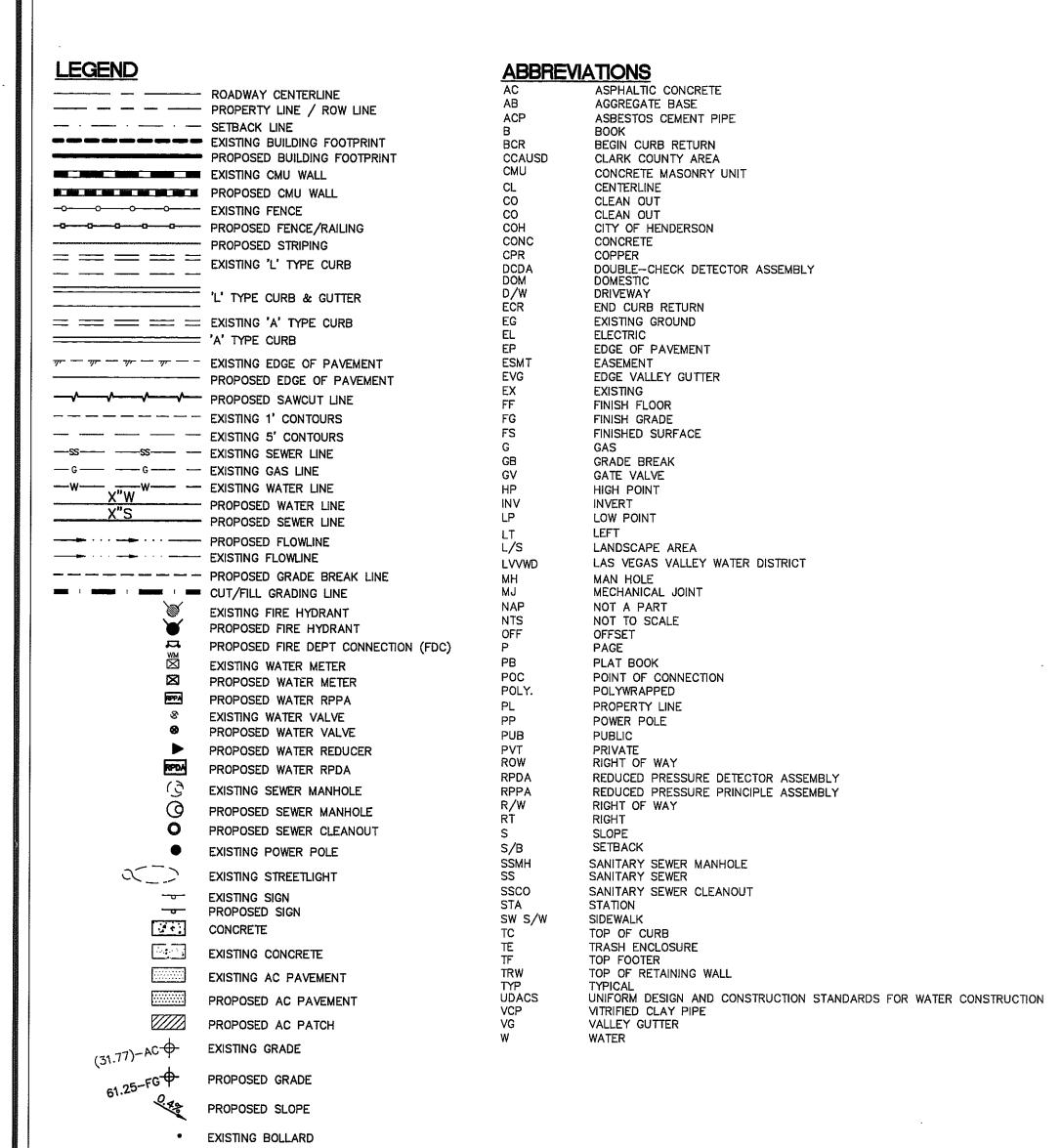
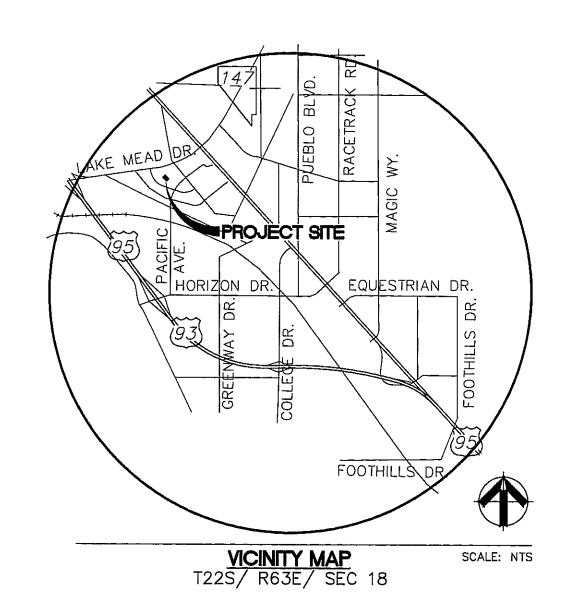
# MOTUS LLC III 150 COPPER STREET CITY OF HENDERSON, NEVADA APN: 179-18-310-062





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

PROJECT INFORMATION	
APN: <u>179-18-310-062</u> ACREAGE: 0.13	GROSS AC
0.13	_NET AC:
NUMBER OF BUILDINGS: _ BLDG. #1:3830	SQ. FT
ZONING: <u>DR</u>	

THIS SET OF IMPROVEMENT PLANS IS CERTIFIED TO CONFORM TO THE REQUIREMENTS OF TRAFFIC IMPACT STUDY APPROVAL LETTER ON FILE WITH THE CITY OF HENDERSON ENERGOV No. 2018-00-1193 TRAFFIC IMPACT ANALYSIS KIVA NUMBER DAVID A. DWYER PRINTED NAME 1-7-/9 DATE P.E. NUMBER

THIS SET OF INDROVEMENT DUANS IS OF	BTIFIED TO CONFORM TO THE PROHIBENESSTO		
THIS SET OF IMPROVEMENT PLANS IS CERTIFIED TO CONFORM TO THE REQUIREMENTS OF THE CITY OF HENDERSON WATER NETWORK ANALYSIS APPROVAL LETTER.			
UNET No.: 2018001488	$\cap$ $\Lambda$		
WATER NETWORK ANALYSIS	$\lambda / \alpha / \lambda$		
DAVID A. DWYER	LACU Ly_		
PRINT NAME	SIGNATURE /		
1-1-19	7785		
DATE	P.E. NUMBER		

OWNER/DEVELOPER

MOTUS LLC 1525 E. ONTARIO AVE; SUITE 101 CORONA, CA, 92881 CONTACT: JOHN A. RUSSO PH: 1-951-836-0530 EMAIL: JRUSSO@E-EQUITIES.COM

## APPROVALS:

CITY APPROVAL OF THE IMPROVEMENT PLANS IS GRANTED FOR ONE (1) YEAR ONLY. PLANS MUST BE RESUBMITTED FOR REVIEW AND APPROVAL TO THE CITY OF HENDERSON DEPARTMENT OF PUBLIC WORKS, PARKS AND RECREATION IF WORK IS NOT COMPLETED WITHIN ONE (1) YEAR OF THE APPROVAL DATE.

3-18-19 1-22-19

14.00

CITY OF HENDERSON

CENTRAL TELEPHONE CO. d/b/a CENTURY LINK "THE AFFIXED CENTURY LINK 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."

Tarres NV ENERGY ACKNOWLEDGES THAT WE HAVE RECEIVED YOUR PLANS AND WILL PROVIDE SERVICE TO ALL ELECTRICAL NEEDS ASSOCIATED WITH THIS PROJECT. NV ENERGY RESERVES THE RIGHT TO ADDRESS ANY EXISTING OR FUTURE CONFLICTS ONCE THE FINAL DESIGN IS COMPLETED. THE NEW SERVICE AND THE RESOLUTION OF ANY CONFLICTS WILL BE ACCOMPLISHED PURSUANT TO THE NEVADA

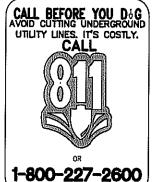
PUBLIC UTILITY COMMISSION'S RULES AND REGULATIONS.

