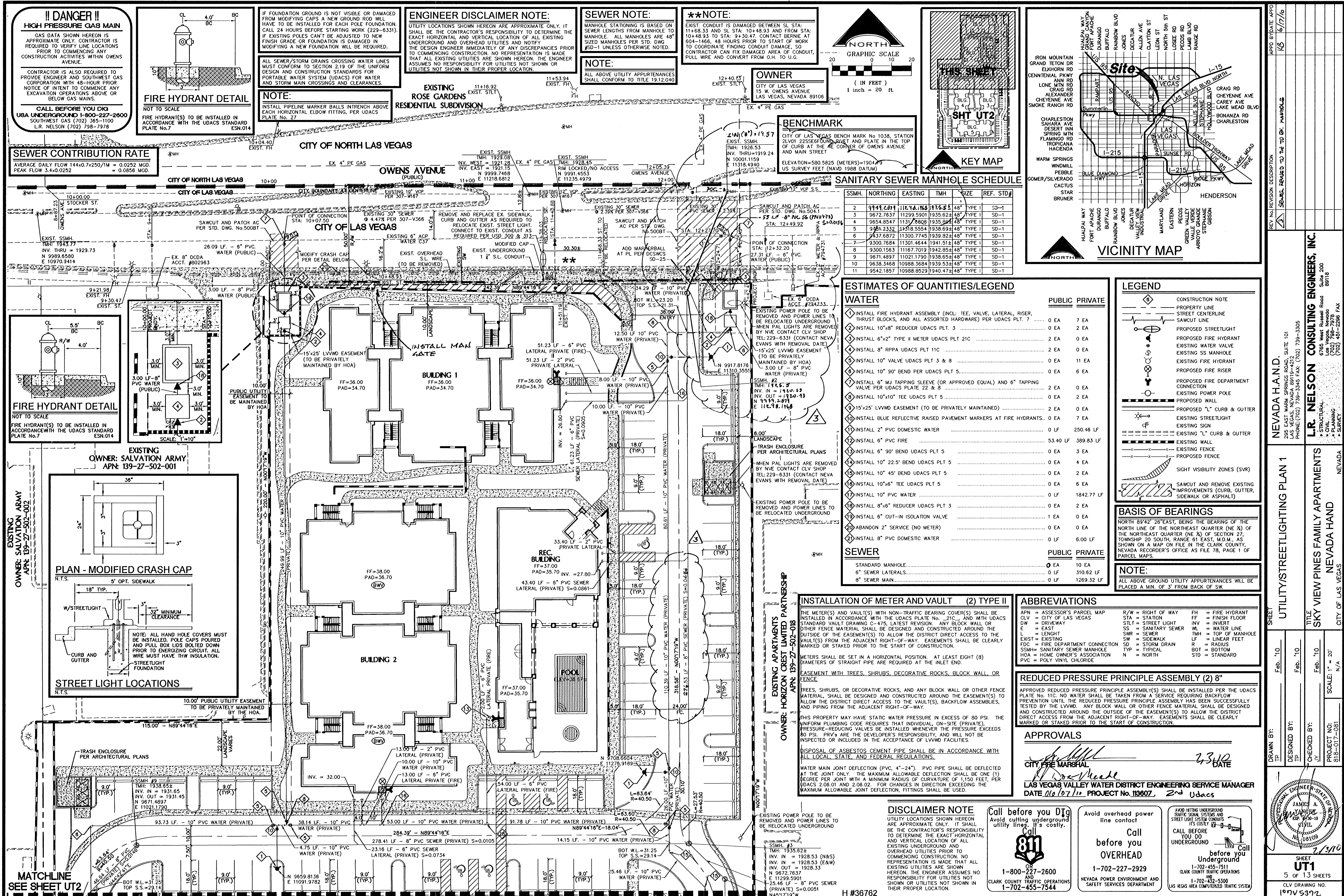
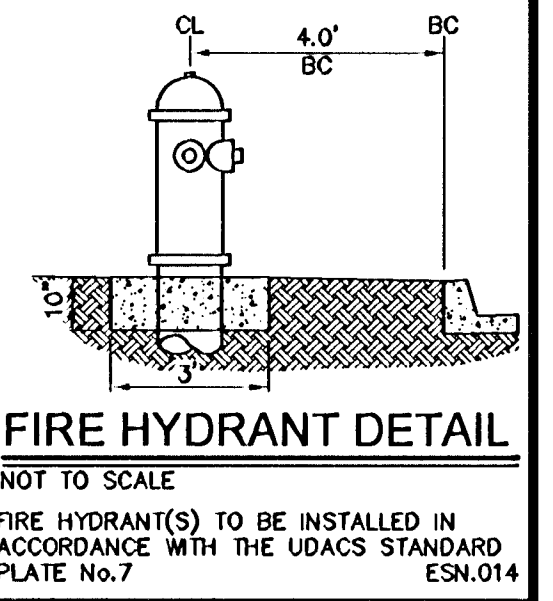




