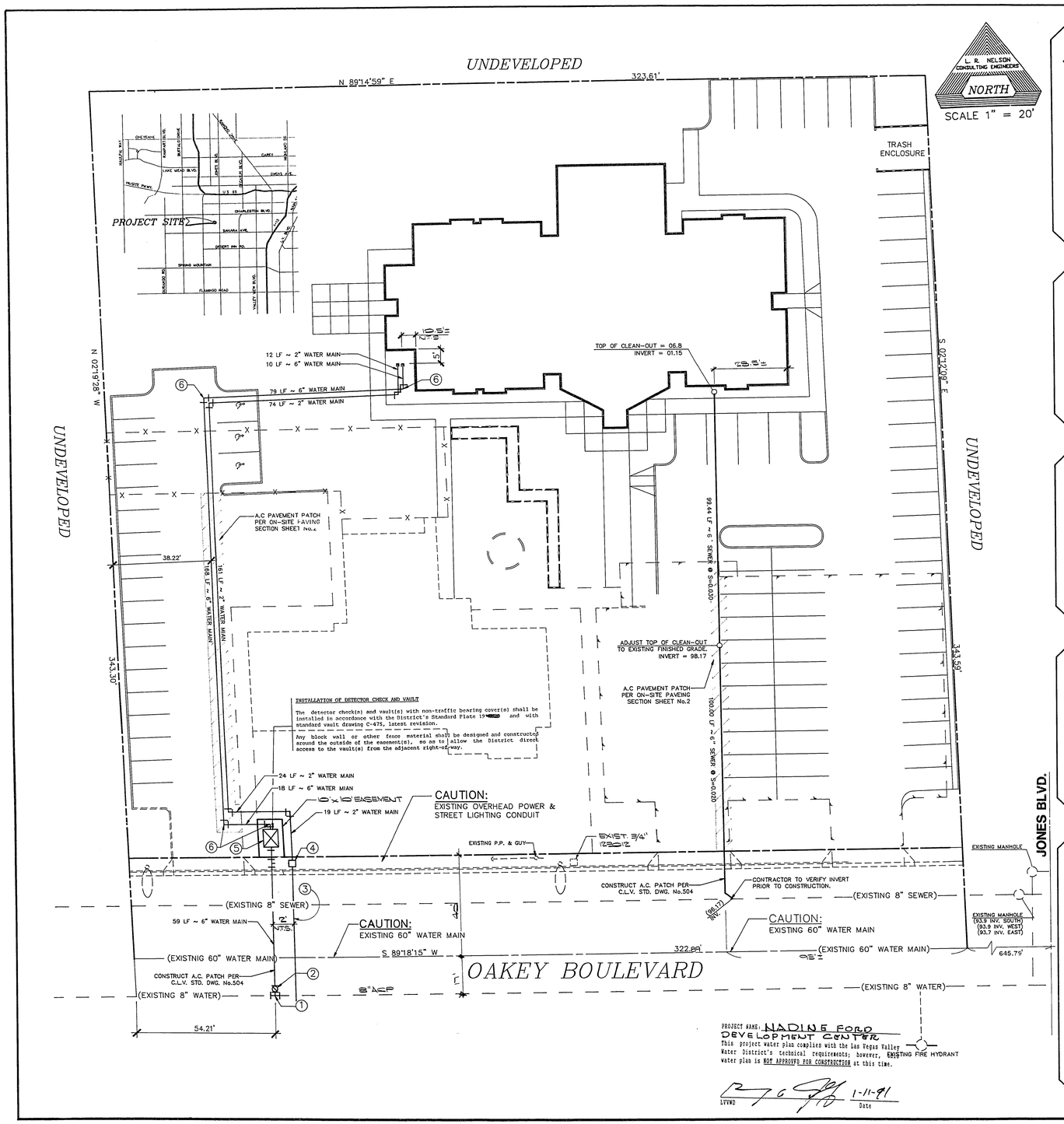

PROJECT NAME: NADINE FORD DEVELOPMENT CENTER
This project water plan complies with the Las Vegas Valley Water District's technical requirements; however, the this water plan is NOT APPROVED FOR CONSTRUCTION at this time.

