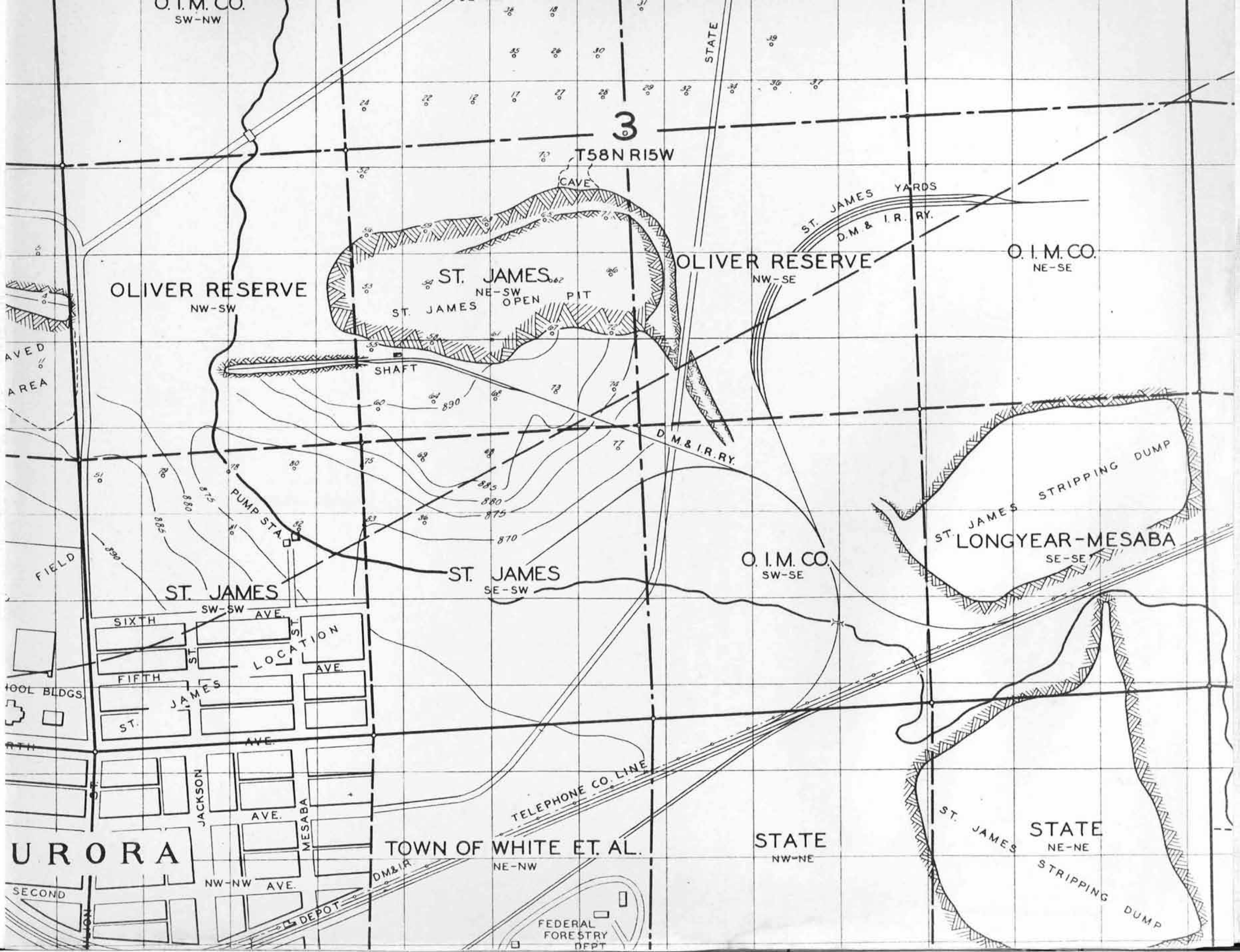
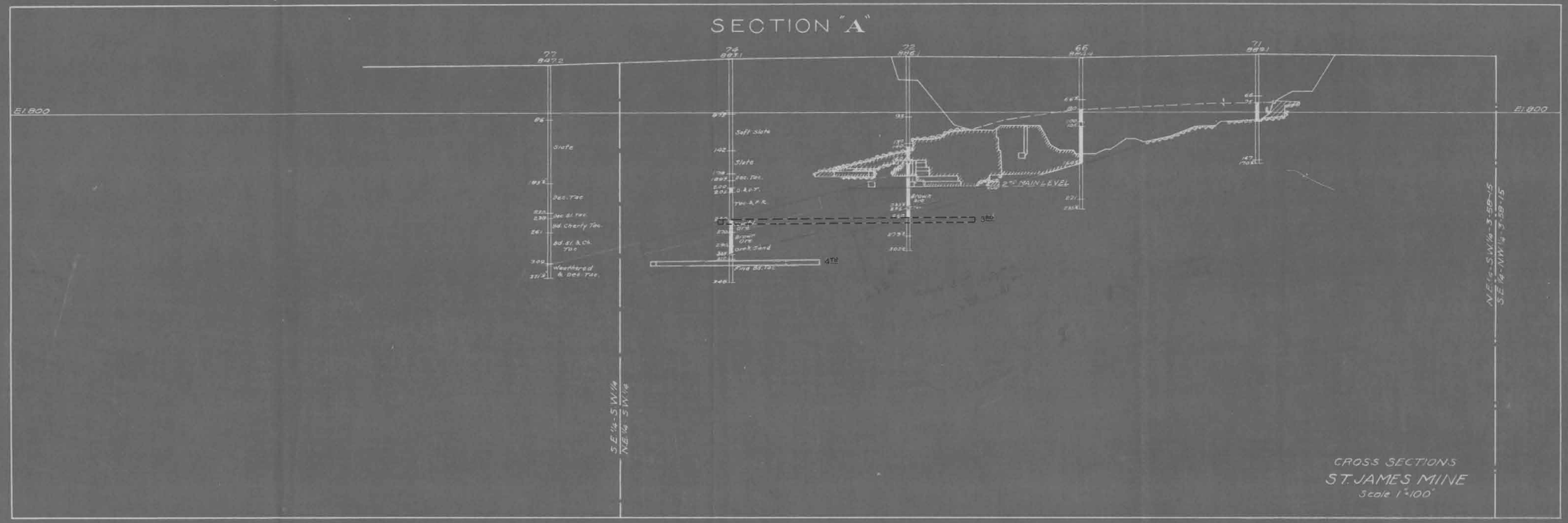