!! DANGER !!
HIGH PRESSURE GAS MAIN
GAS DATA SHOWN HEREON IS APPROXIMATE ONLY. CONTRACTOR IS REQUIRED TO VERIFY LINE LOCATIONS PRIOR TO COMMENCING ANY CONSTRUCTION ACTIVITIES WITHIN OWENS AVENUE.
CONTRACTOR IS ALSO REQUIRED TO PROVIDE ENGINEER AND SOUTHWEST GAS CORPORATION WITH 48-HOUR PRIOR NOTICE OF INTENT TO COMMENCE ANY EXCAVATION OPERATIONS ABOVE OR BELOW GAS MAINS.
CALL BEFORE YOU DIG
USA UNDERGROUND 1-800-227-2600
SOUTHWEST GAS (702) 365-1100
L.R. NELSON (702) 798-7978

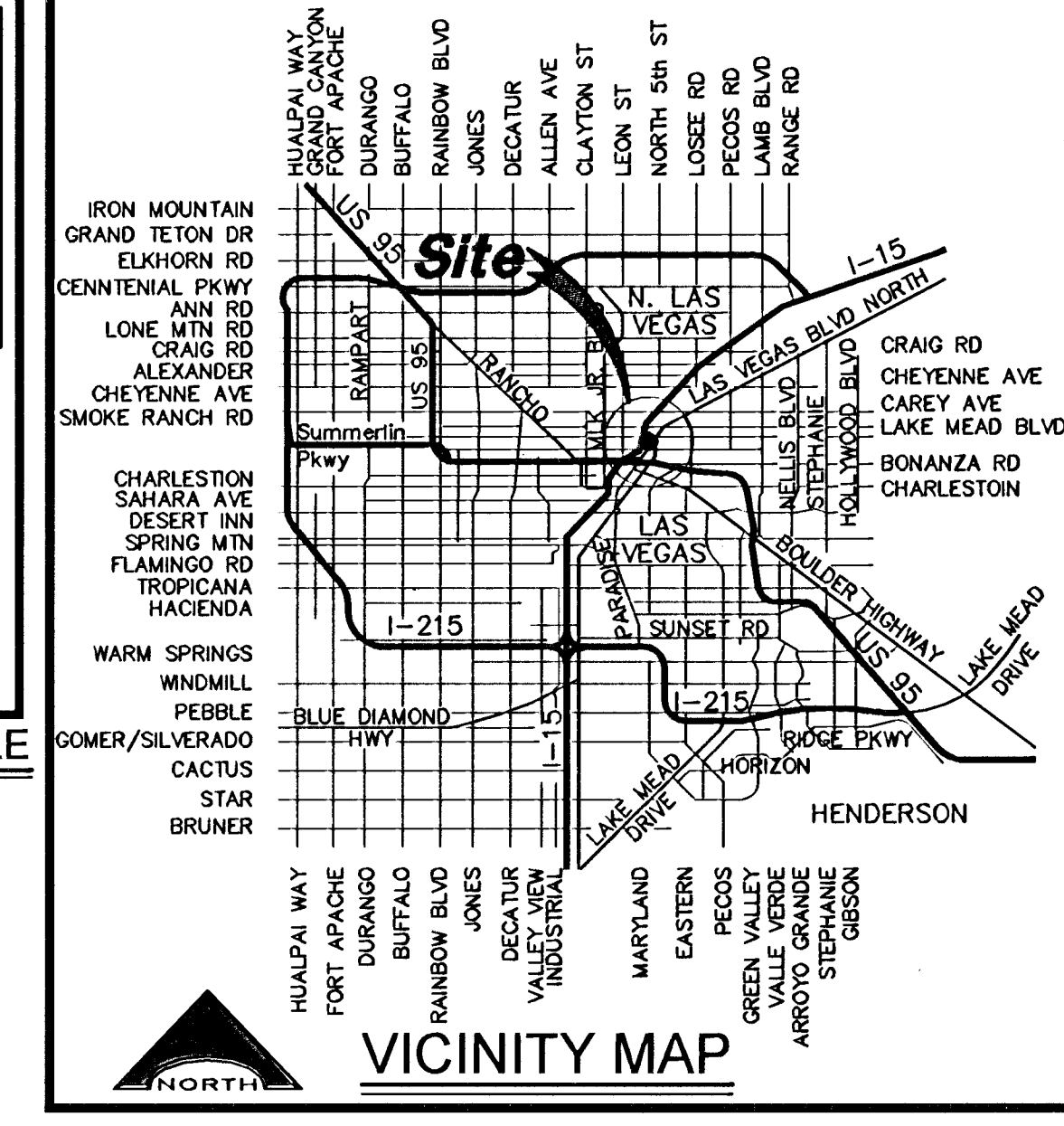
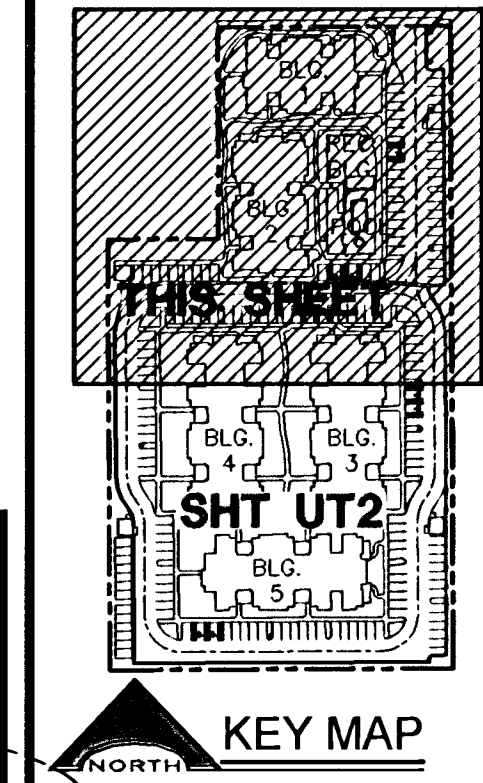
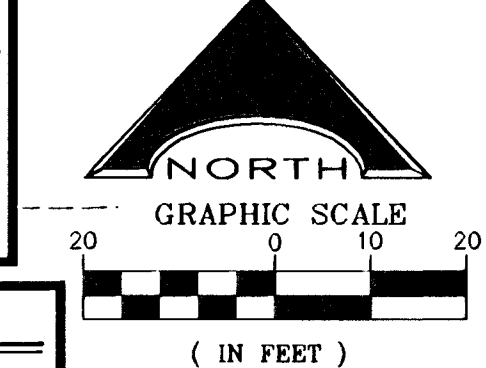


