

webster
baldwin
day
rohrman

architects
engineers

bangor, maine

1616

CUMBERLAND
VILLAGE

35 FAMILY
APARTMENTS

FOR
CUMBERLAND,
MAINE

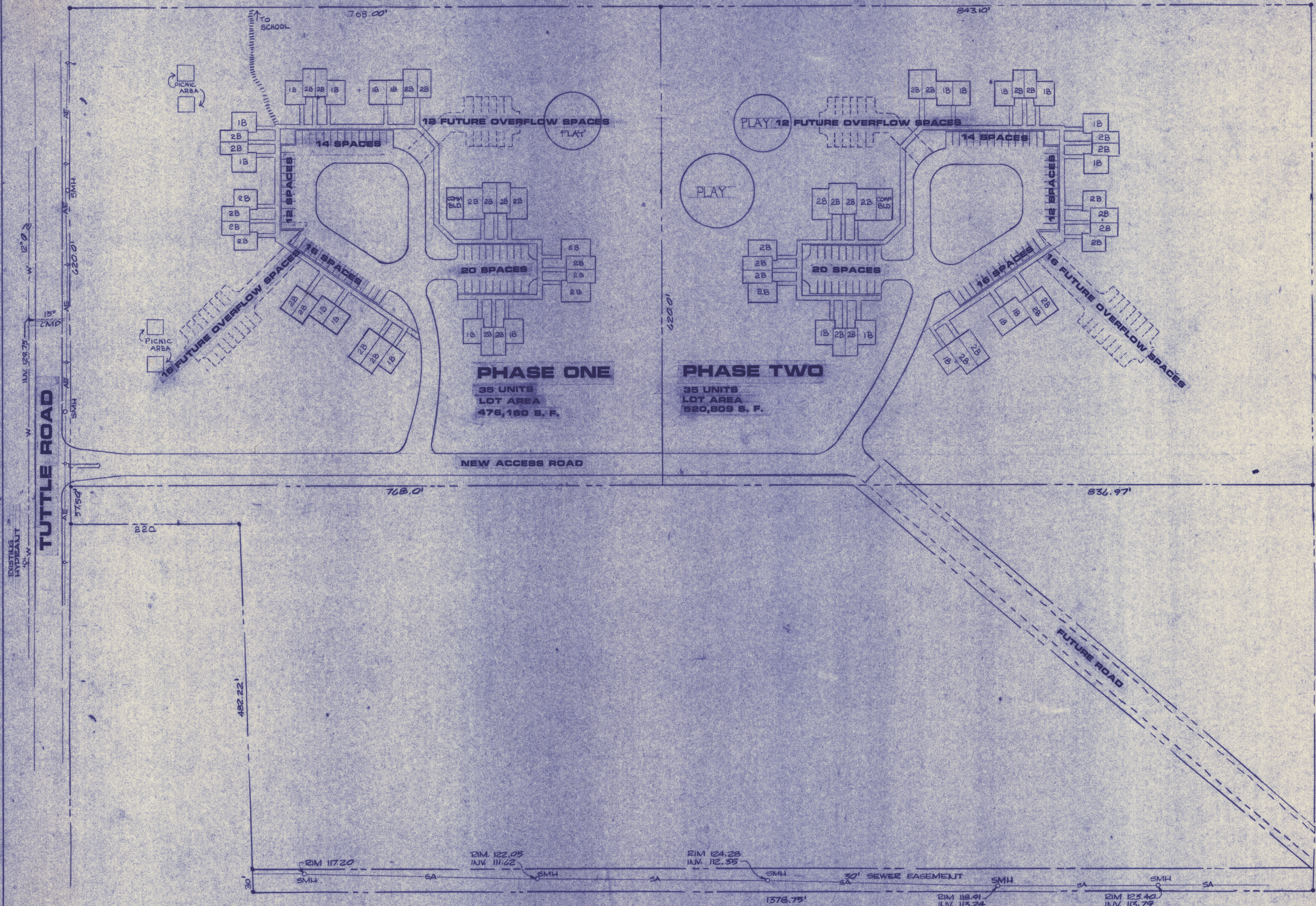
DEVELOPER

CUMBERLAND
VILLAGE
HOUSING
ASSOC.

NO.	REVISION	DATE
1	LOT AREA 3-22	

DESIGNER	
ENGINEER	
DRAWN BY	
CHECKED BY	
DATE:	

SITE
MASTER
PLAN



SITE MASTER PLAN

SCALE: 1" = 60' - 0"

1616

CUMBERLAND
VILLAGE

35 FAMILY
APARTMENTS

FOR
CUMBERLAND,
MAINE

DEVELOPER

CUMBERLAND
VILLAGE
HOUSING
ASSOC.

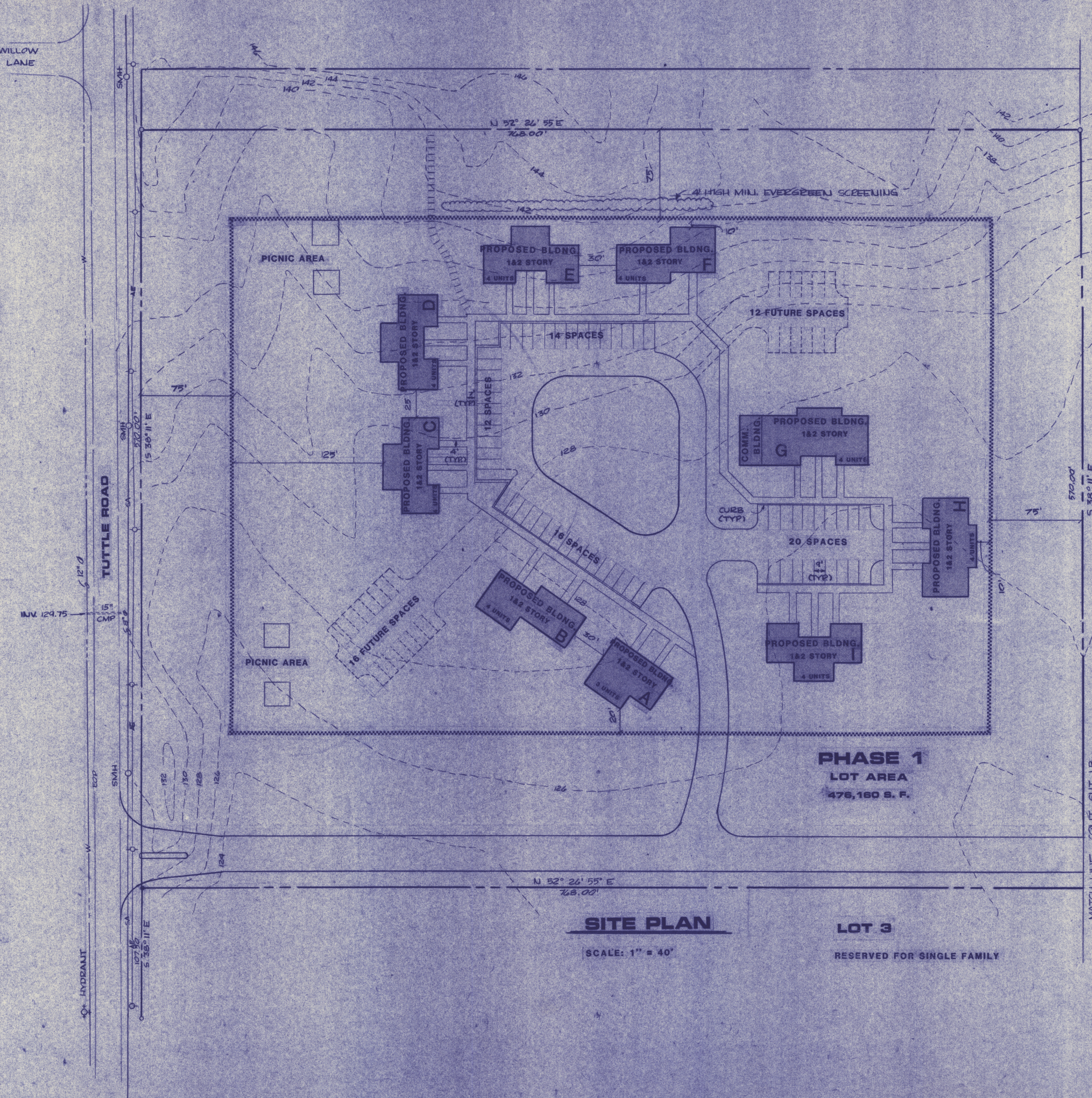
NO. REVISION DATE

1 LOT AREA 3-22

DESIGNER	ATB
ENGINEER	JMR
DRAWN BY	TAP
CHECKED BY	
DATE:	FEB 15, 1984

PLAT PLAN

1A



SITE PLAN

SCALE: 1" = 40'

LOT 3

RESERVED FOR SINGLE FAMILY

LEGEND

- W- EXISTING WATER LINE
- SA- EXISTING SAN. SEWER
- AE- ARIAL ELECTRICAL
- EOP- EDGE OF PAVEMENT
- 126- EXISTING CONTOUR
- o ROD SET
- o UTILITY POLE
- SMH O EXISTING SAN. MANHOLE
- o EXISTING FIRE HYDRANT
- 75' SETBACK LINE



webster
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bangor, maine



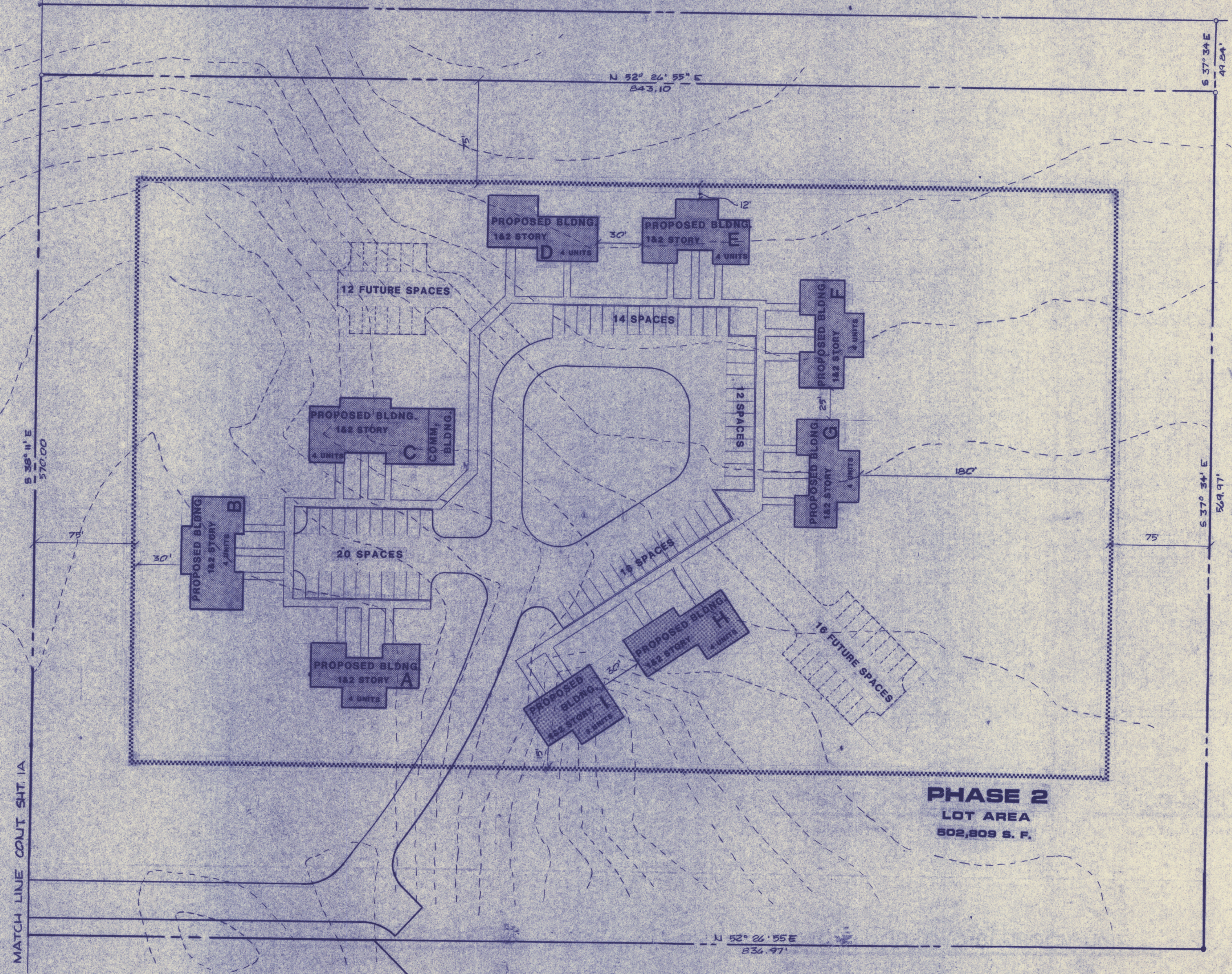
1616		
CUMBERLAND VILLAGE		
35 FAMILY APARTMENTS		
FOR CUMBERLAND, MAINE		
DEVELOPER		
CUMBERLAND VILLAGE HOUSING ASSOC.		

NO.	REVISION	DATE
1	LOT AREA	3-22

DESIGNER	ATB
ENGINEER	JMR
DRAWN BY	TAP
CHECKED BY	
DATE:	FEB. 15, 1984

PLAT PLAN

1B

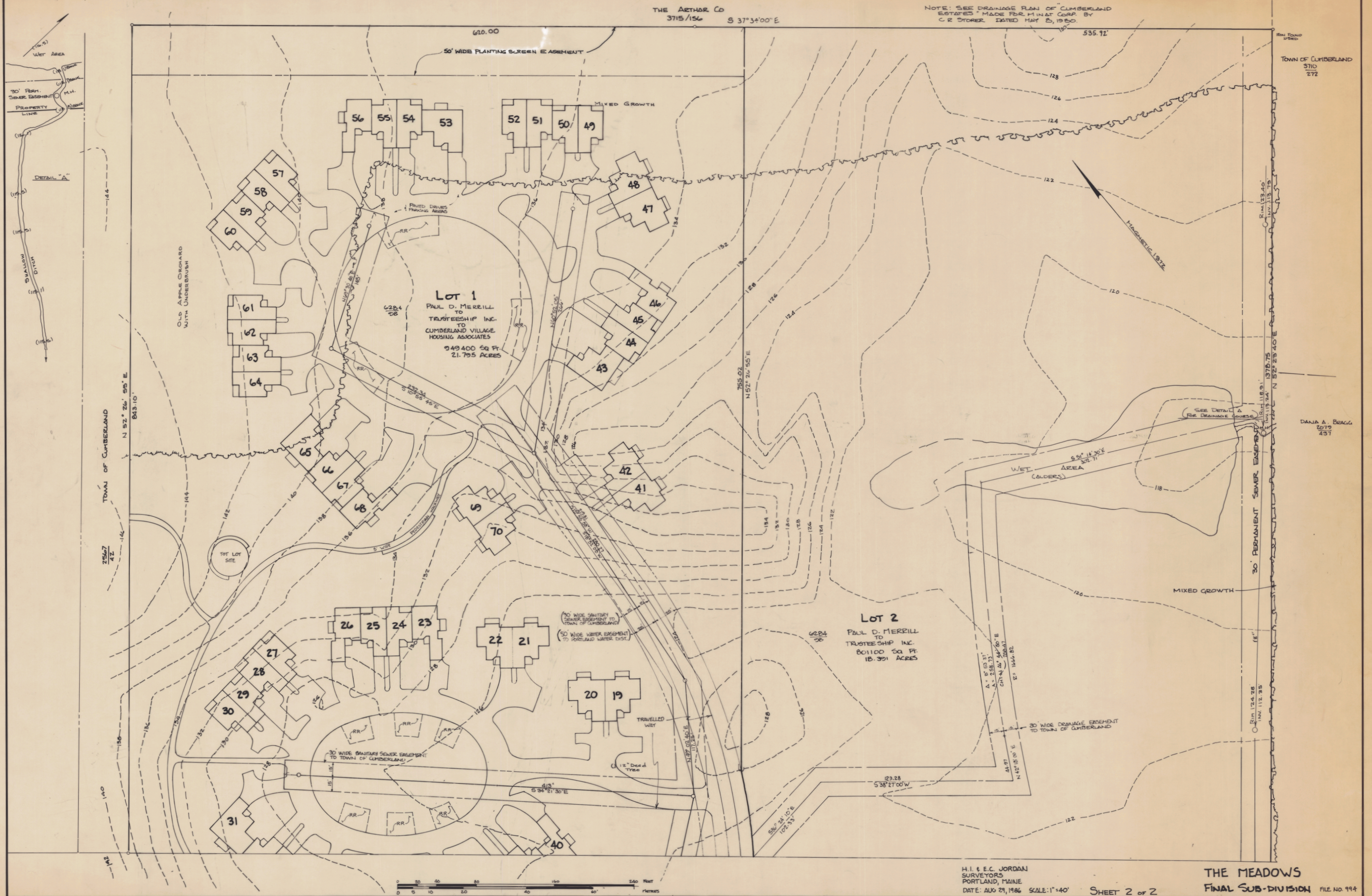


SITE PLAN

LOT 3

RESERVED FOR SINGLE FAMILY

SCALE: 1" = 40'



THE ARTHUR CO
3715/156 S 37°34'00"E

NOTE: SEE DRAINAGE PLAN OF CUMBERLAND
ESTATES MADE FOR MINAT CORP. BY
C. R. STORER DATED MAY 25, 1950.

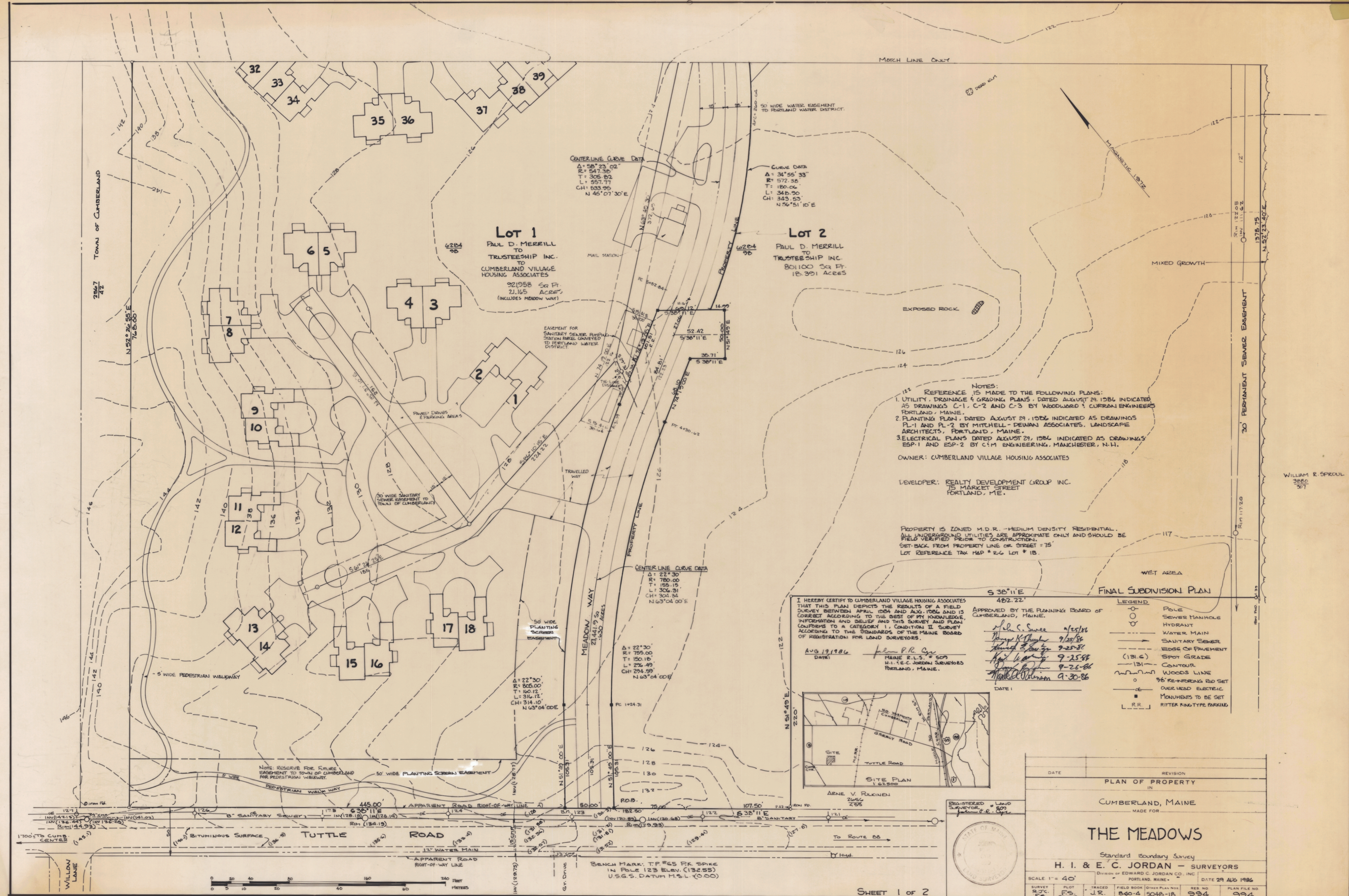
TOWN OF CUMBERLAND
3710
272

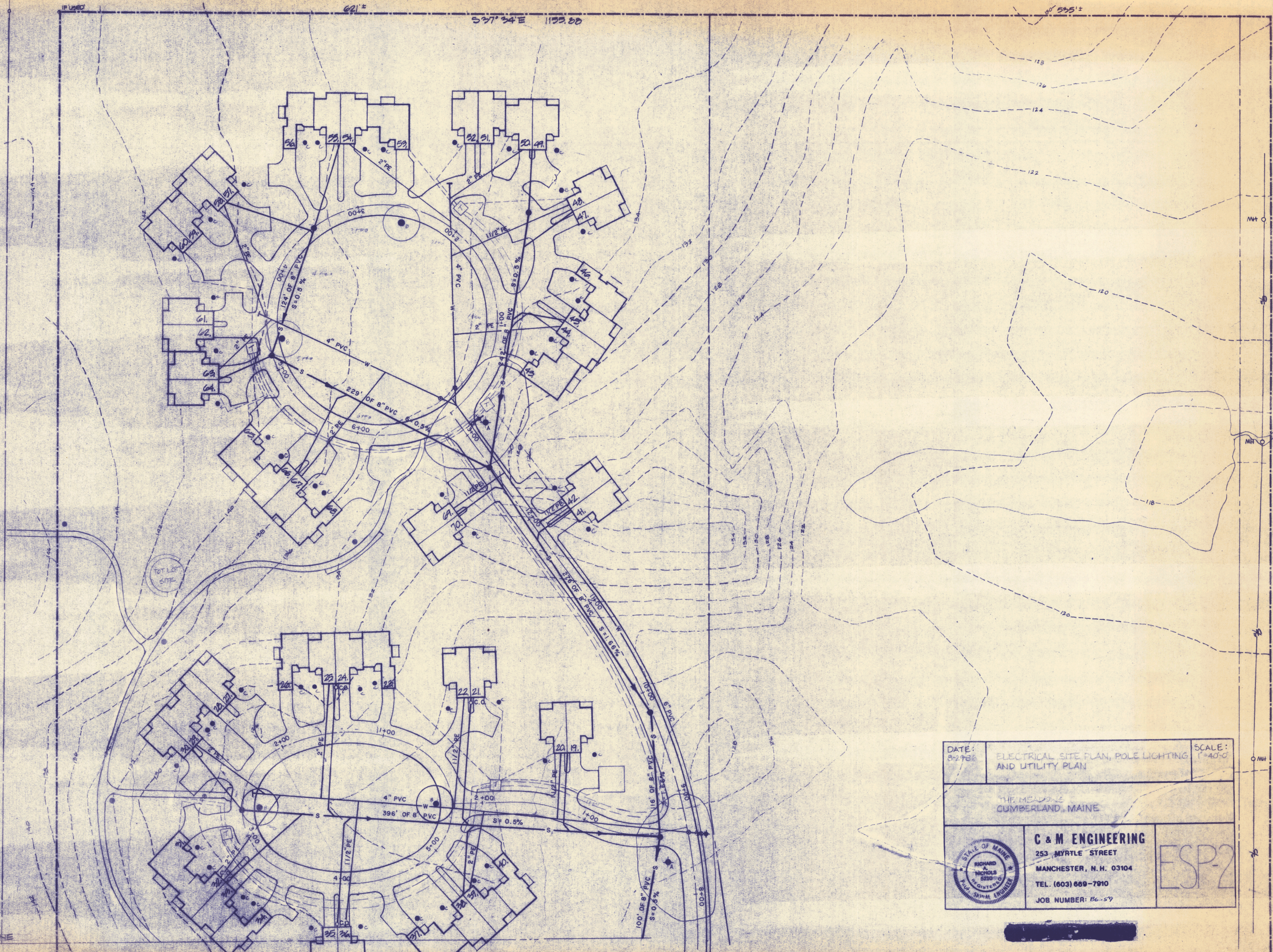
DANIEL A. BRAGG
2079
437

H.I. & E.C. JORDAN
SURVEYORS
PORTLAND, MAINE
DATE: AUG 29, 1986

SCALE: 1"=40'

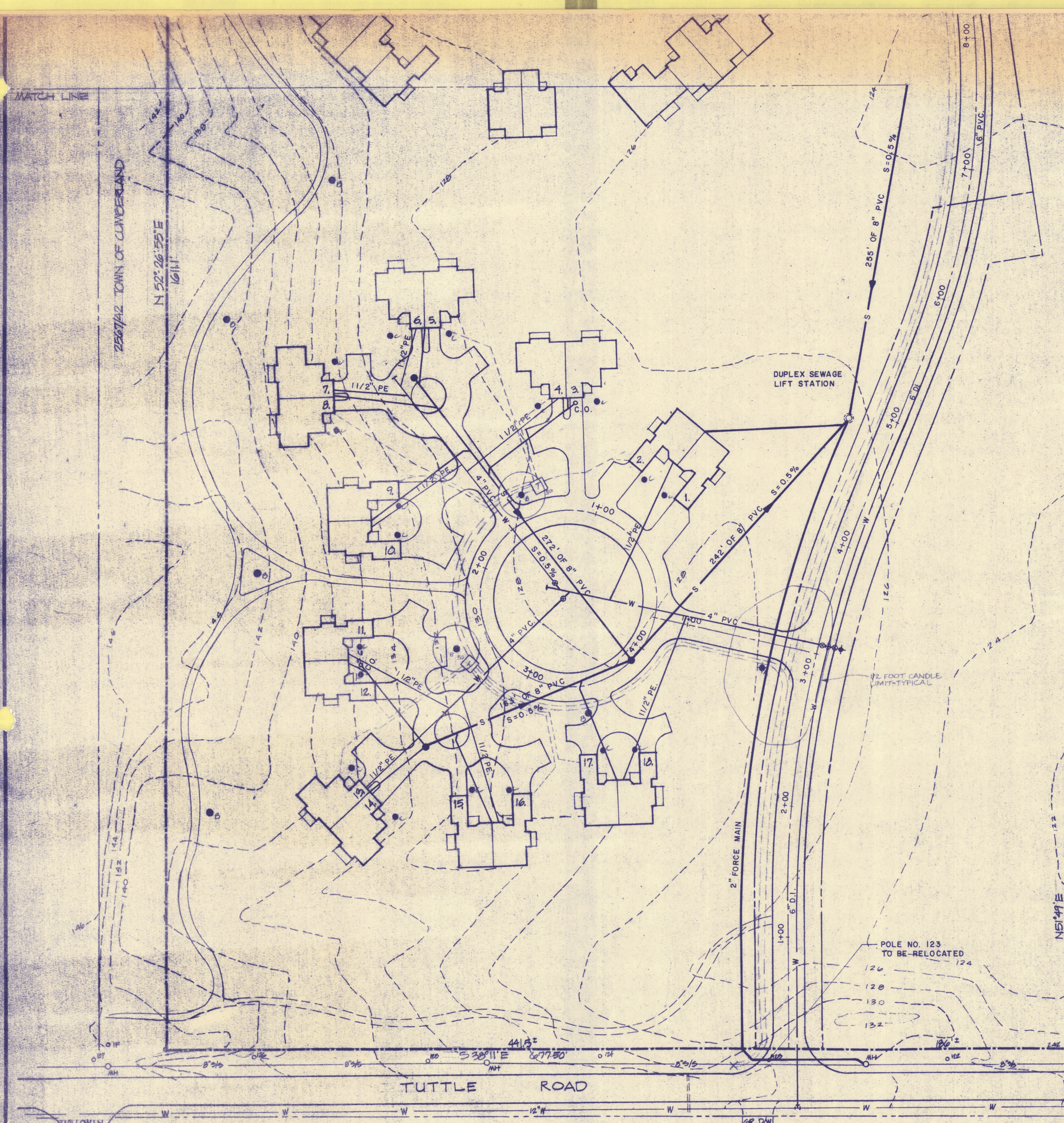
THE MEADOWS
FINAL SUB-DIVISION
SHEET 2 OF 2
FILE NO. 994





DATE: 8-2-86	ELECTRICAL SITE PLAN, POLE LIGHTING AND UTILITY PLAN	SCALE: 1"=40'-0"
THE MEADOWS CUMBERLAND, MAINE		
	C & M ENGINEERING 253 MYRTLE STREET MANCHESTER, N. H. 03104 TEL. (603) 669-7010 JOB NUMBER: 86-59	ESP-2

2019/487 N/D BRAGE



LEGEND

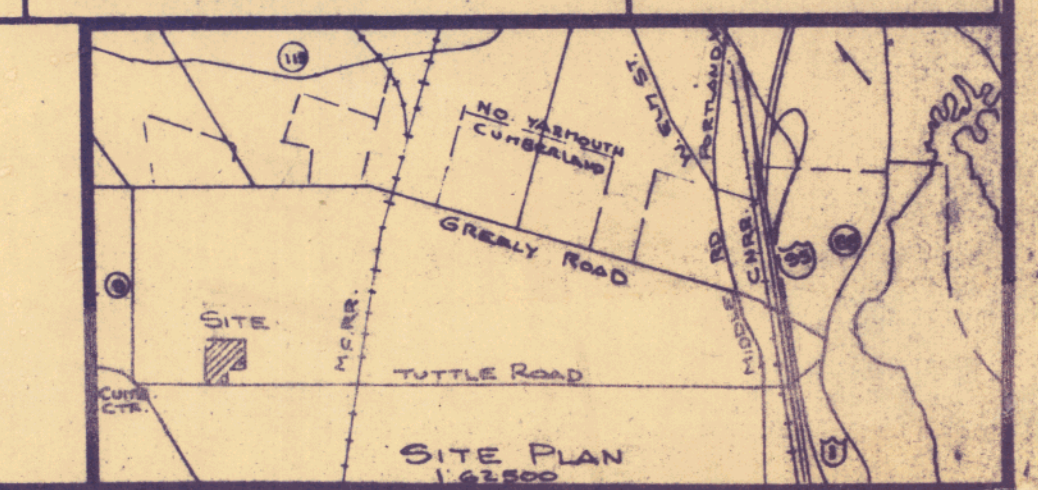
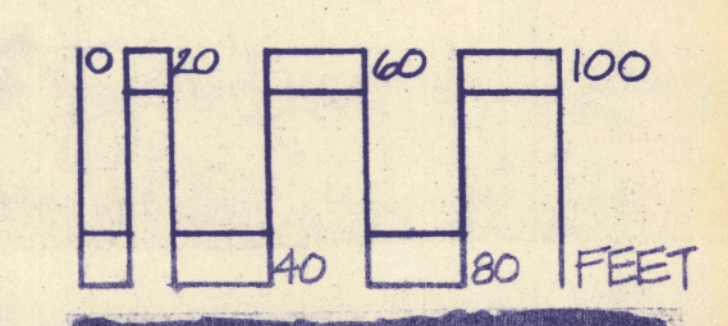
- EXISTING CONTOURS
- PROPOSED CONTOURS
- PROPERTY LINE
- SETBACK LINE
- SANITARY SEWER
- STORM SEWER
- WATER LINE
- DRAINAGE COURSE
- EX. STREET LINE
- CURB LINE
- WALKING PATH
- CULVERT
- IRON PIN FOUND
- IRON PIN TO BE SET
- GRANITE MON. FOUND.
- GRANITE TO BE SET
- EX. MANHOLE
- EX. UTILITY POLE

- FIRE HYDRANT
- MANHOLE
- CATCH BASIN
- PUMP STATION
- STREET LIGHTS
- RIP-RAP

NOTES

- PRIMARY
- SECONDARY
- TRANSFORMER
- PRIMARY TO BE 'LOOP FEED'

DATE: 5-29-86	ELECTRICAL SITE PLAN, LEGEND AND NOTES, UTILITY PLAN	SCALE: 1"=40'-0"
THE MEADOWS / CUMBERLAND, MAINE		
C & M ENGINEERING 253 MYRTLE STREET MANCHESTER, N.H. 03104 TEL. (603) 669-7910 JOB NUMBER: 86-59		ESP-1



UTILITY PLAN

THE MEADOWS

CUMBERLAND VILLAGE HOUSING
ASSOCIATES
Owner/Developer

MITCHELL-DEWAN ASSOCIATES
Landscape Architects

ARCHITECTS FOUR P. A.
Architects

WOODARD & CURRAN, INC.
Engineers

RECEIVING SEP 08 1986

RECEIVING SEP 05 1986

PLANTINGS

TREES SYM #	SCIENTIFIC NAME	COMMON NAME	SIZE
AF 3	Abies fraseri	Fraser Fir	6-7'
AGIN 3	Acer ginnala	Amur Maple	2"
ARUB 58	Acer rubrum	Red Maple	2.5-3"
AMC 14	Amelanchier canadensis	Shadblow (Clump)	1.5-2"
BA 3	Betula allegheniensis	Yellow Birch	10-12"
BP 3	Betula papyrifera	Paper Birch (Clump)	2-2.5"
CAR 3	Carpinus caroliniana	American Hornbeam	10-12"
CRT 6	Crataegus toba	Toba Hawthorne	2"
LD 9	Larix decidua	European Larch	6-8"
MDOL 36	Malus 'Dolgo'	Dolgo Crab	2-2.5"
MGH 3	Malus 'Gold Hornet'	Gold Hornet Crab	2-2.5"
MIM 4	Malus 'Indian Magic'	Indian Magic Crab	2-2.5"
MTS 16	Malus 'Tschonoski'	Tschonoski Crab	2-2.5"
MFLO 21	Malus floribunda	Japanese Crab	2-2.5"
PA 45	Picea abies	Norway Spruce	4-5"
PG 3	Picea glauca	White Spruce	5-6"
PFG 3	Picea pungens glauca	Colorado Blue Spruce	6-7"
PNA 15	Pinus nigra	Austrian Pine	5-6"
PR 27	Pinus resinosa	Red Pine	6-8"
PS 53	Pinus strobus	Eastern White Pine	5-8"
PRU 5	Prunus sargentii	Sargent Cherry	2-2.5"
QP 32	Quercus palustris	Pin Oak	2-2.5"
SA 20	Salix niobe	Golden Weeping Willow	2-2.5"
SOR 3	Sorbus aucuparia	European Mountain Ash	2-2.5"
TI 18	Tilia cordata	Littleleaf Linden	2-2.5"
ARM 21	Acer 'Armstrong'	Armstrong Red Maple	2-2.5"
FL 9	Fraxinus lanceolata	Marshall's Seedless Ash	2-2.5"

SHRUBS SYM #	SCIENTIFIC NAME	COMMON NAME	SIZE
ARO 21	Aronia brilliantissima	Chokeberry	2-3'
CHL 21	Chaenomeles lagenaria	Japanese Floweringquince	2-3'
CPFA 21	Chamaecyparis p. filifera aurea	Gold Thread Falsecypress	2 gal.
CAS 46	Cornus alba siberica	Siberian Dogwood	4-5'
CSF 35	Cornus sericea flaviramea	Yellowtwig Dogwood	3-4'
ELU 24	Eleagnus umbellata	Autumn Olive	5-6"
ENK 14	Enkianthus campanulatus	Redvein Enkianthus	2-3'
EUS 14	Euonymus 'sarcocoe'	Sarcocoe Euonymus	2-2.5"
EUD 8	Euonymus alatus	Winged Euonymus	2.5-3"
EAC 21	Euonymus alatus compactus	Dwarf Winged Euonymus	2-2.5"
FLG 14	Forsythia 'Linwood Gold'	Linwood Gold Forsythia	3-4'
FOR 37	Forsythia arnoldii	Arnold Forsythia	15-18"
IV 21	Ilex verticillata	Common Winterberry	3-4'
JSG 46	Juniperus 'Sea Green'	Sea Green Juniper	18-24"
JHG 21	Juniperus hetzi glauca	Hetz Juniper	18-24"
JUH 19	Juniperus hughes	Hughes Juniper	18-24"
JUS 35	Juniperus sargentii	Sargent Juniper	18-24"
KA 21	Kolkwitzia amabilis	Beautybush	3-4'
LCA 21	Leucothoe catesbaei	Drooping Leucothoe	18-24"
MAG 21	Magnolia stellata	Star Magnolia	5-6"
MYR 21	Myrica pennsylvanica	Northern Bayberry	2.5-3"
PHV 50	Philadelphus virginialis	Mockorange	2-2.5"
PMM 14	Pinus mugho mugho	Dwarf Mugho Pine	2-2.5"
PGD 15	Potentilla 'Golden Drop'	Golden Drop Potentilla	2-2.5"
POJ 21	Potentilla 'Jackmanii'	Jackman Potentilla	2-2.5"
RCAR 7	Rhododendron carolinianum	Carolina Rhododendron	18-24"
RCA 7	Rhododendron cat. album	White Catawba Rhododendron	2-2.5"
RC 7	Rhododendron catawbiense	Catawba Rhododendron	2-2.5"
PJM 6	Rhododendron 'PJM'	PJM Rhododendron	18-24"
ROS 14	Rosa rugosa	Rugose Rose	3-4'
SPW 18	Salix discolor	Pussy Willow	4-5"
SAW 21	Spirea 'Anthony Waterer'	Anthony Waterer Spirea	18-24"
TG 14	Taxus 'Greenwave'	Greenwave Yew	2-2.5"
TCN 14	Taxus cuspidata nana	Dwarf Japanese Yew	18-24"
VFO 21	Viburnum tomentosum	Doublefile Viburnum	3-4'
VTR 7	Viburnum trilobum	American Cranberry	3-4'

