

CITY OF SUPERIOR - Public Works Department

BID OPENING TABULATION

PROJECT: STREETS IMPROVEMENT PROJECT 2003

DS No.: 03-21-PW

Opening: Date: March 25, 2003 (Tues) Time: 10:30 a.m.

BIDDER (Company & City)	Bid Security	Sub List	Bidder's PROOF	AFF.	Assure & EOE	TOTAL BID
1) Northland Const - Duluth MN	bond	✓	✓	✓	✓	\$ 622,929.80
2) J. Kimmes Const - Superior WI	bond	✓	✓	✓	✓	\$ 414,353.46
3) Reuben Johnson - Superior WI	bond	✓	✓	✓	✓	\$ 447,447.00
4)						\$
5)						\$
6)						\$
7)						\$
8)						\$
9)						\$
10)						\$

Opener: Paul King

Recorder: L. Larson

Contract Number:

Project: 12th Street - Superior

Assembly Item List "category" total is \$497,147.65 /LS

20102	446.0000 I.D. @	\$8.00 =	\$3,568.00
0010	CLEARING		
20105	446.0000 I.D. @	\$8.00 =	\$3,568.00
0020	GRUBBING		
20401	8,573.0000 S.Y. @	\$4.25 =	\$36,435.25
0030	REMOVING PAVEMENT		
20403	5,185.0000 L.F. @	\$2.00 =	\$10,370.00
0040	REMOVING CURB		
20405	38.0000 L.F. @	\$3.50 =	\$133.00
0050	REMOVING CURB AND GUTTER		
20406	3,129.0000 S.Y. @	\$2.00 =	\$6,258.00
0060	REMOVING CONCRETE SIDEWALK		
20414	2.0000 EACH @	\$300.00 =	\$600.00
0070	REMOVING MANHOLES		
20416	5.0000 EACH @	\$170.00 =	\$850.00
0080	REMOVING INLETS		
20496	1.0000 EACH @	\$230.00 =	\$230.00
0090	SEALING PIPES		
20501	5,581.0000 C.Y. @	\$3.75 =	\$20,928.75
0100	COMMON EXCAVATION		
21301	1.0000 EACH @	\$3,000.00 =	\$3,000.00
0110	FINISHING ROADWAY		
30404	2,918.0000 TON @	\$8.00 =	\$23,344.00
0120	CRUSHED AGGREGATE BASE COURSE		
30420	4,254.0000 TON @	\$10.00 =	\$42,540.00
0130	CRUSHED AGGREGATE BASE COURSE, OPEN		
30426	824.0000 TON @	\$9.00 =	\$7,416.00
0140	BREAKER RUN STONE		
40204	207.0000 GAL. @	\$2.00 =	\$414.00
0150	ASPHALTIC MATERIAL FOR TACK COAT		
40501	112.0000 TON @	\$210.00 =	\$23,520.00
0160	ASPHALTIC MATERIAL FOR PLANT MIXES		
40722	1,870.0000 TON @	\$20.00 =	\$37,400.00
0170	ASPHALTIC CONCRETE PAVEMENT, TYPE E-1		
41605	223.0000 S.Y. @	\$30.00 =	\$6,690.00
0180	CONCRETE DRIVEWAY, 6-INCH		
60133	5,035.0000 L.F. @	\$8.00 =	\$40,280.00
0190	CONCRETE CURB AND GUTTER, 30-INCH, TYPE D		
60204	26,599.0000 S.F. @	\$2.60 =	\$69,157.40
0200	CONCRETE SIDEWALK, 4-INCH		
60825	308.0000 L.F. @	\$25.00 =	\$7,700.00
0210	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 12-INCH		
60826	192.0000 L.F. @	\$30.00 =	\$5,760.00
0220	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 15-INCH		



State of Wisconsin  
SEH, Inc.  
Estimator Detailed Estimate Assembly Item Lists

Contract Number:

Project: 12th Street - Superior

60827	213.0000 L.F. @	\$36.00 =	\$7,668.00
0230	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 18-INCH		
60829	150.0000 L.F. @	\$40.00 =	\$6,000.00
0240	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 24-INCH		
61102	18.0000 EACH @	\$800.00 =	\$14,400.00
0250	CATCH BASINS, TYPE 2		
61103	2.0000 EACH @	\$850.00 =	\$1,700.00
0260	CATCH BASINS, TYPE 3		
61110	1.0000 EACH @	\$1,500.00 =	\$1,500.00
0270	MANHOLES, TYPE 1		
61112	1.0000 EACH @	\$1,800.00 =	\$1,800.00
0280	MANHOLES, TYPE 3		
61128	3.0000 EACH @	\$760.00 =	\$2,280.00
0290	RECONSTRUCTING MANHOLES		
61151	4.0000 EACH @	\$275.00 =	\$1,100.00
0300	MANHOLE COVERS, TYPE J		
61156	17.0000 EACH @	\$310.00 =	\$5,270.00
0310	INLET COVERS, TYPE H-S		
61167	3.0000 EACH @	\$375.00 =	\$1,125.00
0320	INLET COVERS, TYPE H		
61182	3.0000 EACH @	\$235.00 =	\$705.00
0330	ADJUSTING MANHOLE COVERS		
61201	5,035.0000 L.F. @	\$4.00 =	\$20,140.00
0340	PIPE UNDERDRAIN, 6-INCH		
61910	1.0000 EACH @	\$15,000.00 =	\$15,000.00
0350	MOBILIZATION		
62401	20.0000 MGAL @	\$22.00 =	\$440.00
0360	WATER		
62501	4,457.0000 S.Y. @	\$2.25 =	\$10,028.25
0370	TOPSOIL		
62870	20.0000 EACH @	\$72.00 =	\$1,440.00
0380	INLET PROTECTION, TYPE A		
62872	20.0000 EACH @	\$34.00 =	\$680.00
0390	INLET PROTECTION, TYPE C		
63103	20.0000 MGAL @	\$130.00 =	\$2,600.00
0400	WATERING SODDED AREAS		
63110	4,457.0000 S.Y. @	\$3.00 =	\$13,371.00
0410	LAWN SOD		
63822	16.0000 EACH @	\$65.00 =	\$1,040.00
0420	MOVING SIGNS, TYPE II		
64202	1.0000 EACH @	\$2,000.00 =	\$2,000.00
0430	FIELD OFFICE, TYPE B		
64301	1.0000 EACH @	\$4,000.00 =	\$4,000.00
0440	TRAFFIC CONTROL		
64501	8,583.0000 S.Y. @	\$1.50 =	\$12,874.50
0450	GEOTEXTILE FABRIC, TYPE SAS		

State of Wisconsin  
SEH, Inc.  
Estimator Detailed Estimate Assembly Item Lists

Contract Number:

Project: 12th Street - Superior

64503	8,112.0000 S.Y. @	\$1.25 =	\$10,140.00
0460	GEOTEXTILE FABRIC, TYPE DF		
66501	547.0000 L.F. @	\$2.50 =	\$1,367.50
0470	SAWING EXISTING PAVEMENT		
90005	6.0000 EACH @	\$500.00 =	\$3,000.00
0480	MISC 90005A CONNECT EXISTING SANITARY SEWER OR MANHOLE		
90030	134.0000 L.F. @	\$30.00 =	\$4,020.00
0490	MISC 90030A REMOVING STORM SEWER AND COMBINED SEWER		
90905	648.0000 S.F. @	\$2.00 =	\$1,296.00
0500	POLYSTYRENE INSULATION BOARD, 2-INCH		

Assembly Item List "category" Total = \$497,147.65

*Northland*  
622,929.80  
KEMMES CONST  
441,000  
RJS  
447,447.00

State of Wisconsin  
SEH, Inc.  
Estimator Detailed Estimate

Page 4  
Mar 4, 2003  
2:57 PM

Contract Number:

Project: 12th Street - Superior

Estimated by: SEH user Feb 14, 2003

Checked by:

Approved by:

Units: English  
County: Douglas

Spec Year: 3  
Work Type: AF

Letting Date: Jul 08, 2003

Total Estimate: \$497,147.65

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0010		1.0000 LS @	\$497,147.65 =	\$497,147.65
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Roadway Items

Price based on Assembly Item List "category", page 1.

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Project Total = \$497,147.65



INDEX OF SHEETS

Sheet No. 1	Title
Sheet No.	Typical Sections and Details
Sheet No.	Miscellaneous Quantities
Sheet No.	Plan and Profile
Sheet No.	Computer Earthwork Data
Sheet No.	Cross Sections

TOTAL SHEETS =

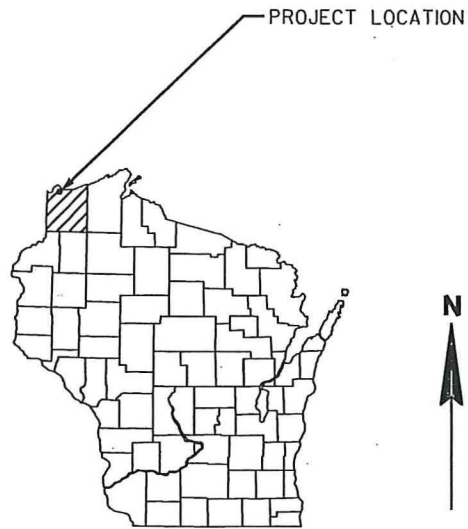
# CITY OF SUPERIOR

## PLAN OF PROPOSED IMPROVEMENT

# 12TH STREET

### HAMMOND AVENUE - GRAND AVENUE

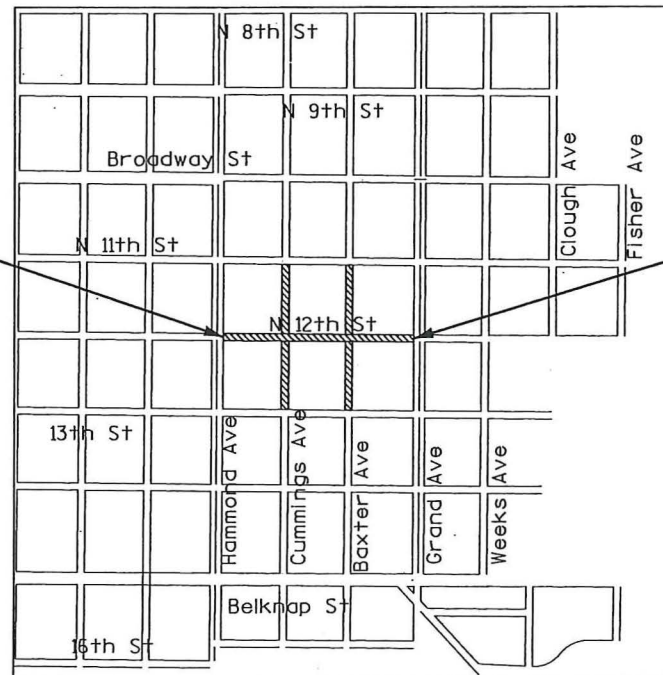
## DOUGLAS COUNTY



SEH PROJECT NUMBER  
**SUPER0004.00**

**BEGIN PROJECT**  
STA 43+99.78  
X = 1442445.782  
Y = 574933.572

**END PROJECT**  
STA 53+60.00



DESIGN DESIGNATION

A.D.T.	=
A.D.T.	=
D.H.V.	=
D.	=
T.	=
DESIGN SPEED	=
ESALS	=

CONVENTIONAL SYMBOLS

COUNTY LINE		COMBUSTIBLE FLUIDS	
CORPORATE LIMITS		UNDERGROUND UTILITIES	
PROPERTY LINE		GAS	
LOT LINE		ELECTRIC	
LIMITED EASEMENT		TELEPHONE OR TELEGRAPH	
EXISTING RIGHT OF WAY		COMMUNICATIONS LINE	
PROPOSED OR NEW R/W LINE		SERVICE PEDESTAL	
SURVEY LINE		POWER POLE	
SLOPE INTERCEPT		TELEPHONE POLE	
ORIGINAL GROUND		RAILROAD	
MARSH OR ROCK PROFILE		SANITARY SEWER	
(To be noted as such)		STORM SEWER	
MARSH AREA		WATER	
WOODED OR SHRUB AREA		EXISTING CULVERT	
		PROPOSED CULVERT	
		(Box or Pipe)	
		CULVERT (Profile View)	

LAYOUT  
SCALE 0 \_\_\_\_\_ MI.

TOTAL NET LENGTH OF CENTERLINE = 0.182 MI.

Coordinates on this plan are referenced to the Wisconsin State Plane Coordinate System (WSPCS), North Zone.

APPROVED FOR

CITY \_\_\_\_\_ of SUPERIOR

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DATE: \_\_\_\_\_ CITY ENGINEER

ORIGINAL PLANS PREPARED BY:



**STANDARD ABBREVIATIONS**

ABUT	ABUTMENT	L	LENGTH OF CURVE
AC	ACRE	LF	LINEAR FOOT
AGG	AGGREGATE	LC	LONG CHORD OF CURVE
ASPH	ASPHALTIC	LS	LUMP SUM
AVG	AVERAGE	MH	MANHOLE
ADT	AVERAGE DAILY TRAFFIC	MOR	MID POINT OF RADIUS
BF	BACK FACE	NC	NORMAL CROWN
BM	BENCH MARK	NO	NUMBER
BR	BRIDGE	OBLIT	OBLITERATE
CE	COMMERCIAL ENTRANCE	PAVT	PAVEMENT
CL OR C/L	CENTER LINE	PE	PRIVATE ENTRANCE
	CENTRAL ANGLE OR DELTA	PVRC	POINT OF VERTICAL REVERSE CURVE
CONC	CONCRETE	QOR	QUARTER POINT OF RADIUS
CR	CREEK	R	RADIUS
CY	CUBIC YARD	RCAEW	REINFORCED CONCRETE APRON ENDWALL
C & G	CURB AND GUTTER	RCCP	REINFORCED CONCRETE CULVERT PIPE
D	DEGREE OF CURVE	RCHECP	REINFORCED CONCRETE HORIZONTAL
DHV	DESIGN HOUR VOLUME		ELLIPTICAL CULVERT PIPE
DISCH	DISCHARGE	RCPSS	REINFORCED CONCRETE PIPE STORM SEWER
DG	DITCH GRADE	REQ'D	REQUIRED
DWY	DRIVEWAY	RES	RESIDENCE OR RESIDENTIAL
X	EAST GRID COORDINATE	RHF	RIGHT-HAND FORWARD
EAT	STEEL PLATE BEAM GUARD	R/W	RIGHT-OF-WAY
	ENERGY ABSORBING TERMINAL	R	RIVER
EOR	END POINT OF RADIUS	RDWY	ROADWAY
EL	ELEVATION	R/L	REFERENCE LINE
ENT	ENTRANCE	SALV	SALVAGED
ESALS	EQUIVALENT SINGLE AXLE LOADS	SAN	SANITARY SEWER
EXC	EXCAVATION	SF	SQUARE FEET
EBS	EXCAVATION BELOW SUBGRADE	SY	SQUARE YARD
EXIST	EXISTING	SDD	STANDARD DETAIL DRAWINGS
FC	FACE OF CURB	STA	STATION
FF	FACE TO FACE	SS	STORM SEWER
FERT	FERTILIZE	SE	SUPERELEVATION RATE
FE	FIELD ENTRANCE	TC	TOP OF CURB
FL	FLOW LINE	T OR TN	TOWN
FO	FIBER OPTIC	T	TRUCKS (PERCENT OF)
CWT	HUNDREDWEIGHT	TYP	TYPICAL
HYD	HYDRANT	VAR	VARIABLE
ID	INSIDE DIAMETER	VC	VERTICAL CURVE
INV	INVERT	Y	NORTH GRID COORDINATE
IP	IRON PIPE ON PIN	YD	YARD
LHF	LEFT-HAND FORWARD		

**UTILITY CONTACTS**

CITY OF SUPERIOR  
SANITARY SEWER SYSTEM (PUBLIC WORKS)  
SUPERIOR, WISCONSIN 54880  
TELEPHONE: 715.394.0333  
ATTENTION: PAUL KING (CITY ENGINEER)

SUPERIOR WATER, LIGHT & POWER CO.  
2915 HILL AVENUE  
P.O. BOX 519  
SUPERIOR, WISCONSIN 54880  
TELEPHONE: 715.395.6315  
ATTENTION: DAVID SMITH (ELECTRIC)  
TELEPHONE: 715.395.6316  
ATTENTION: TOM DONOFRIO (WATER & GAS)

WILLIAMS PIPELINE COMPANY  
2301 WINTER STREET  
SUPERIOR, WISCONSIN 54880  
TELEPHONE: 715.392.2438  
ATTENTION:

**DESIGN CONTACT**

SEH INC.  
831 EAST 2ND STREET  
DULUTH, MN 55805-2103  
TELEPHONE: 218.722.0547  
ATTENTION: SCOTT WEYANDT

CENTURYTEL SERVICE GROUP  
135 N. 21ST STREET  
SUPERIOR, WISCONSIN 54880  
ENGINEERING TELEPHONE: 715.392.0059  
ATTENTION: GARY LEEPER  
CONSTRUCTION TELEPHONE: 608.796.5195  
ATTENTION: STY HOE

CHARTER COMMUNICATIONS  
302 E. SUPERIOR STREET  
DULUTH, MINNESOTA 55802  
TELEPHONE: 218.529.8028  
ATTENTION: ALAN SEIFERT



FOR FIELD LOCATES  
CALL: 1.800.242.8511  
www.DiggersHotline.com

**GENERAL NOTES**

ELEVATIONS SHOWN ON THE PLAN ARE REFERENCED TO THE APPROXIMATE USGS DATUM.

WHEN THE QUANTITY OF THE ITEMS OF BASE OR SURFACE COURSE IS MEASURED FOR PAYMENT BY THE TON THE DEPTH OR THICKNESS OF THE COURSE SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

CURVE DATA IS BASED ON THE ARC DEFINITION.

THE EXACT LOCATION OF THE EROSION CONTROL DEVICES SHALL BE DETERMINED IN THE FIELD.

BEARINGS SHOWN ON THE PLANS ARE GRID BEARINGS TO THE NEAREST SECOND.

THE LOCATION OF ALL DRIVEWAYS WILL BE DETERMINED BY THE ENGINEER.

ALL CURB AND GUTTER RADII ARE SHOWN TO THE EDGE OF PAVEMENT UNLESS NOTED OTHERWISE.

ALL SIDE ROAD EARTHWORK QUANTITIES ARE INCLUDED IN MAINLINE EARTHWORK QUANTITIES.

CONSTRUCT INSIDE EDGE OF SIDEWALK 1/4 INCH HIGHER THAN THE TOP OF CURB, WHEN THEY ARE ADJACENT TO EACH OTHER.

A VERTICAL SAWCUT SHALL BE MADE THROUGH EXISTING DRIVEWAYS AND PAVEMENTS AT REMOVAL LIMITS.

TOP OF CASTING ELEVATIONS SHOWN FOR INLETS REFER TO THE CASTING ELEVATION AT THE FLOWLINE OF GRATE.

ALL STORM SEWER INVERTS, ELEVATIONS, PIPE LENGTHS, AND GRADES ARE COMPUTED CENTER-TO-CENTER OF STRUCTURES.

EXCAVATION BELOW SUBGRADE (EBS) IS NOT USED TO BALANCE YARDAGE AND IS NOT SHOWN ON THE CROSS SECTIONS BUT IS MEASURED AND PAID FOR AS COMMON EXCAVATION.

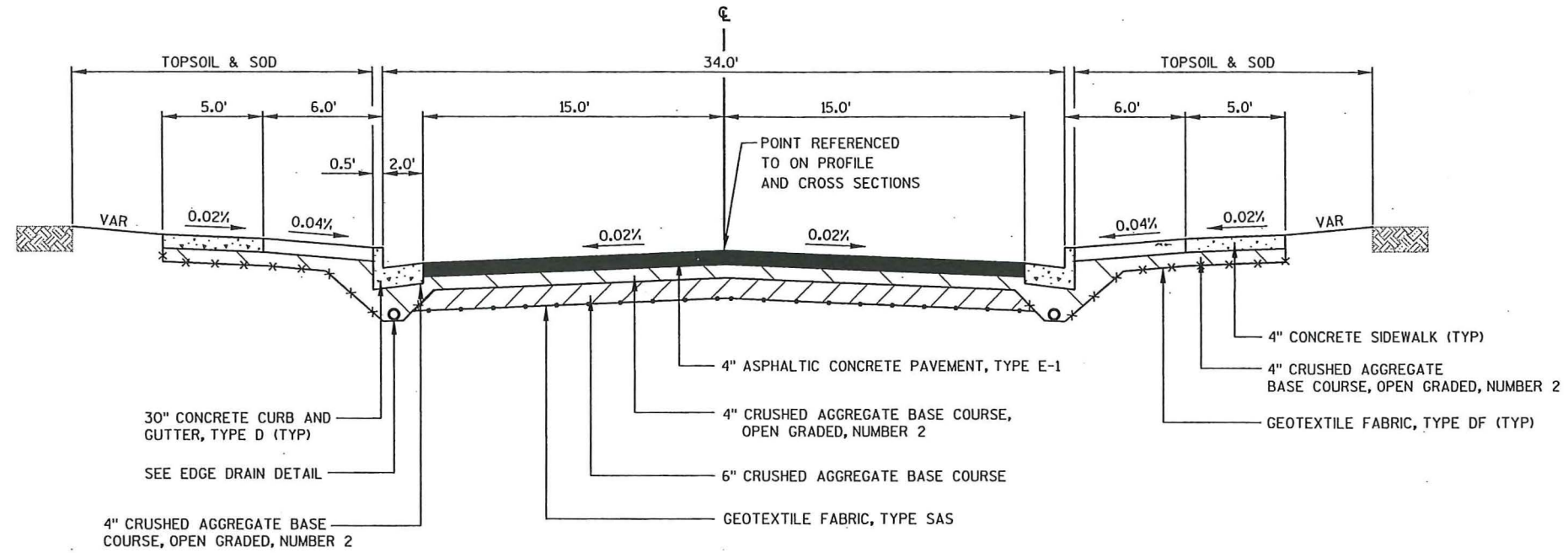
PAVEMENT THICKNESS (INCH)	LOWER LAYER (INCH)	UPPER LAYER (INCH)
4"	2"	2"

▲ CONTROL POINT TABLE		
NO	STATION	COORDINATES
PI	43+52.97 12TH STREET	X = 1442398.995 Y = 574935.051
CP 100	47+53.80, 15.1' LT 12TH STREET	X = 1442800.103 Y = 574937.484
CP 101	51+20.32, 15.0' LT 12TH STREET	X = 1443166.438 Y = 574925.822
PI	54+78.32 12TH STREET	X = 1443523.785 Y = 574899.488
CP 1	INTERSECTION OF HAMMOND AVE/12TH ST	X = 1442364.194 Y = 574951.361
CP 102	INTERSECTION OF 12TH ST/GRAND AVE	X = 1443554.901 Y = 574913.455
PI	10+60.93 CUMMING AVE	X = 1442769.720 Y = 574484.044
PI	17+42.25 CUMMING AVE	X = 1442791.817 Y = 575164.998
PI	19+48.17 CUMMING AVE	X = 1442797.850 Y = 575370.834
PI	20+75.90 BAXTER AVE	X = 1443140.498 Y = 574487.291
PI	29+40.01 BAXTER AVE	X = 1443167.707 Y = 575350.979

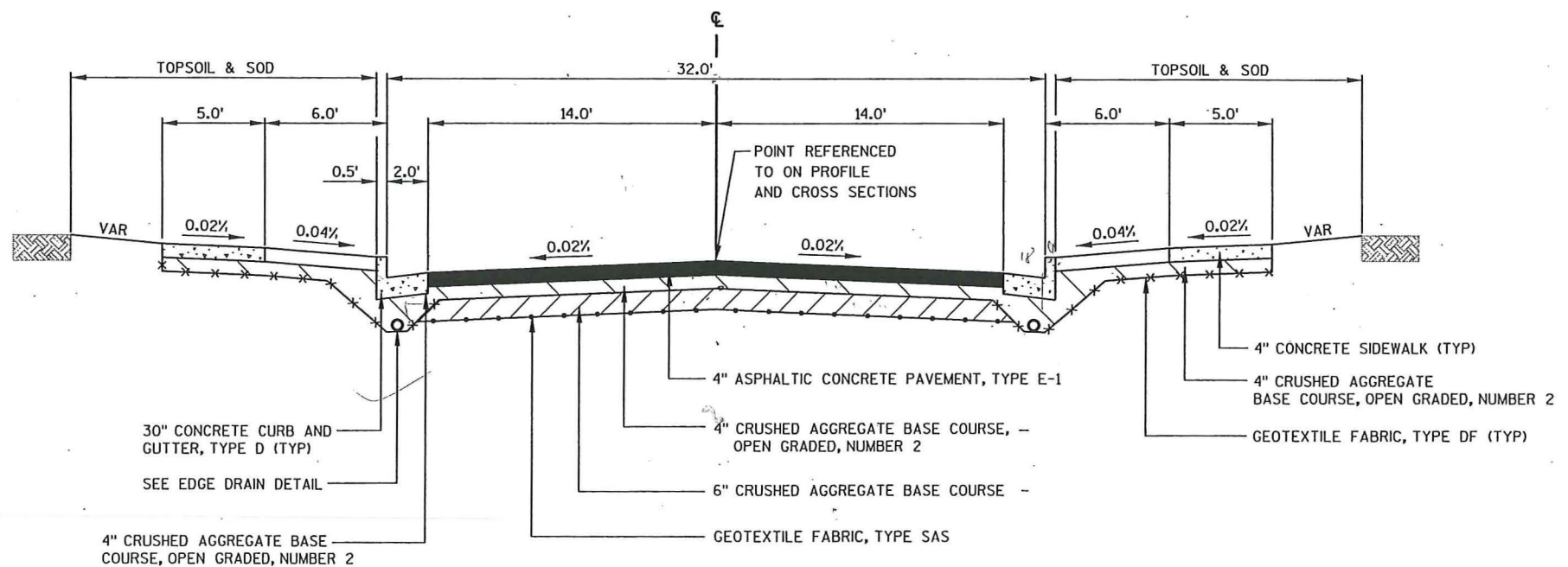
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LEVELS ON \* 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



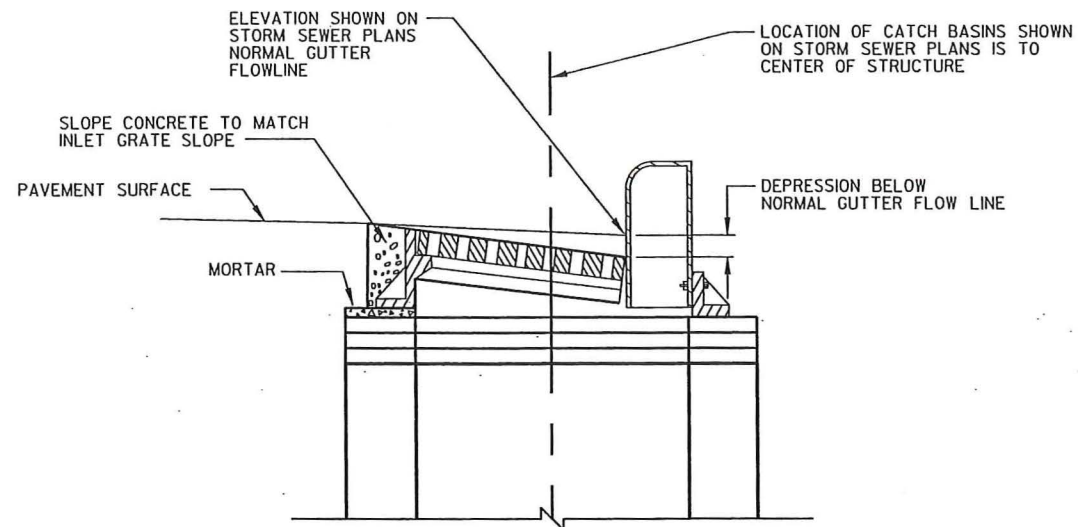
**TYPICAL FINISHED SECTION**  
12TH STREET



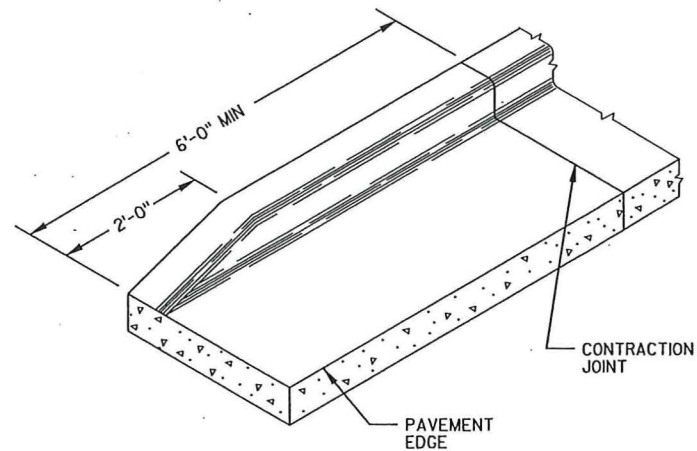
**TYPICAL FINISHED SECTION**  
CUMMING AVENUE  
BAXTER AVENUE

**NOTE:**  
SUB DRAINS SHALL BE PLACED AFTER THE PLACEMENT OF CRUSHED AGGREGATE BASE COURSE, DENSE GRADED AND PRIOR TO THE PLACEMENT OF CRUSHED AGGREGATE BASE COURSE, OPEN GRADED, TO ENSURE THE CRUSHED AGGREGATE BASE COURSE, OPEN GRADED IS DIRECTLY CONNECTED TO THE SUB DRAINS.

