

STREET IMPROVEMENT DISTRICT NO. 56 MANDAN, NORTH DAKOTA

ASBUILT CONSTRUCTION DRAWINGS

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5	8th Avenue NE between 17th Street NE and 16th Street NE (DELETED), and Alley Block 21 Meads Addition and Block 1 Riverside Addition
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21	Street Light Layouts Areas 4, 5, 9, and 13
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MAY 1979



AS BUILT

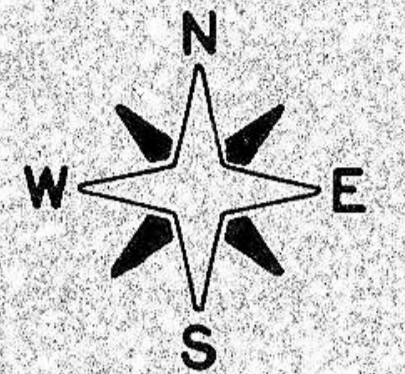


AS BUILT

D 56 TOMAN ENGINEERING CO.
CONSULTING ENGINEERS

MANDAN
NORTH DAKOTA

DELETED
AREA I



SCALE: 1"=1200'

CITY OF MANDAN N.D

NOTE: AREAS 2, 7 & 12 WERE REMOVED FROM PROJECT PRIOR TO BID LETTING.

LEGEND

- ⊕ = EXISTING POWER POLE
- ⊙ = EXISTING STREET LIGHT
- ⊗ = EXISTING MANHOLE
- ⊠ = EXISTING GAS LINE BOX
- ⊚ = EXISTING STOP SIGN
- ⊙ = EXISTING TREE
- +—+— = EXISTING FENCE
- ⊙ = EXISTING HYDRANT
- ⊙ = EXISTING GATE VALVE
- ▨ = EXISTING ASPHALT
- ▩ = EXISTING CONCRETE
- +—+— = EXISTING GAS MAIN (APPROX. LOCATION)
- +—+— = EXISTING OVERHEAD CABLE (APPROX. LOCATION)

AREA 3

AREA 4

AREA 13

AREA 6

AREA 5

AREA 8

AREA II

AREA IO

AREA 9

NOTE: ALL ASPHALT & CONCRETE REMOVED TO BE HAULED TO CITY LAND FILL.

LEWIS & CLARK GRADE SCHOOL

MANDAN JUNIOR HIGH SCHOOL

ROOSEVELT GRADE SCHOOL

MANDAN ATHLETIC FIELD

PROJECT AND WASTE AREA LAYOUT

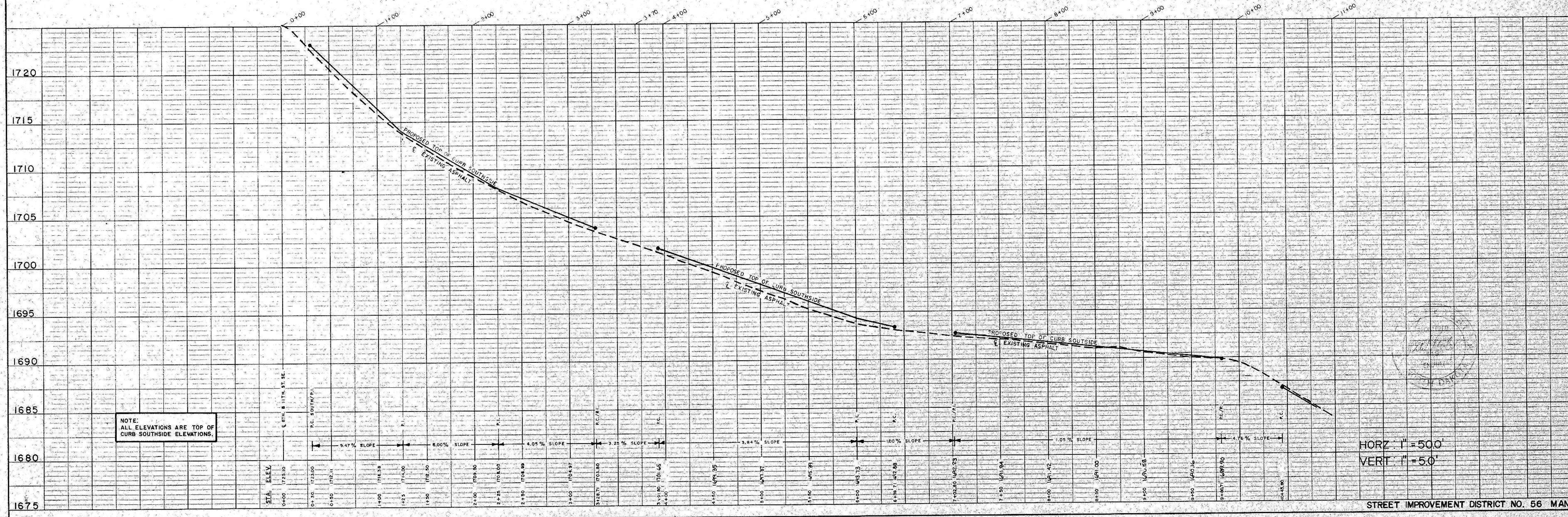
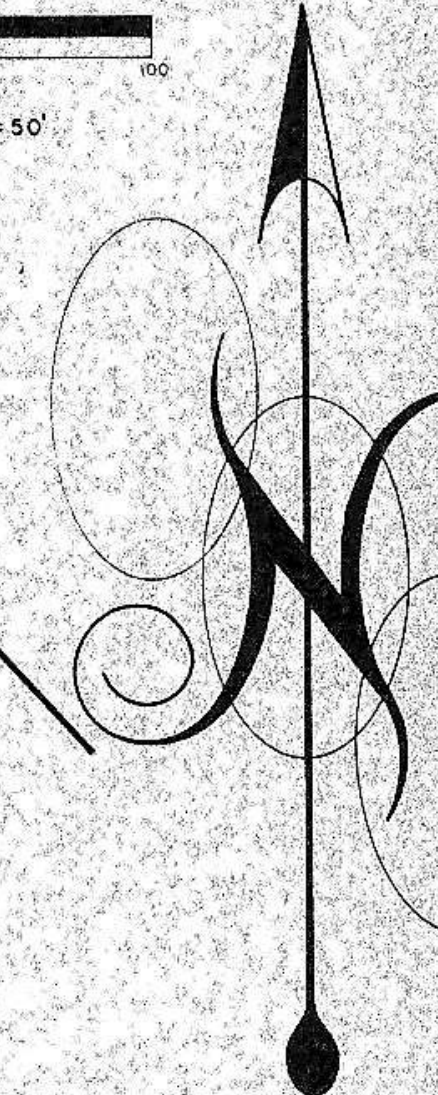
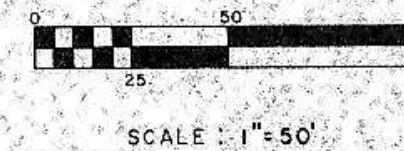
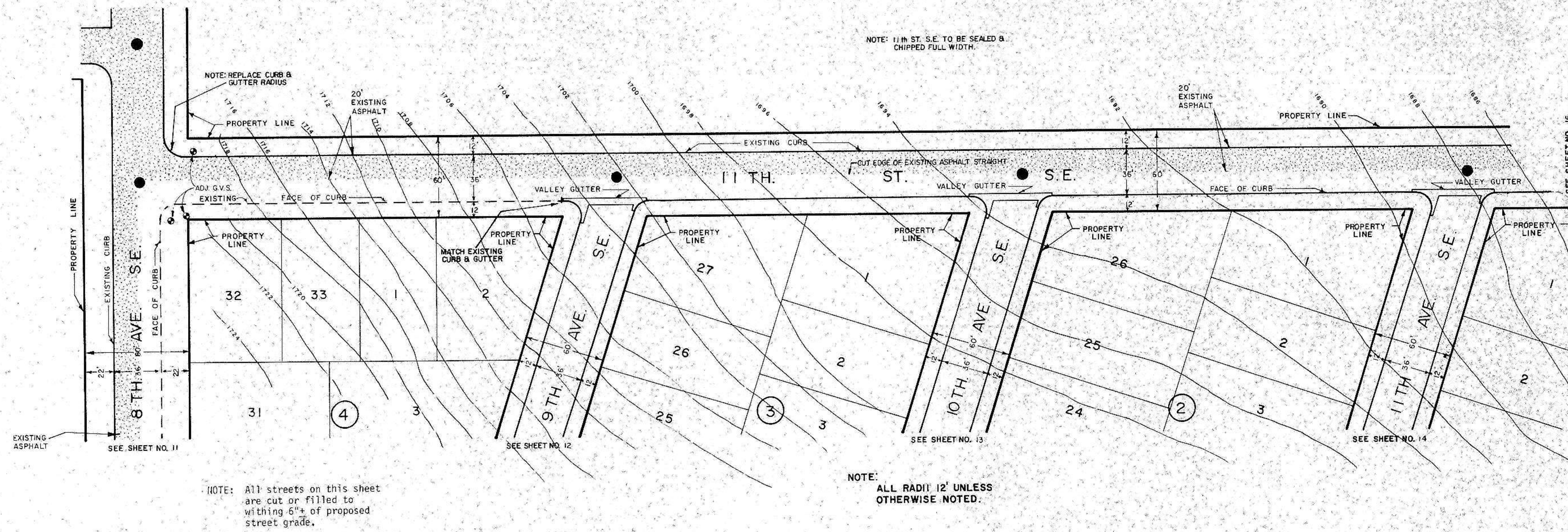
STREET IMPROVEMENT DISTRICT NO. 56 MANDAN

SHEET NO. 1 OF 23 SHEETS



PLAN	SURVEY	DATE
NOTE BOOK	ALIGNED	CHECKED
NO.	BY	BY

PROFILE	DATE
NOTE BOOK	BY
NO.	BY



HORZ. 1" = 50'
VERT. 1" = 50'

STREET IMPROVEMENT DISTRICT NO. 56 MANDALAY AVENUE

PLATE 1 - PLAN - PROFILE - O.P. & R.E. STANDARD
KUEFFEL & ESSER CO., NEW YORK

ASBUILT CONSTRUCTION DRAWINGS SHEET NO. 10 OF 23 SHEETS

K & E Co. No. 347-1R (REVISED 1981) MADE IN U.S.A. 2409

PLAN

DATE: _____

BY: _____

CHECKED: _____

NO. _____

REVISIONS:

DATE: _____

BY: _____

CHECKED: _____

NO. _____

REVISIONS:

PROFILE

DATE: _____

BY: _____

CHECKED: _____

NO. _____

REVISIONS:

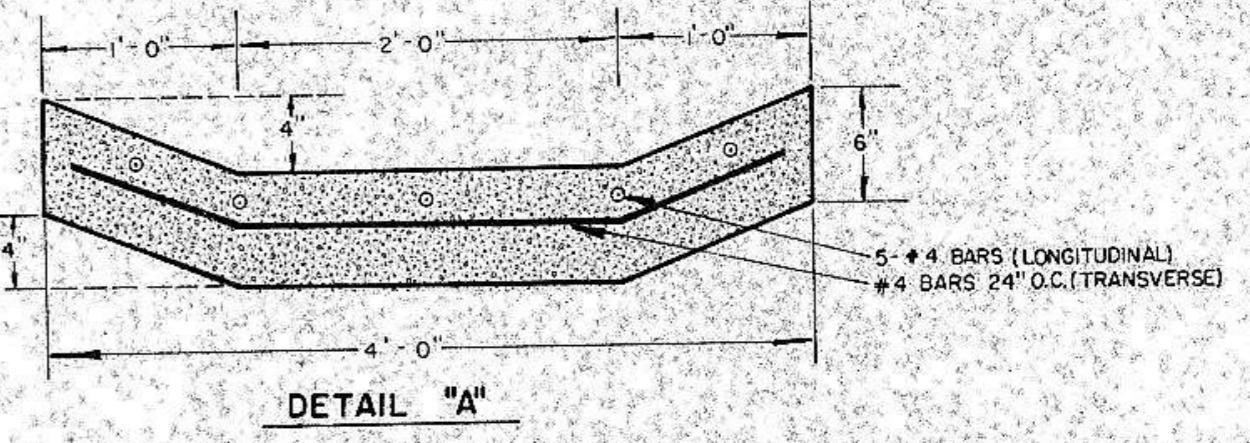
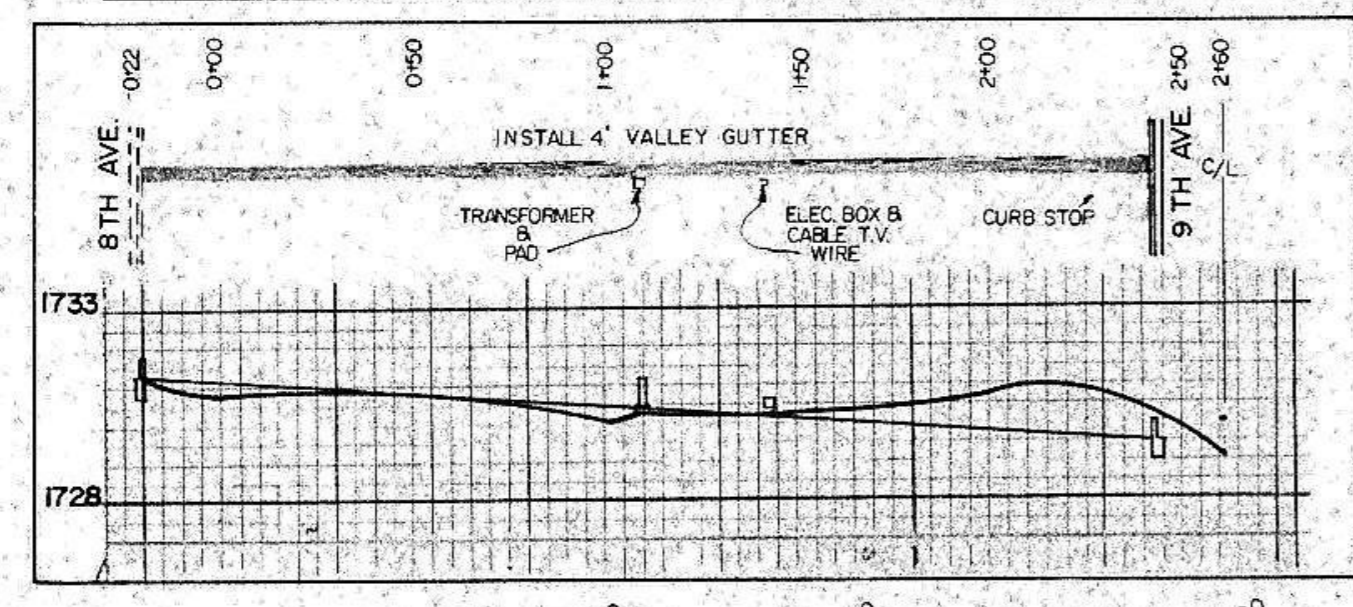
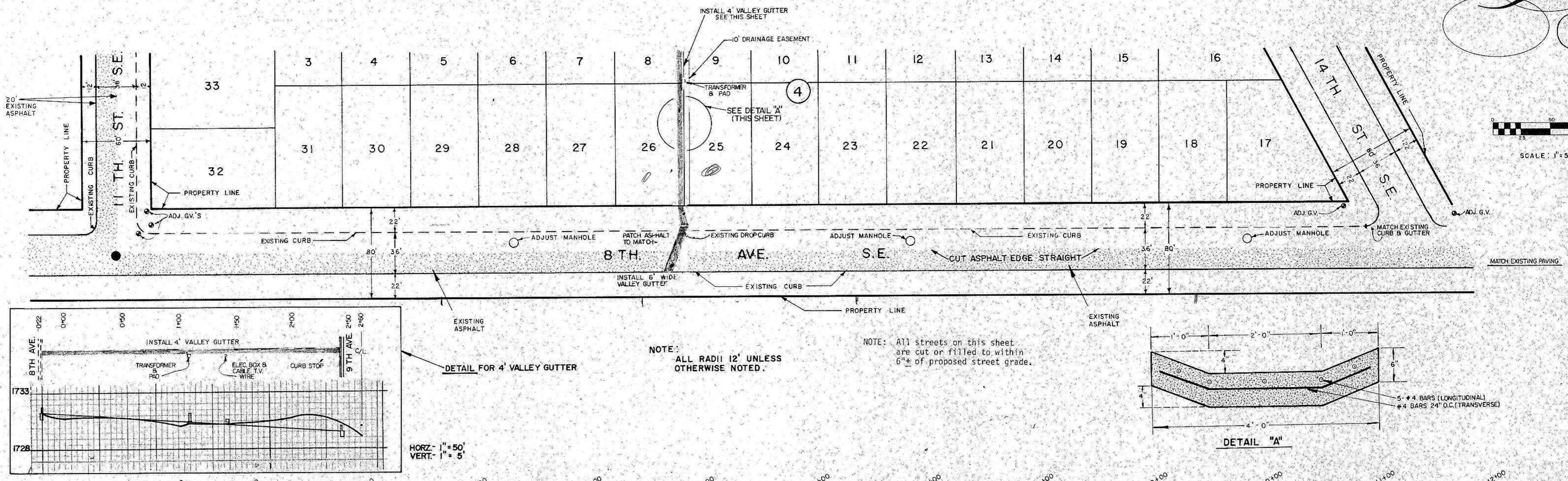
DATE: _____

BY: _____

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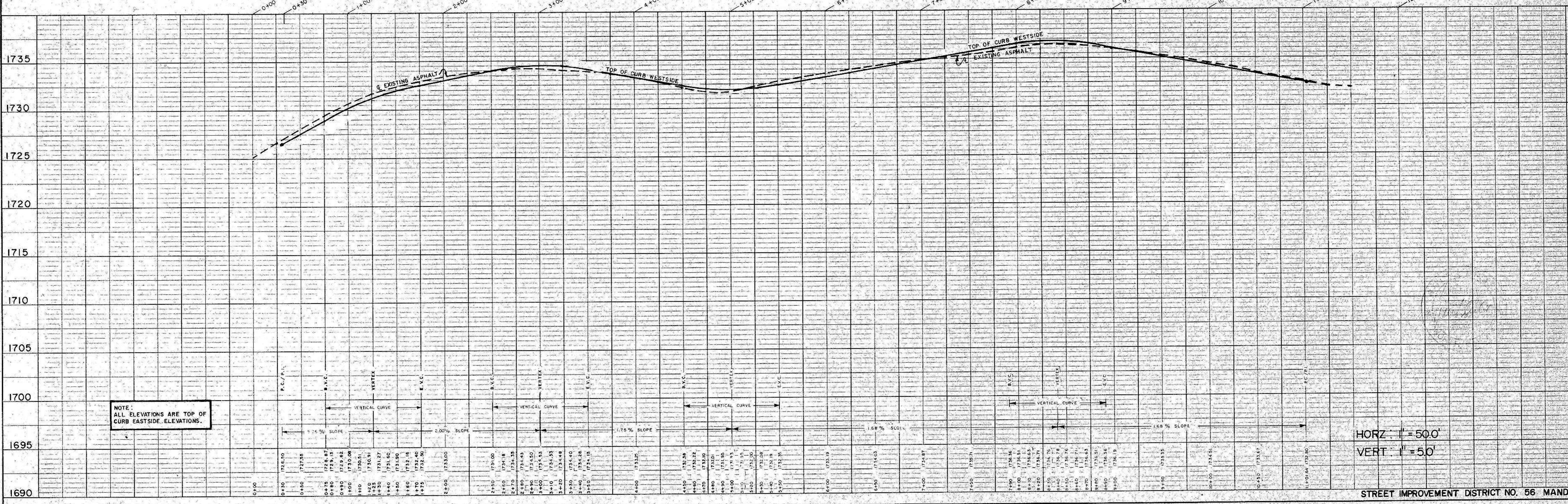
NO. _____

REVISIONS:



NOTE: ALL RADII 12' UNLESS OTHERWISE NOTED.

NOTE: All streets on this sheet are cut or filled to within 6" of proposed street grade.



HORZ: 1" = 50.0'
VERT: 1" = 5.0'

STREET IMPROVEMENT DISTRICT NO. 56 MANDALAY

PLATE 1 - PLAN - PROFILE - D.P.R. & R.C. STANDARD
KEUFFEL & ESSER CO. NEW YORK

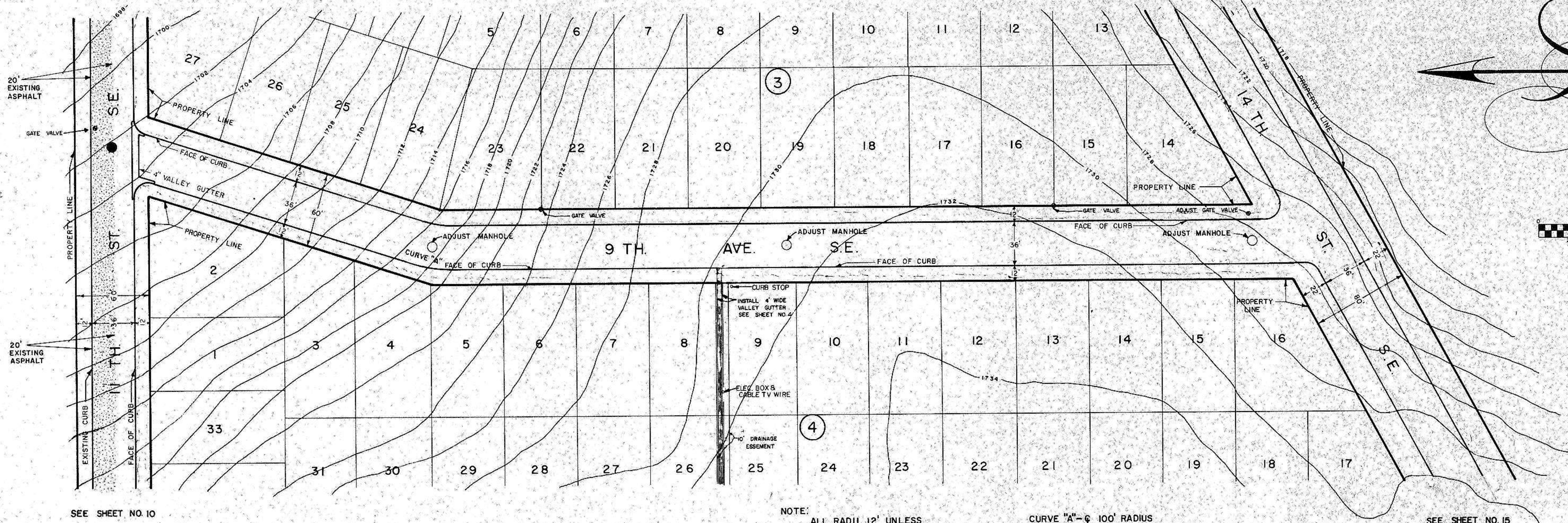
ASBULT CONSTRUCTION DRAWINGS

SHEET NO. 11 OF 23 SHEETS

K & E Co. No. 347 - IR - MANHOLE TANK. MADE IN U.S.A. 3160

PLAN
 SURVEYED BY _____ DATE _____
 ALIGNED BY _____
 CHECKED BY _____
 RT. OF WAY CHECKED BY _____
 NO. _____

NOTE: All streets on this sheet are cut or filled to within 6"± of proposed street grade.



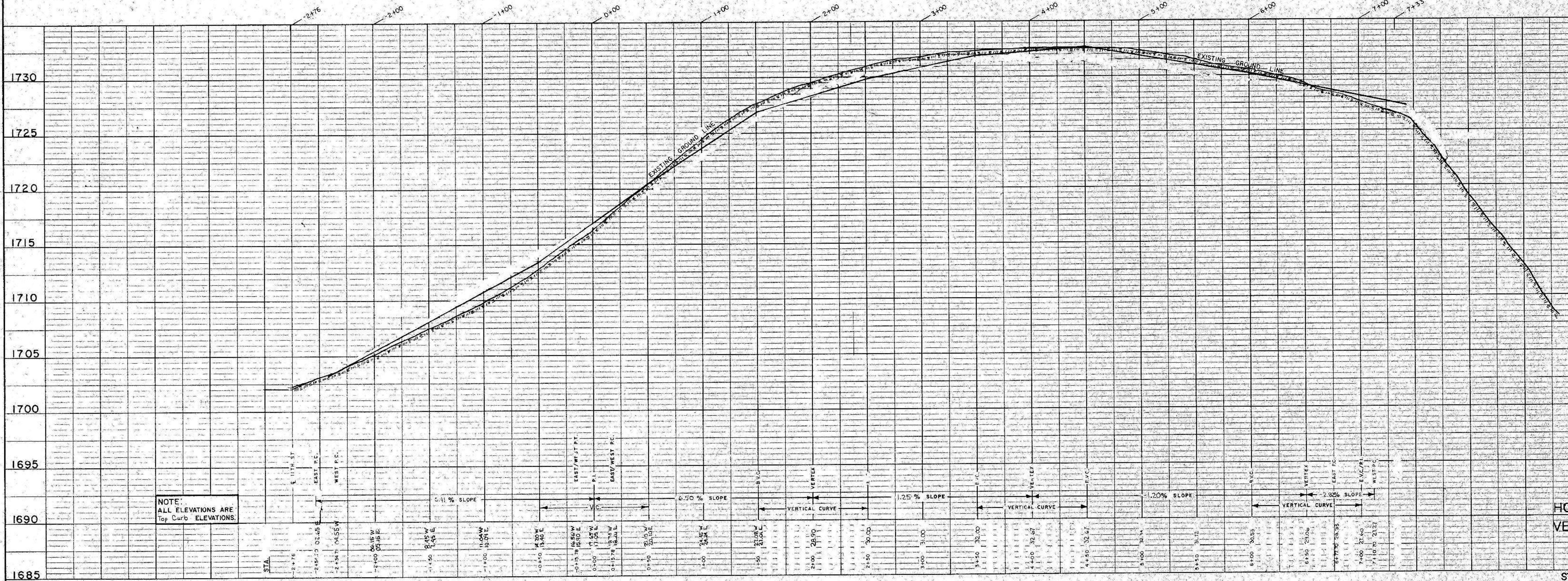
SEE SHEET NO. 10

NOTE: ALL RADII 12' UNLESS OTHERWISE STATED.
 9th, 10th, & 11th AVENUES TO HAVE SURMOUNTABLE CURB.

