

STREET IMPROVEMENT DISTRICT NO. 58

REPLAT OF PART OF PLAINVIEW HEIGHTS FIRST ADDITION

SECTION 2, T. 138 N. R. 81 W.

Lot 1-15, 21, 22 Block 3, Block 4, Block 5, Block 6, Block 7 and Lot 10 Block 8 of Plainview Heights,

First Addition To The City Of
MANDAN, NORTH DAKOTA

Point Of Beginning
Northwest Corner
Section 2
T. 138 N. R. 81 W.

APPROVAL OF CITY ENGINEER

I, THOMAS R. LITTLE, CITY ENGINEER FOR THE CITY OF MANDAN, NORTH DAKOTA, HEREBY APPROVE THE STREET IMPROVEMENT PLANS FOR STREET IMPROVEMENT DISTRICT NO. 58 AS SHOWN ON THE ACCOMPANYING PLANS.

Thomas R. Little
THOMAS R. LITTLE, P. E.
CITY ENGINEER-MANDAN, ND

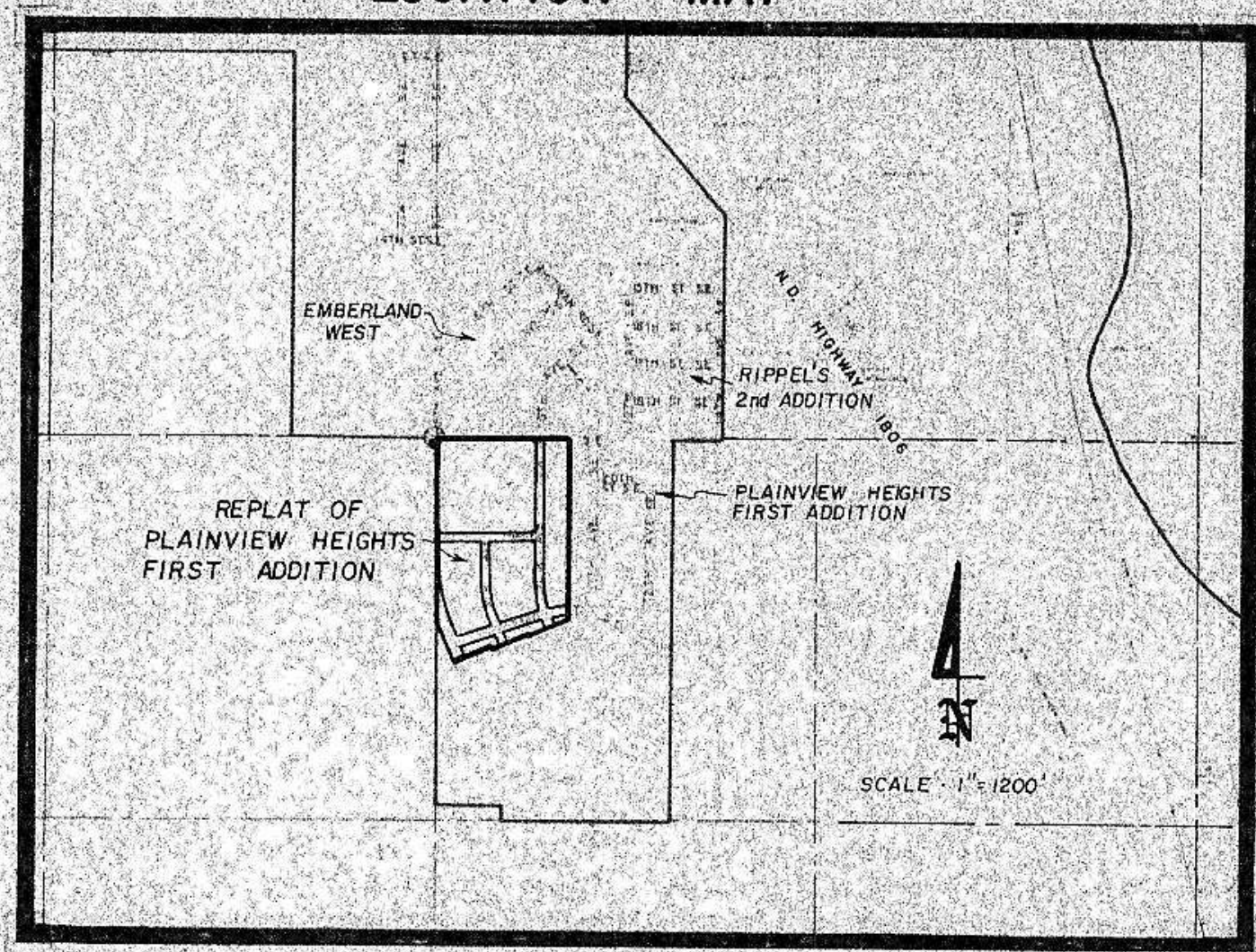
ENGINEER'S CERTIFICATE

I, LONNIE K. ROMSAAS, A REGISTERED PROFESSIONAL ENGINEER, HEREBY CERTIFY THAT THE PLANS FOR STREET IMPROVEMENT DISTRICT NO. 58 TO THE CITY OF MANDAN, NORTH DAKOTA WERE PREPARED UNDER MY SUPERVISION AND ARE COMPLETE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



Lonnie K. Romsaas
LONNIE K. ROMSAAS
REG. PROF. ENGINEER
N. D. REG. NO. 1983

LOCATION MAP



INDEX

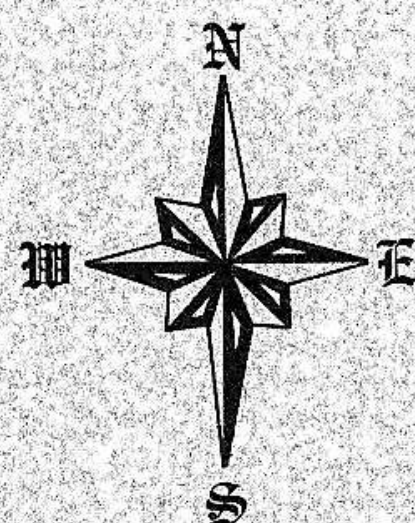
1 of 6	COVER SHEET
2 of 6	8th AVENUE S.E. STA 0+38.62 TO STA 13+05.41
3 of 6	8th AVENUE S.E. STA 13+05.41 TO STA 15+85.82 23rd STREET S.E. STA 0+36.37 TO STA 9+00
4 of 6	21st STREET S.E. STA 0+38.68 TO STA 6+97.54
5 of 6	9th AVENUE S.E. STA 0+33 TO STA 8+02.75
6 of 6	10th AVENUE S.E. STA 0+39 TO STA 13+22.74