PERENNIALS SYM #	SCIENTIFIC NAME	COMMON NAME	SIZE
ART 100	Artemisia 'Silver Mound'	Silvermound Artemisia	2 yr
DIC 100	Dicentra spectabilis	Bleeding Heart	2 yr
EUP 100	Euphorbia polychroma	Spurge	2 yr
HEM 150	Hemerocallis	Day Lily	2 yr
RUD 100	Rudbeckia	Coneflower	2 yr
NAP 700	Narcissus	Narcissus Mix	2 yr

PLANTING PLAN

PL 2 THE MEADOWS

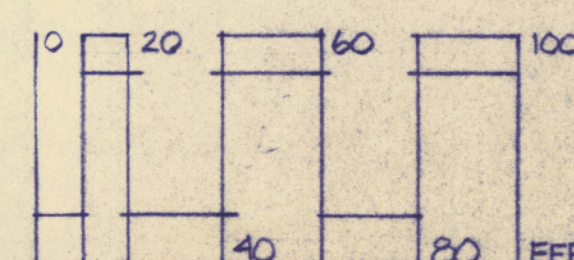
CUMBERLAND VILLAGE
HOUSING ASSOCIATES
Owner/Developer

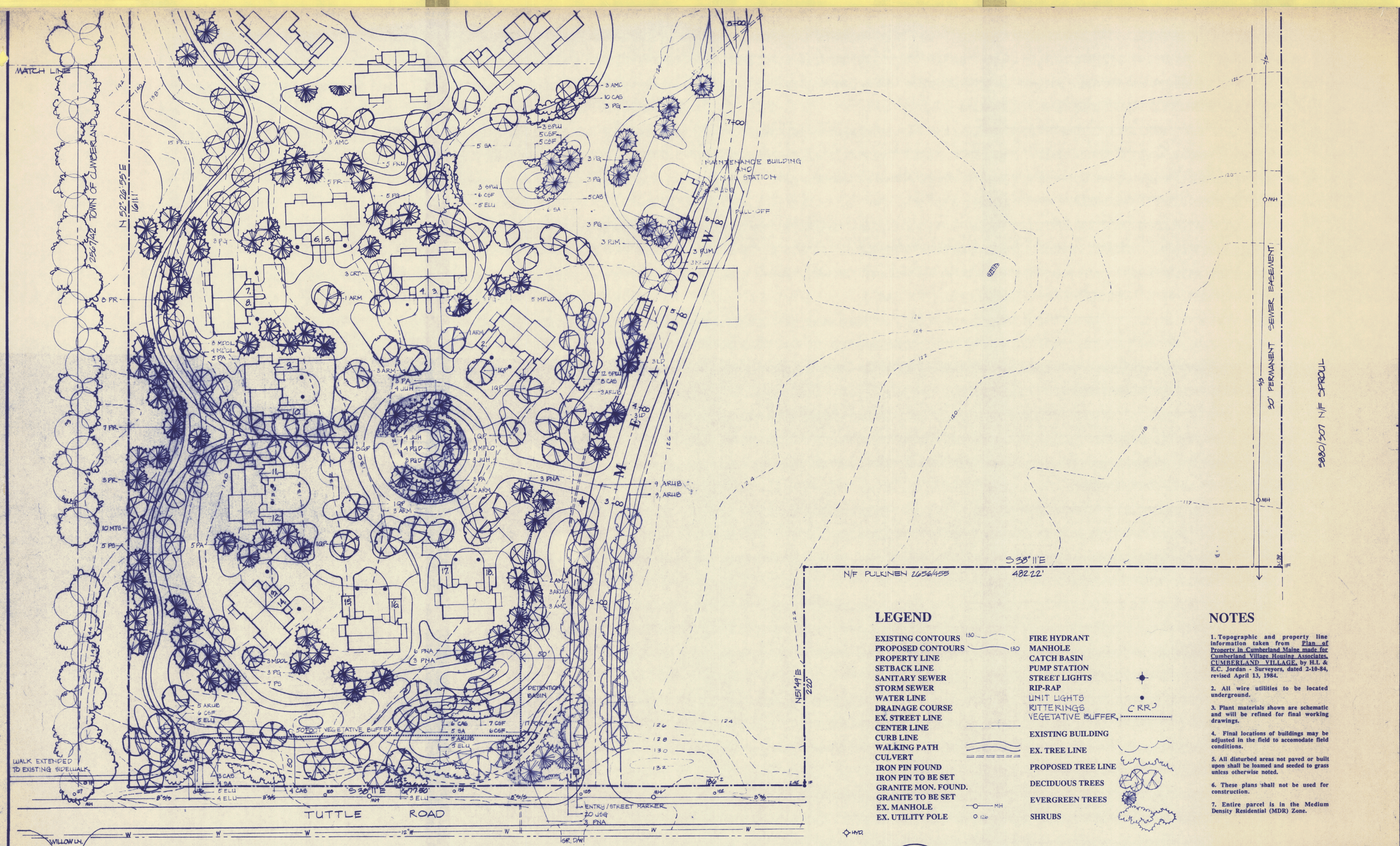
MITCHELL-DEWAN ASSOCIATES
Landscape Architects

ARCHITECTS FOUR P. A.
Architects

WOODARD & CURRAN, INC.
Engineers

AUGUST 29, 1986





PLANTING PLAN

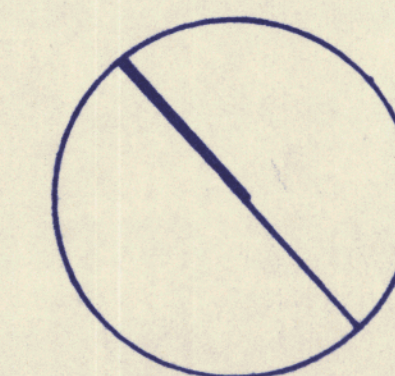
PL·1 THE MEADOWS

**CUMBERLAND VILLAGE
HOUSING ASSOCIATES
Owner/Developer**

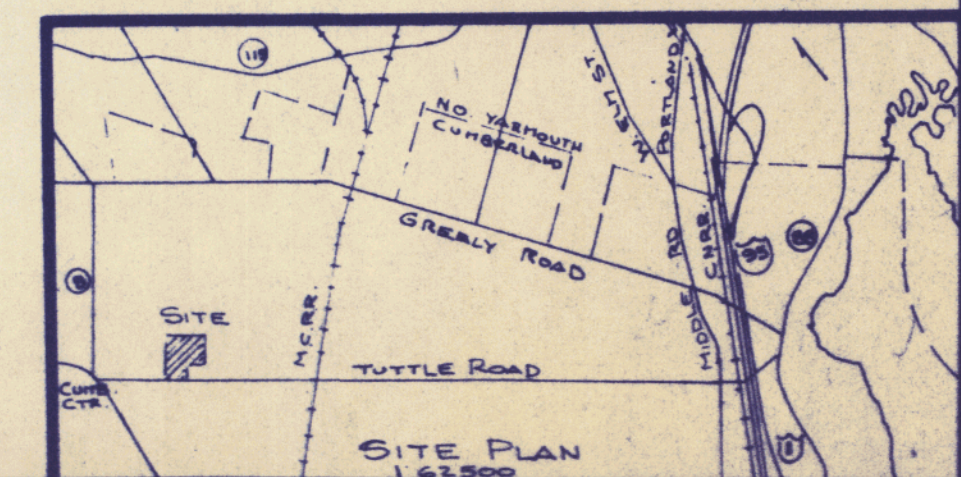
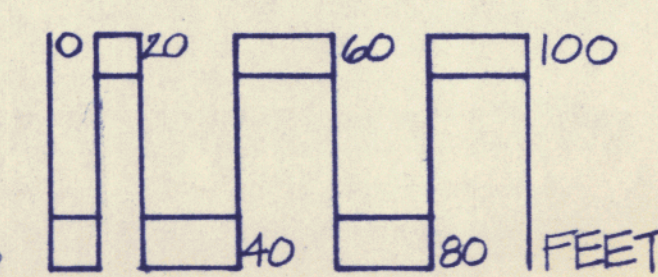
MITCHELL-DEWAN ASSOCIATES
Landscape Architects

ARCHITECTS FOUR P. A.
Architects

WOODARD & CURRAN, INC.
Engineers

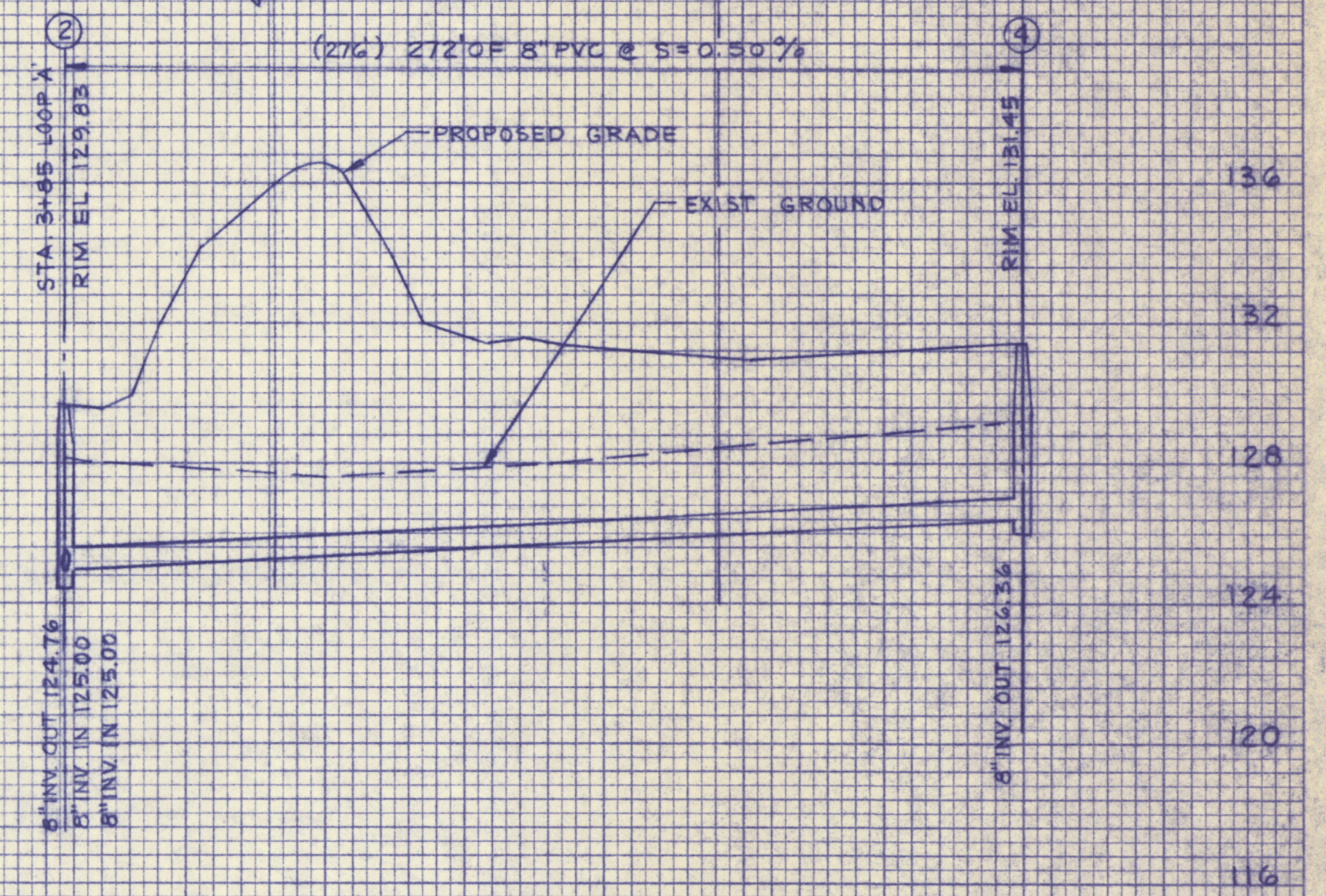
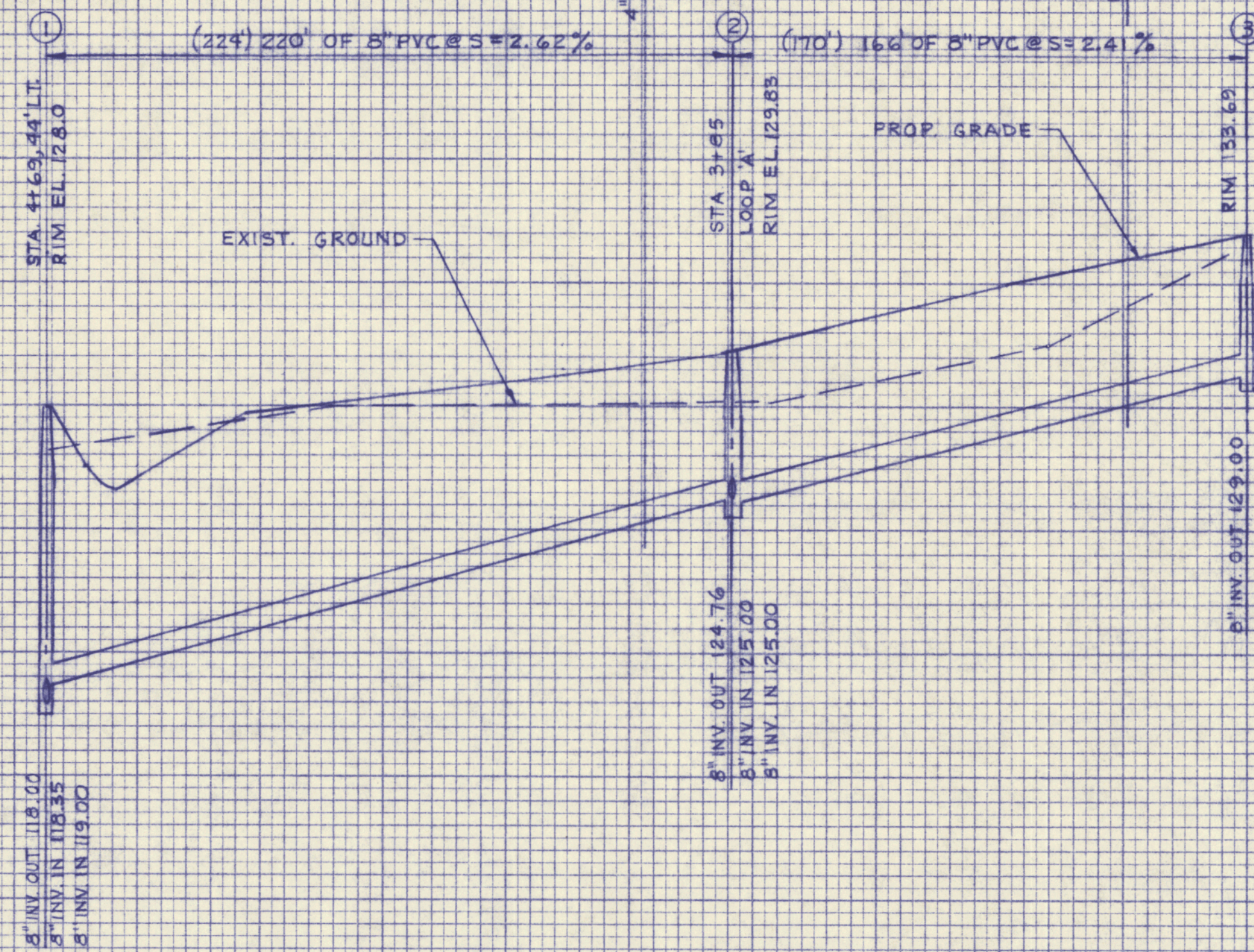
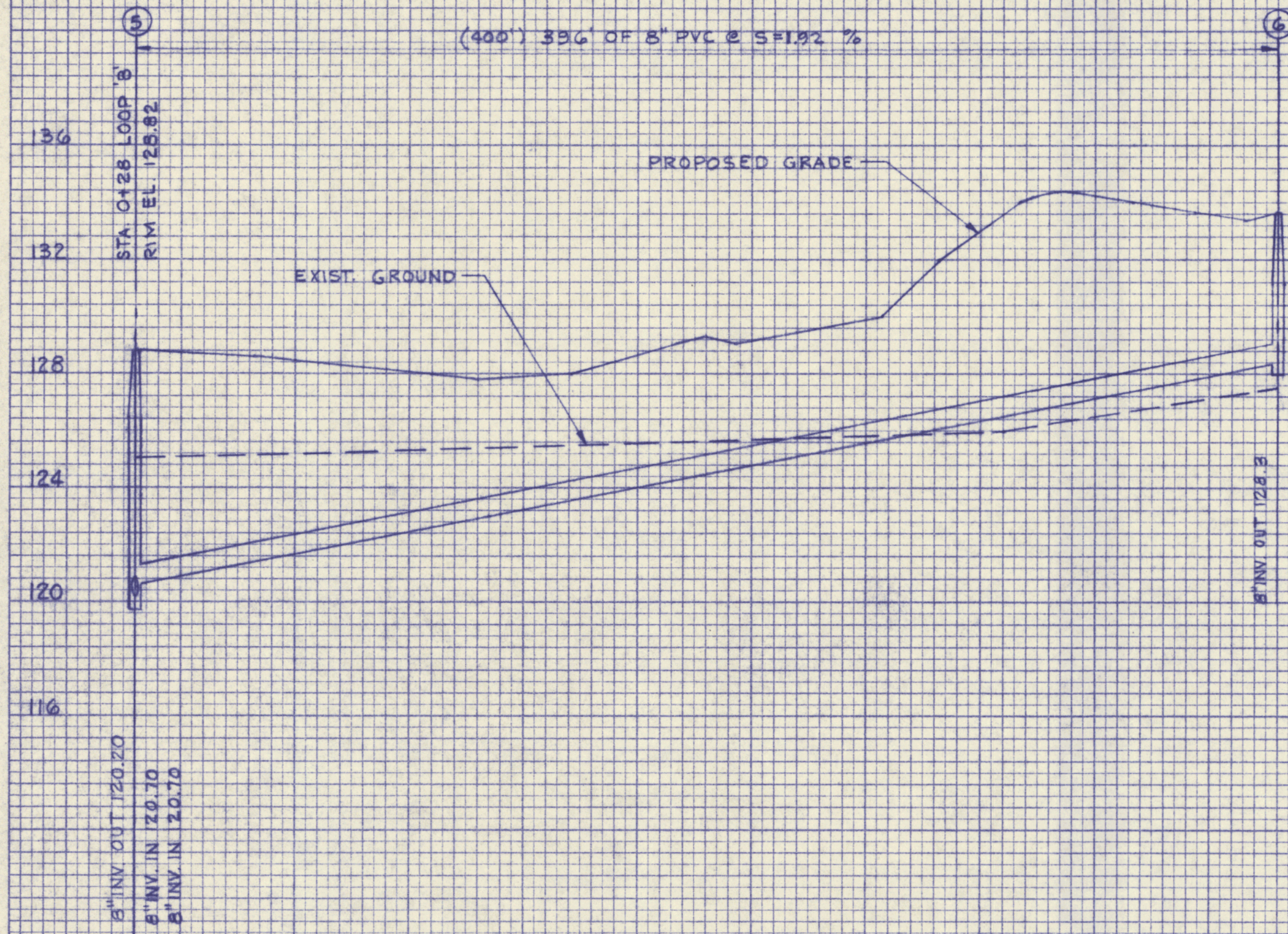


AUGUST 29, 1986

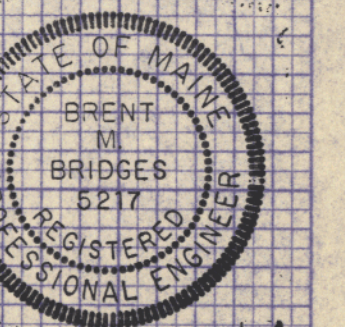


FINAL SURVEY	REVIEWED	DATE
	PLANNED	BY
	NOTED	
	NO.	

ORIGINAL SURVEY	REVIEWED	DATE
	PLANNED	BY
	NOTED	
	NO.	



'THE MEADOWS'
SANITARY SEWER PROFILES
SCALE: HOR. 1"=40' VERT. 1"=4'

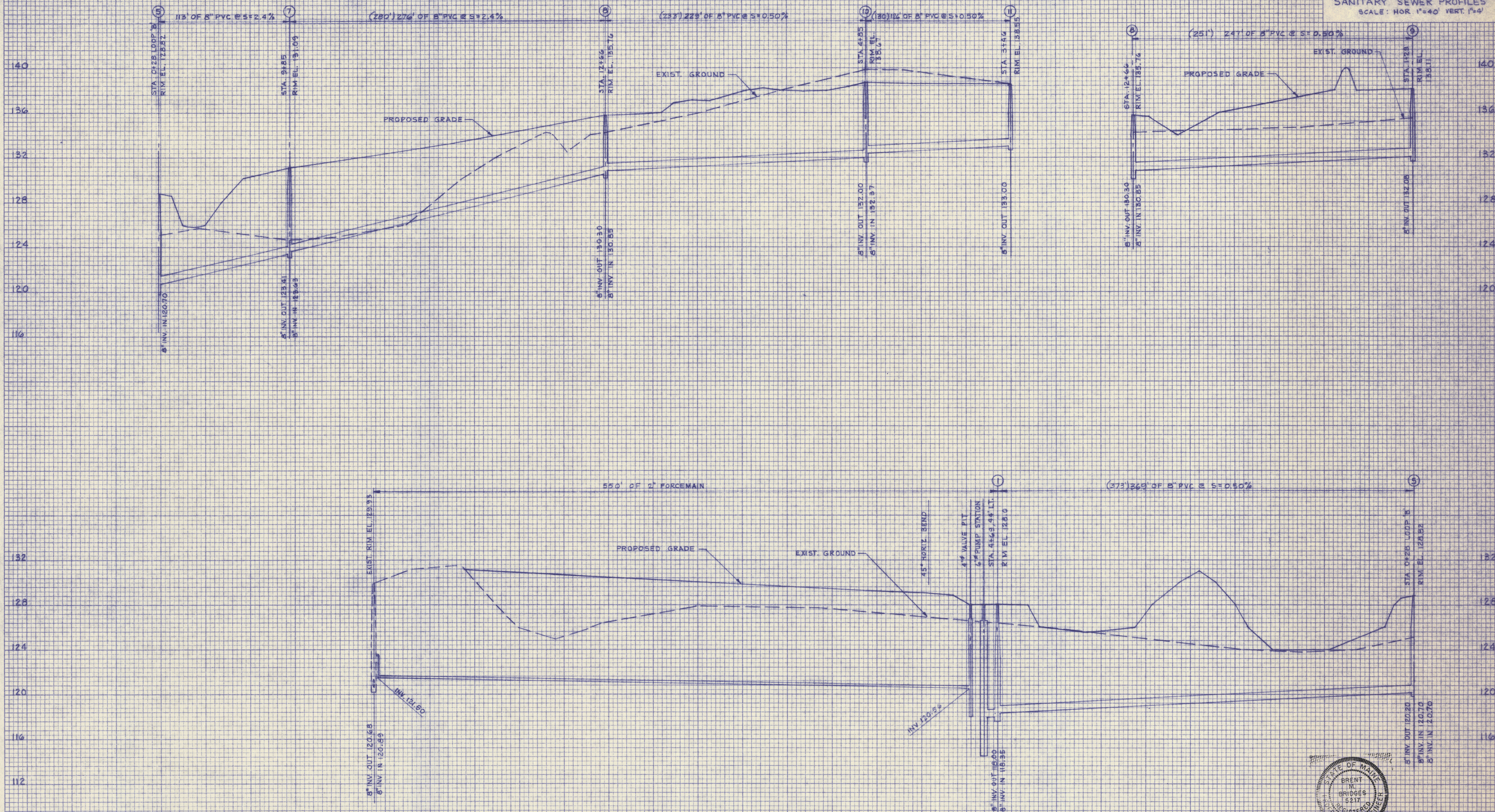


NOT FOR CONSTRUCTION

FINAL SURVEY	DATE	BY	REVIEWED
			TEMPLATE
			NOTE BOOK
			AREAS CHECKED

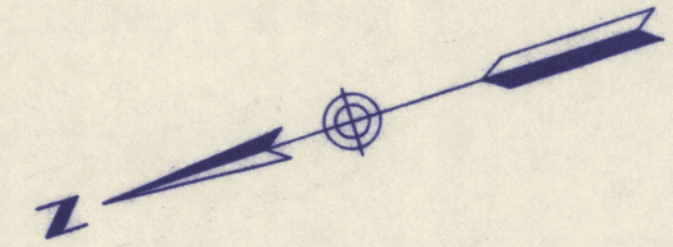
ORIGINAL SURVEY	DATE	BY	REVIEWED
			TEMPLATE
			NOTE BOOK
			AREAS CHECKED

'THE MEADOWS'
SANITARY SEWER PROFILES
SCALE: HOR. 1"=40' VERT. 1"=4'

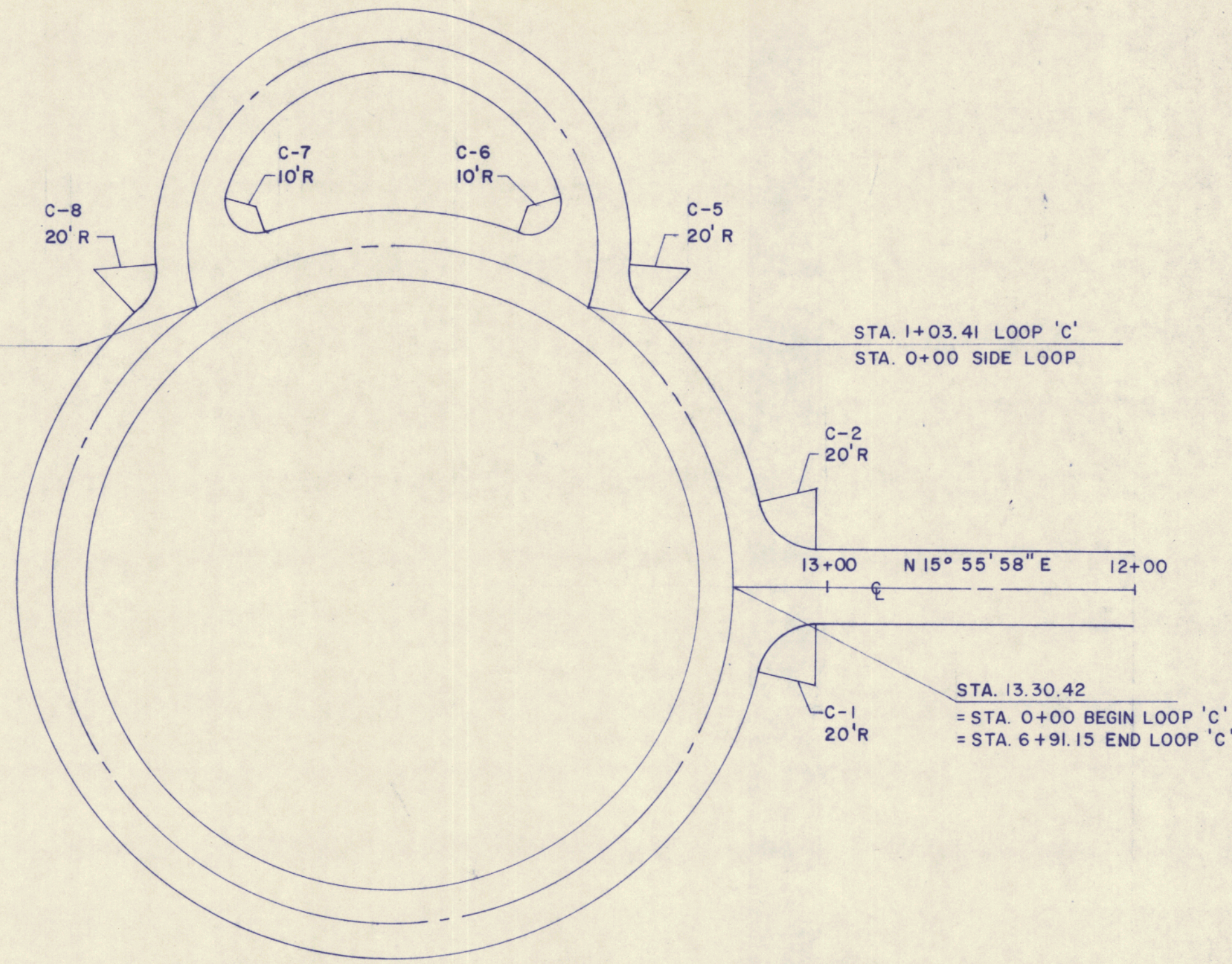


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'THE MEADOWS'
STREET PROFILES
LOOP 'C' & SIDE LOOP
SCALE: HORIZ 1"= 40'
VERT. 1"= 4'



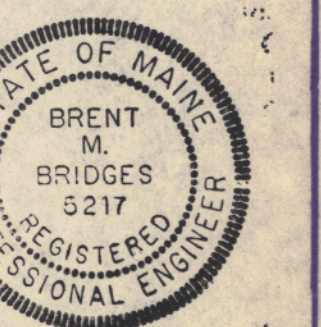
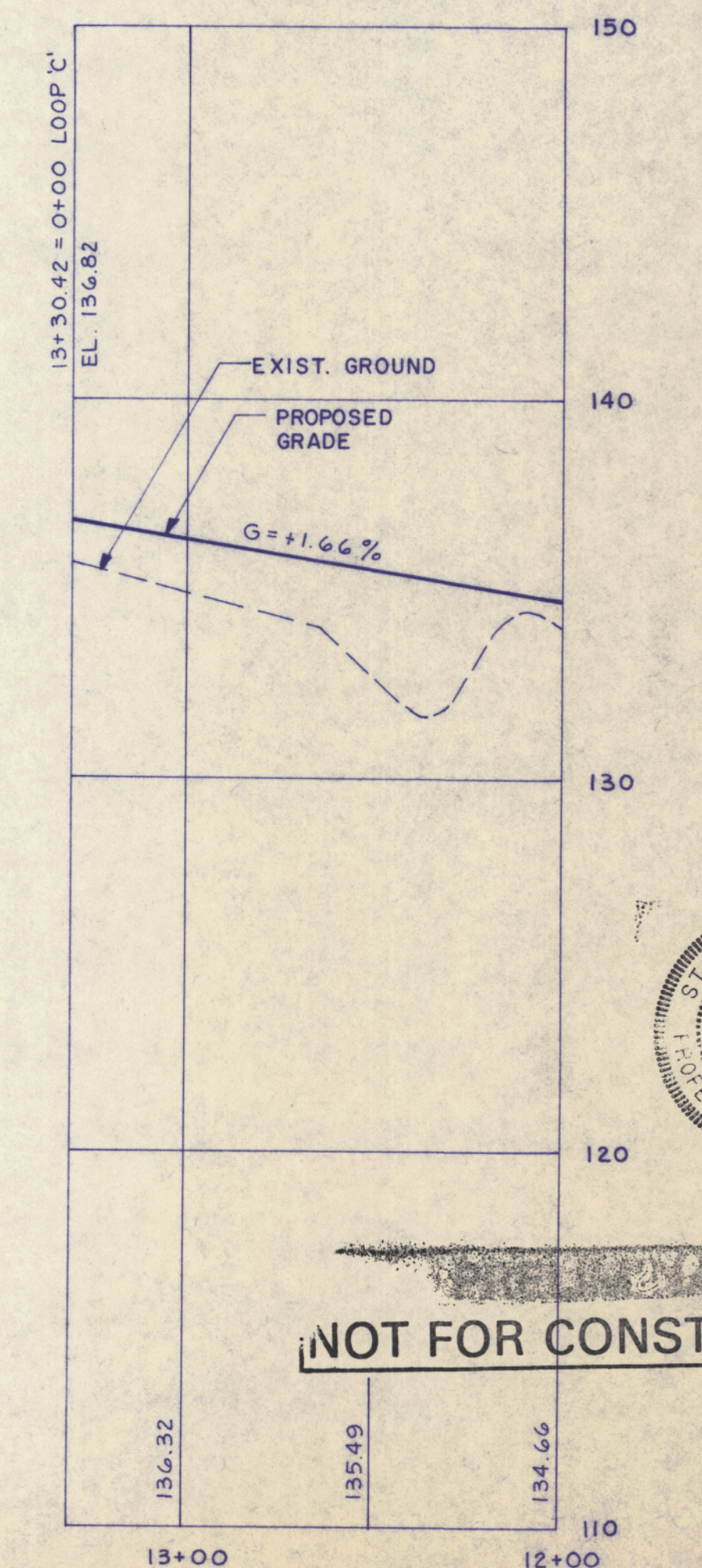
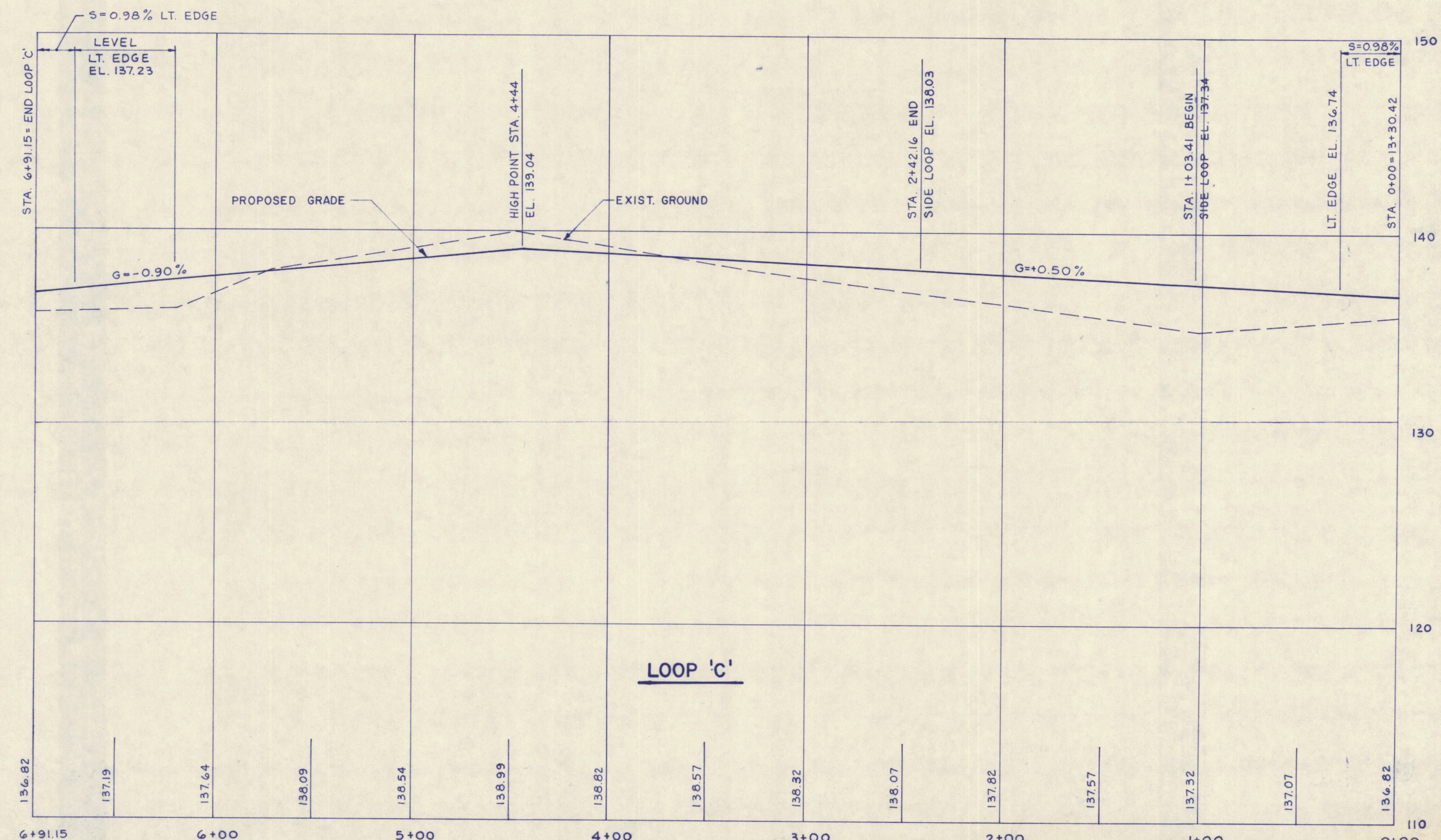
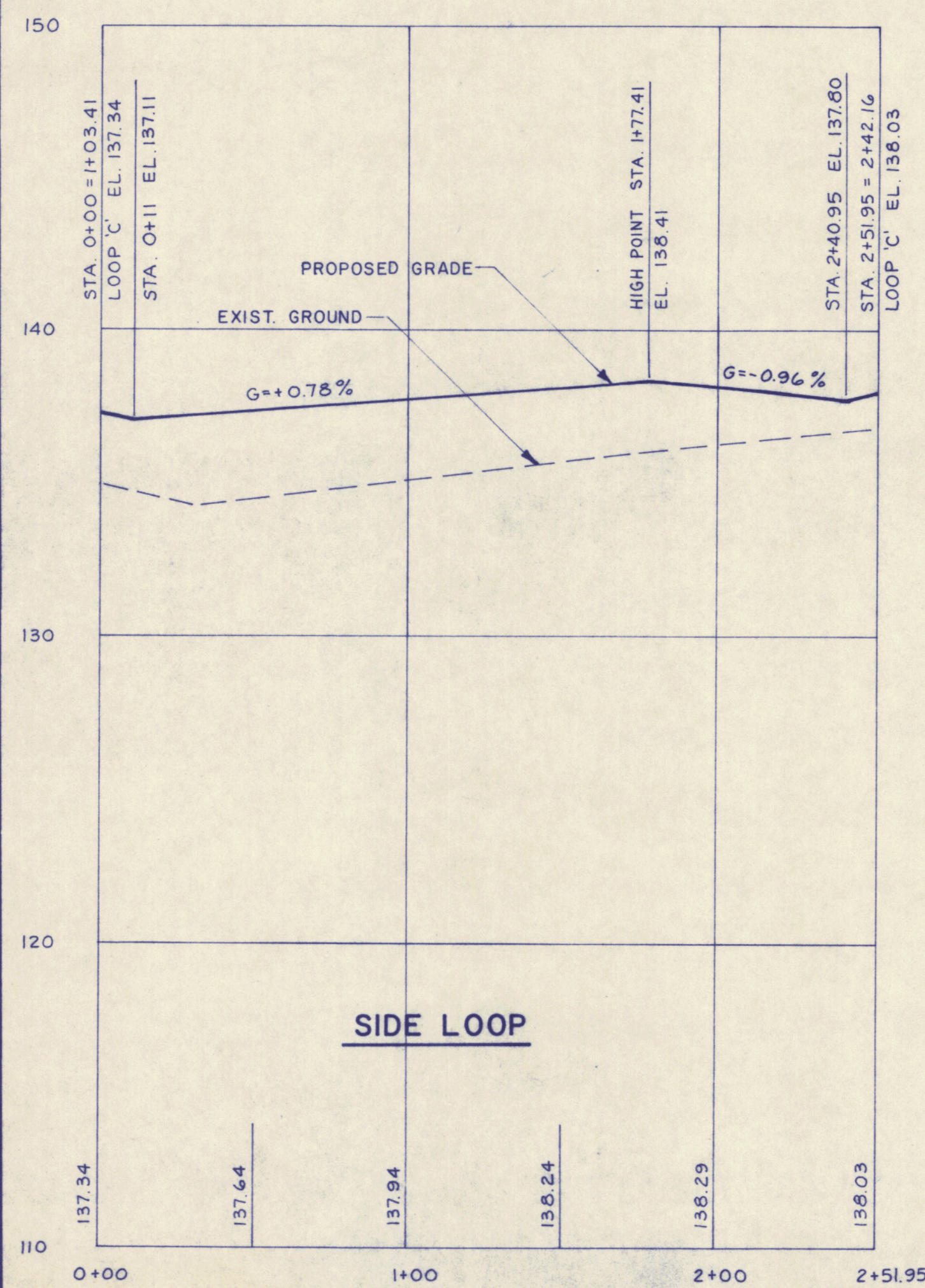
STA. 2+42.16 LOOP 'C'
= STA. 2+51.95 END
SIDE LOOP