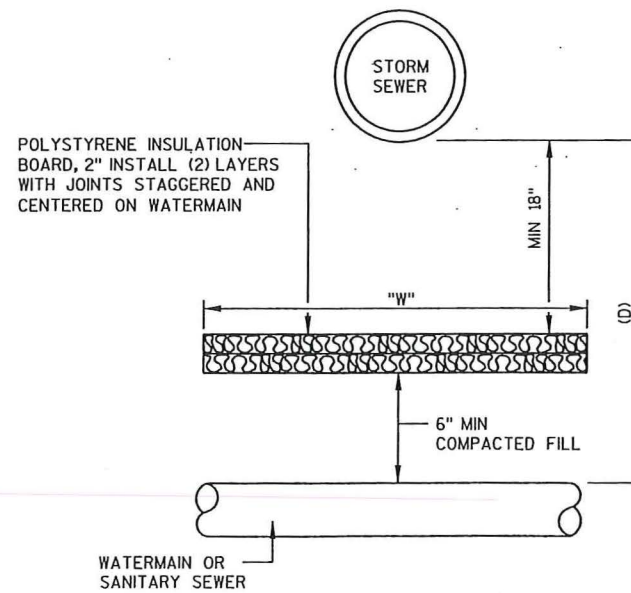
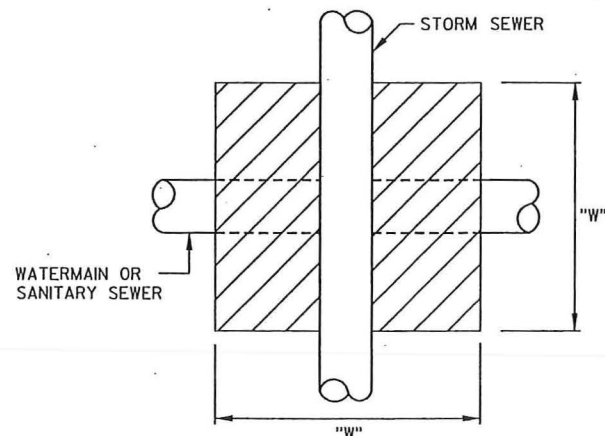




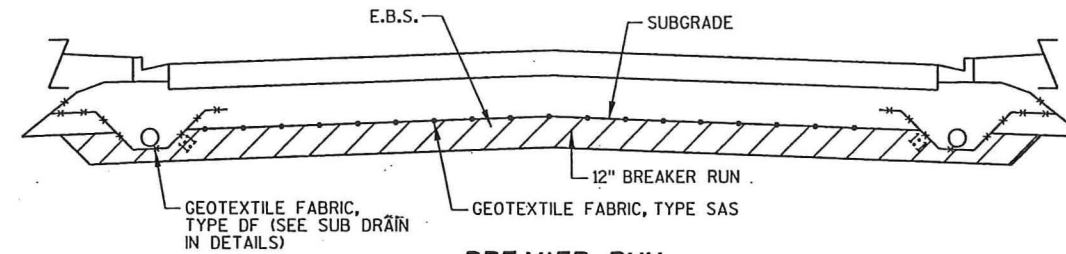
**CATCH BASIN LOCATION DETAIL**



**CURB END TREATMENT**



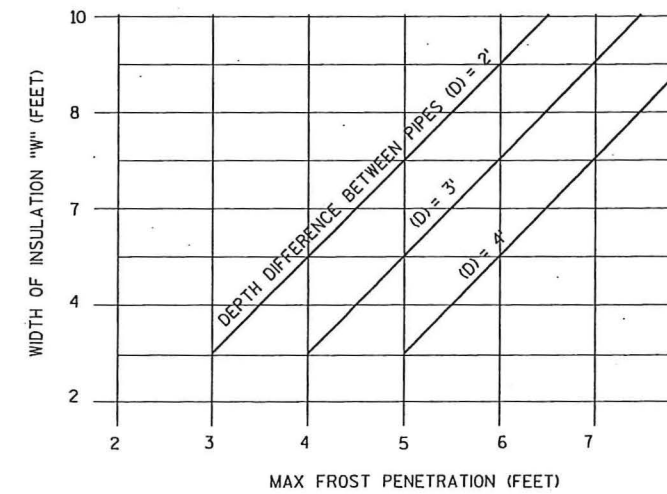
**WATERMAIN OR SANITARY INSULATION DETAIL**



**BREAKER RUN**

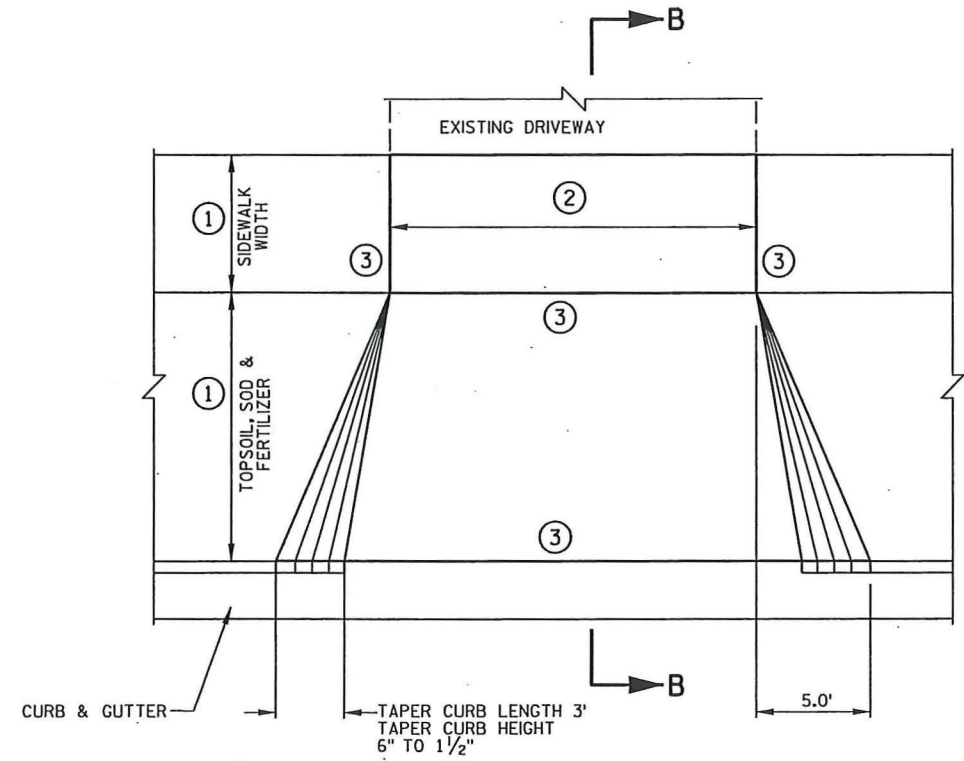
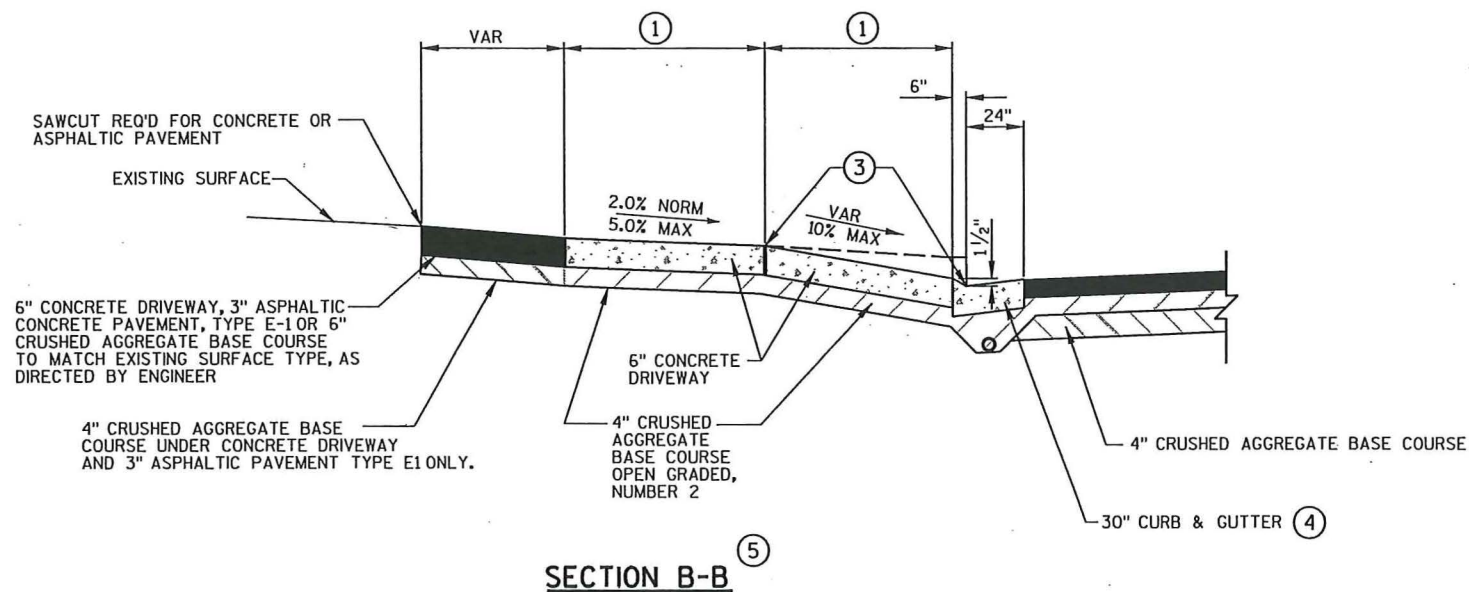
**NOTE:**

SUB DRAINS SHALL BE PLACED AFTER THE PLACEMENT OF CRUSHED AGGREGATE BASE COURSE, DENSE GRADED AND PRIOR TO THE PLACEMENT OF CRUSHED AGGREGATE BASE COURSE, OPEN GRADED, TO ENSURE THE CRUSHED AGGREGATE BASE COURSE, OPEN GRADED IS DIRECTLY CONNECTED TO THE SUB DRAINS. ALL EBS WILL BE PAID AS COMMON EXCAVATION.



LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



- NOTES:
- ① SEE TYPICAL SECTIONS FOR SIDEWALK AND TERRACE WIDTHS.
  - ② SEE PLAN/PROFILES FOR DRIVEWAY WIDTHS.
  - ③ 1/2" PREFORMED EXPANSION FILLER BETWEEN CURB AND NEW SIDEWALK AND BETWEEN NEW SIDEWALK AND EXISTING SIDEWALK AND EXISTING CONCRETE DRIVEWAY.
  - ④ SEE TYPICAL SECTIONS FOR CURB TYPE.
  - ⑤ SEE TYPICAL SECTIONS FOR PLACEMENT OF GEOTEXTILE FABRIC.



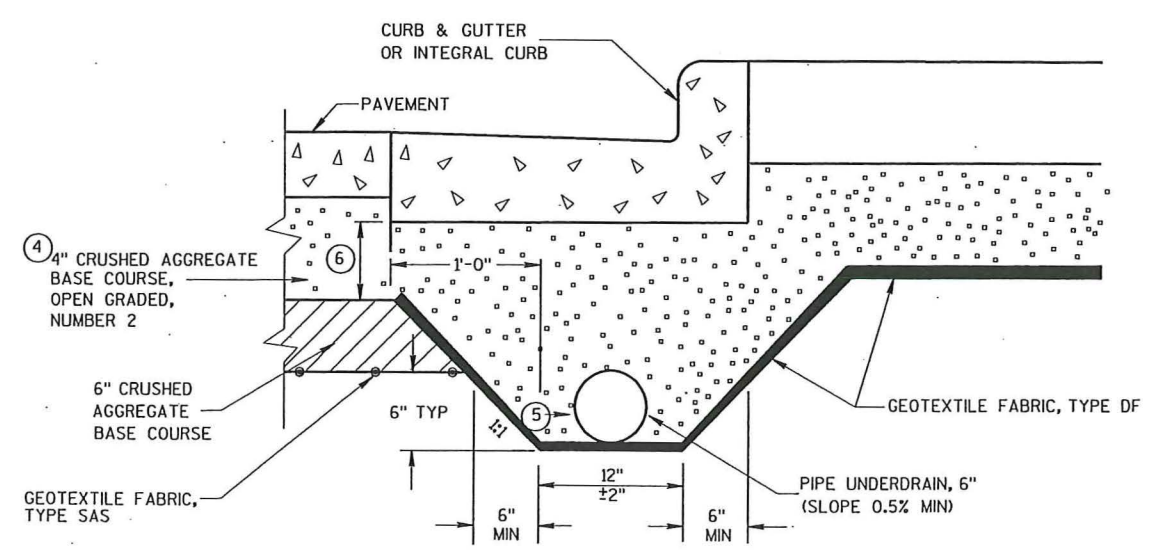
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### GENERAL NOTES

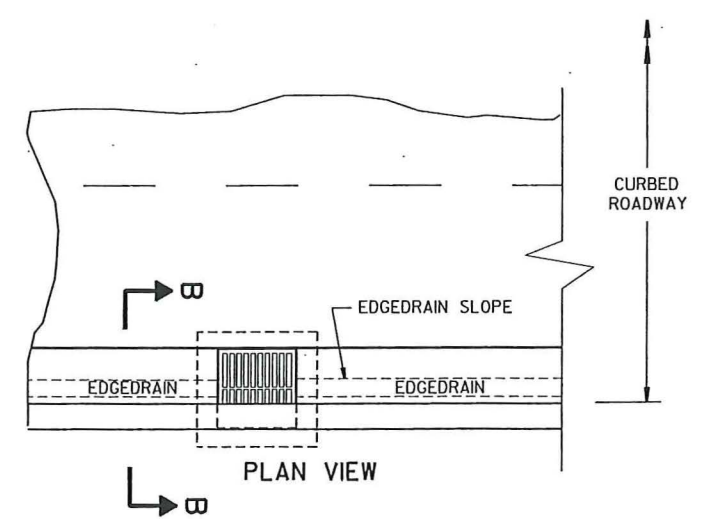
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

THE DIMENSIONS SHOWN ON THE TYPICAL CROSS SECTIONS WILL GOVERN IN THE EVENT THERE IS A CONFLICT WITH THE DETAILS SHOWN ON THIS DRAWING.

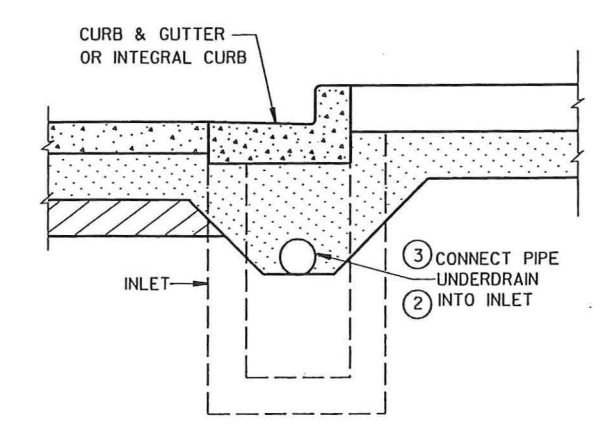
- ① UNPERFORATED PIPE UNDERDRAIN AND FITTINGS FURNISHED FOR OUTFALL PIPE SHALL MEET THE REQUIREMENTS OF ONE OF THE FOLLOWING SPECIFICATIONS:  
 POLYVINYL CHLORIDE (PVC) PLASTIC DRAIN, WASTE, AND VENT PIPE AND FITTINGS, ASTM D 2665, SCHEDULE 40 PVC.  
 TYPE PSM POLYVINYL CHLORIDE (PVC) SEWER PIPE AND FITTINGS, ASTM D 3034, SDR 23.5 PVC SEWER PIPE.
- ② EDGEDRAIN SHALL BE CONNECTED TO INLETS REGARDLESS OF FLOW DIRECTION FOR DRAINAGE AND MAINTENANCE ACCESS.
- ③ EDGEDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF ROADWAY, EXCEPT IN SPECIAL CIRCUMSTANCES AS DIRECTED BY THE ENGINEER IN THE FIELD.
- ④ THE GRADATION OF THE OPEN GRADED BASE COURSE SHALL BE EITHER NO 1 OR NO 2 AS SPECIFIED ELSEWHERE IN THE CONTRACT.
- ⑤ TRENCH BACKFILL WILL BE PAID FOR AS CRUSHED AGGREGATE BASE COURSE, OPEN GRADED NO 1 OR NO 2 AS SPECIFIED.
- ⑥ MAINTAIN A MINIMUM DEPTH OF 4" OF CRUSHED AGGREGATE BASE COURSE, OPEN GRADED, NUMBER 2 UNDER THE CONCRETE CURB AND GUTTER.



EDGEDRAIN IN URBAN ROADWAY



ROADWAY WITH CURBS  
 (EDGEDRAIN CONNECTS INTO INLET STRUCTURES)  
 THIS CONNECTION IS INCIDENTAL TO PLACEMENT OF THE STRUCTURE.

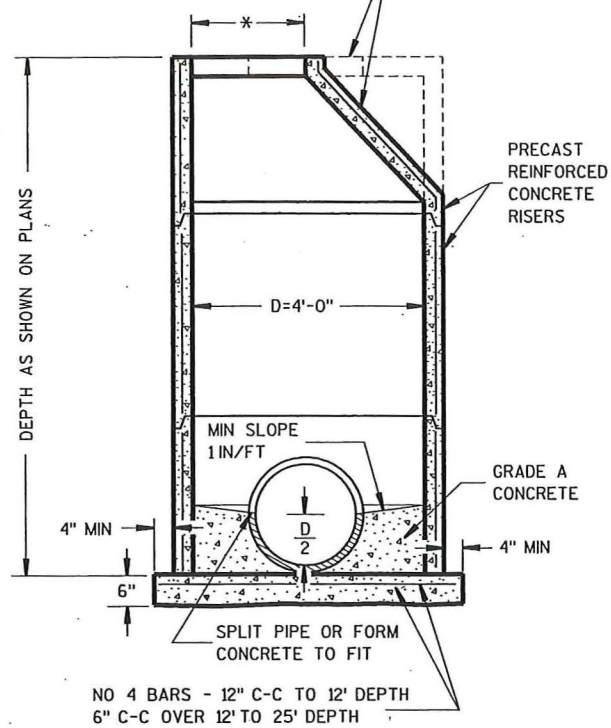


SECTION B-B  
 URBAN CROSS SECTION

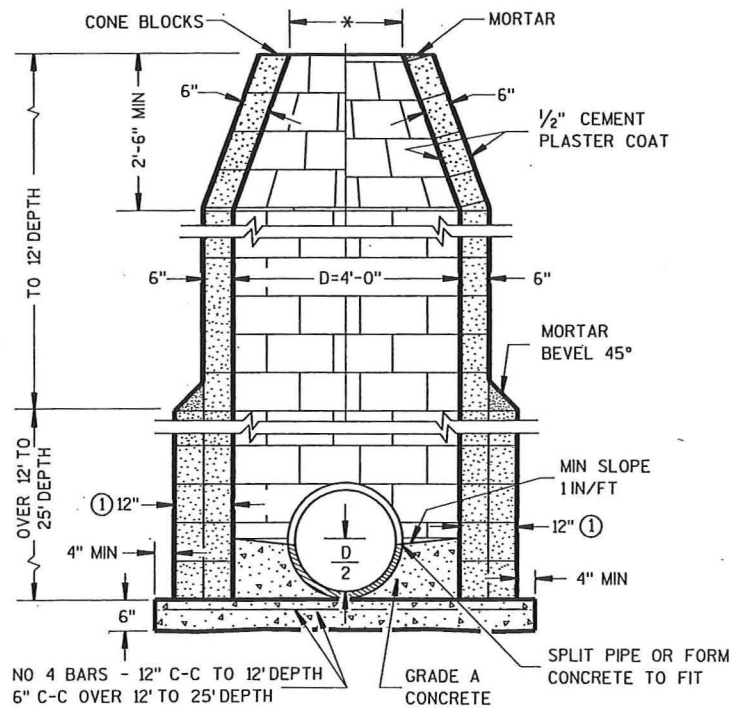


LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62

PRECAST REINFORCED CONCRETE ECCENTRIC OR CONCENTRIC TOP (SEE "GENERAL NOTES")

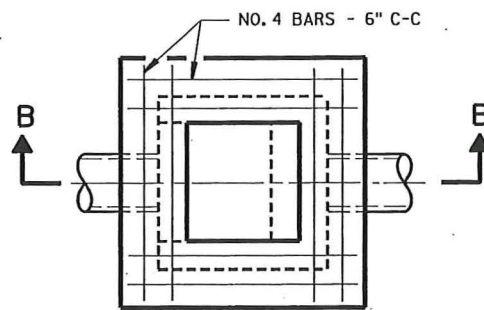


**PRECAST REINFORCED CONCRETE**

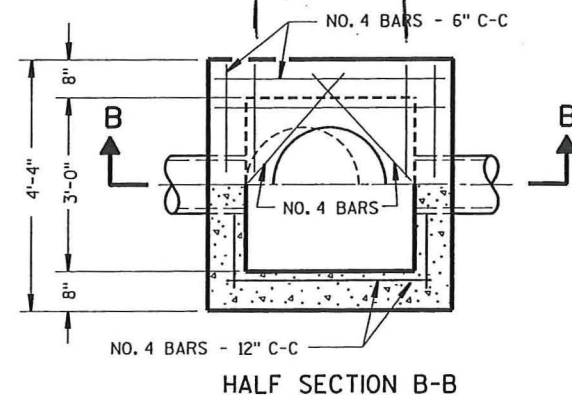


**CONCRETE BLOCK**

**MANHOLES TYPE 1**



PLAN VIEW SHOWING ALTERNATE OPENING



**HALF SECTION B-B**

**GENERAL NOTES**

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

PRECAST REINFORCED BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) MAY BE USED ON CONCRETE BLOCK STRUCTURES. THE CONE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR-LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES; AND BE CAPABLE OF SUPPORTING A CONCENTRATED LOAD OF 300 LBS. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

SOLID ALUMINUM STEPS SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 0.75 INCH. ALUMINUM SURFACES TO BE EMBEDDED IN CONCRETE SHALL BE GIVEN ONE COAT OF SUITABLE QUALITY PAINT, SUCH AS ZINC CHROMATE PRIMER CONFORMING TO FEDERAL SPECIFICATION TT-P-645 OR EQUIVALENT. STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE.

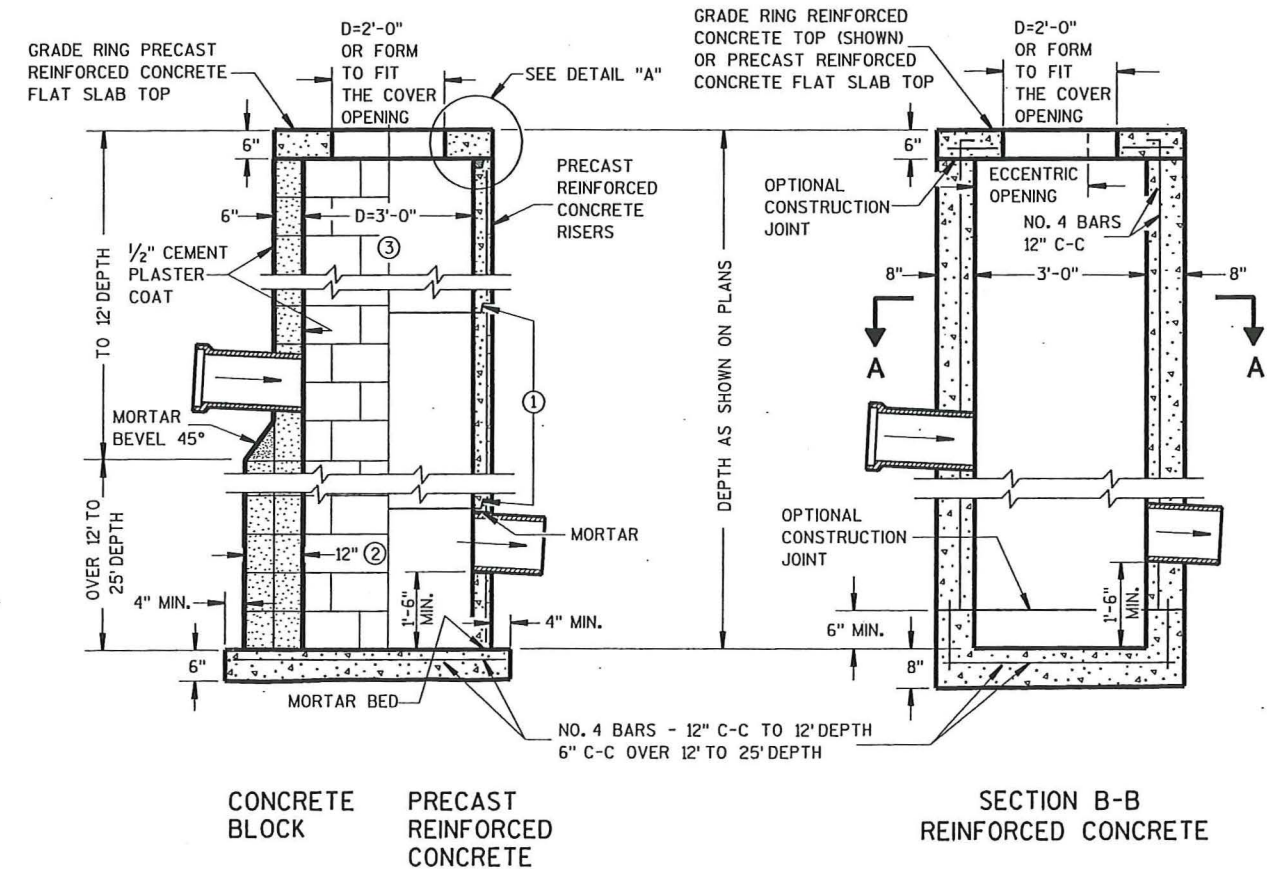
ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED CONCRETE RISERS MAY BE PLACED WITH TONGUE UP OR DOWN.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

\* USE 2'-0" DIAMETER OPENING WITH TYPE "C", "L" AND "J" COVERS, OR 3'-0" DIAMETER WITH TYPE "K" AND "M" COVERS.

① 2 COURSES 6" BLOCK.



**CONCRETE BLOCK**

**PRECAST REINFORCED CONCRETE**

**SECTION B-B REINFORCED CONCRETE**

**CATCH BASINS, TYPE 2**



NOTE:  
GRATE IS REVERSIBLE.

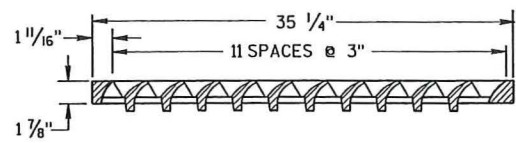
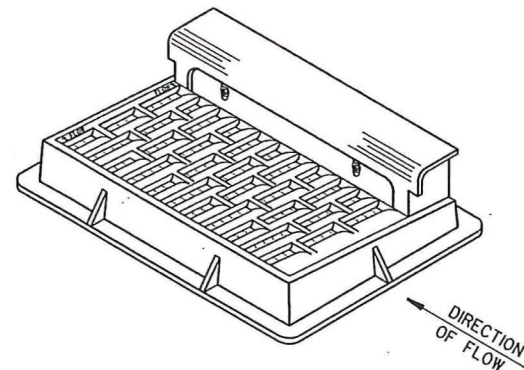
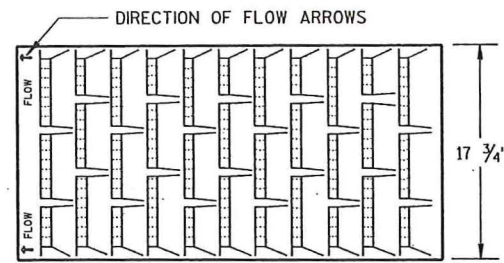
**GENERAL NOTES**

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

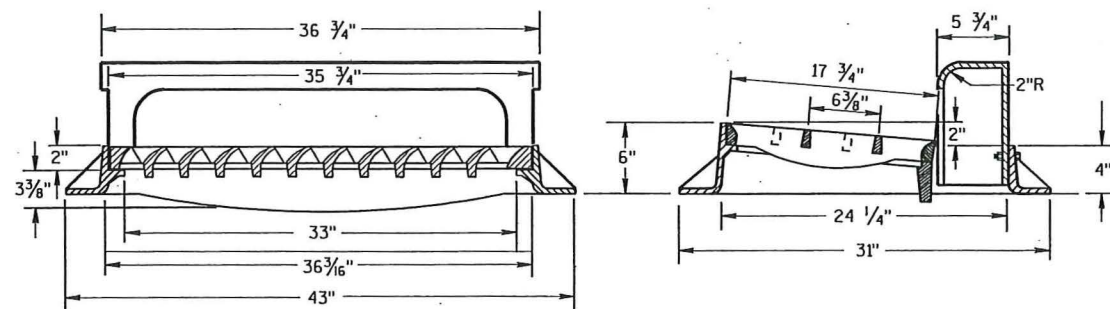
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.



