORM DRAIN PIPE | LF | – | 527 |
| 16 | INSTALL TRENCH DRAIN PER SEPARATE PLANS AND PERMIT. SEE GROCERY PLANS FOR DETAILS | LF | – | 36 |
| 17 | INSTALL 48" TYPE II MANHOLE PER CCAUSD NO. 405.2 | EA | – | 2 (1) |
| 18 | EXPOSED BUILDING FOOTING PER SEPARATE STRUCTURAL PLANS & DETAILS BY OTHERS (PER SEPARATE PERMIT) | LF | – | 737 |
| 19 | INSTALL 48"x48" DROP INLET PER JENSEN PRECAST NO DI4848 OR APPROVED EQUIVALENT, SEE DETAIL 9 ON SHEET D3 | EA | – | 4 |
| 20 | CONSTRUCT CONCRETE RAISED TRUCK LOADING DOCK WITH RETAINING WALLS. DESIGN AND PERMITS BY OTHERS | LF | – | – |
| 21 | CONSTRUCT 4.5' MAX RETAINING WALL PER ARCH PLANS & DETAILS BY OTHERS (PER SEPARATE PERMIT) | LF | – | 994 |
| 22 | CONSTRUCT 6' MAX RETAINING WALL PER ARCH PLANS & DETAILS BY OTHERS (PER SEPARATE PERMIT) | LF | – | 1,418 |
| 23 | INSTALL RINKER STORMCEPTOR (STC 450) WITH LID PER DETAIL "10" ON SHEET D2 AND MANUFACTURERS SPECIFICATIONS | EA | – | 2 (1) |
| 24 | INSTALL ROCK LINED SWALE (D= RAP, D50=8", T=12") PER DETAIL "11" ON SHEET D3 | SF | – | 90 |
| 25 | CONSTRUCT 2.0' WIDE CURB OPENING PER DETAIL "12" ON SHEET D3 | EA | – | 3 |
| 26 | CONSTRUCT BLOCK WALL OPENING PER DETAIL "13" ON SHEET D3 | EA | – | 1 |
| 27 | CONSTRUCT TERRACE PER ARCH PLANS & DETAILS BY OTHERS | EA | – | – |
| 28 | INSTALL 2.0' CONCRETE FLUME PER DETAIL "14" ON SHEET D3 | EA | – | 3 |
| 29 | CONSTRUCT 2.0' HIGH SOLID GROUTED SCREEN WALL PER SNBORS B-100-1 OR SEPARATE STRUCTUAL PLANS BY OTHERS | LF | – | 301 |
| 30 | CONSTRUCT 6" BERM | LF | – | 390 |
| 31 | CONSTRUCT ON-SITE ADA RAMP CASE III PER DETAIL "15" ON SHEET D3 | EA | – | 1 |
| 32 | BUILDING WALL TO RETAIN PER SEPARATE STRUCTURAL PLANS & DETAILS BY OTHERS (PER SEPARATE PERMIT) | LF | – | 39 |
| 33 | CONSTRUCT 42" HANDRAIL – SEE ARCH PLANS FOR DETAILS | LF | – | 46 |
| 34 | CONSTRUCT PRECAST BUMPER BLOCK PER CCAUSD DWG NO. 238 | EA | – | 37 |
| 35 | INSTALL ROOF DRAINS TO SPILL TO GRADE WITH SPLASHBLOCK PER GROCERY ARCH PLANS | EA | – | 7 |
| 36 | INSTALL STAIRS PER PLANS BY ARCH | EA | – | 6 |
| 37 | INSTALL 18" RCP THROUGH RETAINING WALL PER DETAILS BY OTHERS | EA | – | 1 |
| 38 | CONSTRUCT 6' SCREEN WALL PER ARCH PLANS & DETAILS BY OTHERS | LF | – | 278 |
| 39 | SAWCUT & MATCH EXISTING | LF | 271 | – |
| 40 | CONSTRUCT HEAVY ASPHALT FOR INYO AVE | LF | 6,625 | – |
| 41 | CONSTRUCT 4.0' (8" CMU OR EQUIVALENT) HIGH SCREEN WALL PER SNBORS B-100-1 OR SEPARATE STRUCTUAL PLANS BY OTHERS | LF | – | 331 |
| 42 | CONSTRUCT MODIFIED ROLL CURB #1 PER DETAIL "16" ON SHEET G0 | LF | – | 36 |
| 43 | CONSTRUCT MODIFIED ROLL CURB #2 PER DETAIL "17" ON SHEET G0 | LF | – | 30 |
| 44 | TRANSITION FROM "L" CURB TO ROLL CURB #1 PER DETAIL "18" ON SHEET G0 | LF | – | 50 |
| 45 | TRANSITION FROM "A" CURB TO ROLL CURB #2 PER DETAIL "19" ON SHEET G0 | LF | – | 30 (1) |
| 46 | INSTALL RINKER STORMCEPTOR (STC 9000) WITH LID PER DETAIL "20" SHEET C3 & MANUFACTURERS SPECIFICATIONS | EA | – | 1 |

## WATER QUANTITIES

| | | UNIT | PUBLIC | PRIVATE |
|---|---|---|---|---|
| 1 | INSTALL 2" SERVICE SADDLE & CORPORATION STOP PER UDACS PLATE NO. 4 | EA | 1 | – |
| 2 | INSTALL 2" METER PER UDACS PLATE NO. 4 | EA | 1 | – |
| 3 | INSTALL 2" RPPA PER UDACS PLATE NO. 8 | EA | 1 | – |
| 4 | INSTALL 2" COPPER WATER LINE (PUBLIC) | LF | 23 | – |
| 5 | INSTALL 2" BRASS WATER LINE (PUBLIC) | LF | 10 | – |
| 6 | INSTALL 1.5" SERVICE SADDLE & CORPORATION STOP PER UDACS PLATE NO. 4 | EA | 6 | – |
| 7 | INSTALL 1.5" METER PER UDACS PLATE NO. 4 | EA | 6 | – |
| 8 | INSTALL 1.5" RPPA PER UDACS PLATE NO. 8 | LF | 6 | – |
| 9 | INSTALL 1.5" COPPER WATER LINE (PUBLIC) | LF | 93 | – |
| 10 | INSTALL 1.5" BRASS WATER LINE (PUBLIC) | LF | 21 | – |
| 11 | INSTALL 1" SERVICE SADDLE & CORPORATION STOP PER UDACS PLATE NO. 4 | EA | 1 (1) | – |
| 12 | INSTALL 1" METER PER UDACS PLATE NO. 4 | EA | 1 | – |
| 13 | INSTALL 1" RPPA PER UDACS PLATE NO. 8 | EA | 1 | – |
| 14 | INSTALL 1" COPPER WATER LINE (PUBLIC) | LF | 13 | – |
| 15 | INSTALL 1" BRASS WATER LINE (PUBLIC) | LF | 6 | – |
| 16 | INSTALL 10" RPDA PER UDACS PLATE NO. 59 | EA | 2 | – |
| 17 | INSTALL 8" PVC FIRE WATER LINE (PRIVATE) | LF | – | 1,839 |
| 18 | INSTALL 6" PVC FIRE WATER LINE (PRIVATE) | LF | – | 698 |
| 19 | INSTALL 2" PVC DOMESTIC WATER LINE (PRIVATE) | LF | – | 717 (1) |
| 20 | INSTALL 1.5" DOMESTIC WATER LINE (PRIVATE) | LF | – | 1,520 |
| 21 | INSTALL 1.5" PVC IRRIGATION WATER LINE | LF | – | 2 |
| 22 | INSTALL 1" DOMESTIC WATER LINE (PRIVATE) | LF | – | 111 |
| 23 | INSTALL 90° BEND SAME SIZE AS LINE PER UDACS PLATE 31 | EA | – | 21 |
| 24 | INSTALL 45° BEND SAME SIZE AS LINE PER UDACS PLATE 31 | EA | – | 3 |
| 25 | (1) 1.5"X1.5" REDUCER PER UDACS PLATE NO. 30 | EA | – | 1 |
| 26 | INSTALL FIRE HYDRANT PER UDACS PLATE NO. 40 | EA | – | 7 |
| 27 | INSTALL GATE VALVE SAME SIZE AS LINE PER UDACS PLATES NO. 30 & 39 | EA | – | 7 |
| 28 | INSTALL 10"x8" REDUCER WITH THRUST BLOCK PER UDACS PLATE NO. 30 | EA | – | 2 |
| 29 | INSTALL 8"x6" REDUCER WITH THRUST BLOCK PER UDACS PLATE NO. 30 | EA | – | 1 |
| 30 | INSTALL 8"x8" TEE PER UDACS PLATE NO. 31 | EA | – | 2 |
| 31 | INSTALL 8"x6" TEE PER UDACS PLATE NO. 31 | EA | – | 11 |
| 32 | INSTALL 2"x2" TEE | EA | – | 1 |
| 33 | STUB & CAP FOR IRRIGATION | EA | – | 1 |
| 34 | STUB & CAP –SEE PLUMBING PLANS FOR CONTINUATION | EA | – | 6 |
| 35 | INSTALL 10" PVC FIRE WATER LINE (PUBLIC) | LF | 9 | – |
| 36 | INSTALL 3" PVC DOMESTIC WATER LINE (PRIVATE) | LF | – | 210 |
| 37 | REMOVE CAP & CONNECT | EA | 1 | – |

## SEWER QUANTITIES

| | | UNIT | PUBLIC | PRIVATE |
|---|---|---|---|---|
| 1 | CONTRACTOR TO VERIFY INVERT OF EXISTING SEWER MAIN PRIOR TO COMMENCING CONSTRUCTION | EA | 1 | – |
| 2 | INSTALL 48" DIA. SANITARY SEWER MANHOLE PER DCSWCS SD-1A, SD-5 & SD-4 | EA | 1 | 3 |
| 3 | INSTALL 8" PVC (SDR-35 SEWER MAIN PER DDCSWCS SD-16 & SD-17 | LF | 462 | 822 |
| 4 | INSTALL 6" PVC SDR-35 SEWER LATERAL PER SD-22 | LF | – | 1,164 |
| 5 | INSTALL 6" CLEAN OUT PER SD-26 (TRAFFIC RATED LID) | EA | – | 11 |
| 6 | STUP & CAP – SEE PLUMBING PLANS FOR CONTINUATION | EA | – | 9 |
| 7 | INSTALL WYE & 45° BEND PER SD-22 | EA | – | 10 |
| 8 | INSTALL 72" DIA. SANITARY SEWER MANHOLE PER DCSWCS SD-1A, SD-5 & SD-4 WITH 24" SINGLE LID | EA | 1 | – |

## ON-SITE SIGNAGE QUANTITIES

| | | UNIT | PUBLIC | PRIVATE |
|---|---|---|---|---|
| 1 | INSTALL "STOP SIGN" R-1 | EA | 4 | – |
| 2 | INSTALL BLUE REFLECTIVE PAVEMENT MARKER IN THE FIRE LANE ADJACENT TO FIRE HYDRANT | EA | – | 9 |
| 3 | PAINT CURB RED & STENCIL IN WHITE PAINT "FIRE LANE – NO PARKING" | LF | – | 2,003 |
| 4 | INSTALL ENTRANCE WARNING SIGN PER DETAIL ON H SHEETS (OR EQUIVALENT) | EA | – | 4 |
| 5 | INSTALL ADA SIGN PER DETAIL THIS SHEET (OR EQUIVALENT) | EA | – | 13 |
| 6 | INSTALL FIRE LANE SIGNS PER CLV STANDARDS, DETAIL ON H SHEETS | EA | – | 20 |

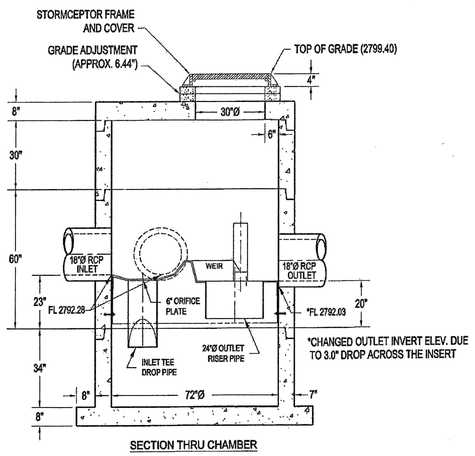
Stormceptor®

**Rinker Materials**

STC 900 Precast Concrete Stormceptor (900 US Gallon Capacity)

PROJECT: DEER SPRING VILLAGE
LOCATION: LAS VEGAS, NV

DR. BY: E. R. NOBLES
CK. BY:
DATE: MAR 19, 2018
SCALE: N.T.S.
DWG.# A270-CE-1392
(SHEET 1 OF 3)




SECTION THRU CHAMBER

*CHANGED OUTLET INVERT ELEV. DUE TO 3.0" DROP ACROSS THE INSERT

NOTE:
1. LIFTING DEVICES TO BE SUPPLIED BY CONTRACTOR. CONTACT SALES FOR ADDITIONAL INFORMATION.

*SAFETY GRATE NOT SHOWN FOR CLARITY

| REV. | DESCRIPTION | BY: | DATE |
|---|---|---|---|
| | | | |

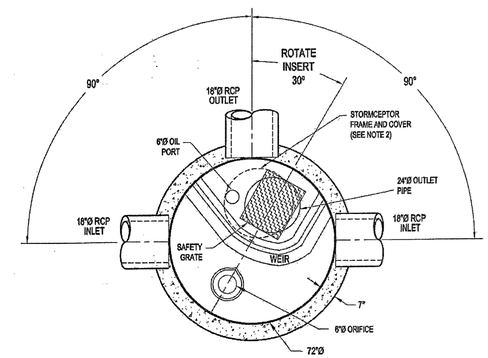
Stormceptor®

**Rinker Materials**

STC 900 Precast Concrete Stormceptor (900 US Gallon Capacity)

PROJECT: DEER SPRING VILLAGE
LOCATION: LAS VEGAS, NV

DR. BY: E. R. NOBLES
CK. BY:
DATE: MAR 19, 2018
SCALE: N.T.S.
DWG.# A270-CE-1392
(SHEET 2 OF 3)




PLAN VIEW OF INSERT

NOTE:
1. THE USE OF GROUTED CONNECTIONS IS RECOMMENDED AT THE INLET AND OUTLET WHERE APPLICABLE.
2. THE COVER SHOULD BE POSITIONED OVER THE 24"Ø OUTLET RISER PIPE AND THE 6"Ø OIL PORT.
3. THE STORMCEPTOR SYSTEM IS PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENTS: #4985148, #5498331, #5725760, #5753115, #5849181, #6068765, & #6371690.
4. CONTRACTOR TO PROVIDE EQUIPMENT TO SET THE UNIT (HEAVIEST SECTION WEIGHS 5.6 TONS).

| REV. | DESCRIPTION | BY: | DATE |
|---|---|---|---|
| | | | |

20 / C3 STORMCEPTOR DETAIL (900)
N.T.S.

## CONTRACTOR NOTE

CONTRACTOR SHALL BE RESPONSIBLE AT HIS COST FOR REPAIR OF DAMAGE OF EXISTING IMPROVEMENTS CAUSED BY HIS OPERATIONS.

## QUANTITIES NOTE

QUANTITIES PROVIDED FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE TO ASCERTAIN QUANTITIES PER THE DRAWINGS. OWNER DOES NOT ALLOW OR ACCEPT BID PROPOSALS WITH POST CONSTRUCTION FIELD MEASURED QUANTITIES.

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

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

Call before you DIG
AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY.
CALL 811 OR 1-800-227-2600

**APPROVED FOR CONSTRUCTION** (1)

4 Dishadi 5/21/18

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NUMBER 125896 FIRST APPROVED DATE: 12/21/17

CLV#: 107Y5072 L17-00759

| No. | REVISIONS | DATE | BY |
|---|---|---|---|
| 1 | UPDATE QUANTITIES & NOTES. | 6-19-18 | CLV SB |


Kimley»Horn
© 2018 KIMLEY-HORN AND ASSOCIATES, INC.
6671 LAS VEGAS BLVD S., SUITE 320, LAS VEGAS, NV 89119
PHONE: 702-862-3600
WWW.KIMLEY-HORN.COM


STATE OF NEVADA PROFESSIONAL ENGINEER No. 17813 CHRISTOPHER L. VIDLER EXPIRES 6/30 6-19-18

KHA PROJECT 61153.52
DATE NOV. 9, 2017
SCALE AS SHOWN
DESIGNED BY JZ
DRAWN BY JZ
CHECKED BY TW

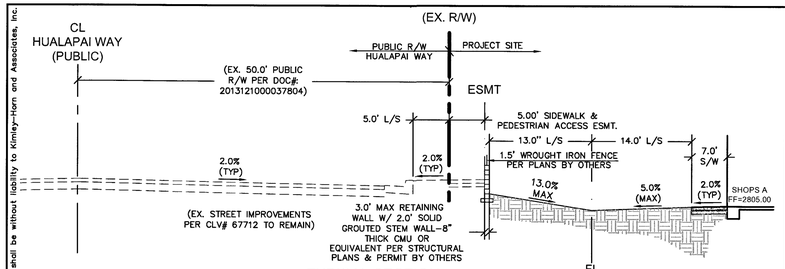
QUANTITIES

DEER SPRINGS VILLAGE
@ SEC DEER SPRINGS & HUALAPAI

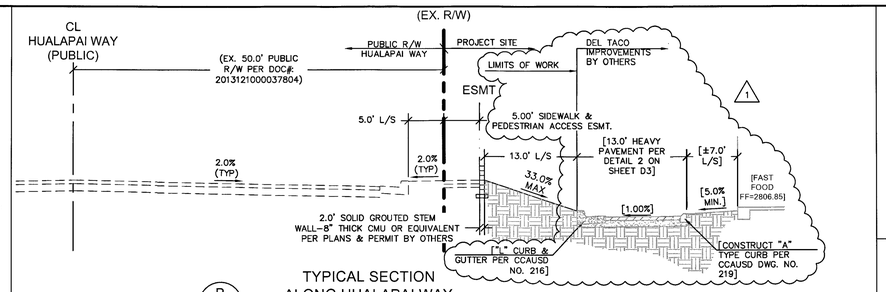
PRO.#:125896 AGR:116521 QS:125-19-SW



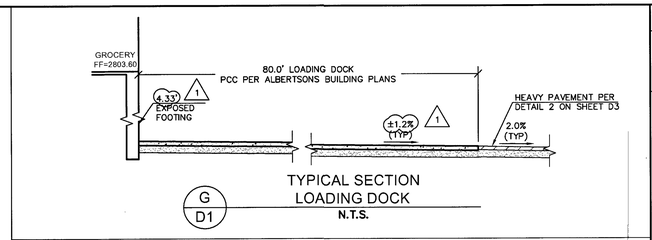
Plotted By:Zito, JoLynn Sheet Set:Kha Layout:C3 May 08, 2018 01:31:07pm W:\61153.LAURICH\DWG\MPRDWGS\ONSITE\01-61153.52-C1.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



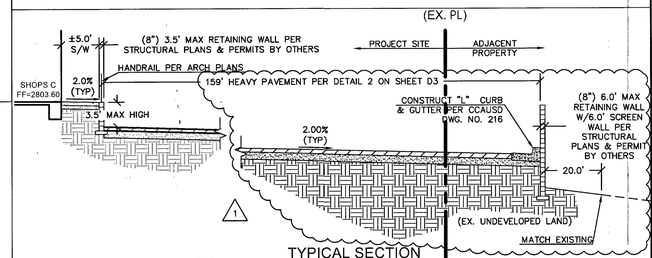

A / D1 TYPICAL SECTION ALONG HUALAPAI WAY
N.T.S.



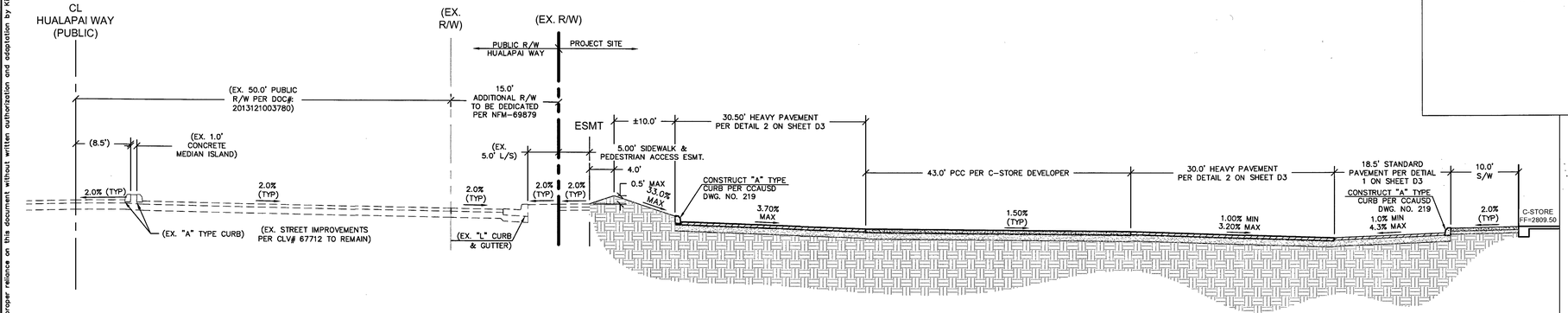

B / D1 TYPICAL SECTION ALONG HUALAPAI WAY
N.T.S.



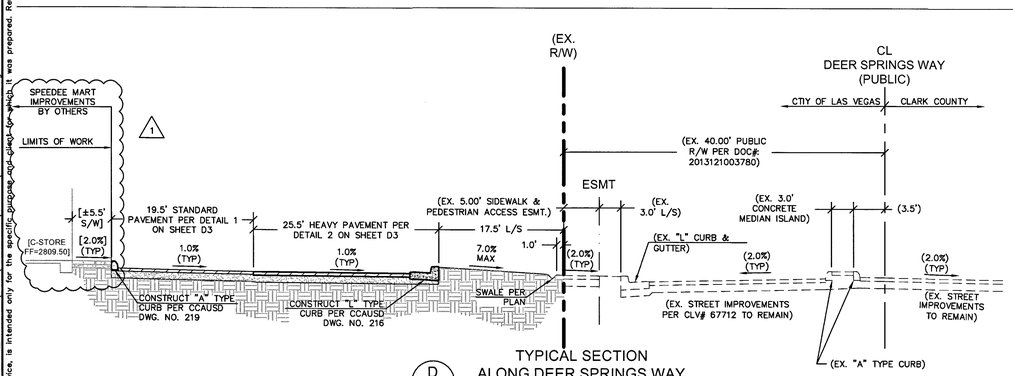

G / D1 TYPICAL SECTION LOADING DOCK
N.T.S.



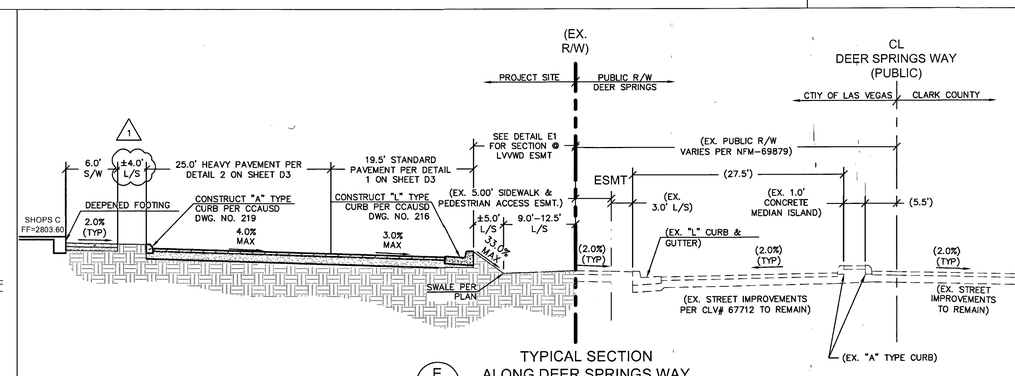

H / D1 TYPICAL SECTION ALONG EAST PL
N.T.S.




C / D1 TYPICAL SECTION ALONG HUALAPAI WAY
N.T.S.

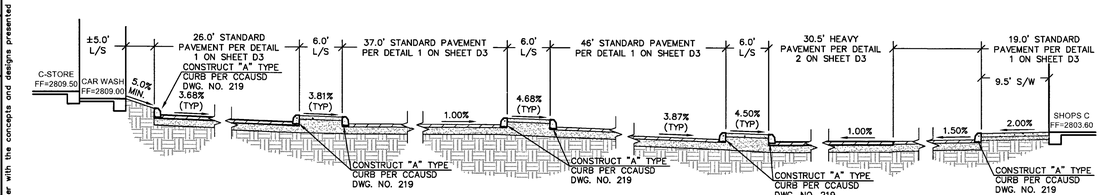



D / D1 TYPICAL SECTION ALONG DEER SPRINGS WAY
N.T.S.

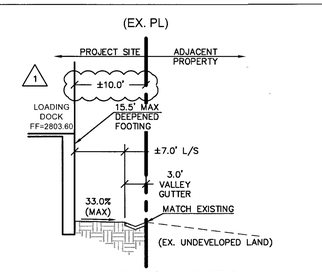



E / D1 TYPICAL SECTION ALONG DEER SPRINGS WAY
N.T.S.

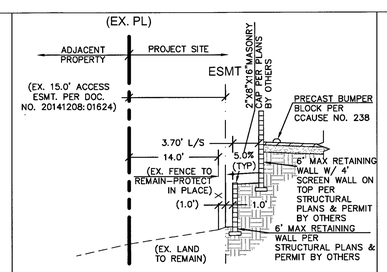
E1 / D1 TYPICAL SECTION ALONG LVVWD ESMT
N.T.S.



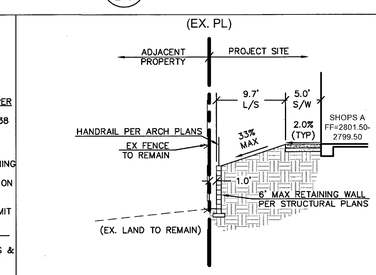

F / D1 TYPICAL SECTION BETWEEN C-STORE & SHOPS "C"
N.T.S.




I / D1 TYPICAL SECTION ALONG EAST PL
N.T.S.




L / D1 TYPICAL SECTION ALONG SOUTH PL
N.T.S.




M / D1 TYPICAL SECTION ALONG SOUTH PL
N.T.S.

CLV#: 107Y5072 L17-00759

Plotted By:Zito, Jolyn Sheet Set:Kmc Layout:D1 May 08, 2018 01:31:19pm W:\61153.LAURICH\DWG\MPRD\WCS\SITE\02-61153.52-D1.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

| No. | REVISIONS | DATE | BY |
|---|---|---|---|
| 1 | UPDATE DIMENSIONS & DETAILS | 1-4-18 | SB |

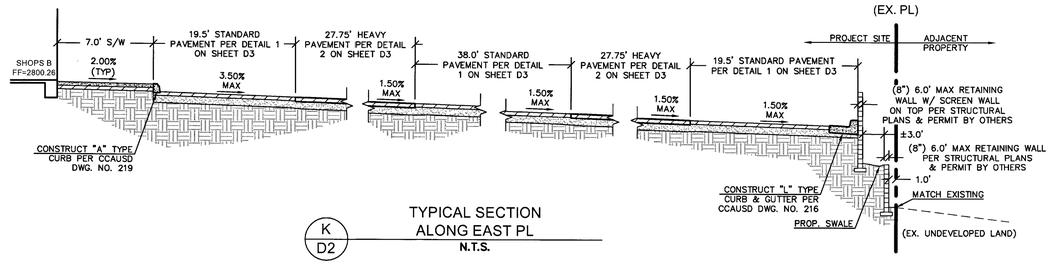
Kimley»Horn
© 2018 KIMLEY-HORN AND ASSOCIATES, INC.
6671 LAS VEGAS BLVD S., SUITE 320, LAS VEGAS, NV 89119
PHONE: 702-862-3600
WWW.KIMLEY-HORN.COM

STATE OF NEVADA PROFESSIONAL ENGINEER CHRISTOPHER TODD TROUT EXP.6-30-18 No. 17879 5-9-18

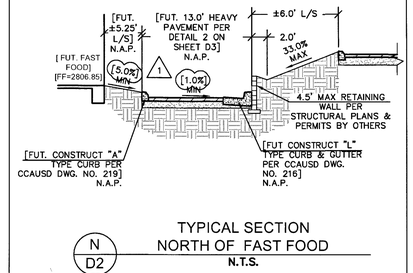
KHA PROJECT 61153.52
DATE NOV. 9, 2017
SCALE AS SHOWN
DESIGNED BY JZ
DRAWN BY CT
CHECKED BY TW

TYPICAL SECTIONS

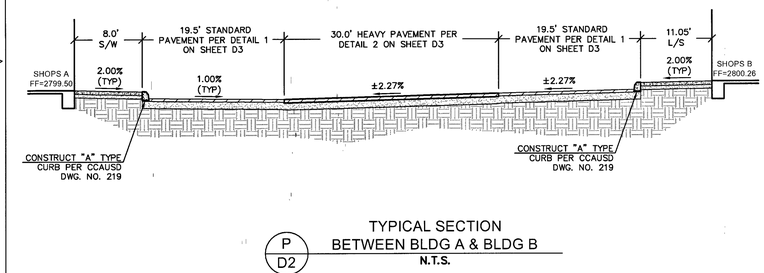
DEER SPRINGS VILLAGE
@ SEC DEER SPRINGS & HUALAPAI



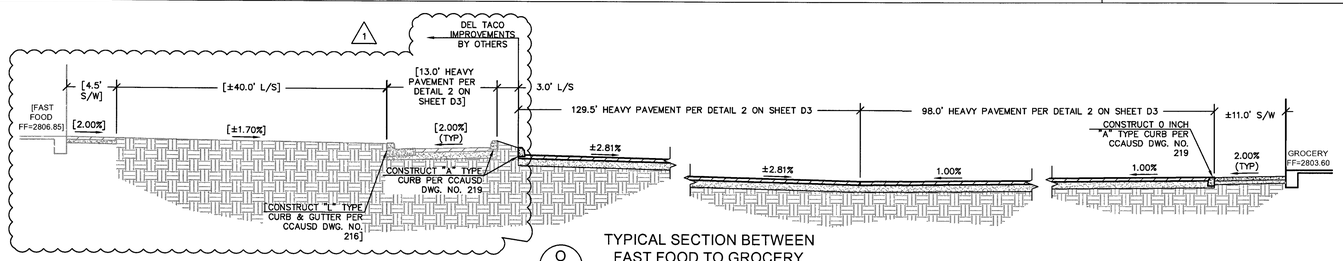

K / D2 TYPICAL SECTION ALONG EAST PL
N.T.S.



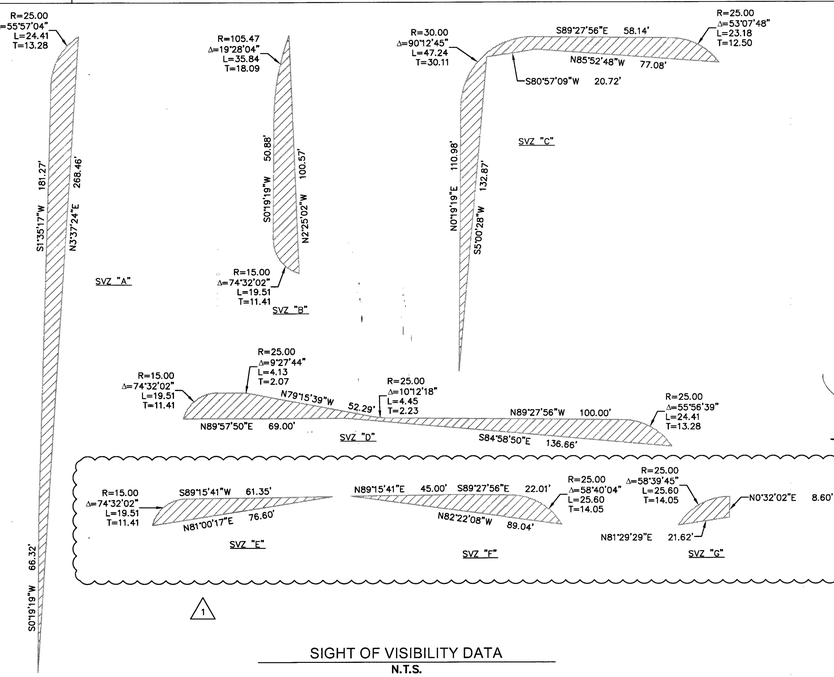

N / D2 TYPICAL SECTION NORTH OF FAST FOOD
N.T.S.




P / D2 TYPICAL SECTION BETWEEN BLDG A & BLDG B
N.T.S.



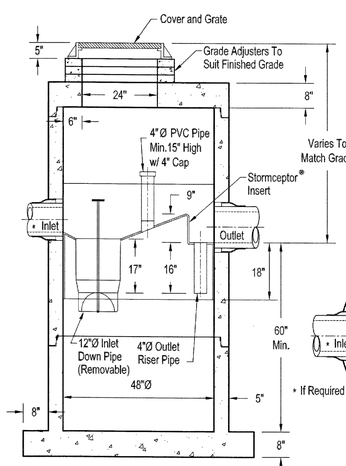

O / D2 TYPICAL SECTION BETWEEN FAST FOOD TO GROCERY
N.T.S.



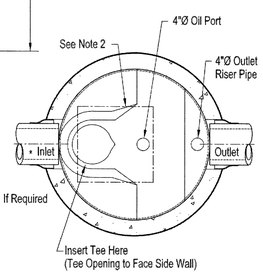

SIGHT OF VISIBILITY DATA
N.T.S.

## Rinker MATERIALS™ — Concrete Pipe Division

### STC 450i Precast Concrete Stormceptor®
### (450 U.S. Gallon Capacity)




Section Thru Chamber

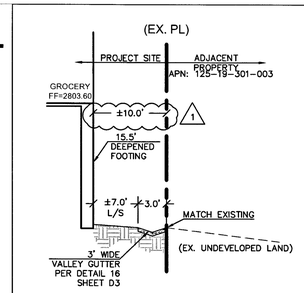



Plan View

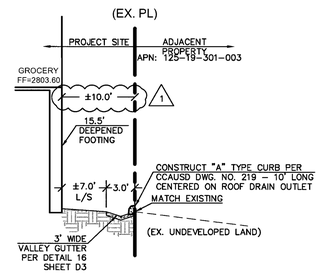
Notes:
1. The Use Of Flexible Connection is Recommended at The Inlet and Outlet Where Applicable.
2. The Cover Should be Positioned Over The Inlet Drop Pipe and The Oil Port.
3. The Stormceptor System is protected by one or more of the following U.S. Patents: #4985148, #5498331, #5725760, #5753115, #5849181, #6068765, #6371690.
4. Contact a Concrete Pipe Division representative for further details not listed on this drawing.

Rinker 027

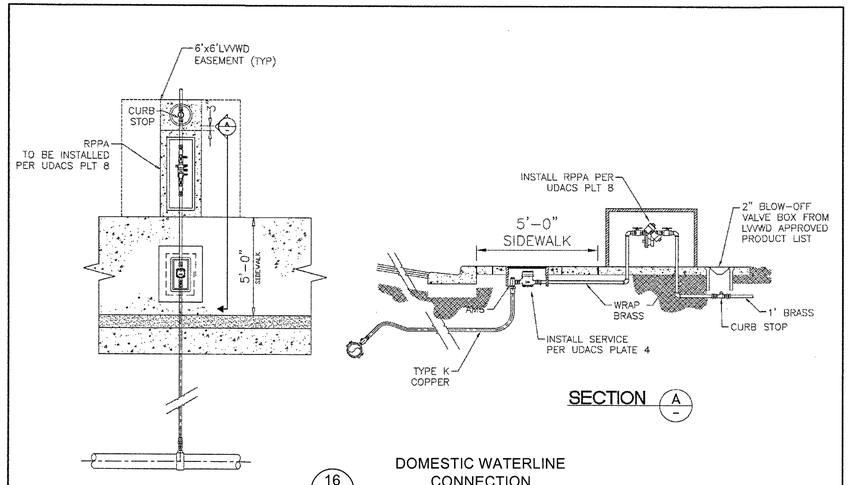
10 / D2 STORMCEPTOR DETAIL
N.T.S.



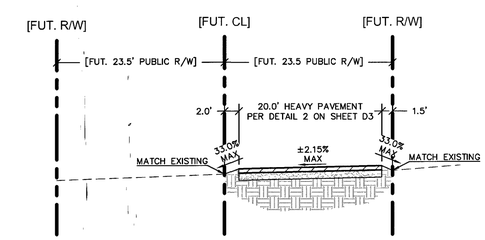

J / D2 TYPICAL SECTION ALONG EAST PL
N.T.S.




R / D2 TYPICAL SECTION ALONG EAST PL
N.T.S.




16 / D2 DOMESTIC WATERLINE CONNECTION
(NOT TO SCALE)




Q / D2 TYPICAL SECTION ALONG INYO AVE
N.T.S.

