MATCH LINE

MATCH LINE

OVERHEAD SYMBOL LEGEND
(Sprinkler head symbol's at bottom of sht.)

- DENOTES PIPE TO BE DEMO
- DENOTES EXISTING PIPING
- CHANGE IN ELEVATION UPWARD
- CHANGE IN ELEVATION DOWNWARD
- AUTOMATIC SPRINKLER RISER
- RIGID GROOVE COUPLING (REGULAR COUPLING WHERE BRACE IS INSTALLED)
- HANGER TYPE AND LOCATION
- RISER NIPPLE
- DENOTES TWO WAY BRACING
- DENOTES FOUR WAY BRACING
- DENOTES NEW SPRINKLER HEAD
- DENOTES EXISTING HEAD TO REMAIN
- DENOTES EXISTING HEAD TO RELOCATED OR PLUG-OFF
- NEW POINT OF CONNECTION TO THE EXISTING CROSSMAIN

3 gpm per feet
REMOTE AREA # 2

"LOGO SHOP"

(E)

SEE BELOW FOR CONTINUATION

NEFERTITI'S LOUNGE

SEE DETAIL A

(E)6" STANDPIPE

CHANGE EXISTING 1/2" ORIF. INSPECTOR'S TEST TO 3/8" FOR SIDEWAL HEAD ● COUNTERS.

1 2½ (E) BUTT.VA. W/ TAMPER
2 2½ (E) P R V FLOOR CONTROL VALVE
3 FLOW SWITCH (WIRING BY OTHERS)
4 6 EXISTING STANDPIPE
5 2½ (E) HOSE VALVE

CASING LEVEL

DETAIL AA
SCALE: 1/4"= 1'-0"

PIPE STRAP #6

PIPE SIZE	FASTENER WOOD SCREW	FASTENER LAG SCREW
1 1/4 - 1 1/2	#8 x 1 1/2	

1½ BUTTERBALL W/TAMPER (WIRING BY OTHERS)

HANG 1-1/4 PIPE (AS SHOWN) WITH HANGER #5 OR #6 FROM WOOD FRAMING (FIELD VERIFY FOR EXACT LOCATION)

TOP OF STEEL 25'-0"

CENTRAL MODEL A SPRINKLER HEAD MODEL # 3/8" ORIF 155° W/ HEAD GUARD

BRANCH LINE

TYPICAL HEAD RELOCATION

#56 BRACKET HANGER ANGLE CLIP

#5

PIPE SIZE	ROD SIZE	FASTENER BOLT SIZE	FASTENER LAG SCREW
1 1/4 - 1 1/2	3/8	3/8	3/8 x 2 1/2

TYPICAL 1" ARMOVER

BRANCH LINE

1" X 2" NIPPLE

1" DROP

12" X 12" X 1/16" STEEL PLATE TO BE BOND

SEMI-RECESSED SPRINKLER HEAD

PLAN

TYPICAL HEAD RELOCATION

NOTE 1:
HANG ALL PIPE IN THIS LOW AREA 7" BELOW DECK (+7'5") WITH HANGER #4

NOTE 2:
ALL SPRINKLER HEADS WITH LOW CEILING TO HAVE SPRINKLER HEAD GUARD.

NOTE 3:
ELECTRICIAN TO INSTALL LIGHTS 6" AWAY FROM SPRINKLER HEAD.

NOTE 4:
ALL OUTLETS IN THE STORAGE ROOM TO HAVE 1X1/2 RED. BUSH FOR FUTURE

NOTE 5:
HANG ALL PIPE IN THIS AREA BELOW NEW STEEL (10'-0") WITH HANGER # 10

MATCH LINE

MATCH LINE

.15/2580 SQ.FT
REMOTE AREA # 1

0'-6" VERIFY

MATCH LINE

REMODEL PHASE II

(e) FIRE RISER LOCATED IN BASEMENT

HYDRAULIC SYSTEM

THIS BUILDING IS PROTECTED BY A HYDRAULICALLY DESIGNED AUTOMATIC SPRINKLER SYSTEM

LOCATION REMOTE AREA # 1
NO. OF SPRINKLERS 21
BASIS OF DESIGN
1.– DENSITY .2GPM/SQ.FT.
2. DESIGN AREA OF DISCHARGE 2580
SYSTEM DEMAND
1. GPM DISCHARGE 481 GPM
2. RESIDUAL PRESSURE AT PRV CONTROL VALVE 67.8 PSI

USE THIS INFO. ON CALC. PLATE RISER

HYDRAULIC SYSTEM

THIS BUILDING IS PROTECTED BY A HYDRAULICALLY DESIGNED AUTOMATIC SPRINKLER SYSTEM

LOCATION REMOTE AREA # 2
NO. OF SPRINKLERS 19
BASIS OF DESIGN
1.– DENSITY .3 GPM PER FEET
2. DESIGN AREA OF DISCHARGE ALL HEADS
SYSTEM DEMAND
1. GPM DISCHARGE 370 GPM
2. RESIDUAL PRESSURE AT BASE OF THE RISER 122.0 PSI

