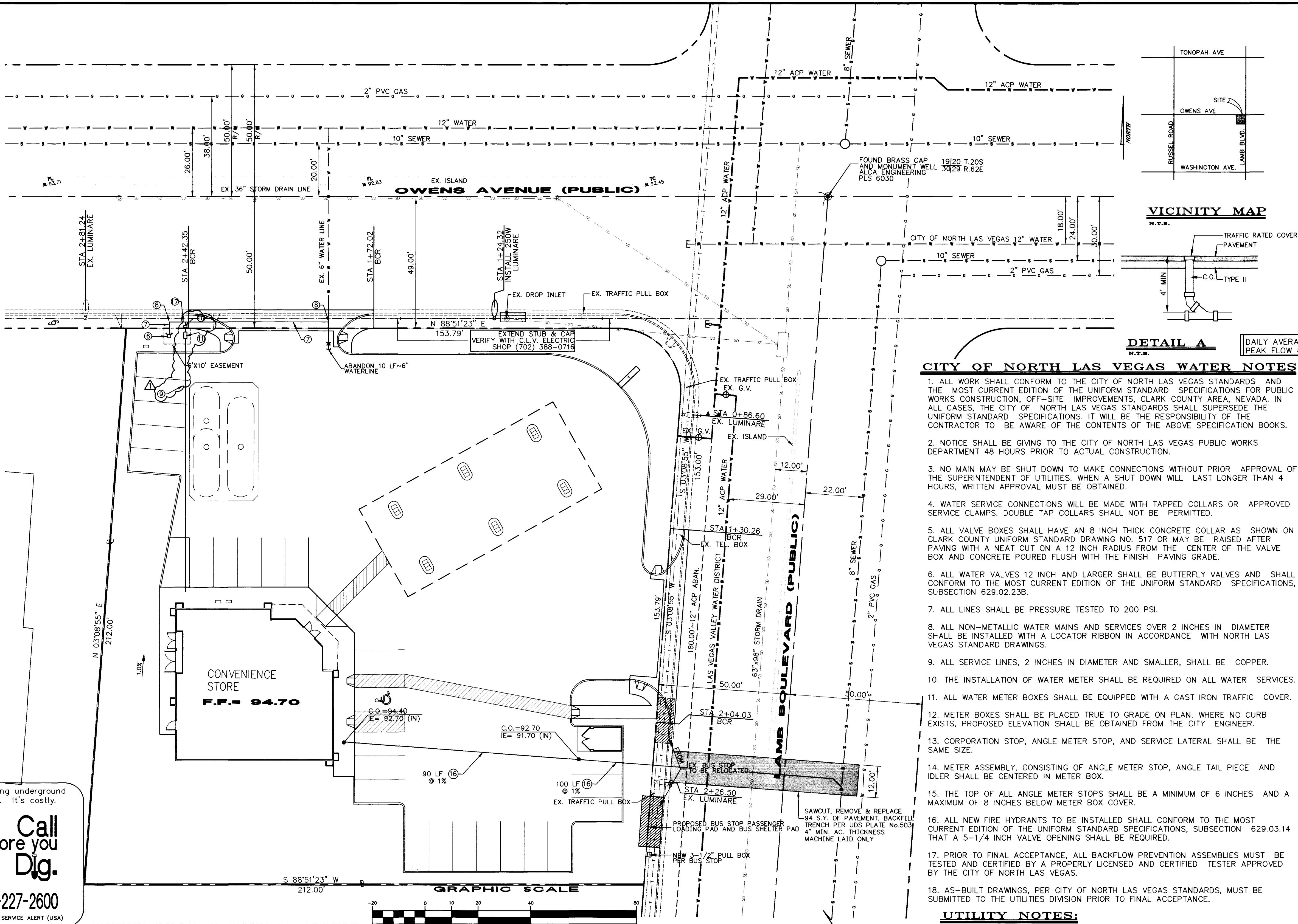




BENCHMARK:

THE BENCHMARK FOR THIS SURVEY IS C.C.E.D. BENCH No. 0002-205WS, BEING A RIVET AND PLATE ON TOP OF CURB, NE QUAD., LAMB and OWENS ELEVATION: 1792.13 FEET (NAVD 88) ELEVATION: 546.243 METERS (NAVD 88)