CALL BEFORE YOU OVERHEAD 1-702-227-2929

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

Call before you Dig CALL 811 OR 1-800-227-2600

APPROVED FOR CONSTRUCTION
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 125896 FIRST APPROVED DATE: 12/21/17

CLV#: 107Y5072 L17-00759

| No. | REVISIONS | DATE | BY |
|---|---|---|---|
| 1 | UPDATED DIMENSIONS | 6-4-19 | C.U. S.B. |

Kimley»Horn
© 2018 KIMLEY-HORN AND ASSOCIATES, INC.
6671 LAS VEGAS BLVD S., SUITE 320, LAS VEGAS, NV 89119
PHONE: 702-862-3600
WWW.KIMLEY-HORN.COM

STATE OF NEVADA PROFESSIONAL ENGINEER No. 17819 CHRISTOPHER T. LAU EXP. 6/30/18

KHA PROJECT 61153.52
DATE NOV. 9, 2017
SCALE AS SHOWN
DESIGNED BY JZ
DRAWN BY CT
CHECKED BY TW

TYPICAL SECTIONS

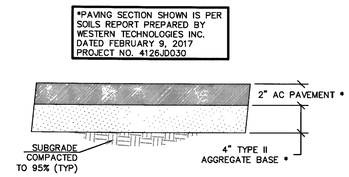
DEER SPRINGS VILLAGE
@ SEC DEER SPRINGS & HUALAPAI

5 OF 19 SHEETS
D2

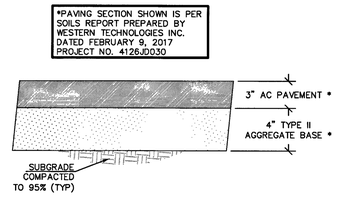
PROJ#:125896 AGR:116521 QS:125-19-SW

Plotted By:Zito, JoLynn Sheet Set:Kho Layout:D2 May 08, 2018 01:31:23pm W:\61153_LAURICH\DWG\MPRDWGS\ONSITE\02-61153.52-D1.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

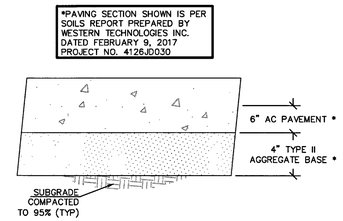
Plotted By:Zito, JoLynn Sheet Set:Kha Layout:D3 November 09, 2017 09:24:59am W:\61153.LAU\Rich\DWG\MPROWS\ONSITE\02-61153.52-D1.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



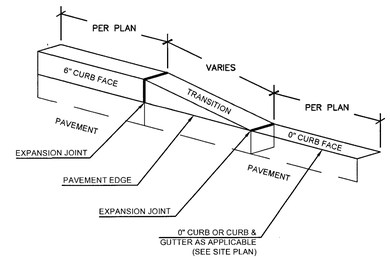

1 / D3 STANDARD PAVEMENT SECTION
(NOT TO SCALE)



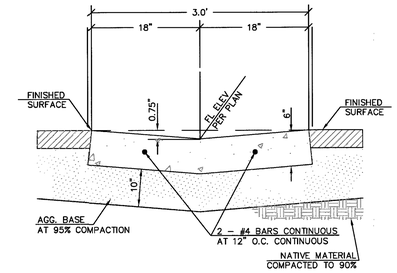

2 / D3 HEAVY PAVEMENT SECTION
(NOT TO SCALE)



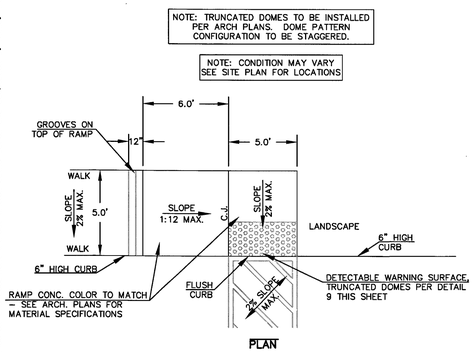

3 / D3 PCC PAVEMENT SECTION
(NOT TO SCALE)



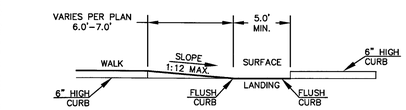

5 / D3 6" CURB TO 0" CURB TRANSITION
(NOT TO SCALE)




16 / D3 3' WIDE VALLEY GUTTER
(NOT TO SCALE)

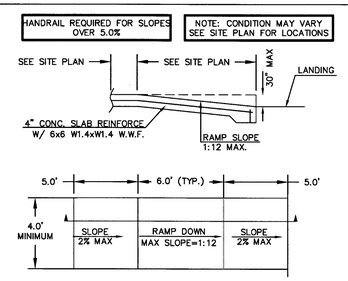



PLAN

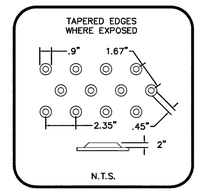



PROFILE

6 / D3 ADA RAMP CASE I
(NOT TO SCALE)

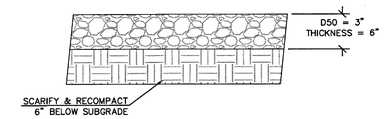



7 / D3 ADA RAMP CASE II
(NOT TO SCALE)

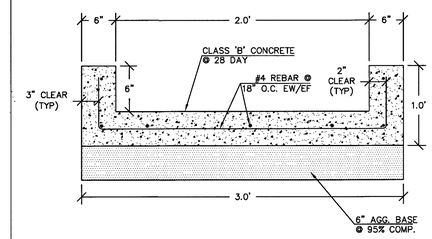



NOTE: MATERIALS SHALL BE PER CONTRACT DOCUMENTS

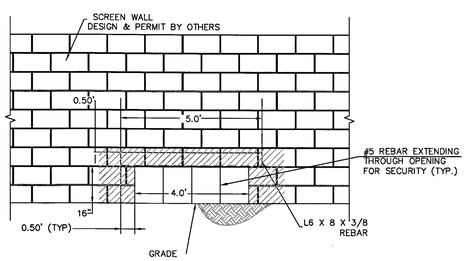
8 / D3 TRUNCATED DOMES
(NOT TO SCALE)



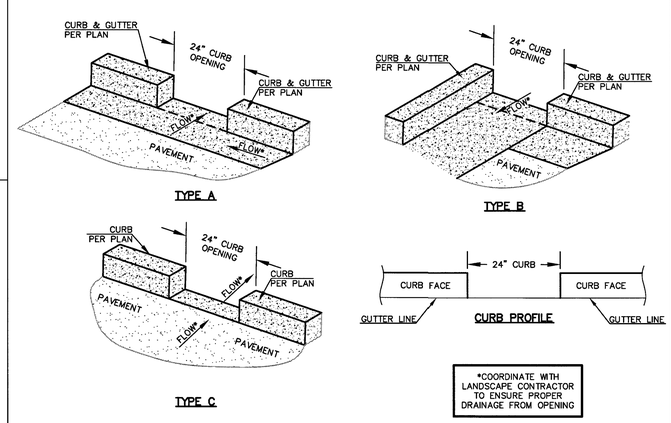

11 / D3 ROCK-LINED SWALE SECTION
(NOT TO SCALE)




14 / D3 2' CONCRETE FLUME
(NOT TO SCALE)

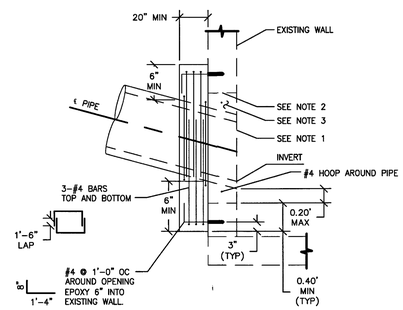



13 / D3 16"x48" BLOCK WALL OPENING
(NOT TO SCALE)

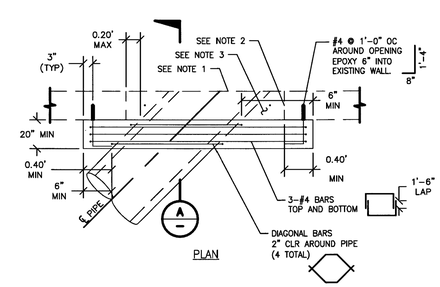



*COORDINATE WITH LANDSCAPE CONTRACTOR TO ENSURE PROPER DRAINAGE FROM OPENING

12 / D3 2' CURB OPENING
(NOT TO SCALE)




SECTION A




PLAN

NOTES:

1. CUT PIPE FLUSH WITH INTERIOR WALL FACE.
2. APPLY EPOXY BONDING ADHESIVE (SIKA SIKADUR 32 HI-MOD OR EQUAL) ALL AROUND INTERFACE BETWEEN EXISTING AND NEW CONCRETE.
3. FILL VOID WITH NON SHRINK GROUT AND TROWEL WALL FACE SMOOTH.
4. EPOXY SHALL BE SIMPSON STRONG-TIE SET EPOXY-TIE ADHESIVE PER ICC ESR-1772.
5. PROVIDE 2" CONCRETE COVER OVER REINFORCING STEEL.

4 / D3 PIPE PENATRATION DETAIL
(NOT TO SCALE)

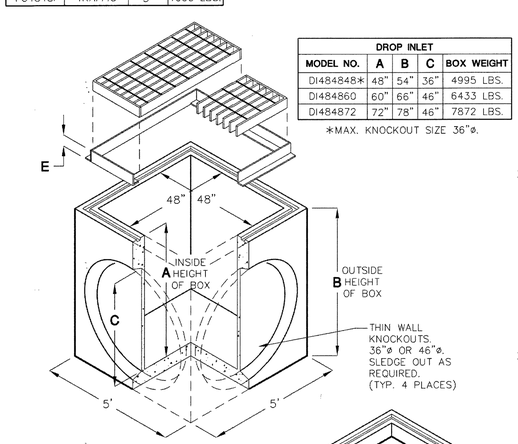
| FRAME AND GRATE | | | |
|---|---|---|---|
| MODEL NO. | RATING | E | WEIGHT |
| FG4848P | PEDESTRIAN | 1 1/2" | 242 LBS. |
| FG4848I | TRAFFIC | 5" | 1000 LBS. |

## 48"x48" DROP INLET

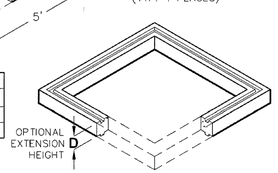
UP TO 6'-0" INSIDE DEPTH

| DROP INLET | | | | |
|---|---|---|---|---|
| MODEL NO. | A | B | C | BOX WEIGHT |
| DI484848* | 48" | 54" | 36" | 4995 LBS. |
| DI484860 | 60" | 66" | 46" | 6433 LBS. |
| DI484872 | 72" | 78" | 46" | 7872 LBS. |

*MAX. KNOCKOUT SIZE 36"ø.




| EXTENSION | | |
|---|---|---|
| MODEL NO. | D | WEIGHT |
| RS484806 | 6" | 675 LBS. |
| RS484812 | 12" | 1350 LBS. |




BOX DESIGN LOAD: H-20 TRAFFIC

FOR COMPLETE DESIGN, AND PRODUCT INFORMATION, CONTACT JENSEN PRECAST.

8/31/00
DI484848.dwg
© 2000 Jensen Precast

9 / D3 48"x48" DROP INLET
(NOT TO SCALE)

JENSEN PRECAST

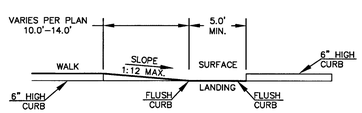



PLAN

15 / D3 ADA RAMP CASE III
(NOT TO SCALE)

NOTE: TRUNCATED DOMES TO BE INSTALLED PER ARCH PLANS. DOME PATTERN CONFIGURATION TO BE STAGGERED.

NOTE: CONDITION MAY VARY SEE SITE PLAN FOR LOCATIONS




PROFILE

AVOID VISITING OVERHEAD POWER LINES. IT'S COSTLY.
CALL BEFORE YOU OVERHEAD
1-702-227-2929
FAST Call before you UnderGround 1-702-432-5300
FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION
Call before you Dig
AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY.
CALL 811
OR
1-800-227-2600

| No. | REVISIONS | DATE | BY |
|---|---|---|---|

Kimley»Horn
© 2017 KIMLEY-HORN AND ASSOCIATES, INC.
6671 LAS VEGAS BLVD S., SUITE 320, LAS VEGAS, NV 89119
PHONE: 702-862-3600
WWW.KIMLEY-HORN.COM

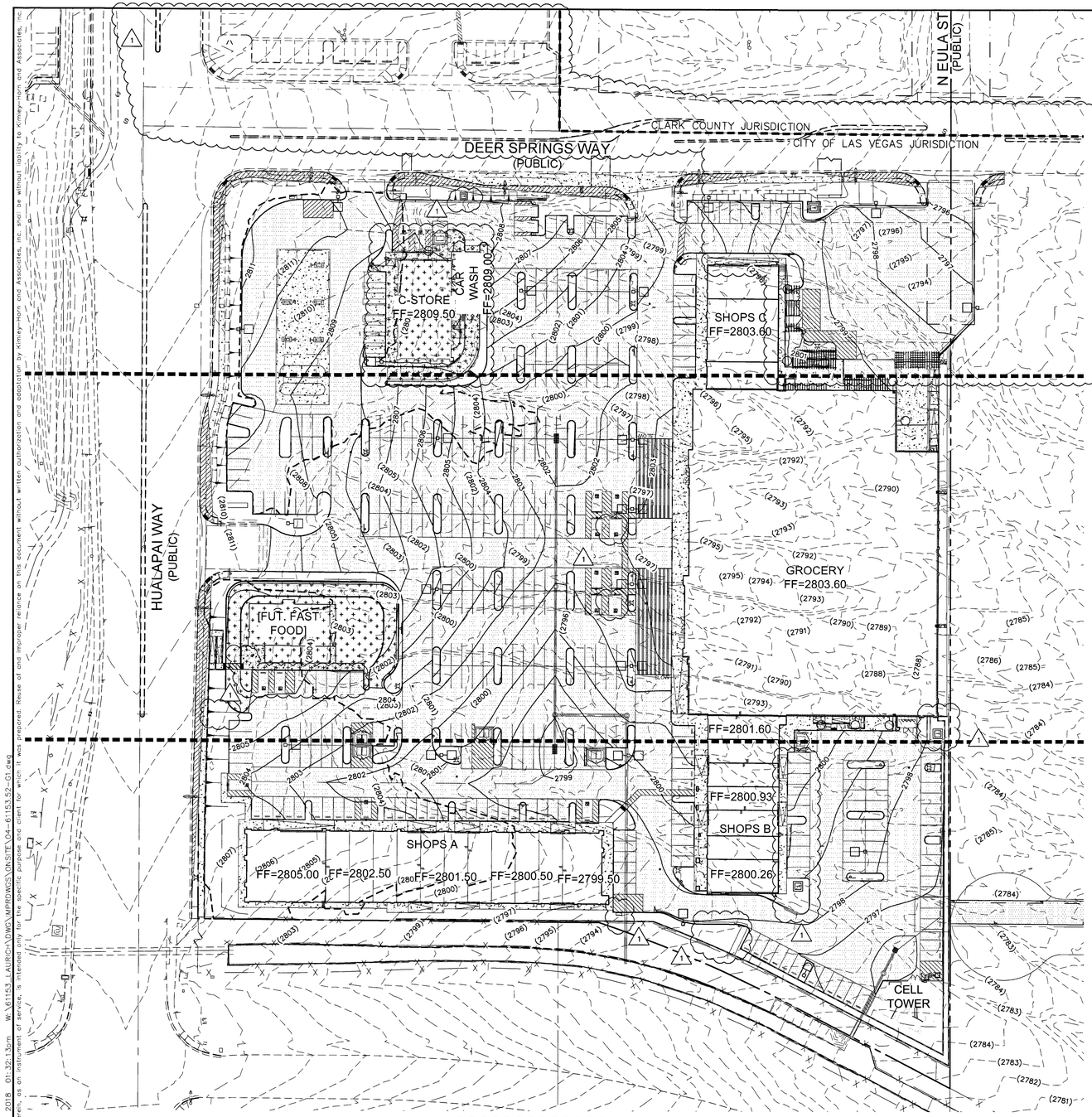
PROFESSIONAL ENGINEER STATE OF NEVADA
CHRISTOPHER J. TOTZ
CIVIL
EXP. 6/30/18
No. 17519

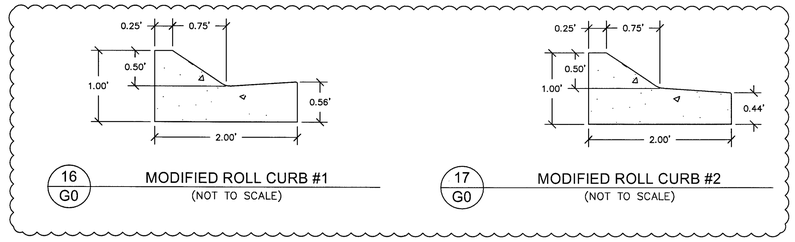
| | |
|---|---|
| KHA PROJECT | 61153.52 |
| DATE | NOV. 9, 2017 |
| SCALE | AS SHOWN |
| DESIGNED BY | JZ |
| DRAWN BY | CT |
| CHECKED BY | TW |

TYPICAL DETAILS

DEER SPRINGS VILLAGE
@ SEC DEER SPRINGS & HUALAPAI

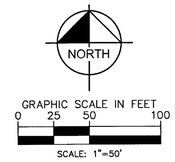
CLV#: 1075072 L17-00759




16 G0 MODIFIED ROLL CURB #1 (NOT TO SCALE)

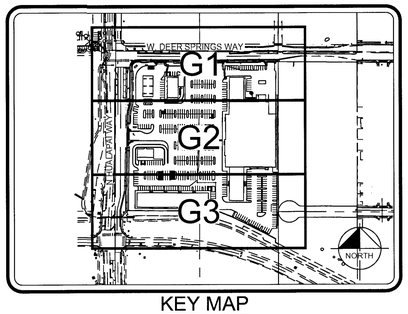
17 G0 MODIFIED ROLL CURB #2 (NOT TO SCALE)




Call before you Dig
AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY.
CALL 811 OR 1-800-227-2600

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

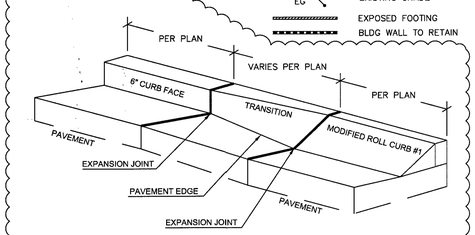
AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY.
CALL BEFORE YOU OVERHEAD 1-702-227-2929



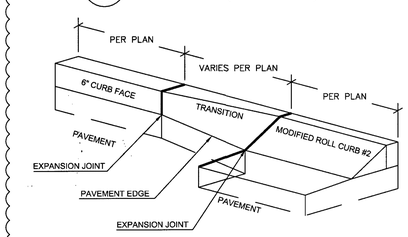

KEY MAP
N.T.S.

## LEGEND

- PROPERTY LINE
- STREET CENTERLINE
- RETAINING WALL
- BUILDING
- (2323) EXISTING CONTOUR
- 2327 CONTOUR
- CURB & GUTTER
- CURB
- EXISTING EDGE OF PAVEMENT
- EXISTING CURB & GUTTER
- EXISTING CURB
- EXISTING BUILDING
- (1) CONSTRUCTION NOTE
- CUT FILL TRANSITION
- SAWCUT LIMITS
- 3:1 / 0.40% SCARP / SLOPE
- FLOW LINE
- EASEMENT LINE
- HANDICAP PARKING
- FS FINISHED SURFACE
- CF CURB FACE
- TC CURB BACK
- EP EDGE OF PAVEMENT
- TG TOP OF GRATE
- 99.56 FG GRADE
- (52.0) EG EXISTING GRADE
- EXPOSED FOOTING
- BLDG WALL TO RETAIN




18 G0 "L" CURB TO MODIFIED ROLL CURB #1 TRANSITION (NOT TO SCALE)




19 G0 "A" CURB TO MODIFIED ROLL CURB #2 TRANSITION (NOT TO SCALE)

## STORM DRAIN NOTE

ALL ON-SITE STORM DRAINS AND THE ASSOCIATED FACILITIES ARE PRIVATELY OWNED AND TO BE PRIVATELY MAINTAINED BY THE PROPERTY OWNERS.

## EARTHWORK QUANTITIES

*NOTE: THESE QUANTITIES ARE APPROXIMATE AND ARE RAW VOLUMES ONLY. OVEREXCAVATION SUBSIDENCE, SHRINKAGE, & BULKING FACTORS ARE NOT TAKEN INTO ACCOUNT.

CUT = 5,751 C.Y.
FILL = 66,425 C.Y.

## STORMWATER MANAGEMENT NOTES:

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 THE 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 THE CLARK COUNTY BUILDING ADMINISTRATIVE CODE 24.40 AND 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.

## ENGINEER'S NOTES:

1. ALL WORK SHALL CONFORM TO THE SOILS REPORT PREPARED BY WESTERN TECHNOLOGIES. DATED FEBRUARY 9, 2017 PROJECT NO. 4126JD030.

2. ALL OFF-SITE IMPROVEMENT CONSTRUCTION SHALL CONFORM TO THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA", LATEST EDITION.

3. FINAL ASPHALTIC CONCRETE (AC) PAVEMENT SURFACES SHALL BE ONE-HALF INCH ABOVE THE TOP OF THE GUTTER (INCLUDING OPEN GRADE).

4. CONTRACTOR IS RESPONSIBLE FOR DUST AND EROSION CONTROL DURING CONSTRUCTION

5. THIS PLAN SHALL NOT, IN PART OR IN WHOLE, BE USED FOR CONSTRUCTION UNTIL APPROVED AND SIGNED BY ALL APPLICABLE GOVERNMENT AGENCIES.

6. ENGINEER TO BE NOTIFIED OF ANY DISCREPANCIES IMMEDIATELY.

7. MATCH ELEVATIONS SHOWN TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION.

8. THIS PROJECT IS NOT PART OF AN EXISTING COMMERCIAL SUBDIVISION.

9. PROPERTY OWNER IS RESPONSIBLE TO MAINTAIN THE BEST MANAGEMENT PRACTICES SUCH AS BUT NOT LIMITED TO THE REMOVAL OF ACCUMULATED SEDIMENT AND DEBRIS AND CARE OF THE VEGETATION.

## NOTES

ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.

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

## SIGHT VISIBILITY ZONES NOTE

NO WALLS, FENCES, TREES, SHRUBS, UTILITY APPURTENANCES OR ANY OTHER OBJECT, OTHER THAN TRAFFIC CONTROL DEVICES AND STREET LIGHT POLES, MAY BE CONSTRUCTED OR INSTALLED WITHIN THE SIGHT VISIBILITY ZONE UNLESS SAID OBJECT IS MAINTAINED AT LESS THAN 24 INCHES IN HEIGHT, MEASURED FROM THE TOP OF CURB.

## FLOODZONE

THE PARCEL DESCRIBED HEREON LIES WITHIN THE FLOOD HAZARD ZONE HAVING A ZONE DESIGNATION OF "X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN). AS SHOWN PER FEMA MAPS, NO. 32003C1750 E AND NO. 32003C1745 E BOTH DATED SEPTEMBER 27, 2002.

## LEGEND & ABBREVIATIONS

SEE COVER SHEET FOR MASTER LEGEND AND ABBREVIATIONS.

## LEGAL DESCRIPTION

SEE COVER SHEET FOR FULL LEGAL DESCRIPTION

## BENCHMARK

BENCHMARK: 12LV99 24E4: A RIVET AND ROUND ALUMINUM PLATE IN THE TOP OF CURB AT THE NORTHWEST CORNER OF HUALAPAI WAY AND DEER SPRINGS WAY = 858.066m = 2815.17sft. (NAVD 88)

## BASIS OF BEARINGS

NORTH 89°47'00" WEST, BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) SECTION 19, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., COUNTY OF CLARK, STATE OF NEVADA

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY ON FILE WITH CITY OF LAS VEGAS FOR THIS PROJECT, DS 4902.

TREASEA WOLF, P.E. No. 17879 — DATE 5-8-18

CLV#: 107Y5072 L17-00759

| No. | REVISIONS | DATE | BY |
|---|---|---|---|
| 1 | UPDATED DRIVEWAY LOCATION, ADA RAMP, SHOPS B DOOR, ADA PARKING, STALLS IN FRONT OF FAST FOOD & NORTH ADJ PROPERTY LINE WORK, ADDED DETAIL FOR MODIFIED ROLL CURBS & TRANSITIONS | 5-11-18 | CLV SG |

Kimley»Horn
© 2018 KIMLEY-HORN AND ASSOCIATES, INC.
6671 LAS VEGAS BLVD S., SUITE 320, LAS VEGAS, NV 89119
PHONE: 702-862-3600
WWW.KIMLEY-HORN.COM

STATE OF NEVADA — TREASEA WOLF — No. 17879 — EXPIRES 6-30-18 — PROFESSIONAL ENGINEER

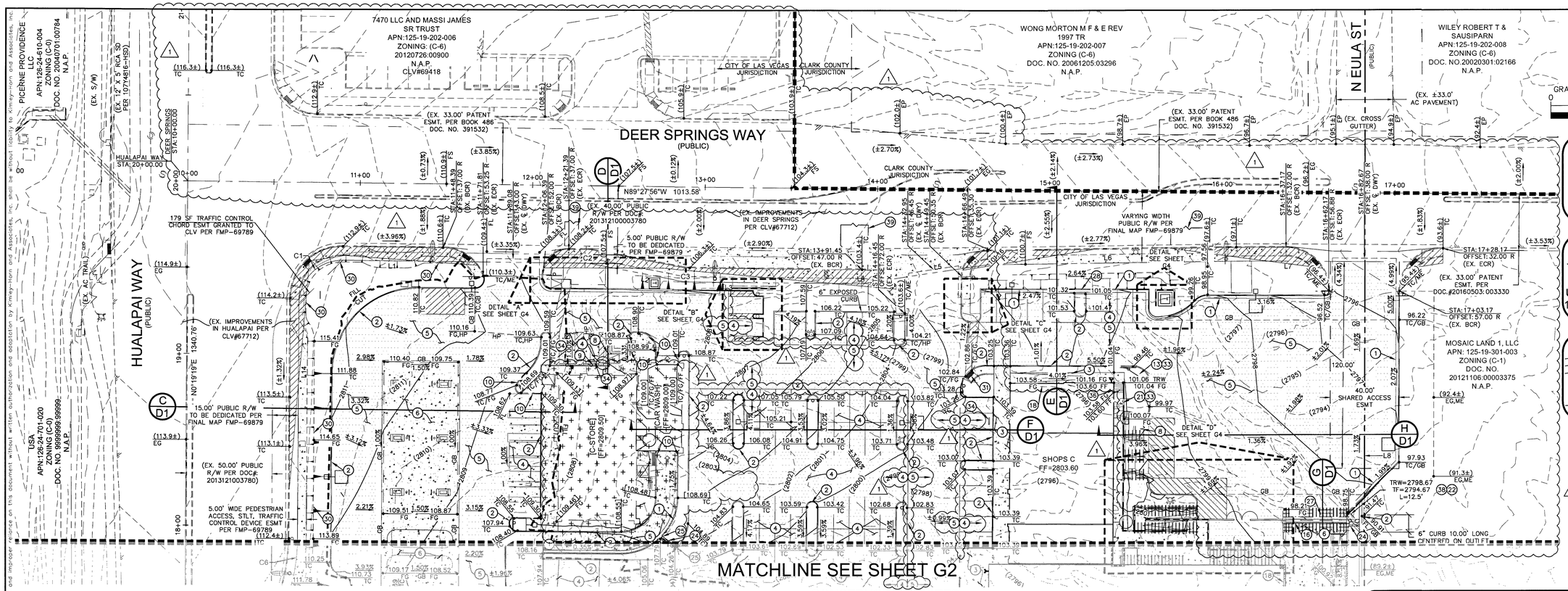
KHA PROJECT 61153.52
DATE NOV. 9, 2017
SCALE AS SHOWN
DESIGNED BY JZ
DRAWN BY JZ
CHECKED BY TW

# GRADING PLAN OVERALL

# DEER SPRINGS VILLAGE @ SEC DEER SPRINGS & HUALAPAI



Plotted By: Zito, JoLynn Sheet Set: Kha Layout: G0 May 08, 2018 01:32:13pm W:\61153.1\AUTO\CIVIL\DWG\MPRD\WGS\ON-SITE\04-61153.52-G1.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.




## ENGINEER'S NOTES:

1. ALL WORK SHALL CONFORM TO THE SOILS REPORT PREPARED BY WESTERN TECHNOLOGIES. DATED FEBRUARY 9, 2017 PROJECT NO. 4126J0030.

2. ALL OFF-SITE IMPROVEMENT CONSTRUCTION SHALL CONFORM TO THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA", LATEST EDITION.

3. FINAL ASPHALTIC CONCRETE (AC) PAVEMENT SURFACES SHALL BE ONE-HALF INCH ABOVE THE TOP OF THE GUTTER (INCLUDING OPEN GRADE).

4. CONTRACTOR IS RESPONSIBLE FOR DUST AND EROSION CONTROL DURING CONSTRUCTION

5. THIS PLAN SHALL NOT, IN PART OR IN WHOLE, BE USED FOR CONSTRUCTION UNTIL APPROVED AND SIGNED BY ALL APPLICABLE GOVERNMENT AGENCIES.

6. ENGINEER TO BE NOTIFIED OF ANY DISCREPANCIES IMMEDIATELY.

7. MATCH ELEVATIONS SHOWN TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION.

8. THIS PROJECT IS NOT PART OF AN EXISTING COMMERCIAL SUBDIVISION.

9. PROPERTY OWNER IS RESPONSIBLE TO MAINTAIN THE BEST MANAGEMENT PRACTICES SUCH AS BUT NOT LIMITED TO THE REMOVAL OF ACCUMULATED SEDIMENT AND DEBRIS AND CARE OF THE VEGETATION.

## NOTES

ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.

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

## SIGHT VISIBILITY ZONES NOTE

NO WALLS, FENCES, TREES, SHRUBS, UTILITY APPURTENANCES OR ANY OTHER OBJECT, OTHER THAN TRAFFIC CONTROL DEVICES AND STREET LIGHT POLES, MAY BE CONSTRUCTED OR INSTALLED WITHIN THE SIGHT VISIBILITY ZONE UNLESS SAID OBJECT IS MAINTAINED AT LESS THAN 24 INCHES IN HEIGHT, MEASURED FROM THE TOP OF CURB.

## FLOODZONE

THE PARCEL DESCRIBED HEREON LIES WITHIN THE FLOOD HAZARD ZONE HAVING A ZONE DESIGNATION OF "X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN). AS SHOWN PER FEMA MAPS, NO. 32003C1750 E AND NO. 32003C1745 E BOTH DATED SEPTEMBER 27, 2002.

## LEGEND & ABBREVIATIONS

SEE COVER SHEET FOR MASTER LEGEND AND ABBREVIATIONS.

## LEGAL DESCRIPTION

SEE COVER SHEET FOR FULL LEGAL DESCRIPTION

## BENCHMARK

BENCHMARK: 12LV99 24E4: A RIVET AND ROUND ALUMINUM PLATE IN THE TOP OF CURB AT THE NORTHWEST CORNER OF HUALAPAI WAY AND DEER SPRINGS WAY = 858.066m = 2815.17sft. (NAVD 88)

## BASIS OF BEARINGS

NORTH 89°47'00" WEST, BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) SECTION 19, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., COUNTY OF CLARK, STATE OF NEVADA

## STORM DRAIN NOTE

ALL ON-SITE STORM DRAINS AND THE ASSOCIATED FACILITIES ARE PRIVATELY OWNED AND TO BE PRIVATELY MAINTAINED BY THE PROPERTY OWNERS.

## EARTHWORK QUANTITIES

*NOTE: THESE QUANTITIES ARE APPROXIMATE AND ARE RAW VOLUMES ONLY. OVEREXCAVATION SUBSIDENCE, SHRINKAGE, & BULKING FACTORS ARE NOT TAKEN INTO ACCOUNT.

CUT = 5,751 C.Y.
FILL = 66,425 C.Y.

## STORMWATER MANAGEMENT NOTES:

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 THE 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 THE CLARK COUNTY BUILDING ADMINISTRATIVE CODE 24.40 AND 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.

### LINE TABLE

| LINE | LENGTH | BEARING |
|---|---|---|
| L1 | 141.18 | N89°27'56.45"W |
| L2 | 51.98 | N79°15'38.89"W |
| L3 | 100.00 | N89°27'56.45"W |
| L4 | 73.77 | N81°27'04.99"E |
| L5 | 73.77 | N81°27'04.99"E |
| L6 | 150.99 | N89°15'40.64"E |
| L7 | 67.74 | N89°27'56.45"W |
| L8 | 669.44 | N0°04'08.34"E |
| L9 | 136.43 | N0°04'08.34"E |
| L10 | 153.21 | S62°30'17.00"E |
| L11 | 339.21 | N89°32'44.04"W |
| L12 | 88.23 | N0°19'19.00"E |
| L13 | 87.55 | N0°19'19.00"E |
| L14 | 136.93 | N0°19'19.00"E |

### CURVE TABLE

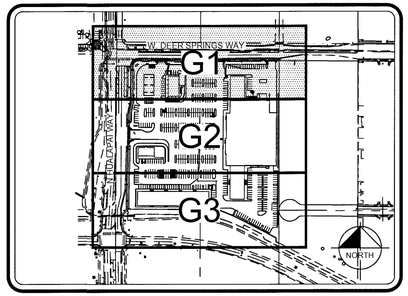
| CURVE | RADIUS | LENGTH | DELTA | TANGENT |
|---|---|---|---|---|
| C1 | 25.00' | 39.36' | 90°12'45" | 25.09' |
| C2 | 17.00' | 3.03' | 10°12'18" | 1.52' |
| C3 | 33.00' | 5.88' | 10°12'18" | 2.95' |
| C4 | 1120.00' | 174.40' | 8°55'19" | 87.38' |
| C5 | 95.00' | 30.17' | 18°11'42" | 15.21' |
| C6 | 105.00' | 33.34' | 18°11'42" | 16.81' |

## CONSTRUCTION NOTES

1. CONSTRUCT "L" TYPE CURB & GUTTER PER CCAUSD NO. 216
2. CONSTRUCT "A" TYPE CURB PER CCAUSD NO. 219
3. CONSTRUCT 4" SIDEWALK PER CCAUSD NO. 234
4. CONSTRUCT STANDARD AC PAVEMENT PER SOILS REPORT BY WESTERN TECHNOLOGIES INC. SEE DETAIL "1" ON SHEET D3
5. CONSTRUCT HEAVY AC PAVEMENT PER SOILS REPORT BY WESTERN TECHNOLOGIES INC. SEE DETAIL "2" ON SHEET D3
6. CONSTRUCT PCC PAVEMENT PER PER SOILS REPORT BY WESTERN TECHNOLOGIES INC. DETAIL "3" ON SHEET D3
8. CONSTRUCT TRASH ENCLOSURE PER SEPARATE ARCHITECTURAL PLANS & DETAILS (BY OTHERS)
9. CONSTRUCT 0" CURB
10. TRANSITION FROM 6" CURB TO 0" CURB PER DETAIL "5" ON SHEET D3
13. CONSTRUCT ON-SITE ADA RAMP CASE II WITH HANDRAILS WHERE APPLICABLE PER DETAIL "7" ON SHEET D3
16. INSTALL TRENCH DRAIN PER SEPARATE PLANS AND PERMIT. SEE GROCERY PLANS FOR DETAILS
18. EXPOSED BUILDING FOOTING PER SEPARATE STRUCTURAL PLANS & DETAILS BY OTHERS (PER SEPARATE PERMIT)
21. CONSTRUCT 4.5' MAX RETAINING WALL PER PLANS & DETAILS BY OTHERS (PER SEPARATE PERMIT)
22. CONSTRUCT 6' MAX RETAINING WALL PER PLANS & DETAILS BY OTHERS (PER SEPARATE PERMIT)
24. INSTALL ROCK LINED SWALE RIP RAP (D50=6", T=12") PER DETAIL "11" ON SHEET D3
25. CONSTRUCT 2.0' WIDE CURB OPENING PER DETAIL "12" ON SHEET D3
27. CONSTRUCT TERRACE PER ARCH PLANS & DETAILS BY OTHERS
28. INSTALL 2.0' CONCRETE FLUME PER DETAIL "14" ON SHEET D3
30. CONSTRUCT 6" BERM
31. CONSTRUCT ON-SITE ADA RAMP CASE III PER DETAIL "15" ON SHEET D3
33. CONSTRUCT 42" HANDRAIL – SEE ARCH PLANS FOR DETAILS
34. CONSTRUCT PRECAST BUMPER BLOCK PER CCAUSD DWG NO. 238
36. INSTALL STAIRS PER PLANS BY ARCH
38. CONSTRUCT 6' SCREEN WALL PER ARCH PLANS & DETAILS BY OTHERS
39. SAWCUT AND MATCH EXISTING

## LEGEND

PROPERTY LINE
STREET CENTERLINE
RETAINING WALL
BUILDING
(2323) EXISTING CONTOUR
2327 CONTOUR
CURB & GUTTER
CURB
EXISTING EDGE OF PAVEMENT
EXISTING CURB & GUTTER
EXISTING CURB
EXISTING BUILDING
1 CONSTRUCTION NOTE
CUT FILL TRANSITION
SAWCUT LIMITS
3:1 SCARP
0.40% SLOPE
FLOW LINE
EASEMENT LINE
HANDICAP PARKING
FS FINISHED SURFACE
CF CURB FACE
TC CURB BACK
EP EDGE OF PAVEMENT
TG TOP OF GRATE
99.56 FG GRADE
(52.0) EG EXISTING GRADE
EXPOSED FOOTING
BLDG WALL TO RETAIN




KEY MAP
N.T.S.

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY ON FILE WITH CITY OF LAS VEGAS FOR THIS PROJECT, DS 4902.

