CITY OF BEVERLY HILLS
WATER DEPARTMENT

CONSTRUCTION OF

GREYSTONE RESERVOIR
AND
RELATED FACILITIES

1967

JAMES M. MONTGOMERY, CONSULTING ENGINEERS, INC.

PASADENA, CALIFORNIA

AS BUILT DRAWING

10241.0

CITY OF BEVERLY HILLS
WATER DEPARTMENT

CONSTRUCTION OF

GREYSTONE RESERVOIR
AND
RELATED FACILITIES

1967

JAMES M. MONTGOMERY, CONSULTING ENGINEERS, INC.

PASADENA, CALIFORNIA

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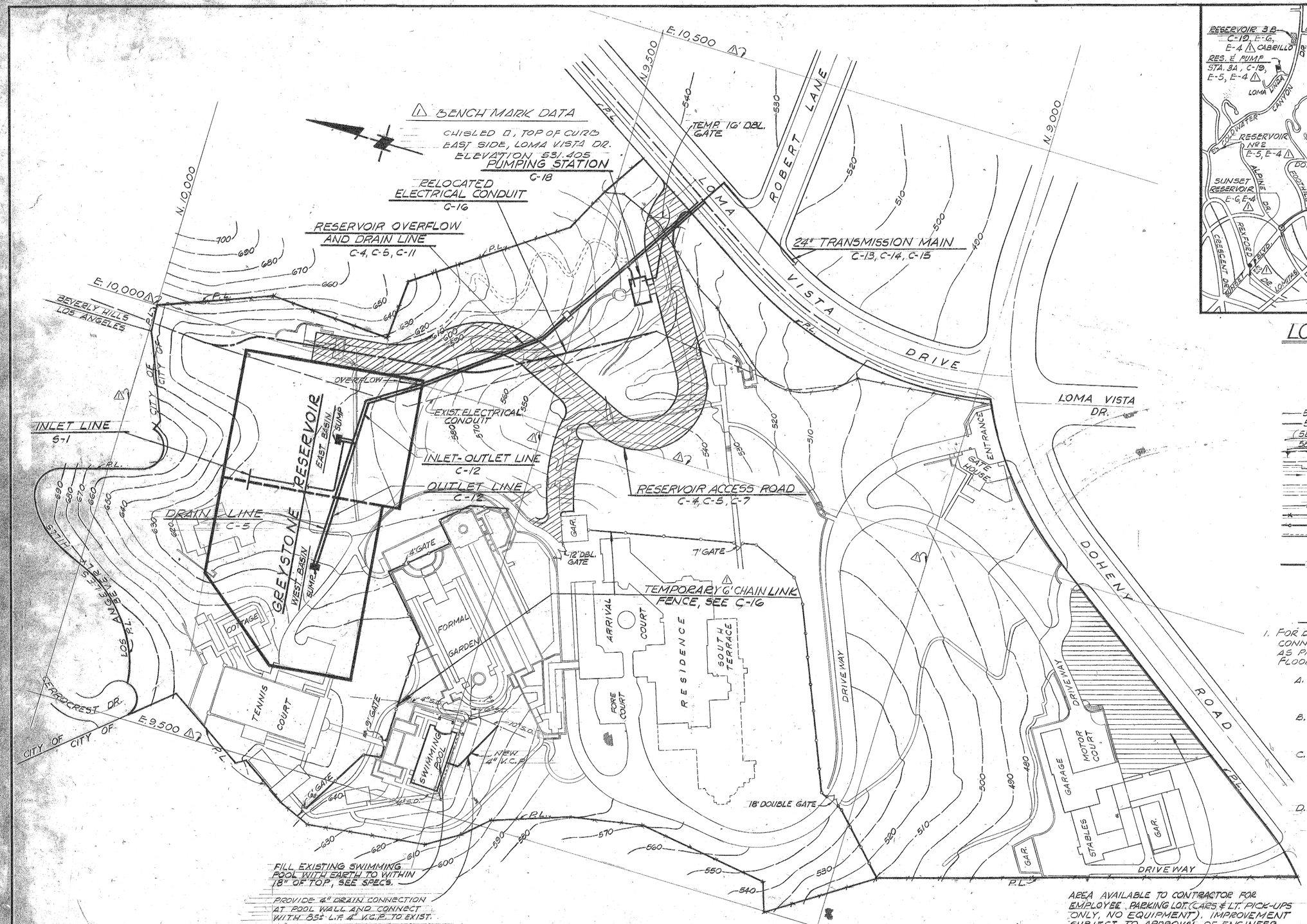
JOB ADDRESS

501 DOHENY ROAD
(905 LOMA VISTA DR.)

AS BUILT DRAWING

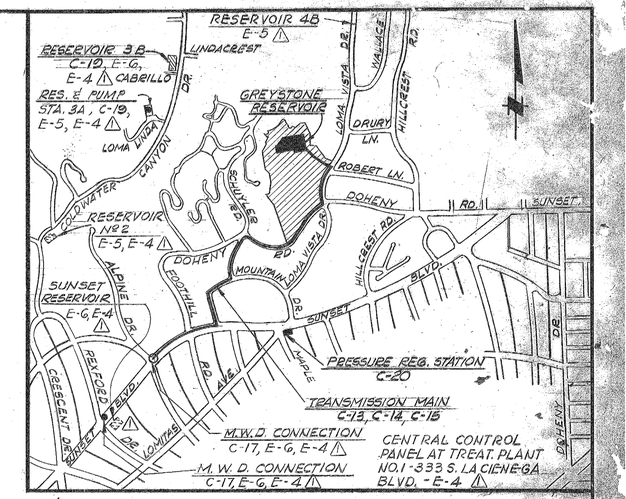
SHEET T-1 OF 47 SHEETS

10241.1



VICINITY MAP

SCALE: 1" = 60'



LOCATION MAP

SCALE: 1" = 1000'

LEGEND

570	EXISTING CONTOURS
570	NEW CONTOURS
(586.20)	EXIST. ELEVATION
585.62 F.G.	FINISH GRADE ELEVATION
	TOP OF SLOPE
	EXIST. STRUCTURE
	DITCH FLOW LINE (F.L.)
W	EXIST. WATER LINE
S	EXIST. SEWER
SD	EXIST. STORM DRAIN
	EXIST. CHAIN LINK FENCE
	TEMPORARY CHAIN LINK FENCE
	EDGE OF NEW A.C. PAVEMENT
	BENCH MARK
6"W	NEW 6" C.I. WATER MAIN

GENERAL NOTES

1. FOR DETAILS OF STORM DRAIN STRUCTURES AND CONNECTIONS, REFER TO STANDARD DRAWINGS AS PREPARED BY THE LOS ANGELES COUNTY FLOOD CONTROL DISTRICT.

A. CATCH BASIN OPENINGS SHALL BE MODIFIED AS PER STD. DWG. NO. 2-D232

B. SEE SHEET C-22 FOR DETAIL OF STORM DRAIN TYPE MANHOLE COVER & 2-D156 FOR M.H. FRAME & COVER FOR CATCH BASINS. △

C. WHERE CHANGES IN GRADE OCCUR IN R.O.W. PROFILES EXCEEDING 0.10 FT. PER FT. PROVIDE CONCRETE COLLAR PER STD. DWG. NO. 2-D393.

D. C.B. NO. 1. STRUCTURES SHALL BE MODIFIED (AS SHOWN ON DRAWINGS AS "C.B. NO. 1 MOD.") AS FOLLOWS:

(1) TOP AND WALLS AS PER C.B. NO. 1. SEE STD. DWG. NO. 2-D160

(2) BASE AS PER M.H. NO. 1. SEE STD. DWG. NO. 2-D102

AS BUILT DRAWING

REV.	DATE	BY	DESCRIPTION
△	3/9/71	R.G.	AS-BUILT

SCALE: AS NOTED

DESIGNED H. WAGNER
DRAWN H. WAGNER
CHECKED LELAND

SUBMITTED Richard S. Leland — PROJECT ENGINEER — R.C.E. NO. 13393 — DATE 9-22-67
RECOMMENDED — JAMES M. MONTGOMERY, CONSULTING ENGINEERS, INC. — R.C.E. NO. 5677 — DATE 9-27-67

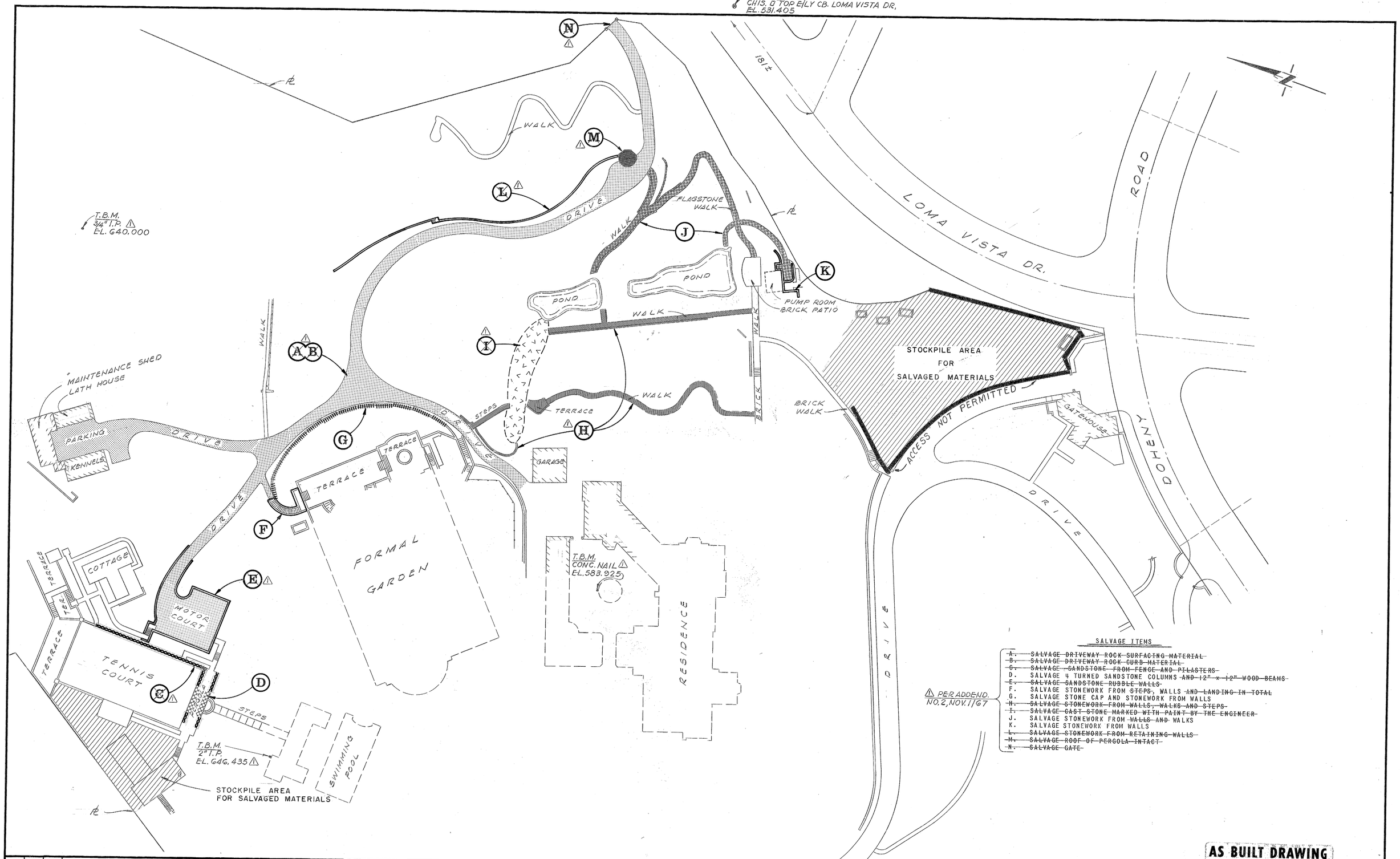
JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
LAFAYETTE COSTA DIEGO LAS VEGAS

APPROVED — MANAGER AND CHIEF ENGINEER — DATE 9-27-67
APPROVED — DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
VICINITY AND LOCATION MAP

SHEET C

10241.2



SALVAGE ITEMS

- ~~A. SALVAGE DRIVEWAY ROCK SURFACING MATERIAL~~
- ~~B. SALVAGE DRIVEWAY ROCK CURB MATERIAL~~
- ~~C. SALVAGE SANDSTONE FROM FENCE AND PILASTERS~~
- D. SALVAGE 4 TURNED SANDSTONE COLUMNS ~~AND 12" x 12" WOOD BEAMS~~
- ~~E. SALVAGE SANDSTONE RUBBLE WALLS~~
- F. SALVAGE STONEWORK FROM STEPS, WALLS ~~AND LANDING IN TOTAL~~
- G. SALVAGE STONE CAP AND STONEWORK FROM WALLS
- ~~H. SALVAGE STONEWORK FROM WALLS, WALKS AND STEPS~~
- ~~I. SALVAGE CAST STONE MARKED WITH PAINT BY THE ENGINEER~~
- J. SALVAGE STONEWORK FROM ~~WALLS AND~~ WALKS
- K. SALVAGE STONEWORK FROM WALLS
- ~~L. SALVAGE STONEWORK FROM RETAINING WALLS~~
- ~~M. SALVAGE ROOF OF PERGOLA INTACT~~
- ~~N. SALVAGE GATE~~

△ PER ADDEND. NO. 2, NOV. 1/67

AS BUILT DRAWING

REV	DATE	BY	DESCRIPTION
△	3/9/71	R.G.	AS BUILT

SCALE: 1" = 40'

DESIGNED R. CARLSON
DRAWN R. CARLSON
CHECKED R. LELAND

SUBMITTED Richard J. Leland — PROJECT ENGINEER — R.C.E. NO. 13393 — DATE 9-22-67
RECOMMENDED — JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.C.E. NO. 5677 — DATE

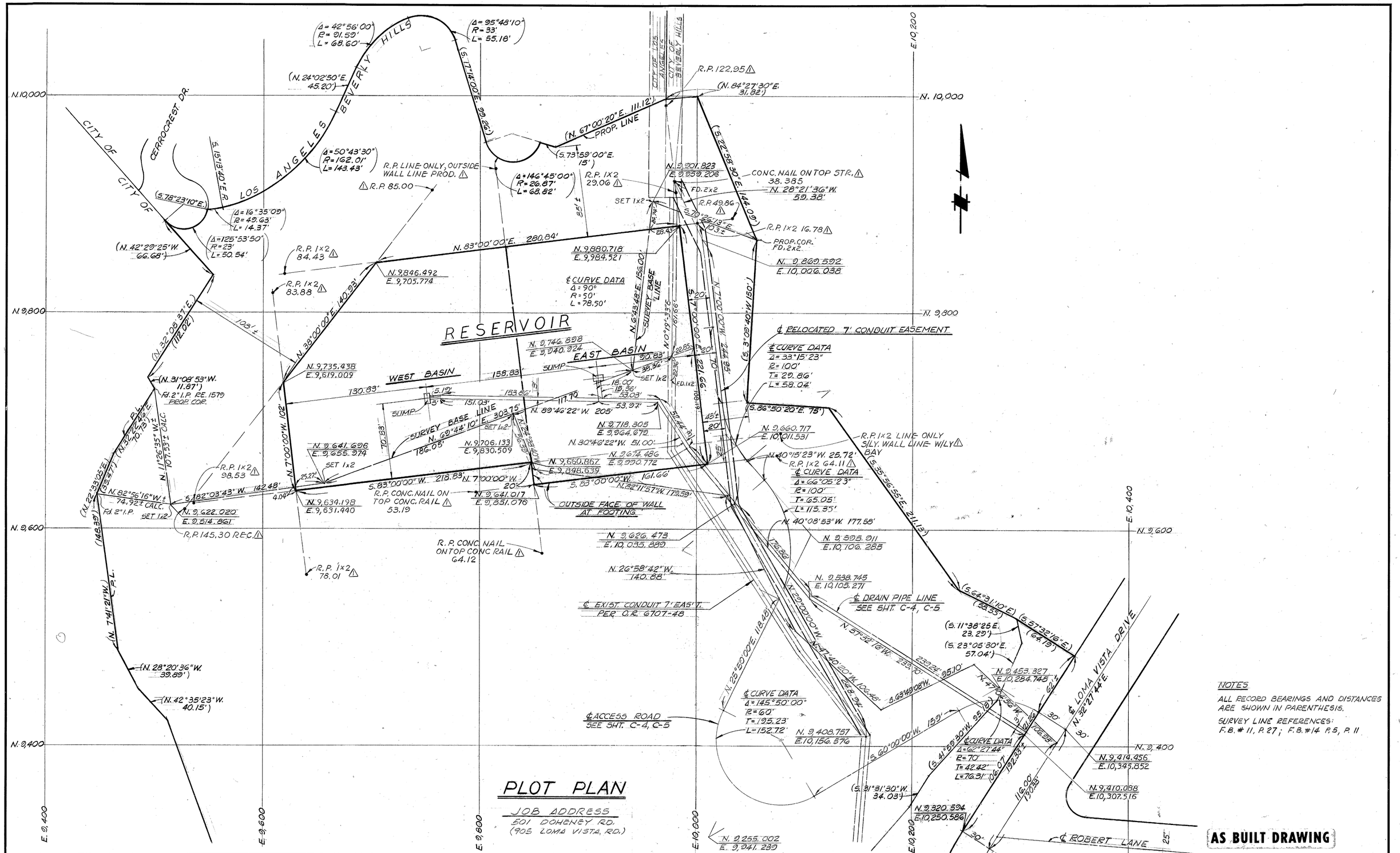
JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

APPROVED — MANAGER AND CHIEF ENGINEER — DATE
APPROVED — DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
MATERIALS TO BE SALVAGED

SHEET C-2 OF 57 SHEETS

10241.3



PLOT PLAN

JOB ADDRESS
501 DOHENEY RD.
(905 LOMA VISTA RD.)

NOTES

ALL RECORD BEARINGS AND DISTANCES ARE SHOWN IN PARENTHESIS.

SURVEY LINE REFERENCES:
F.B. # 11, P. 27; F.B. #14 P. 5, P. 11

AS BUILT DRAWING

REV	DATE	BY	DESCRIPTION
1	3/9/71	R.G.	AS BUILT

SCALE: 1" = 40'

DESIGNED H. WAGNER
DRAWN H. WAGNER, R. VAN GORDER
CHECKED SMITH, MOORE

SUBMITTED Richard S. Leland, PROJECT ENGINEER — 13393 R.C.E. NO. — 9-22-67 DATE

RECOMMENDED R. L. Kemmir, JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — 5677 R.C.E. NO. — 9-27-67 DATE

JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

APPROVED Kelly O. Berry, MANAGER AND CHIEF ENGINEER — 9-27-67 DATE

APPROVED _____ DATE

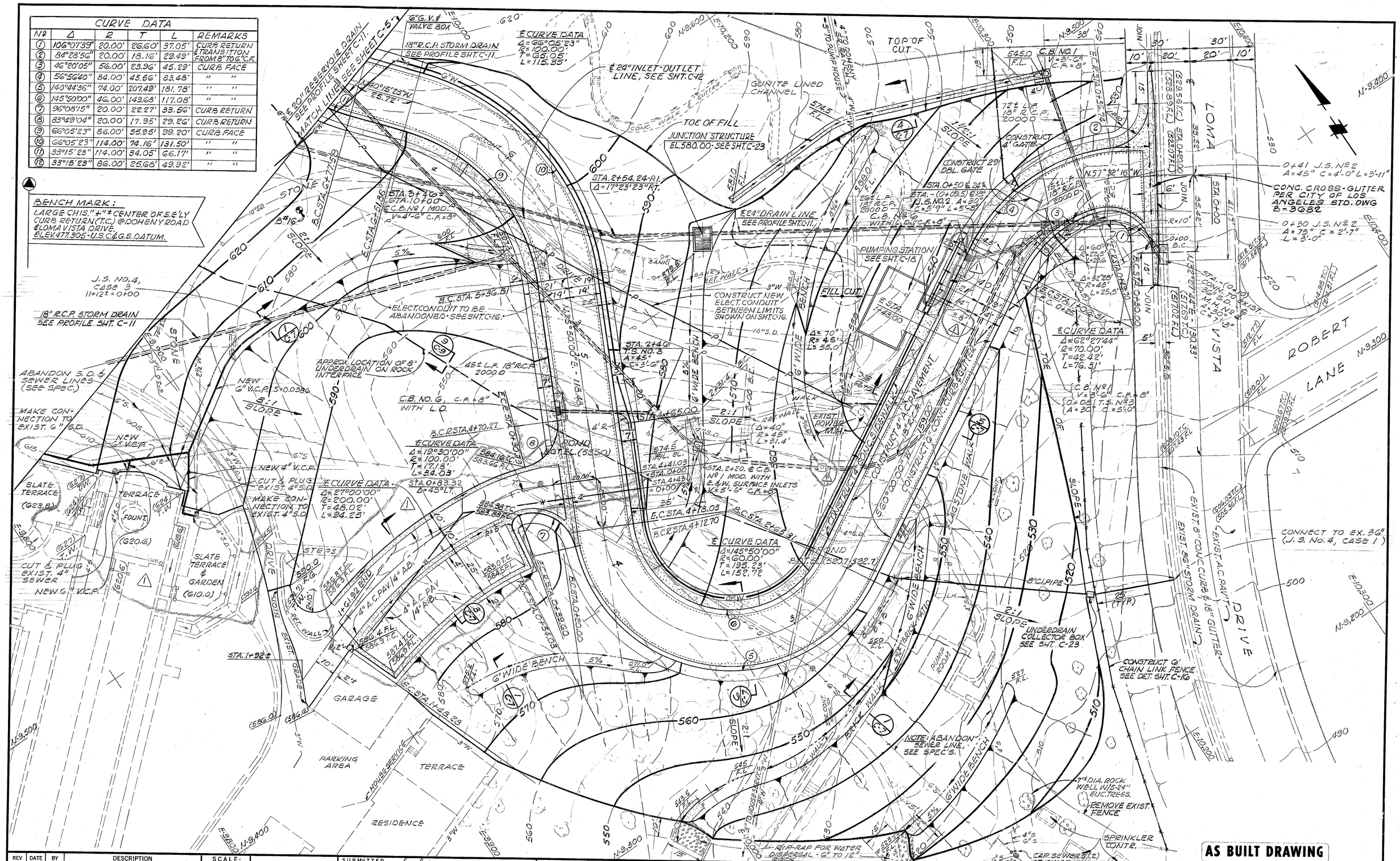
CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
SITE HORIZONTAL CONTROL

SHEET C-3 OF 47 SHEETS

10241.4

CURVE DATA					
Nº	Δ	R	T	L	REMARKS
1	106°07'39"	20.00'	26.60'	37.05'	CURB RETURN & TRANSITION FROM 8" TO 6" C.F.
2	84°28'56"	20.00'	18.16'	29.49'	
3	46°20'05"	56.00'	23.96'	45.29'	CURB FACE
4	56°56'40"	84.00'	45.56'	83.48'	" "
5	140°44'36"	74.00'	207.49'	181.78'	" "
6	145°50'00"	46.00'	149.68'	117.08'	" "
7	96°08'15"	20.00'	22.27'	33.56'	CURB RETURN
8	83°49'04"	20.00'	17.95'	29.26'	CURB RETURN
9	66°05'23"	86.00'	55.95'	99.20'	CURB FACE
10	66°05'23"	114.00'	74.16'	131.50'	" "
11	33°15'23"	114.00'	34.05'	66.17'	" "
12	33°15'23"	86.00'	25.68'	49.92'	" "

BENCH MARK:
LARGE CHIS. "+" ± CENTER OF S.E'LY CURB RETURN (T.C.) @ DOHENY ROAD & LOMA VISTA DRIVE.
ELEV. 477.305 - U.S.C.&G.S. DATUM.



AS BUILT DRAWING

REV	DATE	BY	DESCRIPTION
1	4-8-71	R.G.	AS BUILT

SCALE: 1" = 20'

DESIGNED H. WAGNER
DRAWN R. PEELE
CHECKED R. CARLSON

SUBMITTED: Richard S. Leland, PROJECT ENGINEER — 13393 R.C.E. NO. — 9-22-67 DATE
RECOMMENDED: [signature], JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — 5677 R.C.E. NO. — 9-27-67 DATE

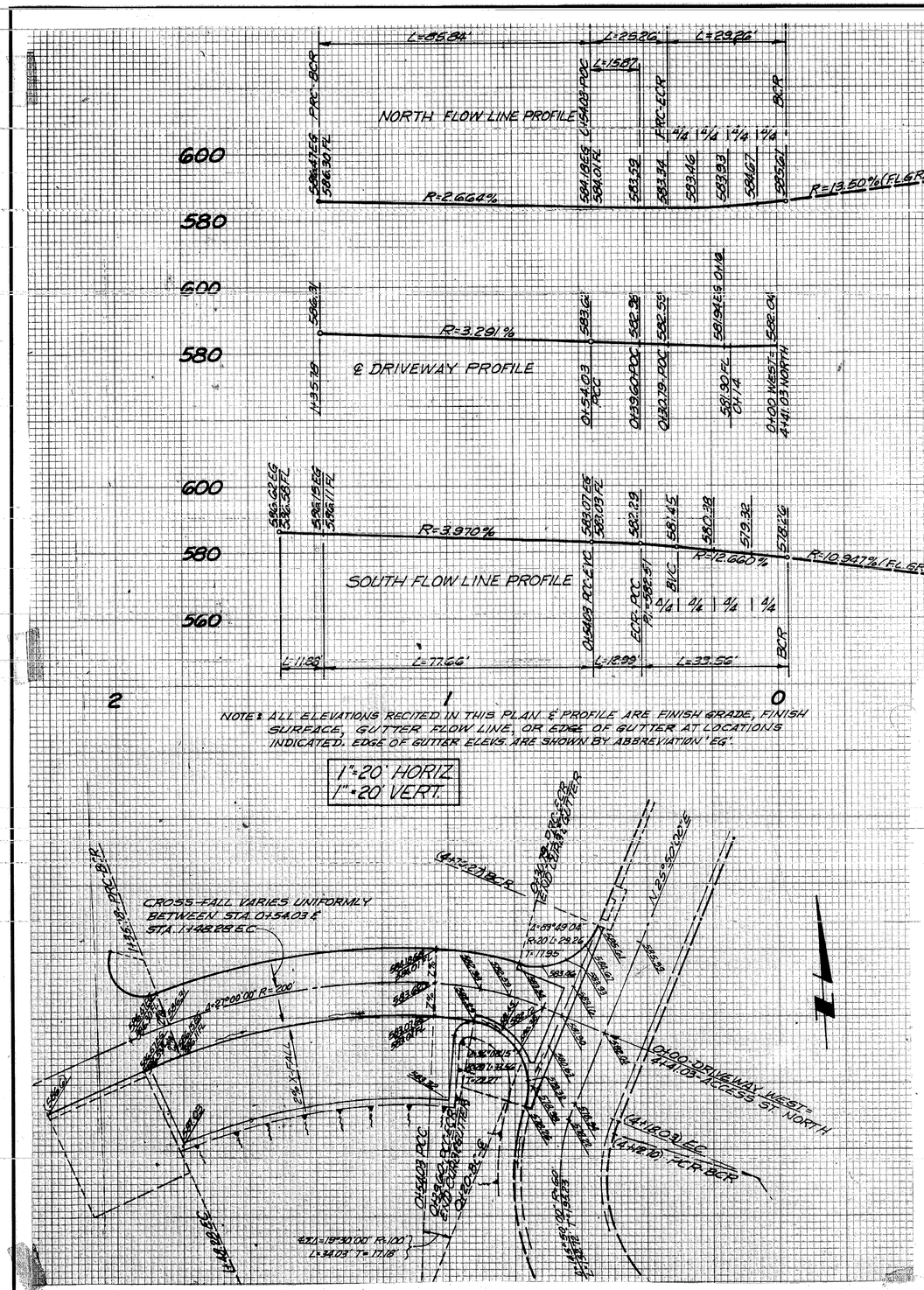
JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

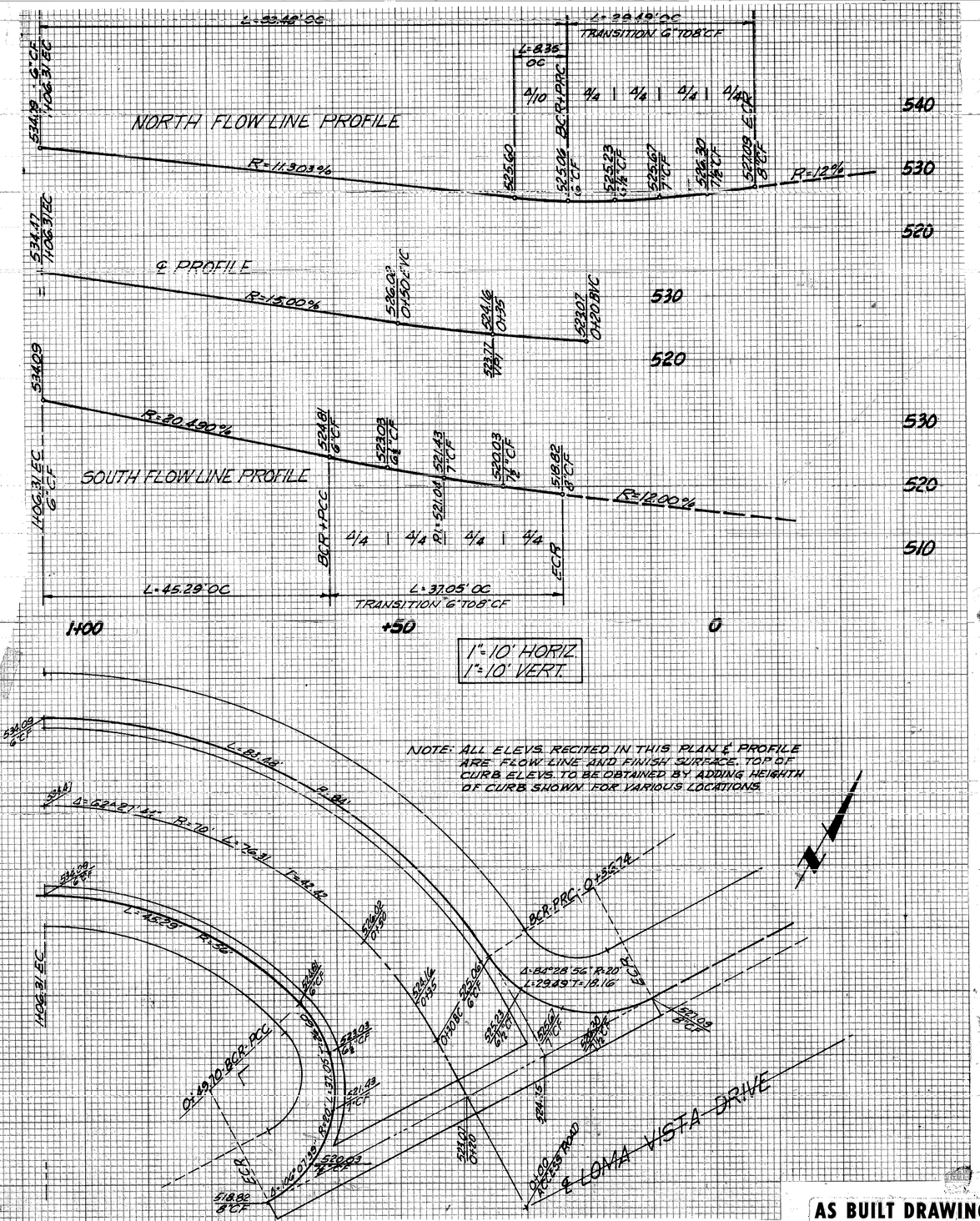
APPROVED: [signature], MANAGER AND CHIEF ENGINEER — 9-27-67 DATE
APPROVED — DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
GRADING PLAN (SOUTHERLY PORTION)

SHEET C-4 OF 47 SHEETS

10241.5





REV	DATE	BY	DESCRIPTION
1	4-71	℄	AS BUILT

SCALE: AS NOTED

DESIGNED F.
DRAWN F.A.F.
CHECKED D.L.

SUBMITTED Richard L. Leland — PROJECT ENGINEER — R.C.E. NO. 13393 — DATE AUG. 17 '70
RECOMMENDED — JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.C.E. NO. — DATE

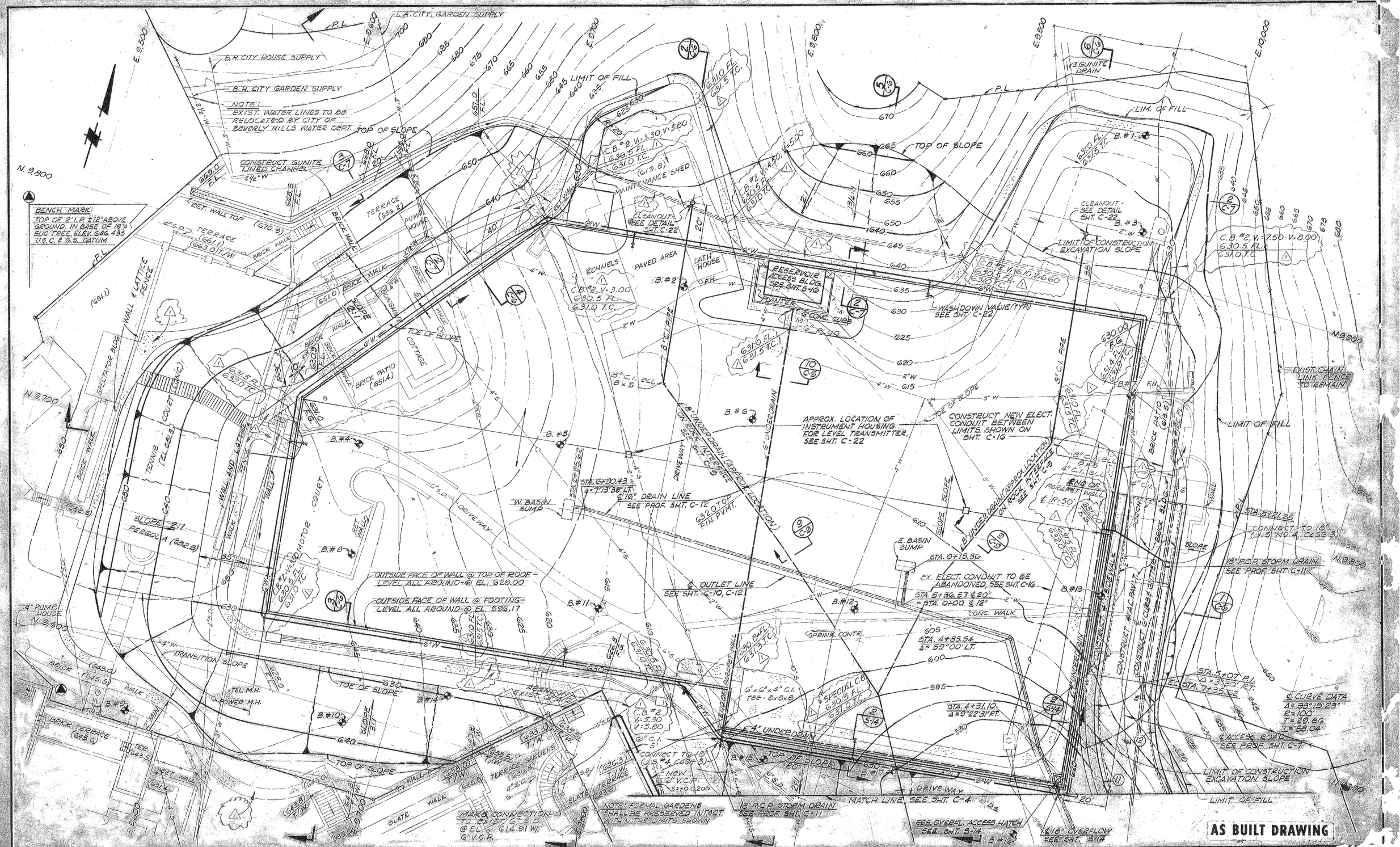
JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.
555 E. WALNUT STREET • PASADENA, CALIFORNIA
681-4255 796-9141
LAFAYETTE COSTA MESA VENTURA LA JOLLA LAS VEGAS

APPROVED — DATE
APPROVED — DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
REVISED PLANS & PROFILES
ACCESS ROAD AT LOMA VISTA DR.
DRIVEWAY AT ACCESS ROAD STA. 4+41.03

SHEET C-4.2 OF 50 SHEETS

10241.6



REV	DATE	BY	DESCRIPTION
△	4-8-71	R.G.	AS BUILT

SCALE: 1"=20'

DESIGNED H. WAGNER
DRAWN H. WAGNER
CHECKED LELAND

SUBMITTED Richard A. Leland — PROJECT ENGINEER — R.C.E. NO. 13993 — DATE 9-22-67

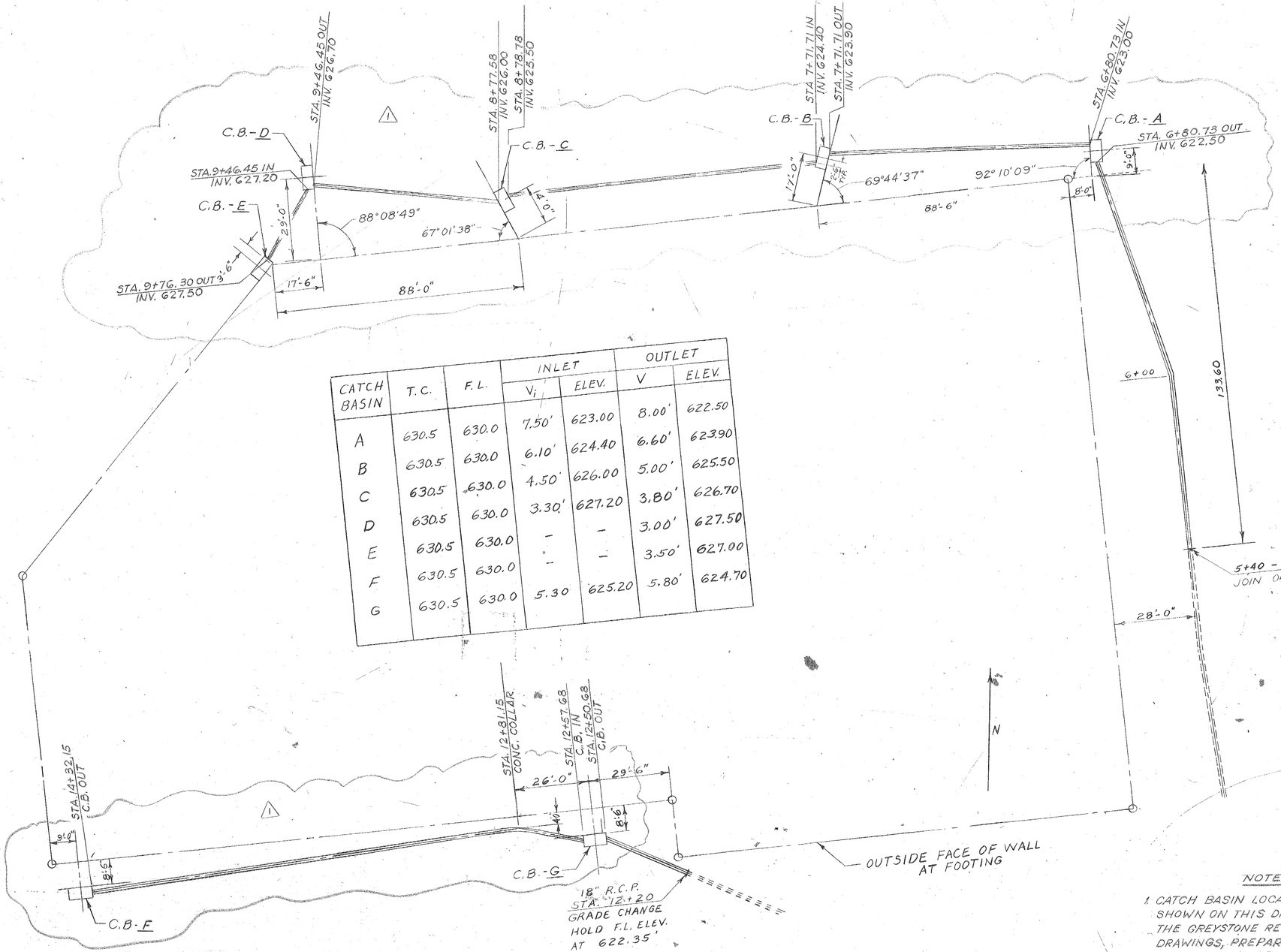
RECOMMENDED — JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.C.E. NO. 5677 — DATE 9-27-67

JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5819 793-1125
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

APPROVED — MANAGER AND CHIEF ENGINEER — DATE 9-27-67
APPROVED — DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
GRADING PLAN (NORTHERLY PORTION)

10241.7



CATCH BASIN	T.C.	F.L.	INLET		OUTLET	
			V_i	ELEV.	V	ELEV.
A	630.5	630.0	7.50'	623.00	8.00'	622.50
B	630.5	630.0	6.10'	624.40	6.60'	623.90
C	630.5	630.0	4.50'	626.00	5.00'	625.50
D	630.5	630.0	3.30'	627.20	3.80'	626.70
E	630.5	630.0	–	–	3.00'	627.50
F	630.5	630.0	–	–	3.50'	627.00
G	630.5	630.0	5.30	625.20	5.80'	624.70

NOTES:

1. CATCH BASIN LOCATIONS AND ELEVATIONS SHOWN ON THIS DRAWING ARE TAKEN FROM THE GREYSTONE RESERVOIR LANDSCAPING DRAWINGS, PREPARED BY CORNELL, BRIDGERS & TROLLER.
2. CATCH BASINS A THRU. G ARE LOS ANGELES COUNTY FLOOD CONTROL DISTRICT CATCH BASIN No. 2. SEE LACFCD DWG. No. 2-D162 FOR DIMENSIONS.