STA. 1+03.41 LOOP 'C'
STA. 0+00 SIDE LOOP

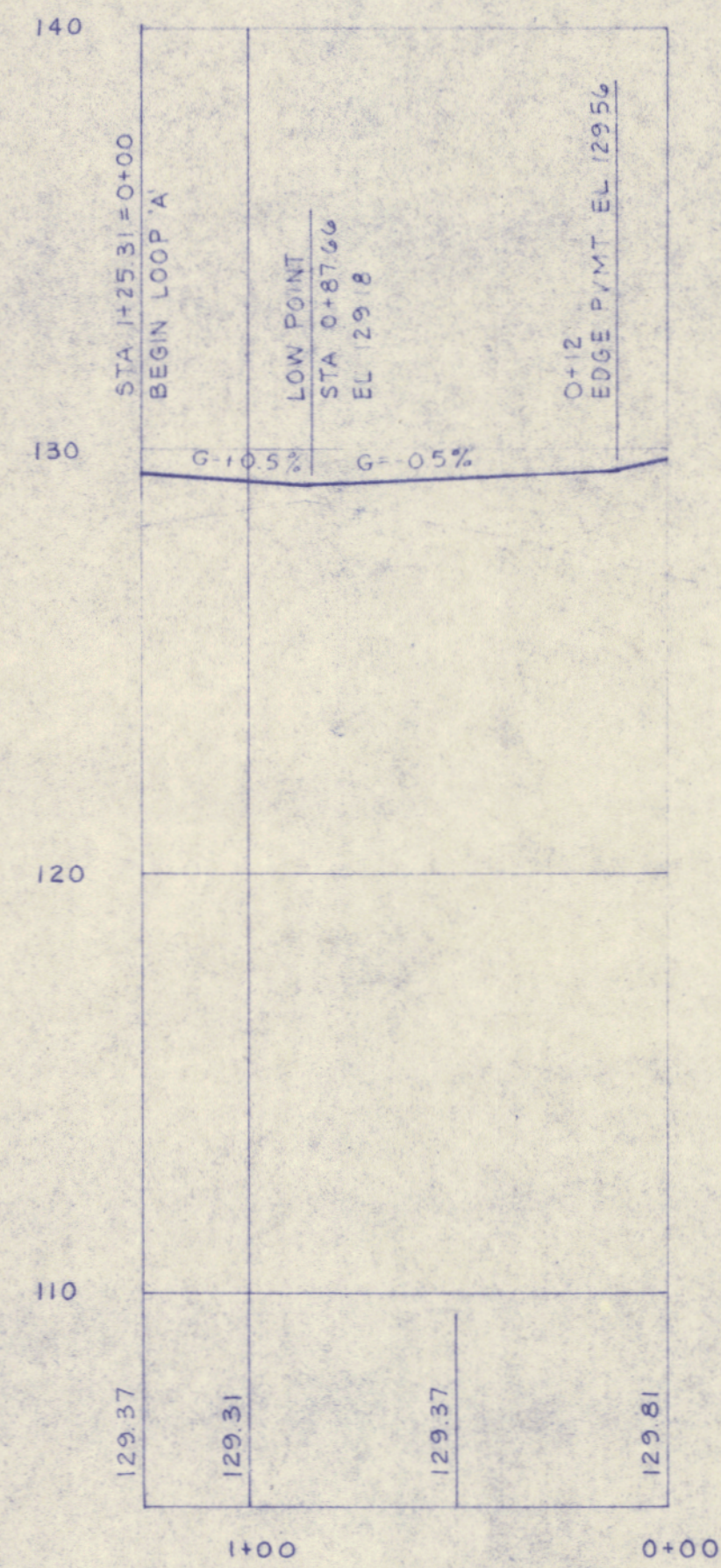
STA. 13.30.42
= STA. 0+00 BEGIN LOOP 'C'
= STA. 6+91.15 END LOOP 'C'

LOOP 'C'
SCALE: 1"= 40'

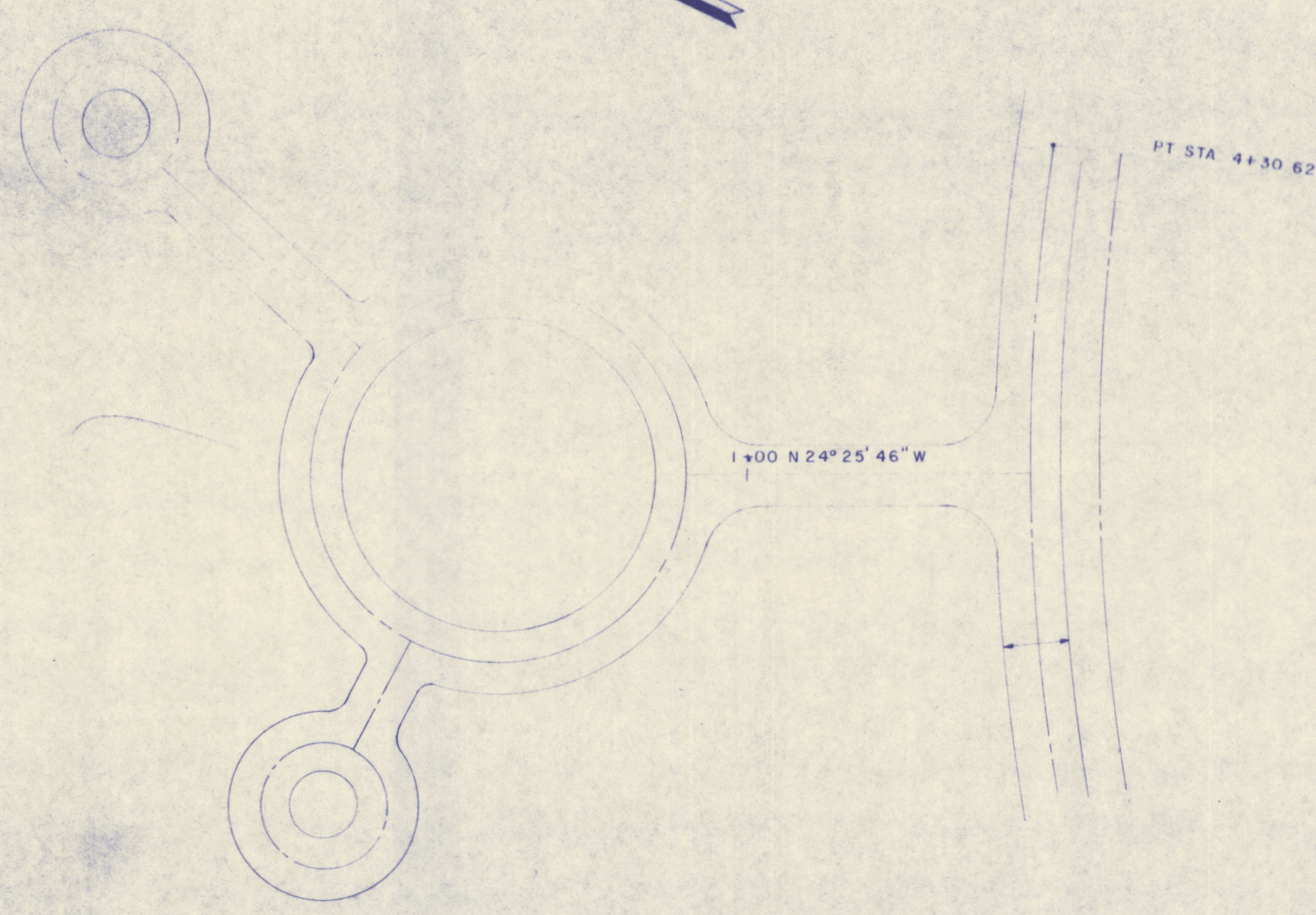


NOT FOR CONSTRUCTION

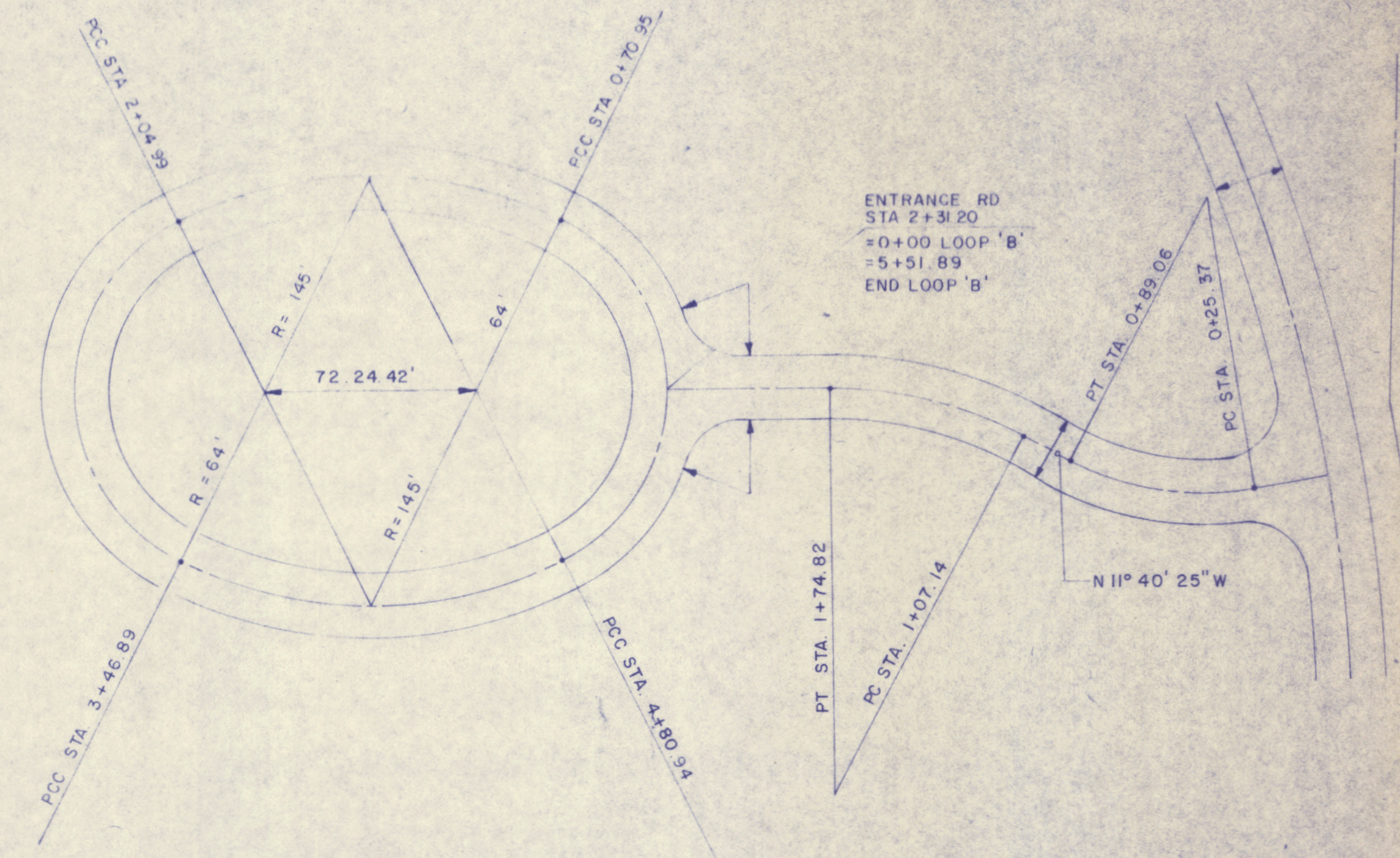
'THE MEADOWS'
STREET PROFILES
LOOP 'A' AND LOOP 'B'
SCALE: HORIZ 1"= 40'
VERT. 1"= 4'



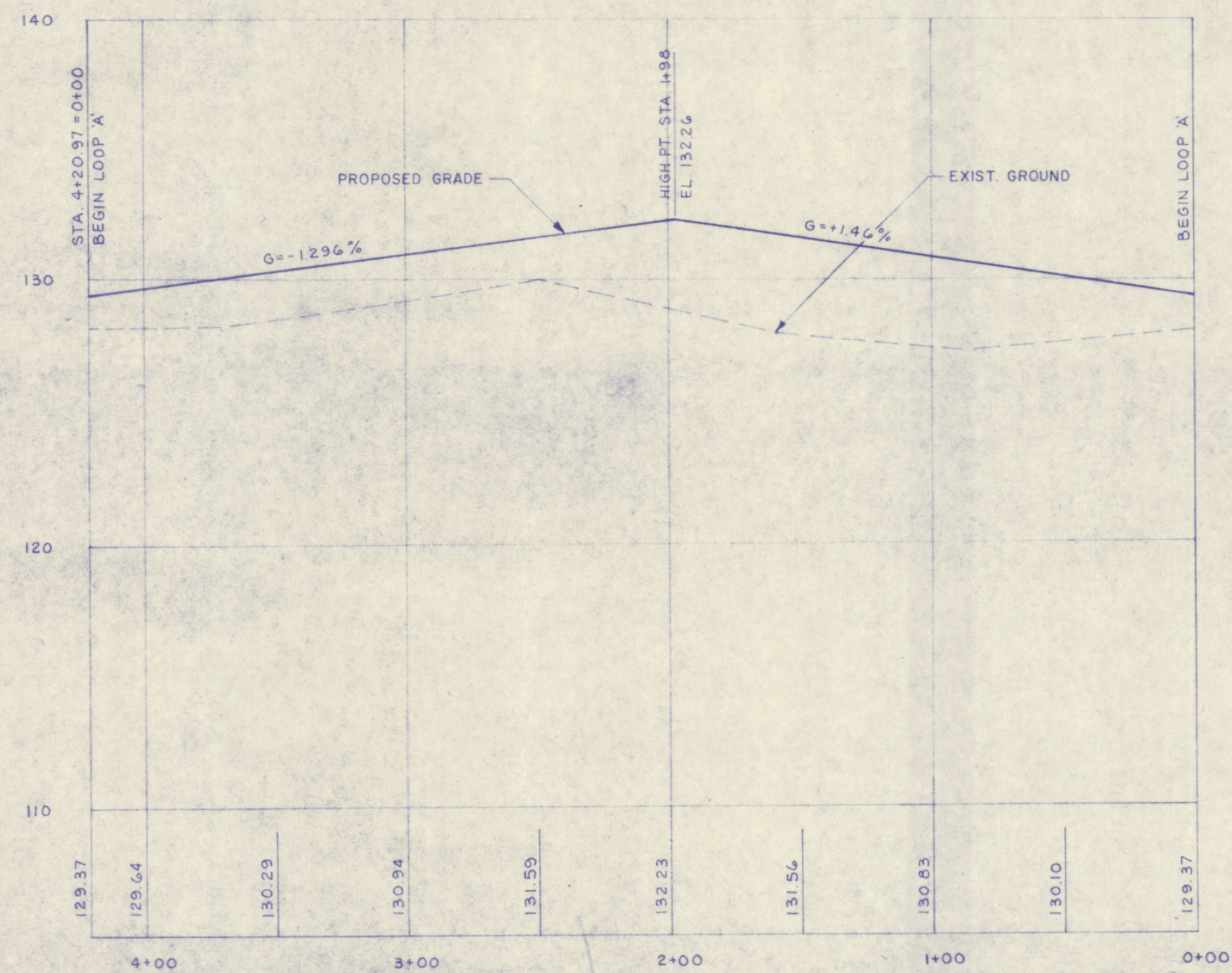
ENTRANCE - LOOP 'A'



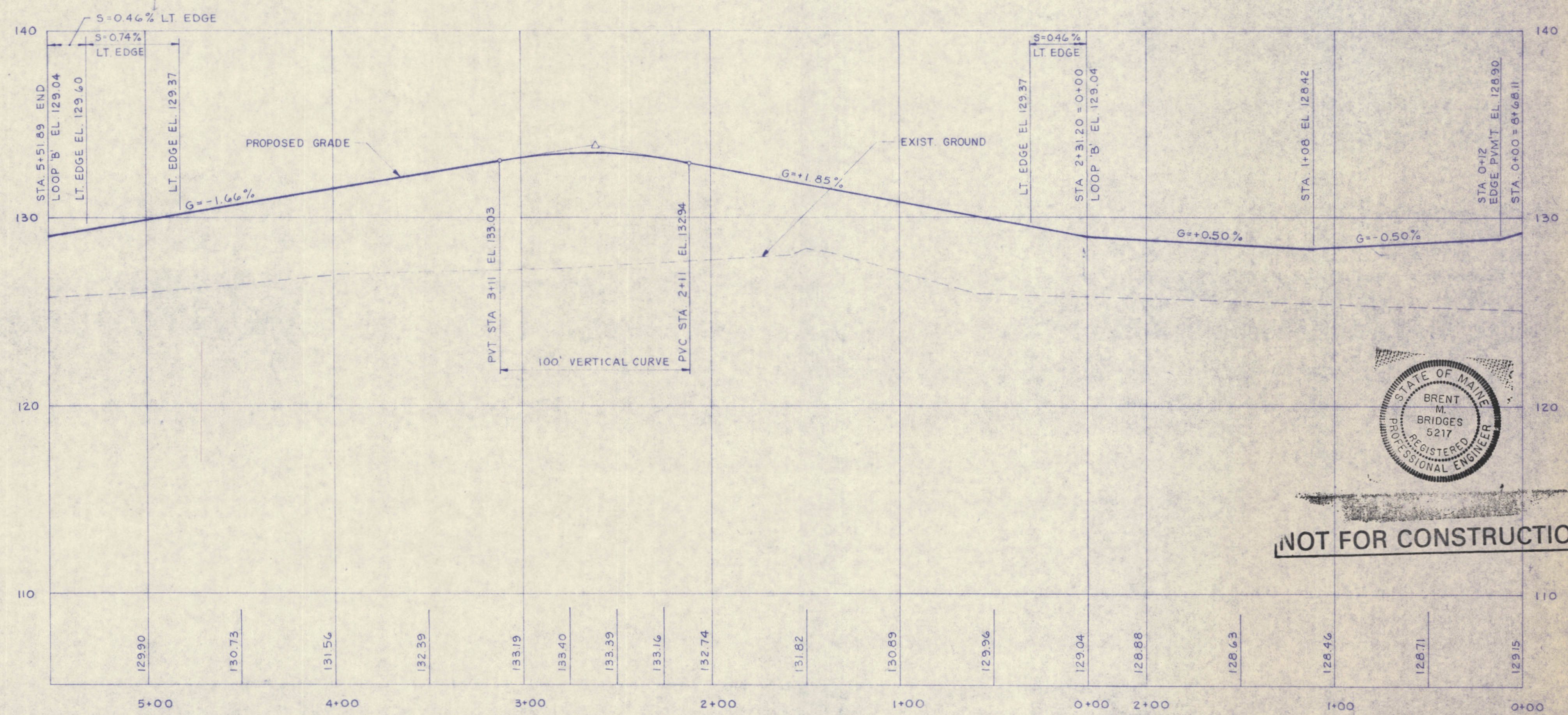
LOOP 'A'
SCALE: 1"= 40'



LOOP 'B'
SCALE: 1"= 40'

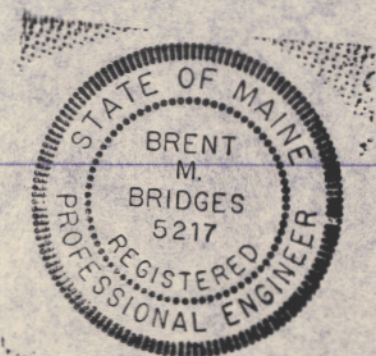


LOOP 'A'



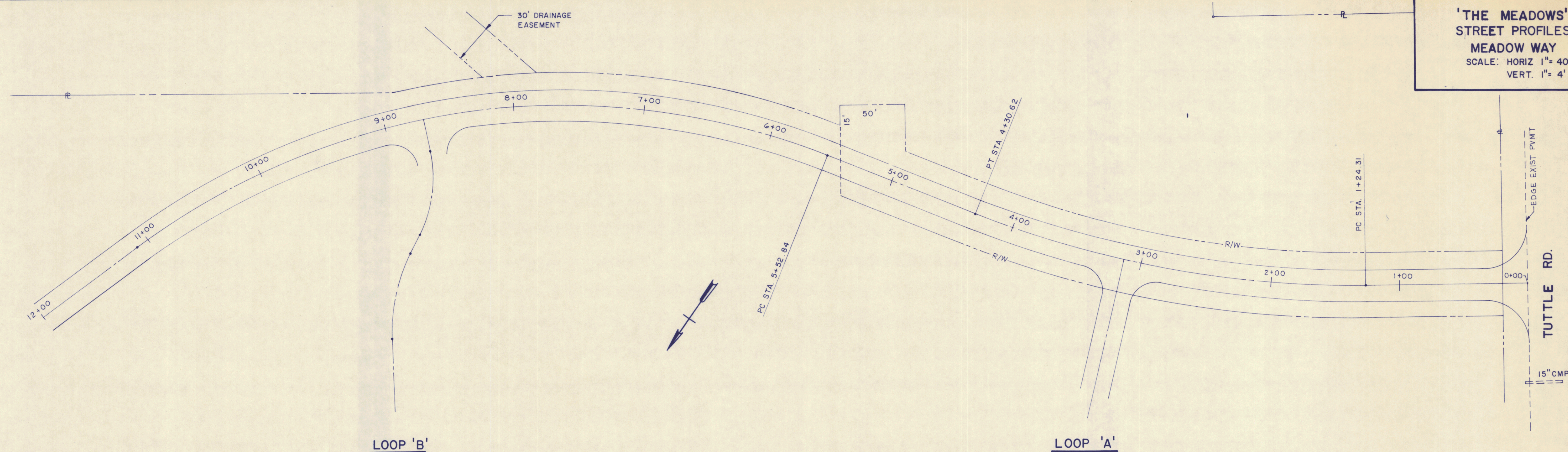
LOOP 'B'

ENTRANCE - LOOP 'B'

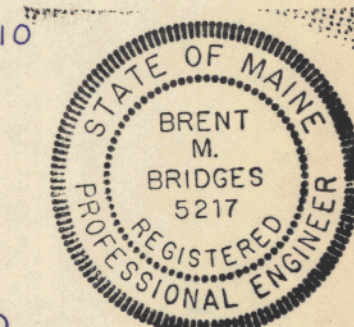
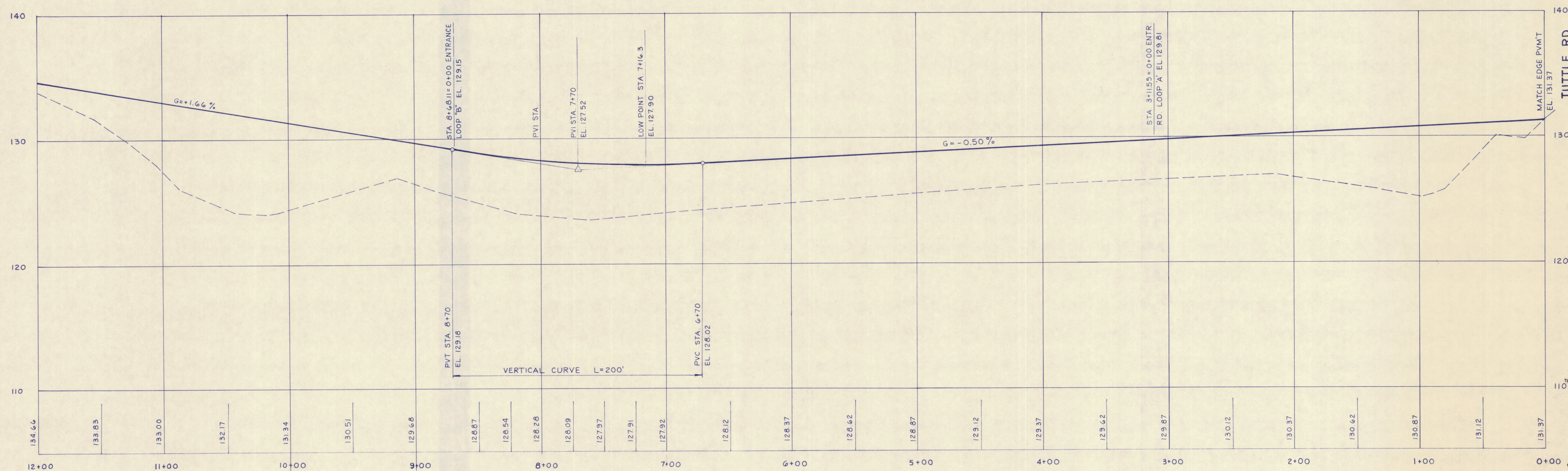


NOT FOR CONSTRUCTION

'THE MEADOWS'
STREET PROFILES
MEADOW WAY
SCALE: HORIZ 1"= 40'
VERT. 1"= 4'

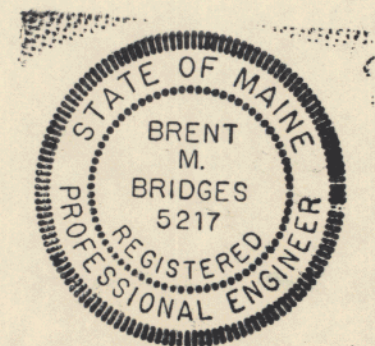
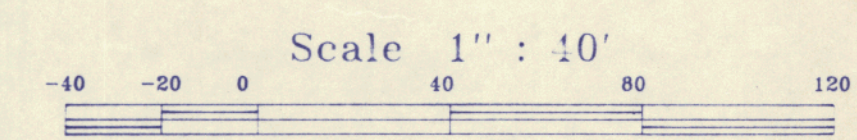
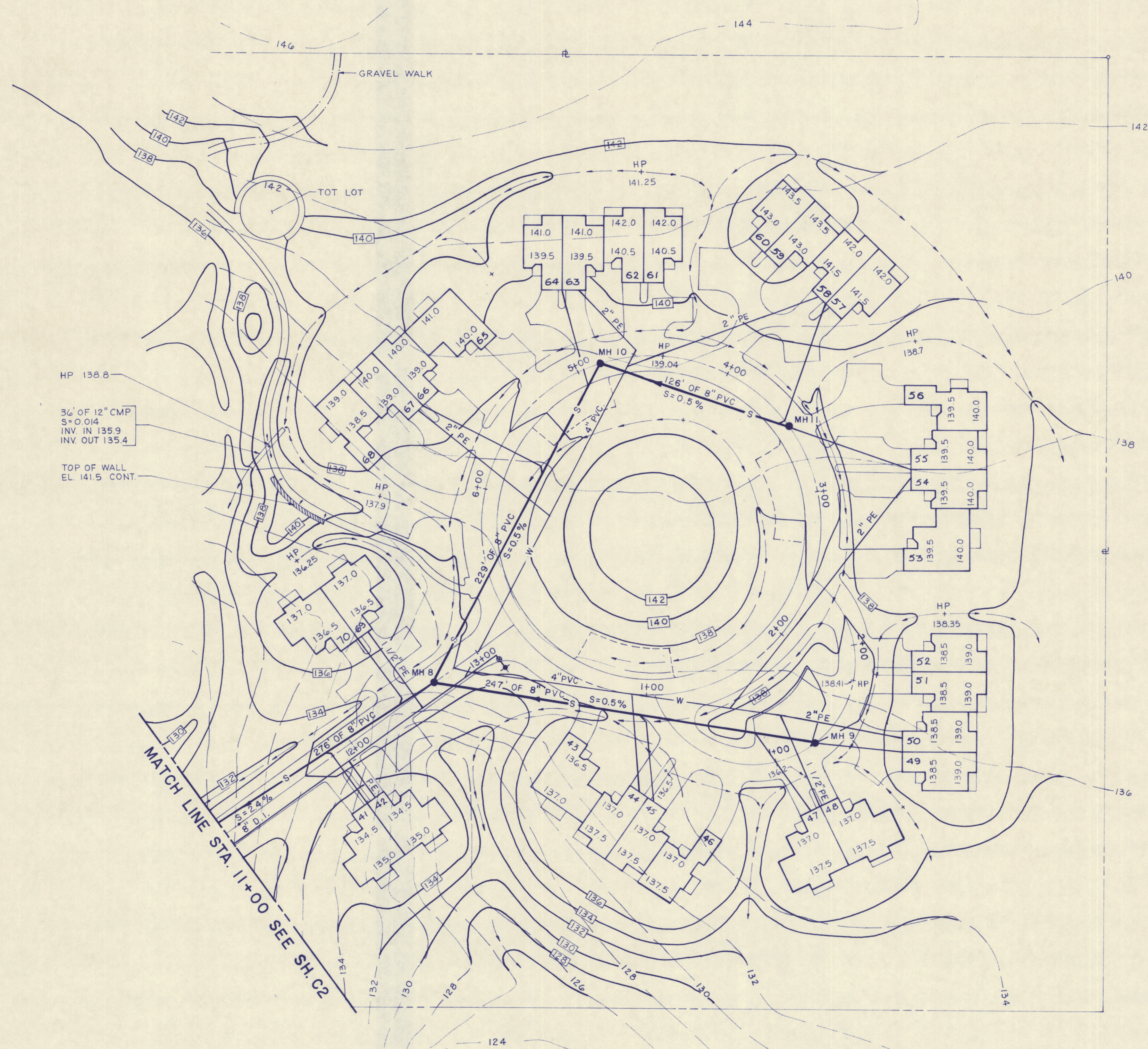


MEADOW WAY



NOT FOR CONSTRUCTION

C4



NOT FOR CONSTRUCTION

ARCHITECTS FOUR
PROFESSIONAL ASSOCIATION
99 MIDDLE ST., MANCHESTER, NH 03101
(603) 627-3844

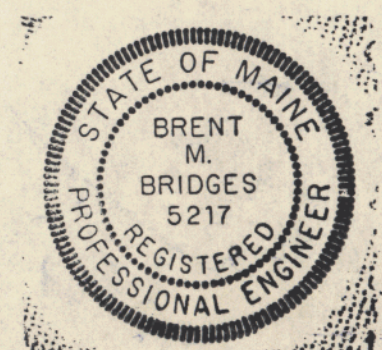
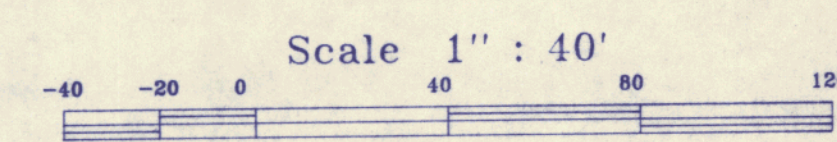
'THE MEADOWS'

UTILITY / GRADING /
DRAINAGE PLAN
DATE AUGUST 29, 1986

REVISIONS

DRAWING NO.

C3



NOT FOR CONSTRUCTION

UTILITY / GRADING /
DRAINAGE PLAN

DATE AUGUST 29, 1986

REVISIONS

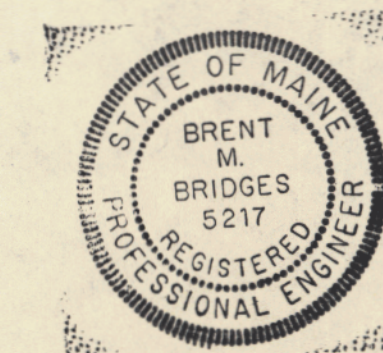
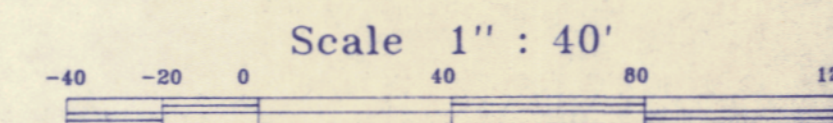
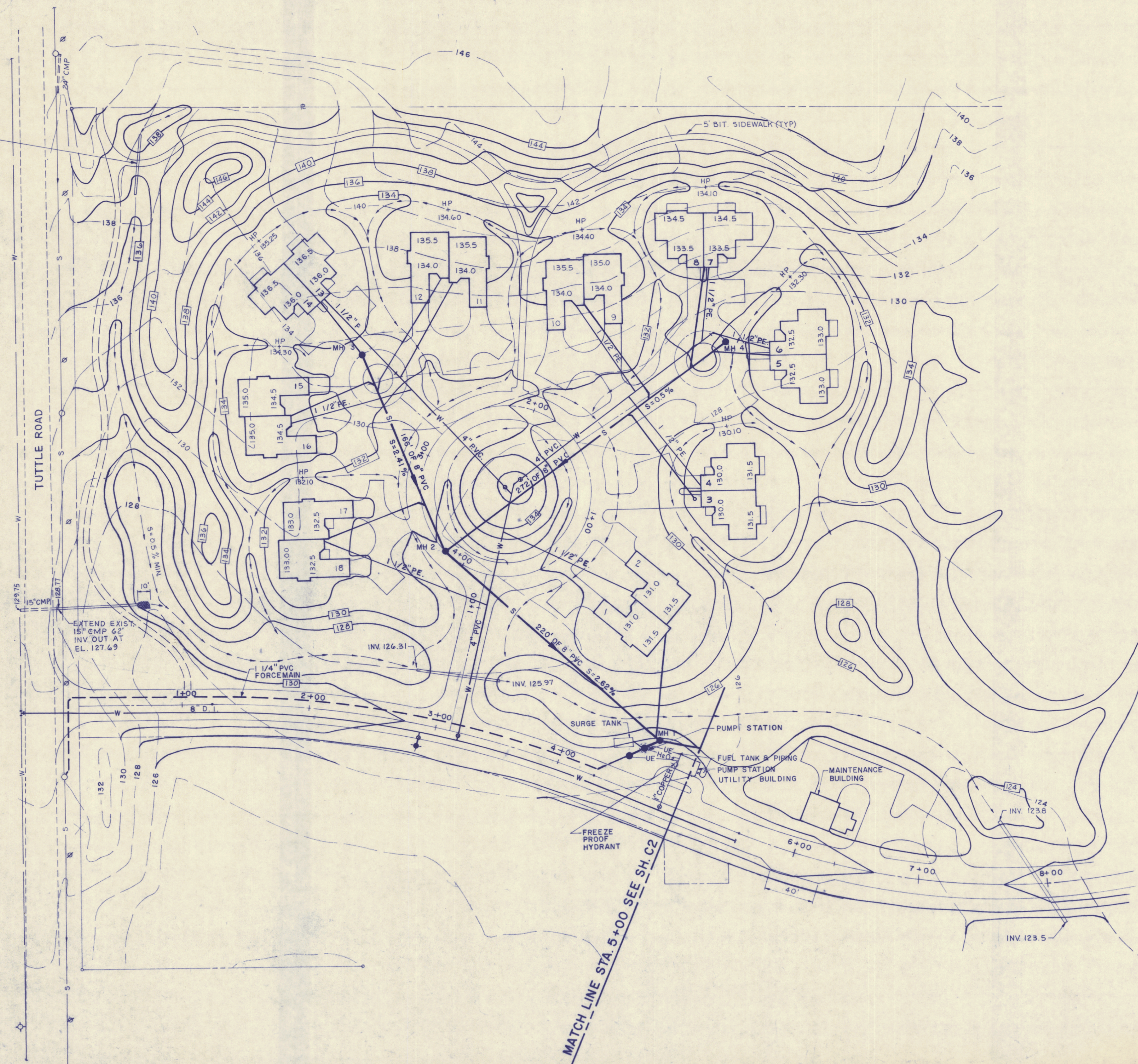
DRAWING NO.