TREASEA WOLF, P.E. No. 17879 — DATE 5-8-18

CLV#: 107Y5072 L17-00759

| No. | REVISIONS | DATE | BY |
|---|---|---|---|
| 1 | UPDATED DRIVEWAY & UPDATED GRADE TAGS FOR C-STORE & CARWASH TO BE FUTURE | 5-11-18 | SE |
| | ADDED PAVEMENT TRANSITION, & NORTH ADJ PROPERTY LINE WORK, ADDED MODIFIED ROLL CURB | | |

Call before you Dig AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY. CALL 811 OR 1-800-227-2600

FAST Call before you UnderGround 1-702-432-5300 DESERT AND AERIAL SYSTEM OF TRANSPORTATION

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


Kimley»Horn
© 2018 KIMLEY-HORN AND ASSOCIATES, INC.
6671 LAS VEGAS BLVD S., SUITE 320, LAS VEGAS, NV 89119
PHONE: 702-862-3600
WWW.KIMLEY-HORN.COM


PROFESSIONAL ENGINEER STATE OF NEVADA TREASEA WOLF CIVIL EXP.6-30-18 No. 17879

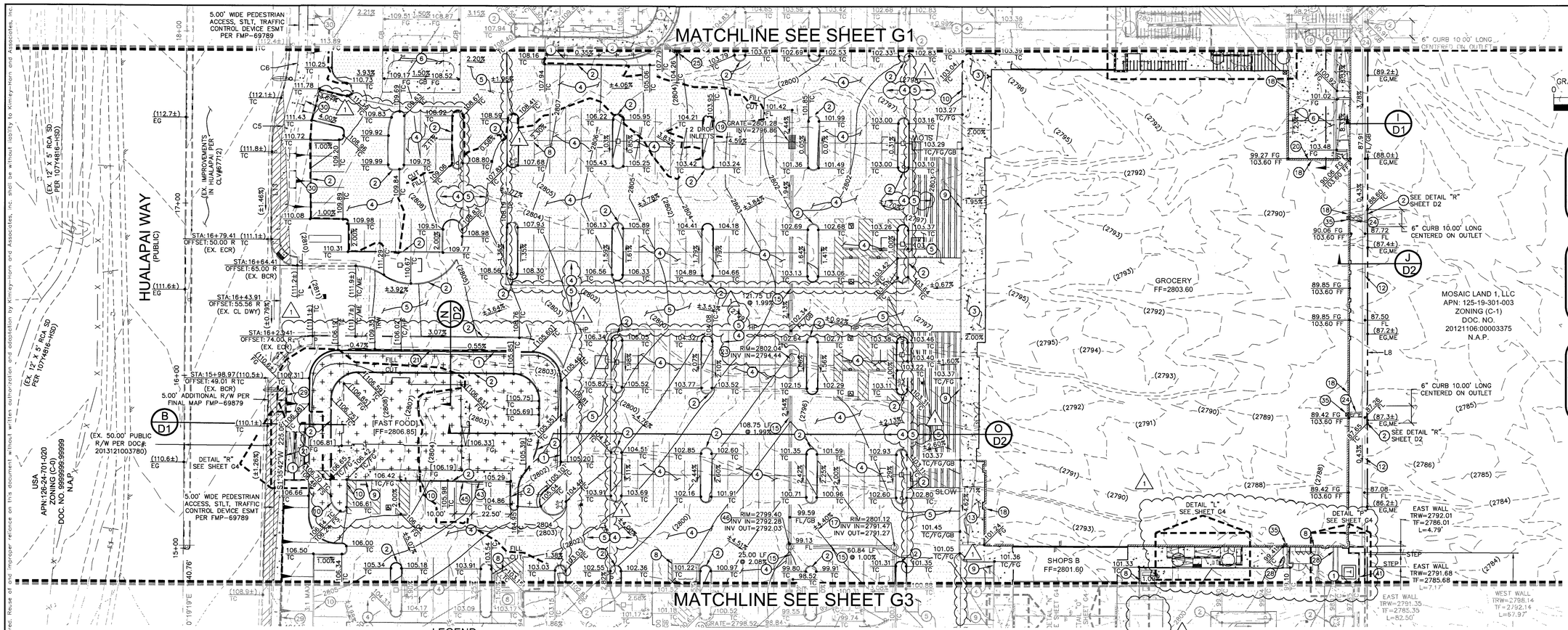
KHA PROJECT 61153.52
DATE NOV. 9, 2017
SCALE AS SHOWN
DESIGNED BY JZ
DRAWN BY JZ
CHECKED BY TW

GRADING PLAN 1

DEER SPRINGS VILLAGE
@ SEC DEER SPRINGS & HUALAPAI

8 OF 19 SHEETS
G1


Plotted By:Zito, JoLynn Sheet Set:Kho Layout:G1 May 08, 2018 01:32:23pm W:\61153.LAURCH\DWG\WPREDWG\ONSITE\04-61153.52-G1.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.




## ENGINEER'S NOTES:

1. ALL WORK SHALL CONFORM TO THE SOILS REPORT PREPARED BY WESTERN TECHNOLOGIES. DATED FEBRUARY 9, 2017 PROJECT NO. 4126JD030.
2. ALL OFF-SITE IMPROVEMENT CONSTRUCTION SHALL CONFORM TO THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA", LATEST EDITION.
3. FINAL ASPHALTIC CONCRETE (AC) PAVEMENT SURFACES SHALL BE ONE-HALF INCH ABOVE THE TOP OF THE GUTTER (INCLUDING OPEN GRADE).
4. CONTRACTOR IS RESPONSIBLE FOR DUST AND EROSION CONTROL DURING CONSTRUCTION
5. THIS PLAN SHALL NOT, IN PART OR IN WHOLE, BE USED FOR CONSTRUCTION UNTIL APPROVED AND SIGNED BY ALL APPLICABLE GOVERNMENT AGENCIES.
6. ENGINEER TO BE NOTIFIED OF ANY DISCREPANCIES IMMEDIATELY.
7. MATCH ELEVATIONS SHOWN TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION.
8. THIS PROJECT IS NOT PART OF AN EXISTING COMMERCIAL SUBDIVISION.
9. PROPERTY OWNER IS RESPONSIBLE TO MAINTAIN THE BEST MANAGEMENT PRACTICES SUCH AS BUT NOT LIMITED TO THE REMOVAL OF ACCUMULATED SEDIMENT AND DEBRIS AND CARE OF THE VEGETATION.

## NOTES

ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.

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

## SIGHT VISIBILITY ZONES NOTE

NO WALLS, FENCES, TREES, SHRUBS, UTILITY APPURTENANCES OR ANY OTHER OBJECT, OTHER THAN TRAFFIC CONTROL DEVICES AND STREET LIGHT POLES, MAY BE CONSTRUCTED OR INSTALLED WITHIN THE SIGHT VISIBILITY ZONE UNLESS SAID OBJECT IS MAINTAINED AT LESS THAN 24 INCHES IN HEIGHT, MEASURED FROM THE TOP OF CURB.

## FLOODZONE

THE PARCEL DESCRIBED HEREON LIES WITHIN THE FLOOD HAZARD ZONE HAVING A ZONE DESIGNATION OF "X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN). AS SHOWN PER FEMA MAPS, NO. 32003C1750 E AND NO. 32003C1745 E BOTH DATED SEPTEMBER 27, 2002.

## LEGEND & ABBREVIATIONS

SEE COVER SHEET FOR MASTER LEGEND AND ABBREVIATIONS.

## LEGAL DESCRIPTION

SEE COVER SHEET FOR FULL LEGAL DESCRIPTION

## BENCHMARK

BENCHMARK: 12LV99 24E4: A RIVET AND ROUND ALUMINUM PLATE IN THE TOP OF CURB AT THE NORTHWEST CORNER OF HUALAPAI WAY AND DEER SPRINGS WAY = 858.066m = 2815.17sft. (NAVD 88)

## BASIS OF BEARINGS

NORTH 89°47'00" WEST, BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) SECTION 19, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., COUNTY OF CLARK, STATE OF NEVADA

## LEGEND

- PROPERTY LINE
- STREET CENTERLINE
- RETAINING WALL
- BUILDING
- (2323) EXISTING CONTOUR
- 2327 CONTOUR
- CURB & GUTTER
- CURB
- EXISTING EDGE OF PAVEMENT
- EXISTING CURB & GUTTER
- EXISTING CURB
- EXISTING BUILDING
- (1) CONSTRUCTION NOTE
- CUT FILL TRANSITION
- SAWCUT LIMITS
- 3:1 SCARP
- 0.40% SLOPE
- FLOW LINE
- EASEMENT LINE
- HANDICAP PARKING
- FS FINISHED SURFACE
- CF CURB FACE
- TC CURB BACK
- EP EDGE OF PAVEMENT
- TG TOP OF GRATE
- 99.56 FG GRADE
- (52.0) EG EXISTING GRADE
- [99.56] FG FUTURE GRADE
- EXPOSED FOOTING
- BLDG WALL TO RETAIN

## STORM DRAIN NOTE

ALL ON-SITE STORM DRAINS AND THE ASSOCIATED FACILITIES ARE PRIVATELY OWNED AND TO BE PRIVATELY MAINTAINED BY THE PROPERTY OWNERS.

## EARTHWORK QUANTITIES

*NOTE: THESE QUANTITIES ARE APPROXIMATE AND ARE RAW VOLUMES ONLY. OVEREXCAVATION SUBSIDENCE, SHRINKAGE, & BULKING FACTORS ARE NOT TAKEN INTO ACCOUNT.

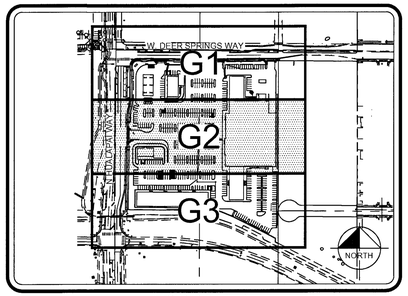
CUT = 5,751 C.Y.
FILL = 66,425 C.Y.

## STORMWATER MANAGEMENT NOTES:

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 THE 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 THE CLARK COUNTY BUILDING ADMINISTRATIVE CODE 24.40 AND 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.

## CONSTRUCTION NOTES

1. CONSTRUCT "L" TYPE CURB & GUTTER PER CCAUSD NO. 216
2. CONSTRUCT "A" TYPE CURB PER CCAUSD NO. 219
3. CONSTRUCT 4" SIDEWALK PER CCAUSD NO. 234
4. CONSTRUCT STANDARD AC PAVEMENT PER SOILS REPORT BY WESTERN TECHNOLOGIES INC. SEE DETAIL "1" ON SHEET D3
5. CONSTRUCT HEAVY AC PAVEMENT PER SOILS REPORT BY WESTERN TECHNOLOGIES INC. SEE DETAIL "2" ON SHEET D3
6. CONSTRUCT PCC PAVEMENT PER PER SOILS REPORT BY WESTERN TECHNOLOGIES INC. DETAIL "3" ON SHEET D3
8. CONSTRUCT TRASH ENCLOSURE PER SEPARATE ARCHITECTURAL PLANS & DETAILS (BY OTHERS)
9. CONSTRUCT 0" CURB
10. TRANSITION FROM 6" CURB TO 0" CURB PER DETAIL "5" ON SHEET D3
12. CONSTRUCT 3.0' WIDE VALLEY GUTTER PER DETAIL "16" ON SHEET D3
13. CONSTRUCT ON-SITE ADA RAMP CASE II WITH HANDRAILS WHERE APPLICABLE PER DETAIL "7" ON SHEET D3
15. INSTALL 18" RCP CLASS III STORM DRAIN PIPE
16. INSTALL TRENCH DRAIN PER SEPARATE PLANS AND PERMIT. SEE GROCERY PLANS FOR DETAILS
17. INSTALL 48" TYPE II MANHOLE PER CCAUSD NO. 405.2
18. EXPOSED BUILDING FOOTING PER SEPARATE STRUCTURAL PLANS & DETAILS BY OTHERS (PER SEPARATE PERMIT)
19. INSTALL 48"x48" DROP INLET PER JENSEN PRECAST NO DI4848 OR APPROVED EQUIVALENT, SEE DETAIL 9 ON SHEET D3
20. CONSTRUCT CONCRETE RAISED TRUCK LOADING DOCK WITH RETAINING WALLS. DESIGN AND PERMITS BY OTHERS
21. CONSTRUCT 4.5' MAX RETAINING WALL PER PLANS & DETAILS BY OTHERS (PER SEPARATE PERMIT)
23. INSTALL RINKER STORMCEPTOR (STC 450) WITH LID PER DETAIL "10" ON SHEET D2 AND MANUFACTURERS SPECIFICATIONS
24. INSTALL ROCK LINED SWALE RIP RAP (D50=6", T=12") PER DETAIL "11" ON SHEET D3
25. CONSTRUCT 2.0' WIDE CURB OPENING PER DETAIL "12" ON SHEET D3
27. CONSTRUCT TERRACE PER ARCH PLANS & DETAILS BY OTHERS
28. INSTALL 2.0' CONCRETE FLUME PER DETAIL "14" ON SHEET D3
29. CONSTRUCT 2.0' (8" CMU OR EQUIVALENT) HIGH SOLID GROUTED SCREEN WALL PER SNBORS B-100-1 OR SEPARATE STRUCTUAL PLANS BY OTHERS
30. CONSTRUCT 6" BERM
35. INSTALL ROOF DRAINS TO SPILL TO GRADE WITH SPLASHBLOCK PER GROCERY ARCH PLANS
41. CONSTRUCT 4.0' (8" CMU OR EQUIVALENT) HIGH SCREEN WALL PER SNBORS B-100-1 OR SEPARATE STRUCTUAL PLANS BY OTHERS
43. CONSTRUCT MODIFIED ROLL CURB #2 PER DETAIL "17" ON SHEET G0
45. TRANSITION FROM "A" CURB TO ROLL CURB #2 PER DETAIL "19" ON SHEET G0
46. INSTALL RINKER STORMCEPTOR (STC 900) WITH LID PER DETAIL "20" ON SHEET C3 & MANUFACTURERS SPECIFICATIONS




KEY MAP
N.T.S.

| LINE TABLE | | |
|---|---|---|
| LINE | LENGTH | BEARING |
| L1 | 141.18 | N89°27'56.45"W |
| L2 | 51.98 | N79°15'38.89"W |
| L3 | 100.00 | N89°27'56.45"W |
| L4 | 73.77 | N81°27'04.99"E |
| L5 | 73.77 | N81°27'04.99"E |
| L6 | 150.99 | N89°15'40.64"E |
| L7 | 67.74 | N89°27'56.45"W |
| L8 | 669.44 | N0°04'08.34"E |
| L9 | 136.43 | N0°04'08.34"E |
| L10 | 153.21 | S62°30'17.00"E |
| L11 | 339.21 | N89°32'44.04"W |
| L12 | 88.23 | N0°19'19.00"E |
| L13 | 87.55 | N0°19'19.00"E |
| L14 | 136.93 | N0°19'19.00"E |

| CURVE TABLE | | | | |
|---|---|---|---|---|
| CURVE | RADIUS | LENGTH | DELTA | TANGENT |
| C1 | 25.00' | 39.36' | 90°12'45" | 25.09' |
| C2 | 17.00' | 3.03' | 10°12'18" | 1.52' |
| C3 | 33.00' | 5.88' | 10°12'18" | 2.95' |
| C4 | 1120.00' | 174.40' | 8°55'19" | 87.38' |
| C5 | 95.00' | 30.17' | 18°11'42" | 15.21' |
| C6 | 105.00' | 33.34' | 18°11'42" | 16.81' |

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY ON FILE WITH CITY OF LAS VEGAS FOR THIS PROJECT, DS 4902.

TREASEA WOLF, P.E. No. 17878 — DATE 5-8-18

CLV#: 107Y5072 L17-00759

| No. | REVISIONS | DATE | BY |
|---|---|---|---|
| 1 | UPDATED FAST FOOD CURB, ADDED PAVEMENT TRANSITION, UPDATED TRANSFORMER LOCATIONS & ADDED MODIFIED ROLL CURB | 5-8-18 | TW |

Kimley»Horn
© 2018 KIMLEY-HORN AND ASSOCIATES, INC.
6671 LAS VEGAS BLVD S., SUITE 320, LAS VEGAS, NV 89119
PHONE: 702-862-3600
WWW.KIMLEY-HORN.COM

PROFESSIONAL ENGINEER STATE OF NEVADA TREASEA WOLF CIVIL EXP.6/30/19 No. 17878

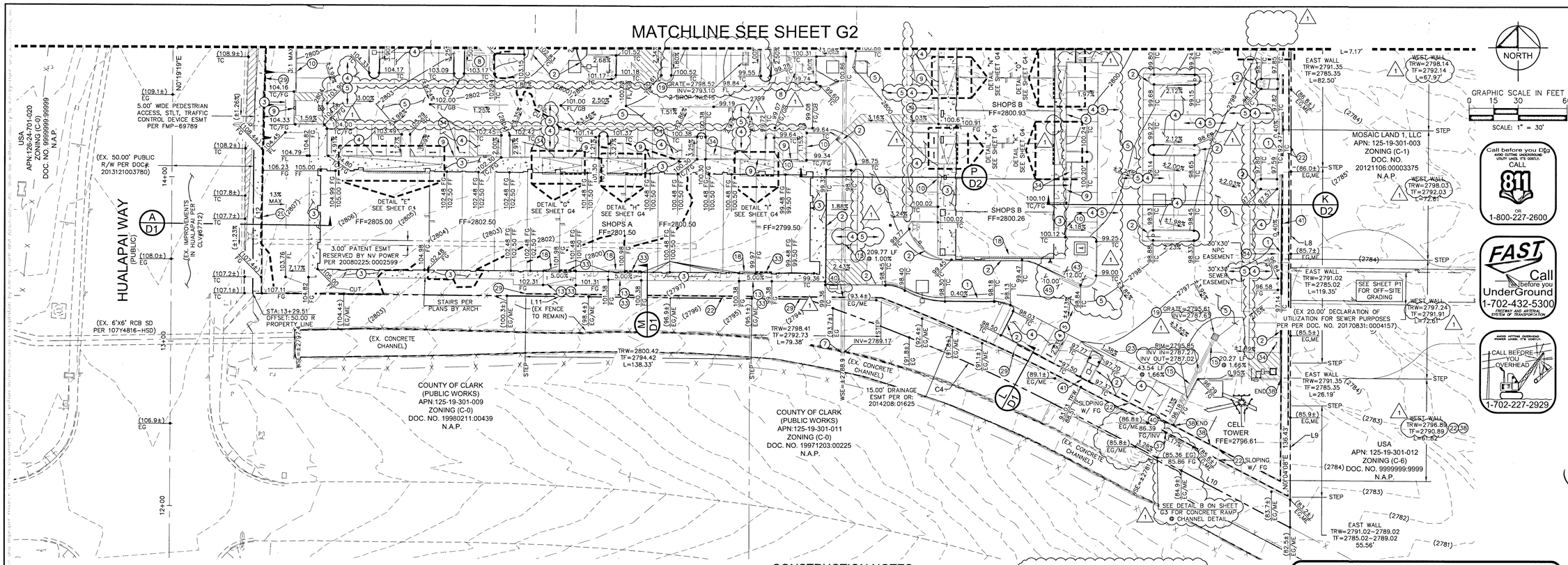
KHA PROJECT 61153.52
DATE NOV. 9, 2017
SCALE AS SHOWN
DESIGNED BY JZ
DRAWN BY JZ
CHECKED BY TW

# GRADING PLAN 2

# DEER SPRINGS VILLAGE @ SEC DEER SPRINGS & HUALAPAI



Plotted By:Zito, Jolyann Sheet Set:Xrp Layout:G2 May 08, 2018 01:32:38pm W:\61152.1\AURC\-VWC\MFRDWGS\ONSITE\04-61153.52-G1.dwg
This document together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.




## ENGINEER'S NOTES:

1. ALL WORK SHALL CONFORM TO THE SOILS REPORT PREPARED BY WESTERN TECHNOLOGIES. DATED FEBRUARY 9, 2017 PROJECT NO. 4126JD030.

2. ALL OFF-SITE IMPROVEMENT CONSTRUCTION SHALL CONFORM TO THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA", LATEST EDITION.

3. FINAL ASPHALTIC CONCRETE (AC) PAVEMENT SURFACES SHALL BE ONE-HALF INCH ABOVE THE TOP OF THE GUTTER (INCLUDING OPEN GRADE).

4. CONTRACTOR IS RESPONSIBLE FOR DUST AND EROSION CONTROL DURING CONSTRUCTION

5. THIS PLAN SHALL NOT, IN PART OR IN WHOLE, BE USED FOR CONSTRUCTION UNTIL APPROVED AND SIGNED BY ALL APPLICABLE GOVERNMENT AGENCIES.

6. ENGINEER TO BE NOTIFIED OF ANY DISCREPANCIES IMMEDIATELY.

7. MATCH ELEVATIONS SHOWN TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION.

8. THIS PROJECT IS NOT PART OF AN EXISTING COMMERCIAL SUBDIVISION.

9. PROPERTY OWNER IS RESPONSIBLE TO MAINTAIN THE BEST MANAGEMENT PRACTICES SUCH AS BUT NOT LIMITED TO THE REMOVAL OF ACCUMULATED SEDIMENT AND DEBRIS AND CARE OF THE VEGETATION.

## NOTES

ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.

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

## SIGHT VISIBILITY ZONES NOTE

NO WALLS, FENCES, TREES, SHRUBS, UTILITY APPURTENANCES OR ANY OTHER OBJECT, OTHER THAN TRAFFIC CONTROL DEVICES AND STREET LIGHT POLES, MAY BE CONSTRUCTED OR INSTALLED WITHIN THE SIGHT VISIBILITY ZONE UNLESS SAID OBJECT IS MAINTAINED AT LESS THAN 24 INCHES IN HEIGHT, MEASURED FROM THE TOP OF CURB.

## FLOODZONE

THE PARCEL DESCRIBED HEREON LIES WITHIN THE FLOOD HAZARD ZONE HAVING A ZONE DESIGNATION OF "X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN). AS SHOWN PER FEMA MAPS, NO. 32003C1750 E AND NO. 32003C1745 E BOTH DATED SEPTEMBER 27, 2002.

## LEGEND & ABBREVIATIONS

SEE COVER SHEET FOR MASTER LEGEND AND ABBREVIATIONS.

## LEGAL DESCRIPTION

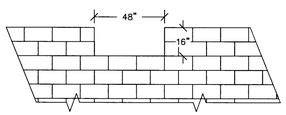
SEE COVER SHEET FOR FULL LEGAL DESCRIPTION

## BENCHMARK

BENCHMARK: 12LV99 24E4: A RIVET AND ROUND ALUMINUM PLATE IN THE TOP OF CURB AT THE NORTHWEST CORNER OF HUALAPAI WAY AND DEER SPRINGS WAY = 858.066m = 2815.17sft. (NAVD 88)

## BASIS OF BEARINGS

NORTH 89°47'00" WEST, BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) SECTION 19, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., COUNTY OF CLARK, STATE OF NEVADA




DETAIL "A"
BLOCK WALL NOTCH OUT
N.T.S.

## STORM DRAIN NOTE

ALL ON-SITE STORM DRAINS AND THE ASSOCIATED FACILITIES ARE PRIVATELY OWNED AND TO BE PRIVATELY MAINTAINED BY THE PROPERTY OWNERS.

## EARTHWORK QUANTITIES

*NOTE: THESE QUANTITIES ARE APPROXIMATE AND ARE RAW VOLUMES ONLY. OVEREXCAVATION SUBSIDENCE, SHRINKAGE, & BULKING FACTORS ARE NOT TAKEN INTO ACCOUNT.

CUT = 5,751 C.Y.
FILL = 66,425 C.Y.

## STORMWATER MANAGEMENT NOTES:

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 THE 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 THE CLARK COUNTY BUILDING ADMINISTRATIVE CODE 24.40 AND 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.

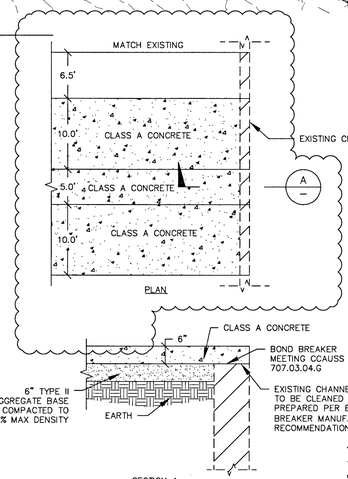
5 ACCUMULATED SEDIMENT IN BMPS SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORMWATER RUNOFF EVENT OR PRIOR TO THE NEXT ANTICIPATED STORM EVENT, WHICHEVER IS EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.

| LINE TABLE | | |
|---|---|---|
| LINE | LENGTH | BEARING |
| L1 | 141.18 | N89°27'56.45"W |
| L2 | 51.98 | N79°15'38.89"W |
| L3 | 100.00 | N89°27'56.45"W |
| L4 | 73.77 | N81°27'04.99"E |
| L5 | 73.77 | N81°27'04.99"E |
| L6 | 150.99 | N89°15'40.64"E |
| L7 | 67.74 | N89°27'56.45"W |
| L8 | 669.44 | N0°04'08.34"E |
| L9 | 136.43 | N0°04'08.34"E |
| L10 | 153.21 | S62°30'17.00"E |
| L11 | 339.21 | N89°32'44.04"W |
| L12 | 88.23 | N0°19'19.00"E |
| L13 | 87.55 | N0°19'19.00"E |
| L14 | 136.93 | N0°19'19.00"E |

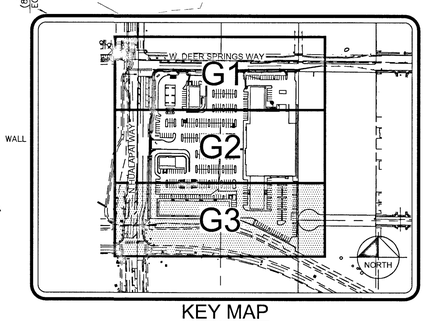
| CURVE TABLE | | | | |
|---|---|---|---|---|
| CURVE | RADIUS | LENGTH | DELTA | TANGENT |
| C1 | 25.00' | 39.36' | 90°12'45" | 25.09' |
| C2 | 17.00' | 3.03' | 10°12'18" | 1.52' |
| C3 | 33.00' | 5.88' | 10°12'18" | 2.95' |
| C4 | 1120.00' | 174.40' | 8°55'19" | 87.38' |
| C5 | 95.00' | 30.17' | 18°11'42" | 15.21' |
| C6 | 105.00' | 33.34' | 18°11'42" | 16.81' |

## CONSTRUCTION NOTES

1. CONSTRUCT "L" TYPE CURB & GUTTER PER CCAUSD NO. 216
2. CONSTRUCT "A" TYPE CURB PER CCAUSD NO. 219
3. CONSTRUCT 4" SIDEWALK PER CCAUSD NO. 234
4. CONSTRUCT STANDARD AC PAVEMENT PER SOILS REPORT BY WESTERN TECHNOLOGIES INC. SEE DETAIL "1" ON SHEET D3
5. CONSTRUCT HEAVY AC PAVEMENT PER SOILS REPORT BY WESTERN TECHNOLOGIES INC. SEE DETAIL "2" ON SHEET D3
7. CONSTRUCT PIPE PENETRATION PER DETAIL "4" ON SHEET D3
8. CONSTRUCT TRASH ENCLOSURE PER SEPARATE ARCHITECTURAL PLANS & DETAILS (BY OTHERS)
9. CONSTRUCT 0" CURB
10. TRANSITION FROM 6" CURB TO 0" CURB PER DETAIL "5" ON SHEET D3
13. CONSTRUCT ON-SITE ADA RAMP CASE II WITH HANDRAILS WHERE APPLICABLE PER DETAIL "7" ON SHEET D3
15. INSTALL 18" RCP CLASS III STORM DRAIN PIPE
18. EXPOSED BUILDING FOOTING PER SEPARATE STRUCTURAL PLANS & DETAILS BY OTHERS (PER SEPARATE PERMIT)
19. INSTALL 48"x48" DROP INLET PER JENSEN PRECAST NO D14848 OR APPROVED EQUIVALENT, SEE DETAIL 9 ON SHEET D3
22. CONSTRUCT 6' MAX RETAINING WALL PER PLANS & DETAILS BY OTHERS (PER SEPARATE PERMIT)
23. INSTALL RINKER STORMCEPTOR (STC 450) WITH LID PER DETAIL "10" ON SHEET D2 AND MANUFACTURERS SPECIFICATIONS
28. INSTALL 2.0' CONCRETE FLUME PER DETAIL "14" ON SHEET D3
29. CONSTRUCT 2.0' (8" CMU OR EQUIVALENT) HIGH SOLID GROUTED SCREEN WALL PER SNBORS B-100-1 OR SEPARATE STRUCTUAL PLANS BY OTHERS
33. CONSTRUCT 42" HANDRAIL – SEE ARCH PLANS FOR DETAILS
34. CONSTRUCT PRECAST BUMPER BLOCK PER CCAUSD DWG NO. 238
35. INSTALL ROOF DRAINS TO SPILL TO GRADE WITH SPLASHBLOCK PER GROCERY ARCH PLANS
37. INSTALL 18" RCP THROUGH RETAINING WALL PER DETAILS BY OTHERS
38. CONSTRUCT 6' SCREEN WALL PER ARCH PLANS & DETAILS BY OTHERS
40. PROVIDE 48" X 16" BLOCK WALL NOTCH OUT FOR EMERGENCY OVERFLOW – SEE DETAIL "A" ON SHEET G3
41. CONSTRUCT 4.0' (8" CMU OR EQUIVALENT) HIGH SCREEN WALL PER SNBORS B-100-1 OR SEPARATE STRUCTUAL PLANS BY OTHERS
43. CONSTRUCT MODIFIED ROLL CURB #2 PER DETAIL "17" ON SHEET G0
44. TRANSITION FROM "L" CURB TO ROLL CURB #1 PER DETAIL "18" ON SHEET G0
45. TRANSITION FROM "A" CURB TO ROLL CURB #2 PER DETAIL "19" ON SHEET G0




DETAIL "B"
5' WIDE CONCRETE RAMP @ CHANNEL
N.T.S.




KEY MAP
N.T.S.

## LEGEND

- PROPERTY LINE
- STREET CENTERLINE
- RETAINING WALL
- BUILDING
- (2323) EXISTING CONTOUR
- 2327 CONTOUR
- CURB & GUTTER
- CURB
- EXISTING EDGE OF PAVEMENT
- EXISTING CURB & GUTTER
- EXISTING CURB
- EXISTING BUILDING
- 1 CONSTRUCTION NOTE
- CUT FILL TRANSITION
- SAWCUT LIMITS
- 35 0.40% SCARP
- SLOPE
- FLOW LINE
- EASEMENT LINE
- HANDICAP PARKING
- FS FINISHED SURFACE
- CF CURB FACE
- TC CURB BACK
- EP EDGE OF PAVEMENT
- TG TOP OF GRATE
- 99.56 FG GRADE
- (52.0) EG EXISTING GRADE
- EXPOSED FOOTING
- BLDG WALL TO RETAIN

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY ON FILE WITH CITY OF LAS VEGAS FOR THIS PROJECT, DS 4902.

TREASEA WOLF, P.E. No. 17879 — DATE 5-24-18

CLV#: 107Y5072 L17-00759

| No. | REVISIONS | DATE | BY |
|---|---|---|---|
| 1 | MAILBOX RELOCATION, RETAINING WALLS, | 6-4-18 | SS |
| | REMOVED SHOPS B DOOR, ADDED PAVEMENT | | |
| | TRANSITION UPDATED TRANSFORMER & ADDED | | |
| | MODIFIED ROLL CURB, UPDATED STORMCEPTOR | | |

Kimley»Horn
© 2018 KIMLEY-HORN AND ASSOCIATES, INC.
6671 LAS VEGAS BLVD S., SUITE 320, LAS VEGAS, NV 89119
PHONE: 702-862-3600
WWW.KIMLEY-HORN.COM

STATE OF NEVADA PROFESSIONAL ENGINEER TREASEA WOLF No. 17879 EXP. 6/30/19 5-24-18

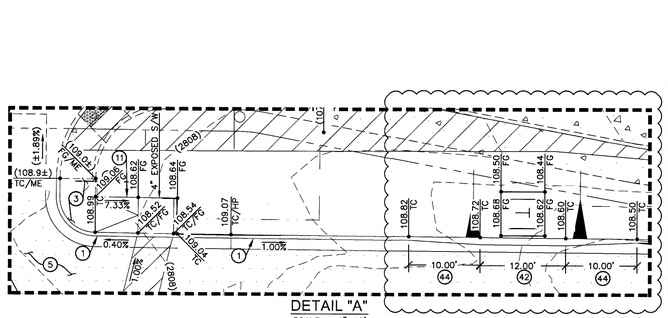
KHA PROJECT 61153.52
DATE NOV. 9, 2017
SCALE AS SHOWN
DESIGNED BY JZ
DRAWN BY JZ
CHECKED BY TW

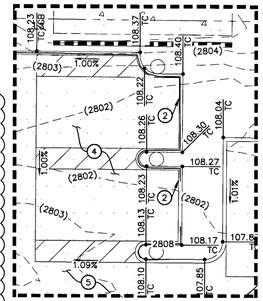
# GRADING PLAN 3

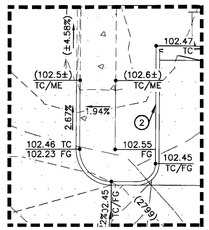
DEER SPRINGS VILLAGE @ SEC DEER SPRINGS & HUALAPAI

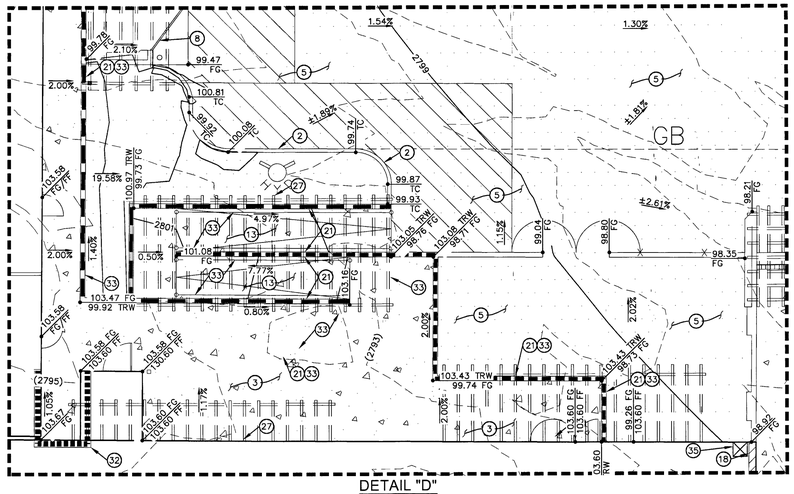
10 OF 19 SHEETS

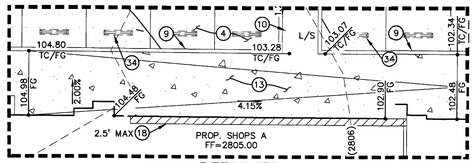
G3

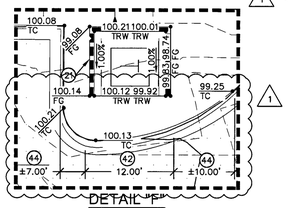


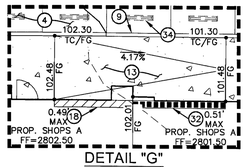



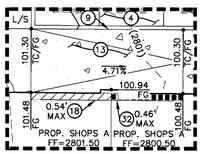



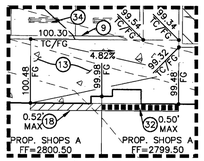



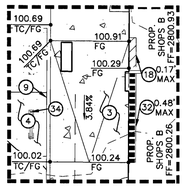



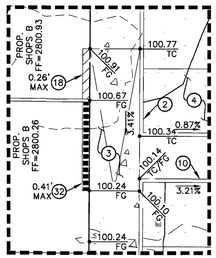



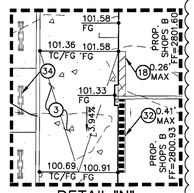



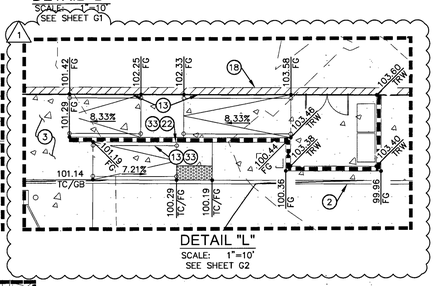



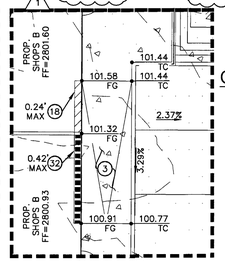



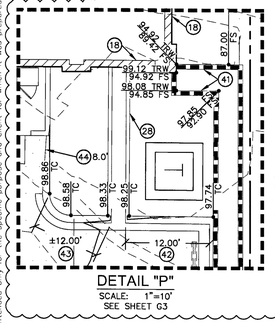



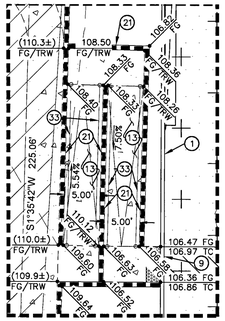




## STORM DRAIN NOTE

ALL ON-SITE STORM DRAINS AND THE ASSOCIATED FACILITIES ARE PRIVATELY OWNED AND TO BE PRIVATELY MAINTAINED BY THE PROPERTY OWNERS.

## SIGHT VISIBILITY ZONES NOTE

NO WALLS, FENCES, TREES, SHRUBS, UTILITY APPURTENANCES OR ANY OTHER OBJECT, OTHER THAN TRAFFIC CONTROL DEVICES AND STREET LIGHT POLES, MAY BE CONSTRUCTED OR INSTALLED WITHIN THE SIGHT VISIBILITY ZONE UNLESS SAID OBJECT IS MAINTAINED AT LESS THAN 24 INCHES IN HEIGHT, MEASURED FROM THE TOP OF CURB.

## FLOODZONE

THE PARCEL DESCRIBED HEREON LIES WITHIN THE FLOOD HAZARD ZONE HAVING A ZONE DESIGNATION OF "X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) BY THE SECRETARY OF HOUSING AND URBAN DEVELOPMENT, AS SHOWN PER FEMA MAPS, NO. 32003C1750 E AND NO. 32003C1745 E BOTH DATED SEPTEMBER 27, 2002.

## LEGEND & ABBREVIATIONS

SEE COVER SHEET FOR MASTER LEGEND AND ABBREVIATIONS.

## LEGAL DESCRIPTION

GOVERNMENT LOTS 22, 23, & 24 LOCATED WITHIN A PORTION OF THE NORTHWEST (NW 1/4) OF THE SOUTHWEST (SW 1/4) OF THE SOUTHEAST CORNER (SEC 19), T.195, R.60 E., MDB&M, CLARK COUNTY, NEVADA.

## BENCHMARK

BENCHMARK: 12LV99 24E4: A RIVET AND ROUND ALUMINUM PLATE IN THE TOP OF CURB AT THE NORTHWEST CORNER OF HUALAPAI WAY AND DEER SPRINGS WAY = 858.066m = 2815.17sft. (NAVD 88)

## BASIS OF BEARINGS

NORTH 89°47'00" WEST, BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) SECTION 19, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., COUNTY OF CLARK, STATE OF NEVADA

## STORMWATER MANAGEMENT NOTES:

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 THE 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 THE CLARK COUNTY BUILDING ADMINISTRATIVE CODE 24.40 AND 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.

## ENGINEER'S NOTES:

1. ALL WORK SHALL CONFORM TO THE SOILS REPORT PREPARED BY WESTERN TECHNOLOGIES. DATED FEBRUARY 9, 2017 PROJECT NO. 4126JD030.

2. ALL OFF-SITE IMPROVEMENT CONSTRUCTION SHALL CONFORM TO THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA", LATEST EDITION.