#### SHEET INDEX

COVER SHEET 2. GENERAL NOTES SHEET 3. SECTIONS & DETAILS SHEET 4. GEOMETRIC CONTROL PLAN 5. UTILITY PLAN

6. GRADING PLAN 7. HORIZONTAL CONTROL PLAN







FILE No. REUSE OF DOCUMENT COVER SHEET
MOTUS LLC III
COPPER STRE

18318 01/07/19 DRAWN BY: CHECKED BY: SHEET PCVL2018027712

NAVD 88 DATUM 586.473 METERS (1924.120 FEET)	
FLOOD ZONE NOTE:	
THE SITE IS LOCATED ON FEMA ZONE "X" — PANEL NUMBER 32003C2615F, MAP REVISED NOV. 16, 2011. ZONE "X" IS AN	
AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOOD.	

LEGAL DESCRIPTION:

**BASIS OF BEARINGS:** 

LOT FOURTEEN (14) IN BLOCK THIRTY-EIGHT (38),

COUNTY RECORDER OF CLARK COUNTY, NEVADA.

SAID LOT CONTAINS APPROXIMATELY 0.13 ACRES.

SOUTH 66'55'35" WEST BEING THE BEARING OF THE CENTERLINE OF COPPER AVENUE BETWEEN MAGNESIUM

AVENUE AND THE PC OF COPPER STREET, BEGINNING

AT LOTS 8 & 30 OF COPPER STREET, LYING IN THE

SOUTHEAST QUARTER (SE 1/4) OF THE NORTHWEST

QUARTER (NW 1/4) OF SECTION 18 TOWNSHIP 22

SOUTH, RANGE 63 EAST, M.D.M., CLARK COUNTY,

NEVADA, AS SHOWN BY MAP THEREOF IN BOOK 3,

PAGE 42 OF PLATS, OF CLARK COUNTY, NEVADA

CITY OF HENDERSON VERTICAL CONTROL v.2004

2" BRASS CAP IN THE TOP OF CURB AT THE SOUTHEAST CORNER OF BASIC ROAD AND HARRIS

HENDERSON TOWNSITE, AS SHOWN BY MAP THEREOF ON

FILE IN BOOK 3 OF PLATS, PAGE 42, AND AMENDED IN

BOOK 16 OF PLATS, PAGE 32, IN THE OFFICE OF THE

APN: 179-18-310-062

OFFICIAL RECORDS.

BENCHMARK:

BENCHMARK NO. 60.

"APPROVAL OF THESE PLANS BY THE CITY OF HENDERSON IS LIMITED TO THOSE IMPROVEMENTS CONSTRUCTED IN THE DEDICATED RIGHTS-OF-WAY AND/OR DEDICATED EASEMENTS. THIS APPROVAL DOES NOT AUTHORIZE THE CONSTRUCTION OF ANY IMPROVEMENTS THAT DEVIATE FROM ADOPTED STANDARDS AND/OR SPECIFICATIONS EXCEPT THOSE SPECIFICALLY IDENTIFIED AS "DEVIATIONS FROM STANDARDS". THE ENGINEER SHALL RESOLVE ANY DEVIATION OTHER THAN THOSE LISTED IN "DEVIATIONS FROM STANDARDS" IN FAVOR OF THE UNIFORM STANDARDS DRAWINGS AND SPECIFICATIONS CLARK COUNTY AREA NEVADA." (CURRENT EDITIONS).

#### STANDARD GENERAL NOTES

. ALL CONSTRUCTION SHALL CONFORM TO THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, OFFSITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA, (CURRENT EDITION), AND THE UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION, OFFSITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA (CURRENT EDITION).

. REQUEST FOR INSPECTION BY THE CITY OF HENDERSON DEPARTMENT OF PUBLIC WORKS, PARKS AND RECREATION SHALL BE MADE BY THE CONTRACTOR AT LEAST 24 HOURS BEFORE THE INSPECTION SERVICES WILL BE REQUIRED. 702-267-3144.

WORK IN PUBLIC STREETS, ONCE BEGUN, SHALL BE COMPLETED WITHOUT DELAY SO AS TO PROVIDE MINIMUM INCONVENIENCE TO ADJACENT PROPERTY OWNERS AND

4. THE CONTRACTOR SHALL TAKE ALL NECESSARY AND PROPER PRECAUTIONS TO PROTECT ADJACENT PROPERTIES FROM ANY AND ALL DAMAGE THAT MAY OCCUR FROM STORM WATER RUNOFF AND/OR DEPOSITION OF DEBRIS RESULTING FROM ANY AND ALL WORK IN CONNECTION WITH CONSTRUCTION ACTIVITY.

5. PRIOR TO FINAL ACCEPTANCE, BOND RELEASE AND A CERTIFICATE OF OCCUPANCY, A CERTIFIED LEGIBLE AS-BUILT DRAWING MUST BE SUBMITTED TO THE CITY OF HENDERSON. AS-BUILT MUST SHOW ALL CHANGES AND ACTUAL FIELD LOCATIONS. IN THE ABSENCE OF CHANGES, A COPY OF APPROVED DRAWINGS WILL BE REQUIRED STATING "INSTALLED AS PER DRAWINGS" AND CERTIFIED AS SUCH BY THE STAMPING ENGINEER.

APPROVAL OF THESE PLANS IS FOR THE CONSTRUCTION OF OFFSITE IMPROVEMENTS AND ON-SITE INFRASTRUCTURE ONLY. ALL OTHER ONSITE IMPROVEMENTS, INCLUDING BLOCK WALLS OR OTHER STRUCTURES, MUST BE APPROVED BY THE BUILDING AND FIRE SAFETY DIVISION OF THE CITY OF HENDERSON COMMUNITY DEVELOPMENT AND SERVICES DEPARTMENT.

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. THE EXTENT OF TRANSITIONS IS TO BE DETERMINED BY THE CITY ENGINEER OR THEIR DESIGNEE.

3. 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 THE PLANS OR NOT IN THE LOCATION SHOWN ON THE PLANS. THIS INCLUDES ALL SERVICE LATERALS OF ANY KIND. CONTRACTOR SHALL NOTIFY CALL BEFORE YOU DIG (1-800-227-2600), CALL BEFORE YOU DO OVERHEAD (1-702-227-2929) AND CALL BEFORE YOU UNDERGROUND (1-702-432-5300) PRIOR TO START OF ANY CONSTRUCTION ACTIVITY.

POWER POLES AND/OR OTHER EXISTING FACILITIES NOT IN PROPER LOCATION BASED ON PROPOSED IMPROVEMENTS SHOWN HEREON WILL BE RELOCATED AT NO EXPENSE TO THE CITY OF HENDERSON.

10. WHEELCHAIR RAMPS SHALL BE CONSTRUCTED IN EACH QUADRANT OF AN INTERSECTION PER UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION, OFFSITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA (CURRENT EDITION). EXACT LOCATION OF RAMPS SHALL BE AS SHOWN ON PLAN OR MAY BE DETERMINED IN THE FIELD BY A CITY OF HENDERSON PUBLIC WORKS INSPECTOR.

1. CURB AND GUTTER WITH A GRADE OF LESS THAN 0.5% SHALL BE CONSTRUCTED BY FORMING. EACH JOINT SHALL BE CHECKED FOR GRADE PRIOR TO CONSTRUCTION AND WATER TESTED AS SOON AS POSSIBLE AFTER CONSTRUCTION.

12. ALL GRADING AND EARTHWORK SHALL BE PERFORMED IN ACCORDANCE WITH THE SOILS REPORT NOTED BELOW. SOILS REPORT MUST BE LESS THAN ONE (1) YEAR OLD AT TIME OF APPROVAL OR AN UPDATE IS REQUIRED.

ENGINEER: NOVA GEOTECHNICAL DATE: \_\_\_\_\_\_\_\_JUNE 15. 2018 JOB NUMBER: \_\_\_\_\_\_G-18-104\_\_\_\_

ALL STREET STRUCTURAL SECTIONS SHALL BE PER THE RECOMMENDATIONS OF THE SOILS ENGINEER. BASED ON CBR OR R-VALUES. NO PAVING OR BASE WORK SHALL COMMENCE UNTIL A STREET STRUCTURAL SECTION IS APPROVED BY THE CITY ENGINEER, CITY OF HENDERSON.

14. BEFORE ANY WORK IS STARTED IN THE RIGHT-OF-WAY, THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS STATED IN THE CITY OF HENDERSON TRAFFIC NOTES.

15. WHERE EXISTING PAVEMENT IS CUT TO INSTALL UTILITY SERVICE LINES, BACKFILL AND PAVEMENT REPLACEMENT SHALL BE DONE PER UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, OFFSITE IMPROVEMENTS, CLARK COUNTY AREA. NEVADA (CURRENT EDITION). AND THE UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION, OFFSITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA (CURRENT EDITION).