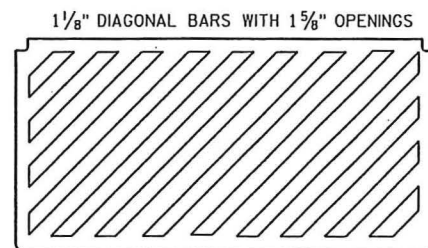
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"



**TYPE "H"**

(APPROXIMATE WEIGHT 422 LBS)

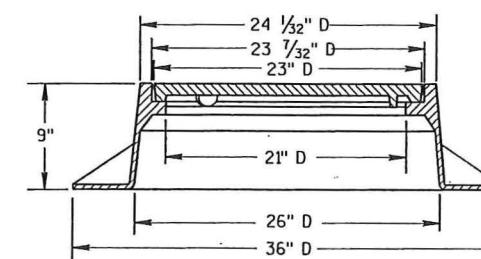
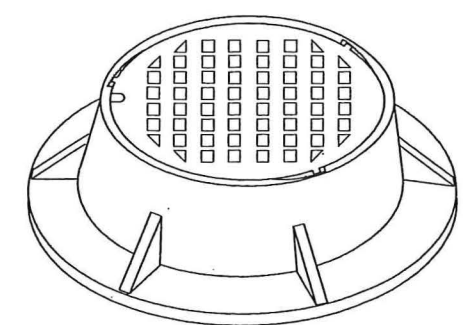
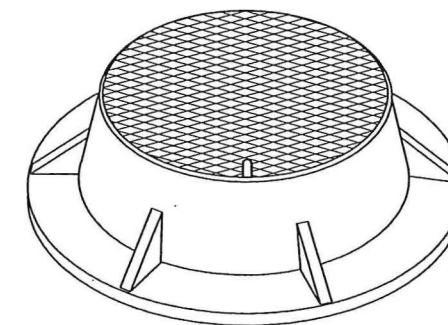
- FRAME..... 175 LBS
- GRATE..... 138 LBS
- CURB BOX..... 109 LBS



**SPECIAL GRATE FOR  
TYPE "H" COVER**

(MEASURES 35 1/4" X 17 3/4" X 2")  
(APPROXIMATE WEIGHT 172 LBS)  
GRATE..... 172 LBS

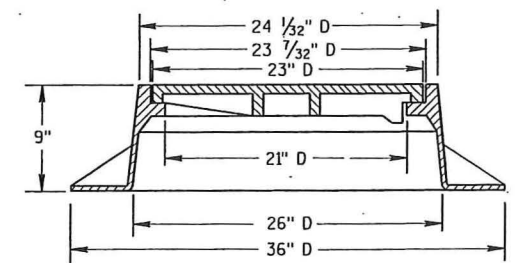
(NOTED AS TYPE H-S ON DRAINAGE TABLE)



**TYPE "J"**

(APPROXIMATE WEIGHT 250 LBS)

- FRAME..... 135 LBS
- LID..... 115 LBS



**TYPE "J" SPECIAL**

TYPE "B" NON-ROCKING SELF-SEAL LID

(APPROXIMATE WEIGHT 245 LBS)

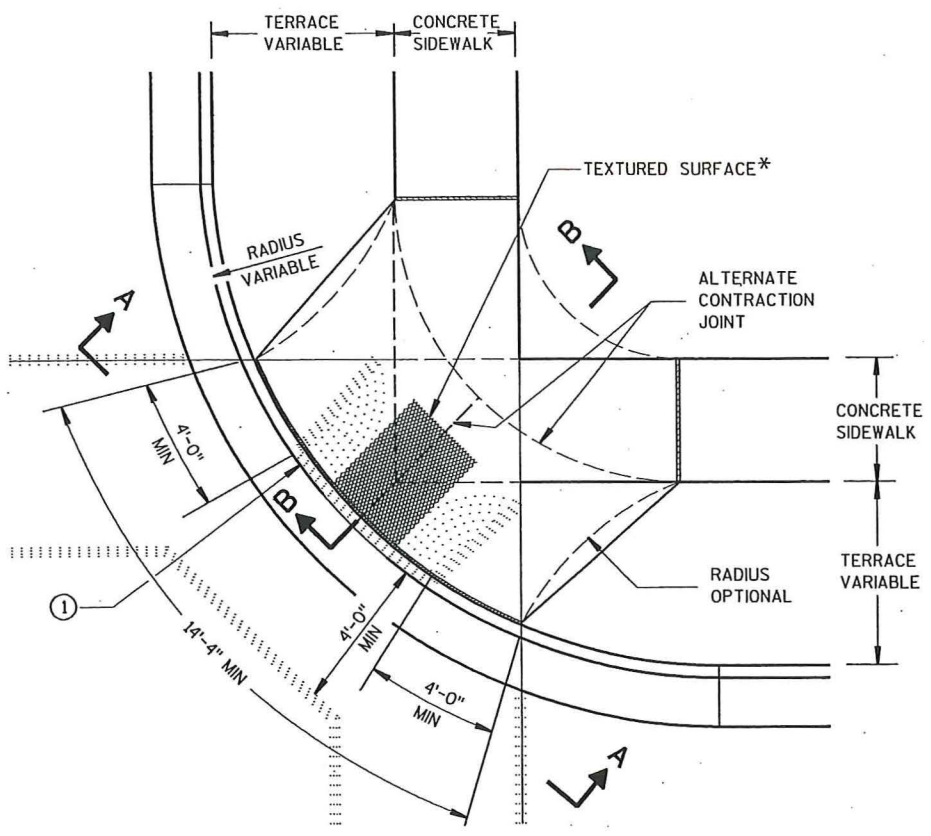
- FRAME..... 145 LBS
- LID..... 100 LBS

(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

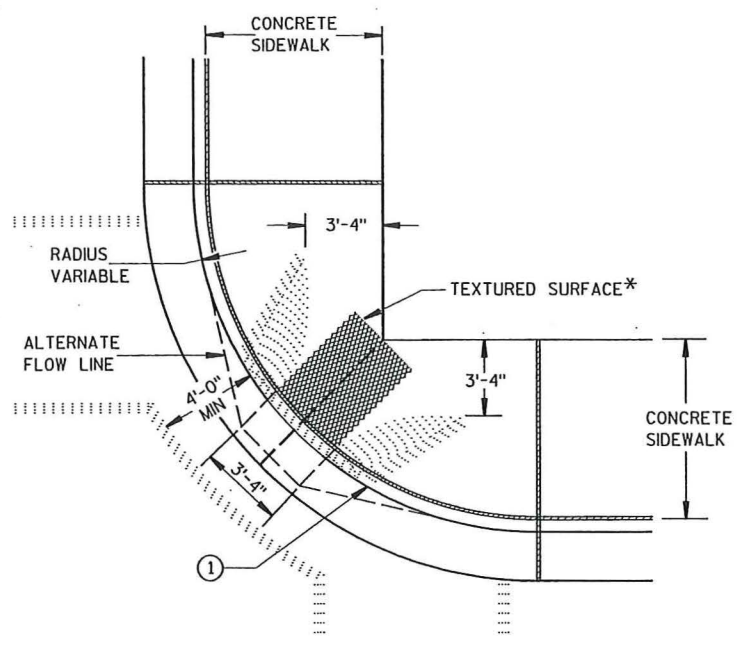


LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62

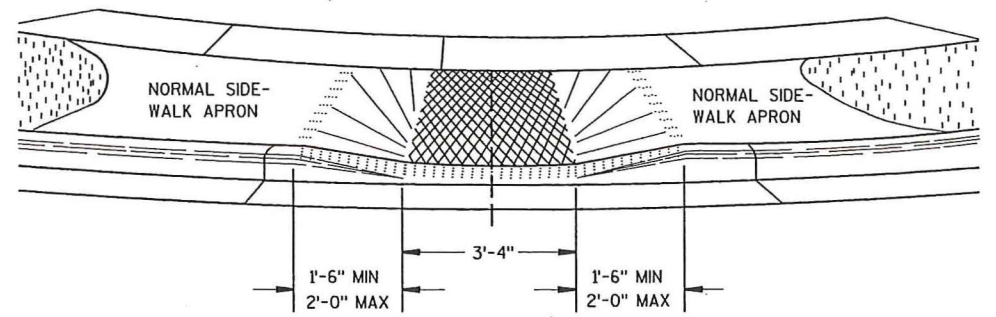


PLAN VIEW  
TYPE 1 RAMP  
(CENTER OF CORNER RADIUS)

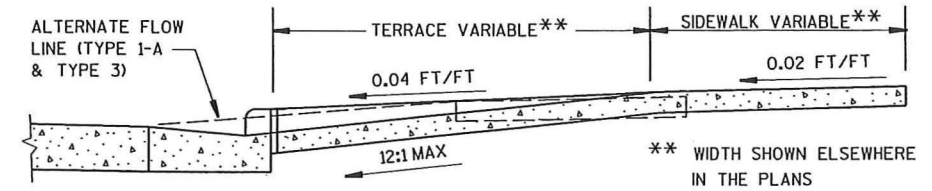
1/2" EXPANSION JOINT-SIDEWALK  
CONTRACTION JOINT  
LOCATION OF JOINTS MAY BE VARIED FROM THOSE SHOWN TO BETTER FIT SITE CONDITIONS AND/OR LOCAL GOVERNMENT PREFERENCE.



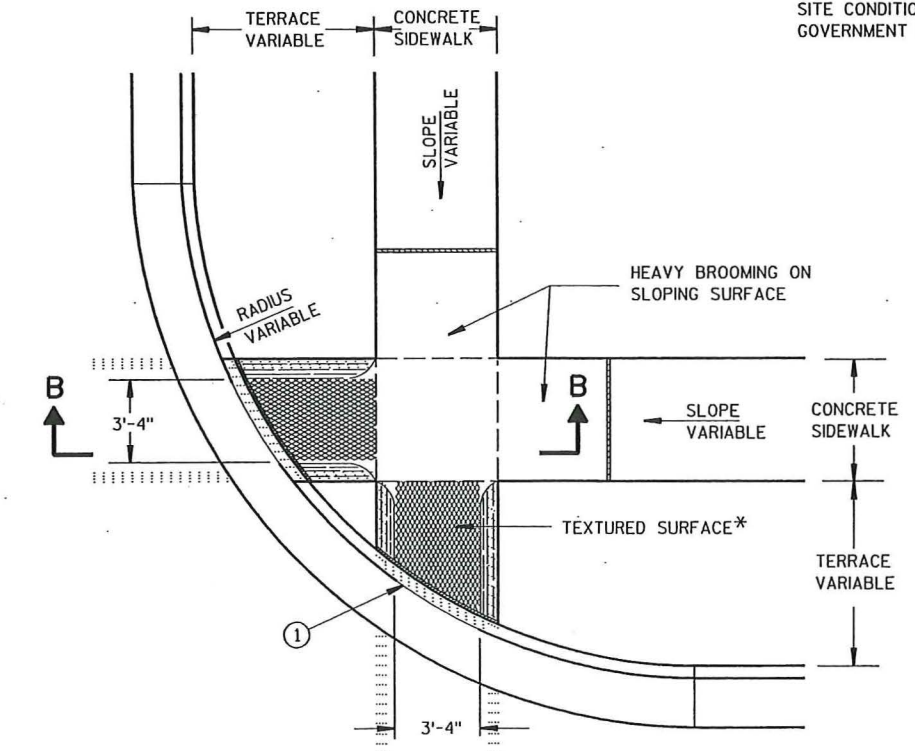
PLAN VIEW  
TYPE 1-A RAMP  
(NO TERRACE)



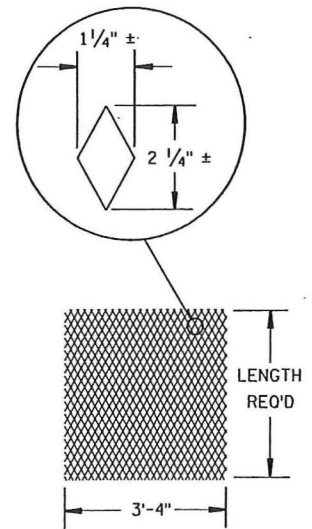
VIEW A-A



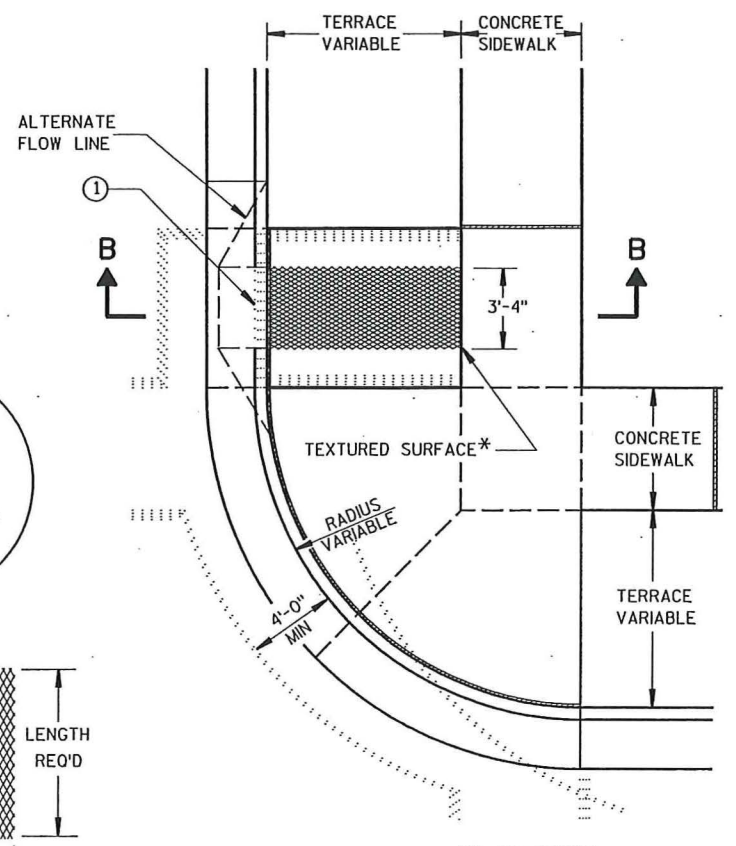
SECTION B-B



PLAN VIEW  
TYPE 2 RAMP  
(ON LINE WITH SIDEWALK)



DETAIL OF DIAMOND PATTERN\*



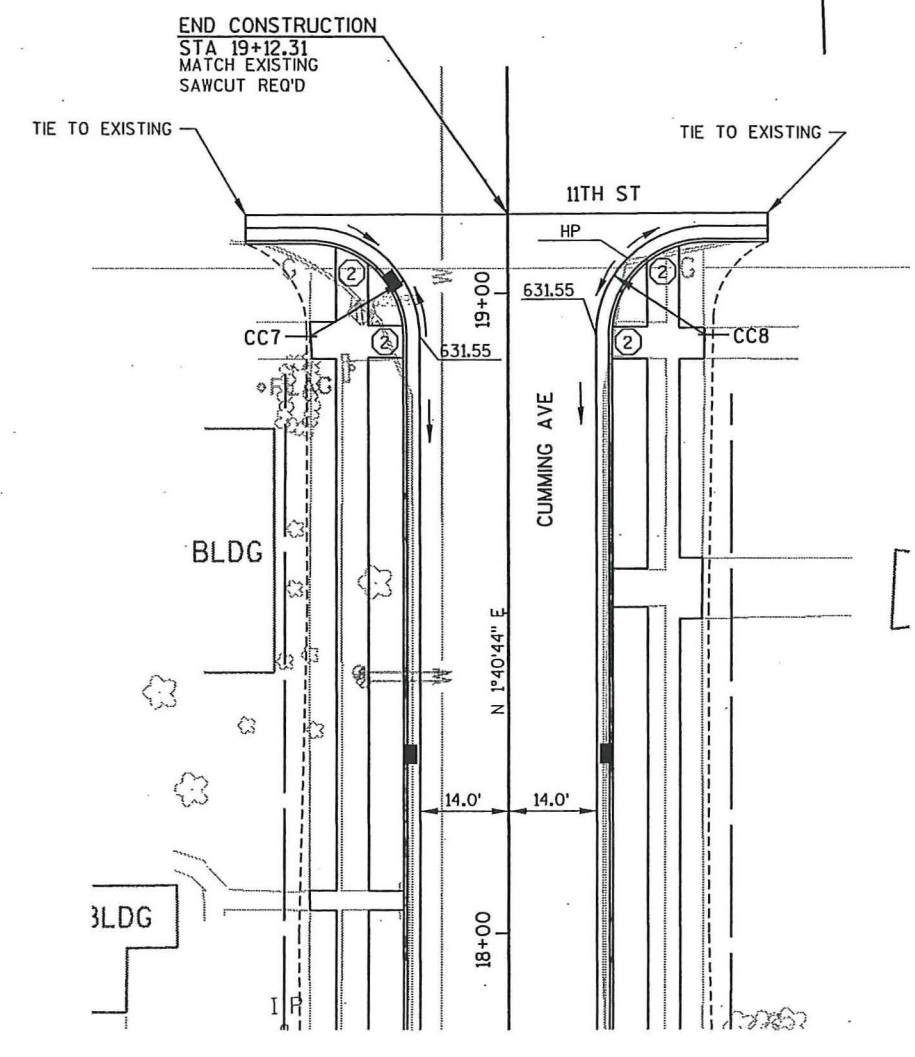
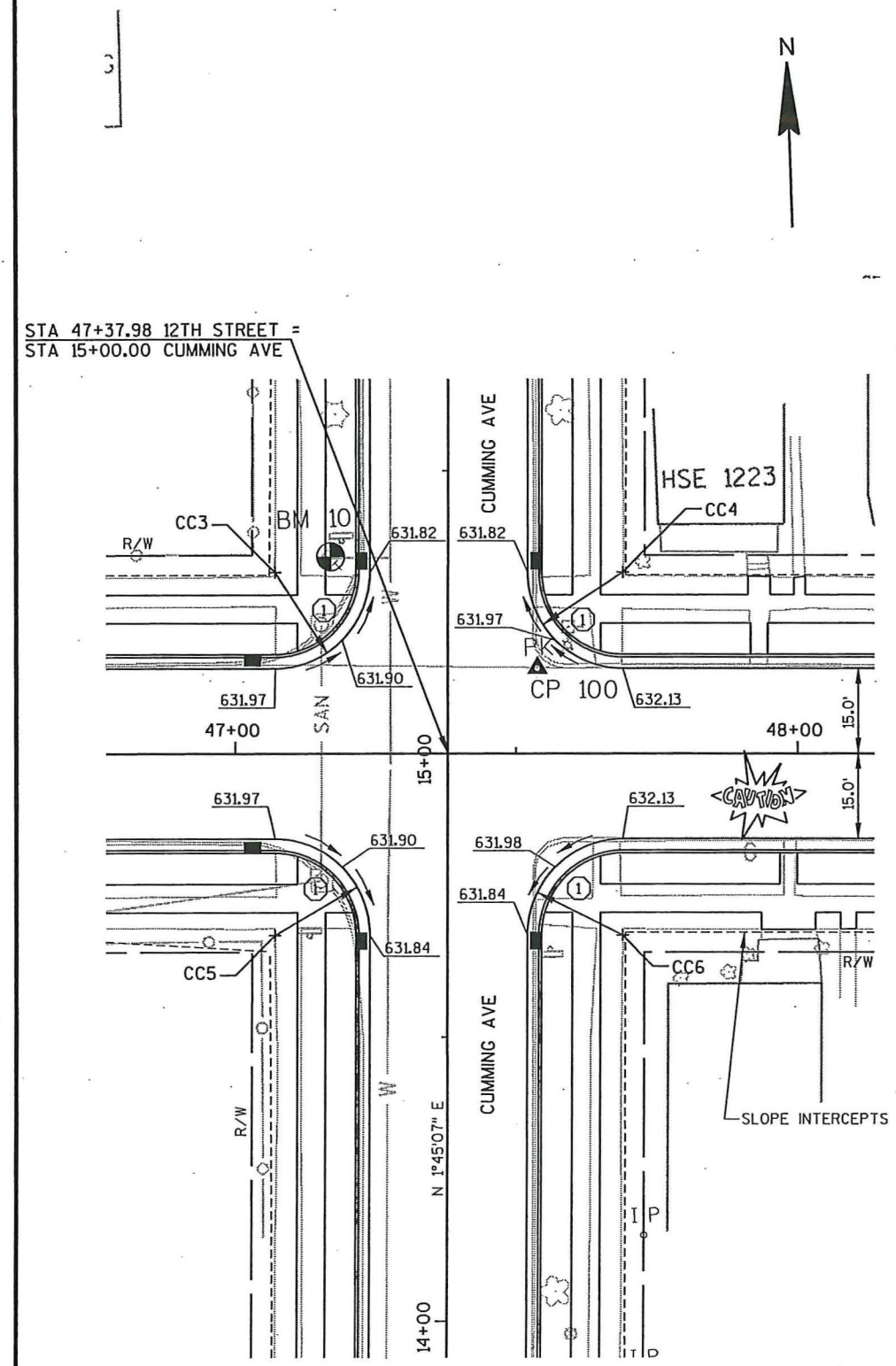
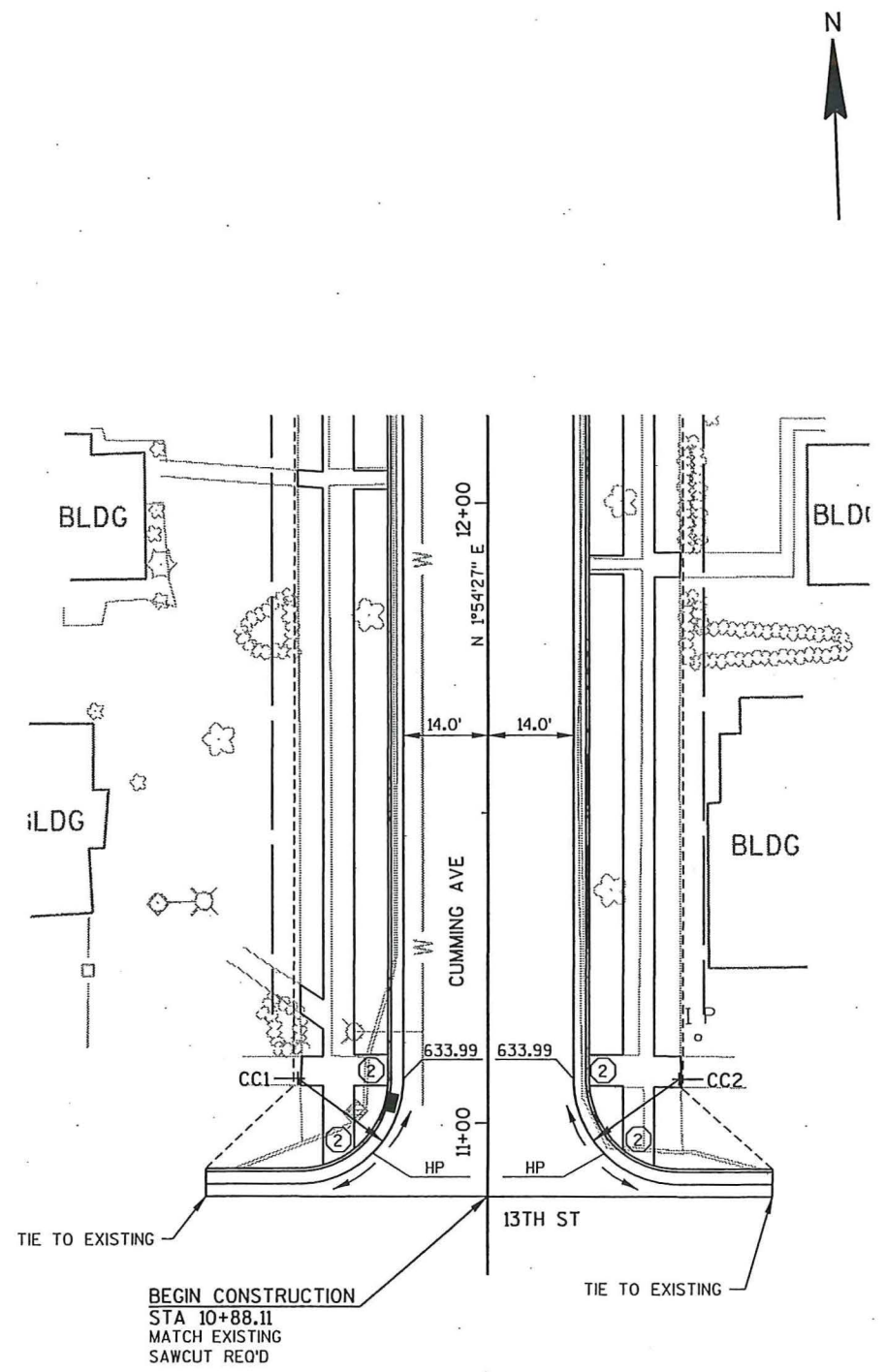
PLAN VIEW  
TYPE 3 RAMP  
(OUTSIDE OF CROSSWALK AREA)

GENERAL NOTES

- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
- RAMPS SHALL BE BUILT AT 12:1 OR FLATTER. WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.
- TYPE 1 OR TYPE 1-A RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.
- CURB RAMPS SHALL BE MEASURED AND PAID FOR AS CONCRETE SIDEWALK AND CONCRETE CURB AND GUTTER.
- SURFACE TEXTURING SHALL CONSIST OF LINEAR IMPRESSIONS APPROXIMATELY 1/4 INCH TO 3/8 INCH IN DEPTH AND WIDTH, ORIENTED TO PROVIDE A UNIFORM PATTERN OF DIAMOND SHAPES MEASURING APPROXIMATELY 1 1/4 INCHES IN WIDTH BY 2 1/4 INCHES IN LENGTH, WITH THE LENGTH BEING PARALLEL TO THE DIRECTION OF PEDESTRIAN MOVEMENT. THIS SURFACE TEXTURE MAY BE ACHIEVED BY IMPRESSING AND REMOVING A PIECE OF EXPANDED METAL REGULAR INDUSTRIAL MESH INTO THE SURFACE OF THE RAMP WHILE THE CONCRETE IS IN A PLASTIC STATE.
- ① THE RAMP SHALL BE BORDERED ON BOTH SIDES AND ON THE CURB LINE WITH A 4 INCH WIDE YELLOW PAINT STRIPE OR WITH BRICK OF A CONTRASTING COLOR. NORMALLY THE PAINT STRIPE ALTERNATE WILL BE USED. THE MUNICIPALITY OR THE DEPARTMENT WILL APPLY THIS STRIPING UNLESS OTHERWISE SPECIFIED IN THE CONTRACT.
- IF A MUNICIPALITY REQUIRES THE BRICK ALTERNATE, SPECIAL DETAILS AND PROVISIONS ARE SHOWN ELSEWHERE IN THE PLANS.



LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 58, 59, 60, 61, 63

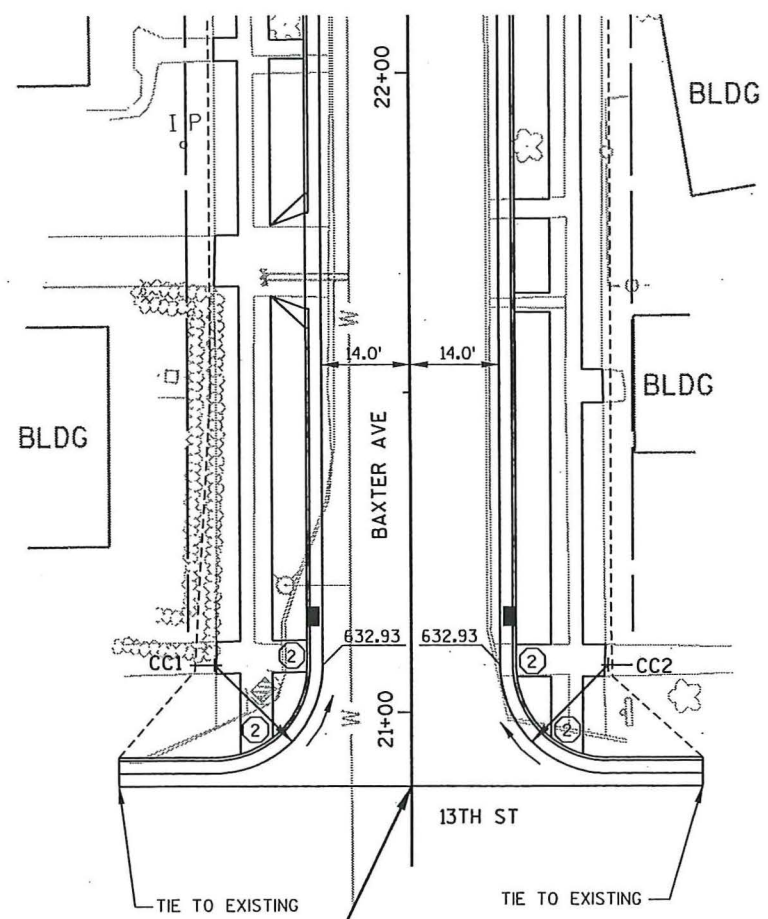


RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	11+07.11 CUMMING AVE	31.0' LT	17.0'	Y = 574531.225 X = 1442740.274
CC2	11+07.11 CUMMING AVE	31.0' RT	17.0'	Y = 574529.161 X = 1442802.240
CC3	47+07.04 12TH STREET 15+31.96 CUMMING AVE	32.0' LT 31.0' LT	17.0'	Y = 574955.847 X = 1442753.903
CC4	47+69.04 12TH STREET 15+32.04 CUMMING AVE	32.0' LT 31.0' RT	17.0'	Y = 574953.887 X = 1442815.872
CC5	47+07.03 12TH STREET 14+68.03 CUMMING AVE	32.0' RT 31.0' LT	17.0'	Y = 574891.878 X = 1442751.871
CC6	47+69.03 12TH STREET 14+67.97 CUMMING AVE	32.0' RT 31.0' RT	17.0'	Y = 574889.919 X = 1442813.839
CC7	18+93.31 CUMMING AVE	31.0' LT	17.0'	Y = 575316.910 X = 1442765.256
CC8	18+93.31 CUMMING AVE	31.0' RT	17.0'	Y = 575315.093 X = 1442827.229

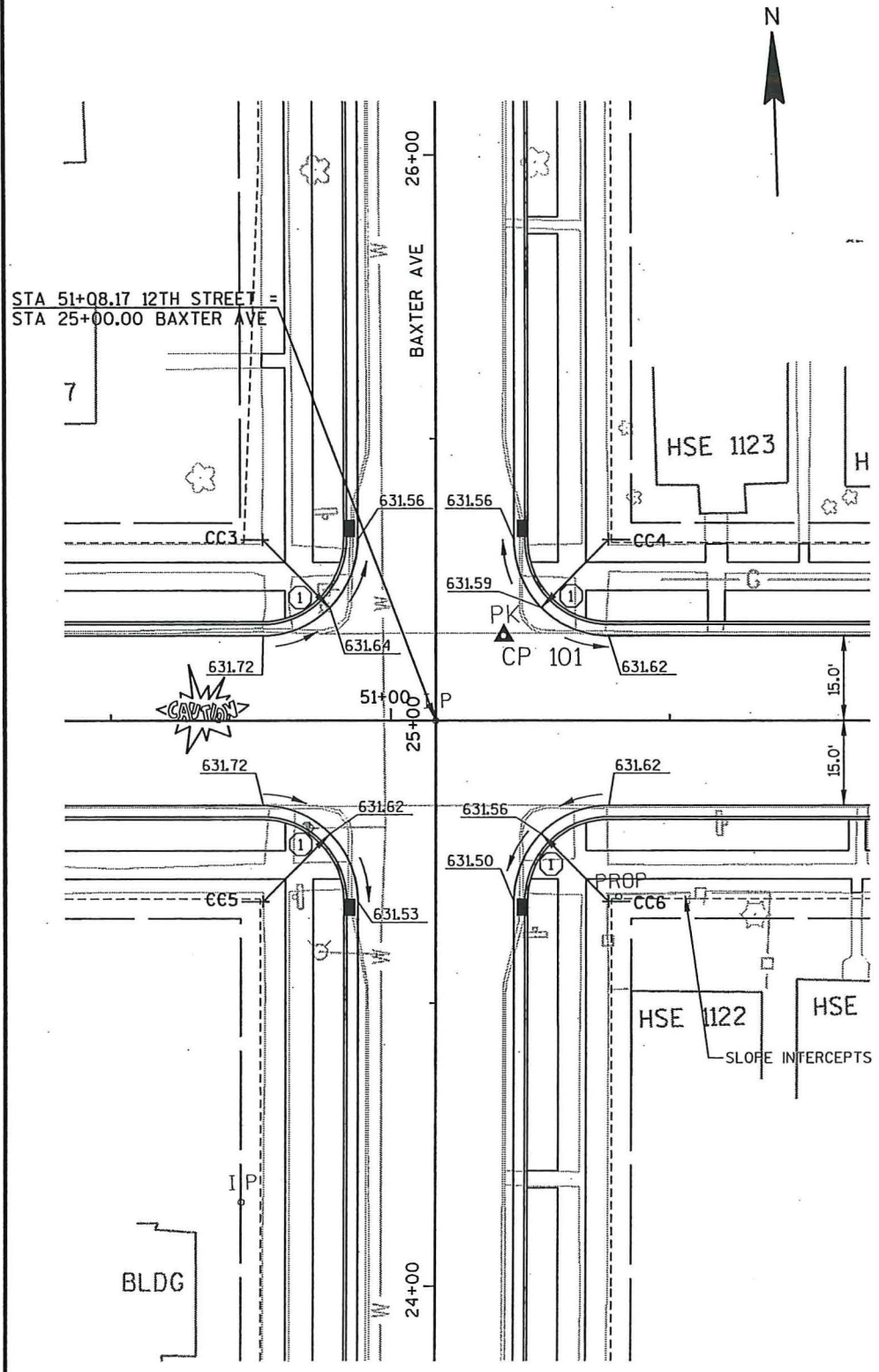
- ① TYPE 1 CURB RAMP
- ② TYPE 2 CURB RAMP



LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 58, 59, 60, 61, 63

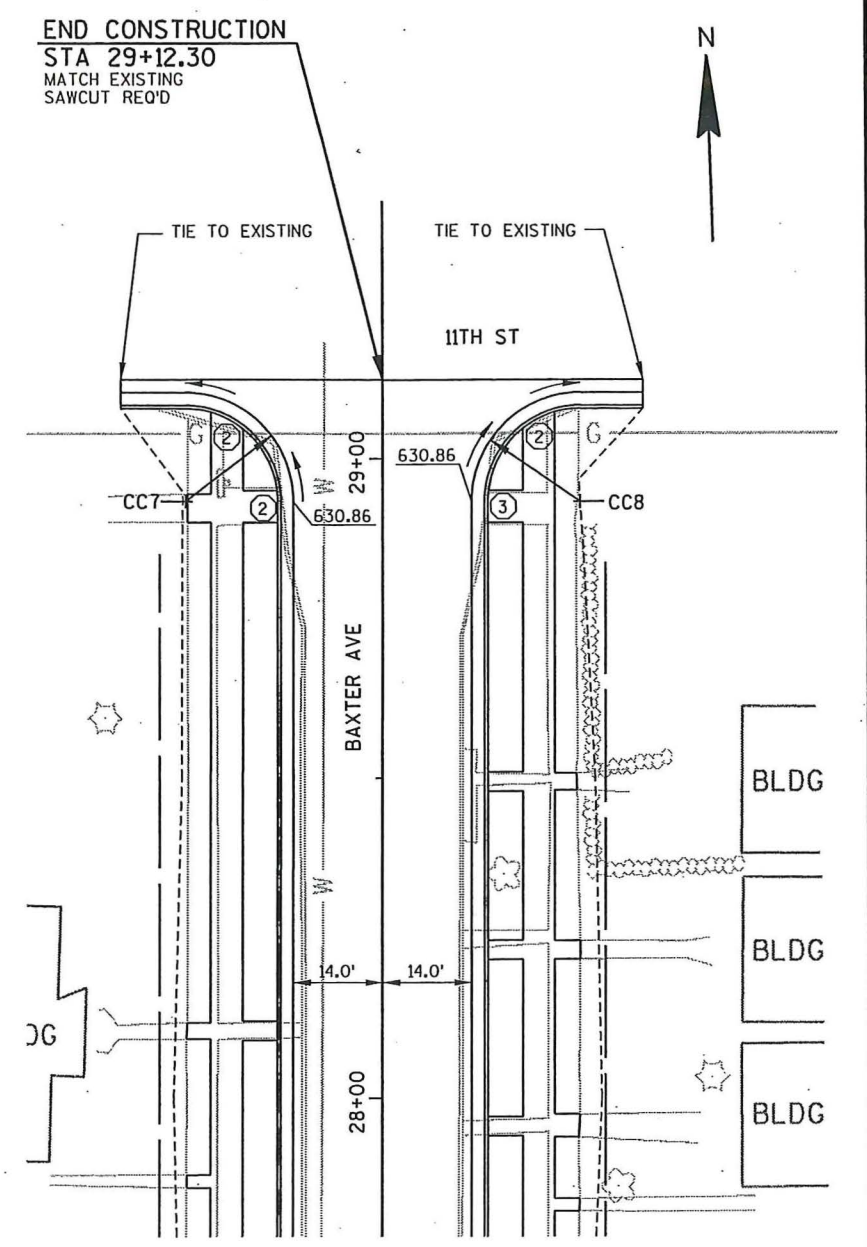


BEGIN CONSTRUCTION  
 STA 20+88.40  
 MATCH EXISTING  
 SAWCUT REQ'D



STA 51+08.17 12TH STREET =  
 STA 25+00.00 BAXTER AVE

- ① TYPE 1 CURB RAMP
- ② TYPE 2 CURB RAMP
- ③ TYPE 2 CURB RAMP

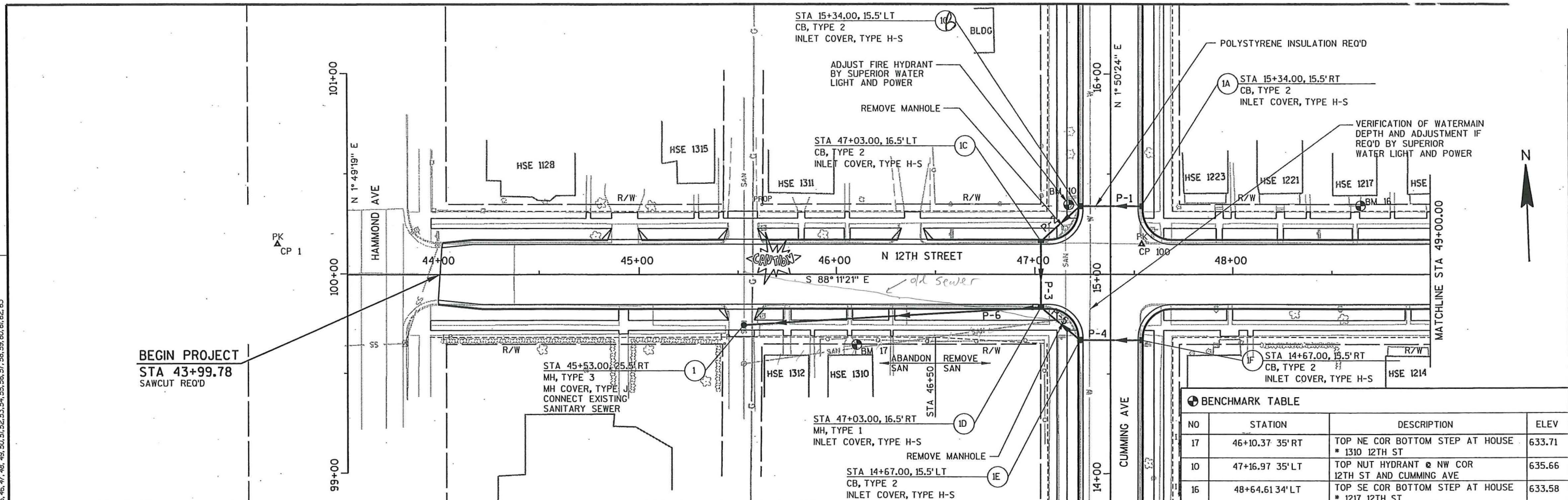


END CONSTRUCTION  
 STA 29+12.30  
 MATCH EXISTING  
 SAWCUT REQ'D

RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	21+07.40 BAXTER AVE	31.0' LT	17.0'	Y = 574519.747 X = 1443110.500
CC2	21+07.40 BAXTER AVE	31.0' RT	17.0'	Y = 574517.807 X = 1443172.469
CC3	50+77.12 12TH STREET 25+32.00 BAXTER AVE	32.0' LT 31.0' LT	17.0'	Y = 574944.152 X = 1443123.796
CC4	51+39.12 12TH STREET 25+32.00 BAXTER AVE	32.0' LT 31.0' RT	17.0'	Y = 574942.193 X = 1443185.765
CC5	50+77.12 12TH STREET 24+68.01 BAXTER AVE	32.0' RT 31.0' RT	17.0'	Y = 574880.183 X = 1443121.781
CC6	51+39.13 12TH STREET 24+67.99 BAXTER AVE	32.0' RT 31.0' RT	17.0'	Y = 574878.223 X = 1443183.750
CC7	28+93.30 BAXTER AVE	31.0' LT	17.0'	Y = 575305.270 X = 1443135.243
CC8	28+93.30 BAXTER AVE	31.0' RT	17.0'	Y = 575303.306 X = 1443197.212

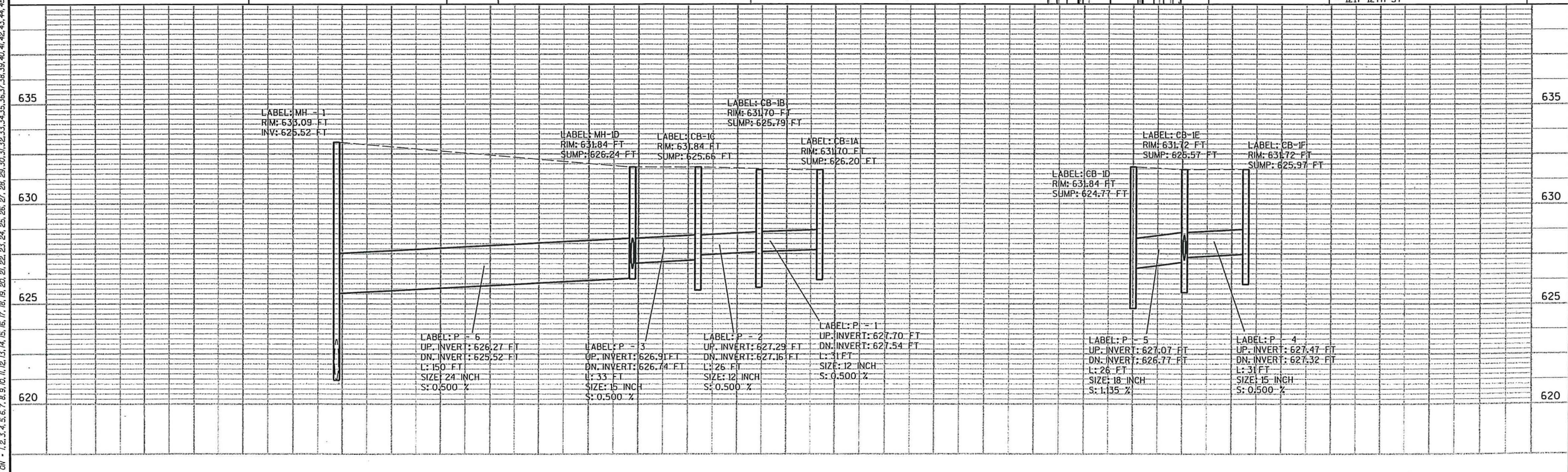


LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



**BEGIN PROJECT**  
**STA 43+99.78**  
 SAWCUT REQ'D

BENCHMARK TABLE			
NO	STATION	DESCRIPTION	ELEV
17	46+10.37 35'RT	TOP NE COR BOTTOM STEP AT HOUSE # 1310 12TH ST	633.71
10	47+16.97 35'LT	TOP NUT HYDRANT @ NW COR 12TH ST AND CUMMING AVE	635.66
16	48+64.61 34'LT	TOP SE COR BOTTOM STEP AT HOUSE # 1217 12TH ST	633.58

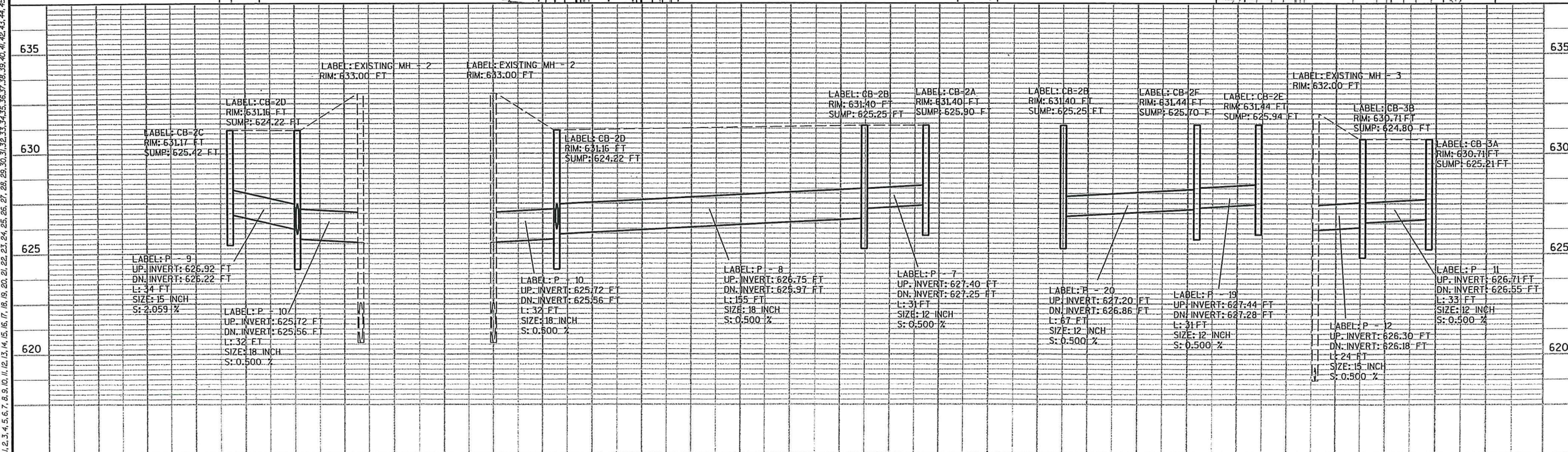
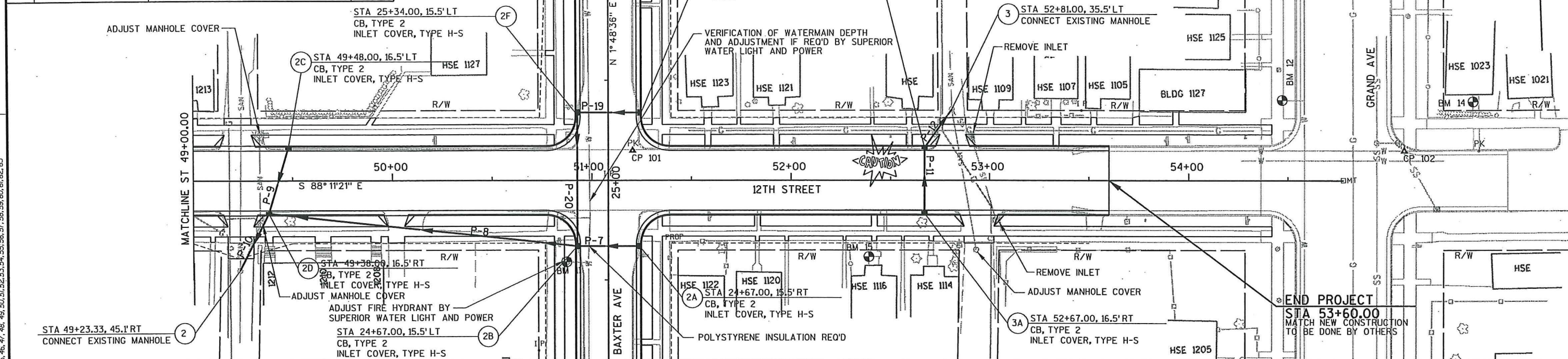


PROJECT NUMBER: SUPER0004.00    HWY: 12TH STREET    COUNTY: DOUGLAS    STORM SEWER    SCALE, FEET    SHEET NO: **E**



⊕ BENCHMARK TABLE

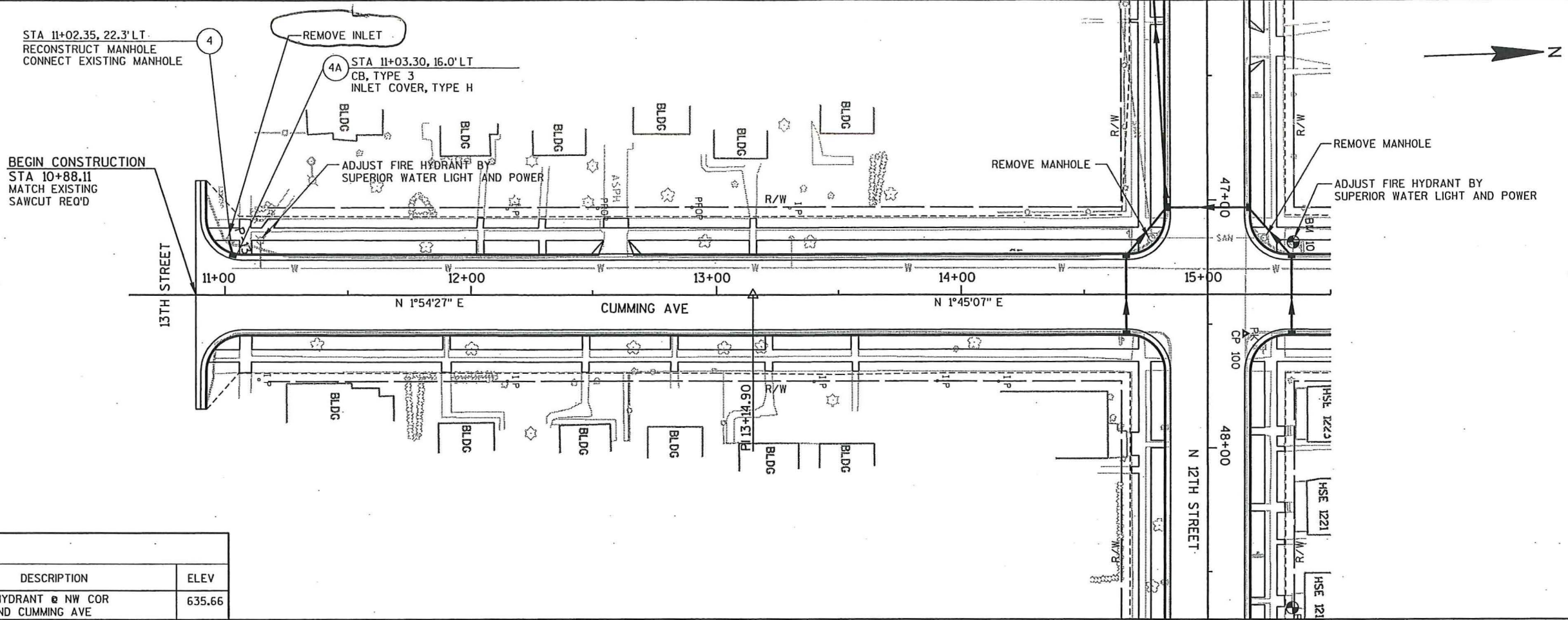
NO	STATION	DESCRIPTION	ELEV
11	50+87.32 41'RT	TOP NUT HYDRANT AT SW COR 12TH ST AND BAXTER AVE	634.80
15	52+39.03 38'RT	TOP OF NW COR BOTTOM STEP AT HOUSE # 1116 12TH ST	633.18
12	54+47.10 40'LT	TOP NUT HYDRANT AT NW COR 12TH ST AND GRAND AVE	633.69
14	55+43.04 39'LT	TOP SW COR BOTTOM STEP AT HOUSE # 1023 NORTH 12TH ST	631.85



LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

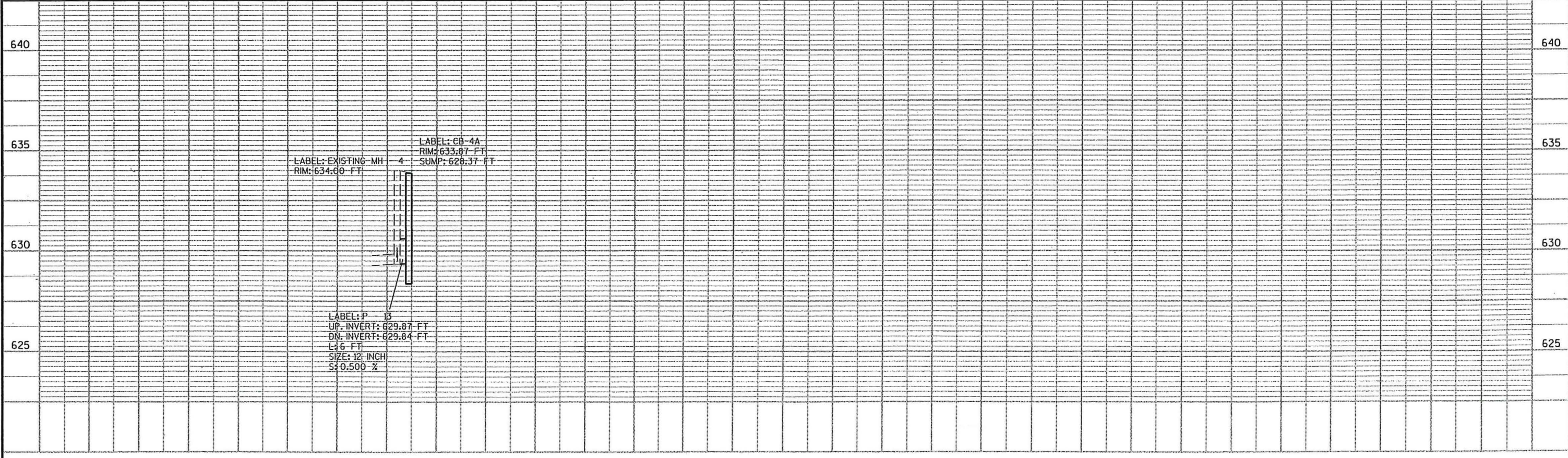


LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 58, 59, 60, 61, 63



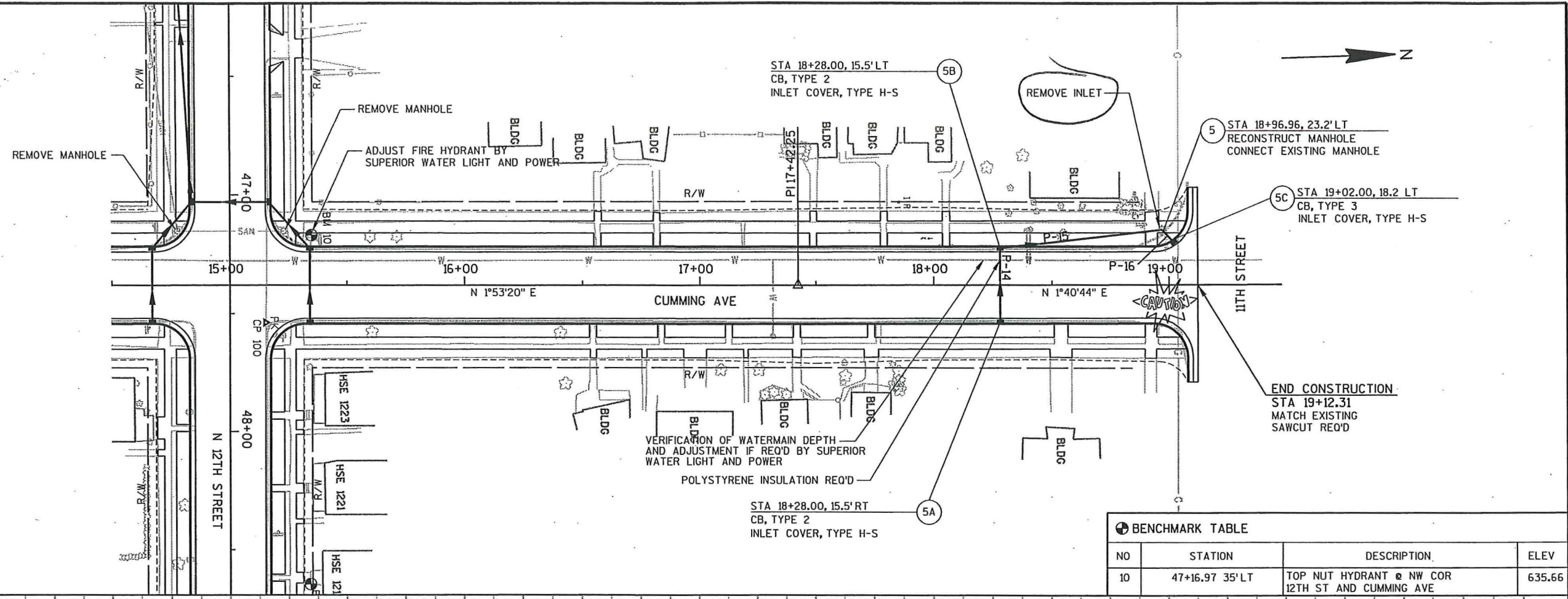
**BENCHMARK TABLE**

NO	STATION	DESCRIPTION	ELEV
10	47+16.97 35' LT	TOP NUT HYDRANT @ NW COR 12TH ST AND CUMMING AVE	635.66

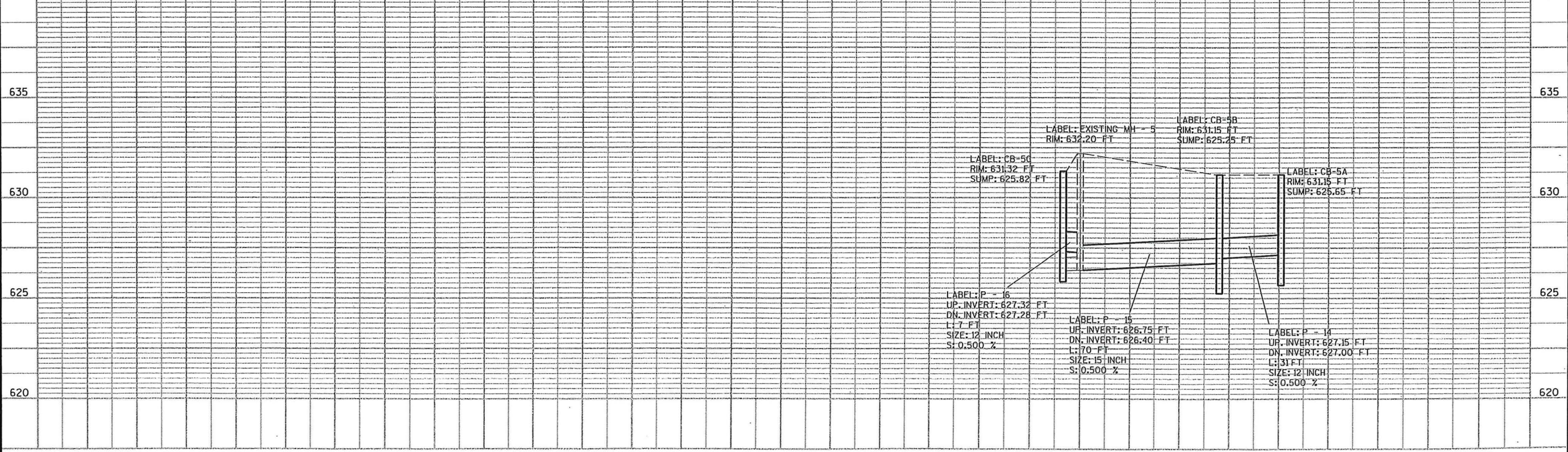




LEVELS ON 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 58, 59, 60, 61, 63



BENCHMARK TABLE			
NO	STATION	DESCRIPTION	ELEV
10	47+16.97 35'LT	TOP NUT HYDRANT @ NW COR 12TH ST AND CUMMING AVE	635.66





LEVELS ON \* 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 58, 59, 60, 61, 63

STA 21+03.50, 23.4' LT  
RECONSTRUCT MANHOLE  
CONNECT EXISTING MANHOLE

REMOVE INLET

6B STA 21+15.00, 15.5' LT  
CB, TYPE 2  
INLET COVER, TYPE H

ADJUST FIRE HYDRANT BY  
SUPERIOR WATER LIGHT AND POWER

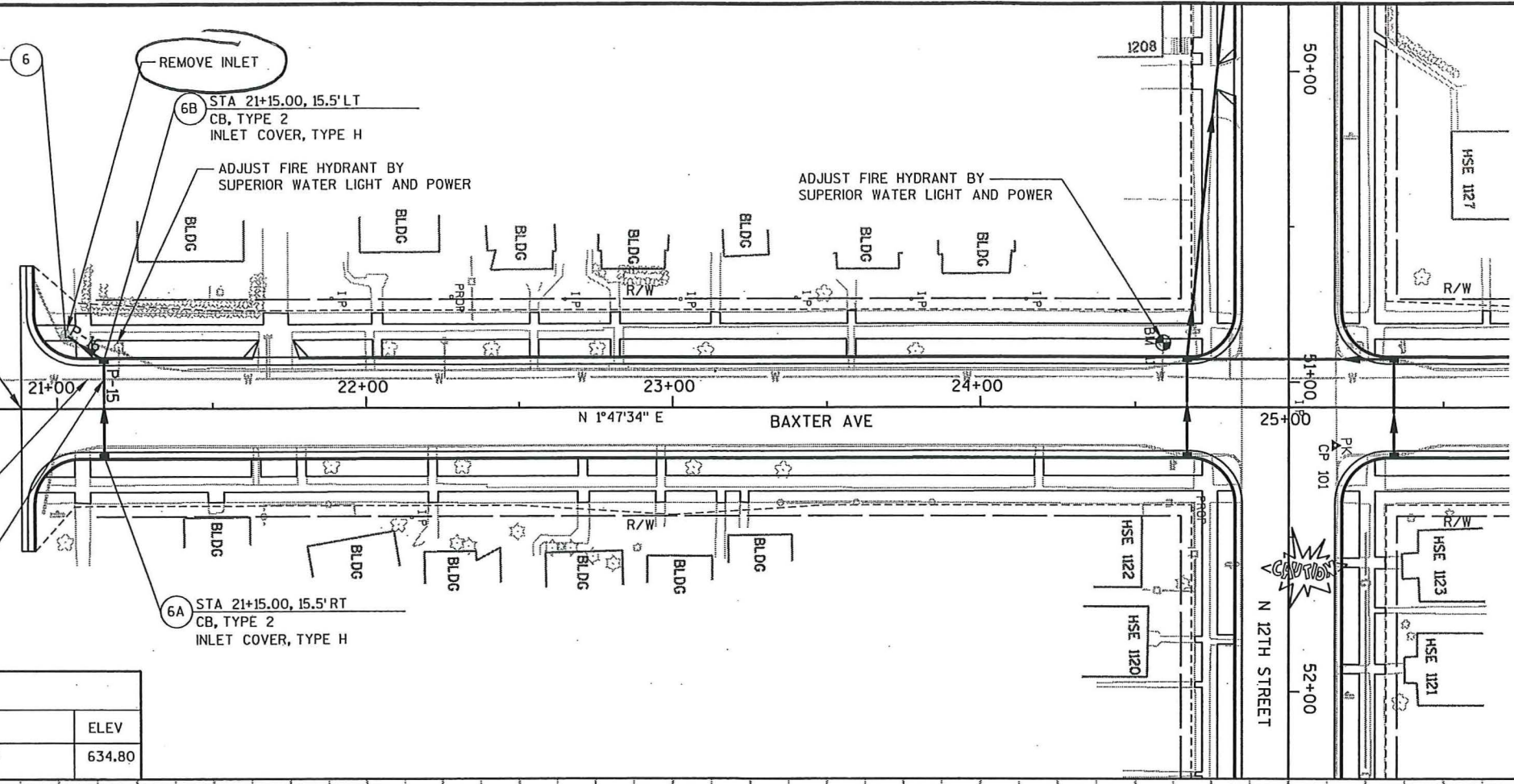
ADJUST FIRE HYDRANT BY  
SUPERIOR WATER LIGHT AND POWER

BEGIN CONSTRUCTION  
STA 20+88.40  
MATCH EXISTING  
SAWCUT REQ'D

VERIFICATION OF WATERMAIN  
DEPTH AND ADJUSTMENT IF REQ'D  
BY SUPERIOR WATER LIGHT AND POWER

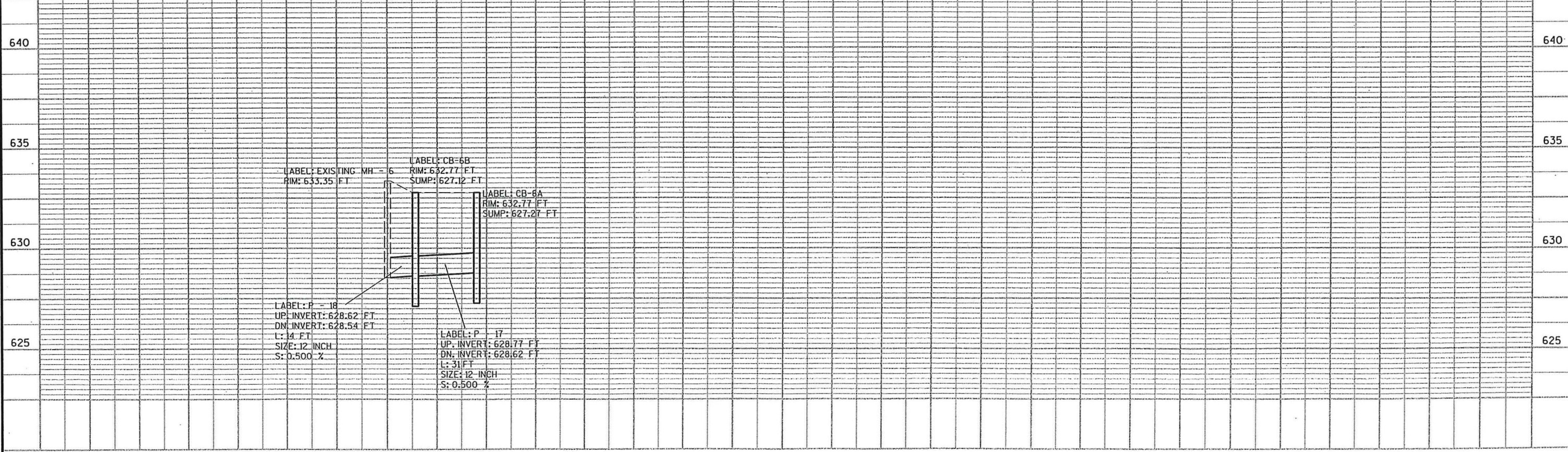
POLYSTYRENE INSULATION REQ'D

6A STA 21+15.00, 15.5' RT  
CB, TYPE 2  
INLET COVER, TYPE H



BENCHMARK TABLE

NO	STATION	DESCRIPTION	ELEV
11	50+87.32 4' RT	TOP NUT HYDRANT AT SW COR 12TH ST AND BAXTER AVE	634.80



PROJECT NUMBER: SUPER0004.00

HWY: 12TH STREET

COUNTY: DOUGLAS

STORM SEWER

SCALE, FEET

SHEET NO: E



LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 58, 59, 60, 61, 63

**CLEARING AND GRUBBING**

STATION	LOCATION	ID
<b>12TH STREET</b>		
44+28.5	LT	16
45+93.4	LT	10
48+31.2	RT	24
48+55.9	RT	26
49+48.8	RT	4
52+65.9	RT	6
<b>CUMMING AVENUE</b>		
11+37.6	RT	12
11+81.9	LT	12
12+00.3	RT	30
12+66.6	RT	24
12+95.5	LT	12
13+03.2	RT	18
13+18.4	RT	24
13+38.6	LT	12
14+05.3	RT	8
15+59.9	LT	12
15+71.3	LT	12
16+40.8	RT	12
18+54.9	LT	12
<b>BAXTER AVENUE</b>		
21+88.6	RT	10
22+07.6	LT	6
22+31.7	RT	10
22+41.3	LT	6
22+75.8	LT	6
23+06.7	RT	10
23+10.8	LT	6
23+35.8	RT	10
23+79.0	LT	10
25+97.4	LT	30
25+98.7	RT	10
26+29.6	RT	10
26+47.8	LT	6
26+53.2	RT	10
27+53.2	LT	10
28+35.1	RT	10
<b>ITEM TOTALS</b>		<b>446</b>