3. FINAL ASPHALTIC CONCRETE (AC) PAVEMENT SURFACES SHALL BE ONE-HALF INCH ABOVE THE TOP OF THE GUTTER (INCLUDING OPEN GRADE).

4. CONTRACTOR IS RESPONSIBLE FOR DUST AND EROSION CONTROL DURING CONSTRUCTION

5. THIS PLAN SHALL NOT, IN PART OR IN WHOLE, BE USED FOR CONSTRUCTION UNTIL APPROVED AND SIGNED BY ALL APPLICABLE GOVERNMENT AGENCIES.

6. ENGINEER TO BE NOTIFIED OF ANY DISCREPANCIES IMMEDIATELY.

7. MATCH ELEVATIONS SHOWN TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION.

8. THIS PROJECT IS NOT PART OF AN EXISTING COMMERCIAL SUBDIVISION.

9. PROPERTY OWNER IS RESPONSIBLE TO MAINTAIN THE BEST MANAGEMENT PRACTICES SUCH AS BUT NOT LIMITED TO THE REMOVAL OF ACCUMULATED SEDIMENT AND DEBRIS AND CARE OF THE VEGETATION.

## NOTES

ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.

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

## LEGEND

- PROPERTY LINE
- STREET CENTERLINE
- RETAINING WALL
- BUILDING
- (2323) EXISTING CONTOUR
- 2327 CONTOUR
- CURB & GUTTER
- CURB
- EXISTING EDGE OF PAVEMENT
- EXISTING CURB & GUTTER
- EXISTING CURB
- EXISTING BUILDING
- (1) CONSTRUCTION NOTE
- CUT FILL TRANSITION
- SAWCUT LIMITS
- 3:1 SCARP
- 0.40% SLOPE
- FLOW LINE
- EASEMENT LINE
- HANDICAP PARKING
- FS FINISHED SURFACE
- CF CURB FACE
- TC CURB BACK
- EP EDGE OF PAVEMENT
- TG TOP OF GRATE
- 99.56 FG GRADE
- (52.0) EG EXISTING GRADE
- EXPOSED FOOTING
- BLDG WALL TO RETAIN

## CONSTRUCTION NOTES

1. CONSTRUCT "L" TYPE CURB & GUTTER PER CCAUSD NO. 216
2. CONSTRUCT "A" TYPE CURB PER CCAUSD NO. 219
3. CONSTRUCT 4" SIDEWALK PER CCAUSD NO. 234
4. CONSTRUCT STANDARD AC PAVEMENT PER SOILS REPORT BY WESTERN TECHNOLOGIES INC. SEE DETAIL "1" ON SHEET D3
5. CONSTRUCT HEAVY AC PAVEMENT PER SOILS REPORT BY WESTERN TECHNOLOGIES INC. SEE DETAIL "2" ON SHEET D3
8. CONSTRUCT TRASH ENCLOSURE PER SEPARATE ARCHITECTURAL PLANS & DETAILS (BY OTHERS)
9. CONSTRUCT 0" CURB
10. TRANSITION FROM 6" CURB TO 0" CURB PER DETAIL "5" ON SHEET D3
11. CONSTRUCT ON-SITE ADA RAMP CASE I PER DETAIL "6" ON SHEET D3
13. CONSTRUCT ON-SITE ADA RAMP CASE II WITH HANDRAILS WHERE APPLICABLE PER DETAIL "7" ON SHEET D3
18. EXPOSED BUILDING FOOTING PER SEPARATE STRUCTURAL PLANS & DETAILS BY OTHERS (PER SEPARATE PERMIT)
21. CONSTRUCT 4.5' MAX RETAINING WALL PER PLANS & DETAILS BY OTHERS (PER SEPARATE PERMIT)
22. CONSTRUCT 6' MAX RETAINING WALL PER PLANS & DETAILS BY OTHERS (PER SEPARATE PERMIT)
27. CONSTRUCT TERRACE PER ARCH PLANS & DETAILS BY OTHERS
28. INSTALL 2.0' CONCRETE FLUME PER DETAIL "14" ON SHEET D3
32. BUILDING WALL TO RETAIN PER SEPARATE STRUCTURAL PLANS & DETAILS BY OTHERS (PER SEPARATE PERMIT)
33. CONSTRUCT 42" HANDRAIL – SEE ARCH PLANS FOR DETAILS
34. CONSTRUCT PRECAST BUMPER BLOCK PER CCAUSD DWG NO. 238
35. INSTALL ROOF DRAINS TO SPILL TO GRADE WITH SPLASHBLOCK PER GROCERY ARCH PLANS
41. CONSTRUCT 4.0' (8" CMU OR EQUIVALENT) HIGH SCREEN WALL PER SNBORS B-100-1 OR SEPARATE STRUCTUAL PLANS BY OTHERS
42. CONSTRUCT MODIFIED ROLL CURB #1 PER DETAIL "16" ON SHEET G0
44. TRANSITION FROM "L" CURB TO ROLL CURB #1 PER DETAIL "18" ON SHEET G0

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY ON FILE WITH CITY OF LAS VEGAS FOR THIS PROJECT, DS 4902.

TREASEA WOLF, P.E. No. 17879 — DATE 5-8-18

CLV#: 107Y5072 L17-00759

NORTH

Call before you Dig — AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY. CALL 811 OR 1-800-227-2600

FAST Call before you UnderGround 1-702-432-5300 — EFFICIENT AND ACTIVE SYSTEM OF TRANSPORTATION

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

| No. | REVISIONS | DATE | BY |
|---|---|---|---|
| 1 | ADDED DETAIL "L", & SHEET LOCATION. REMOVED DETAIL "O" & DETAIL "M", UPDATED DETAIL "A", ADDED TRANSFORMER & MODIFIED ROLL CURB | 5-8-18 | SB |


Kimley»Horn
© 2018 KIMLEY-HORN AND ASSOCIATES, INC.
6671 LAS VEGAS BLVD S., SUITE 320, LAS VEGAS, NV 89119
PHONE: 702-862-3600
WWW.KIMLEY-HORN.COM


STATE OF NEVADA — TREASEA WOLF — No. 17879 — PROFESSIONAL ENGINEER

KHA PROJECT 61153.52
DATE NOV. 9, 2017
SCALE AS SHOWN
DESIGNED BY JZ
DRAWN BY JZ
CHECKED BY TW

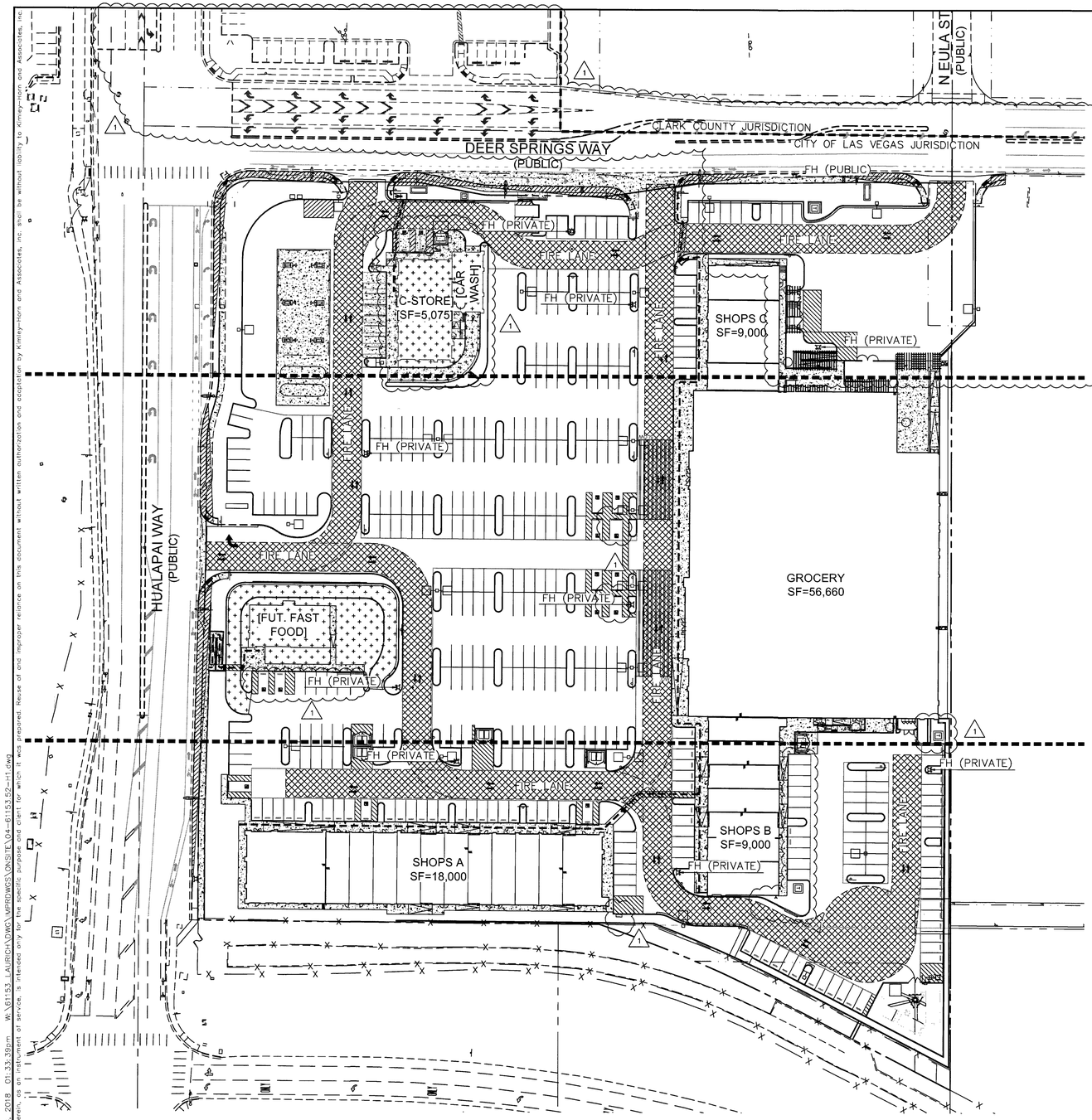
# GRADING PLAN DETAILS

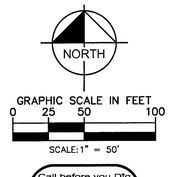
# DEER SPRINGS VILLAGE @ SEC DEER SPRINGS & HUALAPAI

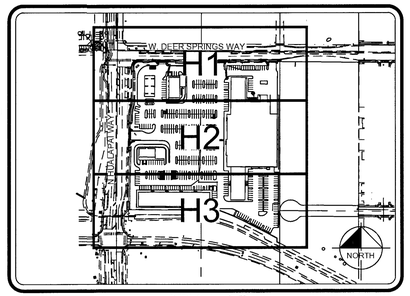


G4

Plotted By:Zito, JaLynn Sheet Set:Kha Layout:G4 May 08, 2018 01:33:21pm W:\61153_LAURICH\DWG\MPROWGS\ONSITE\04-61153.52-G1.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.




KEY MAP
N.T.S.

Call before you Dig
AVOID KOTICE OF VIOLATION
UTILITY LINES. IT'S COSTLY.
CALL
811
OR
1-800-227-2600

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

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

## FIRE LANE LEGEND

SEE SHEET C1 FOR FULL ABBREVIATIONS AND MASTER LEGEND.

- INDICATES RED PAINTED CURB WITH "NO PARKING FIRE LANE" PAINTED EVERY 50 FT. PER LVFR GUIDELINES
- ADA ROUTE TO PUBLIC R/W
- INDICATED LOCATION OF FIRE LANE SIGNS TO BE PLACED AT ENTRANCES. FIRE LANE SIGNS SHALL CONFORM TO LVFR GUIDELINES (SEE DETAIL THIS SHEET)
- PROPOSED BLUE REFLECTIVE PAVEMENT MARKER
- INDICATES FIRE HYDRANT
- INDICATES EXISTING FIRE HYDRANT
- INDICATES FIRE LANE FLOW DIRECTION
- INDICATES FDC
- SIGHT VISIBILITY ZONE
- INDICATES NEW FIRE LANE LIMITS
- TURNING RADIUS (TYPICAL)

## CITY OF LAS VEGAS FIRE DEPARTMENT

FIRE FLOW REQUIREMENT IS 2,500 GALLONS PER MINUTE AT 20 POUNDS PER SQUARE INCH RESIDUAL BASED ON:

| | SHOPS A | SHOPS B | SHOPS C | C-STORE | FAST FOOD | GROCERY STORE |
|---|---|---|---|---|---|---|
| REQ'D FIRE FLOW | 1,875 | 1,500 | 1,500 | 2,000 | 1,500 | 2,500 |
| SQUARE FOOTAGE | 18,000 | 900 | 6,280 | 5,075 | 2,400 | 56,660 |
| LARGEST AREA BETWEEN AREA SEPARATION WALLS | N/A | N/A | N/A | N/A | N/A | N/A |
| HEIGHT | 38 | 32 | 32 | 31 | 28 | – |
| TYPE OF CONSTRUCTION | V-B | V-B | V-B | V-B | V-B | IIIB |
| SPRINKLER SYSTEM | YES | YES | YES | NO | NO | YES |
| OCCUPANCY | A2/M | A2/M | A2/M | M | A2 | – |
| NO. OF STORIES | 1 | 1 | 1 | 1 | 1 | 1 |
| HIGH PILED STORAGE | NO | NO | NO | NO | NO | YES |
| CHEMICAL ADDITIVES | NO | NO | NO | N/A | N/A | NO |

## PAVEMENT MARKERS

INSTALL BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ADJACENT TO THE FIRE HYDRANT ON ALL IMPROVED FIRE APPARATUS ACCESS ROADWAYS WITH HARD SURFACES, INCLUDING BOTH PUBLIC AND PRIVATE ROADS, STREETS OR FIRE LANE.

- ON ROADWAYS WITH NO PARKING PERMITTED ON THE HYDRANT SIDE EIGHT (8) FEET FROM THE FACE OF THE CURB ON THE HYDRANT SIDE.
- ON ROADWAYS WITH PARKING PERMITTED ON THE HYDRANT SIDE SIXTEEN (16) FEET FROM THE FACES OF THE CURB ON THE HYDRANT SIDE.

## ACCESSIBILITY NOTES:

1. MAXIMUM SLOPE ON THE ACCESSIBLE ROUTE IS 5.0% IN THE DIRECTION OF TRAVEL, 2.0% CROSS SLOPE.
2. MAXIMUM SLOPE IN ACCESSIBLE PARKING STALL LOADING AISLES IN 2.0% IN ANY DIRECTION.
3. PROVIDE ACCESSIBLE PARKING STALL SIGNAGE FOR STANDARD AND VAN ACCESSIBLE STALLS PER NRS 484.408.
4. ACCESSIBLE STALLS SHALL BE 9'-0" WIDE X 20'-0" LONG (18'-0" WITH PERMITTED OVERHANG). ACCESSIBLE STALL LOADING AISLES ARE 5'-0" WIDE X THE ENTIRE LENGTH OF THE PARKING STALL (8'-0" WIDE FOR VAN ACCESSIBLE SPACES).

## NOTES

ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.

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

## SIGHT VISIBILITY ZONES NOTE

NO WALLS, FENCES, TREES, SHRUBS, UTILITY APPURTENANCES OR ANY OTHER OBJECT, OTHER THAN TRAFFIC CONTROL DEVICES AND STREET LIGHT POLES, MAY BE CONSTRUCTED OR INSTALLED WITHIN THE SIGHT VISIBILITY ZONE UNLESS SAID OBJECT IS MAINTAINED AT LESS THAN 24 INCHES IN HEIGHT, MEASURED FROM THE TOP OF CURB.

## LEGEND & ABBREVIATIONS

SEE COVER SHEET FOR MASTER LEGEND AND ABBREVIATIONS.

## LEGAL DESCRIPTION

SEE COVER SHEET FOR FULL LEGAL DESCRIPTION.

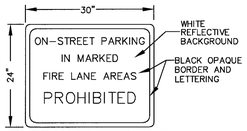
## BENCHMARK

BENCHMARK: 12LV99 24E4: A RIVET AND ROUND ALUMINUM PLATE IN THE TOP OF CURB AT THE NORTHWEST CORNER OF HUALAPAI WAY AND DEER SPRINGS WAY = 858.066m = 2815.17sft. (NAVD 88)

## BASIS OF BEARINGS

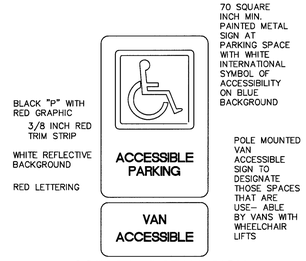
NORTH 89°47'00" WEST, BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) SECTION 19, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., COUNTY OF CLARK, STATE OF NEVADA

R1-1 STOP SIGN
(NOT TO SCALE)




ENTRANCE WARNING SIGN DETAIL
(NOT TO SCALE)

ON-SITE FIRE SIGN DETAIL
(NOT TO SCALE)




ACCESSIBLE STALL SIGN
(NOT TO SCALE)

CITY OF LAS VEGAS
FIRE DEPARTMENT APPROVAL

BY: [signature] DATE: 5/14/18

APPROVAL OF THESE PLANS SHALL NOT BE CONSTRUED TO BE A PERMIT FOR, OR AN APPROVAL OF, ANY VIOLATION OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS.

FIRE FLOW 2,500 GPM AT 20 PSI RESIDUAL.

CLV#: 107Y5072 L17-00759

| No. | REVISIONS | DATE | BY |
|---|---|---|---|
| 1 | UPDATED DRIVEWAY LOCATION, PROP MAILBOXES, ADA PARKING & NORTH ADJ PROPERTY LINE WORK | 6-9-18 | CW SB |

Kimley»Horn
© 2018 KIMLEY-HORN AND ASSOCIATES, INC.
6671 LAS VEGAS BLVD S., SUITE 320, LAS VEGAS, NV 89119
PHONE: 702-862-3600
WWW.KIMLEY-HORN.COM

PROFESSIONAL ENGINEER STATE OF NEVADA
JAMES A. WOLF
CIVIL
EXPIRES 6/30/18
No. 17819

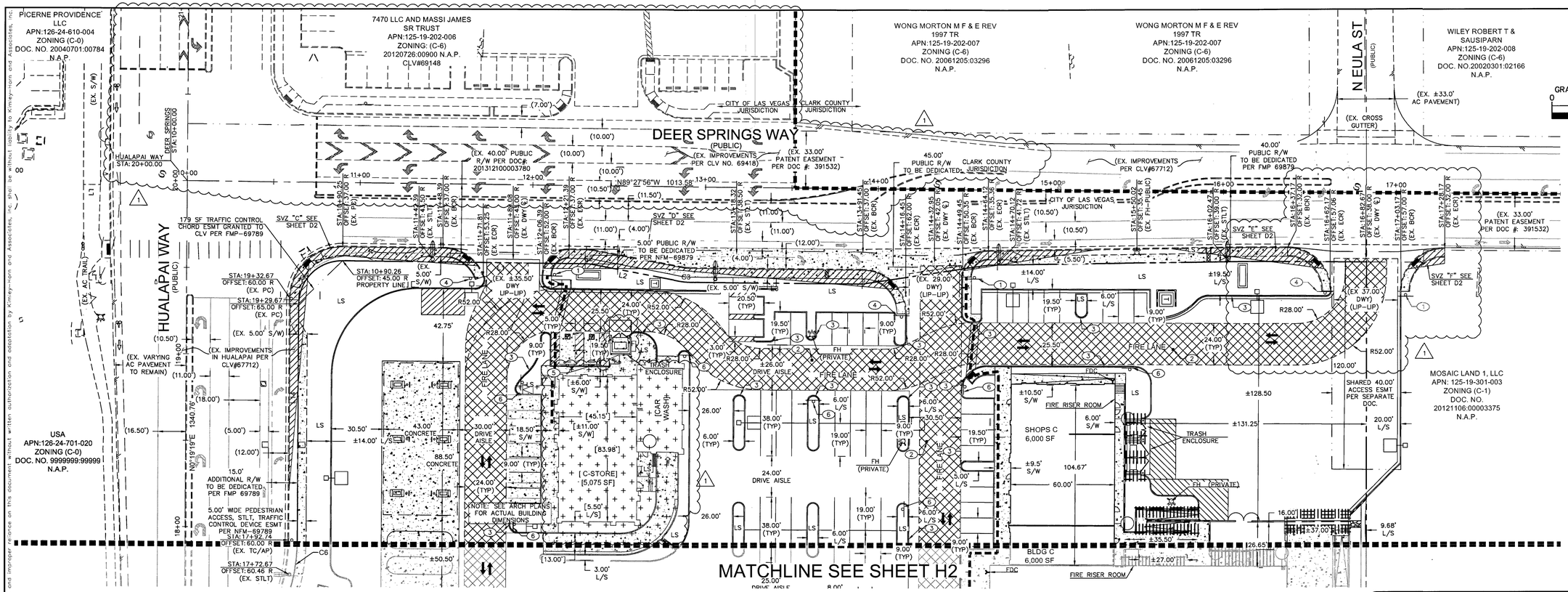
KHA PROJECT 61153.52
DATE NOV. 9, 2017
SCALE AS SHOWN
DESIGNED BY JZ
DRAWN BY JZ
CHECKED BY TW

# HORIZONTAL CONTROL & FIRE PLAN OVERALL

DEER SPRINGS VILLAGE
@ SEC DEER SPRINGS & HUALAPAI

12 OF 19 SHEETS
H0

Plotted By:Zito, JoLynn Sheet Set:Kho Layout:H0 May 08, 2018 01:33:39pm W:\61153_LAURICH\DWG\MPRD\WGS\ONSITE\04-61153.52-H1.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.




## FIRE LANE LEGEND

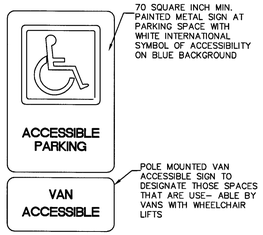
SEE SHEET C1 FOR FULL ABBREVIATIONS AND MASTER LEGEND.

- INDICATES RED PAINTED CURB WITH "NO PARKING FIRE LANE" PAINTED EVERY 50 FT. PER LVFR GUIDELINES
- ADA ROUTE TO PUBLIC R/W
- INDICATED LOCATION OF FIRE LANE SIGNS TO BE PLACED AT ENTRANCES. FIRE LANE SIGNS SHALL CONFORM TO LVFR GUIDELINES (SEE DETAIL THIS SHEET)
- PROPOSED BLUE REFLECTIVE PAVEMENT MARKER
- INDICATES FIRE HYDRANT
- INDICATES EXISTING FIRE HYDRANT
- INDICATES FIRE LANE FLOW DIRECTION
- INDICATES FDC
- SIGHT VISIBILITY ZONE
- INDICATES NEW FIRE LANE LIMITS
- TURNING RADIUS (TYPICAL)

R1-1 STOP SIGN
(NOT TO SCALE)

ENTRANCE WARNING SIGN DETAIL
(NOT TO SCALE)

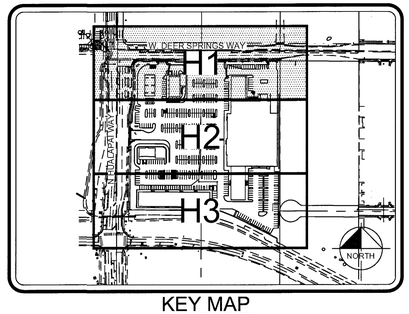
ON-SITE FIRE SIGN DETAIL
(NOT TO SCALE)




ACCESSIBLE STALL SIGN
(NOT TO SCALE)

## ON-SITE SIGNAGE NOTES

1. INSTALL "STOP SIGN" R-1
2. INSTALL BLUE REFLECTIVE PAVEMENT MARKER IN THE FIRE LANE ADJACENT TO FIRE HYDRANT
3. PAINT CURB RED & STENCIL IN WHITE PAINT "FIRE LANE – NO PARKING"
4. INSTALL ENTRANCE WARNING SIGN PER DETAIL ON H SHEETS (OR EQUIVALENT)
5. INSTALL ADA SIGN PER DETAIL THIS SHEET (OR EQUIVALENT)
6. INSTALL FIRE LANE SIGNS PER CLV STANDARDS, DETAIL ON H SHEETS




KEY MAP
N.T.S.

## NOTES

ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.

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

## SIGHT VISIBILITY ZONES NOTE

NO WALLS, FENCES, TREES, SHRUBS, UTILITY APPURTENANCES OR ANY OTHER OBJECT, OTHER THAN TRAFFIC CONTROL DEVICES AND STREET LIGHT POLES, MAY BE CONSTRUCTED OR INSTALLED WITHIN THE SIGHT VISIBILITY ZONE UNLESS SAID OBJECT IS MAINTAINED AT LESS THAN 24 INCHES IN HEIGHT, MEASURED FROM THE TOP OF CURB.

## LEGEND & ABBREVIATIONS

SEE COVER SHEET FOR MASTER LEGEND AND ABBREVIATIONS.

## LEGAL DESCRIPTION

SEE COVER SHEET FOR FULL LEGAL DESCRIPTION.

## BENCHMARK

BENCHMARK: 12LV99 24E4: A RIVET AND ROUND ALUMINUM PLATE IN THE TOP OF CURB AT THE NORTHWEST CORNER OF HUALAPAI WAY AND DEER SPRINGS WAY = 858.066m = 2815.17sft. (NAVD 88)

## BASIS OF BEARINGS

NORTH 89°47'00" WEST, BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) SECTION 19, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., COUNTY OF CLARK, STATE OF NEVADA

## PAVEMENT MARKERS

INSTALL BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ADJACENT TO THE FIRE HYDRANT ON ALL IMPROVED FIRE APPARATUS ACCESS ROADWAYS WITH HARD SURFACES, INCLUDING BOTH PUBLIC AND PRIVATE ROADS, STREETS OR FIRE LANE.

- ON ROADWAYS WITH NO PARKING PERMITTED ON THE HYDRANT SIDE EIGHT (8) FEET FROM THE FACE OF THE CURB ON THE HYDRANT SIDE.
- ON ROADWAYS WITH PARKING PERMITTED ON THE HYDRANT SIDE SIXTEEN (16) FEET FROM THE FACES OF THE CURB ON THE HYDRANT SIDE.

## ACCESSIBILITY NOTES:

1. MAXIMUM SLOPE ON THE ACCESSIBLE ROUTE IS 5.0% IN THE DIRECTION OF TRAVEL, 2.0% CROSS SLOPE.
2. MAXIMUM SLOPE IN ACCESSIBLE PARKING STALL LOADING AISLES IN 2.0% IN ANY DIRECTION.
3. PROVIDE ACCESSIBLE PARKING STALL SIGNAGE FOR STANDARD AND VAN ACCESSIBLE STALLS PER NRS 484.408.
4. ACCESSIBLE STALLS SHALL BE 9'-0" WIDE X 20'-0" LONG (18'-0" WITH PERMITTED OVERHANG). ACCESSIBLE STALL LOADING AISLES ARE 5'-0" WIDE X THE ENTIRE LENGTH OF THE PARKING STALL (8'-0" WIDE FOR VAN ACCESSIBLE SPACES).

## CITY OF LAS VEGAS FIRE DEPARTMENT

FIRE FLOW REQUIREMENT IS 2,500 GALLONS PER MINUTE AT 20 POUNDS PER SQUARE INCH RESIDUAL BASED ON:

| | SHOPS A | SHOPS B | SHOPS C | C-STORE | FAST FOOD | GROCERY STORE |
|---|---|---|---|---|---|---|
| REQ'D FIRE FLOW | 1,875 | 1,500 | 1,500 | 2,000 | 1,500 | 2,500 |
| SQUARE FOOTAGE | 18,000 | 900 | 6,280 | 5,075 | 2,400 | 56,660 |
| LARGEST AREA BETWEEN AREA SEPARATION WALLS | N/A | N/A | N/A | N/A | N/A | N/A |
| HEIGHT | 38 | 32 | 32 | 31 | 28 | – |
| TYPE OF CONSTRUCTION | V-B | V-B | V-B | V-B | V-B | IIIB |
| SPRINKLER SYSTEM | YES | YES | YES | NO | NO | YES |
| OCCUPANCY | A2/M | A2/M | A2/M | M | A2 | – |
| NO. OF STORIES | 1 | 1 | 1 | 1 | 1 | 1 |
| HIGH PILED STORAGE | NO | NO | NO | NO | NO | YES |
| CHEMICAL ADDITIVES | NO | NO | NO | N/A | N/A | NO |

## LINE TABLE

| LINE | LENGTH | BEARING |
|---|---|---|
| L1 | 141.18 | N89°27'56.45"W |
| L2 | 51.98 | N79°15'38.89"W |
| L3 | 100.00 | N89°27'56.45"W |
| L4 | 73.77 | N81°27'04.99"E |
| L5 | 150.99 | N89°15'40.64"E |
| L8 | 136.43 | N0°04'08.34"E |
| L9 | 153.21 | S62°30'17.00"E |
| L10 | 339.21 | N89°32'44.04"W |
| L11 | 88.23 | N0°19'19.00"E |
| L13 | 87.55 | N0°19'19.00"E |
| L14 | 136.93 | N0°19'19.00"E |

## CURVE TABLE

| CURVE | RADIUS | LENGTH | DELTA | TANGENT |
|---|---|---|---|---|
| C1 | 25.00' | 39.36' | 90°12'45" | 25.09' |
| C2 | 17.00' | 3.03' | 10°12'18" | 1.52' |
| C3 | 33.00' | 5.88' | 10°12'18" | 2.95' |
| C4 | 1120.00' | 174.40' | 8°55'19" | 87.38' |
| C5 | 95.00' | 30.17' | 18°11'42" | 15.21' |
| C6 | 105.00' | 33.34' | 18°11'42" | 16.81' |

CITY OF LAS VEGAS
FIRE DEPARTMENT APPROVAL

BY: [signature] DATE: 5/14/18

APPROVAL OF THESE PLANS SHALL NOT BE CONSTRUED TO BE A PERMIT FOR, OR AN APPROVAL OF, ANY VIOLATION OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS.

FIRE FLOW 2,500 GPM AT 20 PSI RESIDUAL.

CLV#: 107Y5072 L17-00759

| No. | REVISIONS | DATE | BY |
|---|---|---|---|
| 1 | UPDATED DRIVEWAY LOCATION & UPDATED DIMENSIONS FOR C-STORE TO FUTURE. NORTH ADJ. PROPERTY LINEWORK | 4-24-18 | CJZ |

Call before you Dig
AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S USEFUL.
CALL 811 OR 1-800-227-2600

FAST Call before you UnderGround 1-702-432-5300
PREPARED AND APPROVED SYSTEM OF TRANSPORTATION

AVOID VEHICLES OVERHEAD POWER LINES. IT'S USEFUL.
CALL BEFORE YOU OVERHEAD 1-702-227-2929

Kimley»Horn
© 2018 KIMLEY-HORN AND ASSOCIATES, INC.
6671 LAS VEGAS BLVD S., SUITE 320, LAS VEGAS, NV 89119
PHONE: 702-862-3600
WWW.KIMLEY-HORN.COM

STATE OF NEVADA PROFESSIONAL ENGINEER No. 17879 JACQUES WOLF CIVIL 05/14/18

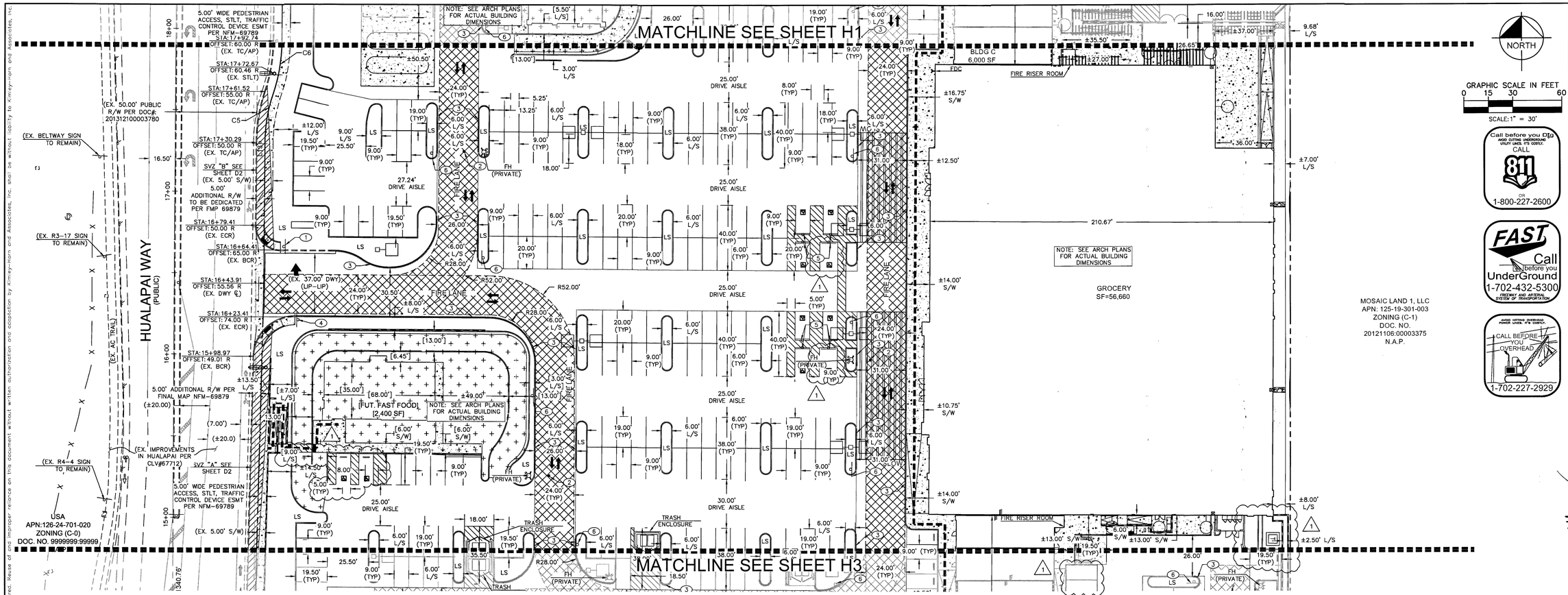
KHA PROJECT 61153.52
DATE NOV. 9, 2017
SCALE AS SHOWN
DESIGNED BY JZ
DRAWN BY JZ
CHECKED BY TW

HORIZONTAL CONTROL & FIRE PLAN 1

DEER SPRINGS VILLAGE
@ SEC DEER SPRINGS & HUALAPAI

13 OF 19 SHEETS
H1

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.
Plotted By: Zito, JoLynn Sheet Set: Kno Layout: H1 May 08, 2018 01:33:46pm W:\61153.1\ALR\CAD\DWG\MPRDWGS\ONSITE\04-61153.52-H1.dwg




## PAVEMENT MARKERS

INSTALL BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ADJACENT TO THE FIRE HYDRANT ON ALL IMPROVED FIRE APPARATUS ACCESS ROADWAYS WITH HARD SURFACES, INCLUDING BOTH PUBLIC AND PRIVATE ROADS, STREETS OR FIRE LANE.

- ON ROADWAYS WITH NO PARKING PERMITTED ON THE HYDRANT SIDE EIGHT (8) FEET FROM THE FACE OF THE CURB ON THE HYDRANT SIDE.
- ON ROADWAYS WITH PARKING PERMITTED ON THE HYDRANT SIDE SIXTEEN (16) FEET FROM THE FACES OF THE CURB ON THE HYDRANT SIDE.

## ACCESSIBILITY NOTES:

1. MAXIMUM SLOPE ON THE ACCESSIBLE ROUTE IS 5.0% IN THE DIRECTION OF TRAVEL, 2.0% CROSS SLOPE.
2. MAXIMUM SLOPE IN ACCESSIBLE PARKING STALL LOADING AISLES IN 2.0% IN ANY DIRECTION.
3. PROVIDE ACCESSIBLE PARKING STALL SIGNAGE FOR STANDARD AND VAN ACCESSIBLE STALLS PER NRS 484.408.
4. ACCESSIBLE STALLS SHALL BE 9'-0" WIDE X 20'-0" LONG (18'-0" WITH PERMITTED OVERHANG). ACCESSIBLE STALL LOADING AISLES ARE 5'-0" WIDE X THE ENTIRE LENGTH OF THE PARKING STALL (8'-0" WIDE FOR VAN ACCESSIBLE SPACES).

## NOTES

ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.

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

## SIGHT VISIBILITY ZONES NOTE

NO WALLS, FENCES, TREES, SHRUBS, UTILITY APPURTENANCES OR ANY OTHER OBJECT, OTHER THAN TRAFFIC CONTROL DEVICES AND STREET LIGHT POLES, MAY BE CONSTRUCTED OR INSTALLED WITHIN THE SIGHT VISIBILITY ZONE UNLESS SAID OBJECT IS MAINTAINED AT LESS THAN 24 INCHES IN HEIGHT, MEASURED FROM THE TOP OF CURB.

## LEGEND & ABBREVIATIONS

SEE COVER SHEET FOR MASTER LEGEND AND ABBREVIATIONS.

## LEGAL DESCRIPTION

SEE COVER SHEET FOR FULL LEGAL DESCRIPTION.

## BENCHMARK

BENCHMARK: 12LV99 24E4: A RIVET AND ROUND ALUMINUM PLATE IN THE TOP OF CURB AT THE NORTHWEST CORNER OF HUALAPAI WAY AND DEER SPRINGS WAY = 858.066m = 2815.17sft. (NAVD 88)

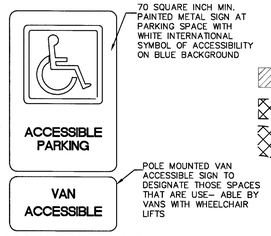
## BASIS OF BEARINGS

NORTH 89°47'00" WEST, BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) SECTION 19, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., COUNTY OF CLARK, STATE OF NEVADA

R1-1 STOP SIGN
(NOT TO SCALE)

ENTRANCE WARNING SIGN DETAIL
(NOT TO SCALE)

ON-SITE FIRE SIGN DETAIL
(NOT TO SCALE)




ACCESSIBLE STALL SIGN
(NOT TO SCALE)

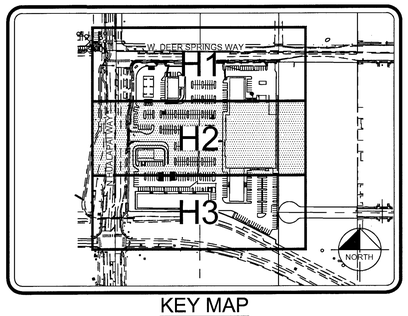
## FIRE LANE LEGEND

SEE SHEET C1 FOR FULL ABBREVIATIONS AND MASTER LEGEND.