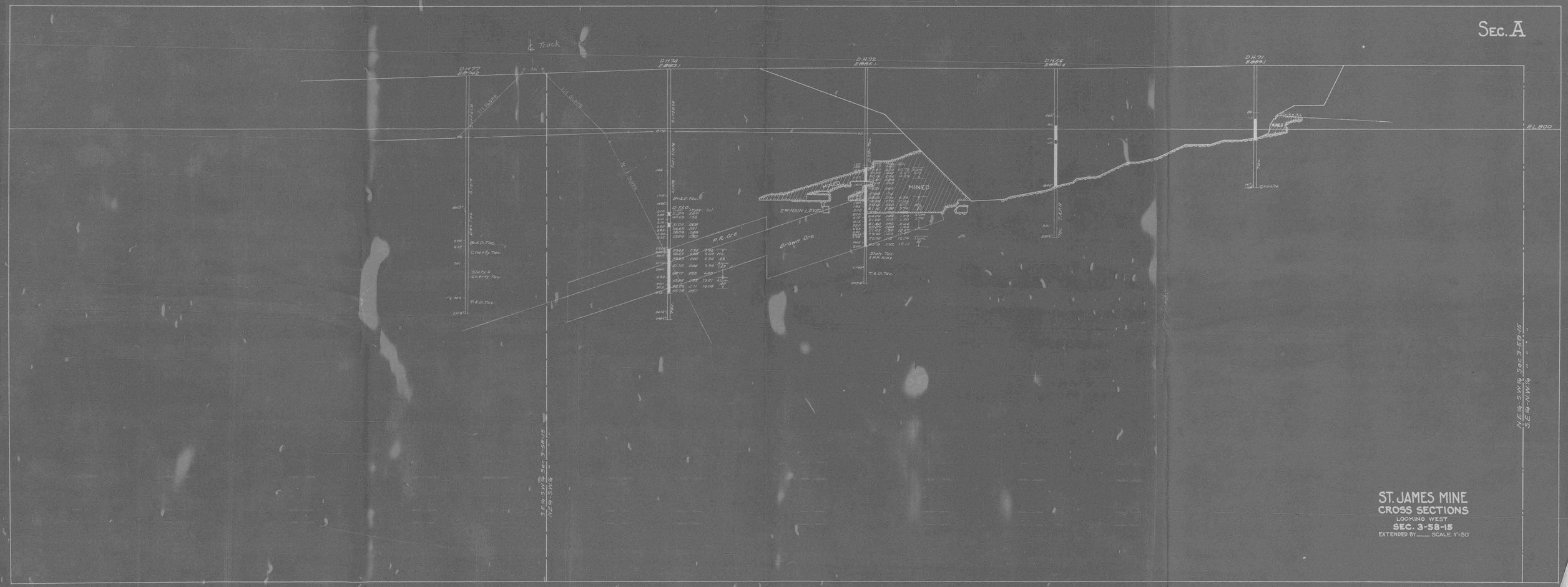
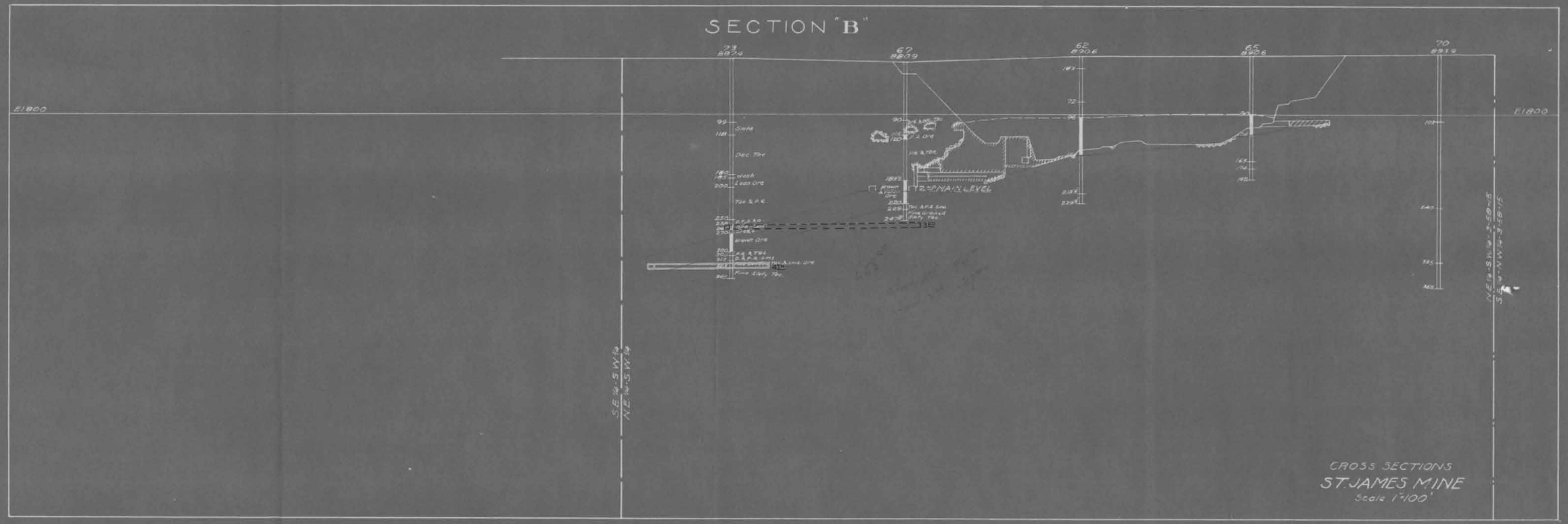