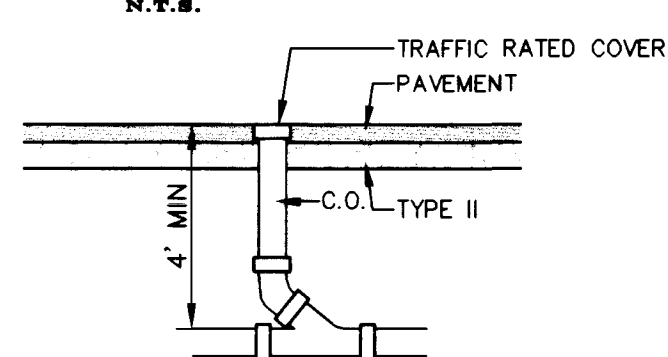
BASIS OF BEARING:

THE BASIS OF BEARINGS FOR THIS SURVEY IS THE CENTERLINE OF OWENS AVE., AS SHOWN IN FILE 66, PAGE 34 OF RECORDED PARCEL MAPS, OFFICIAL RECORDS, CLARK COUNTY, NEVADA. SAID

LEGAL DESCRIPTION

BEING A PORTION OF THE EAST ONE HALF E(1/2) OF THE EAST ONE HALF E(1/2) AND OF THE EAST ONE HALF E(1/2) OF THE WEST ONE HALF W(1/2) OF THE EAST ONE HALF E(1/2), ALL OF THE NORTHEAST NE(1/4) OF THE NORTHEAST NE(1/4) OF SECTION 30, T.20S., R.62E., M.D.M. CITY OF LAS VEGAS, CLARK COUNTY, NEVADA MORE PARTIALLY DESCRIBED AS PARCEL 1 RECORDED THEREOF IN FILE 88 OF PARCEL MAP, PAGE 44, RECORDED MARCH 21 1997 OF OFFICIAL RECORDS CLARK COUNTY NEVADA

VICINITY MAP



DETAIL A

DAILY AVERAGE FLOW = 55 GPM
PEAK FLOW = 99 GPM

LEGEND:

EX. FIRE HYDRANT	EX. WATER VALVE
PROPOSED WATER LINE	PROPOSED SEWER
PROPERTY LINE	CENTERLINE
EXISTING WATER LINE	EXISTING SEWER LINE
EXISTING GAS LINE	EXISTING SEWER MANHOLE
EXISTING STORM DRAIN MANHOLE	EXISTING TELEPHONE LINE
EXISTING STORM SEWER LINE	

FIRE FLOW CALCULATIONS:

FIRE FLOW REQUIREMENTS IS 1500 GALLONS PER MINUTE AT 20 PSI RESIDUAL PRESSURE

BASED ON:

SQUARE FOOTAGE OF LARGEST BUILDING	3,200 SQ. FT.
LARGEST AREA BETWEEN 4-HR SEPARATION WALL	N/A SQ. FT.
BUILDING HEIGHT	30 FEET
NUMBER OF STORIES	1 FLOOR
TYPE OF CONSTRUCTION	SN
OCCUPANCY	COMMERCIAL
FULL AUTOMATIC FIRE SPRINKLER SYSTEM	NO

DATE: 7/9/98
FIRE DEPARTMENT APPROVAL

DATE: 7/10/98
ONLY DEVELOPMENT DIVISION(UTILITIES)

APPROVAL OF THESE PLANS SHALL NOT BE CONSTRUED TO BE A PERMIT FOR CONSTRUCTION, A COMMITMENT TO SUPPLY WATER SERVICE, OR AN APPROVAL OF ANY VIOLATION OF ONLY WATER SERVICE DISTRICT SERVICE RULES AND REGULATIONS OR DESIGN CONSTRUCTION STANDARDS