CURVE "A" - 100' RADIUS

SEE SHEET NO. 15

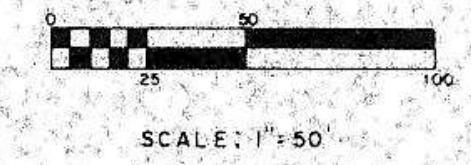
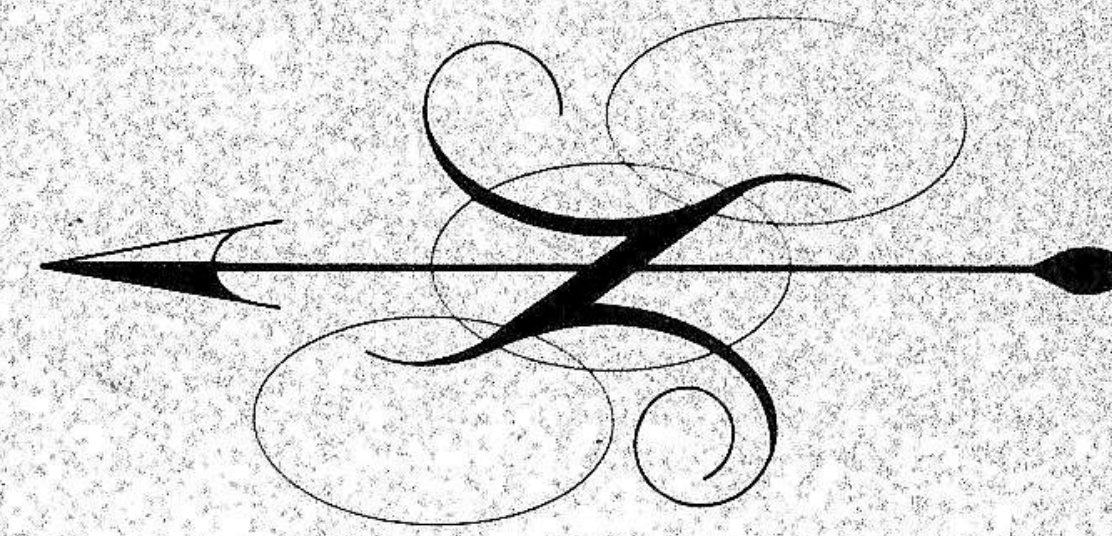
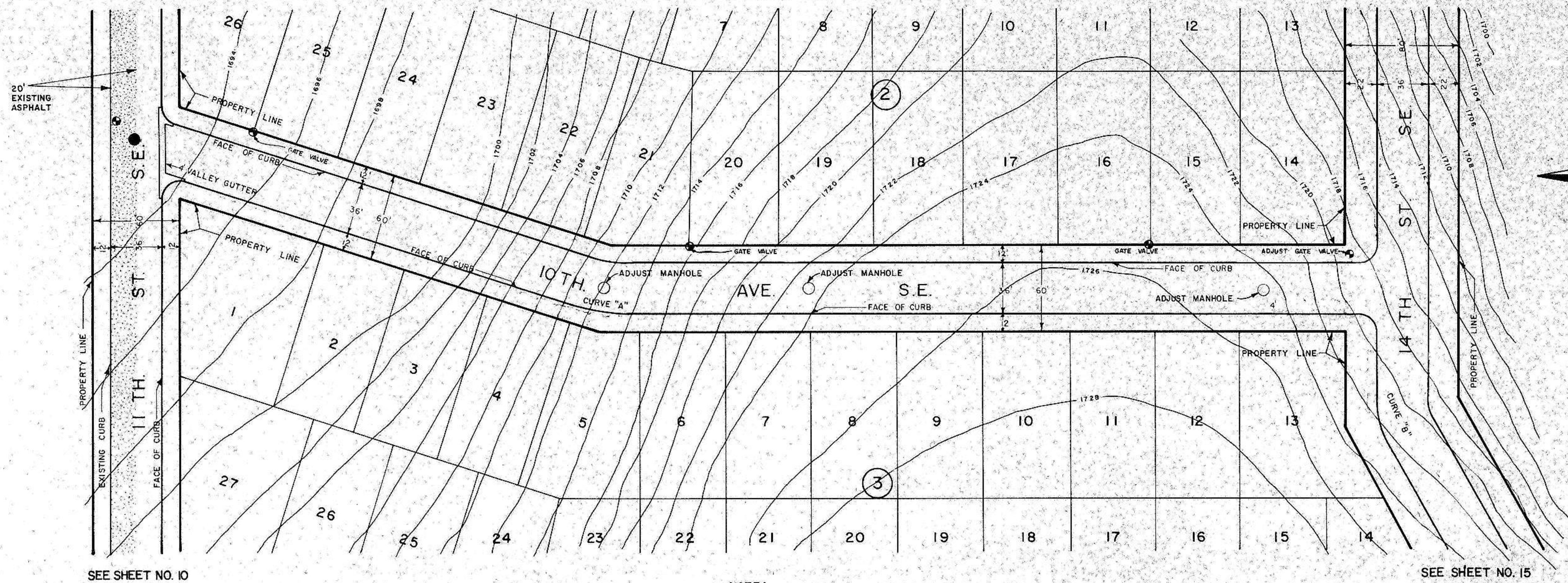
PROFILE
 SURVEYED BY _____ DATE _____
 ALIGNED BY _____
 CHECKED BY _____
 RT. OF WAY CHECKED BY _____
 STRUCTURE NOTES (SEE SHEET NO. 10)
 NO. _____



NOTE: ALL ELEVATIONS ARE Top Curb ELEVATIONS.

HORIZ. 1" = 50.0'
 VERT. 1" = 5.0'

PLAN
 SURVEYED BY: [] DATE: []
 GRADES CHECKED BY: []
 STRUCTURE NOTATIONS BY: []
 NOTE BOOK NO. []
 NO. []



SEE SHEET NO. 10

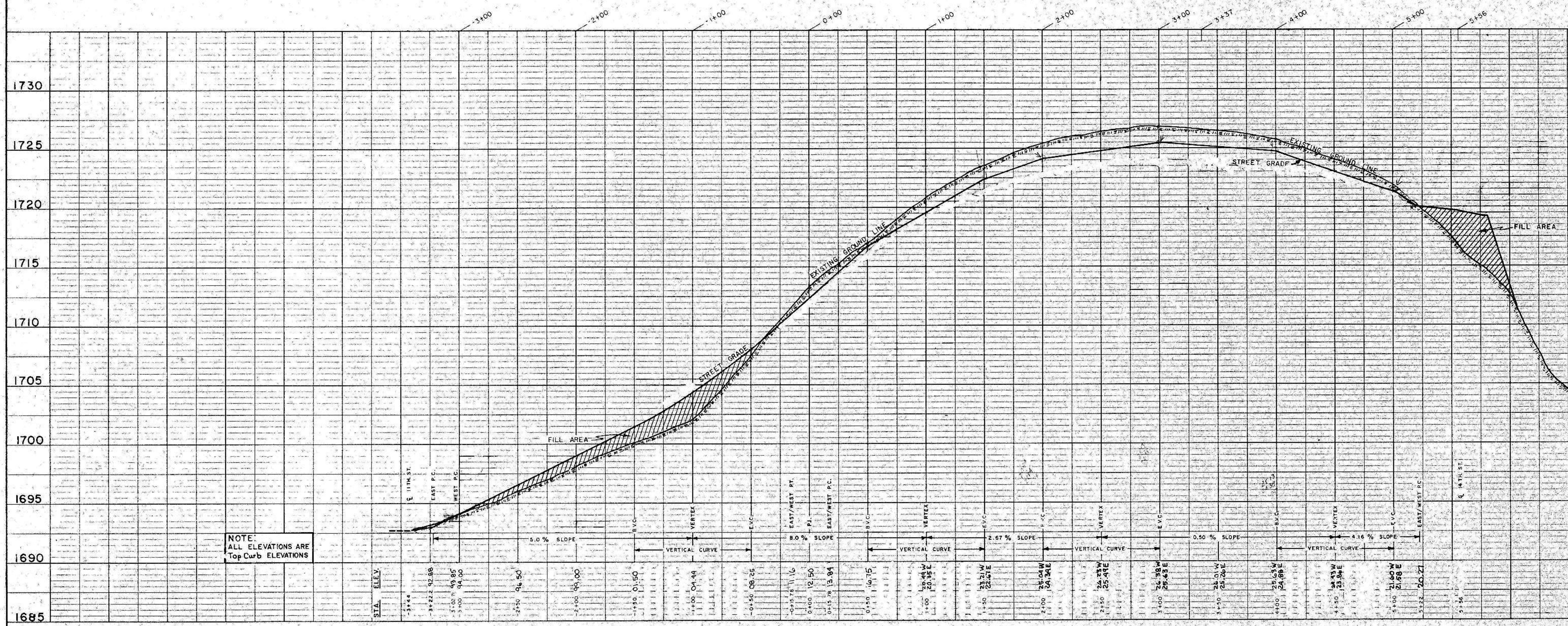
SEE SHEET NO. 15

NOTE: All streets on this sheet are cut or filled to within 6"± of proposed street grade.

NOTE: ALL RADII 12' UNLESS OTHERWISE NOTE.
 9th, 10th, 11th, AVENUES TO HAVE SURMOUNTABLE CURB.

CURVE "A" - 100' RADIUS
 CURVE "B" - 40' RADIUS

PROFILE
 SURVEYED BY: [] DATE: []
 GRADES CHECKED BY: []
 STRUCTURE NOTATIONS BY: []
 NOTE BOOK NO. []
 NO. []



NOTE: ALL ELEVATIONS ARE Top Curb ELEVATIONS

HORZ. 1"=50.0'
 VERT. 1"=5.0'

STREET IMPROVEMENT DISTRICT NO. 56 MANDAMAYOR

PLATE 1-PLAN-PROFILE (O.P.R. & R.E. STANDARD)
 KEUFFEL & ESSER CO., NEW YORK

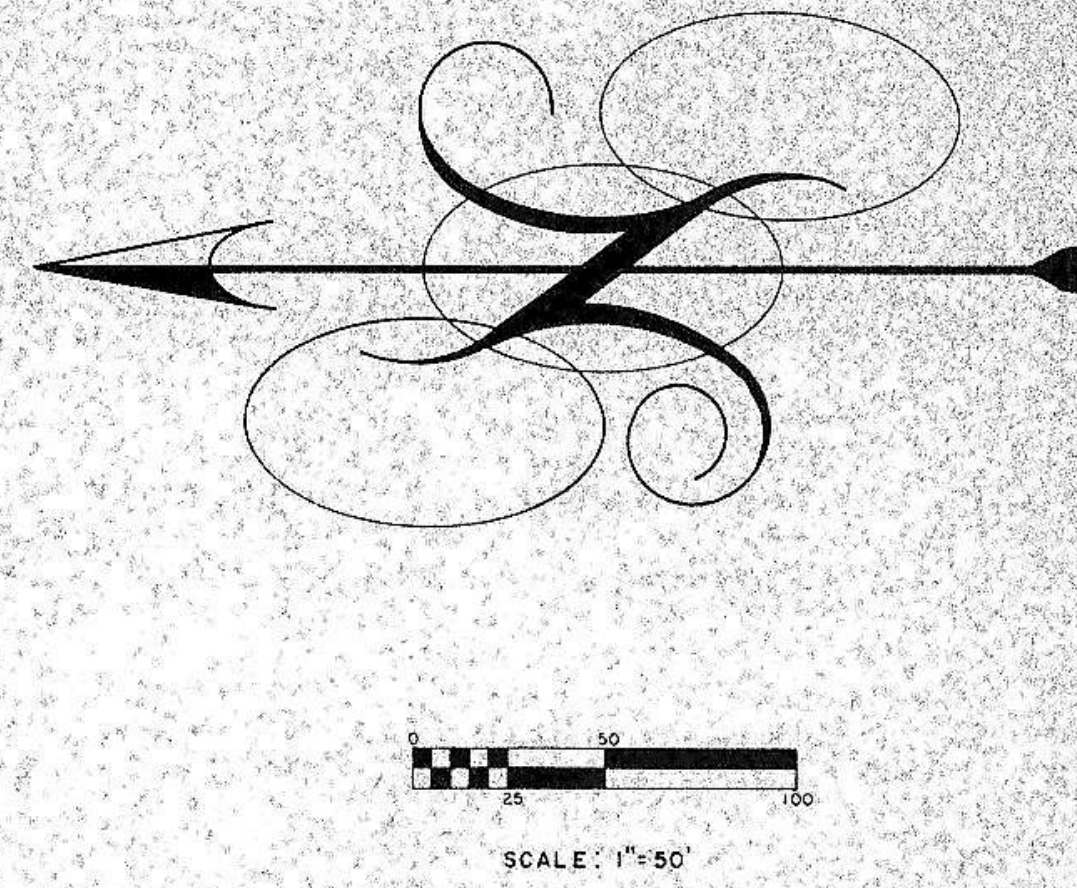
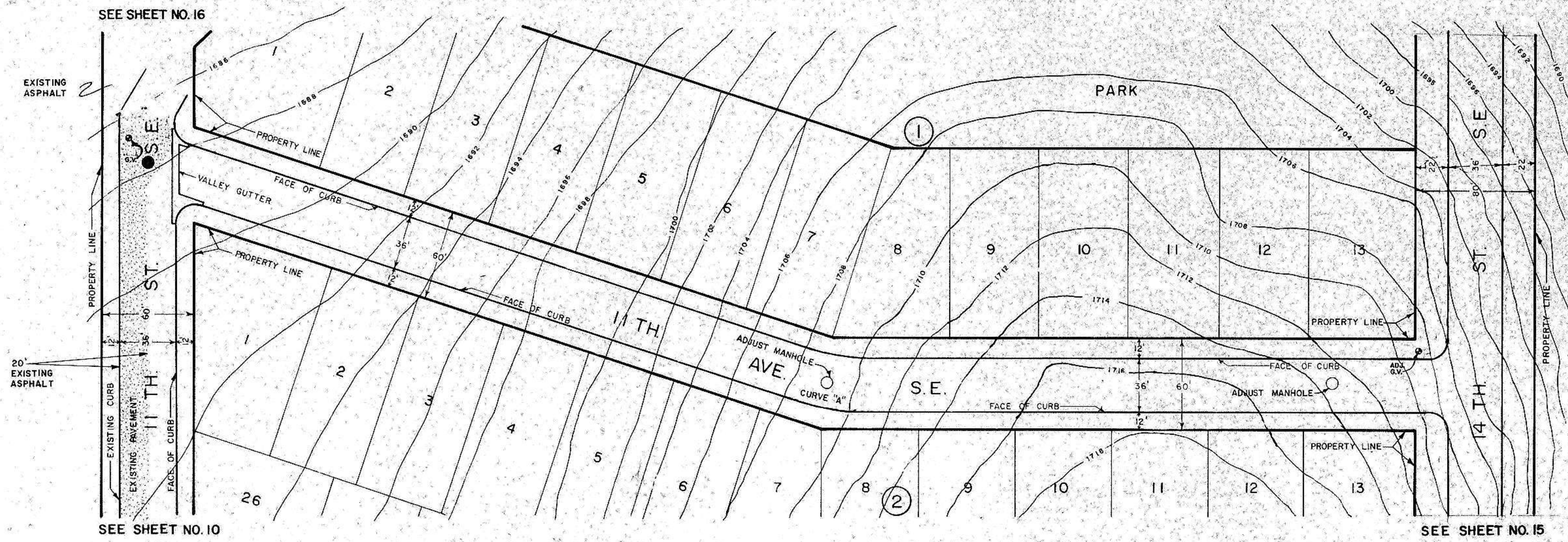
ASBUILT CONSTRUCTION DRAWINGS

SHEET NO. 13 OF 23 SHEETS

K. & E. Co. No. 347-IR ARRANGED, INC. MADE IN U.S.A. 2409

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 PLOTTED BY _____
 NOTE BOOK NO. _____
 CHECKED BY _____
 DATE _____
 NO. OF SHEETS CHECKED _____

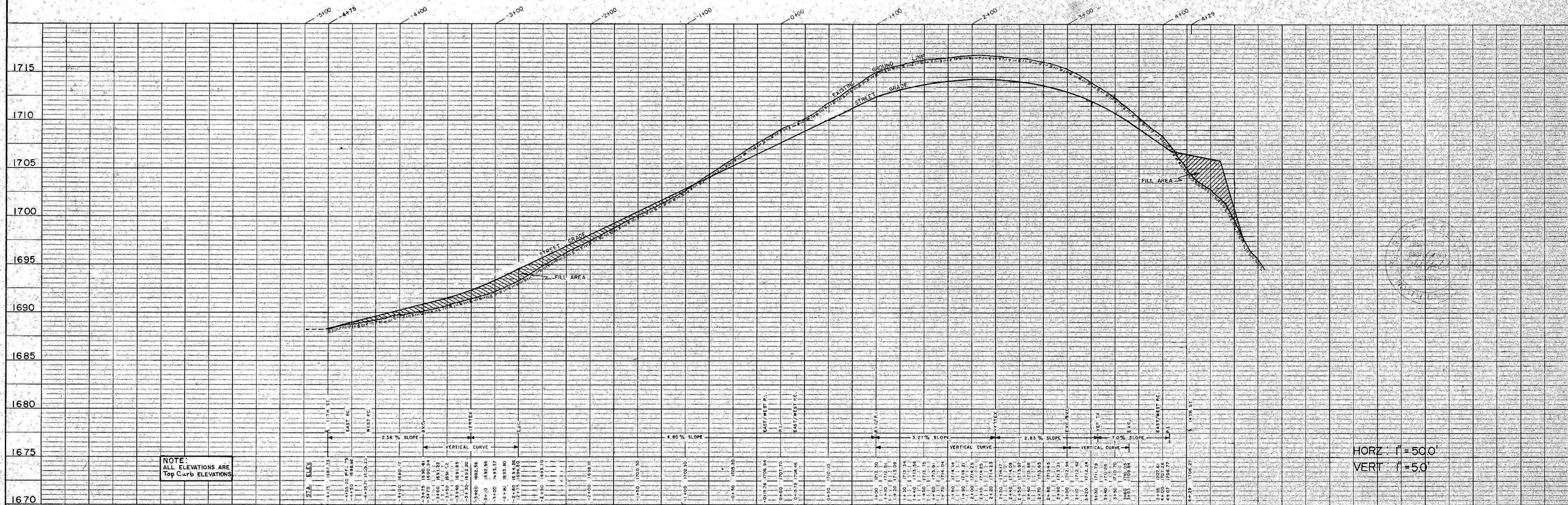
PROFILE
 SURVEYED BY _____ DATE _____
 PLOTTED BY _____
 NOTE BOOK NO. _____
 CHECKED BY _____
 DATE _____
 STRUCTURE NOTATION: CH/K/O



NOTE:
 ALL RADII 12' UNLESS OTHERWISE NOTED.

CURVE "A" - 100' RADIUS
 9th, 10th, & 11th AVENUES TO HAVE SURMOUNTABLE CURB.

NOTE: All streets on this sheet are cut or filled to within 6" of proposed street grade.

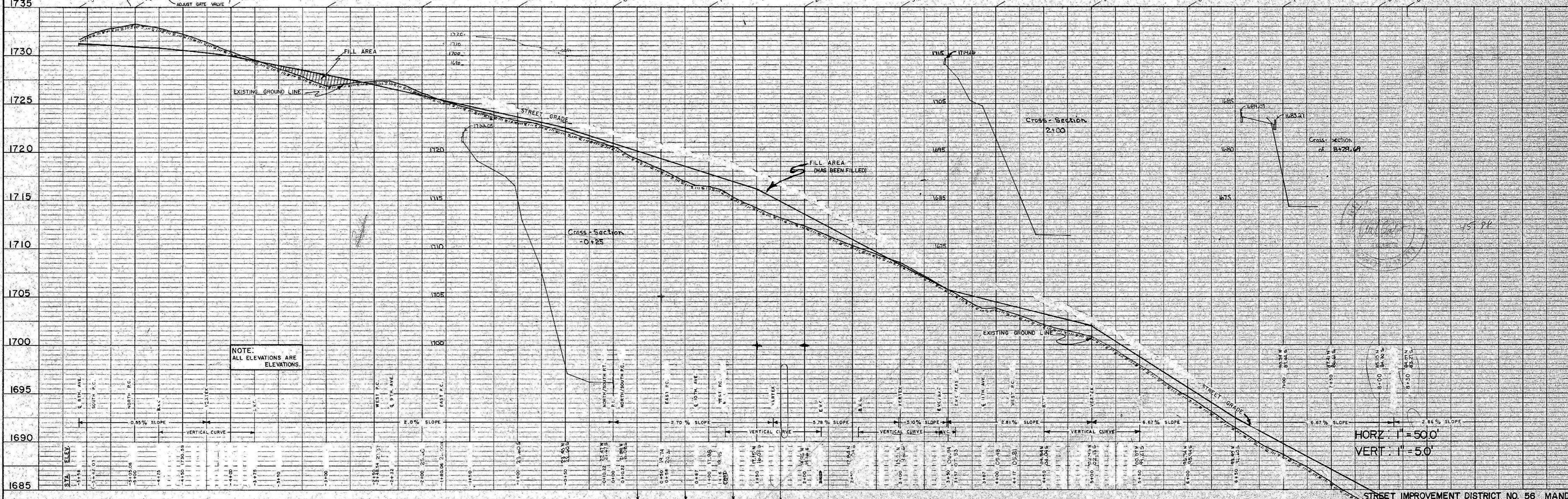
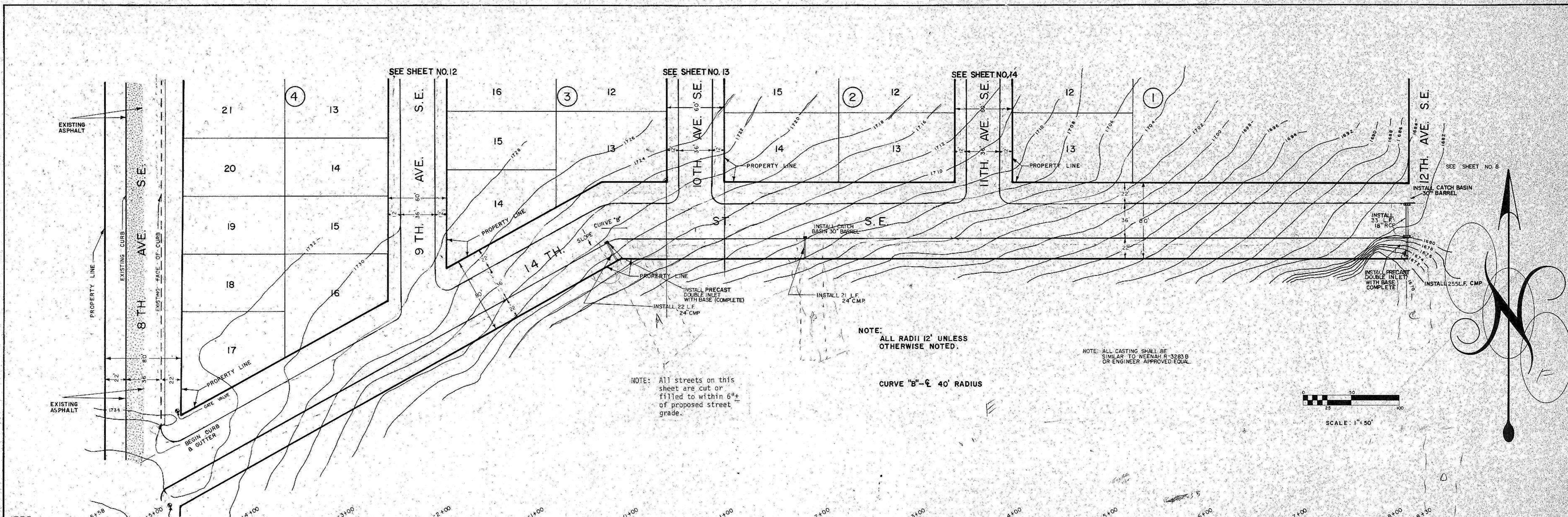


NOTE: ALL ELEVATIONS ARE Top Curb ELEVATIONS.

HORIZ. 1"=50'
 VERT. 1"=50'

PLAN
 SURVEYED BY _____ DATE _____
 NOTE BOOK ALIGNMENT CHECKED _____ NO. _____
 RT. OF WAY CHECKED _____

PROFILE
 SURVEYED BY _____ DATE _____
 NOTE BOOK GRADES CHECKED _____ NO. _____
 STRUCTURE NOTATION CHECKED _____

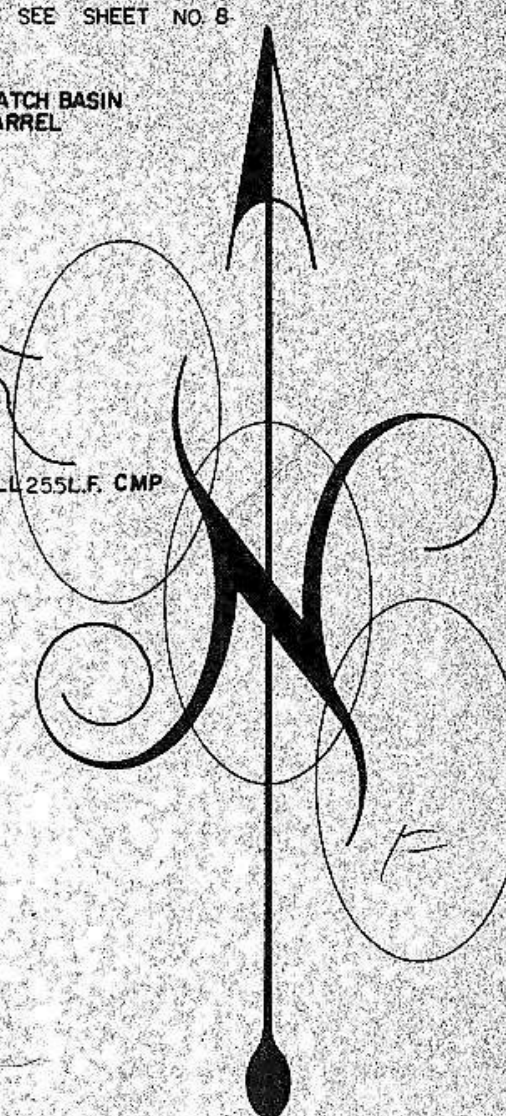
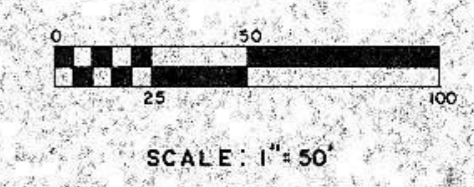


NOTE: All streets on this sheet are cut or filled to within 6"± of proposed street grade.