**REMOVING CURB**

STATION TO STATION	LOCATION	LF
<b>12TH STREET</b>		
43+99.78 - 47+37.98	LT	359
43+99.78 - 47+37.98	RT	354
47+37.98 - 51+08.17	LT	411
47+37.98 - 51+08.17	RT	417
51+08.17 - 53+41.54	LT	345
51+08.17 - 53+41.54	RT	345
<b>CUMMING AVE</b>		
10+88.11 - 14+35.00	LT	362
10+88.11 - 14+35.00	RT	367
15+55.00 - 19+12.31	LT	367
15+55.00 - 19+12.31	RT	373
<b>BAXTER AVE</b>		
20+88.40 - 24+45.00	LT	371
20+88.40 - 24+45.00	RT	378
25+60.00 - 29+12.30	LT	368
25+60.00 - 29+12.30	RT	368
<b>ITEM TOTALS</b>		<b>5185</b>

**EARTHWORK SUMMARY**

STATION	LOCATION	COMMON EXCAVATION CY	EXP (30%) FILL CY	WASTE CY
<b>12TH STREET</b>				
43+99.78 - 54+60.00	12TH STREET	2066	6	2060
	EBS	207		
<b>CUMMING AVENUE</b>				
10+88.11 - 19+12.31	CUMMING AVENUE	1552	7	1545
	EBS	155		
<b>BAXTER AVENUE</b>				
20+88.40 - 29+12.30	BAXTER AVENUE	1455	18	1437
	EBS	146		
<b>ITEM TOTALS</b>		<b>5581</b>	<b>31</b>	<b>5042</b>

**REMOVING CURB AND GUTTER**

STATION TO STATION	LOCATION	LF
<b>12TH STREET</b>		
53+41.54 - 53+60.00	LT	19
53+41.54 - 53+60.00	RT	19
<b>ITEM TOTALS</b>		<b>38</b>

**BASE COURSE**

STATION	LOCATION	CRUSHED AGGREGATE BASE COURSE TON	CRUSHED AGGREGATE BASE COURSE, OPEN GRADED, NUMBER 2 TON
<b>12TH STREET</b>			
43+99.78 - 47+00.00	LT & RT	343	512
44+92.8	LT	6	
45+51.7	RT	6	
45+52.3	LT	9	
46+38.3	LT	5	
47+00.00 - 48+00.00	LT & RT	159	170
48+00.00 - 50+50.00	LT & RT	287	426
49+22.4	LT	7	
49+23.8	RT	6	
50+00.3	RT	4	
50+50.00 - 51+50.00	LT & RT	159	170
51+50.00 - 53+60.00	LT & RT	241	358
52+81.4	LT	6	
52+94.8	RT	8	
<b>CUMMING AVE</b>			
10+88.11 - 14+72.00	LT & RT	418	654
15+28.00 - 19+12.31	LT & RT	418	655
<b>BAXTER AVE</b>			
20+88.40 - 24+72.00	LT & RT	418	654
25+28.00 - 29+12.30	LT & RT	418	655
<b>ITEM TOTAL</b>		<b>2918</b>	<b>4254</b>

**REMOVING PAVEMENT**

STATION	LOCATION	SY	REMARKS
<b>12TH STREET</b>			
43+99.78 - 47+37.98	LT & RT	1349	MAINLINE
44+93.00	LT	15	DRIVEWAY
44+98.61	RT	19	DRIVEWAY
45+52.71	LT	19	ALLEY
47+37.98 - 51+08.17	LT & RT	1558	MAINLINE
49+23.75	RT	12	ALLEY
50+06.45	RT	20	DRIVEWAY
51+08.17 - 53+60.00	LT & RT	1006	MAINLINE
52+96.21	RT	18	ALLEY
<b>CUMMING AVE</b>			
10+88.11 - 14+35.00	LT & RT	1244	SIDEROAD
15+55.00 - 19+12.31	LT & RT	1255	SIDEROAD
<b>BAXTER AVENUE</b>			
20+88.40 - 24+45.00	LT & RT	1038	SIDEROAD
21+70.43	LT	14	DRIVEWAY
25+60.00 - 29+12.30	LT & RT	1006	SIDEROAD
<b>ITEM TOTAL</b>		<b>8573</b>	

**REMOVING CONCRETE SIDEWALK**

STATION TO STATION	LOCATION	SY
<b>12TH STREET</b>		
43+99.78 - 47+37.98	LT	223
43+99.78 - 47+37.98	RT	218
47+37.98 - 51+08.17	LT	263
47+37.98 - 51+08.17	RT	255
51+08.17 - 53+60.00	LT	207
51+08.17 - 53+60.00	RT	213
<b>CUMMING AVE</b>		
10+88.11 - 14+35.00	LT	188
10+88.11 - 14+35.00	RT	239
15+55.00 - 19+12.31	LT	197
15+55.00 - 19+12.31	RT	253
<b>BAXTER AVE</b>		
20+88.40 - 24+45.00	LT	227
20+88.40 - 24+45.00	RT	227
25+60.00 - 29+12.30	LT	209
25+60.00 - 29+12.30	RT	210
<b>ITEM TOTAL</b>		<b>3129</b>

**BREAKER RUN STONE**

STATION TO STATION	LOCATION	TONS
43+99.78 - 53+60.00	UNDISTRIBUTED	824
<b>ITEM TOTAL</b>		<b>824</b>



LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 58, 59, 60, 61, 63

ASPHALTIC CONCRETE PAVEMENT				
STATION	LOCATION	ASPHALTIC		
		CONCRETE PAVEMENT, TYPE E-1 TONS	MATERIAL FOR TACK COAT GAL	MATERIAL FOR PLANT MIXES TONS
<b>12TH STREET</b>				
43+99.78 - 47+37.98	LT & RT	267	30	16
47+37.98 - 51+08.17	LT & RT	306	34	18
51+08.17 - 53+60.00	LT & RT	203	23	12
45+51.7	LT & RT	2		
49+22.4	LT	1		
49+23.8	RT	4		
52+44.8	RT	1		
52+81.4	LT	1		
<b>CUMMING AVE</b>				
10+88.11 - 14+68.02	LT & RT	271	30	16
15+32.00 - 19+12.31	LT & RT	271	30	16
12+59.6	LT	1		
<b>BAXTER AVE</b>				
20+88.40 - 24+67.98	LT & RT	271	30	16
25+31.98 - 29+12.30	LT & RT	271	30	16
<b>ITEM TOTALS</b>		<b>1870</b>	<b>207</b>	<b>112</b>

CONCRETE DRIVEWAY, 6-INCH		
STATION	LOCATION	SY
<b>12TH STREET</b>		
44+92.8	LT	22
45+51.7	RT	23
45+52.3	LT	20
46+38.3	LT	19
49+22.4	LT	24
49+23.8	RT	23
50+00.3	RT	15
52+81.4	LT	18
52+94.8	RT	21
<b>CUMMING AVENUE</b>		
12+59.6	LT	19
<b>BAXTER AVENUE</b>		
21+70.6	LT	19
<b>ITEM TOTAL</b>		<b>223</b>

CONCRETE CURB & GUTTER, 30-INCH, TYPE A		
STATION TO STATION	LOCATION	LF
<b>12TH STREET</b>		
43+99.78 - 47+37.98	LT	329
43+99.78 - 47+37.98	RT	332
47+37.98 - 51+08.17	LT	355
47+37.98 - 51+08.17	RT	355
51+08.17 - 53+60.00	LT	244
51+08.17 - 53+60.00	RT	244
<b>CUMMING AVE</b>		
10+88.11 - 14+68.03	LT	399
10+88.11 - 14+68.03	RT	399
15+31.96 - 19+12.31	LT	395
15+31.96 - 19+12.31	RT	395
<b>BAXTER AVE</b>		
20+88.40 - 24+68.00	LT	399
20+88.40 - 24+68.00	RT	399
25+32.00 - 29+12.30	LT	395
25+32.00 - 29+12.30	RT	395
<b>ITEM TOTAL</b>		<b>5035</b>

CONCRETE SIDEWALK, 4-INCH		
STATION TO STATION	LOCATION	SF
<b>12TH STREET</b>		
43+99.78 - 47+37.98	LT	1523
43+99.78 - 47+37.98	RT	1700
47+37.98 - 51+08.17	LT	1772
47+37.98 - 51+08.17	RT	1734
51+08.17 - 53+60.00	LT	1707
51+08.17 - 53+60.00	RT	1585
<b>CUMMING AVE</b>		
10+88.11 - 14+72.02	LT	1980
10+88.11 - 14+72.02	RT	2081
15+27.97 - 19+12.31	LT	2081
15+27.97 - 19+12.31	RT	2181
<b>BAXTER AVE</b>		
20+88.40 - 24+72.01	LT	2002
20+88.40 - 24+72.01	RT	2105
25+28.00 - 29+12.30	LT	2060
25+28.00 - 29+12.30	RT	2088
<b>ITEM TOTAL</b>		<b>26599</b>

STRUCTURE NUMBER	STATION	LOCATION	RECONSTRUCT MANHOLES EACH	REMOVING MANHOLE EACH	REMOVING INLETS EACH	ADJUST MANHOLE COVERS EACH	MANHOLES,		MANHOLE COVERS, TYPE J EACH	CATCH BASINS,		INLET COVERS		INLET PROTECTION		GRATE OR RIM ELEV	MANHOLE OR BOX INVERT ELEV	CATCH BASIN SUMP ELEV	MANHOLE OR BOX DEPTH LF	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER				DRAINS TO STRUCTURE (MH/CB) NUMBER	% SLOPE	CONNECT EXISTING SANITARY SEWER OR MANHOLE EACH
							TYPE 1 EACH	TYPE 3 EACH		TYPE 2 EACH	TYPE 3 EACH	TYPE H EACH	TYPE H-S EACH	TYPE A EACH	TYPE C EACH					12" LF	15" LF	18" LF	24" LF			
1	45+53.00	25.5' RT					1		1						633.09	625.52	626.20	7.57					EXISTING	0.50	1	
1A	15+34.00	15.5' RT								1					631.70		625.79	5.91	31				1B	0.50		
1B	15+34.00	15.5' LT								1					631.70		625.66	6.18	26				1C	0.50		
1C	47+03.00	16.5' LT								1					631.84			6.18		33			1D	0.50		
1D	47+03.00	16.5' RT								1					631.84	626.24		5.60			150		1E	0.50		
1E	14+67.00	15.5' LT								1					631.72		625.57	6.15			26		1D	0.50		
1F	14+67.00	15.5' RT								1					631.72		625.97	5.75			31		1E	0.50		
2	49+23.33	45.1' RT																					EXISTING	0.50	1	
2A	24+67.00	15.5' RT								1					631.40		625.9	5.50	31				2B	0.50		
2B	24+67.00	15.5' LT								1					631.40		625.25	6.15				155	2D	0.50		
2C	49+48.00	16.5' LT								1					631.17		625.42	5.75			34		2D	2.06		
2D	49+38.00	16.5' RT								1					631.16		624.22	6.94				32	2	0.50		
2E	25+34.00	15.5' RT								1					631.44		625.94	5.50	31				2F	0.50		
2F	25+34.00	15.5' LT								1					631.44		625.70	5.74	67				2B	0.50		
3	52+81.00	35.5' LT																					EXISTING	0.50	1	
3A	52+67.00	16.5' RT								1					630.71		625.21	5.50	33				3B	0.50		
3B	52+67.00	16.5' LT								1					630.71		624.80	5.91			24		3	0.50		
4	11+01.78	21.8' LT	1						1														EXISTING	0.50	1	
4A	11+03.30	16.0' LT									1				633.87		628.37	5.50	6				4	0.50		
5	18+96.96	23.2' LT	1																				EXISTING	0.50	1	
5A	18+28.00	15.5' RT								1					631.15		625.65	5.50	31				5B	0.50		
5B	18+28.00	15.5' LT								1					631.15		625.25	5.90			70		5	0.50		
5C	19+02.00	18.2' LT								1					631.32		625.82	5.50	7				5	0.50		
6	21+03.50	23.4' LT	1																				EXISTING	0.50	1	
6A	21+15.00	15.5' RT								1					632.77		627.27	5.50	31				6B	0.50		
6B	21+15.00	15.5' LT								1					632.77		627.12	5.65	14				6	0.50		
	47+15.31	LT & RT		2																						
	49+33.59	LT & RT				2																				
	52+91.95	22.7' LT			1																					
	52+93.38	34.9' RT				1																				
	53+03.37	21.1' RT			1																					
<b>ITEM TOTALS</b>			<b>3</b>	<b>2</b>	<b>5</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>18</b>	<b>2</b>	<b>3</b>	<b>17</b>	<b>20</b>	<b>20</b>					<b>308</b>	<b>192</b>	<b>213</b>	<b>150</b>			<b>6</b>

622.5  
10.57



LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

PIPE UNDERDRAIN, 6-INCH		
STATION TO STATION	LOCATION	LF
12TH STREET		
43+99.78 - 47+37.98	LT	329
43+99.78 - 47+37.98	RT	332
47+37.98 - 51+08.17	LT	355
47+37.98 - 51+08.17	RT	355
51+08.17 - 53+60.00	LT	244
51+08.17 - 53+60.00	RT	244
CUMMING AVE		
10+88.11 - 14+68.03	LT	399
10+88.11 - 14+68.03	RT	399
15+31.96 - 19+12.31	LT	395
15+31.96 - 19+12.31	RT	395
BAXTER AVE		
20+88.40 - 24+68.00	LT	399
20+88.40 - 24+68.00	RT	399
25+32.00 - 29+12.30	LT	395
25+32.00 - 29+12.30	RT	395
ITEM TOTAL		5035

TURF ESTABLISHMENT				
STATION	LOCATION	TOPSOIL SY	LAWN SOD SY	
12TH STREET				
43+99.78 - 47+38.00	LT	249	249	
43+99.78 - 47+38.00	RT	254	254	
47+38.00 - 51+08.17	LT	277	277	
47+38.00 - 51+08.17	RT	249	249	
51+08.12 - 53+60.00	LT	280	280	
51+08.12 - 53+60.00	RT	253	253	
CUMMING AVE				
10+88.11 - 14+68.02	LT	359	359	
10+88.11 - 14+68.02	RT	373	373	
15+32.00 - 19+12.31	LT	373	373	
15+32.00 - 19+12.31	RT	349	349	
BAXTER AVE				
20+88.40 - 24+67.98	LT	357	357	
20+88.40 - 24+67.98	RT	353	353	
25+31.98 - 29+12.30	LT	368	368	
25+31.98 - 29+12.30	RT	363	363	
ITEM TOTALS		4457	4457	

MOVING SIGNS, TYPE II		
STATION	LOCATION	EACH
12TH STREET		
46+57.4	LT	1
48+42.7	LT	1
50+20.4	LT	1
51+59.8	RT	1
52+00.6	LT	1
53+88.3	LT	1
53+99.0	LT	1
54+30.1	RT	1
CUMMING AVENUE		
14+65.5	RT	1
14+67.9	LT	1
15+37.5	LT	1
18+88.4	LT	1
BAXTER AVENUE		
24+63.1	RT	1
24+68.9	LT	1
25+36.1	LT	1
28+96.2	LT	1
ITEM TOTAL		16

GEOTEXTILE FABRIC, TYPE SAS		
STATION TO STATION	LOCATION	SY
12TH STREET		
43+99.78 - 47+00.00	LT & RT	1030
47+00.00 - 48+00.00	LT & RT	477
48+00.00 - 50+50.00	LT & RT	861
50+50.00 - 51+50.00	LT & RT	477
51+50.00 - 53+60.00	LT & RT	723
CUMMING AVE		
10+88.11 - 14+72.02	LT & RT	1255
15+27.97 - 19+12.31	LT & RT	1253
BAXTER AVE		
20+88.40 - 24+72.01	LT & RT	1254
25+28.00 - 29+12.30	LT & RT	1253
ITEM TOTAL		8583

GEOTEXTILE FABRIC, TYPE DF		
STATION TO STATION	LOCATION	SY
12TH STREET		
43+99.78 - 47+37.98	LT	530
43+99.78 - 47+37.98	RT	535
47+37.98 - 51+08.17	LT	572
47+37.98 - 51+08.17	RT	572
51+08.17 - 53+60.00	LT	393
51+08.17 - 53+60.00	RT	393
CUMMING AVE		
10+88.11 - 14+68.03	LT	643
10+88.11 - 14+68.03	RT	643
15+31.96 - 19+12.31	LT	636
15+31.96 - 19+12.31	RT	636
BAXTER AVE		
20+88.40 - 24+68.00	LT	643
20+88.40 - 24+68.00	RT	643
25+32.00 - 29+12.30	LT	636
25+32.00 - 29+12.30	RT	636
ITEM TOTAL		8112

SAWING EXISTING PAVEMENT			
STATION	LOCATION	LF	
12TH STREET			
43+99.78	LT & RT	31	
44+92.8	LT	13	
45+51.7	RT	13	
46+38.3	LT	8	
49+22.4	LT	13	
49+23.8	RT	13	
50+00.3	RT	8	
52+81.4	LT	12	
53+60.00	LT & RT	35	
CUMMING AVENUE			
10+88.11	LT & RT	101	
12+59.6	LT	9	
19+12.31	LT & RT	91	
BAXTER AVENUE			
20+88.40	LT & RT	101	
21+70.6	LT	8	
29+12.30	LT & RT	91	
ITEM TOTALS		547	

REMOVING STORM SEWER AND COMBINED SEWER		
STATION	LOCATION	LF
47+15.31	LT & RT	68
47+50 - 47+15.31	RT	66
ITEM TOTALS		134

SEALING PIPES		
STATION	LOCATION	EACH
47+50.00	RT	1
ITEM TOTALS		1

POLYSTYRENE INSULATION BOARD		
STATION	LOCATION	2-INCH SY
CUMMING AVE		
11+15	10' LT	81
14+67	10' LT	81
15+34	10' LT	81
18+28	10' LT	81
BAXTER AVE		
21+15	10' LT	81
24+67	10' LT	81
UNDISTRIBUTED		162
ITEM TOTAL		648

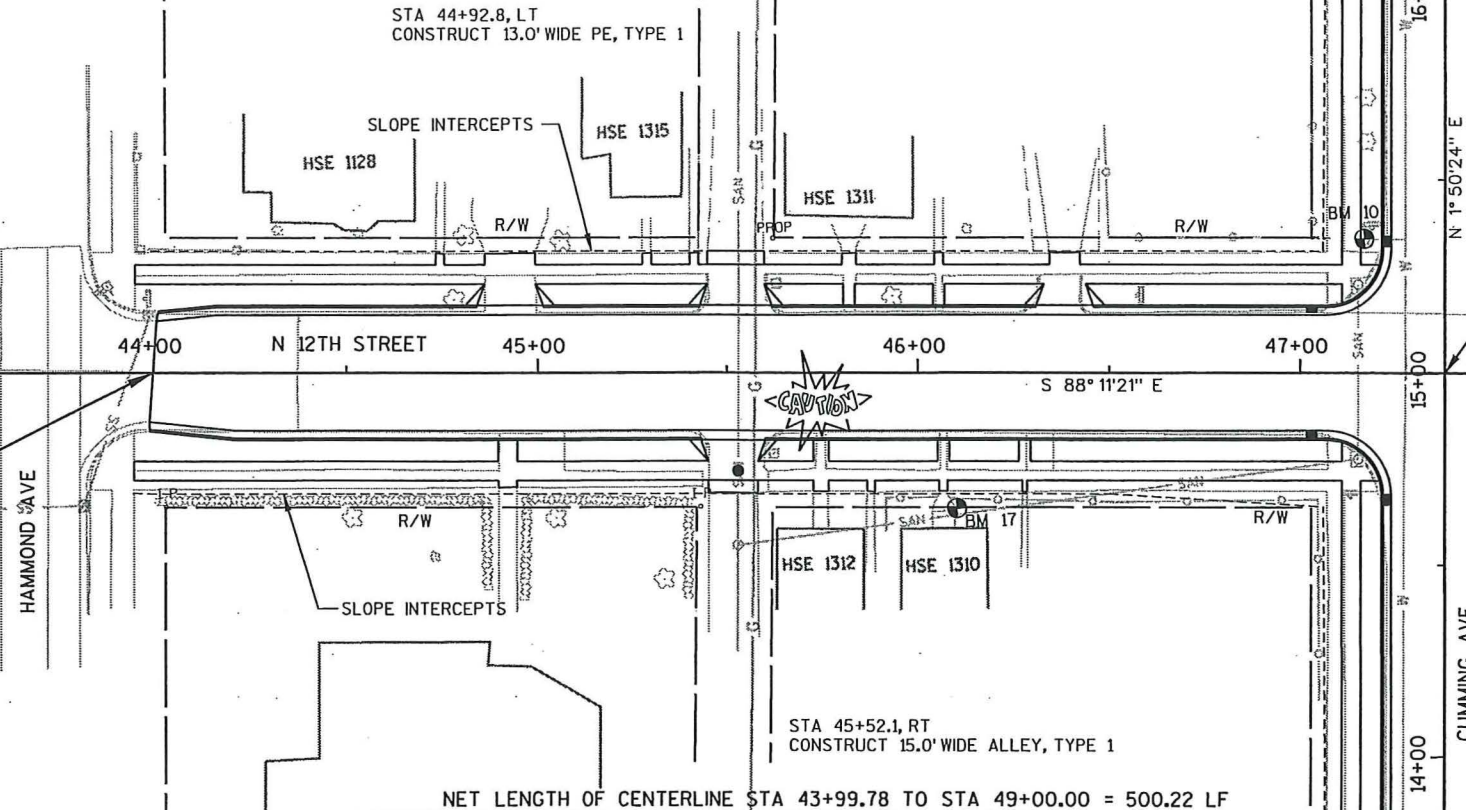


LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

STA 43+52.97 12TH STREET =  
STA 99+99.57 HAMMOND AVE

BEGIN PROJECT  
STA 43+99.78  
MATCH EXISTING

101+00  
N 1° 49' 19" E  
100+00  
99+00

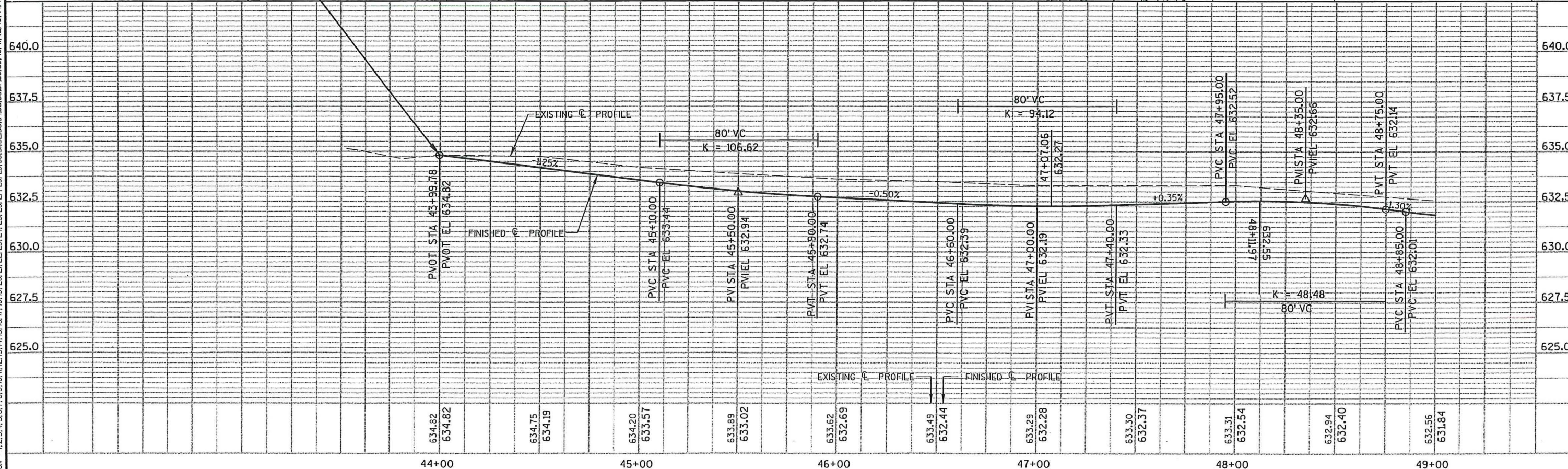


STA 47+37.98 12TH STREET =  
STA 15+00.00 CUMMING AVE

MATCHLINE STA 49+00.00

BENCHMARK TABLE			
NO	STATION	DESCRIPTION	ELEV
17	46+10.37 35' RT	TOP NE COR BOTTOM STEP AT HOUSE # 1310 12TH ST	633.71
10	47+16.97 35' LT	TOP NUT HYDRANT @ NW COR 12TH ST AND CUMMING AVE	635.66
16	48+64.61 34' LT	TOP SE COR BOTTOM STEP AT HOUSE # 1217 12TH ST	633.58