DATE: 7/14/98
ONLY UTILITY DIVISION

CITY OF NORTH LAS VEGAS WATER NOTES

- ALL WORK SHALL CONFORM TO THE CITY OF NORTH LAS VEGAS STANDARDS AND THE MOST CURRENT EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA. IN ALL CASES, THE CITY OF NORTH LAS VEGAS 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.
- NOTICE SHALL BE GIVING TO THE CITY OF NORTH LAS VEGAS PUBLIC WORKS DEPARTMENT 48 HOURS PRIOR TO ACTUAL CONSTRUCTION.
- NO MAIN MAY BE SHUT DOWN TO MAKE CONNECTIONS WITHOUT PRIOR APPROVAL OF THE SUPERINTENDENT OF UTILITIES. WHEN A SHUT DOWN WILL LAST LONGER THAN 4 HOURS, WRITTEN APPROVAL MUST BE OBTAINED.
- WATER SERVICE CONNECTIONS WILL BE MADE WITH TAPPED COLLARS OR APPROVED SERVICE CLAMPS. DOUBLE TAP COLLARS SHALL NOT BE PERMITTED.
- ALL VALVE BOXES SHALL HAVE AN 8 INCH THICK CONCRETE COLLAR AS SHOWN ON CLARK COUNTY UNIFORM STANDARD DRAWING NO. 517 OR MAY BE RAISED AFTER PAVING WITH A NEAT CUT ON A 12 INCH RADIUS FROM THE CENTER OF THE VALVE BOX AND CONCRETE POURED FLUSH WITH THE FINISH PAVING GRADE.
- ALL WATER VALVES 12 INCH AND LARGER SHALL BE BUTTERFLY VALVES AND SHALL CONFORM TO THE MOST CURRENT EDITION OF THE UNIFORM STANDARD SPECIFICATIONS, SUBSECTION 629.02.23B.
- ALL LINES SHALL BE PRESSURE TESTED TO 200 PSI.
- ALL NON-METALLIC WATER MAINS AND SERVICES OVER 2 INCHES IN DIAMETER SHALL BE INSTALLED WITH A LOCATOR RIBBON IN ACCORDANCE WITH NORTH LAS VEGAS STANDARD DRAWINGS.
- ALL SERVICE LINES, 2 INCHES IN DIAMETER AND SMALLER, SHALL BE COPPER.
- THE INSTALLATION OF WATER METER SHALL BE REQUIRED ON ALL WATER SERVICES.
- ALL WATER METER BOXES SHALL BE EQUIPPED WITH A CAST IRON TRAFFIC COVER.
- METER BOXES SHALL BE PLACED TRUE TO GRADE ON PLAN. WHERE NO CURB EXISTS, PROPOSED ELEVATION SHALL BE OBTAINED FROM THE CITY ENGINEER.
- CORPORATION STOP, ANGLE METER STOP, AND SERVICE LATERAL SHALL BE THE SAME SIZE.
- METER ASSEMBLY, CONSISTING OF ANGLE METER STOP, ANGLE TAIL PIECE AND IDLER SHALL BE CENTERED IN METER BOX.
- THE TOP OF ALL ANGLE METER STOPS SHALL BE A MINIMUM OF 6 INCHES AND A MAXIMUM OF 8 INCHES BELOW METER BOX COVER.
- ALL NEW FIRE HYDRANTS TO BE INSTALLED SHALL CONFORM TO THE MOST CURRENT EDITION OF THE UNIFORM STANDARD SPECIFICATIONS, SUBSECTION 629.03.14 THAT A 5-1/4 INCH VALVE OPENING SHALL BE REQUIRED.
- PRIOR TO FINAL ACCEPTANCE, ALL BACKFLOW PREVENTION ASSEMBLIES MUST BE TESTED AND CERTIFIED BY A PROPERLY LICENSED AND CERTIFIED TESTER APPROVED BY THE CITY OF NORTH LAS VEGAS.
- AS-BUILT DRAWINGS, PER CITY OF NORTH LAS VEGAS STANDARDS, MUST BE SUBMITTED TO THE UTILITIES DIVISION PRIOR TO FINAL ACCEPTANCE.