AS BUILT

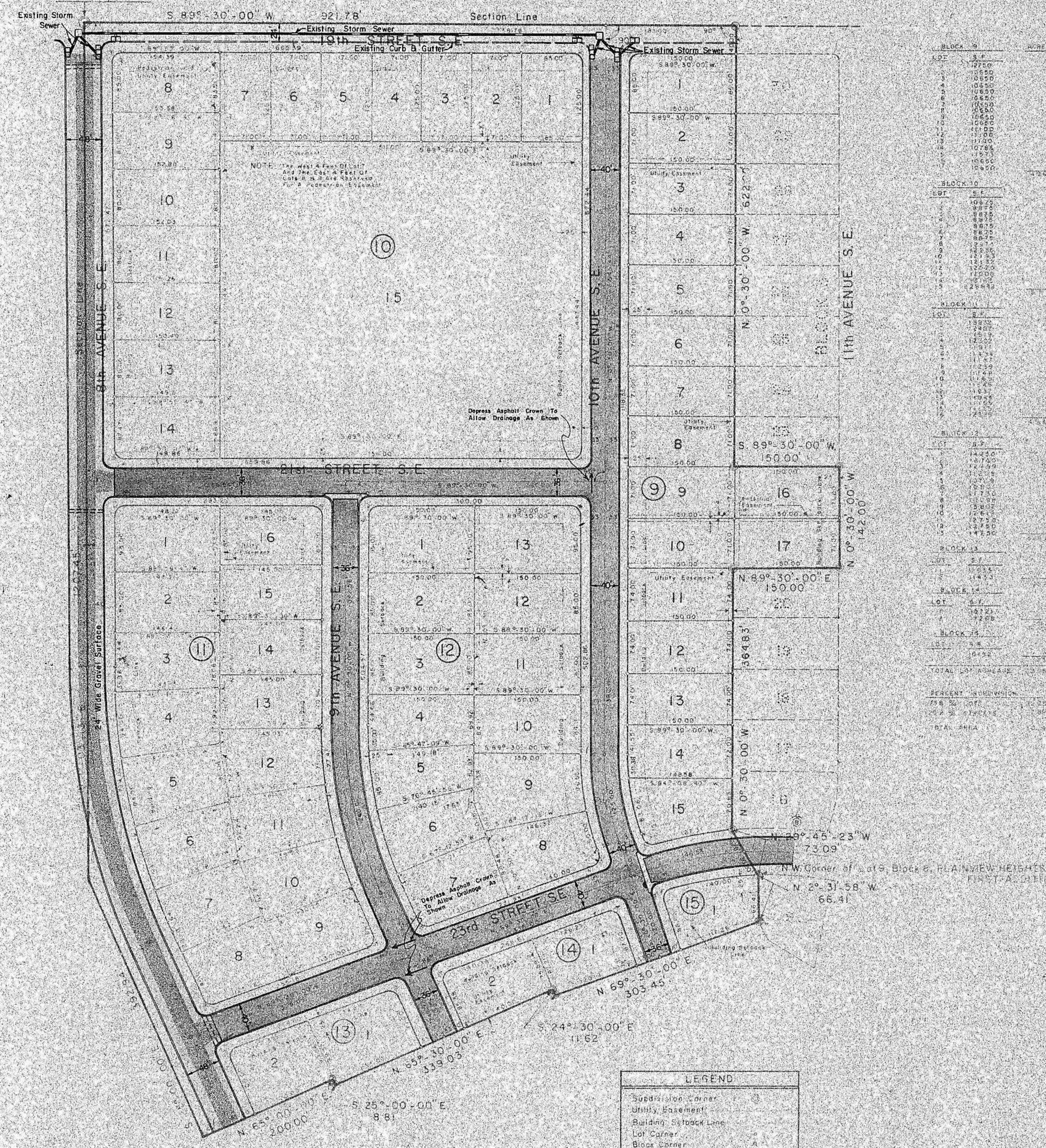
CIVIL ENGINEERING LAND PLANNING LAND SURVEYING

SWENSON, HAGEN & CO. P.C.
Consulting Engineers

PO BOX 1135, 909 BASIN AVENUE
BISMARCK, NORTH DAKOTA 58501
701-223-2800



SCALE 1" = 100'
DATE MAY 1979



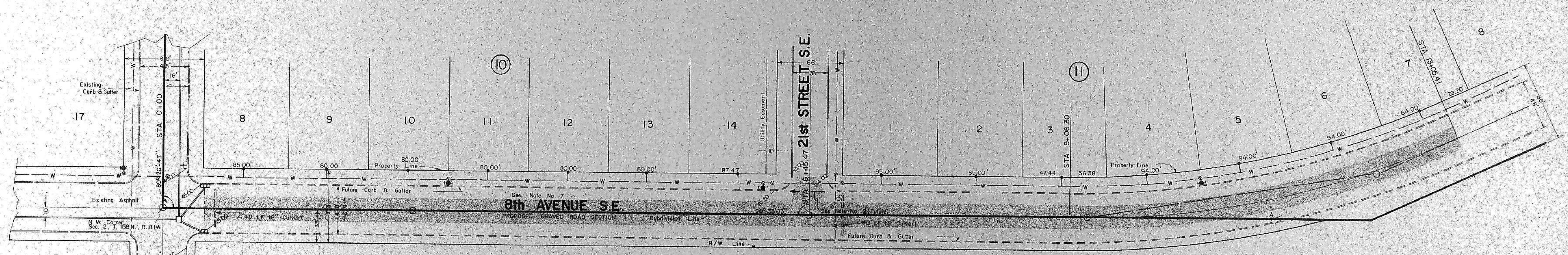
AS BUILT 2

D 58

BEGIN QUANTITIES
STA 0+38.62

END QUANTITIES
STA 13+05.41

HORIZONTAL SCALE 1" = 50'
VERTICAL SCALE 1" = 10'
DATE MAY, 1979

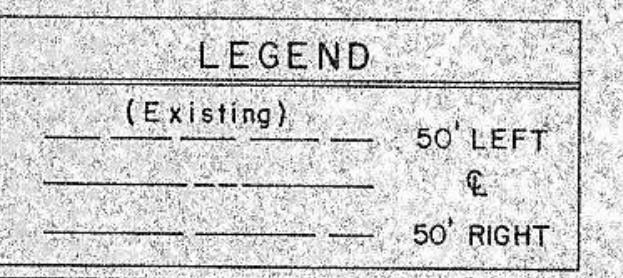
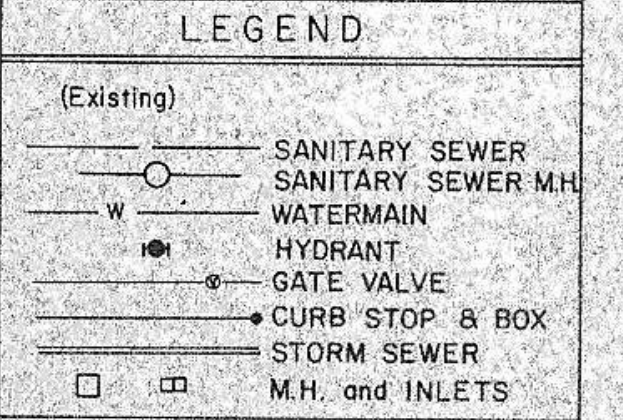
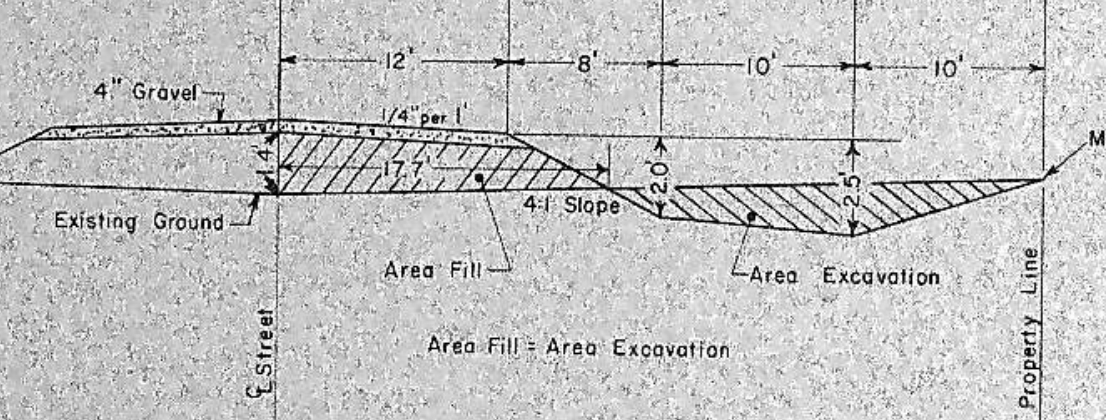


CONSTRUCTION NOTES:

- 1) Preliminary street grading has been done by others.
- 2) Depress crown and tip gutter section to allow drainage as shown. (future)
- 3) All dimensions shown are to face of curb unless otherwise stated.
- 4) All radii at intersections shall be 15' to face of curb unless otherwise stated.
- 5) All elevations shown are to top of curb unless otherwise stated.
- 6) Sewer and Water Improvements shall be completed prior to curb and gutter and asphalt construction. The contractor shall be responsible for the preservation of these improvements and other existing utilities.
- 7) Street as shown above is for future construction. A 24' wide gravel surfaced road shall be built to County Section Standards as shown.
- 8) Class 12 gravel shall be used for road surface.
- 9) Side slopes on approaches shall have a 1" asphalt apron to prevent erosion at the end of the curb and gutter. The cost shall be incidental to other items.
- 10) Straw bales shall be placed in ditches as directed by the Engineer to prevent erosion. Cost shall be incidental to other items.
- 11) All street right-of-way shall be seeded to grass from the edge of the street or road bed to the property line.
- 12) Class IV seeding shall be required.
- 13) Extra rings required to adjust manholes to gravel grade shall be incidental to other items.
- 14) Earthwork quantities were determined by the average end area method with the shrinkage factor excluded from the computations. If additional dirt is required to meet the planned grades on any lot or all streets, the owner shall supply the additional dirt, to be obtained within a one-half (1/2) mile radius of the site, by the contractor, as instructed by the engineer. The payment for the dirt shall be made according to the computed quantities shown on each sheet. The cost due to the additional dirt supplied shall be considered incidental to all other bid items.
- 15) A 16-20-0 fertilizer spread at the rate of 3 pounds per 100 square yards shall be used prior to seeding.

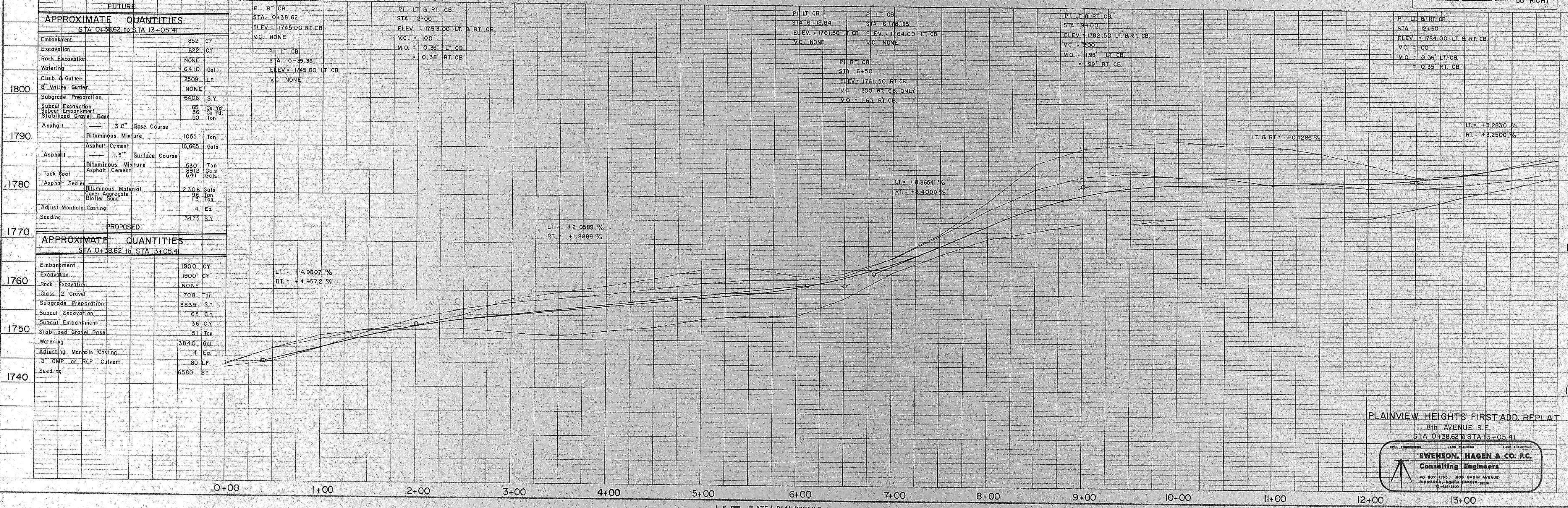
CURVE DATA
Curve A

Δ	23° 56' 47"
D	60' 00' 00"
T	202.60'
L	399.11'
R	955.37'
Ext	21.25'



PLAN
DATE: 5/1/79
BY: J.H.
CHECKED: J.H.
NOTE BOOK: ALIGNMENT CHECKED
RE: OF ANY CHANGES

PROFILE
DATE: 5/1/79
BY: J.H.
CHECKED: J.H.
NOTE BOOK: GRADE AND ELEVATIONS
RE: OF ANY CHANGES



FUTURE APPROXIMATE QUANTITIES
STA 0+38.62 to STA 13+05.41

Embankment	852	CY
Excavation	622	CY
Rock Excavation	NONE	
Watering	6410	Gal.
Curb & Gutter	2509	LF
8" Valley Gutter	NONE	
Subgrade Preparation	5406	S.Y.
Subcut Excavation	65	C.Y.
Subcut Embankment	36	C.Y.
Stabilized Gravel Base	50	Ton
Asphalt 3.0" Base Course	1055	Ton
Asphalt Cement	16,665	Gals
Asphalt 1.5" Surface Course	530	Ton
Tack Coat	892	Gals
Asphalt Sealer	641	Gals
Bituminous Material	2305	Gals
Lower Aggregate	96	Ton
Blotter Sand	13	Ton
Adjust Manhole Casting	4	Ea.
Seeding	3475	S.Y.