16. ALL STATIONING IS REFERENCED TO CENTERLINE

17. EXACT LOCATION OF ALL SAWCUT LINES SHALL BE DETERMINED IN THE FIELD BY A CITY OF HENDERSON PUBLIC WORKS INSPECTOR.

18. PROTECTION AND REPLACEMENT OF SURVEY MONUMENTS OR PROPERTY STAKES NOT DELINEATED ON THE APPROVED DRAWINGS SHALL BE THE CONTRACTOR'S RESPONSIBILITY. REPLACEMENT OF SURVEY MONUMENTS OR PROPERTY STAKES SHALL BE DONE TO THE CITY OF HENDERSON SURVEY/RIGHT-OF-WAY DIVISION'S SATISFACTION AT NO COST TO THE CITY OF HENDERSON.

19. AFFECTED UTILITY COMPANIES SHALL BE NOTIFIED AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION.

20. MODIFICATIONS TO EXISTING UTILITIES SHALL CONFORM TO THE UTILITY OWNER'S STANDARDS AND SPECIFICATIONS.

21. THE CONTRACTOR SHALL TAKE REASONABLE MEASURES TO PROTECT EXISTING IMPROVEMENTS FROM DAMAGE. ALL SUCH IMPROVEMENTS DAMAGED BY THE CONTRACTOR'S OPERATION SHALL BE REPAIRED OR RECONSTRUCTED TO THE PUBLIC WORKS INSPECTOR'S SATISFACTION AT THE EXPENSE OF THE CONTRACTOR.

22. ALL OFFSITE AND ONSITE WATER AND SEWER FACILITIES UP TO WITHIN 5 FEET OF BUILDINGS SHALL BE CONSTRUCTED TO PUBLIC WORKS STANDARDS AND SHALL COMPLY WITH THE CITY OF HENDERSON WATER AND SEWER NOTES.

23. IF SEWER OR WATER LINES WITHIN PUBLIC UTILITY EASEMENTS REQUIRE REPAIRS, ALL SUCH REPAIRS WILL BE DONE IN ACCORDANCE WITH THE CITY OF HENDERSON UTILITY SERVICES DEPARTMENT STANDARDS, NON-STANDARD IMPROVEMENTS SUCH AS BUT NOT LIMITED TO PAVERS, STAMPED CONCRETE, LANDSCAPING AND IRRIGATION SHALL BE THE RESPONSIBILITY OF THE HOMEOWNER'S ASSOCIATION OR PROPERTY

24. IF SIGNS ARE PRESENT ON THIS CONSTRUCTION SITE, PLEASE CONTACT THE SIGN COMPANY LISTED ON THE SIGN 24 HOURS PRIOR TO COMMENCING CONSTRUCTION IN THE SIGN'S LOCATION. CITY OWNED AND CITY SPONSORED SIGNS (KIOSKS) SHALL BE REMOVED AND REPLACED FOLLOWING CONSTRUCTION IN THEIR ORIGINAL LOCATION IN LIKE-NEW CONDITION AT CONTRACTOR'S EXPENSE. ANY CONTRACTOR HAVING TO REMOVE A SIGN, WHICH WAS DAMAGED PRIOR TO THE CONTRACTOR OCCUPYING THE SITE. SHALL ARRANGE FOR VERIFICATION OF THE SIGN'S CONDITION BY A CITY OF HENDERSON PUBLIC WORKS INSPECTOR PRIOR TO REMOVAL. ALL SIGNS NOT PREVIOUSLY VERIFIED BY A CITY OF HENDERSON PUBLIC WORKS INSPECTOR SHALL BE ASSUMED TO BE IN LIKE-NEW CONDITION PRIOR TO REMOVAL.

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

26. ADD THE FOLLOWING NOTE AND APPROVAL BLOCK TO ALL SHEETS EXCEPT HORIZONTAL CONTROL, STRUCTURAL (WHEN REQUIRED) AND LANDSCAPING (WHEN REQUIRED) SHEETS:

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CITY ENGINEER - CITY OF HENDERSON

APPROVAL DATE

# TRAFFIC NOTES:

1. ANY EXISTING TRAFFIC CONTROL DEVICES AND/OR SIGNS SHALL BE MAINTAINED DURING THE PERIOD OF CONSTRUCTION AND SHALL BE REPOSITIONED, AS REQUIRED. PER M.U.T.C.D. AND CITY STANDARDS, UPON COMPLETION OF THE PROJECT.

2. DEVELOPERS/CONTRACTORS ARE RESPONSIBLE FOR OBTAINING A TRAFFIC CONTROL/BARRICADING PERMIT NOT LESS THAN THREE (3) WORKING DAYS BEFORE OBSTRUCTING AND/OR BEGINNING CONSTRUCTION WITHIN THE PUBLIC RIGHT OF WAY. INCLUDING SIDEWALKS. BEFORE ANY WORK IS STARTED IN THE RIGHT-OF-WAY, THE CONTRACTOR WILL INSTALL ALL ADVANCE WARNING SIGNS FOR THE CONSTRUCTION ZONE AS SHOWN ON APPROVED PERMIT. THE CONTRACTOR WILL INSTALL TEMPORARY GROUND MOUNTED STOP SIGNS AT ALL NEW STREET ENCROACHMENTS INTO EXISTING CITY STREETS IMMEDIATELY AFTER FIRST GRADING WORK IS ACCOMPLISHED, AND WILL MAINTAIN SAID SIGNS UNTIL PERMANENT SIGNS ARE

3. WHEN A WORK ZONE IS WITHIN 3000 FEET OF A SIGNALIZED INTERSECTION OR WHEN SPECIFIED ON THE APPROVED TRAFFIC CONTROL/BARRICADING PERMIT. THE PERMIT HOLDER RESPONSIBLE FOR THE WORK SHALL SUBMIT A "NOTIFICATION OF ROADWORK NEAR TRAFFIC SIGNALS" FORM THREE (3) BUSINESS DAYS PRIOR TO THE WORK ZONE IS SET UP. THE PERMIT HOLDER SHALL AGAIN SUBMIT A "NOTIFICATION OF ROADWORK NEAR TRAFFIC SIGNALS" FORM WITHIN 24 HOURS OF THE LANE(S) BEING OPENED TO PUBLIC TRAVEL. (http://www.rtcsnv.com/signal-form)

4. LOCATION AND DESCRIPTION OF NEW AND EXISTING TRAFFIC CONTROL DEVICES. INCLUDING SIGNS. PAVEMENT MARKINGS, MEDIAN ISLANDS, STREETLIGHTS, DRIVEWAYS AND TRAFFIC SIGNALS MUST BE SHOWN ON THE TRAFFIC PLAN SUBMITTED TO THE CITY FOR APPROVAL. ALL NEW TRAFFIC SIGNS WILL BE FABRICATED WITH ASTM TYPE XI RETROREFLECTIVE SHEETING. ALL NEW TRAFFIC SIGNS, EXCEPT STREET NAME SIGNS. WILL HAVE ANTI-GRAFFITI PROTECTIVE FILM. THE PROTECTIVE FILM AND THE RETROREFLECTIVE SHEETING MUST BE FROM THE SAME MANUFACTURER. POLYUREA WILL BE USED FOR BIKE LANE LINES, EDGE LINES, AND ALL TRANSVERSE MARKING INCLUDING BUT NOT LIMITED TO CROSSWALKS, STOP BARS, AND WORD/SYMBOL MARKINGS. POLYUREA MUST HAVE A MINIMUM THICKNESS OF 50

5. LOCATION AND DESCRIPTION OF NEW AND EXISTING STREET NAME SIGNS MUST BE SHOWN ON THE TRAFFIC PLAN SUBMITTED TO THE CITY FOR APPROVAL STREET NAME SIGNS WILL COMPLY WITH CLARK COUNTY AREA UNIFORM STANDARD DRAWINGS NO. 249, 250 AND 251. ALL STREET NAME SIGNS WILL BE FABRICATED WITH ASTM TYPE XI RETROREFLECTIVE SHEETING. ALL INTERSECTIONS WITH 80 FOOT OR GREATER RIGHT-OF-WAY ROADWAYS WILL HAVE THE CITY OF HENDERSON LOGO ON BOTH STREET NAME PANELS. CONTACT CITY OF HENDERSON TRAFFIC SERVICES MAINTENANCE THREE (3) WORKING DAYS IN ADANCE, MONDAY THROUGH THURSDAY. AT (702)-267-3200 TO RECEIVE LOGO TO BE APPLIED BY THE CONTRACTOR TO THE STREET NAME PANELS PER CITY OF HENDERSON STANDARD DETAIL. PRIVATE STREETS SHALL HAVE BROWN BACKGROUND.