IF FOUNDATION GROUND IS NOT VISIBLE OR DAMAGED FROM MODIFYING CAPS A NEW GROUND ROD WILL HAVE TO BE INSTALLED FOR EACH POLE FOUNDATION. CALL 24 HOURS BEFORE STARTING WORK (229-6331). IF EXISTING POLES CAN BE ADJUSTED TO NEW FINISH GRADE OR FOUNDATION IS DAMAGED IN MODIFYING A NEW FOUNDATION WILL BE REQUIRED.
ALL SEWER/STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.19 OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR PORTABLE WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.
NOTE:
INSTALL PIPELINE MARKER BALLS INTRENCH ABOVE EACH HORIZONTAL ELBOW FITTING, PER UDACS PLATE No. 27

ENGINEER 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 AND NOTIFY THE DESIGN ENGINEER IMMEDIATELY OF ANY DISCREPANCIES 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.

SEWER NOTE:
MANHOLE STATIONING IS BASED ON SEWER LENGTHS FROM MANHOLE TO MANHOLE. ALL MANHOLES ARE 48" SIZED MANHOLES PER STD. DWG. #50-1 UNLESS OTHERWISE NOTED.
NOTE:
ALL ABOVE UTILITY APPURTENANCES SHALL CONFORM TO TITLE 19.12.040

****NOTE:**
EXIST. CONDUIT IS DAMAGED BETWEEN ST. STA. 11+68.33 AND ST. STA. 10+48.93 AND FROM STA. 10+48.93 TO STA. 9+30.47. CONTACT BERNIE AT 604-1468, 48 HOURS PRIOR TO START OF WORK TO COORDINATE FINDING CONDUIT DAMAGE. SO CONTRACTOR CAN FIX DAMAGED AREA OF CONDUIT, PULL WIRE AND CONVERT FROM O.H. TO U.G.