PROPOSED APPROXIMATE QUANTITIES
STA 0+38.62 to STA 13+05.41

Embankment	1900	CY
Excavation	1900	CY
Rock Excavation	NONE	
Class 12 Gravel	708	Ton
Subgrade Preparation	5835	S.Y.
Subcut Excavation	65	C.Y.
Subcut Embankment	36	C.Y.
Stabilized Gravel Base	51	Ton
Watering	3840	Gal.
Adjusting Manhole Casting	4	Ea.
18" CMP or RCP Culvert	80	LF
Seeding	6580	S.Y.

PLATE 1, PLAN-PROFILE
KEUFFEL & ESSER CO.
48 7024 MADE IN U.S.A.

PLAINVIEW HEIGHTS FIRST ADD. REPLAT
8th AVENUE S.E.
STA 0+38.62 to STA 13+05.41

SWENSON, HAGEN & CO. P.C.
Consulting Engineers
PO BOX 1175, 400 BASIN AVENUE
BISMARCK, NORTH DAKOTA 58101

BEGIN QUANTITIES
STA. 13+05.41

END QUANTITIES
STA. 15+85.82

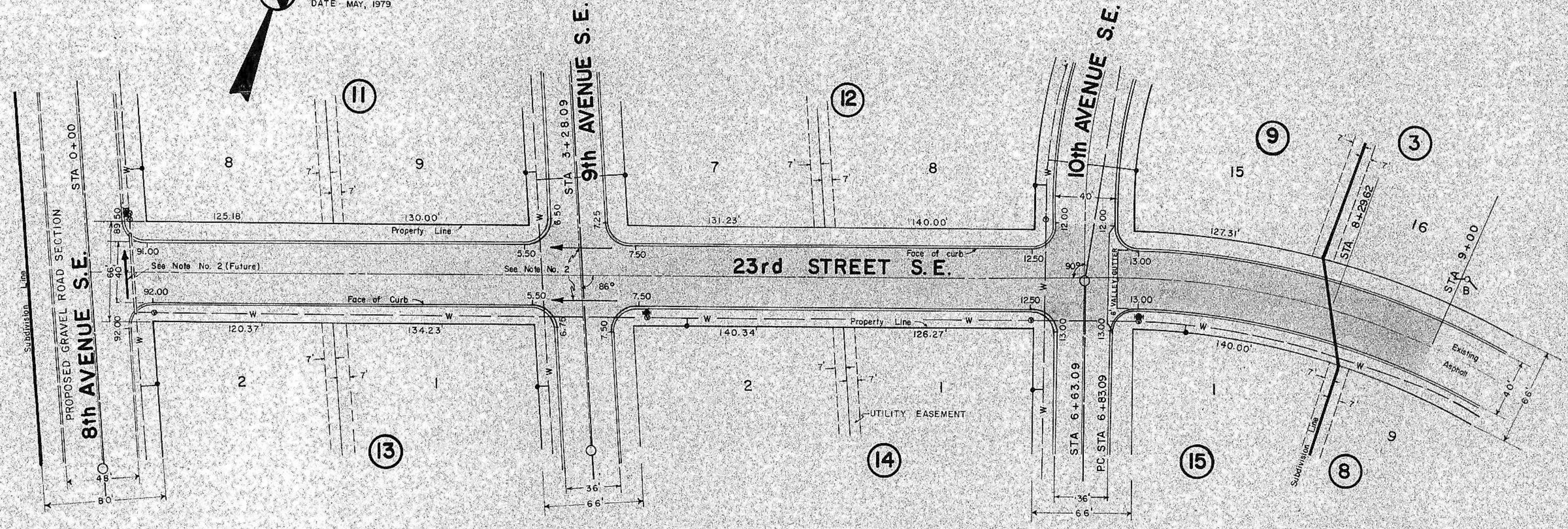
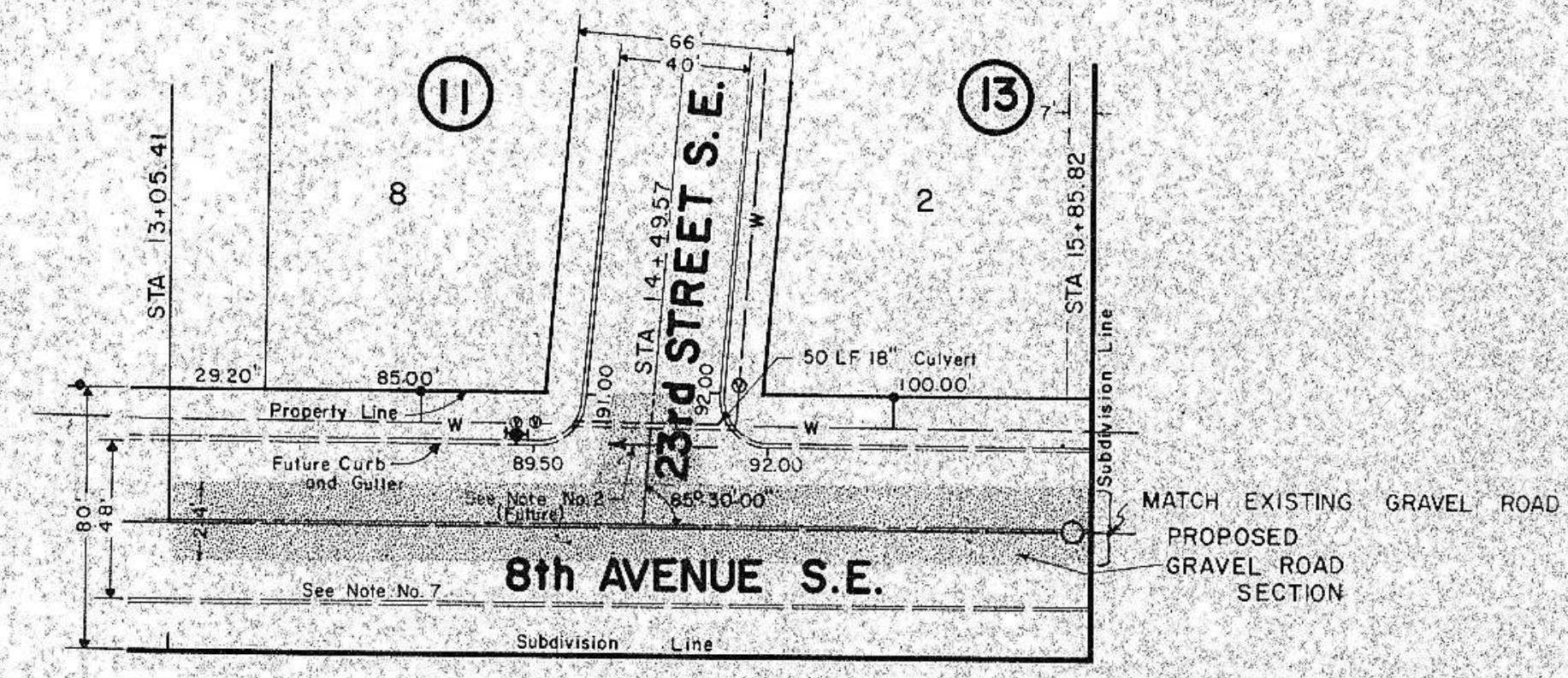
BEGIN QUANTITIES
STA. 0+36.37

END QUANTITIES
STA. 9+00

HORIZONTAL SCALE 1"=50'
VERTICAL SCALE 1"=10'
DATE - MAY, 1979

HORIZONTAL SCALE 1"=50'
VERTICAL SCALE 1"=10'
DATE - MAY, 1979

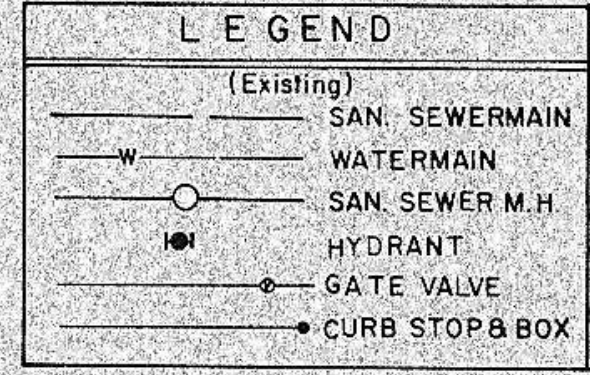
DATE: 5/15/79
BY: J.E.H.
CHECKED: J.E.H.
DATE: 5/15/79
BY: J.E.H.
CHECKED: J.E.H.
DATE: 5/15/79
BY: J.E.H.
CHECKED: J.E.H.