C2

ARCHITECTS FOUR
PROFESSIONAL ASSOCIATION
99 MIDDLE ST, MANCHESTER, NH 03101
(603) 627-3844

'THE MEADOWS'

48' OF 8" CMP
S+0.0064
INV. IN 136.4
INV. OUT 136.1



NOT FOR CONSTRUCTION

ARCHITECTS FOUR
PROFESSIONAL ASSOCIATION
99 MIDDLE ST., MANCHESTER, NH 03101
(603) 627-3844

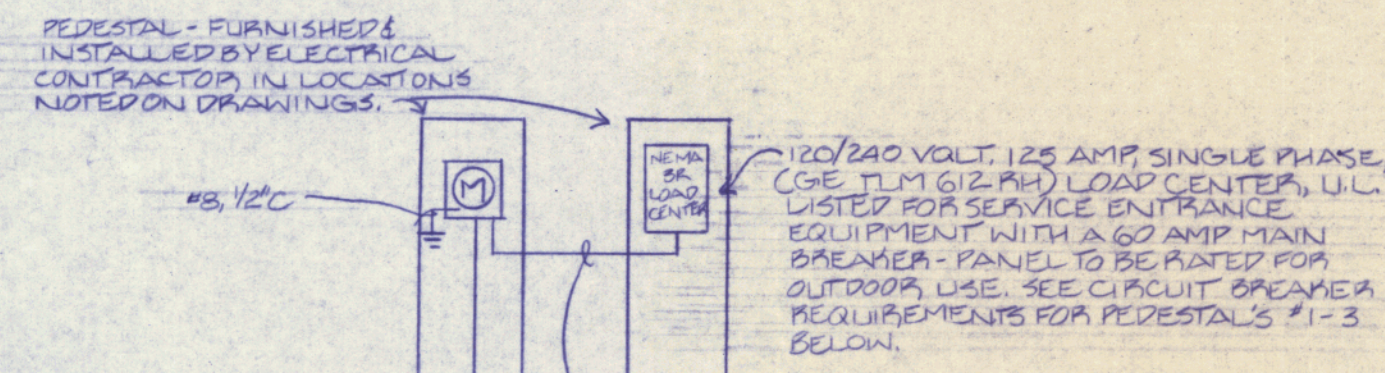
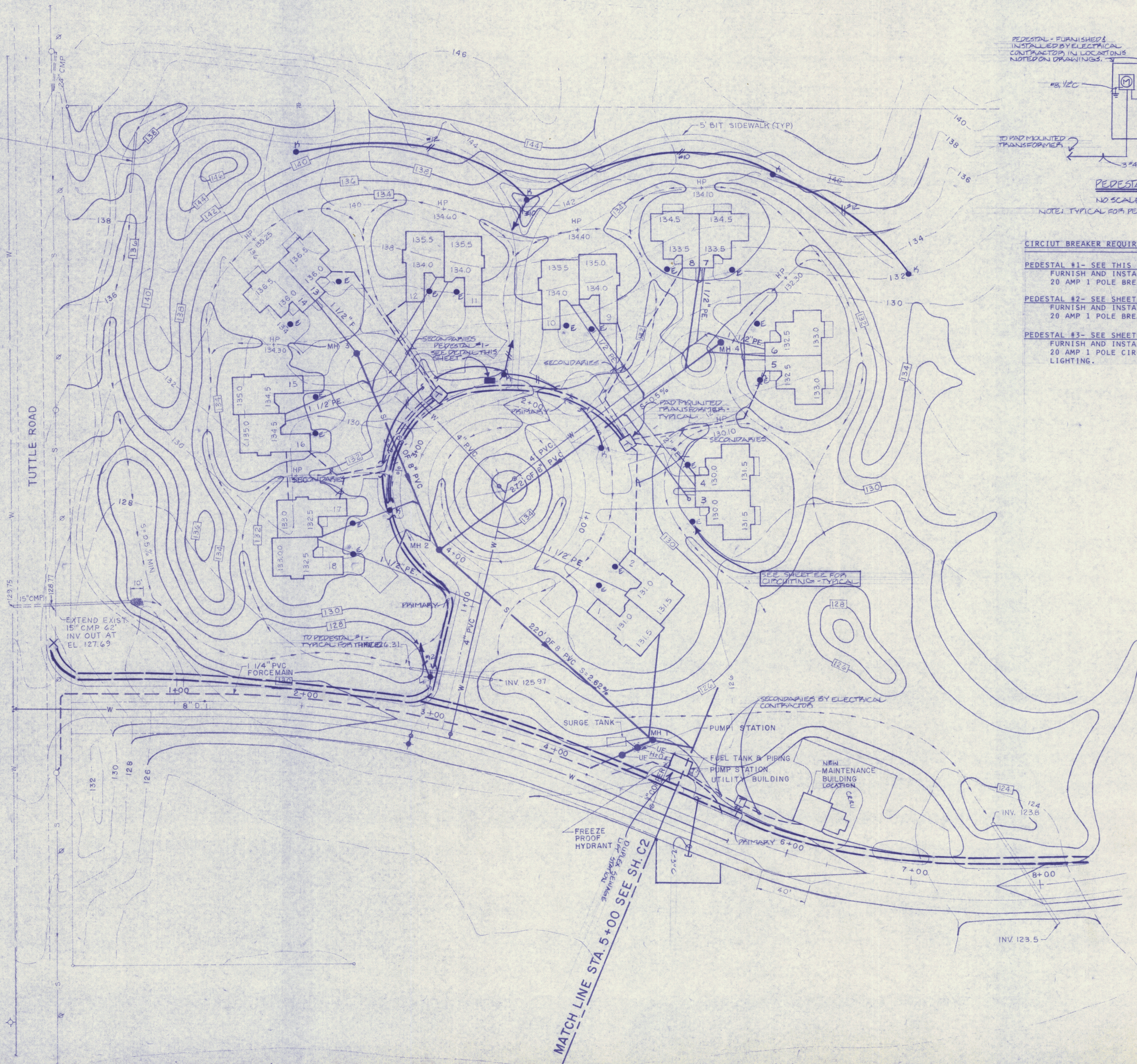
'THE MEADOWS'

UTILITY / GRADING /
DRAINAGE PLAN
DATE AUGUST 29, 1986

REVISIONS

DRAWING NO.

C1



PEDESTAL DETAIL
NO SCALE
NOTE: TYPICAL FOR PEDESTALS #1-3

CIRCUIT BREAKER REQUIREMENTS FOR PEDESTALS #1-#3

- PEDESTAL #1- SEE THIS SHEET FOR PROPOSED LOCATION. FURNISH AND INSTALL ONE 20 AMP 2 POLE & TWO 20 AMP 1 POLE BREAKERS FOR EXTERIOR LIGHTING.
- PEDESTAL #2- SEE SHEET ESP 2 FOR PROPOSED LOCATION. FURNISH AND INSTALL ONE 20 AMP TWO POLE & TWO 20 AMP 1 POLE BREAKERS FOR EXTERIOR LIGHTING.
- PEDESTAL #3- SEE SHEET ESP 3 FOR PROPOSED LOCATION. FURNISH AND INSTALL ONE 20 AMP TWO POLE & ONE 20 AMP 1 POLE CIRCUIT BREAKERS FOR EXTERIOR LIGHTING.

C & M ENGINEERING
253 MYRTLE STREET
MANCHESTER, N.H. 03104
TEL. (603) 669-7910
JOB NUMBER: 86-59



ARCHITECTS FOUR
PROFESSIONAL ASSOCIATION
99 MIDDLE ST., MANCHESTER, NH 03101
(603) 627-3844

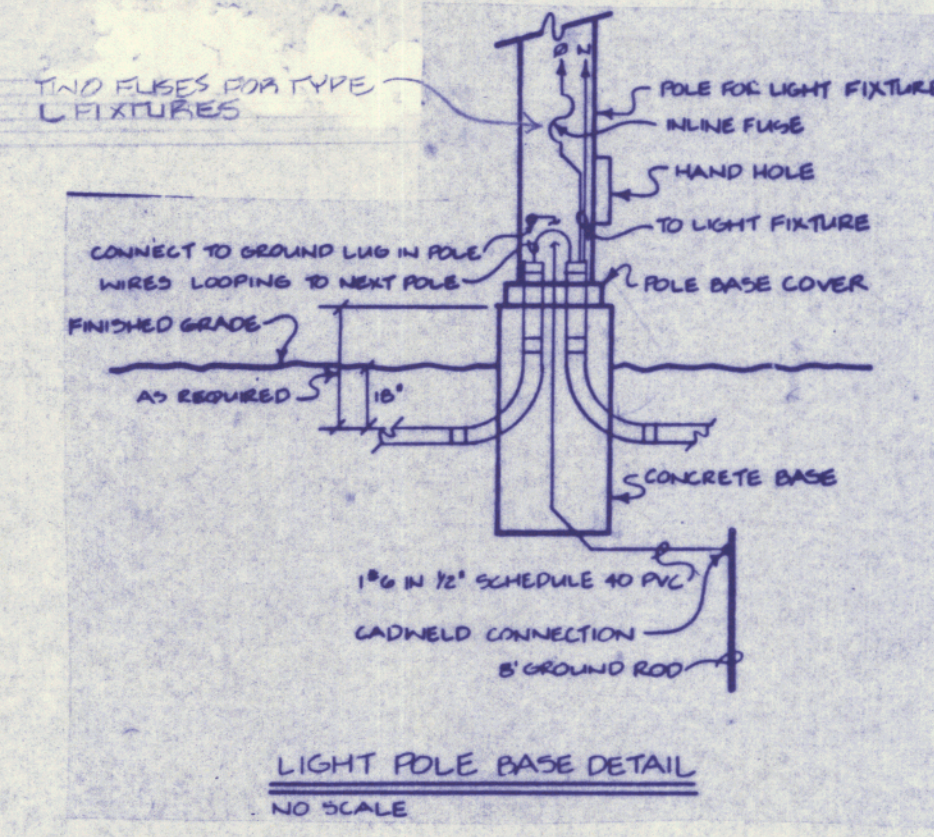
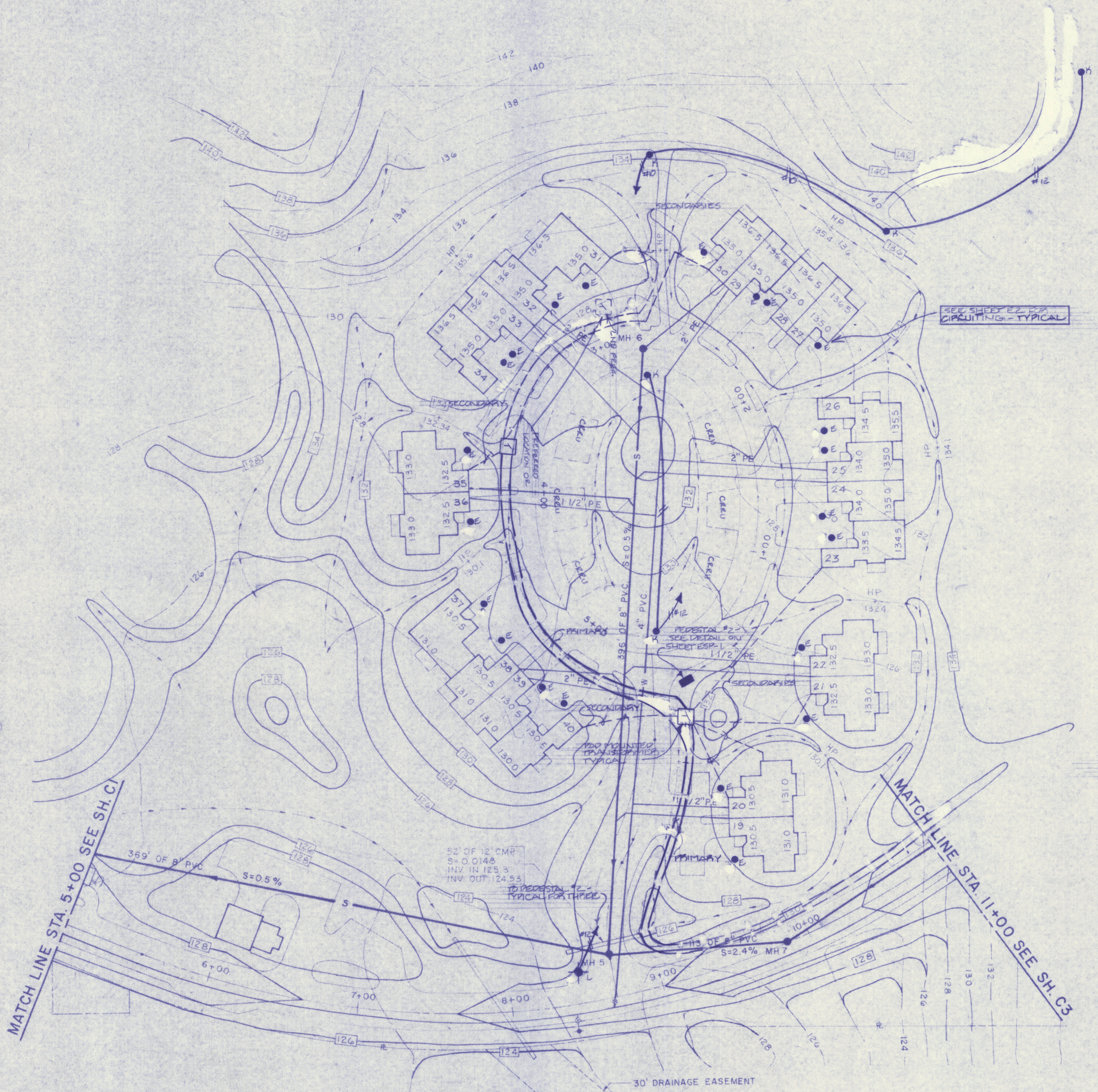
'THE MEADOWS'

UTILITY / GRADING /
DRAINAGE PLAN

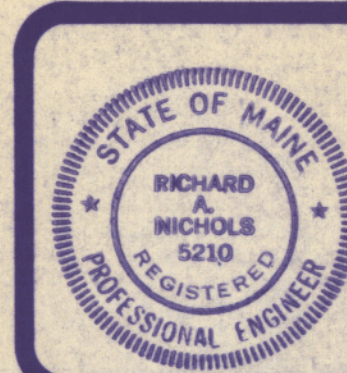
DATE OCT. 8, 1986

REVISIONS
RECEIVED
OCT 08 1986
CONSTRUCTION SERVICES, INC.

DRAWING NO.
ESP-2



C & M ENGINEERING
253 MYRTLE STREET
MANCHESTER, N.H. 03104
TEL. (603) 669-7910
JOB NUMBER: 86-59



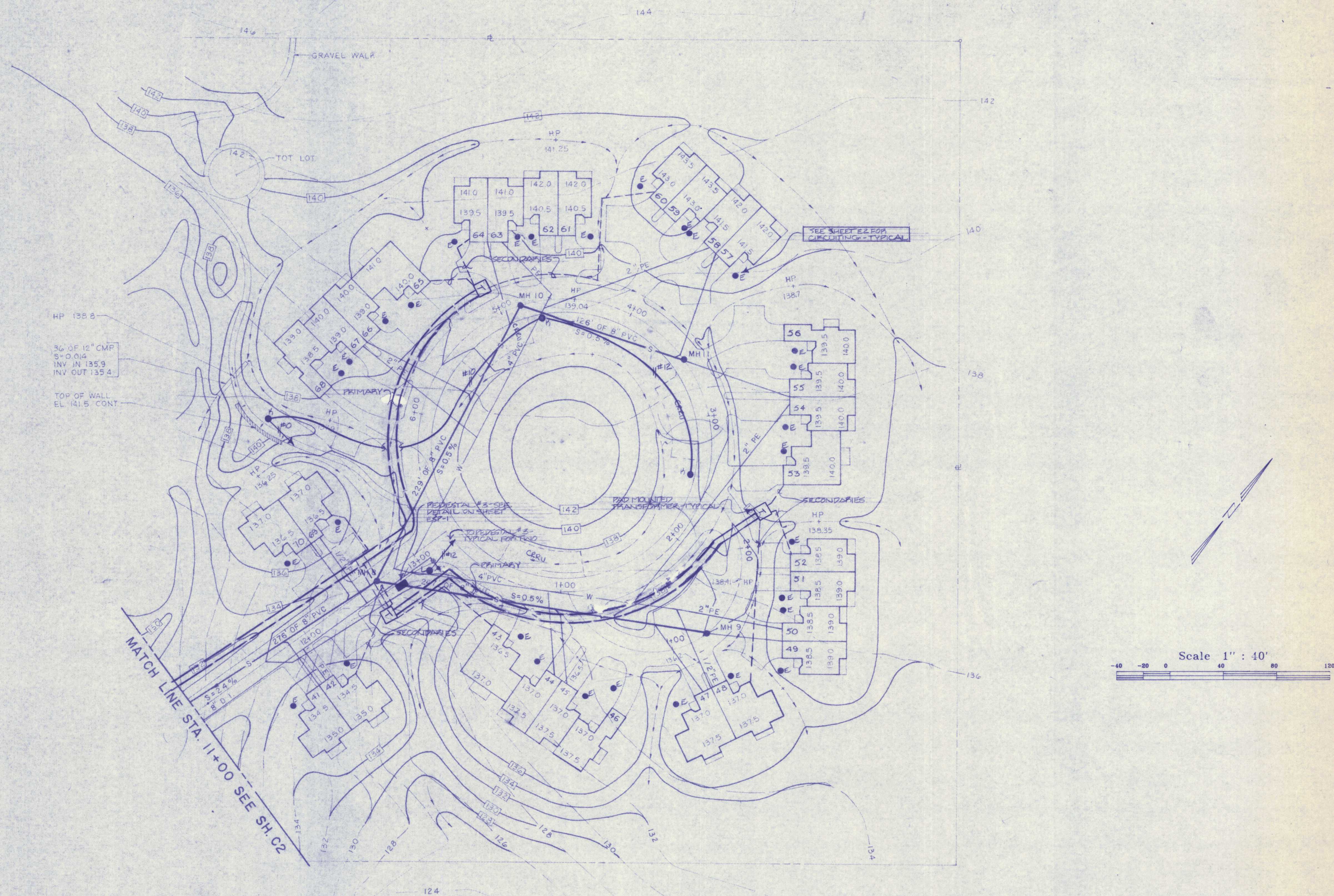
ARCHITECTS FOUR
PROFESSIONAL ASSOCIATION
99 MIDDLE ST. MANCHESTER, NH 03101
(603) 627-3844

'THE MEADOWS'

**UTILITY / GRADING /
DRAINAGE PLAN**
DATE OCT. 8, 1986

**REVISIONS
RECEIVED**
OCT 08 1986
CONSTRUCTION SERVICES, INC.

DRAWING NO.
ESP-3



GENERAL NOTES

1. ALL FOUNDATION DRAIN LINES SHALL BE RUN AT A MINIMUM SLOPE OF 0.005 FT/FT AND DAY LIGHTED IN THE DETENTION PONDS AND DRAINAGE SWALES IN LOCATIONS SHOWN ON THE PLANS.
2. PIPES AROUND FOUNDATIONS SHALL BE FILTER FABRIC WRAPPED 4" PERFORATED POLYETHYLENE PIPE SET ON THE OUTSIDE OF THE FOUNDATION FOOTING WITH 6" OF 3/4" CRUSHED STONE ON ALL SIDES. ALL OTHER DRAIN LINES SHALL BE 4" AND 6" SOLID PVC SDR 35.
3. INSTALLATION OF DRAIN PIPES SHALL BE AS SHOWN IN THE TYPICAL TRENCH SECTION DETAIL.
4. APPROXIMATELY 950 LF OF UNDERDRAIN SHALL BE INSTALLED IN THE DRAINAGE CHANNEL THROUGH THE DETENTION PONDS AS SHOWN.
5. ALL WATER SERVICE LINES TO 2 UNIT BUILDINGS SHALL BE 1 1/2" POLYETHYLENE TUBING AND ALL WATER SERVICE TO 4 UNIT BUILDINGS SHALL BE 2" POLYETHYLENE TUBING.
6. ALL HOUSE SEWER LATERALS SHALL BE 6" PVC SDR35.



ARCHITECTS FOUR

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WOODARD & CURRAN INC.
CONSULTING ENGINEERS
PO BOX 100
PORTLAND, ME 04101

CUMBERLAND
MEADOWS

UTILITY / GRADING /
DRAINAGE PLAN

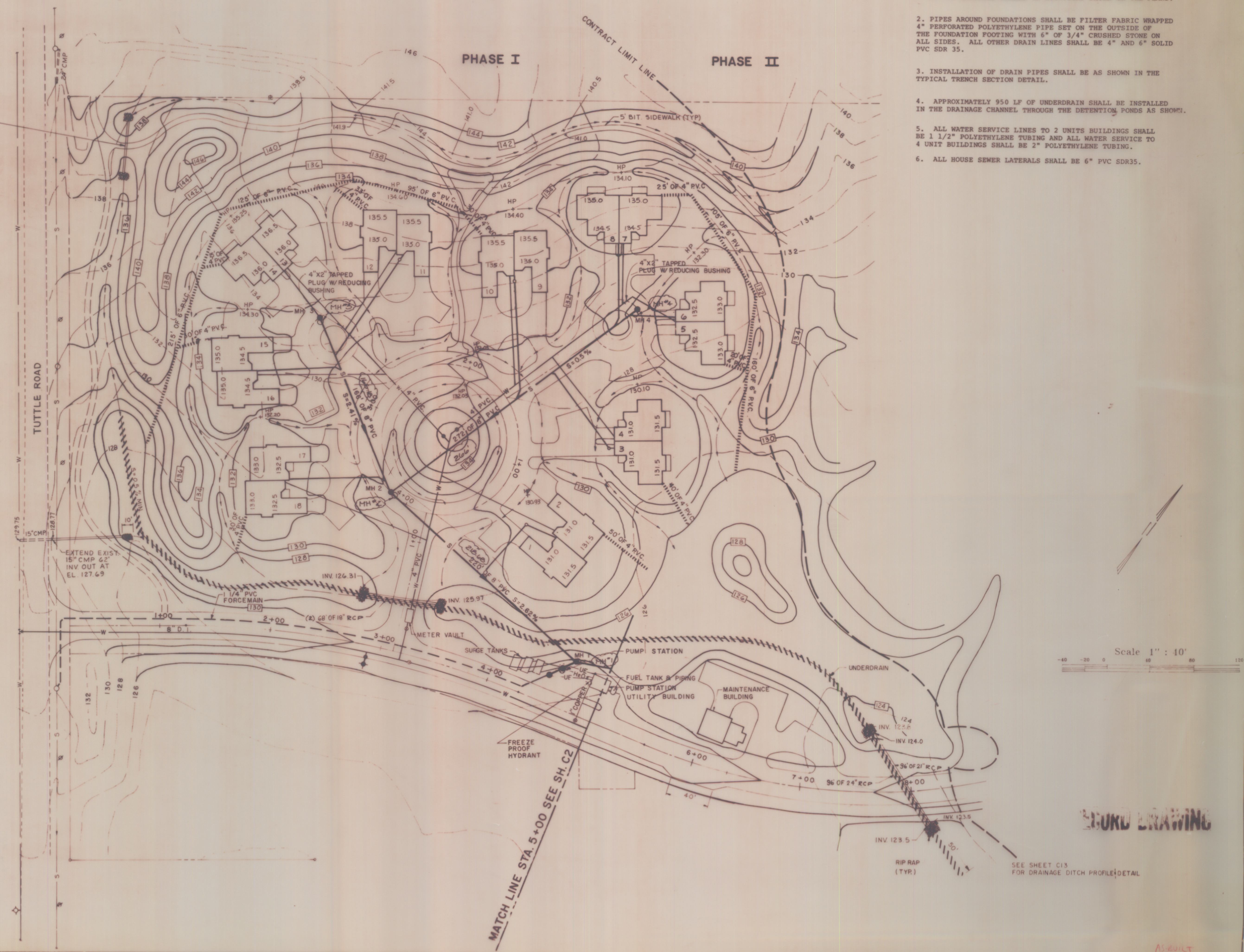
DATE AUGUST 29, 1986

REVISIONS
11/3/86
6/29/87
CONTRACT LIMIT LINE

DRAWING NO.

C1

48" CF 12" CMP
S=C.0004
INV. IN 136.4
INV. OUT 136.1



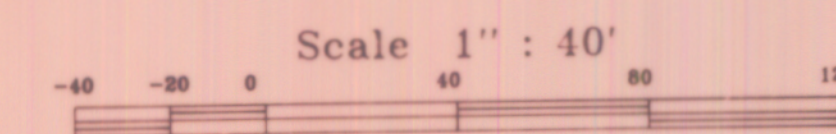
FLOOD DRAWING

SEE SHEET C13
FOR DRAINAGE DITCH PROFILE DETAIL

AS-BUILT

PHASE I

PHASE II



RECORD DRAWING

AS-BUILT



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WOODARD & CURRAN INC.

CONSULTING ENGINEERS
PORTLAND, MAINE

CUMBERLAND
MEADOWS

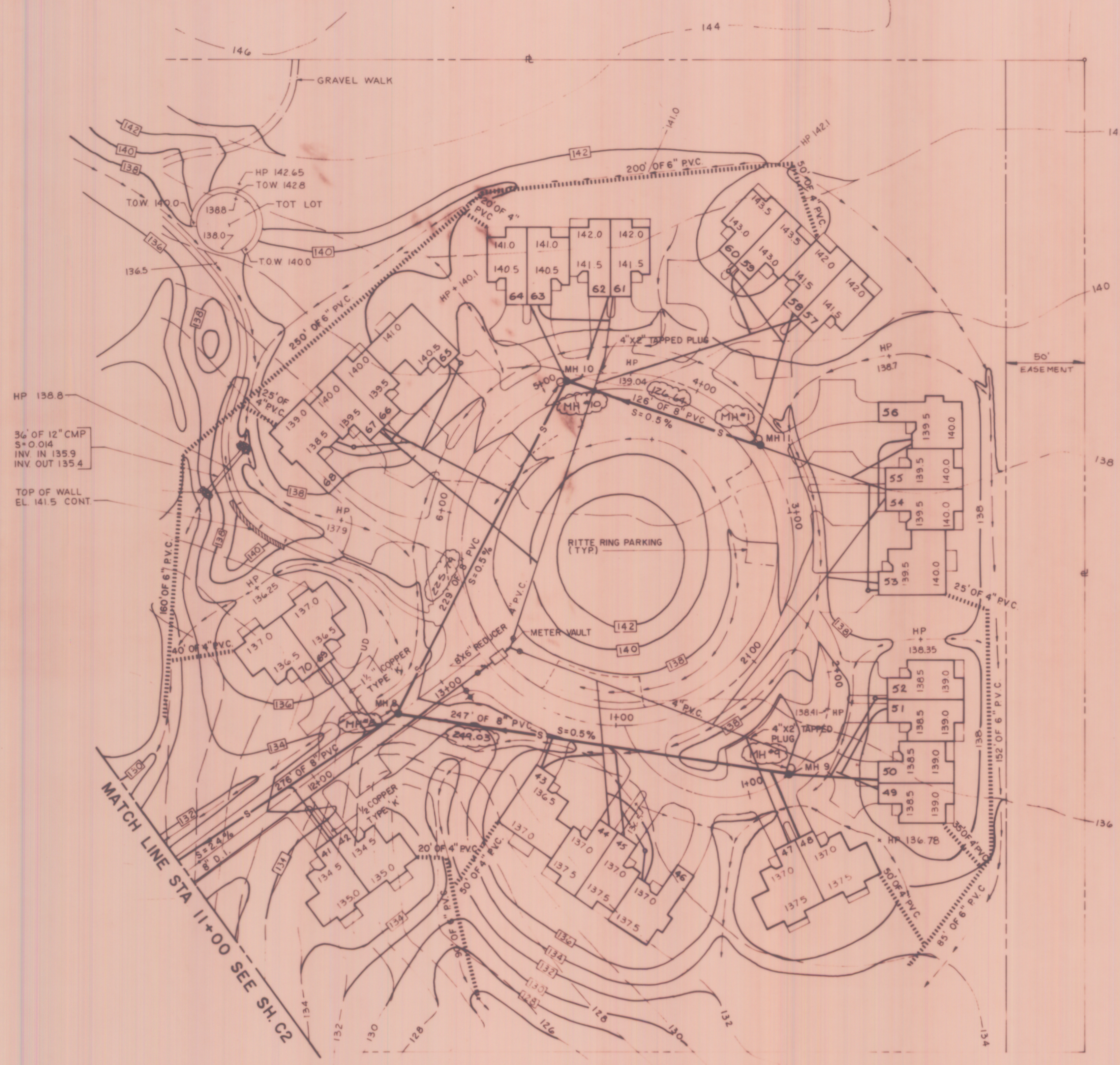
UTILITY / GRADING /
DRAINAGE PLAN

DATE: AUGUST 29, 1986

REVISIONS
11/18/86
6/29/87
CONTRACT LIMIT LINE
12/01/87
SEWER & WATER
SERVICES TO 4-PLEXES

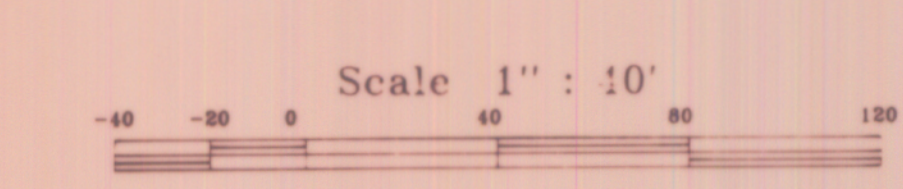
DRAWING NO.

C2



36" OF 12" CMP
S=0.014
INV IN 135.9
INV OUT 135.4

TOP OF WALL
EL 141.5 CONT



RECORD DRAWING

STATE OF MAINE
BRENT M. BRIDGES
REGISTERED PROFESSIONAL ENGINEER

ARCHITECTS FOUR

PROFESSIONAL ASSOCIATION
99 MIDDLE ST., MANCHESTER, NH 03101
(603) 627-3844

WOODARD & CURRAN INC.
CONSULTING ENGINEERS
PORTLAND, ME 04101

CUMBERLAND MEADOWS

**UTILITY / GRADING /
DRAINAGE PLAN**

DATE: AUGUST 29, 1986

REVISIONS

11/18/86
08/06/87
12/01/87
BUFFER BASEMENT
SEWER & WATER
SERVICES TO 4-PLEXES

DRAWING NO.

C3

AS-BUILT

EROSION & SEDIMENTATION CONTROL NOTES

1. THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED AT ANY ONE TIME. THE EXPOSURE TIME SHALL BE KEPT TO A MINIMUM.
2. ALL SLOPES SHALL BE LOAMED, SEEDED, AND MULCHED IMMEDIATELY AFTER FINAL GRADING.
3. SILTATION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO, OR AS THE FIRST STEP IN GRADING. THEY SHALL BE PLACED AS INDICATED ON THE PLANS, AND ANY OTHER LOCATIONS REQUIRED TO KEEP ALL SOIL WITHIN THE CONSTRUCTION ZONE.
4. HAY BALE BARRIERS AND SILTATION FENCES SHALL BE INSPECTED DAILY. DAMAGED OR DETERIORATED BARRIERS SHALL BE REPAIRED OR REPLACED IMMEDIATELY. ALL BARRIERS SHALL BE KEPT CLEAN AND IN PLACE UNTIL ALL EXPOSED SOIL HAS WELL ESTABLISHED COVER.
5. DRAINAGE CULVERTS AND SILTATION CONTROL MEASURES SHALL BE PLACED AS SOON AS POSSIBLE AFTER WORK COMMENCES IN THAT PARTICULAR DRAINAGE AREA.
6. DETENTION PONDS SHALL BE USED AS SEDIMENTATION BASINS DURING CONSTRUCTION.

LEGEND

— HAY BALE BARRIERS

--- SILTATION FENCE

CONTOUR FOR SEDIMENT CONTROL (TYP.)

SEE SHEET 2 & EC3 FOR SILTATION POND DETAILS

Scale 1" = 10'

RECORD DRAWING



THE MEADOWS
EROSION CONTROL PLAN
EC1

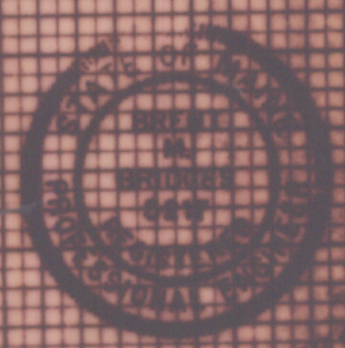
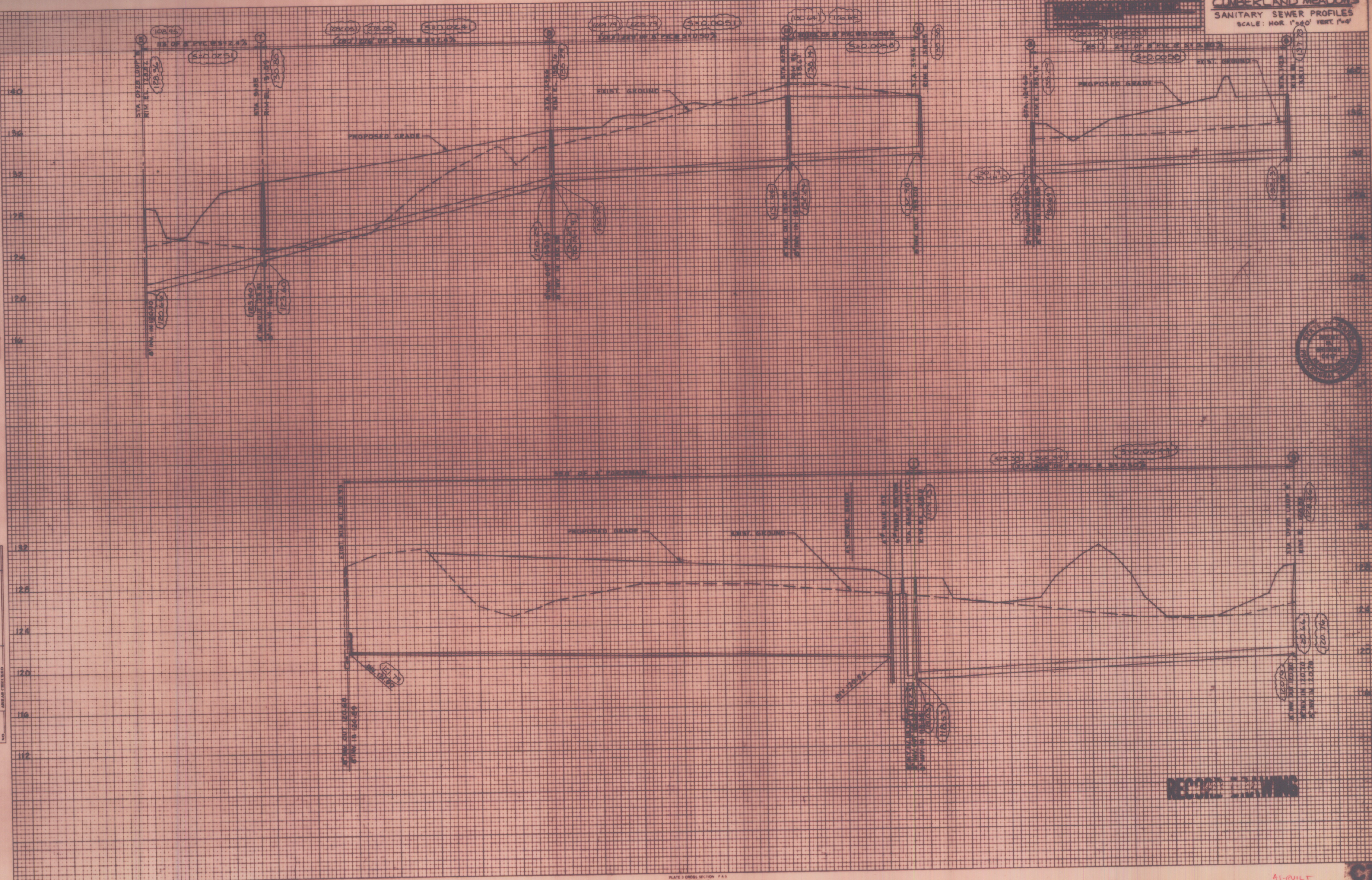


48 OF 6\"/>

FULL SURVEY NO.	REVIEWED	DATE
	PLANNED	BY
	TEMPERATURE	
	NOTE BOOK	

GENERAL SURVEY NO.	REVIEWED	DATE
	PLANNED	BY
	TEMPERATURE	
	NOTE BOOK	

CUMBERLAND MEADOWS
 SANITARY SEWER PROFILES
 SCALE: HOR 1"=50' VERT 1"=4'



