

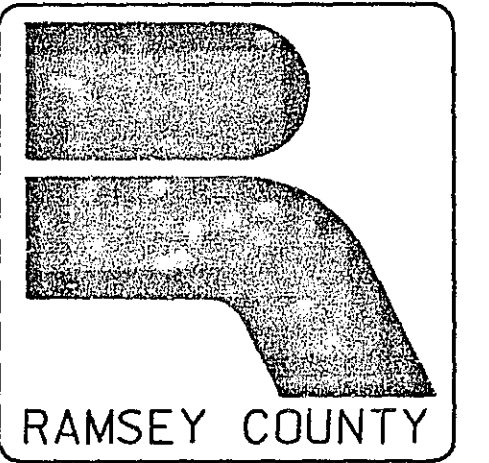
CLEVELAND AVENUE (C.S.A.H. 46)
S.P. NO. 62-646-12
S.P. NO. 147-020-24

MINN. PROJ. NO. STPX 6201 (101)

MINNESOTA DEPARTMENT OF TRANSPORTATION RAMSEY COUNTY

DEPARTMENT OF PUBLIC WORKS

CONSTRUCTION PLANS FOR:
GRADING, PAVING, DRAINAGE.
BRIDGE NO. 62569



CLEVELAND AVENUE (C.S.A.H. 46)

S.P. NO. 62-646-12
S.P. NO. 147-020-24
S.P. NO. 187-020-08

BETWEEN: 1 ST STREET S.E. AND THOM DRIVE.
BEGINNING: AT A POINT 196.228m SOUTH OF THE SOUTHWEST CORNER, SEC 28, T30N, R23W
ENDING: AT A POINT 240.682m NORTH AND 0.844m EAST OF THE SOUTHWEST CORNER, SEC 28, T30N, R23W

END S.P. 62-646-12
END S.P. 147-020-24
END S.P. 187-020-08
STA. 1 + 442.000

PROPOSED BRIDGE
NO. 62569
STA. 1+209.949 TO
STA. 1+224.239

BEGIN S.P. 187-020-08
STA. 1 + 199.828

INDEX	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2-3	STATEMENT OF ESTIMATED QUANTITIES
4	CONSTRUCTION NOTES AND STANDARD PLATES
5	TYPICAL SECTIONS AND ALIGNMENT PLAN
6-7	UTILITY TAB SHEET AND QUANTITY TABULATIONS
8	TRAFFIC CONTROL PLAN
9-11	GUARDRAIL INSTALLATION AND END TREATMENT
12	EROSION CONTROL DETAILS
13	BRIDGE APPROACH PANEL
14	BRIDGE APPROACH TREATMENT
15	ENTRANCE DETAILS
16-17	PLAN AND PROFILE
18-19	DRIVEWAY PLAN AND PROFILE
20-21	STORM SEWER PLAN AND PROFILE
22	SIGN DETAILS
23	PAVEMENT SIGNING AND STRIPING
24	EROSION CONTROL AND TURF ESTABLISHMENT
25-28	CROSS SECTIONS
1-19	BRIDGE NO. 62569

THIS PLAN CONTAINS 48 SHEETS

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

John A. Byrnes REG. NO. 22628 DATE 8/5/99

HNTE ARCHITECTS ENGINEERS PLANNERS
The HNTE Companies
3400 W. 66th Street, Suite 250, Minneapolis, Minnesota 55435 (612) 920-4666

RECOMMENDED FOR APPROVAL *T. J. Killeen* DATE 8/12/99
COUNTY ENGINEER

APPROVED *A. J. Felt* DATE 8-9-99
CITY OF ARDEN HILLS

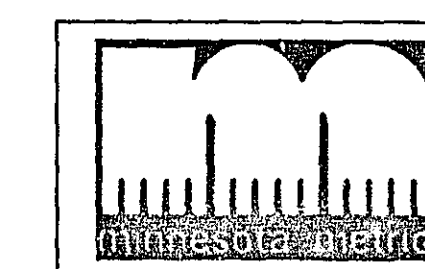
APPROVED *Linda R. Parnell* DATE 8-10-99
CITY OF NEW BRIGHTON

