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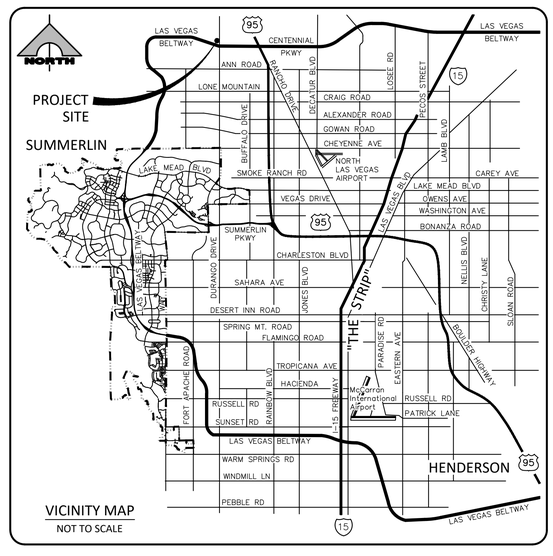
# IMPROVEMENT PLANS FOR

# EMERUS N.W. COMMUNITY HOSPITAL

## A.P.N. 125-20-319-003

## ACREAGE/AREA OF LAND DISTURBANCE:
1.76± ACRES

2023




VICINITY MAP
NOT TO SCALE

Digitally signed by Todd Kelley
DN: C=US, E=tkelley@gcwengineering.com, O=GCW INC., CN=Todd Kelley
Date: 2023.01.19 10:58:49-08'00'

STATE OF NEVADA — PROFESSIONAL ENGINEER — TODD N. KELLEY — No. 14711 — Exp. 6/30/2023 — DATE: 01/19/2023

| REV | DATE | DESCRIPTION | DATE | AGEN APP | DATE | GCW APP | DATE |
|---|---|---|---|---|---|---|---|

### CITY ENGINEER'S APPROVAL

CITY OF LAS VEGAS, CITY ENGINEERING — DATE

### APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT NO. XXXXXX — FIRST APPROVAL DATE:

LVVWD APPROVED FIRE FLOW: TOTAL X,XXX GPM / ON-SITE XXXX GPM

SHEETS: XX, XX, XX

### DRY UTILITY APPROVALS

COX COMMUNICATIONS LAS VEGAS, INC. — DATE

CENTRAL TELEPHONE CO., DBA CENTURYLINK — DATE

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

NV ENERGY — DATE

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

NV ENERGY – TRANSMISSION ENGINEERING — DATE

SOUTHWEST GAS CORPORATION — SWG UID — DATE

### CLARK COUNTY FIRE DEPARTMENT

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 = X,XXX GPM AT 20 P.S.I. RESIDUAL

### LEGAL DESCRIPTION

ALL THAT REAL PROPERTY SITUATED IN THE COUNTY OF CLARK, STATE OF NEVADA, BOUNDED AND DESCRIBED AS FOLLOWS:

GOVERNMENT LOT THIRTY-SIX (36) IN SECTION 6, TOWNSHIP 20 SOUTH, RANGE 60 EAST, M.D.M.,

ASSESSOR PARCEL NUMBER 138-06-101-001

### BASIS OF BEARING:

NORTH 89°55'50" WEST, BEING THE BEARING OF THE SOUTH LINE OF THE NORTH HALF (N 1/2) OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 20, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., AS SHOWN IN BOOK 166, PAGE 63 OF PLATS ON FILE AT THE CLARK COUNTY RECORDER'S OFFICE.

### BENCHMARK :

CITY OF LAS VEGAS VERTICAL CONTROL POINT "5LV902056", BEING A RIVET & PLATE IN TOP OF CURB AT SW CORNER OF DURANGO DR. & WESTBOUND HIGHWAY 215 ON RAMP.

ELEVATION: 2558.08 (FEET)
779.70 (METERS)

CITY OF LAS VEGAS VERTICAL CONTROL (DATE RE-OBSERVED: 2008)
BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD'88)

### DISCLAIMER NOTE:

UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UNDERGROUND AND OVERHEAD 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 LOCATIONS.

Call before you Dig
Avoid cutting underground utility lines. It's costly.
Call 811
OR
1-800-642-2444

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 DO OVERHEAD
1-702-227-2929


**ENGINEER**
GCW ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com

**OWNER**
DURANGO POINT CAPITAL MANAGEMENT LLC
3755 Breakthrough Way Ste 250
Las Vegas, NV. 89135

**DEVELOPER**
318 BRYAN CAPITAL MANAGEMENT, LLC
8872 HSC PARKWAY, SUITE 401
BRYAN, TX 77807
PHONE NO. (979) 823-8525


PROJECT NO. 398-B287
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 01-19-23
PLOT TIME: 10:50:11


GCW ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com


DANIEL LEE
F:\PROJECTS\200\398-B287\DWG\PRODUCTION\398-B287_C.DWG

EMERUS
NW COMMUNITY HOSPITAL
COVER SHEET

DRAWING
C1
1 OF 6 SHTS

## GENERAL NOTES

1. CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITION BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE FOR PROPER DRAINAGE AND OF INGRESS AND EGRESS TO SAID CONSTRUCTION. EXTENT OF TRANSITIONS TO BE DETERMINED BY THE COUNTY ENGINEER.
2. EXISTING UTILITIES ARE LOCATED ON PLANS FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. THE CONTRACTOR SHALL BEAR FULL RESPONSIBILITY FOR THE PROTECTION OF UTILITIES AND THE ENGINEER BEARS NO RESPONSIBILITY FOR UTILITIES NOT SHOWN ON PLANS OR NOT IN THE LOCATION SHOWN ON THE PLANS. (CALL BEFORE YOU DIG 800–227–2600).
3. CONSTRUCTION SURVEY: GRADES ARE GIVEN FROM TOP OF STAKES OR NAILS. THE CONTRACTORS ARE CAUTIONED TO OBSERVE THE FOLLOWING RULE IN USING THE GRADE STAKES GIVEN BY THIS OFFICE. THREE CONSECUTIVE POINTS THAT ARE SHOWN TO BE ON THE SAME RATE OF SLOPE MUST BE USED IN COMMON IN ORDER THAT ANY VARIATION OUT OF A PERFECT STRAIGHT GRADE MAY BE DETECTED. IN CASE ANY SUCH DISCREPANCY IS FOUND, THE SAME MUST BE REPORTED OTHERWISE THIS OFFICE WILL NOT BE RESPONSIBLE FOR ANY ERROR IN THE GRADE OF THE FINISH WORK.
4. WHEELCHAIR RAMPS SHALL BE CONSTRUCTED AT ALL STREET INTERSECTIONS PER CLARK COUNTY STANDARD DRAWING 235 EXACT LOCATION OF RAMP TO BE DETERMINED IN FIELD BY A CLARK COUNTY INSPECTOR.
5. STANDARD STREET SECTIONS PER CLARK COUNTY STANDARD DRAWINGS UNLESS OTHERWISE NOTED.
6. CURB AND GUTTER WITH A GRADE OF LESS THAN FOUR TENTHS OF ONE PERCENT SHALL BE CONSTRUCTED BY FORMING. EACH JOINT SHALL BE CHECKED FOR GRADE PRIOR TO CONSTRUCTION AND WATER TESTED AS SOON AS POSSIBLE AFTER CONSTRUCTION.
7. FINAL ASPHALTIC CONCRETE (AC) PAVEMENT SURFACES SHALL BE ONE–HALF INCH ABOVE LIP OF THE GUTTER (INCLUDING OPEN GRADE).
8. EXACT LOCATION OF ALL SAWCUTS TO BE DETERMINED IN THE FIELD BY A CLARK COUNTY INSPECTOR.
9. VALLEY GUTTER WITH A GRADE OF FOUR TENTHS OF ONE PERCENT OR LESS SHALL BE CHECKED FOR GRADE PRIOR TO CONSTRUCTION AND WATER TESTED AS SOON AS POSSIBLE AFTER CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE PROPER DRAINAGE ACROSS ALL VALLEY GUTTERS.
10. ALL OFF–SITE IMPROVEMENT CONSTRUCTION SHALL CONFORM TO THE "UNIFORM STANDARD SPECIFICATIONS AND STANDARD DRAWINGS CLARK COUNTY AREA NEVADA" AND "CLARK COUNTY SUPPLEMENT TO UNIFORM STANDARD DRAWINGS AND SPECIFICATIONS", LATEST REVISION.
11. NEITHER THE OWNER NOR ENGINEER ASSUMES ANY RESPONSIBILITY FOR UTILITIES OR STRUCTURES NOT SHOWN ON THE DRAWINGS. CONTRACTOR TO VERIFY THE EXACT LOCATION OF UTILITIES PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR'S RESPONSIBILITIES REGARDING UTILITIES SHALL BE AS REQUIRED UNDER SECTION 107.17 OF THE UNIFORM STANDARD SPECIFICATIONS FOR CLARK COUNTY AREA, NEVADA AND AS PROVIDED IN THE SPECIFICATIONS. THE CONTRACTOR SHALL USE EXTREME CARE WORKING OVER OR NEAR ANY EXISTING GAS MAINS.
12. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING IMPROVEMENTS, WHICH ARE TO REMAIN IN PLACE FROM DAMAGE. ALL SUCH IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR RECONSTRUCTED TO THE SATISFACTION OF THE ENGINEER AT THE EXPENSE OF THE CONTRACTOR.
13. FENCES, SIGNS, STRUCTURES, LIGHTS AND OTHER EXISTING IMPROVEMENTS WITHIN STREET R/W SHALL BE REMOVED WHERE SHOWN ON THE CONTRACT DRAWINGS, AND AS REQUIRED BY THE ENGINEER.
14. REPLACEMENT, RELOCATION OR RECONSTRUCTION OF ALL EXISTING IMPROVEMENTS INCLUDING FENCES, WALL SIGNS, AND ALL OTHER ITEMS APPLICABLE TO THIS CONTRACT SHALL BE AS REQUIRED BY THE ENGINEER.
15. ALL BARRICADING AND TEMPORARY TRAFFIC CONTROL DEVICES OR METHODS USED DURING CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE "NEVADA TRAFFIC CONTROL MANUAL, 1986 PUBLISHED BY THE STATE OF NEVADA, DEPARTMENT OF TRANSPORTATION, EXCEPT AS OTHERWISE PROVIDED IN THE CONTRACT DRAWINGS.
16. THE CONTRACTOR SHALL BACKFILL AND FINAL GRADE ALL CUT OR FILL SLOPES TO MATCH EXISTING CONDITIONS TO THE SATISFACTION OF THE ENGINEER.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE VERTICAL ADJUSTMENT OF ALL EXISTING SANITARY, WATER AND STORM SEWER MANHOLES TO THE FINAL FINISH GRADES IN ACCORDANCE WITH THE DETAILS SHOWN ON THE CONTRACT DRAWINGS AND IN ACCORDANCE WITH SECTION 609 OF THE "STANDARD SPECIFICATIONS".
18. ALL GRADING SHALL BE IN ACCORDANCE WITH THE SPECIFICATION MANUAL AND THE SOILS REPORT AS PREPARED BY **Nova Geotechnical & Inspection Services** PROJECT NUMBER **G–20–085**, DATED **JULY 17, 2020** AND ADDENDUM BY UNIVERSAL ENGINEERING SERVICES, DATED MARCH 28, 2022
19. WHERE CONFLICTS OCCUR THE MOST RESTRICTIVE SHALL GOVERN.
20. 48 HOURS PRIOR TO START OF CONSTRUCTION THE CONTRACTOR SHALL CONTACT:

| | |
|---|---|
| NV ENERGY | PHONE – (702) 402–8400 |
| CENTRAL TELEPHONE COMPANY | PHONE – (702) 244–7055 |
| SOUTHWEST GAS CORPORATION | PHONE – (702) 651–2111 |
| LAS VEGAS VALLEY WATER DISTRICT | PHONE – (702) 870–2011 |

21. PRIVATE STREETS, CURB & GUTTER AND VALLEY GUTTERS REFLECTED ON THESE PLANS ARE TO BE INSPECTED BY A CLARK COUNTY INSPECTOR.

## CLARK COUNTY DEPARTMENT OF PUBLIC WORKS DEVELOPMENT REVIEW CONSTRUCTION NOTES

1. INSPECTIONS ARE REQUIRED. CALL 24 HOURS IN ADVANCE (702) 455–4610. THE PERMIT, APPROVED PLANS, AND BARRICADE PLANS FOR THIS WORK MUST BE ON THE JOB SITE AT ALL TIMES.
2. EXACT LOCATION OF ALL SAW–CUT LINES SHALL BE DETERMINED IN THE FIELD BY A CLARK COUNTY INSPECTOR.
3. CURB AND GUTTER WITH A GRADE OF LESS THAT 4/10 OF ONE PERCENT SHALL BE CONSTRUCTED BY FORMING. EACH JOINT SHALL BE CHECKED FOR GRADE PRIOR TO CONSTRUCTION AND WATER TESTED AS SOON AS POSSIBLE AFTER CONSTRUCTION.
4. FINAL ASPHALTIC CONCRETE (AC) PAVEMENT SURFACES SHALL BE ONE–HALF (1/2") INCH ABOVE THE LIP OF THE GUTTER (INCLUDING OPEN GRADE).
5. ALL OFF–SITE IMPROVEMENT CONSTRUCTION SHALL CONFORM TO THE UNIFORM STANDARD SPECIFICATIONS AND STANDARD DRAWINGS CLARK COUNTY AREA NEVADA AND CLARK COUNTY SUPPLEMENT TO UNIFORM STANDARD DRAWINGS AND SPECIFICATIONS, LATEST REVISION EXCEPT FOR LUMINAIRES. REFER TO CLARK COUNTY PUBLIC WORKS QUALIFIED PRODUCTS LIST "QPL" FOR LED LUMINAIRES.

   QPL CAN BE FOUND ONLINE AT
   HTTP://WWW.CLARKCOUNTYNV.GOV/GOVERNMENT/DEPARTMENTS/PUBLIC_WORKS_DEPARTMENT/PROGRAMS_AND_SERVICES/LED_UPGRADE.PHP
6. PRIVATE STREETS CURB & GUTTER AND VALLEY GUTTERS REFLECTED ON THESE PLANS ARE TO BE INSPECTED BY A CLARK COUNTY INSPECTOR.
7. WHEEL CHAIR RAMPS SHALL BE CONSTRUCTED IN EACH QUADRANT OF AN INTERSECTION PER STANDARD DRAWING 235. EXACT LOCATION OF RAMPS SHALL BE DETERMINED IN THE FIELD BY A CLARK COUNTY INSPECTOR.
8. PROPER SIGNS, BARRIERS, BARRICADES AND LIGHTS SHALL BE PLACED AND MAINTAINED IN ACCORDANCE WITH THE LATEST "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS." TRAFFIC, SCHOOL, OR STREET SIGNS OF ANY KIND ARE NOT TO BE MOVED FOR ANY REASON WITHOUT FIRST COORDINATING WITH THE DEPARTMENT OF PUBLIC WORKS OFFSITE INSPECTOR AT (702) 455–4610.
9. THIS PLAN DOES NOT AUTHORIZE CLOSURE OF ANY ROAD OR STREET.
10. NO OPEN TRENCH SHALL BE ALLOWED ACROSS ANY STREET OR WITHIN TEN (10) FEET OF ANY TRAVEL–WAY, EXCEPT WHEN WORK IS IN ACTUAL PROGRESS. AREAS COVERED BY ACCEPTABLE STEEL PLATE ARE NOT TO BE CONSTRUED AS A TRENCH. NO OPEN TRENCH IS PERMITTED IN EXCESS OF 500 FEET OR LENGTH NECESSARY TO ACCOMMODATE PIPE INSTALLATION IN A SINGLE DAY, WHICH EVER IS GREATER. ALL TRENCH CROSSINGS AND BACKFILL SHALL MEET THE STANDARD SPECIFICATION UNLESS OTHERWISE STATED.
11. A TEMPORARY PATCH IS TO BE IN PLACE AT THE END OF EACH WORK DAY WHERE THE BACKFILL IN THE TRENCH HAS BEEN COMPLETED AND PRIOR TO OPENING THE WORK AREA BACK TO TRAFFIC AND IS TO BE MAINTAINED BY THE PERMITTEE. A PERMANENT PATCH IS TO BE IN PLACE WITHIN THIRTY (30) DAYS AFTER THE INSTALLATION OF THE TEMPORARY PATCH.
12. COMPACTION TESTS ARE REQUIRED.

