

LVWD NOTES (PROJECT #25015)

- NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN RELEASED FOR CONSTRUCTION BY THE LVWD. FOLLOWING WATER PLAN APPROVAL 48 HOUR NOTICE SHALL BE GIVEN TO THE LVWD COMMUNICATION SUPPORT CENTER (258-7171) PRIOR TO THE START OF CONSTRUCTION. NOTICE MUST BE GIVEN BY 2:00 PM THE BUSINESS DAY PRIOR TO A LVWD INSPECTION. (WHEN REQUESTING INSPECTIONS, PLEASE REFER TO THE PROJECT # IDENTIFIED ABOVE.)
- ALL WORK SHALL CONFORM TO THE LVWD'S STANDARD PLATES, DRAWINGS AND SPECIFICATIONS AND THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS (UDACS), LATEST EDITION.
- ALL WORK, EXCEPT AS MODIFIED BY THESE PLANS OR BY NOTE 2, SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT DRAFT OR EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENT, CLARK COUNTY AREA.
- A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVWD.
- ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE COPPER TUBING WITH LVWD APPROVED SERVICE SADDLES.
- ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
- ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAY, VALLEY AND CURB CUTTERS.
- THE FOLLOWING REQUIREMENTS MUST BE MET IN THE EVENT A WATER LINE AND SANITARY OR STORM SEWER LINE CROSS:
 - A MINIMUM EIGHTEEN (18) INCH VERTICAL SEPARATION (OUTSIDE TO OUTSIDE) MUST BE MAINTAINED WHEN THE WATER LINE IS INSTALLED OVER THE SANITARY OR STORM SEWER LINE. IF THE VERTICAL SEPARATION CANNOT BE MAINTAINED OR THE WATER LINE MUST BE PLACED UNDER THE SANITARY OR STORM SEWER LINE, THE SANITARY OR STORM SEWER LINE MUST BE CONSTRUCTED WITH ONE OF THE FOLLOWING OR, AS SHOWN ON THESE PLANS:
 - POTABLE WATER SUPPLY QUALITY MATERIAL.
 - ENCASEMENT, WITH FOUR (4) INCH CONCRETE (MINIMUM).
 - SLEEVING WITH POTABLE WATER SUPPLY QUALITY PIPE.
 - EACH PROVISION MUST EXTEND ALONG THE SANITARY OR STORM SEWER, ON EITHER SIDE OF THE MAIN, A MINIMUM 10 FOOT DISTANCE PERPENDICULAR TO THE WATER MAIN EXTERIOR.
- WARNING TAPE SHALL BE REQUIRED OVER ALL MAINS, ALL SIX (6) INCH DIAMETER AND LARGER SERVICE LATERALS, AND ANY SERVICE LATERAL NOT INSTALLED PERPENDICULAR TO THE MAIN IN ACCORDANCE WITH STANDARD PLATE NO. 27.
- ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FIED AND AN ACCEPTABLE WATER SAMPLE OBTAINED, PRIOR TO CONNECTION TO THE LVWD'S DISTRIBUTION SYSTEM.
- THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES AND SMALLER FROM LVWD CENTRAL STORES. TELEPHONE 258-3152 FORTY-EIGHT (48) HOURS PRIOR TO PICKUP.
- CONSTRUCTION MAY INTERRUPT SERVICE, WITH LVWD APPROVAL AND PROPER NOTIFICATION, BETWEEN THE HOURS OF 10 PM AND 6 AM, SUNDAY THROUGH THURSDAY. CIRCUMSTANCES MAY REQUIRE TEMPORARY SERVICE FEEDS BE INSTALLED, WITHOUT LVWD REIMBURSEMENT. ANY TEMPORARY SERVICE FEED MUST HAVE LVWD APPROVAL.
- ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE AS LISTED ON LVWD'S PRE-APPROVED MATERIALS AND MANUFACTURERS LISTING FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS.