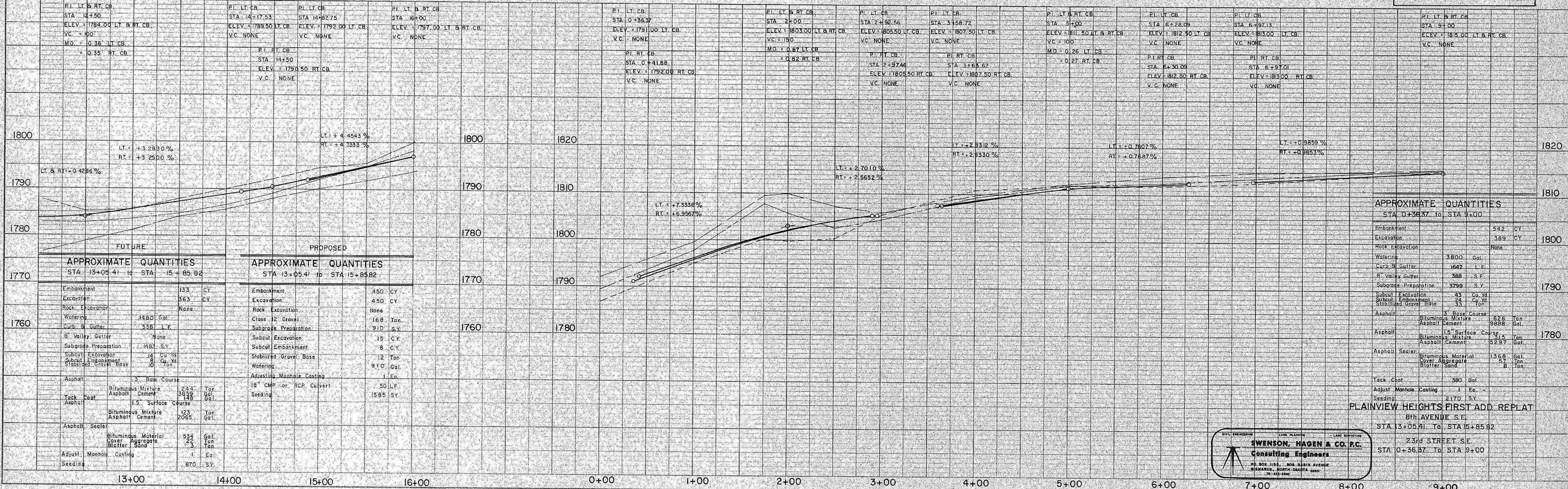
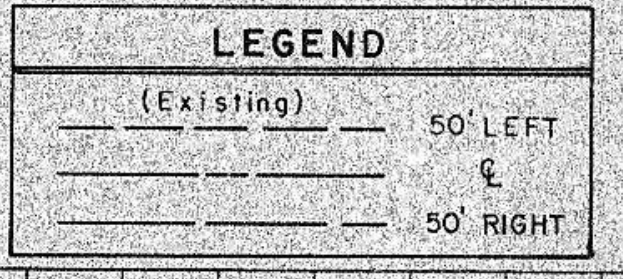
CONSTRUCTION NOTES:

- 1) Preliminary street grading has been done by others.
- 2) Depress crown and tip gutter section to allow drainage as shown. (Future)
- 3) All dimensions shown are to face of curb unless otherwise stated.
- 4) All radii at intersections shall be 15' to face of curb unless otherwise stated.
- 5) All elevations shown are to top of curb unless otherwise stated.
- 6) Sewer and Water Improvements shall be completed prior to curb and gutter and asphalt construction. The contractor shall be responsible for the preservation of those improvements and other existing utilities.
- 7) Street as shown above is for future construction. A 24' wide gravel surfaced road shall be built to County Section Standards. (See Sh. 2 of 6)
- 8) Class 12 gravel shall be used for road surface.
- 9) Side slopes on approaches shall have a 1" asphalt apron to prevent erosion at the end of the curb and gutter.
- 10) Straw bales shall be placed in ditches as directed by the Engineer to prevent erosion. Cost shall be incidental to other items. A maximum of 20 bales will be used.

- 11) All street right-of-way shall be seeded to grass from the edge of the street or road bed to the property line.
- 12) Class IV seeding shall be required.
- 13) Extra rings required to adjust manholes to proper grade shall be incidental to other items.
- 14) A 16-20-0 fertilizer spread at the rate of 3 pounds per 100 square yards shall be used prior to seeding.



LEGEND
CURVE DATA
D = 48'-30.00"
D = 11'-00.00"
T = 235.00'
L = 440.91'
R = 521.67'
Ext = 50.49'



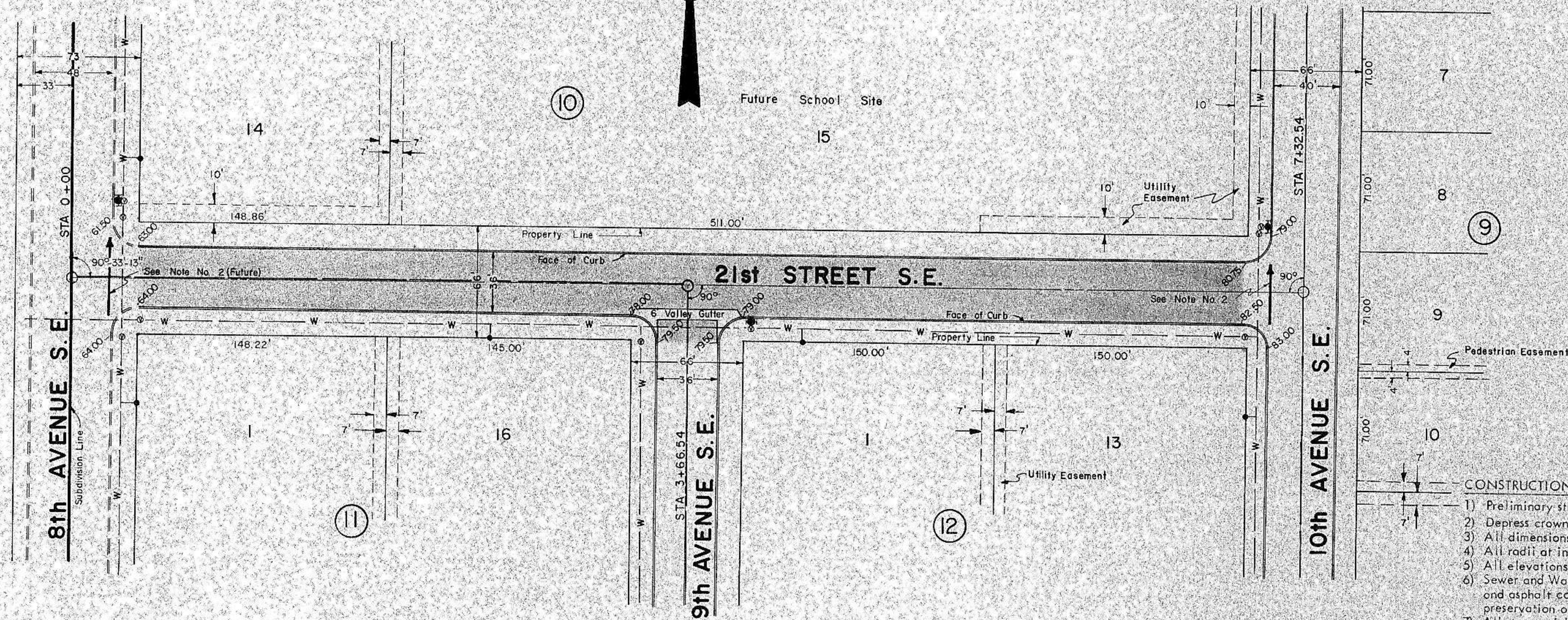
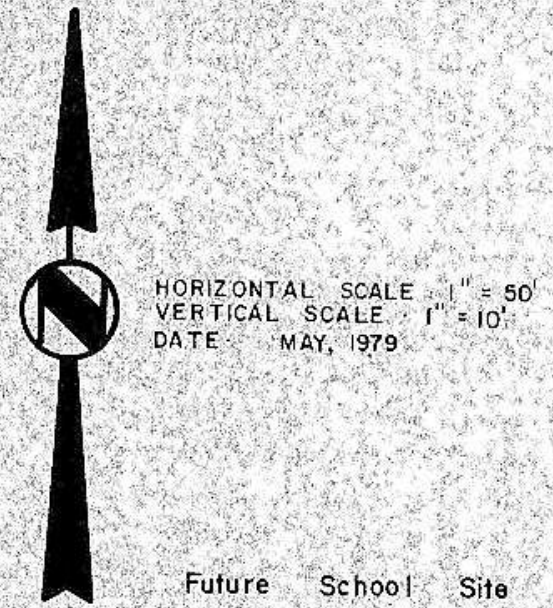
APPROXIMATE QUANTITIES
STA. 0+36.37 to STA. 9+00

Embankment	542	CY
Excavation	389	CY
Rock Excavation	None	
Watering	1800	Gal.
Curb & Gutter	1642	L.F.
8" Valley Gutter	588	S.F.
Subgrade Preparation	3799	S.Y.
Subcut Excavation	43	Cu. Yd.
Subcut Embankment	24	Cu. Yd.
Stabilized Gravel Base	53	Yon.
Asphalt	3	Base Course
	628	Ton
	9888	Gal.
Asphalt	1.5	Surface Course
	5297	Gal.
Asphalt Sealer	1566	Gal.
	8	Ton
Tack Coat	380	Gal.
Adjust Manhole Casting	1	Co.
Seeding	2170	S.Y.