AS BUILT DRAWING

REV.	DATE	BY	DESCRIPTION
1	4-8-71	R.G.	AS BUILT

SCALE:

DESIGNED
DRAWN
CHECKED

SUBMITTED: Richard A. Leland 13393 7-6-70
PROJECT ENGINEER — R.E. NO. — DATE

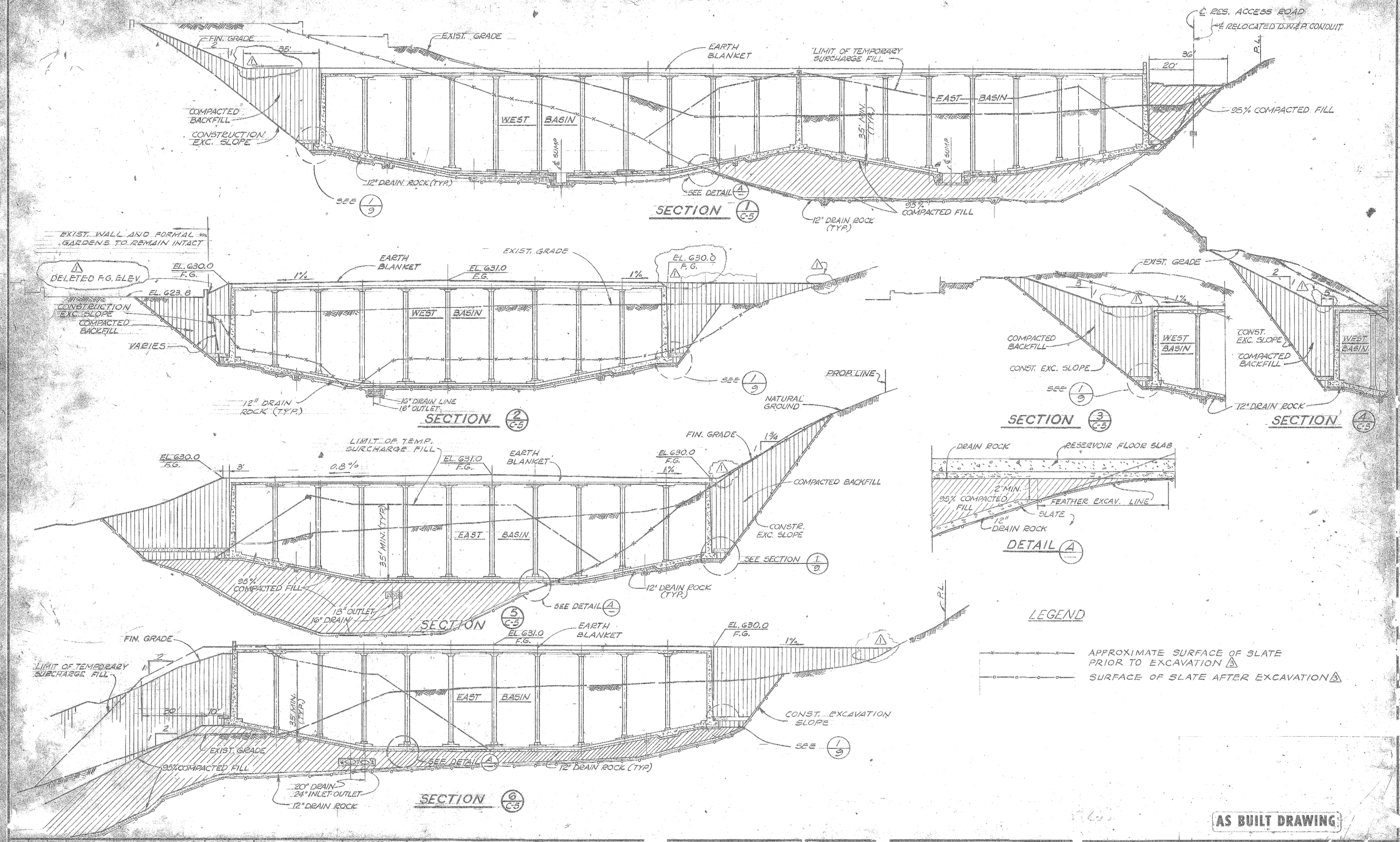
RECOMMENDED
JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.E. NO. — DATE

JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.
555 E. WALNUT STREET • PASADENA, CALIFORNIA
796-9141 681-4255
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

APPROVED — DATE
APPROVED — DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
STORM DRAIN AND CATCH BASIN REVISIONS

SHEET C-5 SUPPLEMENTARY OF 41 SHEETS



AS BUILT DRAWING

REV.	DATE	BY	DESCRIPTION
1	4-8-71	W.Y.	AS BUILT
2	3-10-71	G.J.	CHANGED DISTANCE TO SLATE
3	3-17-71	W.M.	DELETE

SCALE: 1" = 20'

DESIGNED H. WAGNER
DRAWN H. WAGNER
CHECKED L.G. AND

SUBMITTED Richard L. Wilcox — PROJECT ENGINEER — R.C.E. NO. 13393 — DATE 9-22-67
RECOMMENDED — JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.C.E. NO. 5677 — DATE 9-27-67

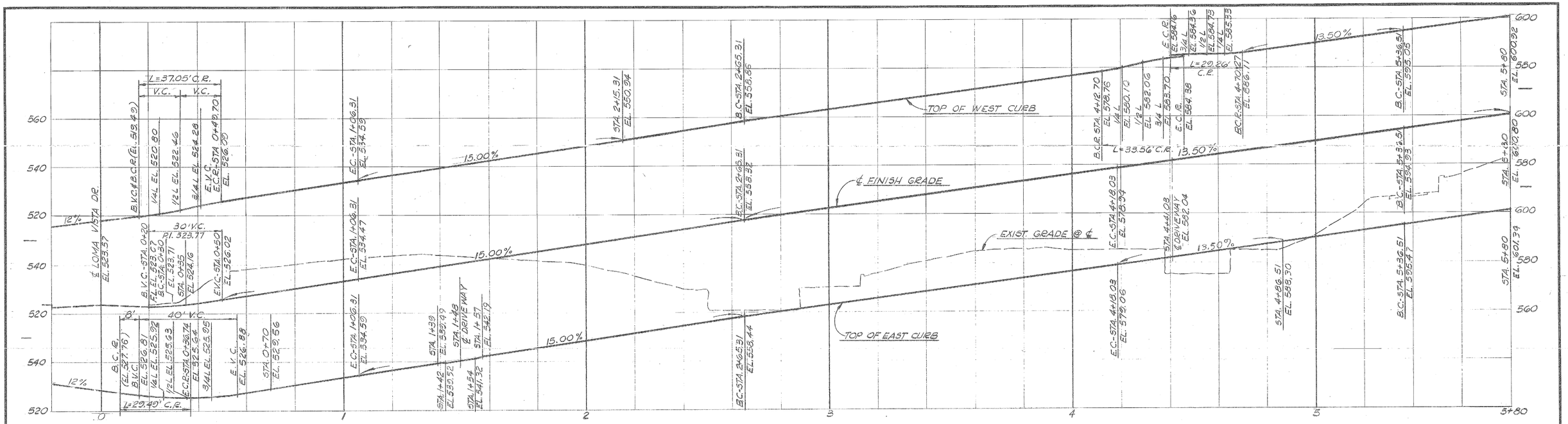
JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE · COSTA MESA · SAN DIEGO · LAS VEGAS

APPROVED — MANAGER AND CHIEF ENGINEER — DATE 9-27-67
APPROVED — DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
RESERVOIR CROSS-SECTIONS

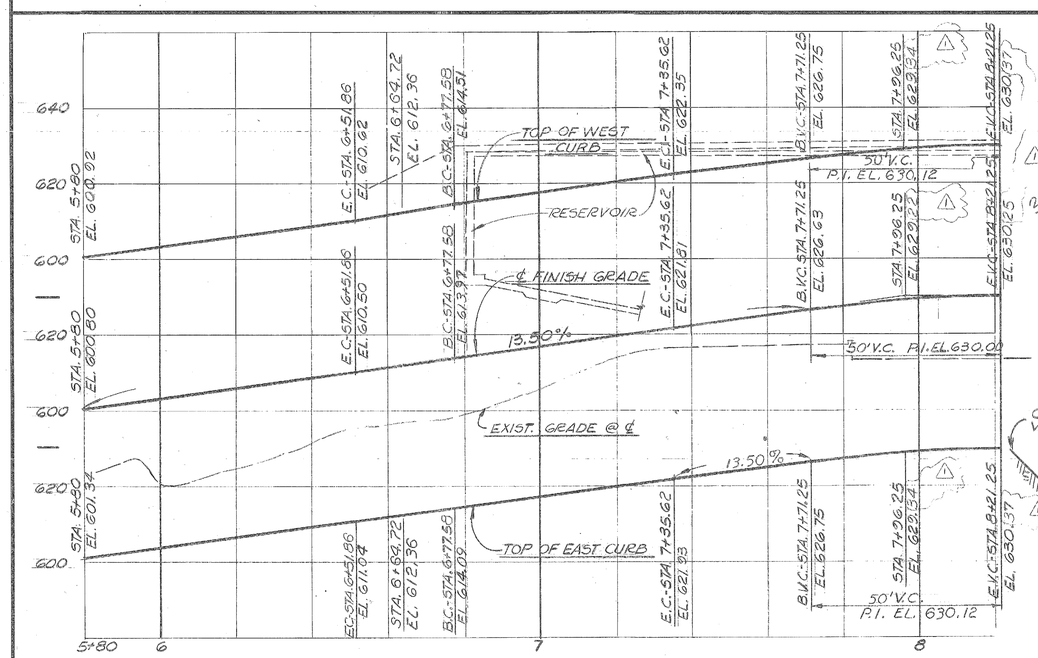
SHEET C-6 OF 4/7 SHEETS

10241-9



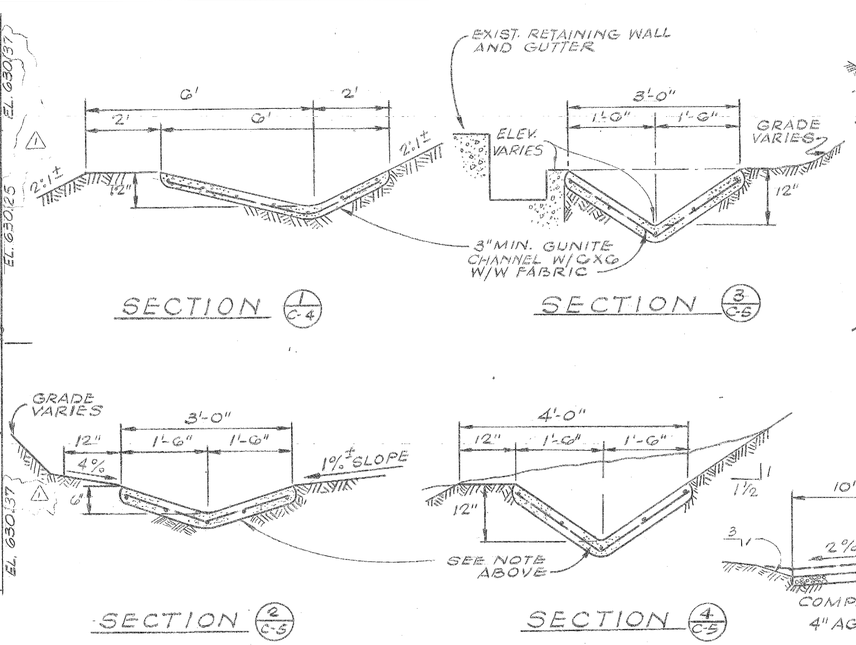
ACCESS ROAD PROFILE

SCALE: 1"=20'



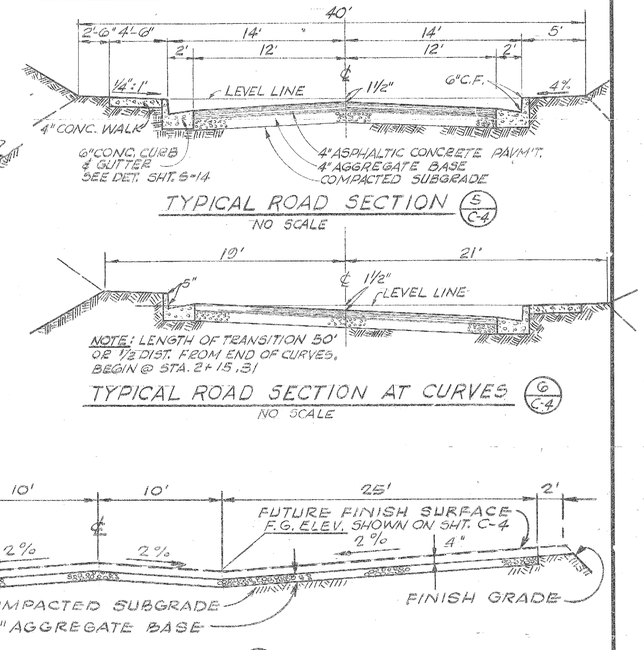
ACCESS ROAD PROFILE

SCALE: 1"=20'



TYPICAL DRAINAGE CHANNEL

NO SCALE



AS BUILT DRAWING

REV	DATE	BY	DESCRIPTION
△	4-8-71	W.Y.	AS BUILT

SCALE: AS NOTED

DESIGNED H. WAGNER
DRAWN H. WAGNER
CHECKED R. CARLSON

SUBMITTED Richard A. Leland, PROJECT ENGINEER — R.E. NO. 13393 — DATE 9-22-67
RECOMMENDED, JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.E. NO. 5677 — DATE 9-27-67

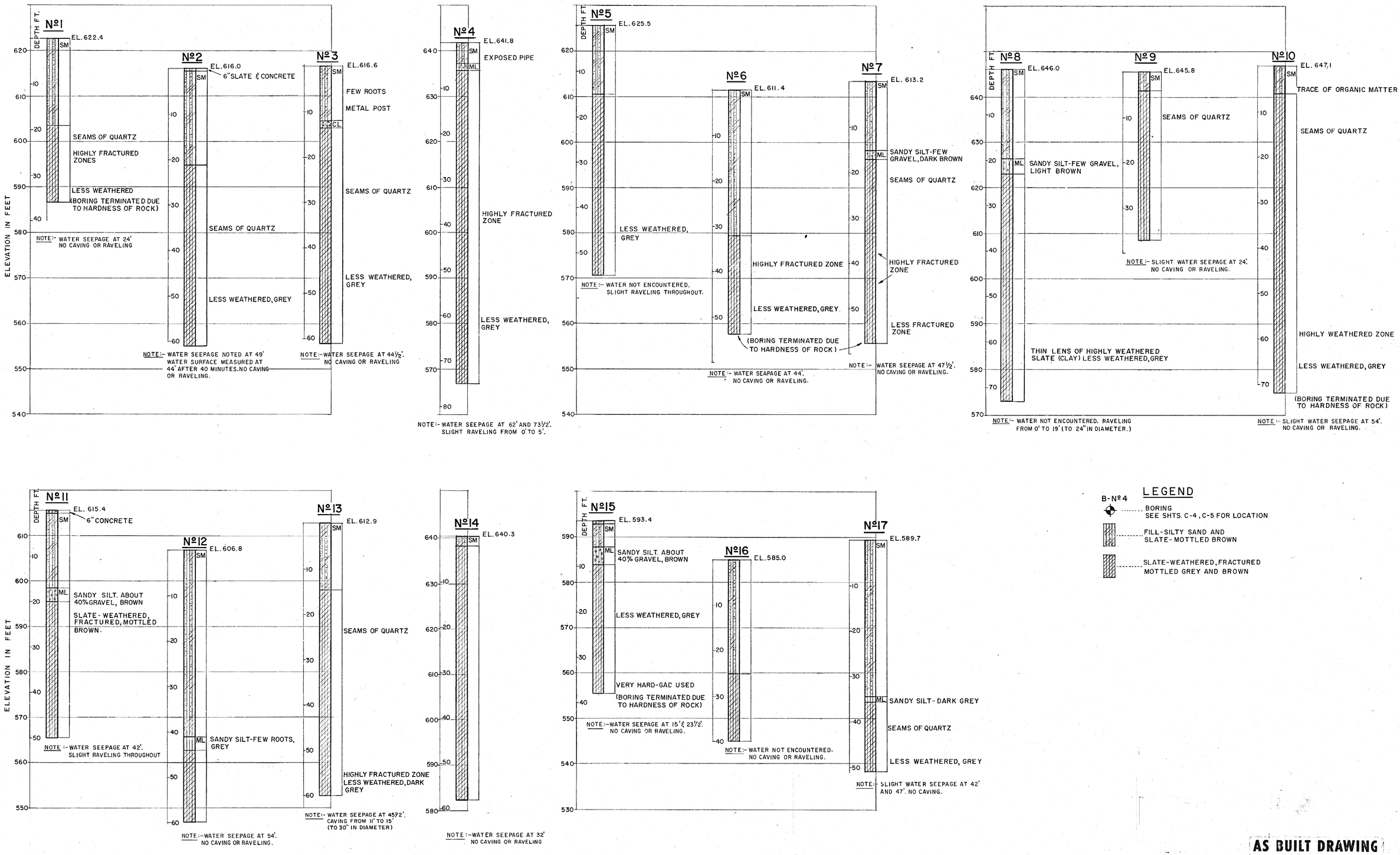
JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
PASADENA COSTA MESA SAN DIEGO LAS VEGAS

APPROVED, MANAGER AND CHIEF ENGINEER — DATE 9-27-67
APPROVED — DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
ACCESS ROAD PROFILE AND TYPICAL SECTIONS

SHEET C-7 OF 47 SHEETS

10241.10



AS BUILT DRAWING

REV	DATE	BY	DESCRIPTION
1	2-71	JL	AS BUILT

SCALE: VERT. 1"=10'

DESIGNED H. WAGNER
DRAWN MANJIKIAN
CHECKED LELAND

SUBMITTED Richard S. Leland — PROJECT ENGINEER — R.C.E. NO. 13393 — DATE 9-22-67
RECOMMENDED — JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.C.E. NO. 5677 — DATE 9-27-67

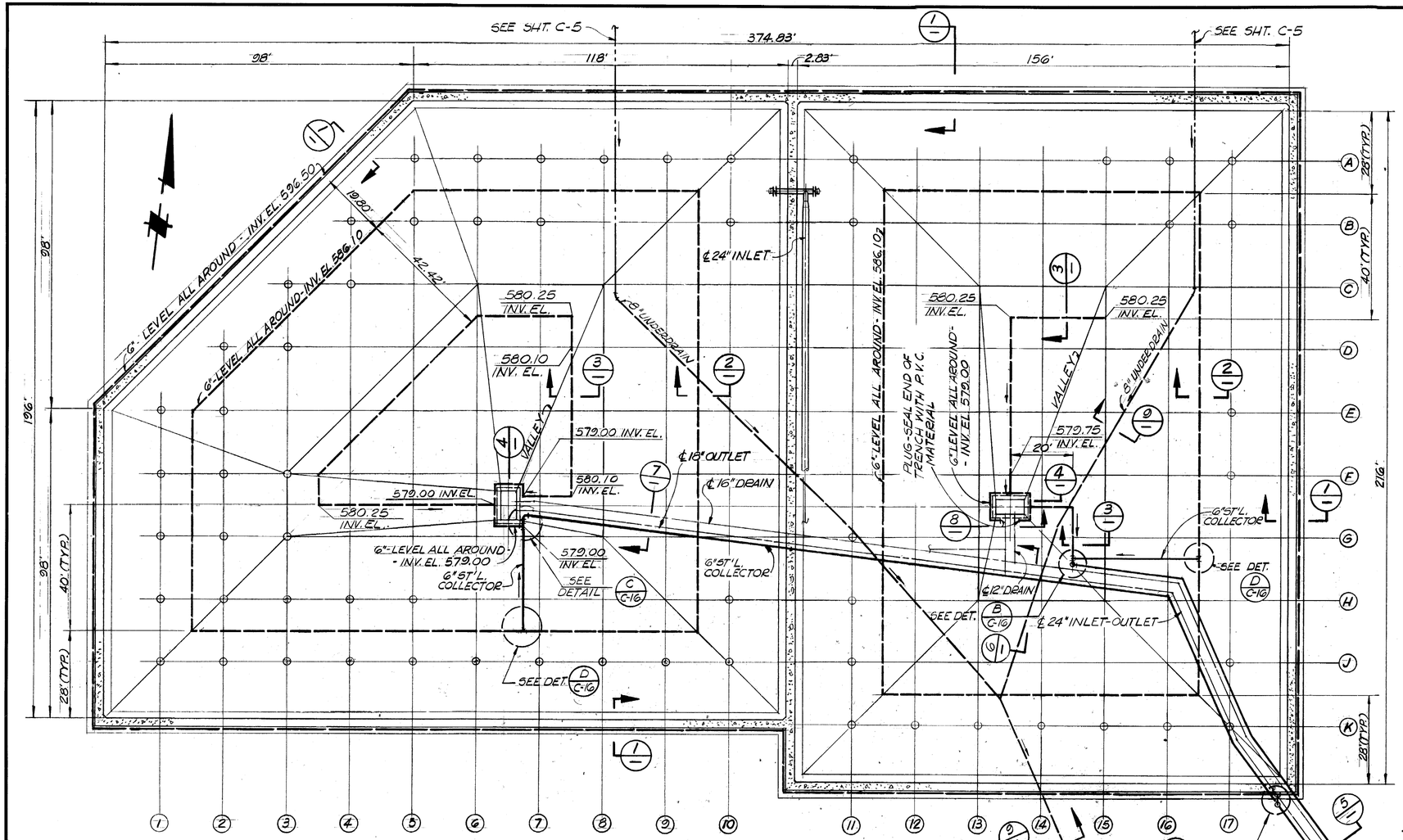
JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

APPROVED — MANAGER AND CHIEF ENGINEER — DATE 9-27-67
APPROVED — DATE

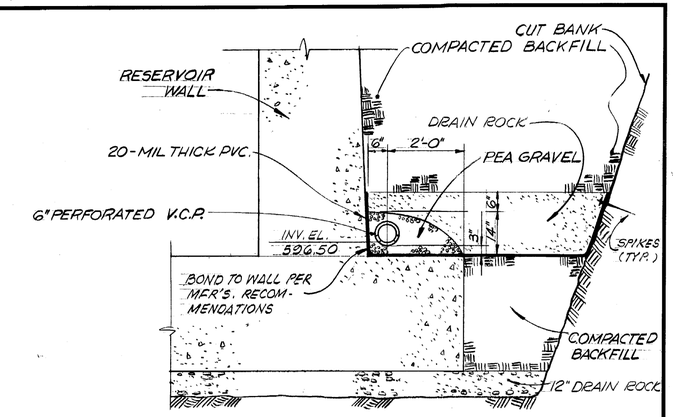
CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
LOGS OF BORINGS

SHEET C-8 OF 47 SHEETS

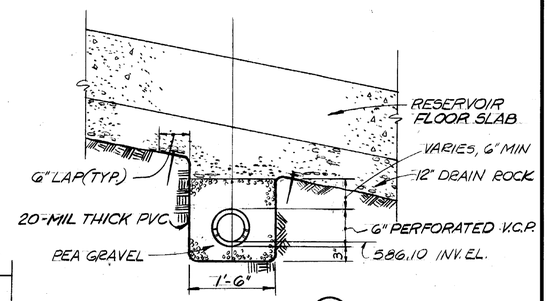
10241.11



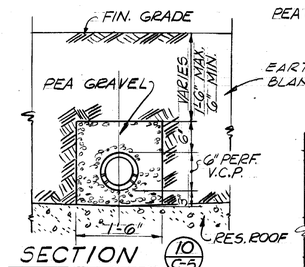
FLOOR PLAN
UNDERDRAIN PIPING LAYOUT
SCALE: 1" = 20'



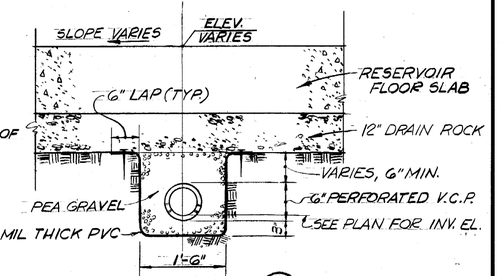
SECTION 1
SCALE: 1/2" = 1'-0"



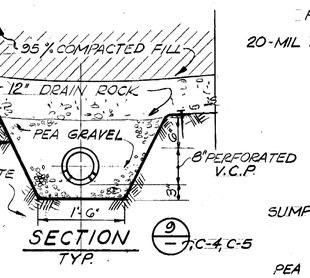
SECTION 2
SCALE: 3/4" = 1'-0"



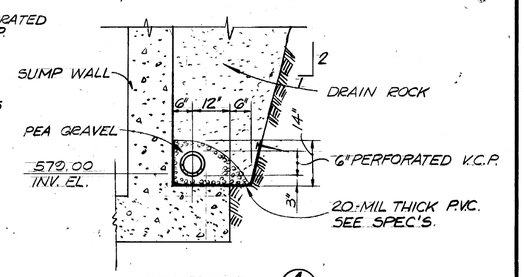
SECTION 10 C-5
SCALE: 3/4" = 1'-0"



SECTION 3
SCALE: 3/4" = 1'-0"



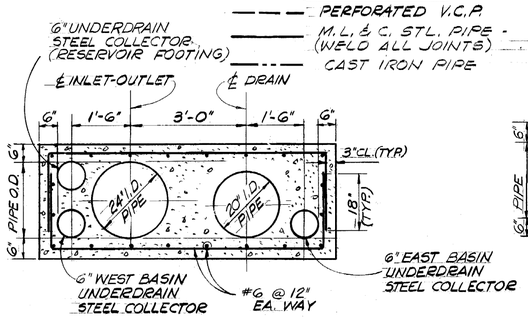
SECTION 9 C-4, C-5
TYP.



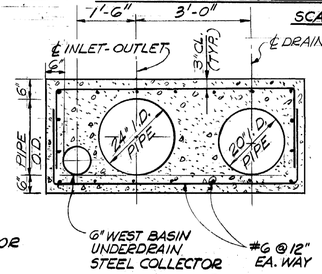
SECTION 4
SCALE: 1/2" = 1'-0"

AS BUILT DRAWING

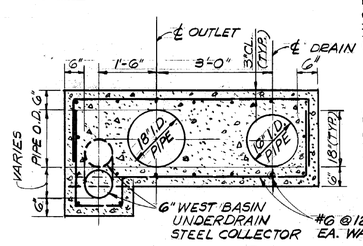
LEGEND
- PERFORATED V.C.P.
- M.L. & C. STL. PIPE - (WELD ALL JOINTS)
- CAST IRON PIPE



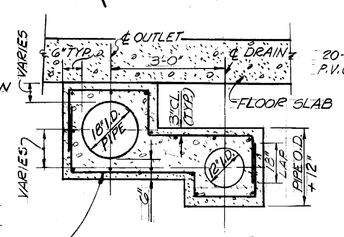
SECTION 5



SECTION 6



SECTION 7



SECTION 8

NOTE: ALL PIPE TO BE ENCASED SHALL BE MORTAR COATED, INCLUDING JOINTS.

CONC. ENCASEMENT DETAILS
SCALE: 1/2" = 1'-0"

REV	DATE	BY	DESCRIPTION
1	4-71		AS BUILT

SCALE: AS NOTED

DESIGNED H. WAGNER
DRAWN H. WAGNER
CHECKED LELAND

SUBMITTED Richard S. Leland — PROJECT ENGINEER — 13393 R.C.E. NO. — 9-22-67 DATE
RECOMMENDED — JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — 5677 R.C.E. NO. — 9-27-67 DATE

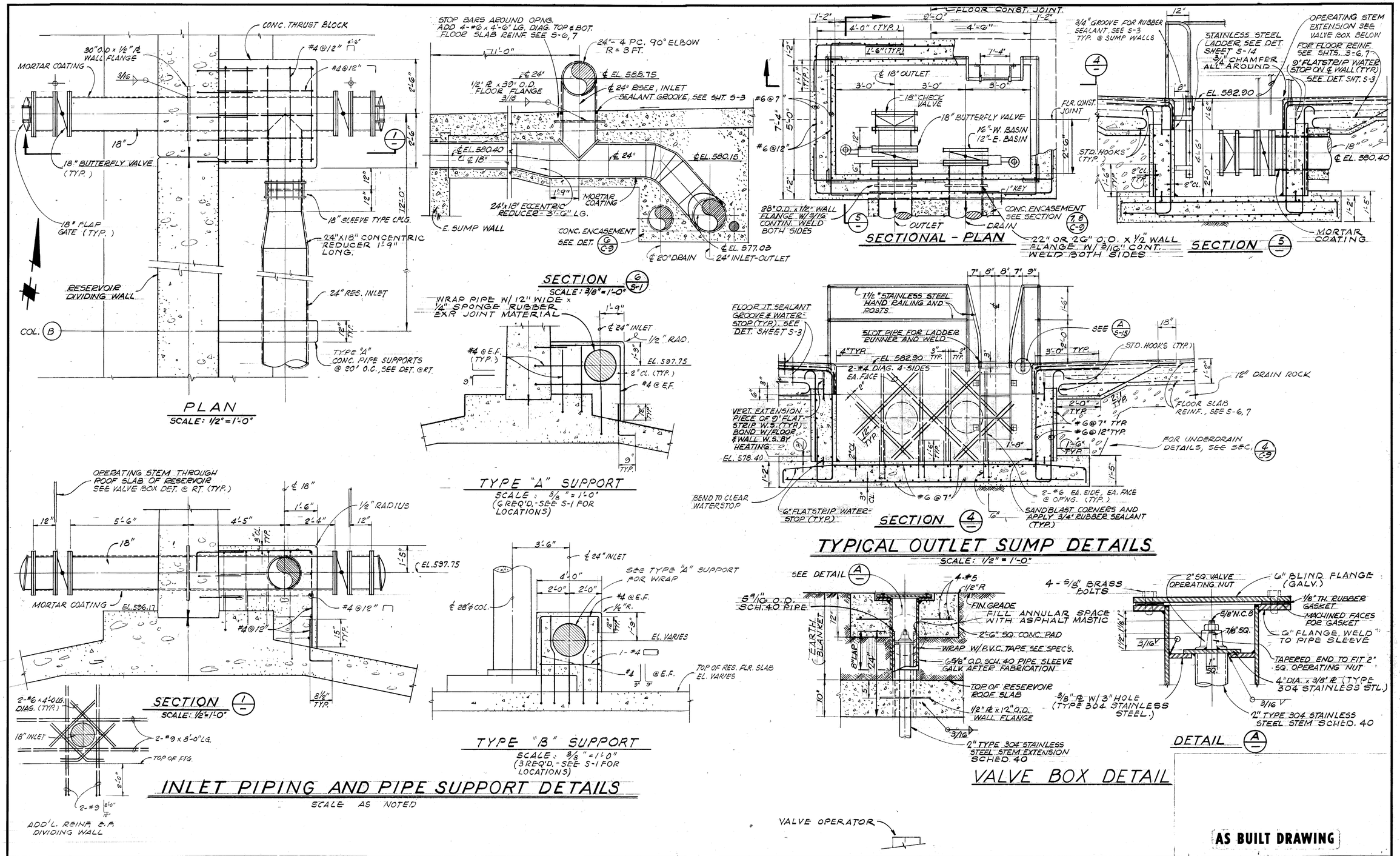
JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

APPROVED — MANAGER AND CHIEF ENGINEER — 9-27-67 DATE
APPROVED — DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
RESERVOIR UNDERDRAINS-PLAN AND SECTIONS

SHEET C-9 OF 47 SHEETS

10241.12



AS BUILT DRAWING

REV	DATE	BY	DESCRIPTION
1	4-71	JL	AS BUILT

SCALE: AS NOTED

DESIGNED LELAND
DRAWN WAGNER
CHECKED Richards

SUBMITTED Richard L. Leland, PROJECT ENGINEER — R.C.E. NO. 13393 — DATE 9-22-67
RECOMMENDED R. Kenmis, JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.C.E. NO. 5677 — DATE 9-27-67

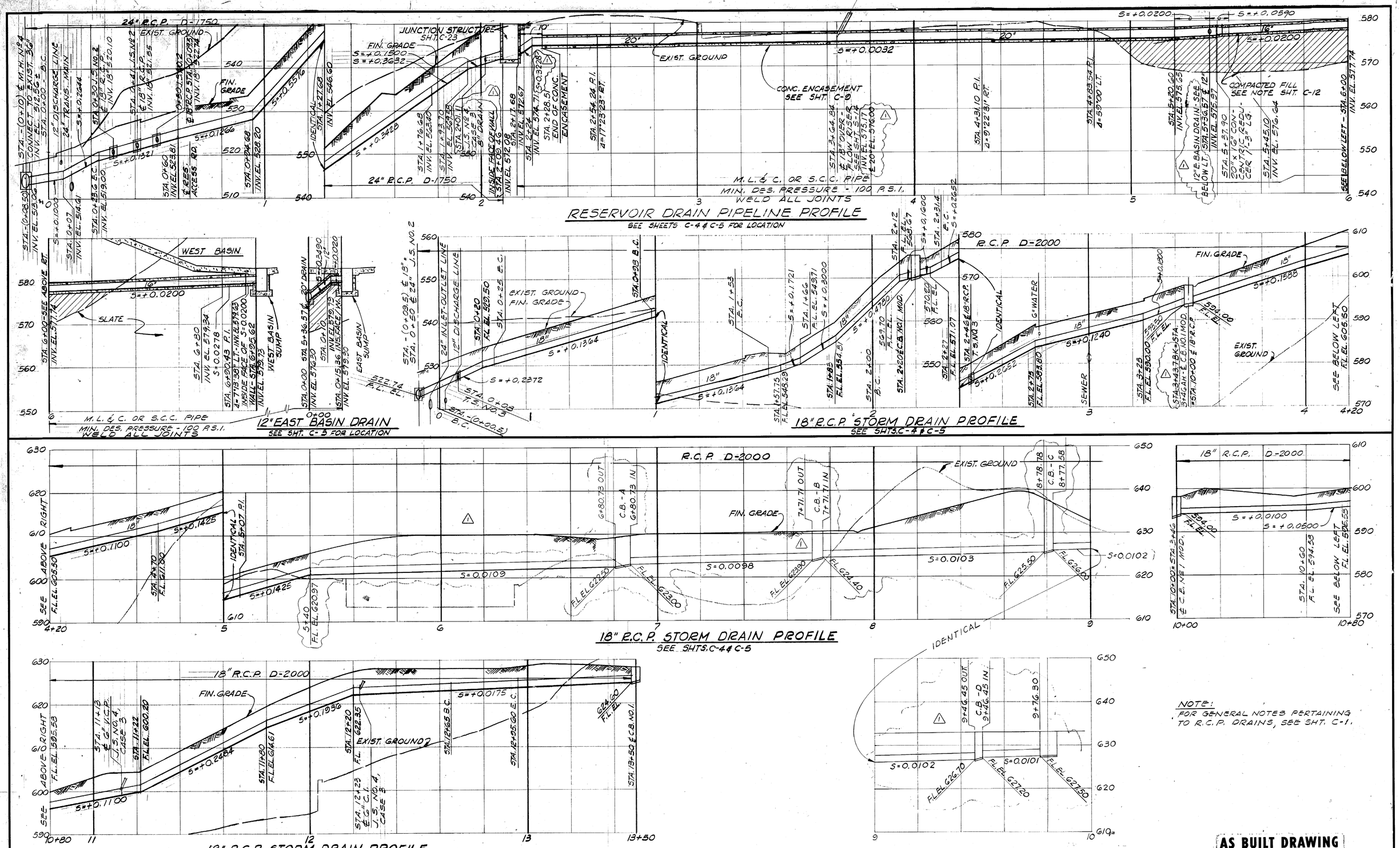
JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

APPROVED Lewis A. Berry, MANAGER AND CHIEF ENGINEER — DATE 9-27-67
APPROVED — DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
MISCELLANEOUS RESERVOIR PIPING DETAILS

SHEET C-10 OF 47 SHEETS

10241 13



NOTE:
FOR GENERAL NOTES PERTAINING TO R.C.P. DRAINS, SEE SHT. C-1.

AS BUILT DRAWING

REV	DATE	BY	DESCRIPTION
1	4-71	H	AS BUILT

SCALE: HORIZ. 1"=20' VERT. 1"=10'

DESIGNED H. WAGNER
DRAWN H. WAGNER
CHECKED R. CARLSON

SUBMITTED Richard S. Leland, PROJECT ENGINEER — R.E. NO. 13393 — DATE 9-22-67
RECOMMENDED R. L. Kenmir, JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.E. NO. 5677 — DATE 9-22-67

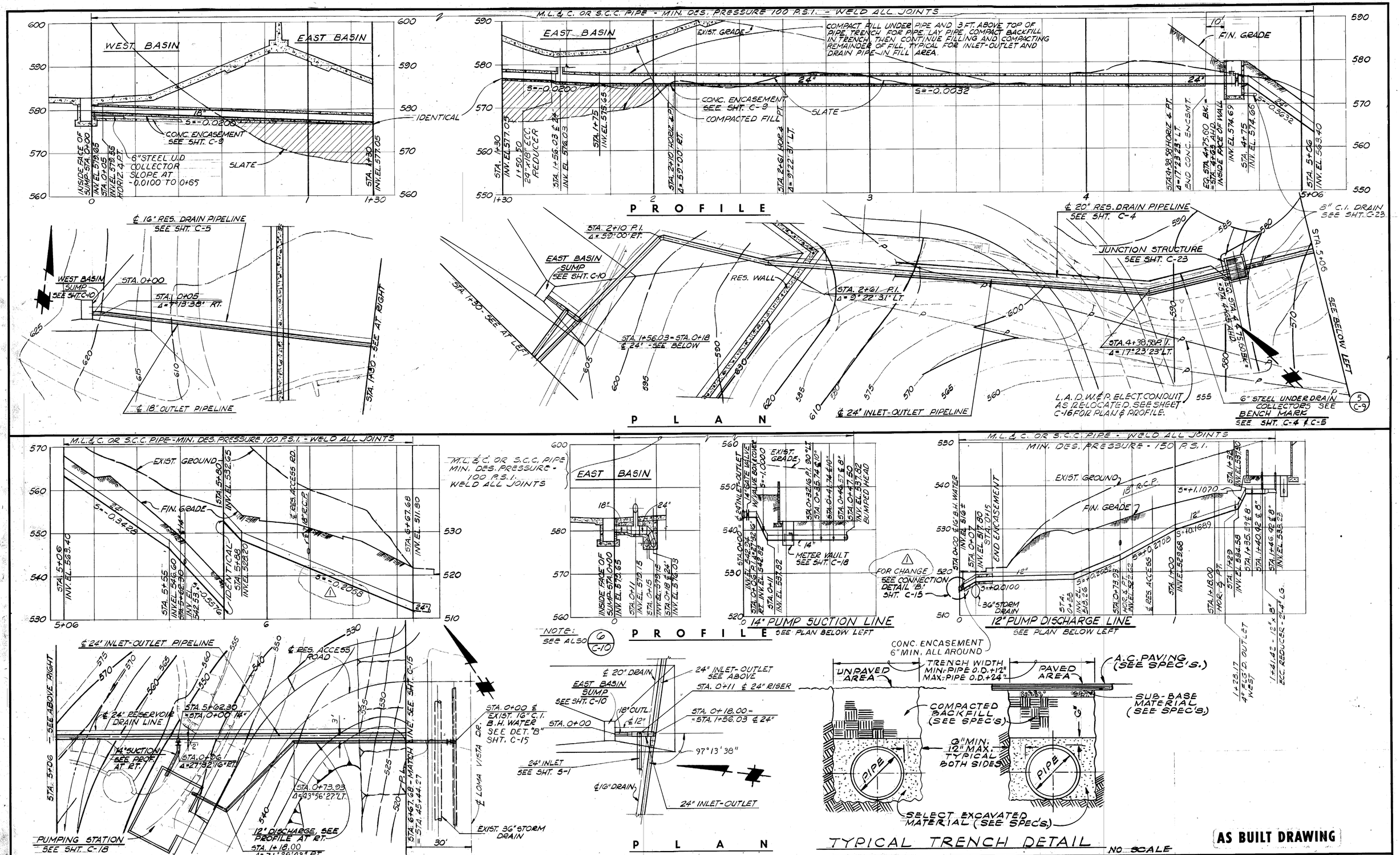
JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
PASADENA COSTA MESA SAN DIEGO LAS VEGAS

APPROVED Peter D. Berry, MANAGER AND CHIEF ENGINEER — DATE 9-27-67
APPROVED — DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
RESERVOIR DRAIN LINE AND STORM DRAIN LINES
PROFILES - DETAILS

SHEET C-11 OF 50 SHEETS

10241.14



AS BUILT DRAWING

REV	DATE	BY	DESCRIPTION
1	4/8/71	R.G.	AS BUILT

SCALE: HOR. 1"=20' VERT. 1"=10'

DESIGNED H. WAGNER
DRAWN H. WAGNER
CHECKED LELAND

SUBMITTED Leland S. Leland, PROJECT ENGINEER — R.E. NO. 13393 — DATE 9-22-67

RECOMMENDED R. L. Merrill, JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.E. NO. 5677 — DATE 9-27-67

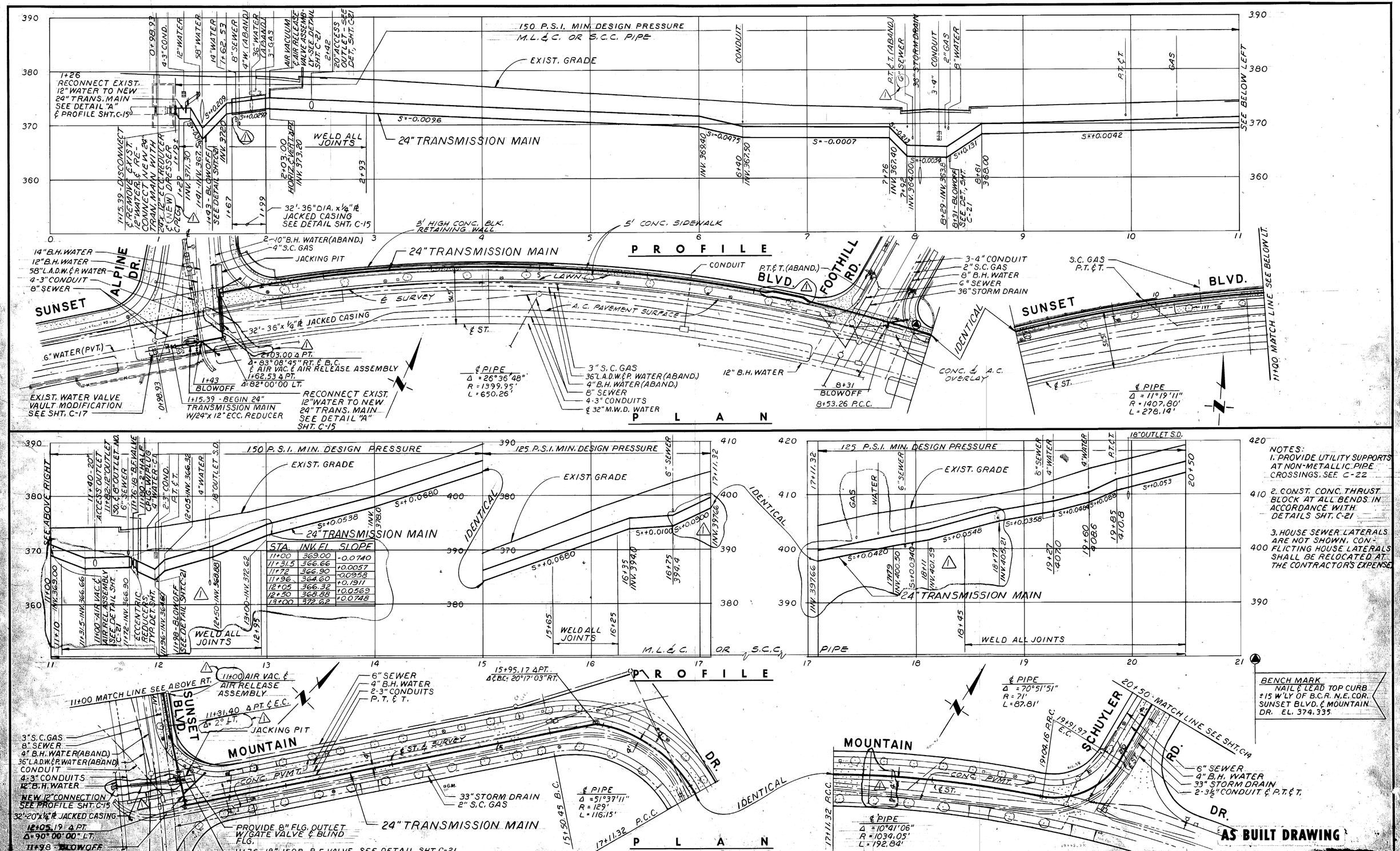
JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7126
PASADENA COSTA MESA SAN DIEGO LAS VEGAS

APPROVED Lucien A. Berry, MANAGER AND CHIEF ENGINEER — DATE 9-27-67
APPROVED — DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
INLET-OUTLET LINE - PLAN AND PROFILE

SHEET C-12 OF 47 SHEETS

7241.15



REV	DATE	BY	DESCRIPTION
A	10-8-71	WY	AS BUILT

SCALE: HORIZ. 1" = 40' VERT. 1" = 8'

DESIGNED J. SMITH
DRAWN R. VAN GORDER
CHECKED LELAND

SUBMITTED Richard L. Leland, PROJECT ENGINEER — R.E. NO. 13393 — DATE 9-22-67

RECOMMENDED R. Montgomery, JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.E. NO. 5677 — DATE 9-27-67

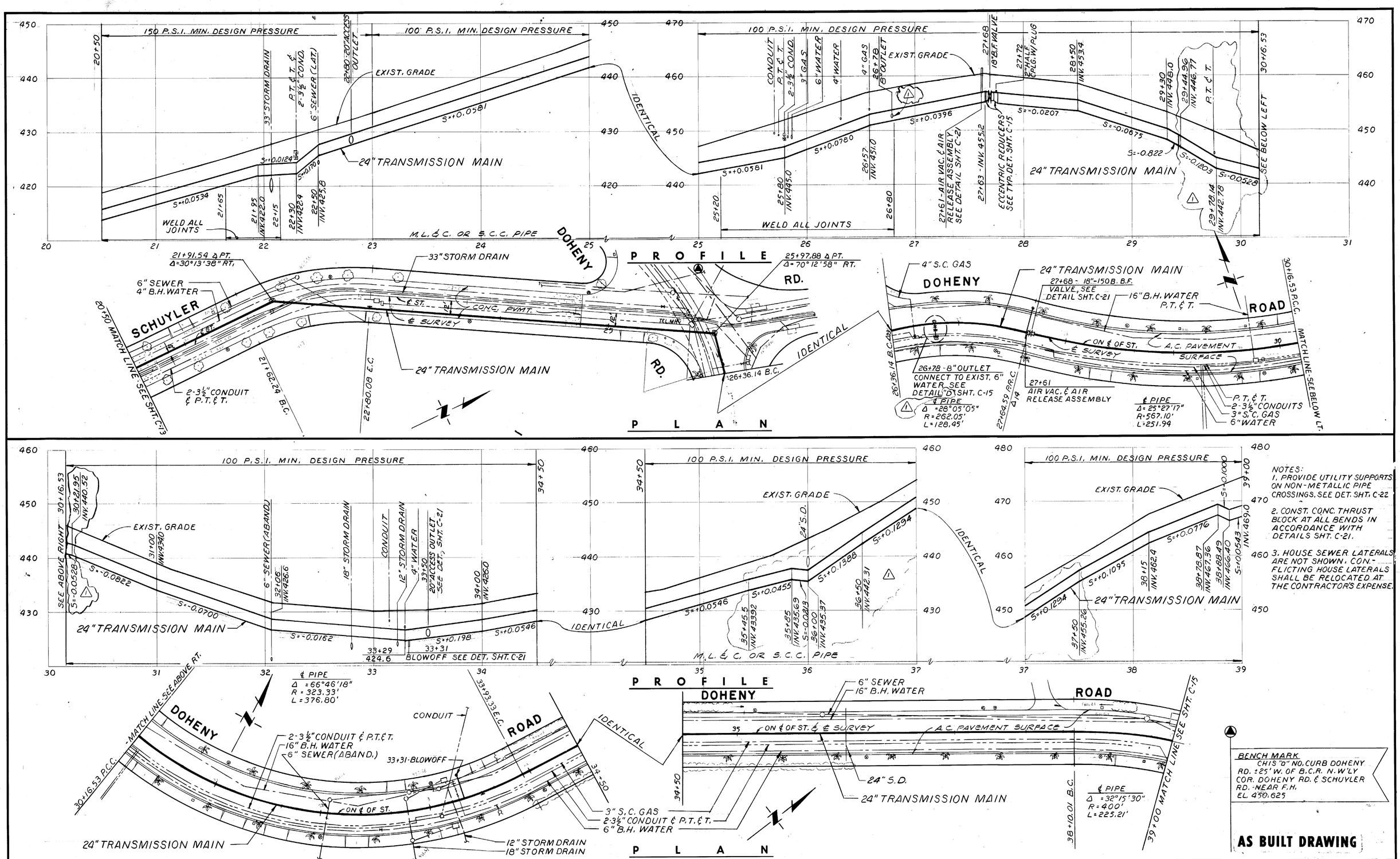
JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
PASADENA COSTA MESA SAN DIEGO LAS VEGAS

APPROVED Willis A. Berry, MANAGER AND CHIEF ENGINEER — DATE 9-27-67
APPROVED — DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
TRANSMISSION MAIN-PLAN AND PROFILE-STA 1+00 TO STA 20+50

SHEET C-13 OF 47

1024



NOTES:
1. PROVIDE UTILITY SUPPORTS ON NON-METALLIC PIPE CROSSINGS. SEE DET. SHT. C-22
2. CONST. CONC. THRUST BLOCK AT ALL BENDS IN ACCORDANCE WITH DETAILS SHT. C-21.
3. HOUSE SEWER LATERALS ARE NOT SHOWN. CONFLICTING HOUSE LATERALS SHALL BE RELOCATED AT THE CONTRACTOR'S EXPENSE.