APPROVED FOR CONSTRUCTION
 LAS VEGAS VALLEY WATER DISTRICT DATE

REDUCED PRESSURE PRINCIPLE ASSEMBLY - (1) 2" (1) 1 1/2"
 APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED PER THE UDACS PLATE #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). RIGHT-OF-WAY, EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

INSTALLATION OF DOUBLE CHECK DETECTOR ASSEMBLY - (1) 8" (2) 10"
 THE DOUBLE CHECK DETECTOR ASSEMBLIES SHALL BE INSTALLED IN ACCORDANCE WITH UDACS PLATE 20B.
 ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S). RIGHT-OF-WAY, EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

BENCHMARK
 CITY OF LAS VEGAS BENCHMARK 0LV09 36SSWB
 NAVD 88 ELEVATION = 919.3498 METERS, 3018.23 FT
 SUMMERLIN DATUM ELEVATION = 3014.08 FT
 THIS PROJECT USES NAVD 88 DATUM

BASIS OF BEARING
 SOUTH 08°05'51" EAST, BEING THE BEARING OF THE EAST LINE OF SECTION 38, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., AS SHOWN BY MAP THEREOF ON FILE IN BOOK 74 OF PLATS, OFFICIAL RECORDS OF CLARK COUNTY, NEVADA

NOTE:
 FOR STORM DRAIN CONSTRUCTION SEE STORM PLANS.

FIRE FLOW CALCULATION
 FROM TABLE A-II-1-1997 UNIFORM FIRE CODE
 TYPE V-H (148,700 SF) = 8000 GPM X 25%
 SPRINKLER REDUCTION = 2000 GPM
 THE FIRE FLOW REQUIREMENT IS: 8000 GALLONS PER MINUTE, 20 PSI RESIDUAL PRESSURE.
 BASED ON:
 SQUARE FOOTAGE: 148,700 SF
 LARGEST AREA BETWEEN 4-10R
 AREA SEPARATION WALLS: SINGLE AREA
 BUILDING HEIGHT: 30.5'
 NUMBER OF STORIES: 1 STORY
 TYPE OF CONSTRUCTION: V-H
 OCCUPANCY: M, S-3
 FULL AUTOMATIC FIRE SPRINKLER SYSTEM: YES

REVIEWED BY: *[Signature]*
 DATE: 3/1/01

WATER CONSTRUCTION NOTES

- INSTALL DUAL 10" DCCA PER UDACS PLATE 11D ON 18"x7" SLAB.
- CONNECT TO 12" STUB INSTALLED BY OTHERS, INSTALL 12"x10" REDUCER
- 10" WATER FOR FIRE PROTECTION
- INSTALL 11-1/4" ELBOW WITH THRUST BLOCK PER U.D.A.C.S. PLATE 5
- INSTALL 45° ELBOW WITH THRUST BLOCK PER U.D.A.C.S. PLATE 5
- INSTALL 90° ELBOW WITH THRUST BLOCK PER U.D.A.C.S. PLATE 5
- INSTALL FIRE HYDRANT ASSEMBLY PER UDACS PLATE # 7 (INCLUDING ALL VALVES, TEE, THRUST BLOCKS AND APURTANCES)
- CONNECT TO EXISTING 8" STUB WITH 8" TAPPING VALVE
- INSTALL (1)-2" METER W/ 2" COPPER SERVICE FOR DOMESTIC SUPPLY PER U.D.A.C.S. PLATE 1D
- INSTALL (1)-1-1/2" METER W/ 1-1/2" COPPER SERVICE FOR IRRIGATION PER U.D.A.C.S. PLATE 1D
- INSTALL (1)-1-1/2" RPPA PER UDACS PLATE 11A
- 3" PVC WATER FOR DOMESTIC SUPPLY
- 3" BENDS AS REQUIRED TO ALIGN WITH FINE LINE
- SEE MECHANICAL PLANS FOR CONNECTION TO BLDG.
- 22-1/2" ELBOW WITH THRUST BLOCK PER U.D.A.C.S. PLATE 5
- INSTALL 8" DCCA PER U.D.A.C.S. PLATE 20B ON A 6"x6" SLAB W/ 5" OFFSET
- INSTALL 8 x 10 REDUCER
- INSTALL 10" TEE WITH THRUST BLOCK PER U.D.A.C.S. PLATE 5
- INSTALL (1) 2" RPPA PER UDACS PLATE 11A.
- INSTALL 2" SERVICE SADDLE
- INSTALL 1-1/2" SERVICE SADDLE
- BEWARE AT WATER CROSSINGS, MAINTAIN DEPTH OF COVER OF PROPOSED WATER AT EXISTING WATER LINE.
- REMOVE EXISTING CAP AND BLOW-OFF AND CONNECT TO EXISTING 8" WATER.
- INSTALL 8"x8" REDUCER