6. BLUE REFLECTORIZED PAVEMENT MARKINGS MUST BE INSTALLED AND CURB MUST BE PAINTED RED AT EVERY FIRE HYDRANT LOCATION PER CITY OF HENDERSON FIRE DEPARTMENT STANDARDS.

7. ALL CONSTRUCTION SIGNING, BARRICADING, AND PAVEMENT MARKINGS WILL CONFORM TO CURRENT MUTCD, RTC CLARK COUNTY AREA UNIFORM STANDARD DRAWINGS & SPECIFICATION AND FHWA REQUIRMENTS

8. WHERE STREETS END AT THE PROJECT BOUNDARY, A PAVED TEMPORARY TURN-AROUND MUST BE CONSTRUCTED AND THREE (3) 18-INCH DIAMOND (MINIMUM), REFLECTORIZED, RED PANELS SHALL BE INSTALLED AT THE END OF THE ROADWAY AND MAINTAINED UNTIL ADJOINING PROJECT IS BUILT.

9. IF THE IMPROVEMENTS NECESSITATE THE OBLITERATION, TEMPORARY OBSTRUCTION, TEMPORARY REMOVAL, OR RELOCATION OF ANY EXISTING TRAFFIC PAVEMENT MARKINGS, SUCH PAVEMENT MARKINGS WILL BE RESTORED OR REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE CITY TRAFFIC ENGINEER.

10. THE FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION (F.A.S.T) MAY HAVE UNDERGROUND FACILITIES IN THE AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL FAST INFRASTRUCTURE ON ROADWAYS WITH RIGHTS-OF-WAY OF 80'AND GREATER. CONTACT F.A.S.T AT (702) 432-5300. 72 HOURS IN ADVANCE OF ANY CONSTRUCTION ACTIVITIES IN THE AREA OF THEIR FACILITIES, FAST INTERCONNECT POLICY IS IN EFFECT. INTERCONNECT CABLE MUST BE MAINTAINED AT ALL TIMES. DAMAGES WILL BE ASSESSED AFTER 24 HOURS HAS ELAPSED FROM TIME OF BREAK OR DAMAGE PER FAST AND RTC REQUIREMENTS.

11. EXCAVATIONS WITHIN THE PUBLIC RIGHT-OF-WAY, DEEPER THAN 6 INCHES AND HAVING LESS THAN A 4:1 SLOPE MAY REQUIRE BARRIER RAIL OR OTHER ROAD SIDE PROTECTION.

12. CONTRACTOR MUST MAINTAIN SAFE ACCESS TO EXISTING RTC BUS STOPS. SCHOOL BUS STOPS AND SCHOOL WALKING ROUTES ADJACENT TO AND OR WITHIN CONSTRUCTION ZONE.

#### **SEWER NOTES:**

APPROVAL OF THE CITY OF HENDERSON.

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE DESIGN & CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS, INCLUDING THE CITY OF HENDERSON ADDENDUM. AND THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS. CLARK COUNTY AREA, NEVADA, AS AMENDED. IN ALL CASES, THESE STANDARDS SHALL SUPERSEDE THE UNIFORM STANDARD SPECIFICATIONS IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BE AWARE OF THE CONTENTS OF THE ABOVE SPECIFICATION BOOKS. ALL MATERIALS UTILIZED SHALL CONFORM TO THE LATEST EDITION OF THE CITY'S APPROVED MATERIALS LIST.

2. SEWER MAINS ONLY SHALL BE LAID IN SEWER TRENCHES. 3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM CONSTRUCTION

PER PLANS. 4. ANY ADDITIONS, DELETIONS, OR CHANGES SHALL FIRST MEET WITH THE

5. SOIL TESTING SHALL BE IN ACCORDANCE WITH SECTION 3.15 OF THE DESIGN & CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS.

6. ALL EXFILTRATION, INFILTRATION, AIR TESTING AND TELEVISING OF LINES SHALL BE IN ACCORDANCE WITH THE DESIGN & CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS.

7. CUT SHEETS MUST BE SUBMITTED TO THE AGENCY BEFORE CONSTRUCTION WILL BE PERMITTED TO START.

8. ALL CONTRACTORS INSTALLING SEWER MAINS THAT WILL BE UNDER THE JURISDICTION OF THE CITY OF HENDERSON MUST BE CLASS "A" CONTRACTORS.

9. ALL HOUSE SEWER LATERALS SHALL BE LAID TO A MINIMUM 2 PERCENT SLOPE AND SHALL CONFORM TO ALL STANDARDS FOR CONSTRUCTION OF OFFSITE IMPROVEMENTS IN THE CLARK COUNTY AREA, UNLESS RECEIVING SPECIFIC PROJECT

10. ALL SANITARY SEWER MANHOLES SHALL BE CONSTRUCTED WITH 24-HOUR. SEVEN DAY A WEEK, ALL-WEATHER DRIVEABLE ACCESS TO ACCOMMODATE SEWER MAINTENANCE VEHICLES. THIS INCLUDES A 12-FOOT WIDE ACCESS ROAD WITH A MINIMUM 50-FOOT INSIDE TURNING RADIUS.

11. DURING THE CONSTRUCTION OF NEW FACILITIES, A DEBRIS TRAP SHALL BE PROVIDED IN ACCORDANCE WITH STANDARD DRAWING SD-30 IN THE FIRST MANHOLE UPSTREAM FROM THE EXISTING SEWER TO WHICH THE NEW SEWER WILL BE CONNECTED AND TRAP IS INSTALLED IN THE OUTLET PIPE OF THAT MANHOLE TO PREVENT DEBRIS FROM ENTERING THE EXISTING SANITARY SEWER. THIS TRAP SHALL REMAIN IN PLACE UNTIL THE NEW SEWER IS COMPLETED, TESTED, AND IS READY FOR TRANSFER TO THE AGENCY.

12. ALL MANHOLES UNDER CONSTRUCTION SHALL HAVE PLYWOOD PLACED IN THE BASE TO STOP DEBRIS FROM GETTING INTO THE SEWER MAIN. ALL PLYWOOD SHALL BE REMOVED BEFORE CLEANING AND ACCEPTANCE.

13. ANY MANHOLE BEING MODIFIED THAT HAS AN EXISTING LINING SYSTEM REQUIRES THE REPAIR OF THE LINING SYSTEM AFTER ALL MODIFICATIONS ARE

14. ANY SEWER MANHOLE LINING SYSTEM SHALL ONLY BE INSTALLED AFTER ALL FINAL GRADE ADJUSTMENTS ARE COMPLETE FOR THAT MANHOLE.

15. ALL SEWER MAINS UNDER CONSTRUCTION AT LESS THAN ONE (1) PERCENT SHALL BE STAKED FOR CONSTRUCTION AT A MAXIMUM OF 25 FEET ON CENTER. 16. SEWER LATERALS SHALL MAKE CONNECTION TO SEWER MAINS ONLY, SEWER

17. A SINGLE TYPE OF PIPE MATERIAL SHALL BE USED FROM MANHOLE TO MANHOLE. A CHANGE IN SEWER MAIN PIPE MATERIAL OR PIPE SIZE SHALL ONLY OCCUR AT A MANHOLE.

LATERALS SHALL NOT BE CONNECTED DIRECTLY TO ANY SEWER MANHOLE.

18. ALL SEWER MAINS FOR "FUTURE" DEVELOPABLE AREAS WILL BE CONSTRUCTED USING C-900 PIPE MATERIAL. REVISED: 2015

## STANDARD WATER NOTES:

1. NO WORK SHALL BEGIN UNTIL THE PLANS HAVE BEEN RELEASED FOR CONSTRUCTION BY THE CITY. FOLLOWING PLAN APPROVAL, A MINIMUM 48-HOUR NOTICE SHALL BE GIVEN TO THE CITY'S QUALITY CONTROL DIVISION PRIOR TO THE START OF CONSTRUCTION, NOTICE MUST BE GIVEN TO THE CITY NO LATER THAN 2:00 P.M. OF THE BUSINESS DAY PRIOR TO ANY REQUESTED INSPECTION, SUBSEQUENT TO THE START OF CONSTRUCTION.

2. ALL WORK SHALL CONFORM TO THE MOST CURRENT UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS, INCLUDING THE CITY OF HENDERSON ADDENDUM. ALL MATERIALS UTILIZED SHALL CONFORM TO THE LATEST EDITION OF THE CITY'S APPROVED MATERIALS LIST.