UTILITY NOTES:

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

CONSTRUCTION NOTES

- 6" FIRE HYDRANT ASSEMBLY INSTALL PER UDACS PLATE NO.7 1 EA. (PUBLIC)
- 6" WATER LINE 65 LF. (PUBLIC)
- 6"x90" ANGLE 2 EA. (PUBLIC)
- 2" COPPER SERVICE LINE 110 LF. (PUBLIC)
- 1-1/2" WATER METER PER UDACS PLATE 11A 1 EA. (PUBLIC)
- 2" RPPA PER UDACS PLATE 11A 1 EA. (PUBLIC)
- 6" CLEAN OUT 2 EA. (PRIVATE)
- INSTALL 6" ABS SEWER 73 LF. (PUBLIC)
- 6"x6"x1-1/2" TEE 117 LF. (PRIVATE)
- 6" EA. (PUBLIC)

WATER METERING REQUIREMENTS FOR NEW DEVELOPMENTS

SEPERATE DOMESTIC AND FIRE SERVICES (WHERE APPLICABLE) ARE REQUIRED A) FOR EACH DWELLING UNIT, QUASI-PUBLIC, COMMERCIAL AND/OR INDUSTRIAL OCCUPANCY LOCATED ON A SINGLE PARCEL LOT. EACH PARCEL OR LOT OF A COMMERCIAL OR RESIDENTIAL SUBDIVISION WILL HAVE A MINIMUM OF ONE (1) METERED DOMESTIC SERVICES. WHEN A FIRE B) SERVICES IS REQUIRED, EACH PARCEL OR LOT WILL HAVE A MINIMUM OF ONE (1) FIRE SERVICE. THE CITY, AT ITS OPTION, MAY ALLOW A COMMUNAL FIRE SERVICE PROVIDED THE PROPERTY OWNER FIRST ESTABLISH A PROPERTY MANAGEMENT VASSOCIATION WHICH ACCEPTS RESPONSIBILITY FOR THE PAYMENT OF WATER BILLS AND MAINTENANCE AND OPERATION OF THE FIRE LINES AND BACKFLOW PREFFENTION ASSEMBLY

REDUCED PRESSURE PRINCIPLE ASSEMBLY

APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED PER THE UDACS PLATE NO. 11A, NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE REDUCED PRESSURE PRINCIPLE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY THE LVWD.

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.

NOTES:

EXISTING UTILITIES ARE LOCATED ON THE PLANS FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. THE ENGINEER BEARS NO RESPONSIBILITY FOR THE LOCATION OF UTILITIES SHOWN OR NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES BEFORE STARTING CONSTRUCTION AND, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION OF ALL UTILITIES WITH THE UTILITY COMPANIES.

THE ONSITE WATER LINES AND APPURTENANCE ARE PRIVATE FACILITIES NOT TO BE OPERATED OR MAINTAIN BY THE CITY OF NORTH LAS VEGAS.

ALL WATER FACILITIES CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE "UNIFORM DESIGN STANDARDS FOR WATER DISTRIBUTION SYSTEMS" (UDACS), LATEST EDITION

(IN FEET)
1 INCH = 20 ft.

WATER-SEWER CROSSING NOTES:

THE FOLLOWING ARE THE REQUIREMENTS THAT MUST BE MET WHEN THERE IS A WATER-SEWER CROSSING:

WHEN PROTECTION OF THE WATER LINE IS CONSIDERED, THE MINIMUM VERTICAL DISTANCE OF 18 (18") INCHES MUST BE MAINTAINED WHEN THE WATER LINE IS INSTALLED OVER THE SEWER/STORM LINE. IF THIS DISTANCE CANNOT BE MAINTAINED BECAUSE OF PHYSICAL OBSTRUCTIONS OR THE WATERLINE MUST BE PLACED UNDER THE SEWER/STORM LINE, THE SEWER/STORM LINE MUST BE CONSTRUCTED WITH ANY ONE OF THE FOLLOWING:

- EXTRA HEAVY CAST IRON OR DUCTILE IRON PIPE.
- WATER SUPPLY QUALITY MATERIAL.
- ENCASEMENT WITH 4 (4") INCHES MINIMUM, OF CONCRETE OR SLEEVING WITH WATER QUALITY PIPE.

EACH OF THESE PROVISIONS MUST BE EXTENDED FOR 10 (10') FEET ON EITHER SIDE OF THE WATERLINE AT 90 DEGREES TO THE CROSSING.

Avoid cutting underground utility lines. It's costly.

Call before you Dig.