NET LENGTH OF CENTERLINE STA 43+99.78 TO STA 49+00.00 = 500.22 LF

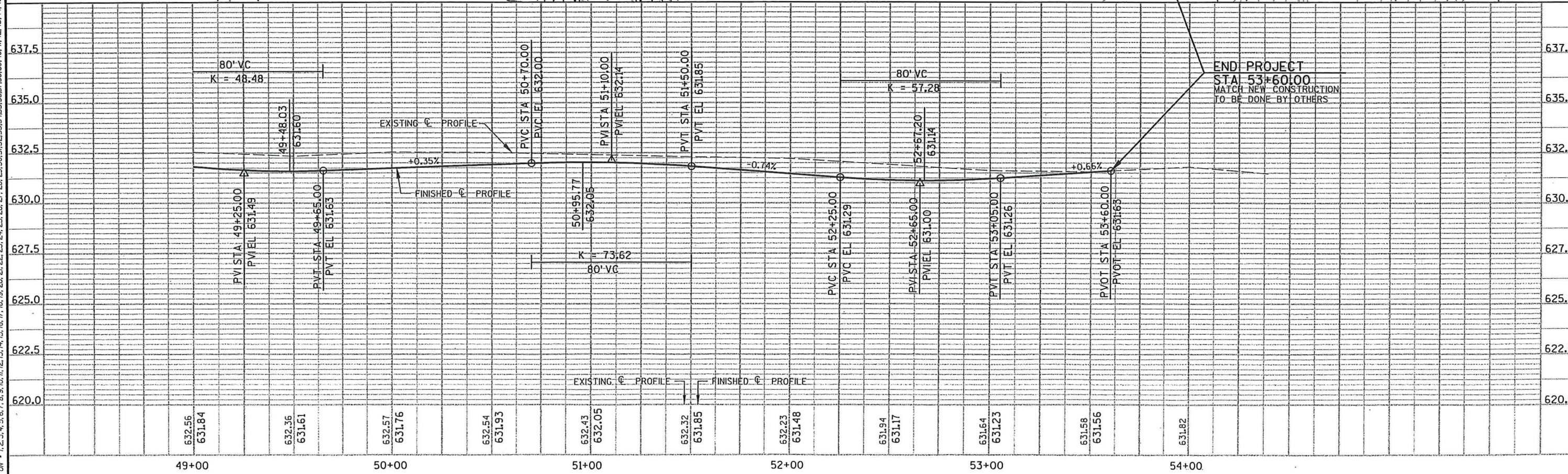
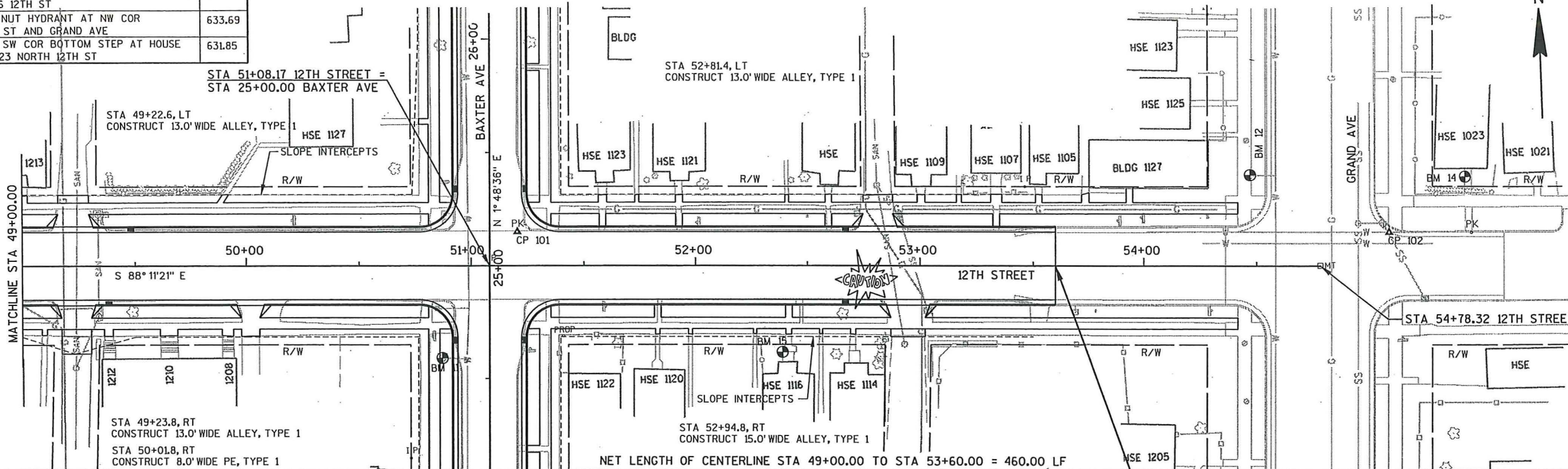


PROJECT NUMBER: SUPER0004.00	HWY: 12TH STREET	COUNTY: DOUGLAS	PLAN & PROFILE	SCALE, FEET	SHEET NO: E
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**BENCHMARK TABLE**

NO	STATION	DESCRIPTION	ELEV
11	50+87.32 41'RT	TOP NUT HYDRANT AT SW COR 12TH ST AND BAXTER AVE	634.80
15	52+39.03 38'RT	TOP OF NW COR BOTTOM STEP AT HOUSE # 1116 12TH ST	633.18
12	54+47.10 40'LT	TOP NUT HYDRANT AT NW COR 12TH ST AND GRAND AVE	633.69
14	55+43.04 39'LT	TOP SW COR BOTTOM STEP AT HOUSE # 1023 NORTH 12TH ST	631.85



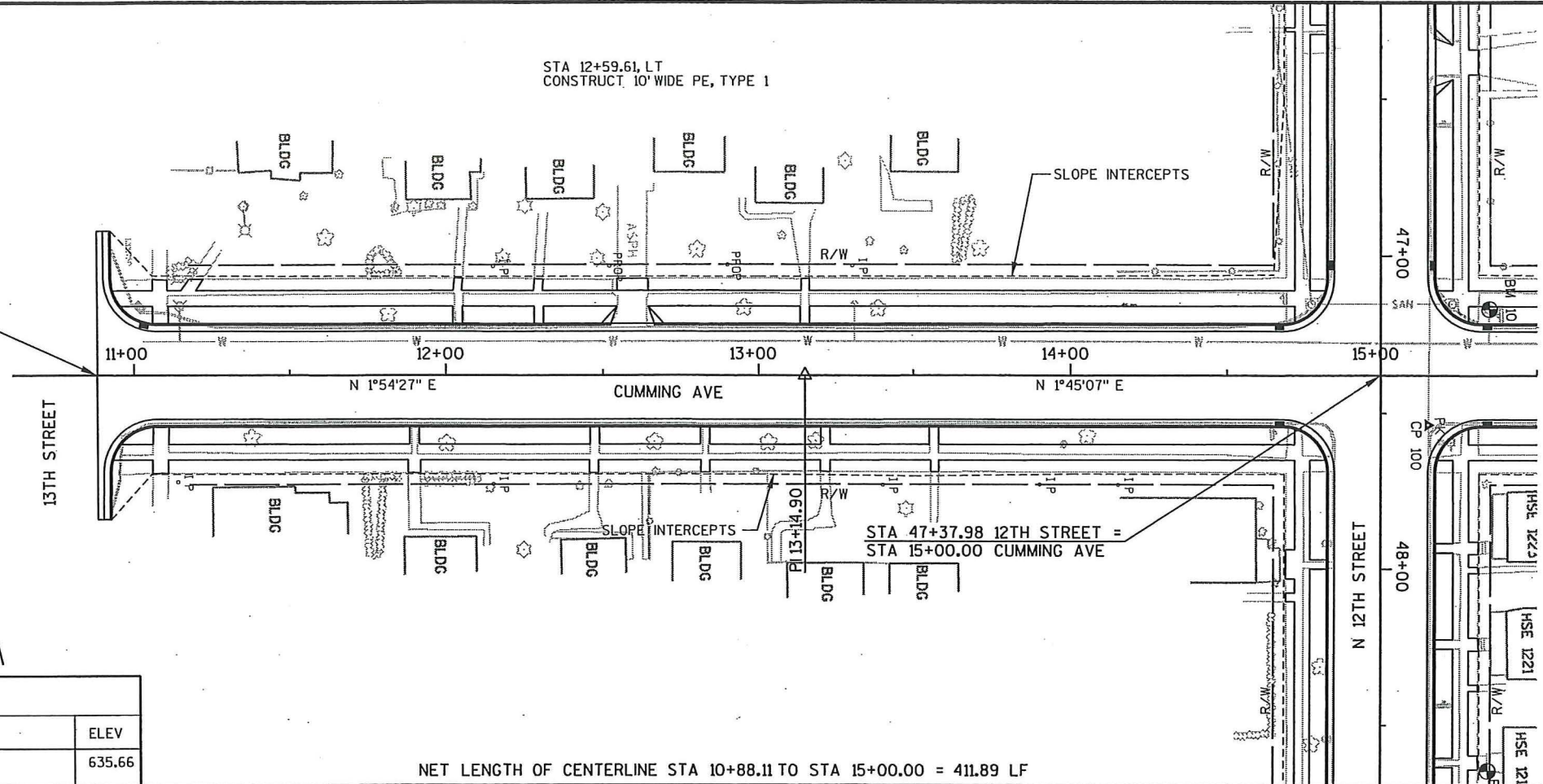
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STA 12+59.61, LT  
CONSTRUCT 10' WIDE PE, TYPE 1

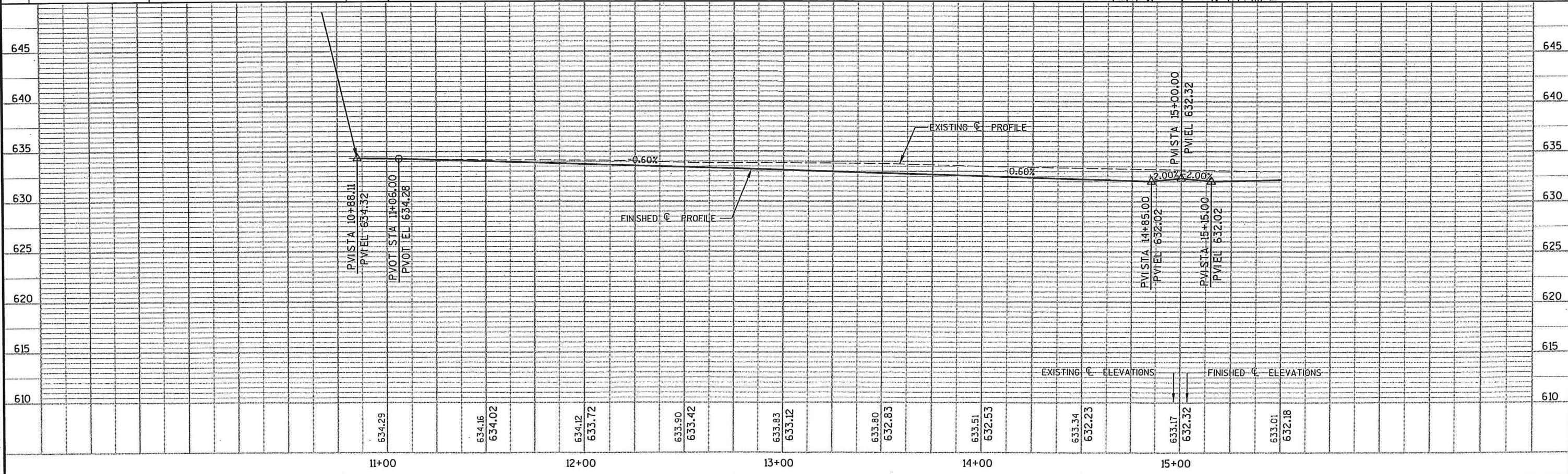


BEGIN CONSTRUCTION  
STA 10+88.11  
MATCH EXISTING  
SAWCUT ROAD



**BENCHMARK TABLE**

NO	STATION	DESCRIPTION	ELEV
10	47+16.97 35'LT	TOP NUT HYDRANT @ NW COR 12TH ST AND CUMMING AVE	635.66

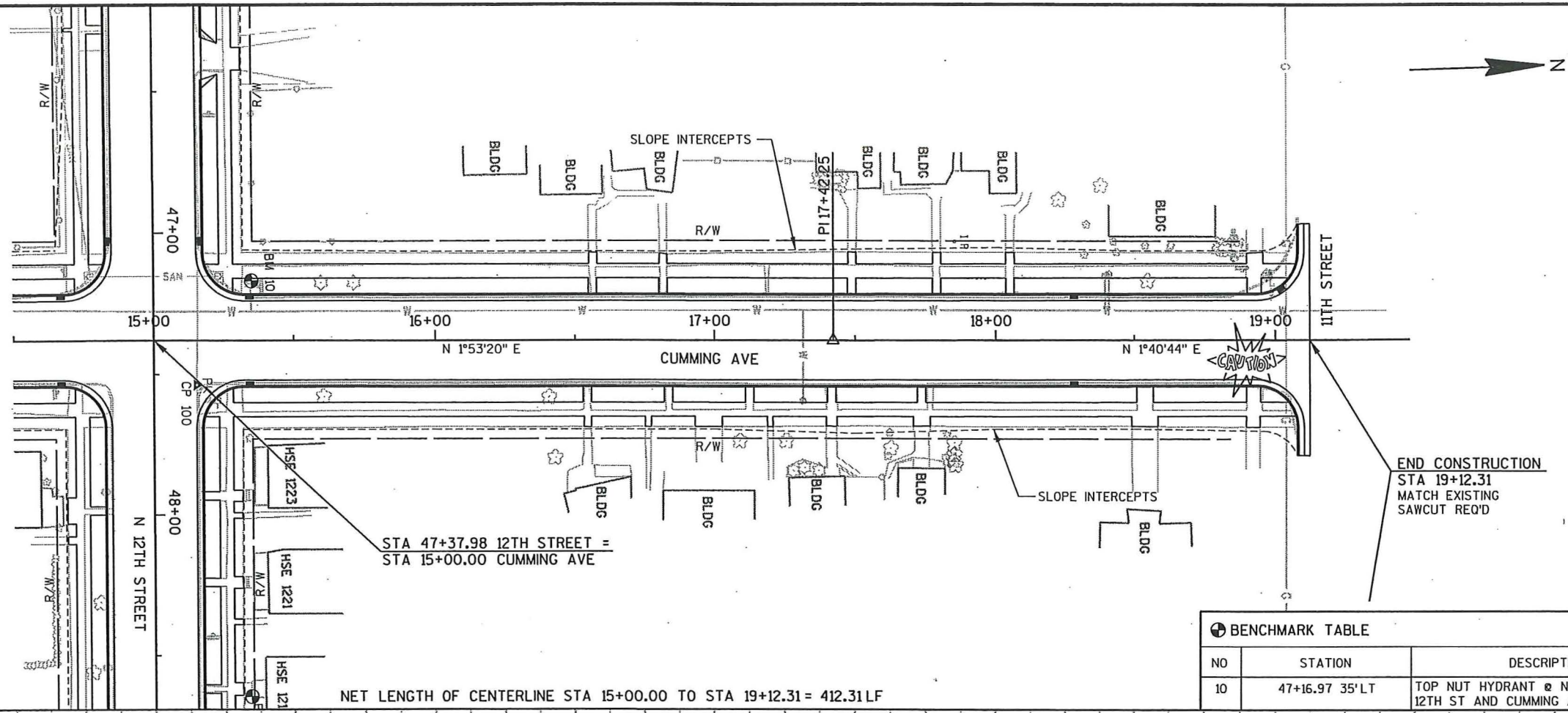


PROJECT NUMBER: SUPER0004.00	HWY: 12TH STREET	COUNTY: DOUGLAS	PLAN & PROFILE	SCALE, FEET	SHEET NO: <b>E</b>
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LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 58, 59, 60, 61, 63

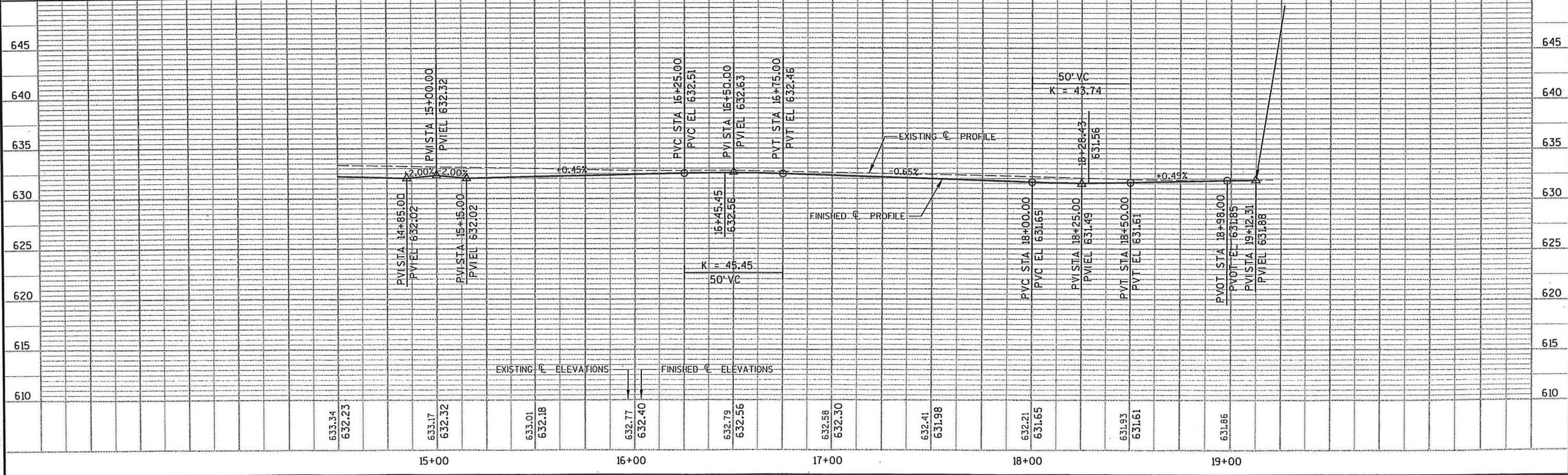


LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 58, 59, 60, 61, 63



NET LENGTH OF CENTERLINE STA 15+00.00 TO STA 19+12.31 = 412.31 LF

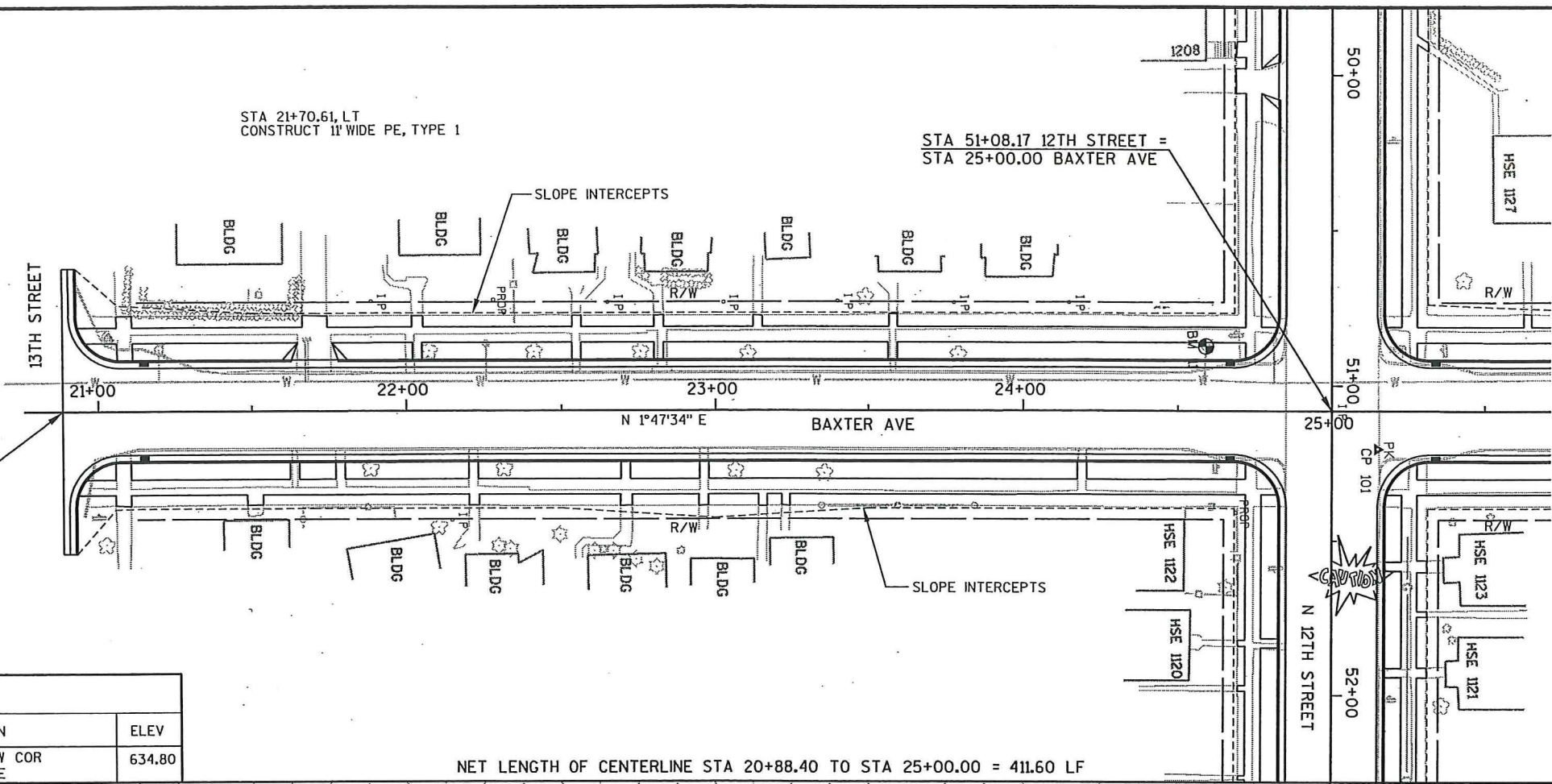
BENCHMARK TABLE			
NO	STATION	DESCRIPTION	ELEV
10	47+16.97 35' LT	TOP NUT HYDRANT @ NW COR 12TH ST AND CUMMING AVE	635.66



PROJECT NUMBER: SUPER0004.00	HWY: 12TH STREET	COUNTY: DOUGLAS	PLAN & PROFILE	SCALE, FEET	SHEET NO: <b>E</b>
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LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56, 58,59,60,61, 63

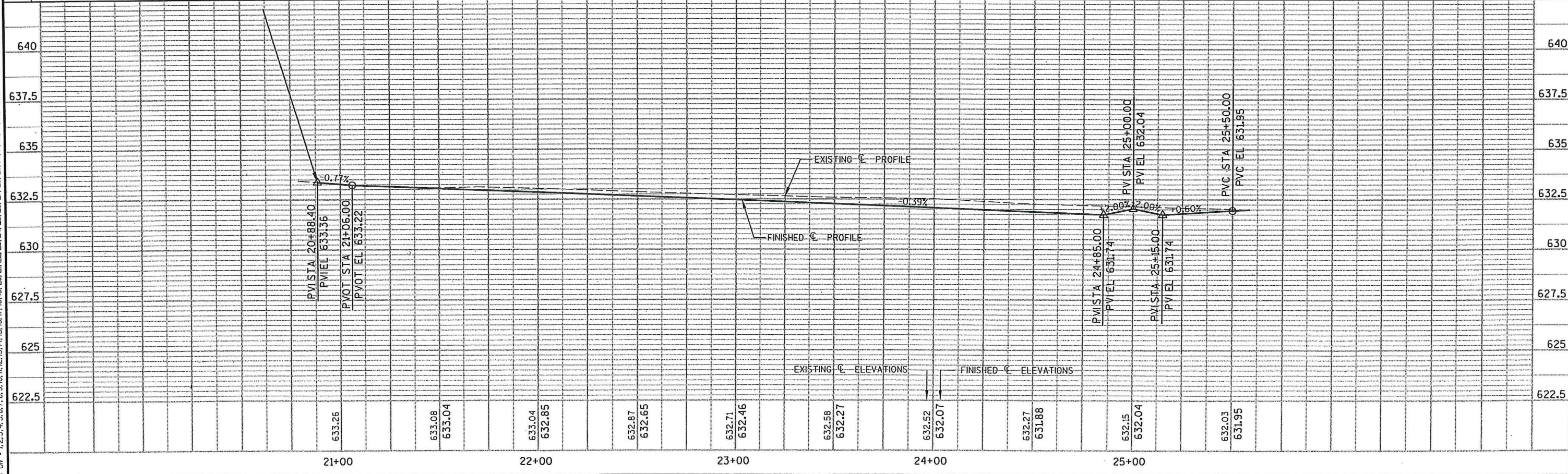


BEGIN CONSTRUCTION  
STA 20+88.40  
MATCH EXISTING  
SAWCUT REQ'D

**BENCHMARK TABLE**

NO	STATION	DESCRIPTION	ELEV
11	50+87.32 41' RT	TOP NUT HYDRANT AT SW COR 12TH ST AND BAXTER AVE	634.80

NET LENGTH OF CENTERLINE STA 20+88.40 TO STA 25+00.00 = 411.60 LF

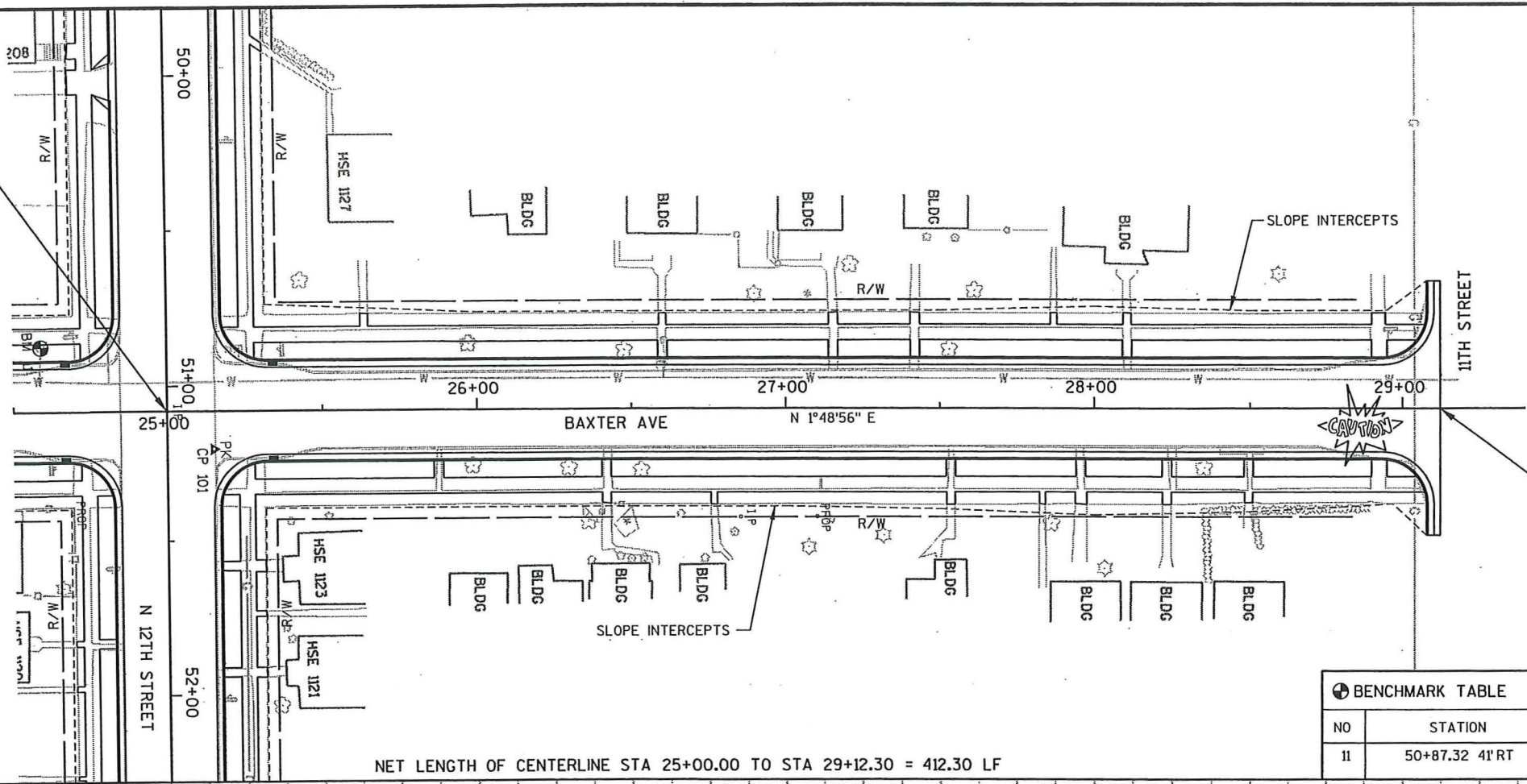


PROJECT NUMBER: SUPER004.00	HWY: 12TH STREET	COUNTY: DOUGLAS	PLAN & PROFILE	SCALE, FEET	SHEET NO: <b>E</b>
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LEVELS ON : 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 58, 59, 60, 61, 63

STA 51+08.17 12TH STREET =  
STA 25+00.00 BAXTER AVE

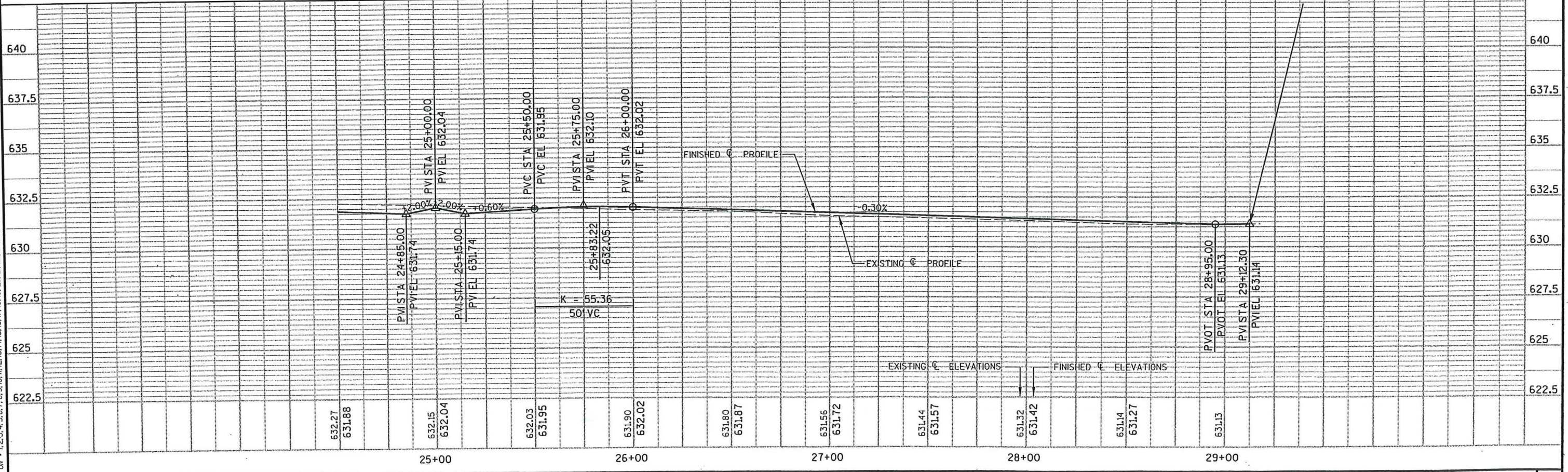


END CONSTRUCTION  
STA 29+12.30  
MATCH EXISTING  
SAWCUT REQ'D

NET LENGTH OF CENTERLINE STA 25+00.00 TO STA 29+12.30 = 412.30 LF

BENCHMARK TABLE

NO	STATION	DESCRIPTION	ELEV
11	50+87.32 41' RT	TOP NUT HYDRANT AT SW COR 12TH ST AND BASTER AVE	634.80





12TH STREET							*EXPANDED 30 %
STATION	END AREA (SF)		VOLUME (CY)		CUM VOLUME (CY)		MASS HAUL (CY)
	CUT	FILL	CUT	*FILL	CUT	*FILL	
44+00	57	1	0	0	0	0	0
44+50	68	1	116	2	116	2	114
45+00	76	0	133	1	249	2	247
45+50	82	0	146	0	395	2	393
46+00	51	0	123	0	519	2	516
46+50	51	0	94	0	613	2	611
47+00	51	0	94	0	707	2	705
48+00	51	0	189	0	896	2	894
48+50	63	0	106	0	1002	2	999
49+00	51	0	106	0	1107	2	1105
49+23	79	0	55	0	1163	2	1160
49+50	51	0	65	0	1228	2	1225
50+00	82	0	123	0	1351	3	1348
50+50	50	0	122	0	1473	3	1470
51+50	51	0	187	0	1660	3	1657
52+00	51	0	94	0	1755	3	1752
52+50	51	0	94	0	1849	3	1846
53+00	60	1	103	1	1952	4	1948
53+50	52	2	104	3	2056	6	2049
53+60	3	0	10	0	2066	6	2059

CUMMING AVENUE							*EXPANDED 30 %
STATION	END AREA (SF)		VOLUME (CY)		CUM VOLUME (CY)		MASS HAUL (CY)
	CUT	FILL	CUT	*FILL	CUT	*FILL	
10+88	0	0	0	0	0	0	0
11+05	50	0.5	16	0	16	0	15
11+60	55	1.1	107	2	123	2	120
12+10	49	0	96	1	219	4	215
12+60	49	0	91	0	310	4	306
13+00	49	0	73	0	382	4	379
13+50	49	0	91	0	473	4	469
14+00	49	0	91	0	564	4	560
14+50	49	0	91	0	654	4	651
15+50	49	0	181	0	836	4	832
16+00	49	0.1	91	0	927	4	923
16+50	55	0.6	96	1	1023	5	1018
17+00	60	0	106	1	1129	5	1124
17+50	73	0.1	123	0	1253	5	1247
18+00	48	0	112	0	1365	6	1359
18+50	62	0	102	0	1466	6	1461
18+85	49	1.4	72	1	1538	7	1532
18+98	3	0	13	0	1551	7	1544
19+12	0	0	1	0	1552	7	1545

BAXTER AVENUE							*EXPANDED 30 %
STATION	END AREA (SF)		VOLUME (CY)		CUM VOLUME (CY)		MASS HAUL (CY)
	CUT	FILL	CUT	*FILL	CUT	*FILL	
20+88	0	0	0	0	0	0	0
21+13	43	6.6	20	4	20	4	16
21+50	58	0.1	69	6	89	10	79
21+70	48	0	39	0	128	10	118
22+00	48	0	53	0	181	10	171
22+50	48	0	89	0	270	10	260
23+00	48	0	89	0	359	10	349
23+50	48	0	89	0	448	10	438
24+00	48	0	89	0	537	10	527
24+50	48	0	89	0	626	10	616
25+50	50	0.3	181	1	807	11	797
26+00	54	0.3	96	1	904	11	892
26+50	51	0.2	97	1	1001	12	989
27+00	49	0.6	93	1	1093	13	1080
27+50	50	0.6	92	1	1185	14	1171
28+00	52	0.3	94	1	1280	15	1264
28+50	51	0.8	95	1	1375	17	1358
28+86	54	0.8	70	1	1445	18	1427
28+95	3	0	10	0	1454	18	1436
29+12	0	0	1	0	1455	18	1437

LEVELS ON 1, 2, 3, 4.