RECOMMENDED FOR APPROVAL *Donald B. Manning* DATE 1-14-00
STATE BRIDGE ENGINEER

W. H. S. Brown DATE 8-18-99
METRO ASSISTANT DIVISION ENGINEER-STATE AID:

REVIEWED FOR COMPLIANCE WITH STATE AIDE RULES/POLICY

Mary L. Beieringer DATE 1/21/00
APPROVED FOR STATE & FEDERAL FUNDING:
STATE AID ENGINEER



ATTENTION !
THIS IS A
METRIC PLAN

ADULT PLAN
CONVINCING TO
COURT JUDGES
DONE BY: *SP*
DATE: 3-16-05

BETWEEN 1 ST STREET AND THOM DRIVE

GROSS LENGTH 438.400 m (0.438 KM)

BRIDGE LENGTH 14.29 m (0.014 KM)

EXCEPTIONS NONE REQUIRED

NET LENGTH 438.400 m (0.438 KM)

S.P. 187-020-08

GROSS LENGTH 242.172 m 0.242 km

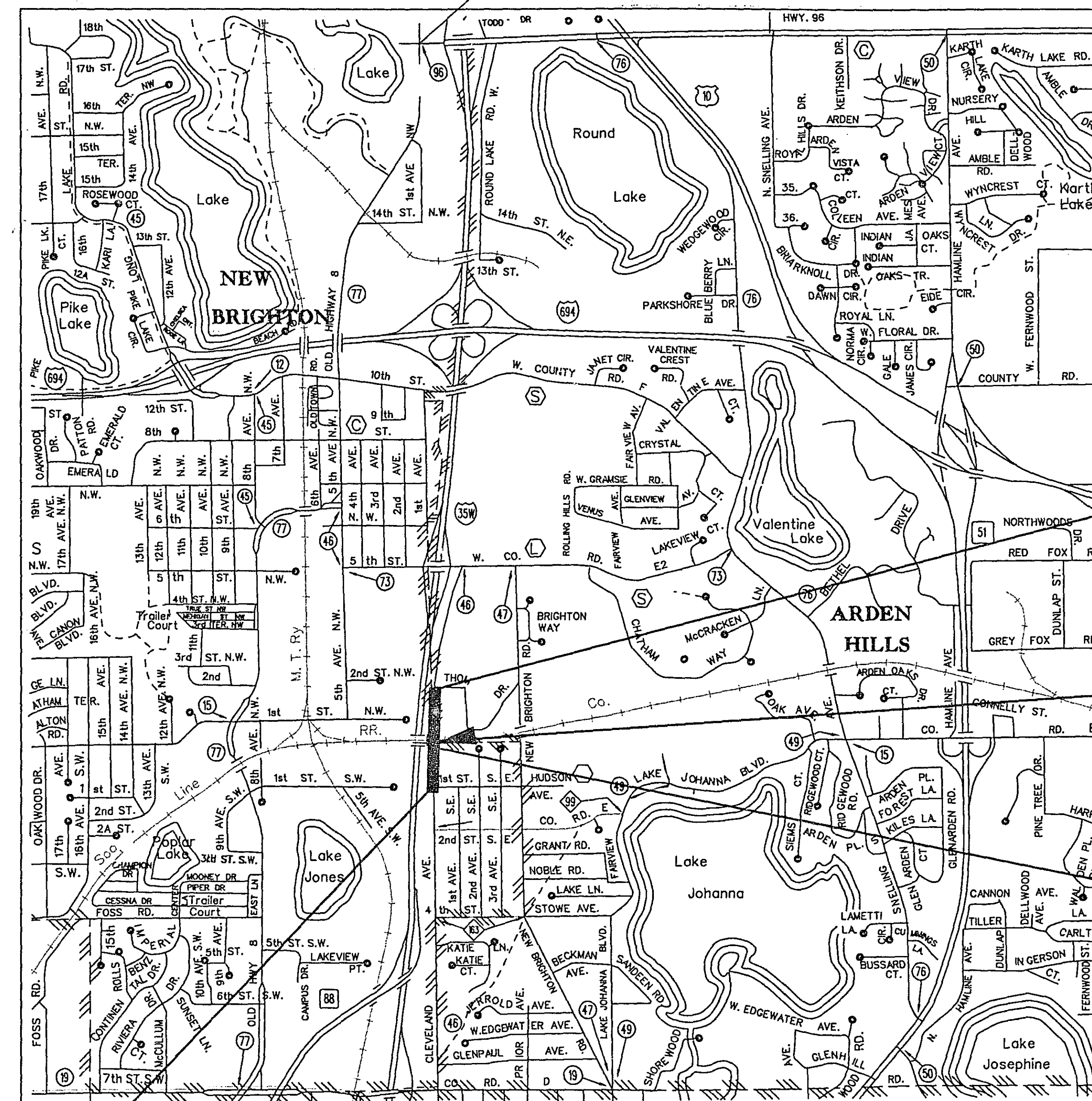
BRIDGE LENGTH 14.29 m 0.14 km

EXCEPTIONS n/a n/a

NET LENGTH 242.172 m 0.242 km



T30N



BEGIN S.P. 62-646-12 R23W
BEGIN S.P. 147-020-24
STA. 1 + 003.600

DESIGN DESIGNATION

PRESENT ADT (1999) 3,125
PROJECTED ADT (2019) 4,375
FUNCTIONAL CLASS "A" MINOR ARTERIAL-RELIEVER
TRAFFIC LANES 2
PARKING LANES 0