REC'D DRAWING

AS-BUILT

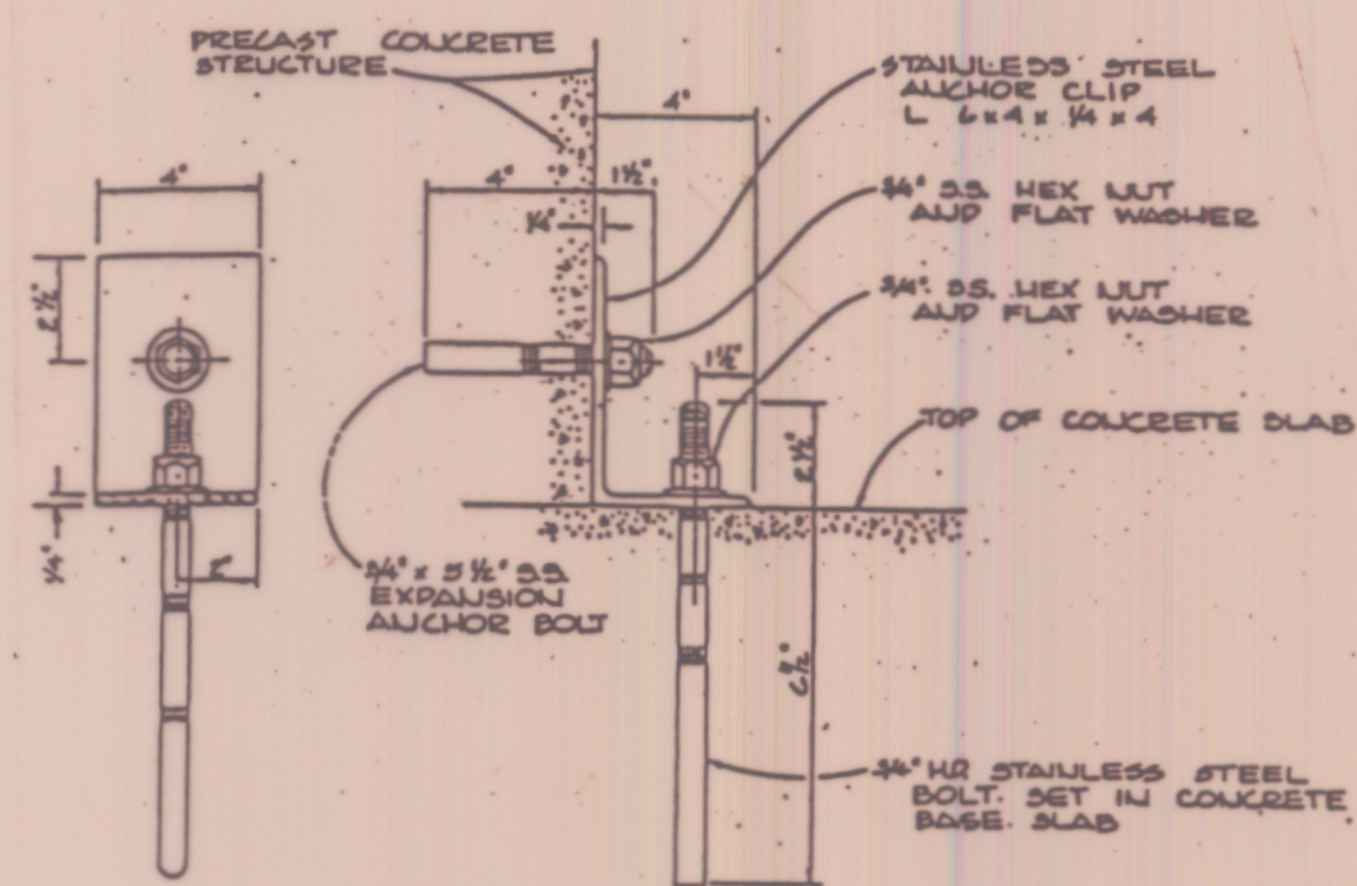
ORIGINAL LEAFLET	REVIEWED PLOTTER	BY	DATE
	TEMP. PLATE		
	AREA		

RECORD DRAWING

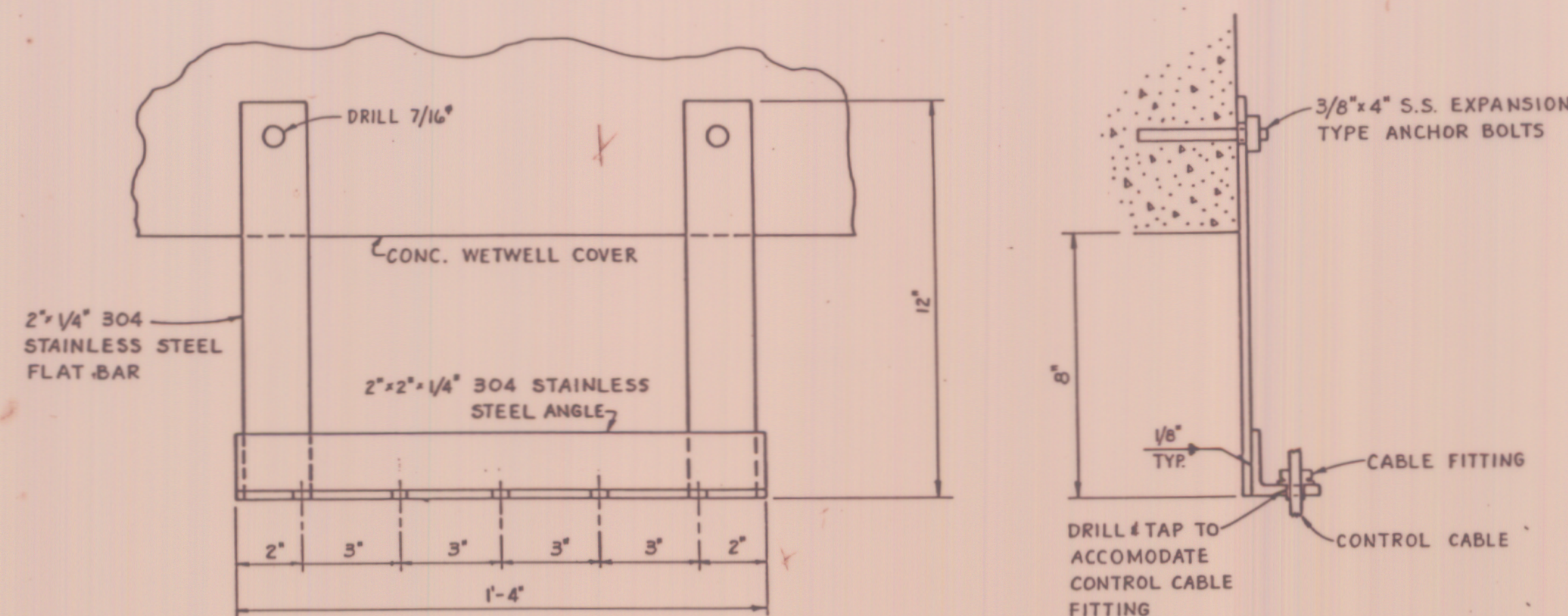
WOODWARD-CLARK, INC.
P.O. BOX 1000
PORTLAND, ORE

PLATE 3 CROSS SECTION F A S
NO 1000H - 3
CLEARPRINT PAPER CO. EMERYVILLE, CA

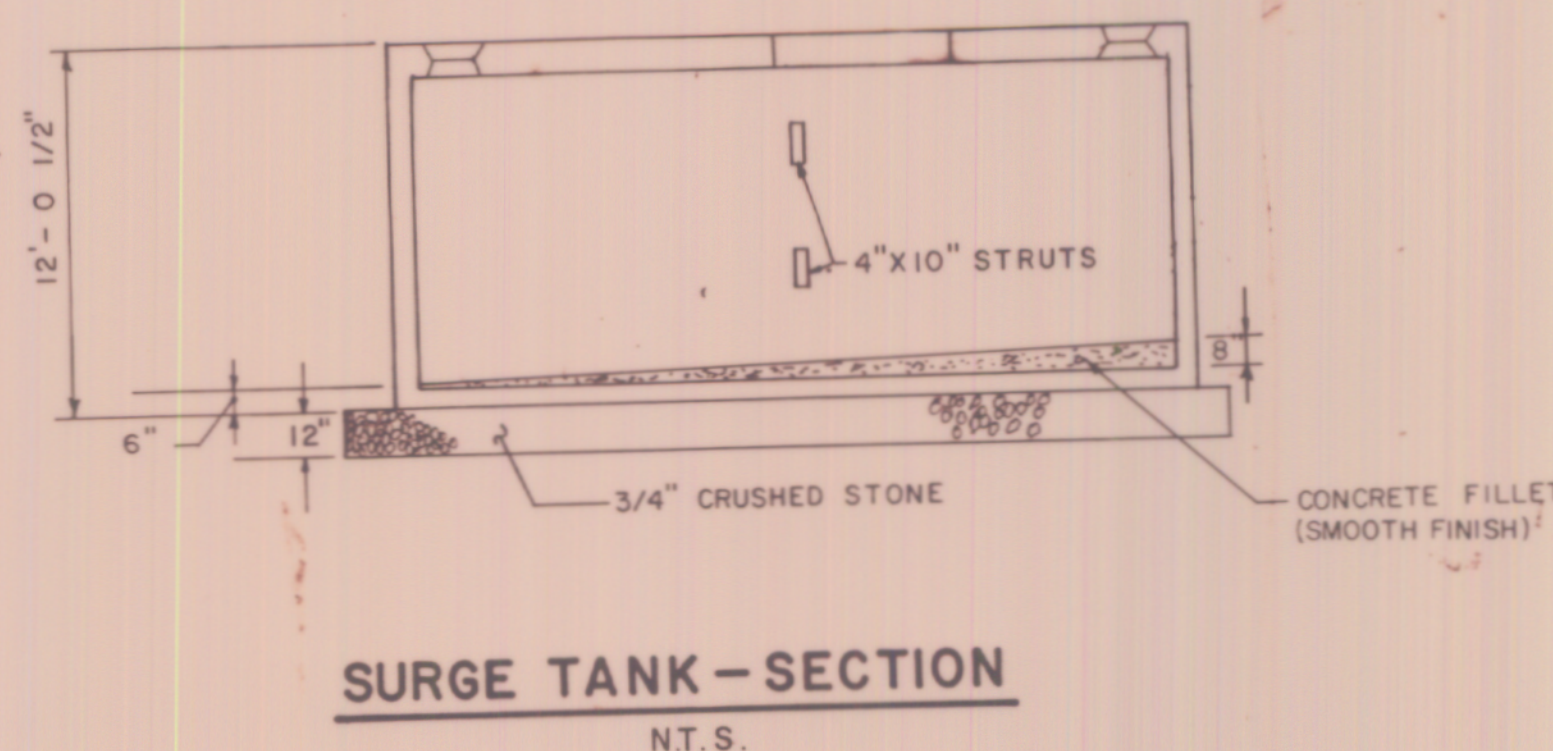
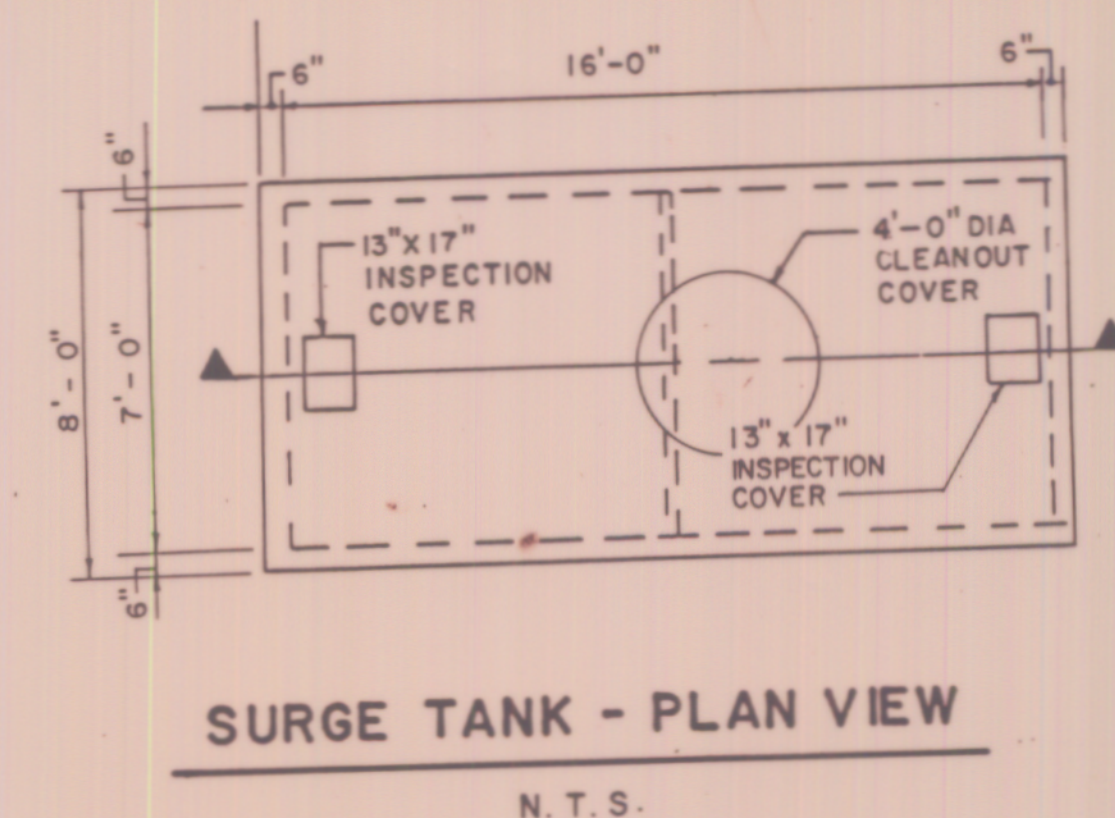
AS-BUL



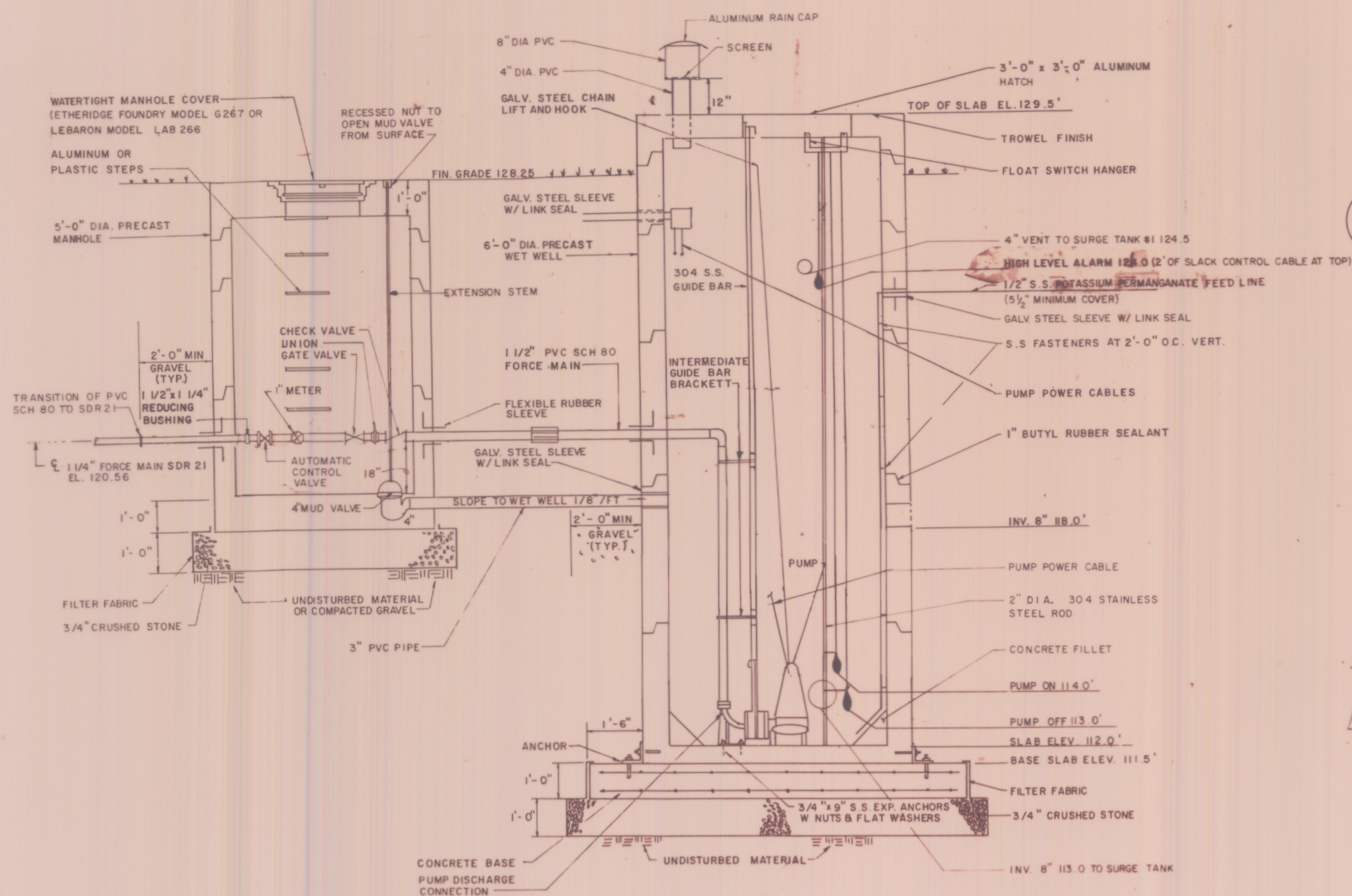
ANCHOR BOLT DETAIL
N.T.S.



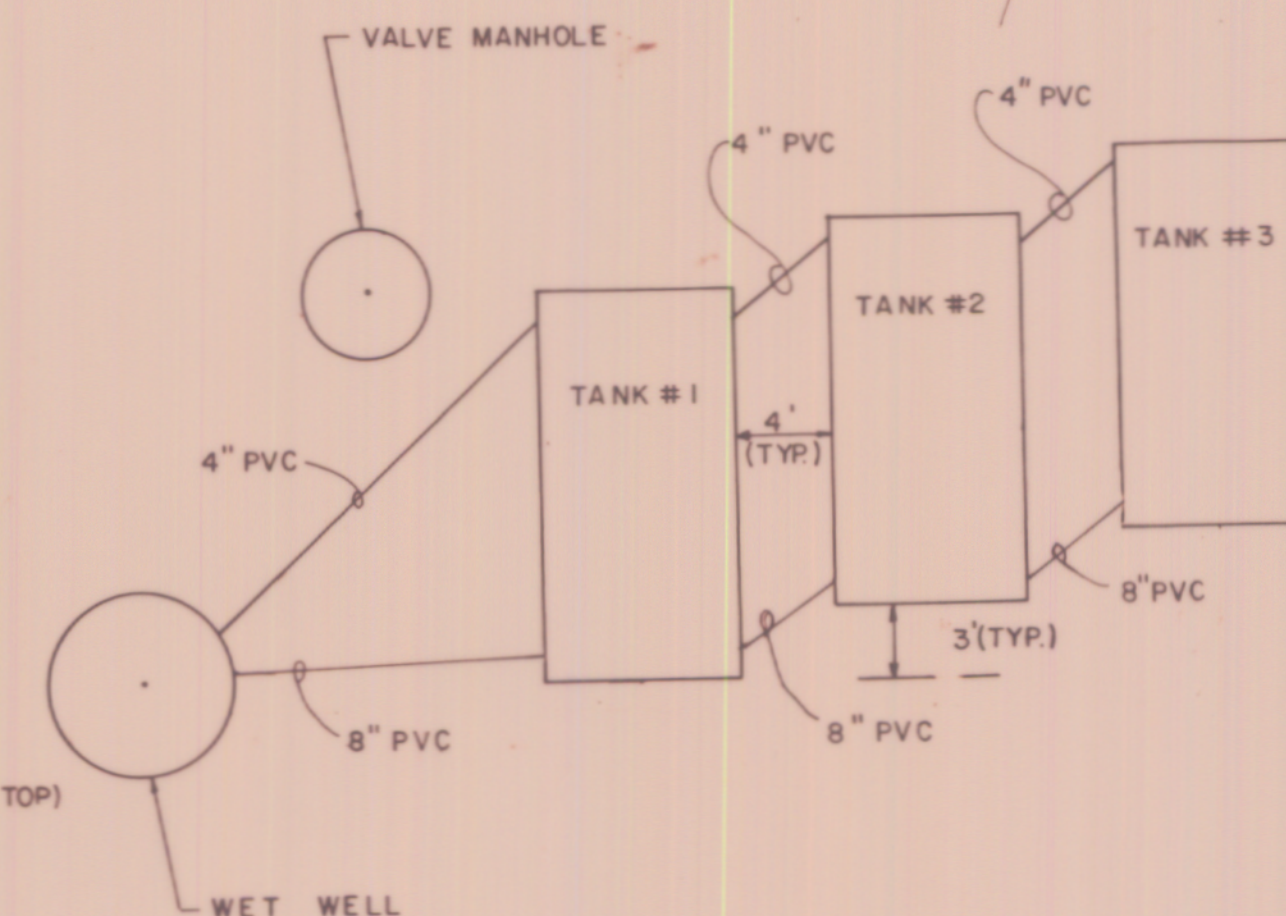
FRONT ELEVATION
SECTION
FLOAT SWITCH HANGER
SCALE: 1/4" = 1'-0"



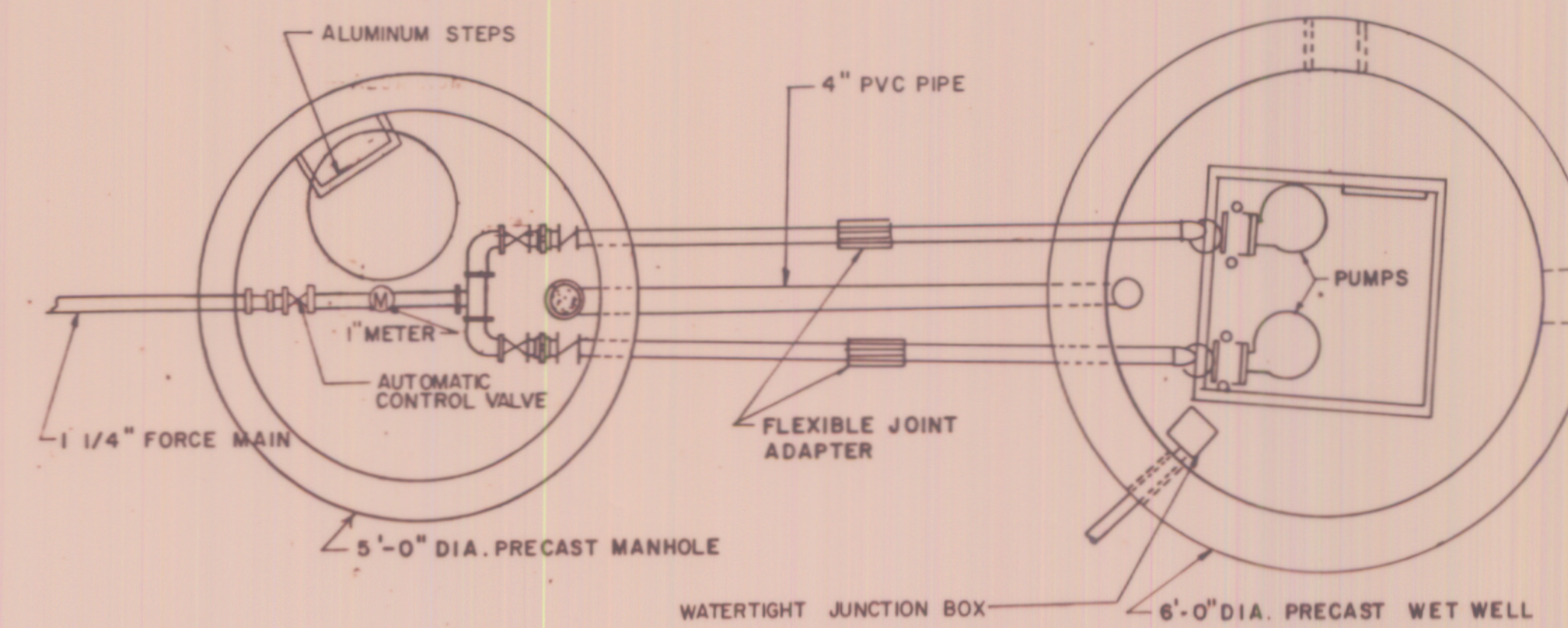
NOTE: INSTALL A 6'-0" DIAMETER PRECAST CONCRETE BARREL SECTION, A 8" THICK PRECAST SLAB TOP & A 4'-0" x 4'-0" ALUMINUM HATCH OVER THE CLEANOUT FOR THE SURGE TANKS.



LIFT STATION & VALVE PIT - SECTION
SCALE: 1/2" = 1'-0"



PIPING DIAGRAM
SURGE TANK & WET WELL
N.T.S.



LIFT STATION & VALVE PIT - PLAN
SCALE: 1/2" = 1'-0"

TANK #1
8" INV OUT TO WETWELL 113.25'
8" INV OUT TO TANK #2 113.25'
4" VENT OUT TO TANK #2 123.83'
SLAB ELEV. 112.75'
TOP OF TANK ELEV. 124.80'

TANK #2
8" INV OUT TO TANK #1 113.50'
8" INV OUT TO TANK #3 113.50'
4" VENT OUT TO TANK #1 123.83'
4" VENT OUT TO TANK #3 123.83'
SLAB ELEV. 113.00'
TOP OF TANK ELEV. 125.05'

TANK #3
8" INV OUT TO TANK #2 113.75'
4" VENT OUT TO TANK #2 123.83'
SLAB ELEV. 113.25'
TOP OF TANK ELEV. 125.30'

STATE OF MAINE
BRENT M. BRIDGES
REGISTERED PROFESSIONAL ENGINEER

ARCHITECTS FOUR
PROFESSIONAL ASSOCIATION
99 MIDDLE ST. MANCHESTER, NH 03101
(603) 627-3844

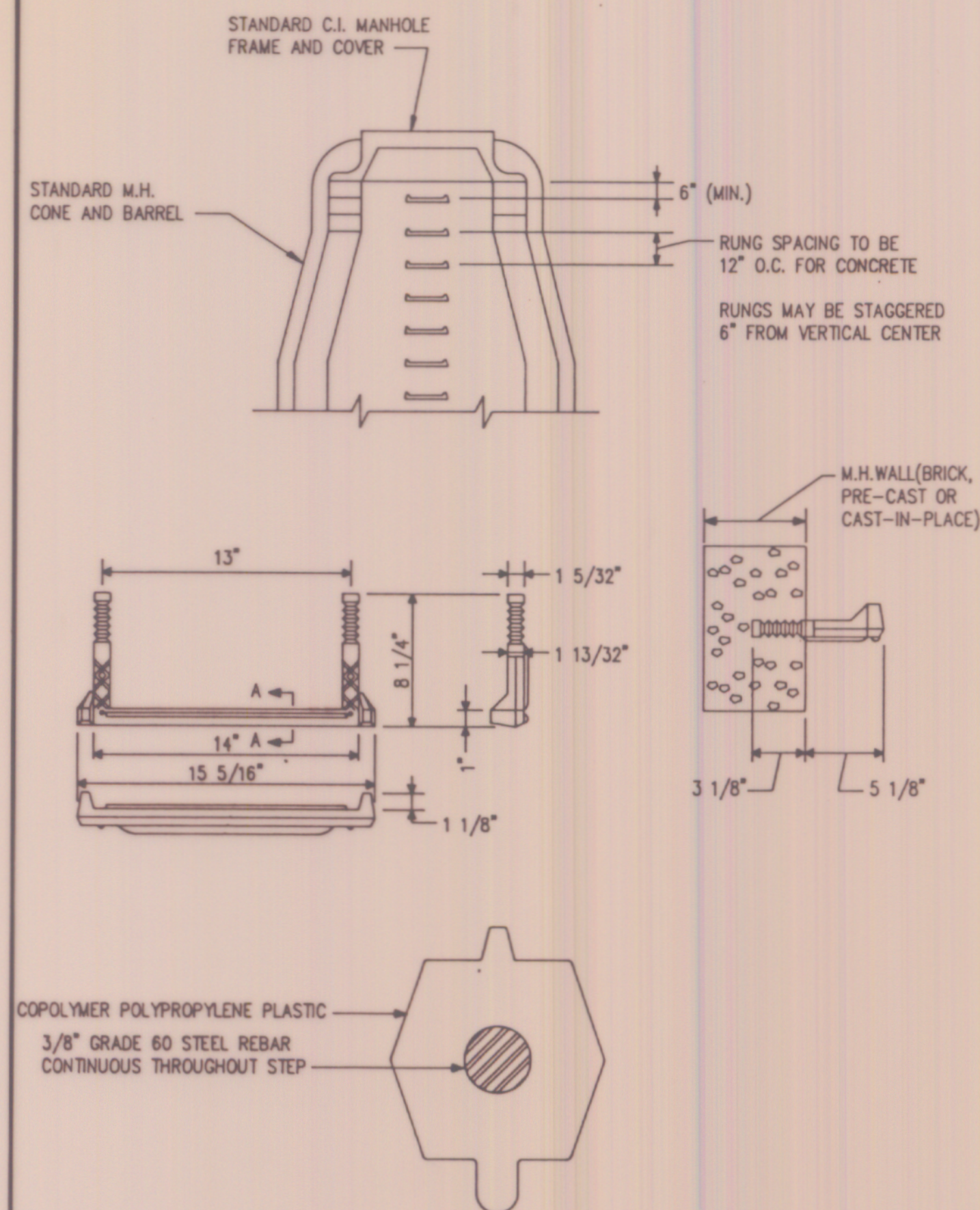
WOODARD & CURRAN INC.
CONSULTING ENGINEERS
PORTLAND, MAINE

CUMBERLAND MEADOWS

LIFT STATION, VALVE PIT & SURGE TANK DETAILS

DATE: AUGUST 29, 1986

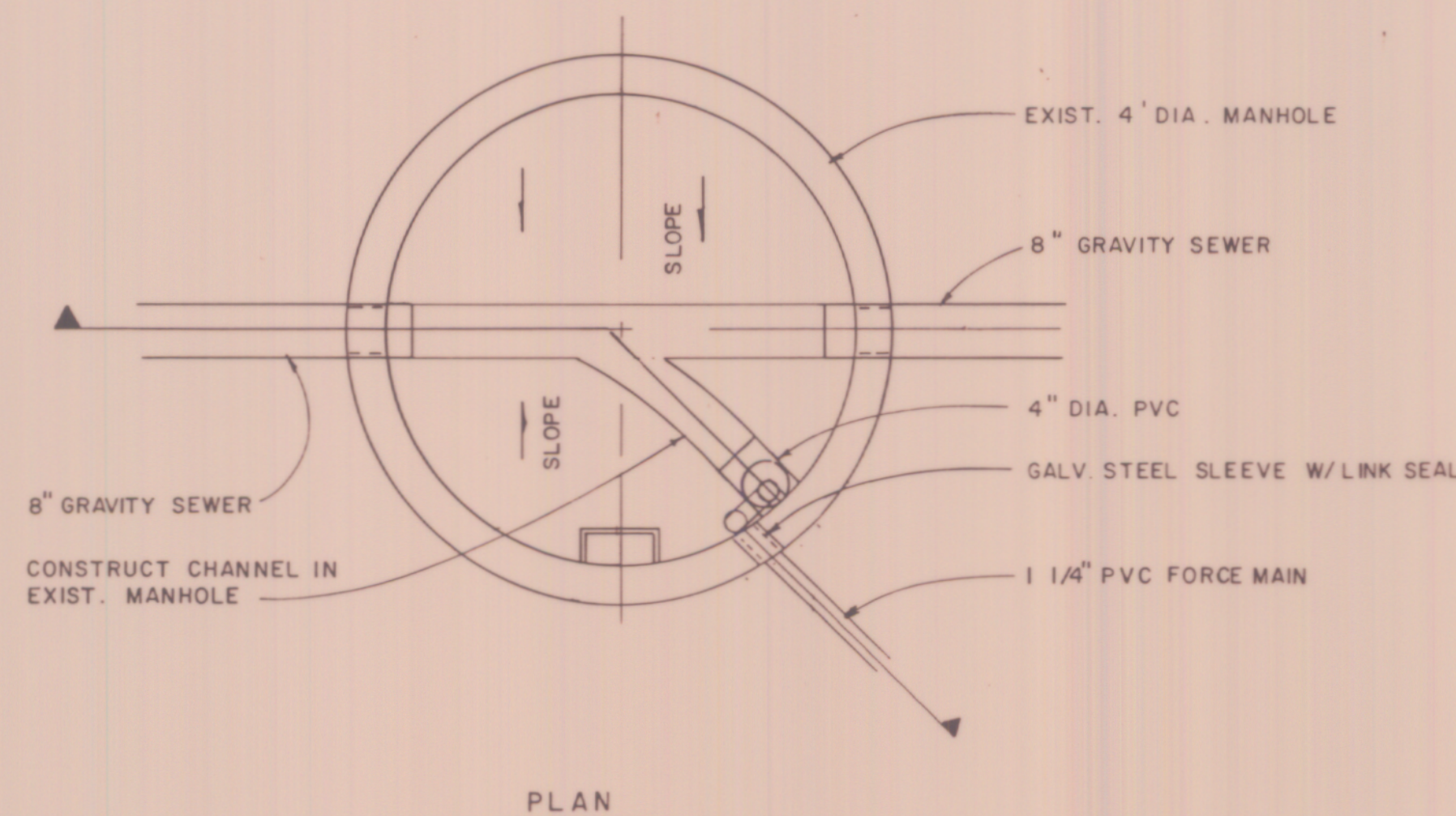
C9



SECTION A-A

PLASTIC MANHOLE STEPS

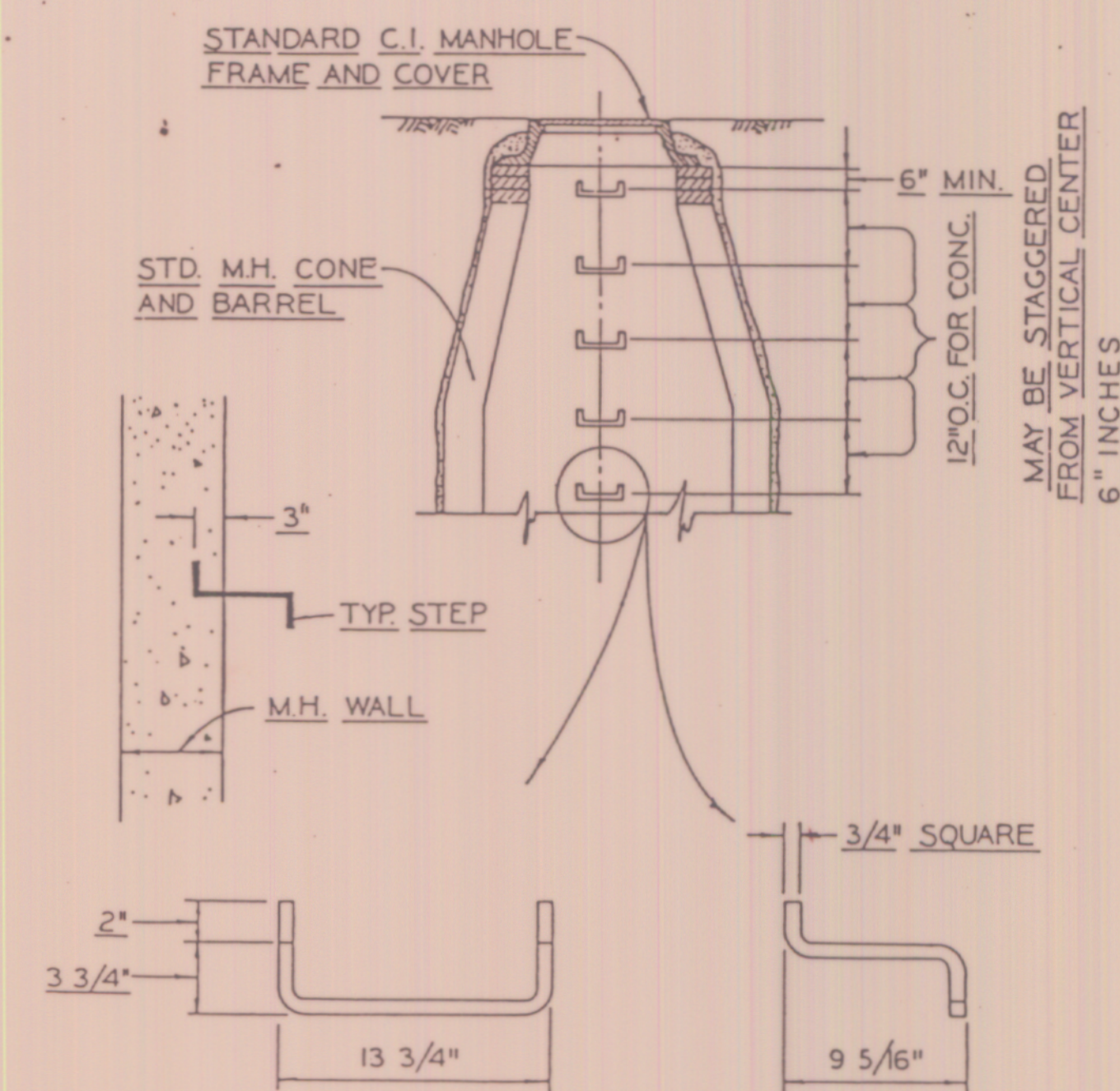
M.A. INDUSTRIES P52 - PF - SL OR EQUAL
N.T.S.



PLAN

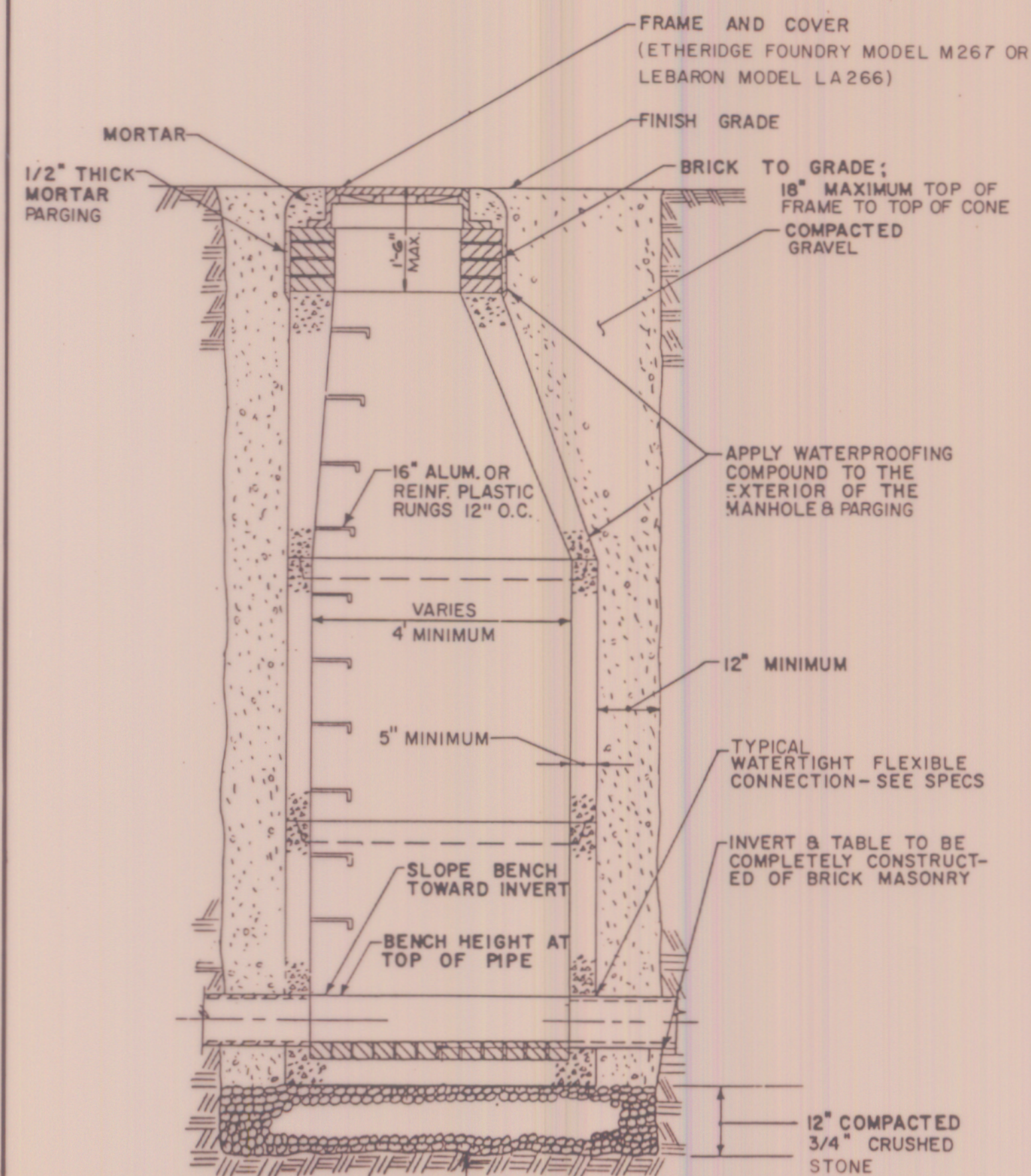
ENTRY OF F.M. INTO MANHOLE

N.T.S.