SEWER CONTRIBUTION RATE
AVERAGE DAILY FLOW 144x0.7x250/1M = 0.0252 MGD.
PEAK FLOW 3.4x0.0252 = 0.0856 MGD.

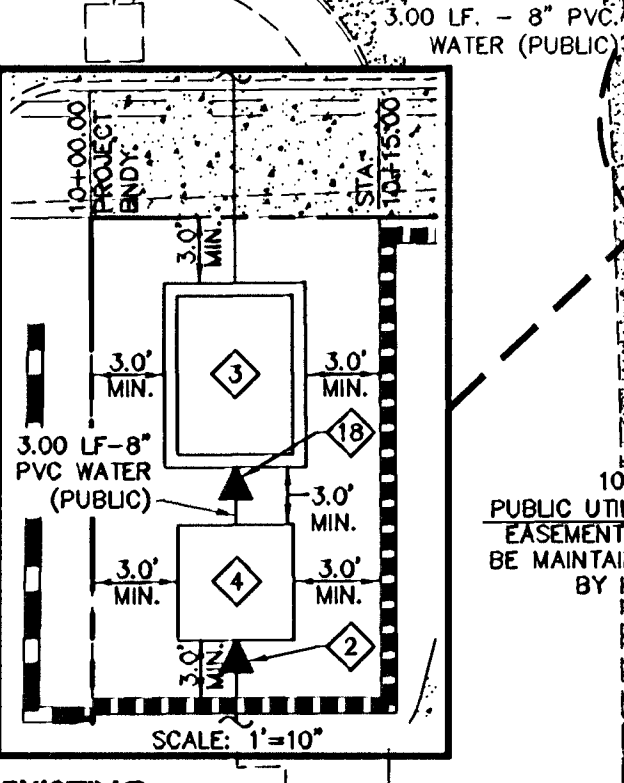
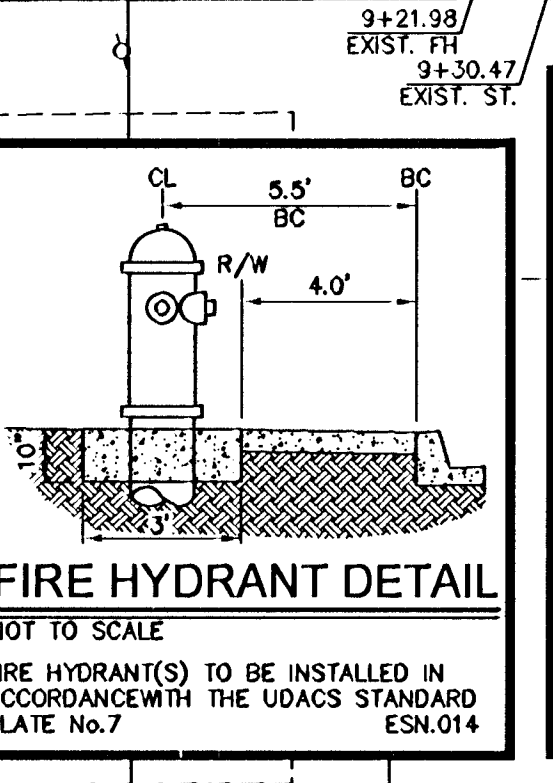
CITY OF NORTH LAS VEGAS
OWENS AVENUE (PUBLIC)
CITY OF LAS VEGAS

OWENS AVENUE
EXIST. 12" VCP PER 307-W167
EXIST. 12" VCP PER 307-W167
EXIST. 12" VCP PER 307-W167

BENCHMARK
CITY OF LAS VEGAS BENCH MARK NO. 1038, STATION 2LVO1 225SE6000, BIVET AND PLATE IN THE TOP OF CURB AT THE CORNER OF OWENS AVENUE AND MAIN STREET
ELEVATION=580.5825 (METERS)=1904.79 US SURVEY FEET (NAVD 1988 DATUM)

SANITARY SEWER MANHOLE SCHEDULE

SSMH.	NORTHING	EASTING	TMH	SIZE	REF. STD.
2	9949.2891	11274.163	1936.51	48" TYPE I	SD-1
3	9672.7637	11299.5901	1935.624	48" TYPE I	SD-1
4	9654.8547	11317.0808	1935.624	48" TYPE I	SD-1
5	9661.2332	11318.5554	1936.694	48" TYPE I	SD-1
6	9437.6872	11300.7745	1939.824	48" TYPE I	SD-1
7	9300.7684	11301.4644	1941.514	48" TYPE I	SD-1
8	9300.1563	11167.7019	1942.854	48" TYPE I	SD-1
9	9671.4897	11021.1790	1938.654	48" TYPE I	SD-1
10	9638.3468	10988.3684	1939.534	48" TYPE I	SD-1
11	9542.1857	10988.8529	1940.474	48" TYPE I	SD-1