REVISED TBD 2021

## CLARK COUNTY FIRE DEPARTMENT

GENERAL
a. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE CLARK COUNTY FIRE CODE AS AMENDED, THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS (UDACS) AS ADOPTED BY CLARK COUNTY AND THE CURRENTLY ADOPTED EDITION OF NFPA 24.
b. FIRE HYDRANTS AND WATER SUPPLIES FOR FIRE PROTECTION SHALL BE INSTALLED, INSPECTED BY FIRE PREVENTION AND IN SERVICE PRIOR TO AND DURING THE TIME OF CONSTRUCTION IN ACCORDANCE WITH SECTION 3312 OF THE IFC, AS AMENDED. FIRE HYDRANTS SHALL BE WITHIN 300 FEET OF COMBUSTIBLE MATERIALS.
c. IF DURING CONSTRUCTION IT BECOMES NECESSARY TO CLOSE ANY CONTROL VALVE OR PLACE A HYDRANT OUT OF SERVICE, APPROVAL SHALL BE OBTAINED FROM THE CLARK COUNTY FIRE PREVENTION PRIOR TO PLACING THE HYDRANT OUT OF SERVICE.

FIRE HYDRANTS
a. FIRE HYDRANTS SHALL BE INSTALLED IN ACCORDANCE WITH THE MOST CURRENT EDITION OF UDACS, NFPA 24 AND THIS GUIDELINE. FIRE HYDRANTS SHALL BE MAINTAINED IN ACCORDANCE WITH NFPA 25 AND KEPT IN AN OPERATIVE CONDITION WITH THE REQUIRED WATER SUPPLY.
b. MANUFACTURER AND MODEL OF FIRE HYDRANTS SHALL CONFORM TO THE APPROVED MATERIALS LIST OF THE WATER PURVEYOR.
c. HYDRANTS SHALL BE INSTALLED WITH THEIR PUMPER OUTLET NOZZLE (STEAMER CONNECTION) FACING THE FIRE ACCESS ROAD. A 3–FOOT CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF FIRE HYDRANTS. WHERE HYDRANTS ARE SUBJECT TO IMPACT BY MOTOR VEHICLES, GUARD POSTS (PIPE BOLLARDS) SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 312.
d. PUBLIC HYDRANTS SHALL BE PAINTED SAFETY YELLOW AND PRIVATE HYDRANTS SHALL BE PAINTED RED.
e. FIRE HYDRANTS SHALL BE LOCATED 4 TO 7 FEET FROM BACK OF CURB.
f. PAINTING OF CURBS AND/OR ASPHALT AREAS ADJACENT TO HYDRANTS SHALL BE COMPLETED BY THE INSTALLER PRIOR TO BOND RELEASE INSPECTION. A COAT OF EXTERIOR INDUSTRIAL GRADE SAFETY RED ENAMEL SHALL BE APPLIED FOR A MINIMUM OF 30 FEET (15 FEET ON EACH SIDE OF THE HYDRANT).
g. HYDRANT LOCATIONS SHALL BE MARKED BY MEANS OF A BLUE REFLECTIVE PAVEMENT MARKER INSTALLED IN THE CENTER OF THE FIRE ACCESS DRIVE LANE NEAREST TO THE HYDRANT.

FIRE DEPARTMENT CONNECTIONS
a. FIRE DEPARTMENT CONNECTIONS SHALL BE LOCATED WITHIN 100 FEET OF A FIRE HYDRANT AS MEASURED BY AN APPROVED UNOBSTRUCTED ROUTE. AN APPROVED ROUTE IS DEFINED AS AN UNOBSTRUCTED PATH OF TRAVEL ON WHICH HOSE CAN EASILY BE LAID.
b. FIRE DEPARTMENT CONNECTIONS SHALL BE LOCATED ON THE FIRE DEPARTMENT ACCESS SIDE OF BUILDINGS, FULLY VISIBLE AND RECOGNIZABLE FROM THE ACCESS ROAD OR NEAREST POINT OF FIRE DEPARTMENT VEHICLE ACCESS (FIRE LANE) OR AS OTHERWISE APPROVED BY THE FIRE CHIEF.
c. FIRE DEPARTMENT CONNECTIONS SHALL NOT BE CLOSER THAN 3 FEET TO ANY DOOR OR WINDOW OPENING AND SHALL NOT BE OBSTRUCTED BY TREES, SHRUBS, PARKING SPACES, ETC.
d. FIRE DEPARTMENT CONNECTIONS SHALL BE LOCATED NOT LESS THAN 18 INCHES AND NOT MORE THAN 48 INCHES ABOVE THE LEVEL OF THE ADJACENT GRADE OR ACCESS LEVEL.

UNDERGROUND PIPING & VALVES
a. UNDERGROUND PIPING SHALL HAVE A MINIMUM WORKING PRESSURE OF 150 PSI (CLASS 235). UNDERGROUND PIPING CONNECTED TO A FIRE PUMP OR A FIRE DEPARTMENT CONNECTION (FDC) SHALL HAVE A MINIMUM WORKING PRESSURE OF 200 PSI (CLASS 305).
b. FOR PRIVATE FIRE SERVICE MAINS TWO SOURCES OF WATER SUPPLY ARE REQUIRED WHENEVER 4 OR MORE FIRE HYDRANTS AND/OR FIRE SPRINKLER LEAD–INS ARE INSTALLED ON A SINGLE SYSTEM. WATER SYSTEMS UNDER THE PURVIEW OF THE LAS VEGAS VALLEY WATER DISTRICT SHALL CONFORM TO THE LAS VEGAS VALLEY WATER DISTRICT RULES.
c. FOR PRIVATE FIRE SERVICE MAINS SECTIONAL CONTROL VALVES SHALL BE INSTALLED SO THAT NO MORE THAN 2 FIRE HYDRANTS AND/OR FIRE SPRINKLER IN BUILDING RISERS (LEAD–INS) CAN BE OUT OF SERVICE DUE TO A BREAK IN A WATER MAIN. WATER SYSTEMS UNDER THE PURVIEW OF THE LAS VEGAS VALLEY WATER DISTRICT SHALL CONFORM TO THE LAS VEGAS VALLEY WATER DISTRICT RULES.
d. ALL PIPING AND VALVES SUPPLYING FIRE SPRINKLER SYSTEMS SHALL BE PROTECTED FROM FREEZING WHEN EXPOSED TO TEMPERATURES LESS THAN 40T. FREEZE PROTECTION SHALL BE APPROVED BY CLARK COUNTY FIRE PREVENTION AND BE DURABLE AND PERMANENT.
e. ALL REQUIRED HYDROSTATIC TESTING AND FLUSHING OF THE PRIVATE FIRE SERVICE MAIN OR UNDERGROUND FIRE SPRINKLER/STANDPIPE WATER SUPPLY PIPING SHALL BE PERFORMED IN THE PRESENCE OF CLARK COUNTY FIRE PREVENTION STAFF. THE PIPING JOINTS SHALL BE UNCOVERED UNTIL INSPECTED. THE INSTALLING CONTRACTOR SHALL FURNISH A "CONTRACTOR'S MATERIAL AND TESTING CERTIFICATE" (CM&T) COUNTERSIGNED BY THE PROPERTY OWNER OR REPRESENTATIVE. THE CM&T SHALL BE FILLED OUT COMPLETELY WITH THE INSPECTOR'S INITIALS, WITNESSING EACH TEST. A COPY OF THE UNDERGROUND FLUSH AND HYDROSTATIC TESTING DOCUMENTATION SHALL BE ON–SITE AND SIGNED PRIOR TO THE CONNECTION OF THE UNDERGROUND WATER SUPPLY TO THE FIRE SPRINKLER SYSTEM.

GATES
a. SHOP DRAWINGS FOR ALL GATES AND MOTORIZED OPENERS SERVING FIRE DEPARTMENT ACCESS ROADS SHALL BE SUBMITTED SEPARATELY UNDER A SEPARATE PERMIT FOR REVIEW BY THE CLARK COUNTY BUILDING DEPARTMENT AND FIRE PREVENTION AND RECEIVE APPROVAL PRIOR TO THEIR INSTALLATION.

FIRE APPARATUS ACCESS ROADS
a. SPEED BUMPS AND/OR SPEED HUMPS SHALL NOT BE PERMITTED WITHIN THE REQUIRED WIDTH OF FIRE APPARATUS ACCESS ROADS.