- INDICATES RED PAINTED CURB WITH "NO PARKING FIRE LANE" PAINTED EVERY 50 FT. PER LVFR GUIDELINES
- ADA ROUTE TO PUBLIC R/W
- INDICATED LOCATION OF FIRE LANE SIGNS TO BE PLACED AT ENTRANCES. FIRE LANE SIGNS SHALL CONFORM TO LVFR GUIDELINES (SEE DETAIL THIS SHEET)
- PROPOSED BLUE REFLECTIVE PAVEMENT MARKER
- INDICATES FIRE HYDRANT
- INDICATES EXISTING FIRE HYDRANT
- INDICATES FIRE LANE FLOW DIRECTION
- INDICATES FDC
- SIGHT VISIBILITY ZONE
- INDICATES NEW FIRE LANE LIMITS
- TURNING RADIUS (TYPICAL)

## ON-SITE SIGNAGE NOTES

1. INSTALL "STOP SIGN" R-1
2. INSTALL BLUE REFLECTIVE PAVEMENT MARKER IN THE FIRE LANE ADJACENT TO FIRE HYDRANT
3. PAINT CURB RED & STENCIL IN WHITE PAINT "FIRE LANE – NO PARKING"
4. INSTALL ENTRANCE WARNING SIGN PER DETAIL ON H SHEETS (OR EQUIVALENT)
5. INSTALL ADA SIGN PER DETAIL THIS SHEET (OR EQUIVALENT)
6. INSTALL FIRE LANE SIGNS PER CLV STANDARDS, DETAIL ON H SHEETS




KEY MAP
N.T.S.

## CITY OF LAS VEGAS FIRE DEPARTMENT

FIRE FLOW REQUIREMENT IS 2,500 GALLONS PER MINUTE AT 20 POUNDS PER SQUARE INCH RESIDUAL BASED ON:

| | SHOPS A | SHOPS B | SHOPS C | C-STORE | FAST FOOD | GROCERY STORE |
|---|---|---|---|---|---|---|
| REQ'D FIRE FLOW | 1,875 | 1,500 | 1,500 | 2,000 | 1,500 | 2,500 |
| SQUARE FOOTAGE | 18,000 | 900 | 6,280 | 5,075 | 2,400 | 56,660 |
| LARGEST AREA BETWEEN AREA SEPARATION WALLS | N/A | N/A | N/A | N/A | N/A | N/A |
| HEIGHT | 38 | 32 | 32 | 31 | 28 | – |
| TYPE OF CONSTRUCTION | V-B | V-B | V-B | V-B | V-B | IIIB |
| SPRINKLER SYSTEM | YES | YES | YES | NO | NO | YES |
| OCCUPANCY | A2/M | A2/M | A2/M | M | A2 | – |
| NO. OF STORIES | 1 | 1 | 1 | 1 | 1 | 1 |
| HIGH PILED STORAGE | NO | NO | NO | NO | NO | YES |
| CHEMICAL ADDITIVES | NO | NO | NO | N/A | N/A | NO |

## LINE TABLE

| LINE | LENGTH | BEARING |
|---|---|---|
| L1 | 141.18 | N89°27'56.45"W |
| L2 | 51.98 | N79°15'38.89"W |
| L3 | 100.00 | N89°27'56.45"W |
| L4 | 73.77 | N81°27'04.99"E |
| L5 | 150.99 | N89°15'40.64"E |
| L8 | 136.43 | N0°04'08.34"E |
| L9 | 153.21 | S62°30'17.00"E |
| L10 | 339.21 | N89°32'44.04"W |
| L11 | 88.23 | N0°19'19.00"E |
| L13 | 87.55 | N0°19'19.00"E |
| L14 | 136.93 | N0°19'19.00"E |

## CURVE TABLE

| CURVE | RADIUS | LENGTH | DELTA | TANGENT |
|---|---|---|---|---|
| C1 | 25.00' | 39.36' | 90°12'45" | 25.09' |
| C2 | 17.00' | 3.03' | 10°12'18" | 1.52' |
| C3 | 33.00' | 5.88' | 10°12'18" | 2.95' |
| C4 | 1120.00' | 174.40' | 8°55'19" | 87.38' |
| C5 | 95.00' | 30.17' | 18°11'42" | 15.21' |
| C6 | 105.00' | 33.34' | 18°11'42" | 16.81' |

CITY OF LAS VEGAS
FIRE DEPARTMENT APPROVAL

BY: [signature] DATE: 5/14/18

APPROVAL OF THESE PLANS SHALL NOT BE CONSTRUED TO BE A PERMIT FOR, OR AN APPROVAL OF, ANY VIOLATION OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS.

FIRE FLOW 2,500 GPM AT 20 PSI RESIDUAL.

CLV#: 107Y5072 L17-00759

| No. | REVISIONS | DATE | BY |
|---|---|---|---|
| 1 | UPDATED PARKING & TRANSFORMERS | 5-14-18 | S.B. |

Call before you Dig
AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY.
CALL 811 OR 1-800-227-2600

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

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


Kimley»Horn
© 2018 KIMLEY-HORN AND ASSOCIATES, INC.
6671 LAS VEGAS BLVD S., SUITE 320, LAS VEGAS, NV 89119
PHONE: 702-862-3600
WWW.KIMLEY-HORN.COM


PROFESSIONAL ENGINEER STATE OF NEVADA JEREMY WOLF CIVIL No. 17879 5-14-18

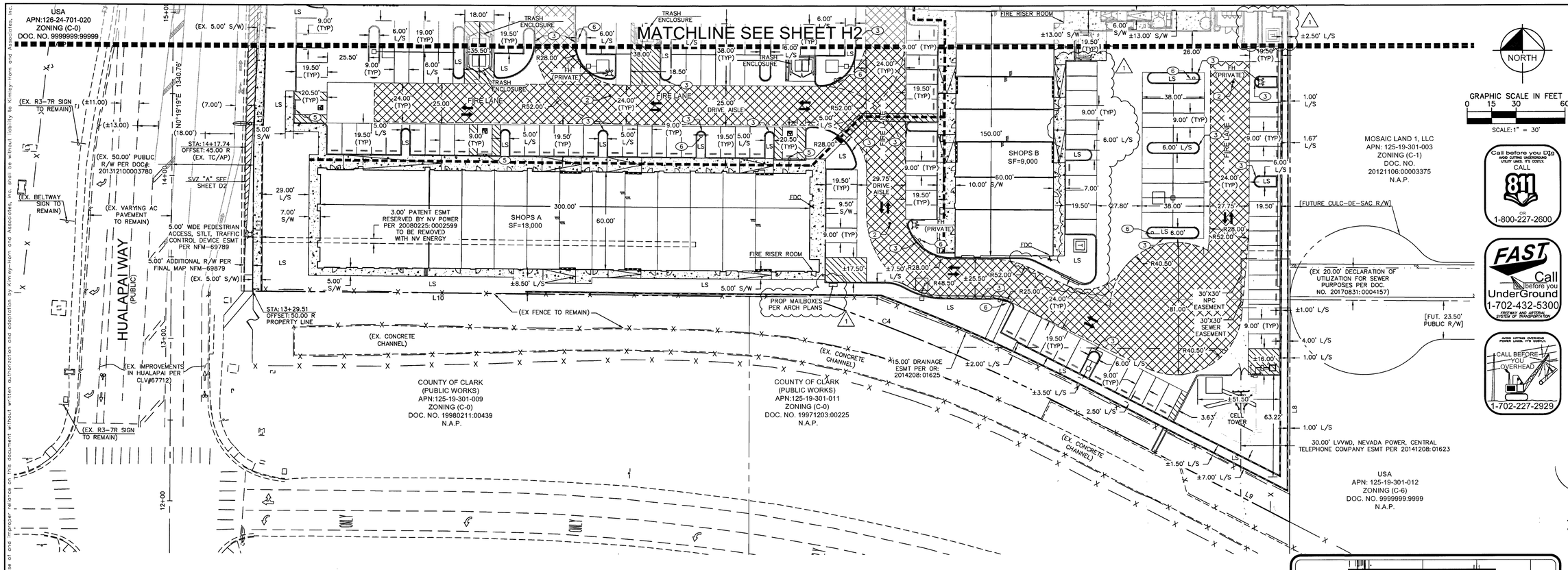
KHA PROJECT 61153.52
DATE NOV. 9, 2017
SCALE AS SHOWN
DESIGNED BY JZ
DRAWN BY JZ
CHECKED BY TW

HORIZONTAL CONTROL & FIRE PLAN 2

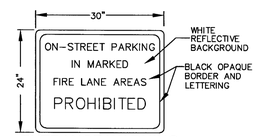
DEER SPRINGS VILLAGE
@ SEC DEER SPRINGS & HUALAPAI



Plotted By: Zhe, JoLynn Street Set: Kho Layout: H2 May 08, 2018 01:33:54pm W:\61153_LAURICH\DWG\MPRD\WGS\ONSITE\04-61153.52-H1.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

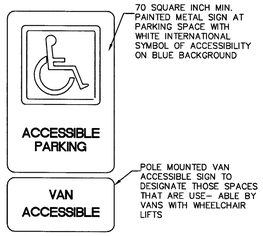


R1-1 STOP SIGN
(NOT TO SCALE)




ENTRANCE WARNING SIGN DETAIL
(NOT TO SCALE)

ON-SITE FIRE SIGN DETAIL
(NOT TO SCALE)




ACCESSIBLE STALL SIGN
(NOT TO SCALE)

## PAVEMENT MARKERS

INSTALL BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ADJACENT TO THE FIRE HYDRANT ON ALL IMPROVED FIRE APPARATUS ACCESS ROADWAYS WITH HARD SURFACES, INCLUDING BOTH PUBLIC AND PRIVATE ROADS, STREETS OR FIRE LANE.

- ON ROADWAYS WITH NO PARKING PERMITTED ON THE HYDRANT SIDE EIGHT (8) FEET FROM THE FACE OF THE CURB ON THE HYDRANT SIDE.
- ON ROADWAYS WITH PARKING PERMITTED ON THE HYDRANT SIDE SIXTEEN (16) FEET FROM THE FACES OF THE CURB ON THE HYDRANT SIDE.

## ACCESSIBILITY NOTES:

1. MAXIMUM SLOPE ON THE ACCESSIBLE ROUTE IS 5.0% IN THE DIRECTION OF TRAVEL, 2.0% CROSS SLOPE.
2. MAXIMUM SLOPE IN ACCESSIBLE PARKING STALL LOADING AISLES IN 2.0% IN ANY DIRECTION.
3. PROVIDE ACCESSIBLE PARKING STALL SIGNAGE FOR STANDARD AND VAN ACCESSIBLE STALLS PER NRS 484.408.
4. ACCESSIBLE STALLS SHALL BE 9'-0" WIDE X 20'-0" LONG (18'-0" WITH PERMITTED OVERHANG). ACCESSIBLE STALL LOADING AISLES ARE 5'-0" WIDE X THE ENTIRE LENGTH OF THE PARKING STALL (8'-0" WIDE FOR VAN ACCESSIBLE SPACES).

## NOTES

ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.

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

## SIGHT VISIBILITY ZONES NOTE

NO WALLS, FENCES, TREES, SHRUBS, UTILITY APPURTENANCES OR ANY OTHER OBJECT, OTHER THAN TRAFFIC CONTROL DEVICES AND STREET LIGHT POLES, MAY BE CONSTRUCTED OR INSTALLED WITHIN THE SIGHT VISIBILITY ZONE UNLESS SAID OBJECT IS MAINTAINED AT LESS THAN 24 INCHES IN HEIGHT, MEASURED FROM THE TOP OF CURB.

## LEGEND & ABBREVIATIONS

SEE COVER SHEET FOR MASTER LEGEND AND ABBREVIATIONS.

## LEGAL DESCRIPTION

SEE COVER SHEET FOR FULL LEGAL DESCRIPTION.

## BENCHMARK

BENCHMARK: 12LV99 24E4: A RIVET AND ROUND ALUMINUM PLATE IN THE TOP OF CURB AT THE NORTHWEST CORNER OF HUALAPAI WAY AND DEER SPRINGS WAY = 858.066m = 2815.17sft. (NAVD 88)

## BASIS OF BEARINGS

NORTH 89°47'00" WEST, BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) SECTION 19, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., COUNTY OF CLARK, STATE OF NEVADA

## CITY OF LAS VEGAS FIRE DEPARTMENT

FIRE FLOW REQUIREMENT IS 2,500 GALLONS PER MINUTE AT 20 POUNDS PER SQUARE INCH RESIDUAL BASED ON:

| | SHOPS A | SHOPS B | SHOPS C | C-STORE | FAST FOOD | GROCERY STORE |
|---|---|---|---|---|---|---|
| REQ'D FIRE FLOW | 1,875 | 1,500 | 1,500 | 2,000 | 1,500 | 2,500 |
| SQUARE FOOTAGE | 18,000 | 900 | 6,280 | 5,075 | 2,400 | 56,660 |
| LARGEST AREA BETWEEN AREA SEPARATION WALLS | N/A | N/A | N/A | N/A | N/A | N/A |
| HEIGHT | 38 | 32 | 32 | 31 | 28 | – |
| TYPE OF CONSTRUCTION | V-B | V-B | V-B | V-B | V-B | IIIB |
| SPRINKLER SYSTEM | YES | YES | YES | NO | NO | YES |
| OCCUPANCY | A2/M | A2/M | A2/M | M | A2 | – |
| NO. OF STORIES | 1 | 1 | 1 | 1 | 1 | 1 |
| HIGH PILED STORAGE | NO | NO | NO | NO | NO | YES |
| CHEMICAL ADDITIVES | NO | NO | NO | N/A | N/A | NO |

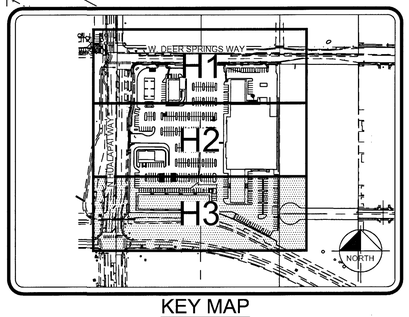
## FIRE LANE LEGEND

SEE SHEET C1 FOR FULL ABBREVIATIONS AND MASTER LEGEND.

- INDICATES RED PAINTED CURB WITH "NO PARKING FIRE LANE" PAINTED EVERY 50 FT. PER LVFR GUIDELINES
- ADA ROUTE TO PUBLIC R/W
- INDICATED LOCATION OF FIRE LANE SIGNS TO BE PLACED AT ENTRANCES. FIRE LANE SIGNS SHALL CONFORM TO LVFR GUIDELINES (SEE DETAIL THIS SHEET)
- PROPOSED BLUE REFLECTIVE PAVEMENT MARKER
- INDICATES FIRE HYDRANT
- INDICATES EXISTING FIRE HYDRANT
- INDICATES FIRE LANE FLOW DIRECTION
- INDICATES FDC
- SIGHT VISIBILITY ZONE
- INDICATES NEW FIRE LANE LIMITS
- TURNING RADIUS (TYPICAL)

## ON-SITE SIGNAGE NOTES

2. INSTALL BLUE REFLECTIVE PAVEMENT MARKER IN THE FIRE LANE ADJACENT TO FIRE HYDRANT
3. PAINT CURB RED & STENCIL IN WHITE PAINT "FIRE LANE – NO PARKING"
5. INSTALL ADA SIGN PER DETAIL THIS SHEET (OR EQUIVALENT)
6. INSTALL FIRE LANE SIGNS PER CLV STANDARDS, DETAIL ON H SHEETS




KEY MAP
N.T.S.

| LINE TABLE | | |
|---|---|---|
| LINE | LENGTH | BEARING |
| L1 | 141.18 | N89°27'56.45"W |
| L2 | 51.98 | N79°15'38.89"W |
| L3 | 100.00 | N89°27'56.45"W |
| L4 | 73.77 | N81°27'04.99"E |
| L5 | 150.99 | N89°15'40.64"E |
| L8 | 136.43 | N0°04'08.34"E |
| L9 | 153.21 | S62°30'17.00"E |
| L10 | 339.21 | N89°32'44.04"W |
| L11 | 88.23 | N0°19'19.00"E |
| L13 | 87.55 | N0°19'19.00"E |
| L14 | 136.93 | N0°19'19.00"E |

| CURVE TABLE | | | | |
|---|---|---|---|---|
| CURVE | RADIUS | LENGTH | DELTA | TANGENT |
| C1 | 25.00' | 39.36' | 90°12'45" | 25.09' |
| C2 | 17.00' | 3.03' | 10°12'18" | 1.52' |
| C3 | 33.00' | 5.88' | 10°12'18" | 2.95' |
| C4 | 1120.00' | 174.40' | 8°55'19" | 87.38' |
| C5 | 95.00' | 30.17' | 18°11'42" | 15.21' |
| C6 | 105.00' | 33.34' | 18°11'42" | 16.81' |

CITY OF LAS VEGAS
FIRE DEPARTMENT APPROVAL

BY: K Gick DATE: 5/14/18

APPROVAL OF THESE PLANS SHALL NOT BE CONSTRUED TO BE A PERMIT FOR, OR AN APPROVAL OF, ANY VIOLATION OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS.

FIRE FLOW 2,500 GPM AT 20 PSI RESIDUAL.

CLV#: 107Y5072 L17-00759

| No. | REVISIONS | DATE | BY |
|---|---|---|---|
| 1 | UPDATED TRANSFORMERS, PROP MAILBOXES & PARKING | 1-19-18 | SB |

Kimley»Horn
© 2018 KIMLEY-HORN AND ASSOCIATES, INC.
6671 LAS VEGAS BLVD S., SUITE 320, LAS VEGAS, NV 89119
PHONE: 702-862-3600
WWW.KIMLEY-HORN.COM

STATE OF NEVADA
JASON WOLFF
CIVIL
EXPIRES 6/30
No. 17879
PROFESSIONAL ENGINEER

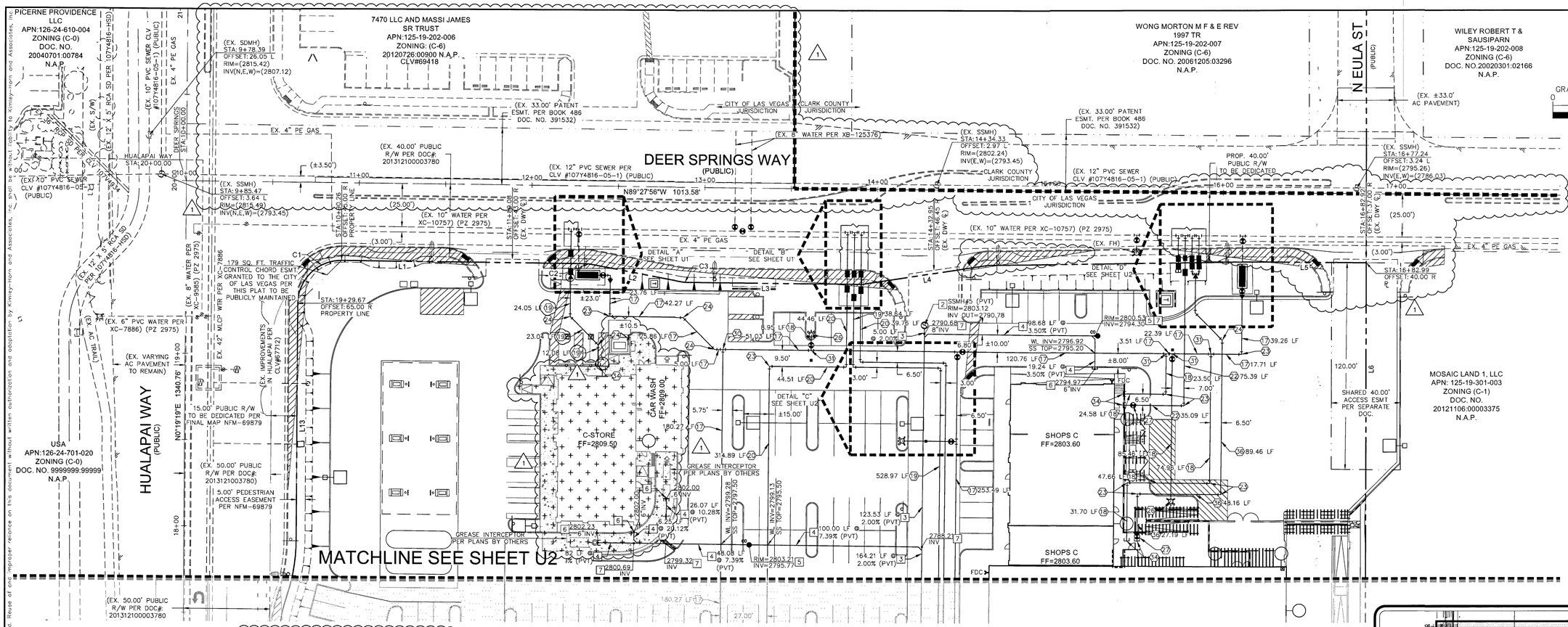
KHA PROJECT 61153.52
DATE NOV. 9, 2017
SCALE AS SHOWN
DESIGNED BY JZ
DRAWN BY JZ
CHECKED BY TW

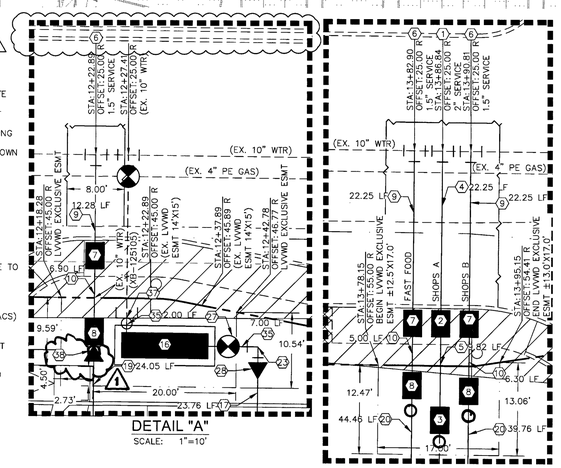
HORIZONTAL CONTROL & FIRE PLAN 3

DEER SPRINGS VILLAGE
@ SEC DEER SPRINGS & HUALAPAI

15 OF 19 SHEETS
H3

Plotted By:Zito, Jaiyan Sheet Set:Kho Layout:H3 May 08, 2018 01:34:02pm W:\61153.4\AURC\LDWG\MPRDWGS\ONSITE\04-61153.52-c1.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.




## NOTES

1. EXISTING UTILITY LOCATIONS SHOWN HEREIN 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. ALL DISCREPANCIES MUST BE IMMEDIATELY REPORTED TO THE ENGINEER.

2. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL ALIGNMENT OF EXISTING UTILITIES AND TO NOTIFY THE DESIGN ENGINEER IMMEDIATELY ON ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

3. ALL DIMENSIONS TO UTILITIES ARE TO CENTERLINE OF PIPE UNLESS INDICATED OTHERWISE.

4. ALL SEWER LENGTHS SHOWN ARE FROM CENTER OF MANHOLE TO CENTER OF MANHOLE.

5. ALL SEWER/STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.22 OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.

6. SEE ARCHITECTURAL PLANS FOR ALL CONNECTION DETAILS AT THE BUILDING.

7. SEE LANDSCAPE PLANS BY OTHERS FOR ALL IRRIGATION AND LANDSCAPING INFORMATION.

8. SEE PLANS BY ELECTRICAL ENGINEER, NV ENERGY, COX, CENTURY LINK & SW GAS FOR ALL DRY UTILITY INFORMATION.

## LEGAL DESCRIPTION

SEE COVER SHEET FOR FULL LEGAL DESCRIPTION

## BENCHMARK

BENCHMARK: 12LV99 24E4: A RIVET AND ROUND ALUMINUM PLATE IN THE TOP OF CURB AT THE NORTHWEST CORNER OF HUALAPAI WAY AND DEER SPRINGS WAY = 858.066m = 2815.17sft. (NAVD 88)

## BASIS OF BEARINGS

NORTH 89°47'00" WEST, BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) SECTION 19, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., COUNTY OF CLARK, STATE OF NEVADA

## SIGHT VISIBILITY ZONES NOTE

NO WALLS, FENCES, TREES, SHRUBS, UTILITY APPURTENANCES OR ANY OTHER OBJECT, OTHER THAN TRAFFIC CONTROL DEVICES AND STREET LIGHT POLES, MAY BE CONSTRUCTED OR INSTALLED WITHIN THE SIGHT VISIBILITY ZONE UNLESS SAID OBJECT IS MAINTAINED AT LESS THAN 24 INCHES IN HEIGHT, MEASURED FROM THE TOP OF CURB.

## NOTES

ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.

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

## CITY OF LAS VEGAS FIRE DEPARTMENT

FIRE FLOW REQUIREMENT IS 2,500 GALLONS PER MINUTE AT 20 POUNDS PER SQUARE INCH RESIDUAL BASED ON:

| | SHOPS A | SHOPS B | SHOPS C | C-STORE | FAST FOOD | GROCERY STORE |
|---|---|---|---|---|---|---|
| REQ'D FIRE FLOW | 1,875 | 1,500 | 1,500 | 2,000 | 1,500 | 2,500 |
| SQUARE FOOTAGE | 18,000 | 900 | 6,280 | 5,075 | 2,400 | 56,660 |
| LARGEST AREA BETWEEN AREA SEPARATION WALLS | N/A | N/A | N/A | N/A | N/A | N/A |
| HEIGHT | 38 | 32 | 32 | 31 | 28 | – |
| TYPE OF CONSTRUCTION | V-B | V-B | V-B | V-B | V-B | IIIB |
| SPRINKLER SYSTEM | YES | YES | YES | NO | NO | YES |
| OCCUPANCY | A2/M | A2/M | A2/M | M | A2 | – |
| NO. OF STORIES | 1 | 1 | 1 | 1 | 1 | 1 |
| HIGH PILED STORAGE | NO | NO | NO | NO | NO | YES |
| CHEMICAL ADDITIVES | NO | NO | NO | N/A | N/A | NO |

## LINE TABLE

| LINE | LENGTH | BEARING |
|---|---|---|
| L1 | 141.18 | N89°27'56.45"W |
| L2 | 51.98 | N79°15'38.89"W |
| L3 | 100.00 | N89°27'56.45"W |
| L4 | 73.77 | N81°27'04.99"E |
| L5 | 67.74 | N89°27'56.45"W |
| L6 | 669.44 | N0°04'08.34"E |
| L7 | 136.43 | N0°04'08.34"E |
| L8 | 153.21 | S62°30'17.00"E |
| L9 | 339.21 | N89°32'44.04"W |
| L10 | 88.23 | N0°19'19.00"E |
| L11 | 225.06 | S1°35'41.91"W |
| L12 | 87.55 | N0°19'19.00"E |
| L13 | 136.93 | N0°19'19.00"E |

## CURVE TABLE

| CURVE | RADIUS | LENGTH | DELTA | TANGENT |
|---|---|---|---|---|
| C1 | 25.00' | 39.36' | 90°12'45" | 25.09' |
| C2 | 17.00' | 3.03' | 10°12'18" | 1.52' |
| C3 | 33.00' | 5.88' | 10°12'18" | 2.95' |
| C4 | 1120.00' | 174.40' | 8°55'19" | 87.38' |
| C5 | 95.00' | 30.17' | 18°11'42" | 15.21' |

## WATER CONSTRUCTION NOTES

1. INSTALL 2" SERVICE SADDLE & CORPORATION STOP PER UDACS PLATE NO. 4, SEE DETAIL 16 ON SHEET D2
2. INSTALL 2" BADGER RECORDALL DISC METER PER UDACS PLATE NO. 4
3. INSTALL 2" RPPA PER UDACS PLATE NO. 8
4. INSTALL 2" COPPER WATER LINE (PUBLIC)
5. INSTALL 2" BRASS WATER LINE (PUBLIC)
6. INSTALL 1.5" SERVICE SADDLE & CORPORATION STOP PER UDACS PLATE NO. 4, SEE DETAIL 16 ON SHEET D2
7. INSTALL 1.5" BADGER RECORDALL DISC METER PER UDACS PLATE NO. 4
8. INSTALL 1.5" RPPA PER UDACS PLATE NO. 8
9. INSTALL 1.5" COPPER WATER LINE (PUBLIC)
10. INSTALL 1.5" BRASS WATER LINE (PUBLIC)
16. INSTALL 10" RPDA PER UDACS PLATE NO. 59
17. INSTALL 8" PVC FIRE WATER LINE (PRIVATE)
18. INSTALL 6" PVC FIRE WATER LINE (PRIVATE)
19. INSTALL 2" PVC DOMESTIC WATER LINE (PRIVATE)
20. INSTALL 1.5" PVC DOMESTIC WATER LINE (PRIVATE)
22. INSTALL 1" PVC DOMESTIC WATER LINE (PRIVATE)
23. INSTALL 90° BEND SAME SIZE AS LINE PER UDACS PLATE 31
24. INSTALL 45° BEND SAME SIZE AS LINE PER UDACS PLATE 31
26. INSTALL FIRE HYDRANT PER UDACS PLATE NO. 40
27. INSTALL GATE VALVE SAME SIZE AS LINE PER UDACS PLATES NO. 30 & 39
28. INSTALL 10"x8" REDUCER WITH THRUST BLOCK PER UDACS PLATE NO. 30
30. INSTALL 8"x8" TEE PER UDACS PLATE NO. 31
31. INSTALL 8"x6" TEE PER UDACS PLATE NO. 31
34. STUB & CAP –SEE PLUMBING PLANS FOR CONTINUATION
35. INSTALL 10" PVC FIRE WATER LINE (PUBLIC)
36. INSTALL 3" PVC DOMESTIC WATER LINE (PRIVATE)
37. REMOVE CAP & CONNECT PROPOSED 10" WATER LINE (PUBLIC)
38. 2"X1.5" REDUCER PER UDACS PLATE NO. 30

## SEWER CONSTRUCTION NOTES

2. INSTALL 48" DIA. SANITARY SEWER MANHOLE PER DCSWCS SD-1A, SD-5 & SD-4
3. INSTALL 8" PVC (SDR-35 SEWER MAIN PER DDCSWCS SD-16 & SD-17
4. INSTALL 6" PVC SDR-35 SEWER LATERAL PER SD-22
5. INSTALL 6" CLEAN OUT PER SD-26 (TRAFFIC RATED LID)
6. STUB & CAP – SEE PLUMBING PLANS FOR CONTINUATION
7. INSTALL WYE & 45° BEND PER SD-22

## SOUTHWEST GAS APPROVAL

ORIGINALLY SIGNED DATE: 1/15/18
SOUTHWEST GAS CORPORATION

## FIRE WATER AT DOMESTIC WATER CROSSING

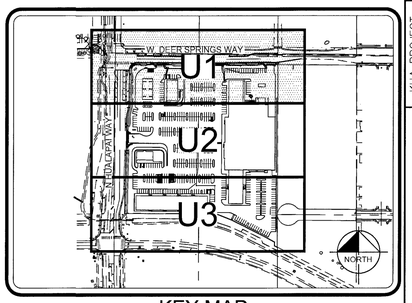
ALL NON-POTABLE FIRE WATER LINES CROSSING POTABLE DOMESTIC WATER LINES ARE TO BE INSTALLED WITH "A VERTICAL SEPARATION OF NO LESS THAN 6 INCHES..." AND IN ACCORDANCE WITH UDACS 2.23.01, 2.04.03, 2.22.02.B1 AND 2.22.02.B2."

## REDUCED PRESSURE DETECTOR ASSEMBLY- (2) 10"

THE REDUCED PRESSURE DETECTOR ASSEMBLIES SHALL BE INSTALLED IN ACCORDANCE WITH THE UDACS PLATE NO. 59. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY LVVWD. ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S) SO AS TO ALLOW LVVWD DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY. EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

## REDUCED PRESSURE PRINCIPLE ASSEMBLY- (1) 2" DOM., (5) 1.5" DOM., (1) 1" DOM., & (1) 1.5" IRRIG.

APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED PER UDACS PLATE NO. 8. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE REDUCED PRESSURE PRINCIPLE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY LVVWD. ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S) TO ALLOW THE DISTRICT DIRECT ACCESS FROM THE ADJACENT RIGH-OF-WAY. EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.




## KEY MAP

N.T.S.

## LEGEND

| | EXISTING | PROPOSED |
|---|---|---|
| WATER LINE | | |
| SEWER LINE | | |
| GAS LINE | | |
| STORM DRAIN LINE | | |
| POWER LINE (OVERHEAD) | | |
| FIRE HYDRANT | | |
| WATER VALVES | | |
| REDUCER | | |
| SEWER MANHOLE | | |
| STORM DRAIN MANHOLE | | |
| CLEANOUT | | |

## APPROVED FOR CONSTRUCTION

K. Dishapi 5/21/18
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 125896 FIRST APPROVED DATE: 12/21/17
LVVWD APPROVED FIRE FLOW 2,500 GPM AT 20 PSI RESIDUAL

## CITY OF LAS VEGAS FIRE DEPARTMENT APPROVAL

BY: K Gaik DATE: 5/14/18

APPROVAL OF THESE PLANS SHALL NOT BE CONSTRUED TO BE A PERMIT FOR, OR AN APPROVAL OF, ANY VIOLATION OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS.

FIRE FLOW 2,500 GPM AT 20 PSI RESIDUAL.

CLV#: 107Y5072 L17-00759

| No. | REVISIONS | DATE | BY |
|---|---|---|---|
| 1 | UPDATED DWY LOCATION, REVISE ALB WTR PER LVVWD | 5-14-18 | SB |
| | SIZE, ADD NORTH PROPERTY LINE WORK, | | |
| | UPDATED C-STORE& CAR WASH TO BE FUTURE | | |

Kimley»Horn
© 2018 KIMLEY-HORN AND ASSOCIATES, INC.
6671 LAS VEGAS BLVD S., SUITE 320, LAS VEGAS, NV 89119
PHONE: 702-862-3600
WWW.KIMLEY-HORN.COM

STATE OF NEVADA PROFESSIONAL ENGINEER STEVEN B. WOLF CIVIL No. 17873 5-9-18

KHA PROJECT 61153.52
DATE NOV. 9, 2017
SCALE AS SHOWN
DESIGNED BY JZ
DRAWN BY JZ
CHECKED BY TW

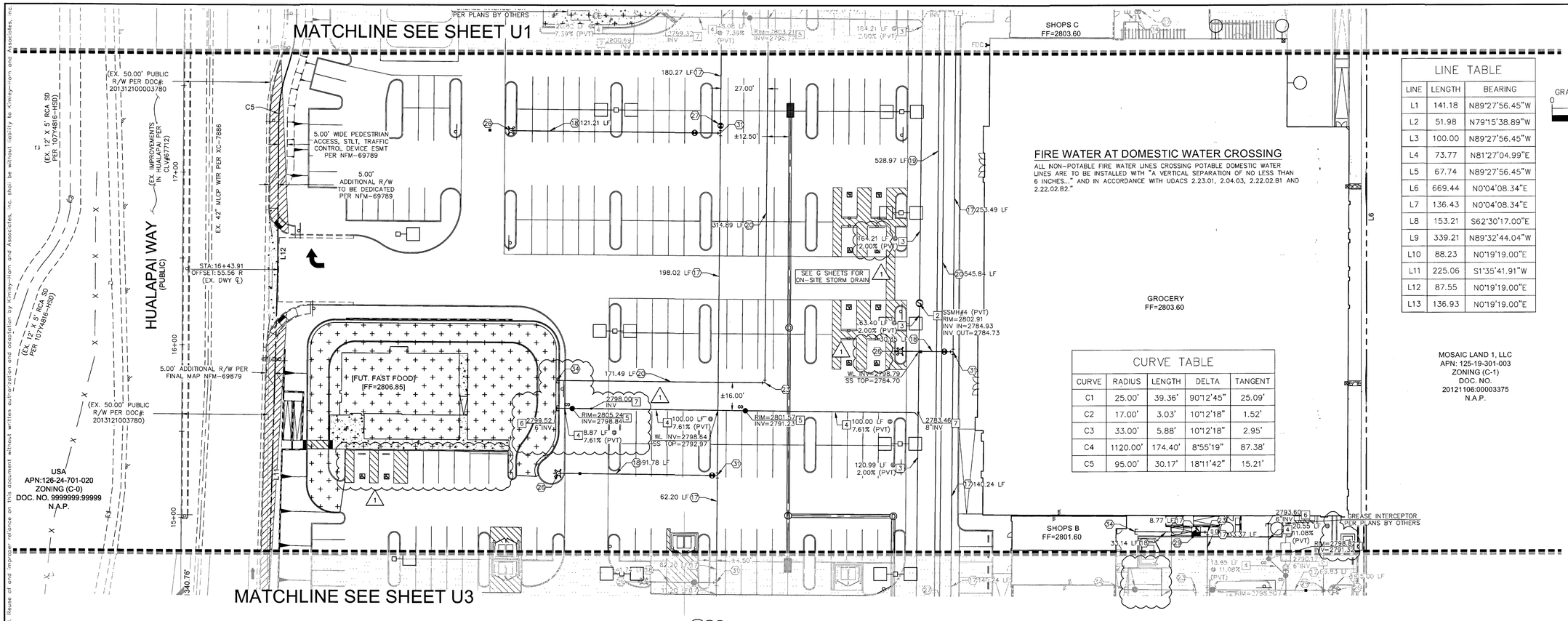
# UTILITY PLAN 1

# DEER SPRINGS VILLAGE @ SEC DEER SPRINGS & HUALAPAI



PROJ.#:125896 AGR:116521 QS:125-19-SW

Plotted By:Zito, Jalynn Sheet Set:Kho Layout:U1 May 08, 2018 01:34:23pm W:\61153.14\ACAD\CIVIL\PROJECTS\DNSTE\04-61153.52-U1.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.




| LINE TABLE | | |
|---|---|---|
| LINE | LENGTH | BEARING |
| L1 | 141.18 | N89°27'56.45"W |
| L2 | 51.98 | N79°15'38.89"W |
| L3 | 100.00 | N89°27'56.45"W |
| L4 | 73.77 | N81°27'04.99"E |
| L5 | 67.74 | N89°27'56.45"W |
| L6 | 669.44 | N0°04'08.34"E |
| L7 | 136.43 | N0°04'08.34"E |
| L8 | 153.21 | S62°30'17.00"E |
| L9 | 339.21 | N89°32'44.04"W |
| L10 | 88.23 | N0°19'19.00"E |
| L11 | 225.06 | S1°35'41.91"W |
| L12 | 87.55 | N0°19'19.00"E |
| L13 | 136.93 | N0°19'19.00"E |

| CURVE TABLE | | | | |
|---|---|---|---|---|
| CURVE | RADIUS | LENGTH | DELTA | TANGENT |
| C1 | 25.00' | 39.36' | 90°12'45" | 25.09' |
| C2 | 17.00' | 3.03' | 10°12'18" | 1.52' |
| C3 | 33.00' | 5.88' | 10°12'18" | 2.95' |
| C4 | 1120.00' | 174.40' | 8°55'19" | 87.38' |
| C5 | 95.00' | 30.17' | 18°11'42" | 15.21' |

Call before you Dig — AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY. CALL 811 OR 1-800-227-2600

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

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

## NOTES

1. EXISTING UTILITY LOCATIONS SHOWN HEREIN 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. ALL DISCREPANCIES MUST BE IMMEDIATELY REPORTED TO THE ENGINEER.
2. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL ALIGNMENT OF EXISTING UTILITIES AND TO NOTIFY THE DESIGN ENGINEER IMMEDIATELY ON ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
3. ALL DIMENSIONS TO UTILITIES ARE TO CENTERLINE OF PIPE UNLESS INDICATED OTHERWISE.
4. ALL SEWER LENGTHS SHOWN ARE FROM CENTER OF MANHOLE TO CENTER OF MANHOLE.
5. ALL SEWER/STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.22 OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.
6. SEE ARCHITECTURAL PLANS FOR ALL CONNECTION DETAILS AT THE BUILDING.
7. SEE LANDSCAPE PLANS BY OTHERS FOR ALL IRRIGATION AND LANDSCAPING INFORMATION.
8. SEE PLANS BY ELECTRICAL ENGINEER, NV ENERGY, COX, CENTURY LINK & SW GAS FOR ALL DRY UTILITY INFORMATION.