SEWER CONSTRUCTION NOTES

- INSTALL STANDARD ECCENTRIC 48" MANHOLE PER C.C. SANITATION DISTRICT STD DWG 5D-1
- CONNECT NEW 8" SEWER TO EXISTING STUB
- 4" SEWER STUB - CONNECT TO 4" OUTLET FROM BLDG. 4' BELOW FF SEE MECHANICAL PLANS FOR CONNECTION
- 4" SEWER STUB - CONNECT TO 4" OUTLET FROM BLDG. 6.5' BELOW FF SEE MECHANICAL PLANS FOR CONNECTION AND GREASE INTERCEPTOR INFORMATION
- 4" SEWER STUB - CONNECT TO 4" OUTLET FROM BLDG. 4.5' BELOW FF SEE MECHANICAL PLANS FOR CONNECTION AND GREASE INTERCEPTOR INFORMATION
- 4" SEWER STUB - CONNECT TO 4" OUTLET FROM BLDG. 4.5' BELOW FF SEE MECHANICAL PLANS FOR CONNECTION
- 4" SEWER STUB - CONNECT TO 4" OUTLET FROM BLDG. 7.25' BELOW FF SEE MECHANICAL PLANS FOR CONNECTION
- 4" SEWER STUB - CONNECT TO 4" OUTLET FROM BLDG. 7.25' BELOW FF SEE MECHANICAL PLANS FOR CONNECTION

ALL 4" LATERALS SHALL BE INSTALLED AT MIN. SL=2.0%

WATER QUANTITIES

10" DCCA	2 EA
10" WATER	1,850 LF
3" WATER	630 LF
FIRE HYDRANTS	7 EA
2" METER FOR DOMESTIC SUPPLY	1 EA
1-1/2" METER FOR IRRIGATION	1 EA
(1) 1-1/2" RPPA	1 EA
8" DCCA	1 EA
8 x 10 REDUCER	1 EA
(1) 2" RPPA	1 EA
REMOVE AND REPLACE EXISTING AC PAVEMENT	20 SY