Concrete Structure
Tolco fig. 911 Tolco fig. 910 Or equal
1" SCH. 40 MAX.
½ x 3½ KWIK BOLT
60° 90°
Tolco fig. 910 — Brace Fitting Or equal
Tolco Fig.4A Clamp Or equal

2-WAY EARTHQUAKE BRACE LATERAL

40' MAX. UP TO 3" max.
(TABLES WERE USED)
ASSIGNED LOAD — MAX. LOAD TABLE 4–6.4.3.5.4
1740 (lb) 2076 (lb)

Concrete Structure
Tolco fig. 911 Tolco fig. 910 Or equal
1" SCH. 40 MAX.
½ x 3½ KWIK BOLT
60° 90°
Tolco fig. 910 Brace Fitting
1" Tolco Fig.4A Clamp Or equal

2-WAY EARTHQUAKE BRACE LONGITUDINAL

80' MAX. UP TO 3" max.
(TABLES WERE USED)
ASSIGNED LOAD — MAX. LOAD TABLE 4–6.4.3.5.4
1740 (lb) 2076 (lb)

SYSTEM DESIGN SPECIFICATIONS
1) SPRINKLER SYSTEM SHALL BE HYDRAULICALLY DESIGNED AS FOLLOWS:
STORAGE AREA : .15 GPM DENSITY OVER 2,500 SQ. FT.
WATER CURTAIN: 3 GPM PER LINEAR FOOT OVER THE ENTIRE LENGTH
2) SPRINKLER SPACING SHALL BE AS FOLLOWS:
130 SQUARE FEET MAXIMUM FOR RETAIL AND CASINO AREAS
225 SQUARE FEET MAXIMUM FOR CORRIDOR AND OFFICE AREAS.
6' MINIMUM FOR WATER CURTAIN

GENERAL NOTES
1) THIS AUTOMATIC FIRE PROTECTION SPRINKLER SYSTEM SHALL BE DESIGNED, FABRICATED, AND INSTALLED IN ACCORDANCE WITH N.F.P.A. #13–CURRENT EDITION, FACTORY MUTUAL AND CLARK COUNTY FIRE DEPARTMENT.
2) ALL MATERIALS ARE TO BE UL LISTED AND APPROVED FOR FIRE PROTECTION.
3) ALL 1" THRU 2" PIPING IS TO BE SCH. 30 BLACK STEEL WITH BLACK CAST IRON FITTINGS CLASS 125. ALL 2-1/2" THRU 4" PIPING IS TO BE DYNA-FLOW BLACK STEEL WITH GROOVED FITTINGS.
4) PIPE PENETRATION TO BE SEALED WITH FIRE AND SMOKE RESISTIVE MATERIALS PER NFPA STANDARDS, (BY OTHERS)
5) ALL PIPE SUPPORTS AND EARTHQUAKE BRACING IS TO BE IN ACCORDANCE WITH NFPA PAMPHLET #13 REQUIREMENTS. ACTUAL HANGER TYPE/ROD LENGTH IS TO BE AS NOTED ON PLAN.
6) END HANGERS ON ALL BRANCH LINES TO INCLUDE "TOLCO" FIG. 25 SURGE RESTRAINER PER NFPA PAMPHLET #13
7) WELDED OUTLETS SHALL BE BLACK STEEL AND SHOULD BE INSPECTED PRIOR TO INSTALLATION.
8) SPRINKLER DEFLECTOR DISTANCE SHALL BE PER CODE.
9) ALL CONTROL VALVES SHALL BE PROVIDED WITH SUPERVISORY SWITCHES.
10) THE PROTECTION OF SPRINKLER HEADS FROM PAINT IS TO BE THE RESPONSIBILITY OF OTHERS.
11) ALL ELECTRICAL WIRING REQUIRED IS TO BE PERFORMED BY OTHERS.
12) ALL SYSTEMS ARE TO BE FLUSHED AND HYDROSTATICALLY TESTED AT 200 PSI FOR A MINIMUM OF (2) HOURS.
13) IT IS NOT PART OF THIS CONTRACT FOR SPRINKLER HEAD TO BE IN CENTER LINE OF TILE OR LIGHT PATTERN.
14) USE # 401 CANOPIES IN AREAS W/ SURFACE MOUNTED LIGHTS

Authority Having Jurisdiction Information Block:
1. All piping, 2 inch and smaller, ANSI / ASTM A-795 "Dyna-Thread" manufactured by American Tube & Pipe Company, Inc.
2. All piping, 2 1/2 inch and larger, ANSI / ASTM A-795 "Dyna-Flow" manufactured by American Tube & Pipe Company, Inc.
3. a) All screwed fittings to be cast iron 125lb. manufactured by Grinnell, Stockham, and/or Ward.
   b) Grooved fittings to be manufactured by Victaulic.
   c) Weld outlets to be manufactured by Merit.
4. a) Underground piping installed under building footings shall be Ductile Iron pipe and fittings manufactured by Pacific States.
   b) All other underground piping to be C-900 P.V.C. class N/A manufactured by Vinyl Tech.
5. Backflow preventor is manufactured by N/A model no. N/A with a N/A meter.
6. Type of freeze protection is a heated building.
7. Maximum deflector distance below roof deck is 6" inches.