LVVWD 1-11-91 Date

CONSTRUCTION NOTES

WATER	
① 8x8x6 MECHANICAL TAPPING TEE	1 EACH
② 6" GATE VALVE	1 EACH
③ 2" SERVICE CONNECTION PER LVVWD STD. PLATE No.2	1 EACH
④ 2" METER FROM LVVWD	1 EACH
⑤ 6" DETECTOR CHECK WITH 10'x10' EASEMENT (TO BE DEDICATED TO LVVWD)	1 EACH
⑥ 6" 90 DEGREE BEND	4 EACH
6" WATER MAIN	334 LF
2" WATER MAIN	290 LF
SEWER	
6" SEWER CLEAN-OUT	2 EACH
6" SEWER LATERAL	199.44 LF

UTILITY 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 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.

Avoid cutting underground utility lines. It's costly.
Call before you Dig
1-800-227-2600
UNDERGROUND SERVICE (USA)

STREETLIGHT NOTES

1. ALL STREET LIGHTING INSTALLATIONS EXCEPT AS NOTED ON THE STREET LIGHTING PLANS SHALL CONFORM TO THE IMPROVEMENT STANDARDS, DEPARTMENT OF PUBLIC WORKS, CLARK COUNTY, NEVADA, AND THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA.
2. EXISTING POLES THAT ARE RELOCATED SHALL HAVE NEW WIRE PULLED, NO SPLICES OR PULL BOXES.
3. EXISTING POLES TO BE ADJUSTED TO NEW FINISH GRADES.
4. ALL HAND HOLE COVERS MUST BE INSTALLED POLE CAPS POURED, AND PULL BOX LIDS BOLTED DOWN PRIOR TO ENERGIZING CIRCUIT. ALL WIRE MUST HAVE THW INSTALLATION.
5. SERVICE POINT TO BE DETERMINED BY NEVADA POWER COMPANY.

FIRE DATA

BUILDING USE – REDEVELOPMENT FACILITY
BUILDING SQUARE FOOTAGE – 10,716 SQ. FT.
NUMBER OF STORIES – ONE
TYPE OF CONSTRUCTION – V-NON-RATED
SEPERATION WALLS – NONE
SPRINKLERS – YES
FIRE FLOW ESTIMATE – 1325 GPM

SEWER NOTES

1. ALL SANITARY SEWER INSTALLATIONS SHALL CONFORM TO THE STANDARD DETAILS AND SPECIFICATIONS OF THE CITY OF LAS VEGAS, AND SHALL ALSO CONFORM TO THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OF OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, LATEST EDITION, UNLESS OTHERWISE NOTED.
2. CHISEL "S" OR "G" IN CURBS WHERE SEWER OR GAS LATERALS PASS UNDER THE CURB.
3. POLYVINYL CHLORIDE (PVC) SEWER PIPES SHALL MEET ASTM D-3034 SDR 35 SPECIFICATIONS, AND INSTALLED WITH SAND BEDDING AND BACKFILL OR TYPE II GRAVEL.
4. ALL MANHOLES IN PAVED STREETS 80' R/W AND LARGER, SHALL HAVE CONCRETE COLLARS.
5. TEE SADDLES SHALL BE USED TO CONNECT SEWER LATERALS TO EXISTING MAIN LINES UP TO 12" DIA. SIZE. CONNECTIONS TO 15" OR LARGER MAINS SHALL REQUIRE SPECIAL PROCEDURES.
6. A SEWER MAIN CROSSING EITHER OVER A WATER MAIN OR LESS THAN 18" UNDER A WATER MAIN MUST BE REINFORCED CONCRETE ENCASED PIPE FOR A DISTANCE NOT LESS THAN TEN FEET (10') TO EACH SIDE OF THE CENTERLINE OF THE WATER MAIN.