NOTE: ALL RADII 12' UNLESS OTHERWISE NOTED.

CURVE "B" - R 40' RADIUS

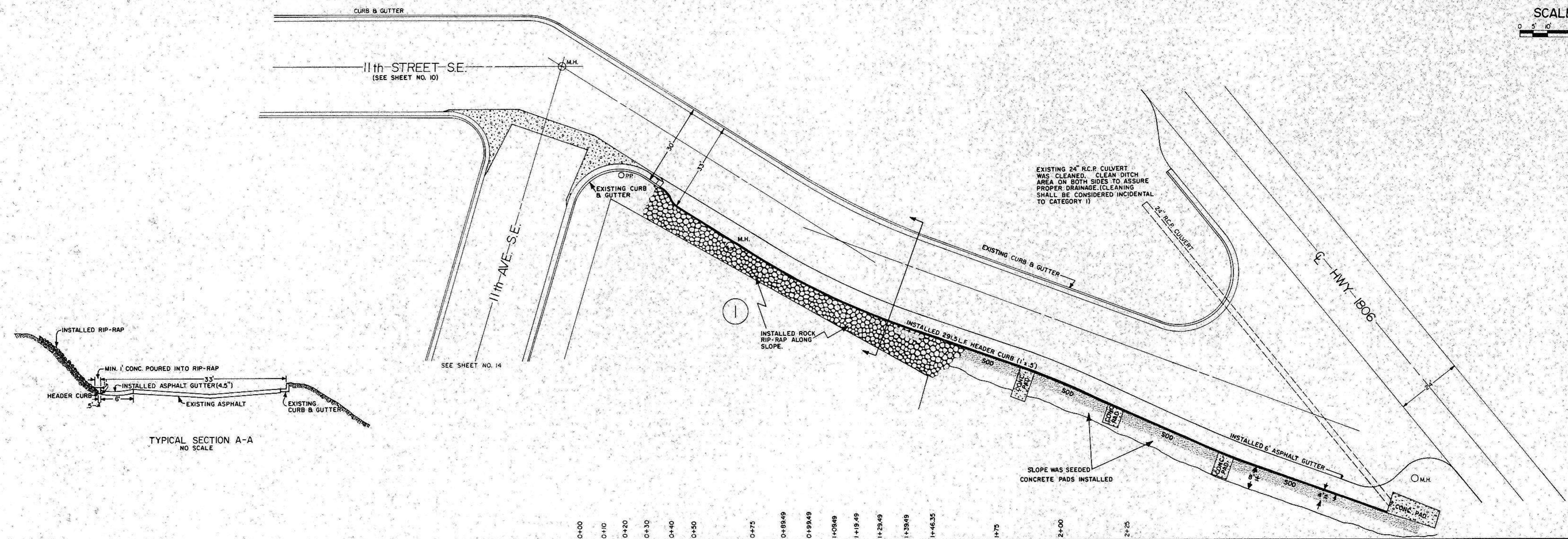
NOTE: ALL CASTING SHALL BE SIMILAR TO NEENAH R-3283 B OR ENGINEER APPROVED/EQUAL



NOTE: ALL ELEVATIONS ARE ELEVATIONS.

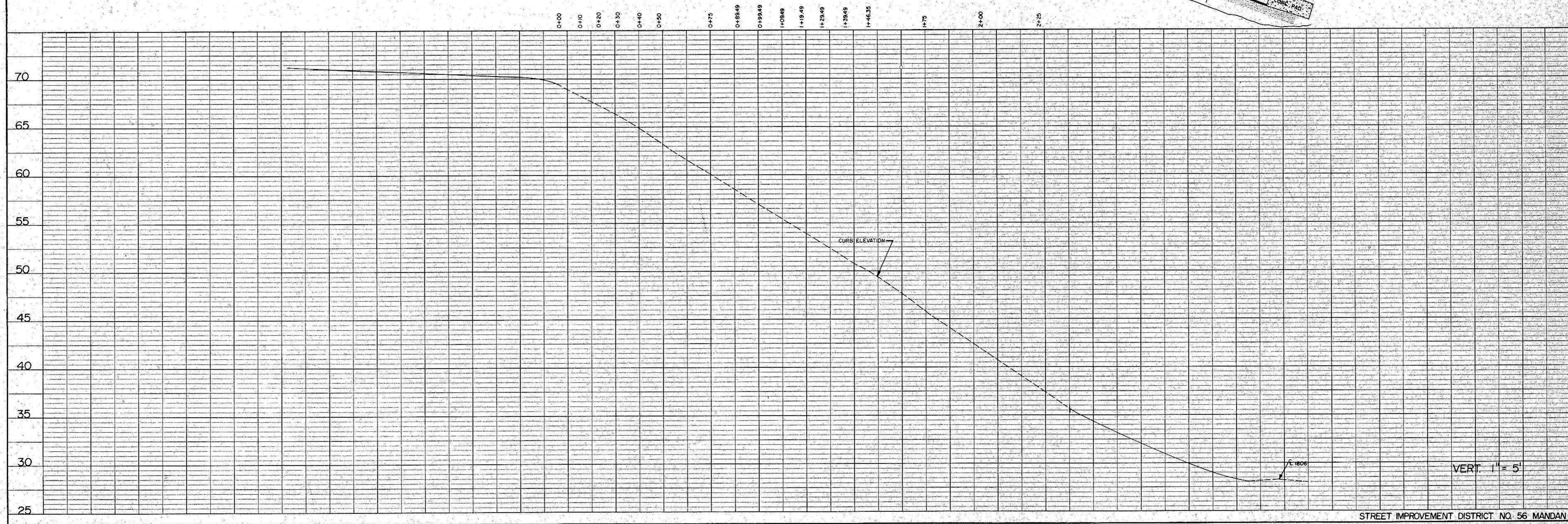
HORZ. 1" = 50.0'
 VERT. 1" = 5.0'

PLAN
 SURVEYED: _____
 PLOTTED: _____
 NOTE BOOK NO. _____
 DATE _____
 BY _____
 CHECKED: _____
 RT. OF WAY CHECKED: _____



TYPICAL SECTION A-A
 NO SCALE

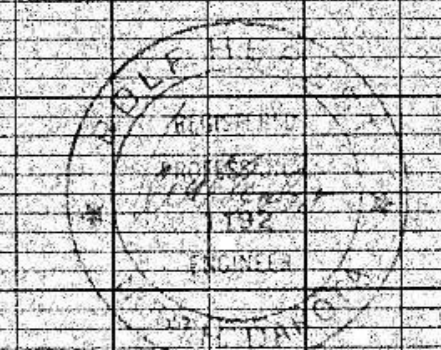
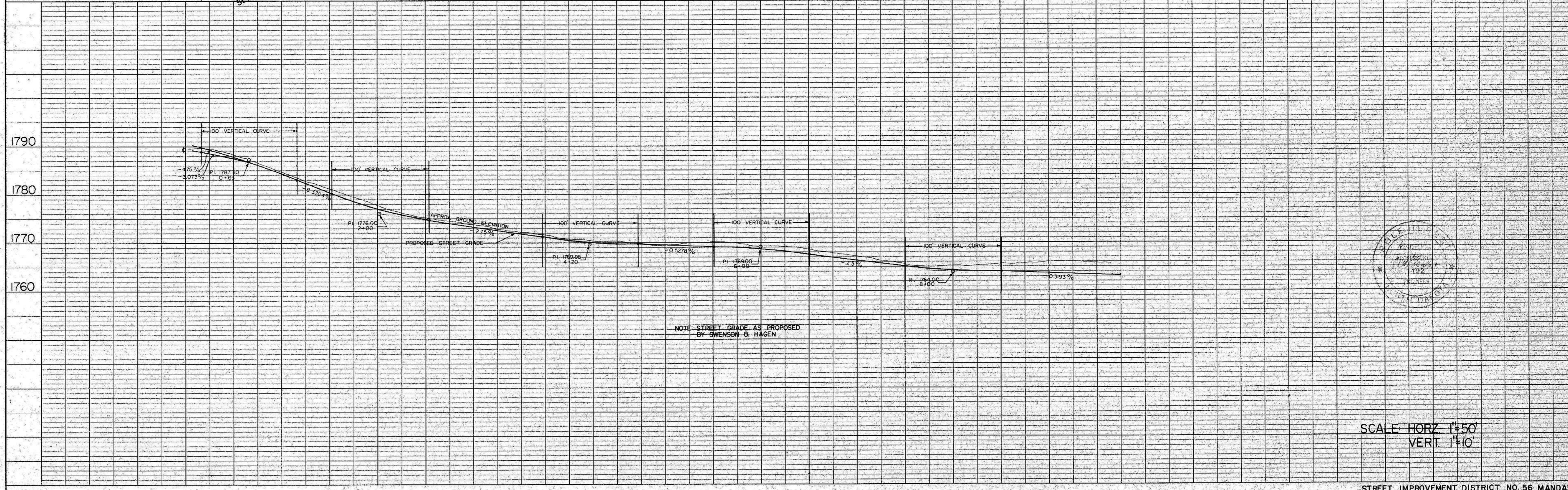
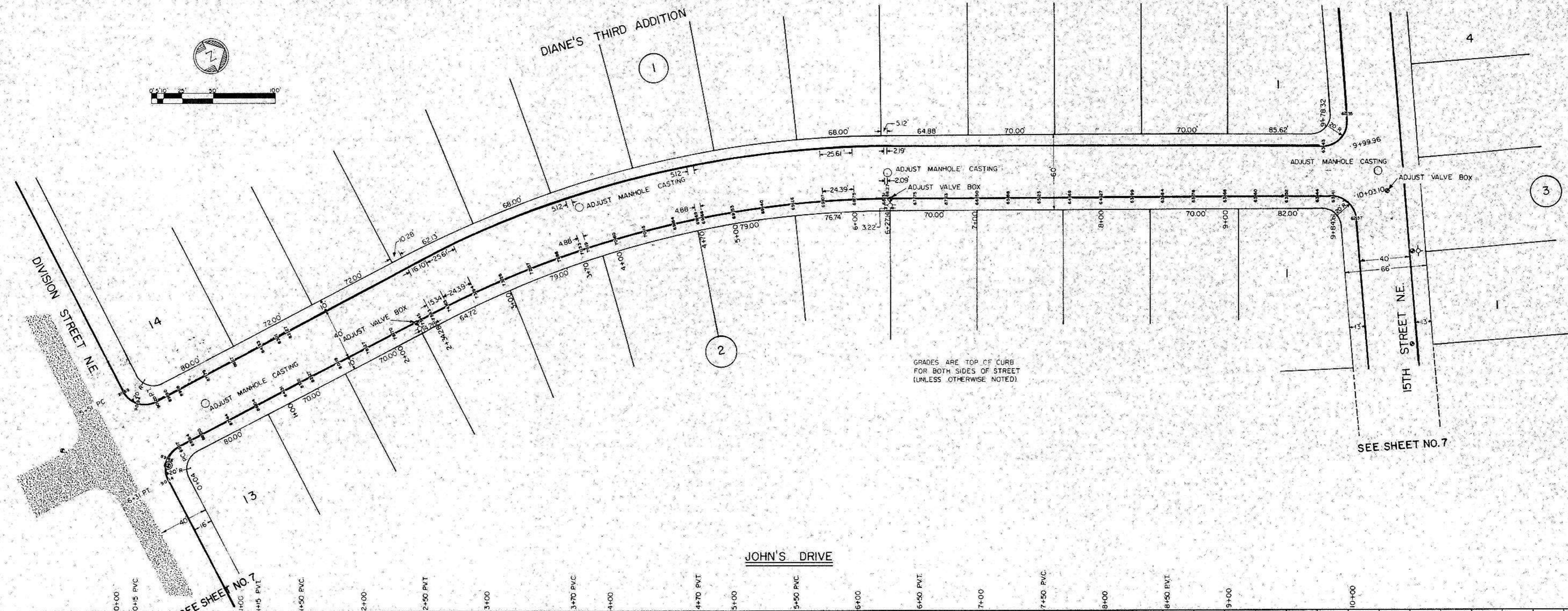
PROFILE
 SURVEYED: _____
 PLOTTED: _____
 NOTE BOOK NO. _____
 DATE _____
 BY _____
 CHECKED: _____
 STRUCTURE NOTATIONS (H/V/D)



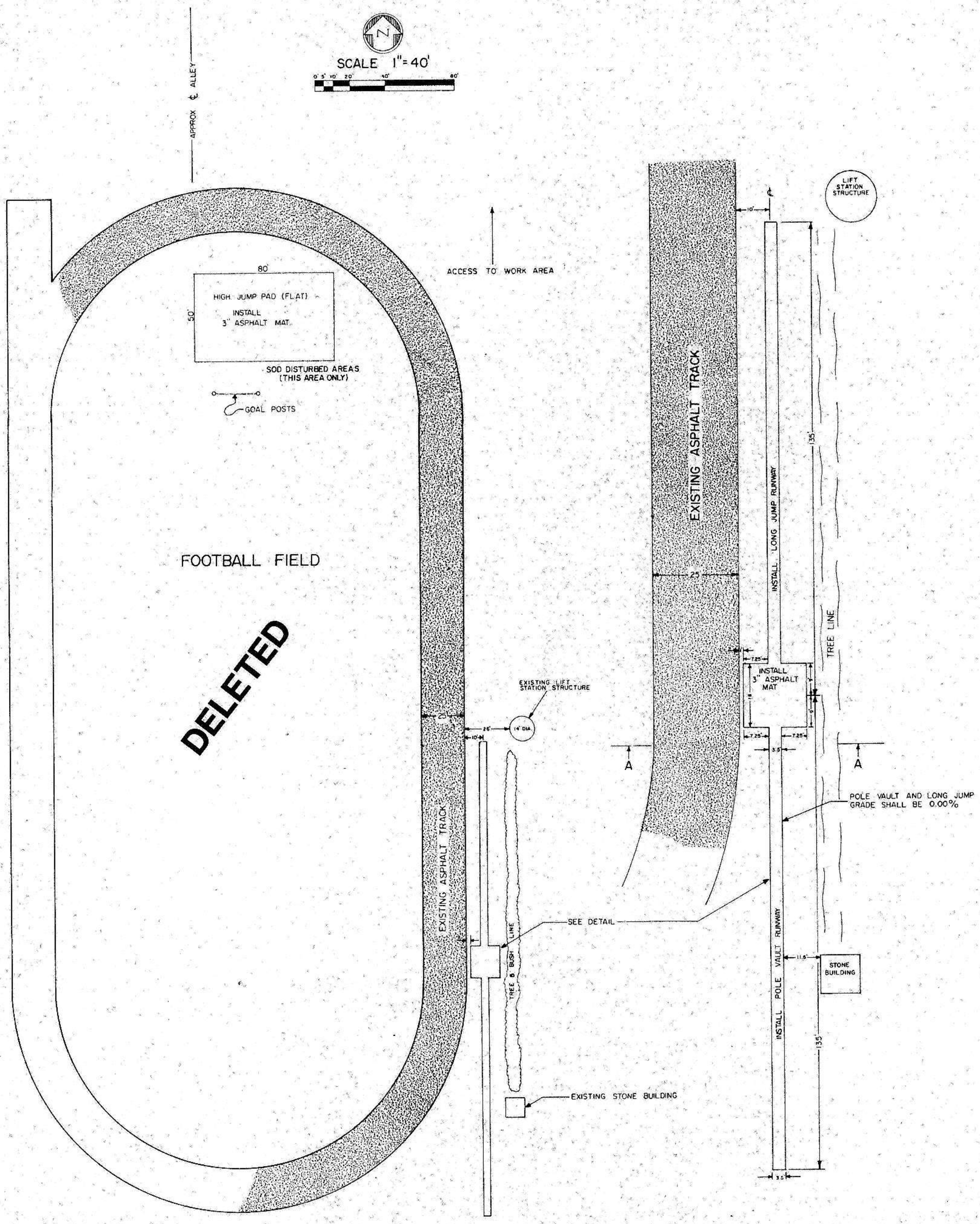
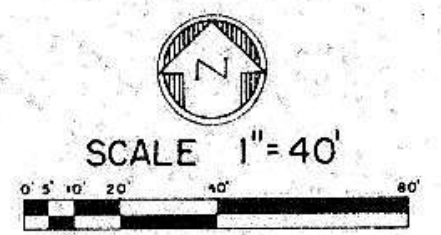
VERT 1" = 5'

PLAN	SUBMITTED	DATE
	PLOTTED	
	NOTE BOOK	
	ALIGNMENT CHECKED	
	RT. OF WAY CHECKED	
	NO.	

PROFILE	SUBMITTED	DATE
	PLOTTED	
	NOTE BOOK	
	GRADES CHECKED	
	B. M. NOTED	
	STRUCTURE ADJUSTMENTS	
	NO.	



SCALE: HORIZ. 1"=50'
VERT. 1"=10'



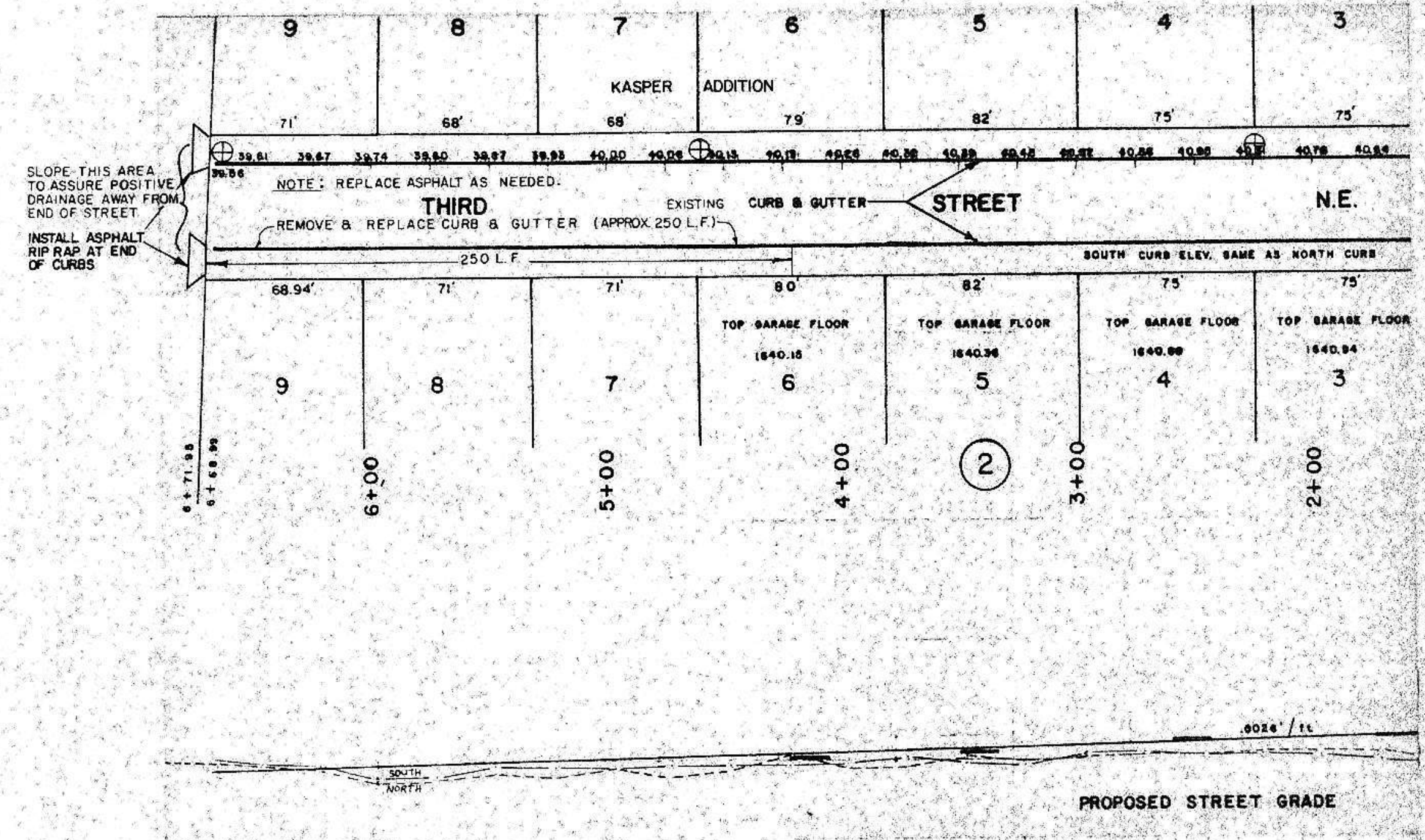
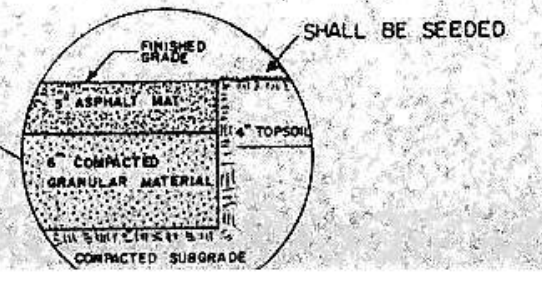
GENERAL LAYOUT
MANDAN ATHLETIC FIELD
DELETED

GENERAL NOTES:

1. Asphalt mats to be 3" thick.
2. All asphalt mats to have a 6" compacted granular base.
3. Areas under asphalt shall have soil sterilizer applied prior to gravel installation.
4. The top 6" of subgrade shall be scarified and recompact prior to gravel installation.
5. Excess dirt to be moved to waste area.
6. No vehicles will be allowed to drive on the existing track and football field.
7. All areas around the new mats shall be shaped to blend into the existing area.
8. All areas disturbed shall be seeded or sodded as noted.



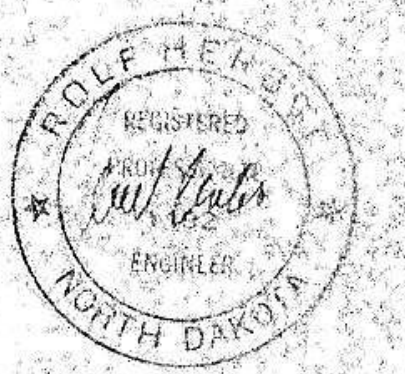
PLAN VIEW
SCALE: HORIZ. 1"=20'