SEWER QUANTITIES

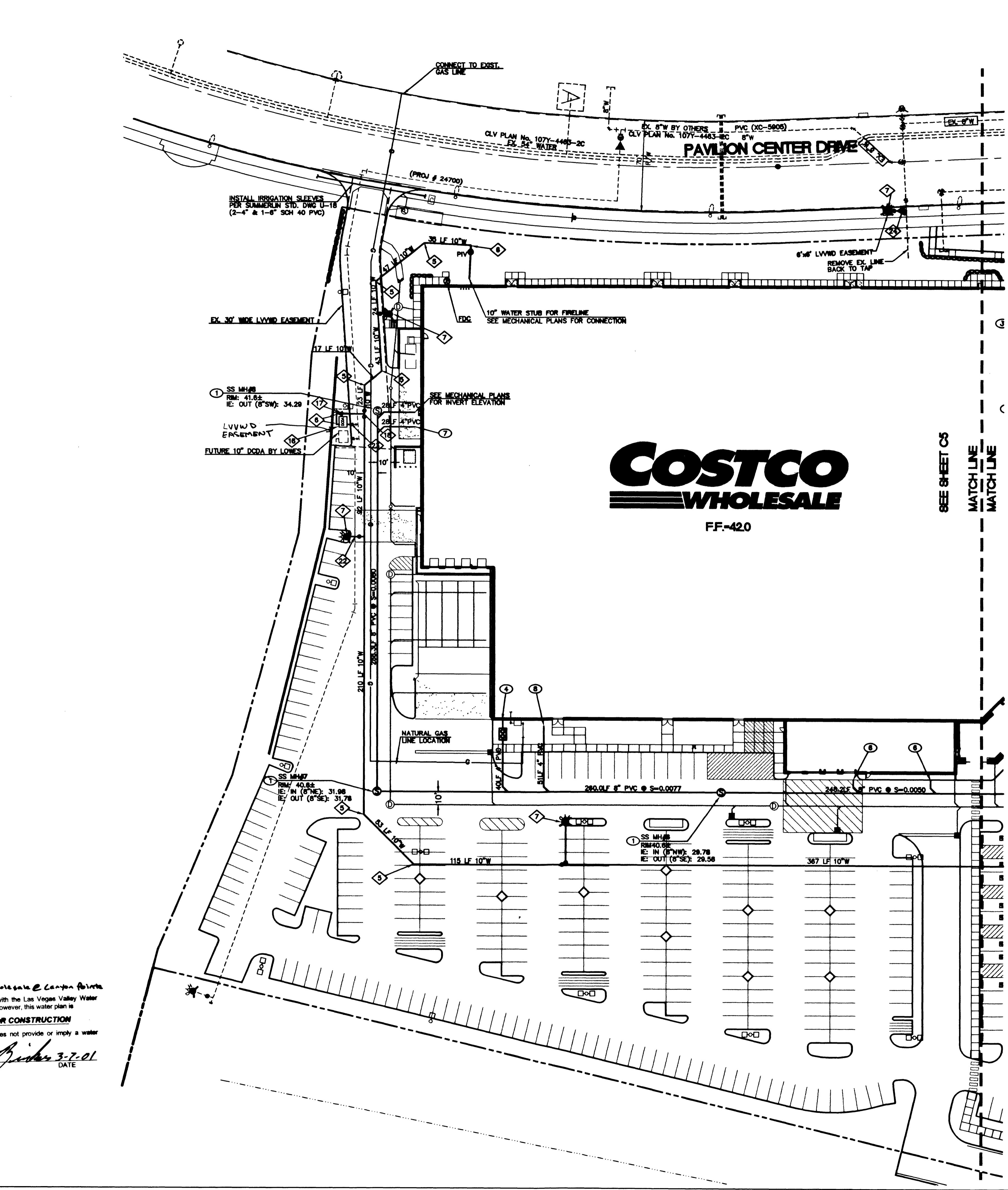
8" SEWER	1725 LF
6" SEWER	48 LF
4" SEWER	275 LF
48" SEWER MANHOLE	8 EA
6" SEWER CLEANOUT	1 EA

SEWER CONTRIBUTION

SEWER DAILY AVERAGE:	0.023 MGD
SEWER PEAK FLOW:	0.081 MGD

PROJECT NAME: *Costco Wholesale @ Canyon Pointe*
 This project water plan complies with the Las Vegas Valley Water District's technical requirements. However, this water plan is NOT APPROVED FOR CONSTRUCTION at this time and this signature does not provide or imply a water commitment.
[Signature] DATE: 3-7-01

Call before you Dig. 1-800-227-2600
 Call before you OVERHEAD. 1-702-593-6111
 SCALE: 1"=40'



COSTCO WHOLESALE
 889 Lake Drive Henderson, NV 89014
 (702) 315-8052

UTILITIES PLAN (NORTH)
COSTCO WHOLESALE AT CANYON POINTE
 CITY OF LAS VEGAS
 PORTION OF SECTION 35 AND 36, TOWNSHIP 20 SOUTH, RANGE 59 EAST
 M.D.M., CLARK COUNTY, NEVADA

DATE: 2/01/01
 DESIGNED: J. SLATER
 ENGINEER: J. SLATER
 CHECKED: J. SLATER
 SCALE: 1"=40' HORIZ

PROFESSIONAL ENGINEER - STATE OF NEVADA
 JERRY J. SLATER
 No. 14167

SHEET TITLE: UTILITY PLAN
 SHEET NUMBER: C4 OF 14
 CLV DRAWING NO. 107-V-3367