   EXCEPTIONS:
   1. SPEED HUMPS ARE ALLOWED ON PRIVATE FIRE APPARATUS ACCESS ROADS SERVING COMMERCIAL AND INDUSTRIAL BUILDINGS WHEN APPROVED BY THE FIRE CODE OFFICIAL.
   2. RUMBLE STRIPS ARE ALLOWED ON PRIVATE FIRE APPARATUS ACCESS ROADS SERVING RESIDENTIAL, COMMERCIAL AND INDUSTRIAL BUILDINGS WHEN APPROVED BY THE FIRE CODE OFFICIAL.

b. A MAXIMUM OF SIX (6) SINGLE FAMILY HOMES (IBC GROUP R–3) OR STRUCTURES CONSTRUCTED IN ACCORDANCE WITH THE IRC, MAY BE SITUATED ON A 25 FOOT WIDE STREET (STUB STREET) HAVING A MAXIMUM LENGTH OF 150 FEET WHEN ALL HOMES ARE PROVIDED WITH AN APPROVED AUTOMATIC SPRINKLER SYSTEM. THE MINIMUM WIDTH SHALL BE 25 FEET MEASURED FROM BACK–OF–CURB TO BACK–OF–CURB AND ON–STREET PARKING SHALL BE PROHIBITED ON SUCH STUB STREETS.
c. FIRE APPARATUS ACCESS ROADS SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF FIRE APPARATUS, WITH A MINIMUM VEHICLE LOAD OF 33,000 POUNDS PER AXLE, AND SHALL BE SURFACED AND PAVED SO AS TO PROVIDE ALL–WEATHER DRIVING CAPABILITIES.
d. FIRE APPARATUS ACCESS ROADS INCLUDING ELEVATED PORTIONS SHALL BE DESIGNED WITH A GROUND BEARING CAPACITY NOT LESS THAN 75 PSI OVER THE GROUND CONTACT AREA.

## FIRE FLOW CALCULATIONS

| | |
|---|---|
| TYPE OF CONSTRUCTION: | TYPE IB |
| TOTAL LIVING AREA (RESIDENTIAL SQ FT): | N/A |
| TOTAL FIRE AREA: | 22,848 |
| NUMBER OF STORIES: | 2 (MAX) |
| TYPE IA or IB CONSTRUCTION: | |
| AREA OF THREE (3) LARGEST FLOORS: | 23,087 |
| BUILDING HEIGHT: | 56'4" |
| HIGH–RISE BUILDING: | YES ☐ NO ☒ |
| MID–RISE BUILDING: | YES ☐ NO ☒ |
| IBC USE GROUP: | I2 |
| SPRINKLER SYSTEM: | YES ☒ NO ☐ |
| NUMBER OF HYDRANTS INSTALLED: | 2 |
| FIRE FLOW ONSITE: | 1750 |
| TOTAL FIRE FLOW: | 1750 GPM at 20 PSI |

## LAS VEGAS VALLEY WATER DISTRICT
## LVVWD PROJECT # XXXXXX

(REVISED 10/18/2021)

1. NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN APPROVED FOR CONSTRUCTION BY THE LVVWD. FOLLOWING WATER PLAN APPROVAL, NOTICE SHALL BE GIVEN TO THE LVVWD COMMUNICATION SUPPORT CENTER (258–7171) TWO (2) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION. FOR FUTURE INSPECTIONS, NOTICE MUST BE GIVEN BY 2:00 P.M. THE BUSINESS DAY PRIOR TO THE REQUESTED LVVWD INSPECTION. WHEN REQUESTING INSPECTIONS, PLEASE REFER TO THE PROJECT # IDENTIFIED ABOVE.
2. ALL WORK SHALL CONFORM TO LVVWD STANDARD PLATES, DRAWINGS, AND SPECIFICATIONS, AND TO THE 2010 EDITION OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS). THE LATEST EDITION OF UDACS SHALL SUPERSEDE ANY CONFLICTS CONTAINED IN THE APPROVED DRAWINGS AND/OR SPECIFICATIONS.
3. ALL WORK, EXCEPT AS MODIFIED BY THESE PLANS OR BY NOTE 2 ABOVE, SHALL BE DONE IN ACCORDANCE WITH THE MOST RECENT DRAFT OR EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENT, CLARK COUNTY AREA.
4. A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVVWD.
5. ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE TYPE K COPPER TUBING WITH LVVWD APPROVED SERVICE SADDLES.
6. ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
7. ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEY AND CURB GUTTERS.
8. ALL WATER AND STORM DRAIN OR SANITARY SEWER CROSSINGS SHALL CONFORM TO SECTION 2.22 OF THE 2010 EDITION OF THE UDACS
9. ALL WATER FACILITIES AND APPURTENANCES SHALL BE DISINFECTED, PRESSURE TESTED, AND HAVE AN ACCEPTABLE PASSING HEALTH WATER SAMPLE OBTAINED, PRIOR TO OPERATION AND USE.
10. THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES AND SMALLER FROM LVVWD CENTRAL STORES. TELEPHONE 258–3152 OR 258–3802, TWO (2) WORKING DAYS PRIOR TO METER PICKUP.
11. ANY INTERRUPTION OF SERVICE MUST BE PERFORMED IN ACCORDANCE WITH UDACS SECTION 3.14.01, AND APPROVED BY THE LVVWD INSPECTION DIVISION PRIOR TO SHUTDOWN. PROPER WRITTEN NOTIFICATION MUST BE GIVEN TO ALL AFFECTED CUSTOMERS.
12. ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE LISTED ON THE LVVWD APPROVED PRODUCT'S LIST (APL) FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS BY SUBMITTING SHOP DRAWINGS.
13. TELEPHONE USA NORTH 811 "CALL 811 BEFORE YOU DIG" AT 811 OR 1–800–642–2444.
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 DONE BY THE LVVWD TO THE MUNICIPAL WATER FACILITIES WILL INCLUDE THE PLACEMENT OF AN APPROPRIATELY SIZED ASPHALT REPAIR PATCH ON THE STREET SURFACE.

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

15. NO LEAD COMPLIANCE NOTE:

    TO COMPLY WITH THE FEDERAL SAFE DRINKING WATER ACT, ALL WATER WORKS BRASS PRODUCTS PROPOSED TO BE RELOCATED, OR INSTALLED AS NEW MUST BE INSTALLED WITH THE LEAD FREE APPROVED PRODUCT. THE OLD LEADED PRODUCT MAY NOT BE REUSED.

16. PROTECT IN PLACE AND ADJUST LVVWD EXISTING FACILITIES TO FINISHED GRADE PER UDACS PLATES. ALL LVVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.
17. DRY UTILITY NOTES: MAINTAIN A MINIMUM 12" VERTICAL SEPARATION AT ALL POINTS OF CROSSING. MAINTAIN A MINIMUM 3' PARALLEL SEPERATION.

## 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.
11. SEWER SERVICES AS APPROVED ON THIS PLAN, ARE INTENDED SPECIFICALLY FOR THE LOT AND USE SHOWN, AND ARE NOT INTENDED TO SERVE ADDITIONAL PARCELS OR STRUCTURES WHICH MAY BE CREATED IN THE FUTURE. IN THE EVENT THAT THE PARCEL AND/OR LOTS SHOWN ON THIS PLAN ARE FURTHER DIVIDED TO CREATE ADDITIONAL PARCELS OR LOTS, THE OWNER IS REQUIRED TO PROVIDE SEPARATE SEWER SERVICES TO EACH.

REVISED 09/16/20

## LAS VEGAS VALLEY CONSTRUCTION STORMWATER RUNOFF MANAGEMENT - STANDARD 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 ACCUMULATE IN, THE PUBLIC RIGHTS OF WAYS 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 CLARK COUNTY 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, SITE STABILIZATION REQUIREMENTS, SCHEDULES AND DEADLINES.
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, INSPECTIONS SECTION.
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.
6. AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL RESPOND TO STORMWATER INSPECTION CORRECTIVE ACTIONS IN THE MANNER PRESCRIBED BY CLARK COUNTY, INCLUDING BUT NOT LIMITED TO PROVIDING PHOTOS AND DESCRIPTIONS OF THE CORRECTION COMPLETED BY THE CONTRACTOR OR HIS AGENT.

## FEMA FLOOD ZONE DESIGNATION

THIS PROJECT IS LOCATED WITHIN A FEMA DESIGNATED FLOOD ZONE X PER FIRM PANEL 32003C1745E DATED SEPTEMBER 27, 2002. ZONE X IS DEFINED AS AREAS DETERMINED TO BE OUTSIDE 0.2% ANNUAL CHANCE FLOODPLAIN.