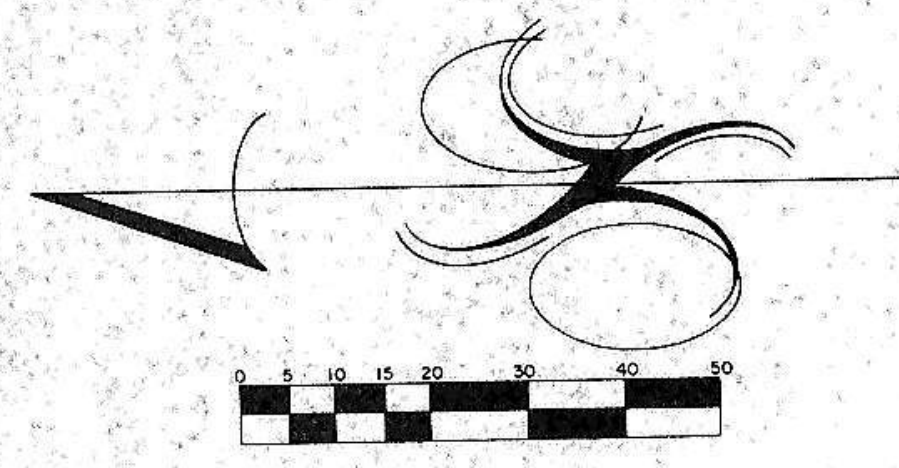


SLOPE THIS AREA TO ASSURE POSITIVE DRAINAGE AWAY FROM END OF STREET
INSTALL ASPHALT RIP RAP AT END OF CURBS

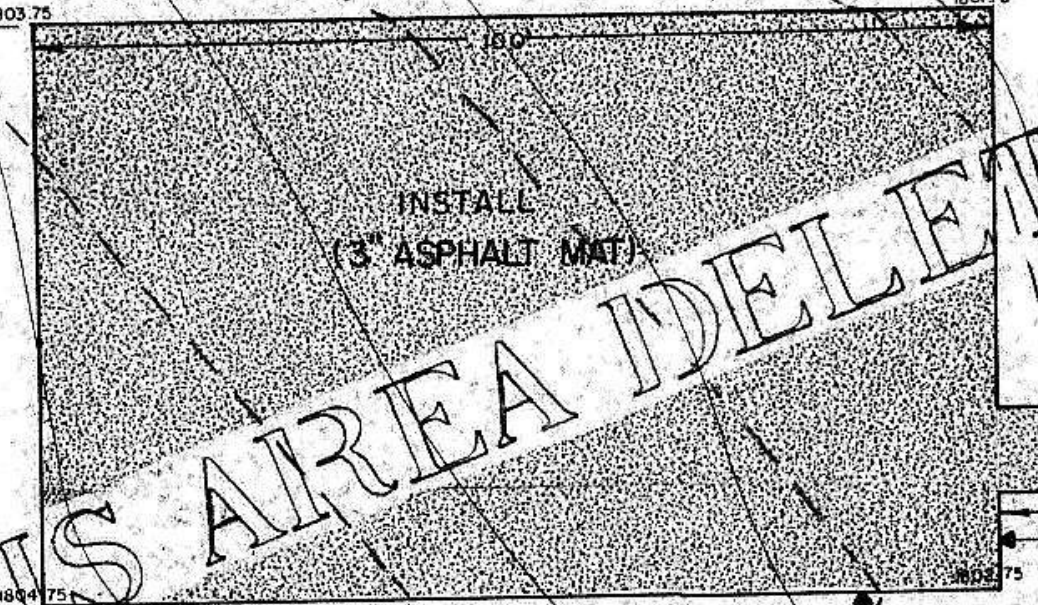
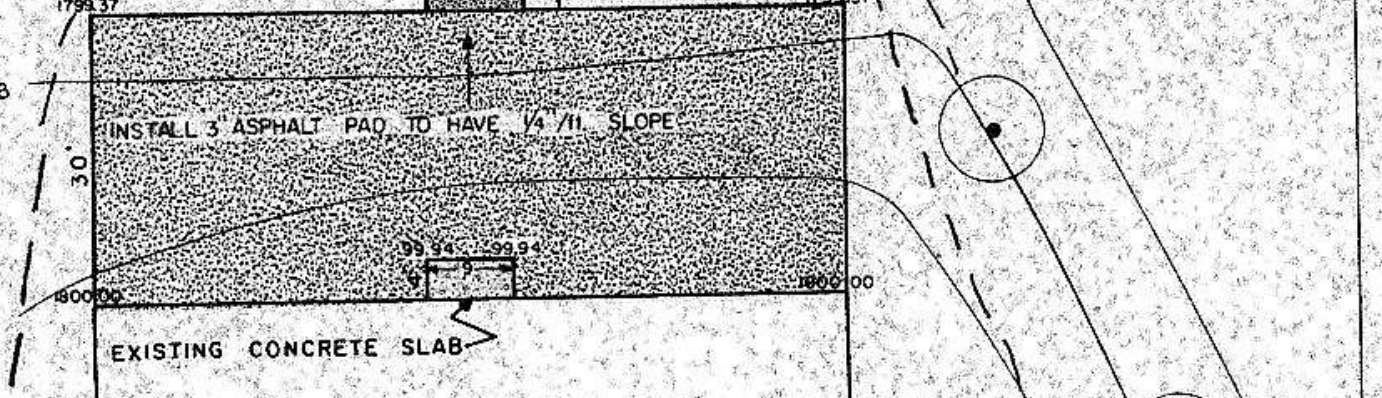
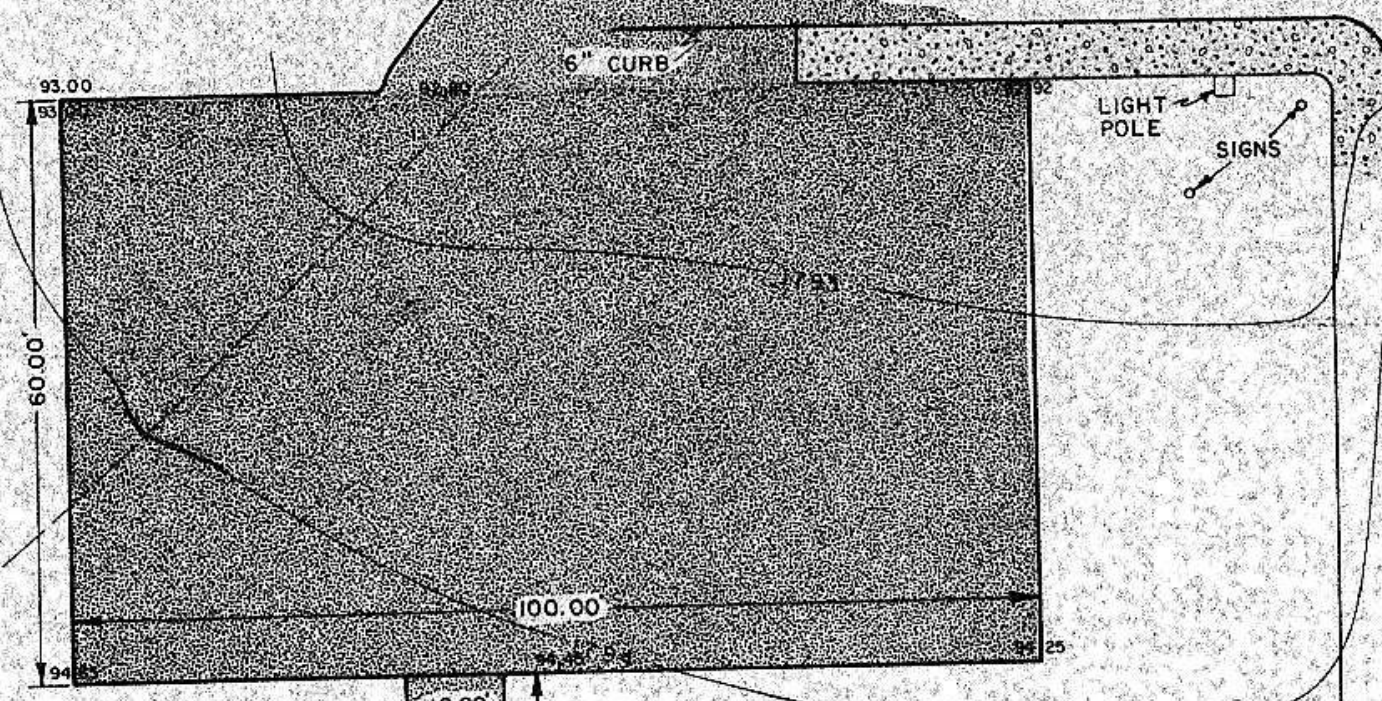
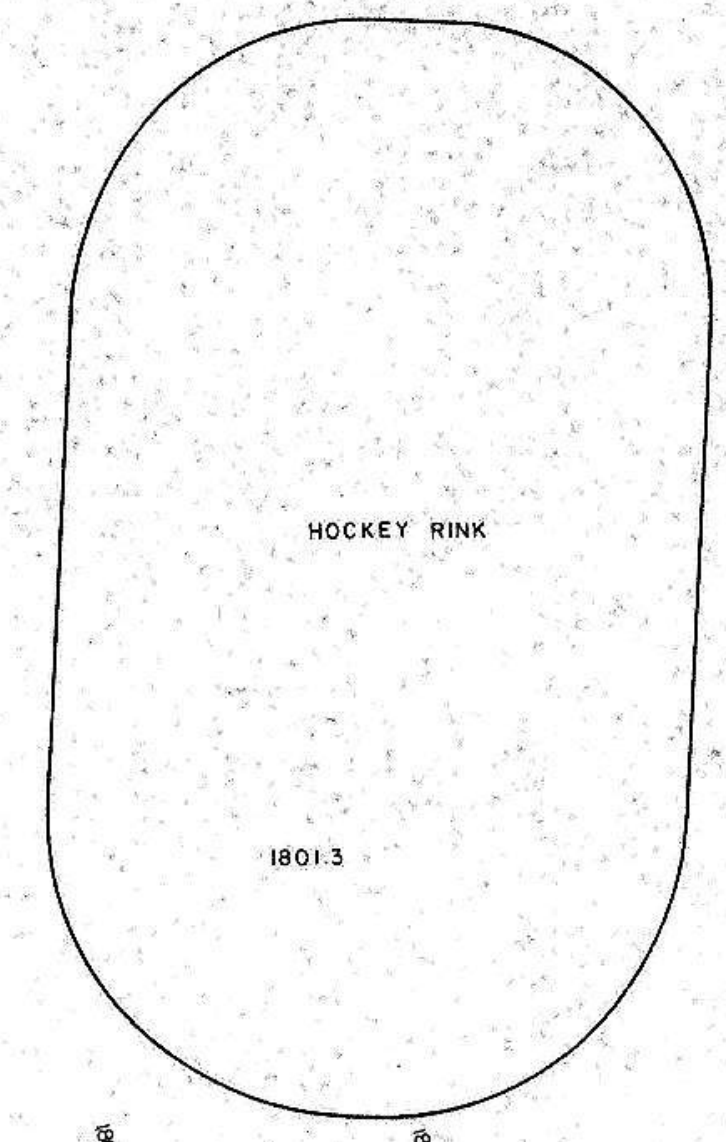
NOTE: REPLACE ASPHALT AS NEEDED.
THIRD REMOVE & REPLACE CURB & GUTTER (APPROX 250 L.F.)

NOTE: THIRD STREET N.E. IS PAVED





SCALE: 1"=20'
MAY 1978



LEGEND

- 1799 — = EXISTING CONTOUR LINES
- - - 1798 - - - = PROPOSED CONTOUR LINES (THIS PROJECT)
- = INDICATES AREAS TO BE PAVED

NOTE: SHAPE AREA AROUND TO BLOCK-IV
INSTALL 3 1/2" ASPHALT MAT (EROSION BARRIER)

NOTE: ALL AREAS THAT WERE RESHAPED SHALL BE SEEDED

NOTE: (1) EXISTING SIDEWALK SHALL BE CUT TRENCH AND LID INSTALLED AS SHOWN IN TALLS ON SHEET NO. 20 (2) SIDEWALK 1" FRAME AND SOLID LID SHALL BE NEEL-AM MODEL NO. 4-760P N-1 OR ENGINEER APPROVED EQUAL

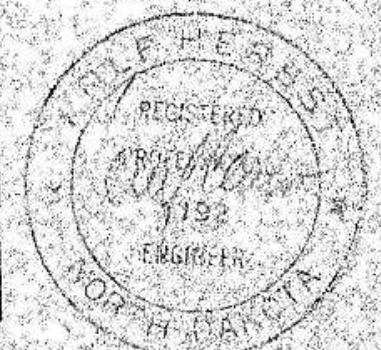
THIS AREA DELETED

DELETED

16 TH. ST. NW.

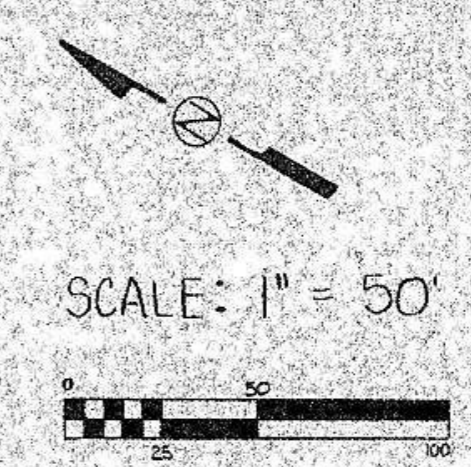
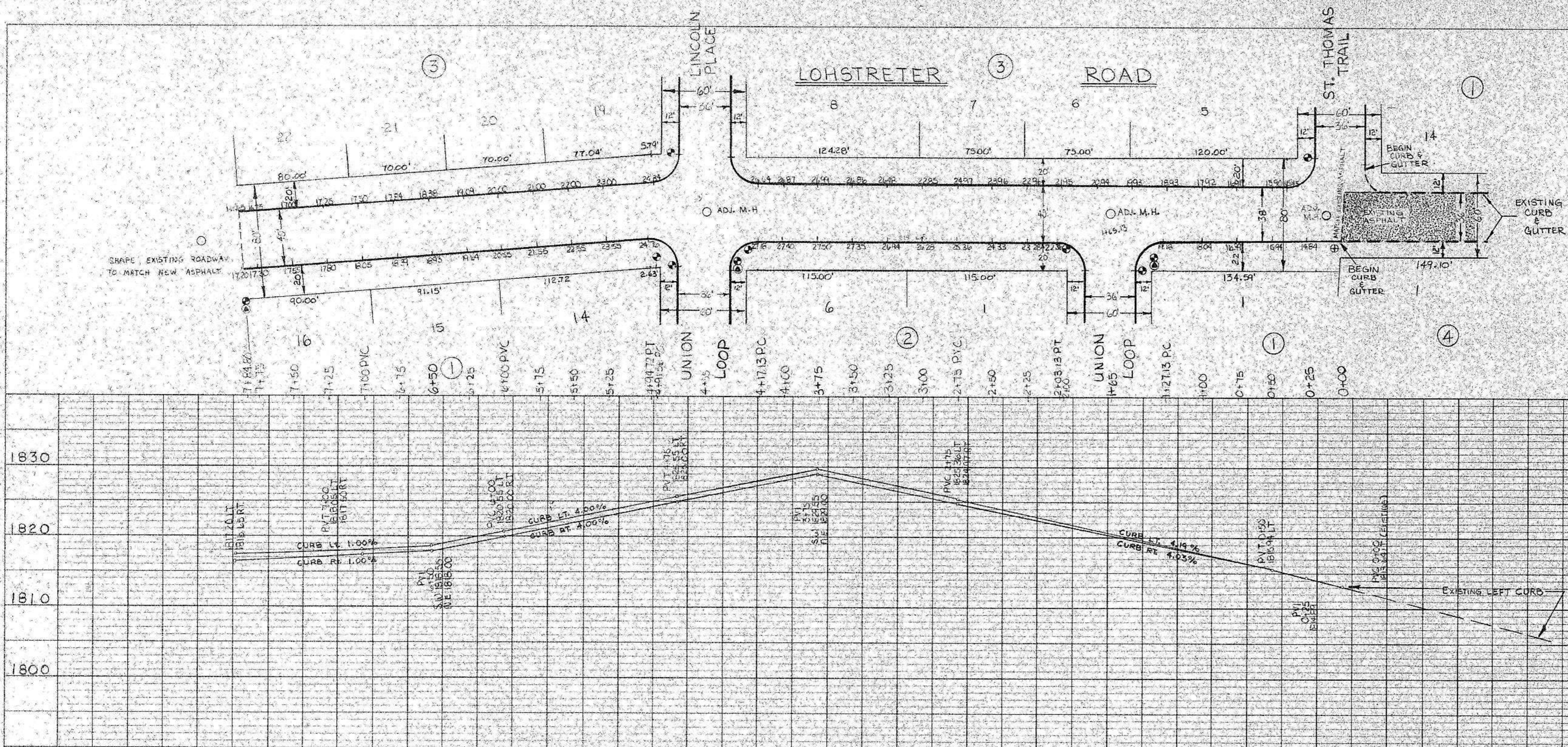
14 TH. ST. NW.

6 TH. AVE. NW.

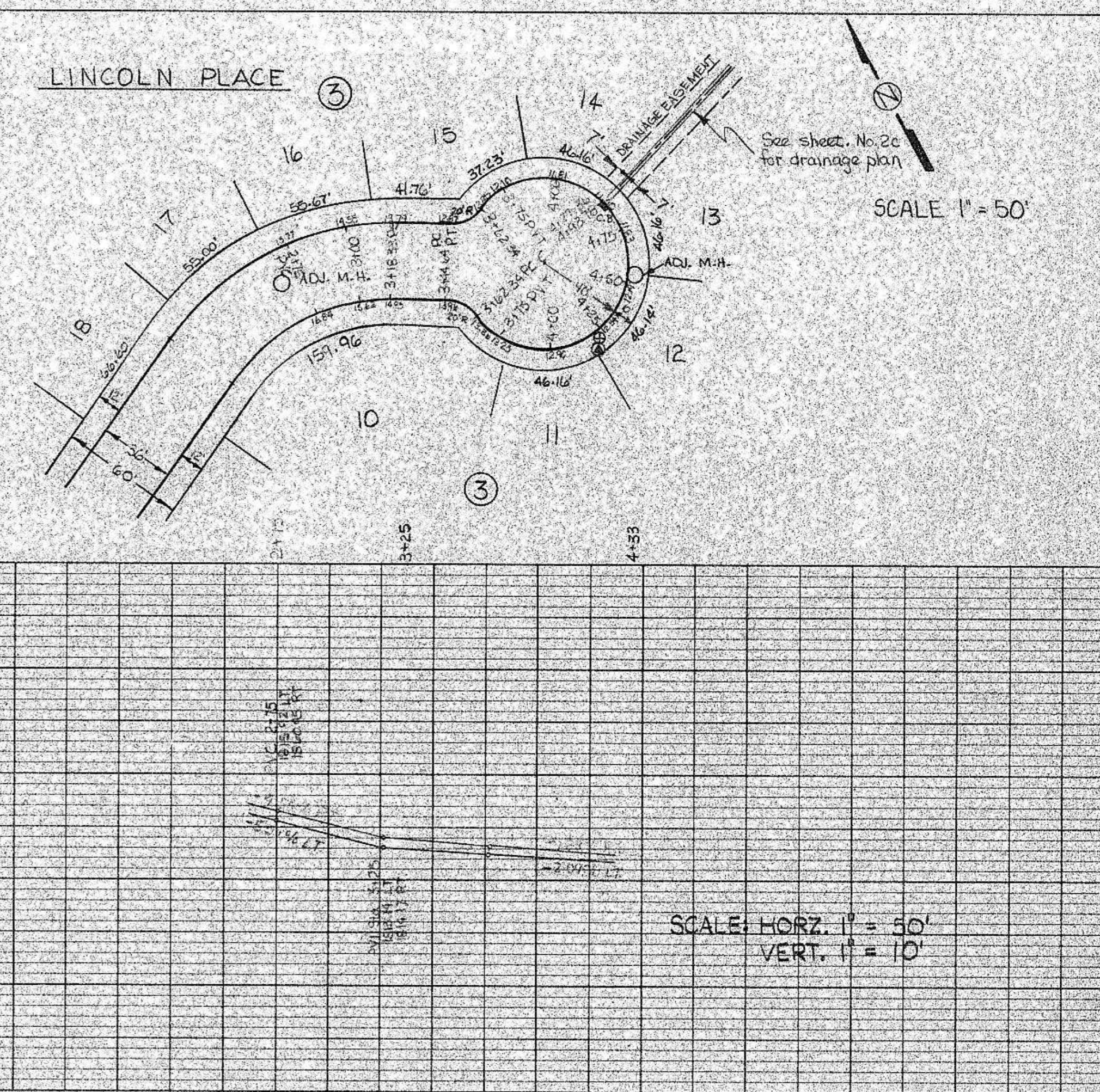
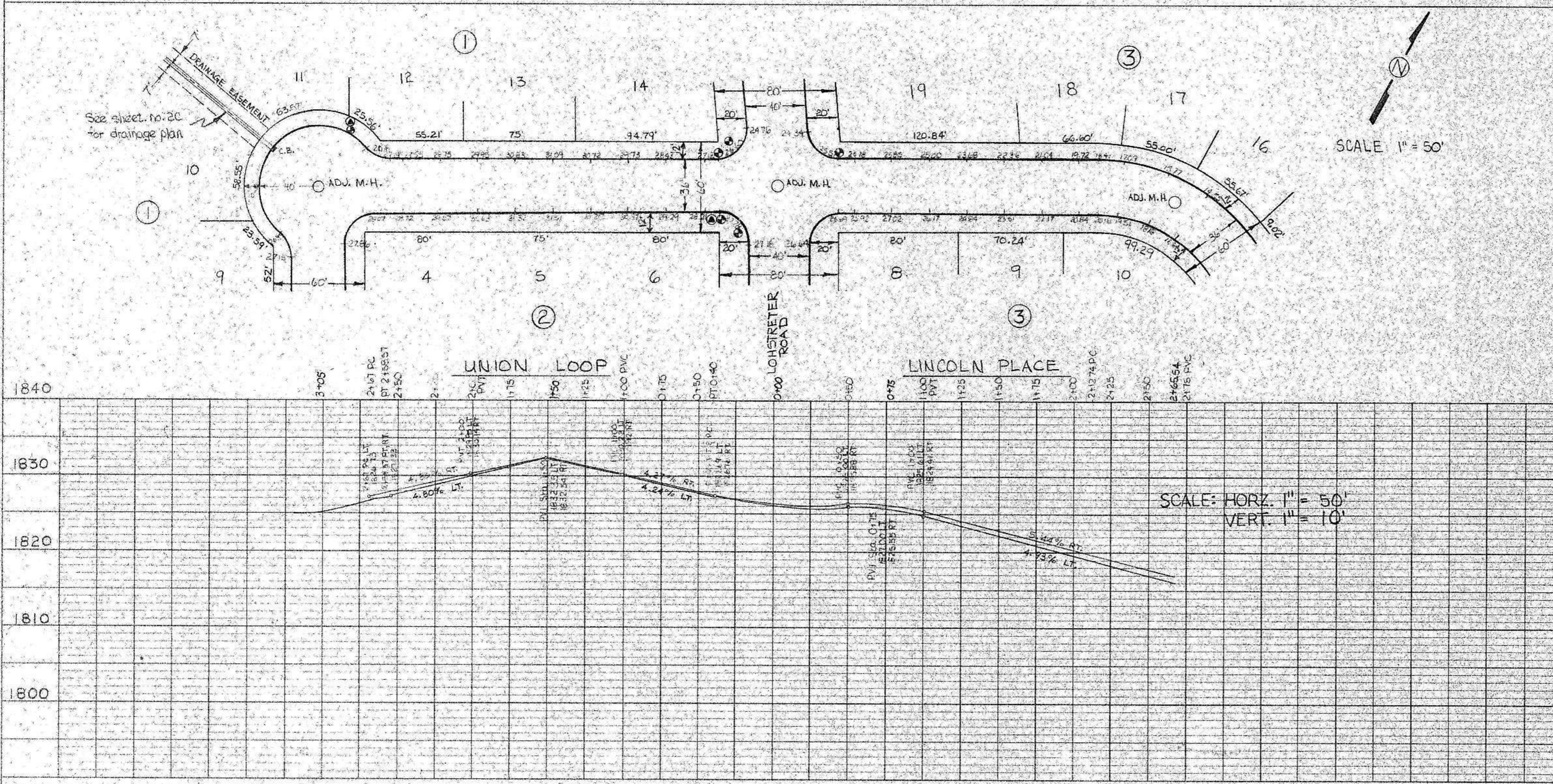