O. I. M. CO.
SW-NW
STATE
3
T58N R15W
CAVE
ST. JAMES YARDS
D.M & I.R. RY.
OLIVER RESERVE
NW-SE
O. I. M. CO.
NE-SE
OLIVER RESERVE
NW-SW
ST. JAMES
NE-SW
ST. JAMES OPEN PIT
SHAFT
890
D M & I.R.RY.
885
880
875
870
PUMP STA.
ST. JAMES STRIPPING DUMP
ST. LONGYEAR-MESABA
SE-SE
O. I. M. CO.
SW-SE
ST. JAMES
SE-SW
FIELD
ST. JAMES
SW-SW
SIXTH AVE.
LOCATION ST.
FIFTH AVE.
ST. JAMES ST.
HOOL BLDGS.
AVE.
JACKSON
AVE.
MESABA
TELEPHONE CO. LINE
ST. JAMES STRIPPING DUMP
STATE
NE-NE
URORA
TOWN OF WHITE ET. AL.
NE-NW
STATE
NW-NE
NW-NW AVE.
SECOND
DEPOT
DM&IR
FEDERAL FORESTRY DEPT

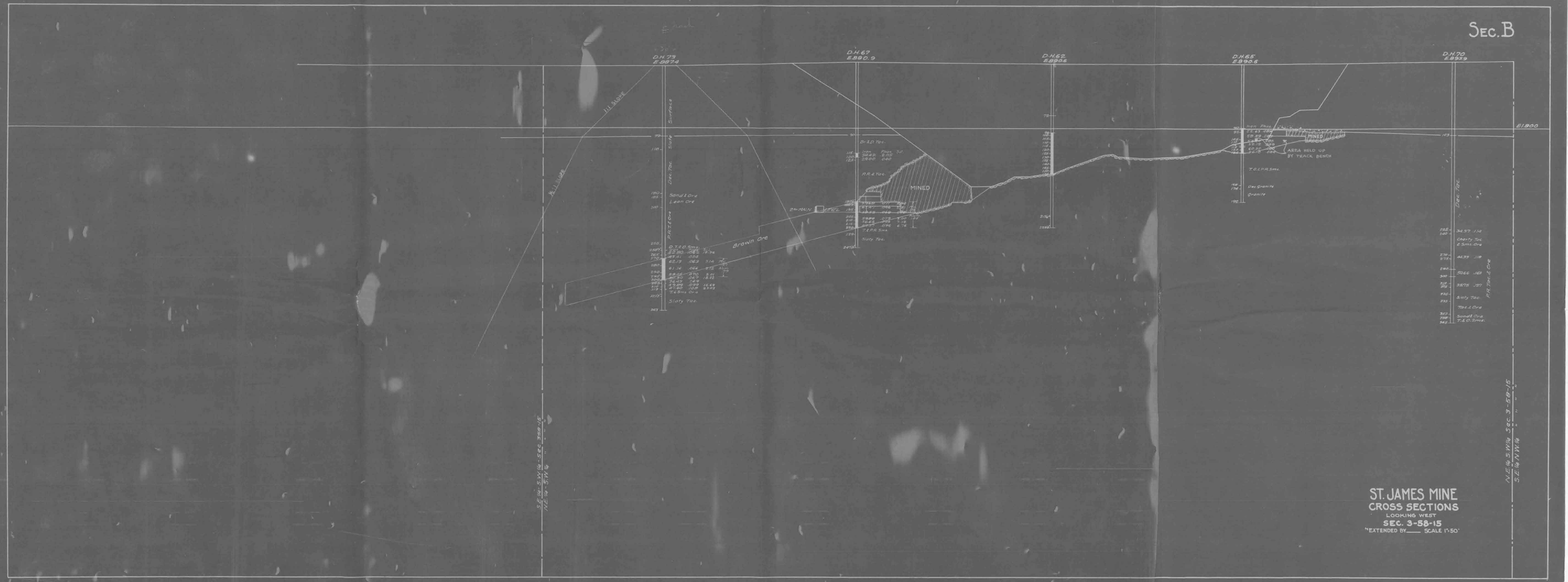


CROSS SECTIONS
ST. JAMES MINE
Scale 1"=100'

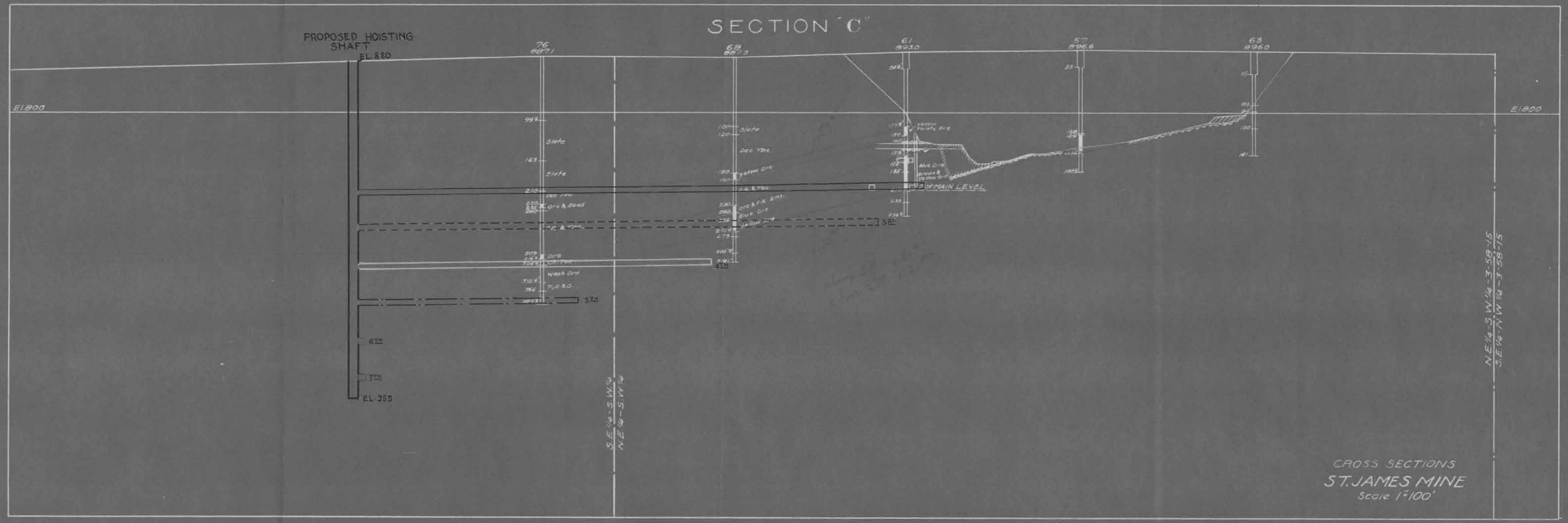


ST. JAMES MINE
CROSS SECTIONS
LOOKING WEST
SEC. 3-58-15
EXTENDED BY ____ SCALE 1"=50'