BENCH MARK
CHIS "D" NO. CURB DOHENY RD. ±25' W. OF B.C.R. N.W'LY COR. DOHENY RD. & SCHUYLER RD. NEAR F.H. EL. 450.625

AS BUILT DRAWING

REV	DATE	BY	DESCRIPTION
△	4-8-71	W.Y.	AS BUILT

SCALE: HORIZ. 1"=40' VERT. 1"=8'

DESIGNED J. SMITH
DRAWN R. VAN GORDER
CHECKED LELAND

SUBMITTED Richard A. Leland, PROJECT ENGINEER — R.E. NO. 13393 — DATE 9-22-67
RECOMMENDED R. L. Dennis, JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.E. NO. 5677 — DATE 9-27-67

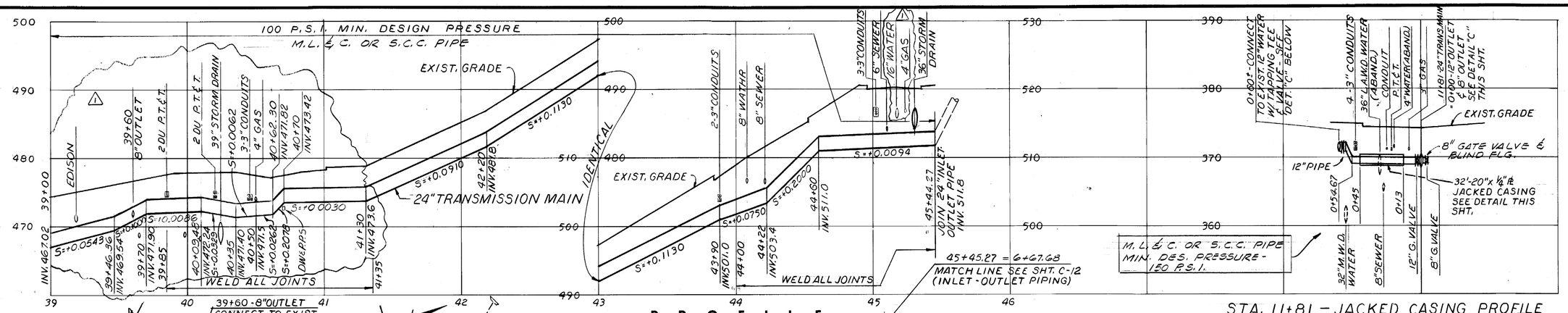
JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7 28
PASADENA COSTA MESA SAN DIEGO LAS VEGAS

APPROVED Oliver A. Berry, MANAGER AND CHIEF ENGINEER — DATE 9-27-67
APPROVED — DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
TRANSMISSION MAIN-PLAN AND PROFILE-STA 20+50 TO STA 39+00

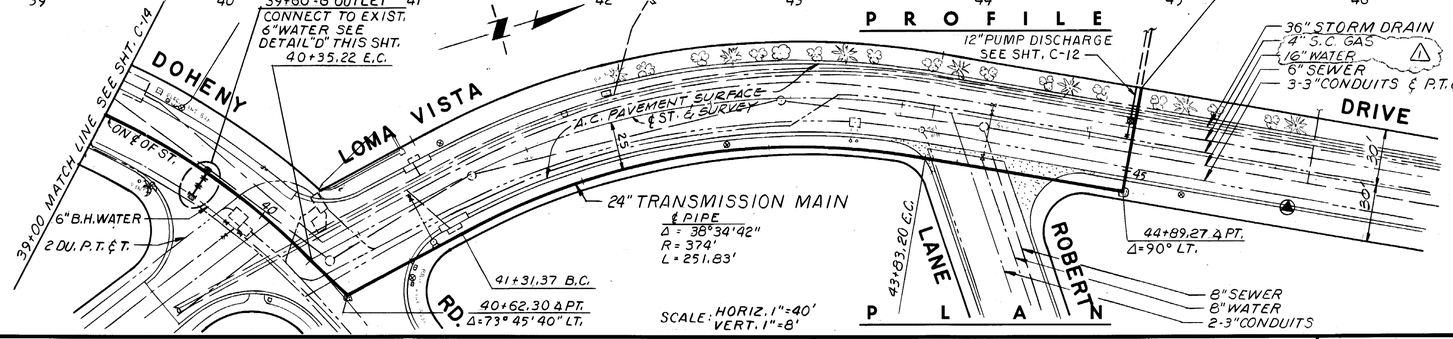
SHEET C-14 OF 47 SHEETS

10241.12



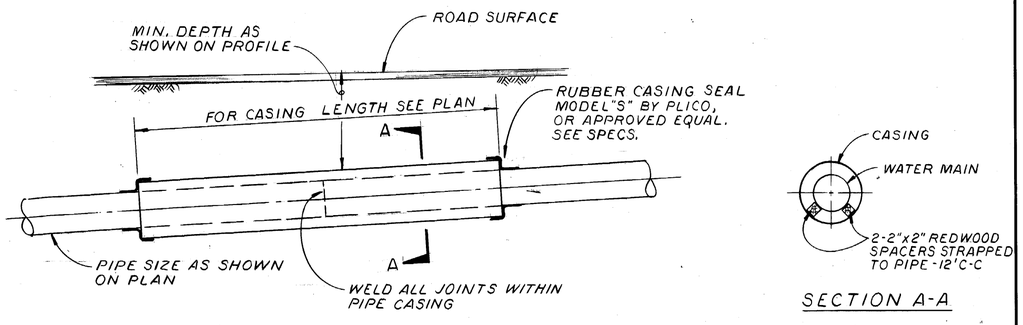
STA. 11+81 – JACKED CASING PROFILE AT SUNSET BLVD. & MOUNTAIN DR.

SEE SHT. C-13



NOTES:
1. PROVIDE UTILITY SUPPORTS ON NON-METALLIC PIPE CROSSINGS. SEE DET. SHT. C-22
2. CONST. CONC. THRUST BLOCK AT ALL BENDS IN ACCORDANCE WITH DETAILS ON SHT. C-21
3. HOUSE SEWER LATERALS ARE NOT SHOWN; CONFLICTING HOUSE LATERALS SHALL BE RELOCATED AT THE CONTRACTORS EXPENSE.

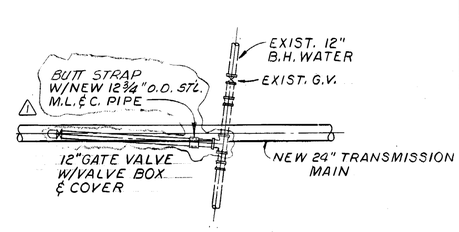
BENCH MARK
CHIS. "D" ON TOP E'LY CURB OF LOMA VISTA DR AT SUR. STA. ± 46+10
EL. 531.400



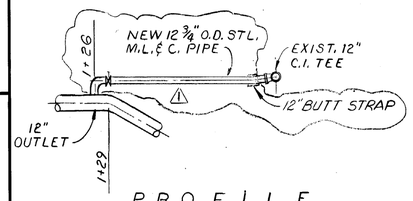
SECTION A-A

TYPICAL STEEL CASING DETAIL

NO SCALE



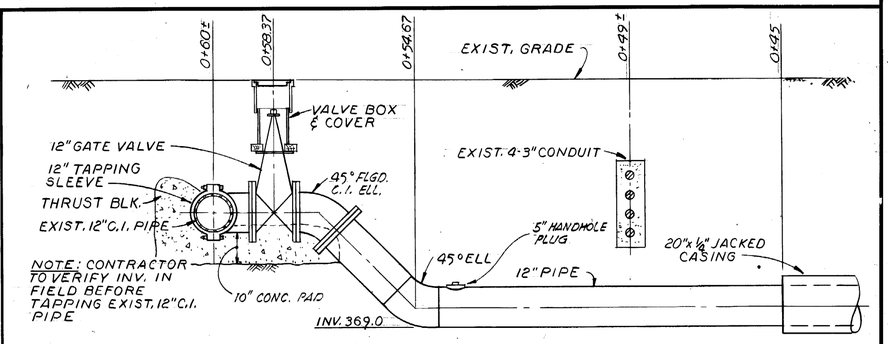
PLAN



PROFILE

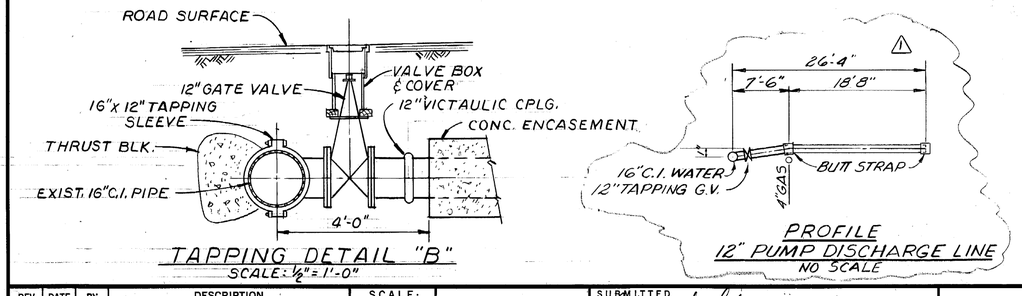
STA. 1+26 - DETAIL "A"

SCALE: 1"=10'



TAPPING DETAIL "C"

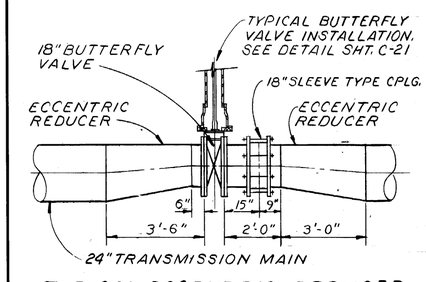
SCALE: 1/2" = 1'-0"



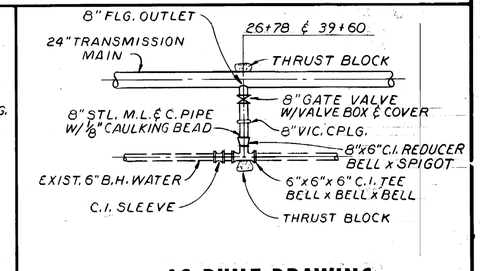
TAPPING DETAIL "B"

SCALE: 1/2" = 1'-0"

PROFILE
12" PUMP DISCHARGE LINE
NO SCALE



TYPICAL ECCENTRIC REDUCER DETAIL



AS BUILT DRAWING

STA. 26+78 & 39+60 - DETAIL "D"

SEE THIS SHT. & SHT. C-14

REV	DATE	BY	DESCRIPTION
1	4-8-71	W.Y.	AS BUILT

SCALE: AS NOTED

DESIGNED J. SMITH
DRAWN R. VAN GORDER
CHECKED LELAND

SUBMITTED Richard J. Leland, PROJECT ENGINEER — R.E. NO. 13393 — DATE 9-22-67
RECOMMENDED R. Kennir, JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.E. NO. 5677 — DATE 9-27-67

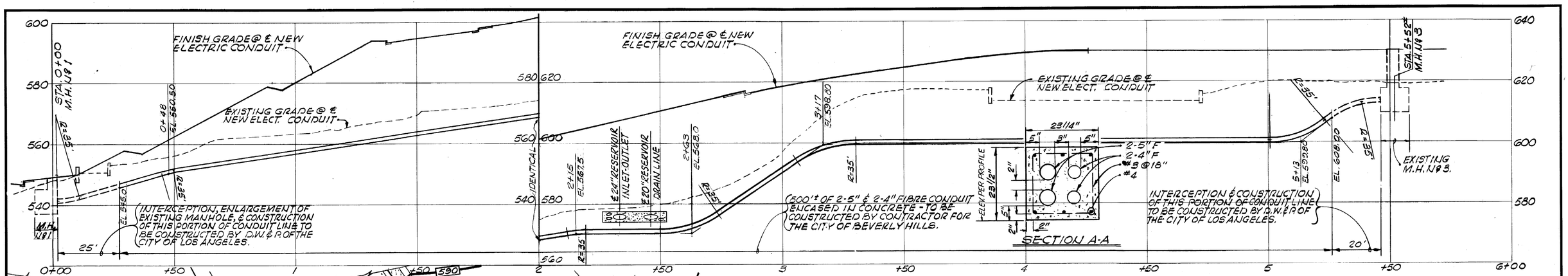
JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
PASADENA COSTA MESA SAN DIEGO LAS VEGAS

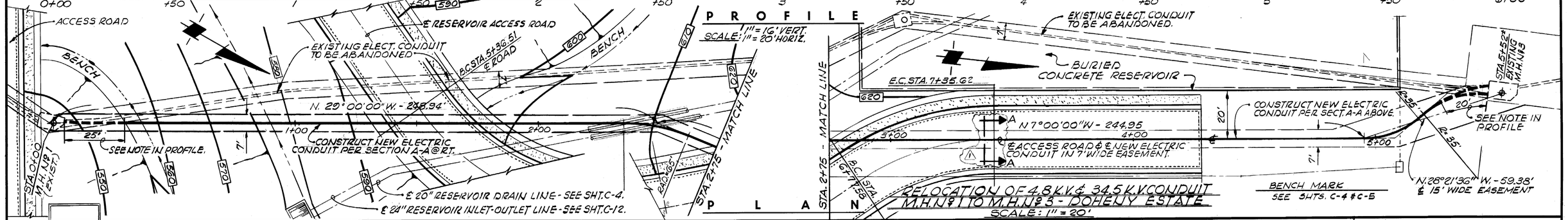
APPROVED Earl A. Berry, MANAGER AND CHIEF ENGINEER — DATE 9-27-67
APPROVED _____ DATE

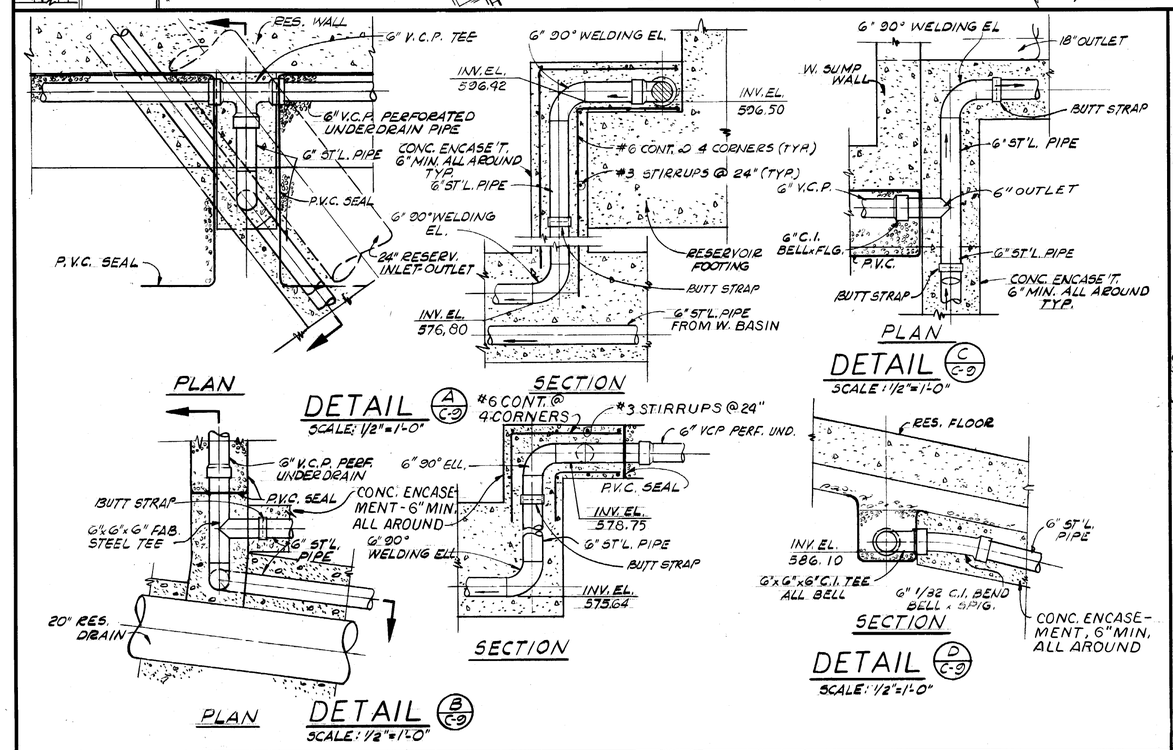
CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
TRANSMISSION MAIN-PLAN AND PROFILE-STA 39+00 TO STA 45+45.11

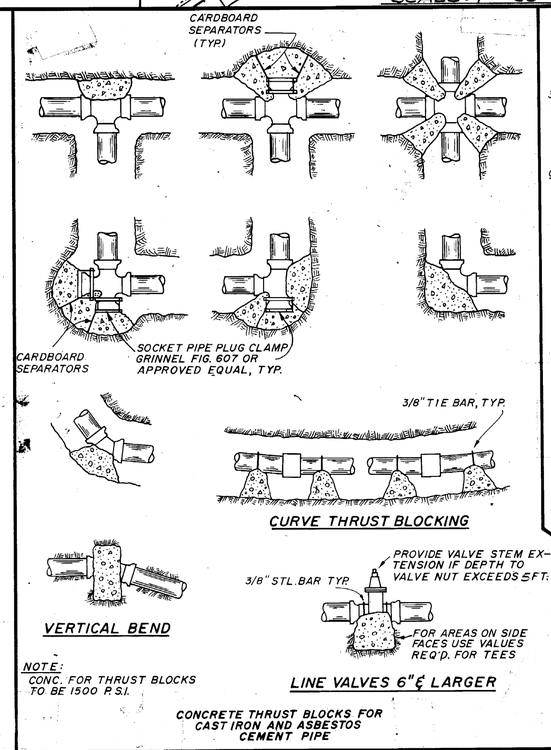
SHEET C-15 OF 47 SHEETS

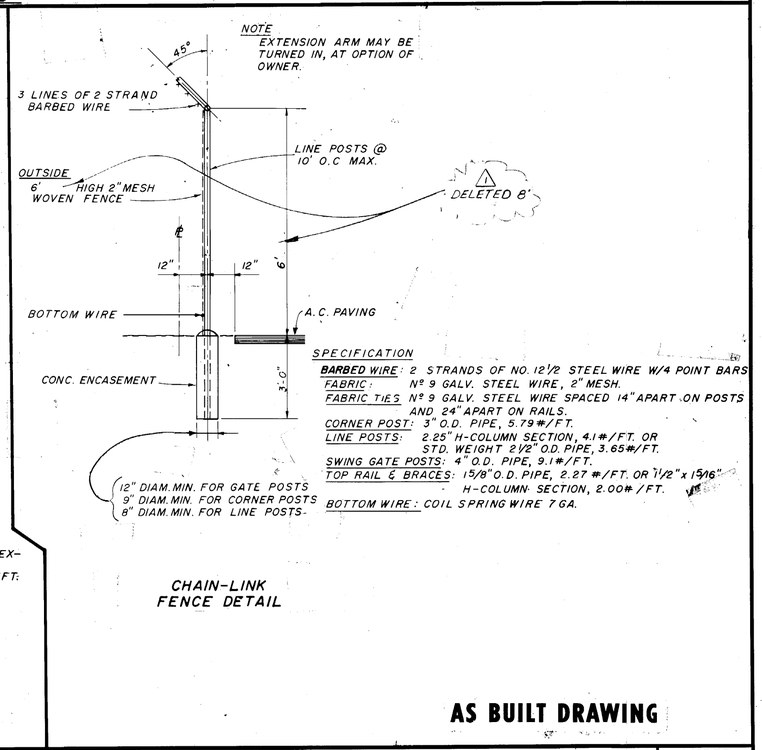
10241.10











AS BUILT DRAWING

REV	DATE	BY	DESCRIPTION
1	4-8-71	W.Y.	AS BUILT

SCALE: AS NOTED

DESIGNED R. PEELE H. WAGNER
DRAWN R. PEELE H. WAGNER
CHECKED LELAND

SUBMITTED Richard S. Leland PROJECT ENGINEER — I 3393 R.E. NO. — 9-22-67 DATE
RECOMMENDED R. Chesmir JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — 5677 R.E. NO. — 9-27-67 DATE

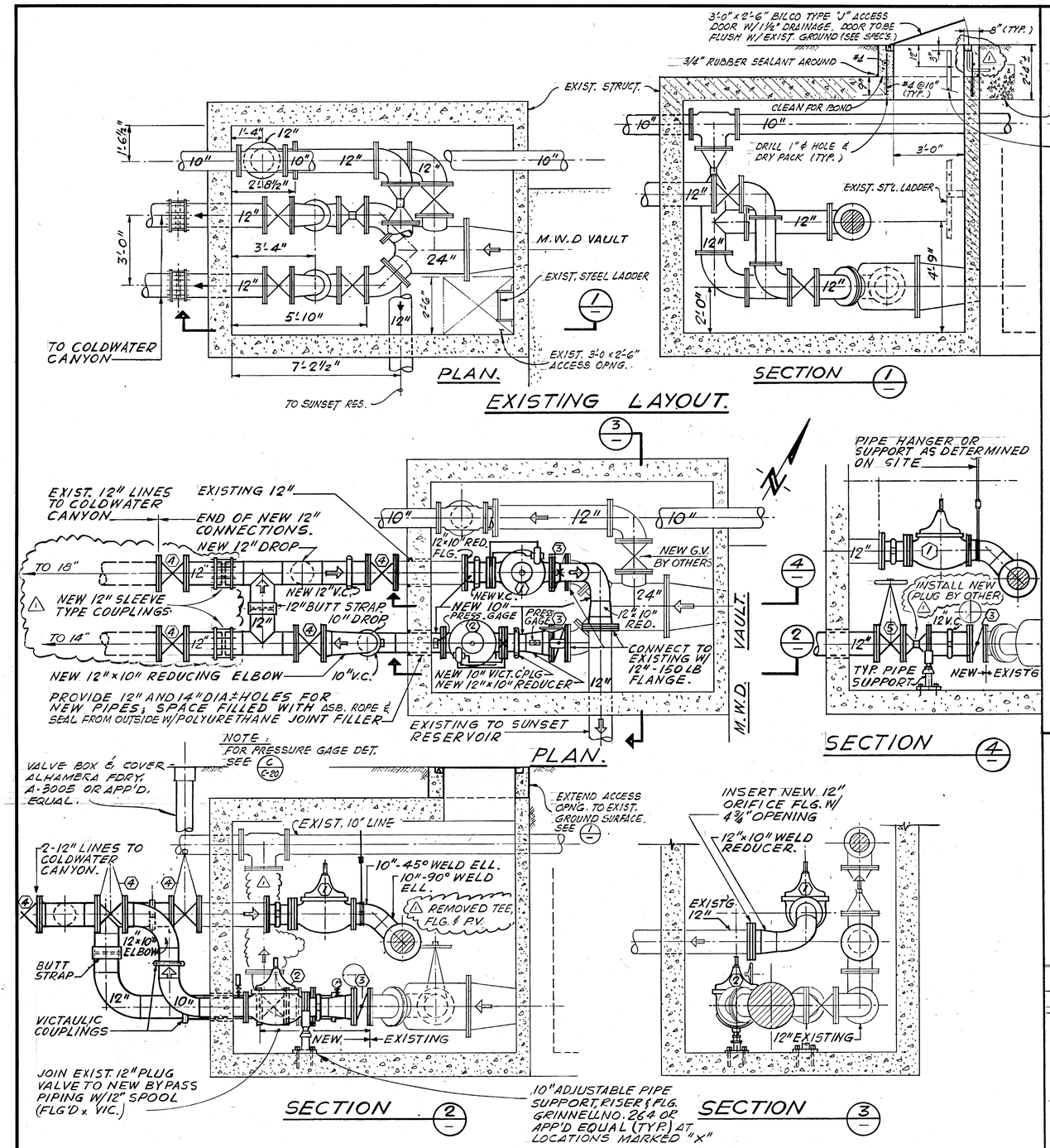
JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
PASADENA COSTA MESA SAN DIEGO LAS VEGAS

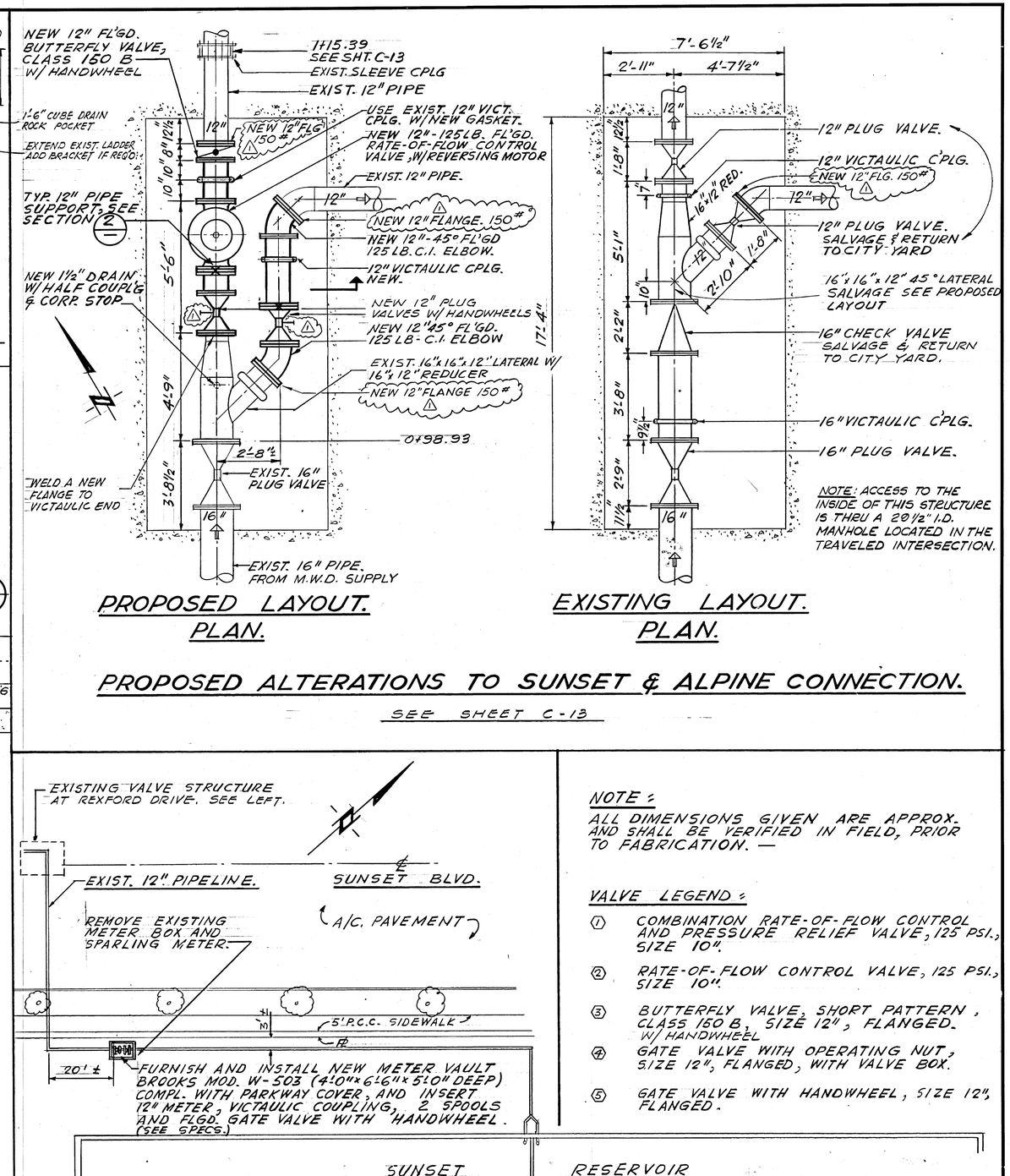
APPROVED Charles D. Berry MANAGER AND CHIEF ENGINEER — 9-27-67 DATE
APPROVED _____ DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
RELOCATION OF ELECTRICAL CONDUIT AT RESERVOIR SITE
PLAN AND PROFILE
MISCELLANEOUS DETAILS

SHEET C-16 OF 47 SHEETS

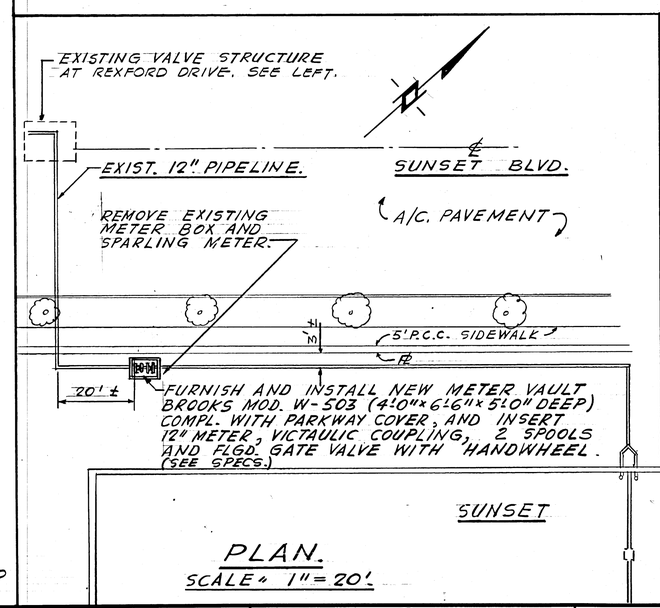
10241.19





PROPOSED ALTERATIONS TO SUNSET & ALPINE CONNECTION.

SEE SHEET C-13



NOTE:

ALL DIMENSIONS GIVEN ARE APPROX. AND SHALL BE VERIFIED IN FIELD, PRIOR TO FABRICATION. —

VALVE LEGEND:

1. COMBINATION RATE-OF-FLOW CONTROL AND PRESSURE RELIEF VALVE, 125 PSI., SIZE 10".
2. RATE-OF-FLOW CONTROL VALVE, 125 PSI., SIZE 10".
3. BUTTERFLY VALVE, SHORT PATTERN, CLASS 150 B, SIZE 12", FLANGED. W/ HANDWHEEL
4. GATE VALVE WITH OPERATING NUT, SIZE 12", FLANGED, WITH VALVE BOX.
5. GATE VALVE WITH HANDWHEEL, SIZE 12", FLANGED.

AS BUILT DRAWING

REV	DATE	BY	DESCRIPTION
1	4-8-71	W.Y.	AS BUILT

SCALE: 3/8" = 1'-0" OR AS SHOWN

DESIGNED SMITH
DRAWN STRASSLE
CHECKED LELAND

SUBMITTED Richard S. Leland, PROJECT ENGINEER — R.C.E. NO. 13393 — DATE 9-22-67

RECOMMENDED J. M. Montgomery, JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.C.E. NO. 5677 — DATE 9-27-67

JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

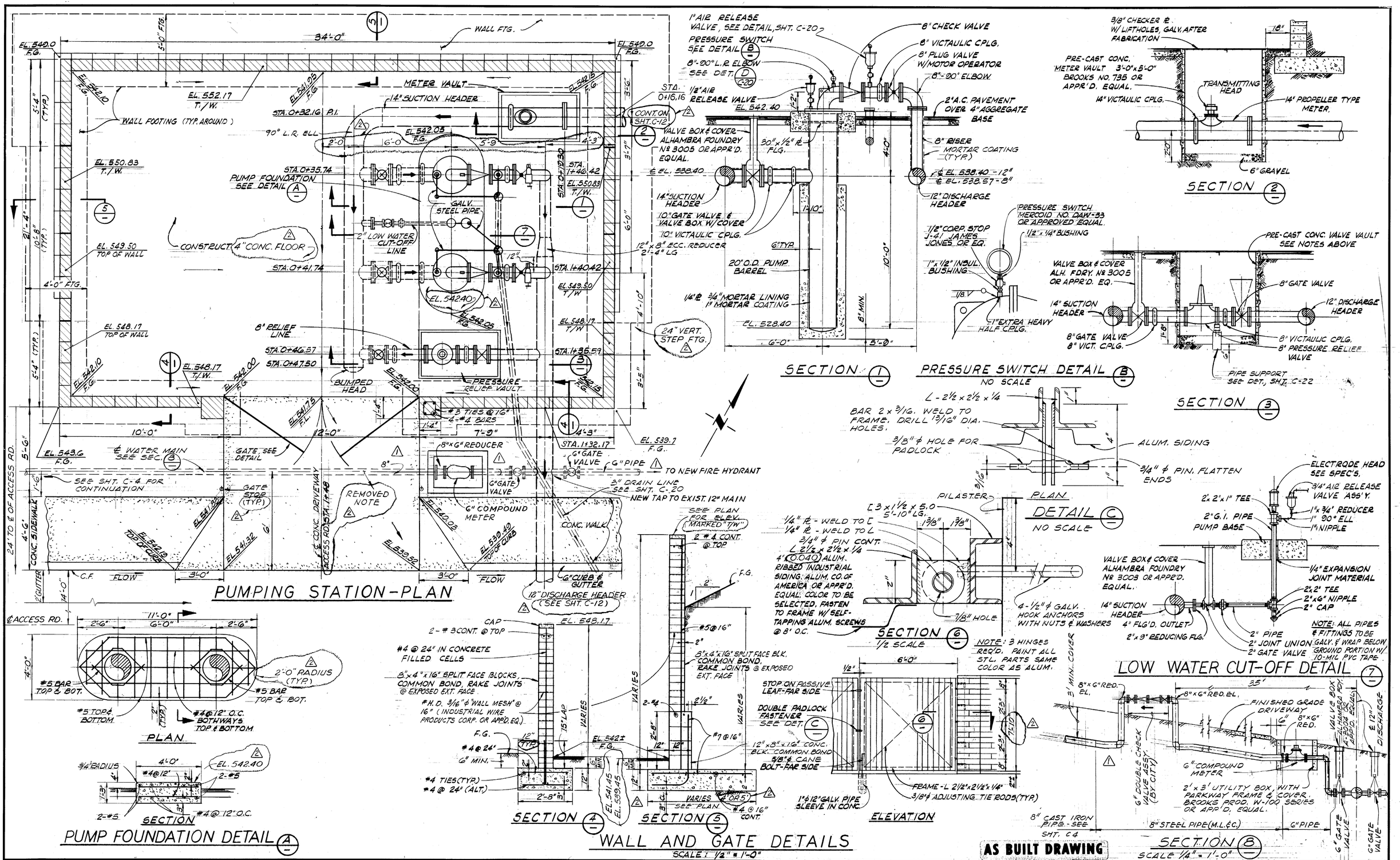
APPROVED Chas. H. Berry, MANAGER AND CHIEF ENGINEER — DATE 9-27-67

APPROVED — DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
MWD CONNECTIONS-MODIFICATIONS

SHEET C-17 OF 47 SHEETS

10241.20



REV	DATE	BY	DESCRIPTION
1	9/14/70	R.J.G.	WATER LINE CHANGES
2	4-8-71	W.Y.	AS BUILT

SCALE: 3/8" = 1'-0" OR AS NOTED

DESIGNED KIMBERLEY
DRAWN H. WAGNER
CHECKED LELAND

SUBMITTED Leland J. Leland, PROJECT ENGINEER — R.C.E. NO. 13393 — DATE 9-22-67

RECOMMENDED, JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.C.E. NO. 5677 — DATE 9-27-67

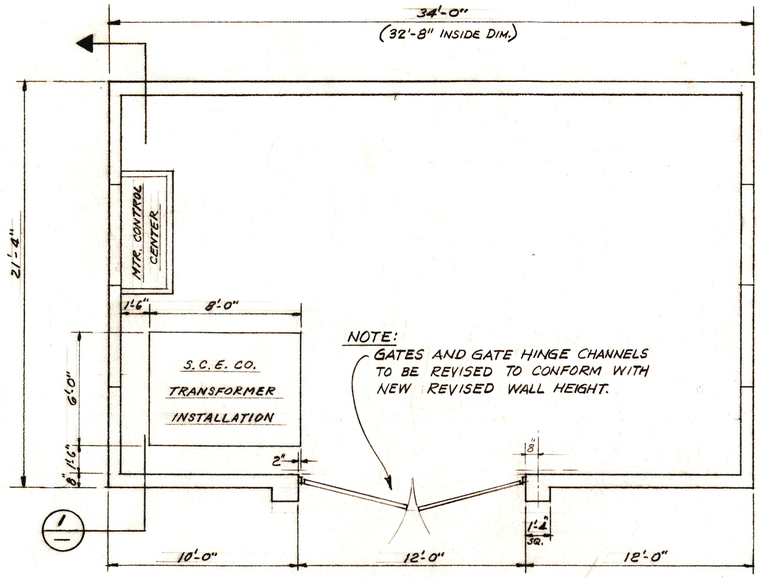
JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

APPROVED, MANAGER AND CHIEF ENGINEER — DATE 9-27-67
APPROVED — DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
PUMPING STATION - PLAN, SECTIONS AND DETAILS

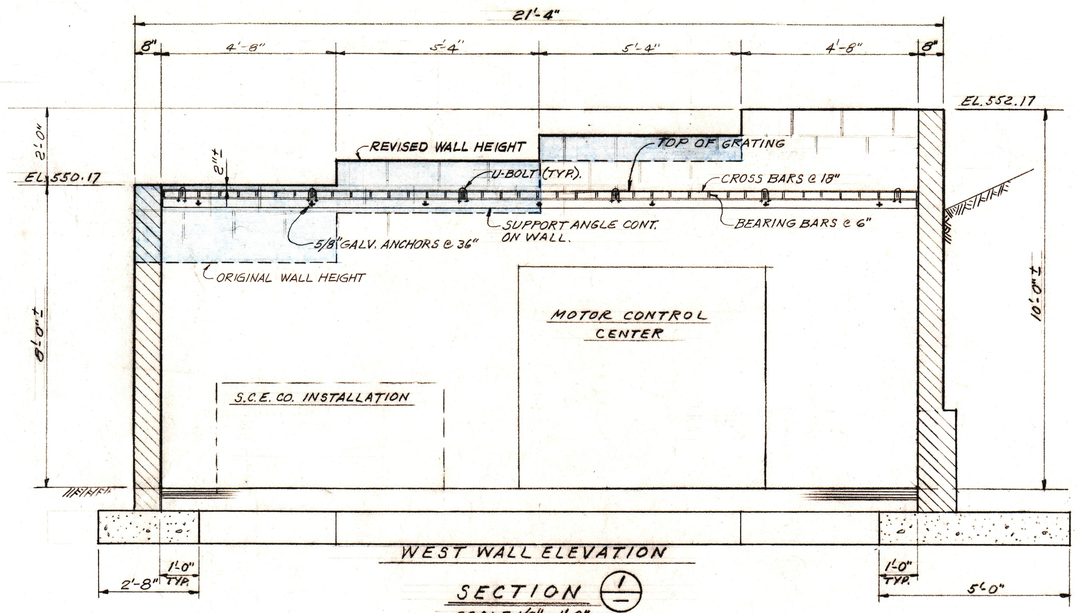
SHEET C-18 OF 47 SHEETS

10241.21



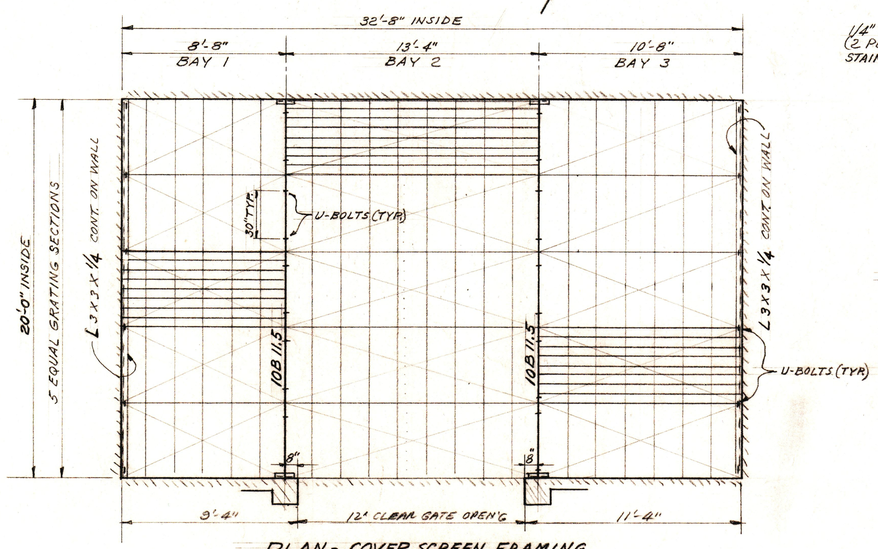
NOTE:
GATES AND GATE HINGE CHANNELS TO BE REVISED TO CONFORM WITH NEW REVISED WALL HEIGHT.