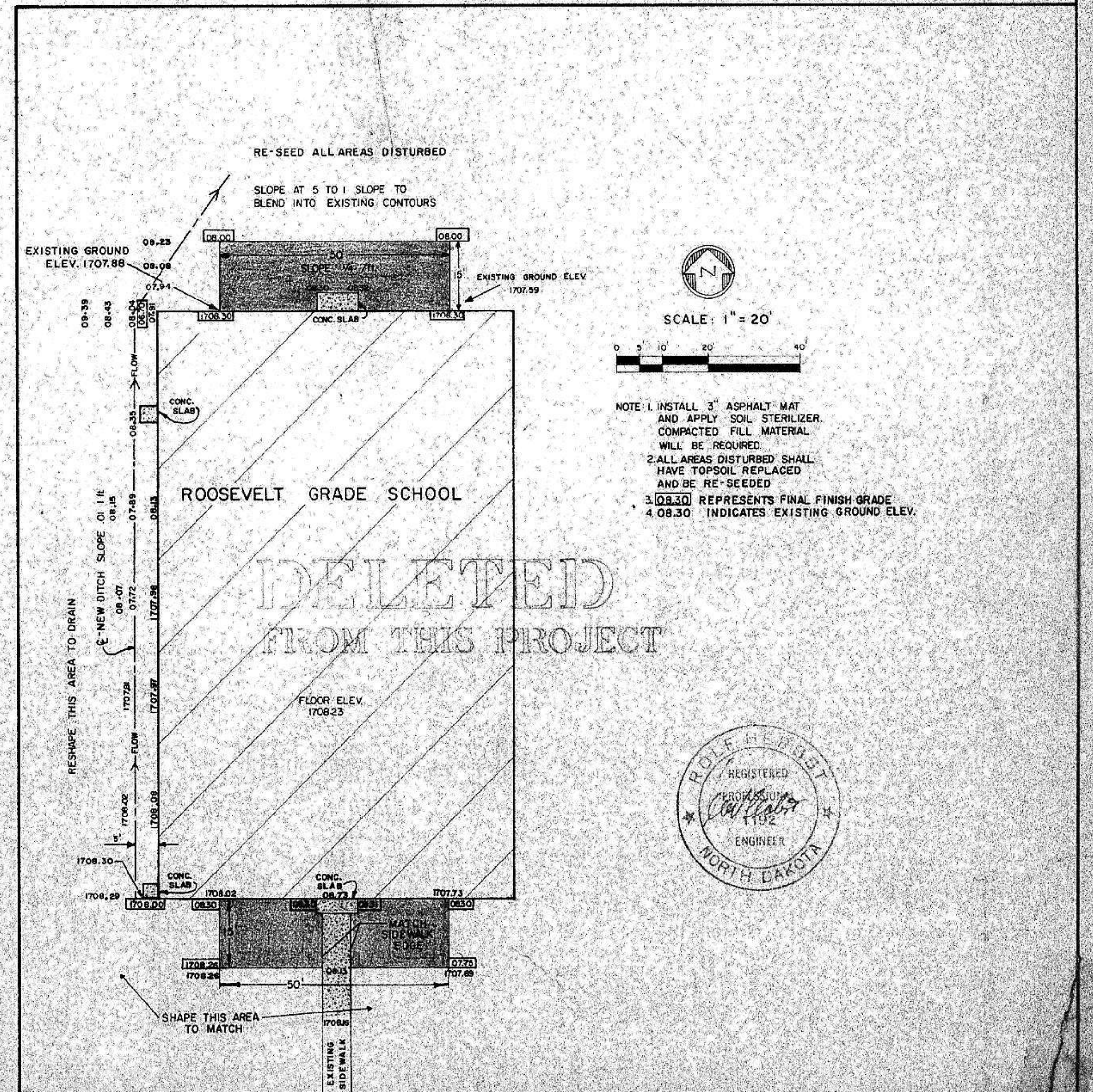
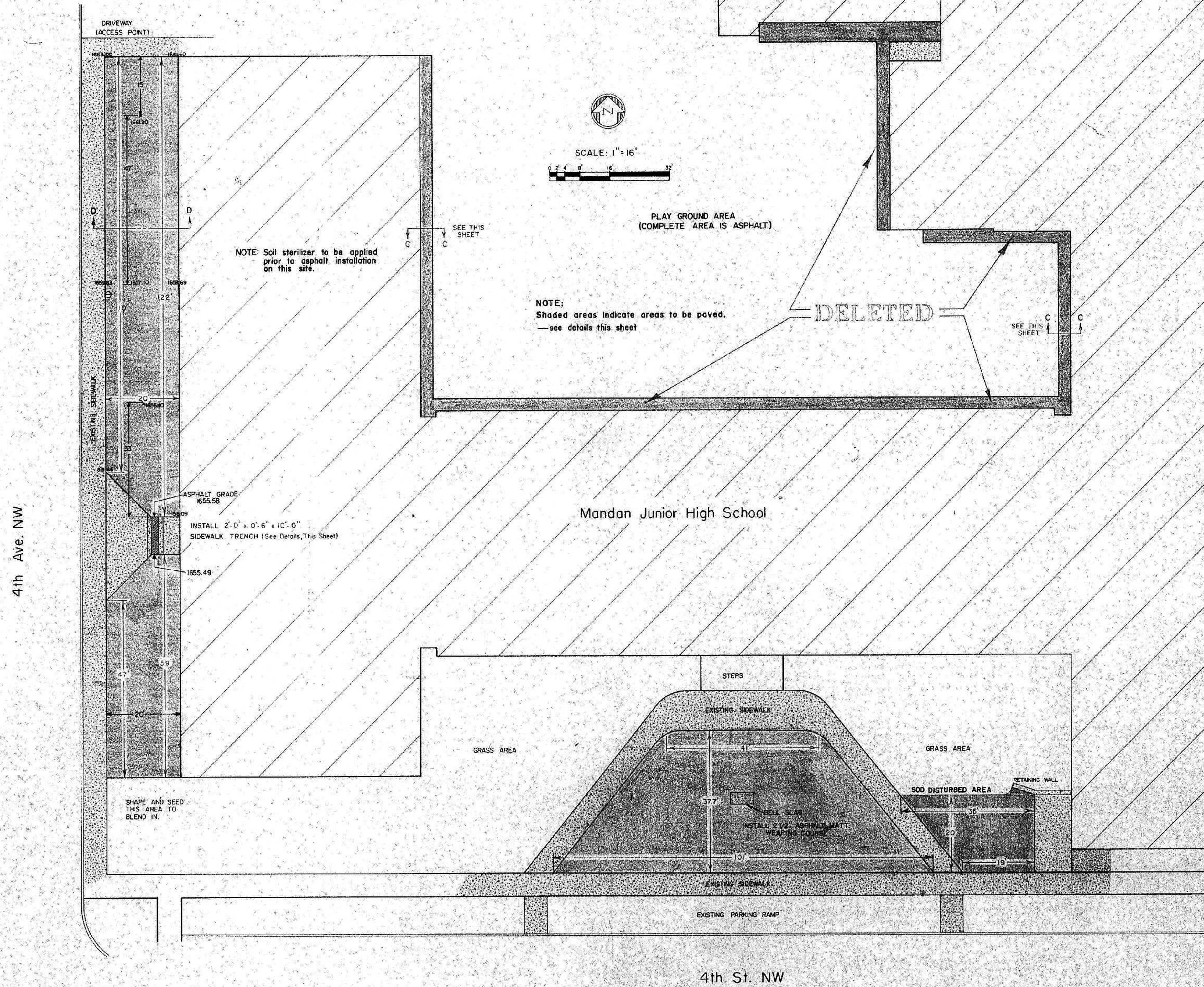
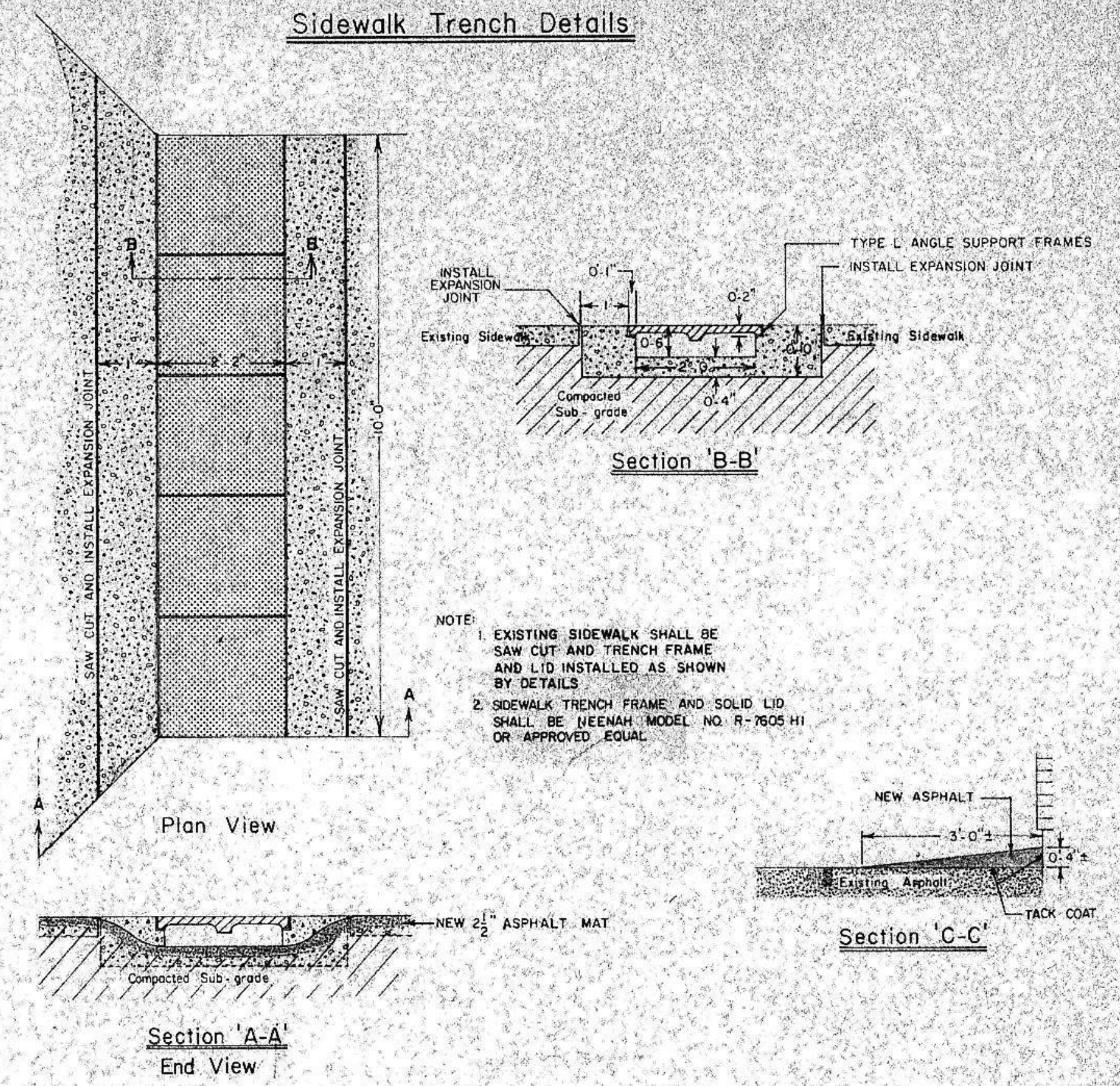
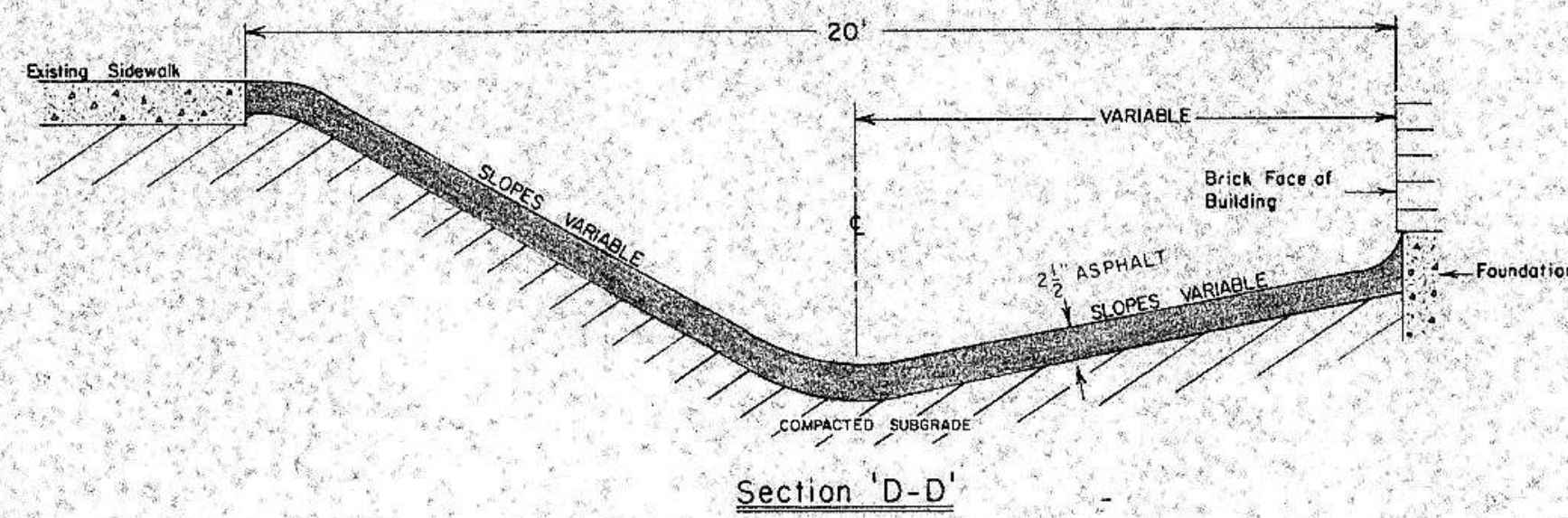
PLAN
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 DATE: _____
 NO. OF PAGES CHECKED: _____

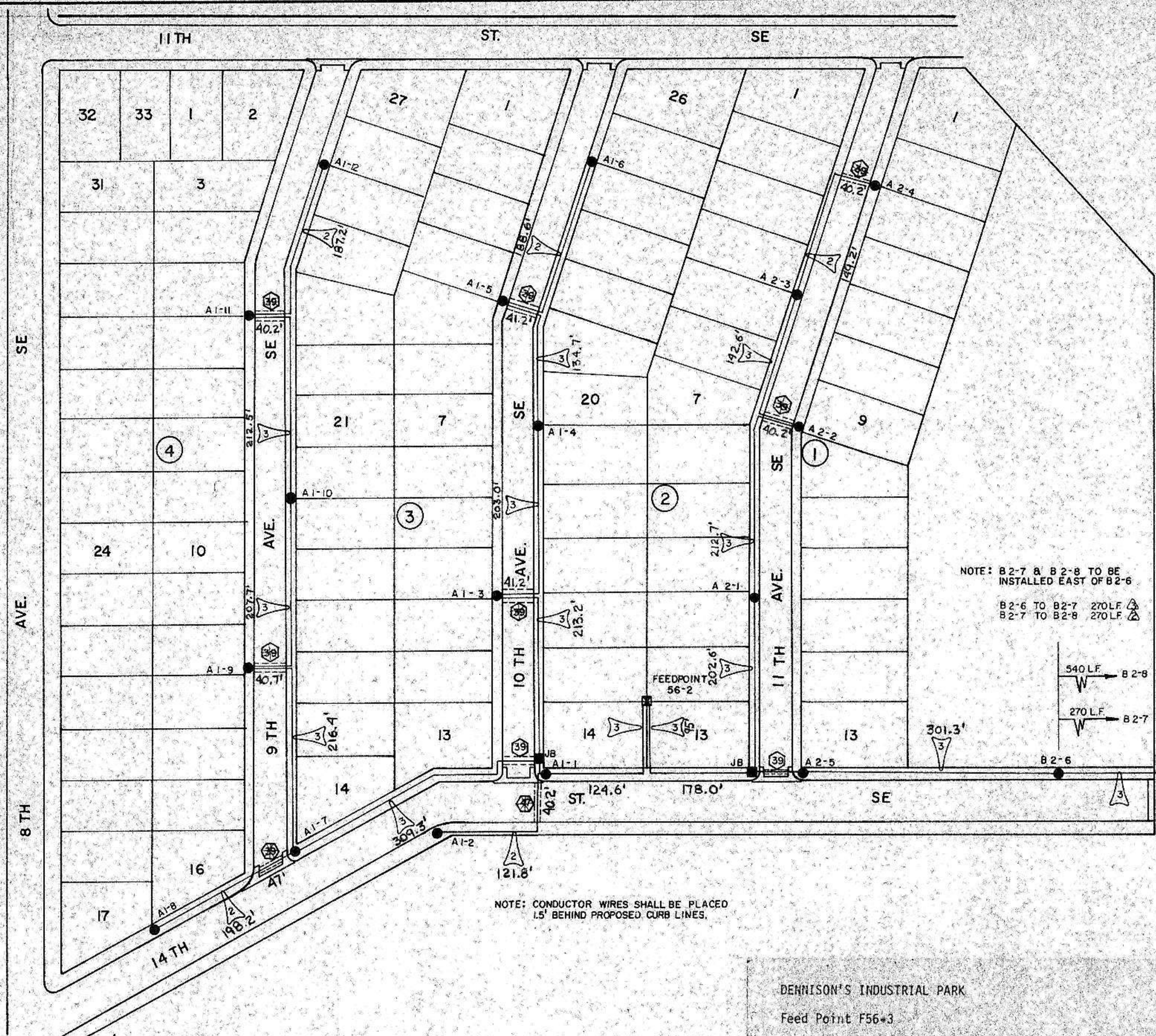
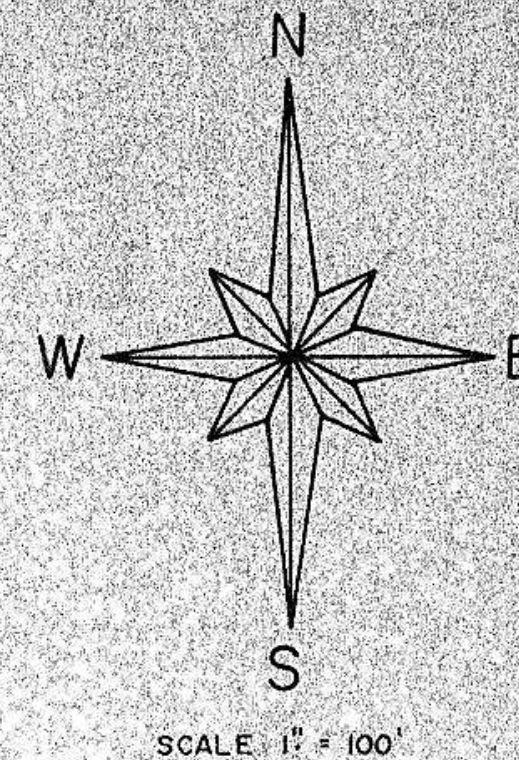
PROFILE
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 CHECKED: _____
 DATE: _____
 NO. OF PAGES CHECKED: _____



ALL RADII 20' UNLESS OTHERWISE NOTED.







NICOLA'S THIRD ADDITION

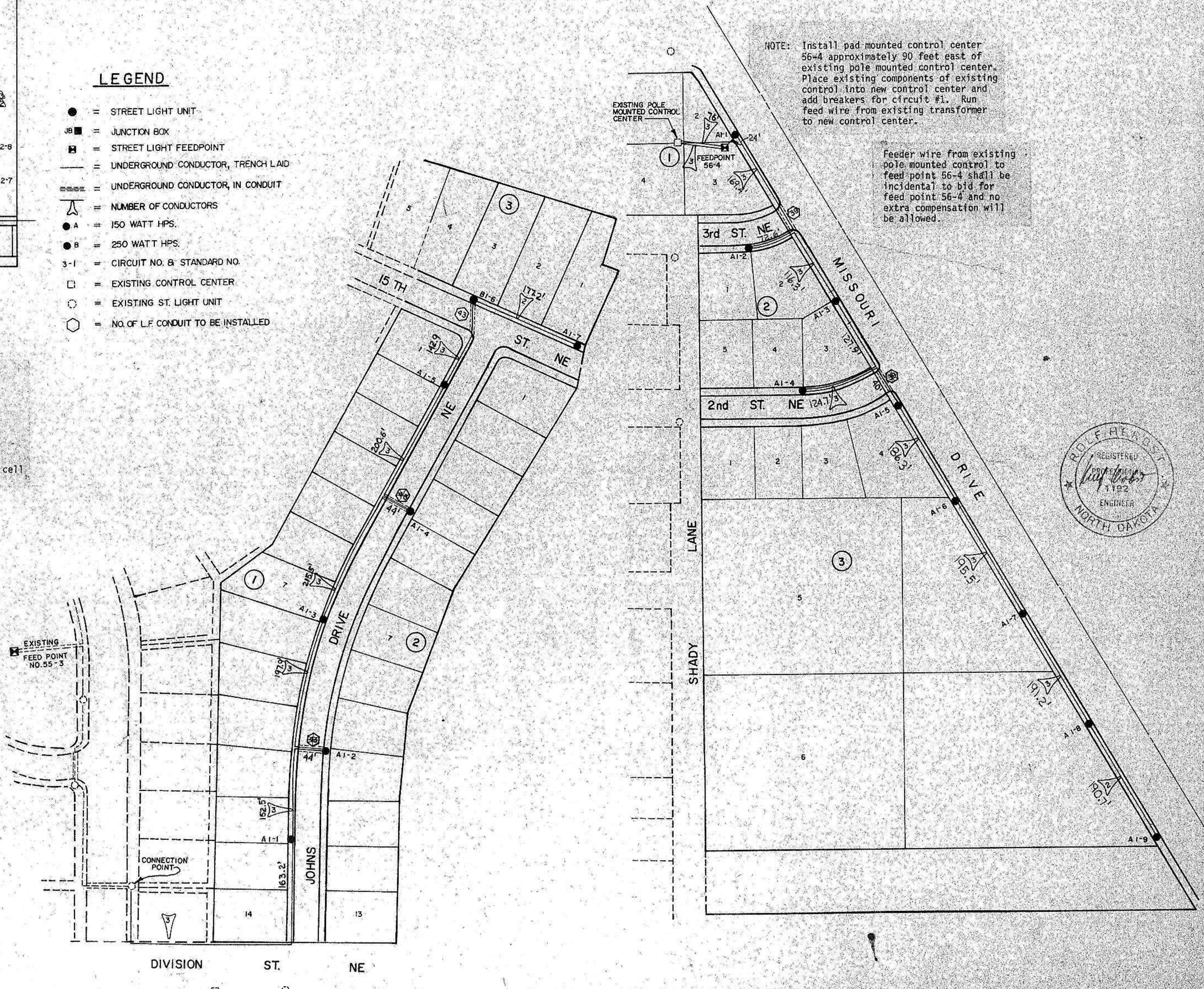
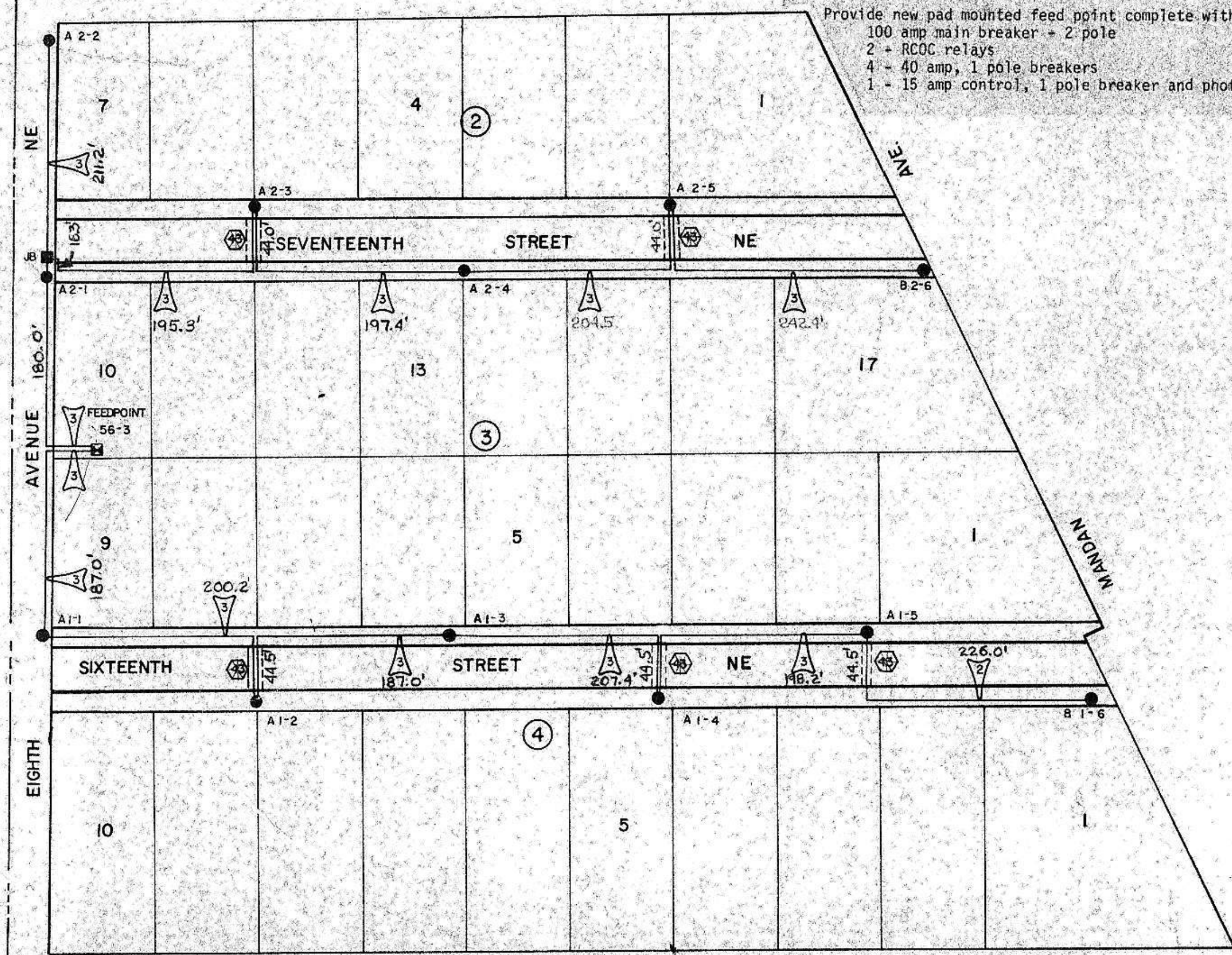
Feed Point F56-2
 Provide new pad mounted feed point complete with:
 100 amp main breaker - 2 pole
 2 - RCOC relays
 4 - 40 amp, 1 pole breakers
 1 - 15 amp control, 1 pole breaker and photo cell

LEGEND

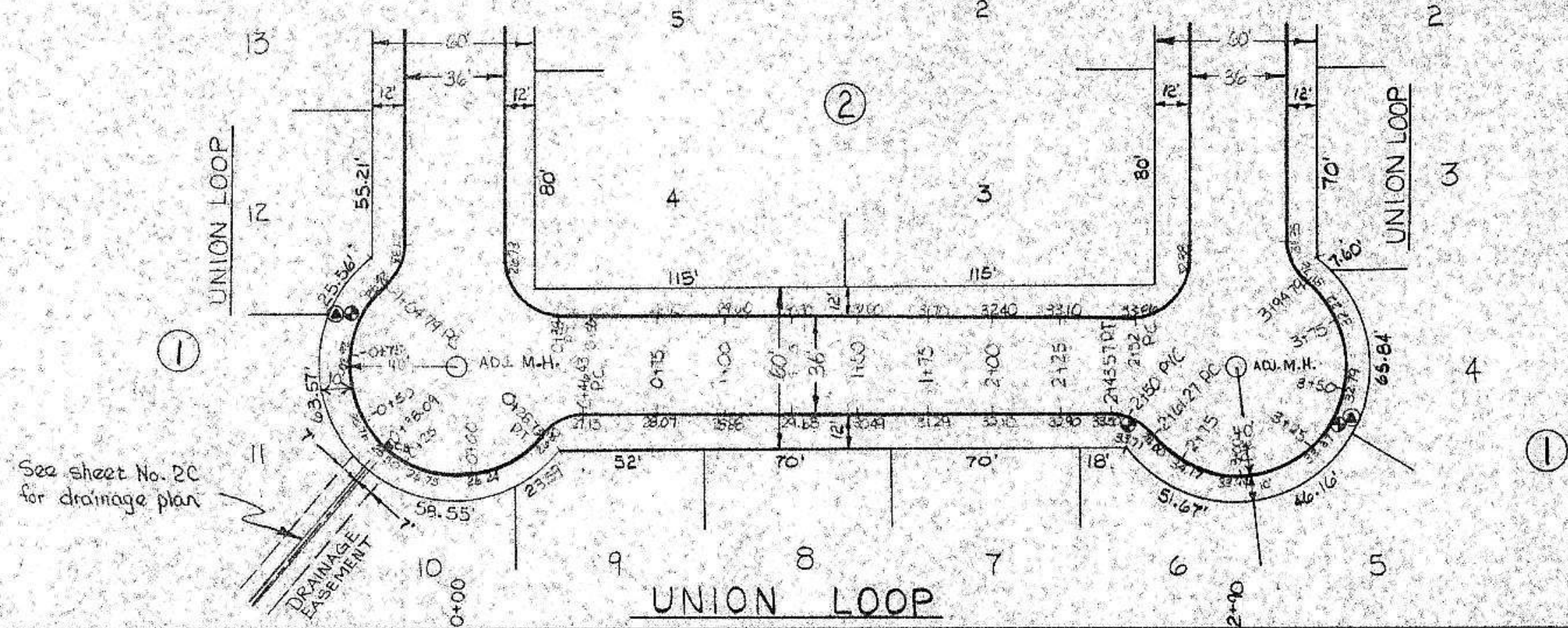
- = STREET LIGHT UNIT
- = JUNCTION BOX
- = STREET LIGHT FEEDPOINT
- = UNDERGROUND CONDUCTOR, TRENCH LAID
- = UNDERGROUND CONDUCTOR, IN CONDUIT
- = NUMBER OF CONDUCTORS
- A = 150 WATT HPS.
- B = 250 WATT HPS.
- 3-1 = CIRCUIT NO. & STANDARD NO.
- = EXISTING CONTROL CENTER
- = EXISTING ST. LIGHT UNIT
- = NO. OF L.F. CONDUIT TO BE INSTALLED