SWENSON, HAGEN & CO. P.C.
Consulting Engineers
P.O. BOX 1124 - 306 N. MAIN AVENUE
BISMARCK, NORTH DAKOTA 58101
701-223-1800

BEGIN QUANTITIES
STA 0+38.68

END QUANTITIES
STA 6+97.54



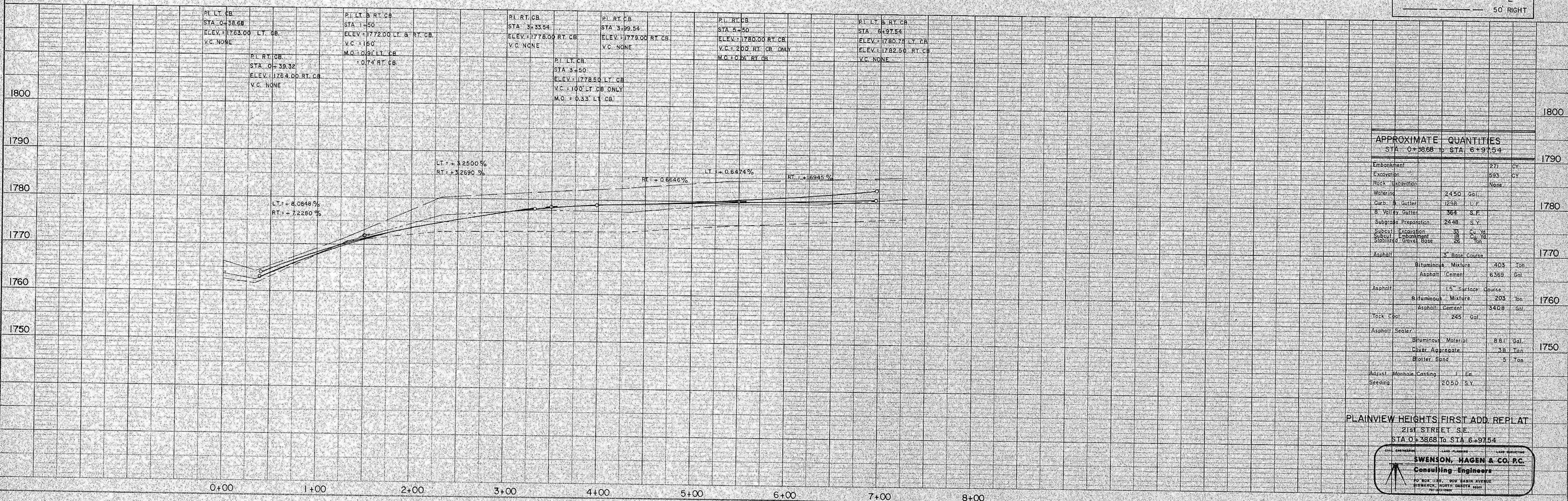
- CONSTRUCTION NOTES:**
- 1) Preliminary street grading has been done by others.
 - 2) Depress crown and tip gutter section to allow drainage as shown.
 - 3) All dimensions shown are to face of curb unless otherwise stated.
 - 4) All radii at intersections shall be 15' to face of curb unless otherwise stated.
 - 5) All elevations shown are to top of curb unless otherwise stated.
 - 6) Sewer and Water Improvements shall be completed prior to curb and gutter and asphalt construction. The contractor shall be responsible for the preservation of these improvements and other existing utilities.
 - 7) All street right-of-way shall be seeded to grass from the edge of the street or road bed to the property line.
 - 8) Class IV seeding shall be required.
 - 9) A 16-20-0 fertilizer spread at the rate of 3 pounds per 100 square yards shall be used prior to seeding.

LEGEND	
(Existing)	SAN. SEWERMAIN
W	WATERMAIN
○	SAN. SEWER M.H.
⊕	HYDRANT
⊕	GATE VALVE
⊕	CURB STOP & BOX

LEGEND	
(Existing)	50' LEFT
⊕	50' RIGHT

PLAN
NOTE BOOK
ALIGNMENT SHEET
RT OF WAY CHECKS

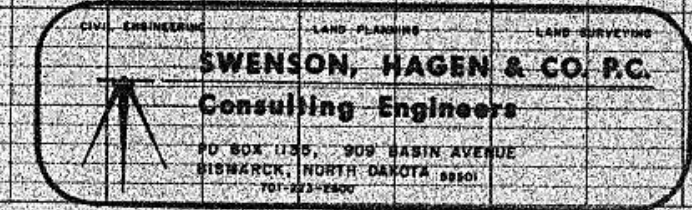
PROFILE
NOTE BOOK
% GRADES
VERTICAL CURVES



APPROXIMATE QUANTITIES
STA 0+38.68 to STA 6+97.54

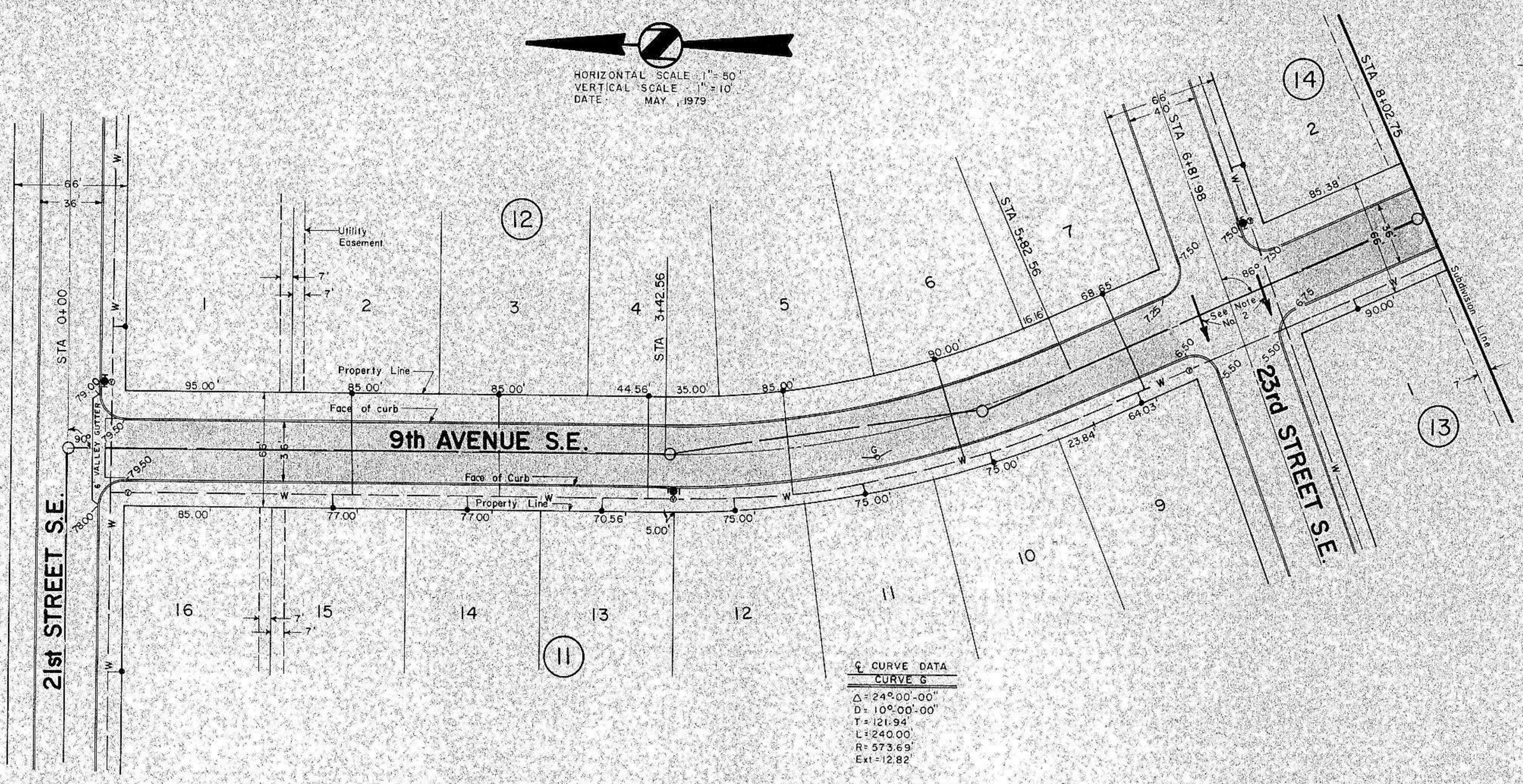
Embankment	271	CY
Excavation	593	CY
Rock Excavation	None	
Waterline	2450	Gal.
Curb & Gutter	1298	L.F.
B. Valley Gutter	364	S.F.
Subgrade Preparation	2448	S.Y.
Subcut Excavation	35	Cu. Yd.
Subcut Embankment	18	Cu. Yd.
Stabilized Gravel Base	28	Sq. Yd.
Asphalt	5	Base Course
Bituminous Mixture	303	Ton
Asphalt Cement	6369	Gal.
Asphalt	15	Surface Course
Bituminous Mixture	203	Ton
Asphalt Cement	3408	Gal.
Truck Coal	245	Gal.
Asphalt Sealer		
Bituminous Material	881	Gal.
Cover Aggregate	38	Ton
Boiler Sand	5	Ton
Adjust Manhole Casting	1	En.
Seeding	2050	S.Y.