3. A SINGLE WATER MAIN PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT, UNLESS OTHERWISE APPROVED BY THE CITY.

4. ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS. UNLESS RECEIVING SPECIFIC PROJECT APPROVAL FOR THIS APPLICATION. 5. ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEY AND CURB

6. ALL WATER MAIN APPURTENANCES SHALL BE LOCATED AS SHOWN ON THE UDACS STANDARD PLATES. WHERE DISCREPANCIES EXIST BETWEEN THIS PLAN SET AND THE UDACS STANDARD PLATES, THE STANDARD PLATES SHALL APPLY. 7. 14 GAUGE SOLID COPPER WIRE FOR LINE LOCATIONS SHALL BE REQUIRED UNDER

ALL MAINS, ALL SERVICE LATERALS SIX (6) INCH DIAMETER AND LARGER, AND ANY

8. ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED AND AN ACCEPTABLE WATER SAMPLE OBTAINED, PRIOR TO ALLOWING CONNECTION TO THE CITY'S WATER SYSTEM.

SERVICE LATERAL NOT INSTALLED PERPENDICULAR TO THE MAIN.

9. ALL WATER METERS 2 INCHES AND SMALLER WILL BE SUPPLIED AND INSTALLED BY THE CITY OF HENDERSON. ALL WATER METERS 3 INCHES AND LARGER SHALL BE SUPPLIED AND INSTALLED BY THE CONTRACTOR.

10. ALL FLANGED DUCTILE IRON FITTINGS SHALL BE COATED WITH EC-244 AND WRAPPED WITH 120 MIL THICK POLYETHYLENE.

11. ALL VALVE BOXES SHALL HAVE CONCRETE COLLARS AT THE SURFACE OF THE PAVED AREAS, PER CLARK COUNTY AREA UNIFORM STANDARD DRAWING NUMBER 517. WATER METER BOXES THAT ARE INSTALLED WITHIN LANDSCAPED AREAS SHALL BE INSTALLED WITH REINFORCED CONCRETE COLLARS PER CLARK COUNTY AREA UNIFORM STANDARD DRAWING NUMBER 329.

13. NO OTHER UTILITY LINES MAY BE PLACED IN THE SAME TRENCH WITH WATER

14. BLUE REFLECTORS ARE REQUIRED AND MUST BE INSTALLED AT THE CENTERLINE OF THE NEAREST DRIVING LANE TO ALL FIRE HYDRANTS, AND MUST BE PERPENDICULAR TO THE HYDRANT.

15. ALL WATER MAINS INSTALLED ON ANY PROJECT SHALL BE A MINIMUM PRESSURE CLASS 235. THE MINIMUM TEST PRESSURE FOR ALL WATER MAINS IS

16. ANY CONFLICT WITH EXISTING UTILITIES SHALL BE IMMEDIATELY CALLED TO THE ATTENTION OF THE ENGINEER.

17. UNLESS OTHERWISE APPROVED BY THE CITY, ALL PIPING 4 INCHES IN DIAMETER AND LARGER SHALL BE EITHER PVC C-900 OR DUCTILE IRON PIPE. ALL COPPER SERVICE LATERALS TWO (2) INCHES OR SMALLER MUST BE WRAPPED IN A MINIMUM 6 MILS THICKNESS POLYETHYLENE PIPELINE SLEEVE OR MUST BE OF PLASTIC COATED COPPER FOR CORROSION PROTECTION. ALL PIPING 2 INCHES IN DIAMETER AND LESS SHALL BE TYPE K SOFT COPPER TUBING, NO 3-INCH PIPE SHALL BE USED WITHIN THE CITY FOR ANY DOMESTIC OR FIRE WATER SERVICE.

18. LANDSCAPING AND IRRIGATION, ADJACENT TO WATER VAULTS, SHALL BE INSTALLED IN SUCH A MANNER WHEREBY IRRIGATION WATER DRAINS AWAY FROM THE VAULT. ALL VAULTS LOCATED BEHIND CURB OR SIDEWALK MUST BE BUILT WITH THE VAULT OPENING DESIGNED TO PROVIDE UNOBSTRUCTED ACCESS FROM THE CURB/STREET SIDE OF THE VAULT.

19. CONTRACTOR SHALL PROVIDE APPURTENANCES TO PERFORM PRESSURE TEST AND DISINFECTION AS REQUIRED BY THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS.

20. THE CONTRACTOR SHALL BE ADVISED THAT WATER SERVICE TO EXISTING CUSTOMERS SHALL REMAIN IN SERVICE AT ALL TIMES DURING CONSTRUCTION. LINE STOPS MAY BE REQUIRED IN ORDER TO MAINTAIN SERVICE TO EXISTING CUSTOMERS. GIVEN THIS, THE CONTRACTOR SHALL PLAN ALL WORK ACCORDINGLY. HOWEVER, IF THE CITY HAS DETERMINED THAT SERVICE MUST BE DISRUPTED IN ORDER TO ACCOMPLISH THE PROPOSED WORK, THE CONTRACTOR SHALL FOLLOW THE CITY'S ESTABLISHED PROCEDURE FOR WATER MAIN SHUTDOWNS. CIRCUMSTANCES MAY ALSO REQUIRE TEMPORARY SERVICE FEEDS TO BE INSTALLED. IF SO, THE COST FOR SUCH TEMPORARY SERVICE FEEDS SHALL BE 100% BORNE BY THE CONTRACTOR. ANY TEMPORARY SERVICE FEED MUST RECEIVE SPECIFIC APPROVAL FROM THE CITY.

21. ALL VALVE BOXES, LIDS, MANHOLES AND APPURTENANCES SHALL BE BROUGHT TO WITHIN 1/8" TO 1/4" BELOW FINAL STREET GRADE.

#### STORM WATER POLLUTION 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 CITY OF HENDERSON AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT, SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SEWER

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 HENDERSON 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 STORM WATER POLLUTION PREVENTION PLAN AS NECESSARY, SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO THE NEVADA STORM WATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR100000,

5. ACCUMULATED SEDIMENT IN BMPS SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORM WATER 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.

# FLOOD ZONE NOTE:

HE SITE IS LOCATED ON FEMA ZONE "X" - PANEL NUMBER 32003C2615F, MAP REVISED NOV. 16, 2011. ZONE "X" IS AN AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOOD.

# STREET LIGHTING REQUIREMENTS:

STREETLIGHTS SHALL GENERALLY CONFORM TO CLARK COUNTY STANDARD DRAWINGS (1988), UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS' CONSTRUCTION OFF-SITE IMPROVEMENTS CLARK COUNTY AREA (1986), THE NATIONAL ELECTRIC CODE INCLUDING ALL ADDENDA AND REVISIONS, AND THE FOLLOWING:

FOR GREEN VALLEY RANCH, GREEN VALLEY NORTH AND GREEN VALLEY SOUTH

STREETLIGHT POLES SHALL BE NOMINAL 26 FEET SIX INCHES TALL PRE-STRESSED CONCRETE WITH EXPOSED BLACK AND WHITE AGGREGATE, SMOOTH FINISH AND PROTECTIVE GRAFFITI RESISTANT CLEAR COATING (AMERON SPEC. 3.1.7 OR EQUIVALENT). ARMS SHALL BE SIX FEET LONG, TWO-INCH ALUMINUM PIPE WITH RISE FOR A LUMINARIE MOUNTING HEIGHT OF 28 FEET NINE INCHES. POLES SHALL BE AMERON NO. 2C2-25A6 OR EQUIVALENT, FOUNDATIONS WILL BE NO LESS THAN 60 INCHES DEEP; CRASH CAP (TOP FOUR INCHES OF THE FOUNDATION) WILL COVER ANCHOR BOLTS. ANCHOR BOLTS PER MANUFACTURER SPECIFICATIONS (ONE INCH BY 36 INCHES BY FOUR INCHES).

ALL AREAS EXCEPT GREEN VALLEY RANCH, GREEN VALLEY NORTH AND GREEN VALLEY SOUTH

1. STREET LIGHT POLES SHALL BE NOMINAL 30 FEET LONG, STEEL SHEET 11 GAUGE, FACTORY GALVANIZED INSIDE AND OUTSIDE AS PER ASTM A123. ARMS SHALL BE 8 FEET LONG, 2-INCH STEEL PIPE WITH RISE FOR A LUMINAIRE MOUNTING HEIGHT OF 31 FEET 9 INCHES. FOUNDATION WILL BE NOT LESS THAN 48 INCHES DEEP. POLES SHALL CONFORM TO CLARK COUNTY AREA UNIFORM STANDARD DRAWINGS NO. 314 & 315.