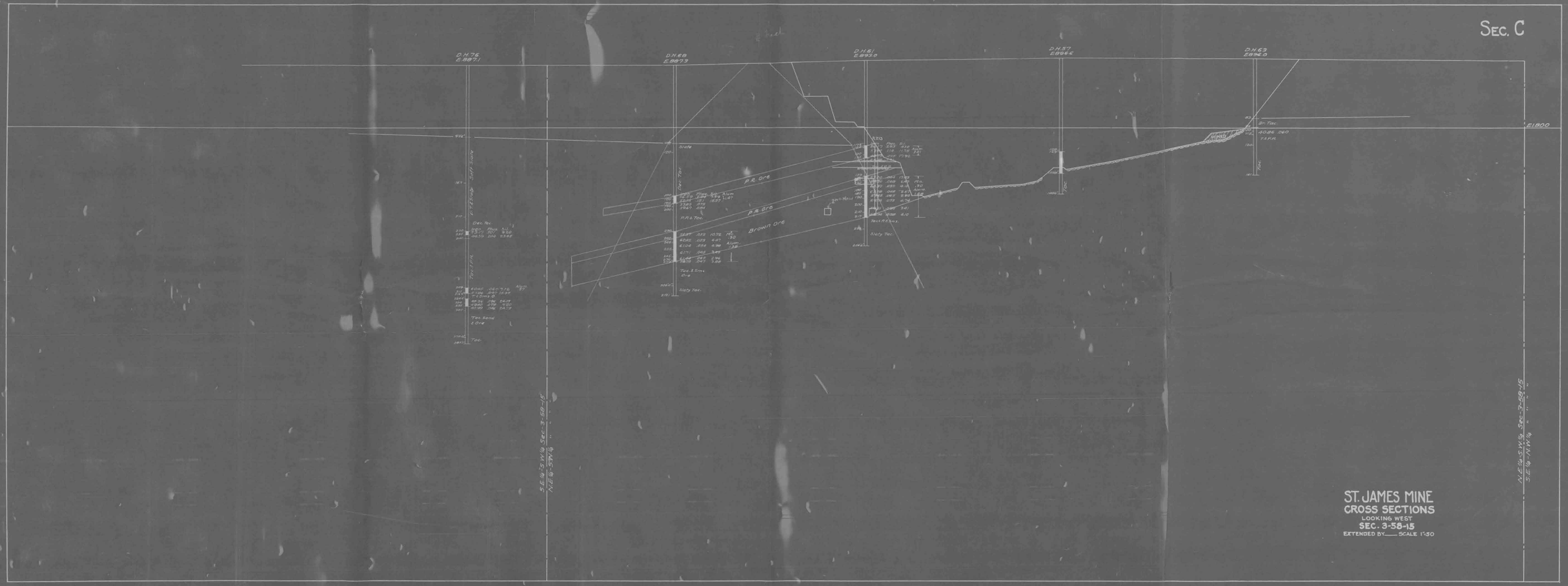

SECTION "B"
E1800
E1800
73
8874
67
8809
62
8906
62
8906
70
8919
Scale
Dec. Tow
Wash
Least Ore
Tow & P.R.
Brown Ore
Fine Sandy Tow.
Tow & Ore
Tow & P.R.
TRANSVERSE LEVEL
S.E.¼-S.W.¼
N.E.¼-S.W.¼
N.E.¼-S.W.¼-S.29-15
S.E.¼-N.W.¼-S.28-15
CROSS SECTIONS
ST. JAMES MINE
Scale 1"=100'

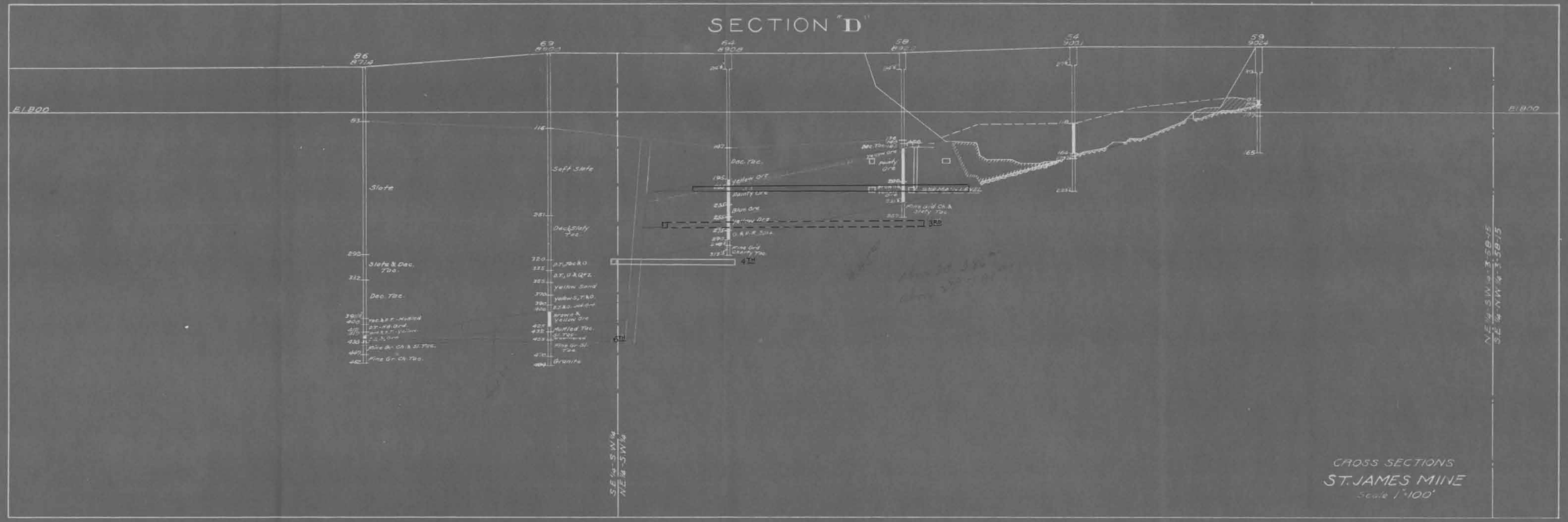


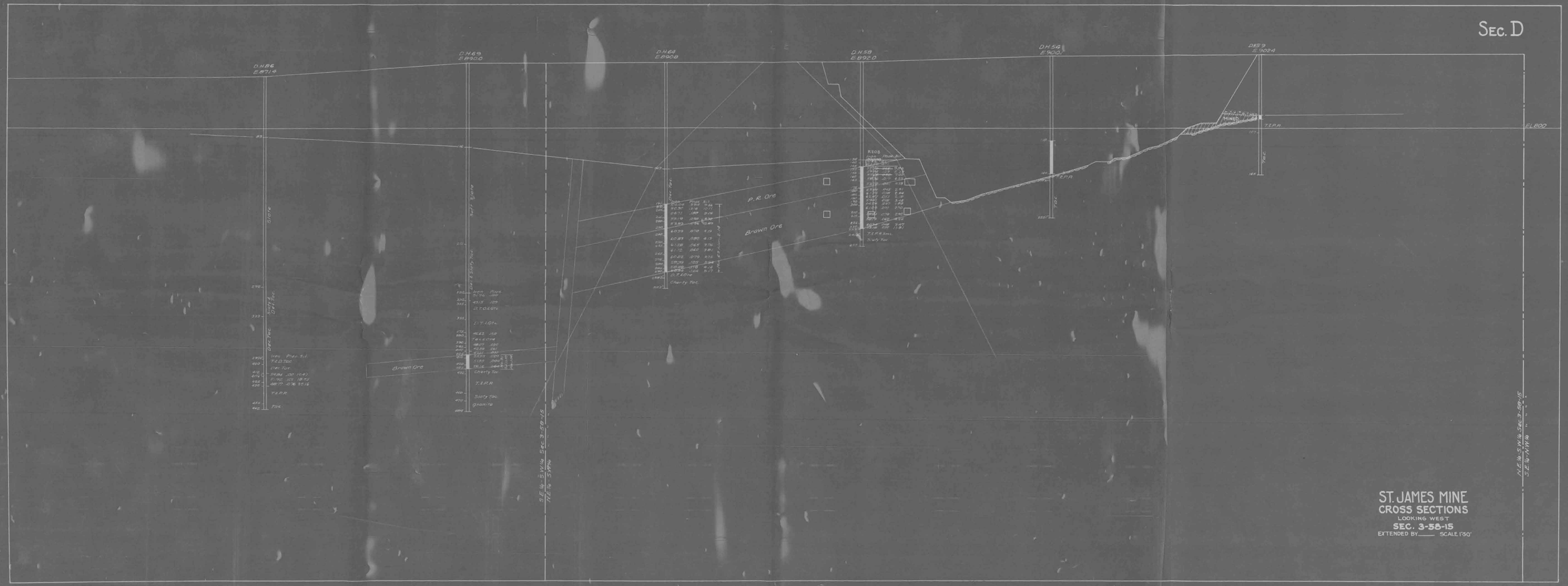
ST. JAMES MINE
CROSS SECTIONS
LOOKING WEST
SEC. 3-58-15
"EXTENDED BY_____ SCALE 1"=50'