DENLISON'S INDUSTRIAL PARK

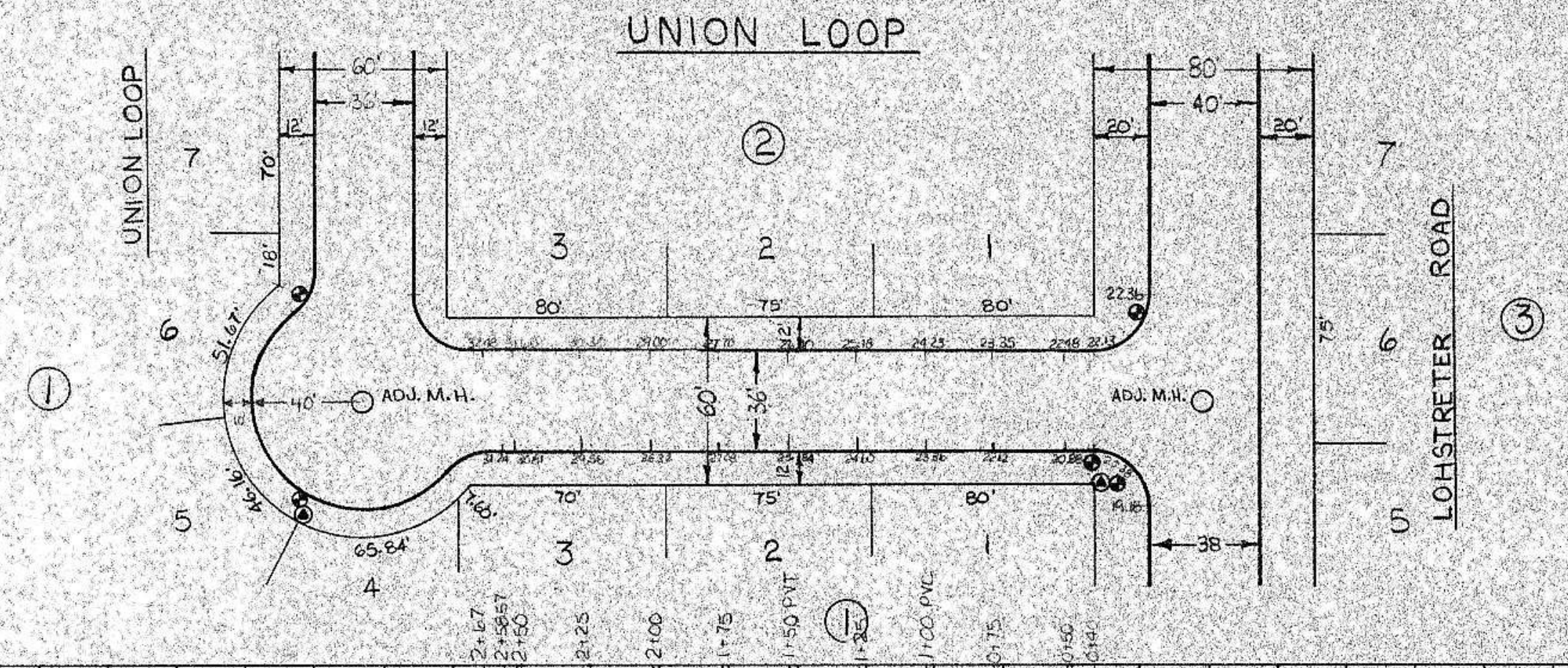
Feed Point F56-3
 Provide new pad mounted feed point complete with:
 100 amp main breaker - 2 pole
 2 - RCOC relays
 4 - 40 amp, 1 pole breakers
 1 - 15 amp control, 1 pole breaker and photo cell



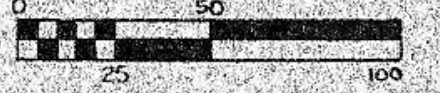
DATE: _____
 BY: _____
 CHECKED: _____
 IN CHARGE: _____
 PLAN SUPERVISOR
 NOTE BOOK NO. _____
 PLotted: _____
 BY: _____
 No. _____
 CHECKED BY: _____



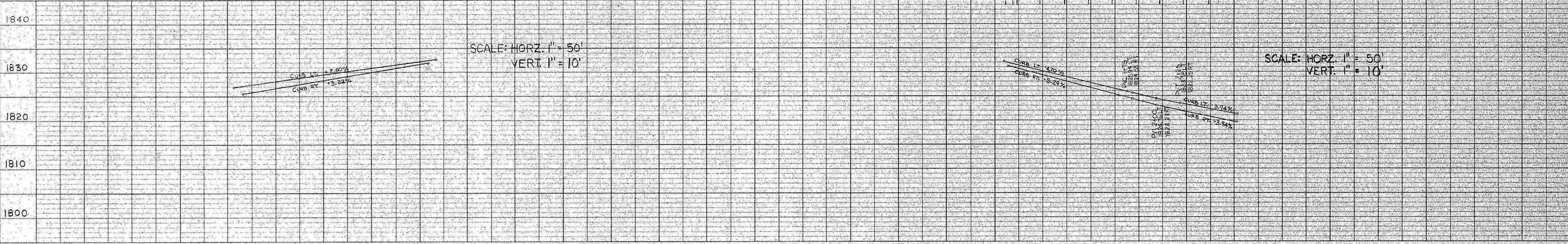
SCALE: 1" = 50'



SCALE: 1" = 50'



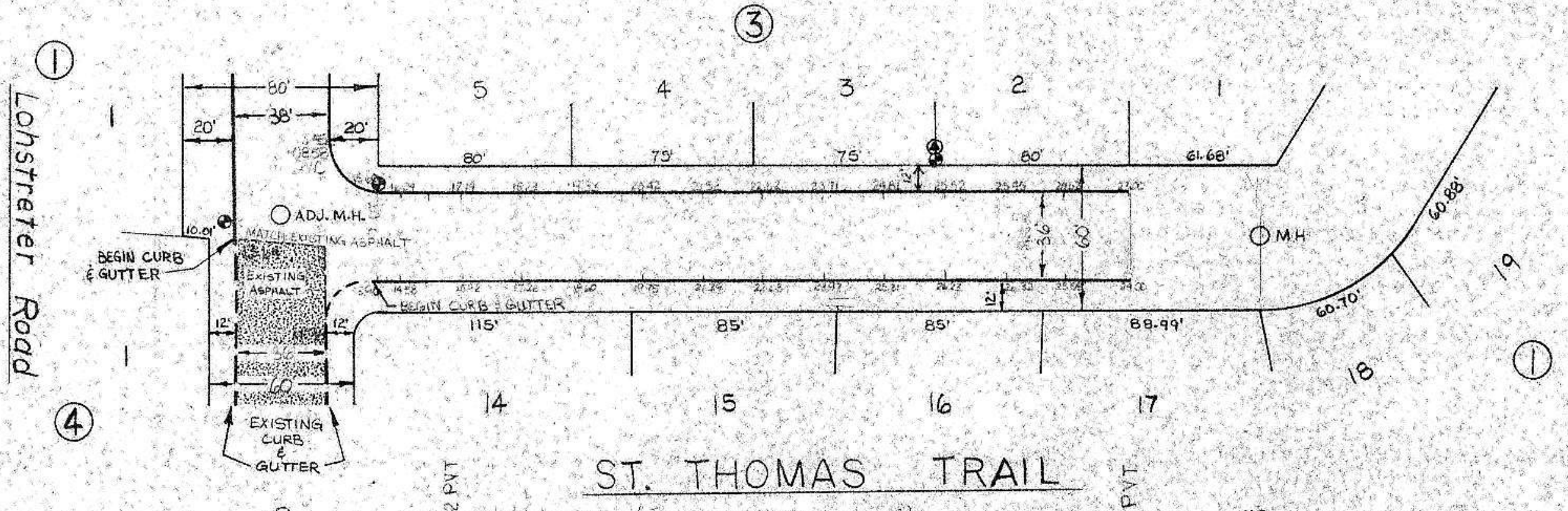
ALL RATES IN EXCESS
 OTHERWISE NOTED



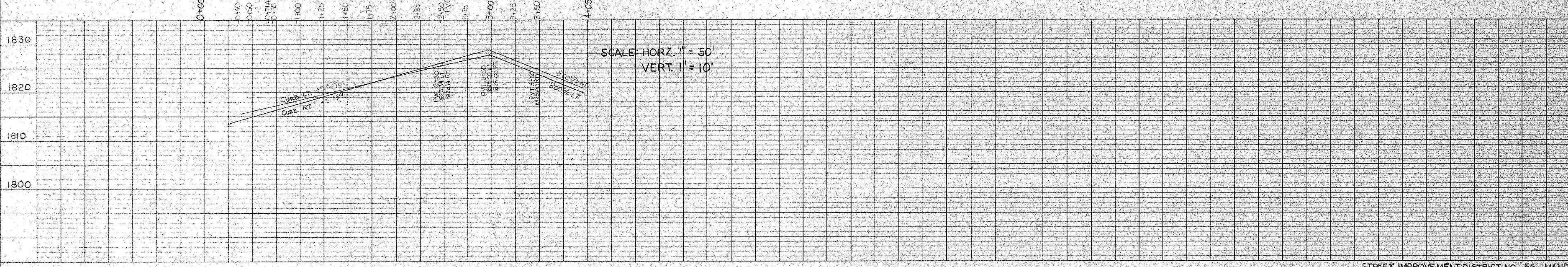
SCALE: HORZ. 1" = 50'
 VERT. 1" = 10'

SCALE: HORZ. 1" = 50'
 VERT. 1" = 10'

DATE: _____
 BY: _____
 CHECKED: _____
 IN CHARGE: _____
 PROFILE SUPERVISOR
 NOTE BOOK NO. _____
 Plotted: _____
 BY: _____
 No. _____
 CHECKED BY: _____



SCALE: 1" = 50'



SCALE: HORZ. 1" = 50'
 VERT. 1" = 10'

HIGHWAY FEDERAL AID SHEET
 PLATE 2-DOUBLE PLAN AND PROFILE-FULL LINE
 PRINTED IN U.S.A.

ASBUILT CONSTRUCTION DRAWINGS

STREET IMPROVEMENT DISTRICT NO. 56 MANDA

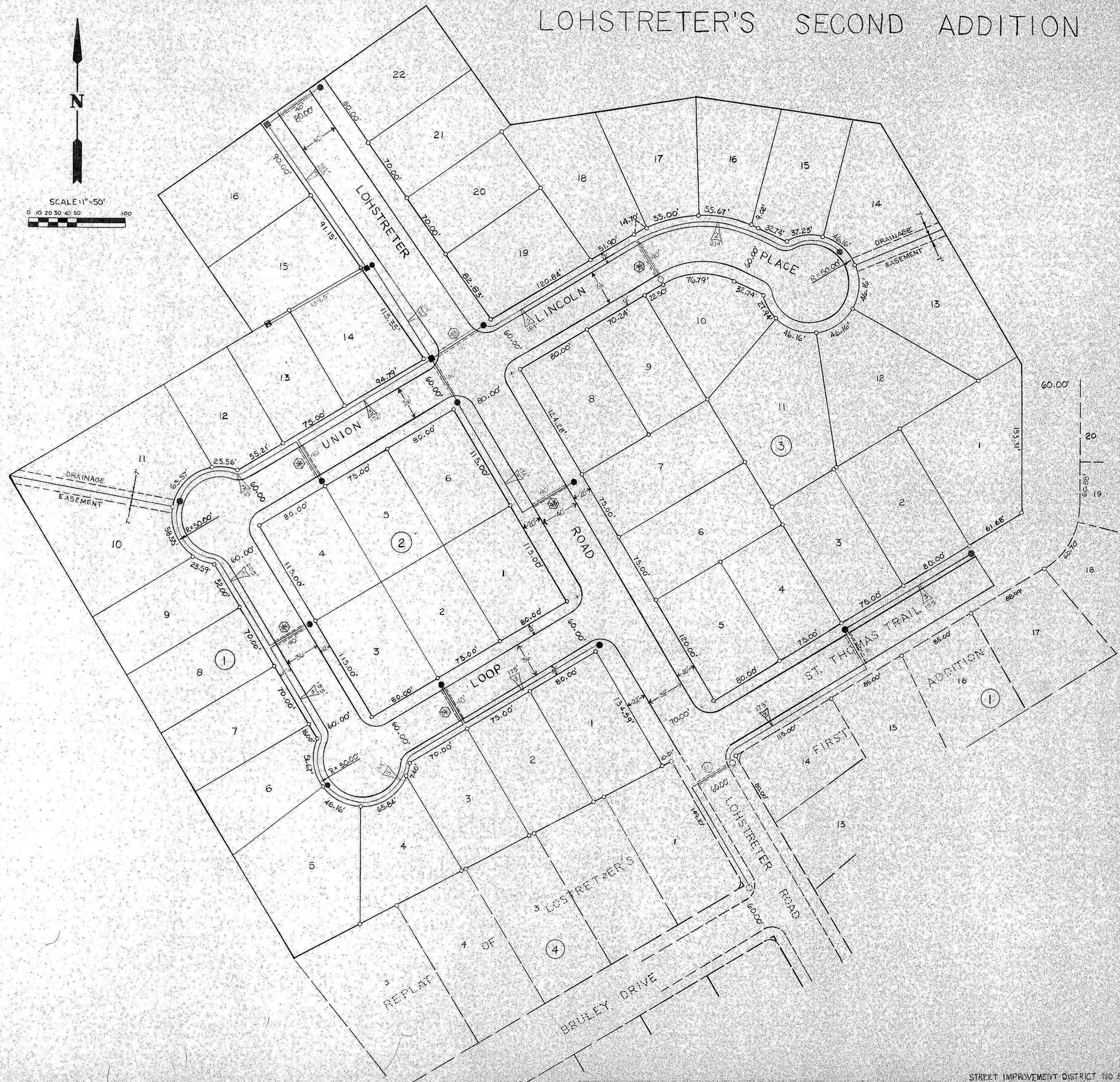
CHANGE ORDER #1
 SHEET NO. 2A OF 23

LOHSTRETER'S SECOND ADDITION

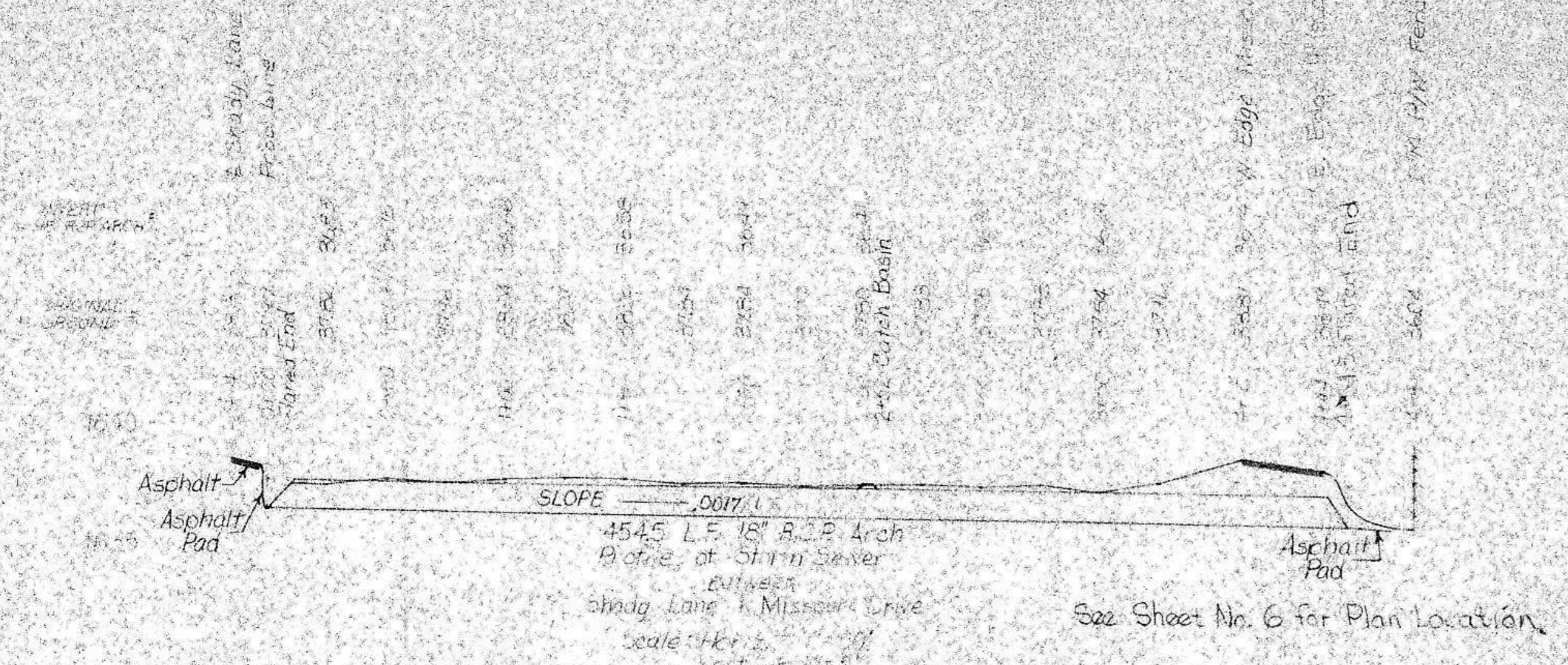


SCALE 1" = 50'
 0 10 20 30 40 50 100

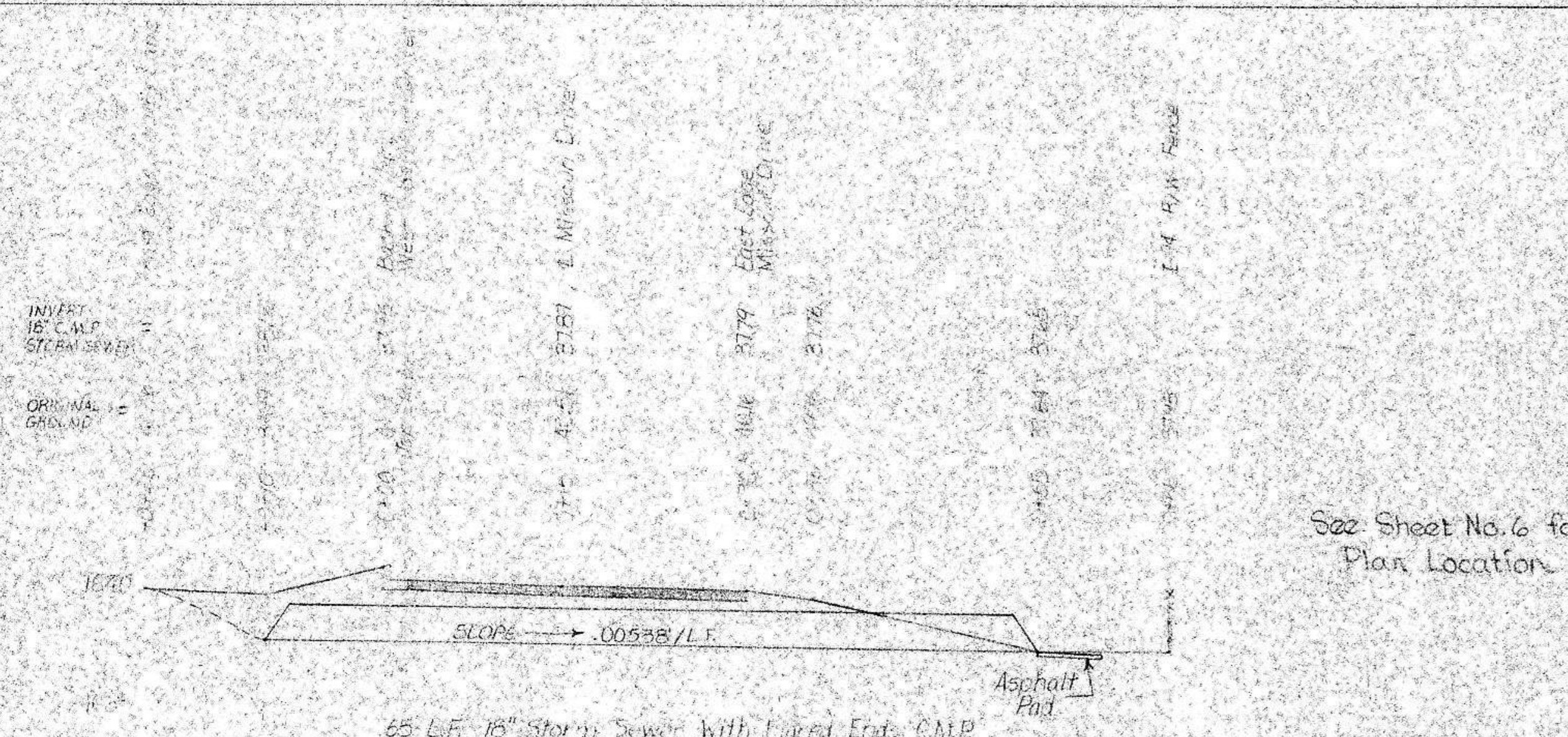
LEGEND	
●	STREET LIGHT UNIT
⊠	MANHOLE
⊞	STREET LIGHT FEEDPOINT
---	UNDERGROUND CONDUIT FOR PHYSICAL
---	UNDERGROUND CONDUIT IN CONDUIT
△	NUMBER OF CONDUITS
●	150 WATT HPS
●	300 WATT HPS
⊞	CIRCUIT NO. BY SCHEMATIC
---	EXISTING LIGHTS TO REMAIN
⊞	EXISTING STREET LIGHT UNIT
○	NO OF CONDUIT TO BE INSTALLED



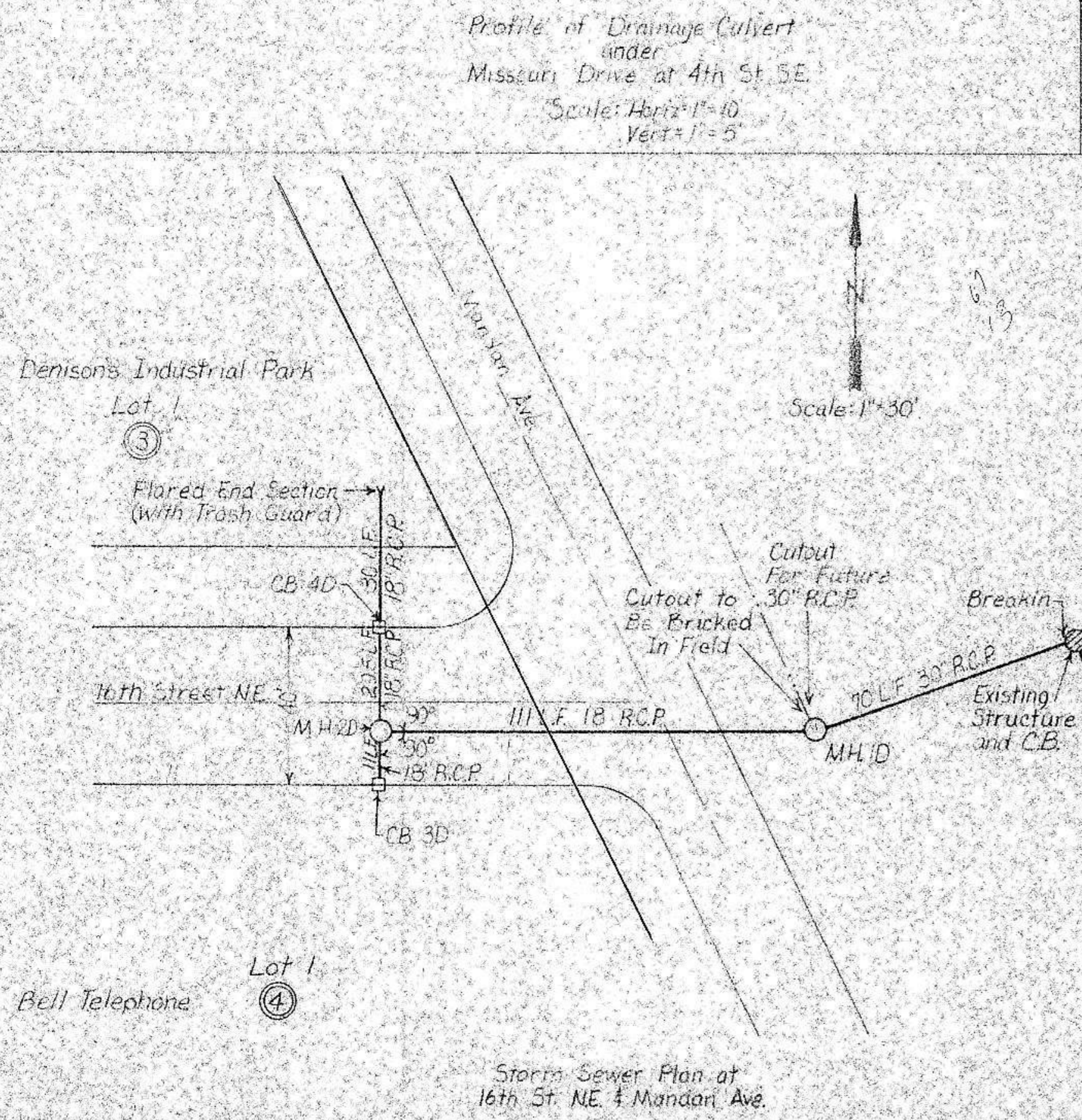
Change Order No.
Installed Week Ending November 15, 1980



See Sheet No. 6 for Plan Location



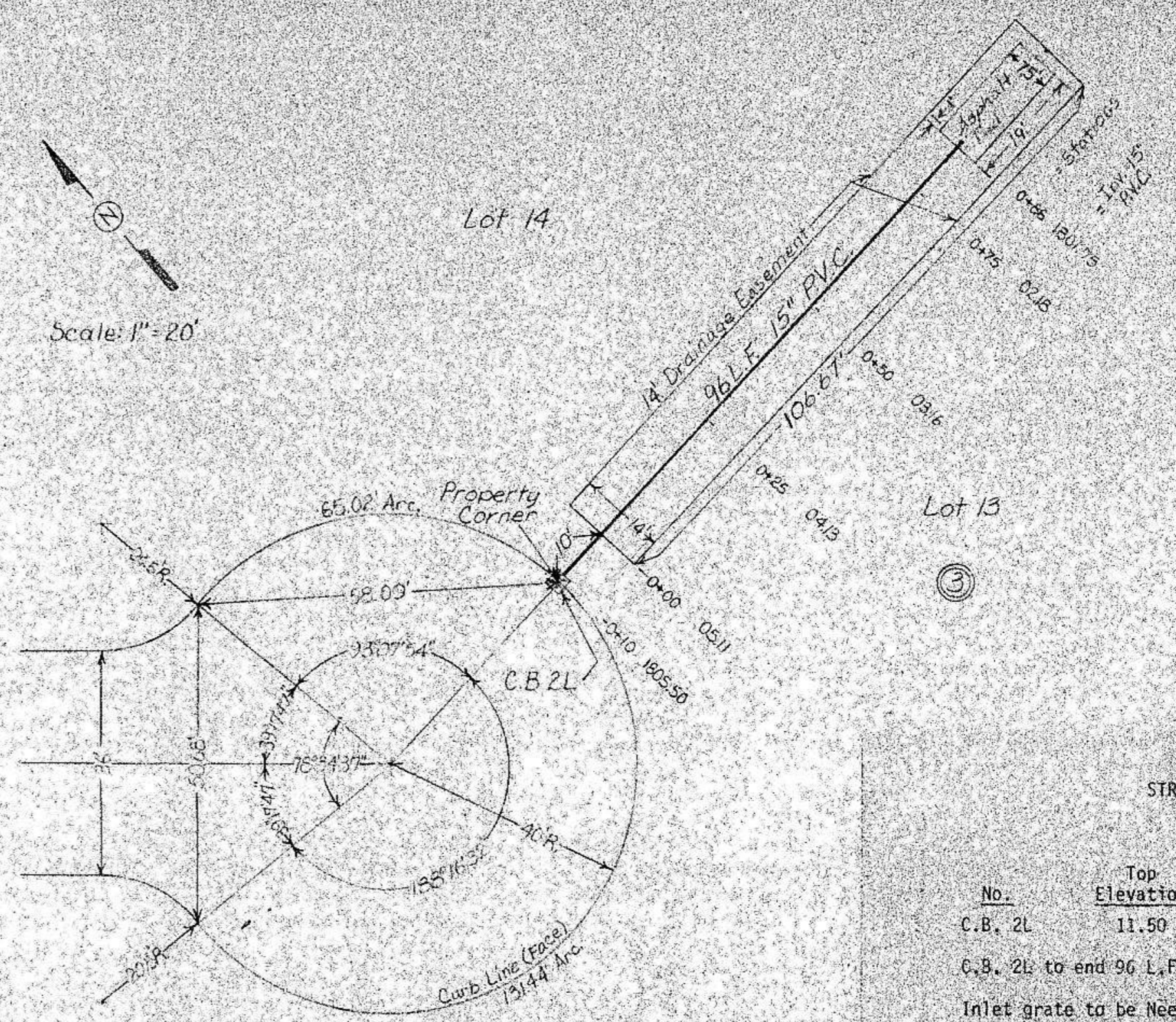
See Sheet No. 6 for Plan Location



Storm Sewer Plan at 16th St. NE & Mandan Ave.