PROJECT NUMBER: SUPER0004.00

HWY: 12TH STREET

COUNTY: DOUGLAS

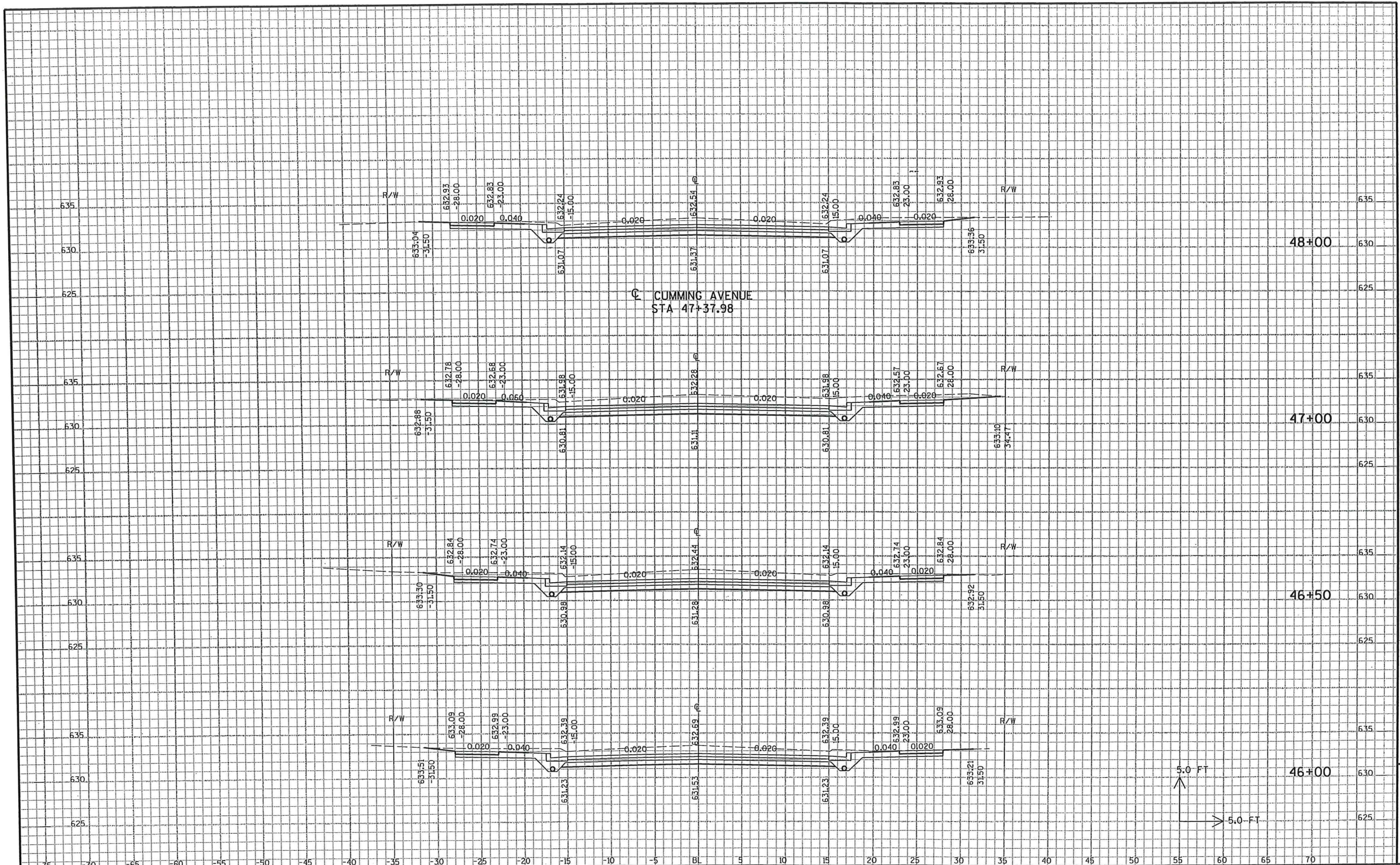
EARTHWORK TABULATIONS

SCALE, FEET  NTS

SHEET NO:

E





SEH PROJECT NO : SUPER0004.00

HWY : 12TH STREET

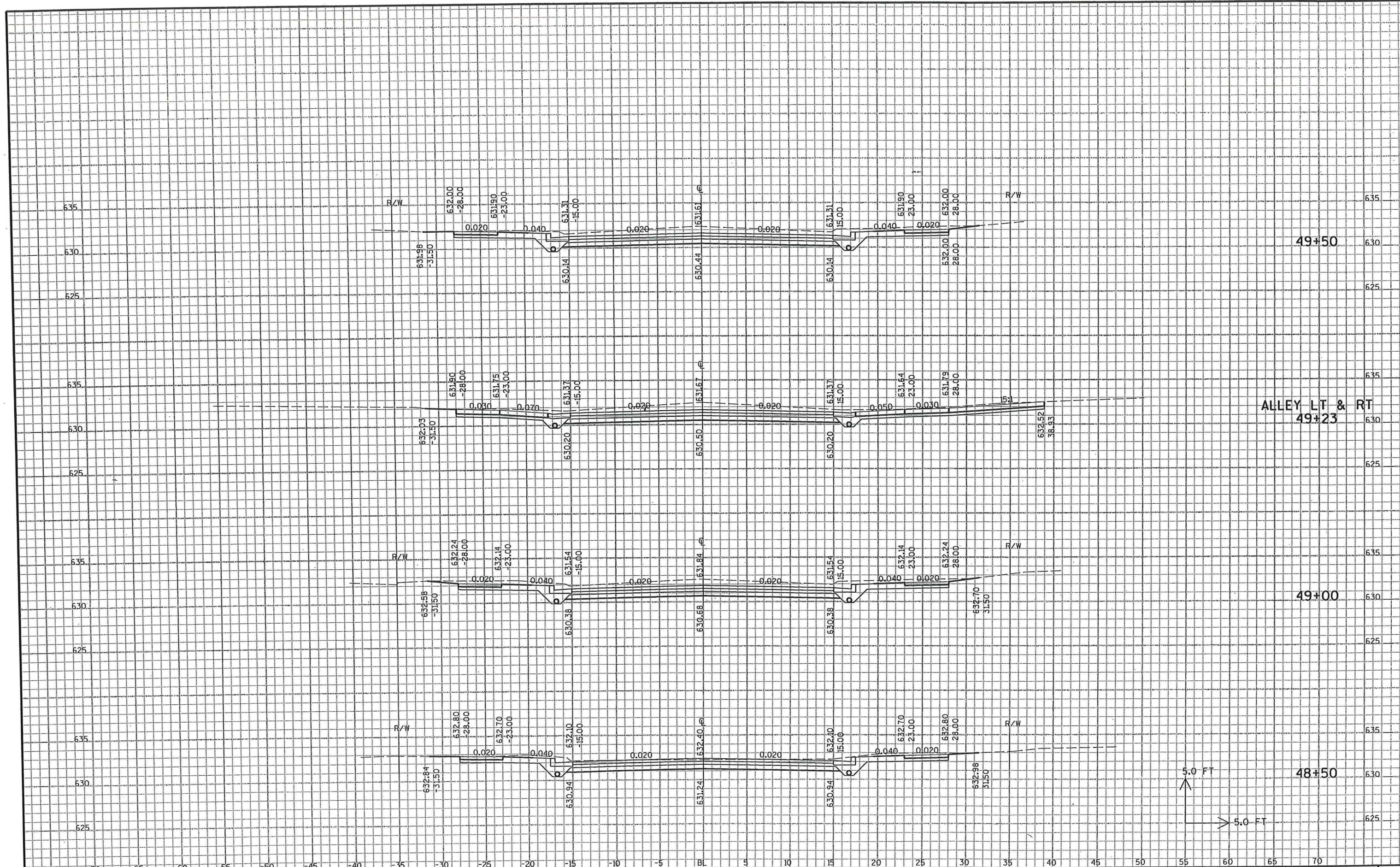
COUNTY : DOUGLAS

CROSS SECTIONS - 12TH STREET

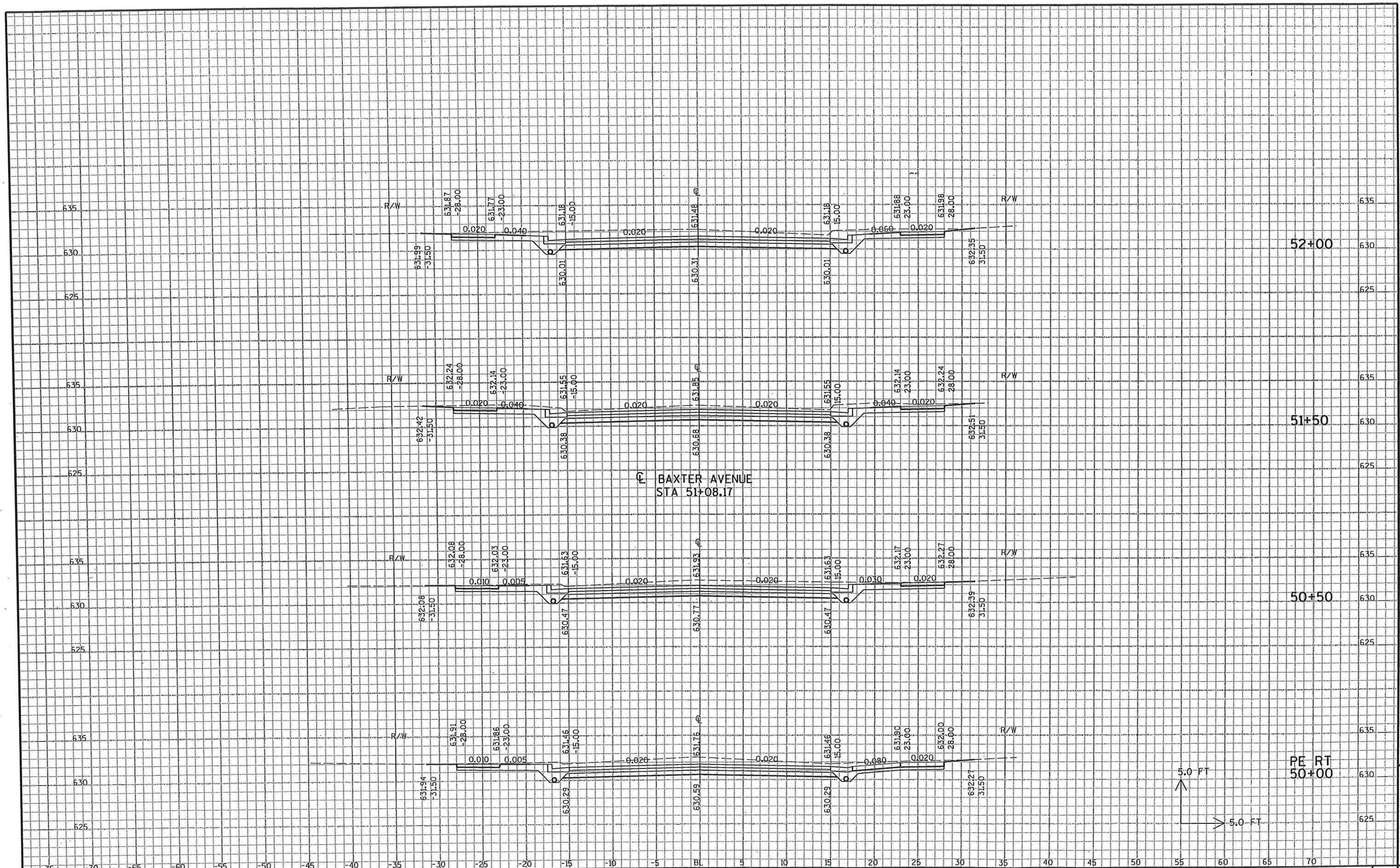
SHEET NO:

E









SEH PROJECT NO : SUPER0004.00

HWY : 12TH STREET

COUNTY : DOUGLAS

CROSS SECTIONS - 12TH STREET

SHEET NO:

E

FILE NAME : e:\trans\super\0004.00\CAD\xs12th01.dgn

PLOT DATE: 03/04/03

PLOT TIME: 02:37:56 PM

ORG DATE :

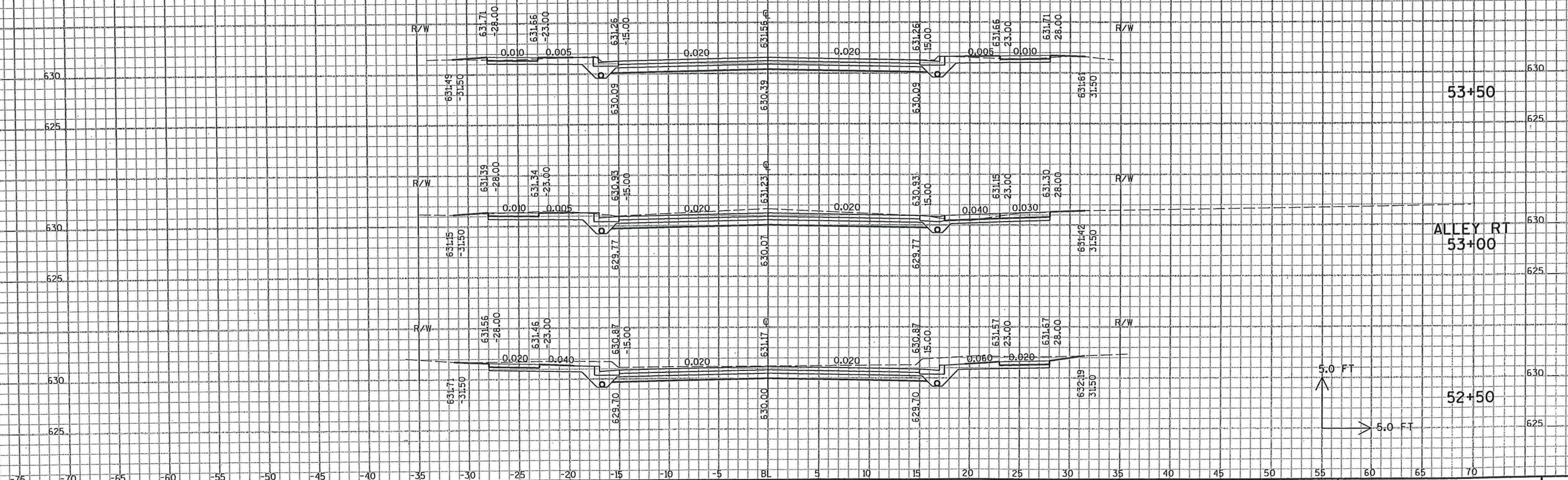
PLOT NAME :

Originator : Dist

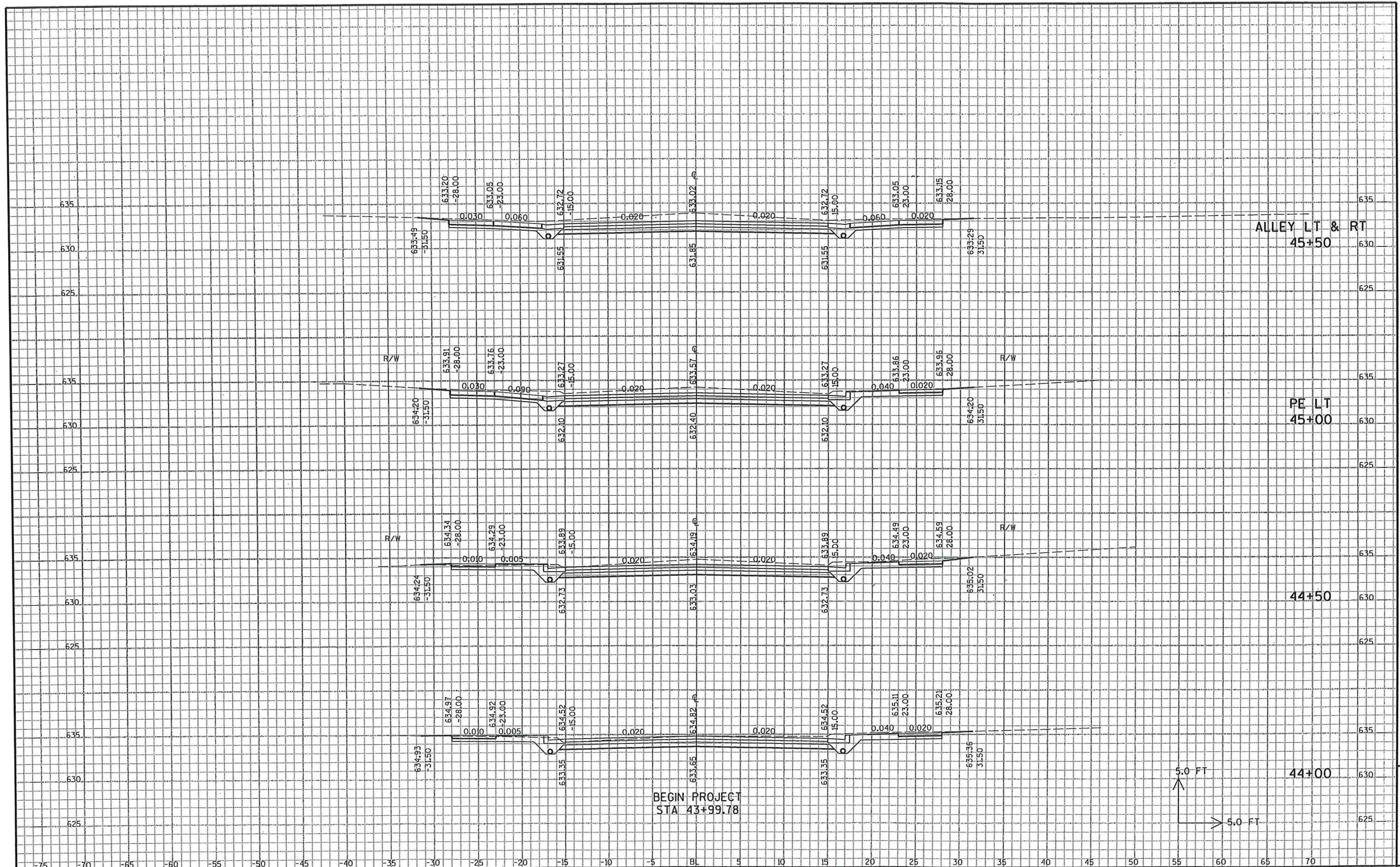
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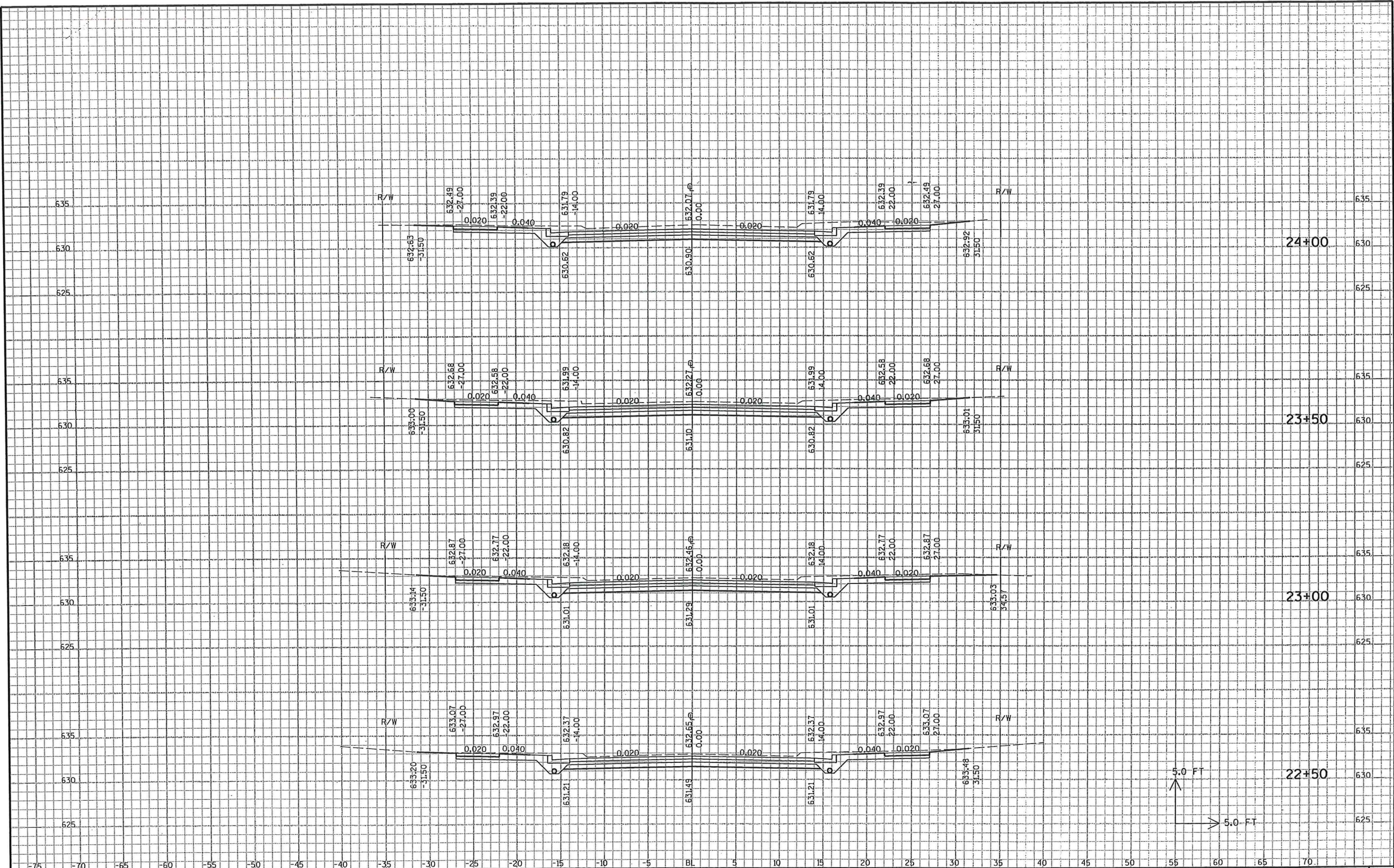
END PROJECT  
STA 53+60:00











SEH PROJECT NO : SUPER0004.00

HWY : 12TH STREET

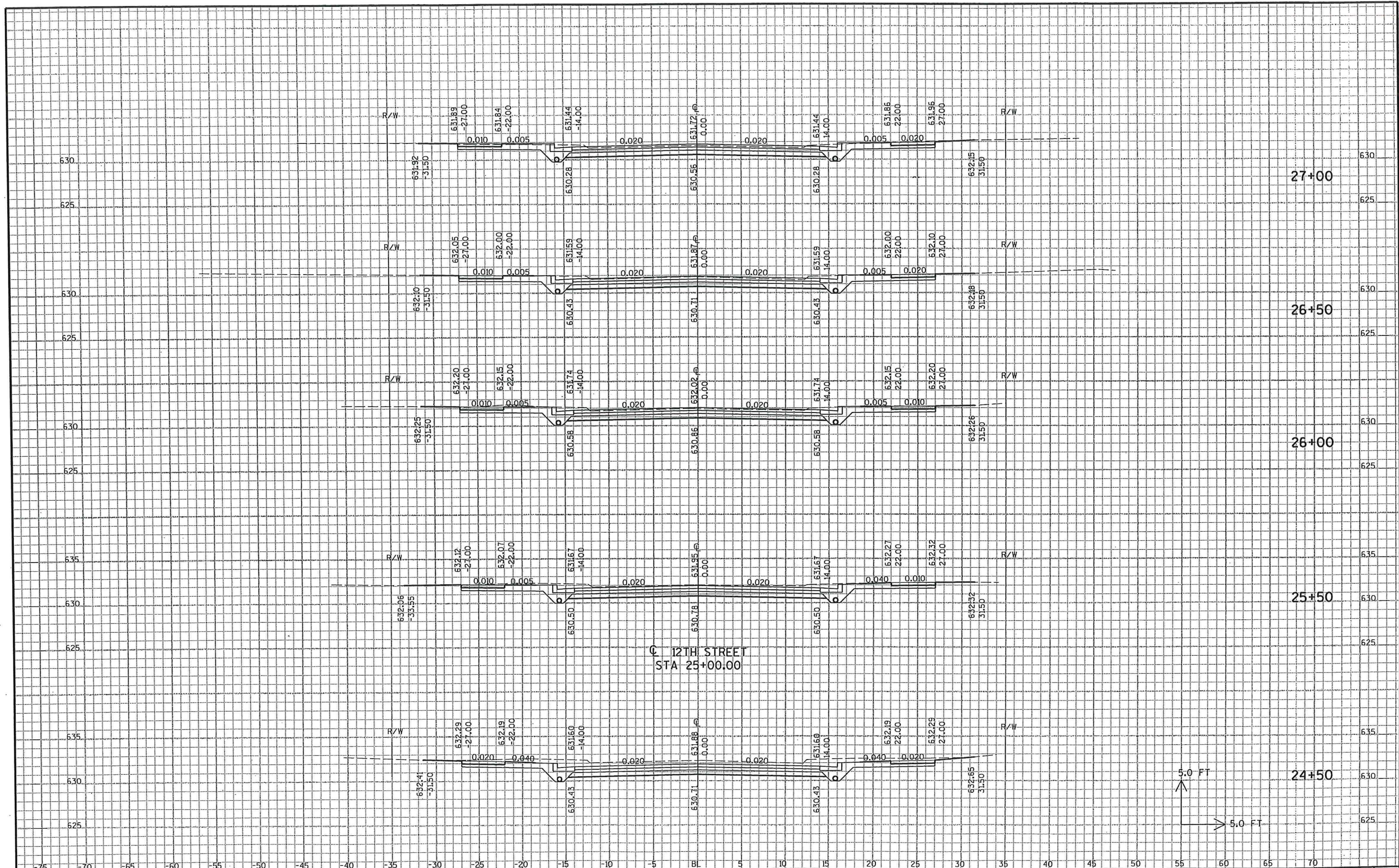
COUNTY : DOUGLAS

CROSS SECTIONS - BAXTER AVENUE

SHEET NO:

E





SEH PROJECT NO : SUPER0004.00

HWY : 12TH STREET

COUNTY : DOUGLAS

CROSS SECTIONS - BAXTER AVENUE

SHEET NO:

E

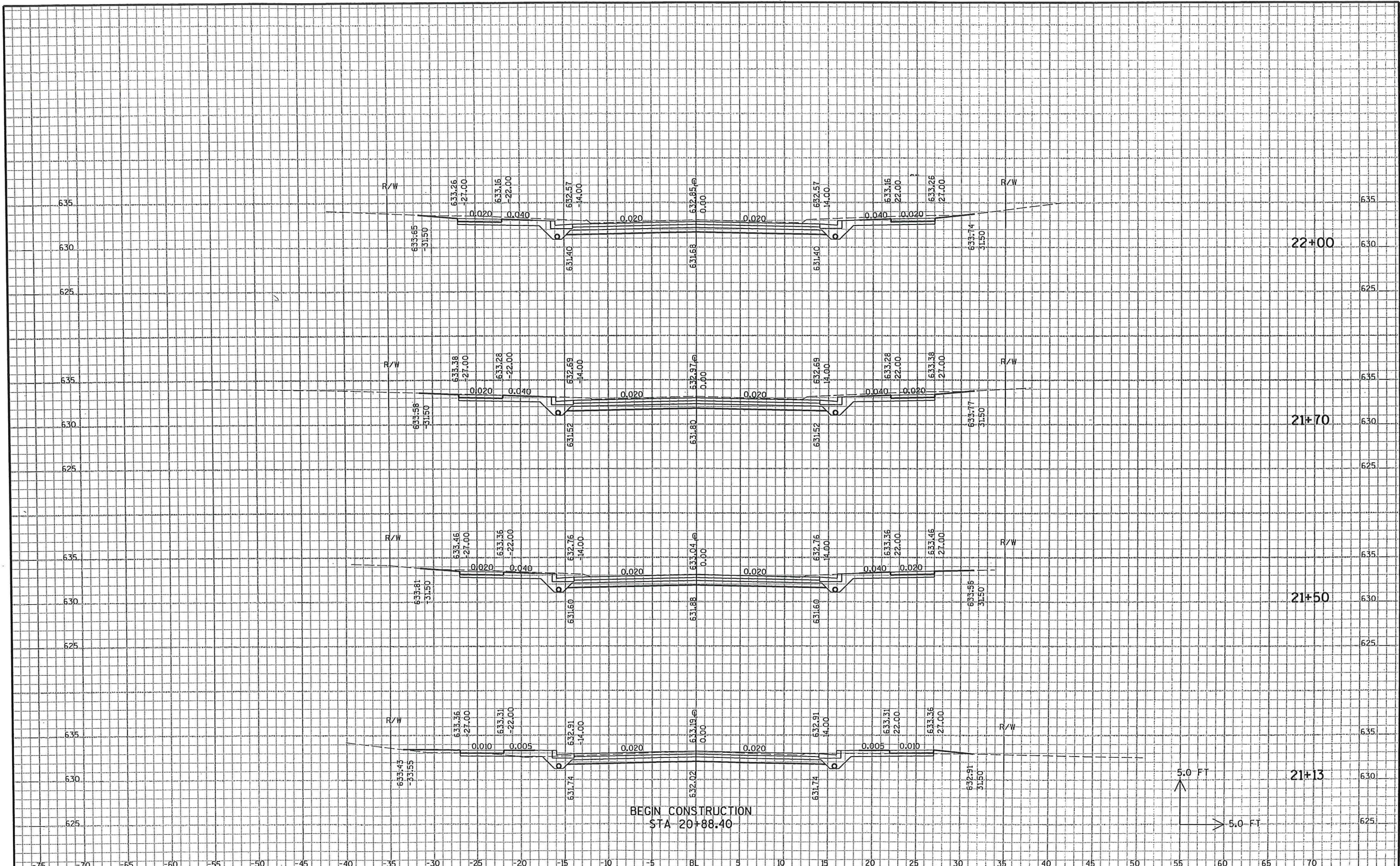


END CONSTRUCTION  
STA 29+12.30



SEH PROJECT NO : SUPER0004.00      HWY : 12TH STREET      COUNTY : DOUGLAS      CROSS SECTIONS - BAXTER AVENUE      SHEET NO:      E