1-800-227-2600

UNDERGROUND SERVICE ALERT (USA)

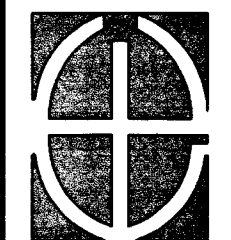
AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY.

CALL BEFORE YOU DO OVERHEAD

CALL 1-702-593-6111

REVISIONS:
A REVISED FOR 1-1/2" WATER METER, 2" RPPA & 2" SERVICE LINE 6/29/98

ACE ENGINEERING



5601 N. TENAYA WAY,
SUITE 105, LAS VEGAS, NV 89130
PHONE: (702) 596-5115, FAX (702) 596-7912

UTILITY PLAN
FOR THE SOUTHWEST CORNER
OF LAMB BLVD. & OWENS AVE.

A.P.N. 140-30-504-002

DATE: 6/24/98
JOB # 98-186
DWG. BY: C.C.

C3
SHEET

3 OF 3

107-V2898

SEE SHEET 10-100-002
before
Cal
1-800-927-1900



PROPOSED UTILITY PLANS
THIS PLAN SHOWS THE PROPOSED UTILITY PLANS FOR THE PROJECT. THE PLANS SHOW THE LOCATION OF THE UTILITY LINES AND THE PROPOSED CHANGES TO THE EXISTING UTILITY LINES.

THE PLANS SHOW THE LOCATION OF THE UTILITY LINES AND THE PROPOSED CHANGES TO THE EXISTING UTILITY LINES.

THE PLANS SHOW THE LOCATION OF THE UTILITY LINES AND THE PROPOSED CHANGES TO THE EXISTING UTILITY LINES.

THE PLANS SHOW THE LOCATION OF THE UTILITY LINES AND THE PROPOSED CHANGES TO THE EXISTING UTILITY LINES.

THE PLANS SHOW THE LOCATION OF THE UTILITY LINES AND THE PROPOSED CHANGES TO THE EXISTING UTILITY LINES.

THE PLANS SHOW THE LOCATION OF THE UTILITY LINES AND THE PROPOSED CHANGES TO THE EXISTING UTILITY LINES.

EXISTING UTILITY LINES
THE PLANS SHOW THE LOCATION OF THE EXISTING UTILITY LINES AND THE PROPOSED CHANGES TO THE EXISTING UTILITY LINES.

THE PLANS SHOW THE LOCATION OF THE EXISTING UTILITY LINES AND THE PROPOSED CHANGES TO THE EXISTING UTILITY LINES.

THE PLANS SHOW THE LOCATION OF THE EXISTING UTILITY LINES AND THE PROPOSED CHANGES TO THE EXISTING UTILITY LINES.

THE PLANS SHOW THE LOCATION OF THE EXISTING UTILITY LINES AND THE PROPOSED CHANGES TO THE EXISTING UTILITY LINES.

THE PLANS SHOW THE LOCATION OF THE EXISTING UTILITY LINES AND THE PROPOSED CHANGES TO THE EXISTING UTILITY LINES.

THE PLANS SHOW THE LOCATION OF THE EXISTING UTILITY LINES AND THE PROPOSED CHANGES TO THE EXISTING UTILITY LINES.

