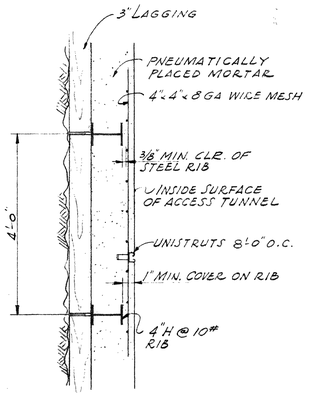
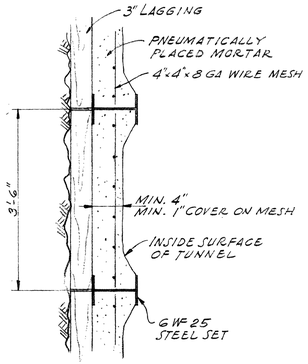


SECTION A-A

ACCESS TUNNEL (C/4)

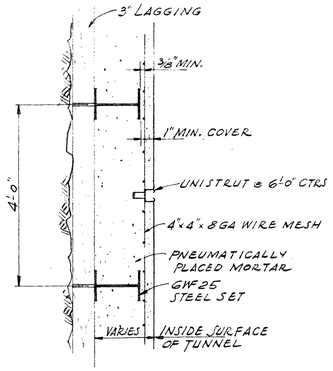
No Scale



SECTION B-B

ADITS (D/4)

No Scale

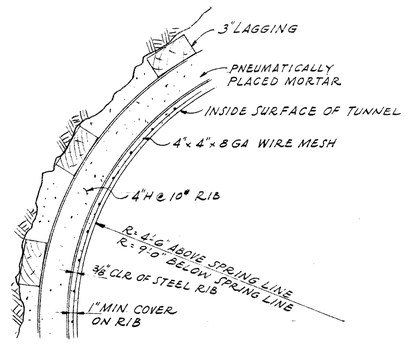


SECTION C-C

TYPICAL LINING

BEAM TUNNEL (B/4)

No Scale

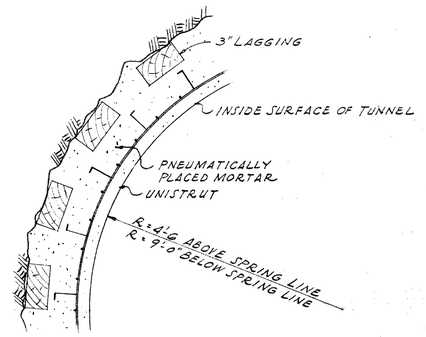


SECTION D-D

TYPICAL LINING DETAIL AT RIB

BEAM TUNNEL (A/4)

No Scale

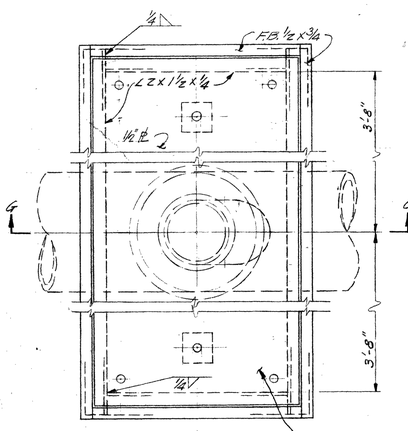


SECTION E-E

TYPICAL LINING DETAIL AT UNISTRUT

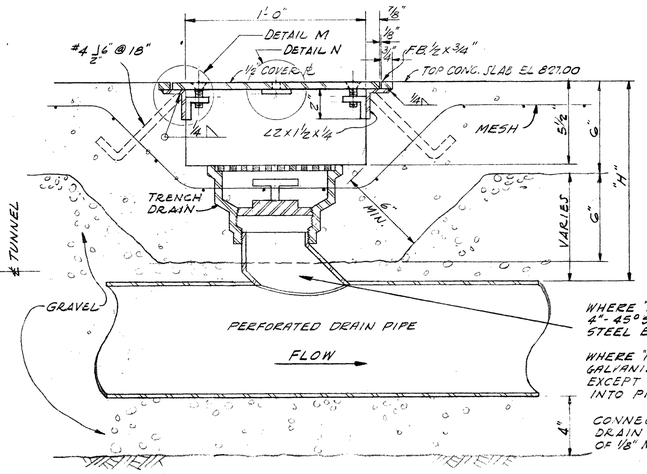
BEAM TUNNEL (A/4)