PLAN
SCALE 1/4" = 1'-0"

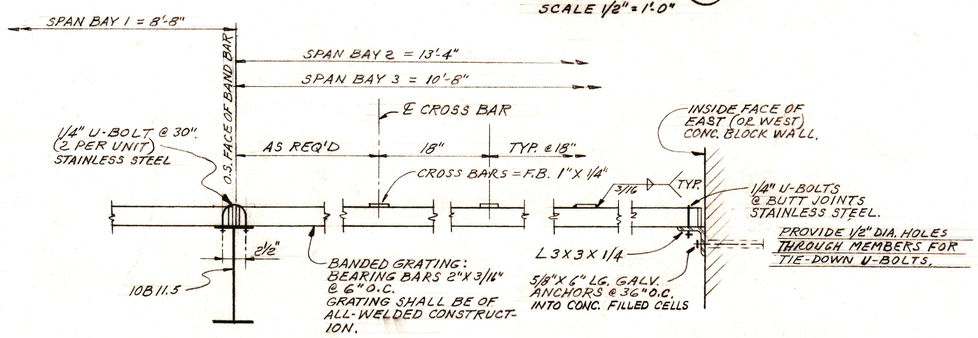


WEST WALL ELEVATION

SECTION 1/1
SCALE 1/2" = 1'-0"

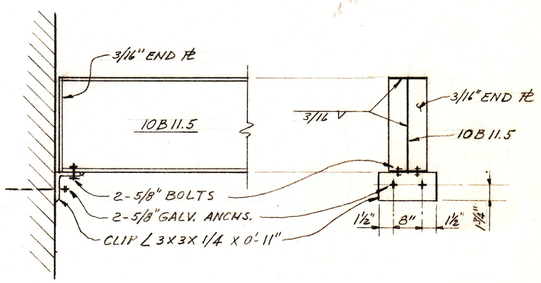


PLAN - COVER SCREEN FRAMING
SCALE 1/4" = 1'-0"



TYPICAL GRATING & SUPPORTS
SCALE 1 1/2" = 1'-0"

NOTE:
EXCEPT FOR STAINLESS STEEL, ALL PARTS (GRATING, SUPPORT BEAMS, ANGLES, WALL BRACKETS AND BOLTS) SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION.



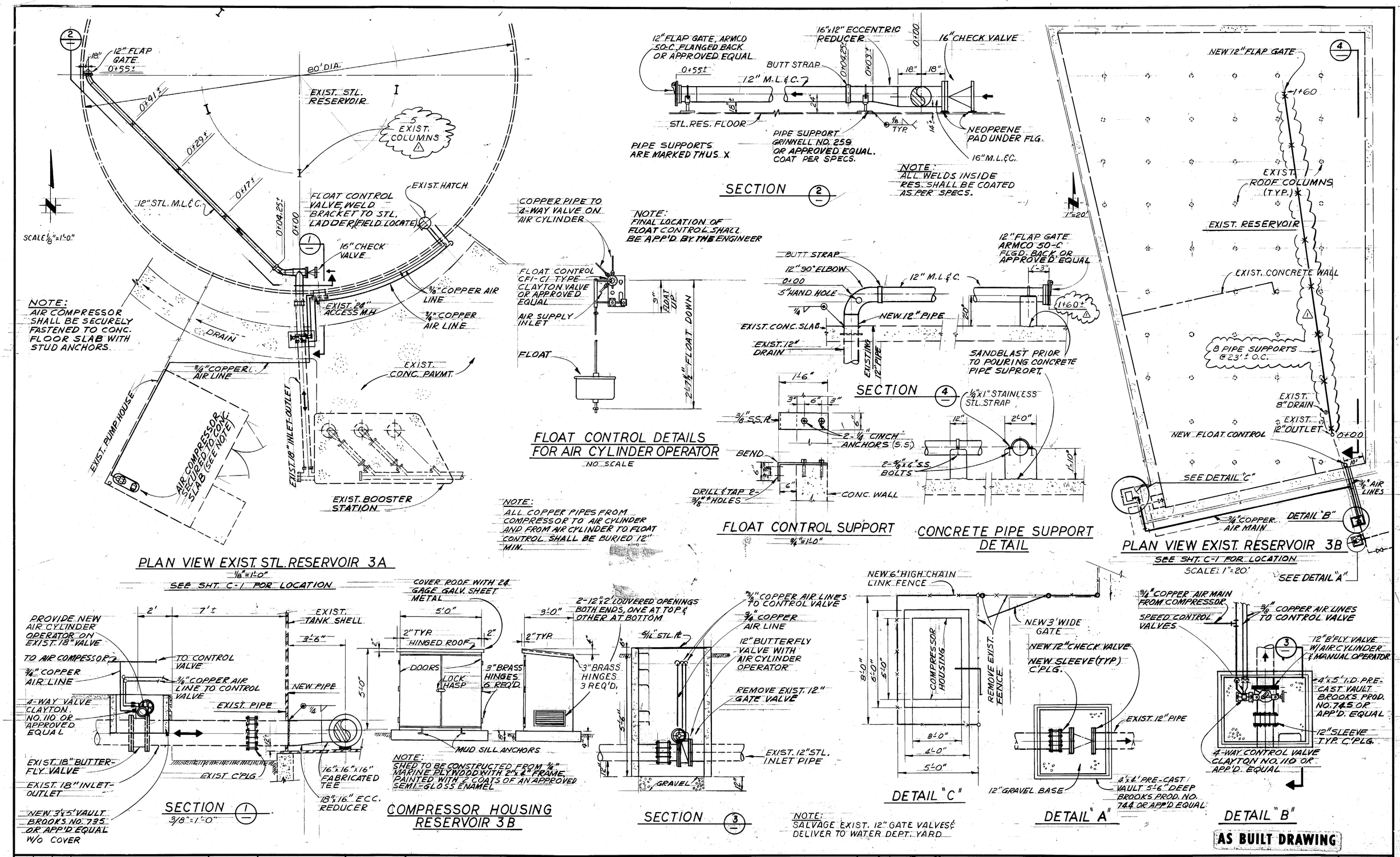
BEAM SUPPORT AT WALL
SCALE 1 1/2" = 1'-0"

AS BUILT DRAWING

REVISED 4-8-70
" 7-27-70

SCALE: AS NOTED	DESIGNED AL. PALO DRAWN J. REYNOLDS CHECKED LELAND	JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. 555 E. WALNUT STREET · PASADENA, CALIFORNIA LAFAYETTE COSTA MESA LA JOLLA LAS VEGAS	CITY OF BEVERLY HILLS WATER DEPARTMENT GREYSTONE RESERVOIR PUMPING STATION — SECURITY GRILL DETAILS	SHEET C-18 (SUPPLEMENTAL) OF 50 SHEETS

10241.22



REV	DATE	BY	DESCRIPTION
1	4-8-71	W.Y.	AS BUILT

SCALE: 3/8"=1'-0" OR AS NOTED

DESIGNED KIMBERLEY
DRAWN KIMBERLEY
CHECKED CARLSON

SUBMITTED Richard L. Leland, PROJECT ENGINEER — R.C.E. NO. 13393 — DATE 9-22-67
RECOMMENDED C. Kennie, JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.C.E. NO. 5677 — DATE 9-27-67

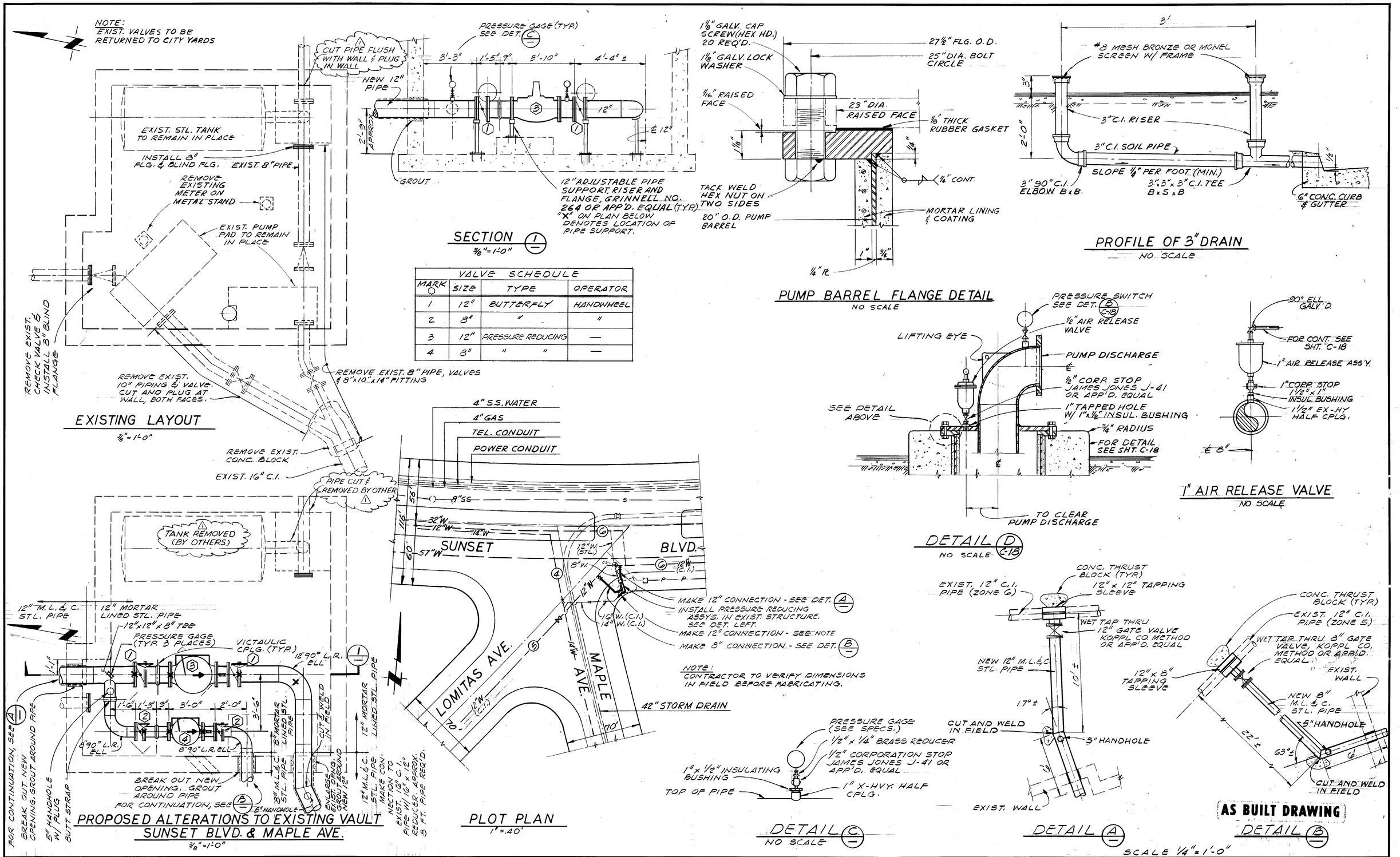
JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

APPROVED Guido D. Berry, MANAGER AND CHIEF ENGINEER — DATE 9-27-67
APPROVED — DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
ALTITUDE VALVE MODIFICATIONS

SHEET C-19 OF 47 SHEETS

1024123



REV	DATE	BY	DESCRIPTION
1	4-8-71	W.Y.	AS BUILT

SCALE:

DESIGNED KIMBERLEY
DRAWN KIMBERLEY
CHECKED CARLSON

SUBMITTED Richard L. Leland, PROJECT ENGINEER — R.C.E. NO. 13393 — DATE 9-22-67
RECOMMENDED, JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.C.E. NO. 5677 — DATE 9-27-67

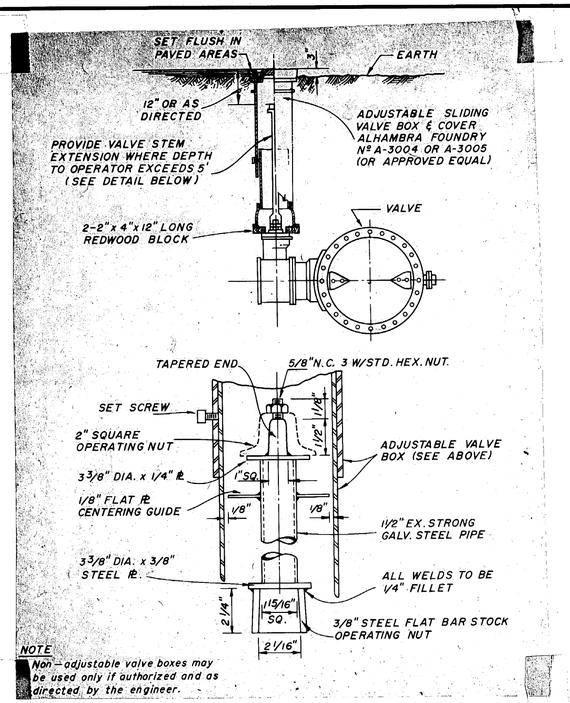
JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

APPROVED, MANAGER AND CHIEF ENGINEER — DATE 9-27-67
APPROVED — DATE

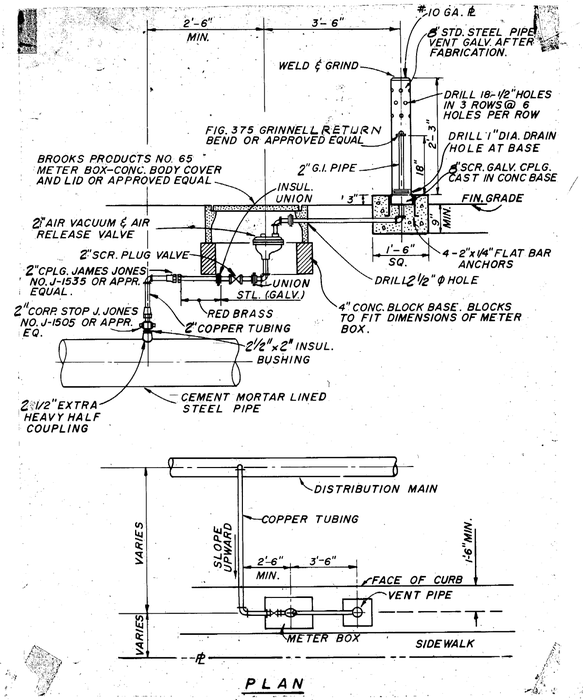
CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
PRESSURE REDUCING STATION MODIFICATION - DETAILS

SHEET C-20 OF 47 SHEETS

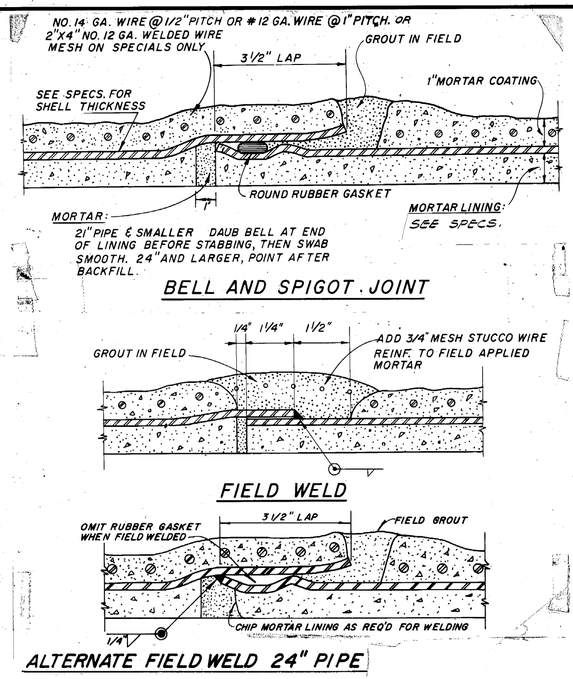
10241.24



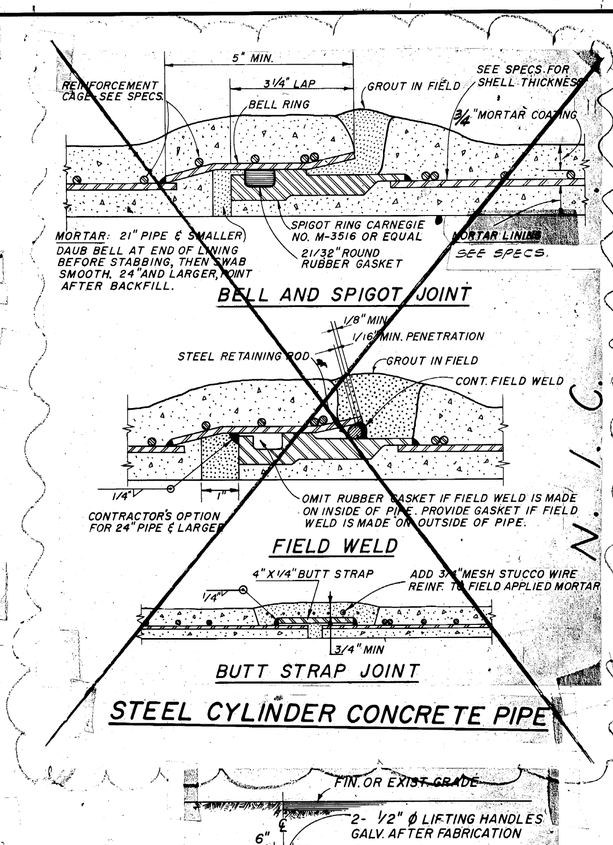
TYPICAL BUTTERFLY VALVE INSTALLATIONS



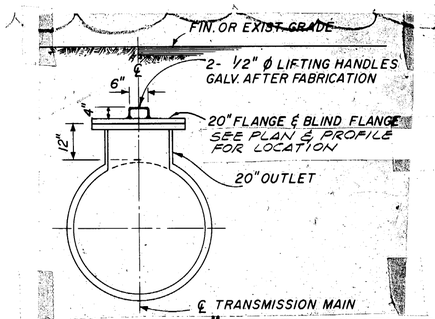
TYPICAL AIR-VACUUM AND AIR-RELEASE VALVE ASSEMBLY



MORTAR LINED AND COATED STEEL PIPE

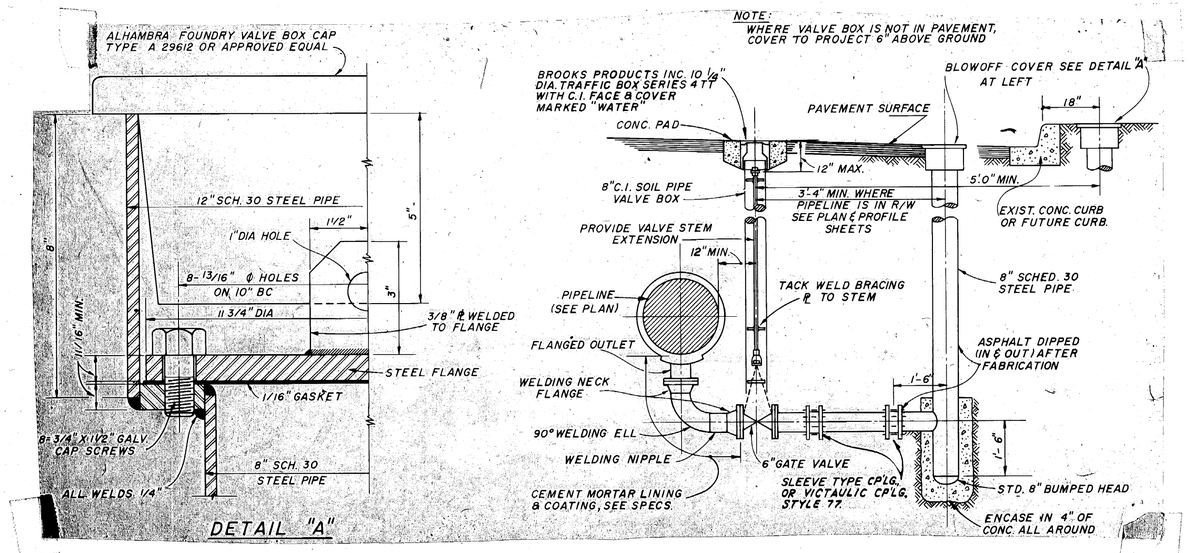


STEEL CYLINDER CONCRETE PIPE

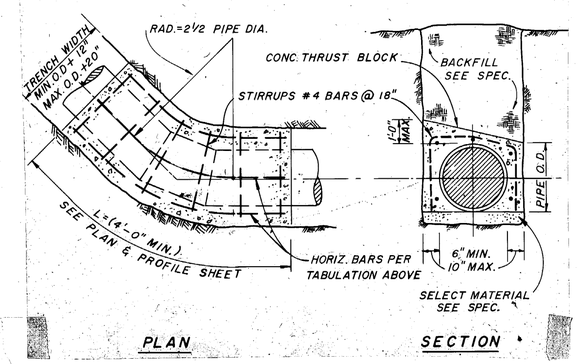


TYPICAL BURIED 20" ACCESS OUTLET

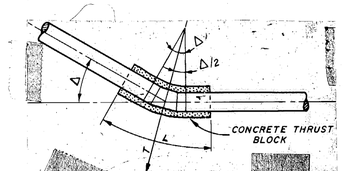
LENGTH IN FEET	REINFORCING BARS	
	HORIZ.	STIRRUPS
4 - 7	NONE	NONE
8 - 9	5 - #5	# 4 @ 18"
10 - 13	5 - #6	# 4 @ 18"
14 - 17	5 - #7	# 4 @ 18"
18 - 21	5 - #8	# 4 @ 18"
22 - 25	5 - #9	# 4 @ 18"



BLOWOFF DETAILS



THRUST BLOCK DETAILS



L = LENGTH OF CONCRETE THRUST BLOCK, IN FT.
H = HEIGHT OF CONCRETE THRUST BLOCK, IN FT.

T = THRUST AT BEND, IN LBS.
A = AREA OF PIPE, IN SQ. INCHES
P = PIPE PRESSURE (TEST PRESSURE) IN PSI.
Δ = ANGLE AT BEND, IN DEGREES

$T = 2 \times P \times A \times \sin\frac{\Delta}{2}$

$L = \frac{T}{H \times 2500\#}$

[redacted] SSURE TAKEN AS A 2,500# / SQ. FT. [redacted] AS LOCAL CONDITIONS REQUIR

THRUST BLOCK CALCULATION

AS BUILT DRAWING

REV	DATE	BY	DESCRIPTION
1	4-8-71	W.Y.	AS BUILT

SCALE: NO SCALE

DESIGNED WAGNER
DRAWN WAGNER
CHECKED LELAND

SUBMITTED Richard S. Leland, PROJECT ENGINEER, R.C.E. NO. 13393, DATE 9-22-67
RECOMMENDED, JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC., R.C.E. NO. 5677, DATE 9-27-67

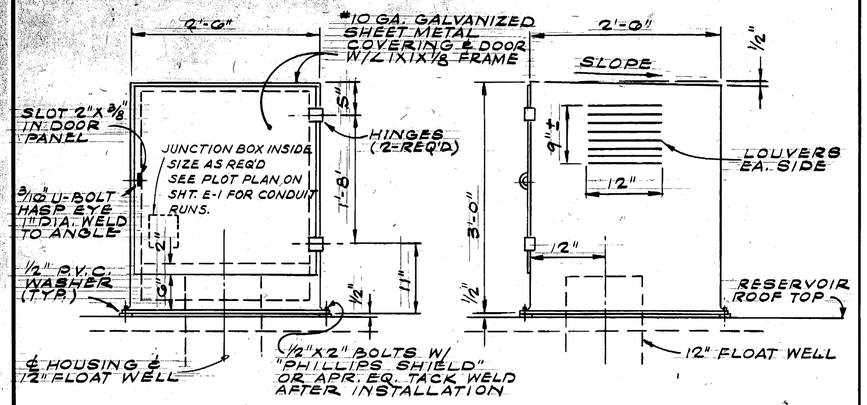
JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

APPROVED, MANAGER AND CHIEF ENGINEER, DATE 9-27-67
APPROVED, DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
MISCELLANEOUS DETAILS - "A"

SHEET C-21 OF 47 SHEETS

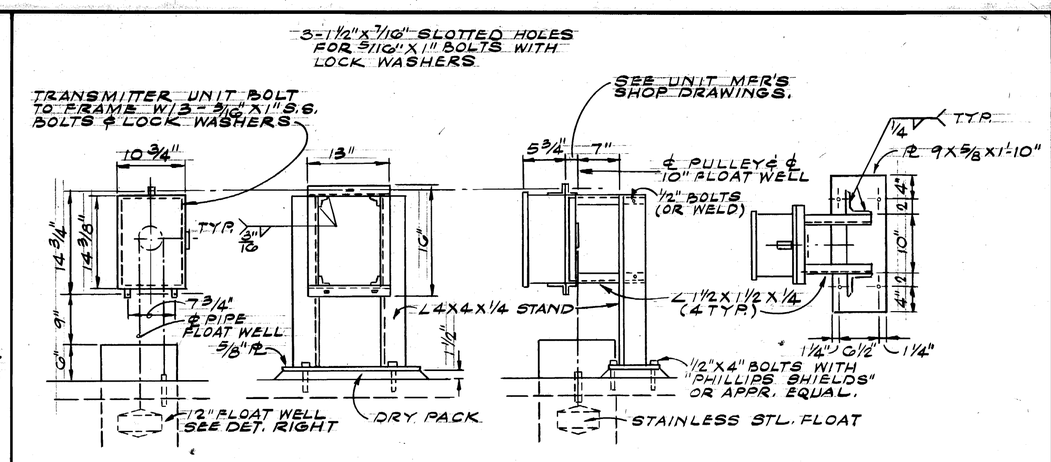
10241.25



FRONT ELEVATION SIDE ELEVATION

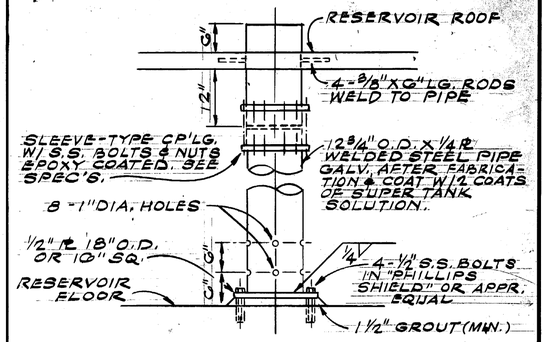
INSTRUMENT HOUSING FOR RESERVOIR LEVEL TRANSMITTER

SCALE = 1" = 1'-0"



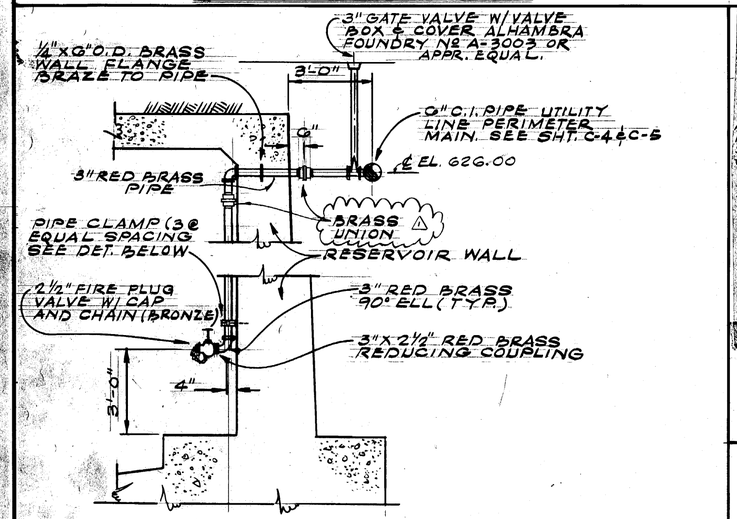
FRONT ELEVATION SIDE ELEVATION PLAN

MOUNTING BRACKET FOR RES. LEVEL TRANSMITTER



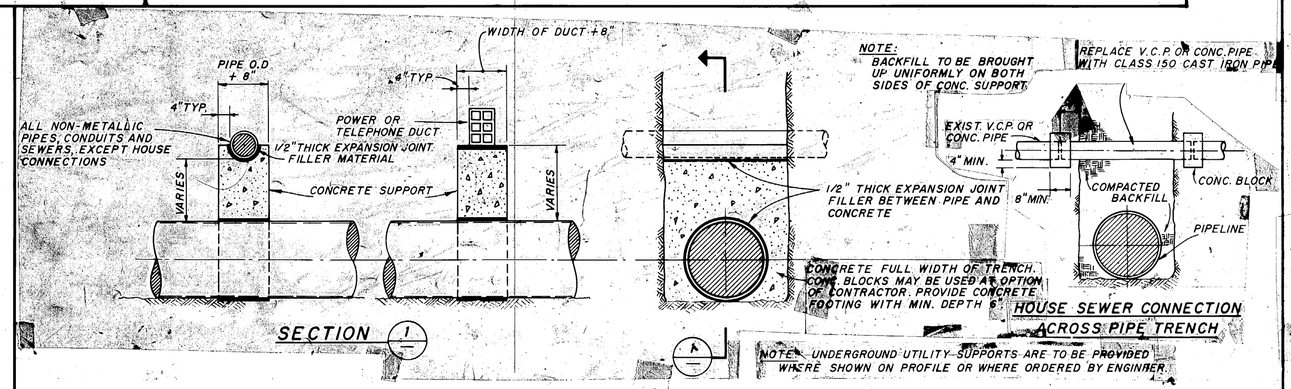
FLOAT WELL DETAIL

SCALE 3/4" = 1'-0"



WASHDOWN VALVE DETAILS

NO SCALE

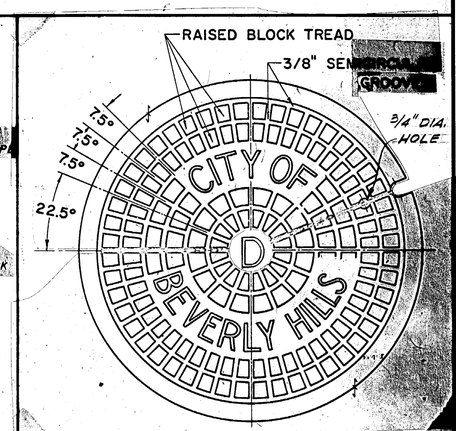


SECTION 1/—

A/—

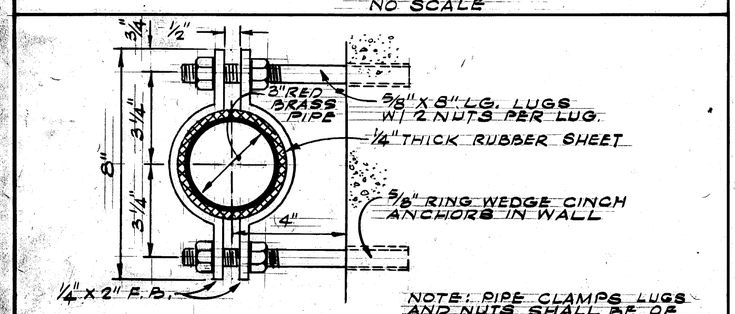
UNDERGROUND UTILITY SUPPORT DETAILS

NO SCALE



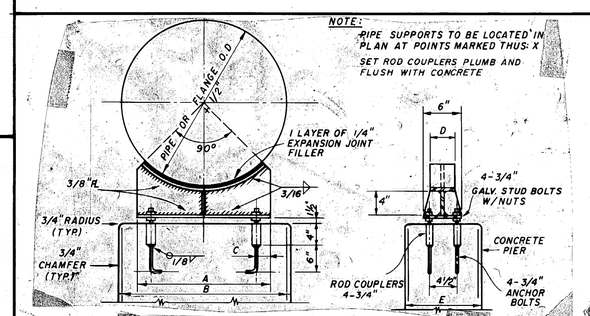
PLAN

STORM DRAIN MANHOLE COVER



PIPE CLAMP DETAIL

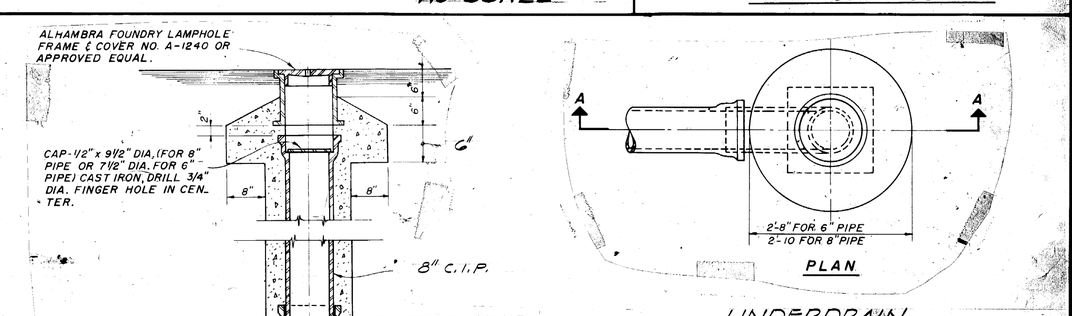
NO SCALE



DIMENSIONS IN INCHES							
NOMINAL PIPE SIZE	SUPPORTING PIPE OR FLANGE			SUPPORTING PIPE & FLANGE			
	C	D	E	A	B	A	B
6	2	4	12	10	16	10	16
8 & 10	2	4	12	10	16	14	20
12 & 14	2	4	12	12	18	16	22
16 & 18	2	4	12	14	20	20	26
20 & 22	3	5	12	16	22	22	28
24	3	5	12	18	24	24	30

PIPE SUPPORT DETAIL

NO SCALE



SECTION A-A

PLAN

UNDERDRAIN CLEANOUT DETAIL

NO SCALE

2 REQ'D. (FOR LOCATIONS SEE SHT. C-5)

AS BUILT DRAWING

REV	DATE	BY	DESCRIPTION
△	4-8-71	W.Y.	AS BUILT

SCALE: NOTED

DESIGNED H. WAGNER
DRAWN E.N. MJELLEM
CHECKED R. CARLSON

SUBMITTED Richard J. Leland, PROJECT ENGINEER — R.C.E. NO. 13393 — DATE 9-22-67

RECOMMENDED R. Lehmann, JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.C.E. NO. 5677 — DATE 9-27-67

JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

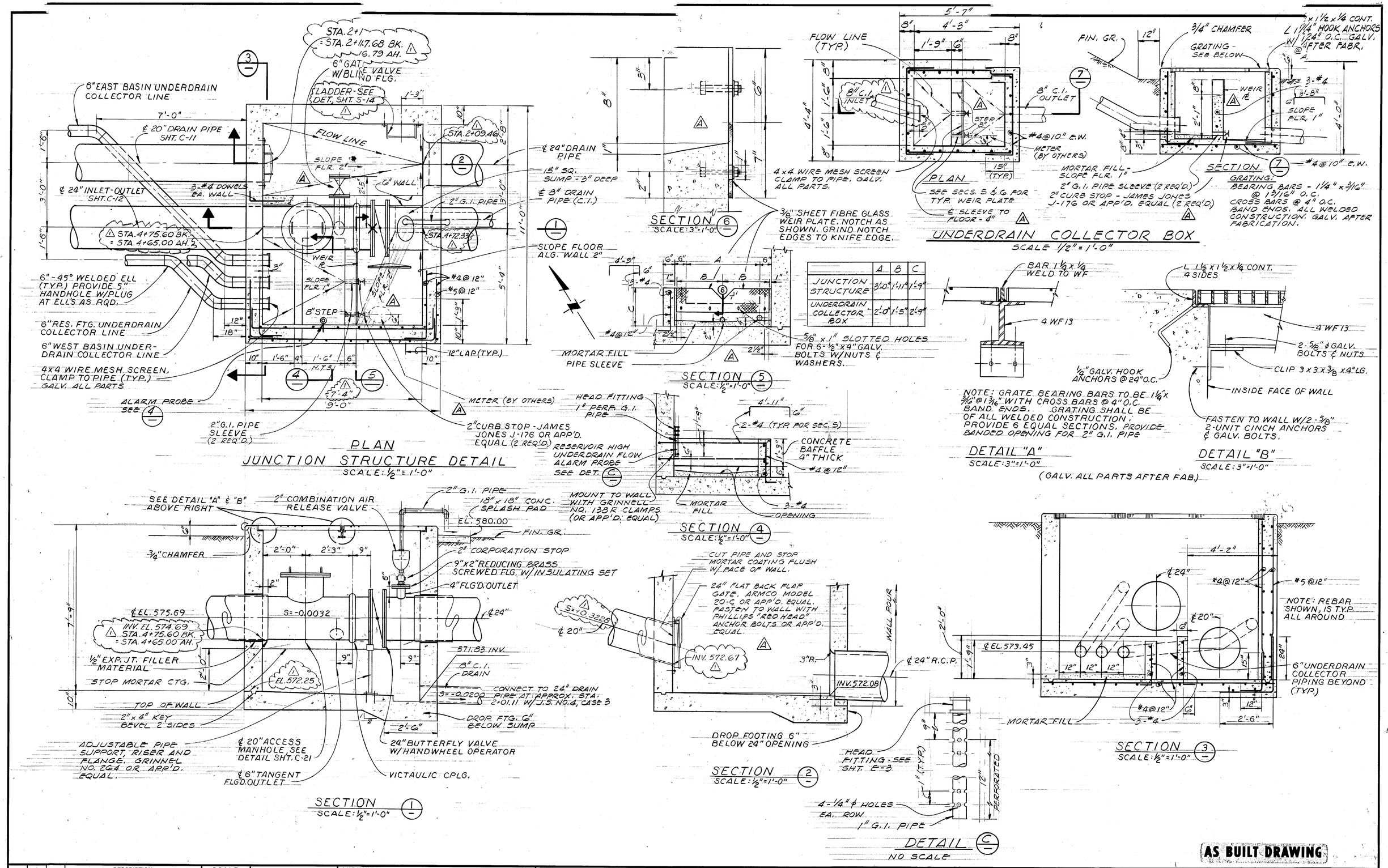
APPROVED Lucie D. Benson, MANAGER AND CHIEF ENGINEER — DATE 9-27-67

APPROVED — DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
MISCELLANEOUS DETAILS - "B"

SHEET C-22 OF 47 SHEETS

10241.26



	A	B	C
JUNCTION STRUCTURE	3'-0"	1'-11"	1'-9"
UNDERDRAIN COLLECTOR BOX	2'-0"	1'-5"	2'-9"

REV	DATE	BY	DESCRIPTION
3	3/27/68	RRC	ADDED FLAP VALVE & 2" PIPE SLEEVE
—	—	—	REV'D. WEIR PLATE
1	4/8/91	W.Y.	AS BUILT

SCALE: AS NOTED

DESIGNED R. CARLSON
DRAWN R. VAN GORDER
CHECKED R. LELAND

SUBMITTED Richard L. Leland, PROJECT ENGINEER — R.C.E. NO. 13393 — DATE 9-22-67
RECOMMENDED, JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.C.E. NO. 5677 — DATE 9-27-67

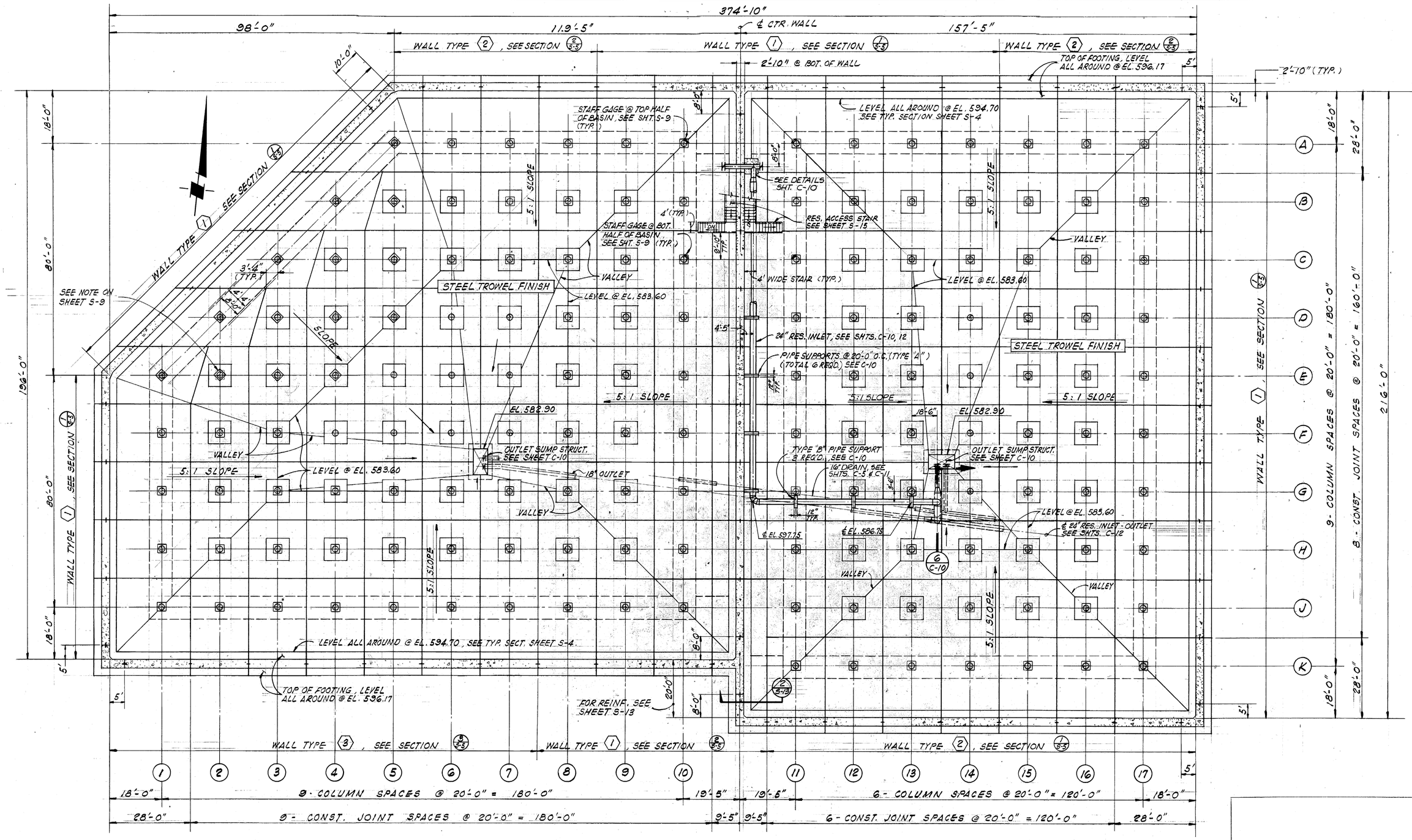
JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