DESIGN LOAD 8.2 +
STABILOMETER "R" VALUE 50
DESIGN SPEED 60 km/h
N18 25 YEAR 708,000

BASED ON STOPPING DISTANCE
HEIGHT OF EYE: 1070 mm
HEIGHT OF OBJECT: 150 mm

NEW BRIGHTON, ARDEN HILLS

COUNTY: RAMSEY
DIVISION: METRO
REVISED 3/16/99

PLAN REVISIONS		
DATE	SHEET NO. & DESCRIPTION	BY

S.P. NO. 62-646-12
S.P. NO. 147-020-24
S.P. NO. 187-020-08

28-192
Sheet No. 1 of 28 Sheets

PLAN SYMBOLS

STATE LINE
COUNTY LINE
TOWNSHIP OR RANGE LINE
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
EXISTING RIGHT OF WAY LINE
PROPOSED RIGHT OF WAY LINE
PROPERTY LINE
CORPORATE OR CITY LIMITS
RAILROAD
RAILROAD RIGHT-OF-WAY
RIVER OF CREEK
CULVERT
GUARDRAIL
WOOD FENCE
BARBED WIRE FENCE
WOVEN WIRE FENCE
CHAIN LINK FENCE
TIMBER WALL
STONE WALL
HEDGE
RAILROAD CROSSING SIGN
CROSSING GATE
MEANDER CORNER
SLOPE EASEMENT (CONST. LIMITS)
MARSH
DECIDUOUS TREE
CONIFEROUS TREE
BUSH OR SHRUB
WOODS
CATCH BASIN
BRIDGE
IRON PIPE OR ROD
MONUMENT (STONE, CONCRETE OR METAL)
WOODEN HUB