WATER NOTES

1. NO WORK SHALL BEGIN ON THE WATER PLANS UNTIL THEY HAVE BEEN RELEASED FOR CONSTRUCTION BY THE LVVWD. FOLLOWING APPROVAL OF THE PLANS, NOTICE MUST BE GIVEN TO THE LVVWD CUSTOMER SERVICE DEPARTMENT (870-4194), 48 HOURS PRIOR TO ACTUAL CONSTRUCTION AND 24 HOURS PRIOR TO AN INSPECTION.
2. CALL BEFORE YOU DIG 1-800-227-2600.
3. ALL WORK SHALL CONFORM TO LVVWD LATEST STANDARD PLATES, DRAWINGS, AND SPECIFICATIONS.
4. ALL WORK, EXCEPT AS MODIFIED HEREON OR BY NOTE 3, SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT DRAFT OR ADDITON OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENTS, CLARK COUNTY AREA.
5. DISTRICT APPROVED SERVICE SADDLES OR TAPPED COLLARS WILL BE REQUIRED ON ALL 3/4" AND 1" SERVICE LATERALS. SERVICE SADDLES ONLY WILL BE PERMITTED ON 1-1/2" AND 2" SERVICE LATERALS. DOUBLE TAPPED COLLARS ARE NOT PERMITTED.
6. COPPER SERVICE LATERALS: ALL 3/4" TO 2" SERVICE LATERALS WILL BE OF COPPER TUBING IN ACCORDANCE WITH THE DISTRICT SPECIFICATION TITLED "3503-COPPER WATER TUBING".
7. THE MAXIMUM ALLOWABLE JOINT DEFLECTION FOR ACP AND DUCTILE IRON PIPE SHALL BE AS FOLLOWS:

PIPE SIZES	ACP	DUCTILE IRON SLIP JOINT	DUCTILE IRON MECHANICAL JOINT
6 INCH	2.5 DEGREES	2.5 DEGREES	3.5 DEGREES
8-12 INCH	2.5 DEGREES	2.5 DEGREES	2.5 DEGREES
14-16 INCH	2 DEGREES	1.5 DEGREES	1.5 DEGREES
18-24 INCH	N/A	1.5 DEGREES	1.5 DEGREES

ON PVC PIPE, THE MAXIMUM OFFSET FOR A 20' LENGTH OF FACTORY BELLED PIPE SHALL BE 17 INCHES FOR 6" PIPE, 12 INCHES FOR 8" PIPE, 11 INCHES FOR 10" PIPE, AND 9 INCHES FOR 12" PIPE.

8. ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
9. ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS AND VALLEY GUTTERS.
10. DETECTOR TAPE IS REQUIRED IN ACCORDANCE WITH STANDARD PLATE NO. 27 WHERE INDICATED, AND AS FOLLOWS:
    A. OVER ALL MAINS NOT INSTALLED 6 FEET FROM BACK OF CURB
    B. OVER ALL SERVICE LATERALS NOT INSTALLED AT RIGHT ANGLES TO MAIN.
11. ALL WATER MAINS ARE TO BE PRESSURE TESTED AT 200 PSI FOR A CONTINUOUS TWO HOUR PERIOD.
12. ALL WATER MAINS AND LATERALS SHALL BE DISINFECTED & FLUSHED, AND AN ACCEPTABLE WATER SAMPLE OBTAINED, PRIOR TO ACCEPTANCE BY THE DISTRICT.
13. CONTRACTOR TO OBTAIN ALL METERS 2" AND SMALLER FROM L.V.V.W.D. CENTRAL STORES. TELEPHONE 258-3152 FORTY-EIGHT HOURS PRIOR TO PICKUP.