INSTALL MAN GATE
FF=36.00
PAD=34.70
FF=36.00
PAD=34.70
FF=36.00
PAD=34.70

BUILDING 1
FF=36.00
PAD=34.70
FF=36.00
PAD=34.70
FF=36.00
PAD=34.70

BUILDING 2
FF=36.00
PAD=34.70
FF=36.00
PAD=34.70
FF=36.00
PAD=34.70

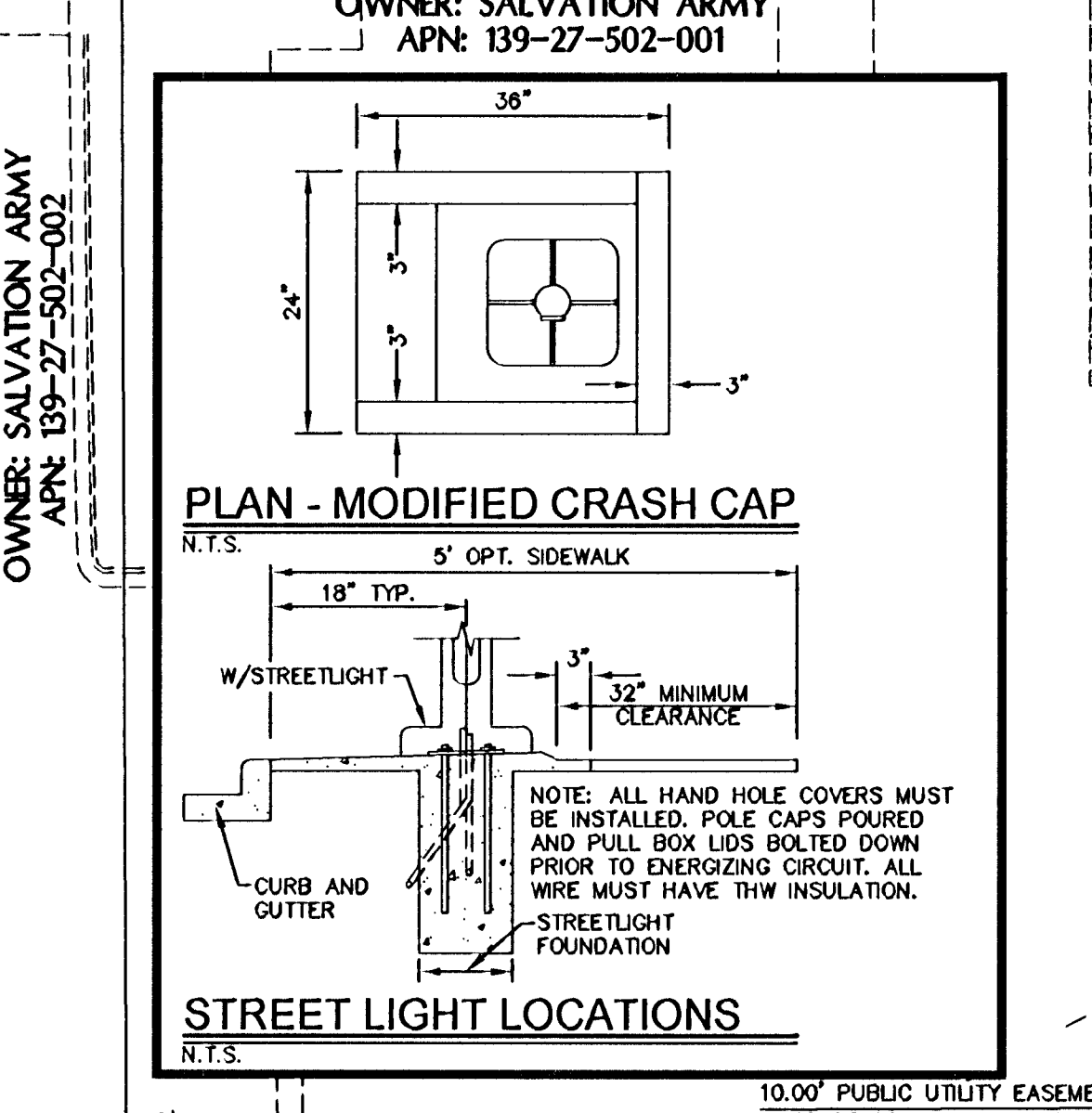
WATER	
1	INSTALL FIRE HYDRANT ASSEMBLY (INCL. TEE, VALVE, LATERAL, RISER, THURST BLOCKS, AND ALL ASSORTED HARDWARE) PER UDACS PLT. 7
2	INSTALL 10" 8" REDUCER UDACS PLT. 3
3	INSTALL 6"x2" TYPE II METER UDACS PLT 21C
4	INSTALL 8" RPPA UDACS PLT 11C
5	INSTALL 10" VALVE UDACS PLT 3 & 8
6	INSTALL 10" 90° BEND PER UDACS PLT 5
7	INSTALL 6" M J TAPPING SLEEVE (OR APPROVED EQUAL) AND 6" TAPPING VALVE PER UDACS PLATE 22 & 8
8	INSTALL 10"x10" TEE UDACS PLT 5
9	15"x25" LVWMD EASEMENT (TO BE PRIVATELY MAINTAINED BY HOA)
10	INSTALL BLUE REFLECTIVE RAISED PAVEMENT MARKERS AT FIRE HYDRANTS.
11	INSTALL 2" PVC DOMESTIC WATER
12	INSTALL 6" PVC FIRE
13	INSTALL 6" 90° BEND UDACS PLT 5
14	INSTALL 10" 22.5° BEND UDACS PLT 5
15	INSTALL 10" 45° BEND UDACS PLT 5
16	INSTALL 10"x6" TEE UDACS PLT 5
17	INSTALL 10" PVC WATER
18	INSTALL 8"x6" REDUCER UDACS PLT 3
19	INSTALL 6" CUT-IN ISOLATION VALVE
20	ABANDON 2" SERVICE (NO METER)
21	INSTALL 8" PVC DOMESTIC WATER
SEWER	
1	STANDARD MANHOLE
2	6" SEWER LATERALS
3	8" SEWER MAIN