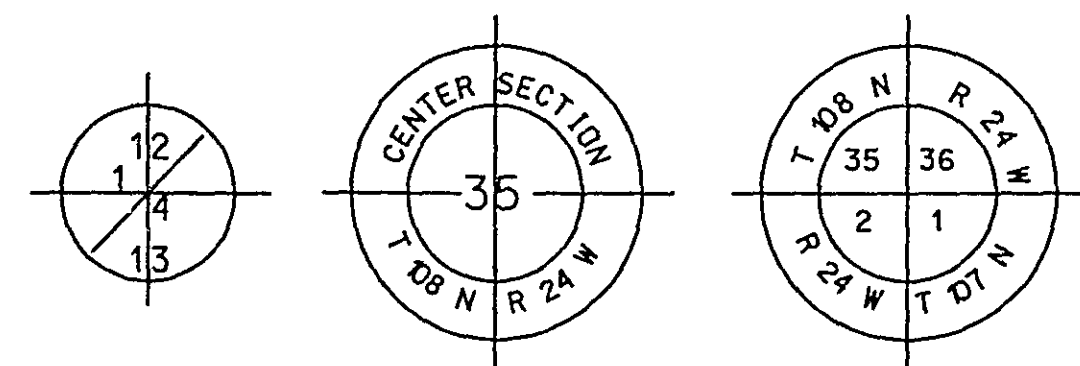
UTILITY SYMBOLS

UTILITY POLE
GUY OR ANCHOR
STREET LIGHT
TELEPHONE PEDESTAL
GAS MAIN
WATER MAIN
TELEPHONE VAULT
ELECTRIC VAULT
TELEPHONE CABLE
ELECTRIC CABLE
STORM SEWER
SANITARY SEWER
SEWER MANHOLE
GATE VALVE
CONTROLLER CABINET
EXISTING HYDRANT
CABLE TELEVISION-BURIED
FIBER OPTIC CABLE
TRAFFIC SIGNAL LINE
TRAFFIC SIGNAL HAND HOLE

FOR PLANS AND UTILITIES SYMBOLS SEE
MN/DOT TECHNICAL MANUAL.

-GOVERNING SPECIFICATIONS-

THE 1995 EDITION OF THE MINNESOTA DEPARTMENT OF
TRANSPORTATION, "STANDARD SPECIFICATIONS FOR
CONSTRUCTION" SHALL GOVERN.



SCALES IN METERS

PLAN 0 10m 20m
PROFILE HORIZ. 0 10m 20m
PROFILE VERT. 0 1m 2m
CROSS SECTIONS 0 1m 2m 3m 4m

S.P. NO. 62-646-12
S.P. NO. 147-020-24
S.P. NO. 187-020-08

QUANTITY NOTES:

- 1) BUILDING IS A 7.56m X 6.20m GARAGE WITH AN ATTACHED 6.04m X 3.66m SHED ON A CONCRETE SLAB LOCATED AT #3622.
- 2) ENTRANCES ACCOUNT FOR 9.5 METERS OF SAWING.
- 3) SALVAGE CHAIN LINK FENCE INCLUDES SALVAGING OF ELECTRICAL GROUNDS.
- 4) QUANTITY INCLUDES 400 CUBIC METERS TOPSOIL.
- 5) QUANTITY INCLUDES 28 CUBIC METERS FOR SEWER PIPE BEDDING.
- 6) SELECT GRANULAR MODIFIED MATERIAL USED AT BRIDGE.
- 7) THIS QUANTITY INCLUDES 33 m³ FOR THE 50 mm CLASS 6 AGGREGATE BASE FOR SIDEWALK.
- 8) THIS QUANTITY IS FOR BITUMINOUS DRIVEWAYS.
- 9) THIS QUANTITY INCLUDES 123 TONS FOR DRIVEWAYS.
- 10) CONSTRUCTION DETAILS ARE CONTAINED IN THE BRIDGE PLAN.
- 11) THIS QUANTITY INVOLVES MOVING EACH MAILBOX TWICE: 1) TO A LOCATION APPROVED FOR POSTAL DELIVERY AT THE START OF CONSTRUCTION, AND 2) BACK TO THE FINAL LOCATION AT COMPLETION OF THE PROJECT.
- 12) INSTALL CHAIN LINK FENCE INCLUDES INSTALLATION OF SALVAGED ELECTRICAL GROUNDS.
- 13) ALL PERMANENT SIGNS WILL HAVE V.I.P. SHEETING.