## CLARK COUNTY TRAFFIC NOTES

1. ALL PERMANENT TRAFFIC CONTROL DEVICES CALL

## ABBREVIATIONS

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

## LEGEND

- TYPICAL EXISTING LINEWORK
- TYPICAL FUTURE LINEWORK
- TYPICAL PROPOSED LINEWORK
- TYPICAL SIDEWALK AND RAMP W/ CURB & GUTTER
- CENTERLINE
- CONTOUR (MAJOR)
- CONTOUR (MINOR)
- DAYLIGHT GRADING
- EASEMENT LINE
- EDGE OF PAVEMENT
- ENCASEMENT (CONC OR STL)
- FENCE (CHAIN LINK)
- FENCE (WROUGHT IRON)
- FENCE (POST & CABLE)
- FLOWLINE
- GRADE BREAK
- HYDRAULIC GRADE LINE
- IRRIGATION SLEEVE
- LOTLINE
- PEDESTRIAN ACCESS
- PROPERTY LINE/BOUNDRY
- RETAINING WALL
- RIGHT-OF-WAY LINE
- ROCKERY WALL
- SAWCUT
- SCARPLINE
- SCREEN OR GROUTED WALL
- SEWER LINE W/ MANHOLE
- SIGHT VISIBILITY ZONE
- STORM LINE W/ MANHOLE
- SWALE FLOWLINE
- WATER LINE W/ GATE VALVE
- CBL — EX. CABLE TV
- ELEC — EX. ELECTRICAL
- EX. ELEC & PWR POLES
- PE GAS — EX. GAS LINE
- OPL — EX. OVERHEAD POWER LINES
- TEL — EX. TELEPHONE
- 1/C — DETAIL BUBBLE W/ REF.
- BENCHMARK
- GATE VALVE
- PRV — PRESSURE REDUCING VALVE
- BWV — BACK WATER VALVE
- DROP INLET
- FIRE HYDRANT
- WATER METER
- WATER RPPA
- WATER RPDA
- TRAFFIC SIGNAL PULL BOX
- STREET LIGHT CLARK COUNTY
- STREET LIGHT SUMMERLIN STD
- TRAFFIC SIGNAL/FLASHER
- EXISTING TELE POLE
- EXISTING POWER POLE
- EXISTING POLE
- EX. ELEC MARKER
- TRANSFORMER PAD
- SERVICE PEDESTAL
- PULLBOX
- 3005 — PROPOSED CONTOUR
- (3005) — EXISTING CONTOUR
- 60.50 TC — PROPOSED SPOT ELEVATION
- (60.5) TC — EXISTING SPOT ELEVATION
- 1.00% — PROPOSED SLOPE
- TOP SLOPE / TOE SLOPE — SLOPE DIRECTION
- FF = 2333.25 — FINISH FLOOR ELEVATION

## ROADWAY IMPROVEMENTS

| DESCRIPTION | UNIT | PUBLIC | PRIVATE |
|---|---|---|---|
| TYPE II GRAVEL | CY | | |
| 2-INCH ASPHALTIC CONCRETE PAVING | SY | | |
| "A" CURB \| "L" CURB & GUTTER \| ROLL CURB | LF | | |
| SIDEWALK RAMP | EA | | |
| COMMERICAL DRIVEWAY | SF | | |
| CONCRETE CROSS GUTTER | SF | | |
| 4-INCH CONCRETE SIDEWALK | SF | | |
| SIDEWALK UNDERDRAIN | EA | | |
| SURVEY MONUMENTS: TYPE II | EA | | |

## TRAFFIC IMPROVEMENTS

| DESCRIPTION | UNIT | PUBLIC | PRIVATE |
|---|---|---|---|
| STREETLIGHT (STANDARD BASE) | EA | | |
| STREETLIGHT, DOUBLE ARM (STANDARD BASE) | EA | | |
| TRAFFIC SIGNAL POLE AND LUMINAIRE | EA | | |
| PULLBOX, #3 | EA | | |
| STREETLIGHT CONDUIT, 1.25-INCH | LF | | |
| SL 200 AMP SERVICE | EA | | |
| STREET SIGNS | EA | | |
| 8-INCH WIDE WHITE PAINTED LINE | LF | | |

## STORM IMPROVEMENTS

| DESCRIPTION | UNIT | PUBLIC | PRIVATE |
|---|---|---|---|
| 8-INCH PVC STORM DRAIN | LF | | 4 |
| 18"x18" DROP INLET | EA | | 1 |
| RIPRAP (D50 = 3") (THICKNESS=6") | CY | | 15 |

## WATER IMPROVEMENTS

| DESCRIPTION | UNIT | PUBLIC | PRIVATE |
|---|---|---|---|
| 6-INCH WATER MAIN | LF | | |
| 8-INCH WATER MAIN | LF | | |
| IRRIGATION SLEEVES | LF | | |
| FIRE HYDRANT | EA | | |
| WATER SERVICE W/ METER | EA | | |
| 6-INCH RPDA | EA | | |

## SEWER IMPROVEMENTS

| DESCRIPTION | UNIT | PUBLIC | PRIVATE |
|---|---|---|---|
| 8-INCH SEWER | LF | | |
| 8-INCH SEWER, C900 | LF | | |
| SEWER MANHOLE (<6') | EA | | |
| BACKWATER VALVES | EA | | |
| SEWER SERVICE | EA | | |

CONTRACTOR TO FIELD VERIFY SIZE, LOCATION AND INVERT OF EXISTING PIPE, AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO NEW SEWER CONSTRUCTION

## CAUTION: HIGH PRESSURE GAS!!

CALL SOUTHWEST GAS AT 702-278-8451 FOR STANDBY WHEN EXCAVATING (INCLUDING SAW CUTTING AND PAVEMENT REMOVAL) OVER OR NEAR HIGH PRESSURE GAS LINES 48 HOURS PRIOR TO CONSTRUCTION.

## SOUTHERN NEVADA - SOUTHWEST GAS CORPORATION GENERAL NOTES

1. IN THE EVENT OF NATURAL GAS EMERGENCIES CALL 911 AND 1-877-860-6020.
2. MINIMUM HORIZONTAL AND VERTICAL CLEARANCES BETWEEN NATURAL GAS FACILITIES AND ANY UNDERGROUND UTILITIES AND/OR STRUCTURES, INCLUDING BUT NOT LIMITED TO WATER, SEWER, STORM DRAIN, COMMUNICATIONS, AND ELECTRIC SHALL BE AT LEAST 12-INCHES OR GREATER AS DICTATED BY LOCAL CODES AND STANDARDS.
   a) ANY DEVIATION FROM SPECIFIED MINIMUM CLEARANCES MUST BE APPROVED BY ALL AFFECTED UTILITIES AND/OR MUNICIPALITIES
3. FOR VALVE ADJUSTMENT CONTACT 702-528-7855 14 DAYS PRIOR TO CONSTRUCTION
4. FOR ADJUSTMENT OF CATHODIC PROTECTION TEST POINTS CONTACT 702-528-7873 14 DAYS PRIOR TO CONSTRUCTION.
5. IN THE EVENT OF A NATURAL GAS CONFLICT WITH PROPOSED UTILITIES AND STRUCTURES CONTACT 702-365-2099
6. FOR STANDBY WHEN EXCAVATING (INCLUDING SAW CUTTING AND PAVEMENT REMOVAL) OVER OR NEAR HIGH PRESSURE GAS LINES CONTACT 702-278-8451 48 HOURS PRIOR TO CONSTRUCTION.

## APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT NO. XXXXXX FIRST APPROVAL DATE: _____

LVVWD APPROVED FIRE FLOW: TOTAL X,XXX GPM / ON-SITE XXXX GPM

STATE OF NEVADA — PROFESSIONAL ENGINEER — TODD N. KELLEY — Exp. 6/30/2023 — No. 14711

DATE: 01/19/2023

| REV | DATE | DESCRIPTION | DATE | AGEN APP | DATE | GCW APP |
|---|---|---|---|---|---|---|
| | | | | | | |

PROJECT NO. 398-B287

DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 01-19-23
PLOT TIME: 10:51:32

GCW ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com

DANIEL LEE

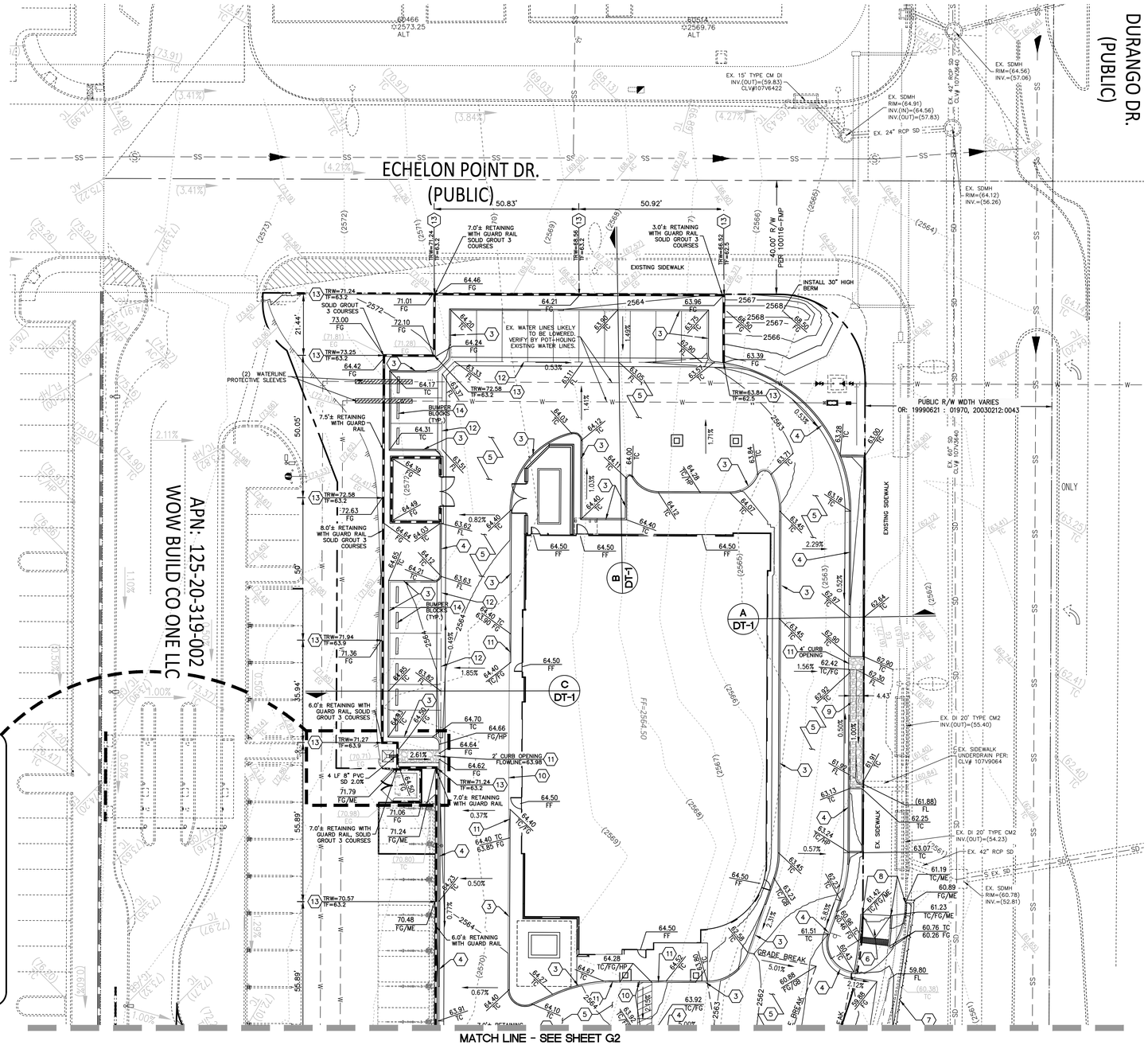
F:\PROJECTS\300\398-B287\DWG\PRODUCTION\398-B287_C.DWG

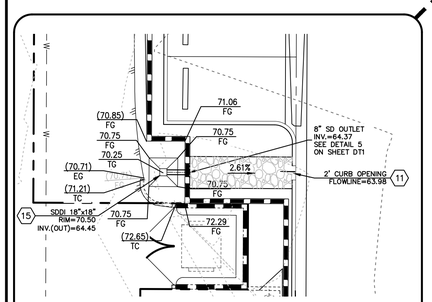
EMERUS

NW COMMUNITY HOSPITAL

PROJECT DATA

DRAWING
C3
3 OF 6 SHTS

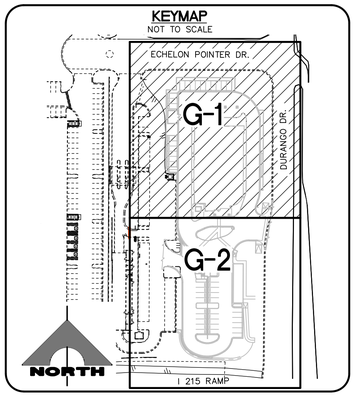



1 STORM DRAIN INLET GRADING DETAIL

NOT TO SCALE

APN: 125-20-319-002
WOW BUILD CO ONE LLC




## NOTES:

1. ALL ONSITE STORM DRAINS AND THE ASSOCIATED FACILITIES ARE PRIVATELY OWNED AND TO BE PRIVATELY MAINTAINED BY THE HOA.
2. CURB FLOW LINES LESS THAN 0.60% GRADE SHALL BE WATER TESTED. ANY CURB THAT DOES NOT FLOW SHALL BE REMOVED AND REPLACED AT NO COAST TO THE CITY.

**Call before you Dig**
Avoid cutting underground utility lines. It's costly.
Call 811
OR
1-800-642-2444

**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 DO OVERHEAD
1-702-227-2929

## FEMA FLOOD ZONE DESIGNATION

THIS PROJECT IS LOCATED WITHIN A FEMA DESIGNATED FLOOD ZONE X PER FIRM PANEL 32003C1745E DATED SEPTEMBER 27, 2002. ZONE X IS DEFINED AS AREAS DETERMINED TO BE OUTSIDE 0.2% ANNUAL CHANCE FLOODPLAIN.

## NOTES TO CONTRACTOR

EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.

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## SVZ NOTE:

NO WALLS, FENCES, SHRUBS, UTILITY APPURTENANCES OR ANY OTHER OBJECT, OTHER THAN TRAFFIC CONTROL DEVICES, FIRE HYDRANTS, TREES, 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 TOP OF CURB, OR WHERE NO CURB EXISTS, A HEIGHT OF 27 INCHES MEASURED FROM THE TOP OF ADJACENT ASPHALT, GRAVEL OR PAVEMENT STREET SURFACE. THIS RESTRICTION EXTENDS ALONG THE SIGHT VISIBILITY LINE THROUGH LANDSCAPED MEDIANS..

## DRAINAGE STUDY COMPLIANCE

I CERTIFY THAT THE GRADING PLANS ARE IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY _____ ON FILE AT THE CITY OF LAS VEGAS FOR THIS PROJECT.

TODD KELLEY, P.E. DATE
NEVADA PE #14711

NORTH

20' 0' 10' 20' 40'

SCALE: 1" = 20'

## CONSTRUCTION NOTES

1. CONSTRUCT CONCRETE SIDEWALK PER USDCCA NO. 234.
2. CONSTRUCT 8' WIDE VALLEY GUTTER PER USDCCA NO. 228.
3. CONSTRUCT MEDIAN "A" TYPE PER USDCCA NO. 218 & 219
4. CONSTRUCT "L" CURB PER USDCCA NO. 216.
5. CONSTRUCT PAVEMENT PER: GEOTECHNICAL REPORT PREPARED BY: NOVA GEOTECHNICAL PROJ: GA-20-085 SEE DETAIL 1 SHEET DT1.
6. CONSTRUCT HANDICAP RAMP PER USDCCA NO. 235 CASE 1 & NO. 235.1. SEE PLAN FOR "A" & "B" DIMENSION.
7. SAWCUT & REMOVE, NEW IMPROVEMENTS TO MATCH EXISTING CURB, SIDEWALK, AND AC. INSTALL AC TO SMOOTH EDGE AND FEATHER IN TO MATCH EXISTING AC GRADE. PAVEMENT RESTORATION PER USDCCA DWG. NO. 500.1, AND 500.2.
8. MATCH EX. CURB, GUTTER, AND SIDEWALK.
9. INSTALL LINED BMP SWALE WITH RIP-RAP D50=3" THICKNESS=6" PER: DETAIL G ON SHEET DT1. SEE GRADING PLAN FOR WIDTH.
10. INSTALL 0" CURB FLUSH WITH PAVEMNET PER DETAIL 4 ON SHEET DT1.
11. INSTALL 0" TO 6" CURB TRANSITION FOR "A" & "L" CURB CONDITIONS PER DETAIL 2, ON SHEET DT1.
12. INSTALL 3' WIDE CONCRETE VALLEY GUTTER PER DETAIL 3. ON SHEET DT1.
13. INSTALL RETAINING WALL, CONTRACTOR TO DETERMINE STEP LOCATIONS PER FIELD CONDITIONS. SEE ARCHITECTURAL PLANS FOR DETAILS.
14. INSTALL PRECAST BUMPER BLOCKS PER CCAUSD DWG. NO. 238.
15. INSTALL 18"x18" JENSEN DROP INLET (SKU DI1818). SEE DETAIL 7 ON DT1.
16. INSTALL 2' CONCRETE DRAINAGE GUTTER PER DETAIL 8 ON SHEET DT1.