No Scale



DETAIL "F"

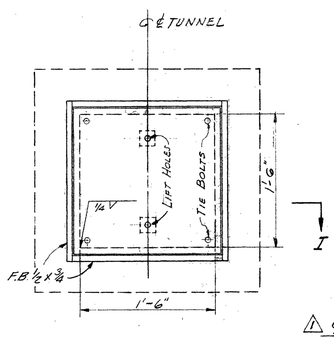
SCALE: 3"=1'-0"



WHERE "H" IS 15" OR GREATER USE 4"-45° SPECIAL GALVANIZED STEEL ELBOW

WHERE "H" IS LESS THAN 15" USE 4" GALVANIZED STEEL STRAIGHT NIPPLE EXCEPT WHERE DRAIN PROTRUDES INTO PIPE.

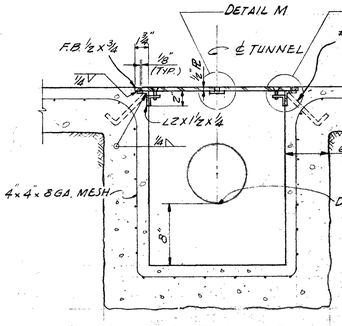
CONNECTION BETWEEN 4"ø PIPE & DRAIN PIPE SHALL PREVENT PASSAGE OF ⅛" MATERIAL.



DETAIL "H"

SCALE: 1½"=1'-0"

PIPES NOT SHOWN - SEE SHEET 6 FOR SIZES & ANGLES OF INTERSECTION.



SECTION I-I

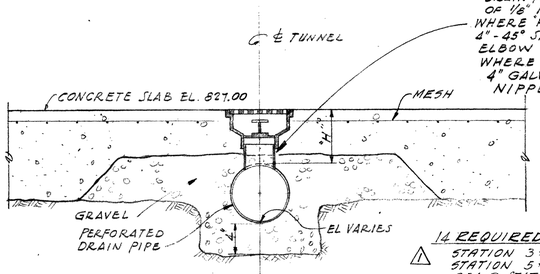
SCALE: 1½"=1'-0"

⚠ 9 REQUIRED:

STATION 1+29.7	BEAM TUNNEL
STATION 3+63.0	BEAM TUNNEL
STATION 7+71.7	BEAM TUNNEL
STATION 11+80.5	BEAM TUNNEL
STATION 12+29.0	BEAM TUNNEL
STATION 16+37.7	BEAM TUNNEL
STATION 20+46.5	BEAM TUNNEL
STATION 1+29.3	ACCESS TUNNEL
STATION 7+55.5	ACCESS TUNNEL

NOTES:

1. UNISTRUT CHANNELS ARE P-3300 SERIES OR EQUAL WITH WELDED CROSSBRACED FILLER AND CONTINUOUS CONCRETE INSERTS. CHANNELS SHALL BE SHAPED TO CONFORM TO INSIDE RADII OF TUNNELS. FACE OF CHANNELS SHALL BE FLUSH WITH TUNNEL SURFACE.
2. PERFORATED DRAIN PIPE SHALL BE 16 GA GALVANIZED METAL TYPE DOUBLE ASPHALT COATED BOTH SIDES, ARMCO OR EQUAL.
3. ALL FLOOR & TRENCH DRAINS SHALL BE JOSAM #124 OR EQUAL, GALVANIZED WITH 4"ø IPS OUTLET.
4. FOR ADDITIONAL TUNNEL DRAINAGE DETAILS, GRADES, & LOCATIONS SEE SHEETS 3 & 6, 7, & 10.
5. ALL FRAMES FOR CLEAN OUT BOXES AND TRENCH COVERS SHALL BE GALVANIZED.