CASINO LEVEL – TENANT IMPROVEMENT
FIRE SPRINKLER PIPING PLAN AND REFLECTED CEILING
SCALE: 1/8"= 1'-0"

FIRE RISER ROOM

SEE RISER DETAIL

NOTE: EXISTING PIPING SHOWN FOR COORDINATION ONLY

BASEMENT AREA SHOWING PIPING THAT FEEDS RETAIL STORE C-200
SCALE: 1/16"= 1'-0"

C-CLAMP HANGER W/RETAINING STRAP
HANGER #10

PIPE SIZE	ROD SIZE
1 TO 4"	3/8

1 2½ CENTRAL BUTT.VA. W/ TAMPER
2 2½ CENTRAL SHOTGUN CHK.VA. W/TRIM
3 2½ FLOW SWITCH (WIRING BY OTHERS)
4 8 X 2½ GROOVED MECH. TEE

+ 7'-0"
+ 6'-0"
2'-0"±

BASEMENT LEVEL

NEW FIRE RISER FOR CASINO LEVEL ROOM C-200 (WATER CURTAIN)
SCALE 1/4" = 1'-0"

KEY PLAN– 1ST. FLOOR

NORTH

SCALE: 1/8" = 1'-0"

NO.	DATE	REVISIONS DESCRIPTIONS
1	9/20/96	GENERAL REVISIONS PER NEW ROOM CONFIGURATIONS
2	10/11/96	ADD AND RELOCATE HEADS AT NEFERTITI'S LOUNGE PER NEW CEIL
3	10/22/96	ADD AND RELOCATE HEADS PER NEW CEILING LAYOUT
4	11/05/96	A) ADD HEADS UNDER COUNTER B) CHANGE NORTH ENTRY WALKWAY
5	12/6/96	AS BUILT

HEAD COUNT

SYM	CNT	NAME	METAL	TEMP	K	NPT	ORIF	MFG.	MODEL #	ESCUT
◎	264	Pendent	Chrome	155	5.60	1/2"	1/2	CENTRAL	GB	RECESSED
◁	09	Side wall	Chrome	155	5.60	1/2"	1/2	CENTRAL	GB	RECESSED
◎	04	D–Pendent	Brass	212	5.60	1/2"	1/2	CENTRAL	A	RECESSED
◉	82	Pendent	BRASS	155	5.60	1/2"	1/2	CENTRAL	GB	HEAD GUARD
⊠	22	Pendent	Chrome	155	5.60	1/2"	1/2	CENTRAL	GB	RECESSED
◀	34	Side wall	Bras	155	2.60	1/2"	3/8	CENTRAL	H	

TOTAL HEADS THIS SHEET: 416

STANDARD SYMBOLS
- POST INDICATOR VALVE
- KEY VALVE
- FIRE HYDRANT
- FIRE DEPT. CONNECTION
- O.S. & Y GATE VALVE
- SWING CHECK VALVE
- NEW UNDERGROUND

STANDARD SYMBOLS
- ALARM CHECK VALVE
- RISER W/ALARM VALVE
- RISER W/DRY VALVE
- RISER W/ELEC. FLOW SWITCH
- RISER W/DELUGE VALVE
- WATER MOTOR BELL
- ELECTRIC BELL
- FLUSH FIRE DEPT. CONNECTION

SPRINKLER HEAD SYMBOLS
- UPRIGHT ON 1/2" OUTLET
- PENDENT ON 1/2" OUTLET
- UPRIGHT ON 1" STUBB–UP
- PENDENT ON 1" DROP
- PEND. ON 1" DROP BELOW CEILING
- UPRIGHT AND PEND. ON DROP
- SIDEWALL ON 1/2" OUTLET
- SIDEWALL ON 1" OUTLET

INSPECTIONS
1. FACTORY MUTUAL
2. CLARK FIRE DEPT
3. OWNERS
4.
5.

PROJECT LUXOR
ADDRESS
CITY
TITLE:

DRAWN: W Y DATE: ---

W Y
FIRE SPRINKLER DESIGN SERVICES

DRAWING NO. FP-1
OF --- SHEETS