## LEGAL DESCRIPTION

SEE COVER SHEET FOR FULL LEGAL DESCRIPTION

## BENCHMARK

BENCHMARK: 12LV99 24E4: A RIVET AND ROUND ALUMINUM PLATE IN THE TOP OF CURB AT THE NORTHWEST CORNER OF HUALAPAI WAY AND DEER SPRINGS WAY = 858.066m = 2815.17sft. (NAVD 88)

## BASIS OF BEARINGS

NORTH 89°47'00" WEST, BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) SECTION 19, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., COUNTY OF CLARK, STATE OF NEVADA

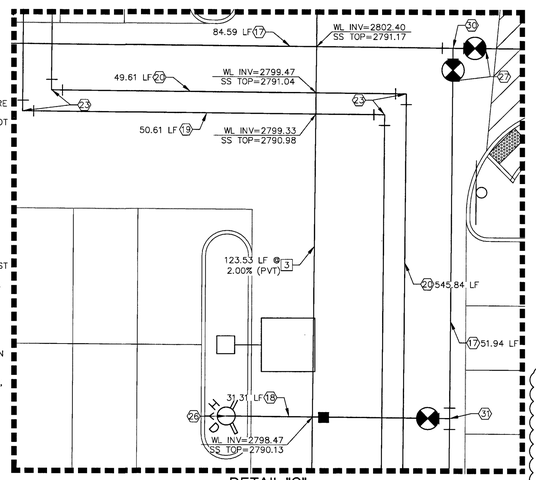
## SIGHT VISIBILITY ZONES NOTE

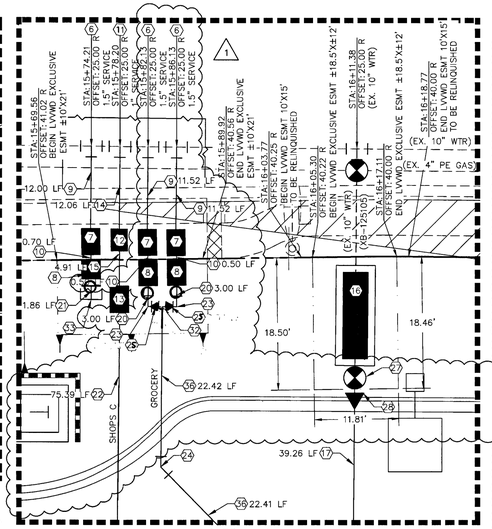
NO WALLS, FENCES, TREES, SHRUBS, UTILITY APPURTENANCES OR ANY OTHER OBJECT, OTHER THAN TRAFFIC CONTROL DEVICES AND STREET LIGHT POLES, MAY BE CONSTRUCTED OR INSTALLED WITHIN THE SIGHT VISIBILITY ZONE UNLESS SAID OBJECT IS MAINTAINED AT LESS THAN 24 INCHES IN HEIGHT, MEASURED FROM THE TOP OF CURB.

## NOTES

ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.

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




## CITY OF LAS VEGAS FIRE DEPARTMENT

FIRE FLOW REQUIREMENT IS 2,500 GALLONS PER MINUTE AT 20 PONDS PER SQUARE INCH RESIDUAL BASED ON:

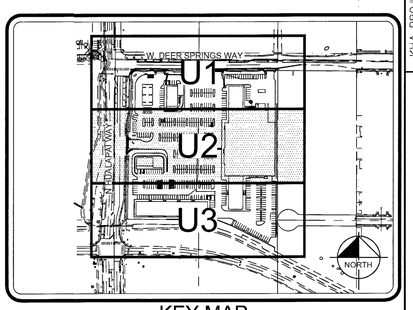
| | SHOPS A | SHOPS B | SHOPS C | C-STORE | FAST FOOD | GROCERY STORE |
|---|---|---|---|---|---|---|
| REQ'D FIRE FLOW | 1,875 | 1,500 | 1,500 | 2,000 | 1,500 | 2,500 |
| SQUARE FOOTAGE | 18,000 | 900 | 6,280 | 5,075 | 2,400 | 56,660 |
| LARGEST AREA BETWEEN AREA SEPARATION WALLS | N/A | N/A | N/A | N/A | N/A | N/A |
| HEIGHT | 38 | 32 | 32 | 31 | 28 | – |
| TYPE OF CONSTRUCTION | V-B | V-B | V-B | V-B | V-B | IIIB |
| SPRINKLER SYSTEM | YES | YES | YES | NO | NO | YES |
| OCCUPANCY | A2/M | A2/M | A2/M | M | A2 | – |
| NO. OF STORIES | 1 | 1 | 1 | 1 | 1 | 1 |
| HIGH PILED STORAGE | NO | NO | NO | NO | NO | YES |
| CHEMICAL ADDITIVES | NO | NO | NO | N/A | N/A | NO |

## SEWER CONSTRUCTION NOTES

2. INSTALL 48" DIA. SANITARY SEWER MANHOLE PER DCSWCS SD-1A, SD-5 & SD-4
3. INSTALL 8" PVC (SDR-35 SEWER MAIN PER DDCSWCS SD-16 & SD-17
4. INSTALL 6" PVC SDR-35 SEWER LATERAL PER SD-22
5. INSTALL 6" CLEAN OUT PER SD-26 (TRAFFIC RATED LID)
6. STUP & CAP – SEE PLUMBING PLANS FOR CONTINUATION
7. INSTALL WYE & 45° BEND PER SD-22

## WATER CONSTRUCTION NOTES

6. INSTALL 1.5" SERVICE SADDLE & CORPORATION STOP PER UDACS PLATE NO. 4, SEE DETAIL 16 ON SHEET D2
7. INSTALL 1.5" BADGER RECORDALL DISC METER PER UDACS PLATE NO. 4
8. INSTALL 1.5" RPPA PER UDACS PLATE NO. 8.
9. INSTALL 1.5" COPPER WATER LINE (PUBLIC)
10. INSTALL 1.5" BRASS WATER LINE (PUBLIC)
11. INSTALL 1" SERVICE SADDLE & CORPORATION STOP PER UDACS PLATE NO. 4, SEE DETAIL 16 ON SHEET D2
12. INSTALL 1" BADGER RECORDALL DISC METER PER UDACS PLATE NO. 4
13. INSTALL 1" RPPA PER UDACS PLATE NO. 8
14. INSTALL 1" COPPER WATER LINE (PUBLIC)
15. INSTALL 1" BRASS WATER LINE (PUBLIC)
16. INSTALL 10" RPDA PER UDACS PLATE NO. 59
17. INSTALL 8" PVC FIRE WATER LINE (PRIVATE)
18. INSTALL 6" PVC FIRE WATER LINE (PRIVATE)
19. INSTALL 2" PVC DOMESTIC WATER LINE (PRIVATE)
20. INSTALL 1.5" PVC DOMESTIC WATER LINE (PRIVATE)
21. INSTALL 1.5" PVC IRRIGATION WATER LINE
22. INSTALL 1" PVC DOMESTIC WATER LINE (PRIVATE)
23. INSTALL 90° BEND SAME SIZE AS LINE PER UDACS PLATE 31
24. INSTALL 45° BEND SAME SIZE AS LINE PER UDACS PLATE 31
25. 3"X1.5" REDUCER PER UDACS PLATE NO. 30
26. INSTALL FIRE HYDRANT PER UDACS PLATE NO. 40
27. INSTALL GATE VALVE SAME SIZE AS LINE PER UDACS PLATES NO. 30 & 39
28. INSTALL 10"x8" REDUCER WITH THRUST BLOCK PER UDACS PLATE NO. 30
29. INSTALL 8"x6" REDUCER WITH THRUST BLOCK PER UDACS PLATE NO. 30
30. INSTALL 8"x8" TEE PER UDACS PLATE NO. 31
31. INSTALL 8"x6" TEE PER UDACS PLATE NO. 31
32. INSTALL 3" x 3" TEE
33. STUB & CAP FOR IRRIGATION
34. STUB & CAP –SEE PLUMBING PLANS FOR CONTINUATION
36. INSTALL 3" PVC DOMESTIC WATER LINE (PRIVATE)




KEY MAP
N.T.S.

## REDUCED PRESSURE PRINCIPLE ASSEMBLY (1) 2" DOM (5) .5" DOM & (1) 1" DOM

APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED PER UDACS PLATE NO. 8. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE REDUCED PRESSURE PRINCIPLE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY LVVWD. ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S) TO ALLOW THE DISTRICT DIRECT ACCESS FROM THE ADJACENT RIGH-OF-WAY. EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

## SOUTHWEST GAS APPROVAL

ORIGINALLY SIGNED — DATE: 1/5/18
SOUTHWEST GAS CORPORATION

## LEGEND

| | EXISTING | PROPOSED |
|---|---|---|
| WATER LINE | | |
| SEWER LINE | | |
| GAS LINE | | |
| STORM DRAIN LINE | | |
| POWER LINE (OVERHEAD) | | |
| FIRE HYDRANT | | |
| WATER VALVES | | |
| REDUCER | | |
| SEWER MANHOLE | | |
| STORM DRAIN MANHOLE | | |
| CLEANOUT | | |

## APPROVED FOR CONSTRUCTION

5/21/18
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT No. 125896 FIRST APPROVED DATE: 12/21/17
LVVWD APPROVED FIRE FLOW 2,500 GPM AT 20 PSI RESIDUAL

## CITY OF LAS VEGAS FIRE DEPARTMENT APPROVAL

BY: K Smith DATE: 5/4/18

APPROVAL OF THESE PLANS SHALL NOT BE CONSTRUED TO BE A PERMIT FOR, OR AN APPROVAL OF, ANY VIOLATION OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS.

FIRE FLOW 2,500 GPM AT 20 PSI RESIDUAL.

CLV#: 107Y5072 L17-00759

| No. | REVISIONS | DATE | BY |
|---|---|---|---|
| 1 | UPDATED FAST FOOD WATER & SEWER, ADA PARKING, REVISE ALB WTR METER SIZES | 5-14-18 | CJJ SB |


Kimley»Horn
© 2018 KIMLEY-HORN AND ASSOCIATES, INC.
6671 LAS VEGAS BLVD. S., SUITE 320, LAS VEGAS, NV 89119
PHONE: 702-862-3600
WWW.KIMLEY-HORN.COM


STATE OF NEVADA — PROFESSIONAL ENGINEER — No. 17879 — 5-18-18

| KHA PROJECT 61153.52 | |
|---|---|
| DATE | NOV. 9, 2017 |
| SCALE | AS SHOWN |
| DESIGNED BY | JZ |
| DRAWN BY | JZ |
| CHECKED BY | TW |

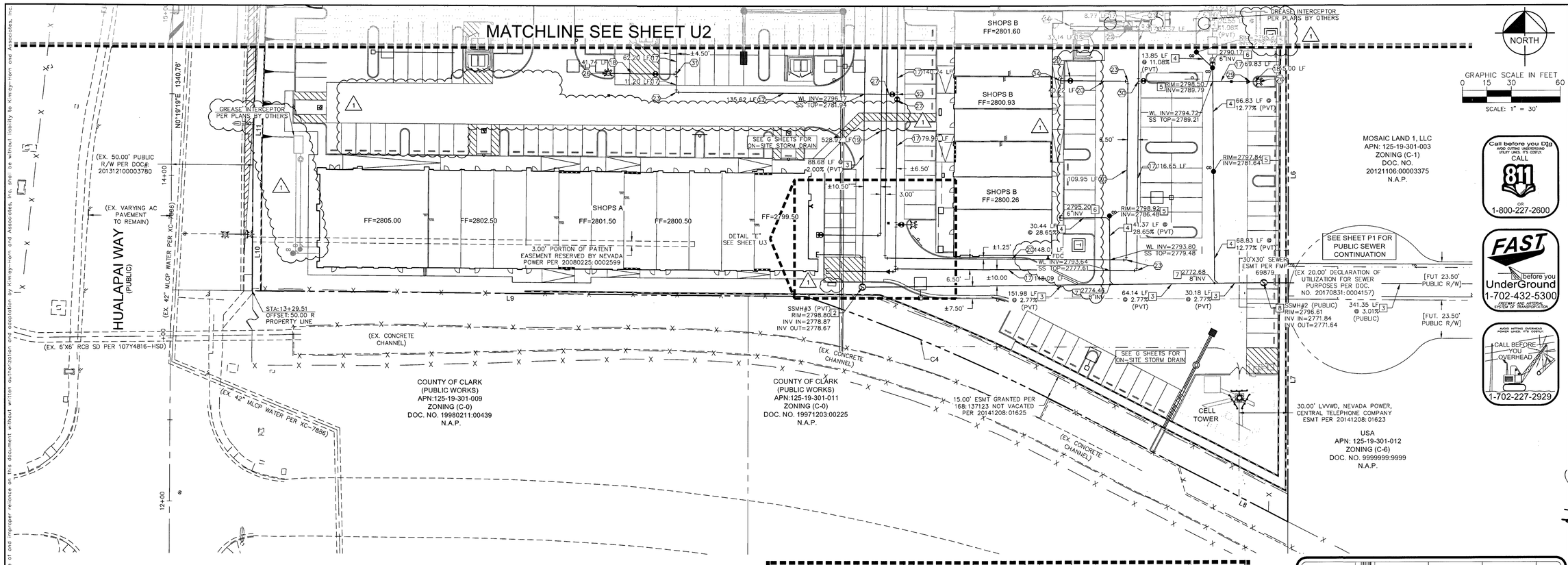
# UTILITY PLAN 2

DEER SPRINGS VILLAGE @ SEC DEER SPRINGS & HUALAPAI



PROJ#:125896 AGR:116521 QS:125-19-SW

Plotted By:Zito, Jolynn Sheet Set:Kho Layout:U2 May 08, 2018 01:34:34pm W:\61153.1\AUR\CAD\DWG\MPRDWGS\ONSITE\04-61153.52-U1.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

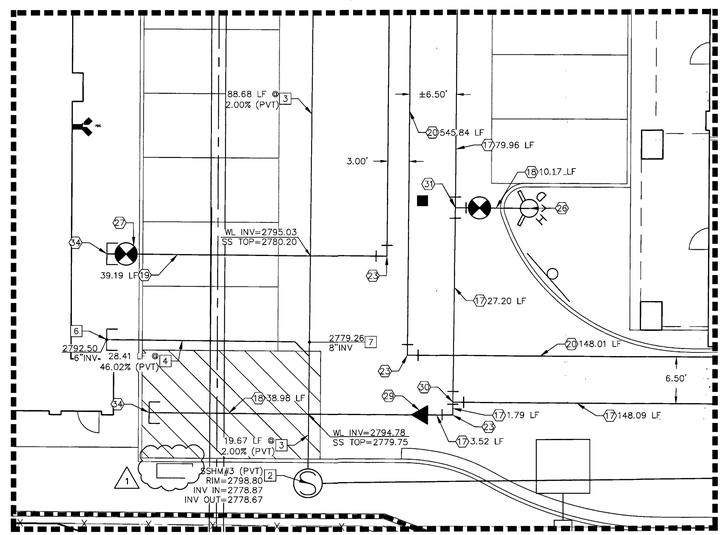



| LINE TABLE | | |
|---|---|---|
| LINE | LENGTH | BEARING |
| L1 | 141.18 | N89°27'56.45"W |
| L2 | 51.98 | N79°15'38.89"W |
| L3 | 100.00 | N89°27'56.45"W |
| L4 | 73.77 | N81°27'04.99"E |
| L5 | 67.74 | N89°27'56.45"W |
| L6 | 669.44 | N0°04'08.34"E |
| L7 | 136.43 | N0°04'08.34"E |
| L8 | 153.21 | S62°30'17.00"E |
| L9 | 339.21 | N89°32'44.04"W |
| L10 | 88.23 | N0°19'19.00"E |
| L11 | 225.06 | S1°35'41.91"W |
| L12 | 87.55 | N0°19'19.00"E |
| L13 | 136.93 | N0°19'19.00"E |

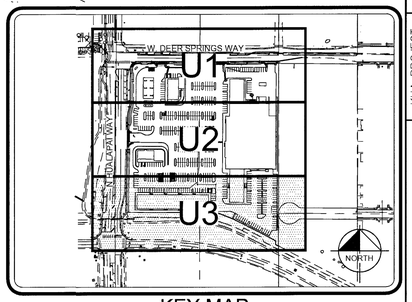
| CURVE TABLE | | | | |
|---|---|---|---|---|
| CURVE | RADIUS | LENGTH | DELTA | TANGENT |
| C1 | 25.00' | 39.36' | 90°12'45" | 25.09' |
| C2 | 17.00' | 3.03' | 10°12'18" | 1.52' |
| C3 | 33.00' | 5.88' | 10°12'18" | 2.95' |
| C4 | 1120.00' | 174.40' | 8°55'19" | 87.38' |
| C5 | 95.00' | 30.17' | 18°11'42" | 15.21' |

## FIRE WATER AT DOMESTIC WATER CROSSING

ALL NON-POTABLE FIRE WATER LINES CROSSING POTABLE DOMESTIC WATER LINES ARE TO BE INSTALLED WITH "A VERTICAL SEPARATION OF NO LESS THAN 6 INCHES..." AND IN ACCORDANCE WITH UDACS 2.23.01, 2.04.03, 2.22.02.B1 AND 2.22.02.B2."




DETAIL "E"
SCALE: 1"=10'




KEY MAP
N.T.S.

## LEGEND

| | EXISTING | PROPOSED |
|---|---|---|
| WATER LINE | | |
| SEWER LINE | | |
| GAS LINE | | |
| STORM DRAIN LINE | | |
| POWER LINE (OVERHEAD) | | |
| FIRE HYDRANT | | |
| WATER VALVES | | |
| REDUCER | | |
| SEWER MANHOLE | | |
| STORM DRAIN MANHOLE | | |
| CLEANOUT | | |

## LEGAL DESCRIPTION

SEE COVER SHEET FOR FULL LEGAL DESCRIPTION

## BENCHMARK

BENCHMARK: 12LV99 24E4: A RIVET AND ROUND ALUMINUM PLATE IN THE TOP OF CURB AT THE NORTHWEST CORNER OF HUALAPAI WAY AND DEER SPRINGS WAY = 858.066m = 2815.17sft. (NAVD 88)

## BASIS OF BEARINGS

NORTH 89°47'00" WEST, BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) SECTION 19, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., COUNTY OF CLARK, STATE OF NEVADA

## SIGHT VISIBILITY ZONES NOTE

NO WALLS, FENCES, TREES, SHRUBS, UTILITY APPURTENANCES OR ANY OTHER OBJECT, OTHER THAN TRAFFIC CONTROL DEVICES AND STREET LIGHT POLES, MAY BE CONSTRUCTED OR INSTALLED WITHIN THE SIGHT VISIBILITY ZONE UNLESS SAID OBJECT IS MAINTAINED AT LESS THAN 24 INCHES IN HEIGHT, MEASURED FROM THE TOP OF CURB.

## NOTES

ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.

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

## SEWER EASEMENT NOTE

NO STRUCTURES, AND NO TREES OR VEGETATION TALLER THAN 3 FEET ALLOWED WITHIN CLV SEWER EASEMENT.

## NOTES

1. EXISTING UTILITY LOCATIONS SHOWN HEREIN 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. ALL DISCREPANCIES MUST BE IMMEDIATELY REPORTED TO THE ENGINEER.

2. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL ALIGNMENT OF EXISTING UTILITIES AND TO NOTIFY THE DESIGN ENGINEER IMMEDIATELY ON ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

3. ALL DIMENSIONS TO UTILITIES ARE TO CENTERLINE OF PIPE UNLESS INDICATED OTHERWISE.

4. ALL SEWER LENGTHS SHOWN ARE FROM CENTER OF MANHOLE TO CENTER OF MANHOLE.

5. ALL SEWER/STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.22 OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.

6. SEE ARCHITECTURAL PLANS FOR ALL CONNECTION DETAILS AT THE BUILDING.

7. SEE LANDSCAPE PLANS BY OTHERS FOR ALL IRRIGATION AND LANDSCAPING INFORMATION.

8. SEE PLANS BY ELECTRICAL ENGINEER, NV ENERGY, COX, CENTURY LINK & SW GAS FOR ALL DRY UTILITY INFORMATION.

## REDUCED PRESSURE PRINCIPLE ASSEMBLY(1) 2" DOM.. (5) 1.5" DOM & (1) 1" DOM

APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED PER UDACS PLATE NO. 8. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE REDUCED PRESSURE PRINCIPLE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY LVVWD. ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S) TO ALLOW THE DISTRICT DIRECT ACCESS FROM THE ADJACENT RIGH-OF-WAY. EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

## WATER CONSTRUCTION NOTES

17. INSTALL 8" PVC FIRE WATER LINE (PRIVATE)
18. INSTALL 6" PVC FIRE WATER LINE (PRIVATE)
19. INSTALL 2" PVC DOMESTIC WATER LINE (PRIVATE)
20. INSTALL 1.5" PVC DOMESTIC WATER LINE (PRIVATE)
23. INSTALL 90° BEND SAME SIZE AS LINE PER UDACS PLATE 31
26. INSTALL FIRE HYDRANT PER UDACS PLATE NO. 40
27. INSTALL GATE VALVE SAME SIZE AS LINE PER UDACS PLATES NO. 30 & 39
29. INSTALL 8"x6" REDUCER WITH THRUST BLOCK PER UDACS PLATE NO. 30
30. INSTALL 8"x8" TEE PER UDACS PLATE NO. 31
31. INSTALL 8"x6" TEE PER UDACS PLATE NO. 31
34. STUB & CAP –SEE PLUMBING PLANS FOR CONTINUATION

## SEWER CONSTRUCTION NOTES

2. INSTALL 48" DIA. SANITARY SEWER MANHOLE PER DCSWCS SD-1A, SD-5 & SD-4
3. INSTALL 8" PVC (SDR-35 SEWER MAIN PER DDCSWCS SD-16 & SD-17
4. INSTALL 6" PVC SDR-35 SEWER LATERAL PER SD-22
5. INSTALL 6" CLEAN OUT PER SD-26 (TRAFFIC RATED LID)
6. STUP & CAP – SEE PLUMBING PLANS FOR CONTINUATION
7. INSTALL WYE & 45° BEND PER SD-22
8. INSTALL 72" DIA. SANITARY SEWER MANHOLE PER DCSWCS SD-1A, SD-5 & SD-4 WITH 24" SINGLE LID

## CITY OF LAS VEGAS FIRE DEPARTMENT

FIRE FLOW REQUIREMENT IS 2,500 GALLONS PER MINUTE AT 20 POUNDS PER SQUARE INCH RESIDUAL BASED ON:

| | SHOPS A | SHOPS B | SHOPS C | C-STORE | FAST FOOD | GROCERY STORE |
|---|---|---|---|---|---|---|
| REQ'D FIRE FLOW | 1,875 | 1,500 | 1,500 | 2,000 | 1,500 | 2,500 |
| SQUARE FOOTAGE | 18,000 | 900 | 6,280 | 5,075 | 2,400 | 56,660 |
| LARGEST AREA BETWEEN AREA SEPARATION WALLS | N/A | N/A | N/A | N/A | N/A | N/A |
| HEIGHT | 38 | 32 | 32 | 31 | 28 | – |
| TYPE OF CONSTRUCTION | V-B | V-B | V-B | V-B | V-B | IIIB |
| SPRINKLER SYSTEM | YES | YES | YES | NO | NO | YES |
| OCCUPANCY | A2/M | A2/M | A2/M | M | A2 | – |
| NO. OF STORIES | 1 | 1 | 1 | 1 | 1 | 1 |
| HIGH PILED STORAGE | NO | NO | NO | NO | NO | YES |
| CHEMICAL ADDITIVES | NO | NO | NO | N/A | N/A | NO |

## APPROVED FOR CONSTRUCTION

Y. DISHAPPI 3/21/18
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 125896 FIRST APPROVED DATE: 12/21/17
LVVWD APPROVED FIRE FLOW 2,500 GPM AT 20 PSI RESIDUAL

## CITY OF LAS VEGAS FIRE DEPARTMENT APPROVAL

BY: K Smith DATE: 5/14/18

APPROVAL OF THESE PLANS SHALL NOT BE CONSTRUED TO BE A PERMIT FOR, OR AN APPROVAL OF, ANY VIOLATION OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS.

FIRE FLOW 2,500 GPM AT 20 PSI RESIDUAL.

CLV#: 107Y5072 L17-00759

| No. | REVISIONS | DATE | BY |
|---|---|---|---|
| 1 | UPDATED TRANSFORMER LOCATIONS, PARKING STALLS, MAILBOX & GREASE LINE | 4-19-18 | CW SB |

Kimley»Horn
© 2018 KIMLEY-HORN AND ASSOCIATES, INC.
6671 LAS VEGAS BLVD S., SUITE 320, LAS VEGAS, NV 89119
PHONE: 702-862-3600
WWW.KIMLEY-HORN.COM

STATE OF NEVADA PROFESSIONAL ENGINEER CHRISTOPHER W. WOLF CIVIL No. 17819 EXPIRES 6/30/18

K-H PROJECT 61153.52
DATE NOV 9, 2017
SCALE AS SHOWN
DESIGNED BY JZ
DRAWN BY JZ
CHECKED BY TW

# UTILITY PLAN 3

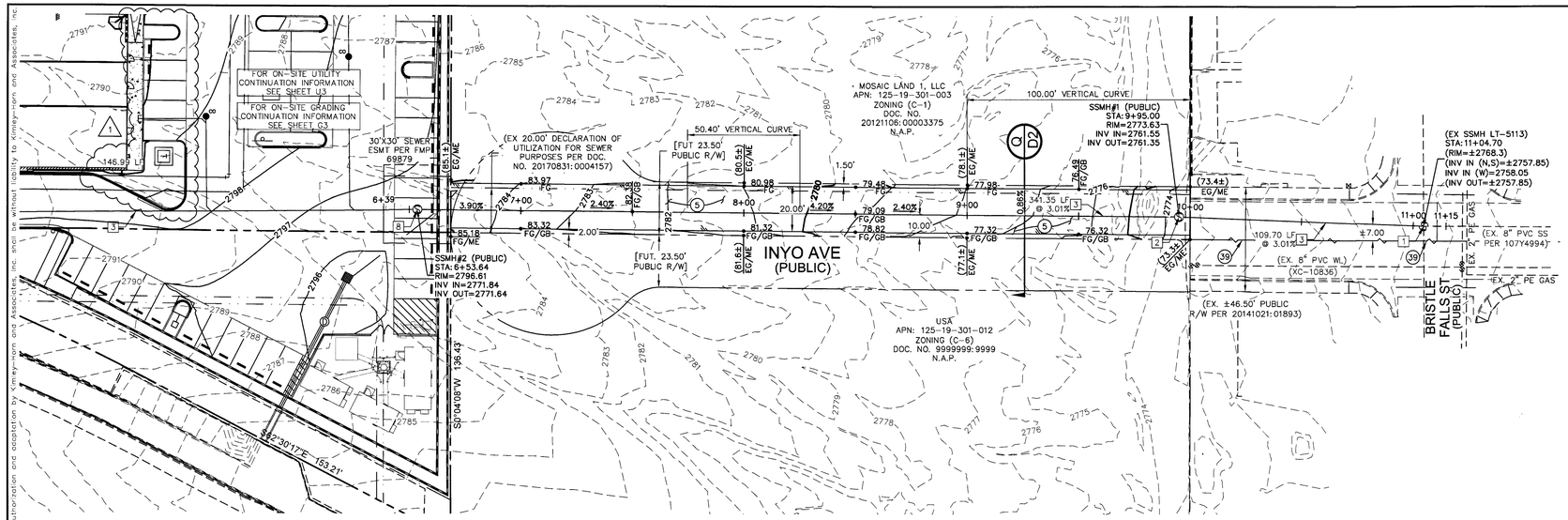
# DEER SPRINGS VILLAGE @ SEC DEER SPRINGS & HUALAPAI



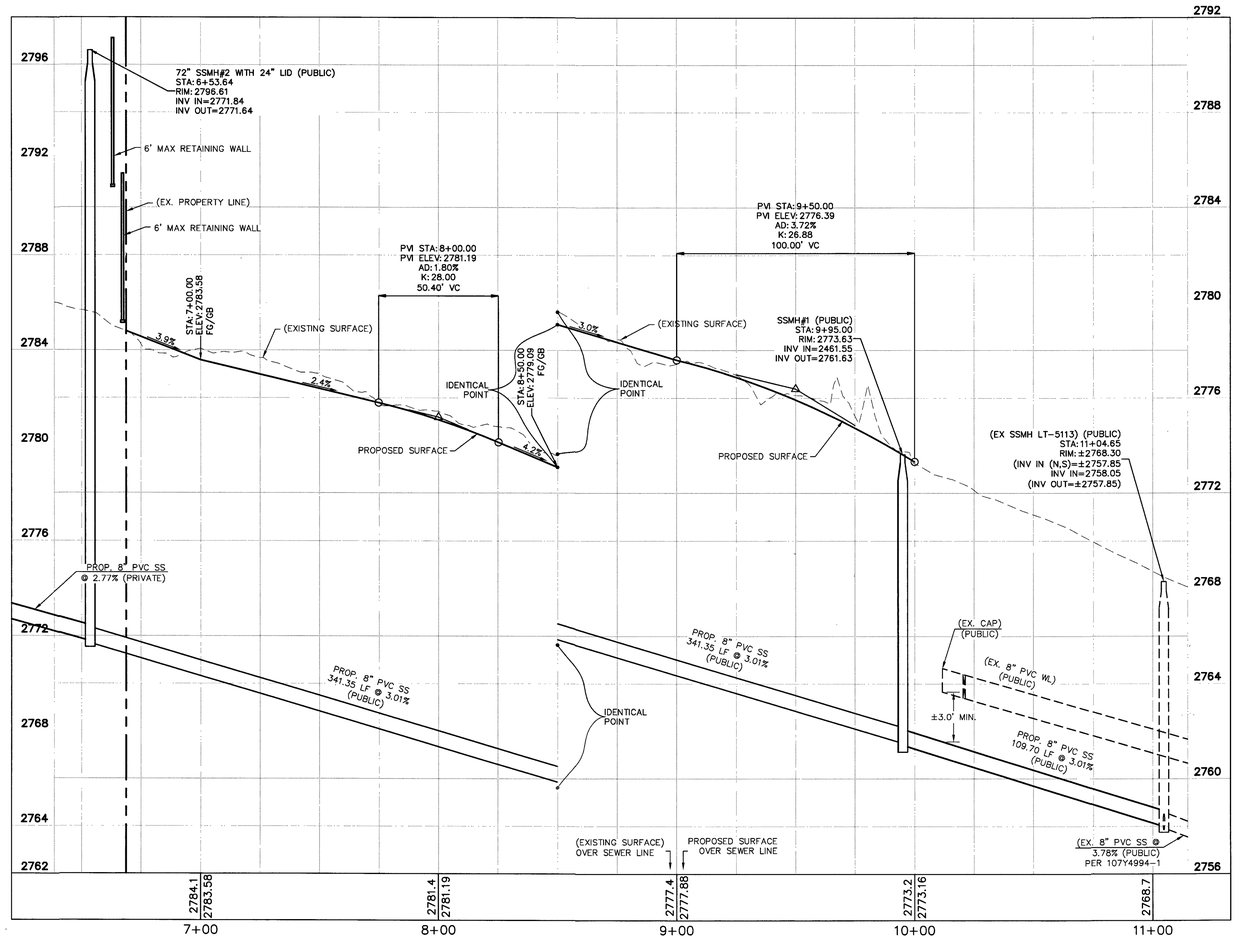
PROJ#:125896 AGR:116521 QS:125-19-SW

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

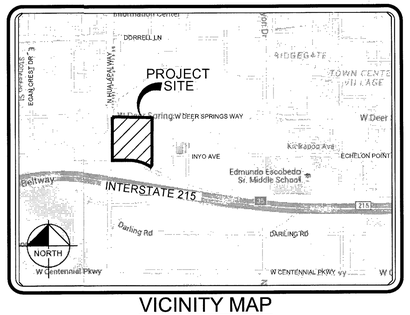
Plotted By:Zito, JoLynn Sheet Set:Kno Layout:U3 May 08, 2018 01:34:41pm W:\61153_LAUR\CIV\DWG\MPRDWGS\ONSITE\04-61153.52-U1.dwg




INYO- PLAN VIEW
STA: 6+39.00 TO STA: 11+15.00
SCALE: 1"=30'




INYO SEWER - PROFILE
STA: 6+39.00 TO STA: 11+15.00
SCALE: 1"=30' - HORZ
1"=3' - VERT




VICINITY MAP
N.T.S.

GRAPHIC SCALE IN FEET
0 15 30 60

NORTH

## SEWER CONSTRUCTION NOTES

1. CONTRACTOR TO VERIFY INVERT OF EXISTING SEWER MAIN PRIOR TO COMMENCING CONSTRUCTION
2. INSTALL 48" DIA. SANITARY SEWER MANHOLE PER DCSWCS SD-1A, SD-5 & SD-4
3. INSTALL 8" PVC (SDR-35 SEWER MAIN PER DDCSWCS SD-16 & SD-17
8. INSTALL 72" DIA. SANITARY SEWER MANHOLE PER DCSWCS SD-1A, SD-5 & SD-4 WITH 24" SINGLE LID

## CONSTRUCTION NOTES

5. CONSTRUCT HEAVY AC PAVEMENT PER SOILS REPORT BY WESTERN TECHNOLOGIES INC. SEE DETAIL "2" ON SHEET D3
39. SAWCUT AND MATCH EXISTING

## NOTES:

ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.

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

## ENGINEER'S NOTES:

1. ALL WORK SHALL CONFORM TO THE SOILS REPORT PREPARED BY TERRACON, DATED 12/09/2016, NO. 64165132.
2. ALL OFF-SITE IMPROVEMENT CONSTRUCTION SHALL CONFORM TO THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA" LATEST EDITION.
3. FINAL ASPHALTIC CONCRETE (AC PAVEMENT SURFACES SHALL BE FLUSH WITH THE LIP OF GUTTER (INCLUDING OPEN GRADE).
4. CONTRACTOR IS RESPONSIBLE FOR DUST AND EROSION CONTROL DURING CONSTRUCTION.
5. THIS PLAN SHALL NOT, IN PART OR IN WHOLE, BE USED FOR CONSTRUCTION UNTIL APPROVED AND SIGNED BY ALL APPLICABLE GOVERNMENT AGENCIES.
6. ENGINEER TO BE NOTIFIED OF ANY DISCREPANCIES IMMEDIATELY.
7. MATCH ELEVATIONS SHOWN TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION.
8. THIS PROJECT IS PART OF AN EXISTING COMMERCIAL SUBDIVISION.
9. ALL ON-SITE STORM DRAINS AND THE ASSOCIATED STORM WATER FACILITIES ARE PRIVATELY OWNED AND PRIVATELY MAINTAINED.

## BENCHMARK

BENCHMARK: 12LV99 24E4: A RIVET AND ROUND ALUMINUM PLATE IN THE TOP OF CURB AT THE NORTHWEST CORNER OF HUALAPAI WAY AND DEER SPRINGS WAY = 858.066m = 2815.17sft. (NAVD 88)

## BASIS OF BEARING

NORTH 89°47'00" WEST, BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) SECTION 19, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., COUNTY OF CLARK, STATE OF NEVADA

## FLOOD ZONE NOTE

THIS PROJECT IS LOCATED IN SHADED ZONE X PER FEMA FLOOD INSURANCE MAP NUMBERS 32003C2553F & 32003C2554F, DATED NOVEMBER 16, 2011. SHADED FLOOD ZONE X IS DEFINED AS AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTH OF LESS THAN 1 FOOT OR WITH DRAINAGE AREA LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD.

## SIGHT VISIBILITY ZONES NOTE

NO WALLS, FENCES, TREES, SHRUBS, UTILITY APPURTENANCES OR ANY OTHER OBJECT, OTHER THAN TRAFFIC CONTROL DEVICES AND STREET LIGHT POLES, MAY BE CONSTRUCTED OR INSTALLED WITHIN THE SIGHT VISIBILITY ZONE UNLESS SAID OBJECT IS MAINTAINED AT LESS THAN 24 INCHES IN HEIGHT, MEASURED FROM THE TOP OF CURB.