NO DEEP ROOTED TREES SHALL BE PLACED WITHIN 10 FEET OF THE OUTSIDE EDGE OF THE STORM DRAIN PIPE.

## BASIS OF BEARING:

NORTH 89°55'50" WEST, BEING THE BEARING OF THE SOUTH LINE OF THE NORTH HALF (N 1/2) OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 20, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., AS SHOWN IN BOOK 166, PAGE 63 OF PLATS ON FILE AT THE CLARK COUNTY RECORDER'S OFFICE.

## BENCHMARK :

CITY OF LAS VEGAS VERTICAL CONTROL POINT "5LV9020S6", BEING A RIVET & PLATE IN TOP OF CURB AT SW CORNER OF DURANGO DR. & WESTBOUND HIGHWAY 215 ON RAMP.

ELEVATION: 2558.08 (FEET)
779.70 (METERS)

CITY OF LAS VEGAS VERTICAL CONTROL (DATE RE-OBSERVED: 2008) BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD'88)

L#: XX-XXXXX | CLV#: 107YXXXX-XX

STATE OF NEVADA PROFESSIONAL ENGINEER
TODD N. KELLEY
Exp. 6/30/2023
No. 14711
DATE: 01/19/2023

| REV | DATE | DESCRIPTION | DATE | AGEN APP | DATE | GCW APP |
|---|---|---|---|---|---|---|
| | | | | | | |

PROJECT NO. 398-B287
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 01-19-23
PLOT TIME: 10:52:28

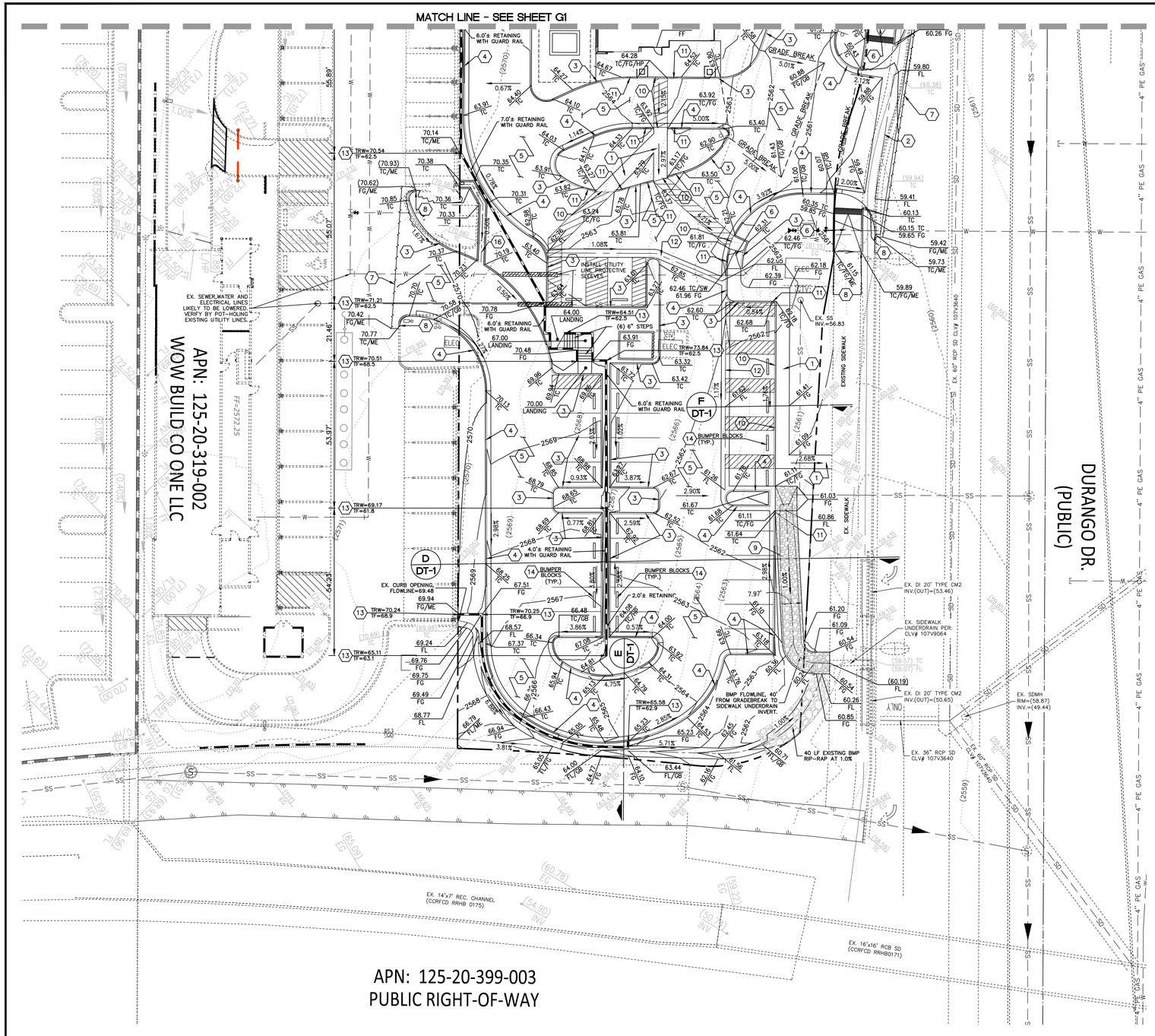
GCW
ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com

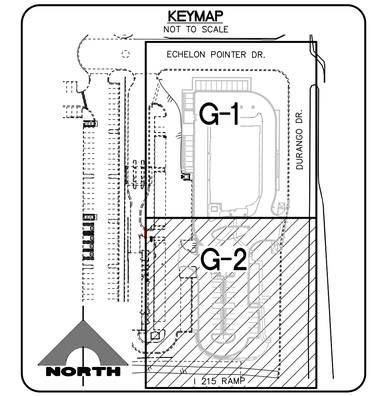
F:\PROJECTS\2021\398-B287\DWG\PRODUCTION\398-B287_GRD.DWG

DANIEL LEE

EMERUS
NW COMMUNITY HOSPITAL
GRADING PLAN 1

DRAWING
G1
4 OF 6 SHTS

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ELEVATION: 2558.08 (FEET)
779.70 (METERS)

CITY OF LAS VEGAS VERTICAL CONTROL (DATE RE-OBSERVED: 2008) BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD'88)

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## FEMA FLOOD ZONE DESIGNATION

THIS PROJECT IS LOCATED WITHIN A FEMA DESIGNATED FLOOD ZONE X PER FIRM PANEL 32003C1745E DATED SEPTEMBER 27, 2002. ZONE X IS DEFINED AS AREAS DETERMINED TO BE OUTSIDE 0.2% ANNUAL CHANCE FLOODPLAIN.

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## DRAINAGE STUDY COMPLIANCE

I CERTIFY THAT THE GRADING PLANS ARE IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY ON FILE AT THE CITY OF LAS VEGAS FOR THIS PROJECT.