NOTES

1. ALL UTILITIES SHALL BE DEEPENED TO A MINIMUM OF 48" BELOW FINISHED GRADE.

2. ALL UTILITIES SHALL BE DEEPENED TO A MINIMUM OF 48" BELOW FINISHED GRADE.

3. ALL UTILITIES SHALL BE DEEPENED TO A MINIMUM OF 48" BELOW FINISHED GRADE.

4. ALL UTILITIES SHALL BE DEEPENED TO A MINIMUM OF 48" BELOW FINISHED GRADE.

5. ALL UTILITIES SHALL BE DEEPENED TO A MINIMUM OF 48" BELOW FINISHED GRADE.

6. ALL UTILITIES SHALL BE DEEPENED TO A MINIMUM OF 48" BELOW FINISHED GRADE.

7. ALL UTILITIES SHALL BE DEEPENED TO A MINIMUM OF 48" BELOW FINISHED GRADE.

8. ALL UTILITIES SHALL BE DEEPENED TO A MINIMUM OF 48" BELOW FINISHED GRADE.

9. ALL UTILITIES SHALL BE DEEPENED TO A MINIMUM OF 48" BELOW FINISHED GRADE.

10. ALL UTILITIES SHALL BE DEEPENED TO A MINIMUM OF 48" BELOW FINISHED GRADE.

11. ALL UTILITIES SHALL BE DEEPENED TO A MINIMUM OF 48" BELOW FINISHED GRADE.

12. ALL UTILITIES SHALL BE DEEPENED TO A MINIMUM OF 48" BELOW FINISHED GRADE.

13. ALL UTILITIES SHALL BE DEEPENED TO A MINIMUM OF 48" BELOW FINISHED GRADE.

14. ALL UTILITIES SHALL BE DEEPENED TO A MINIMUM OF 48" BELOW FINISHED GRADE.

15. ALL UTILITIES SHALL BE DEEPENED TO A MINIMUM OF 48" BELOW FINISHED GRADE.

16. ALL UTILITIES SHALL BE DEEPENED TO A MINIMUM OF 48" BELOW FINISHED GRADE.

17. ALL UTILITIES SHALL BE DEEPENED TO A MINIMUM OF 48" BELOW FINISHED GRADE.

18. ALL UTILITIES SHALL BE DEEPENED TO A MINIMUM OF 48" BELOW FINISHED GRADE.

19. ALL UTILITIES SHALL BE DEEPENED TO A MINIMUM OF 48" BELOW FINISHED GRADE.

20. ALL UTILITIES SHALL BE DEEPENED TO A MINIMUM OF 48" BELOW FINISHED GRADE.

21. ALL UTILITIES SHALL BE DEEPENED TO A MINIMUM OF 48" BELOW FINISHED GRADE.

22. ALL UTILITIES SHALL BE DEEPENED TO A MINIMUM OF 48" BELOW FINISHED GRADE.

23. ALL UTILITIES SHALL BE DEEPENED TO A MINIMUM OF 48" BELOW FINISHED GRADE.

24. ALL UTILITIES SHALL BE DEEPENED TO A MINIMUM OF 48" BELOW FINISHED GRADE.

25. ALL UTILITIES SHALL BE DEEPENED TO A MINIMUM OF 48" BELOW FINISHED GRADE.

REVISIONS
DATE OF REVISION
BY
REASON

DATE OF REVISION
BY
REASON

DATE OF REVISION
BY
REASON

DATE OF REVISION
BY
REASON

DATE OF REVISION
BY
REASON

DATE OF REVISION
BY
REASON

DATE OF REVISION
BY
REASON

DATE OF REVISION
BY
REASON

DATE OF REVISION
BY
REASON

DATE OF REVISION
BY
REASON

DATE OF REVISION
BY
REASON

DATE OF REVISION
BY
REASON

DATE OF REVISION
BY
REASON

DATE OF REVISION
BY
REASON

DATE OF REVISION
BY
REASON

DATE OF REVISION
BY
REASON

DATE OF REVISION
BY
REASON

DATE OF REVISION
BY
REASON

DATE OF REVISION
BY
REASON

DATE OF REVISION
BY
REASON

DATE OF REVISION
BY
REASON

DATE OF REVISION
BY
REASON

DATE OF REVISION
BY
REASON

DATE OF REVISION
BY
REASON

DATE OF REVISION
BY
REASON

DATE OF REVISION
BY
REASON

DATE OF REVISION
BY
REASON

DATE OF REVISION
BY
REASON

DATE OF REVISION
BY
REASON

DATE OF REVISION
BY
REASON

DATE OF REVISION
BY
REASON

DATE OF REVISION
BY
REASON

DATE OF REVISION
BY
REASON

DATE OF REVISION
BY
REASON



ACE ENGINEERING
2401 N. TERRY WAY
SUITE 100
DALLAS, TEXAS 75201
PHONE (214) 342-1000 FAX (214) 342-1001

UTILITY PLAN
FOR THE SOUTHWEST CORNER
OF LAMB BLVD. & OWENS AVE.

C3
SHEET
3 OF 3

107-1240