SOUTHWEST GAS APPROVAL
ORIGINALLY SIGNED 1/15/18
SOUTHWEST GAS CORPORATION DATE:

APPROVED FOR CONSTRUCTION
5/21/18
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NUMBER 125896 FIRST APPROVED DATE: 12/21/17
CLV#: 107Y5072 L17-00759

| No. | REVISIONS | DATE | BY |
|---|---|---|---|
| 1 | UPDATED TRANSFORMER LOCATIONS, PARKING STALLS & CURB | 1-18-18 | SB |


Kimley»Horn
© 2018 KIMLEY-HORN AND ASSOCIATES, INC.
6671 LAS VEGAS BLVD S., SUITE 320, LAS VEGAS, NV 89119
PHONE: 702-862-3600
WWW.KIMLEY-HORN.COM


STATE OF NEVADA PROFESSIONAL ENGINEER No. 17613 JOSEPH WOLF CIVIL EXP:6-30-18 1-18-18

KHA PROJECT 61153.52
DATE NOV 9, 2017
SCALE AS SHOWN
DESIGNED BY JZ
DRAWN BY JZ
CHECKED BY TW

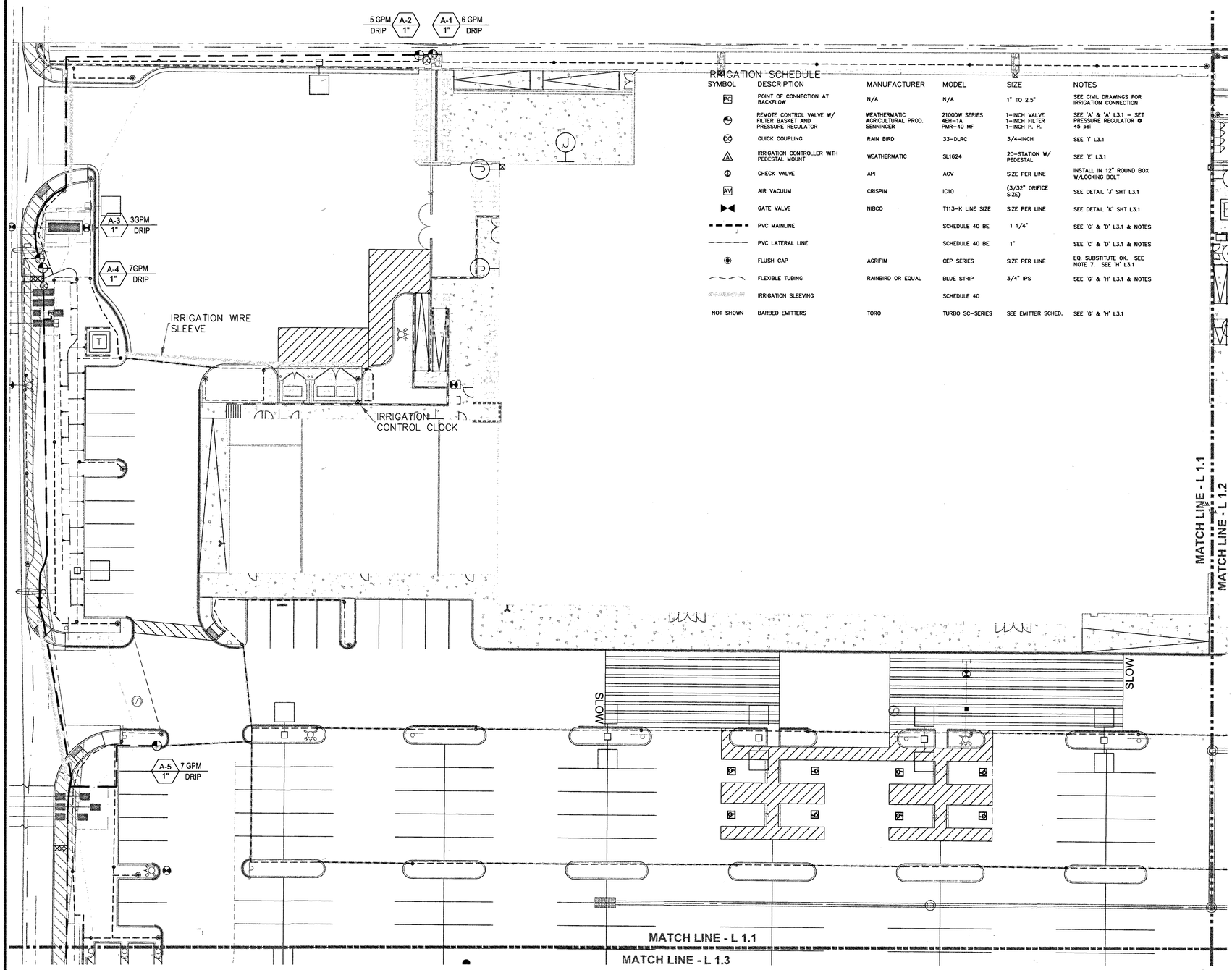
INYO SEWER
PLAN & PROFILE

DEER SPRINGS VILLAGE
@ SEC DEER SPRINGS & HUALAPAI



PROJ#:125896 AGR:116521 QS:125-19-SW

Plotted By:Zito, JoLynn Sheet Set:Kha Layout:P1 May 08, 2018 01:34:57pm W:\61153_LAURCH\DWG\WPRDWGS\ONSITE\05-61153.52-P1.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.




## IRRIGATION SCHEDULE

| SYMBOL | DESCRIPTION | MANUFACTURER | MODEL | SIZE | NOTES |
|---|---|---|---|---|---|
| PC | POINT OF CONNECTION AT BACKFLOW | N/A | N/A | 1" TO 2.5" | SEE CIVIL DRAWINGS FOR IRRIGATION CONNECTION |
| | REMOTE CONTROL VALVE W/ FILTER BASKET AND PRESSURE REGULATOR | WEATHERMATIC AGRICULTURAL PROD. SENNINGER | 2100DW SERIES 4EH-1A PMR-40 MF | 1-INCH VALVE 1-INCH FILTER 1-INCH P. R. | SEE 'A' & 'A' L3.1 – SET PRESSURE REGULATOR @ 45 psi |
| QC | QUICK COUPLING | RAIN BIRD | 33-DLRC | 3/4-INCH | SEE 'I' L3.1 |
| | IRRIGATION CONTROLLER WITH PEDESTAL MOUNT | WEATHERMATIC | SL1624 | 20-STATION W/ PEDESTAL | SEE 'E' L3.1 |
| | CHECK VALVE | API | ACV | SIZE PER LINE | INSTALL IN 12" ROUND BOX W/LOCKING BOLT |
| AV | AIR VACUUM | CRISPIN | IC10 | (3/32" ORIFICE SIZE) | SEE DETAIL 'J' SHT L3.1 |
| | GATE VALVE | NIBCO | T113-K LINE SIZE | SIZE PER LINE | SEE DETAIL 'K' SHT L3.1 |
| | PVC MAINLINE | | SCHEDULE 40 BE | 1 1/4" | SEE 'C' & 'D' L3.1 & NOTES |
| | PVC LATERAL LINE | | SCHEDULE 40 BE | 1" | SEE 'C' & 'D' L3.1 & NOTES |
| | FLUSH CAP | AGRIFIM | CEP SERIES | SIZE PER LINE | EQ. SUBSTITUTE OK. SEE NOTE 7. SEE 'H' L3.1 |
| | FLEXIBLE TUBING | RAINBIRD OR EQUAL | BLUE STRIP | 3/4" IPS | SEE 'G' & 'H' L3.1 & NOTES |
| | IRRIGATION SLEEVING | | SCHEDULE 40 | | |
| NOT SHOWN | BARBED EMITTERS | TORO | TURBO SC-SERIES | SEE EMITTER SCHED. | SEE 'G' & 'H' L3.1 |

## EMITTER SCHEDULE

| PLANT | MFR. | MODEL | QTY. | G.P.H. |
|---|---|---|---|---|
| EXISTING TREES | TORO | TURBO SC PLUS-RED | VARIES | |
| FAN PALM | TORO | TURBO SC PLUS-RED | 8-12 | 2.0 |
| 36" BOX | TORO | TURBO SC PLUS-RED | 16-20 | 2.0 |
| 24" BOX | TORO | TURBO SC PLUS-RED | 12-14 | 2.0 |
| 15 GAL SHRUB | TORO | TURBO SC PLUS-BLACK | 5-7 | 1.0 |
| 5 GAL | TORO | TURBO SC PLUS-BLACK | 3-4 | 1.0 |
| 1 GAL | TORO | TURBO SC PLUS-BLACK | 3 | 1.0 |
| BLACK FOOT DAISY | TORO | TURBO SC PLUS-BLACK | 3 | 1.0 |

NOTES:

1. THE IRRIGATION PLAN IS DRAWN FOR GRAPHIC CLARITY. WHERE PIPING AND VALVES ARE SHOWN IN CONCRETE OR PAVED AREAS, THE INTENT IS FOR THE PIPING AND VALVES TO BE PLACED IN THE ADJACENT PLANTING AREAS.
2. IRRIGATION CONTRACTOR TO COORDINATE WITH GENERAL CONTRACTOR TO PROVIDE POWER SOURCE FOR IRRIGATION CONTROLLER.
3. IRRIGATION CONTRACTOR TO VERIFY ALL EXISTING SITE CONDITIONS PRIOR TO STARTING WORK. PROVIDE AN ALTERNATE BID COST FOR BACKFLOW DEVICE AND ENCLOSURE, AS THE UNIT MAY ALREADY BE EXISTING OR PROVIDED BY CIVIL.
4. COORDINATE IRRIGATION PLAN WITH PLANTING PLAN AND UTILITY PLANS. PLACE IRRIGATION LINES AWAY FROM OTHER UTILITIES AND TREES WHEN POSSIBLE.
5. DISCREPANCIES BETWEEN THE DRAWINGS AND SITE SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT FOR CLARIFICATION BEFORE STARTING WORK.
6. ANY AND ALL MATERIAL OR EQUIPMENT SUBSTITUTIONS TO BE APPROVED BY THE LANDSCAPE ARCHITECT.
7. EMITTERS TO THE BLACK FOOT DAISY SHALL BE (3) THREE 0.5 GPH SEE EMITTER SCHEDULE ABOVE.
8. EMITTER QUANTITIES ARE SET FOR WHAT IS BEST FOR THE PLANTS. PRIOR TO INSTALLING THE CRUSHED ROCK TURN THE VALVES ON INDIVIDUALLY TO VERIFY THE WET PATTERN AROUND THE PLANTS. THE SOIL SHOULD BE WET 360-DEGREES AROUND THE PLANTS. IF DRY SPOTS OCCUR ADJUST THE EMITTER LOCATIONS OR ADD ADDITIONAL EMITTERS. THE LANDSCAPE ARCHITECT IS TO REVIEW THE WET PATTERNS PRIOR TO THE CRUSHED ROCK INSTALLATION (702) 358-8700. PROVIDE A 48 TO 72-HOUR NOTICE FOR ALL SITE VISITS.
9. INSTALL FLUSH CAPS AT ALL TERMINATIONS OF BLUE STRIPE TUBING.
10. INSTALL SLEEVING BASED ON THE SIZING GUIDE BELOW:

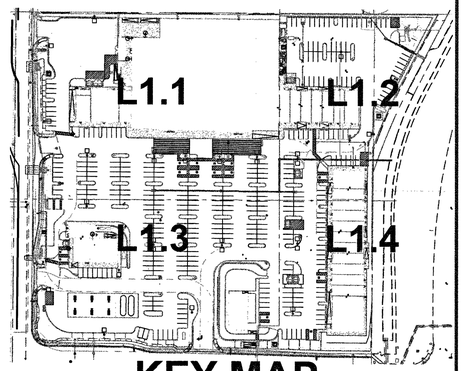
| PIPE SIZE | REQUIRED SLEEVING |
|---|---|
| 1" to 2.5" PVC MAINLINE | 1 – 4" SCH 40 PVC SLEEVE |
| 1" TO 1 1/2" PVC LATERAL | 1 – 4" SCH 40 PVC SLEEVE |
| WIRE QUANTITY | |
| 1 – 20 CONTROL WIRES | 1 – 4" SCH 40 PVC SLEEVE |

## IRRIGATION PLAN

north

0 10' 20' 40'

SCALE: 1"=20'-0"




## KEY MAP

NTS

NADEL

NADEL NEVADA INC
175 E. WARM SPRINGS ROAD
SUITE 100
LAS VEGAS, NV 89119
T. 702.896.2000
F. 702.896.7170
WWW.NADELARC.COM

PROFESSIONAL STAMP(S):

REGISTERED LANDSCAPE ARCHITECT
JOHN HILL
318
STATE OF NEVADA
10-26-17
Expires: 6-30-18

CONSULTANT:

HILL CLARK & ASSOCIATES
LANDSCAPE ARCHITECTURE
94 Megan Drive
Henderson, NV 89074
P: (702) 358-8700

CLIENT:

DEER SPRINGS VILLAGE, LLC

10655 PARK RUN DRIVE #160
LAS VEGAS, NV 89144

CLIENT PROJECT №: 07-05-2016

PROJECT:

DEER SPRINGS VILLAGE

6750 N HUALAPAI WAY
LAS VEGAS, NV 89149

| | |
|---|---|
| PUBLIC AGENCY SUBMITTAL: | N/A |
| ISSUED FOR BIDDING: | N/A |
| ISSUED FOR CONSTRUCTION: | N/A |

REVISIONS:

| ISSUE NO.: | DESCRIPTION: | ISSUE DATE: |
|---|---|---|

BD SUBMITTAL SET

| | |
|---|---|
| NADEL PROJECT №: | 16061 |
| PROJECT DATE: | 07-05-2017 |

ISSUE:

DRAWING TITLE:

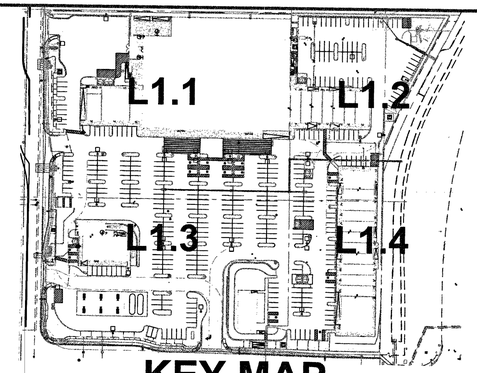
# IRRIGATION PLAN

L17-00759
10745012

# L1.1

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF THE ARCHITECT AND THE SAME MAY NOT BE DUPLICATED, USED OR DISCLOSED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT. Copyright © 2017, NADEL NEVADA INC. ALL RIGHTS RESERVED.

F:\BACKUP\Current\1616 Nadel Deer Springs Village\Nadel Irrigation Plan.dwg

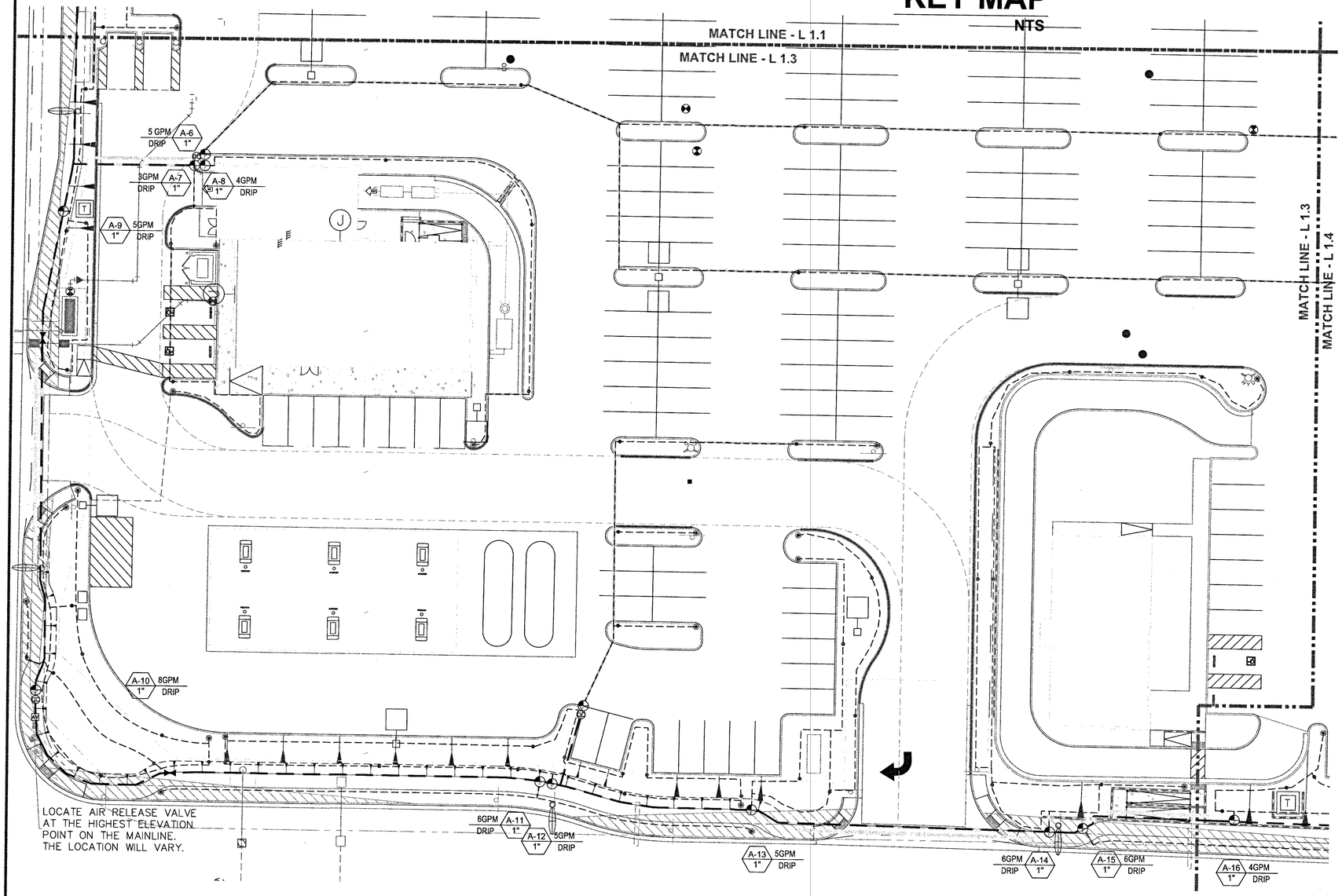



# KEY MAP

NTS

## IRRIGATION SCHEDULE

| SYMBOL | DESCRIPTION | MANUFACTURER | MODEL | SIZE | NOTES |
|---|---|---|---|---|---|
| PC | POINT OF CONNECTION AT BACKFLOW | N/A | N/A | 1" TO 2.5" | SEE CIVIL DRAWINGS FOR IRRIGATION CONNECTION |
| | REMOTE CONTROL VALVE W/ FILTER BASKET AND PRESSURE REGULATOR | WEATHERMATIC AGRICULTURAL PROD. SENNINGER | 2100DW SERIES 4EH-1A PMR-40 MF | 1-INCH VALVE 1-INCH FILTER 1-INCH P. R. | SEE 'A' & 'A' L3.1 - SET PRESSURE REGULATOR @ 45 psi |
| QC | QUICK COUPLING | RAIN BIRD | 33-DLRC | 3/4-INCH | SEE 'I' L3.1 |
| | IRRIGATION CONTROLLER WITH PEDESTAL MOUNT | WEATHERMATIC | SL1624 | 20-STATION W/ PEDESTAL | SEE 'E' L3.1 |
| | CHECK VALVE | API | ACV | SIZE PER LINE | INSTALL IN 12" ROUND BOX W/LOCKING BOLT |
| AV | AIR VACUUM | CRISPIN | IC10 | (3/32" ORIFICE SIZE) | SEE DETAIL 'J' SHT L3.1 |
| | GATE VALVE | NIBCO | T113-K LINE SIZE | SIZE PER LINE | SEE DETAIL 'K' SHT L3.1 |
| | PVC MAINLINE | | SCHEDULE 40 BE | 1 1/4" | SEE 'C' & 'D' L3.1 & NOTES |
| | PVC LATERAL LINE | | SCHEDULE 40 BE | 1" | SEE 'C' & 'D' L3.1 & NOTES |
| | FLUSH CAP | AGRIFIM | CEP SERIES | SIZE PER LINE | EQ. SUBSTITUTE OK. SEE NOTE 7. SEE 'H' L3.1 |
| | FLEXIBLE TUBING | RAINBIRD OR EQUAL | BLUE STRIP | 3/4" IPS | SEE 'G' & 'H' L3.1 & NOTES |
| | IRRIGATION SLEEVING | | SCHEDULE 40 | | |
| NOT SHOWN | BARBED EMITTERS | TORO | TURBO SC-SERIES | SEE EMITTER SCHED. | SEE 'G' & 'H' L3.1 |




## EMITTER SCHEDULE

| PLANT | MFR. | MODEL | QTY. | G.P.H. |
|---|---|---|---|---|
| EXISTING TREES | | | VARIES | |
| FAN PALM | TORO | TURBO SC PLUS-RED | 8-12 | 2.0 |
| 36" BOX | TORO | TURBO SC PLUS-RED | 16-20 | 2.0 |
| 24" BOX | TORO | TURBO SC PLUS-RED | 12-14 | 2.0 |
| 15 GAL SHRUB | TORO | TURBO SC PLUS-BLACK | 5-7 | 1.0 |
| 5 GAL | TORO | TURBO SC PLUS-BLACK | 3-4 | 1.0 |
| 1 GAL | TORO | TURBO SC PLUS-BLACK | 3 | 1.0 |
| BLACK FOOT DAISY | TORO | TURBO SC PLUS-BLACK | 3 | 1.0 |

NOTES:

1. THE IRRIGATION PLAN IS DRAWN FOR GRAPHIC CLARITY. WHERE PIPING AND VALVES ARE SHOWN IN CONCRETE OR PAVED AREAS, THE INTENT IS FOR THE PIPING AND VALVES TO BE PLACED IN THE ADJACENT PLANTING AREAS.
2. IRRIGATION CONTRACTOR TO COORDINATE WITH GENERAL CONTRACTOR TO PROVIDE POWER SOURCE FOR IRRIGATION CONTROLLER.
3. IRRIGATION CONTRACTOR TO VERIFY ALL EXISTING SITE CONDITIONS PRIOR TO STARTING WORK. PROVIDE AN ALTERNATE BID COST FOR BACKFLOW DEVICE AND ENCLOSURE, AS THE UNIT MAY ALREADY BE EXISTING OR PROVIDED BY CIVIL.
4. COORDINATE IRRIGATION PLAN WITH PLANTING PLAN AND UTILITY PLANS. PLACE IRRIGATION LINES AWAY FROM OTHER UTILITIES AND TREES WHEN POSSIBLE.
5. DISCREPANCIES BETWEEN THE DRAWINGS AND SITE SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT FOR CLARIFICATION BEFORE STARTING WORK.
6. ANY AND ALL MATERIAL OR EQUIPMENT SUBSTITUTIONS TO BE APPROVED BY THE LANDSCAPE ARCHITECT.
7. EMITTERS TO THE BLACK FOOT DAISY SHALL BE (3) THREE 0.5 GPH SEE EMITTER SCHEDULE ABOVE.
8. EMITTER QUANTITIES ARE SET FOR WHAT IS BEST FOR THE PLANTS. PRIOR TO INSTALLING THE CRUSHED ROCK TURN THE VALVES ON INDIVIDUALLY TO VERIFY THE WET PATTERN AROUND THE PLANTS. THE SOIL SHOULD BE WET 360-DEGREES AROUND THE PLANTS. IF DRY SPOTS OCCUR ADJUST THE EMITTER LOCATIONS OR ADD ADDITIONAL EMITTERS. THE LANDSCAPE ARCHITECT IS TO REVIEW THE WET PATTERNS PRIOR TO THE CRUSHED ROCK INSTALLATION (702) 358-8700. PROVIDE A 48 TO 72-HOUR NOTICE FOR ALL SITE VISITS.
9. INSTALL FLUSH CAPS AT ALL TERMINATIONS OF BLUE STRIPE TUBING.
10. INSTALL SLEEVING BASED ON THE SIZING GUIDE BELOW:

| PIPE SIZE | REQUIRED SLEEVING |
|---|---|
| 1" to 2.5" PVC MAINLINE | 1 - 4" SCH 40 PVC SLEEVE |
| 1" TO 1 1/2" PVC LATERAL | 1 - 4" SCH 40 PVC SLEEVE |
| WIRE QUANTITY | |
| 1 - 20 CONTROL WIRES | 1 - 4" SCH 40 PVC SLEEVE |

# IRRIGATION PLAN

north

0 10' 20' 40'

SCALE: 1"=20'-0"

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF THE ARCHITECT AND THE SAME MAY NOT BE DUPLICATED, USED OR DISCLOSED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT. COPYRIGHT © 2016, NADEL NEVADA INC. ALL RIGHTS RESERVED.

NADEL

NADEL NEVADA INC
175 E. WARM SPRINGS ROAD
SUITE 100
LAS VEGAS, NV 89119
T. 702.896.2000
F. 702.896.7170
WWW.NADELARC.COM

PROFESSIONAL STAMP(S):

REGISTERED LANDSCAPE ARCHITECT DAN HILL 318 STATE OF NEVADA
10-26-17
Expires: 5-30-18

CONSULTANT:

HILL CLARK & ASSOCIATES
LANDSCAPE ARCHITECTURE
94 Megan Drive
Henderson, NV 89074
P: (702) 358-8700

CLIENT:

DEER SPRINGS VILLAGE, LLC

10655 PARK RUN DRIVE #160
LAS VEGAS, NV 89144

CLIENT PROJECT №: 07-05-2016

PROJECT:

DEER SPRINGS VILLAGE

6750 N HUALAPAI WAY
LAS VEGAS, NV 89149

| | |
|---|---|
| PUBLIC AGENCY SUBMITTAL: | N/A |
| ISSUED FOR BIDDING: | N/A |
| ISSUED FOR CONSTRUCTION: | N/A |

REVISIONS:

| ISSUE DESCRIPTION: NO.: | ISSUE DATE: |
|---|---|

BD SUBMITTAL SET

| | |
|---|---|
| NADEL PROJECT №: | 18061 |
| PROJECT DATE: | 07-05-2017 |

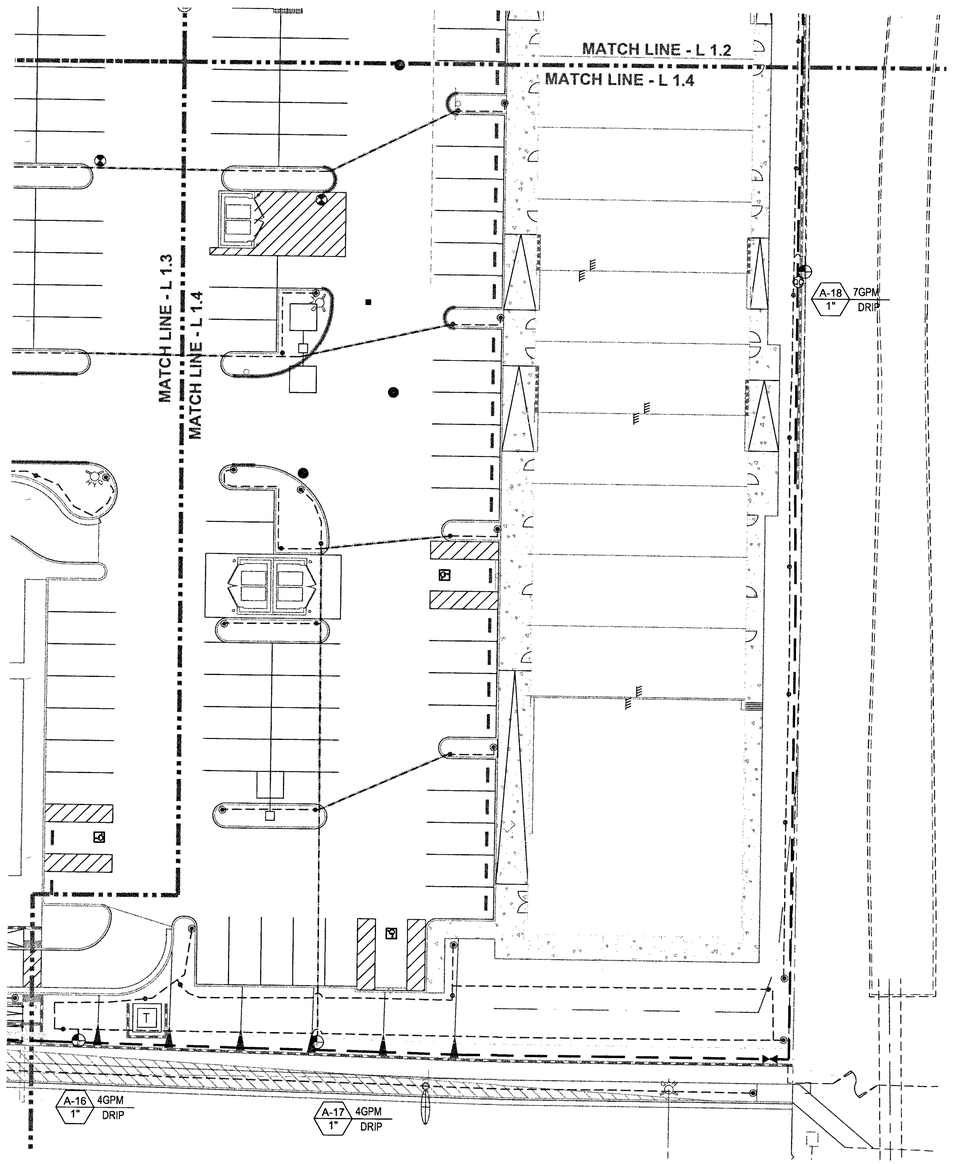
ISSUE:

DRAWING TITLE:

**IRRIGATION PLAN**

L17-00759
10745072

**L1.3**




## IRRIGATION PLAN

north

0 10' 20' 40'

SCALE: 1"=20'-0"

## IRRIGATION SCHEDULE

| SYMBOL | DESCRIPTION | MANUFACTURER | MODEL | SIZE | NOTES |
|---|---|---|---|---|---|
| PC | POINT OF CONNECTION AT BACKFLOW | N/A | N/A | 1" TO 2.5" | SEE CIVIL DRAWINGS FOR IRRIGATION CONNECTION |
| | REMOTE CONTROL VALVE W/ FILTER BASKET AND PRESSURE REGULATOR | WEATHERMATIC AGRICULTURAL PROD. SENNINGER | 2100DW SERIES 4CH-1A PMR-40 MF | 1-INCH VALVE 1-INCH FILTER 1-INCH P. R. | SEE 'A' & 'A' L3.1 - SET PRESSURE REGULATOR @ 45 psi |
| QC | QUICK COUPLING | RAIN BIRD | 33-DLRC | 3/4-INCH | SEE 'I' L3.1 |
| | IRRIGATION CONTROLLER WITH PEDESTAL MOUNT | WEATHERMATIC | SL1624 | 20-STATION W/ PEDESTAL | SEE 'E' L3.1 |
| | CHECK VALVE | API | ACV | SIZE PER LINE | INSTALL IN 12" ROUND BOX W/LOCKING BOLT |
| AV | AIR VACUUM | CRISPIN | IC10 | (3/32" ORIFICE SIZE) | SEE DETAIL 'J' SHT L3.1 |
| | GATE VALVE | NIBCO | T113-K LINE SIZE | SIZE PER LINE | SEE DETAIL 'K' SHT L3.1 |
| | PVC MAINLINE | | SCHEDULE 40 BE | 1 1/4" | SEE 'C' & 'D' L3.1 & NOTES |
| | PVC LATERAL LINE | | SCHEDULE 40 BE | 1" | SEE 'C' & 'D' L3.1 & NOTES |
| | FLUSH CAP | AGRIFIM | CEP SERIES | SIZE PER LINE | EQ. SUBSTITUTE OK. SEE NOTE 7. SEE 'H' L3.1 |
| | FLEXIBLE TUBING | RAINBIRD OR EQUAL | BLUE STRIP | 3/4" IPS | SEE 'G' & 'H' L3.1 & NOTES |
| | IRRIGATION SLEEVING | | SCHEDULE 40 | | |
| NOT SHOWN | BARBED EMITTERS | TORO | TURBO SC-SERIES | SEE EMITTER SCHED. | SEE 'G' & 'H' L3.1 |

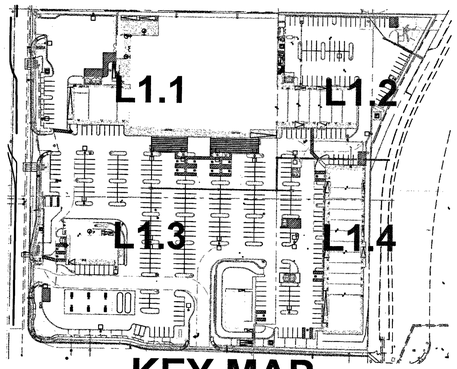
## EMITTER SCHEDULE

| PLANT | MFR. | MODEL | QTY. | G.P.H. |
|---|---|---|---|---|
| EXISTING TREES | TORO | TURBO SC PLUS-RED | VARIES | |
| FAN PALM | TORO | TURBO SC PLUS-RED | 8-12 | 2.0 |
| 36" BOX | TORO | TURBO SC PLUS-RED | 16-20 | 2.0 |
| 24" BOX | TORO | TURBO SC PLUS-RED | 12-14 | 2.0 |
| 15 GAL SHRUB | TORO | TURBO SC PLUS-BLACK | 5-7 | 1.0 |
| 5 GAL | TORO | TURBO SC PLUS-BLACK | 3-4 | 1.0 |
| 1 GAL | TORO | TURBO SC PLUS-BLACK | 3 | 1.0 |
| BLACK FOOT DAISY | TORO | TURBO SC PLUS-BLACK | 3 | 1.0 |

NOTES:

1. THE IRRIGATION PLAN IS DRAWN FOR GRAPHIC CLARITY. WHERE PIPING AND VALVES ARE SHOWN IN CONCRETE OR PAVED AREAS, THE INTENT IS FOR THE PIPING AND VALVES TO BE PLACED IN THE ADJACENT PLANTING AREAS.
2. IRRIGATION CONTRACTOR TO COORDINATE WITH GENERAL CONTRACTOR TO PROVIDE POWER SOURCE FOR IRRIGATION CONTROLLER.
3. IRRIGATION CONTRACTOR TO VERIFY ALL EXISTING SITE CONDITIONS PRIOR TO STARTING WORK. PROVIDE AN ALTERNATE BID COST FOR BACKFLOW DEVICE AND ENCLOSURE, AS THE UNIT MAY ALREADY BE EXISTING OR PROVIDED BY CIVIL.
4. COORDINATE IRRIGATION PLAN WITH PLANTING PLAN AND UTILITY PLANS. PLACE IRRIGATION LINES AWAY FROM OTHER UTILITIES AND TREES WHEN POSSIBLE.
5. DISCREPANCIES BETWEEN THE DRAWINGS AND SITE SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT FOR CLARIFICATION BEFORE STARTING WORK.
6. ANY AND ALL MATERIAL OR EQUIPMENT SUBSTITUTIONS TO BE APPROVED BY THE LANDSCAPE ARCHITECT.
7. EMITTERS TO THE BLACK FOOT DAISY SHALL BE (3) THREE 0.5 GPH SEE EMITTER SCHEDULE ABOVE.
8. EMITTER QUANTITIES ARE SET FOR WHAT IS BEST FOR THE PLANTS. PRIOR TO INSTALLING THE CRUSHED ROCK TURN THE VALVES ON INDIVIDUALLY TO VERIFY THE WET PATTERN AROUND THE PLANTS. THE SOIL SHOULD BE WET 360-DEGREES AROUND THE PLANTS. IF DRY SPOTS OCCUR ADJUST THE EMITTER LOCATIONS OR ADD ADDITIONAL EMITTERS. THE LANDSCAPE ARCHITECT IS TO REVIEW THE WET PATTERNS PRIOR TO THE CRUSHED ROCK INSTALLATION (702) 358-8700. PROVIDE A 48 TO 72-HOUR NOTICE FOR ALL SITE VISITS.
9. INSTALL FLUSH CAPS AT ALL TERMINATIONS OF BLUE STRIPE TUBING.
10. INSTALL SLEEVING BASED ON THE SIZING GUIDE BELOW:

| PIPE SIZE | REQUIRED SLEEVING |
|---|---|
| 1" to 2.5" PVC MAINLINE | 1 - 4" SCH 40 PVC SLEEVE |
| 1" TO 1 1/2" PVC LATERAL | 1 - 4" SCH 40 PVC SLEEVE |
| WIRE QUANTITY | |
| 1 - 20 CONTROL WIRES | 1 - 4" SCH 40 PVC SLEEVE |




## KEY MAP

NTS

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF THE ARCHITECT AND THE SAME MAY NOT BE DUPLICATED, USED OR DISCLOSED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT. COPYRIGHT 2017, NADEL ARCHITECTS, ALL RIGHTS RESERVED.