STREET IMPROVEMENT DISTRICT NO. 56
MANDAN, NORTH DAKOTA

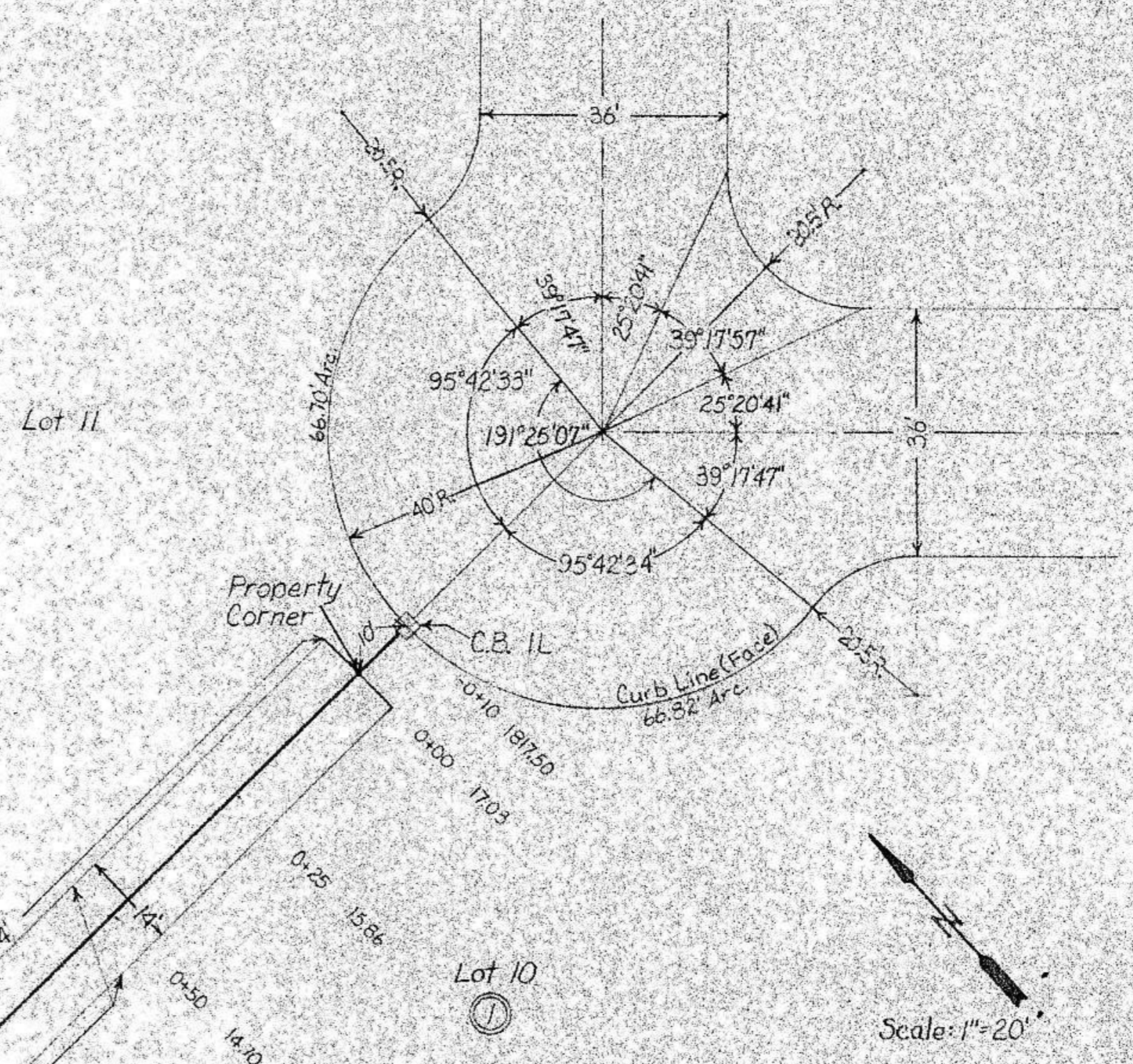
MANHOLE NO.	TOP	INVERT	SIZE	MANHOLE DIAMETER
Existing Structure	92.21	83.25		
1D	96.00	83.53 East	30" East	66" + Type Two Cover + Casting
		85.55 West	18" West	
		89.63 North	30" North	(for future)
2D	98.30	92.00	18" East	42" + Type Two Cover + Casting
		92.25	18" South	
		92.25	18" North	
3D C.B.	98.55	92.91	18" North	30" + Inlet & Grate
4D C.B.	98.45	94.32 South	18" South	30" + Inlet & Grate
		94.32 North	18" North	
Flared End	96.00			
MANHOLE	L.F.	TYPE	SIZE	SLOPE
Existing Structure to 1D	70.0	R.C.P.	30"	.004/ft.
1D to 2D	110.0	R.C.P.	18"	.06/ft.
2D to 3D	11.0	R.C.P.	18"	.06/ft.
2D to 4D	29.5	R.C.P.	18"	.06/ft.
4D North to End (flared)	30.0	R.C.P.	18"	.056/ft.
				(including flared end)



Drainage Pipe Plan at Lincoln Place
Lohstreters 2nd Addition
Change Order No.

STREET IMPROVEMENT DISTRICT NO. 56
LINCOLN PLACE

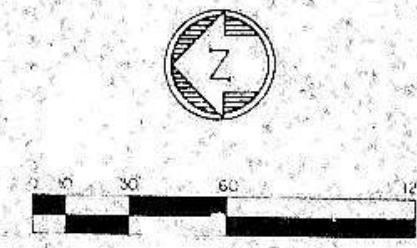
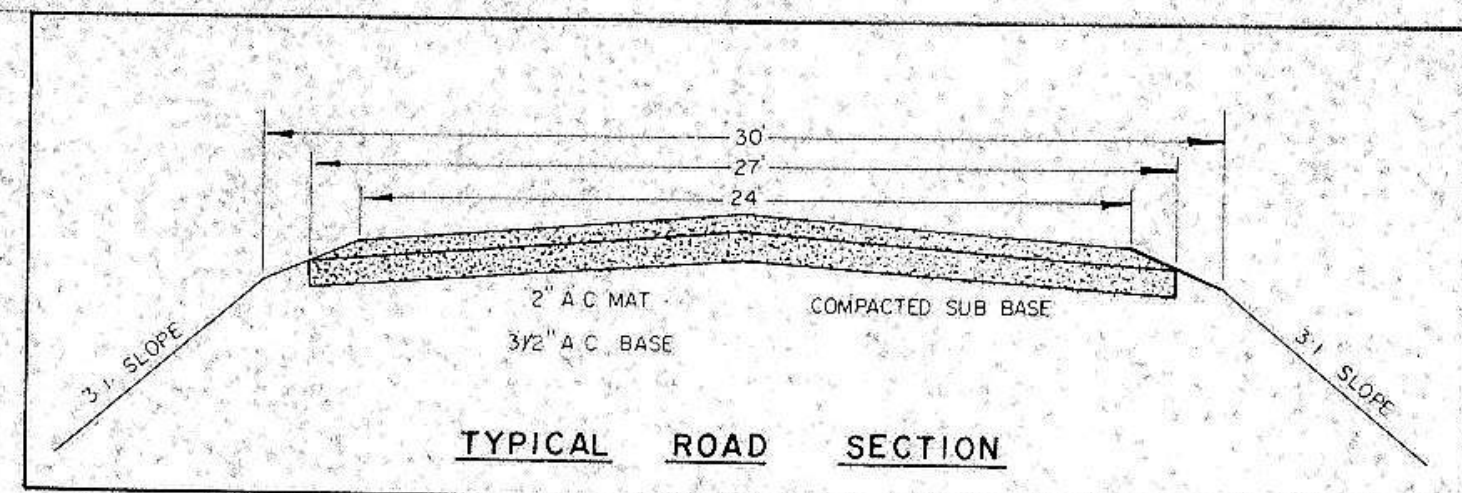
No.	Top Elevation	Invert	Size	Barrel Diameter
C.B. 2L	11.50	05.5	15" East	30" & Inlet Grate
C.B. 2L to end 96 L.F. 15" P.V.C.				Slope .03866/ft.
Inlet grate to be Neenah R-3010DR, casting and grate or approved equal.				



Drainage Pipe Plan at NW Corner Union Loop
Lohstreters 2nd Addition
Change Order No.

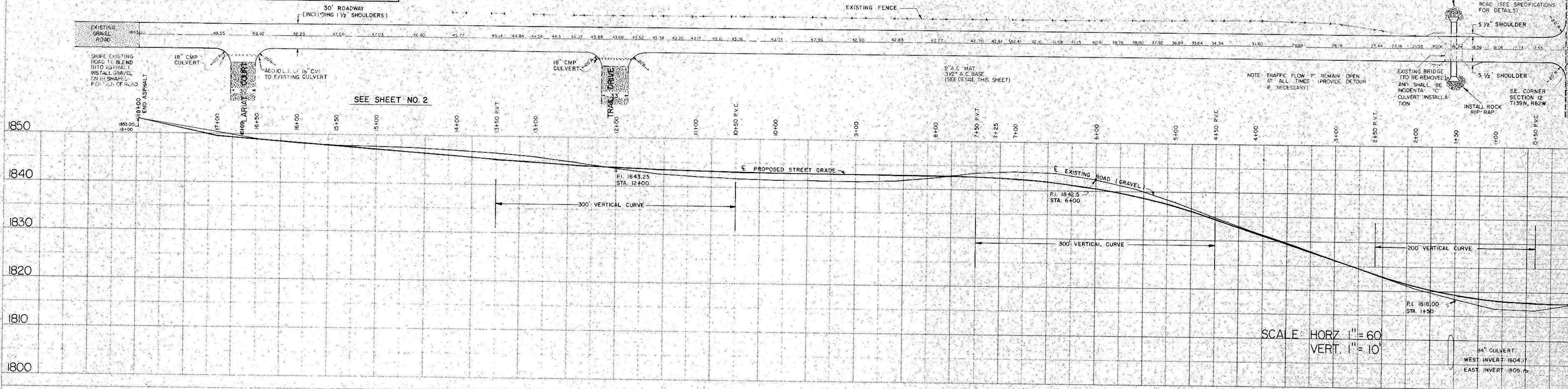
STREET IMPROVEMENT DISTRICT NO. 56
NW CORNER UNION LOOP

No.	Top Elevation	Invert	Size	Barrel Diameter
C.B. 1L	23.08	17.50	15" West	30" & Inlet Grate
C.B. 1L to end 150 L.F. 15" P.V.C.				Slope .0466/ft.
Inlet grates to be Neenah R-3010DR, casting and grates or approved equal.				



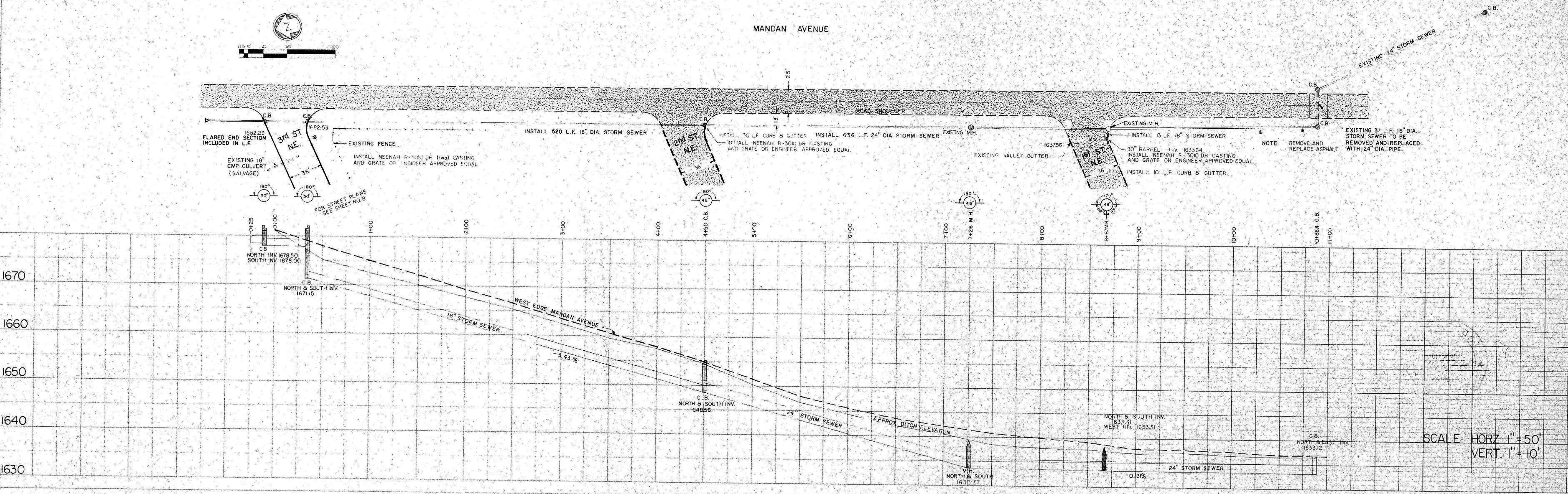
50TH AVE. N.W.
 0+0+00 TO 11+00

PLAN
 CHECKED BY: [Signature]
 DRAWN BY: [Signature]
 NOTE BOOK, ALGEBRA CHECKED
 P.E. DEWAY CHECKED
 No. [Blank]



SCALE: HORIZ. 1" = 60'
 VERT. 1" = 10'

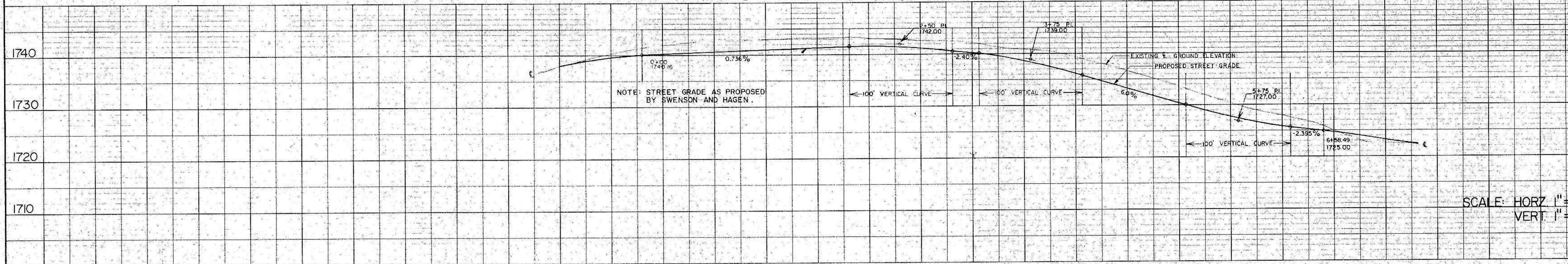
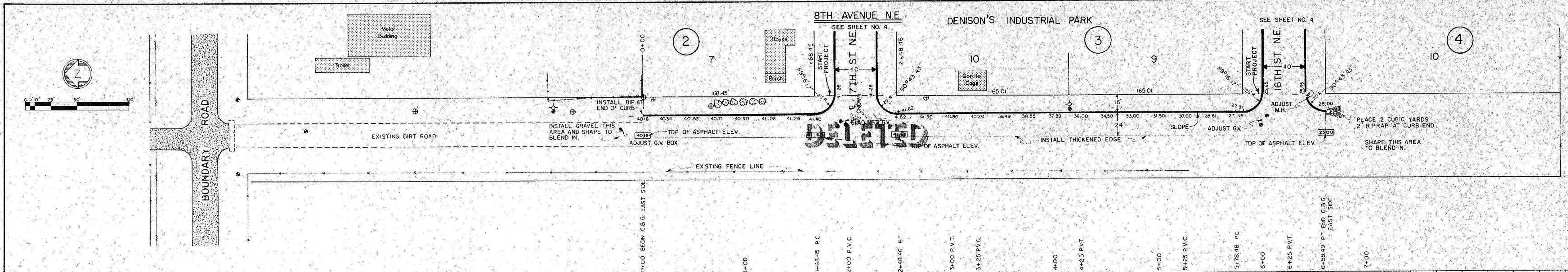
PROFILE
 CHECKED BY: [Signature]
 DRAWN BY: [Signature]
 NOTE BOOK, ALGEBRA CHECKED
 P.E. DEWAY CHECKED
 No. [Blank]



SCALE: HORIZ. 1" = 50'
 VERT. 1" = 10'

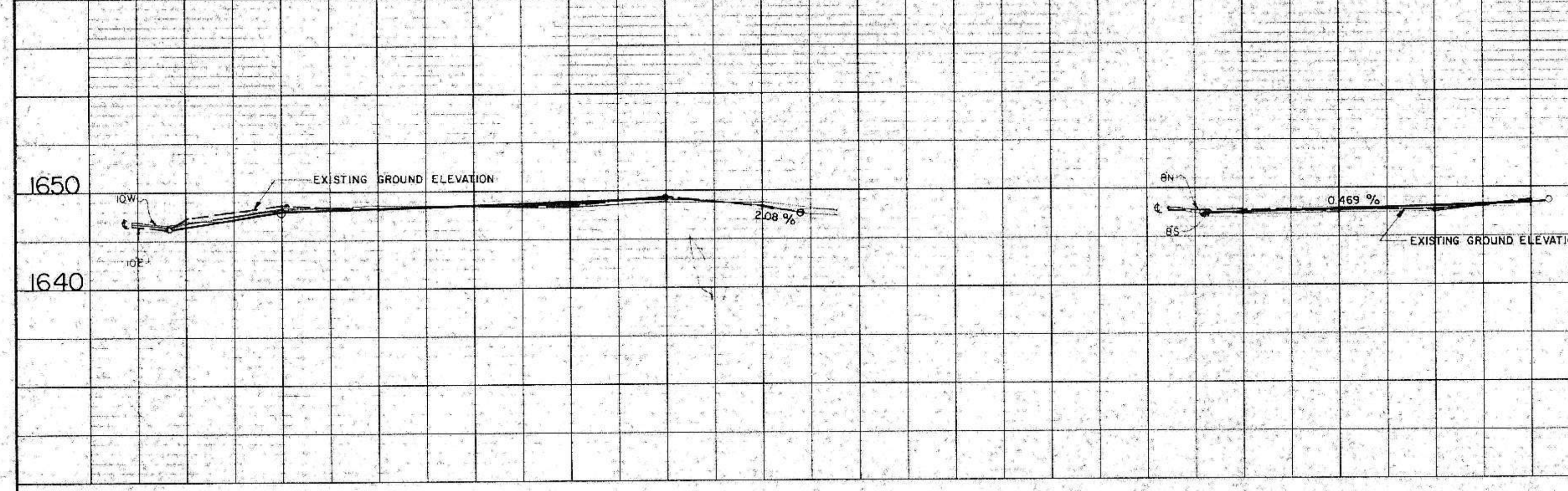
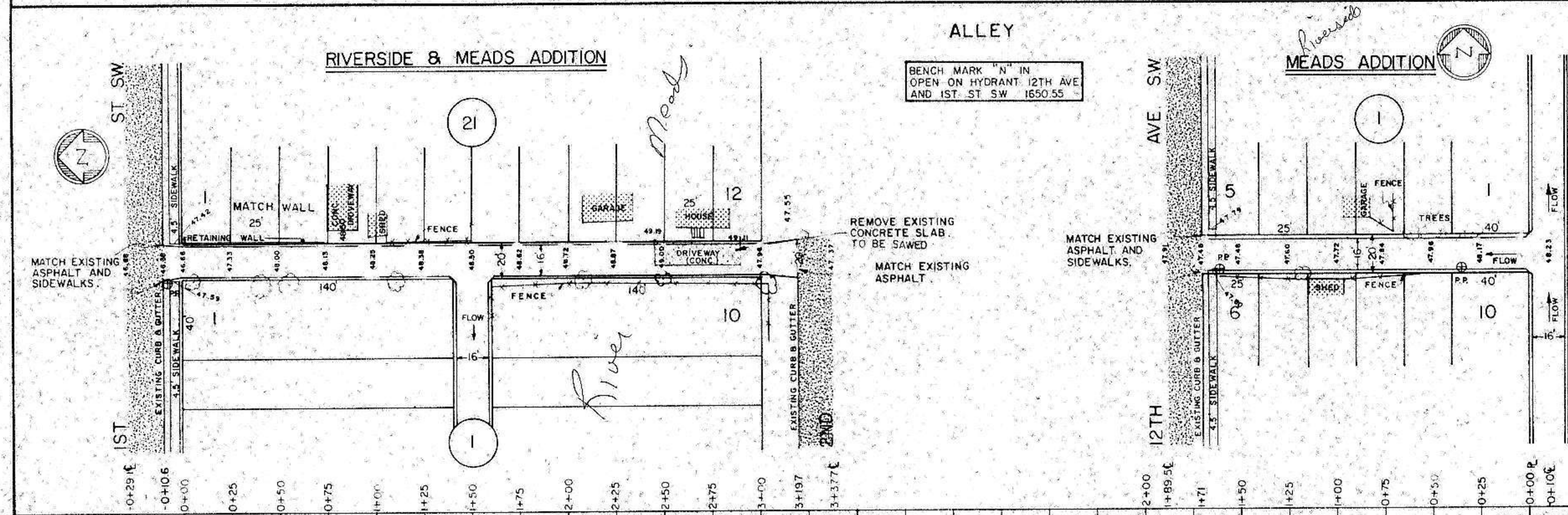
PLATE 2 - DOUBLE PLAN AND PROFILE - FULL LINE
 ASBUILT CONSTRUCTION DRAWINGS

PLAN
 SURVEYED: _____
 PLOTTED: _____
 NOTE BOOK: _____
 NO. _____



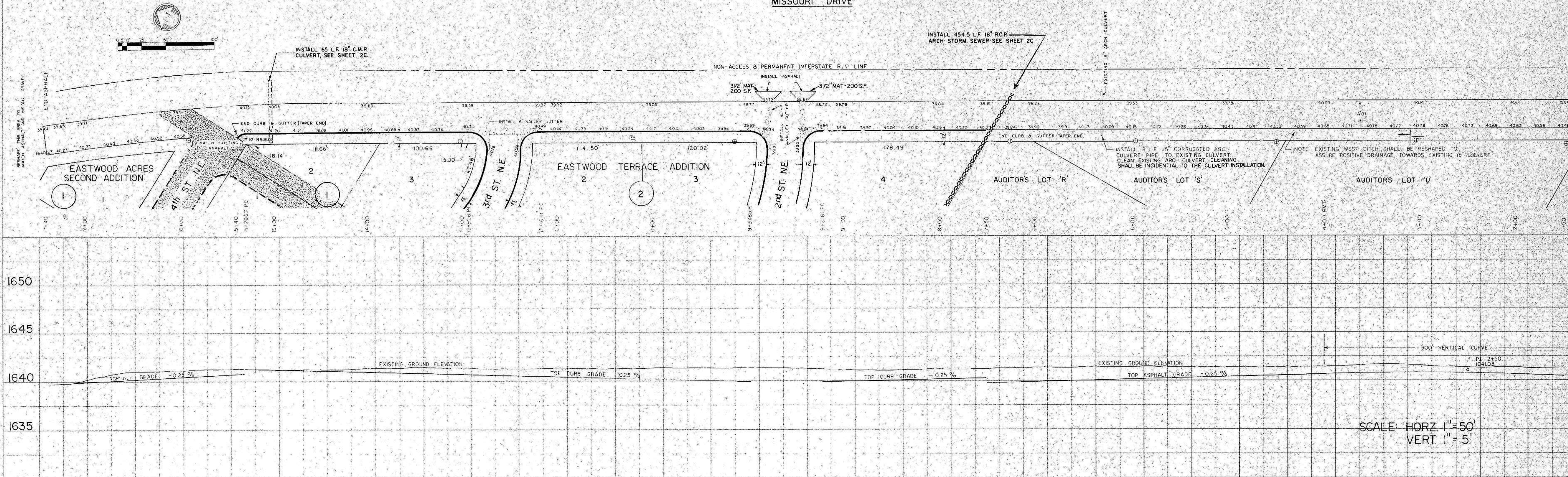
SCALE: HORIZ 1"=50'
 VERT 1"=10'