PLAINVIEW HEIGHTS FIRST ADD. REPLAT
21st STREET S.E.
STA 0+38.68 to STA 6+97.54



BEGIN QUANTITIES
STA 0+33

END QUANTITIES
STA 8+02.75



CURVE DATA

CURVE 1	
Δ	240°00'00"
D	100°00'00"
Y	121.94'
L	240.00'
R	573.69'
E	-12.82'

CONSTRUCTION NOTES:

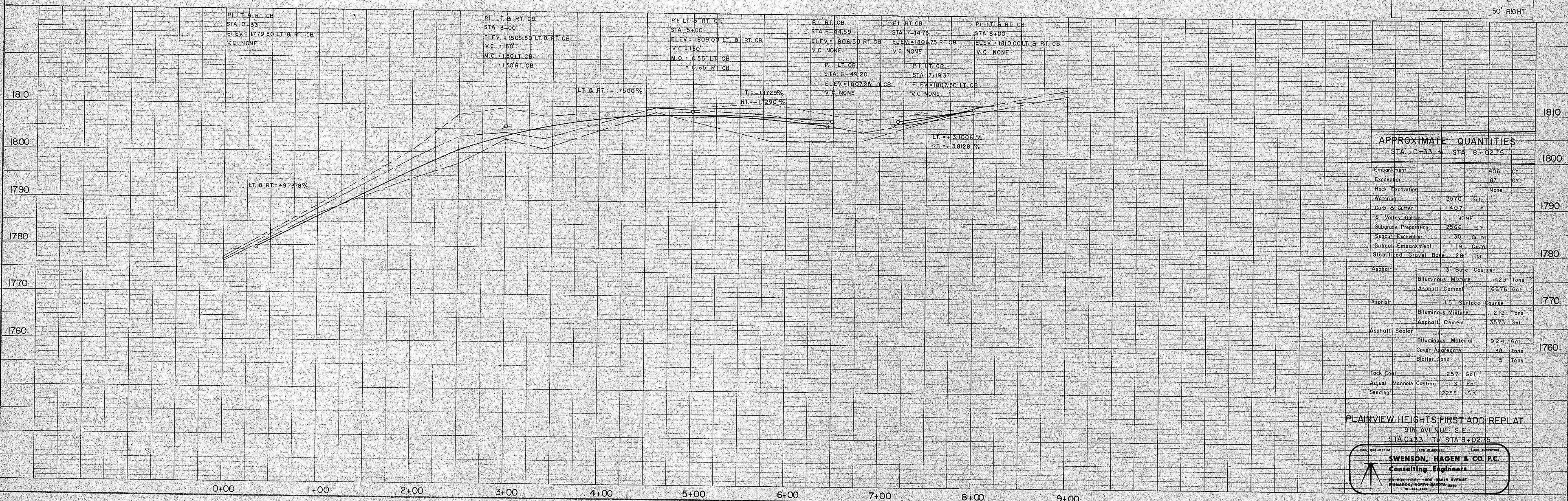
- 1) Preliminary street grading has been done by others.
- 2) Depress crown and tip gutter section to allow drainage as shown.
- 3) All dimensions shown are to face of curb unless otherwise stated.
- 4) All radii of intersections shall be 15' to face of curb unless otherwise stated.
- 5) All elevations shown are to top of curb unless otherwise stated.
- 6) Sewer and water improvements shall be completed prior to curb and gutter and asphalt construction. The contractor shall be responsible for the preservation of those improvements, and other existing utilities.
- 7) All street right-of-way shall be seeded to grass from the edge of the street or road bed to the property line.
- 8) Class IV seeding shall be required.
- 9) A 16-20-0 fertilizer spread at the rate of 3 pounds per 100 square yards shall be used prior to seeding.

LEGEND

(Existing)	SAN SEWERMAIN
W	WATERMAIN
○	SAN SEWER M.H.
⊙	HYDRANT
⊕	GATE VALVE
⊖	CURB STOP & BOX

LEGEND

(Existing)	50' LEFT
⊖	⊖
⊕	50' RIGHT

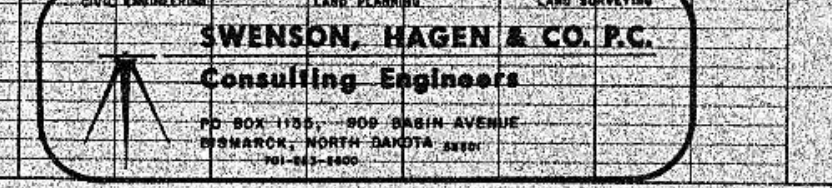


APPROXIMATE QUANTITIES
STA 0+33 TO STA 8+02.75

Embankment	466	CY
Excavation	871	CY
Rock Excavation	None	
Watering	2570	Gal
Curb & Gutter	1407	LF
8" Valley Gutter	None	
Subgrade Preparation	2566	S.Y.
Subcut Excavation	35	Cu.Yd.
Subcut Embankment	19	Cu.Yd.
Stabilized Gravel Base	28	Ton
Asphalt	3" Base Course	
	Bituminous Mixture	423 Tons
	Asphalt Cement	6676 Gal
Asphalt	1.5" Surface Course	
	Bituminous Mixture	212 Tons
	Asphalt Cement	3573 Gal
Asphalt Sander	Bituminous Material	924 Gal
	Cover Aggregate	38 Tons
	Blotter Sand	5 Tons
Tack Coat	257	Gal
Adjust Manhole Casting	3	En
Seeding	2253	S.Y.

PLAINVIEW HEIGHTS FIRST ADD REPLAT

9th AVENUE S.E.
STA 0+33 TO STA 8+02.75



PLAN
DATE: 5/1/79
BY: [Signature]
CHECKED: [Signature]
NO. 1

PROFILE
DATE: 5/1/79
BY: [Signature]
CHECKED: [Signature]
NO. 1

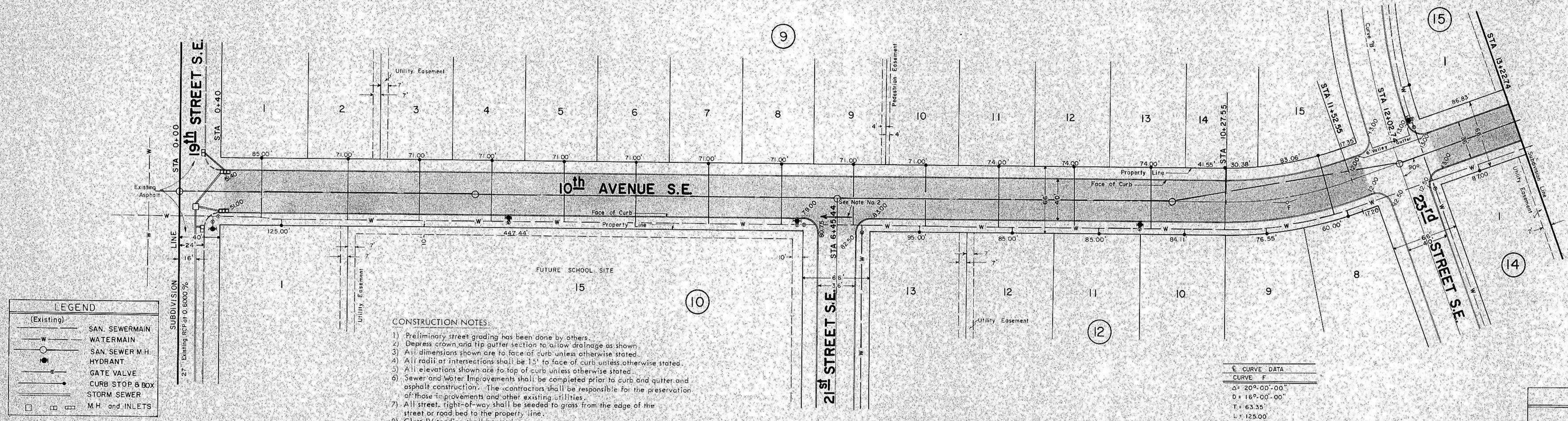
BEGIN QUANTITIES
STA 0+39

END QUANTITIES
STA 13+22.74

HORIZONTAL SCALE 1" = 50'
VERTICAL SCALE 1" = 10'
DATE: MAY, 1979

PLAN
NOTE BOOK ALIGNMENT CHECKED
BY: [Signature]
DATE: 5/15/79

PROFILE
NOTE BOOK GRADE CHECKED
BY: [Signature]
DATE: 5/15/79



LEGEND

(Existing)

- W- SAN SEWERMAIN
- W- WATERMAIN
- SAN SEWER M.H.
- HYDRANT
- GATE VALVE
- CURB STOP & BOX
- STORM SEWER
- M.H. and INLETS

- CONSTRUCTION NOTES:**
- 1) Preliminary street grading has been done by others.
 - 2) Depress crown and tip gutter section to allow drainage as shown.
 - 3) All dimensions shown are to face of curb unless otherwise stated.
 - 4) All radii of intersections shall be 15' to face of curb unless otherwise stated.
 - 5) All elevations shown are to top of curb unless otherwise stated.
 - 6) Sewer and Water Improvements shall be completed prior to curb and gutter and asphalt construction. The contractor shall be responsible for the preservation of those improvements and other existing utilities.
 - 7) All street, right-of-way shall be seeded to grass from the edge of the street or road bed to the property line.
 - 8) Class IV seeding shall be used.
 - 9) A 16-20-0 fertilizer spread at the rate of 3 pounds per 100 square yards shall be used prior to seeding.