APPROVED, MANAGER AND CHIEF ENGINEER — DATE 9-27-67
APPROVED — DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
JUNCTION STRUCTURE DETAILS

SHEET C-23 OF 47 SHEETS

10241.27



FLOOR PLAN

SCALE: 1/16" = 1'-0"

AS BUILT DRAWING

REV	DATE	BY	DESCRIPTION
1	4-71	A	AS BUILT

SCALE: 1/16" = 1'-0"

DESIGNED N. RAMOS
DRAWN W. FU
CHECKED

SUBMITTED — PROJECT ENGINEER — R.C.E. NO. 13393 — DATE 9-22-67
RECOMMENDED — JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.C.E. NO. 5677 — DATE 9-27-67

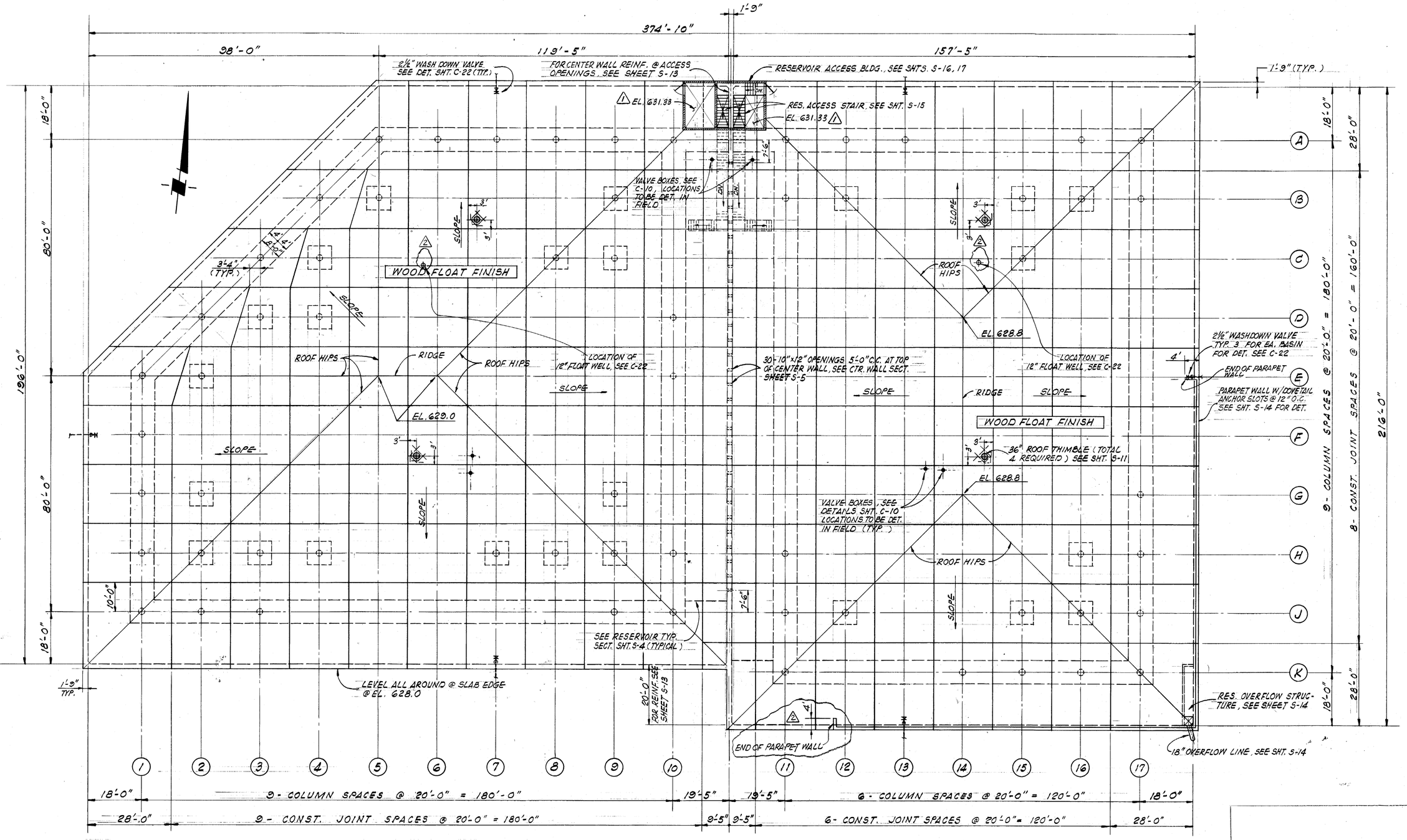
JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

APPROVED — MANAGER AND CHIEF ENGINEER — DATE 9-27-67
APPROVED — DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
STRUCTURAL-RESERVOIR FLOOR PLAN

SHEET S-1 OF 47 SHEETS

10241.28



ROOF PLAN

SCALE: 1/16" = 1'-0"

AS BUILT DRAWING

REV	DATE	BY	DESCRIPTION
1	3/23/70	JER	RAISED ACCESS BLDG. FLOOR ELEV. 1'-0"
2	4/9/71	R.G.	AS BUILT

SCALE: 1/16"=1'-0"

DESIGNED N. RAMOS
DRAWN W. FU
CHECKED [illegible]

SUBMITTED Richard S. Leland, PROJECT ENGINEER — R.C.E. NO. 13393 — DATE 9-22-67
RECOMMENDED [illegible], JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.C.E. NO. 5677 — DATE 9-27-67

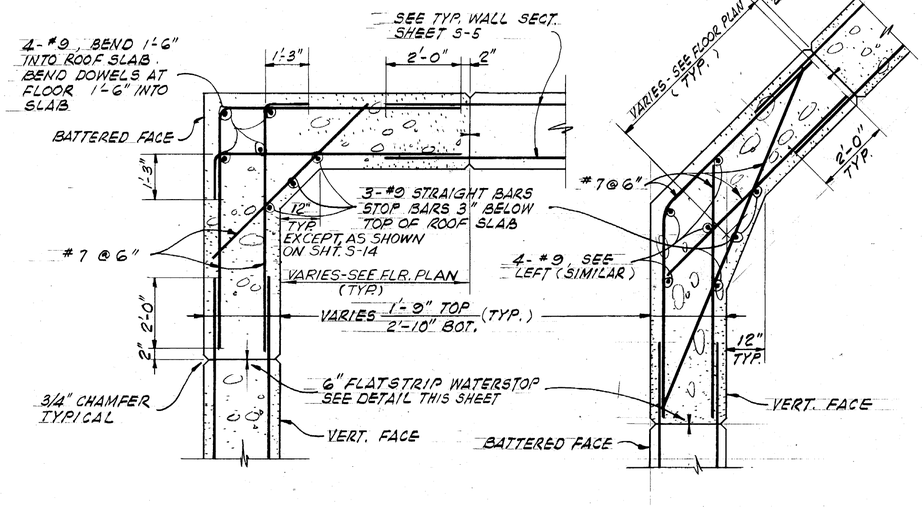
JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

APPROVED [illegible], MANAGER AND CHIEF ENGINEER — DATE 9-27-67
APPROVED _____ DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
STRUCTURAL-RESERVOIR ROOF PLAN

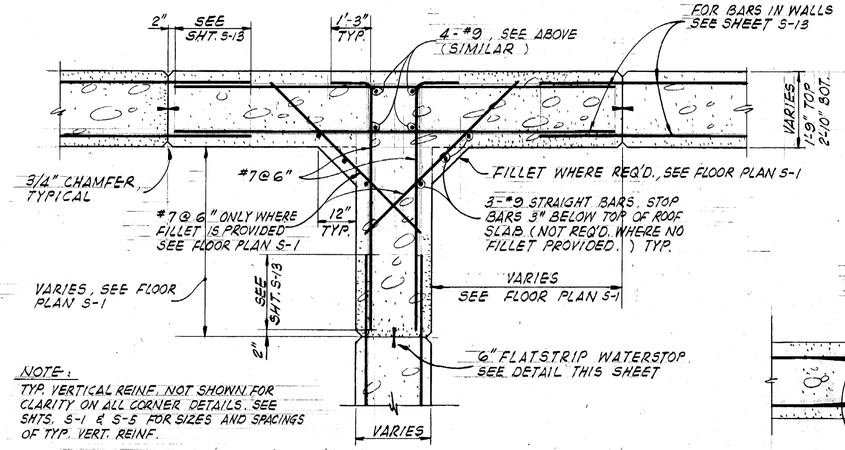
SHEET S-2 OF 47 SHEETS

10241.29

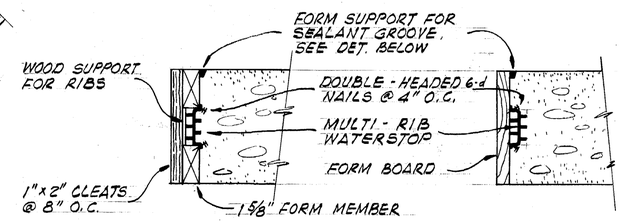


WALL CORNER DETAILS

SCALE : 1/2" = 1'-0"

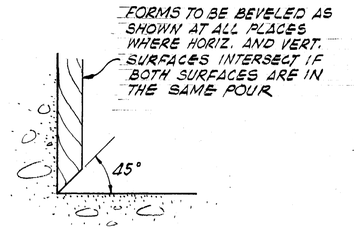


NOTE :
TYP. VERTICAL REINF. NOT SHOWN FOR CLARITY ON ALL CORNER DETAILS. SEE SHTS. S-1 & S-5 FOR SIZES AND SPACINGS OF TYP. VERT. REINF.

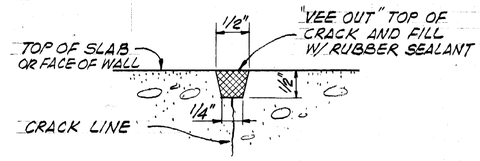


FORMING DETAILS

NO SCALE

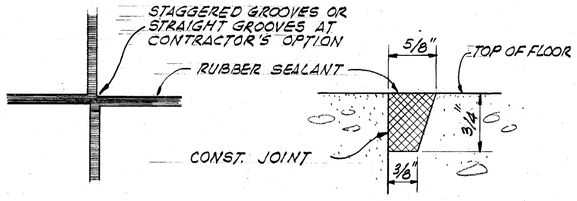


NOTE : PRIOR TO FILLING BASINS WITH WATER, REPAIR ALL CRACKS IN FLOOR SLAB, WALLS & ROOF SLAB AS PER DETAIL SHOWN BELOW".



CRACK REPAIR DETAIL

NO SCALE

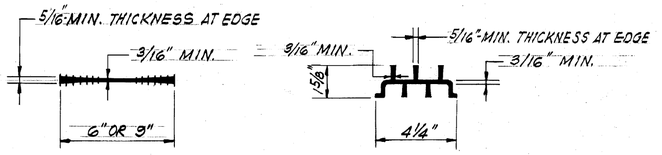


PLAN SECTION

RUBBER SEALANT GROOVE DETAIL

NO SCALE

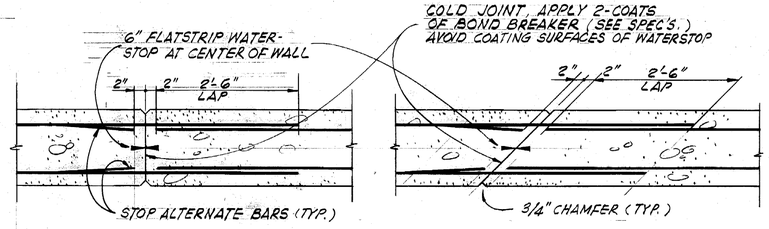
NOTE : WATERSTOP TO BE BONDED AT ALL INTERSECTIONS BY HEATING.



FLATSTRIP MULTI-RIB

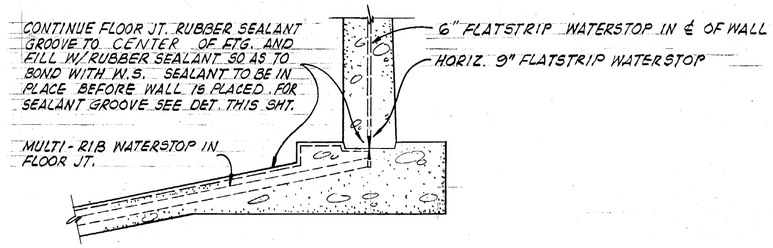
WATERSTOP DETAILS

SCALE : 3" = 1'-0"



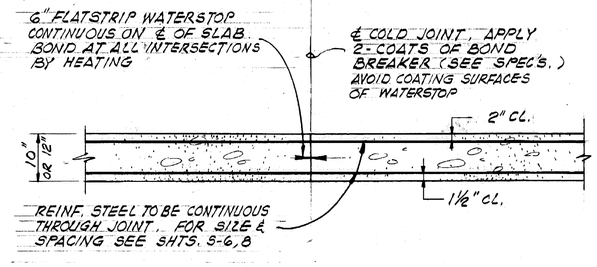
VERT. WALL CONST. JOINT DETAIL

SCALE : 3/4" = 1'-0"



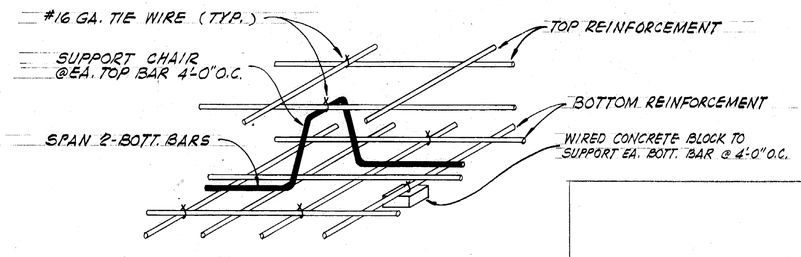
WATERSTOPS AT FOOTING DETAIL

NO SCALE



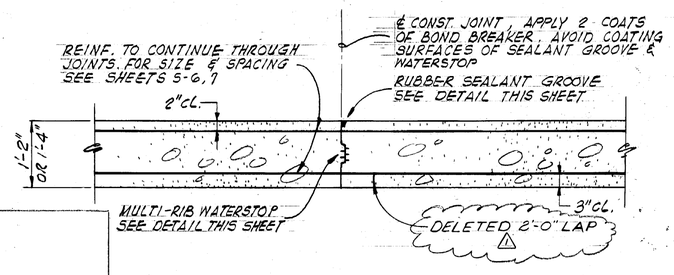
ROOF CONST. JOINT DETAIL

SCALE : 3/4" = 1'-0"



REBAR SUPPORT DETAIL

NO SCALE



FLOOR CONST. JOINT DETAIL

SCALE : 3/4" = 1'-0"

AS BUILT DRAWING

REV	DATE	BY	DESCRIPTION
△	4/16/71	R.G.	AS BUILT

SCALE: AS NOTED

DESIGNED N. RAMOS
DRAWN W. FU
CHECKED Batsenlis

SUBMITTED Richard S. Leland — PROJECT ENGINEER — R.C.E. NO. 13393 — DATE 9-22-67

RECOMMENDED R. L. Kermis — JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.C.E. NO. 5677 — DATE 9-27-67

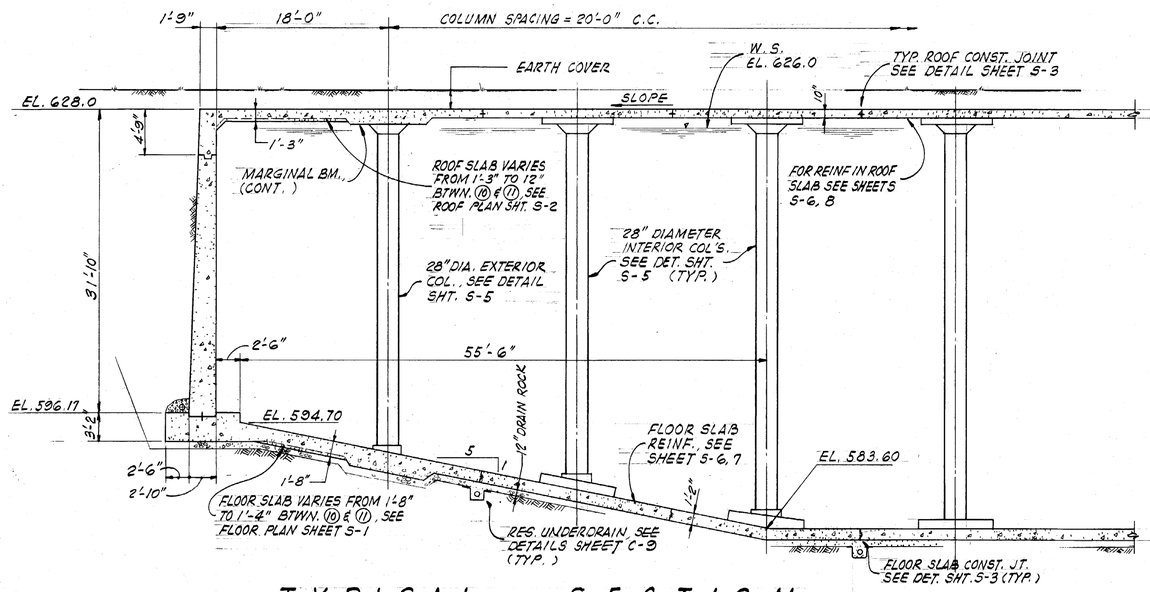
JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

APPROVED Carlin D. Berry — MANAGER AND CHIEF ENGINEER — DATE 9-27-67
APPROVED — DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
STRUCTURAL-RESERVOIR JOINT, FORMING AND MISCELLANEOUS DETAILS

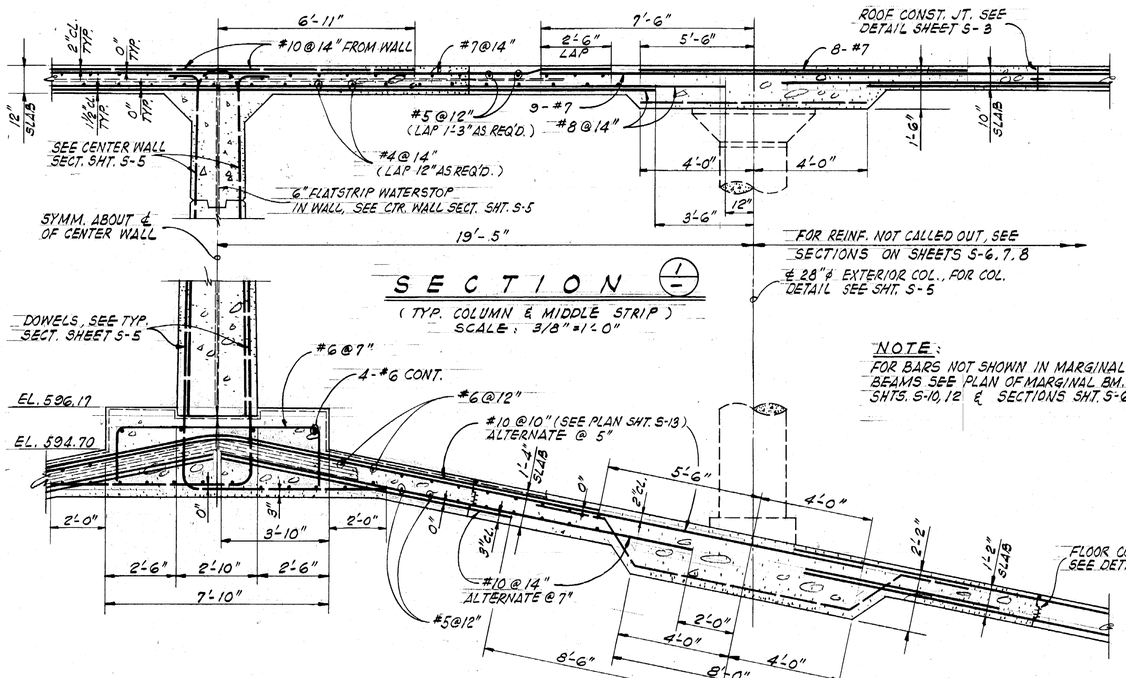
SHEET S-3 OF 47 SHEETS

10241.30



TYPICAL SECTION

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



SECTION 1/-

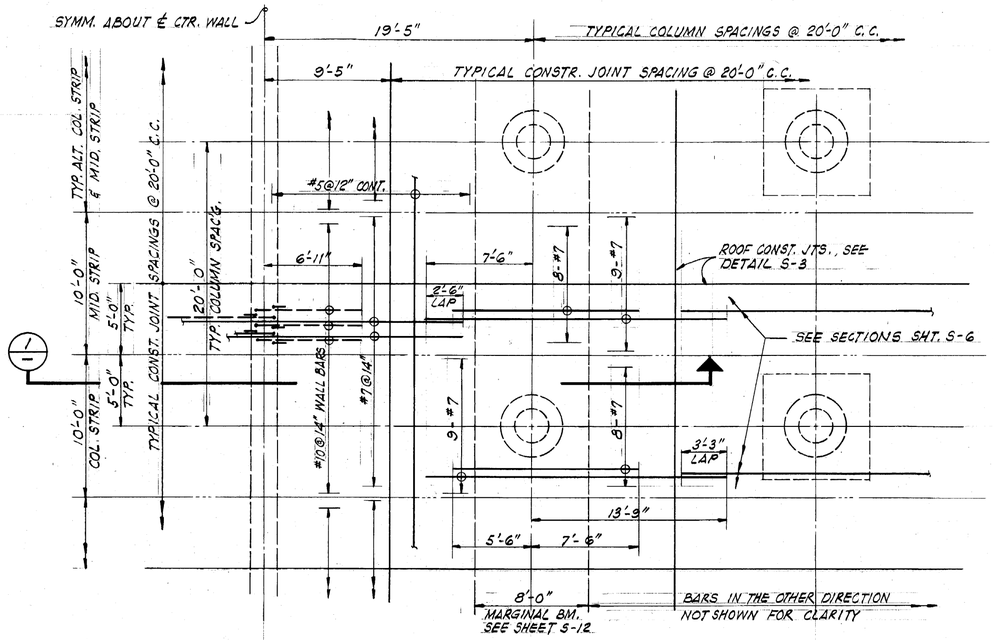
(TYP. COLUMN & MIDDLE STRIP)
SCALE: 3/8" = 1'-0"

NOTE:
FOR BARS NOT SHOWN IN MARGINAL BEAMS SEE PLAN OF MARGINAL BM. SHTS. S-10, 12 & SECTIONS SHT. S-6

NOTE:
SEE ALSO PLAN ON SHEET S-13

SECTION 2/S-13

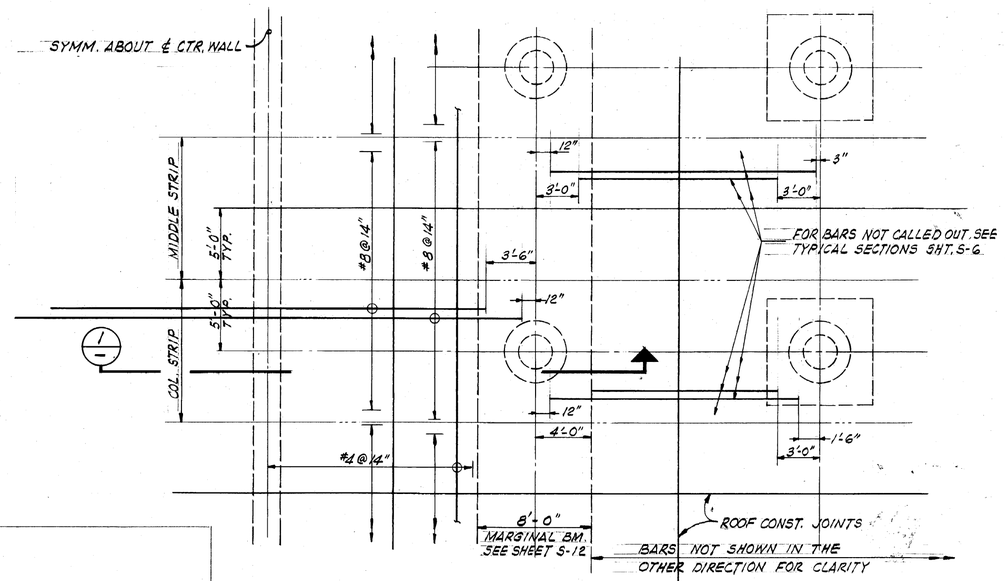
(TYPICAL COLUMN AND MIDDLE STRIP)
SCALE: 3/8" = 1'-0"



ROOF AT CENTER WALL

TOP REINFORCEMENT

SCALE: 3/16" = 1'-0"



ROOF AT CENTER WALL

BOTTOM REINFORCEMENT

SCALE: 3/16" = 1'-0"

AS BUILT DRAWING

REV	DATE	BY	DESCRIPTION
1	4-71	JL	AS BUILT

SCALE: AS NOTED

DESIGNED N. RAMOS
DRAWN W. FU
CHECKED Patrolly

SUBMITTED Richard A. Leland — PROJECT ENGINEER — R.C.E. NO. 13393 — DATE 9-22-67
RECOMMENDED R. K. Kermis — JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.C.E. NO. 5677 — DATE 9-27-67

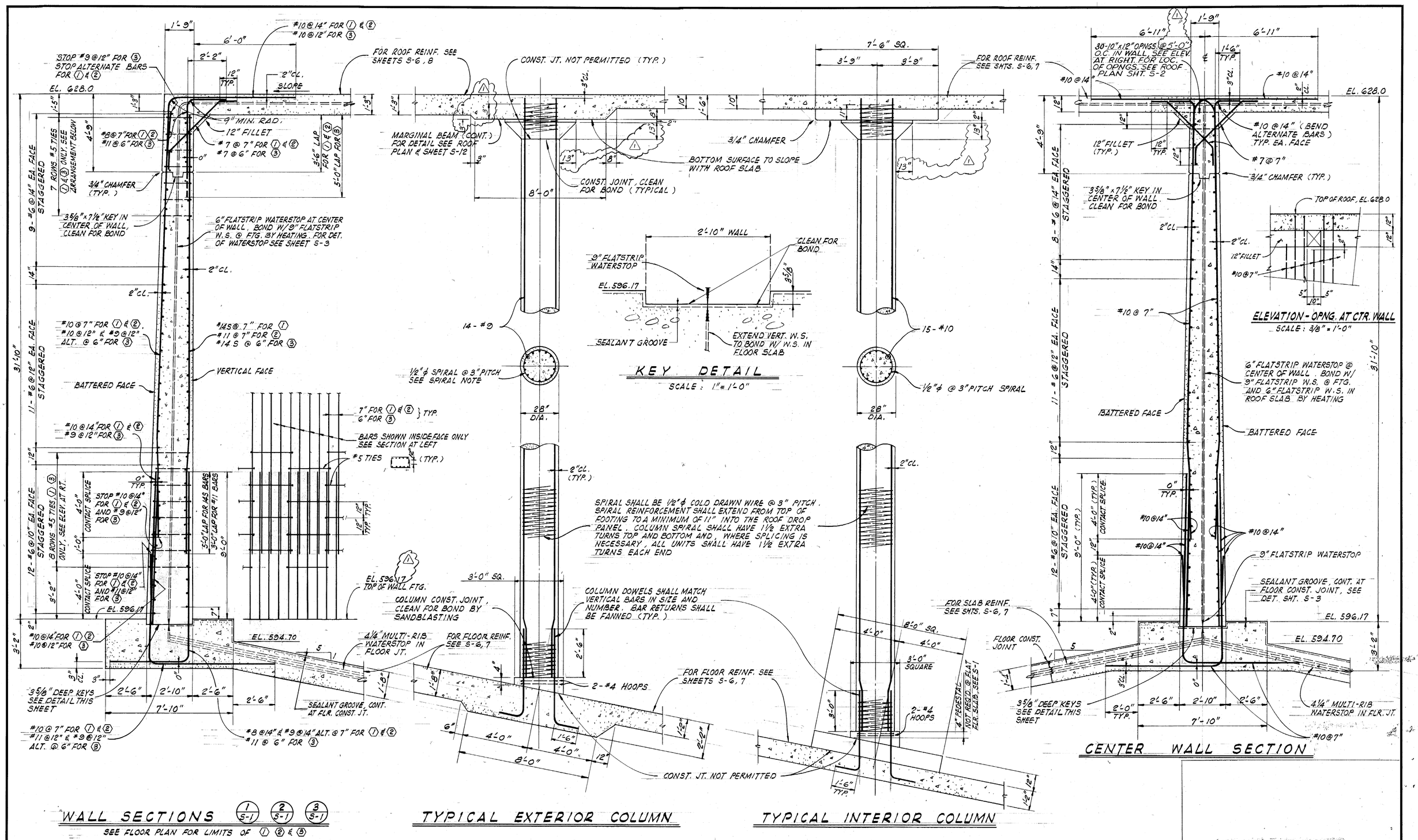
JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 • 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

APPROVED — MANAGER AND CHIEF ENGINEER — DATE 9-27-67
APPROVED — DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
STRUCTURAL-RESERVOIR TYPICAL SECTION AND SLAB DETAILS

SHEET S-4 OF 47 SHEETS

10241.31



REV	DATE	BY	DESCRIPTION
1	4/18/71	W.Y.	AS BUILT

SCALE: 3/8" = 1'-0"

DESIGNED N. RAMOS
DRAWN W. FU
CHECKED Batsoulis

SUBMITTED Richard J. Wand — PROJECT ENGINEER — R.C.E. NO. 13393 — DATE 9-22-67

RECOMMENDED P. Yeomans — JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.C.E. NO. 5677 — DATE 9-27-67

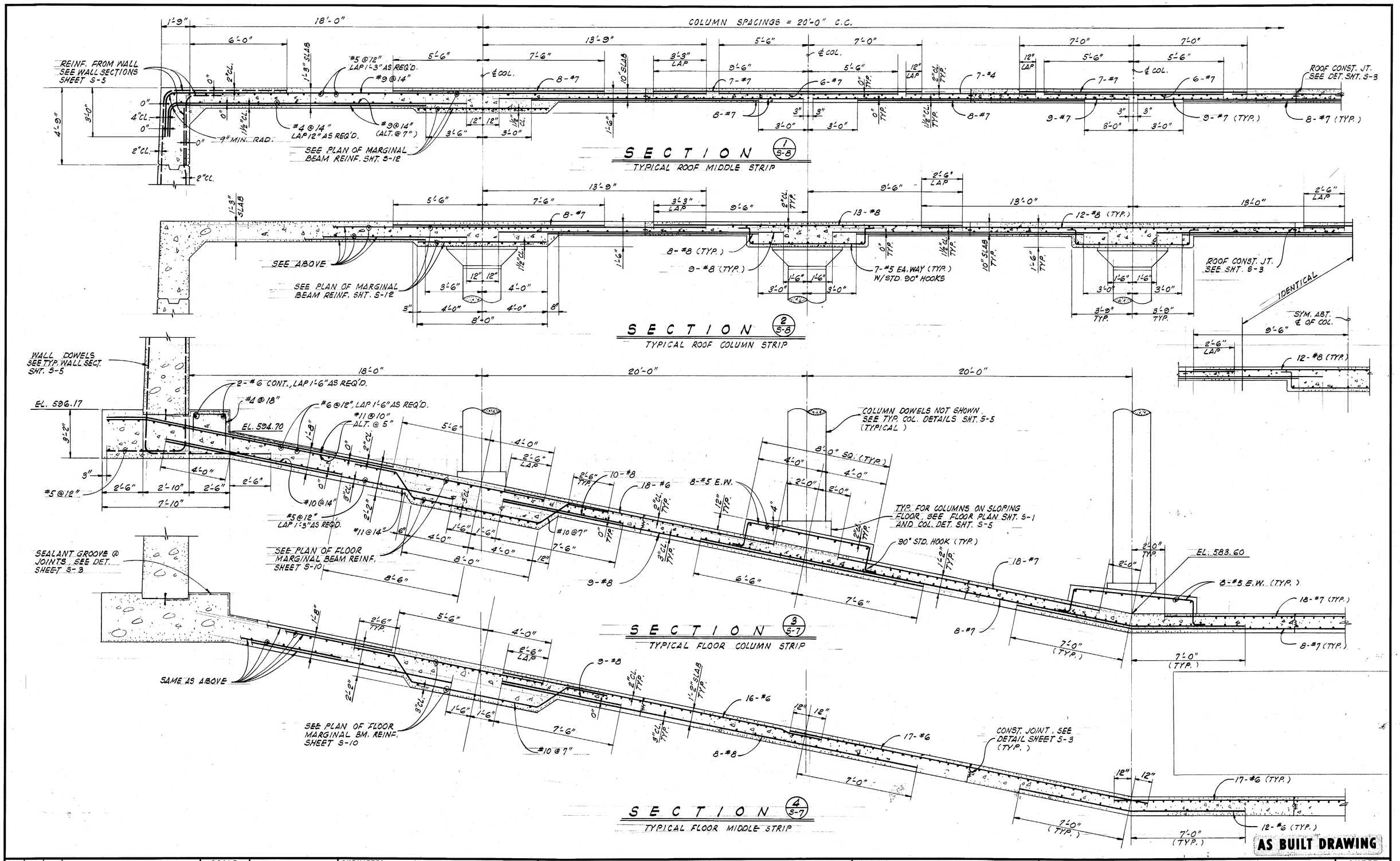
JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

APPROVED Guy D. Benson — MANAGER AND CHIEF ENGINEER — DATE 9-27-67
APPROVED — DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
STRUCTURAL-RESERVOIR WALL AND COLUMN DETAILS

SHEET S-5 (51) OF 47 SHEETS

10241.32



AS BUILT DRAWING

REV	DATE	BY	DESCRIPTION
1	4-71	[illegible]	AS BUILT

SCALE: 3/8" = 1'-0"

DESIGNED N. RAMOS
DRAWN W. FU
CHECKED P. Gatsorily

SUBMITTED Richard S. Leland, PROJECT ENGINEER — 13393 R.C.E. NO. — 9-22-67 DATE
RECOMMENDED R. L. Kenmir, JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — 5677 R.C.E. NO. — 9-27-67 DATE

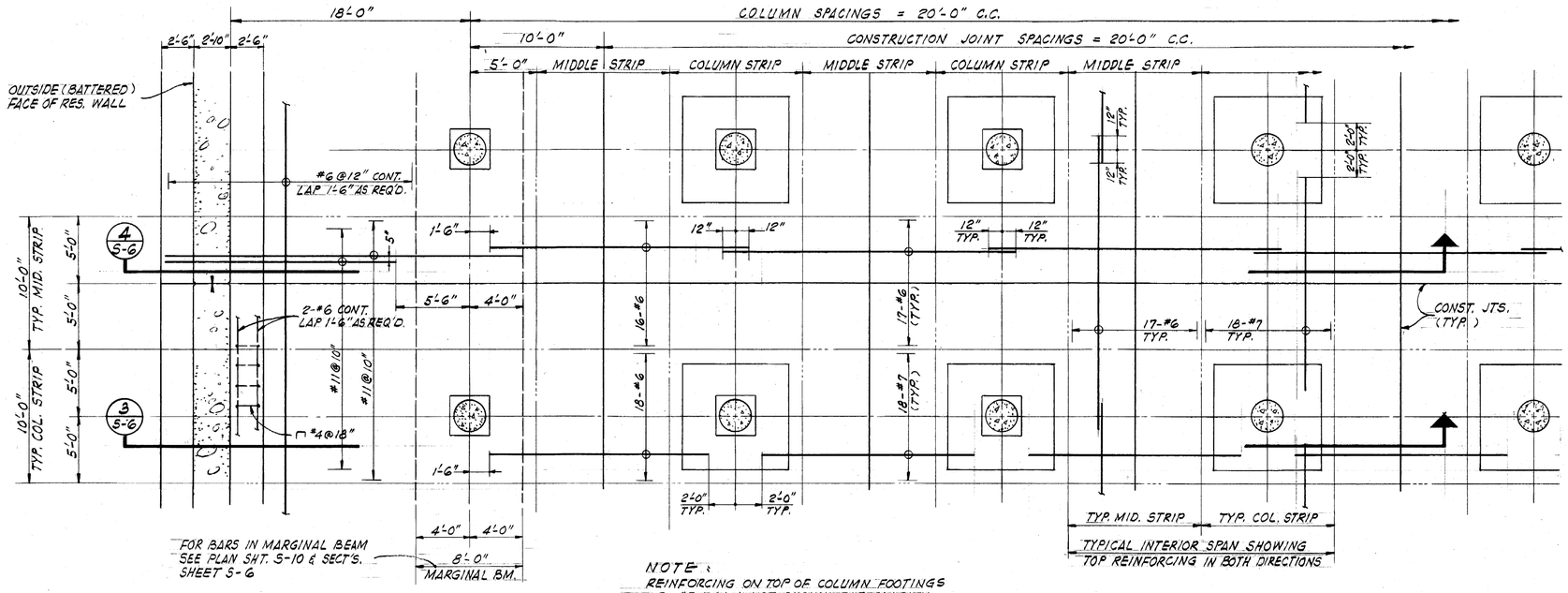
JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

APPROVED Kellie D. Berry, MANAGER AND CHIEF ENGINEER — 9-27-67 DATE
APPROVED — DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
STRUCTURAL-TYPICAL RESERVOIR ROOF AND FLOOR SECTIONS

SHEET S-6 OF 47 SHEETS

10241.33

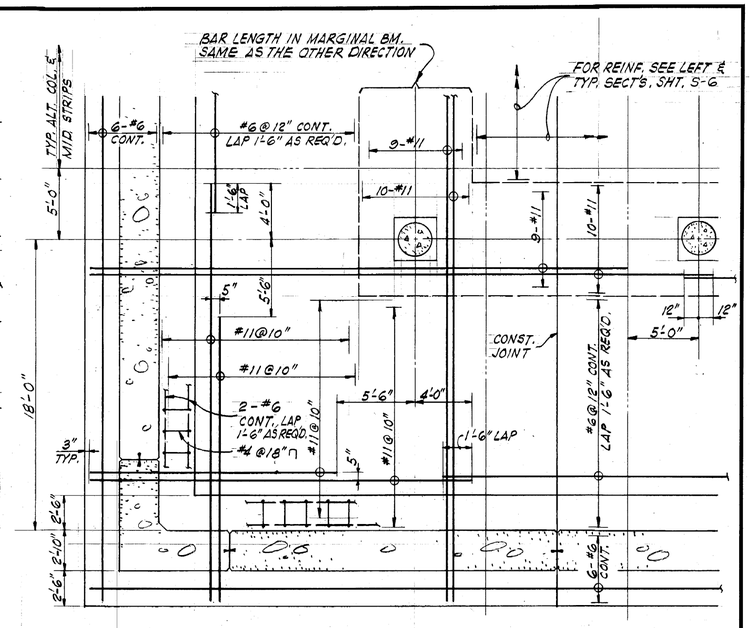


NOTE:
REINFORCING ON TOP OF COLUMN FOOTINGS (8-#5 E.W.) NOT SHOWN FOR CLARITY, SEE 3/S-6 FOR DETAILS

NOTE:
ALL REINFORCING BARS SHALL BE AT EQUAL SPACING WITHIN COLUMN STRIPS & MIDDLE STRIPS. SEE TYPICAL BAR SPACING DETAIL SHEET S-11

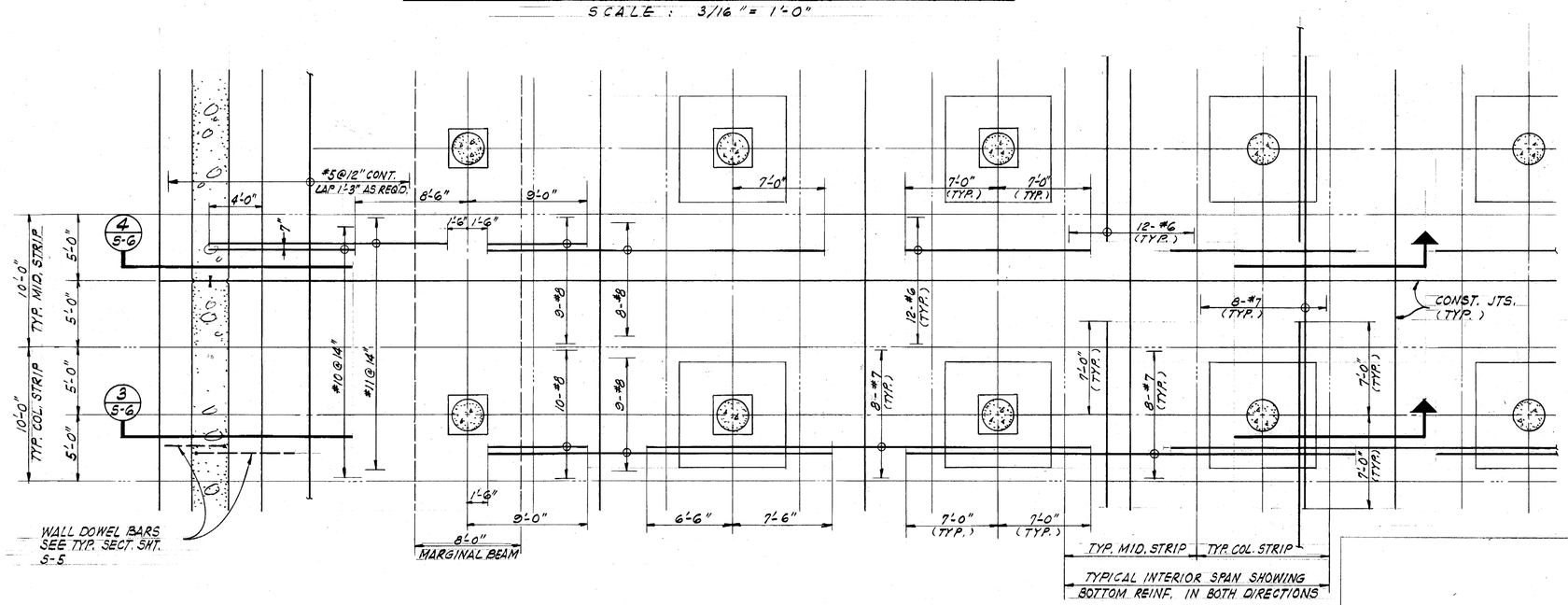
FLOOR SLAB - TOP REINFORCEMENT

SCALE: 3/16" = 1'-0"