NADEL

NADEL NEVADA INC
175 E. WARM SPRINGS ROAD
SUITE 100
LAS VEGAS, NV 89119
T. 702.896.2000
F. 702.896.7170
WWW.NADELARC.COM

PROFESSIONAL STAMP(S):

REGISTERED LANDSCAPE ARCHITECT
DAN RITZ
318
STATE OF NEVADA
6-26-17
Expires: 6-30-18

CONSULTANT:

HILL CLARK & ASSOCIATES
LANDSCAPE ARCHITECTURE
94 Megan Drive
Henderson, NV 89074
P: (702) 358-8700

CLIENT:

DEER SPRINGS VILLAGE, LLC

10655 PARK RUN DRIVE #160
LAS VEGAS, NV 89144

CLIENT PROJECT №: 07-05-2016

PROJECT:

DEER SPRINGS VILLAGE

6750 N HUALAPAI WAY
LAS VEGAS, NV 89149

| | |
|---|---|
| PUBLIC AGENCY SUBMITTAL: | N/A |
| ISSUED FOR BIDDING: | N/A |
| ISSUED FOR CONSTRUCTION: | N/A |

REVISIONS:

| ISSUE NO.: | DESCRIPTION: | ISSUE DATE: |
|---|---|---|

BD SUBMITTAL SET

| | |
|---|---|
| NADEL PROJECT №: | 16061 |
| PROJECT DATE: | 07-05-2017 |

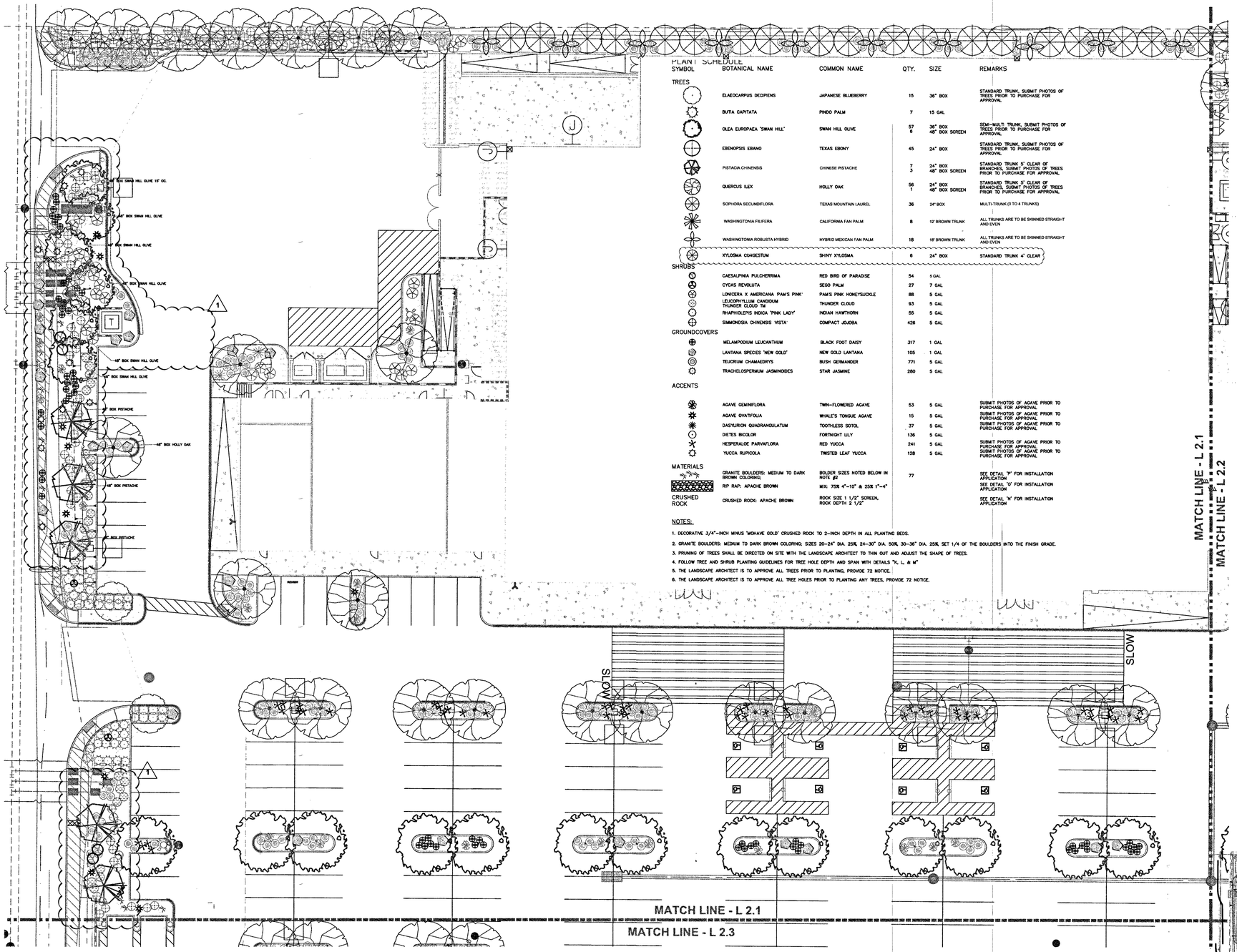
ISSUE:

DRAWING TITLE:

# IRRIGATION PLAN

L17-00759
10745072

# L1.4




## PLANT SCHEDULE

| SYMBOL | BOTANICAL NAME | COMMON NAME | QTY. | SIZE | REMARKS |
|---|---|---|---|---|---|
| **TREES** | | | | | |
| | ELAEOCARPUS DECIPIENS | JAPANESE BLUEBERRY | 15 | 36" BOX | STANDARD TRUNK, SUBMIT PHOTOS OF TREES PRIOR TO PURCHASE FOR APPROVAL |
| | BUTIA CAPITATA | PINDO PALM | 7 | 15 GAL | |
| | OLEA EUROPAEA 'SWAN HILL' | SWAN HILL OLIVE | 57<br>6 | 36" BOX<br>48" BOX SCREEN | SEMI-MULTI TRUNK, SUBMIT PHOTOS OF TREES PRIOR TO PURCHASE FOR APPROVAL |
| | EBENOPSIS EBANO | TEXAS EBONY | 45 | 24" BOX | STANDARD TRUNK, SUBMIT PHOTOS OF TREES PRIOR TO PURCHASE FOR APPROVAL |
| | PISTACIA CHINENSIS | CHINESE PISTACHE | 7<br>3 | 24" BOX<br>48" BOX SCREEN | STANDARD TRUNK 5' CLEAR OF BRANCHES, SUBMIT PHOTOS OF TREES PRIOR TO PURCHASE FOR APPROVAL |
| | QUEROUS ILEX | HOLLY OAK | 56<br>1 | 24" BOX<br>48" BOX SCREEN | STANDARD TRUNK 5' CLEAR OF BRANCHES, SUBMIT PHOTOS OF TREES PRIOR TO PURCHASE FOR APPROVAL |
| | SOPHORA SECUNDIFLORA | TEXAS MOUNTAIN LAUREL | 36 | 24" BOX | MULTI-TRUNK (3 TO 4 TRUNKS) |
| | WASHINGTONIA FILIFERA | CALIFORNIA FAN PALM | 8 | 12' BROWN TRUNK | ALL TRUNKS ARE TO BE SKINNED STRAIGHT AND EVEN |
| | WASHINGTONIA ROBUSTA HYBRID | HYBRID MEXICAN FAN PALM | 18 | 18' BROWN TRUNK | ALL TRUNKS ARE TO BE SKINNED STRAIGHT AND EVEN |
| | XYLOSMA CONGESTUM | SHINY XYLOSMA | 6 | 24" BOX | STANDARD TRUNK 4' CLEAR |
| **SHRUBS** | | | | | |
| | CAESALPINIA PULCHERRIMA | RED BIRD OF PARADISE | 54 | 5 GAL | |
| | CYCAS REVOLUTA | SEGO PALM | 27 | 7 GAL | |
| | LONICERA X AMERICANA 'PAM'S PINK' | PAM'S PINK HONEYSUCKLE | 88 | 5 GAL | |
| | LEUCOPHYLLUM CANDIDUM THUNDER CLOUD TM | THUNDER CLOUD | 93 | 5 GAL | |
| | RHAPHIOLEPIS INDICA 'PINK LADY' | INDIAN HAWTHORN | 55 | 5 GAL | |
| | SIMMONDSIA CHINENSIS 'VISTA' | COMPACT JOJOBA | 426 | 5 GAL | |
| **GROUNDCOVERS** | | | | | |
| | MELAMPODIUM LEUCANTHUM | BLACK FOOT DAISY | 317 | 1 GAL | |
| | LANTANA SPECIES 'NEW GOLD' | NEW GOLD LANTANA | 105 | 1 GAL | |
| | TEUCRIUM CHAMAEDRYS | BUSH GERMANDER | 771 | 5 GAL | |
| | TRACHELOSPERMUM JASMINOIDES | STAR JASMINE | 280 | 5 GAL | |
| **ACCENTS** | | | | | |
| | AGAVE GEMINIFLORA | TWIN-FLOWERED AGAVE | 53 | 5 GAL | SUBMIT PHOTOS OF AGAVE PRIOR TO PURCHASE FOR APPROVAL |
| | AGAVE OVATIFOLIA | WHALE'S TONGUE AGAVE | 15 | 5 GAL | SUBMIT PHOTOS OF AGAVE PRIOR TO PURCHASE FOR APPROVAL |
| | DASYLIRION QUADRANGULATUM | TOOTHLESS SOTOL | 37 | 5 GAL | SUBMIT PHOTOS OF AGAVE PRIOR TO PURCHASE FOR APPROVAL |
| | DIETES BICOLOR | FORTNIGHT LILY | 136 | 5 GAL | |
| | HESPERALOE PARVAFLORA | RED YUCCA | 241 | 5 GAL | SUBMIT PHOTOS OF AGAVE PRIOR TO PURCHASE FOR APPROVAL |
| | YUCCA RUPICOLA | TWISTED LEAF YUCCA | 128 | 5 GAL | SUBMIT PHOTOS OF AGAVE PRIOR TO PURCHASE FOR APPROVAL |
| **MATERIALS** | | | | | |
| | GRANITE BOULDERS: MEDIUM TO DARK BROWN COLORING; | BOLDER SIZES NOTED BELOW IN NOTE #2 | 77 | | SEE DETAIL "P" FOR INSTALLATION APPLICATION |
| | RIP RAP: APACHE BROWN | MIX: 75% 4"-10" & 25% 1"-4" | | | SEE DETAIL "O" FOR INSTALLATION APPLICATION |
| CRUSHED ROCK | CRUSHED ROCK: APACHE BROWN | ROCK SIZE 1 1/2" SCREEN, ROCK DEPTH 2 1/2" | | | SEE DETAIL "N" FOR INSTALLATION APPLICATION |

NOTES:

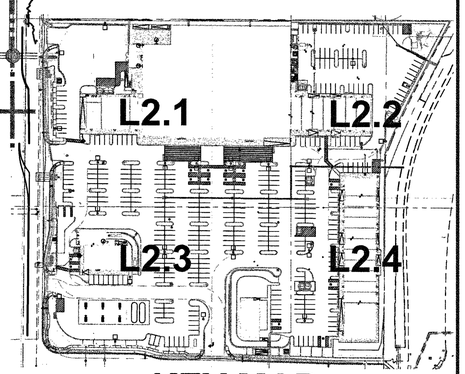
1. DECORATIVE 3/4"-INCH MINUS 'MOHAVE GOLD' CRUSHED ROCK TO 2-INCH DEPTH IN ALL PLANTING BEDS.
2. GRANITE BOULDERS: MEDIUM TO DARK BROWN COLORING; SIZES 20-24" DIA. 25%, 24-30" DIA. 50%, 30-36" DIA. 25%, SET 1/4 OF THE BOULDERS INTO THE FINISH GRADE.
3. PRUNING OF TREES SHALL BE DIRECTED ON SITE WITH THE LANDSCAPE ARCHITECT TO THIN OUT AND ADJUST THE SHAPE OF TREES.
4. FOLLOW TREE AND SHRUB PLANTING GUIDELINES FOR TREE HOLE DEPTH AND SPAN WITH DETAILS "K, L, & M"
5. THE LANDSCAPE ARCHITECT IS TO APPROVE ALL TREES PRIOR TO PLANTING, PROVIDE 72 NOTICE.
6. THE LANDSCAPE ARCHITECT IS TO APPROVE ALL TREE HOLES PRIOR TO PLANTING ANY TREES, PROVIDE 72 NOTICE.

## PLANTING PLAN

north

0 10' 20' 40'

SCALE: 1"=20'-0"




## KEY MAP

NTS


NADEL

NADEL NEVADA INC
175 E. WARM SPRINGS ROAD
SUITE 100
LAS VEGAS, NV 89119
T. 702.896.2000
F. 702.896.7170
WWW.NADELARC.COM


PROFESSIONAL STAMP(S):

REGISTERED LANDSCAPE ARCHITECT DAN HILL STATE OF NEVADA

10-26-17

Expires: 6-30-18

CONSULTANT:


HILL CLARK & ASSOCIATES
LANDSCAPE ARCHITECTURE
94 Megan Drive
Henderson, NV 89074
P: (702) 358-8700


CLIENT:

DEER SPRINGS VILLAGE, LLC

10655 PARK RUN DRIVE #160
LAS VEGAS, NV 89144

CLIENT PROJECT №: 07-05-2016

PROJECT:

DEER SPRINGS VILLAGE

6750 N HUALAPAI WAY
LAS VEGAS, NV 89149

| | |
|---|---|
| PUBLIC AGENCY SUBMITTAL: | N/A |
| ISSUED FOR BIDDING: | N/A |
| ISSUED FOR CONSTRUCTION: | N/A |

REVISIONS:

| ISSUE DESCRIPTION: NO.: | ISSUE DATE: |
|---|---|
| 1 Plan Check Comments | 08-18-2017 |

BD SUBMITTAL SET

| | |
|---|---|
| NADEL PROJECT №: | 16061 |
| PROJECT DATE: | 07-05-2017 |

ISSUE:

DRAWING TITLE:

**PLANTING PLAN**

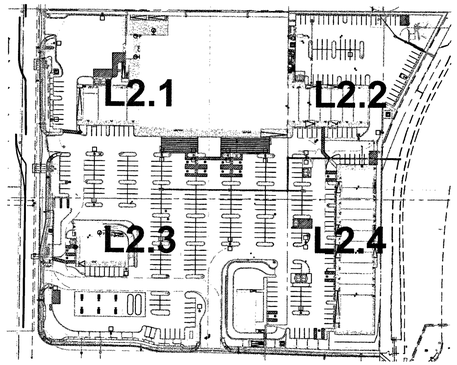
L17-00759
10745072

**L2.1**


ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF THE ARCHITECT AND THE SAME MAY NOT BE DUPLICATED, USED OR DISCLOSED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT. Copyright © 2017, NADEL NEVADA INC. ALL RIGHTS RESERVED.



F:\NAC\HOA Current\1010 Nadel Deer Springs Village\Landscape\Planting Plan 10-04-17.dwg




# KEY MAP

NTS

## PLANT SCHEDULE

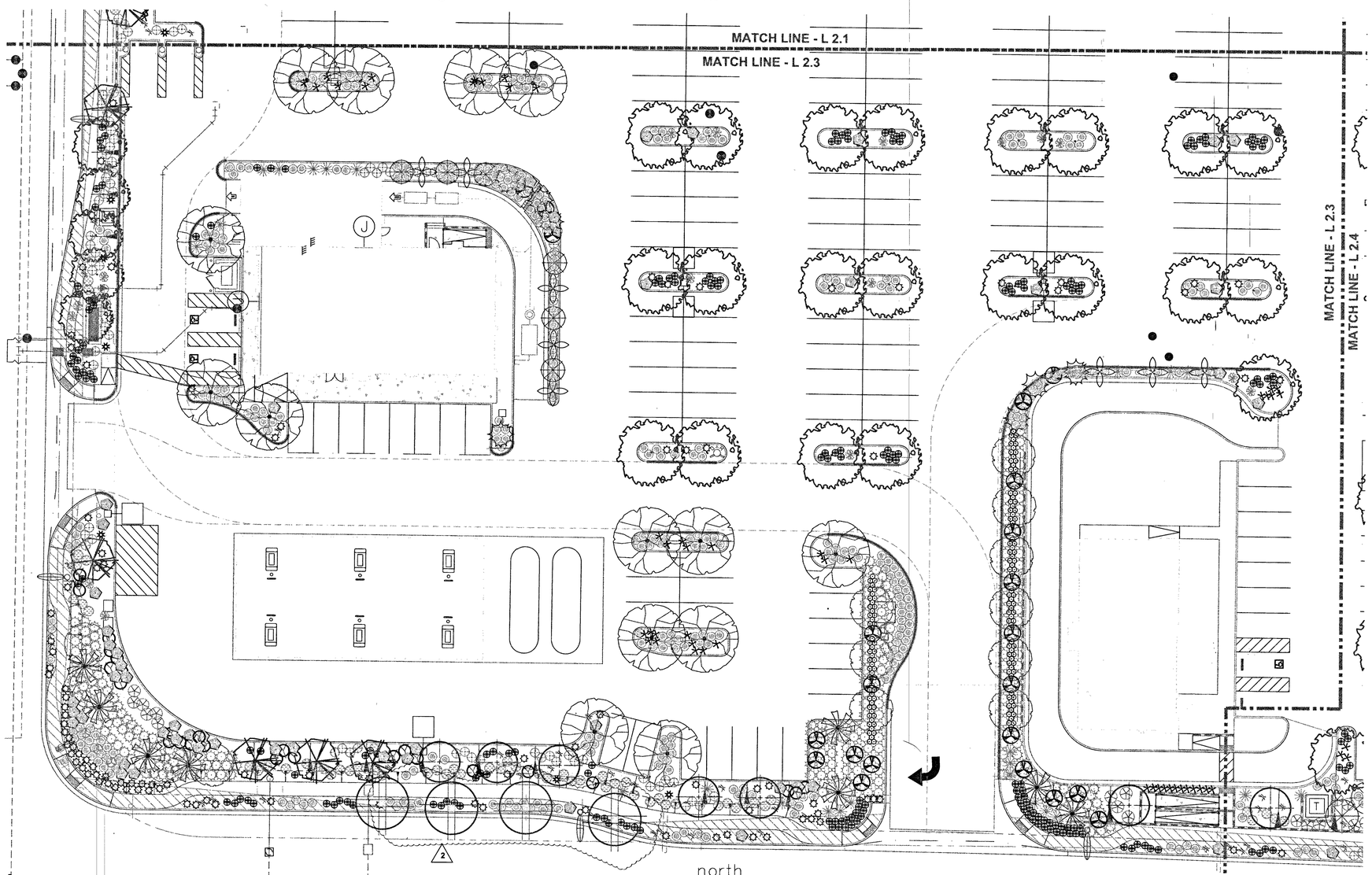
| SYMBOL | BOTANICAL NAME | COMMON NAME | QTY. | SIZE | REMARKS |
|---|---|---|---|---|---|
| TREES | | | | | |
| | ELAEOCARPUS DECIPIENS | JAPANESE BLUEBERRY | 15 | 36" BOX | STANDARD TRUNK. SUBMIT PHOTOS OF TREES PRIOR TO PURCHASE FOR APPROVAL |
| | BUTIA CAPITATA | PINDO PALM | 7 | 15 GAL | |
| | OLEA EUROPAEA "SWAN HILL" | SWAN HILL OLIVE | 57<br>6 | 36" BOX<br>48" BOX SCREEN | SEMI-MULTI TRUNK. SUBMIT PHOTOS OF TREES PRIOR TO PURCHASE FOR APPROVAL |
| | EBENOPSIS EBANO | TEXAS EBONY | 45 | 24" BOX | STANDARD TRUNK. SUBMIT PHOTOS OF TREES PRIOR TO PURCHASE FOR APPROVAL |
| | PISTACIA CHINENSIS | CHINESE PISTACHE | 7<br>3 | 24" BOX<br>48" BOX SCREEN | STANDARD TRUNK 5' CLEAR OF BRANCHES. SUBMIT PHOTOS OF TREES PRIOR TO PURCHASE FOR APPROVAL |
| | QUERCUS ILEX | HOLLY OAK | 56<br>1 | 24" BOX<br>48" BOX SCREEN | STANDARD TRUNK 5' CLEAR OF BRANCHES. SUBMIT PHOTOS OF TREES PRIOR TO PURCHASE FOR APPROVAL |
| | SOPHORA SECUNDIFLORA | TEXAS MOUNTAIN LAUREL | 36 | 24" BOX | MULTI-TRUNK (3 TO 4 TRUNKS) |
| | WASHINGTONIA FILIFERA | CALIFORNIA FAN PALM | 8 | 12' BROWN TRUNK | ALL TRUNKS ARE TO BE SKINNED STRAIGHT AND EVEN |
| | WASHINGTONIA ROBUSTA HYBRID | HYBRID MEXICAN FAN PALM | 18 | 18' BROWN TRUNK | ALL TRUNKS ARE TO BE SKINNED STRAIGHT AND EVEN |
| | XYLOSMA CONGESTUM | SHINY XYLOSMA | 6 | 24" BOX | STANDARD TRUNK 4' CLEAR |
| SHRUBS | | | | | |
| | CAESALPINIA PULCHERRIMA | RED BIRD OF PARADISE | 54 | 5 GAL | |
| | CYCAS REVOLUTA | SEGO PALM | 27 | 7 GAL | |
| | LONICERA X AMERICANA 'PAM'S PINK' | PAM'S PINK HONEYSUCKLE | 88 | 5 GAL | |
| | LEUCOPHYLLUM CANDIDUM THUNDER CLOUD TM | THUNDER CLOUD | 93 | 5 GAL | |
| | RHAPHIOLEPIS INDICA 'PINK LADY' | INDIAN HAWTHORN | 55 | 5 GAL | |
| | SIMMONDSIA CHINENSIS 'VSTA' | COMPACT JOJOBA | 426 | 5 GAL | |
| GROUNDCOVERS | | | | | |
| | MELAMPODIUM LEUCANTHUM | BLACK FOOT DAISY | 317 | 1 GAL | |
| | LANTANA SPECIES 'NEW GOLD' | NEW GOLD LANTANA | 105 | 1 GAL | |
| | TEUCRIUM CHAMAEDRYS | BUSH GERMANDER | 771 | 5 GAL | |

## PLANT SCHEDULE

| SYMBOL | BOTANICAL NAME | COMMON NAME | QTY. | SIZE | REMARKS |
|---|---|---|---|---|---|
| ACCENTS | | | | | |
| | AGAVE GEMINIFLORA | TWIN-FLOWERED AGAVE | 53 | 5 GAL | SUBMIT PHOTOS OF AGAVE PRIOR TO PURCHASE FOR APPROVAL |
| | AGAVE OVATIFOLIA | WHALE'S TONGUE AGAVE | 15 | 5 GAL | SUBMIT PHOTOS OF AGAVE PRIOR TO PURCHASE FOR APPROVAL |
| | DASYLIRION QUADRANGULATUM | TOOTHLESS SOTOL | 37 | 5 GAL | SUBMIT PHOTOS OF AGAVE PRIOR TO PURCHASE FOR APPROVAL |
| | DIETES BICOLOR | FORTNIGHT LILY | 136 | 5 GAL | |
| | HESPERALOE PARVIFLORA | RED YUCCA | 241 | 5 GAL | SUBMIT PHOTOS OF AGAVE PRIOR TO PURCHASE FOR APPROVAL |
| | YUCCA RUPICOLA | TWISTED LEAF YUCCA | 128 | 5 GAL | SUBMIT PHOTOS OF AGAVE PRIOR TO PURCHASE FOR APPROVAL |
| MATERIALS | | | | | |
| | GRANITE BOULDERS: MEDIUM TO DARK BROWN COLORING; | BOLDER SIZES NOTED BELOW IN NOTE #2 | 77 | | SEE DETAIL 'P' FOR INSTALLATION APPLICATION |
| | RIP RAP: APACHE BROWN | MIX: 75% 4"-10" & 25% 1"-4" | | | SEE DETAIL 'O' FOR INSTALLATION APPLICATION |
| CRUSHED ROCK | CRUSHED ROCK: APACHE BROWN | ROCK SIZE 1 1/2" SCREEN, ROCK DEPTH 2 1/2" | | | SEE DETAIL 'N' FOR INSTALLATION APPLICATION |

NOTES:

1. DECORATIVE 3/4"-INCH MINUS 'MOHAVE GOLD' CRUSHED ROCK TO 2-INCH DEPTH IN ALL PLANTING BEDS.
2. GRANITE BOULDERS: MEDIUM TO DARK BROWN COLORING; SIZES 20-24" DIA. 25%, 24-30" DIA. 50%, 30-36" DIA. 25%, SET 1/4 OF THE BOULDERS INTO THE FINISH GRADE.
3. PRUNING OF TREES SHALL BE DIRECTED ON SITE WITH THE LANDSCAPE ARCHITECT TO THIN OUT AND ADJUST THE SHAPE OF TREES.
4. FOLLOW TREE AND SHRUB PLANTING GUIDELINES FOR TREE HOLE DEPTH AND SPAN WITH DETAILS "L, L, & M".
5. THE LANDSCAPE ARCHITECT IS TO APPROVE ALL TREES PRIOR TO PLANTING, PROVIDE 72 NOTICE.
6. THE LANDSCAPE ARCHITECT IS TO APPROVE ALL TREE HOLES PRIOR TO PLANTING ANY TREES, PROVIDE 72 NOTICE.




# PLANTING PLAN

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF THE ARCHITECT AND THE SAME MAY NOT BE DUPLICATED, USED OR DISCLOSED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECTS. Copyright 2017, NADEL ARCHITECTS, INC. ALL RIGHTS RESERVED.

NADEL

NADEL NEVADA INC
175 E. WARM SPRINGS ROAD
SUITE 150
LAS VEGAS, NV 89119
T. 702.896.2000
F. 702.896.7170
WWW.NADELARC.COM

PROFESSIONAL STAMP(S):

REGISTERED LANDSCAPE ARCHITECT DAN HILL 318 STATE OF NEVADA
10-24-17
Expires: 6-30-18

CONSULTANT:

HILL CLARK & ASSOCIATES
LANDSCAPE ARCHITECTURE
94 Megan Drive
Henderson, NV 89074
P: (702) 358-8700

CLIENT:

DEER SPRINGS VILLAGE, LLC

10655 PARK RUN DRIVE #160
LAS VEGAS, NV 89144

CLIENT PROJECT №: 07-05-2016

PROJECT:

DEER SPRINGS VILLAGE

6750 N HUALAPAI WAY
LAS VEGAS, NV 89149

| | |
|---|---|
| PUBLIC AGENCY SUBMITTAL: | N/A |
| ISSUED FOR BIDDING: | N/A |
| ISSUED FOR CONSTRUCTION: | N/A |

REVISIONS:

| ISSUE NO.: | DESCRIPTION: | ISSUE DATE: |
|---|---|---|
| 1 | Plan Check Comments | 08-18-2017 |
| 2 | Plan Check Comments | 10-24-2017 |

ISSUE: BD SUBMITTAL SET

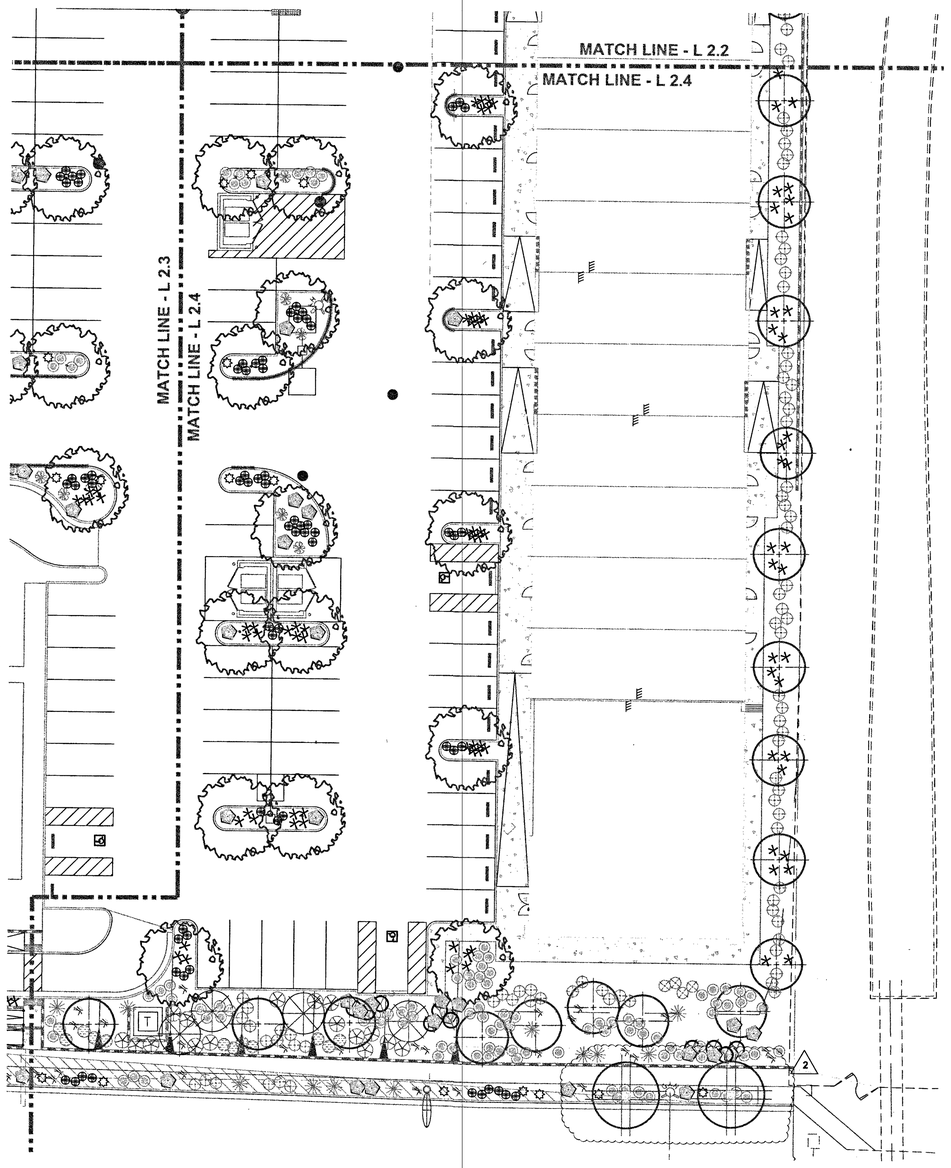
| | |
|---|---|
| NADEL PROJECT №: | 16061 |
| PROJECT DATE: | 07-05-2017 |

DRAWING TITLE:

**PLANTING PLAN**

L17-00759
10745072

**L2.3**




## PLANTING PLAN

north

0 10' 20' 40'

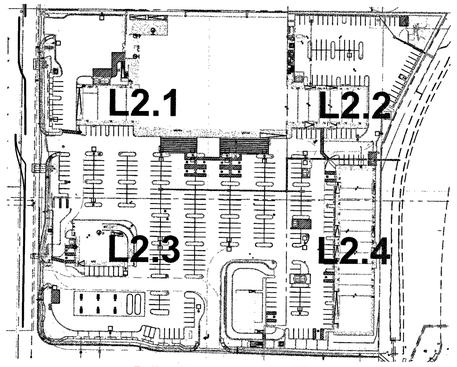
SCALE: 1"=20'-0"

PLANT SCHEDULE

| SYMBOL | BOTANICAL NAME | COMMON NAME | QTY. | SIZE | REMARKS |
|---|---|---|---|---|---|
| TREES | | | | | |
| | ELAEOCARPUS DECIPIENS | JAPANESE BLUEBERRY | 15 | 36" BOX | STANDARD TRUNK, SUBMIT PHOTOS OF TREES PRIOR TO PURCHASE FOR APPROVAL |
| | BUTIA CAPITATA | PINDO PALM | 7 | 15 GAL | |
| | OLEA EUROPAEA 'SWAN HILL' | SWAN HILL OLIVE | 57<br>6 | 36" BOX<br>48" BOX SCREEN | SEMI-MULTI TRUNK, SUBMIT PHOTOS OF TREES PRIOR TO PURCHASE FOR APPROVAL |
| | EBENOPSIS EBANO | TEXAS EBONY | 45 | 24" BOX | STANDARD TRUNK, SUBMIT PHOTOS OF TREES PRIOR TO PURCHASE FOR APPROVAL |
| | PISTACIA CHINENSIS | CHINESE PISTACHE | 7<br>3 | 24" BOX<br>48" BOX SCREEN | STANDARD TRUNK 5' CLEAR OF BRANCHES, SUBMIT PHOTOS OF TREES PRIOR TO PURCHASE FOR APPROVAL |
| | QUERCUS ILEX | HOLLY OAK | 56<br>1 | 24" BOX<br>48" BOX SCREEN | STANDARD TRUNK 5' CLEAR OF BRANCHES, SUBMIT PHOTOS OF TREES PRIOR TO PURCHASE FOR APPROVAL |
| | SOPHORA SECUNDIFLORA | TEXAS MOUNTAIN LAUREL | 36 | 24" BOX | MULTI-TRUNK (3 TO 4 TRUNKS) |
| | WASHINGTONIA FILIFERA | CALIFORNIA FAN PALM | 8 | 12' BROWN TRUNK | ALL TRUNKS ARE TO BE SKINNED STRAIGHT AND EVEN |
| | WASHINGTONIA ROBUSTA HYBRID | HYBRID MEXICAN FAN PALM | 18 | 18' BROWN TRUNK | ALL TRUNKS ARE TO BE SKINNED STRAIGHT AND EVEN |
| | XYLOSMA CONGESTUM | SHINY XYLOSMA | 6 | 24" BOX | STANDARD TRUNK 4' CLEAR |
| SHRUBS | | | | | |
| | CAESALPINIA PULCHERRIMA | RED BIRD OF PARADISE | 54 | 5 GAL | |
| | CYCAS REVOLUTA | SEGO PALM | 27 | 7 GAL | |
| | LONICERA X AMERICANA PAM'S PINK' | PAM'S PINK HONEYSUCKLE | 88 | 5 GAL | |
| | LEUCOPHYLLUM CANDIDUM THUNDER CLOUD TM | THUNDER CLOUD | 93 | 5 GAL | |
| | RHAPHIOLEPIS INDICA 'PINK LADY' | INDIAN HAWTHORN | 55 | 5 GAL | |
| | SIMMONDSIA CHINENSIS 'VISTA' | COMPACT JOJOBA | 426 | 5 GAL | |
| GROUNDCOVERS | | | | | |
| | MELAMPODIUM LEUCANTHUM | BLACK FOOT DAISY | 317 | 1 GAL | |
| | LANTANA SPECIES 'NEW GOLD' | NEW GOLD LANTANA | 105 | 1 GAL | |
| | TEUCRIUM CHAMAEDRYS | BUSH GERMANDER | 771 | 5 GAL | |
| | TRACHELOSPERMUM JASMINOIDES | STAR JASMINE | 280 | 5 GAL | |
| ACCENTS | | | | | |
| | AGAVE GEMINIFLORA | TWIN-FLOWERED AGAVE | 53 | 5 GAL | SUBMIT PHOTOS OF AGAVE PRIOR TO PURCHASE FOR APPROVAL |
| | AGAVE OVATIFOLIA | WHALE'S TONGUE AGAVE | 15 | 5 GAL | SUBMIT PHOTOS OF AGAVE PRIOR TO PURCHASE FOR APPROVAL |
| | DASYLIRION QUADRANGULATUM | TOOTHLESS SOTOL | 37 | 5 GAL | SUBMIT PHOTOS OF AGAVE PRIOR TO PURCHASE FOR APPROVAL |
| | DIETES BICOLOR | FORTNIGHT LILY | 136 | 5 GAL | |
| | HESPERALOE PARVAFLORA | RED YUCCA | 241 | 5 GAL | SUBMIT PHOTOS OF AGAVE PRIOR TO PURCHASE FOR APPROVAL |
| | YUCCA RUPICOLA | TWISTED LEAF YUCCA | 128 | 5 GAL | SUBMIT PHOTOS OF AGAVE PRIOR TO PURCHASE FOR APPROVAL |
| MATERIALS | | | | | |
| | GRANITE BOULDERS: MEDIUM TO DARK BROWN COLORING; | BOLDER SIZES NOTED BELOW IN NOTE #2 | 77 | | SEE DETAIL 'P' FOR INSTALLATION APPLICATION |
| | RIP RAP: APACHE BROWN | MIX: 75% 4"-10" & 25% 1"-4" | | | SEE DETAIL 'O' FOR INSTALLATION APPLICATION |
| CRUSHED ROCK | CRUSHED ROCK: APACHE BROWN | ROCK SIZE 1 1/2" SCREEN, ROCK DEPTH 2 1/2" | | | SEE DETAIL 'N' FOR INSTALLATION APPLICATION |

NOTES:

1. DECORATIVE 3/4"-INCH MINUS "MOHAVE GOLD" CRUSHED ROCK TO 2-INCH DEPTH IN ALL PLANTING BEDS.
2. GRANITE BOULDERS: MEDIUM TO DARK BROWN COLORING; SIZES 20-24" DIA. 25%, 24-30" DIA. 50%, 30-36" DIA. 25%, SET 1/4 OF THE BOULDERS INTO THE FINISH GRADE.
3. PRUNING OF TREES SHALL BE DIRECTED ON SITE WITH THE LANDSCAPE ARCHITECT TO THIN OUT AND ADJUST THE SHAPE OF TREES.
4. FOLLOW TREE AND SHRUB PLANTING GUIDELINES FOR TREE HOLE DEPTH AND SPAN WITH DETAILS "K, L, & M"
5. THE LANDSCAPE ARCHITECT IS TO APPROVE ALL TREES PRIOR TO PLANTING, PROVIDE 72 NOTICE.
6. THE LANDSCAPE ARCHITECT IS TO APPROVE ALL TREE HOLES PRIOR TO PLANTING ANY TREES, PROVIDE 72 NOTICE.




## KEY MAP

NTS


NADEL

NADEL NEVADA INC
175 E. WARM SPRINGS ROAD
SUITE 100
LAS VEGAS, NV 89119
T. 702.896.2000
F. 702.896.7170
WWW.NADELARC.COM


PROFESSIONAL STAMP(S):

REGISTERED LANDSCAPE ARCHITECT DAN HILL CLARK 318 STATE OF NEVADA

10-26-17

Expires: 6-30-18

CONSULTANT:


HILL CLARK & ASSOCIATES
LANDSCAPE ARCHITECTURE
94 Megan Drive
Henderson, NV 89074
P: (702) 358-8700


CLIENT:

DEER SPRINGS VILLAGE, LLC

10655 PARK RUN DRIVE #160
LAS VEGAS, NV 89144

CLIENT PROJECT №: 07-05-2016

PROJECT:

DEER SPRINGS VILLAGE

6750 N HUALAPAI WAY
LAS VEGAS, NV 89149

| | |
|---|---|
| PUBLIC AGENCY SUBMITTAL: | N/A |
| ISSUED FOR BIDDING: | N/A |
| ISSUED FOR CONSTRUCTION: | N/A |

REVISIONS:

| NO.: | DESCRIPTION: | DATE: |
|---|---|---|
| 1 | Plan Check Comments | 08-18-2017 |
| 2 | Plan Check Comments | 10-24-2017 |

BD SUBMITTAL SET

| | |
|---|---|
| NADEL PROJECT №: | 16061 |
| PROJECT DATE: | 07-05-2017 |

ISSUE:

DRAWING TITLE:

# PLANTING PLAN

L17-00759
10745072

# L2.4


ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF THE ARCHITECT AND THE SAME MAY NOT BE DUPLICATED, USED OR DISCLOSED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT. COPYRIGHT 2017 NADEL NEVADA INC. ALL RIGHTS RESERVED



C:\Users\nadel\Dropbox\16061 Nadel Deer Springs Village\Landscape\Planting Plan 10-24-17.dwg