ESTIMATES OF QUANTITIES/LEGEND	
	PUBLIC PRIVATE
1	0 EA 2 EA
2	0 EA 7 EA
3	2 EA 0 EA
4	2 EA 0 EA
5	0 EA 11 EA
6	0 EA 6 EA
7	2 EA 0 EA
8	0 EA 2 EA
9	2 EA 0 EA
10	0 EA 7 EA
11	0 LF 250.46 LF
12	53.40 LF 389.83 LF
13	0 EA 3 EA
14	0 EA 4 EA
15	0 EA 2 EA
16	0 EA 6 EA
17	0 LF 1842.77 LF
18	0 EA 2 EA
19	1 EA 0 EA
20	0 EA 0 EA
21	0 LF 6.00 LF
PUBLIC PRIVATE	
1	0 EA 10 EA
2	0 LF 310.62 LF
3	0 LF 1269.32 LF

LEGEND	
CONSTRUCTION NOTE	PROPERTY LINE
STREET CENTERLINE	SAWCUT LINE
PROPOSED STREETLIGHT	PROPOSED FIRE HYDRANT
EXISTING WATER VALVE	EXISTING SS MANHOLE
EXISTING FIRE HYDRANT	PROPOSED FIRE RISER
PROPOSED FIRE DEPARTMENT CONNECTION	EXISTING POWER POLE
PROPOSED "L" CURB & GUTTER	EXISTING STREETLIGHT
EXISTING SIGN	EXISTING "L" CURB & GUTTER
EXISTING WALL	EXISTING FENCE
EXISTING FENCE	SIGHT VISIBILITY ZONES (SVR)
SAWCUT AND REMOVE EXISTING IMPROVEMENTS (CURB, GUTTER, SIDEWALK OR ASPHALT)	

BASIS OF BEARINGS
NORTH 89°42' 26"E, BEING THE BEARING OF THE NORTH LINE OF THE NORTHEAST QUARTER (NE 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF SECTION 27, TOWNSHIP 30 SOUTH, RANGE 61 EAST, M.D.M., AS SHOWN ON A MAP ON FILE IN THE CLARK COUNTY, NEVADA RECORDER'S OFFICE AS FILE 78, PAGE 1 OF PARCEL MAPS.

NOTE:
ALL ABOVE GROUND UTILITY APPURTENANCES WILL BE PLACED A MIN. OF 3' FROM BACK OF SW.



