HYDRAULIC CALCULATIONS - B257

	PRESS. LOSS (PSI)	PRESS AVAIL. (PSI)
PRESSURE AT STREET MIN: 64 PSI	–	64
(E) 4" BACKFLOW PREVENTER LOSS (OUTSIDE OF BUILDING)	9	55
PRESSURE AFTER (E) BFP	–	50
ELEVATION LOSS (35 FT.) x 0.433	15	35
DESIGN PRESSURE AT FIXTURE	25	10
PRESS. AVAILABLE FOR 265' PIPING FRICTION LOSS	–	10
PRESS. AVAILABLE FOR PIPING FRICTION LOSS PER 100FT 10/265' X 100	–	3.7

HYDRAULIC CALCULATIONS - B256

	PRESS. LOSS (PSI)	PRESS AVAIL. (PSI)
PRESSURE AT STREET MIN: 64 PSI	–	64
(E) 4" BACKFLOW PREVENTER LOSS (OUTSIDE OF BUILDING)	9	55
PRESSURE AFTER (E) BFP	–	50
ELEVATION LOSS (35 FT.) x 0.433	15	35
DESIGN PRESSURE AT FIXTURE	25	10
PRESS. AVAILABLE FOR 250' PIPING FRICTION LOSS	–	10
PRESS. AVAILABLE FOR PIPING FRICTION LOSS PER 100FT 10/250' X 100	–	3.5

PLUMBING FIXTURE SCHEDULE

ABBREV.	DESCRIPTION	CW	HW	REMARKS
STV	STOP VALVE	3/4"	3/4"	"CHICAGO" MODEL NO. 375–LK, 3/4" STRAIGHTWAY STOP VALVE W/ LOOSE KEY TEE HANDLE.
WHA	WATER HAMMER ARRESTER	3/4"	–	"PRECISION PLUMBING PRODUCTS" – 3/4".
AP	ACCESS PANEL	–	–	"SMITH" MODEL 4735U, SQUARE, POLISHED FACE CHROME–PLATED BRONZE.
TP	(E) TRAP PRIMER	1/2"	–	EXISTING VALVE TO REMAIN.
S	(E) SINK	3/4"	3/4"	EXISTING FIXTURE TO REMAIN.
SS	(E) SERVICE SINK	3/4"	3/4"	EXISTING FIXTURE TO REMAIN.
HB	(E) HOSE BIBB	3/4"	–	EXISTING FIXTURE TO REMAIN.
SH	(E) SHOWER	3/4"	3/4"	EXISTING FIXTURE TO REMAIN.
L	(E) LAVATORY	3/4"	3/4"	EXISTING FIXTURE TO REMAIN.
WC	(E) WATER CLOSET	1 1/2"	–	EXISTING FIXTURE TO REMAIN.
EWC	(E) ELECTRIC WATER COOLER	3/4"	–	EXISTING FIXTURE TO REMAIN.
UR	(E) URINAL	1 1/4"	–	EXISTING FIXTURE TO REMAIN.
DF	(E) DRINKING FOUNTAIN	3/4"	–	EXISTING FIXTURE TO REMAIN.
BT	(E) BATH TUB	3/4"	3/4"	EXISTING FIXTURE TO REMAIN.

POINT OF CONNECTION NOTE:

1. POINT OF CONNECTION TO (E) WATER CLOSETS AND URINALS SHALL BE UPSTREAM OF (E) VALVE BEHIND WALL. (E) FLUSH VALVE AND ASSOCIATED VALVES TO REMAIN.

PIPE SIZING CHART - B257

COPPER TYPE L 3 PSI / 100'–0" @ FT/SEC	MAXIMUM FU ALLOWABLE		
SIZE	FLUSH TANK COLD	FLUSH TANK HOT	FLUSH VALVE
1/2"	1	1	–
3/4"	6	6	–
1"	13	13	–
1 1/4"	24	24	–
1 1/2"	47	47	10
2"	158	120	64
2 1/2"	380	246	245
3"	691	412	630

PIPE SIZING CHART - B256

COPPER TYPE L 3 PSI / 100'–0" @ FT/SEC	MAXIMUM FU ALLOWABLE		
SIZE	FLUSH TANK COLD	FLUSH TANK HOT	FLUSH VALVE
1/2"	1	1	–
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1 1/4"	24	24	–
1 1/2"	47	47	10
2"	158	120	64
2 1/2"	380	246	245
3"	691	412	630

EQUIPMENT SCHEDULE

ITEM	DESCRIPTION	REMARKS
CP 1	HOT WATER CIRCULATING PUMP	"GRUNDFOS" MODEL NO. UPS 15–35 SFC. TEMP. RANGE: 35.6 TO 165.2°F, MAX. OPER. PRESSURE: 145 PSI, UL, CSA APPROVED, 2–POLES, 110W MAX POWER INPUT, 60 HZ. PROVIDE AQUASTAT WITH GAUGE.
TMV 1	THERMOSTATIC MIXING VALVE	"LEONARD" MODEL NO. LV–982–LF, 120V, 1 PH, 60 HZ, 94 TO 188 GPM, DIGITAL MIXING VALVE, PROGRAMMABLE CONTROL MODULE.

Revisions	Date
100% CD SUBMITTAL	08/05/15

ARCHITECT/ENGINEERS/CONSULTANTS:

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CHIEF OF STAFF (11)

Drawing Title: PLUMBING FIXTURE SCHEDULE AND HYDRAULIC CALCULATIONS

ASSOCIATE DIRECTOR, ADMINISTRATION & SUPPORT SERVICES (10A)
DIRECTOR (00)

Project Title: CORRECT POTABLE WATER DEFICIENCIES - BUILDING 256/257

Location: VA MEDICAL CENTER WEST LOS ANGELES, CA 90073

Date: APRIL 14, 2015 | Checked: WM | Drawn: LC

Project Number: 691-15-115-WL
Building Number: 256/257
Drawing Number: P002
Dwg. 2 of 20

Office of Facilities Management
Department of Veterans Affairs

100% CD SUBMITTAL

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