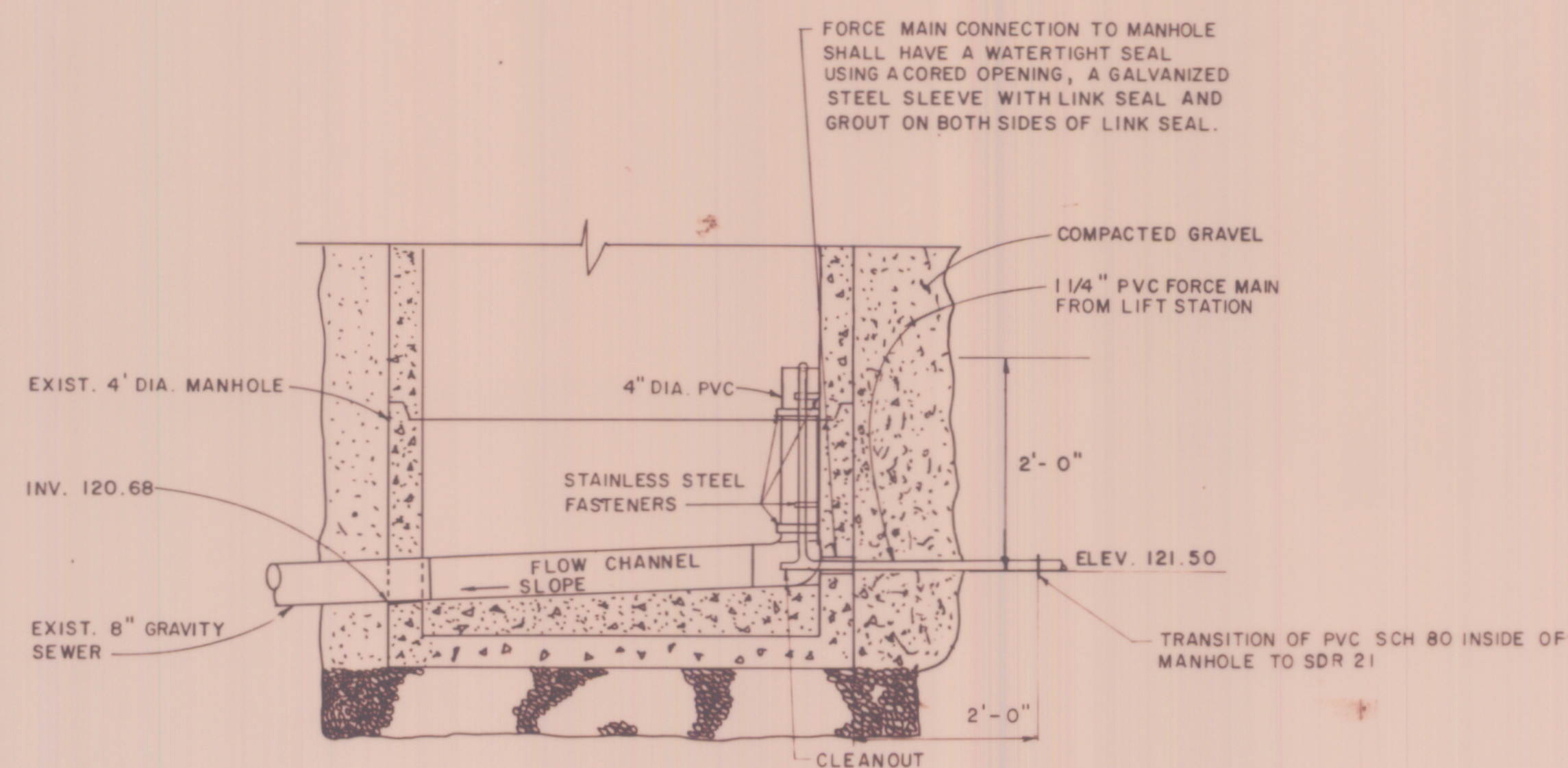
ALUMINUM MANHOLE STEPS

ALCOA #12653B, OR AN APPROVED EQUAL
N.T.S.



PRECAST MANHOLE SECTION

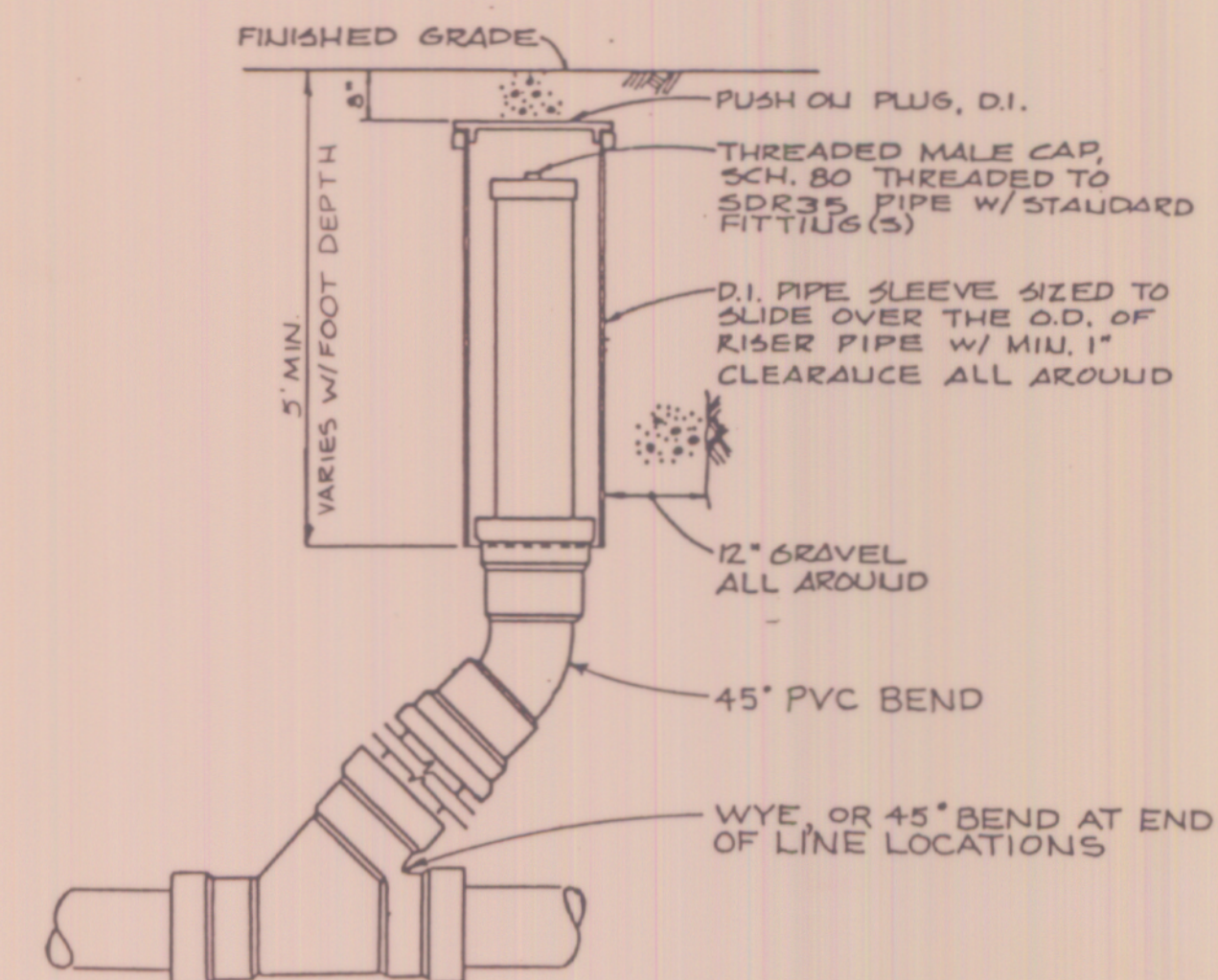
N.T.S.



ELEVATION

ENTRY OF F.M. INTO MANHOLE

N.T.S.



CLEAN OUT DETAIL

N.T.S.

AS-BUILT



ARCHITECTS FOUR

PROFESSIONAL ASSOCIATION
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(603) 627-3844

WOODARD & CURRAN INC.
CONSULTING ENGINEERS
PORTLAND, MAINE

CUMBERLAND
MEADOWS

MANHOLE, STEPS AND
CLEAN OUT DETAILS

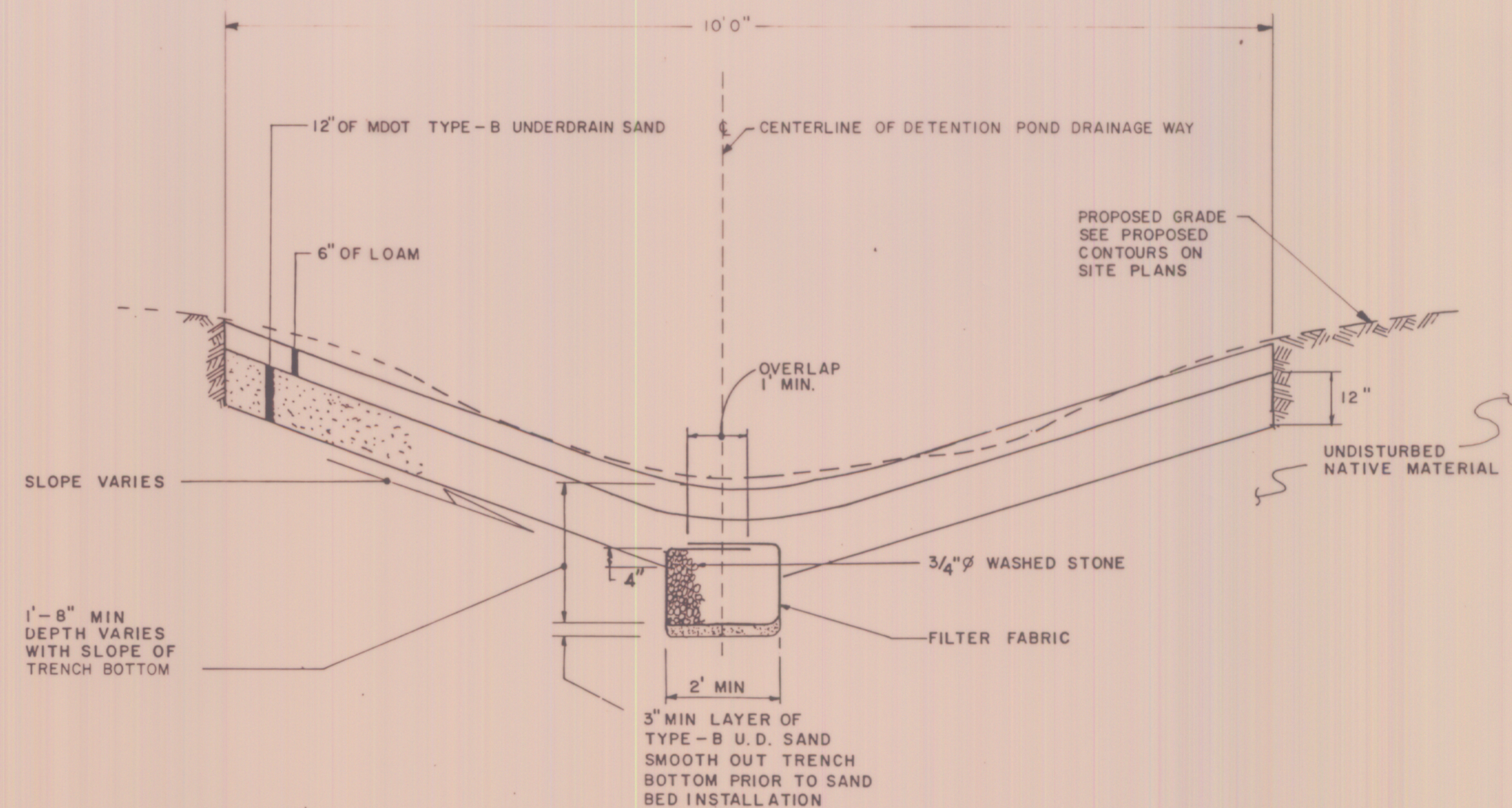
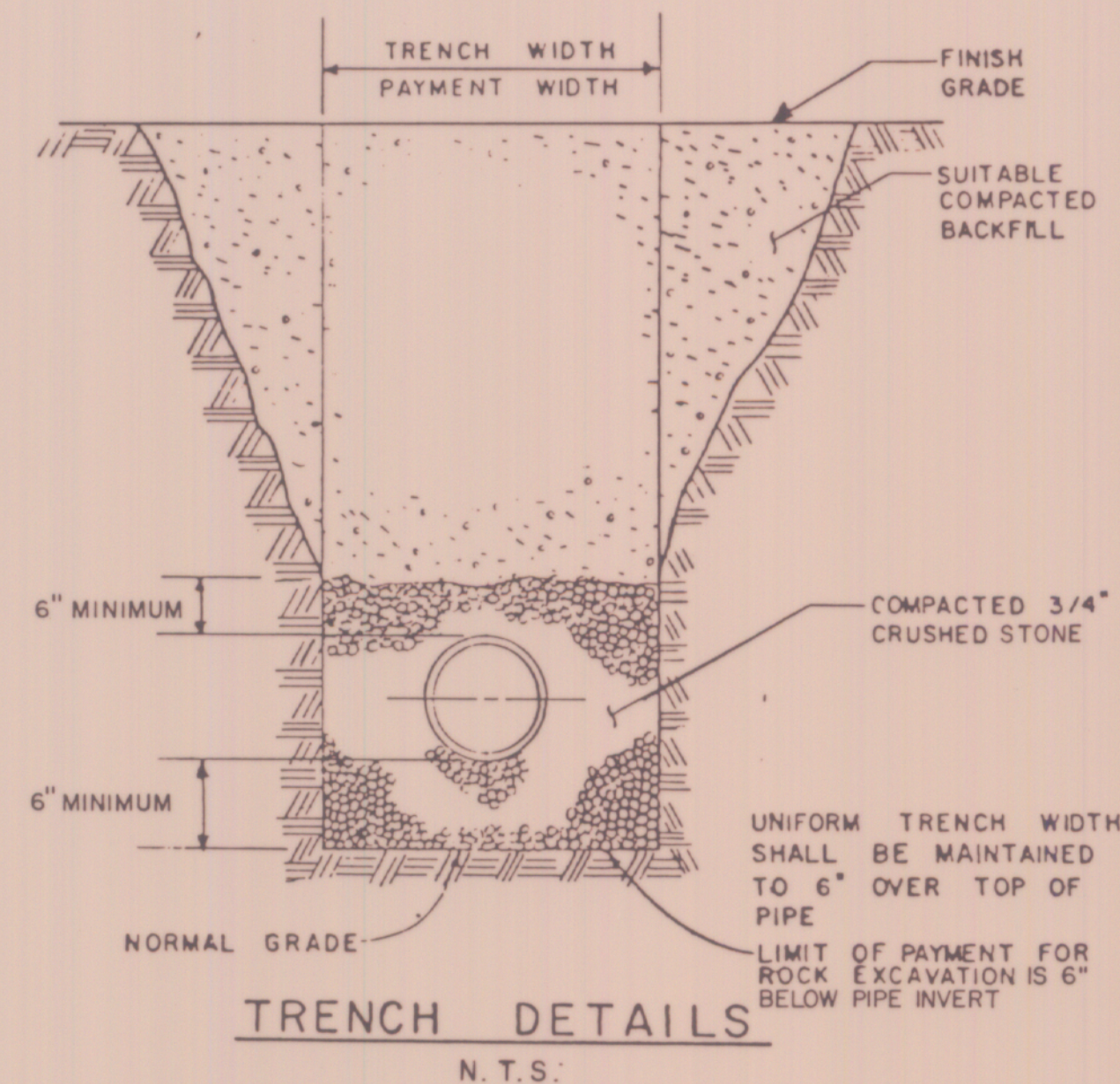
DATE AUGUST 29, 1986

C10

TABLE OF DIMENSIONS OF PIPE										
D	A	A-1	B	C	E	F	G	VOL. BASE /100'	WEIGHT /100'	O.D. SOCKET
8"	3'-0"	3'-0"	1'-1 1/2"	0'-10 1/2"	0'-6"	0'-4 1/2"	0'-0 1/2"	7.358	7.358	10 3/8"
10"	3'-0"	3'-0"	1'-0 3/8"	0'-11 5/8"	0'-6"	0'-4 5/8"	0'-0 5/8"	7.856	7.856	12 1/2"
12"	3'-0"	3'-0"	0'-11 3/8"	0'-11 5/8"	0'-6"	0'-4 5/8"	0'-0 5/8"	7.832	7.832	14 1/2"
14"	3'-0"	3'-0"	0'-10 3/8"	0'-11 5/8"	0'-6"	0'-4 5/8"	0'-0 5/8"	8.178	8.178	16 3/4"
16"	3'-0"	3'-0"	0'-8 1/4"	0'-10 3/4"	0'-6"	0'-4 3/4"	0'-0 3/4"	8.447	8.447	18"
18"	3'-0"	3'-2 1/8"	0'-8 1/4"	0'-10 3/4"	0'-6"	0'-4 3/4"	0'-0 3/4"	8.863	10.846	21 1/8"
20"	3'-0"	3'-8 3/8"	0'-7 3/8"	0'-10 3/4"	0'-6"	0'-4 3/4"	0'-0 3/4"	8.815	11.552	23 3/8"
24"	3'-1 3/4"	4'-1 3/4"	0'-6"	0'-10 3/4"	0'-6"	0'-4 3/4"	0'-0 3/4"	8.833	13.475	27 3/4"
27"	3'-5 1/4"	4'-5 1/4"	0'-6"	0'-10 3/4"	0'-6"	0'-4 3/4"	0'-0 3/4"	10.958	15.029	31 1/8"
30"	3'-8 1/4"	4'-8 1/4"	0'-6"	0'-10 3/4"	0'-6"	0'-4 3/4"	0'-0 3/4"	12.196	16.585	34 1/2"
33"	3'-11 3/4"	5'-0 1/2"	0'-6"	0'-11 7/8"	0'-6"	0'-4 3/8"	0'-1 3/8"	13.513	18.354	38 1/8"
36"	4'-3 3/4"	5'-3 1/2"	0'-6"	0'-11 7/8"	0'-6"	0'-4 3/8"	0'-1 3/8"	14.910	20.042	41 1/2"

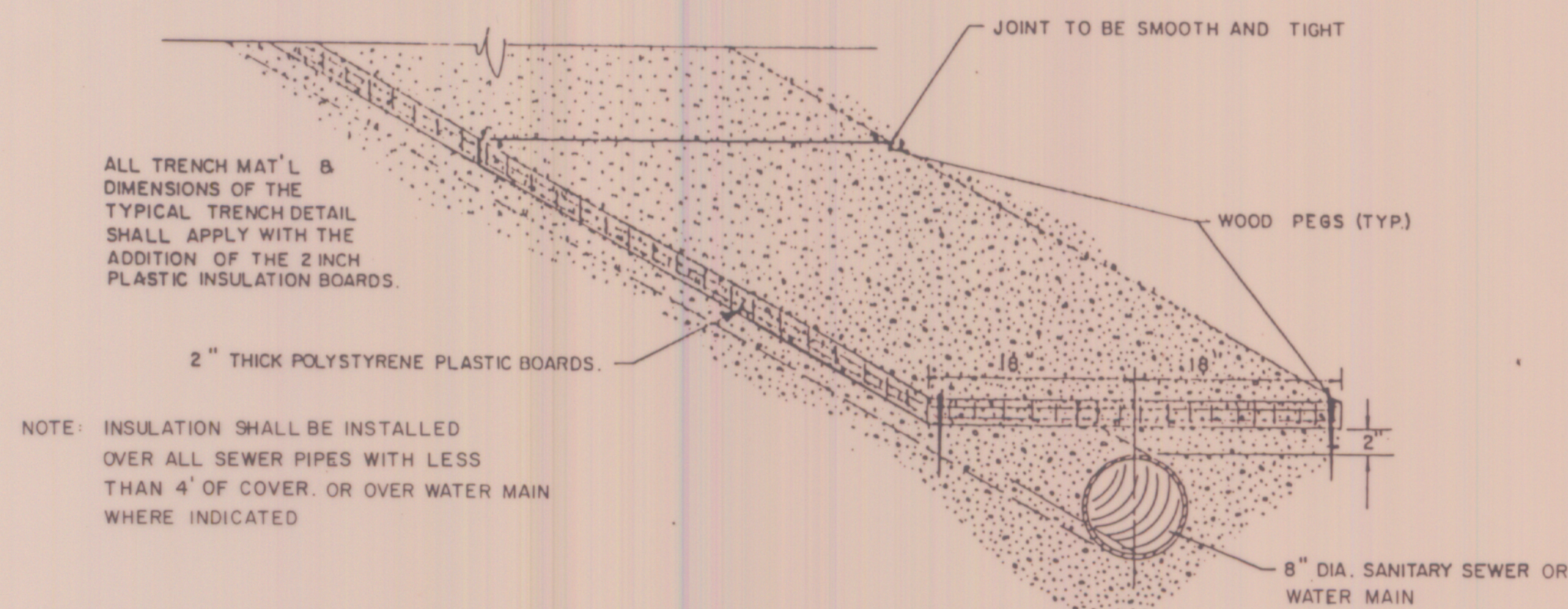
A = WIDTH OF UNSHIELDED TRENCH
A-1 = WIDTH OF SHIELDED TRENCH

* COLUMN A & A-1 SAME FOR P.V.C., TRUSS AND C.M.P.

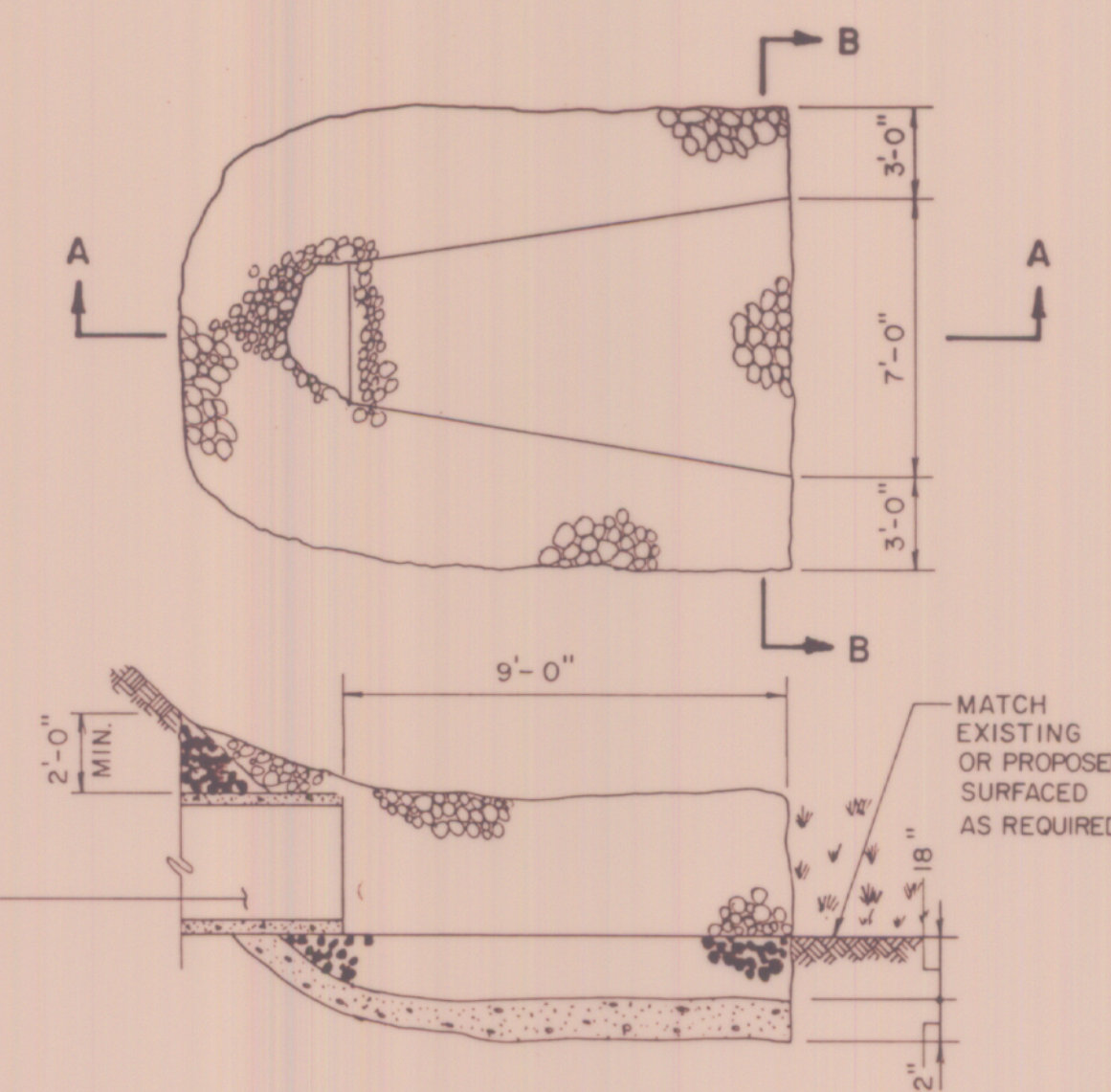


NOTE: TO BE USED IN DETENTION PONDS.
UNDERDRAIN SHALL BE CARRIED UNDER
ROADWAY CULVERTS

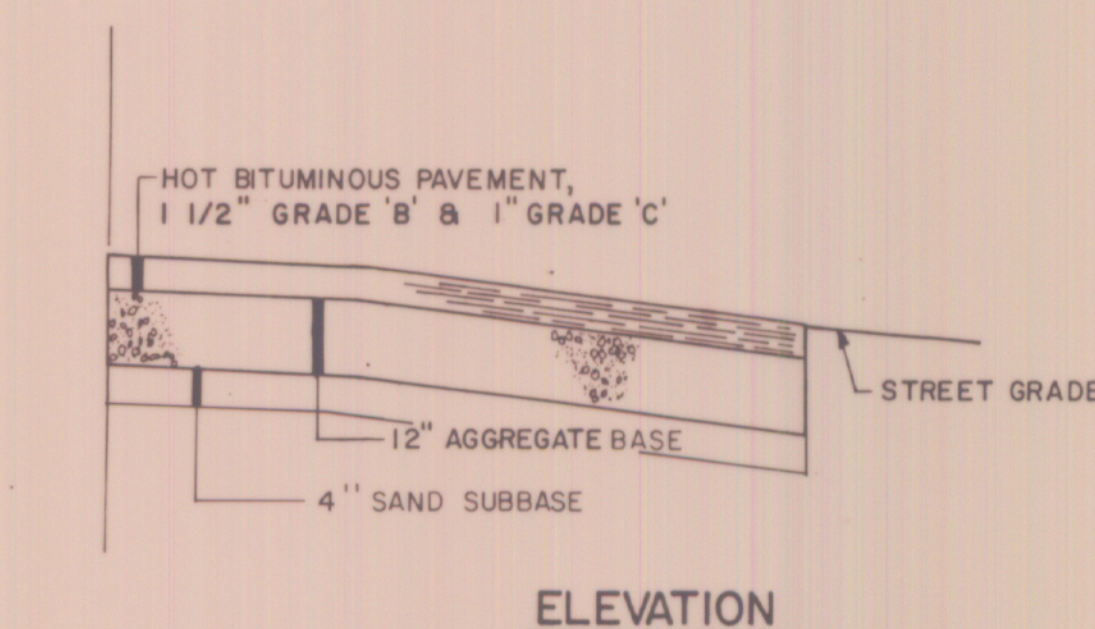
TYPICAL UNDERDRAIN CROSS SECTION
N.T.S.



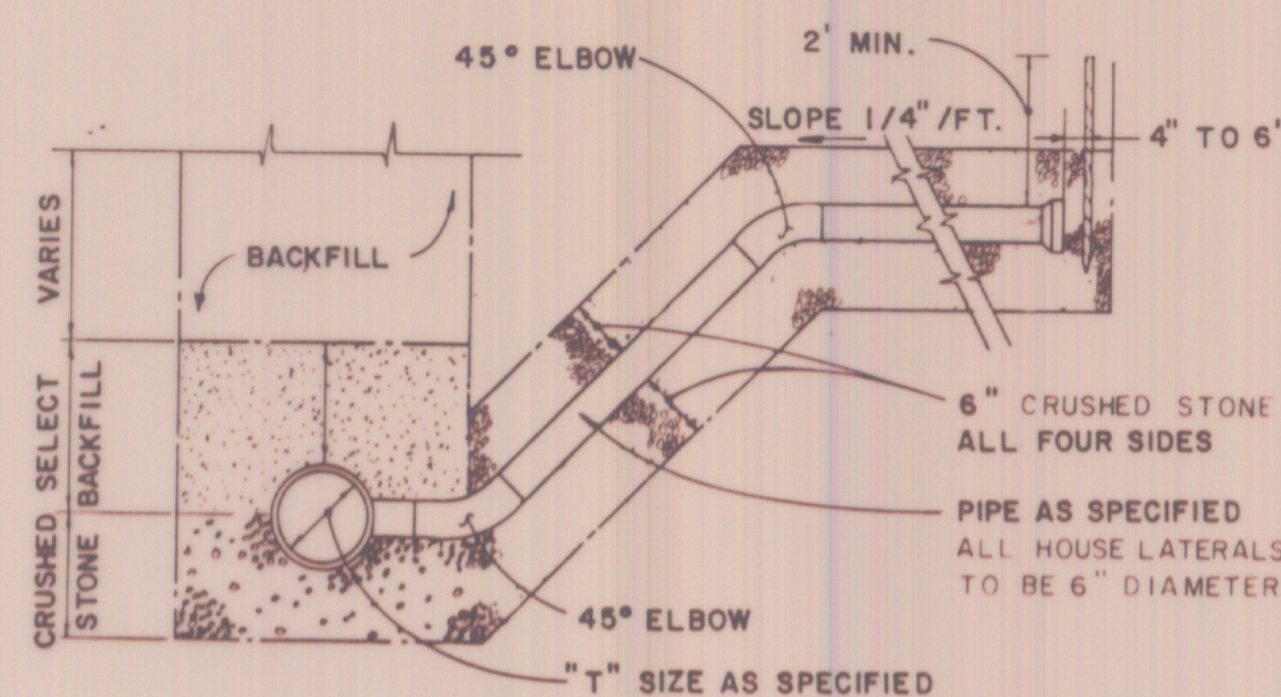
PIPE INSULATION DETAIL
N.T.S.



STONE DITCH PROTECTION DETAIL
N.T.S.



BITUMINOUS DRIVEWAY CONSTRUCTION
N.T.S.



ALTERNATE HOUSE LATERAL CONNECTION
N.T.S.



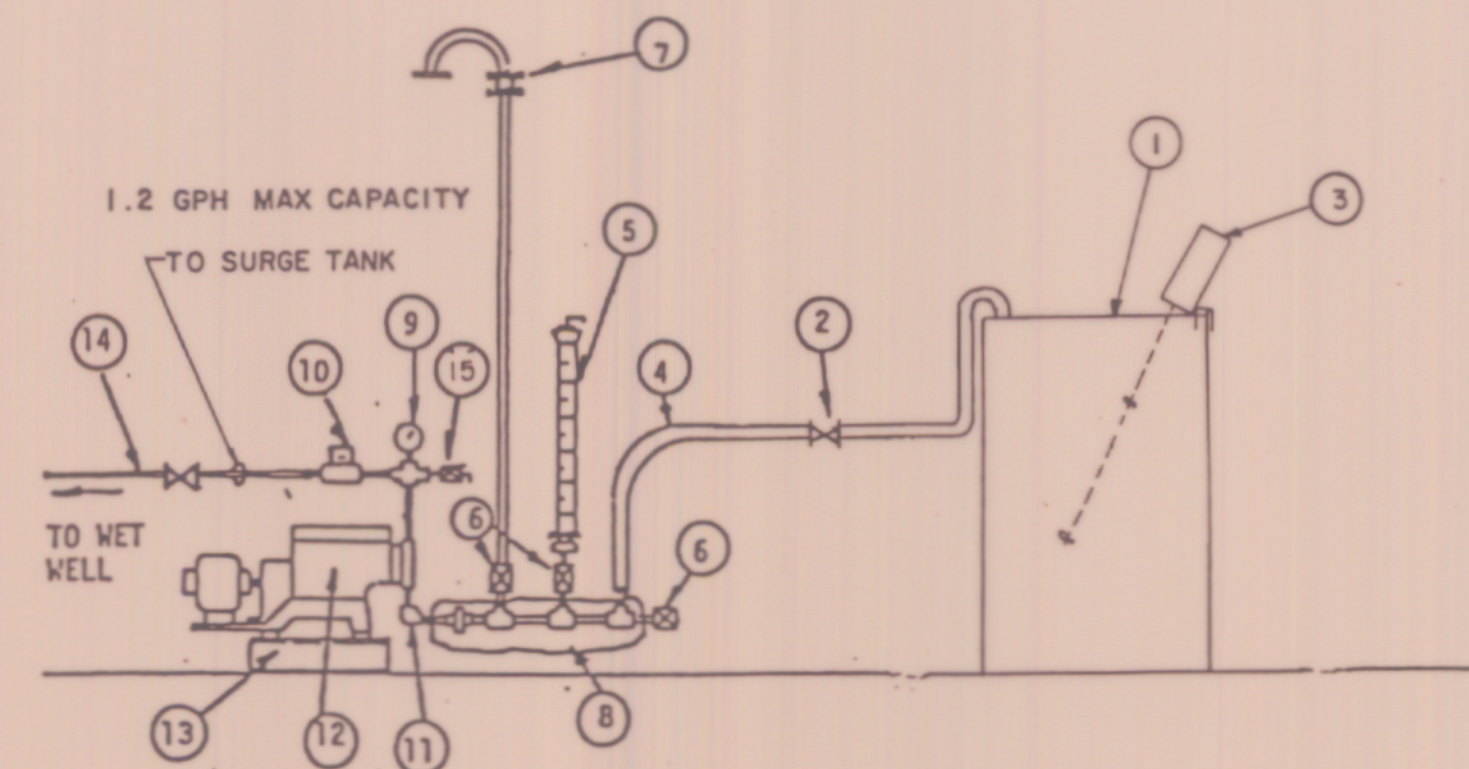
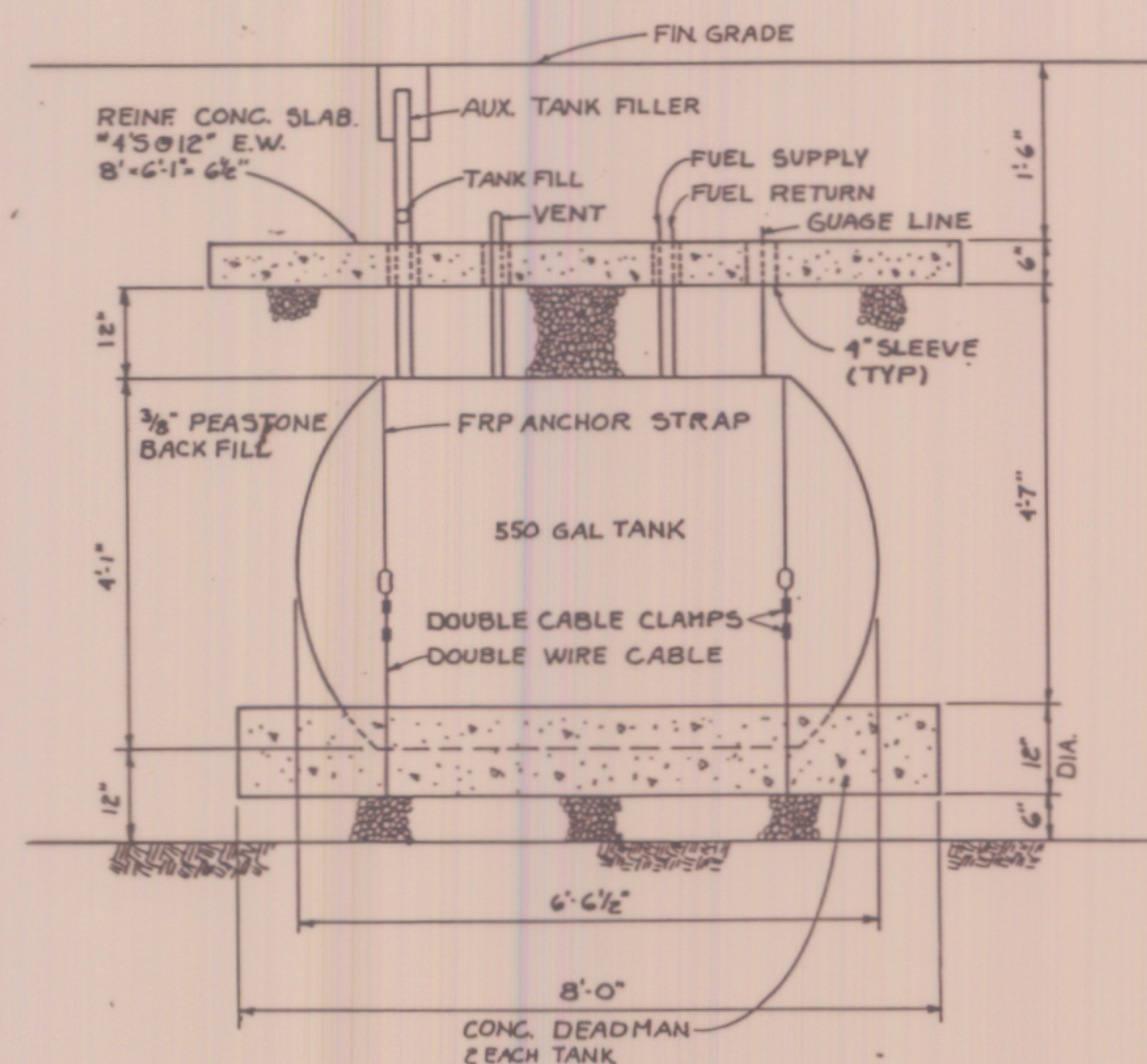
TYPICAL SIDEWALK DETAIL
N.T.S.