SECTION J-J

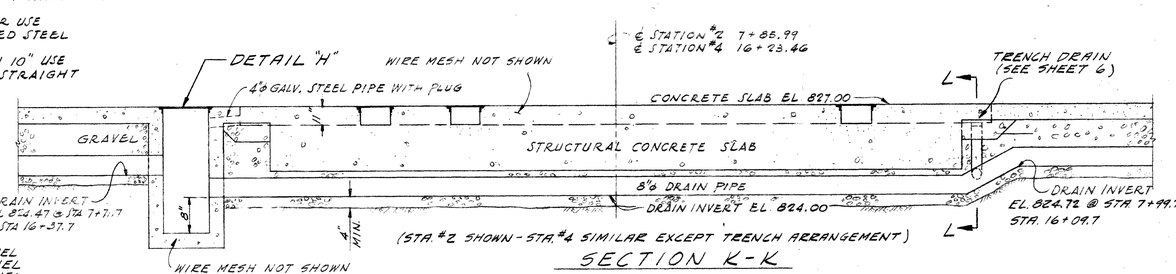
FLOOR DRAIN DETAIL

SCALE: 1½"=1'-0"

CONNECTION BETWEEN 4"ø PIPE & DRAIN PIPE SHALL PREVENT PASSAGE OF ⅛" MATERIAL.
WHERE "H" IS 10" OR GREATER USE 4"-45° SPECIAL GALVANIZED STEEL ELBOW
WHERE "H" IS LESS THAN 10" USE 4" GALVANIZED STEEL STRAIGHT NIPPLE.

⚠ 14 REQUIRED:

STATION 3+10 ACCESS TUNNEL
STATION 5+50 ACCESS TUNNEL
2 EA. @ STATION #3 ACCESS TUNNEL CONNECTION
BEAM TUNNEL:
STATION 2+82.22
STATION 4+96.39
STATION 6+90.95
STATION 9+05.33
STATION 10+99.69
STATION 13+34.06
STATION 15+28.42
STATION 17+22.80
STATION 19+37.16
STATION 21+51.53

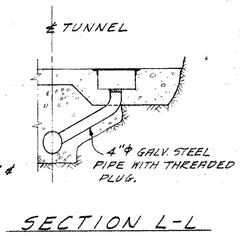


(STA. #2 SHOWN - STA. #4 SIMILAR EXCEPT TRENCH ARRANGEMENT)

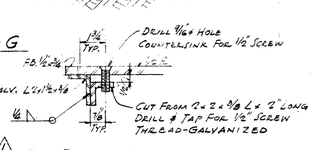
SECTION K-K

DETAIL DRAIN PIPE STATIONS #2 & #4

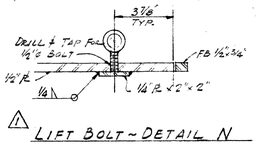
SCALE: 2"=1'-0"



SECTION L-L



⚠ TIE BOLT ~ DETAIL M



⚠ LIFT BOLT ~ DETAIL N

CLEAN OUT BOX

LTR	REVISIONS	DATE	BY	APP'D
⚠	GENERAL REVISION	5-26-65	JHH	GEW

10 GEV. CORNELL SYNCHROTRON LABORATORY

CORNELL UNIVERSITY

ITHACA NEW YORK

TUNNEL AND DRAINAGE DETAILS

WILLIAM M. BROBECK AND ASSOCIATES

IAN MACKINLAY, AIA — ARCHITECT
PREGNOFF & MATHEU — STRUCTURAL ENGR.
JACOBS ASSOCIATES — CONSTRUCTION ENGR.

950 GILMAN ST. TELEPHONE — BERKELEY, CALIF. 94710. 415 - 524 - 8664

DR. JEF	CHK. JHH	SUPV. GEW	SCALE As Shown
RELEASED	APPROVED	LAB NUCLEAR STUDIES	SHEET 5 OF 13
DATE 3/18/65		V.P.-BUSINESS	DRAWING NO. T-5
		DATE	WMB & A NO. 111-5

1/8"

2085-23-65-603 048 006 Cornell University B.& P.

1/10"