2. STREET LIGHT LUMINARIES SHALL HAVE A BALLAST VOLTAGE OF 120 V-277V

A. FOR 60-FOOT OR LESS RIGHT-OF-WAY STREETS, HENDERSON RESIDENTIAL APPROVED FIXTURES. SEE APPROVED SUPPLIERS LIST B. FOR 80-FOOT OR MORE RIGHT-OF-WAY STREETS, HENDERSON ARTERIAL

APPROVED FIXTURES. SEE APPROVED SUPPLIERS LIST

3. THE STREET LIGHTING CIRCUIT SHALL BE 240V, 1 PHASE, 2 WIRE (TWO No. 4 AND ONE No. 8 GROUND WIRES IN 11/4-INCH CONDUIT). A No. 10 GREEN WIRE (GROUND) SHALL CONNECT THE LUMINARIES TO THE POLE'S GROUND LUG AT THE

4. STREETLIGHTS SHALL BE LOCATED BEHIND THE SIDEWALK OR IN THE MEDIAN ISLAND. ALTERNATIVE LOCATIONS MUST BE APPROVED BY CITY OF HENDERSON PUBLIC WORKS. SPACING AND LOCATION OF LIGHTS SHALL CONFORM TO CLARK COUNTY AREA UNIFORM STANDARD DRAWINGS No. 300 THROUGH No. 313, No. 320 AND No. 320.1 WITH ANY ADDENDA AND REVISIONS AS AMENDED BY THE CITY OF HENDERSON. FIELD LOCATIONS MUST BE INSPECTED AND APPROVED BY THE CITY OF HENDERSON. LAYOUT MUST BE APPROVED BY THE CITY OF HENDERSON. FIELD LOCATIONS MUST BE INSPECTED AND APPROVED BY THE CITY OF HENDERSON PRIOR TO DIGGING THE FOUNDATIONS AND TRENCHING FOR CONDUITS.

5. THE DEVELOPER SHALL INSTALL PAD-MOUNTED SERVICE POINTS PER CLARK COUNTY AREA UNIFORM STANDARD DRAWING No. 330, 331, & 332 LOCATED BEHIND THE SIDEWALK, PHOTOCELL (TORK No. 3000 OR APPROVED EQUIVALENT) MUST BE MOUNTED ON THE SIDE WITHIN THE ENCLOSURE. PROPOSED LOCATION OF SERVICE POINTS MUST BE SHOWN ON THE DRAWINGS SUBJECT TO REVISION BY NV ENERGY. THE SERVICE RUN SHALL BE 120/240V, 1 PHASE, 3 WIRE CIRCUIT BREAKER SECTION WILL BE:

- A. 125 AMP SERVICE PEDESTAL: (PRIOR AUTHORIZATION REQUIRED FROM COH PUBLIC WORKS.)
- 1. 60 AMP DOUBLE POLE/240V STREETLIGHT CIRCUIT A (WITH CONTACTOR) 2. 60 AMP DOUBLE POLE/240V - STREETLIGHT CIRCUIT B (WITH CONTACTOR) 3. 15 AMP SINGLE POLE/120V - PHOTOCELL
- B. 200 AMP SERVICE PEDESTAL:
- 1. 60 AMP SINGLE POLE/120V TRAFFIC SIGNAL
- 2. 30 AMP SINGLE POLE/120V INTERSECTION LIGHTS 3. 60 AMP DOUBLE POLE/240V - STREETLIGHT CIRCUIT A (WITH CONTACTOR) 4. 60 AMP DOUBLE POLE/240V - STREETLIGHT CIRCUIT B (WITH CONTACTOR)
- 6. ALL WIRES SHALL BE THWN OR THW 7-STRAND COPPER.

5. 15 AMP SINGLE POLE/120V - PHOTOCELL

7. STREETLIGHTS MUST BE OPERATING BEFORE A CERTIFICATE OF OCCUPANCY IS

8. WHEN STREETLIGHTS ARE TO BE CONNECTED TO AN EXISTING CIRCUIT. THE DESIGN ENGINEER MUST CERTIFY THAT THE EXISTING CIRCUIT IS CAPABLE OF HANDLING THE ADDITIONAL CIRCUIT LOAD. EXISTING AND PROPOSED CIRCUIT LOADING MUST BE SHOWN ON THE PLANS. (CALL CITY OF HENDERSON TRAFFIC SERVICES MAINTENANCE AT (702) 267-3200 FOR EXISTING CIRCUIT LOAD INFORMATION.)

9. CONTRACTORS ARE NOT ALLOWED TO HAVE ANY EQUIPMENT OR PERSONNEL WITHIN TEN FEET OF POWER LINES. CONTACT NV ENERGY FOR ASSISTANCE FIVE WORKING DAYS IN ADVANCE IF WORKING WITHIN TEN FEET OF POWER LINES.

10. ALL WALLS OR OTHER OBSTRUCTIONS ARE NOT ALLOWED WITHIN TWO FEET OF THE CENTER OF THE STREETLIGHT POLE PER CLARK COUNTY STANDARD DRAWING

REVISED 4/30/15

# SOUTHERN NEVADA - SOUTHWEST GAS **CORPORATION GENERAL NOTES:**

- 1. IN THE EVENT OF NATURAL GAS EMERGENCIES CALL 911 OR 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
- 3. FOR VALVE ADJUSTMENT CONTACT 702-668-6107 FORTY EIGHT (48) HOURS PRIOR TO CONSTRUCTION.

A.) ANY DEVIATION FROM SPECIFIED MINIMUM CLEARANCES MUST BE APPROVED

4. IN THE EVENT OF A NATURAL GAS CONFLICT WITH PROPOSED UTILITIES AND STRUCTURES CONTACT 702-365-2099.

BY ALL AFFECTED UTILITIES AND/OR MUNICIPALITIS

# **BASIS OF BEARINGS:**

SOUTH 66'55'35" WEST BEING THE BEARING OF THE CENTERLINE OF COPPER AVENUE BETWEEN MAGNESIUM AVENUE AND THE PC OF COPPER STREET, BEGINNING AT LOTS 8 & 30 OF COPPER STREET, LYING IN THE SOUTHEAST QUARTER (SE 1/4) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 18 TOWNSHIP 22 SOUTH, RANGE 63 EAST, M.D.M., CLARK COUNTY, NEVADA, AS SHOWN BY MAP THEREOF IN BOOK 3, PAGE 42 OF PLATS, OF CLARK COUNTY, NEVADA OFFICIAL RECORDS.

#### BENCHMARK: CITY OF HENDERSON VERTICAL CONTROL v.2004 BENCHMARK NO. 60.

2" BRASS CAP IN THE TOP OF CURB AT THE SOUTHEAST CORNER OF BASIC ROAD AND HARRIS NAVD 88 DATUM 586.473 METERS (1924.120 FEET)

#### APPROVAL:

CITY APPROVAL OF THE IMPROVEMENT PLANS IS GRANTED FOR ONE (1) YEAR ONLY. PLANS MUST BE RESUBMITTED FOR REVIEW AND APPROVAL TO THE CITY OF HENDERSON DEPARTMENT OF PUBLIC WORKS, PARKS AND RECREATION IF WORK IS NOT COMPLETED WITHIN ONE (1) YEAR OF THE APPROVAL DATE. 3.19.19  $\sim$ 

CITY ENGINEER - CITY OF HENDERSON

# FIRE DEPARTMENT GENERAL NOTES:

1. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE INTERNATIONAL FIRE CODE AS AMENDED AND THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS (UDACS) AS ADOPTED BY THE CITY OF HENDERSON.

2. APPROVED FIRE APPARATUS ACCESS ROADS SHALL BE PROVIDED TO ALL CONSTRUCTION SITES PRIOR TO THE PERMANENT FIRE APPARATUS ACCESS ROADS BEING COMPLETE. THE APPROVED VEHICLE ACCESS, ACCESS TO BUILDINGS. HYDRANTS AND OTHER FIRE APPLIANCES SHALL NOT BE BLOCKED BY CONSTRUCTION MATERIALS, EQUIPMENT OR OPEN UTILITY TRENCHING.

3. AN APPROVED WATER SUPPLY FOR FIRE PROTECTION, EITHER TEMPORARY OR PERMANENT, SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ARRIVES ON SITE. ADDITIONAL FIRE FLOW SHALL BE PROVIDED UPON COMMENCEMENT OF VERTICAL CONSTRUCTION IN ACCORDANCE WITH IFC SECTION 3312 AS AMENDED.