EXISTING POWER POLE TO BE REMOVED AND POWER LINES TO BE RELOCATED UNDERGROUND
WHEN PAL LIGHTS ARE REMOVED BY NVE CONTACT CLV SHOP TEL: 229-6331 (CONTACT NEVA EVANS WITH REMOVAL DATE)

EXISTING POWER POLE TO BE REMOVED AND POWER LINES TO BE RELOCATED UNDERGROUND
WHEN PAL LIGHTS ARE REMOVED BY NVE CONTACT CLV SHOP TEL: 229-6331 (CONTACT NEVA EVANS WITH REMOVAL DATE)

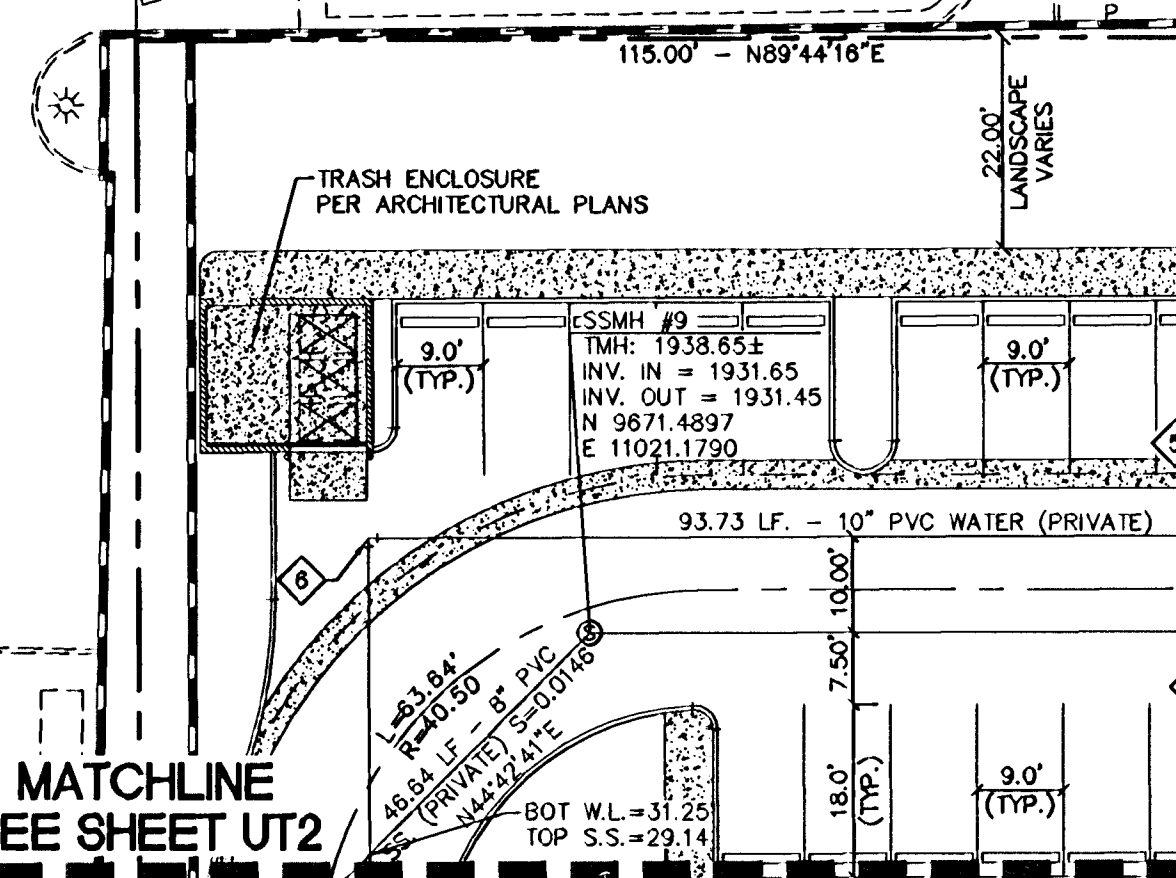
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INSTALLATION OF METER AND VAULT (2) TYPE II
THE METER(S) AND VAULT(S) WITH NON-TRAFFIC BEARING COVER(S) SHALL BE INSTALLED IN ACCORDANCE WITH THE UDACS PLATE No. 21C, AND WITH UDACS STANDARD VAULT DRAWING C-475, LATEST REVISION. ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S) TO ALLOW THE DISTRICT DIRECT ACCESS TO THE VAULT(S) FROM THE ADJACENT RIGHT-OF-WAY. EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.
METERS SHALL BE SET IN A HORIZONTAL POSITION. AT LEAST EIGHT (8) DIAMETERS OF STRAIGHT PIPE ARE REQUIRED AT THE INLET END.
EASEMENT WITH TREES, SHRUBS, DECORATIVE ROCKS, BLOCK WALL, OR FENCE
TREES, SHRUBS, OR DECORATIVE ROCKS, AND ANY BLOCK WALL OR OTHER FENCE MATERIAL, SHALL BE DESIGNED AND CONSTRUCTED AROUND THE EASEMENT(S) TO ALLOW THE DISTRICT DIRECT ACCESS TO THE REDUCED PRESSURE ASSEMBLY, AND PIPING FROM THE ADJACENT RIGHT-OF-WAY.
THIS PROPERTY MAY HAVE STATIC WATER PRESSURE IN EXCESS OF 80 PSI. THE UNIFORM PLUMBING CODE REQUIRES THAT INDIVIDUAL ON-SITE (PRIVATE) PRESSURE-REDUCING VALVES BE INSTALLED WHENEVER THE PRESSURE EXCEEDS 80 PSI. PRVs ARE THE DEVELOPER'S RESPONSIBILITY, AND WILL NOT BE INSPECTED OR INCLUDED IN THE ACCEPTANCE OF LVWMD FACILITIES.
DISPOSAL OF ASBESTOS CEMENT PIPE SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.
WATER MAIN JOINT DEFLECTION (PVC, 4"-24"). PVC PIPE SHALL BE DEFLECTED AT THE JOINT ONLY. THE MAXIMUM ALLOWABLE DEFLECTION SHALL BE ONE (1) DEGREE PER JOINT WITH A MINIMUM RADIUS OF CURVATURE OF 1,150 FEET, PER UDACS 2.08.01 AND 2.08.02. FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED.