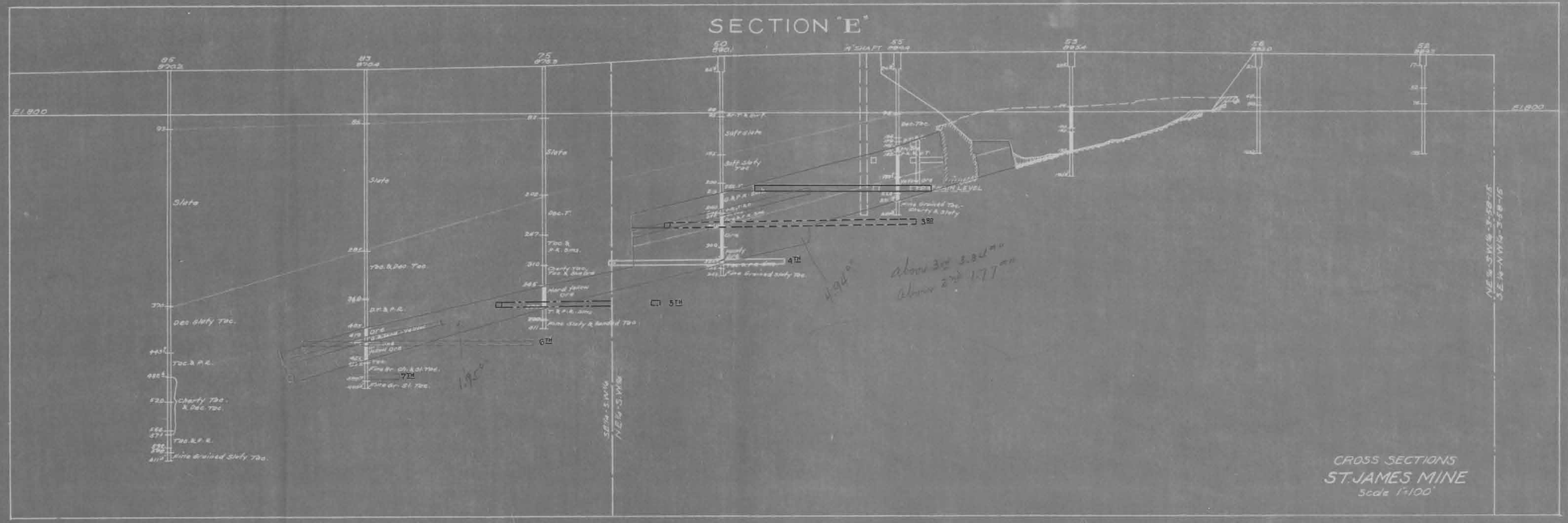
CROSS SECTIONS
ST. JAMES MINE
Scale 1"=100'

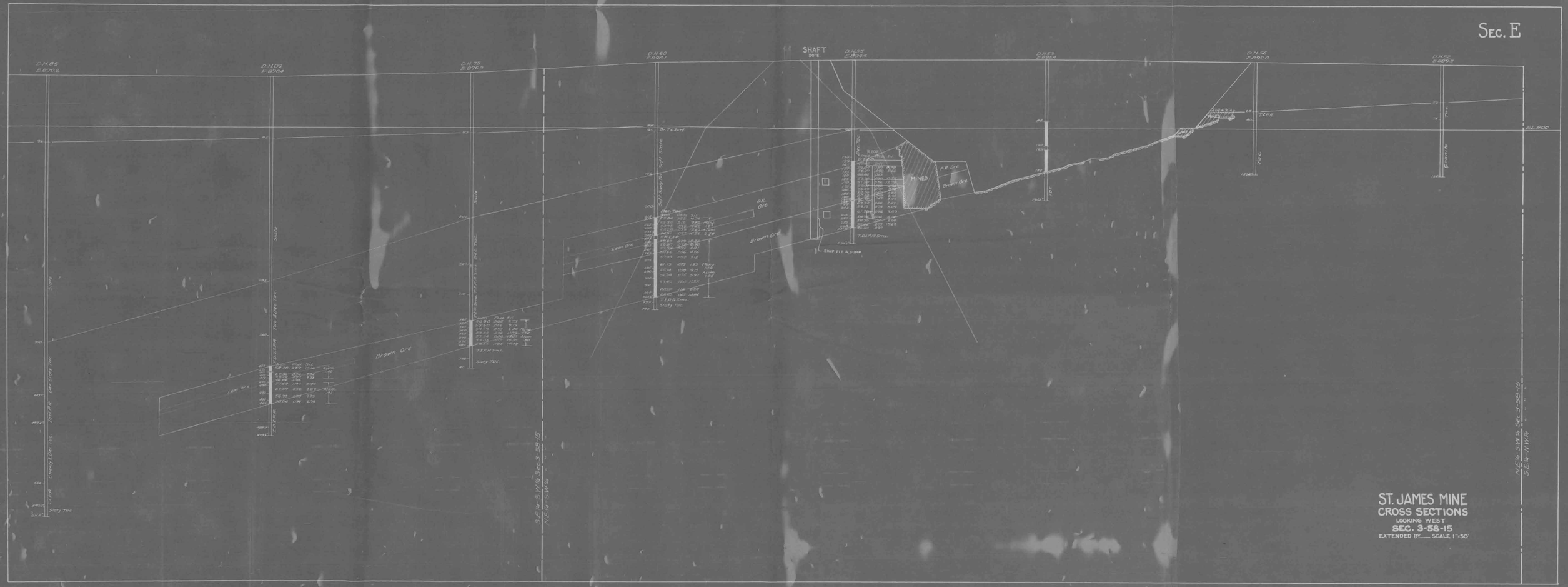

SEC. C
D.H.76
E.8871
D.H.68
E.8873
D.H.61
E.8930
D.H.57
E.8964
D.H.63
E.8940
E1800
P.R. Ore
Brown Ore
Slate
Dec. Tac.
Slaty Tac.
Tac.
Tac. Sand & Ore
Tac. & Sand
Dec. Tac.
Tac. & Sand
Ore
Tac.
Slaty Tac.
Tac. & Sand
Slaty Tac.
Tac. & Sand
Slaty Tac.
Tac.
Tac.
Slaty Tac.
Tac.
Tac.