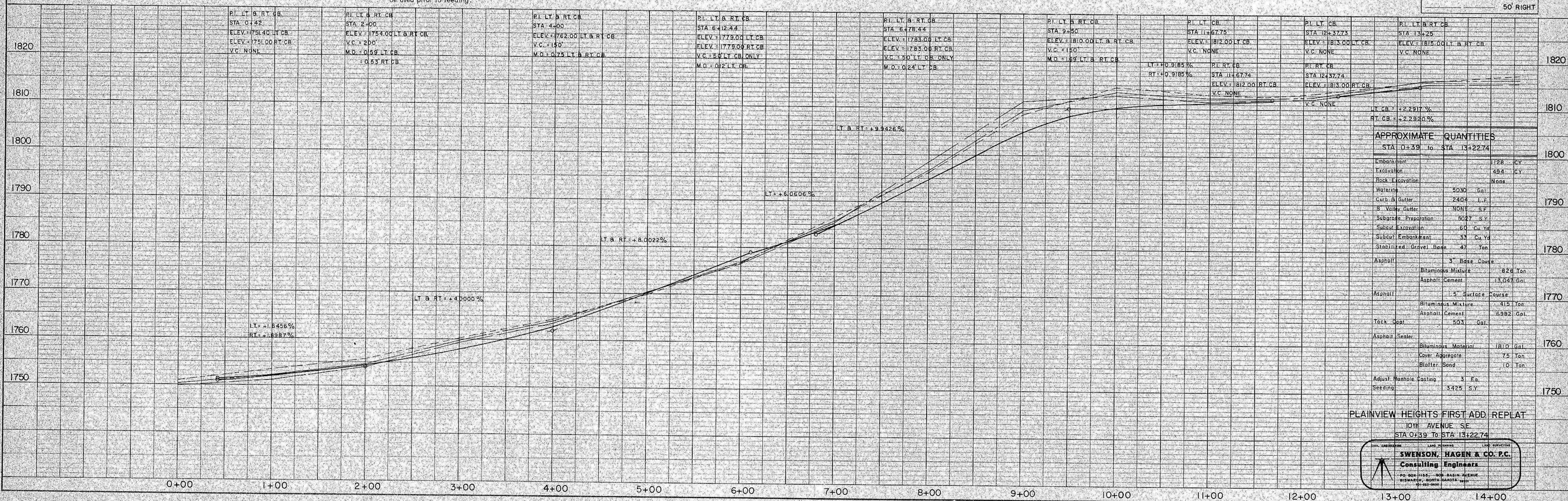
CURVE DATA

CURVE	F
A	20° 00' 00"
B	16° 00' 00"
L	63.35'
T	125.00'
R	359.26'
E	5.54'

LEGEND

(Existing)

- 50' LEFT
- ℄
- 50' RIGHT



APPROXIMATE QUANTITIES
STA 0+39 to STA 13+22.74

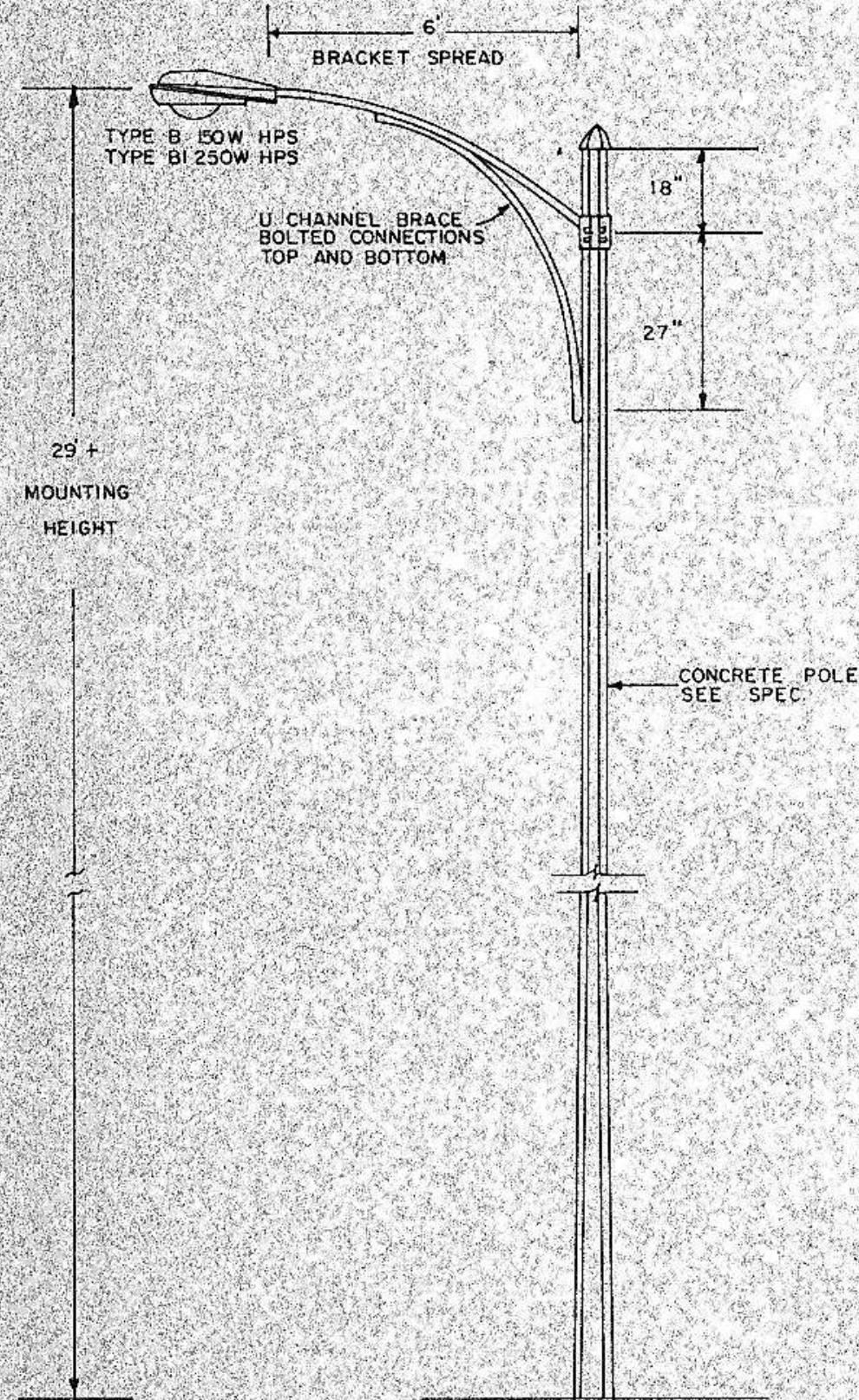
Embankment	1728	CY
Excavation	494	CY
Rock Excavation	None	
Water	4030	Gal
Curb & Gutter	2404	L.F.
B. Valve, Gutter	NONE	S.F.
Subgrade Preparation	6077	S.Y.
Subcut Embankment	60	Cu. Yd.
Subcut Embankment	33	Cu. Yd.
Stabilized Gravel Base	47	Ton
Asphalt	3" Base Course	
	Bituminous Mixture	828 Ton
	Asphalt Cement	13,047 Gal
Asphalt	1.5" Surface Course	
	Bituminous Mixture	415 Ton
	Asphalt Cement	6,982 Gal
Tack Coat	503	Gal.
Asphalt Sealer		
	Bituminous Material	1870 Gal
	Cover Aggregate	75 Ton
	Blotter Sand	10 Ton
Adjust Manhole Casting	3	Eq.
Seeding	3428	S.Y.

PLAINVIEW HEIGHTS FIRST ADD. REPLAT
10TH AVENUE S.E.
STA 0+39 TO STA 13+22.74

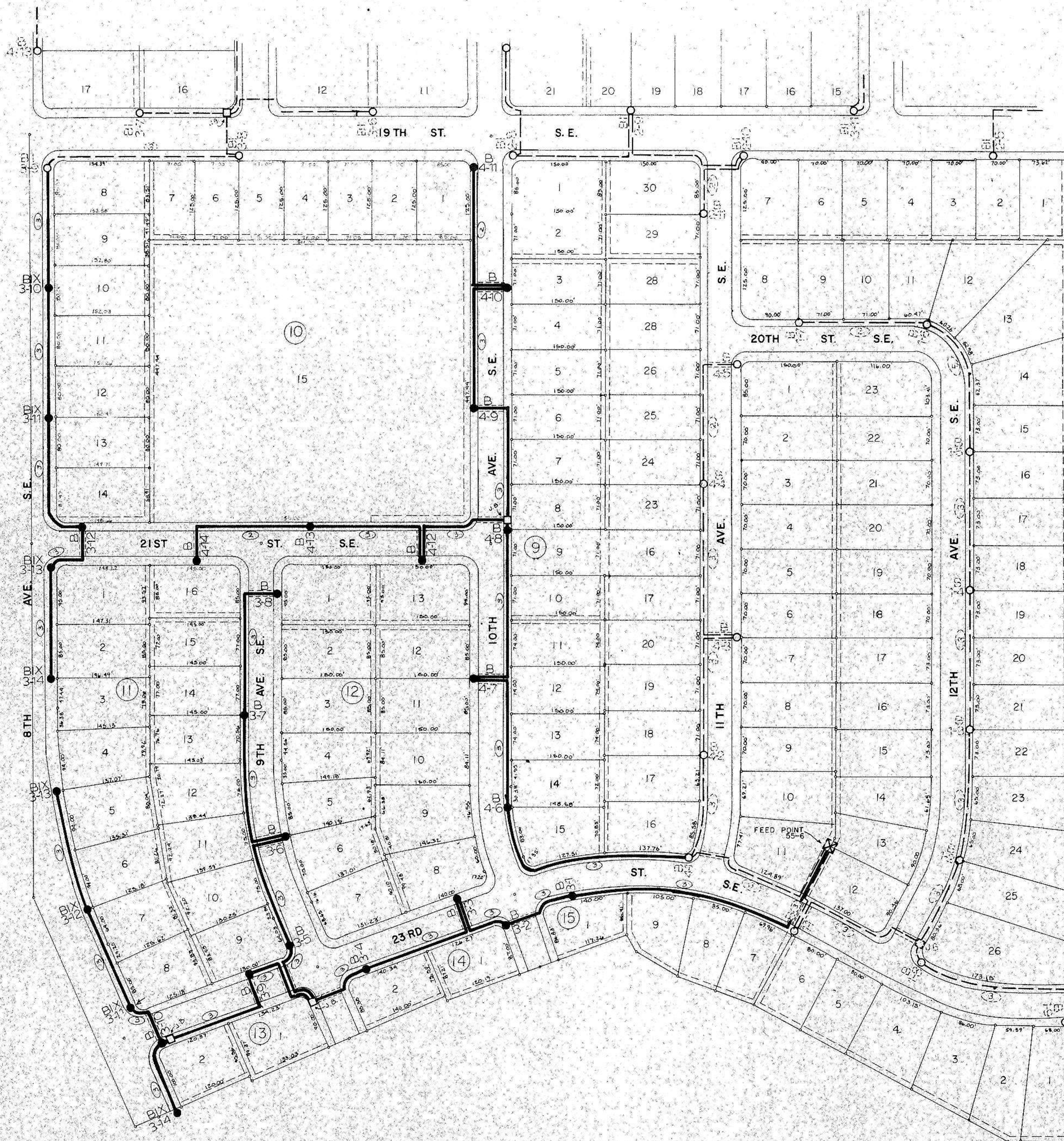
SWENSON, HAGEN & CO. P.C.
Consulting Engineers
PO BOX 1188 - 5000 BASIN AVENUE
BISMARCK, NORTH DAKOTA 58101