ABBREVIATIONS	
APN = ASSESSOR'S PARCEL MAP	R/W = RIGHT OF WAY
CLV = CITY OF LAS VEGAS	STA = STATION
DW = DRIVEWAY	STLT = STREET LIGHT
E = EAST	SS = SANITARY SEWER
EXIST = EXISTING	SW = SIDEWALK
FDC = FIRE DEPARTMENT CONNECTION	SW = SIDEWALK
SSMH = SANITARY SEWER MANHOLE	SW = SIDEWALK
HOA = HOME OWNER'S ASSOCIATION	SW = SIDEWALK
PVC = POLY VINYL CHLORIDE	SW = SIDEWALK
	SW = SIDEWALK

REDUCED PRESSURE PRINCIPLE ASSEMBLY (2) 8"	
APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED PER THE UDACS PLATE No. 11C. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE REDUCED PRESSURE PRINCIPLE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY THE LVWMD. ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S) TO ALLOW THE DISTRICT DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY. EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.	

APPROVALS
CITY ENGINEER
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICE MANAGER
DATE 06/07/10 PROJECT No. 138007, 2nd Udac



EXISTING POWER POLE TO BE REMOVED AND POWER LINES TO BE RELOCATED UNDERGROUND
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DISCLAIMER NOTE
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Call before you Dig
Avoid cutting underground utility lines. It's costly.
Call before you Dig
1-800-227-2600
OR
CLARK COUNTY TRAFFIC OPERATIONS
1-702-455-7544

Call before you Dig
Avoid overhead power line contact
Call before you Dig
1-702-227-2929
NEVADA POWER ENVIRONMENT AND SAFETY SERVICES DEPARTMENT

Call before you Dig
Avoid hitting underground traffic signal systems and street light system controls. It's costly.
Call before you Dig
1-702-455-7511
CLARK COUNTY TRAFFIC OPERATIONS
1-702-455-7544
LAS VEGAS AREA CONVENTIONAL TRAFFIC SYSTEM

NEVADA H.A.N.D.
295 EAST WARM SPRINGS ROAD, SUITE 101
LAS VEGAS, NEVADA 89119-4212
PHONE (702) 739-3345 FAX (702) 739-3305

L.R. NELSON CONSULTING ENGINEERS, INC.
6765 West Russell Road Suite 200
Las Vegas, NV 89118
(702) 798-7978
(702) 451-2266 FAX

UTILITY/STREETLIGHTING PLAN 1

SKY VIEW PINES FAMILY APARTMENTS
NEVADA HAND
CITY OF LAS VEGAS

APPROVALS
DESIGNED BY: [Signature]
CHECKED BY: [Signature]
PROJECT NO: 138007
SCALE: 1" = 20'

UT1
5 OF 13 SHEETS
CLV DRAWING NO. 107V 5372