TODD KELLEY, P.E.
NEVADA PE #14711

DATE

NORTH

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

L#: XX-XXXXX | CLV#: 107YXXXX-XX

EMERUS
NW COMMUNITY HOSPITAL
GRADING PLAN 2

DRAWING
G2
5 OF 6 SHTS

GCW
ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com

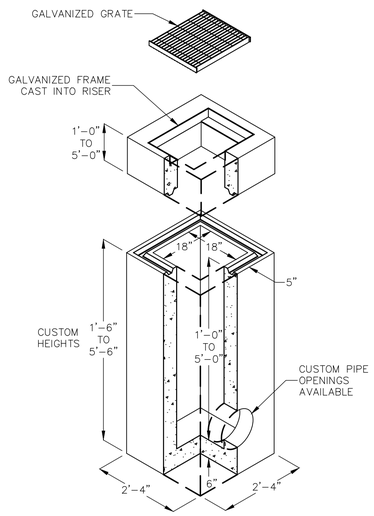
F:\PROJECTS\200\398-B287\DWG\PRODUCTION\398-B287_GRD.DWG

DANIEL LEE

PROJECT NO. 398-B287
DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 01-19-23
PLOT TIME: 10:53:07

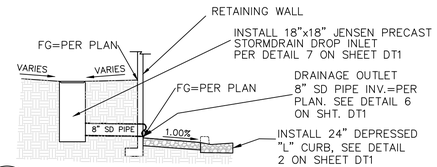
| REV | DATE | DESCRIPTION | DATE | AGEN APP | DATE | GCW APP |
|---|---|---|---|---|---|---|
| | | | | | | |

STATE OF NEVADA PROFESSIONAL ENGINEER
TODD N. KELLEY
Exp. 6/30/2023
No. 14711
DATE: 01/19/2023



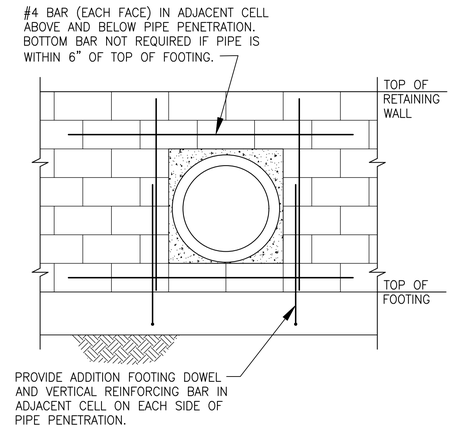

7 - 18'x18" JENSEN DROP INLET DETAIL

PRODUCT # DI1818




6 - STORM DRAIN OUTLET DETAIL

NOT TO SCALE

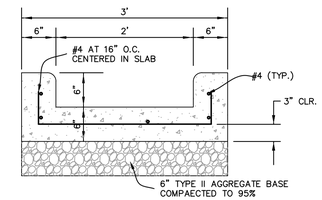



NOTES:

1. THIS DETAIL IS APPLICABLE FOR THE FOLLOWING CONDITIONS ONLY:
   MAXIMUM PIPE DIAMETER = 10"
   MAXIMUM RETAINED HEIGHT = 8'-0"
   PIPE SKEW IS LESS THAN 15 DEGREES
2. MASON CAN CUT BLOCK AROUND PIPE OR BLOCK OUT OPENING AND GROUT AROUND PIPE AS SHOWN.
3. SOLID GROUT CMU WALL A MINIMUM OF 16" AROUND PIPE PENETRATION.

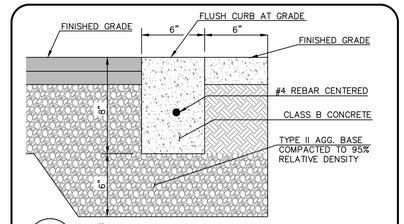
5 - CMU WALL PIPE PENETRATION

NOT TO SCALE



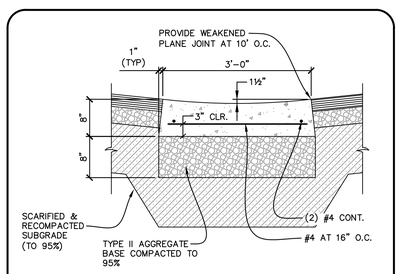

8 - 2' WIDE CONCRETE GUTTER

NOT TO SCALE



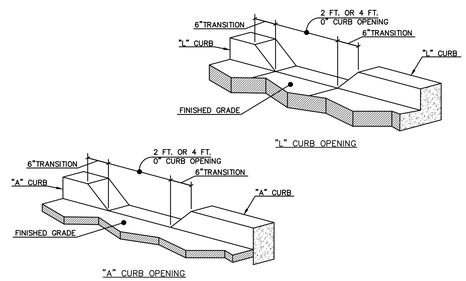

4 - 0" FLUSH CURB

NOT TO SCALE

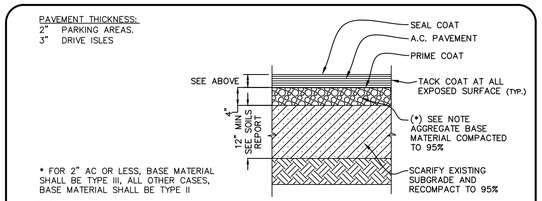



3 - 3' WIDE CONCRETE VALLEY GUTTER

NOT TO SCALE




2 - 24" CURB OPENING DETAIL



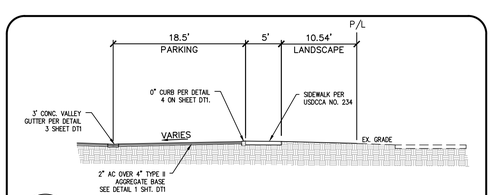

1 - PAVEMENT & CONCRETE SECTION

NOT TO SCALE



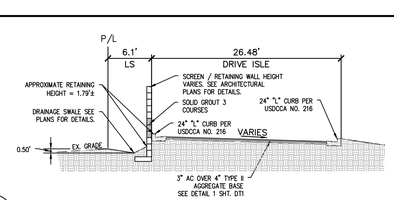

G - (BMP) DRAINAGE SWALE DETAIL

NOT TO SCALE




F - CROSS SECTION

not to scale:




E - CROSS SECTION

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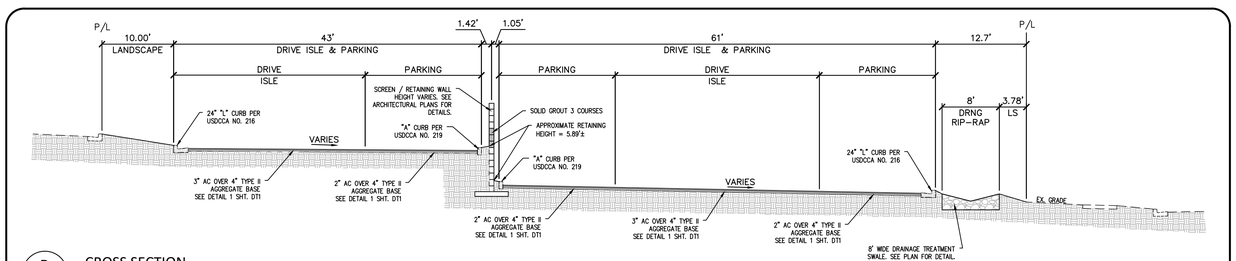


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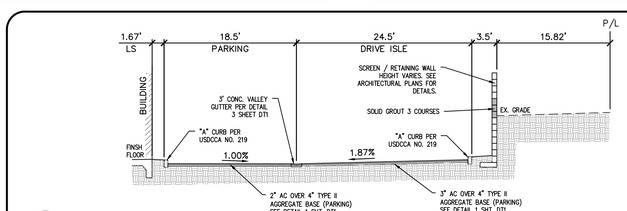


C - CROSS SECTION

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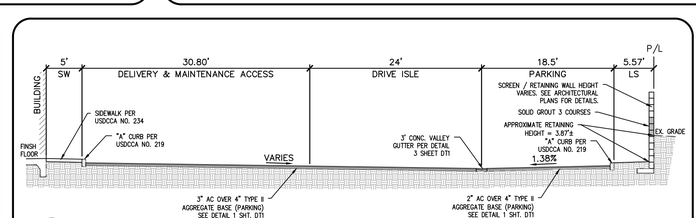


B - CROSS SECTION

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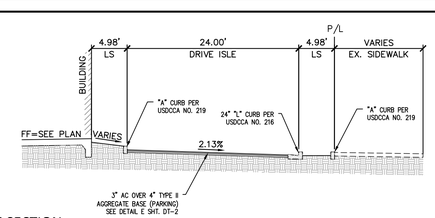


A - CROSS SECTION

not to scale:

STATE OF NEVADA PROFESSIONAL ENGINEER TODD N. KELLEY Exp. 6/30/2023 No. 14711 DATE: 01/19/2023

| REV | DATE | DESCRIPTION | DATE | AGEN APP | DATE | GCW APP |
|---|---|---|---|---|---|---|

PROJECT NO. 398-B287

DESIGN: GCW
DRAWN: GCW
CHECK: GCW
PLOT DATE: 01-19-23
PLOT TIME: 10:54:03

GCW ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
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gcwengineering.com

DANIEL LEE

F:\PROJECTS\200\398-B287\DWG\PRODUCTION\398-B287_DET.DWG

EMERUS

NW COMMUNITY HOSPITAL

DETAIL & SECTIONS

DRAWING

DT1

6 OF 6 SHTS