SECTION "D"
86
8714
63
8903
64
8908
58
54
9031
59
9024
El 800
El 800
Slate
Slate & Dec. Tac.
Dec. Tac.
Soft Slate
Dec. Tac.
Yellow Qtz.
Blue Ore
Granite
3RD
4TH
6TH
S.E. ¼ - S.W. ¼
N.E. ¼ - S.W. ¼
N.E. ¼ - S.W. ¼ = 3.58-15
S.E. ¼ - N.W. ¼ = 3.58-15
CROSS SECTIONS
ST. JAMES MINE
Scale 1" = 100'

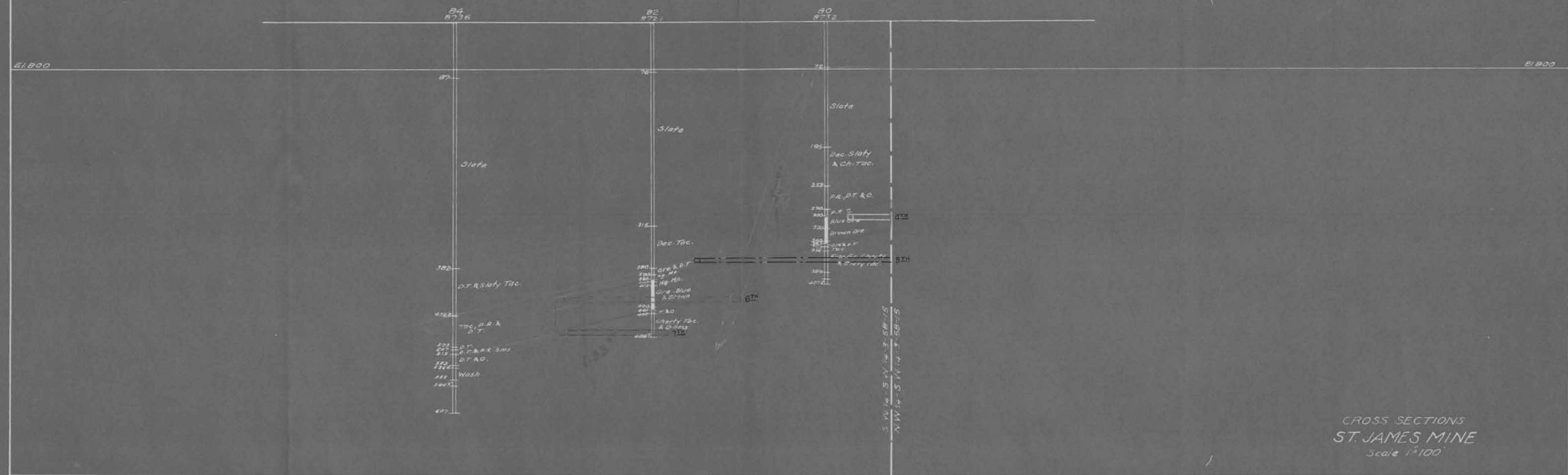


ST. JAMES MINE
CROSS SECTIONS
LOOKING WEST
SEC. 3-58-15
EXTENDED BY_____ SCALE 1"=30'


SECTION "E"
El 800
Slate
Dec. Slaty Tac.
Tac. & P.R.
Cherty Tac. & Dec. Tac.
Fine Grained Slaty Tac.
Slate
Tac. & Dec. Tac.
Dec. T.
Tac. & P.R. Sms.
Cherty Tac. Tac. & Slate
Hard Yellow Ore
T. & P.R. Sms.
Mine Slaty & Banded Tac.
Ore
Fine Gr. Ch. & Sl. Tac.
Fine Gr. Sl. Tac.
Sulf. Slate
Sulf. Slaty Tac.
Dec. Tac.
Fine Grained Tac. Slaty & Slaty
Ore
Fine Grained Slaty Tac.
A SHAFT
MAIN LEVEL
5TH
4TH
6TH
7TH
1.95°
4.94°
above 3rd 5.84m
above 2nd 1.77m
SE¼-SW¼
NE¼-SW¼
NE¼-SW¼-3-58-15
SE¼-NW¼-3-58-15
CROSS SECTIONS
ST. JAMES MINE
Scale 1"=100'