SEH PROJECT NO : SUPER0004.00

HWY : 12TH STREET

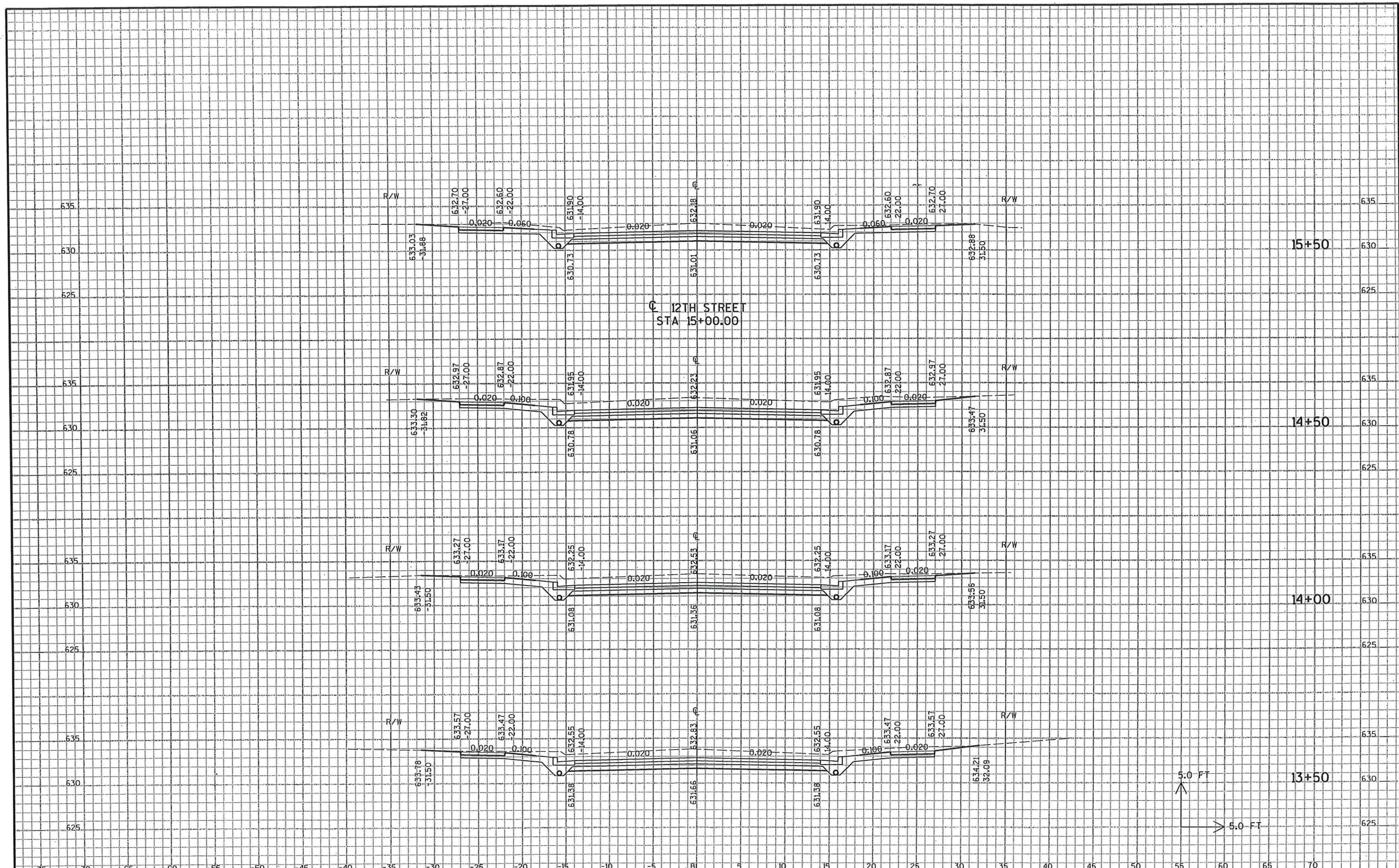
COUNTY : DOUGLAS

CROSS SECTIONS - BAXTER AVENUE

SHEET NO:

E





SEH PROJECT NO : SUPER0004.00

HWY : 12TH STREET

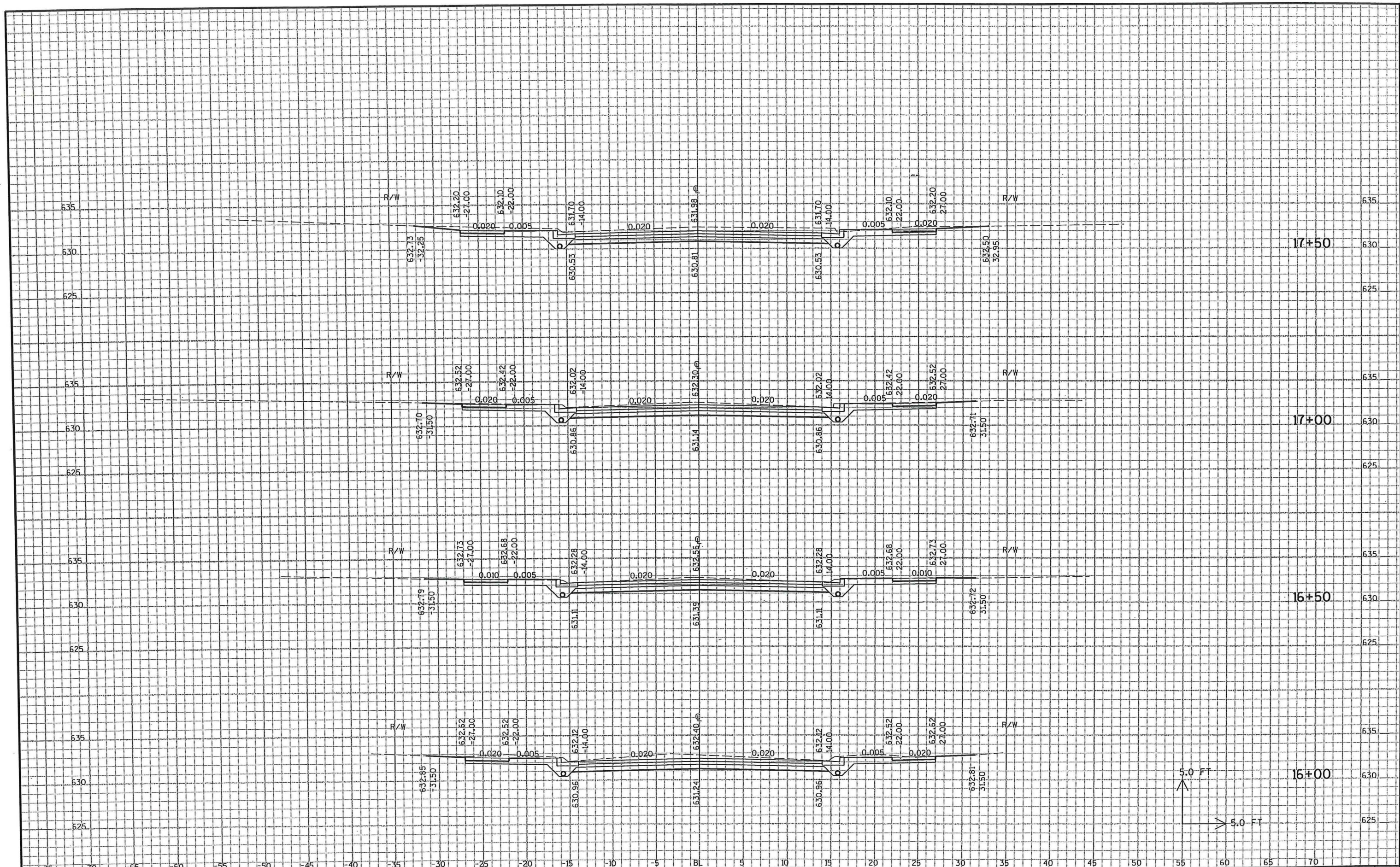
COUNTY : DOUGLAS

CROSS SECTIONS - CUMMING AVENUE

SHEET NO:

9

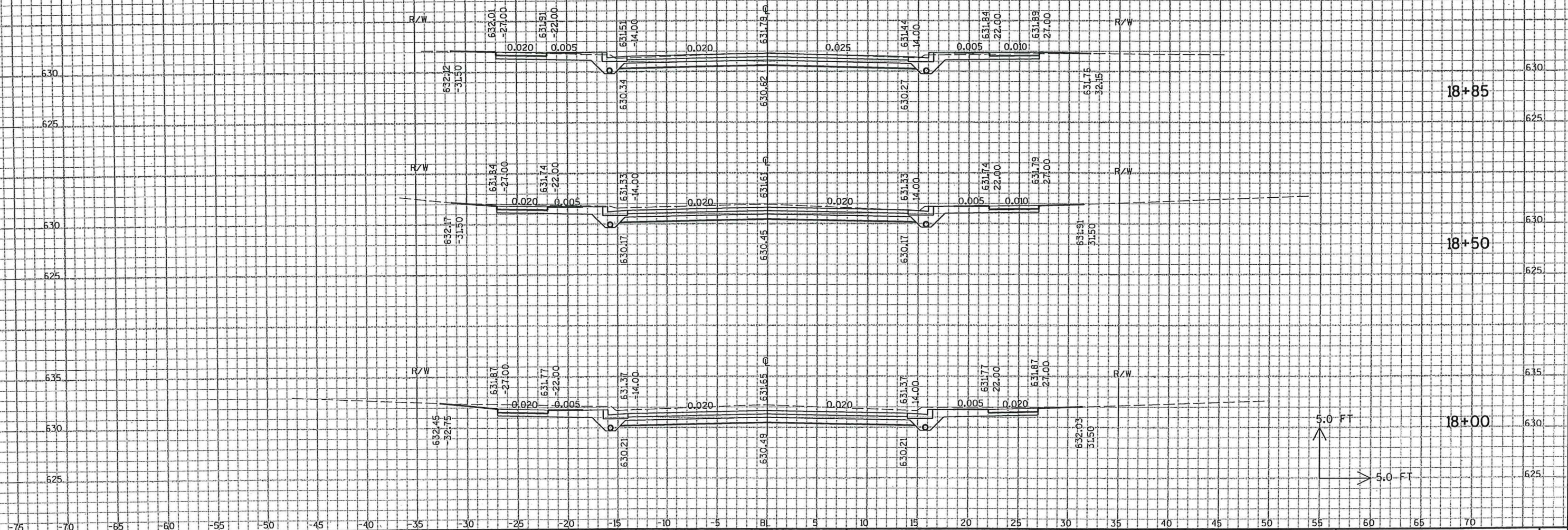




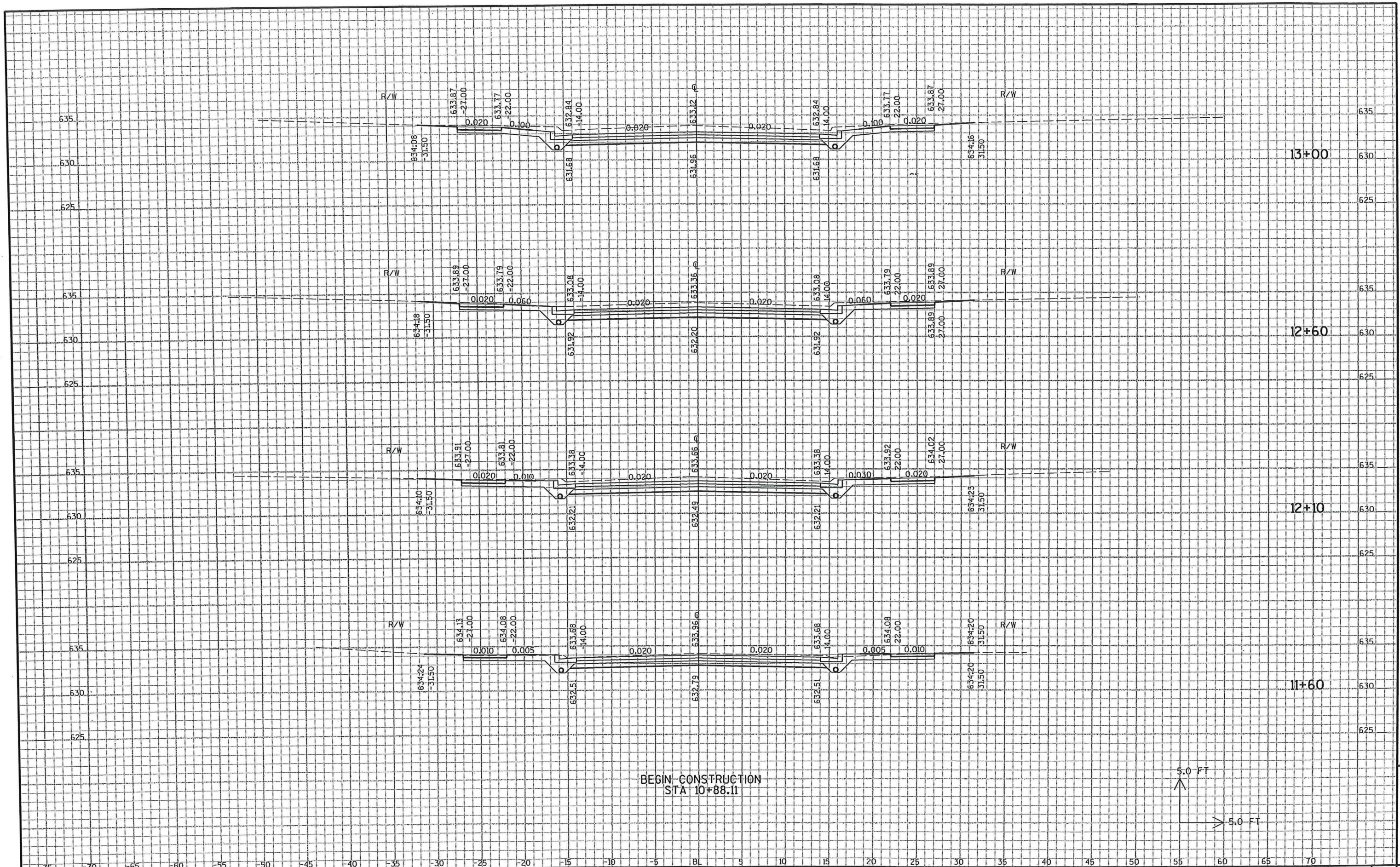
SEH PROJECT NO : SUPER0004.00	HWY : 12TH STREET	COUNTY : DOUGLAS	CROSS SECTIONS - CUMMING AVENUE
SHEET NO:			E



END CONSTRUCTION  
STA 19+12.34







SEH PROJECT NO : SUPER0004.00

HWY : 12TH STREET

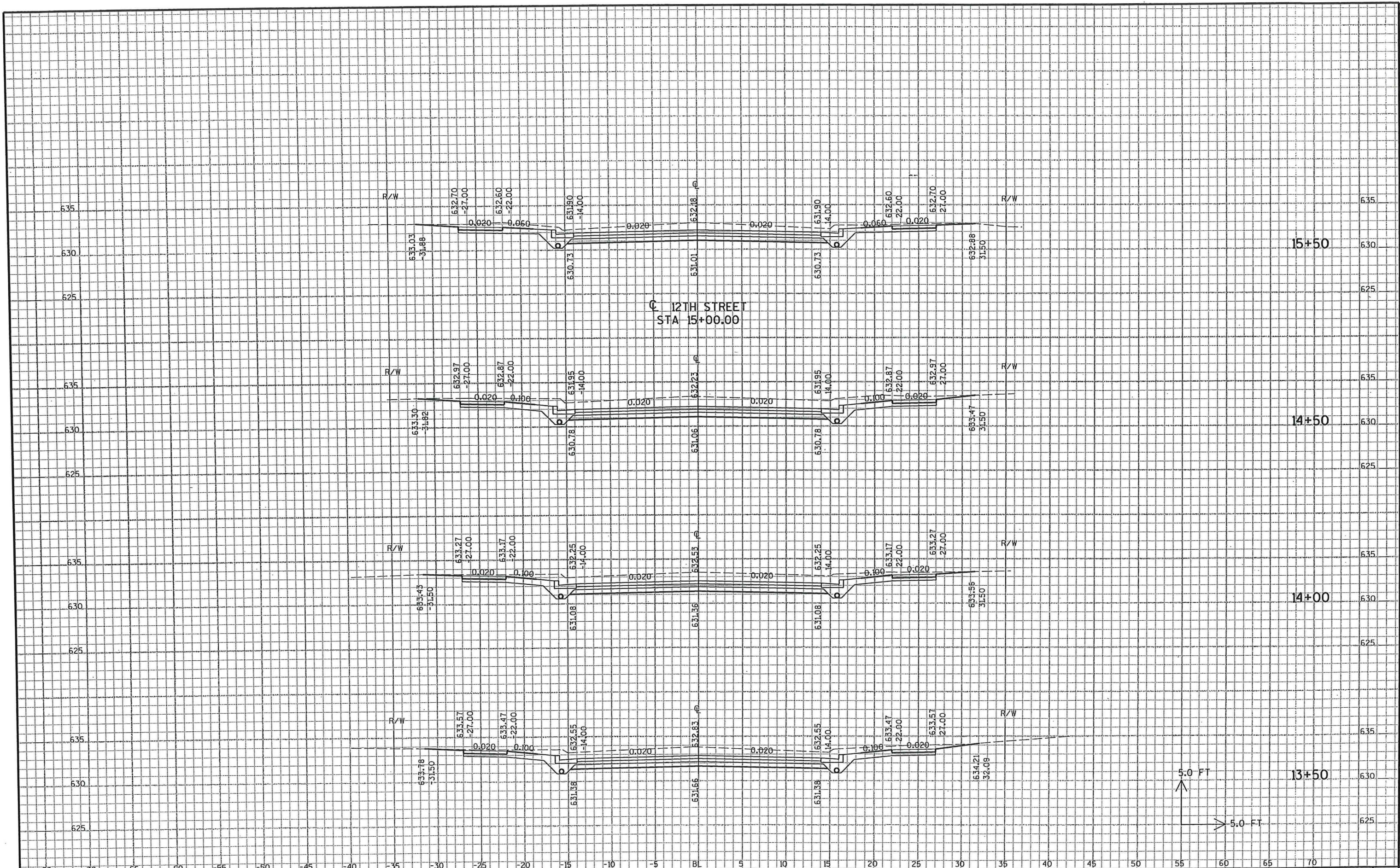
COUNTY : DOUGLAS

CROSS SECTIONS - CUMMING AVENUE

SHEET NO:

E





SEH PROJECT NO : SUPER0004.00

HWY : 12TH STREET

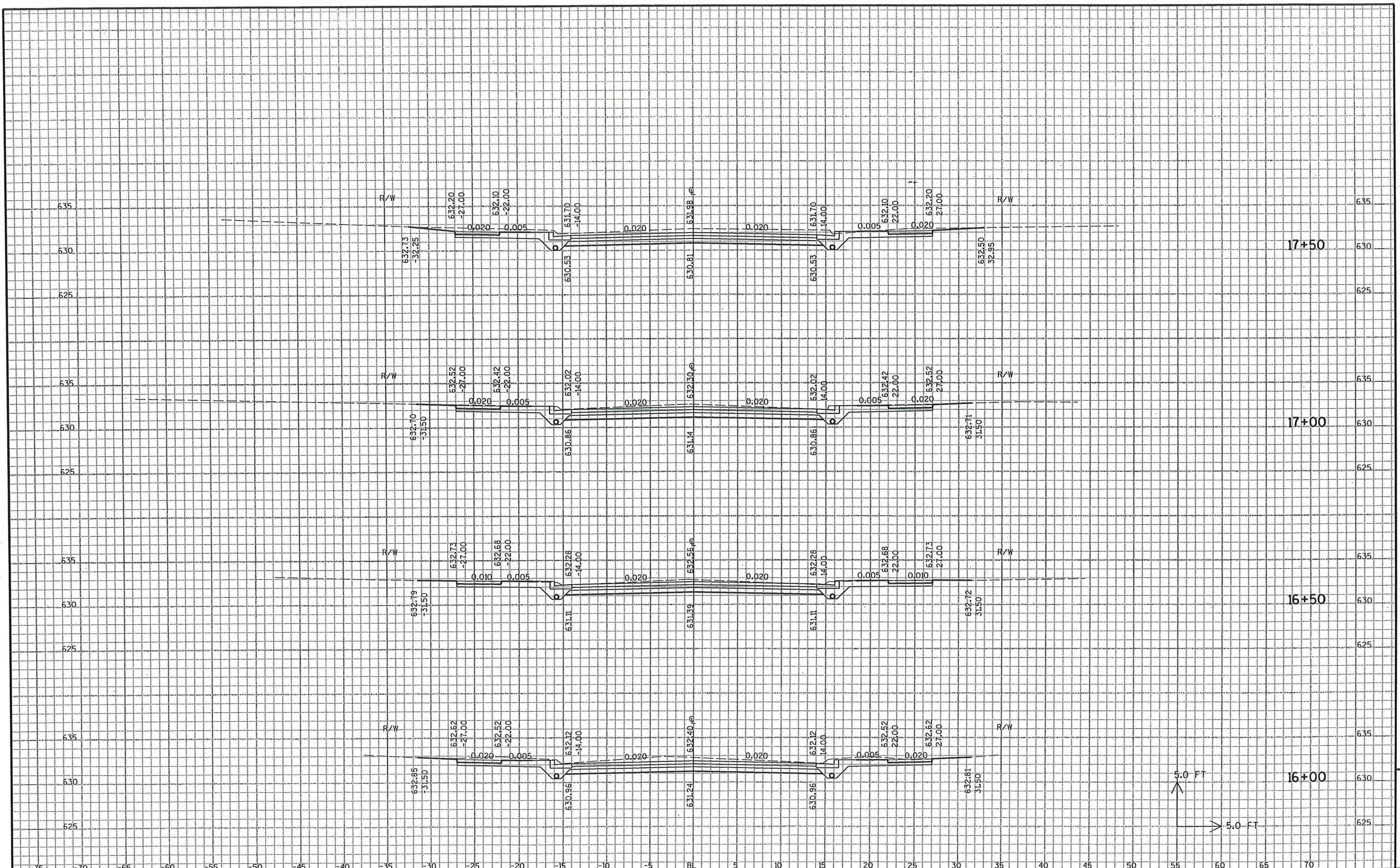
COUNTY : DOUGLAS

CROSS SECTIONS - CUMMING AVENUE

SHEET NO:

E

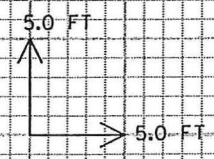
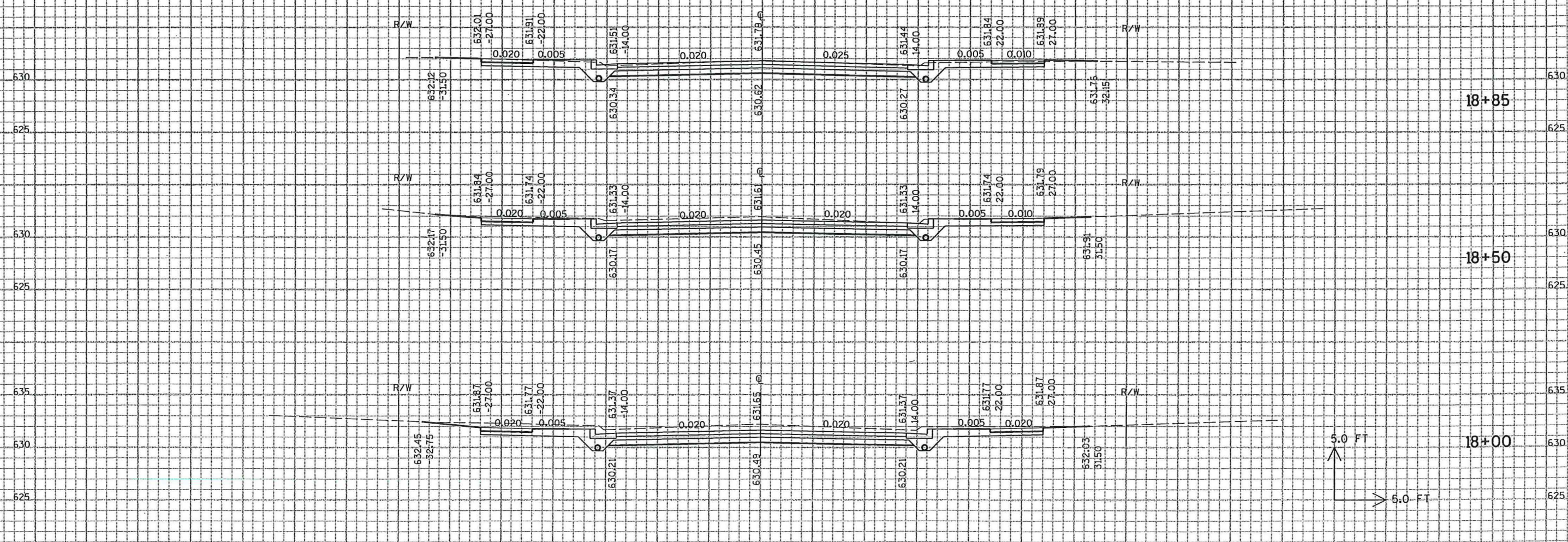




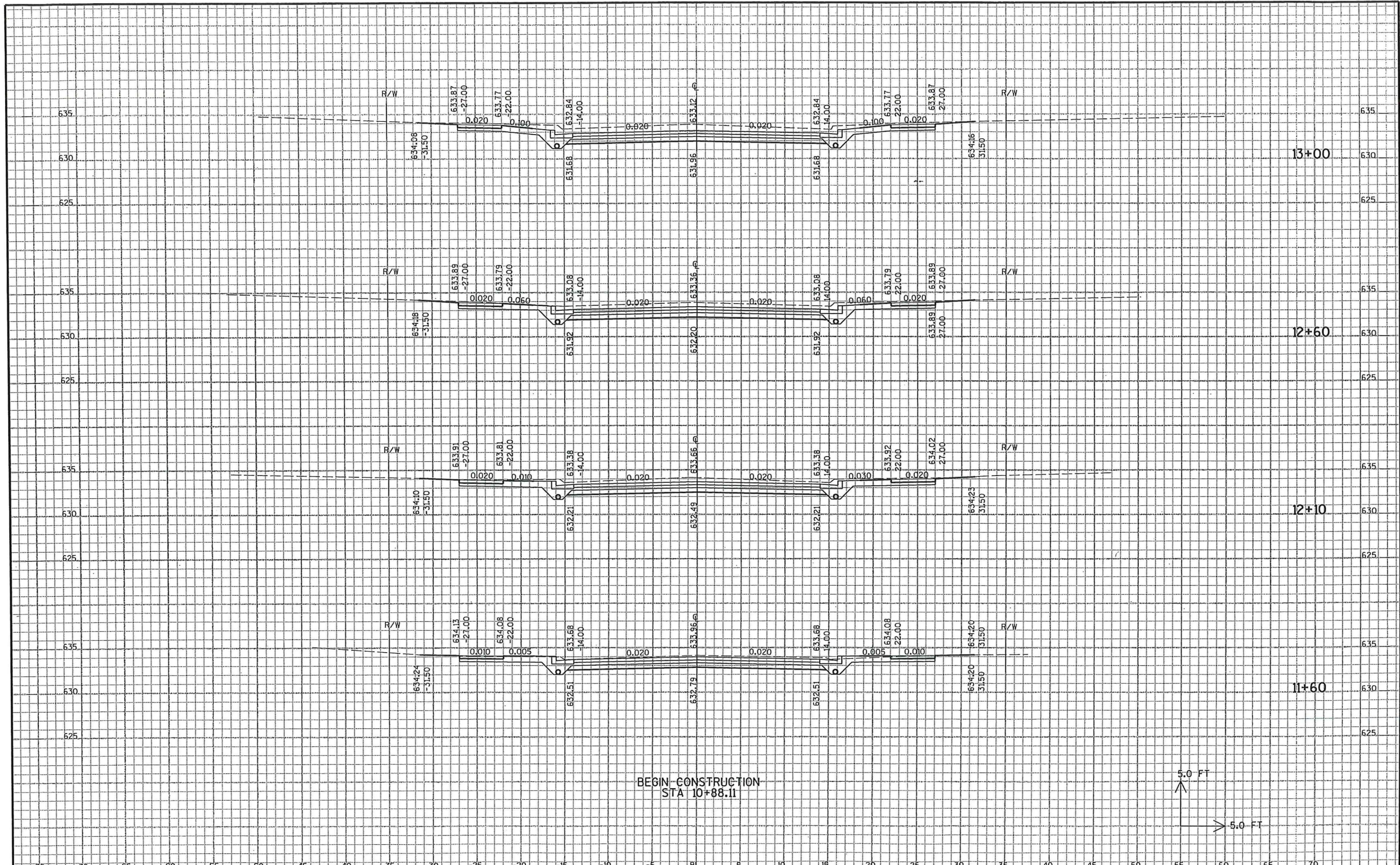
SEH PROJECT NO : SUPER0004.00	HWY : 12TH STREET	COUNTY : DOUGLAS	CROSS SECTIONS - CUMMING AVENUE
SHEET NO:			E



END CONSTRUCTION  
STA 19+12.34







SEH PROJECT NO : SUPER0004.00

HWY : 12TH STREET

COUNTY : DOUGLAS

CROSS SECTIONS - CUMMING AVENUE

SHEET NO:

E