PROFILE
 SURVEYED: _____
 PLOTTED: _____
 NOTE BOOK: _____
 NO. _____

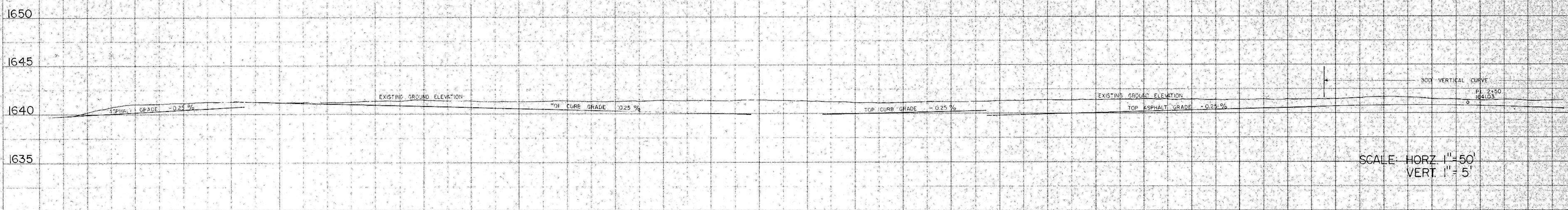


SCALE: HORIZ 1"=50'
 VERT 1"=10'

MISSOURI DRIVE

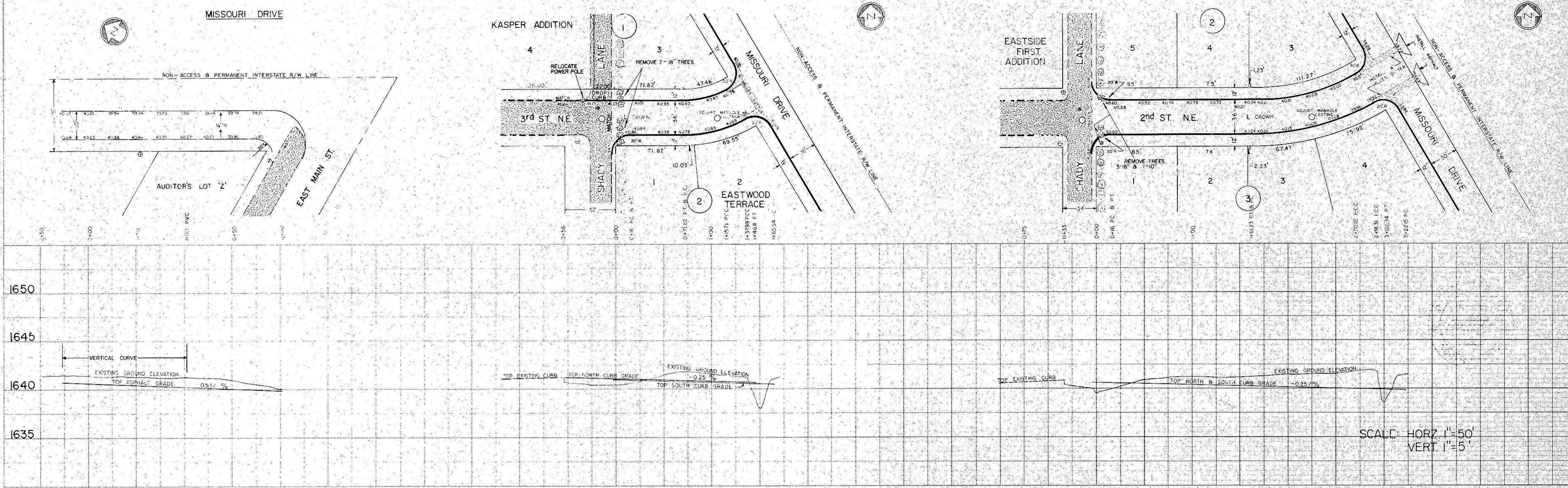


PLAN
 SUPPLIES
 CHECKED
 DATE

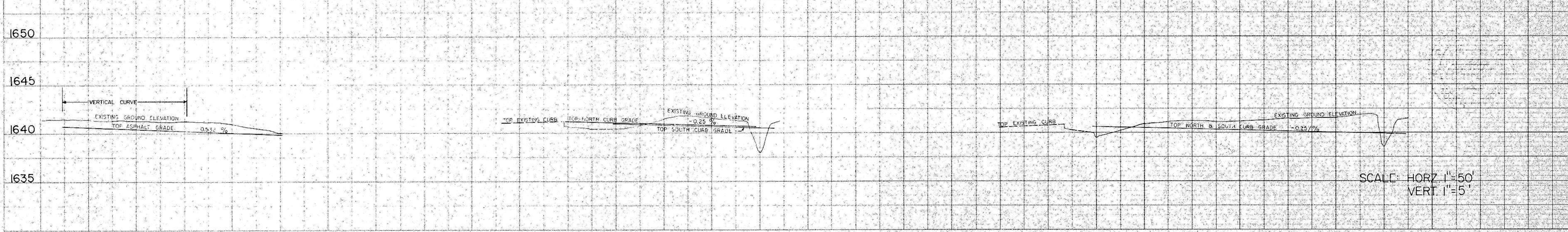


SCALE: HORIZ 1"=50'
 VERT. 1"=5'

MISSOURI DRIVE

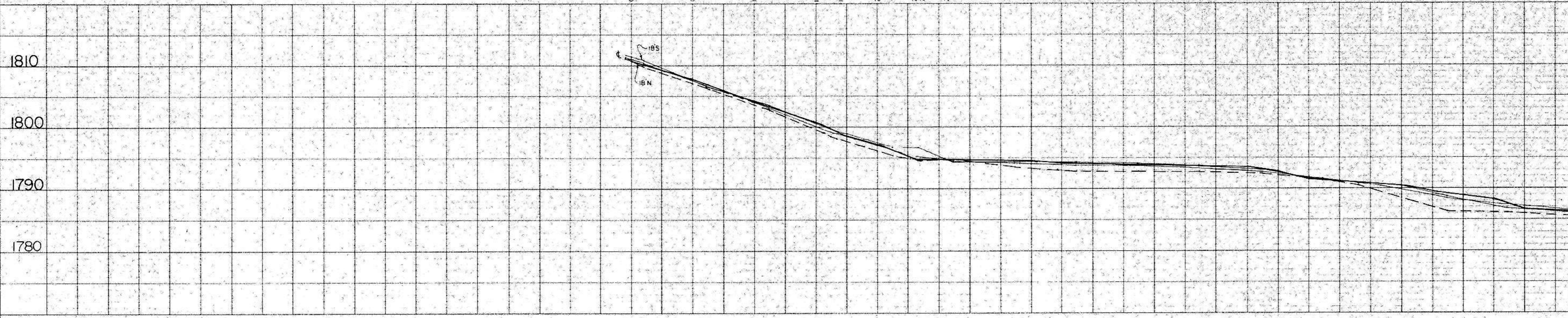
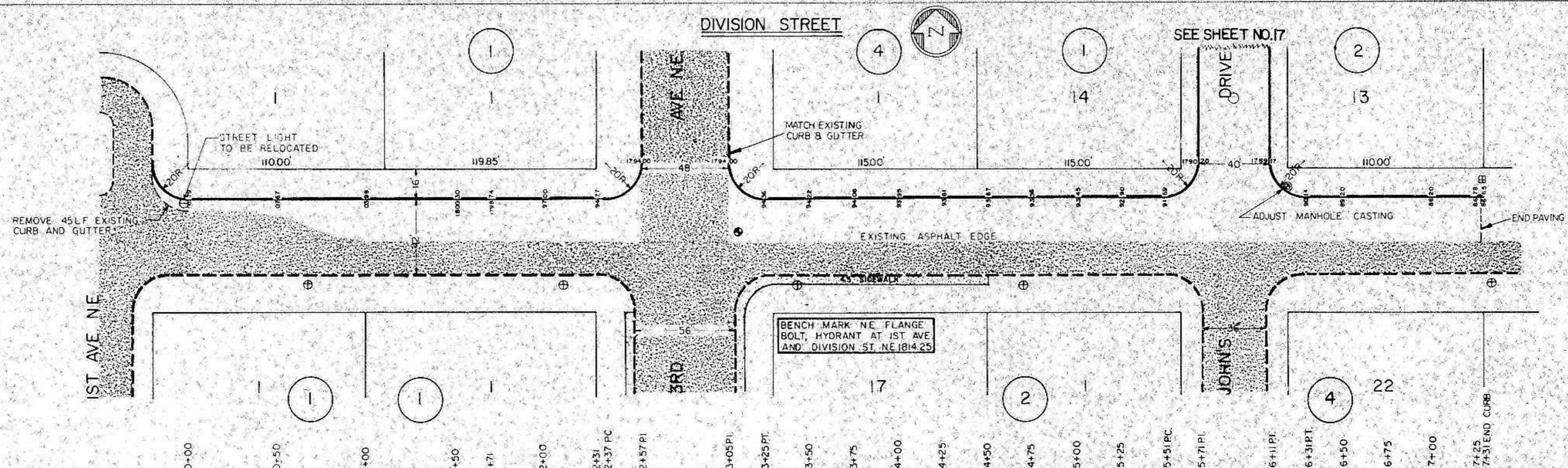


PROFILE
 SUPPLIES
 CHECKED
 DATE

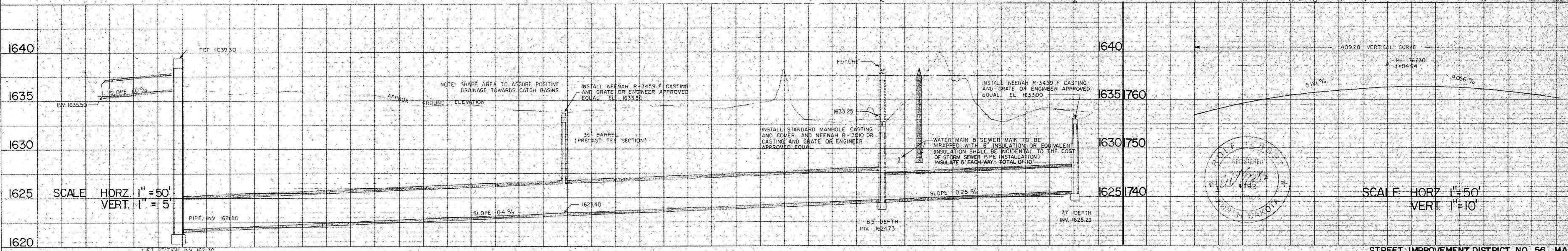
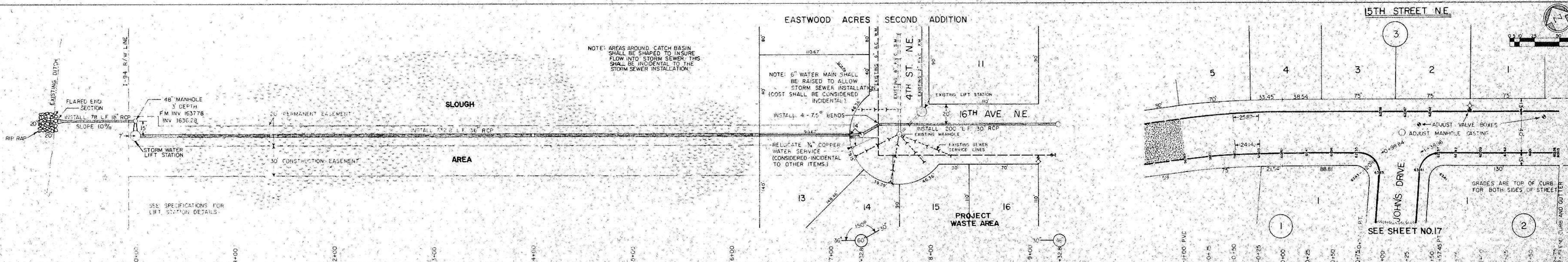


SCALE: HORIZ 1"=50'
 VERT. 1"=5'

DATE: _____ BY: _____
 SURVEYED: _____
 PLAN
 SUPPORTED: _____
 NOTE BOOK: _____
 ALIGNMENT CHECKED: _____
 FT. OF WAY CHECKED: _____
 No. _____

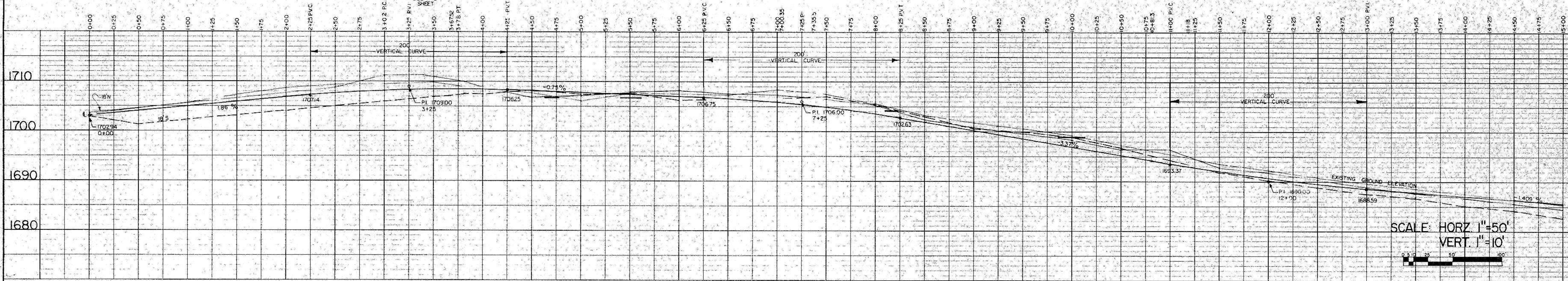
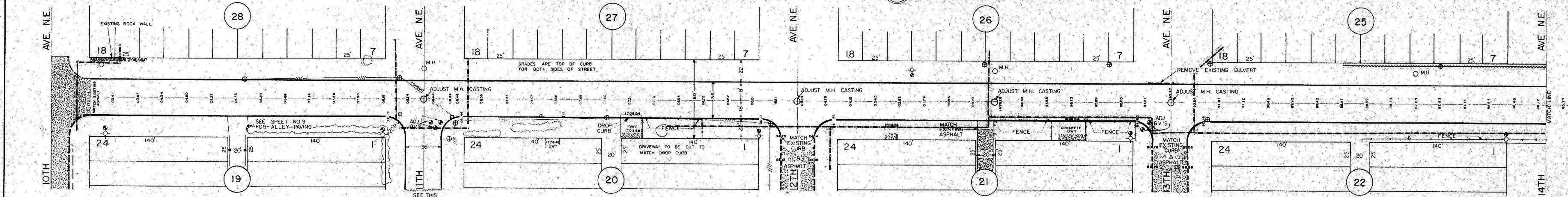


DATE: _____ BY: _____
 SURVEYED: _____
 PROFILE
 SUPPORTED: _____
 NOTE BOOK: _____
 GRADES CHECKED: _____
 E. M. NOTED: _____
 STRUCTURE NOTATIONS CHECKED: _____
 No. _____



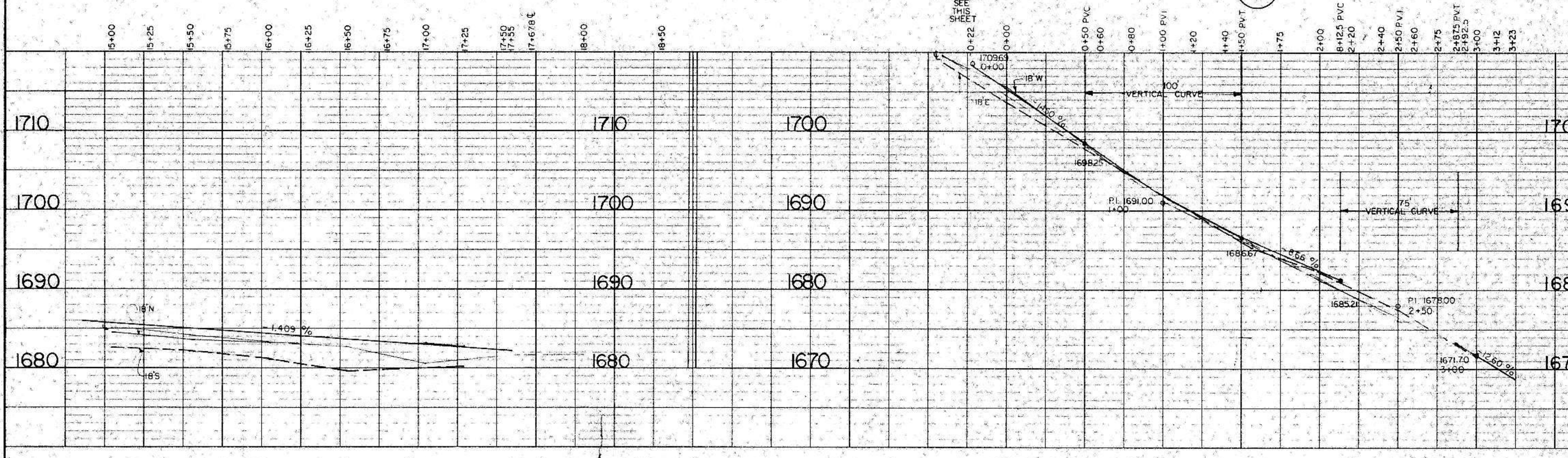
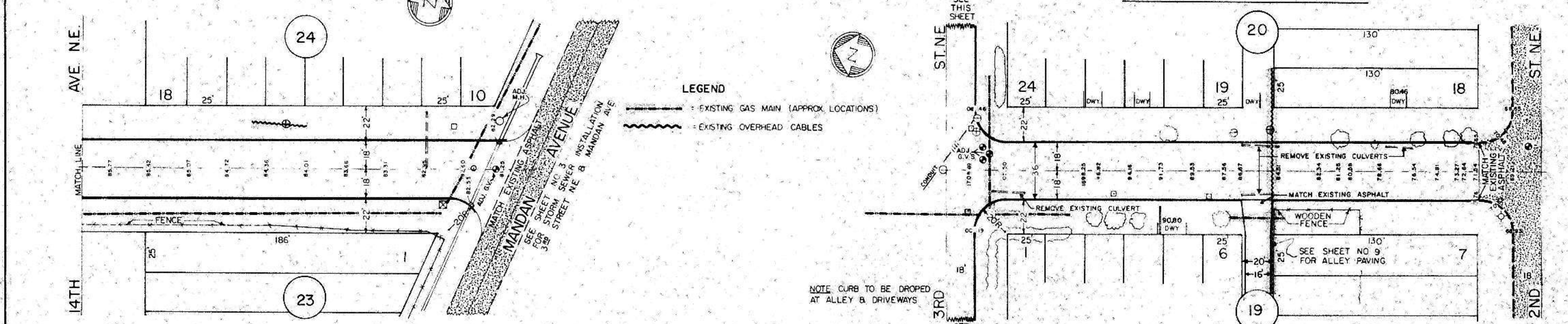
HELMSWORTH-McLEAN ADDITION

THIRD STREET N.E.



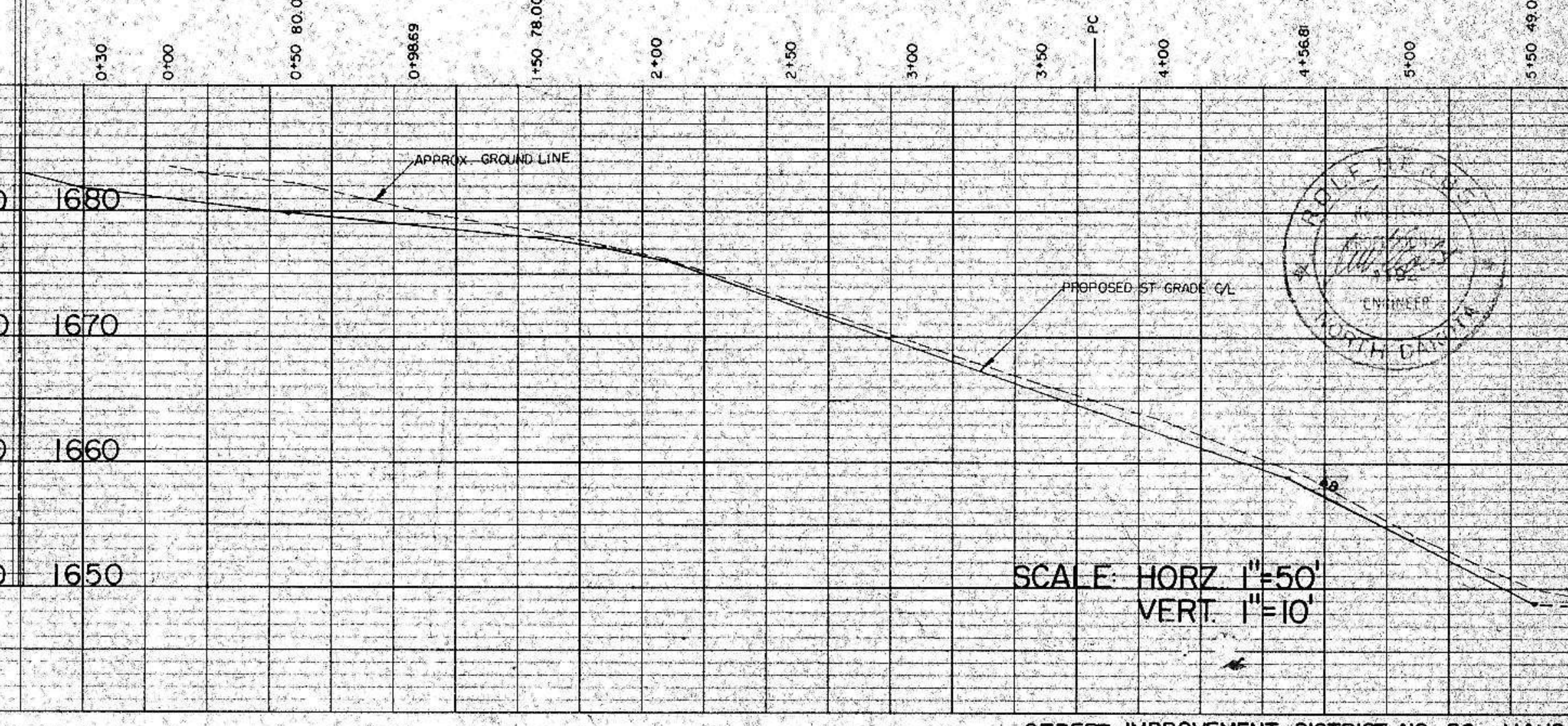
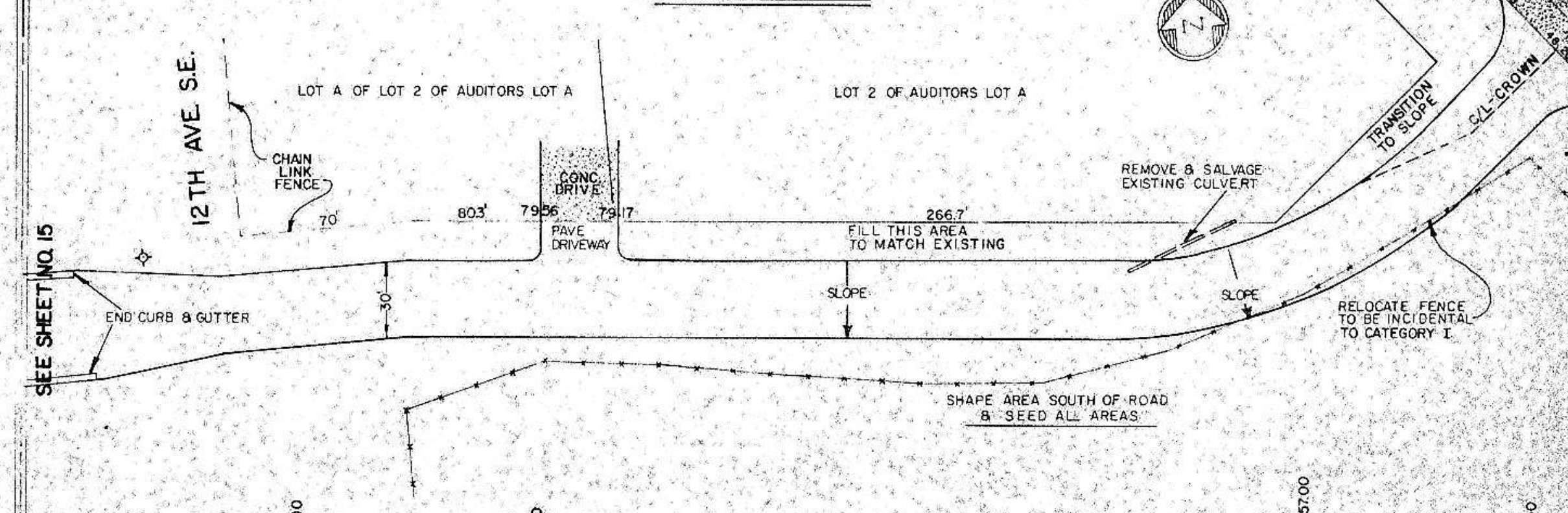
SCALE: HORZ 1"=50'
VERT. 1"=10'

11TH AVE N.E.
HELMSWORTH-McLEAN ADDITION



SCALE: HORZ 1"=50'
VERT. 1"=10'

14TH STREET SE



SCALE: HORZ 1"=50'
VERT. 1"=10'

PLAN
NOTE BOOK
No.

PROFILE
NOTE BOOK
No.

PLAN	DATE
BY	
REVISIONS	
NO.	
NOTE BOOK	
ALIGNED CHECKED	
RT. OF WAY CHECKED	
NO.	

PROFILE	DATE
BY	
GRADES	
CHECKED	
B. M. NOTED	
STRUCTURE NOTATIONS	
NO.	