FIRE NOTES

1. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE CITY OF LAS VEGAS FIRE DEPARTMENT "HYDRANT SPECIFICATIONS", "HYDRANT INSTALLATION SPECIFICATIONS" AND ORDINACE No. 3318.
2. AUTHORIZED HYDRANTS FOR THIS PROJECT ARE:
   A – KENNEDY GUARDIAN
   B – MUELLER A-423 CENTURION
   C – CLOW MODEL 2548 MEDALLION
3. ON ANY NEW HOME OR BUILDING CONSTRUCTION, ACCESSIBLE FIRE HYDRANTS SHALL BE INSTALLED BEFORE COMBUSTIBLE CONSTRUCTION COMMENCES AND SAID FIRE HYDRANTS SHALL BE IN GOOD WORKING ORDER WITH AN ADQUATE WATER SUPPLY.
4. CONTRACTOR SHALL PLACE A GREEN REFLECTIVE MARKER AT THE CENTERLINE OF THE STREEET ADJACENT TO THE FIRE HYDRANTS.
5. CALL THE CITY OF LAS VEGAS FIRE DEPARTMENT AT (702) 383-2888 FOR UNDERGROUND INSPECTION, PRESSURE AND FLUSH VERIFICATION OF ALL FIRE HYDRANTS AND FIRE LINES BEFORE COVERING.
6. PAINTING OF THE CURBS AND HYDRANT AND ANY WORK NECESSARY FOR PROTECTION OF HYDRANTS FROM PHYSICAL DAMAGE PER ORDINANCE No. 3318 SHALL BE COMPLETED BEFORE APPROVAL BY THE CITY OF LAS VEGAS FIRE DEPARTMENT.
7. A PERMIT IS REQUIRED FROM THE CITY OF LAS VEGAS FIRE DEPARTMENT FOR WATER LINE AND FIRE HYDRANT INSTALLATION ON THE PRIVATE SIDE OF THE METER.
8. A FLOW TEST MUST BE WITNESSED BY THE CITY OF LAS VEGAS FIRE DEPARTMENT FOR VERIFICATION OF ON-SITE WATER SUPPLY.
9. ALL ON-SITE FIRE MAIN MATERIALS MUST BE U.I. LISTED AND F.M. APPROVED.
10. FIRE HYDRANT SPACING:
    RESIDENTIAL – 600 FEET MAXIMUM
    COMMERCIAL, INCLUDING MULTI-FAMILY – 500 FEET MAXIMUM
11. FIRE HYDRANTS SHALL BE LOCATED WITHIN 500 FEET OF ANY CONSTRUCTION OR COMBUSTIBLE OPEN STORAGE.
12. NO FIRE HYDRANT SHALL BE LOCATED WITHIN THE REQUIRED RADIUS OF A CUL-DE-SAC OR WITHIN 20 FEET OF THE PERIMETER OF THE RADIUS OF THE CUL-DE-SAC.
13. NO FIRE HYDRANT SHALL BE LOCATED WITHIN 6 FEET OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREETLIGHT, OR ANY OTHER OBSTRUCTION.
13. ENSURE THAT FIRE HYDRANTS ARE CONNECTED TO A DEPENDABLE WATER SUPPLY CAPABLE OF SUPPLYING THE REQUIRED FIRE FLOW.

APPROVALS

2/6/91
CITY OF LAS VEGAS FIRE MARSHAL — DATE

2-07-91
LAS VEGAS VALLEY WATER DISTRICT — DATE

2-1-91
NEVADA POWER COMPANY — DATE
THIS APPROVAL IS ONLY FOR THE PLACEMENT AND CLEARANCE OF STREET LIGHT AND SIGNAL LIGHT INSTALLATIONS.

DUNHAM CIVIL

DRAWN & DESIGNED BY:
JOB NUMBER: 032-027-002
DATE: OCT. 22, 1990

NO.	REVISION

L.R. NELSON
CONSULTING ENGINEERS
6075 SOUTH EASTERN AVENUE
LAS VEGAS, NEVADA 89119
(702) 798-7978

NADINE FORD DEVELOPMENT CENTER
UTILITY PLAN

LAS VEGAS NEVADA

SHEET NUMBER 3 OF SHEETS

107-V1862

25-3-103