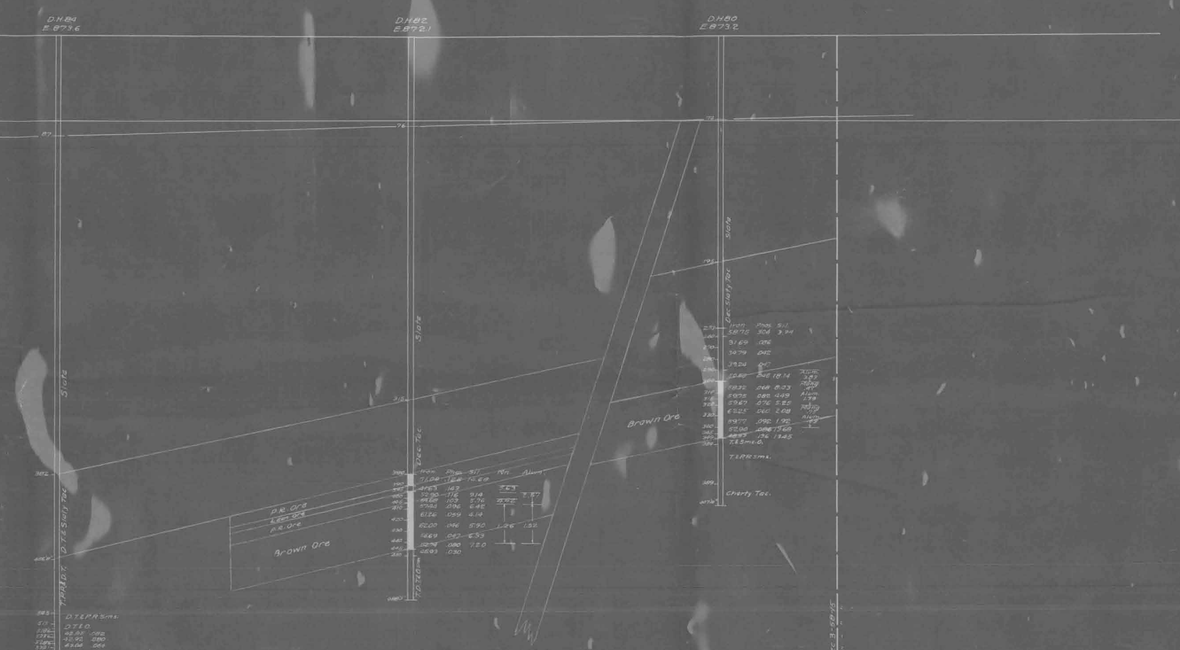

SEC. E
SHAFT
MINED
Brown Ore
Pk. Ore
Lean Ore
Slate
Soft Slate
Hard Slate
Hard Tac.
Soft Tac.
Sandy Tac.
Chlorite Tac.
Sandy Tac.
Slate Tac.
Slate Tac.
Slate

SECTION "F"

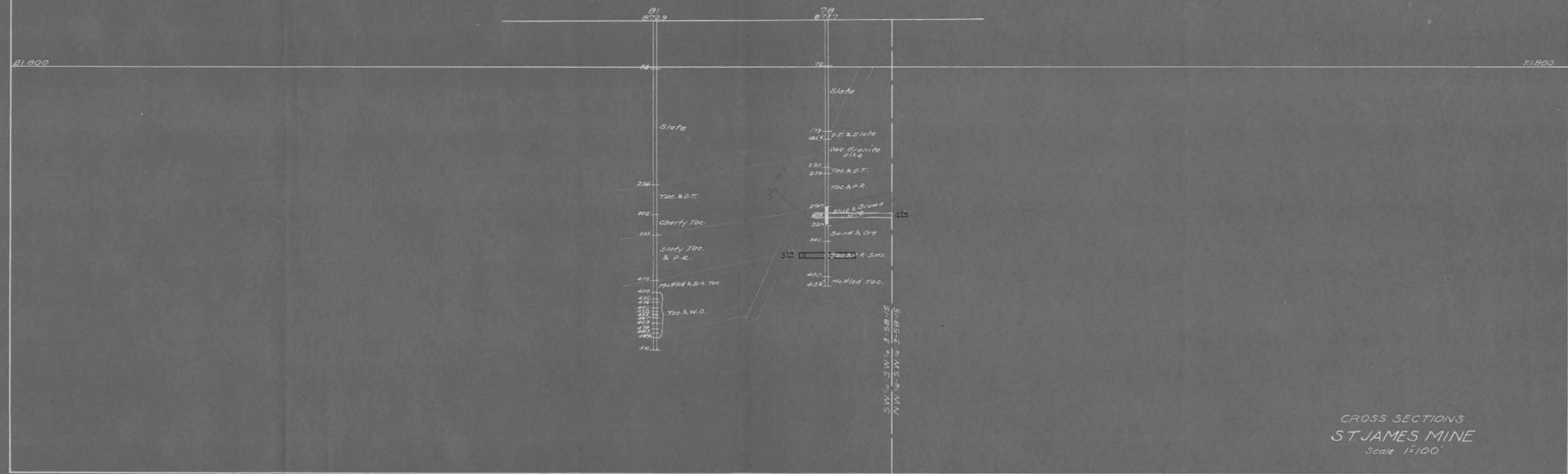


CROSS SECTIONS
ST. JAMES MINE
Scale 1"=100'

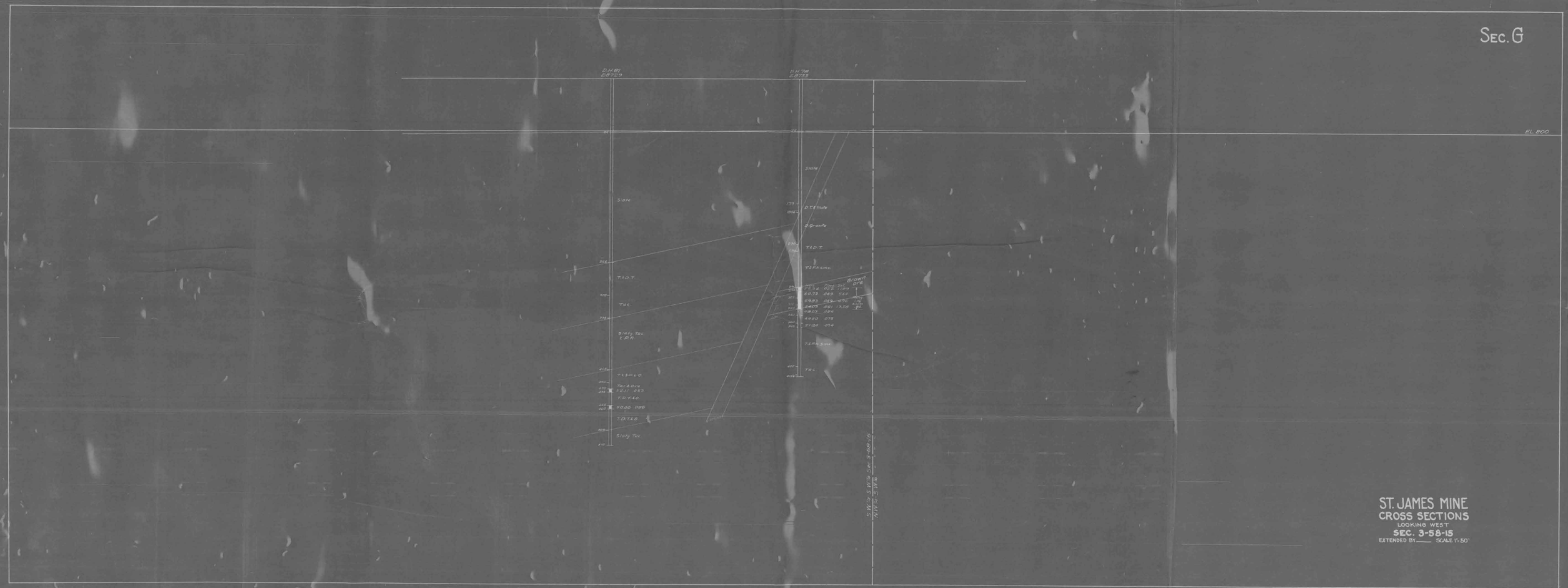
SEC. F


D.H.84
E.8736
D.H.82
E.8792.1
D.H.80
E.8732
EL 800
Brown Ore
Brown Ore
Cherty Tec.
Chert Tec.
Chert Tec.
Chert