4. PRIOR TO CLOSING ANY WATER SUPPLY CONTROL VALVE OR PLACING ANY FIRE HYDRANT OUT OF SERVICE CONTACT HENDERSON FIRE DEPARTMENT DISPATCH CENTER (702-267-4913) AND ANY MONITORING FACILITY SUPERVISING THE CONTROL VALVE(S).

5. FIRE HYDRANTS SHALL BE INSTALLED IN ACCORDANCE WITH THE MOST CURRENT EDITION OF UDACS AND SHALL BE MAINTAINED IN ACCORDANCE WITH NFPA 25 AND KEPT IN AN OPERATIVE CONDITION WITH THE REQUIRED WATER SUPPLY.

6. MANUFACTURER AND MODEL OF FIRE HYDRANTS SHALL CONFORM TO THE APPROVED MATERIALS LIST BY CITY OF HENDERSON UTILITIES SERVICE DEPARTMENT. FINAL ACCEPTANCE OF HYDRANT INSTALLATION SHALL BE BY CITY OF HENDERSON PUBLIC WORKS DEPARTMENT - QUALITY CONTROL DIVISION.

7. 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 IFC SECTION 312.

8. HYDRANTS SHALL BE PAINTED SAFETY YELLOW FOR PUBLIC AND SAFETY RED FOR PRIVATE.

9. ALL PUBLIC FIRE HYDRANTS SHALL HAVE A SIX DIGIT NUMBER AS DESIGNATED BY CITY OF HENDERSON UTILITY SERVICES DEPARTMENT (702-267-2536) PAINTED ON THE BARREL BY THE HYDRANT INSTALLER. THE NUMBER SHALL BE IN 1" HIGH BLOCK NUMBERS USING BLACK ENAMEL PAINT.

10. PAINTING OF CURBS AND/OR ASPHALT AREAS ADJACENT TO HYDRANTS SHALL BE COMPLETED BY THE INSTALLER PRIOR TO FINAL 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.

11. 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.

BY AN APPROVED UNOBSTRUCTED ROUTE.

FIRE DEPARTMENT CONNECTIONS:
12. FDC SHALL BE LOCATED WITHIN 100 FEET OF A FIRE HYDRANT AS MEASURED

13. FDC SHALL FACE THE FIRE LANE. 14. FDC SHALL NOT BE CLOSER THAN 3 FEET TO ANY DOOR OR WINDOW OPENING

AND SHALL NOT BE OBSTRUCTED BY TREES, SHRUBS, PARKING SPACES, ETC.

UNDERGROUND PIPING & VALVES:
15. UNDERGROUND PIPING SHALL HAVE A MINIMUM WORKING PRESSURE OF 150 PSI. UNDERGROUND PIPING CONNECTED TO A FIRE PUMP OR A FIRE DEPARTMENT CONNECTION (FDC) SHALL HAVE A MINIMUM WORKING PRESSURE OF 200 PSI (CLASS

16. TWO SOURCES OF WATER SUPPLY ARE REQUIRED WHENEVER 4 OR MORE FIRE HYDRANTS AND/OR FIRE SPRINKLER LEAD-INS ARE INSTALLED ON A SINGLE

17. SECTIONAL CONTROL VALVES SHALL BE INSTALLED SO THAT NO MORE THAN 2 FIRE HYDRANTS AND/OR FIRE SPRINKLER LEAD-INS CAN BE OUT OF SERVICE DUE TO A BREAK IN A WATER MAIN. 18. A POST INDICATING VALVE (PIV) SHALL BE PROVIDED AND INSTALLED A

MINIMUM OF 5 FEET FROM THE BUILDING ON EACH FIRE SPRINKLER LEAD-IN AND SHALL BE SET SO THE TOP OF THE POST WILL BE 32" TO 40" ABOVE THE FINAL

19. ALL VALVES THAT CONTROL THE WATER SUPPLY TO PRIVATE FIRE SERVICE MAINS AND/OR FIRE SPRINKLER SYSTEMS SHALL BE LISTED, INDICATING AND ELECTRICALLY SUPERVISED. EXCEPTION 1: UNDERGROUND KEY OR HUB VALVES.

EXCEPTION 2: BACKFLOW ASSEMBLY VALVES THAT ARE CHAINED AND LOCKED IN THE OPEN POSITION OR LOCATED IN AN UNDERGROUND VAULT OR APPROVED INSULATED ENCLOSURE: HOWEVER, BACKFLOW ASSEMBLY VALVES THAT ARE DESIGNED TO CONTROL ONLY FIRE SPRINKLERS, IN LIEU OF INSTALLING A PIV. SHALL BE ELECTRICALLY MONITORED. 20. ALL PIPING AND VALVES SUPPLYING FIRE SPRINKLER SYSTEMS SHALL BE PROTECTED FROM FREEZING WHEN EXPOSED TO TEMPERATURES LESS THAN 40°F.

FREEZE PROTECTION SHALL BE APPROVED, DURABLE AND PERMANENT. 21. ALL BACKFLOW OR CROSS CONNECTION REQUIREMENTS OF THE CITY OF HENDERSON UTILITY SERVICES DEPARTMENT SHALL BE INSTALLED UPSTREAM OF THE

22. ALL REQUIRED TESTING AND FLUSHING OF THE UNDERGROUND FIRE SPRINKLER / STANDPIPE WATER SUPPLY PIPING SHALL BE PERFORMED IN THE PRESENCE OF CITY OF HENDERSON PUBLIC WORKS - QUALITY CONTROL DIVISION (702-267-3100). 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 QC 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

23. SHOP DRAWINGS FOR ALL GATES AND MOTORIZED OPENERS OBSTRUCTING FIRE DEPARTMENT ACCESS ROADS SHALL BE SUBMITTED SEPARATELY FOR REVIEW AND RECEIVE APPROVAL PRIOR TO INSTALLATION. A SEPARATE PERMIT IS REQUIRED FOR EACH GATED ENTRANCE.

<u>SPEED BUMPS / SPEED HUMPS:</u> 24. SPEED BUMPS AND/OR SPEED HUMPS SHALL NOT BE PERMITTED WITHIN THE

SPRINKLER SYSTEM.

FIRE SPRINKLER OR STANDPIPE SYSTEM PIV.

REQUIRED WIDTH OF FIRE APPARATUS ACCESS ROADS. EXCEPTION: SPEED HUMPS ARE ALLOWED ON PRIVATE FIRE APPARATUS ACCESS ROADS SERVING COMMERCIAL AND INDUSTRIAL BUILDINGS WHEN APPROVED BY THE FIRE CODE OFFICIAL.

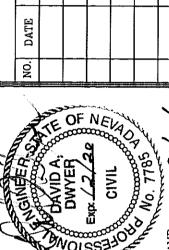
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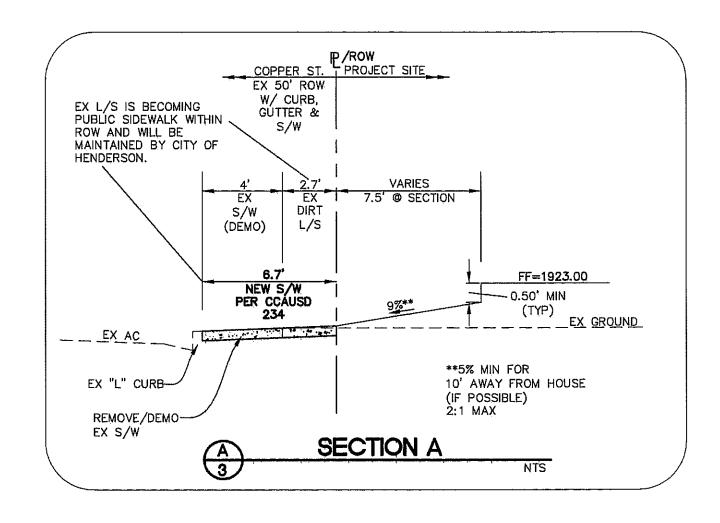