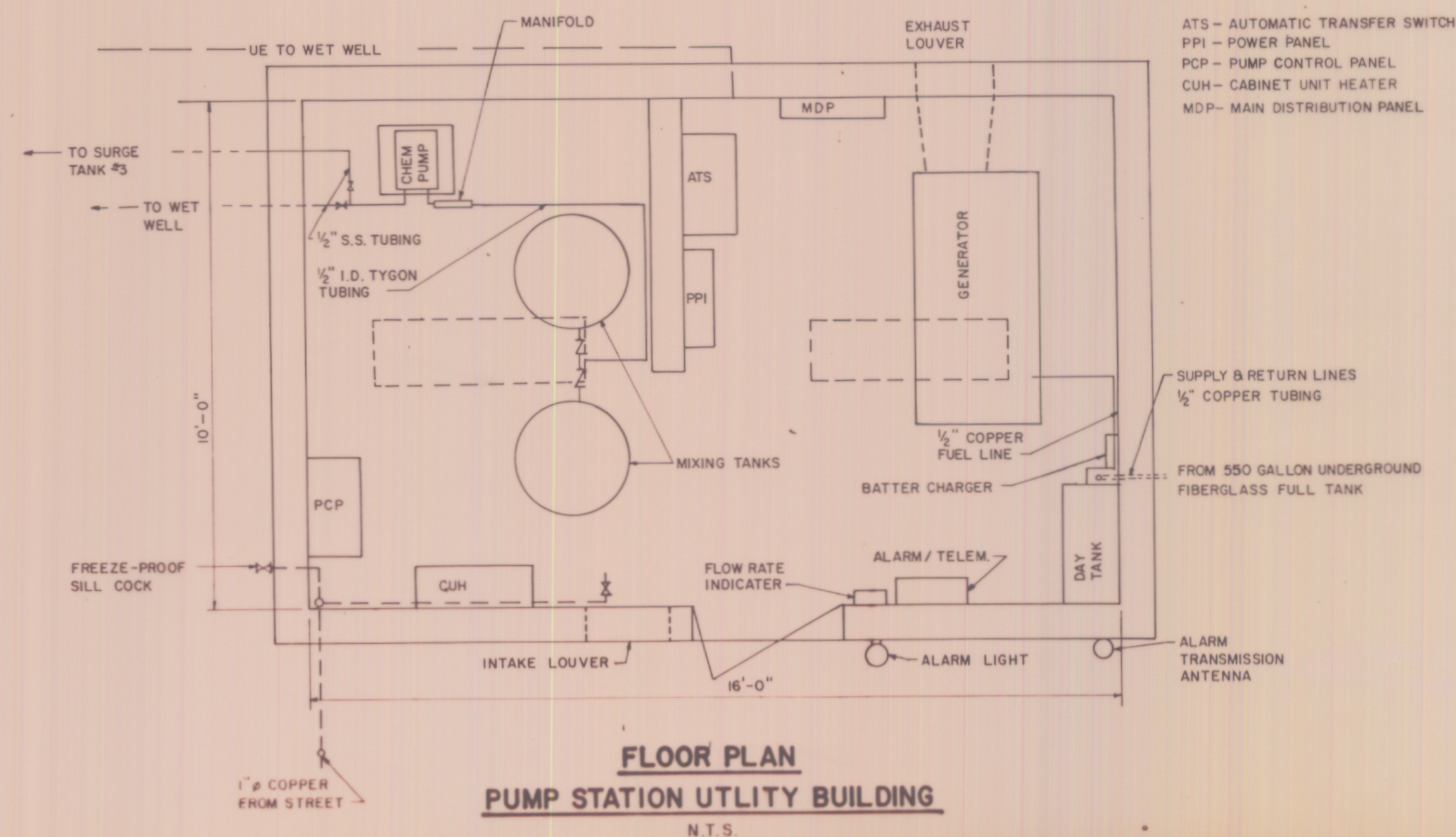
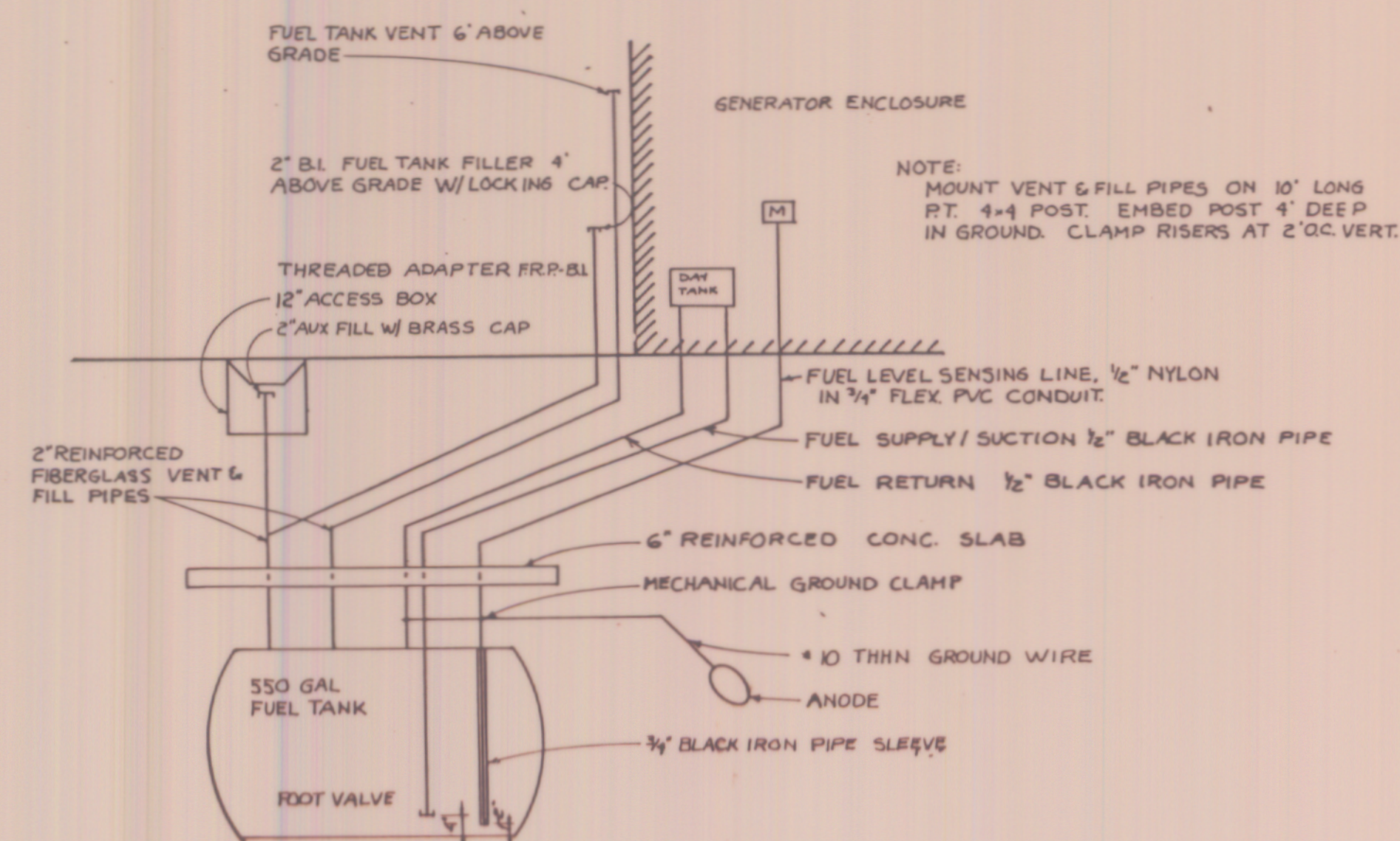
WOODARD & CURRAN INC.
CONSULTING ENGINEERS
PORTLAND, MAINE

CUMBERLAND
MEADOWS

TRENCH, SIDEWALK,
DRIVEWAY, LATERAL,
UNDERDRAIN AND DITCH
PROTECTION DETAILS
DATE: AUGUST 29, 1986

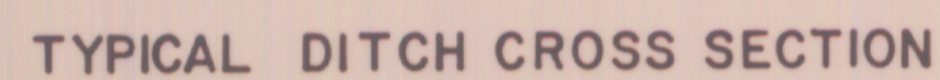
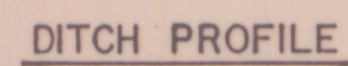


ITEM	NO.	DESCRIPTION
1	2	100 GAL. POLYETHYLENE MIXING TANK W/COVERS MANUFACTURED BY NALGENE
2	2	PVC BALL VALVE
3	2	EASTERN ECONOLINE MIXER MODEL E-2D WITH DUAL 3 1/2" PROPELLERS OR EQUAL.
4	20'	1/2" I.D. TYGON HOSE
5	1	150 cc PYREX MEASURING CYLINDER FOR PUMP CALIBRATION
6	3	1/2" JAMESBURY SCREWED B-356 ALUMINUM TYPE AK44-36T1 BALL VALVE
7	1	1/2" ALUMINUM FILTERED VENT ASSEMBLY
8	1	1/2" SS TYPE 304 MANIFOLD
9	1	1/4" IPS SS TYPE 316 BOURDON TUBE PRESSURE GAGE. 0 TO 300 PSI
10	1	1/2" SS TYPE 316 BACK PRESSURE VALVE SET AT 50 PSI
11	8	1/2" & 1/4" SS TYPE 304 CROSS. NIPPLES RED BUSHING & ELBOWS
12	1	MICRO-PLO LAPP PULSAFEEDER METERING PUMP CONSTRUCTED OF 316 SS WITH TEFLON DIAPHRAM & 1/6 HP, 115/230 V, 60 CYCLE SINGLE-PHASE, 1725 RPH TEFLON MOTOR
13	1	STEEL PUMP BASE C 8 x 11.5 x 12" LONG
14	1	1/4" SS TUBING TO POINT OF USE
15	1	1/4" JAMESBURY SCREWED B-356 ALUMINUM TYPE AK44-36T1 BALL VALVE.



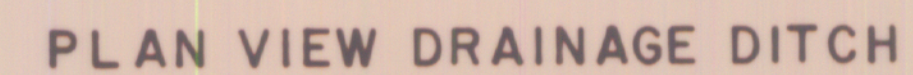


N.T.S.



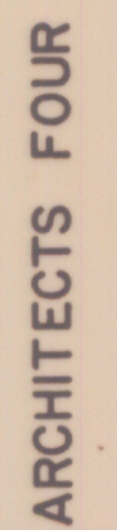
SCALE : HORIZ. 1" = 5'
VERT. 1" = 2'

NOTE EXACT CONFIGURATION OF DRAINAGE
DITCH TO BE SET IN FIELD BY ENGINEER.



NTS

AS-BUILT



PROFESSIONAL ASSOCIATION
99 MIDDLE ST, MANCHESTER, NH 03101
(603) 627-3844

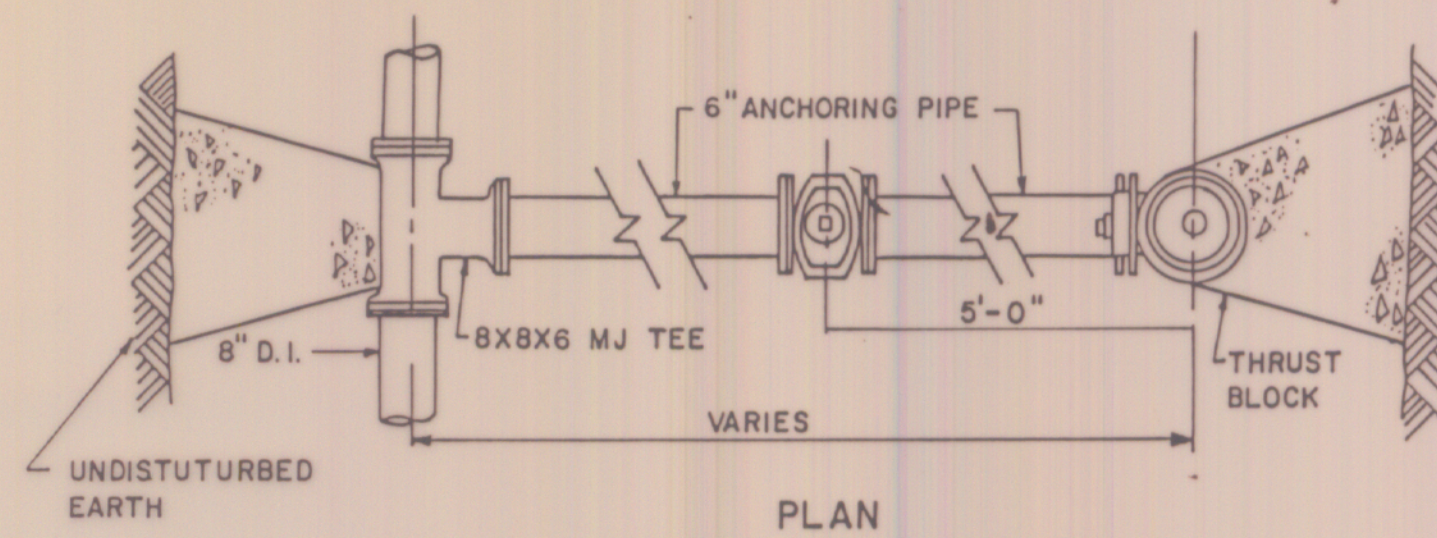
WOODARD & CURRAN INC.
CONSULTING ENGINEERS

CUMBERLAND
MEADOWS

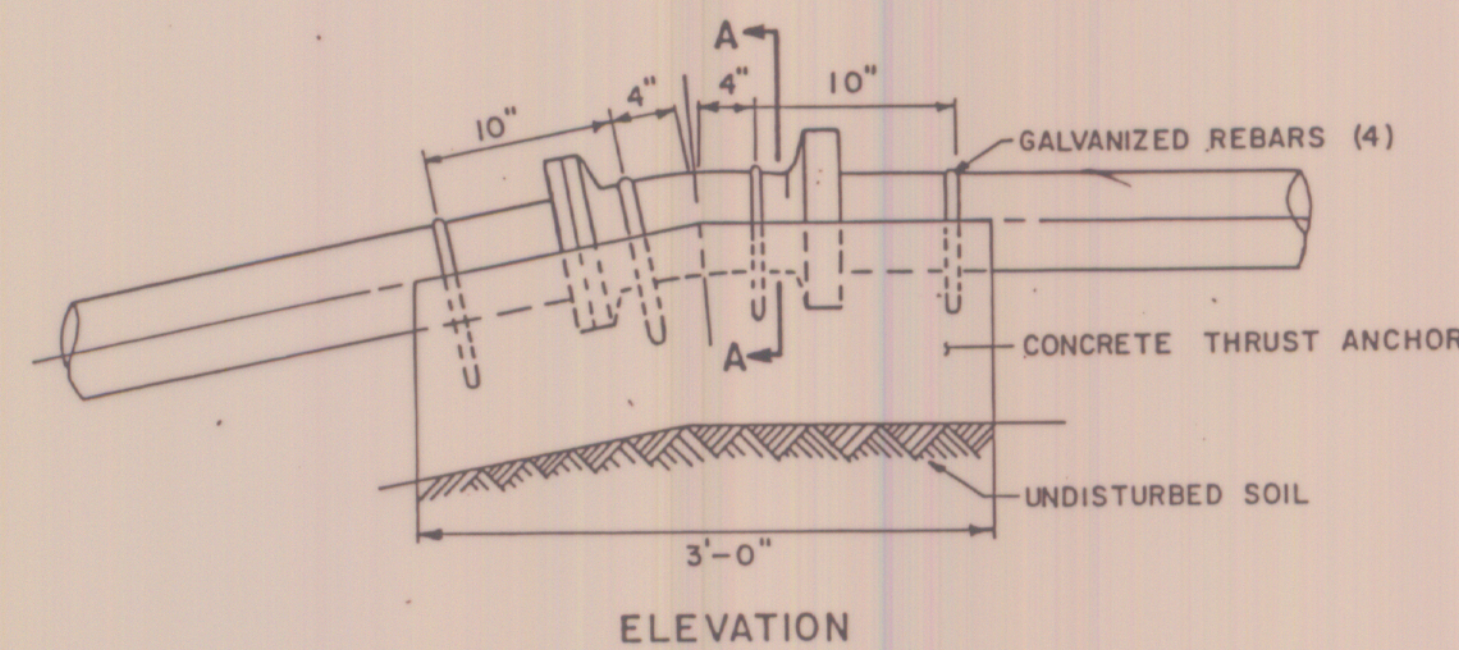
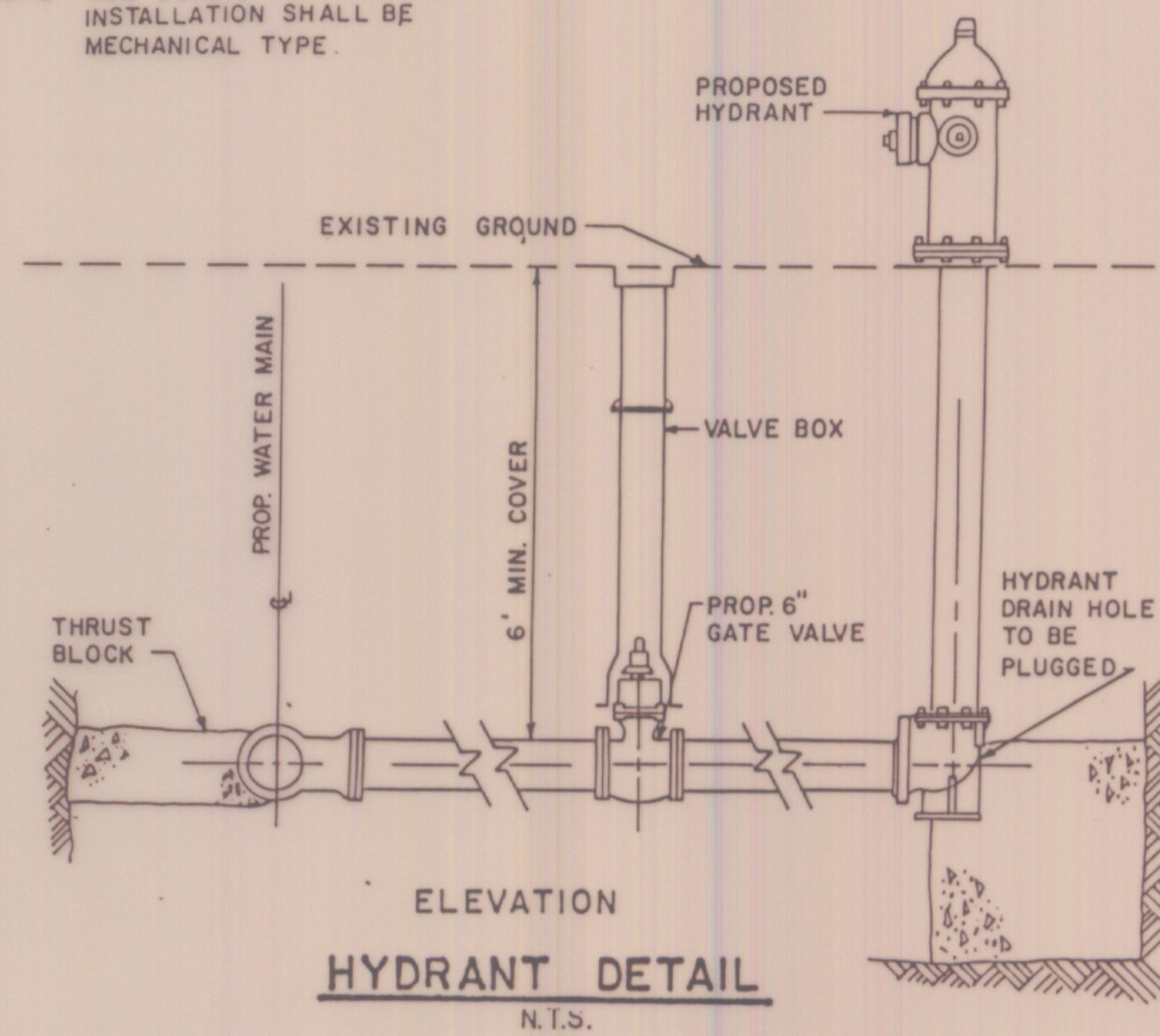
ROADWAY AND DRAINAGE DITCH DETAILS

DATE AUGUST 29, 1986

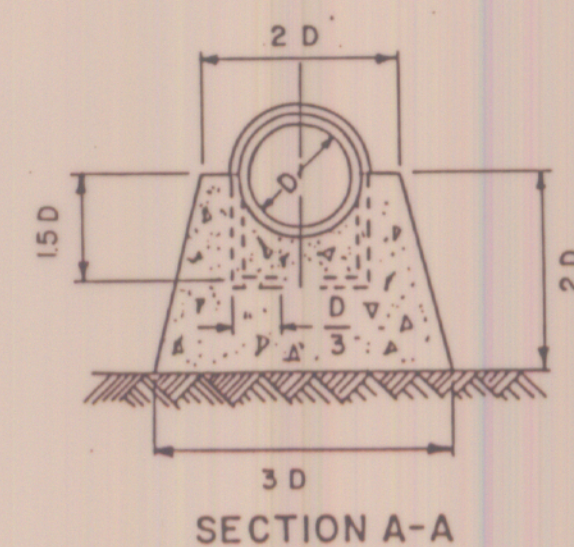
C 13



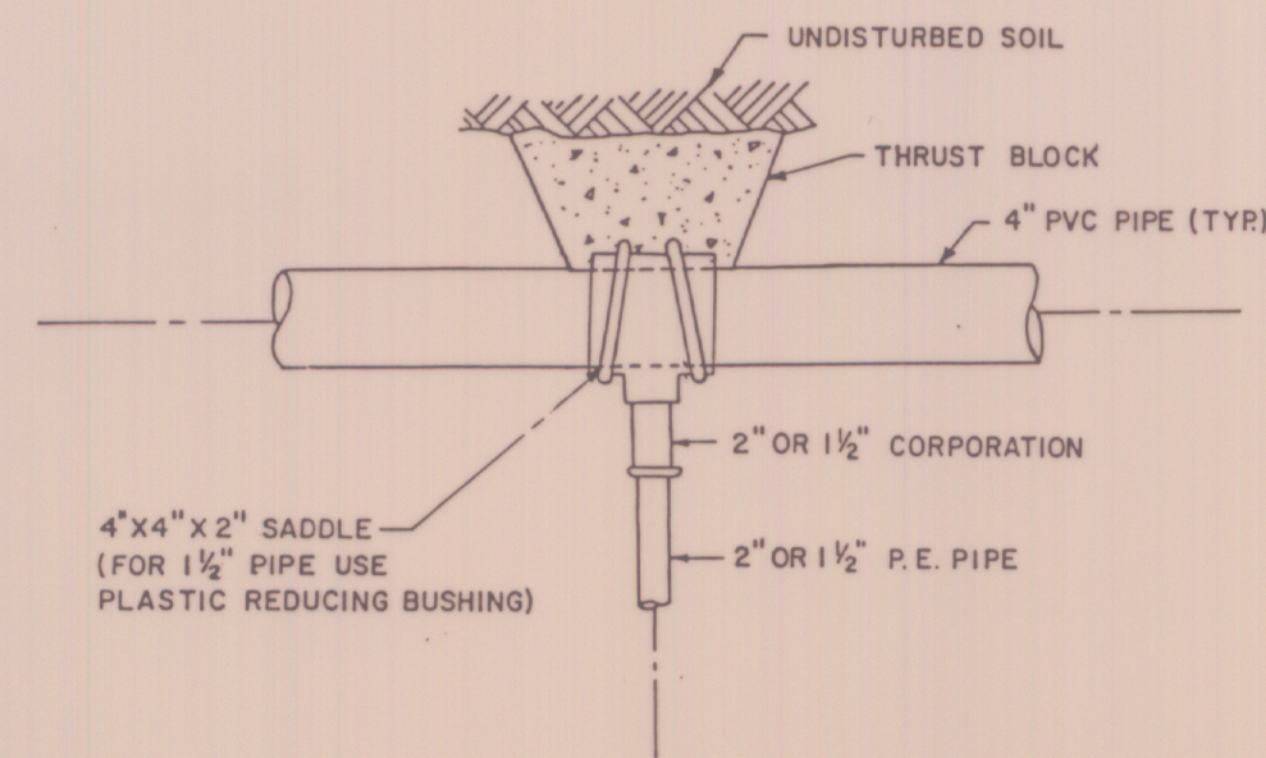
NOTE: ALL JOINTS FOR HYDRANT INSTALLATION SHALL BE MECHANICAL TYPE.



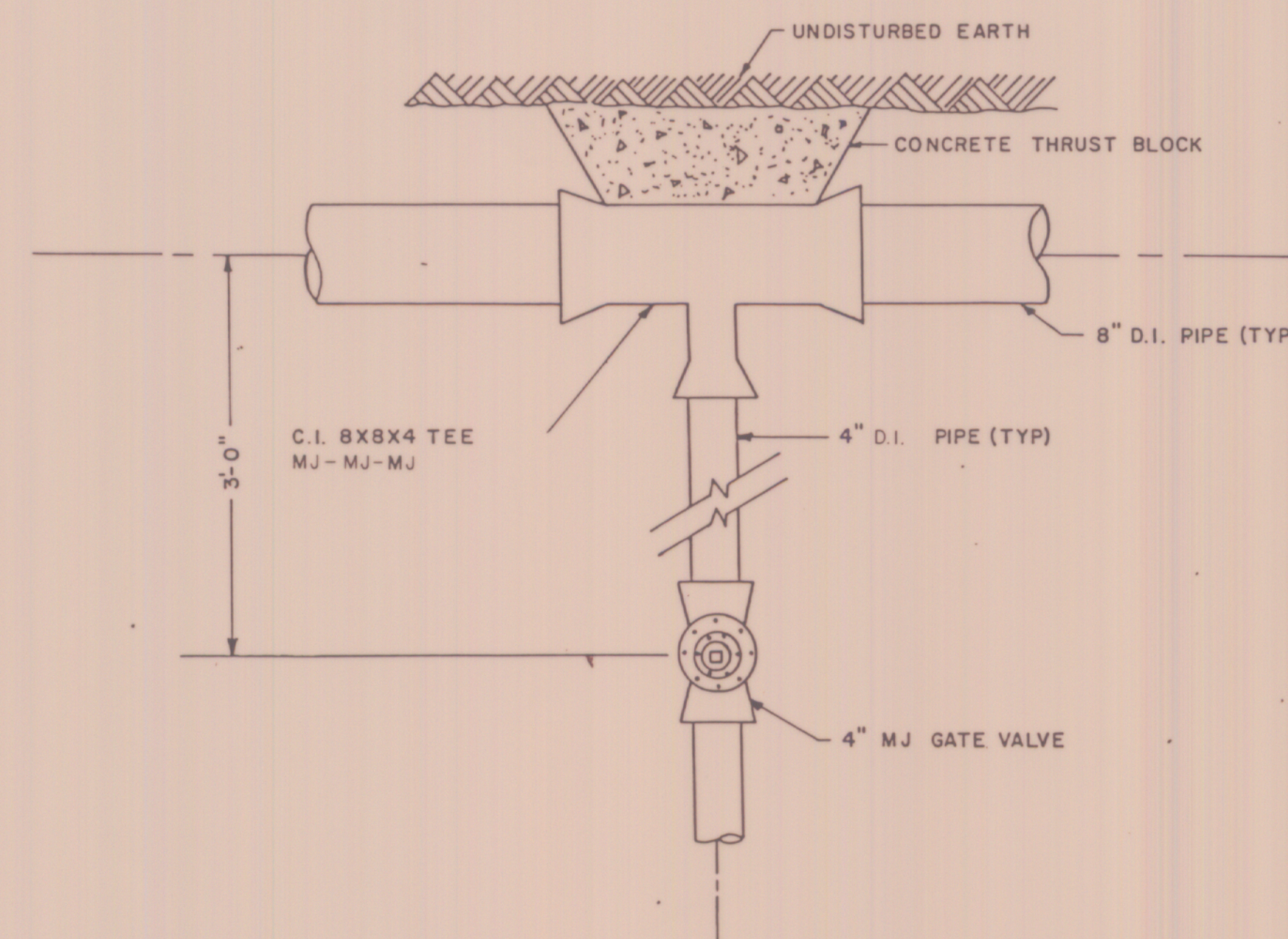
NOTE: KEEP CONCRETE AWAY FOR JOINT IN PIPE



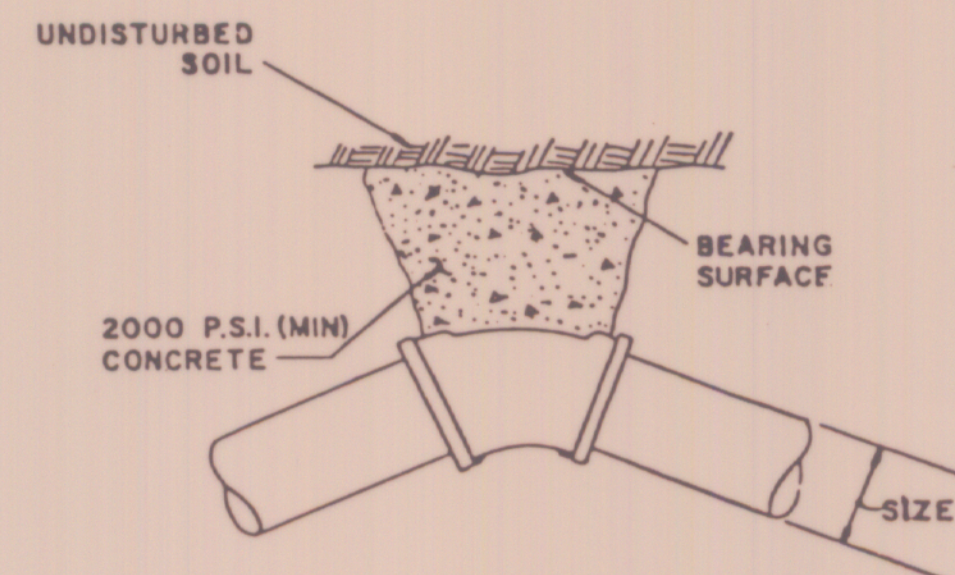
TYPICAL THRUST ANCHOR
FOR BEND DOWN - PVC & D.I. PIPE
N.T.S.



4" PVC TO P.E. PIPE
JOINT DETAIL
N.T.S.

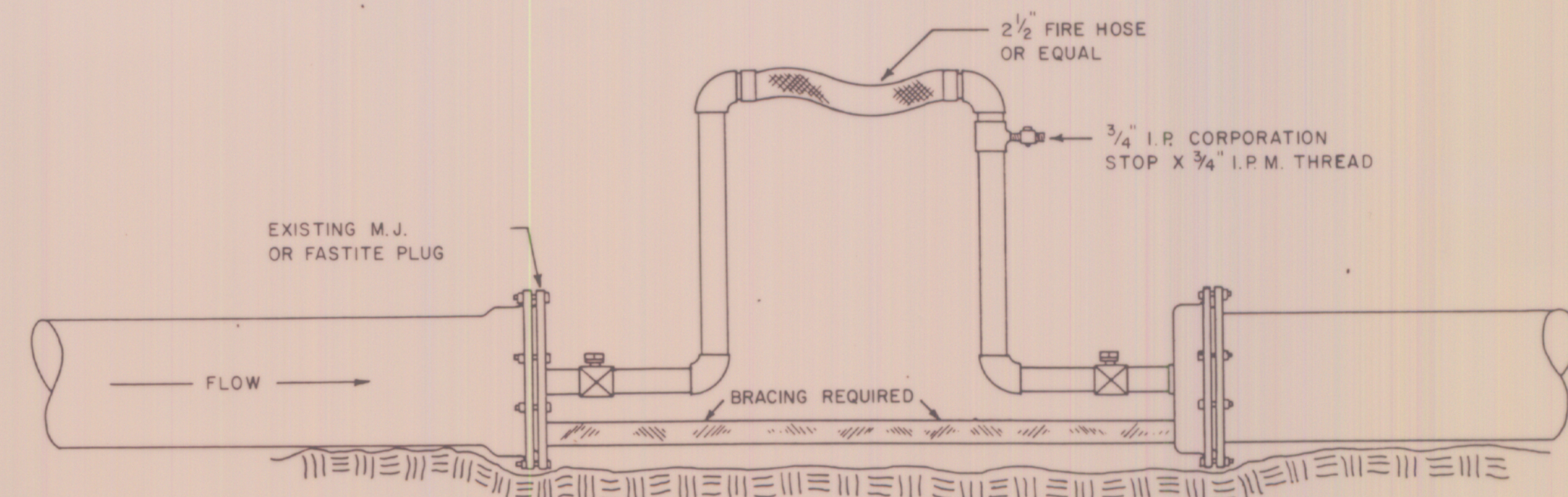


8" D.I. TO 4" PVC
JOINT DETAIL
N.T.S.

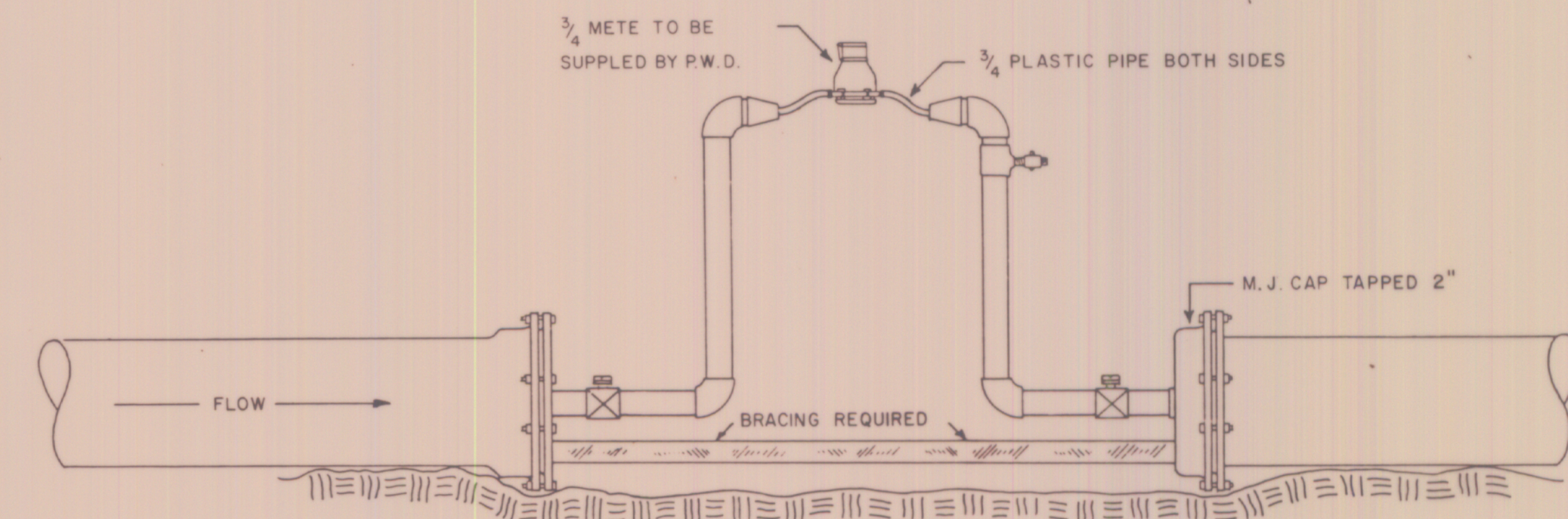


PIPE SIZE, IN.	BEARING SURFACE, FT ²			
	TEE, 90°	45°	22 1/2°	11 1/4°
2	1.0	1.0	1.0	1.0
3	1.0	1.0	1.0	1.0
4	1.2	1.0	1.0	1.0
6	2.6	1.4	1.0	1.0
8	4.6	2.3	1.4	1.0
10	7.2	3.9	2.0	1.0
12	10.4	5.6	2.8	1.5
14	14.2	7.7	3.9	2.0
16	18.5	10.0	5.0	2.5
18	23.4	12.7	6.4	3.3

FORCEMAIN THRUST BLOCK DETAIL
NO SCALE

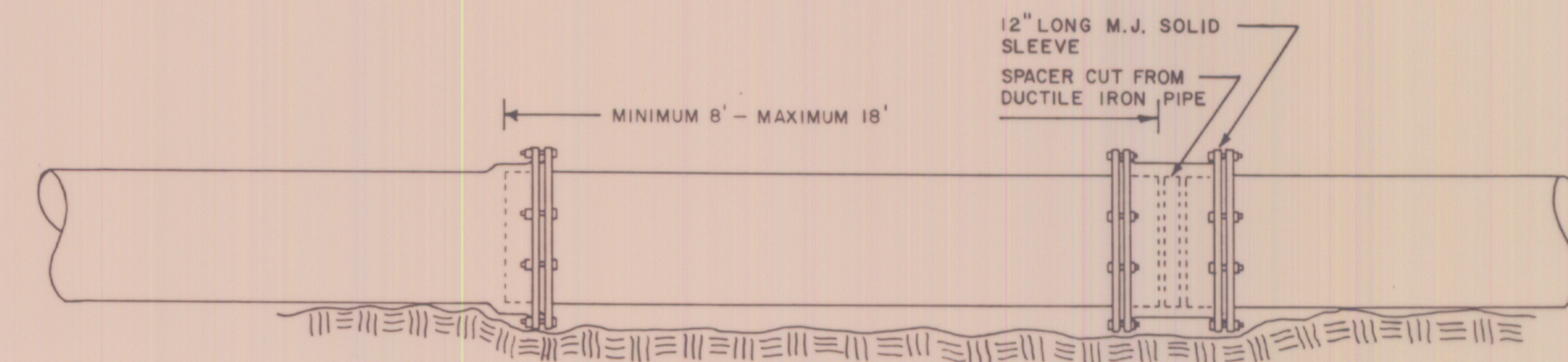


STEP 1 & 2
CHLORINATION & FLUSHING
NOT TO SCALE



STEP 3
24 HR. METER LEAKAGE TEST
NOT TO SCALE

- DISINFECTION/LEAK TESTING PROCEDURE
1. Use Step 1 set-up to fill and chlorinate main.
 2. PWD will operate all existing valves on supply system AND should be given 24 hours notice prior to filling new lines to operate valves.
 3. Remove flexible hose after main is full and during disinfecting period to protect existing PWD system from possible contamination.
 4. After adequate disinfecting time, reconnect flexible hose for Step 2 flushing out superchlorinated water.
 5. PWD will test water quality. Please give 24 hour notice for PWD employee to take sample. (Again disconnect flexible hose after sample is taken.)
 6. After O.K. is given by PWD lab (usually 24-48 hrs), proceed with Step 3, 24 hour meter leakage test.
 7. After satisfactory results on leakage test, connect new system to existing system as shown in Step 4.