LEGEND SYMBOLS

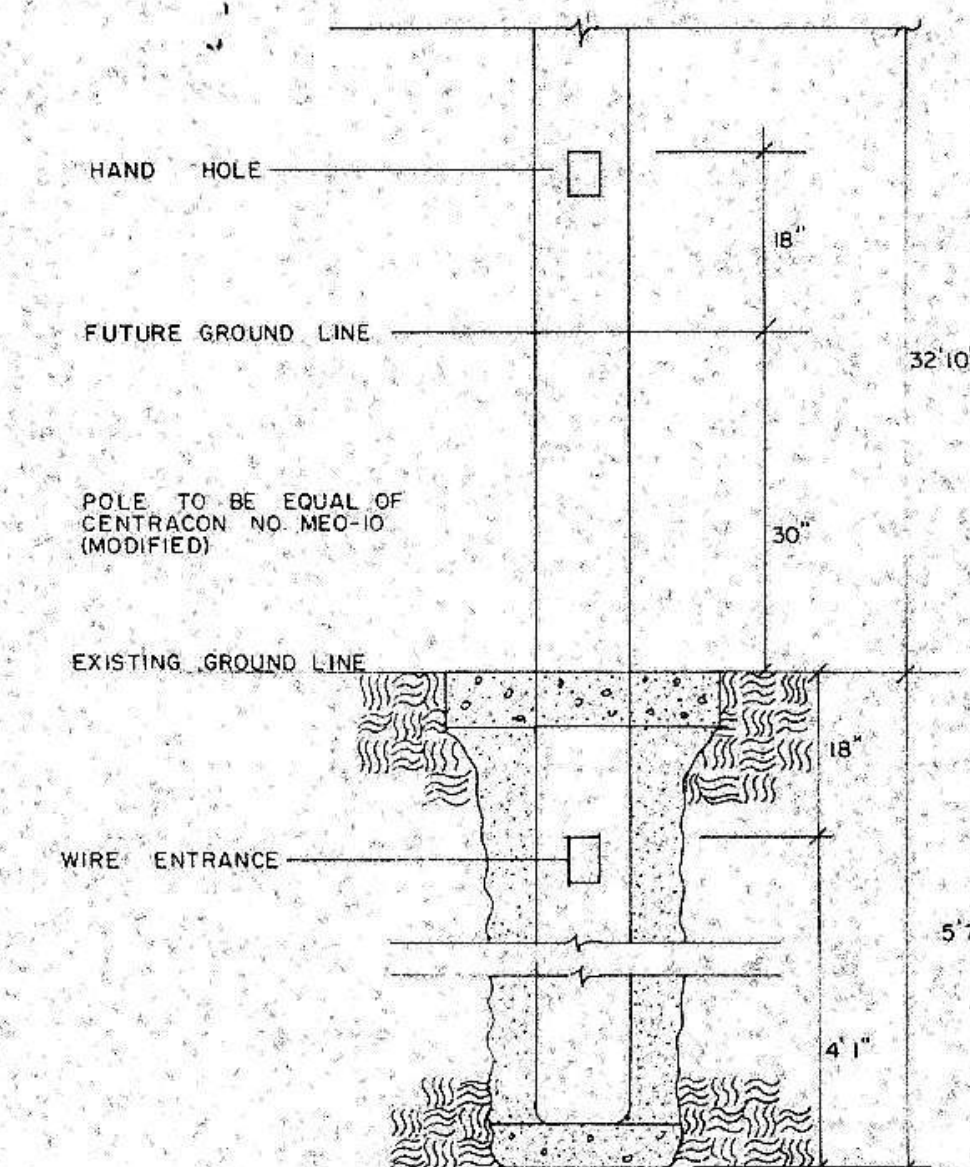
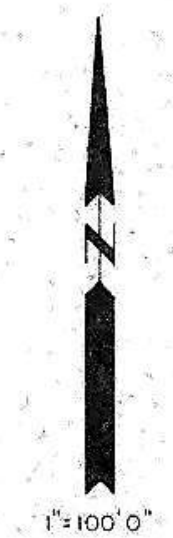
- NEW STREET LIGHT UNIT
- ◐ RELOCATED STREET LIGHT UNIT
- EXISTING STREET LIGHT UNIT
- ⊠ FEED POINT - NEW
- ⊡ FEED POINT - EXISTING
- UNDERGROUND CONDUCTOR (direct burial)
- UNDERGROUND CONDUCTOR (conduit encased)
- UNDERGROUND CONDUCTOR (existing)
- NUMBER OF CONDUCTORS
- B UNIT NUMBER & TYPE
- B-2 150 watt HIGH PRESSURE SODIUM
- B-1 250 watt " " "
- BR 150 watt " " "
- DRIVEWAY & WIDTH
- JUNCTION BOX



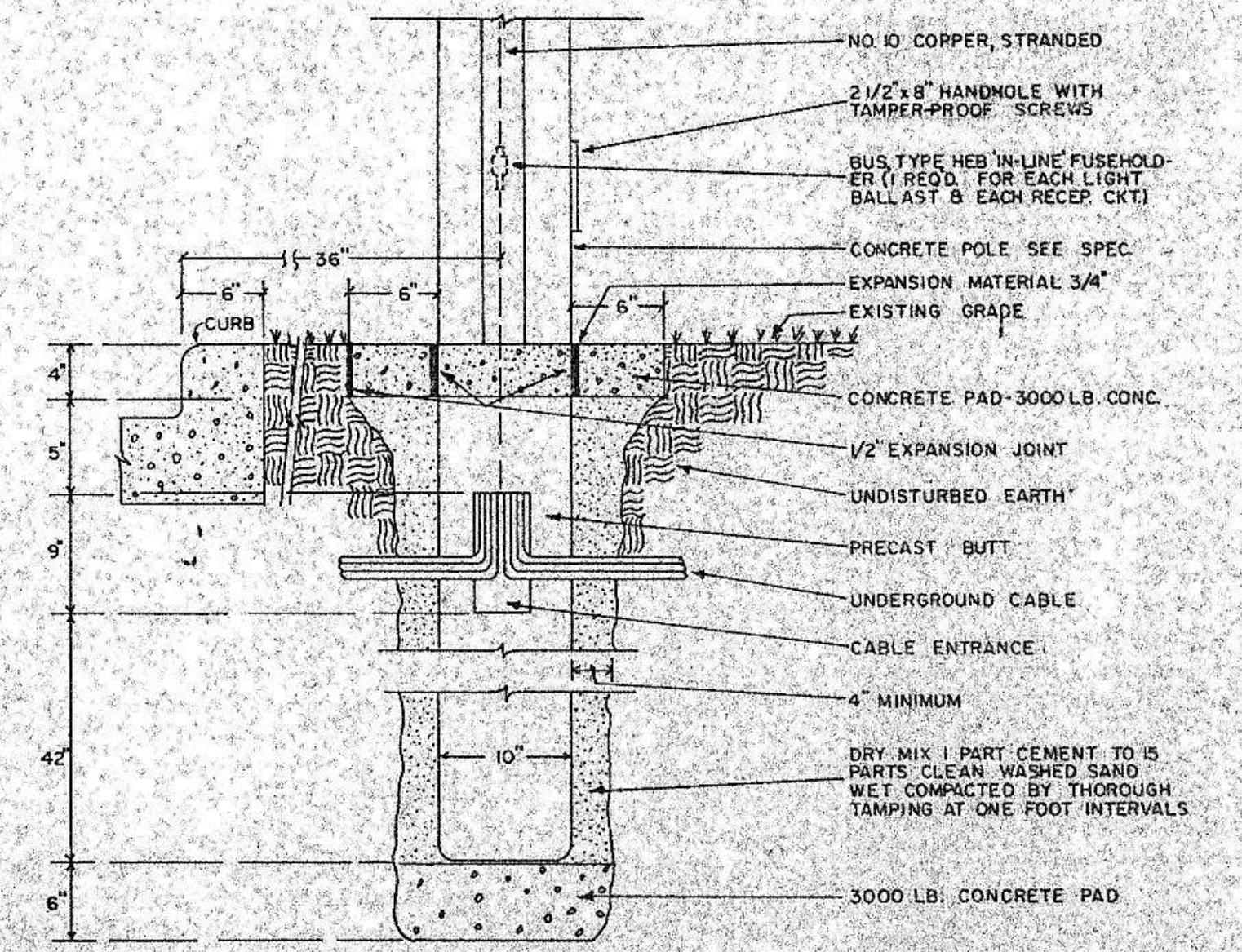
TYPE B, B1, & B1X POLE DETAIL
NO SCALE



REPLAT OF PLAINVIEW HEIGHTS FIRST ADDITION
STREET LIGHTING - STREET IMPROVEMENT DISTRICT 58



TYPE B1X BASE DETAIL
NO SCALE



TYPE B & B1 BASE DETAIL
NO SCALE