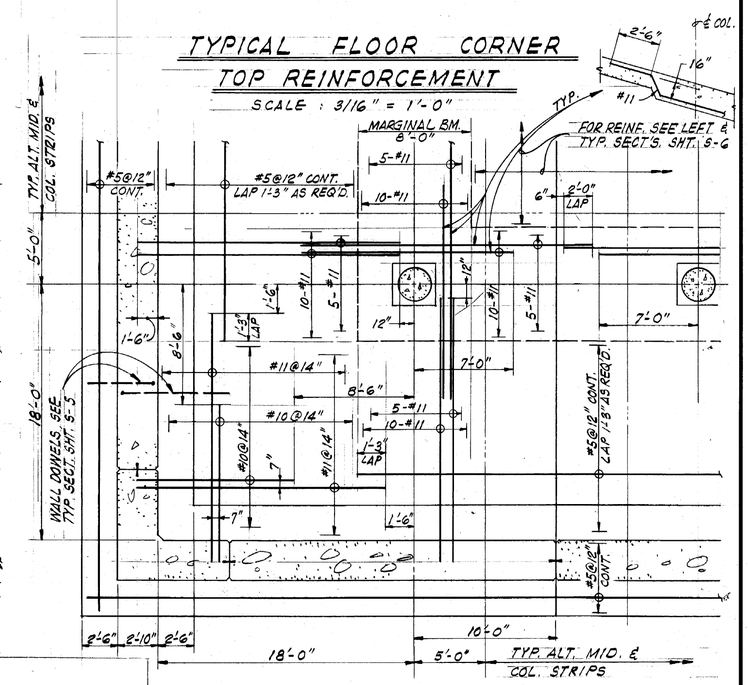
TYPICAL FLOOR CORNER TOP REINFORCEMENT

SCALE: 3/16" = 1'-0"



FLOOR SLAB - BOTTOM REINFORCEMENT

SCALE: 3/16" = 1'-0"



TYPICAL FLOOR CORNER BOTTOM REINFORCEMENT

SCALE: 3/16" = 1'-0"

AS BUILT DRAWING

REV	DATE	BY	DESCRIPTION
1	4-71		AS BUILT

SCALE: 3/16"=1'-0"

DESIGNED N. RAMOS
DRAWN W. FU
CHECKED

SUBMITTED — PROJECT ENGINEER — R.C.E. NO. 13393 — DATE 9-22-67
RECOMMENDED — JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.C.E. NO. 5677 — DATE 9-27-67

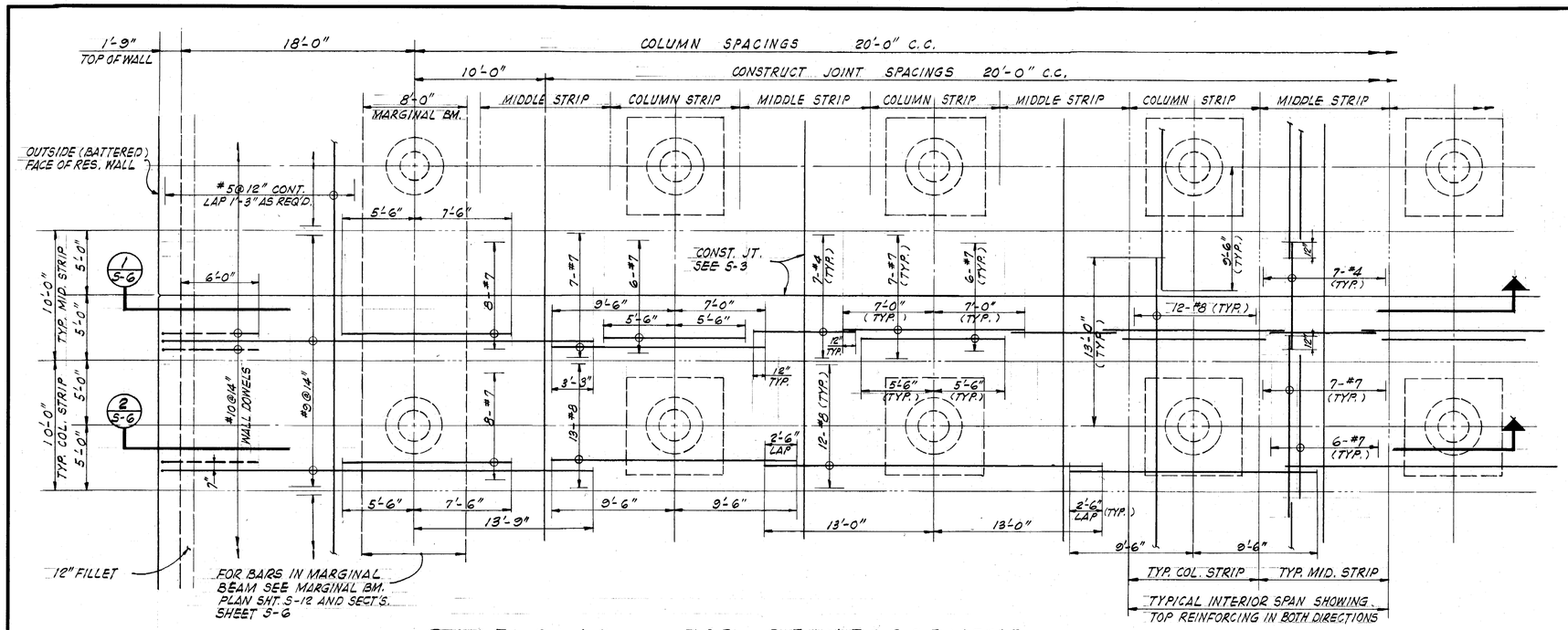
JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

APPROVED — MANAGER AND CHIEF ENGINEER — DATE 9-27-67
APPROVED — DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
STRUCTURAL-TYPICAL RESERVOIR FLOOR REINFORCING DETAILS

SHEET S-7 OF 47 SHEETS

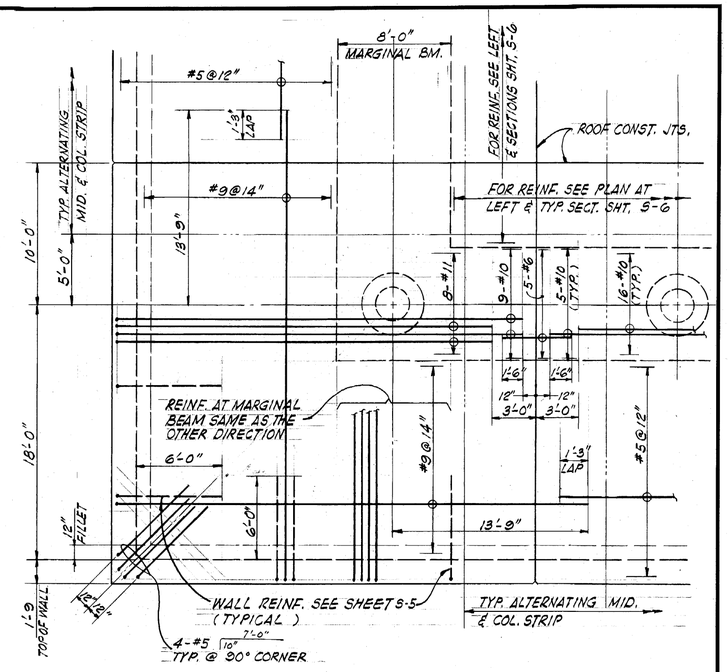
10241.34



ROOF SLAB - TOP REINFORCEMENT

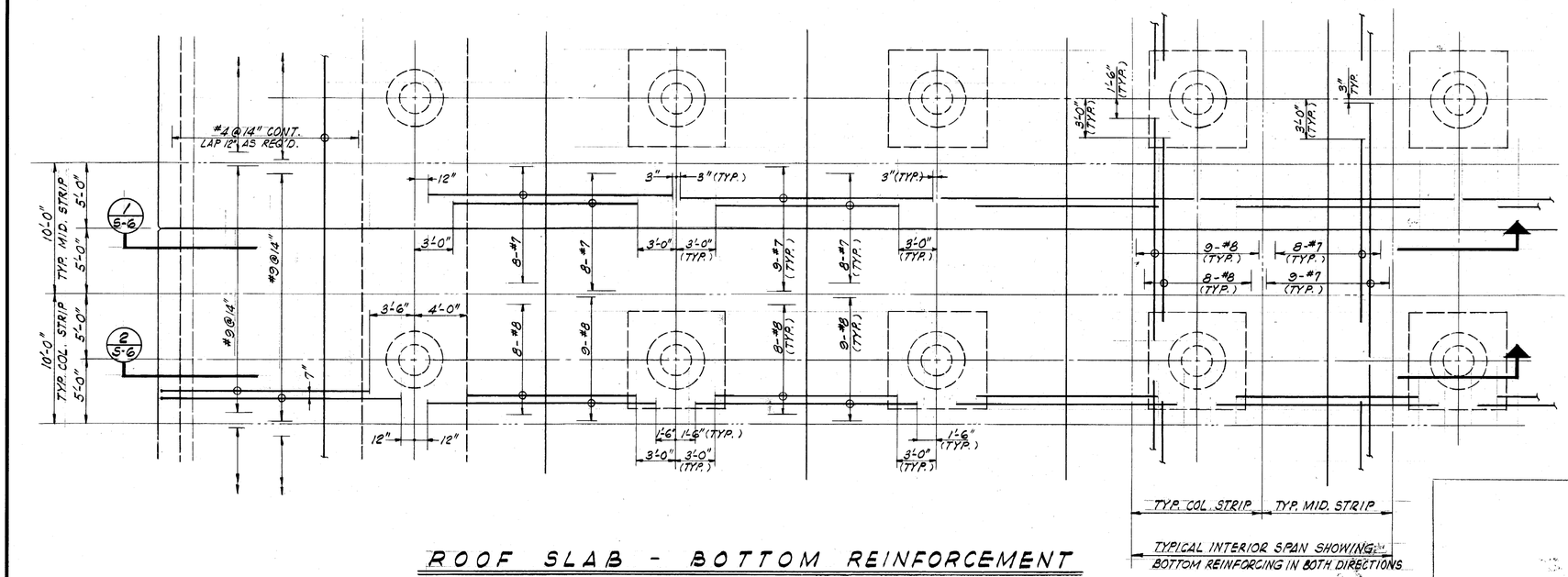
SCALE : 3/16" = 1'-0"

NOTE :
ALL REINFORCING BARS SHALL BE AT EQUAL SPACING WITHIN COLUMN STRIPS & MIDDLE STRIPS. SEE TYPICAL BAR SPACING DETAIL SHEET S-11



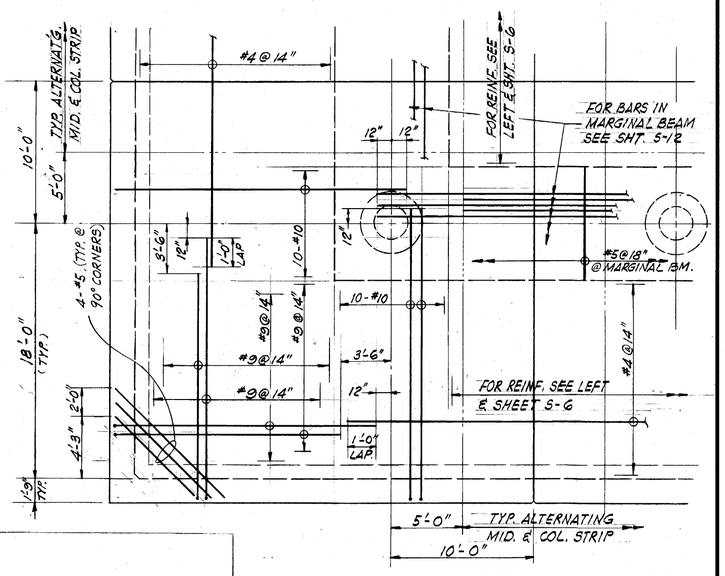
TYPICAL ROOF CORNER TOP REINFORCEMENT

SCALE : 3/16" = 1'-0"



ROOF SLAB - BOTTOM REINFORCEMENT

SCALE : 3/16" = 1'-0"



TYPICAL ROOF CORNER BOT. REINFORCEMENT

SCALE : 3/16" = 1'-0"

AS BUILT DRAWING

REV	DATE	BY	DESCRIPTION
1	4-71	DL	AS BUILT

SCALE: 3/16"=1'-0"

DESIGNED N. RAMOS
DRAWN W. FU
CHECKED Patoulis

SUBMITTED Richard J. Leland — PROJECT ENGINEER — R.C.E. NO. 13393 — DATE 9-22-67
RECOMMENDED J. M. Montgomery — JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.C.E. NO. 5677 — DATE 9-27-67

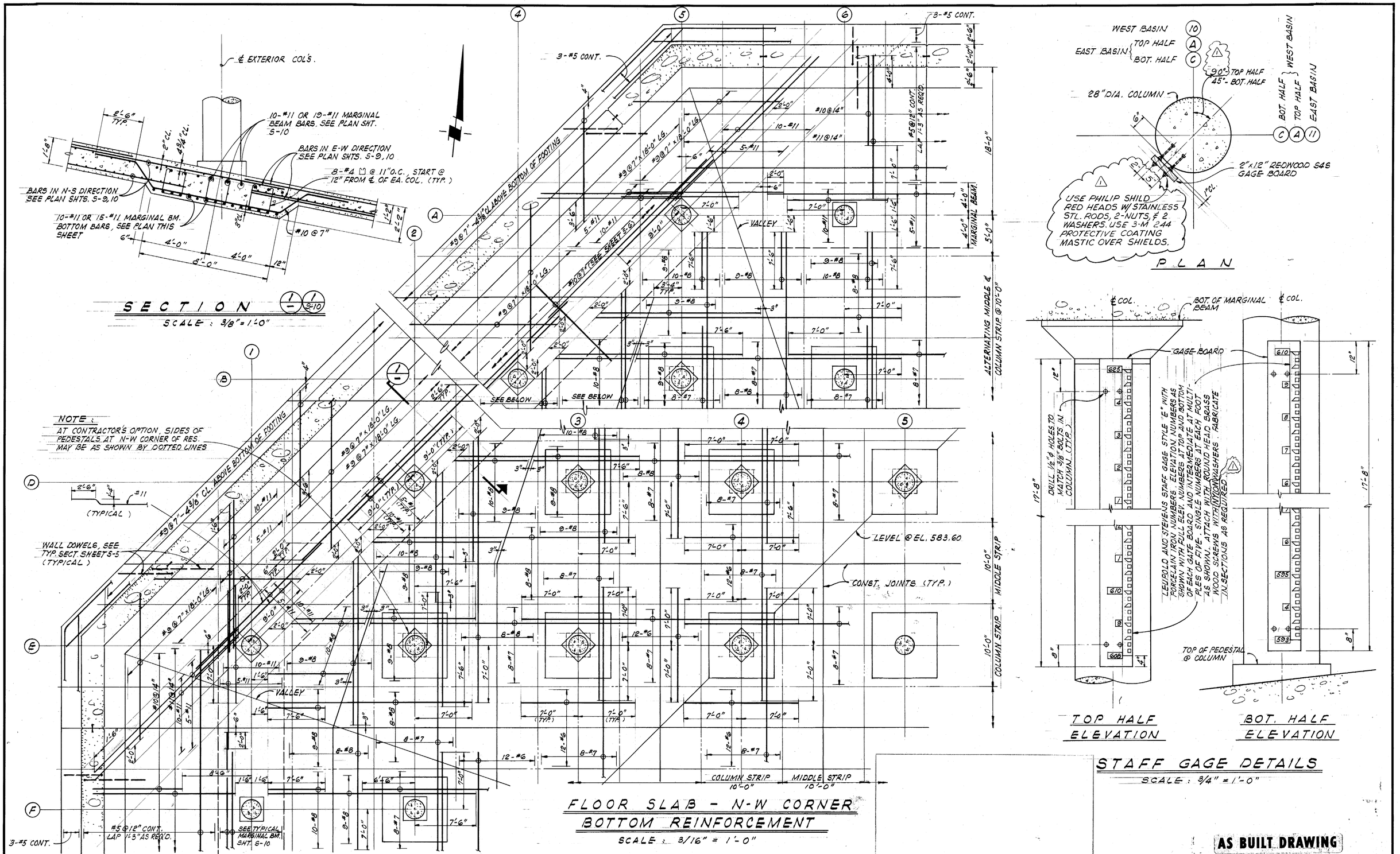
JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

APPROVED Willis D. Berry — MANAGER AND CHIEF ENGINEER — DATE 9-27-67
APPROVED — DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
STRUCTURAL-TYPICAL RESERVOIR ROOF REINFORCING DETAILS

SHEET S-8 OF 47 SHEETS

10241.35



AS BUILT DRAWING

REV	DATE	BY	DESCRIPTION
△	4/8/71	W.Y.	AS BUILT

SCALE: AS NOTED

DESIGNED N. RAMOS
DRAWN W. FU
CHECKED P. Gatsouli

SUBMITTED Richard S. Leland — PROJECT ENGINEER — 13393 R.C.E. NO. — 9-22-67 DATE
RECOMMENDED [signature] — JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — 5677 R.C.E. NO. — 9-27-67 DATE

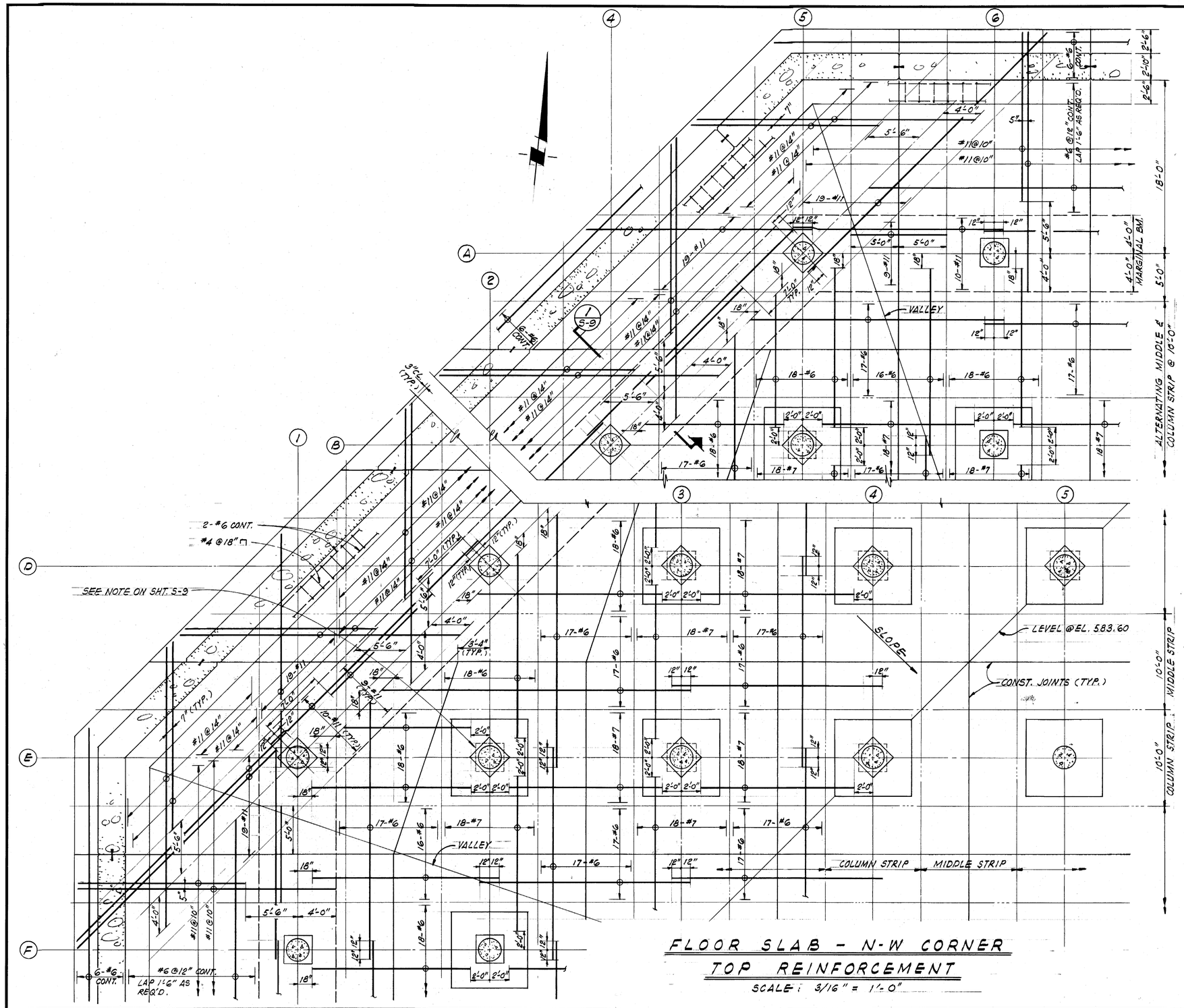
JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

APPROVED [signature] MANAGER AND CHIEF ENGINEER — 9-27-67 DATE
APPROVED — DATE

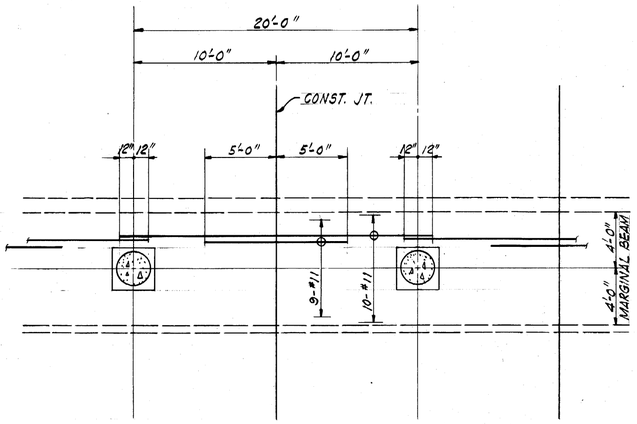
CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
STRUCTURAL-RESERVOIR FLOOR SLAB, N-W CORNER, BOTTOM REINFORCING DETAILS

SHEET S-9 OF 47 SHEETS

10241,36

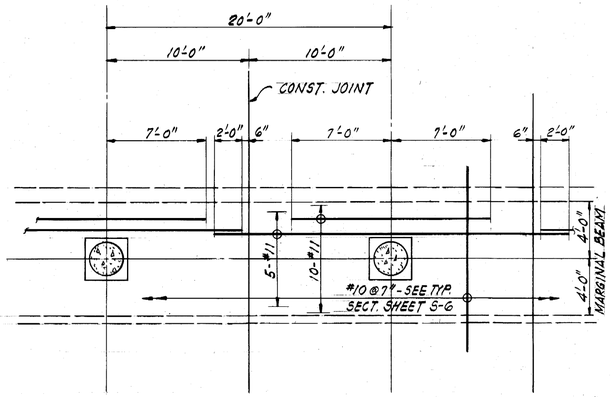


FLOOR SLAB - N-W CORNER
TOP REINFORCEMENT
SCALE: 3/16" = 1'-0"



TYP. FLOOR MARGINAL BEAM
TOP REINFORCEMENT
SCALE: 3/16" = 1'-0"

NOTE:
BARS FOR FLOOR MARGINAL BEAM AT N-W WALL ARE SHOWN WITH FLOOR SLAB BARS IN PLANS, SEE SHEET S-9 AND THIS SHEET



TYP. FLOOR MARGINAL BEAM
BOTTOM REINFORCEMENT
SCALE: 3/16" = 1'-0"

AS BUILT DRAWING

REV	DATE	BY	DESCRIPTION
1	4-71	DF	AS BUILT

SCALE: 3/16" = 1'-0"

DESIGNED N. RAMOS
DRAWN W. FU
CHECKED [signature]

SUBMITTED Richard S. Leland, PROJECT ENGINEER, 13393 R.C.E. NO., 9-22-67 DATE
RECOMMENDED [signature], JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC., 5677 R.C.E. NO., 9-27-67 DATE

JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

APPROVED [signature], MANAGER AND CHIEF ENGINEER, 9-27-67 DATE
APPROVED _____ DATE

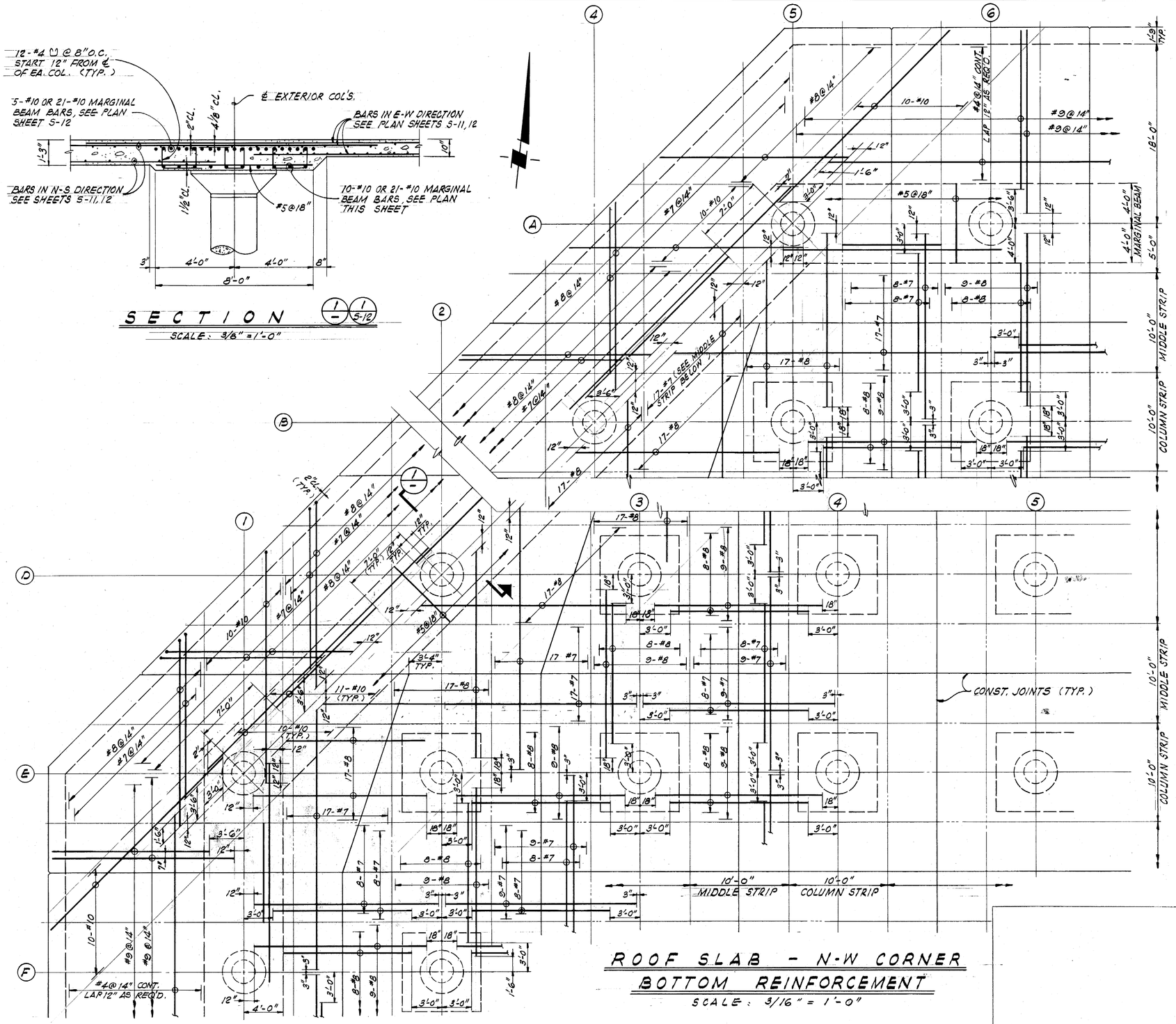
CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
STRUCTURAL-RESERVOIR FLOOR SLAB, N-W CORNER, TOP REINFORCING DETAILS

SHEET S-10 OF 47 SHEETS

10241.37

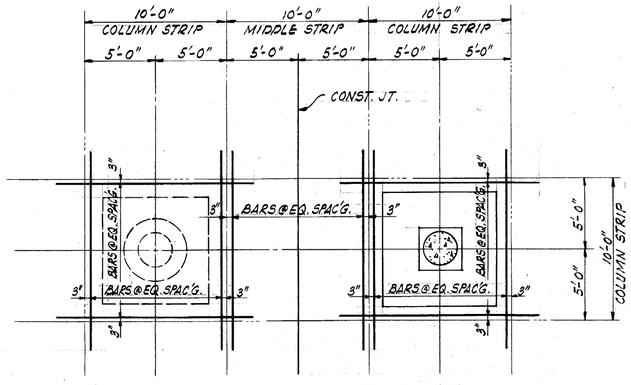
SECTION 1/S-12

SCALE: 3/16" = 1'-0"



ROOF SLAB - N-W CORNER BOTTOM REINFORCEMENT

SCALE: 3/16" = 1'-0"

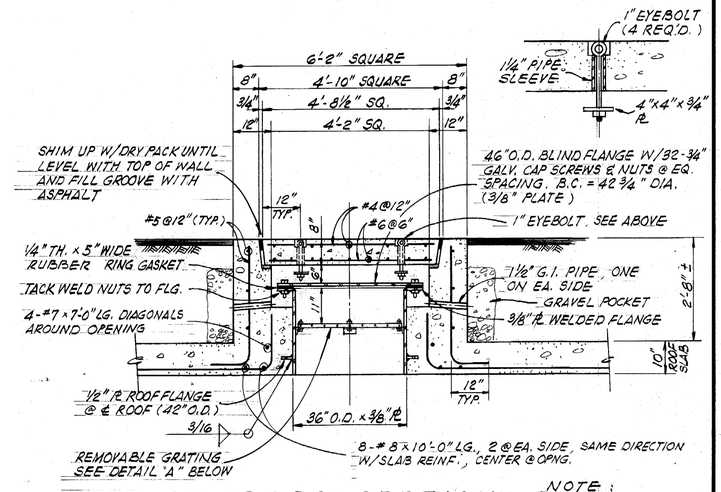


ROOF — TOP OR BOTTOM REINF.

FLOOR — TOP OR BOTTOM REINF.

TYPICAL BAR SPACING DETAIL

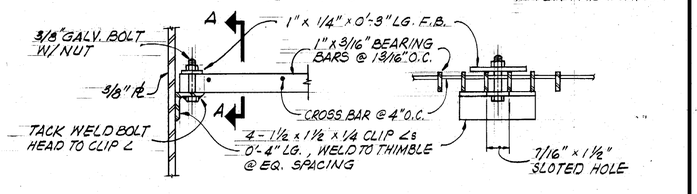
SCALE: 3/16" = 1'-0"



CROSS SECTION

½" = 1'-0"

NOTE: GALV. ALL ASSEMBLIES AFTER FABRICATION



DETAIL "A" 3" = 1'-0"

SECTION A-A 3" = 1'-0"

ROOF THIMBLE DETAILS

REV	DATE	BY	DESCRIPTION
1	4-11	DL	AS BUILT

SCALE: AS NOTED

DESIGNED N. RAMOS
DRAWN W. FU
CHECKED Ralph

SUBMITTED Vihad A. Lilaud — PROJECT ENGINEER — R.C.E. NO. 13393 — DATE 9-22-67

RECOMMENDED Rhesmir — JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.C.E. NO. 5677 — DATE 9-27-67

JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

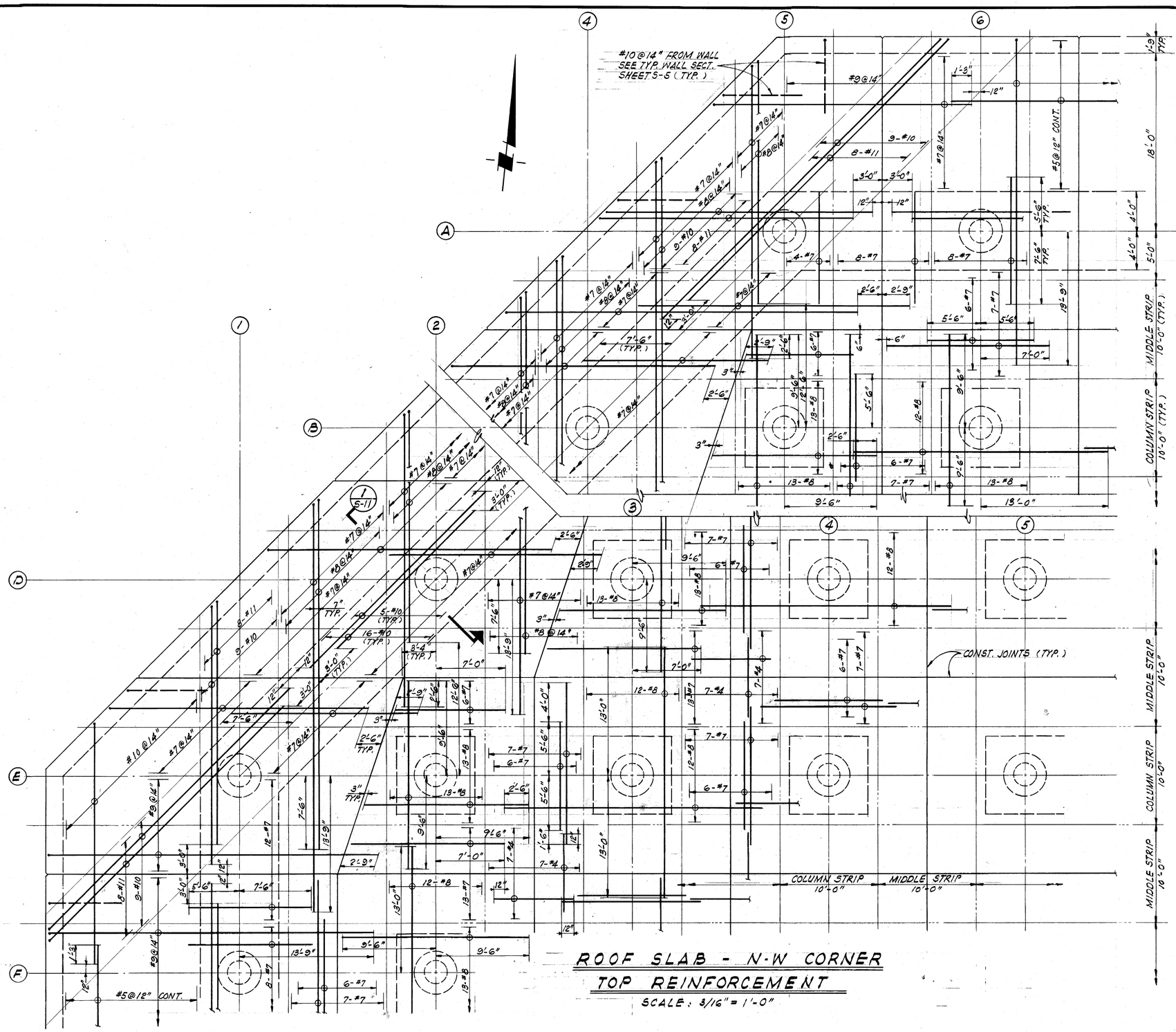
APPROVED Chas. R. Berry — MANAGER AND CHIEF ENGINEER — DATE 9-27-67

APPROVED — DATE

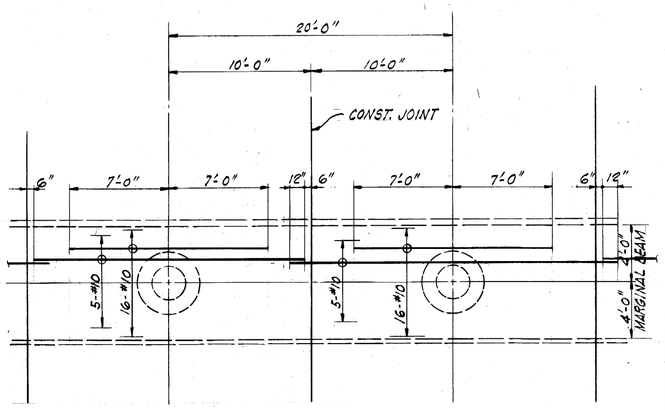
CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
STRUCTURAL-RESERVOIR ROOF SLAB, N-W CORNER, BOTTOM REINFORCING DETAILS

SHEET S-11 OF 47 SHEETS

10241.38

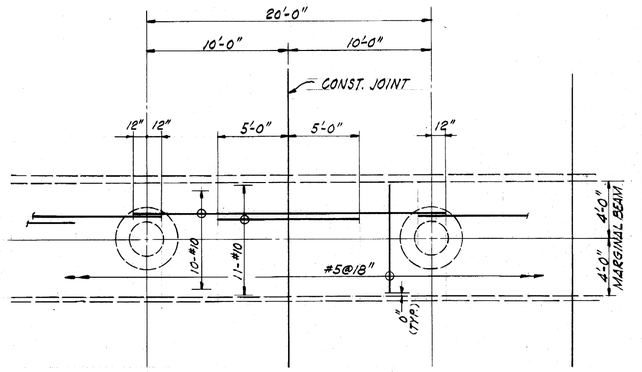


ROOF SLAB - N-W CORNER
TOP REINFORCEMENT
SCALE: 3/16" = 1'-0"



TYP. ROOF MARGINAL BEAM
TOP REINFORCEMENT
SCALE: 3/16" = 1'-0"

NOTE:
BARS FOR ROOF MARGINAL BEAM AT N-W WALL ARE SHOWN WITH ROOF SLAB BARS IN PLANS, SEE THIS SHEET AND SHEET S-11



TYP. ROOF MARGINAL BEAM
BOTTOM REINFORCEMENT
SCALE: 3/16" = 1'-0"

AS BUILT DRAWING

REV	DATE	BY	DESCRIPTION
1	4-71		AS BUILT

SCALE: 3/16" = 1'-0"

DESIGNED N. RAMOS
DRAWN W. FU
CHECKED

SUBMITTED — PROJECT ENGINEER — R.C.E. NO. 13393 — DATE 9-22-67
RECOMMENDED — JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.C.E. NO. 5677 — DATE 9-27-67

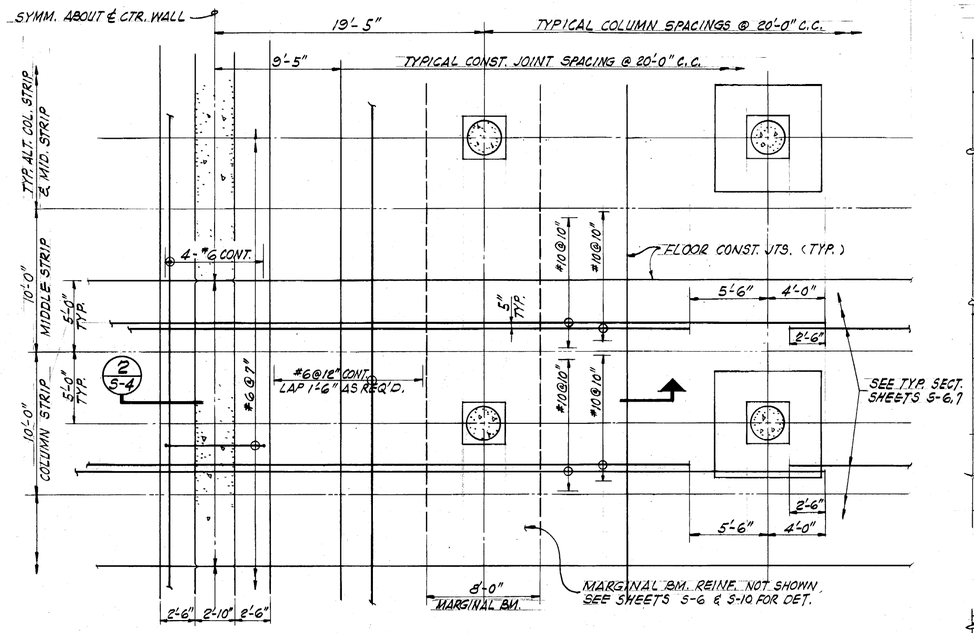
JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

APPROVED — MANAGER AND CHIEF ENGINEER — DATE 9-27-67
APPROVED — DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
STRUCTURAL-RESERVOIR ROOF SLAB, N-W CORNER
TOP REINFORCING DETAILS

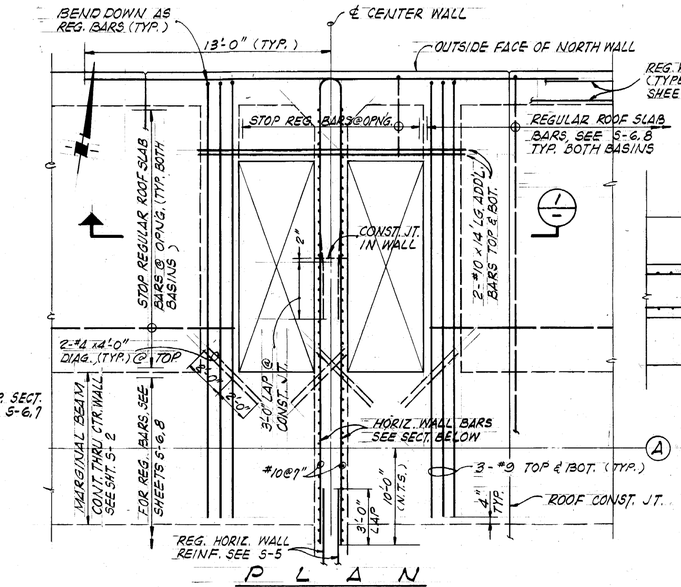
SHEET S-12 OF ~~47~~ 54 SHEETS

10241.39

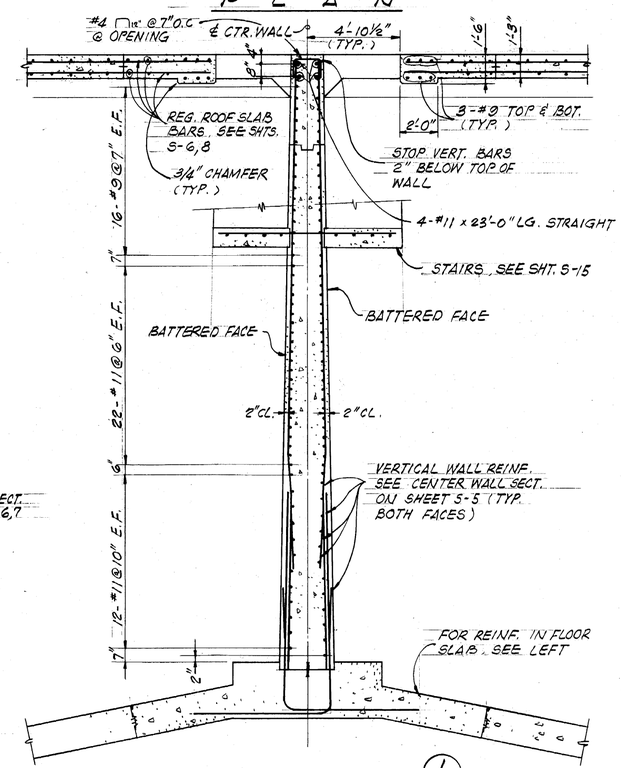


NOTE: SEE ALSO SECT. 2/S-4

FLOOR AT CENTER WALL
TOP REINFORCEMENT
SCALE: 3/16" = 1'-0"