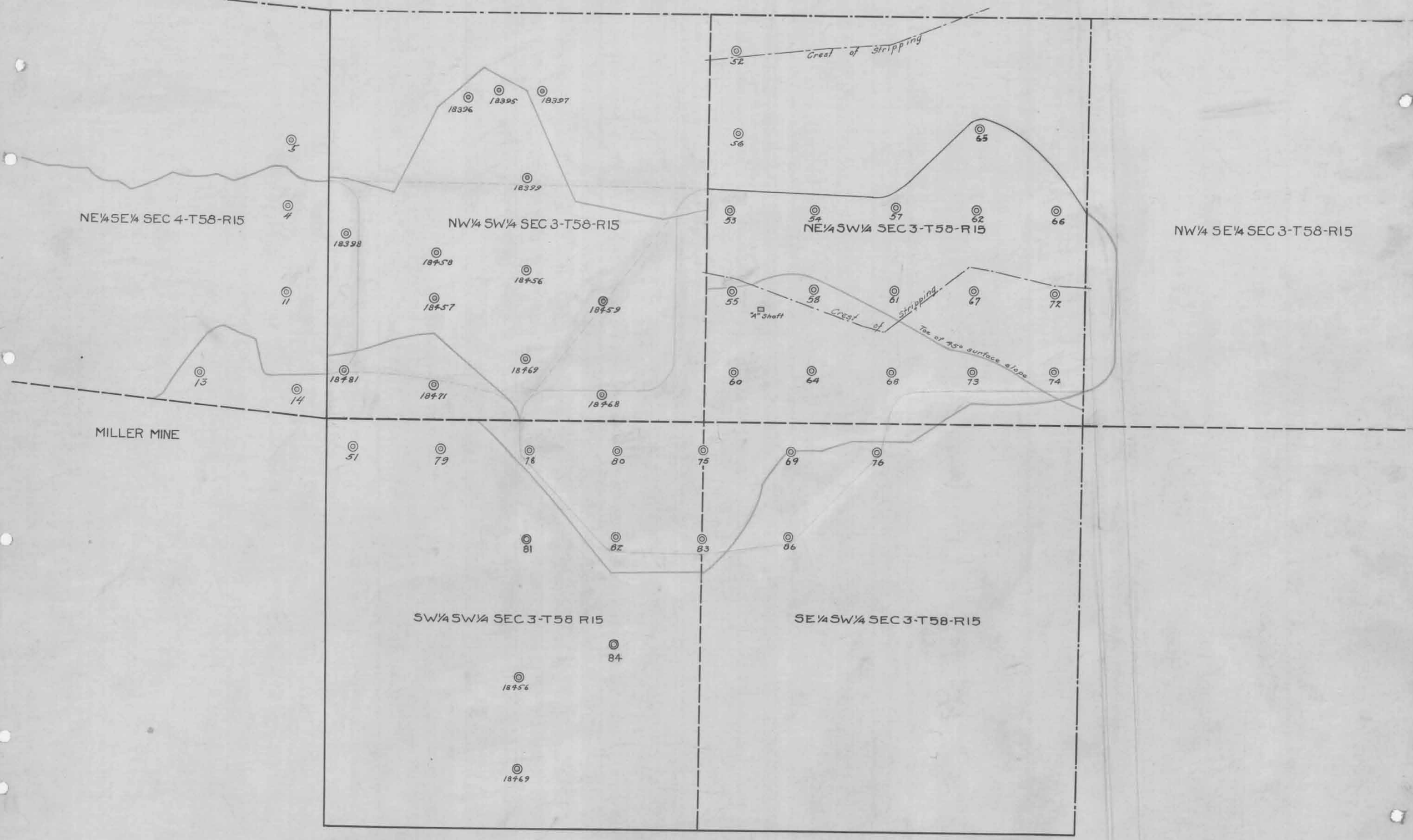
SECTION "G"



CROSS SECTIONS
ST. JAMES MINE
Scale 1" = 100'



ST. JAMES MINE
CROSS SECTIONS
LOOKING WEST
SEC. 3-58-15
EXTENDED BY____ SCALE 1"=50'



nonbessemer

ST JAMES

Scale 200'=1"
Map No 81
June 29 1910.
Revised July 28-1917
Revised July 5-1922
Revised Sept. 14-1923
Revised July 24-1954
Revised Oct. 20, 1955

E. P. M.
M. S. K.
W. R. Appleby Dean.

THE ST. JAMES MINING COMPANY
AURORA, MINNESOTA
MAP OF ST. JAMES MINE
T. 58 N. R. 15 W.
SCALE
DATE 8-20-62
DATUM: SEA LEVEL
LEGEND
SURFACE
FILL
ORE
VIRGINIA SLATE
SYENITE SILL
FERRUGINOUS CHERT
CREST
TOE
ESTIMATED
AUG 29 1962
UNIVERSITY OF MINNESOTA
SCHOOL OF MINES
ORE ESTIMATE DIVISION
RECEIVED
UNIVERSITY OF MINNESOTA
SCHOOL OF MINES
ORE ESTIMATE DIVISION
AUG 22 1962
LOADING POCKET
SAMPLE OFFICE
SUB STATION
SUMP
NW 1/4 - SW 1/4 - SEC. 3
NE 1/4 - SW 1/4 - SEC. 3
NW 1/4 - SE 1/4 - SEC. 3
SE 1/4 - SW 1/4 - SEC. 3
SW 1/4 - SW 1/4 - SEC. 3
SW 1/4 - SE 1/4 - SEC. 3
M P & L POWER LINE
ST. JAMES POWER LINE
DRAINAGE DITCH
D. M. & I. R. RAILROAD
DEEPWELL EL. 1377.6
STOCKPILE AREA
CRUSHING PLANT
DEEPWELL NO. 1270.2
PIPELINE
PIT OFFICE
OIL HOUSE & TANKS
TO POCKET
TO STRIPPING PIONEERS
DIVERSION CHANNEL
TOP OF DIKE ELEV. 1470.0
SPILLWAY ELEV. 1479.0
ST. JAMES SETTLING BASIN
HIGHWAY 35
SIXTH AVE
FIFTH AVE.
FOURTH AVE
NORTH
WEST STREET
MAIN STREET
EAST STREET
FIRST STREET
SECOND STREET EAST
THIRD STREET EAST
TIRE STORAGE
SHOP & OFFICE BUILDING
SHOP SUB
TRUCK STORAGE GARAGE
CREEK