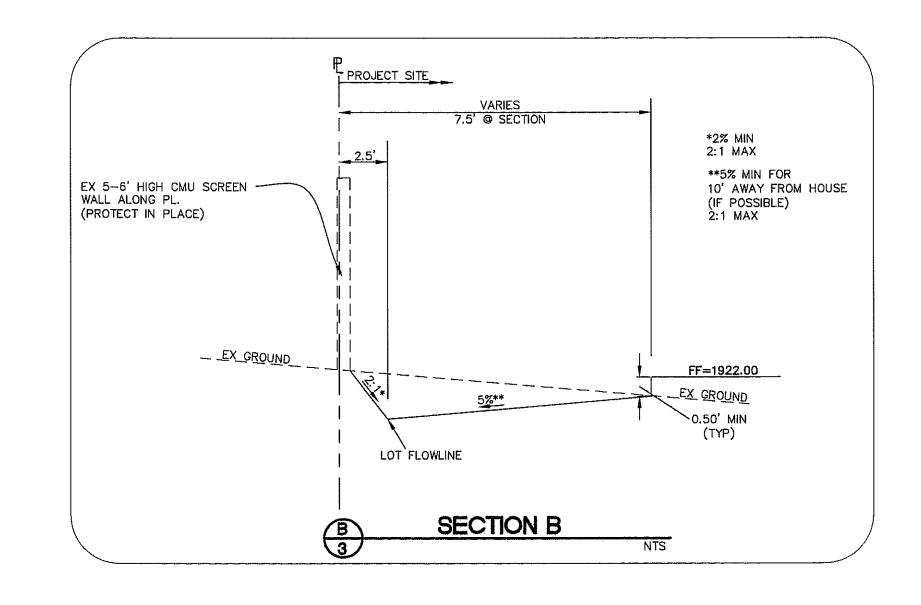
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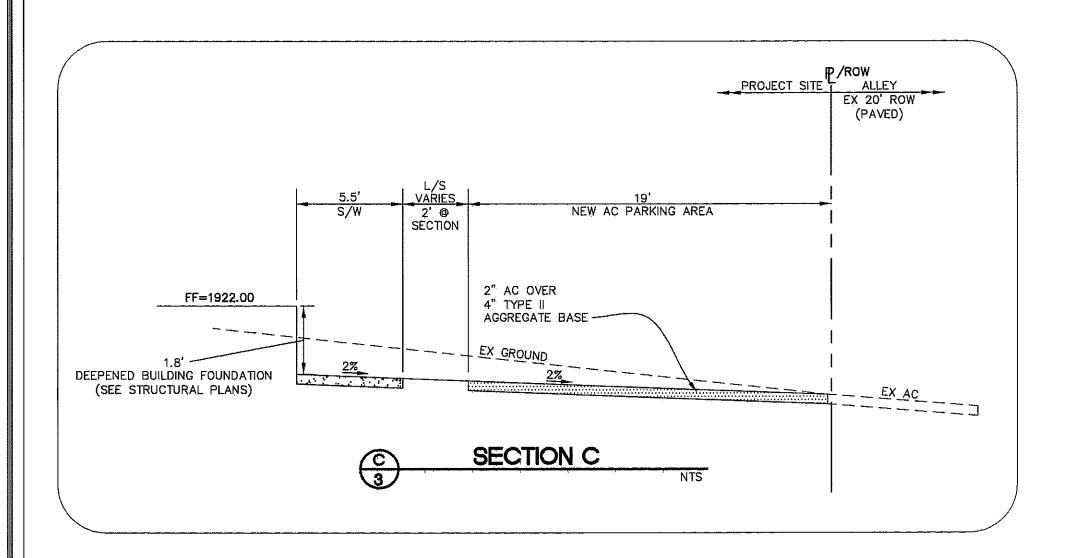
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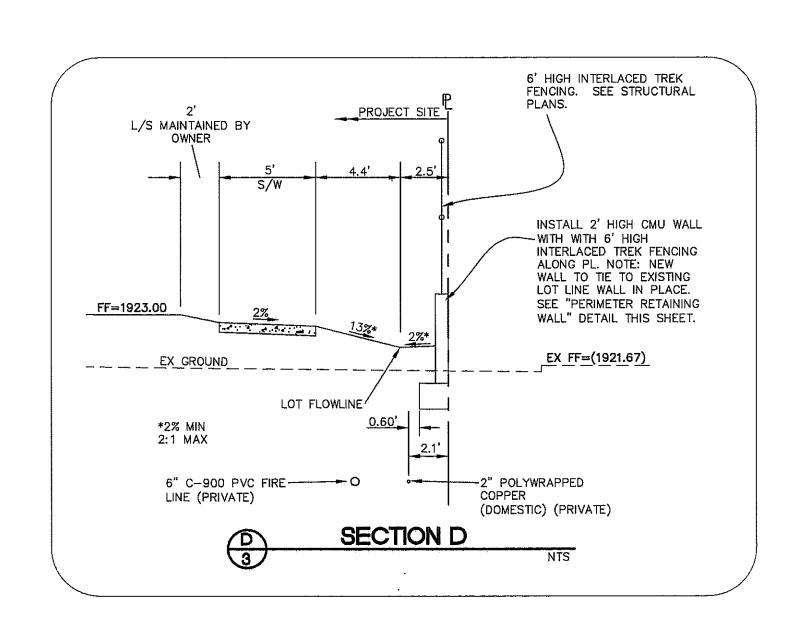
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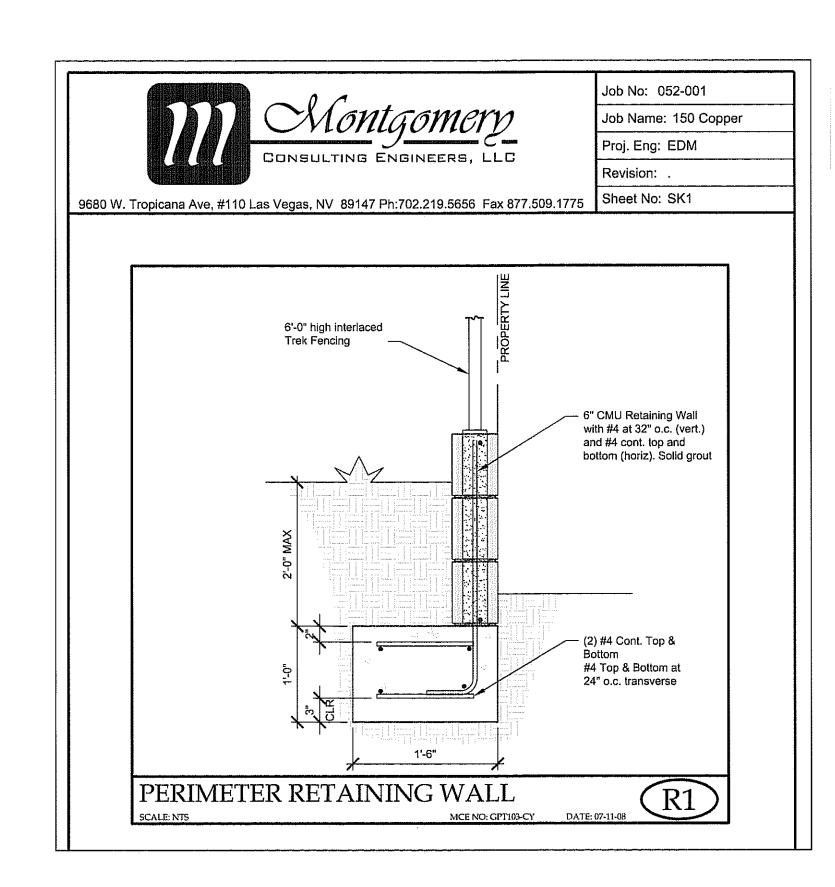
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GEOTECHNICAL NOTE:

ALL GRADING SHALL CONFORM TO THE SOIL REPORT.

ENGINEER: NOVA GEOTECHNICAL

ORIGINAL DATE: JUNE 15, 2018

JOB NUMBER: G-18-104

WALL CONSTRUCTION NOTES:

1.) SEE GEOTECHNICAL REPORT AND STRUCTURAL PLANS FOR WALL AND FOOTING DESIGN.

2.) SEE GEOTECHNICAL REPORT FOR TOP OF FOOTING COVER. THESE PLANS ASSUME A MINIMUM 0.67'± OF COVER OVER TOP OF FOOTER.

3.) SEE STRUCTURAL PLANS FOR SOLID GROUTING AND WATERPROOFING DESIGN.

4.) TOP OF RETAINING WALL (TRW) AND TOP OF FOOTER (TF) ELEVATIONS SHOWN ON THE GRADING PLAN ARE APPROXIMATE AND NEED TO BE VERIFIED BY MASON BEFORE CONSTRUCTION.

5.) ALL WALLS SHALL CONFORM TO COH STANDARDS.

APPROVAL:

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CITY ENGINEER — CITY OF HENDERSON

APPROVAL DATE

AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY.

CALL BEFORE YOU DO DO THE ALL BEFORE YOU DO THE ALL BEFORE

1-800-227-2600

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