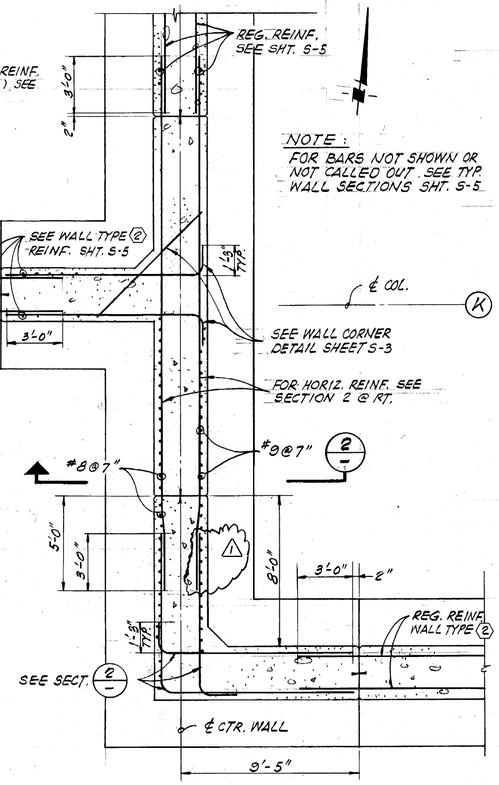


P L A N

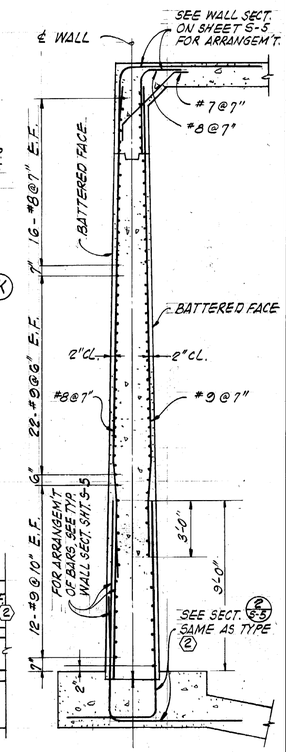


S E C T I O N 1/-

REINF. AT ACCESS OPENINGS
SCALE: 1/4" = 1'-0"

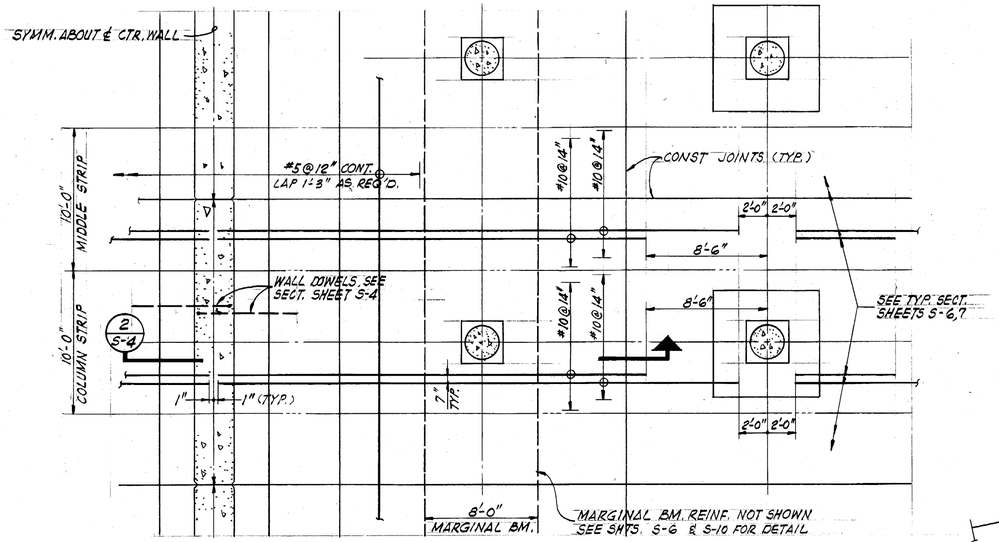


P L A N



S E C T I O N 2/-

REINF. AT CENTER WALL - SOUTH END
SCALE: 1/4" = 1'-0"



NOTE: SEE ALSO SECT. 2/S-4

FLOOR AT CENTER WALL
BOTTOM REINFORCEMENT
SCALE: 3/16" = 1'-0"

AS BUILT DRAWING

REV	DATE	BY	DESCRIPTION
1	1/8/71	W.Y.	AS BUILT

SCALE: AS NOTED

DESIGNED N. RAMOS
DRAWN W. FU
CHECKED Bahorski

SUBMITTED Richard A. Leonard — PROJECT ENGINEER — R.C.E. NO. 13393 — DATE 9-22-67

RECOMMENDED — JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.C.E. NO. 5677 — DATE 9-27-67

JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

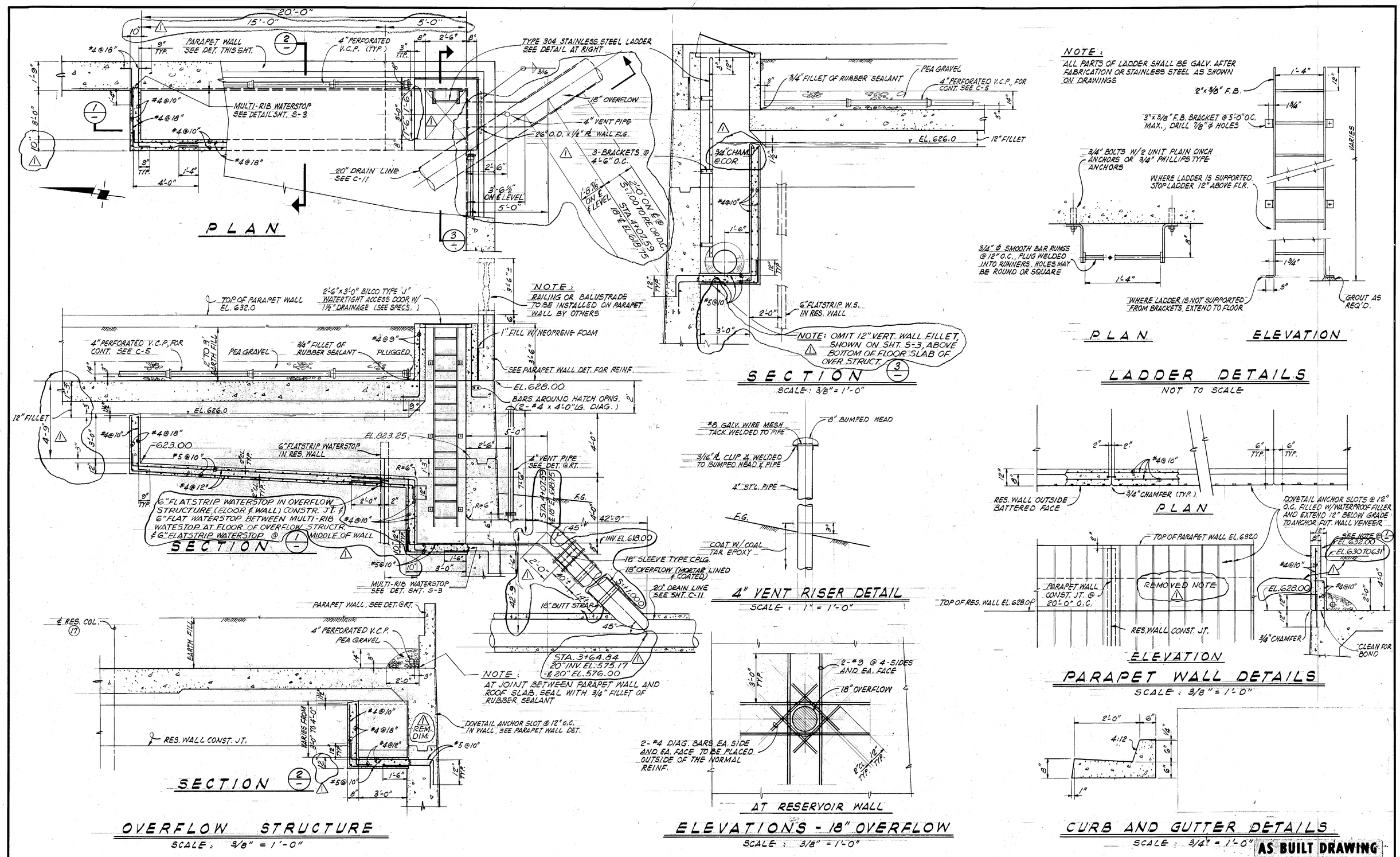
APPROVED — MANAGER AND CHIEF ENGINEER — DATE 9-27-67

APPROVED — DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
STRUCTURAL
RESERVOIR FLOOR SLAB AND CENTER WALL DETAILS

SHEET S-13 OF 47 SHEETS

10241.40



REV	DATE	BY	DESCRIPTION
1	4/8/71	W.Y.	AS BUILT

SCALE: AS NOTED

DESIGNED N. RAMOS
DRAWN W. FU
CHECKED Patrick

SUBMITTED Richard L. Leland — PROJECT ENGINEER — R.C.E. NO. 13393 — DATE 9-22-67
RECOMMENDED R. Kennis — JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.C.E. NO. 5677 — DATE 9-27-67

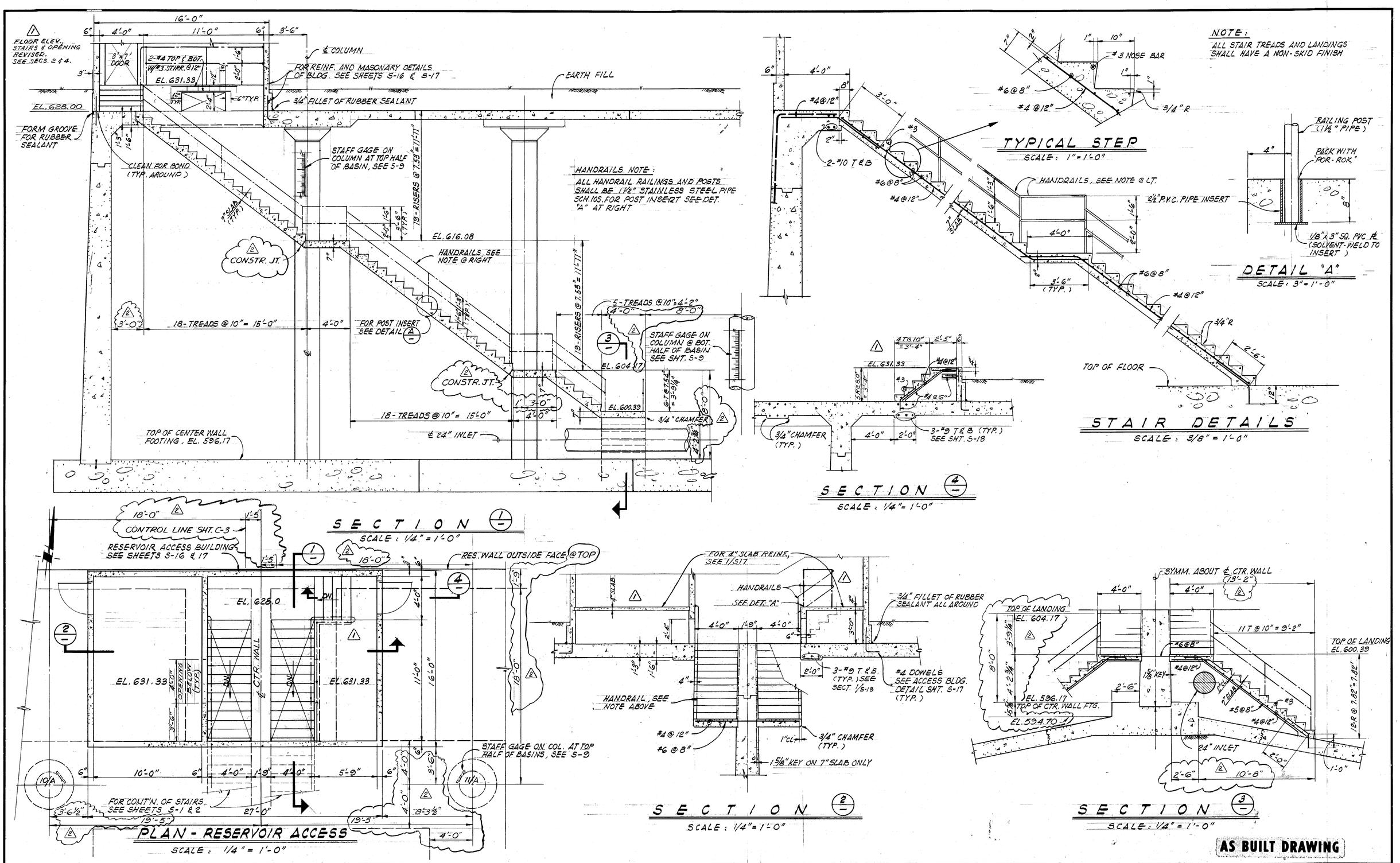
JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

APPROVED Gene A. Berry — MANAGER AND CHIEF ENGINEER — DATE 9-27-67
APPROVED — DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
STRUCTURAL-RESERVOIR OVERFLOW STRUCTURE AND MISCELLANEOUS DETAILS

SHEET S-14 OF 47 SHEETS

1024141



AS BUILT DRAWING

REV	DATE	BY	DESCRIPTION
1	3/25/70	JER	RAISED FLOOR ELEV. 1'-0". ADDED STEP
2	4/8/11	W.Y.	AS BUILT

SCALE: AS NOTED

DESIGNED N. RAMOS
DRAWN W. FU
CHECKED Batsoulis

SUBMITTED Richard S. Leland — PROJECT ENGINEER — 13393 R.C.E. NO. — 9-22-67 DATE
RECOMMENDED R. L. Kenmir — JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — 5677 R.C.E. NO. — 9-27-67 DATE

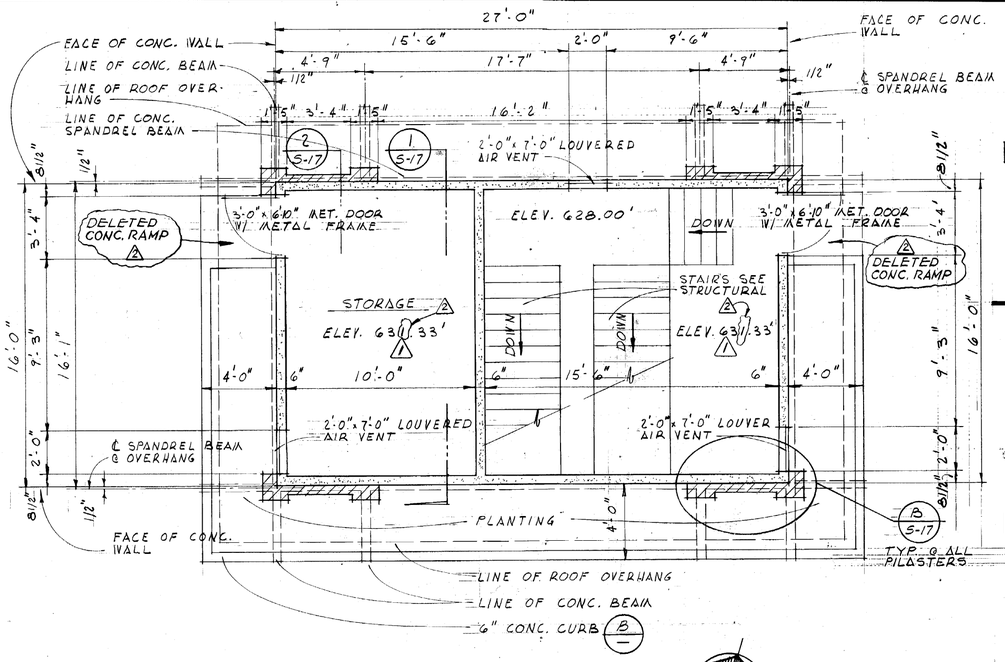
JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

APPROVED Hollie D. Berry — MANAGER AND CHIEF ENGINEER — 9-27-67 DATE
APPROVED — DATE

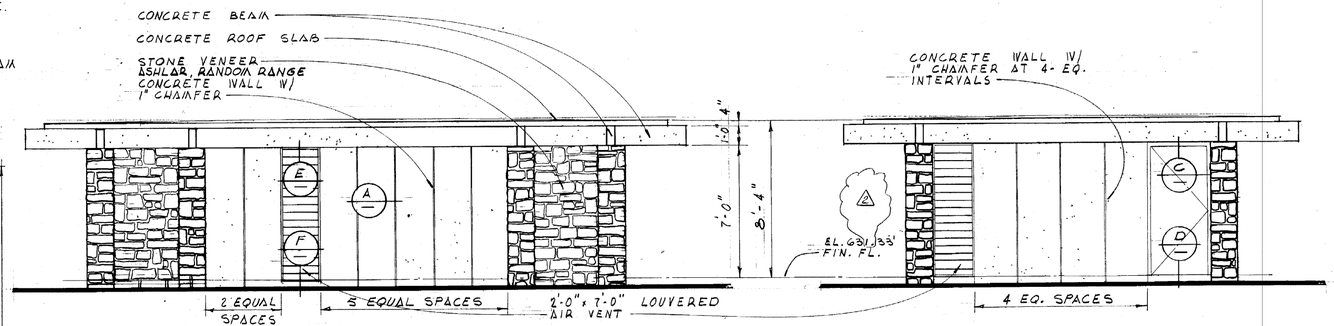
CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
STRUCTURAL-RESERVOIR ACCESS STAIR DETAILS

SHEET S-15 OF 47 SHEETS

10241.42



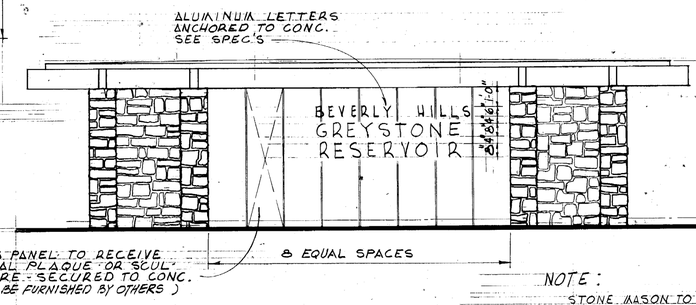
FLOOR PLAN
SCALE - 1/4" = 1'-0"



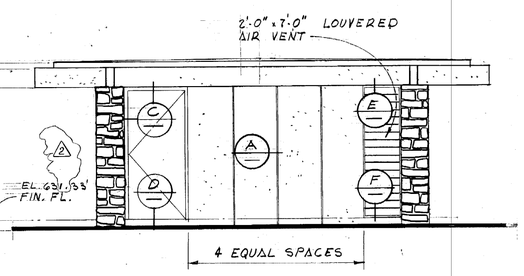
NORTH ELEV.
SCALE - 1/4" = 1'-0"

EAST ELEV.

NOTE: ALL EXPOSED EXTERIOR CONC. SHALL RECEIVE LIGHT SAND BLASTING - 1/8" MAXIMUM PENETRATION.

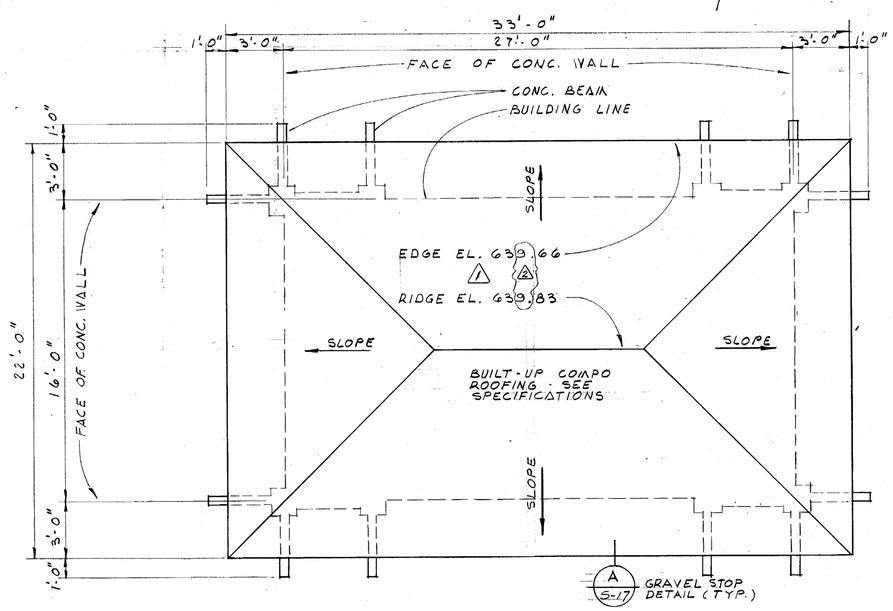


SOUTH ELEV.

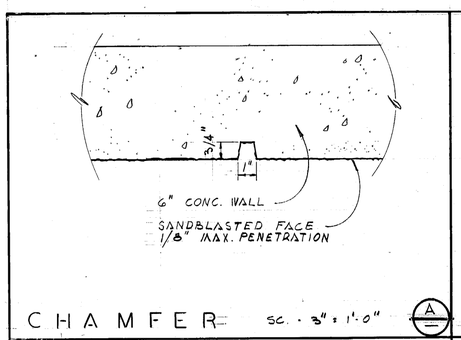


WEST ELEV.
SCALE 1/4" = 1'-0"

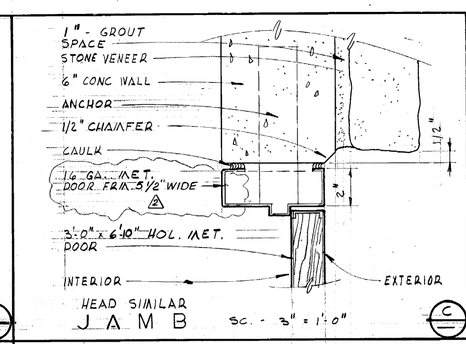
NOTE: STONE MASON TO SELECT SANDSTONE FROM EXIST'G. STRUCTURES BEING DEMOLISHED AT SITE. CHIP OR SAW CUT UNEXPOSED FACE TO MEET CONDITIONS INDICATED. SEE SPECIFICATIONS



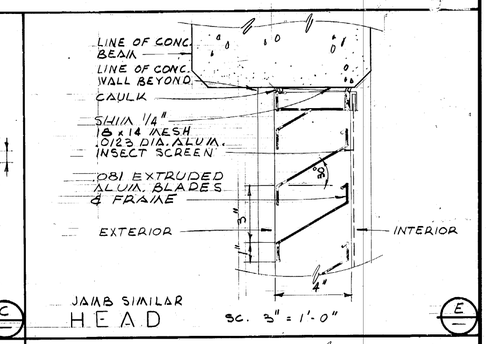
ROOF PLAN
SCALE - 1/4" = 1'-0"



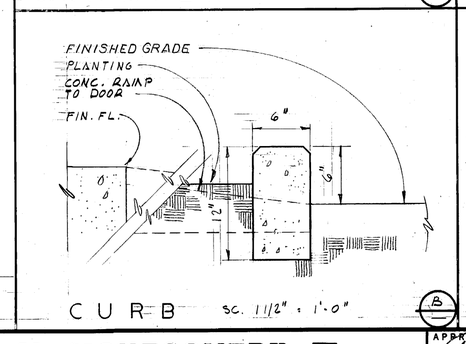
CHAMFER SC. - 3" = 1'-0"



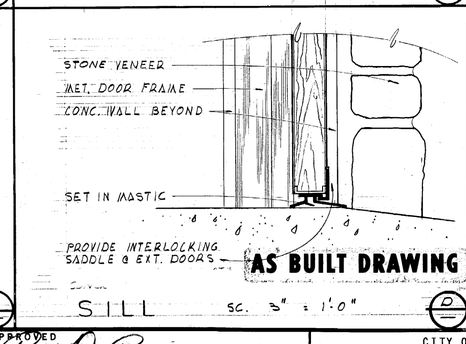
JAMB SC. - 3" = 1'-0"



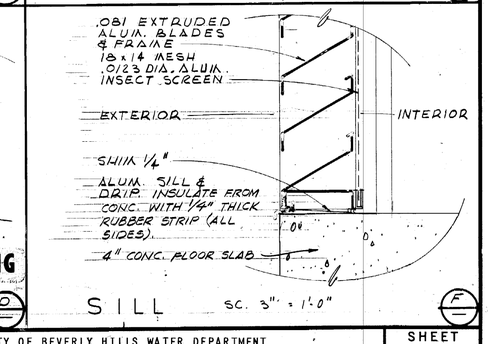
HEAD SC. 3" = 1'-0"



CURB SC. 1 1/2" = 1'-0"



SILL SC. 3" = 1'-0"



SILL SC. 3" = 1'-0"

DAVID JACOBSON JR. A.I.A.
ARCADIA, CALIFORNIA

REV	DATE	BY	DESCRIPTION
1	3/25/70	JER	RAISED FLOOR & ROOF ELEVS. 1'-0"
2	4/19/11	W.Y.	AS BUILT

SCALE: AS NOTED

DESIGNED D. JACOBSON
DRAWN D. JACOBSON
CHECKED D. LELAND

SUBMITTED Richard L. Leland, PROJECT ENGINEER, R.C.E. NO. 13393, DATE 9-22-67
RECOMMENDED R. L. Wessmin, JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC., R.C.E. NO. 5677, DATE 9-27-67

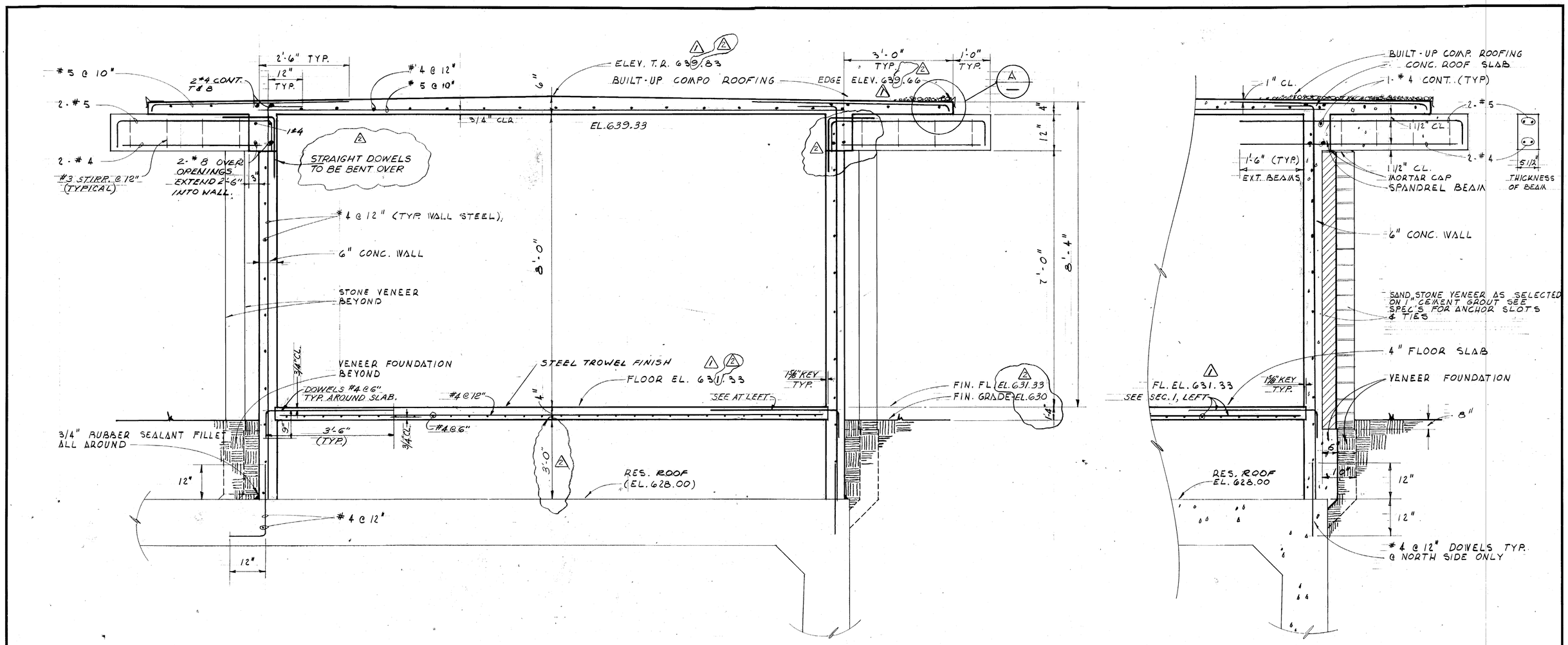
JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

APPROVED Willis D. Burns, MANAGER AND CHIEF ENGINEER, DATE 9-27-67
APPROVED _____ DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
RESERVOIR ACCESS BUILDING DETAILS

SHEET S-16 OF 47 SHEETS

10241.43



10241.47

AS BUILT DRAWING

REV	DATE	BY	DESCRIPTION
1	3/25/70	JER	RAISED FLOOR & ROOF ELEVS. 1'-0"
2	4/9/71	R.G.	AS BUILT

SCALE: AS NOTED

DESIGNED D. JACOBSON
DRAWN D. JACOBSON
CHECKED D. LELAND

SUBMITTED Richard S. Leland — PROJECT ENGINEER — 13393 R.C.E. NO. — 9-22-67 DATE
RECOMMENDED R. L. Kennie — JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — 5677 R.C.E. NO. — 9-27-67 DATE

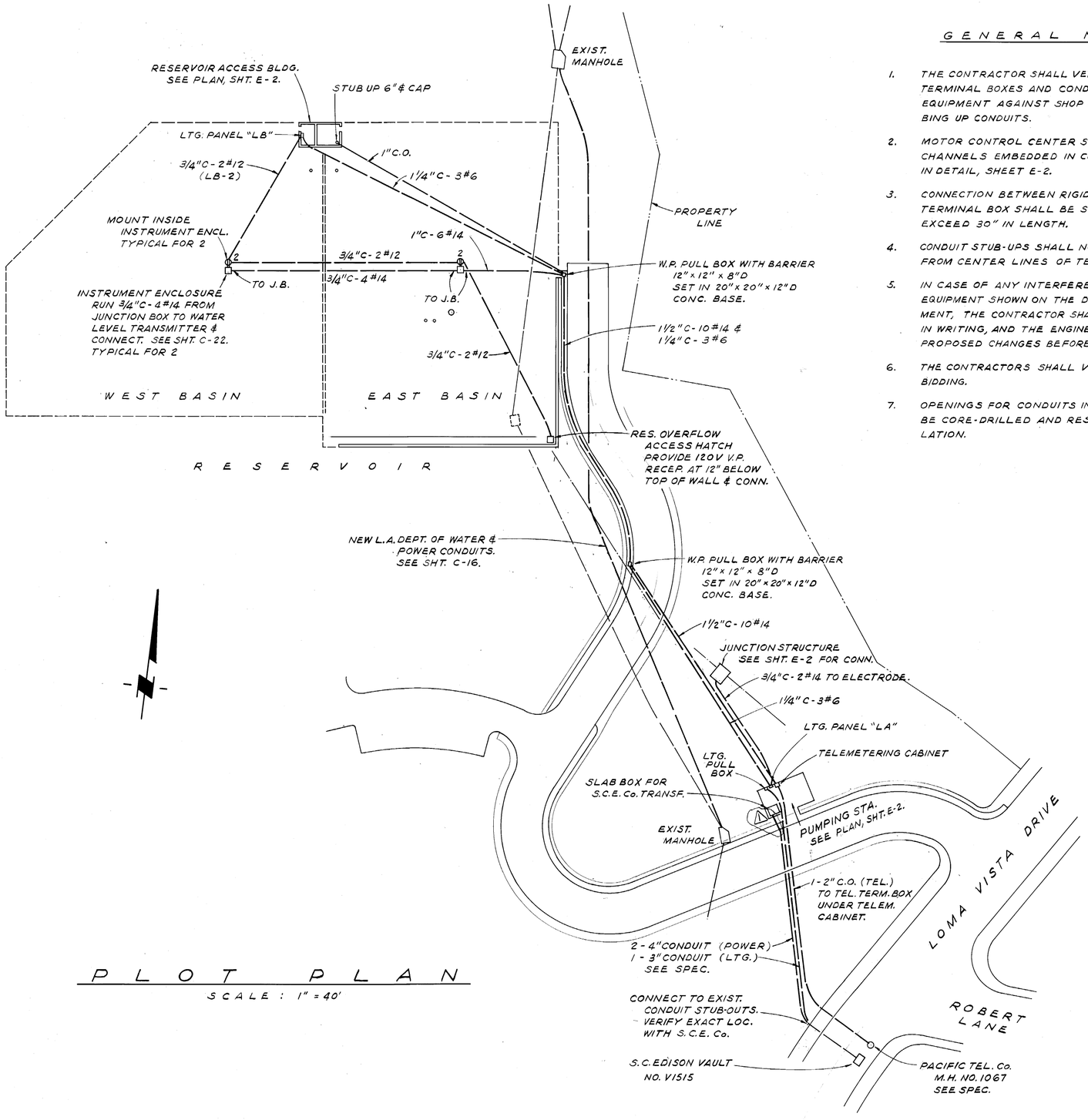
JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

APPROVED Billie D. Berry — MANAGER AND CHIEF ENGINEER — 9-27-67 DATE
APPROVED — DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
RESERVOIR ACCESS BUILDING REINFORCING DETAILS

SHEET S-17 OF 47 SHEETS

10241.44



PLOT PLAN

SCALE : 1" = 40'

GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY EXACT LOCATION OF TERMINAL BOXES AND CONDUIT ENTRANCES OF ALL EQUIPMENT AGAINST SHOP DRAWINGS BEFORE STUBBING UP CONDUITS.
2. MOTOR CONTROL CENTER SHALL BE SET ON LEVELING CHANNELS EMBEDDED IN CONCRETE PAD AS SHOWN IN DETAIL, SHEET E-2.
3. CONNECTION BETWEEN RIGID CONDUIT AND MOTOR TERMINAL BOX SHALL BE SEALTITE AND SHALL NOT EXCEED 30" IN LENGTH.
4. CONDUIT STUB-UPS SHALL NOT BE MORE THAN 6" FROM CENTER LINES OF TERMINAL BOX.
5. IN CASE OF ANY INTERFERENCE BETWEEN ELECTRICAL EQUIPMENT SHOWN ON THE DRAWINGS AND OTHER EQUIPMENT, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING, AND THE ENGINEER SHALL APPROVE THE PROPOSED CHANGES BEFORE THEY ARE MADE.
6. THE CONTRACTORS SHALL VISIT THE SITES PRIOR TO BIDDING.
7. OPENINGS FOR CONDUITS IN MASONRY WALLS SHALL BE CORE-DRILLED AND RESEALED AFTER INSTALLATION.

SYMBOLS

———	EXPOSED CONDUIT RUN
—·—	CONCEALED CONDUIT RUN IN OR ABOVE ROOF SLAB
— —	CONDUIT RUN UNDERGROUND OR IN FLOOR SLAB OR WALL
—///—	HASH MARKS INDICATE NUMBER OF #12 AWG CONDUCTORS. UNMARKED RUNS ARE 2-#12 UNLESS OTHERWISE NOTED. LTG. CONDUITS SHALL BE OF FOLLOWING SIZE : 2 OR 3 CONDUCTORS IN 1/2" CONDUIT-EXPOSED RUN ONLY; 2 TO 5 " IN 3/4" "
—LA-1,3—	3/4" CONDUIT, 3#12 AWG CONDUCTORS, ONE NEUTRAL FOR CIRCUITS 1 & 3 TO LTG. PANEL "LA"
—o—	CONDUIT FITTING - TYPE AS NOTED
—o	CONDUIT BENT TOWARD OBSERVER
—•	CONDUIT BENT AWAY FROM OBSERVER
(J) [J]	JUNCTION BOX - SIZE AS REQ'D
	120 VOLT COMBINATION DUPLEX RECEPTACLE MTG. HEIGHT = 12" OR AS NOTED
	240 VOLT, 1φ SINGLE RECEPTACLE MTG. HEIGHT = 24"
2a	CEILING-MTD. LTG. FIXTURE ON CIR. 2 & CONTROLLED BY SW. 'a'
	WALL-MTD. BRACKET LIGHT
	FLOODLIGHT
A/150 2	LTG. FIXTURE TYPE A WITH 150W LAMP, 2 FIXTURES IN AREA
Sa	SINGLE POLE TOGGLE SWITCH OR SWITCHES MTG. HEIGHT = 42" OR AS NOTED; a INDICATES OUTLET CONTROLLED
WP/VP	WEATHERPROOF OR VAPORPROOF
C.O.	CONDUIT ONLY

AS BUILT DRAWING Earl D. Wagner R.E.E. NO. 1732

REV	DATE	BY	DESCRIPTION
1	4/9/71	R.G.	AS BUILT

SCALE: AS NOTED

DESIGNED SCHNEIDER
DRAWN HUGHES
CHECKED SCHNEIDER

SUBMITTED Richard S. Leland — PROJECT ENGINEER — R.C.E. NO. 13393 — DATE 9-26-67
RECOMMENDED R. L. Kemmir — JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.C.E. NO. 5677 — DATE 9-27-67

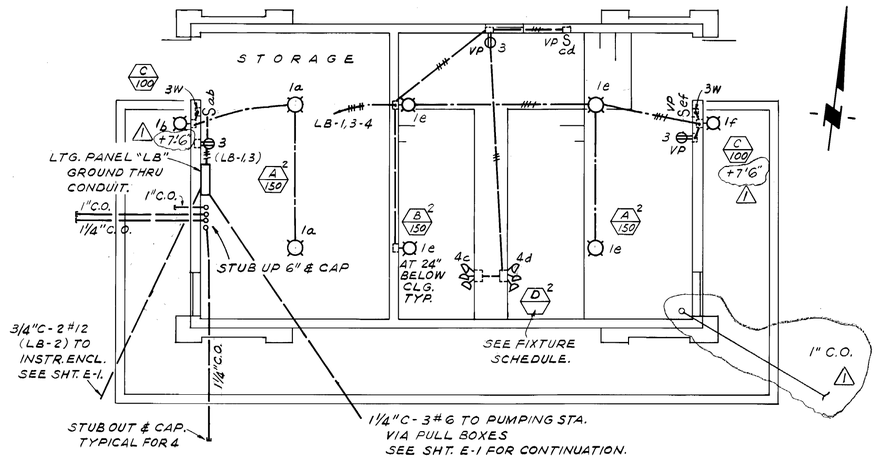
JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

APPROVED Charles A. Berry — MANAGER AND CHIEF ENGINEER — DATE 9-27-67
APPROVED — DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
ELECTRICAL
PLOT PLAN, GENERAL NOTES AND SYMBOLS

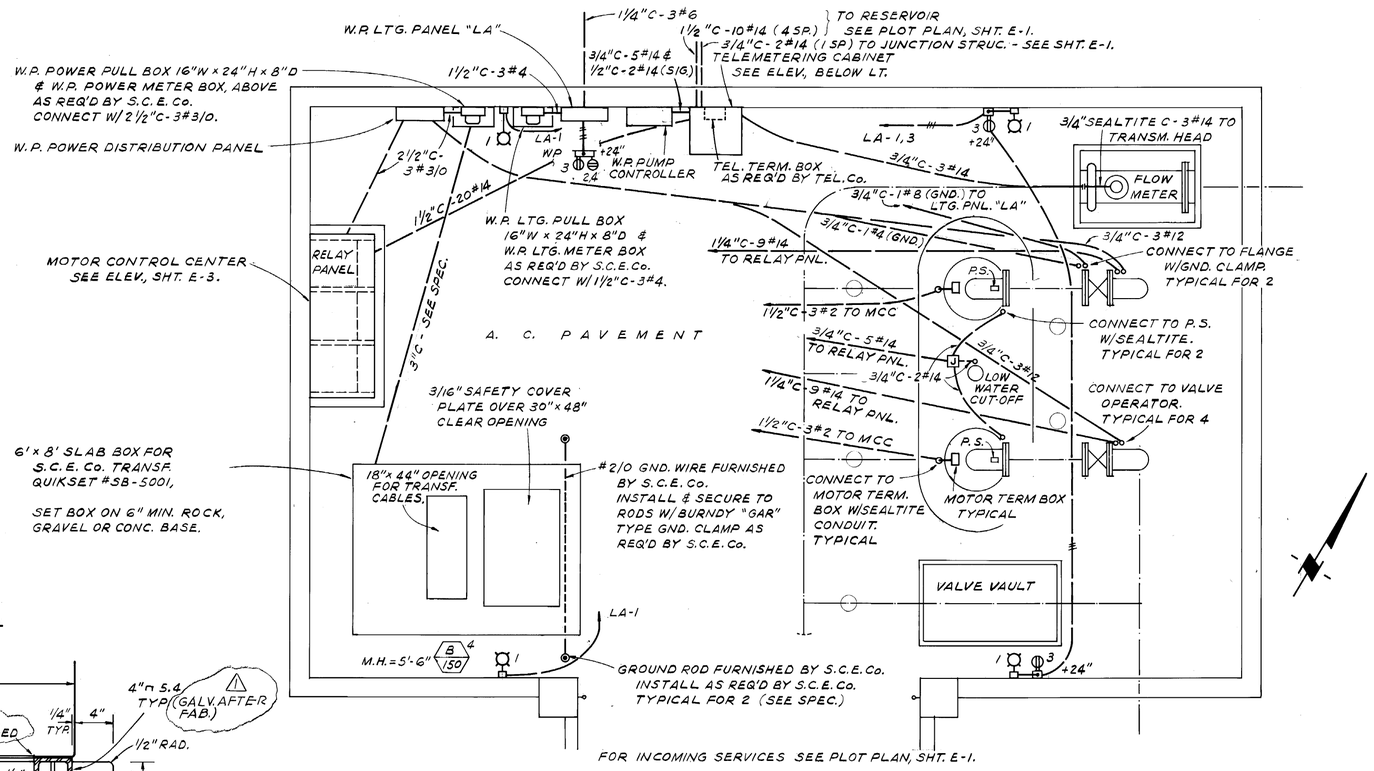
SHEET E-1 OF 47 SHEETS

1024145



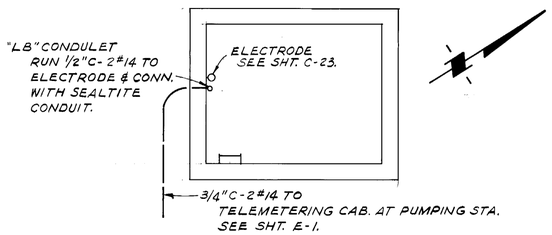
RES. ACCESS BLDG.