NOTE: THESE DETAILS SHALL BE USED TO CONNECT WATER MAIN FOR PHASE 1 TO TUTTLE ROAD, WATER MAIN FOR PHASE 2 TO PHASE 1 CONSTRUCTION AND WATER MAIN FOR PHASE 3 TO PHASE 3 CONSTRUCTION

STEP 4
FINAL CONNECTION TO P.W.D. SYSTEM
NOT TO SCALE

WATER MAIN CONNECTION DETAILS

ARCHITECTS FOUR

PROFESSIONAL ASSOCIATION
95 MIDDLE ST. MANCHESTER, NH 03101
(603) 627-3644

WOODARD & CURRAN INC.
CONSULTING ENGINEERS
PORTLAND, MAINE

CUMBERLAND
MEADOWS

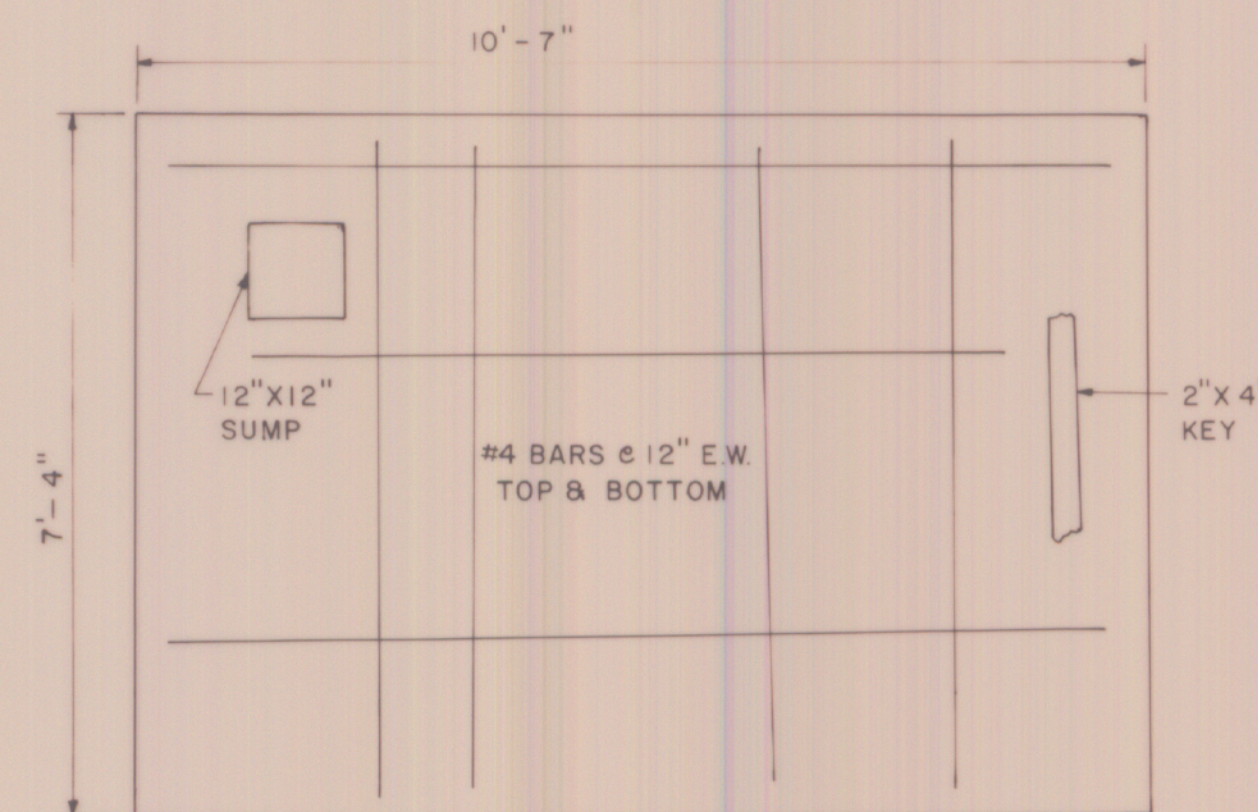
WATER LINE DETAILS

DATE AUGUST 29, 1986

REVISIONS

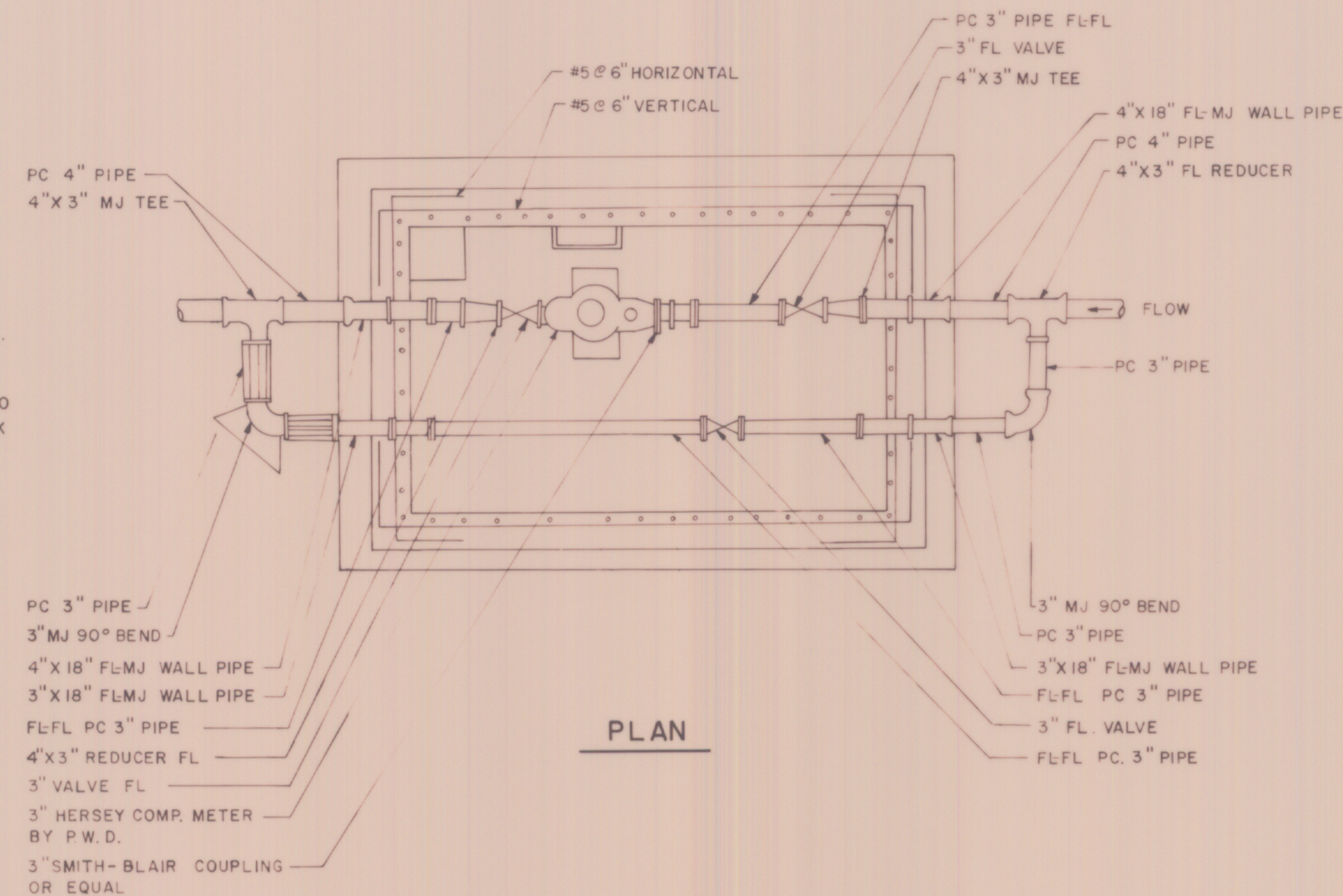
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C14

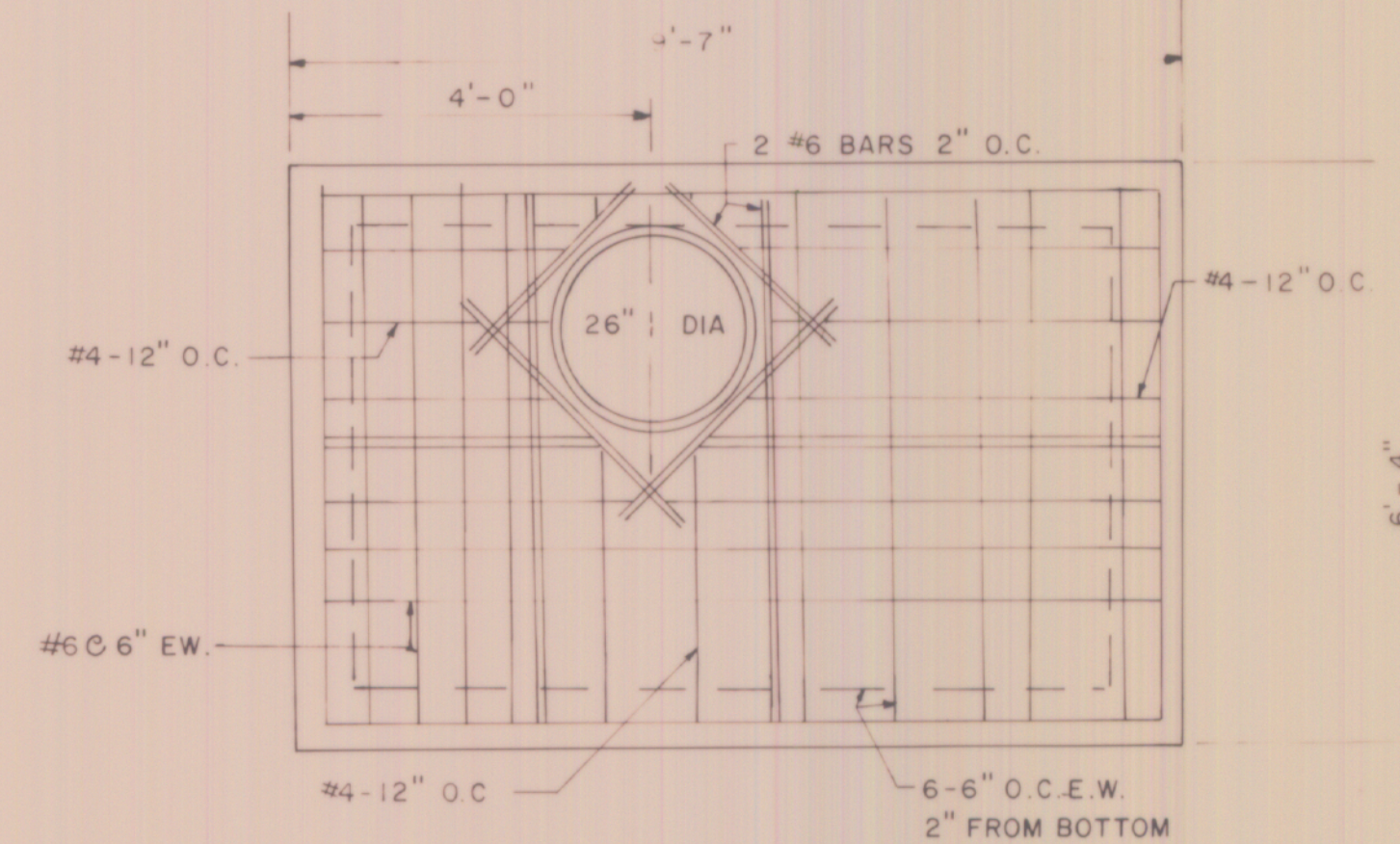


PLAN - BOTTOM SLAB

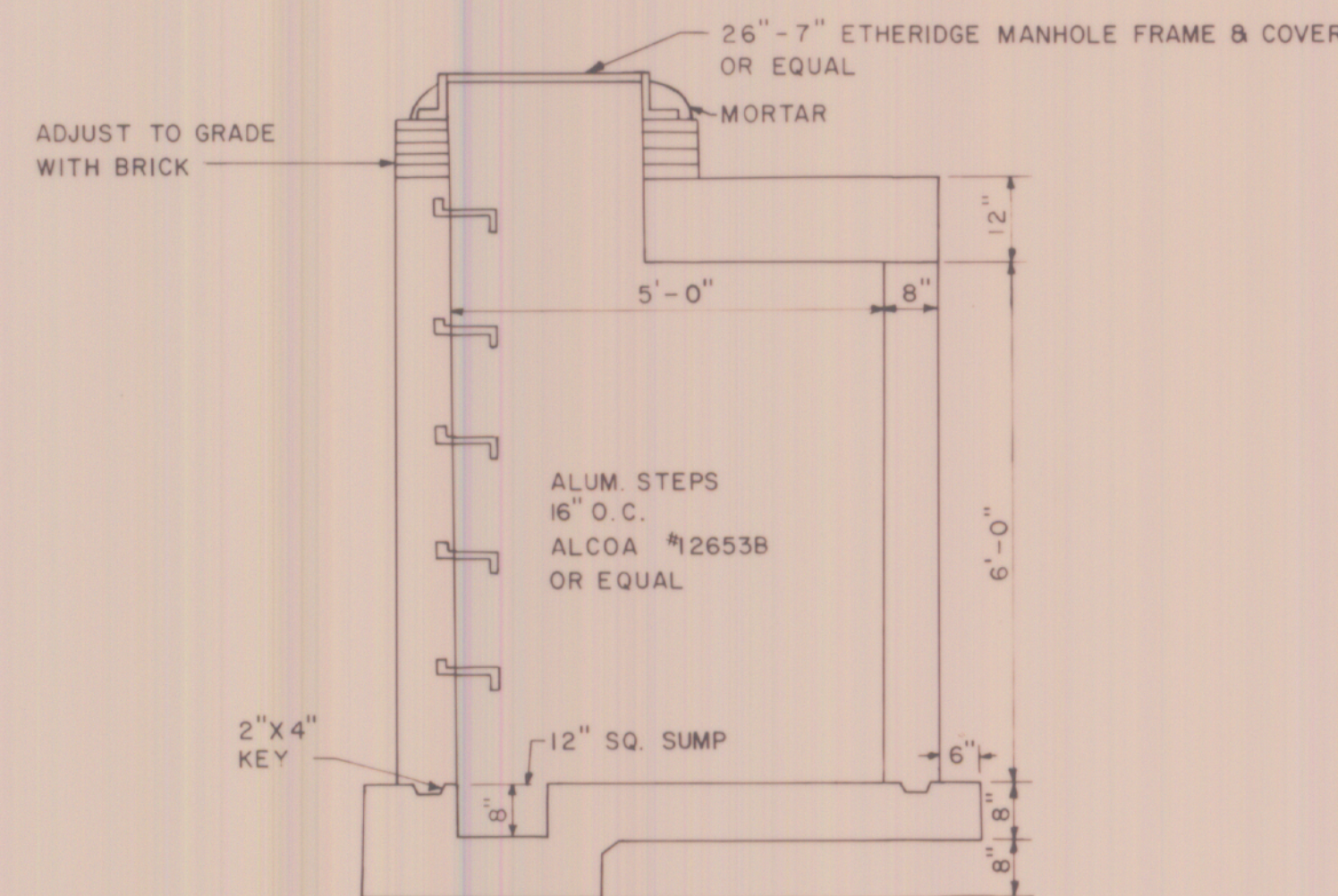
NOTE: KICK BLOCK TO HAVE 18 SQ. IN. BEARING FACE. RODDING TO BE 4 1/2" THREADED ROD ON 3" BYPASS. BOTH ENDS TO USE SAME KICK BLOCK AND RODDING



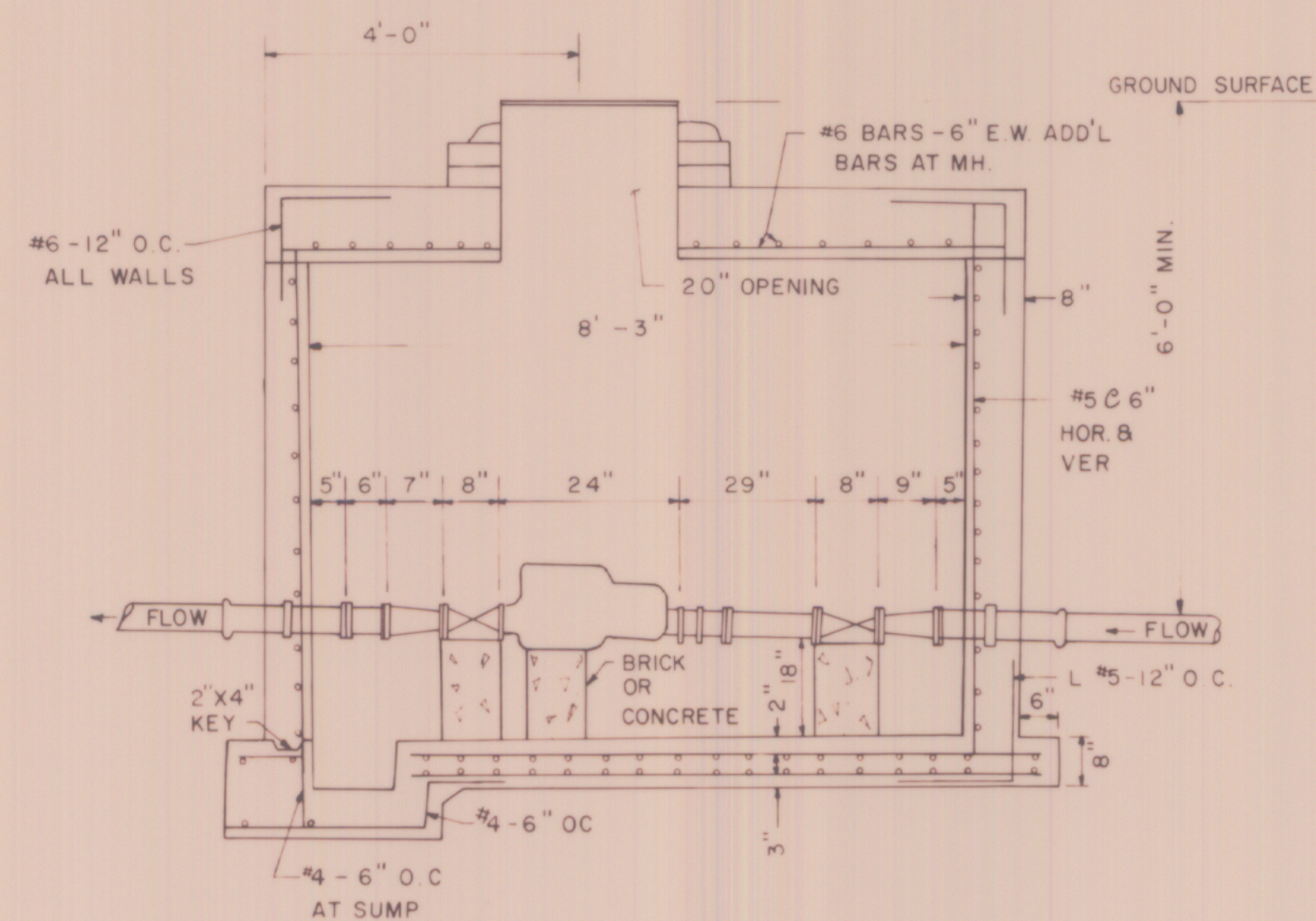
PLAN



ROOF REINF. PLAN



SECTION B-B



SECTION A-A

GENERAL NOTES:

1. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS
2. REINFORCING STEEL SHALL BE ASTM 615 GRADE 60
3. ALL FITTING INSIDE VAULT SHALL BE FLANGE-FLANGE
4. PORTLAND WATER DISTRICT WILL FURNISH, OWN, AND MAINTAIN THE METER
5. THE RECOMMENDED CONSTRUCTION SEQUENCE IS: CAST FLOOR SLAB, ASSEMBLE ALL PIPE AND FITTINGS AND CONSTRUCT WALLS AND ROOF SLAB. THE DISTRICT WILL LOAN THE CONTRACTOR A SPACER CORRESPONDING TO THE SIZE OF METER TO BE INSTALLED.
6. ALL PIPE SHALL BE DUCTILE IRON AND ALL FITTINGS SHALL BE CAST OR DUCTILE IRON CONFORMING TO PORTLAND WATER DISTRICT SPECIFICATIONS REVISION DATED 3/10/86

ARCHITECTS FOUR

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PORTLAND, MAINE

CUMBERLAND
MEADOWS

CONCRETE METER VAULT
3" HERSEY COMPOUND
METER

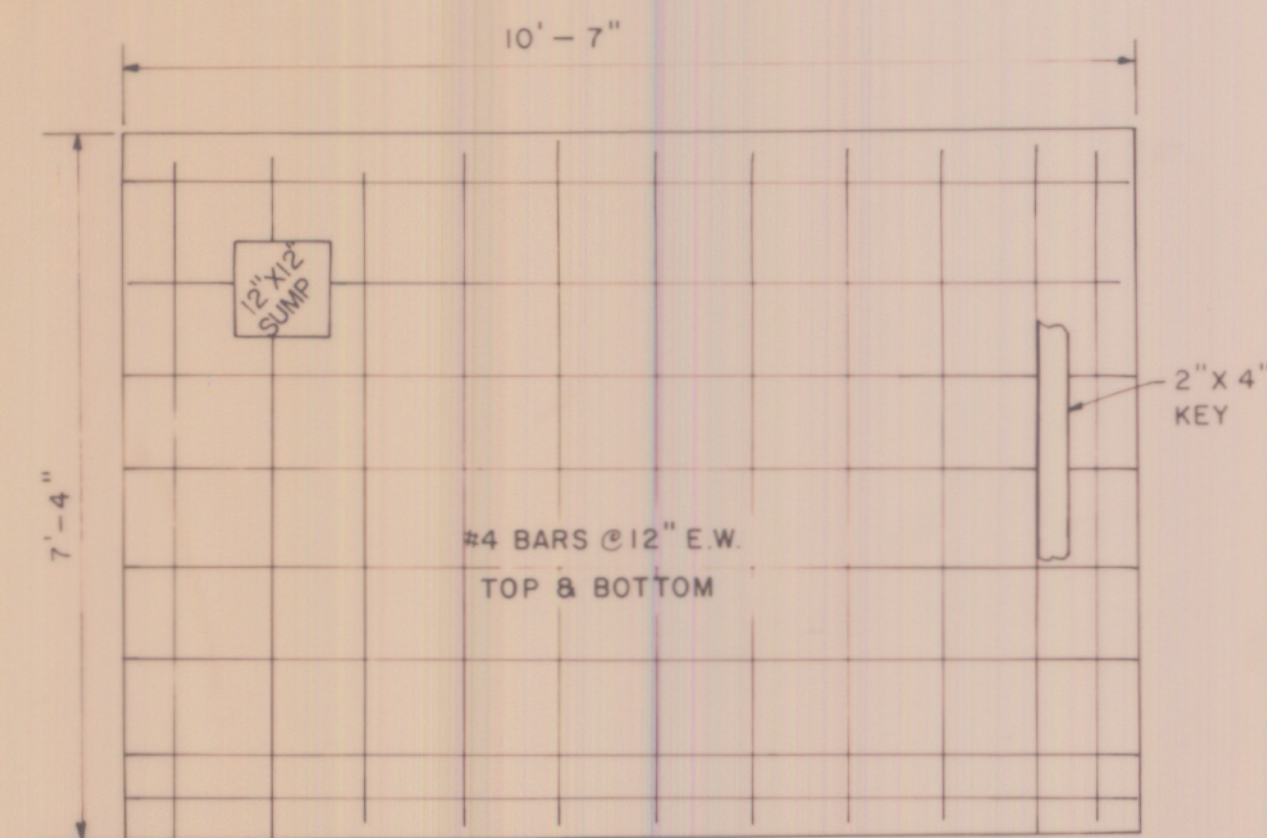
DATE AUGUST 29, 1986

REVISIONS

DRAWING NO.

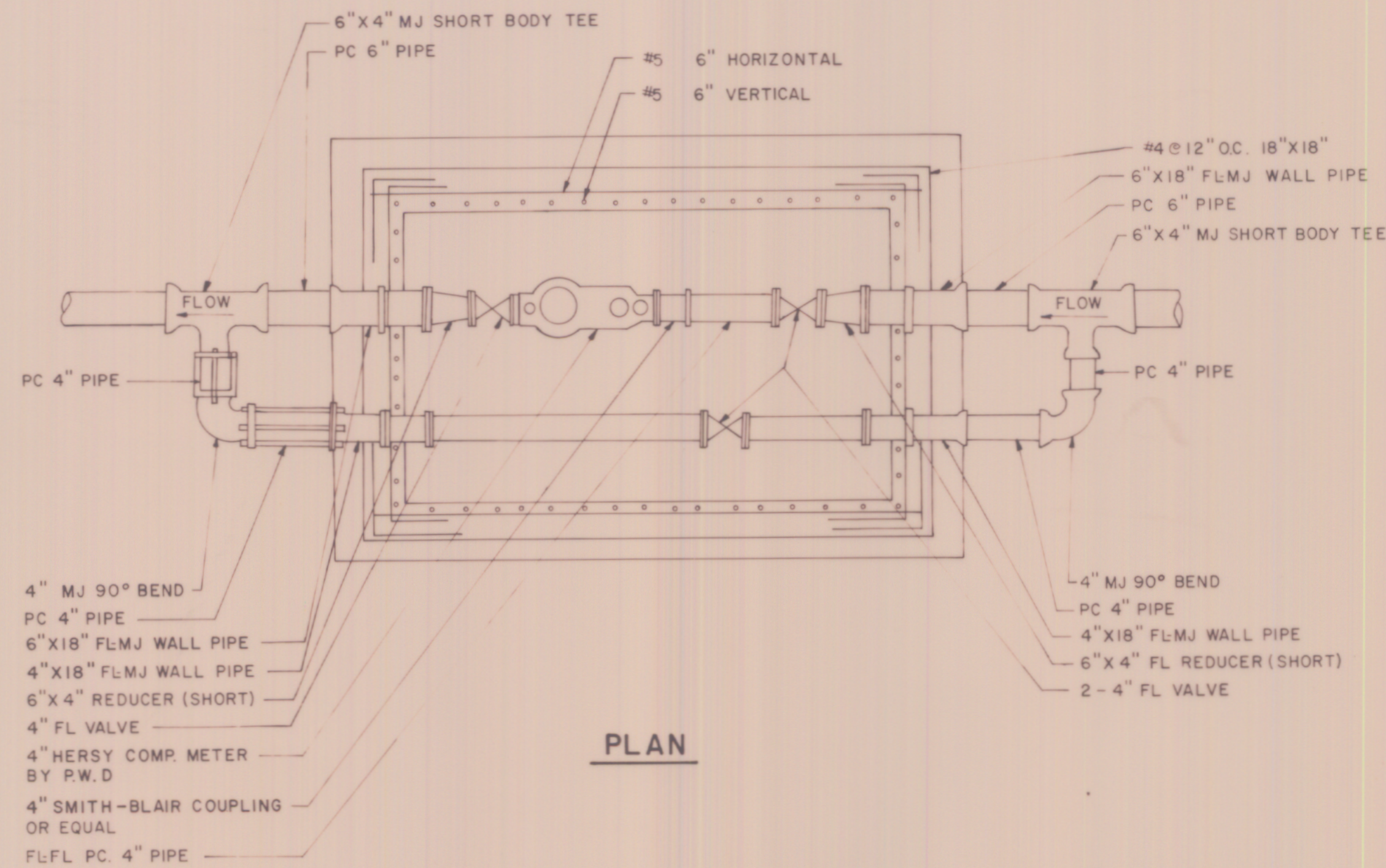
C15

AJ-BUILT

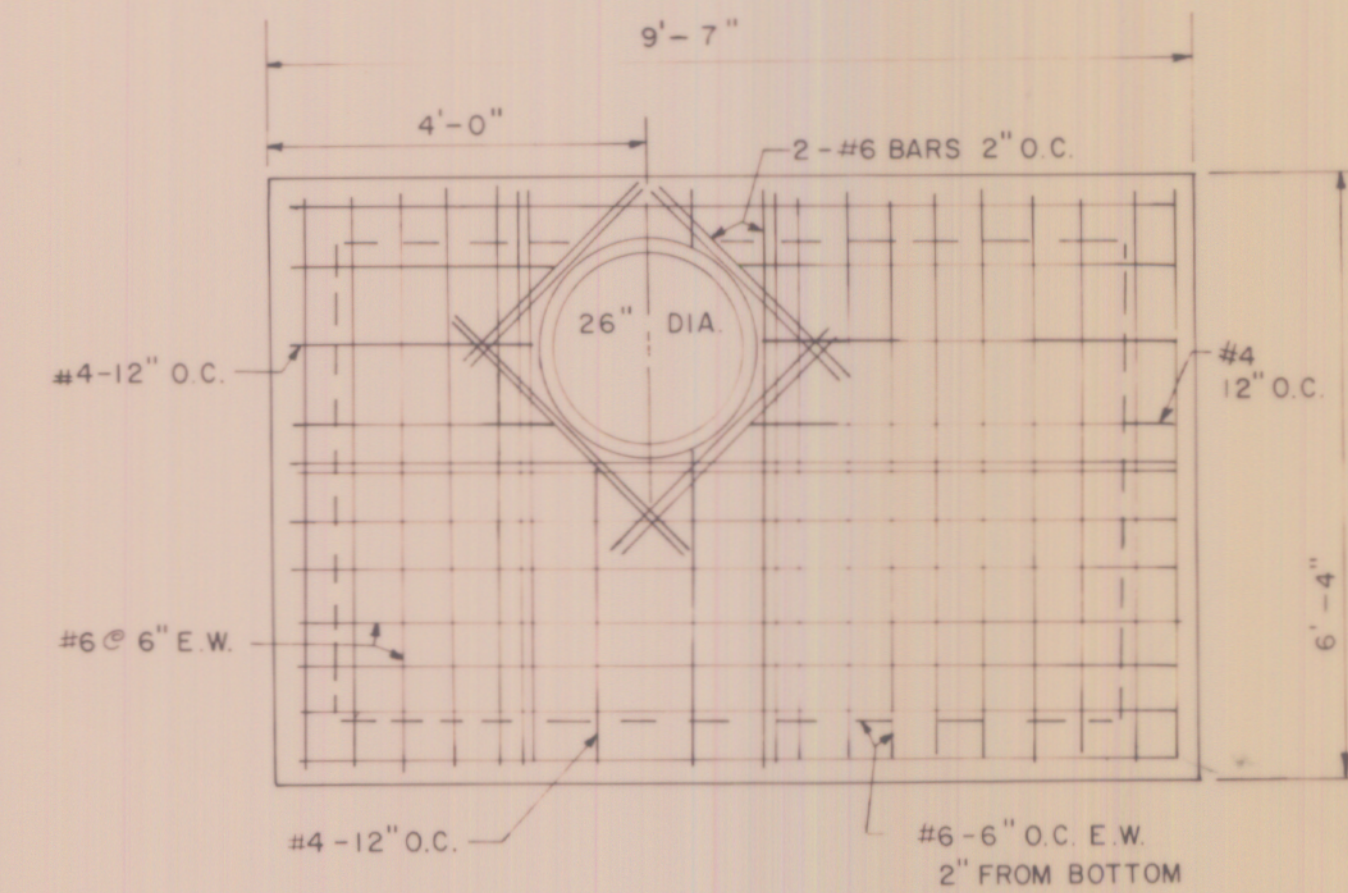


PLAN - BOTTOM SLAB

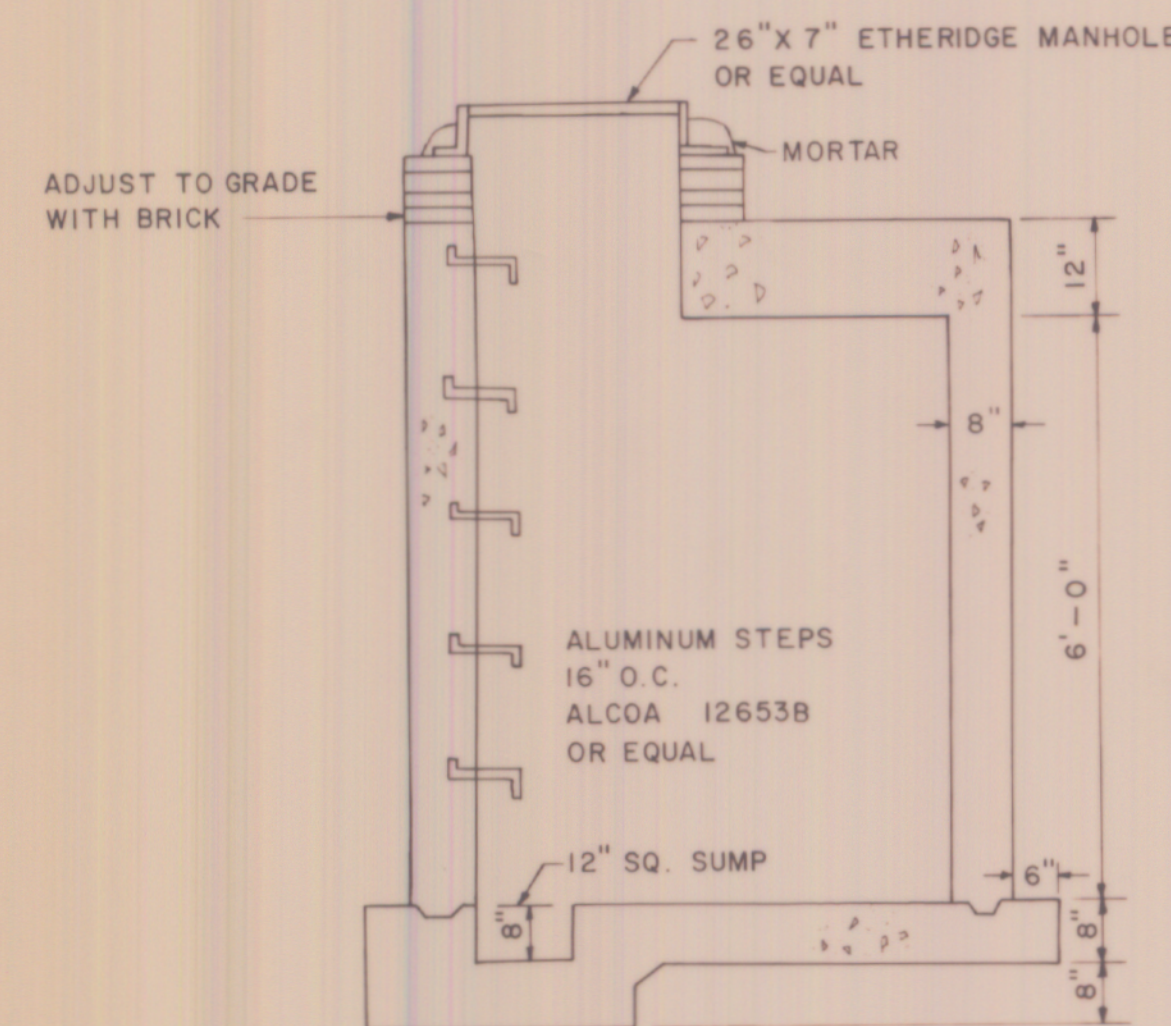
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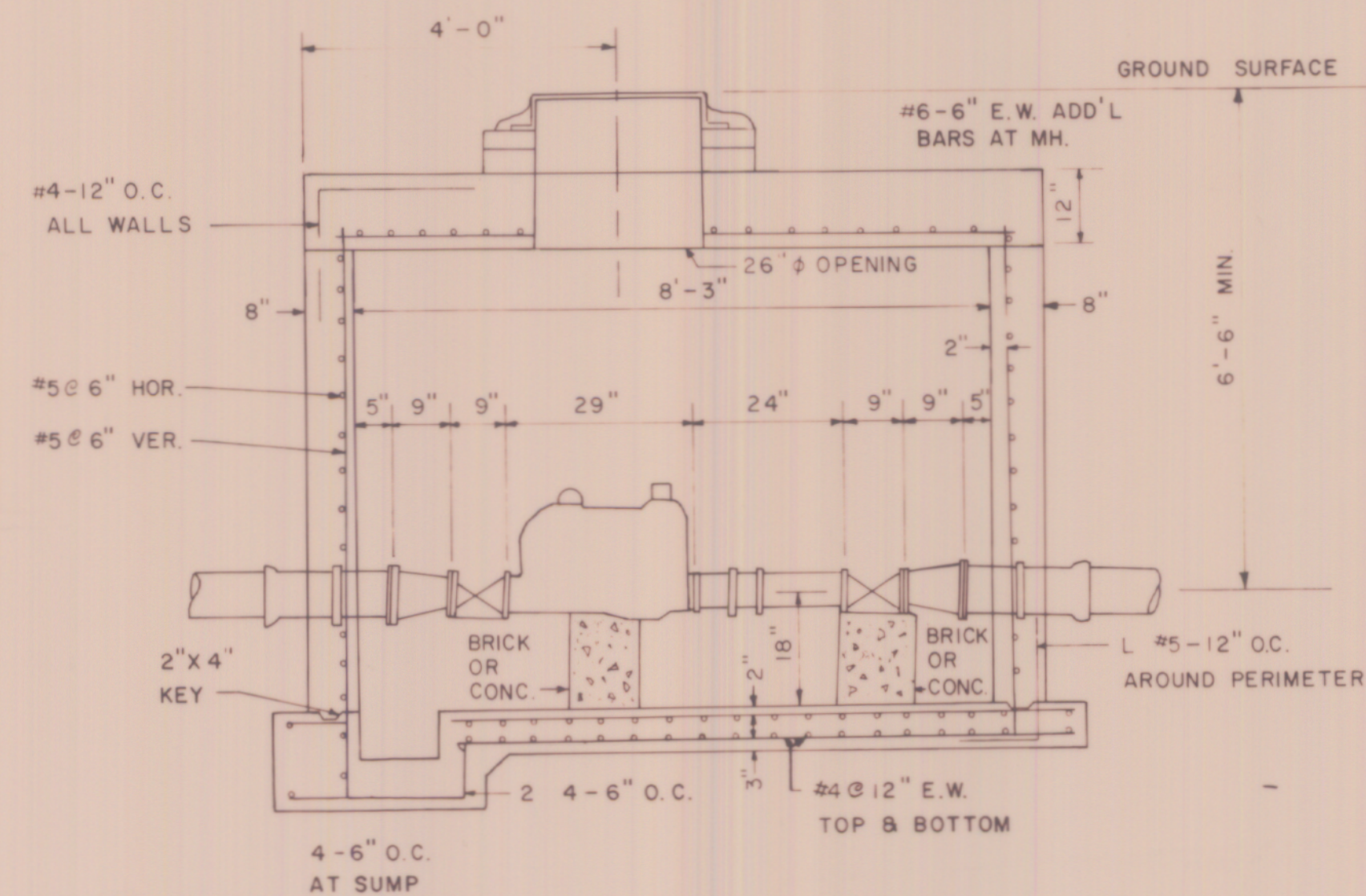
PLAN



ROOF REINF. PLAN



SECTION B-B



SECTION A-A

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WOODARD & CURRAN INC.
CONSULTING ENGINEERS
PORTLAND, MAINE

CONCRETE METER VAULT
4" HERSEY COMPOUND
METER
DATE AUGUST 29, 1986

REVISIONS

DRAWING NO.

C16

AS-BUILT