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



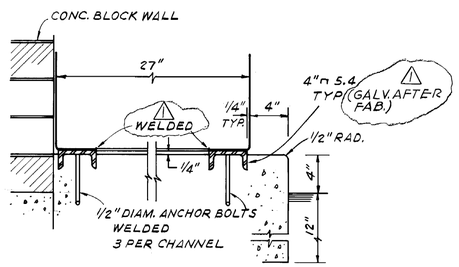
PUMPING STATION

SCALE : 3/8" = 1'-0"



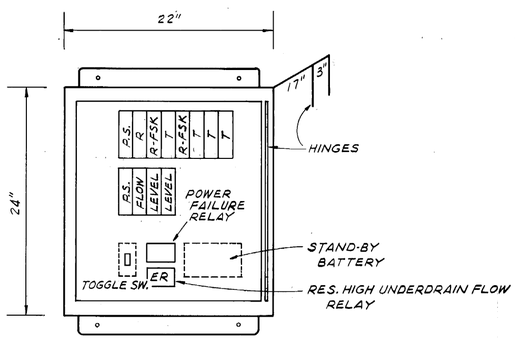
JUNCTION STRUCTURE

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



CONC. PAD DETAIL

NO SCALE



TELEMETERING CABINET

SCALE : 1½" = 1'-0"

LTG. FIXTURE SCHEDULE

TYPE	WATTS	DESCRIPTION
A	100 OR 150	INCANDESCENT, VAPORPROOF, CEILING-MTD. WITH TAPERED PRISMATIC GLOBE & GUARD CROUSE-HINDS NO. VXH15GP OR APPROVED EQUAL
B	150	SAME AS TYPE "A" EXCEPT BOX-FLUSH-MTD. WALL BRACKET CROUSE-HINDS NO. VXHB15GP OR APPR. EQUAL
C	100	INCANDESCENT, VAPORPROOF, BOX-FLUSH-MTD WALL BRACKET W/OPAL GLOBE & GUARD McPHILBEN NO. 43-54VT, MARCO NO. B201VTG OR APPROVED EQUAL M.H. = 7'-6"
D	3/200	FLOODLIGHT, VAPORPROOF, BOX-FLUSH-MTD AT 9" BELOW TOP OF DIVIDING WALL, WITH ONE 120V PAR 46 NARROW BEAM LAMP FOR LOWER HALF STAFF GAGE AND TWO PAR 38 LAMPS FOR UPPER HALF STAFF GAGE & STAIRS STONCO (1) NO. 4600E & (2) NO. 4400-L, REVERE (1) NO. 3510-AL WITH THREADED NIPPLE & (2) NO. 3160M OR APPROVED EQUAL

SCHEDULE - LTG. PANEL "LA"

CIR. NO.	BKR. AMPS	BKR. POLE	OUTLETS LTG.	OUTLETS RECEP.	OUTLETS MISC.	NAMEPLATE	WATTS A	WATTS B
1	20	1	4			LIGHTS - PUMPING STA.	600	
3	20	1		3		120V RECEP. "		600
2	20	2		1		240V RECEP.	250	
4								250
5	50	2				LTG. PANEL "LB" FEEDER	2200	
7								2300
6	20	1				S P A R E	500	
8	20	1				"		500
9						S P A C E		
11						"		
10						"		
12						"		
LOAD PER LEG							3550	3650
TOTAL LOAD : 7,200 W @ 120/240V-1φ-3W = 30 AMPS.								

PROVIDE 70A, 2P MAIN BREAKER.

SCHEDULE - LTG. PANEL "LB"

CIR. NO.	BKR. AMPS	BKR. POLE	OUTLETS LTG.	OUTLETS RECEP.	OUTLETS MISC.	NAMEPLATE	WATTS A	WATTS B
1	20	1	8			LIGHTS - ACCESS BLDG.	1100	
3				3		120V RECEP. - "		600
2				3		" RESERVOIR	600	
4			2			FLOODLIGHTS - RES. STAIRS		1200
5						S P A R E	500	
7						"		500
6						S P A C E		
8						"		
9						"		
11						"		
10						"		
12						"		
LOAD PER LEG							2200	2300
TOTAL LOAD : 4,500 W @ 120/240V-1φ-3W = 19 AMPS.								

PROVIDE 100A, 2P, N.A. MAIN BREAKER.

AS BUILT DRAWING

Earl D. Wagner R.E.E. NO. 1732

REV	DATE	BY	DESCRIPTION
	4/9/71	R.G.	AS BUILT

SCALE: AS NOTED

DESIGNED SCHNEIDER
DRAWN HUGHES
CHECKED SCHNEIDER

SUBMITTED Richard S. Leland — PROJECT ENGINEER — 13393 R.C.E. NO. — 9-26-67 DATE

RECOMMENDED R. Neumann — JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — 5677 R.C.E. NO. — 9-27-67 DATE

JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

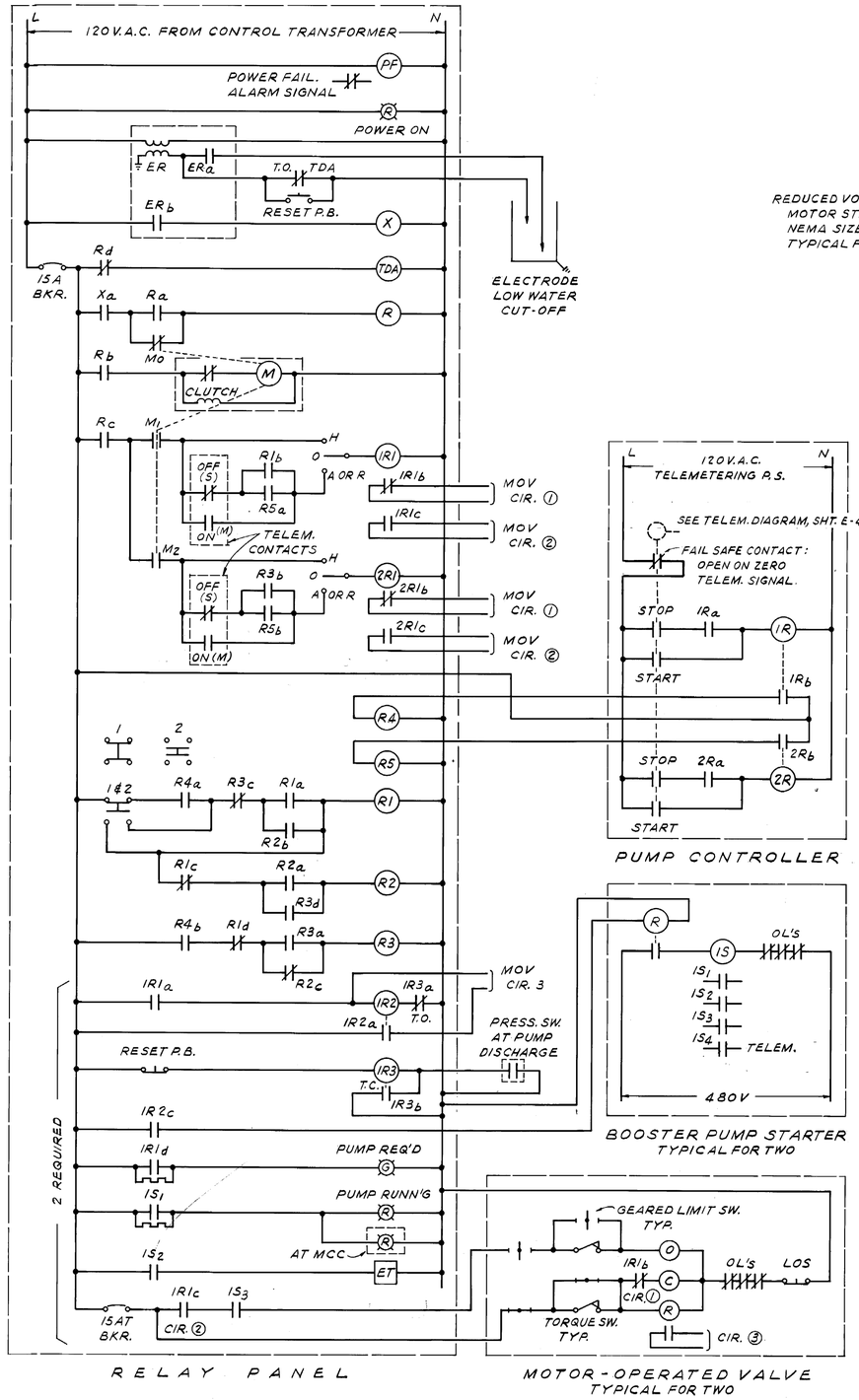
APPROVED Leslie A. Berry — MANAGER AND CHIEF ENGINEER — 9-27-67 DATE

APPROVED _____ DATE

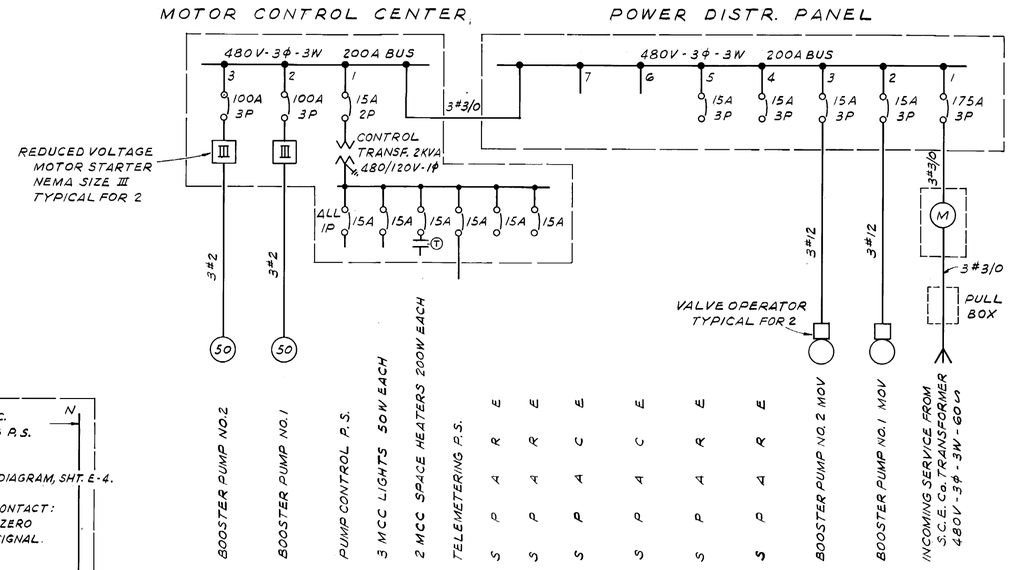
CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
ELECTRICAL PLANS AND DETAILS

SHEET E-2 OF 47 SHEETS

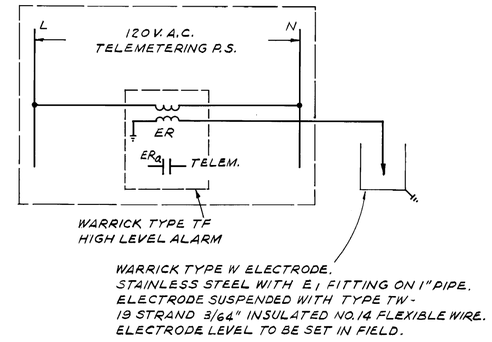
1024146



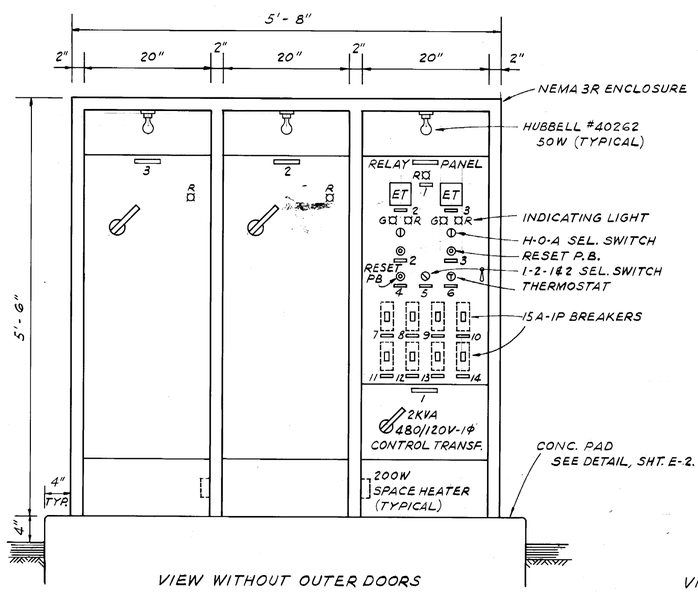
BOOSTER PUMP MOTOR & VALVE CONTROL SCHEM. DIAGRAM



SINGLE LINE DIAGRAM

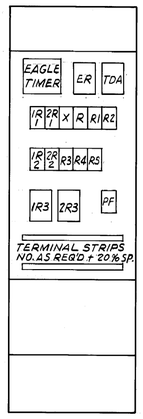


RES. HIGH UNDERDRAIN FLOW SCHEM. DIAGRAM



MOTOR CONTROL CENTER

SCALE: 1" = 1'-0"



RELAY PANEL

RELAY PANEL NAMEPLATE SCHEDULE	
1	POWER ON
2	BOOSTER PUMP NO. 2
3	" " NO. 1
4	LOW WATER CUT-OFF RESET
5	PUMP SELECTOR SWITCH
6	SPACE HEATER THERMOSTAT
7	BOOSTER PUMP CONTROL P.S.
8	MOV NO. 2 CONTROL POWER
9	" NO. 1 " "
10	MCC LIGHTS
11	MCC SPACE HEATERS
12	
13	
14	TELEMETERING P.S.

AS BUILT DRAWING

Earl B. Wagner R.E.E. NO. 1732

REV	DATE	BY	DESCRIPTION
1	4-71	K	AS BUILT

SCALE: AS NOTED

DESIGNED SCHNEIDER
DRAWN HUGHES
CHECKED WAGNER

SUBMITTED Richard S. Leland — PROJECT ENGINEER — R.C.E. NO. 13393 — DATE 9-26-67
RECOMMENDED — JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.C.E. NO. 5677 — DATE 9-27-67

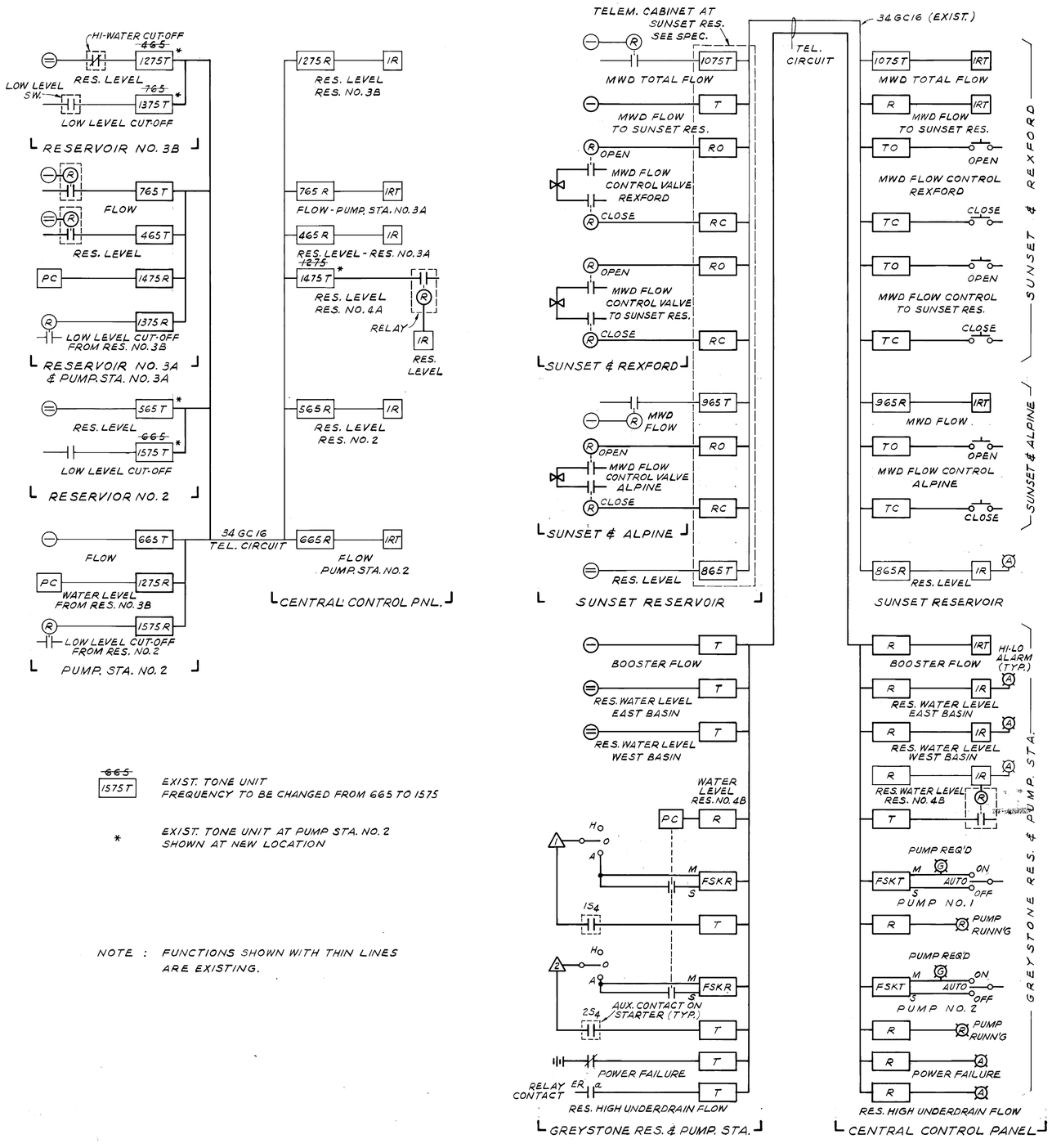
JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

APPROVED — MANAGER AND CHIEF ENGINEER — DATE 9-27-67
APPROVED — DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
ELECTRICAL
SINGLE LINE AND SCHEMATIC DIAGRAMS AND ELEVATION

SHEET E-3 OF 47 SHEETS

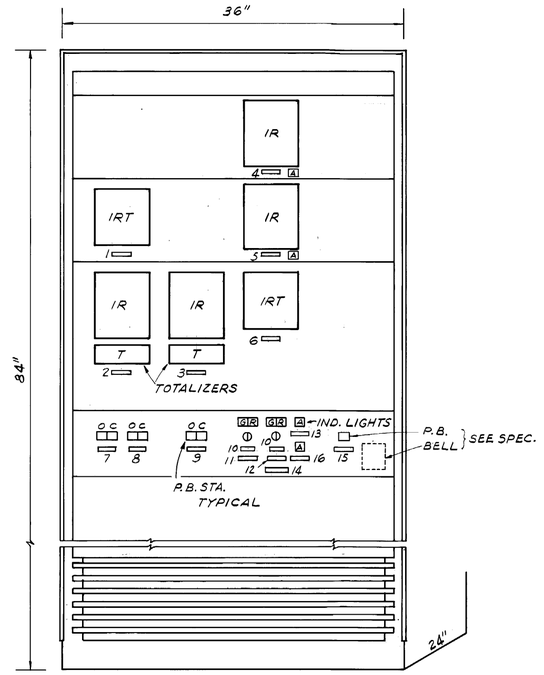
1024147



~~665~~ / 1575T — EXIST. TONE UNIT FREQUENCY TO BE CHANGED FROM 665 TO 1575

* — EXIST. TONE UNIT AT PUMP STA. NO. 2 SHOWN AT NEW LOCATION

NOTE : FUNCTIONS SHOWN WITH THIN LINES ARE EXISTING.



NEW SECTION

CENTRAL CONTROL PANEL

SCALE : 1½" = 1'-0"

SYMBOLS

T	TONE TRANSMITTER
R	TONE RECEIVER
	FLOW TRANSMITTER
	WATER LEVEL TRANSMITTER
IR	INDICATOR-RECORDER
IRT	INDICATOR-RECORDER-TOTALIZER
PC	PUMP CONTROLLER
R	RELAY
	BOOSTER PUMP NO. 1
G A	INDICATING LIGHT — A = AMBER, G = GREEN, R = RED
	NORMALLY OPEN CONTACT
	NORMALLY CLOSED CONTACT
	PUSHBUTTON STATION
	SELECTOR SWITCH
	SELECTOR SWITCH ON-AUTO-OFF
FSK	FREQUENCY SHIFT KEY
M	MARK
S	SPACE

NAMEPLATE SCHEDULE

NO.	INSCRIPTION
1	MWD FLOW TO SUNSET RES.
2	MWD TOTAL FLOW - REXFORD
3	MWD FLOW - ALPINE
4	EAST BASIN LEVEL GREYSTONE RES.
5	WEST BASIN LEVEL " "
6	BOOSTER FLOW GREYSTONE PUMPING STA.
7	MWD FLOW CONTROL VALVE TO SUNSET RES.
8	" " " " - REXFORD
9	" " " " - ALPINE
10	OVERRIDE
11	PUMP NO. 1
12	PUMP NO. 2
13	POWER FAILURE
14	GREYSTONE PUMPING STA.
15	ALARM SILENCER
16	RESERVOIR HIGH UNDERDRAIN FLOW

TELEMETERING SCHEMATIC FUNCTIONAL DIAGRAMS

AS BUILT DRAWING

Earl B. Wagner R.E.E. NO. 1732

REV	DATE	BY	DESCRIPTION
1	4-71		AS BUILT

SCALE: AS NOTED

DESIGNED WAGNER
DRAWN HUGHES
CHECKED WAGNER

SUBMITTED Richard S. Leland — PROJECT ENGINEER — 13393 R.C.E. NO. — 9-26-67 DATE

RECOMMENDED — JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — 5677 R.C.E. NO. — 9-27-67 DATE

JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

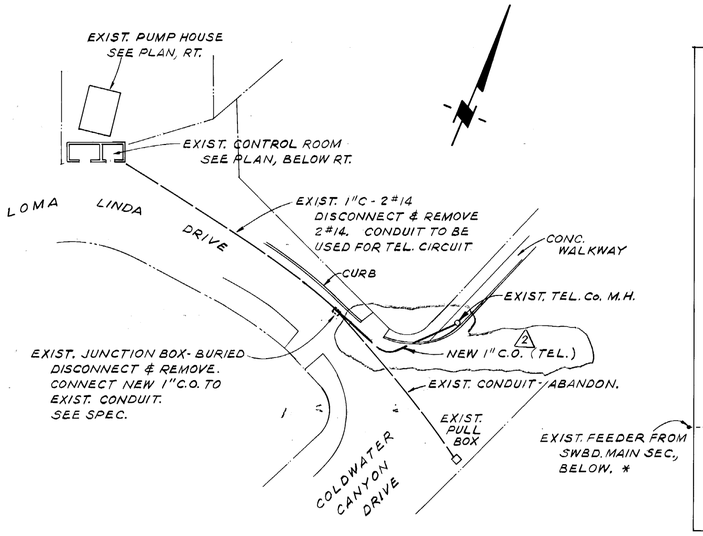
APPROVED — MANAGER AND CHIEF ENGINEER — 9-27-67 DATE

APPROVED — DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
ELECTRICAL TELEMETERING

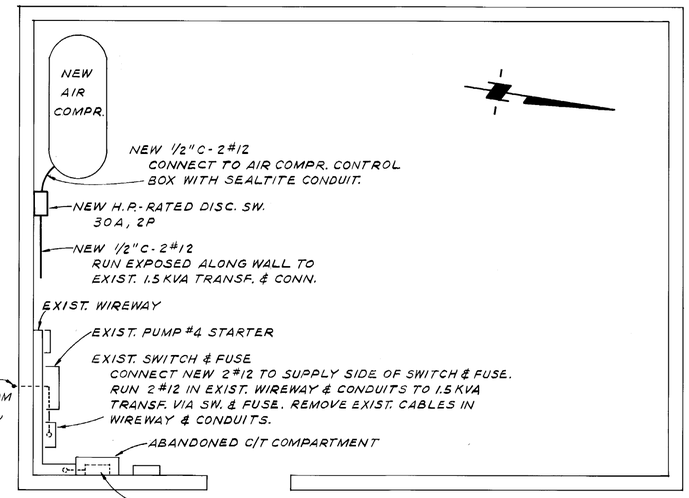
SHEET E-4 OF 47 SHEETS

10241.48



PART. PLOT PLAN

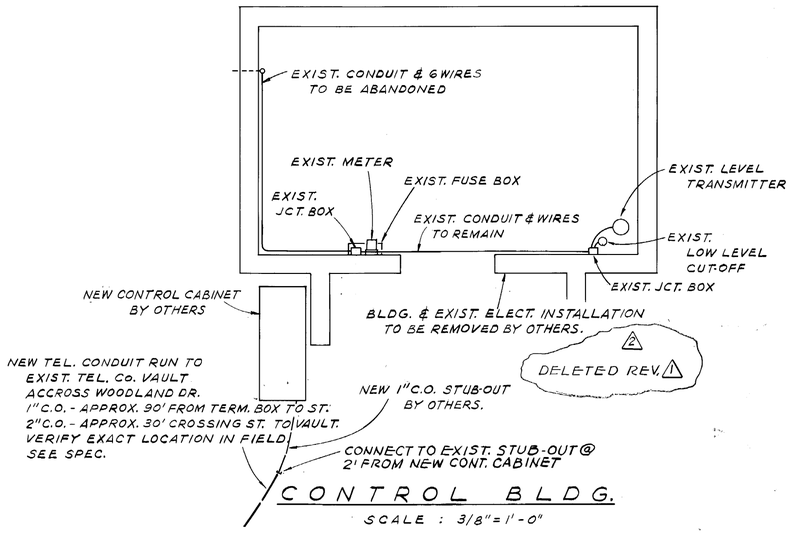
SCALE : 1" = 40'



* PROVIDE WARNING ON BREAKER FOR THE FEEDER AS FOLLOWS : "DO NOT OPEN BREAKER FOR VALVE AIR COMPRESSOR." (2)

EXIST. PUMP HOUSE

SCALE : 3/8" = 1'-0"

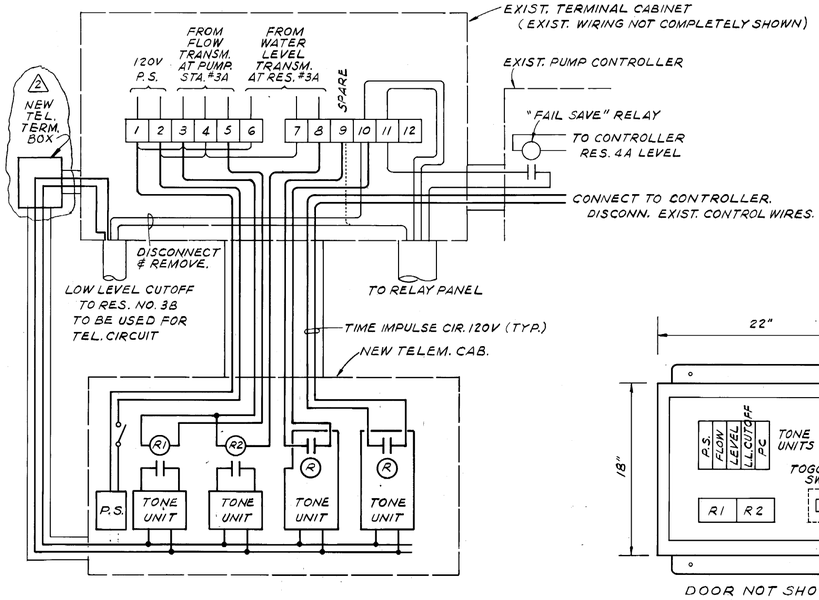


CONTROL BLDG.

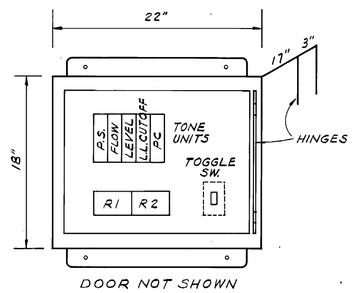
SCALE : 3/8" = 1'-0"

EXIST. RESERVOIR NO. 2

1098 BEVERLY DRIVE, B.H.



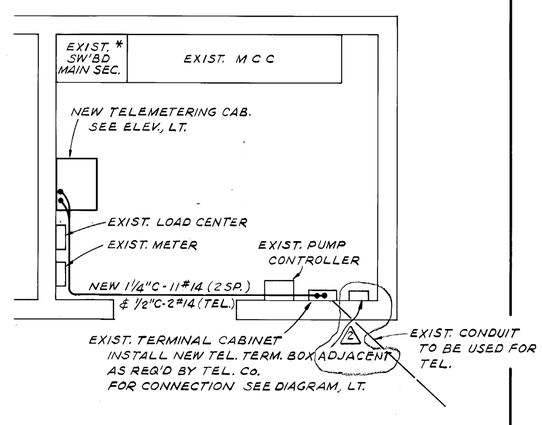
TELEMETERING CONNECTION DIAGRAM



DOOR NOT SHOWN

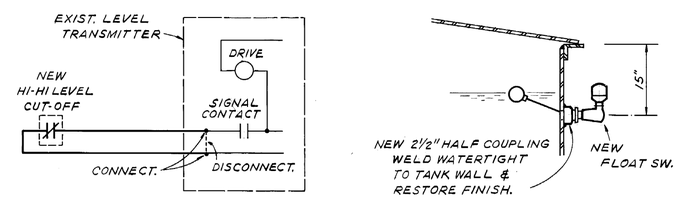
NEW TELEMETERING CAB.

SCALE : 1 1/2" = 1'-0"



CONTROL ROOM

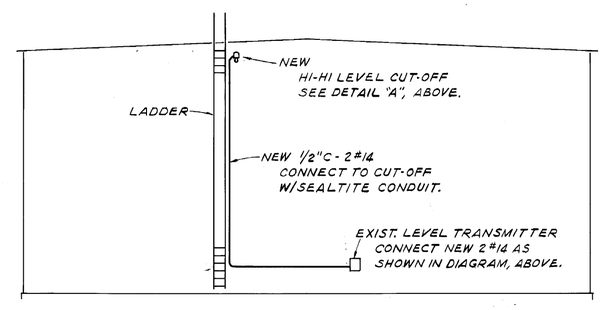
SCALE : 3/8" = 1'-0"



DIAGRAM

DETAIL "A"

NO SCALE



ELEVATION

NO SCALE

EXIST. RESERVOIR NO. 3A & PUMPING STA. NO. 3A

Earl P. Wagner R.E.E. NO. 1732

EXIST. RESERVOIR NO. 4B

1180 LOMA VISTA DRIVE, B.H.

AS BUILT DRAWING

REV	DATE	BY	DESCRIPTION
1	10-28-68	J.H.	DELETE TELEM CAB. & CONN AT RES. #2
2	4/9/71	R.G.	AS BUILT

SCALE: AS NOTED

DESIGNED SCHNEIDER
DRAWN HUGHES
CHECKED SCHNEIDER

SUBMITTED Richard J. Leland — PROJECT ENGINEER — R.C.E. NO. 13393 — DATE 9-26-67

RECOMMENDED — JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.C.E. NO. 5677 — DATE 9-27-67

JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

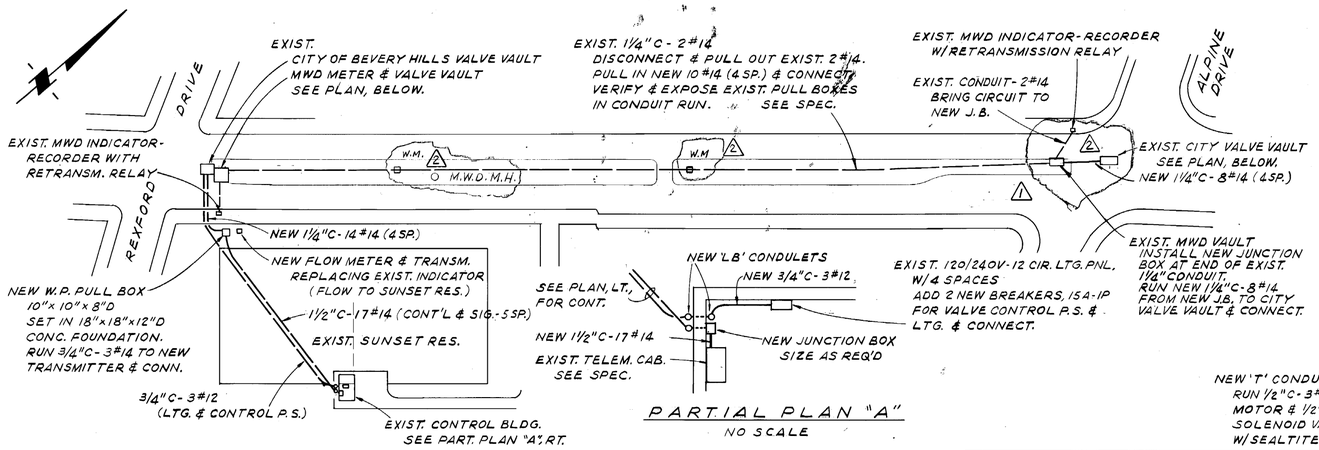
APPROVED — MANAGER AND CHIEF ENGINEER — DATE 9-27-67

APPROVED — DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT
GREYSTONE RESERVOIR
ELECTRICAL
RESERVOIRS NO. 2, NO. 3A AND NO. 4B AND PUMPING STATION NO. 3A

SHEET E-5 OF 47 SHEETS

1024149

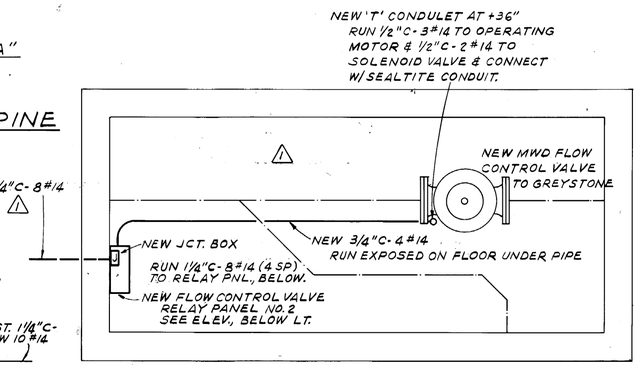


PARTIAL PLAN "A"

NO SCALE

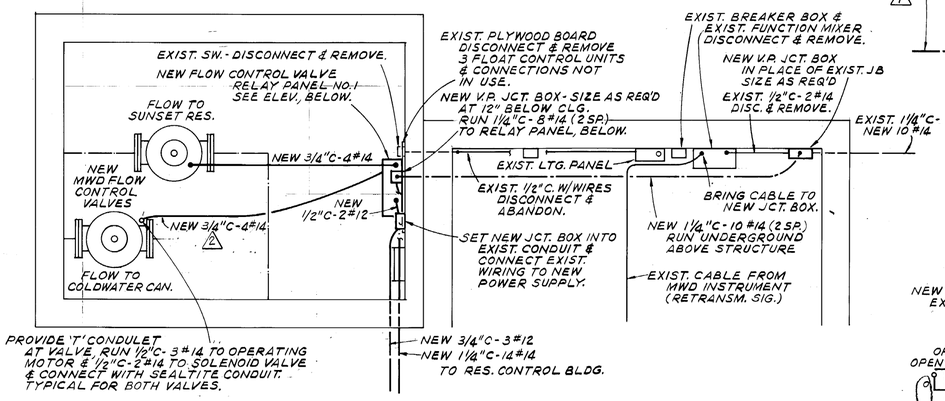
PLAN - SUNSET BLVD. FROM REXFORD TO ALPINE

SCALE : 1" = 80'



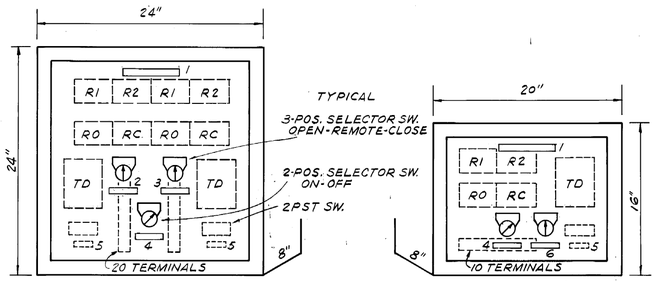
EXIST. CITY VALVE VAULT AT ALPINE

SCALE : 3/8" = 1'-0"



EXIST. CITY VALVE VAULT EXIST. MWD METER & VALVE VAULT

SCALE : 3/8" = 1'-0"

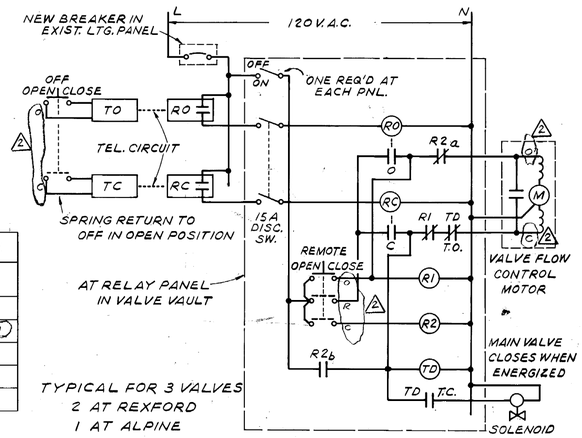


AT REXFORD AT ALPINE

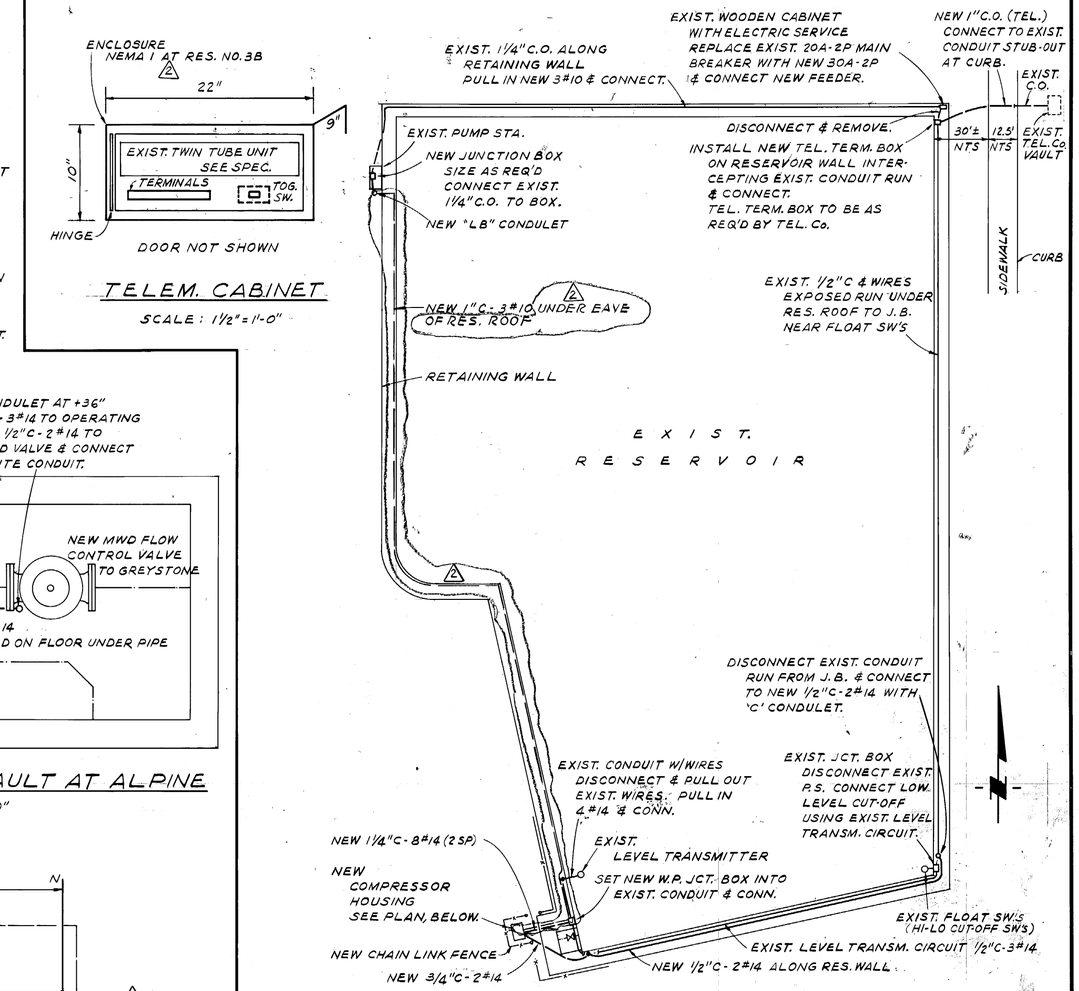
FLOW CONTROL VALVE RELAY PANELS

SCALE : 1½" = 1'-0"

NAMEPLATE SCHEDULE	
1	FLOW CONTROL VALVE RELAY PANEL
2	MWD FLOW TO SUNSET RES.
3	" " COLDWATER CANYON
4	POWER SUPPLY
5	SIGNAL DISCONNECT
6	MWD FLOW - ALPINE



FLOW CONTROL VALVE SCHEMATIC DIAGRAM



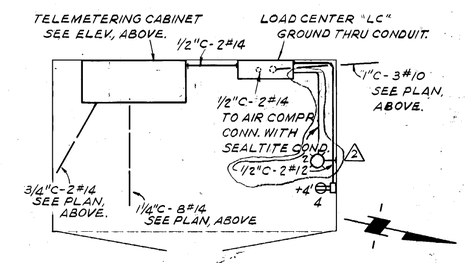
TELEM. CABINET

SCALE : 1½" = 1'-0"

R E S E R V O I R

S C A L E : 1" = 20'

SCHEDULE - LOAD CENTER "LC"						
CIR. NO.	BKR. AMPS	BKR. POLE	OUTLETS	NAMEPLATE	WATTS A	WATTS B
1	15	2	1	AIR COMPR.	570	
3						570
2	15	1	1	LIGHT	100	
4	20	1	1	RECEP.		200
5	15	1		TELEM. P.S.	180	
6				S P A C E		
7	30	2		MAIN BREAKER		
8						
LOAD PER LEG					850	770
TOTAL LOAD : 1620W @ 120/240V - 1φ - 3W = 7A						



NEW COMPRESSOR HOUSING

SCALE : 3/4" = 1'-0"

EXIST. MWD CONNECTIONS ON SUNSET AT REXFORD AND ALPINE

Earl H. Wagner R.E.E. NO. 1732

EXIST. RESERVOIR NO. 3B

1201 COLDWATER CANYON DRIVE, B.H.

AS BUILT DRAWING

REV	DATE	BY	DESCRIPTION
1	10-29-68	J.H.	ADD. MWD VAULT AT SUNSET & ALPINE
2	4/9/71	R.G.	AS BUILT

SCALE: AS NOTED

DESIGNED SCHNEIDER
DRAWN HUGHES
CHECKED SCHNEIDER

SUBMITTED Richard S. Leland, PROJECT ENGINEER, R.C.E. NO. 13393, DATE 9-26-67

RECOMMENDED R. Kermis, JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC., R.C.E. NO. 5677, DATE 9-27-67

JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.
535 E. WALNUT STREET • PASADENA, CALIFORNIA
681-5619 793-7128
LAFAYETTE COSTA MESA SAN DIEGO LAS VEGAS

APPROVED Charles O. Berry, MANAGER AND CHIEF ENGINEER, DATE 9-27-67

APPROVED _____ DATE

CITY OF BEVERLY HILLS WATER DEPARTMENT

GREYSTONE RESERVOIR

ELECTRICAL
MWD CONNECTIONS AND RESERVOIR NO. 3B

SHEET E-6 OF 47 SHEETS

10241.50