INDEX OF TABULATIONS

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BASIS OF QUANTITIES

WEIGHT OF BITUMINOUS MIXTURE:	60 kg per m ² per 25mm (110 LBS. per SQ. YD. per IN.)
BITUMINOUS MATERIAL FOR TACK COAT	0.22 L per m ² (0.05 GALLONS per SQ. YD.)
SEED MIXTURE 40A:	75 kg per ha (67 LBS. per ACRE)
FERTILIZER ANALYSIS 10-10-10:	450 kg per ha (400 LBS. per ACRE)

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STATEMENT OF ESTIMATED QUANTITIES

NOTES	ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL PROJECT QUANTITIES	100% RAMSEY COUNTY S.P. 62-646-12	73.4% RAMSEY COUNTY S.P. 62-646-12 19.9% NEW BRIGHTON 147-020-24 6.7% ARDEN HILLS 187-020-08	25% RAMSEY COUNTY S.P. 62-646-12 75% NEW BRIGHTON 147-020-24	25% RAMSEY COUNTY S.P. 62-646-12 75% ARDEN HILLS 187-020-08	100% RAMSEY COUNTY S.P. 62-646-12 STORM SEWER
				ESTIMATED	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY
	2021.501	MOBILIZATION	LUMP SUM	1	1				
	2031.501	FIELD OFFICE TYPE D	EACH	1	1				
	2101.502	CLEARING	TREE	16	16				
	2101.507	GRUBBING	TREE	16	16				
1	2103.501	BUILDING REMOVAL	LUMP SUM	1	1				
	2104.501	REMOVE CURB AND GUTTER	m	8	8				
	2104.501	REMOVE GUARD RAIL - PLATE BEAM	m	394	394				
	2104.503	REMOVE BITUMINOUS PAVEMENT	m ²	5547	5547				
	2104.503	REMOVE CONCRETE DRIVEWAY PAVEMENT	m ²	84	84				
2	2104.513	SAWING BITUMINOUS PAVEMENT	m	45.12	45.12				
3	2104.521	SALVAGE CHAIN LINK FENCE	m	277	277				
	2104.523	SALVAGE SIGN TYPE C	EACH	13	13				
	2104.523	SALVAGE DELINEATOR	EACH	4	4				
	2104.523	SALVAGE METAL BRACE ASSEMBLY	EACH	6	6				
4	2105.501	COMMON EXCAVATION (P)	m ³	4011		4011			
5	2105.522	SELECT GRANULAR BORROW (CV)	m ³	3685		3685			
6	2105.522	SELECT GRANULAR BORROW MOD (CV)	m ³	2855	2855				
	2105.525	TOPSOIL BORROW (CV)	m ³	230	230				
	2112.501	SUBGRADE PREPARATION	m	408		408			
7	2211.503	AGGREGATE BASE (CV) CLASS 6	m ³	1051		1051			
	2301.553	BRIDGE APPROACH PANELS	m ²	254.8	254.8				
	2340.508	TYPE 41 WEARING COURSE MIXTURE	+	557		557			
8	2340.508	TYPE 31 WEARING COURSE MIXTURE	+	136	136				
9	2340.510	TYPE 31 BINDER COURSE MIXTURE	+	692		692			
	2340.514	TYPE 31 BASE COURSE MIXTURE	+	1200		1200			
	2357.502	BITUMINOUS MATERIAL FOR TACK COAT	L	2427		2427			
10	2411.604	MODULAR BLOCK RETAINING WALL	m ²	455	455				
	2501.515	300 mm RC PIPE APRON	EACH	2					2
	2503.541	300 MM RC PIPE SEWER DESIGN 3006 CLASS V	m	275.6					275.6

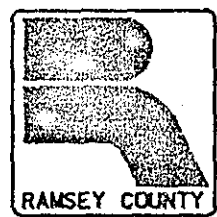
ASUILT PLAN
CONFORMING TO
COUNCIL RECORDS
DONE BY: *8/8*
DATE: 3-16-05

REVISIONS

DATE BY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

REG. NO. 22628
DATE 11/15/99



CLEVELAND AVE.

STATEMENT OF ESTIMATED QUANTITIES

DES: JSS DR: JSS APPROVED: JAB
CHK: GLS CHK: JAB

SHEET NO. 2 of 28 SHEETS



DESIGN FILE: F:\21928\1\cd\cp\cvqt02.dgn
PLOTTED: 15-NOV-1999 15:21
PEN TABLE: F:\21928\cvpenm.pen

S.P. NO. 62-646-12
S.P. NO. 147-020-24
S.P. NO. 187-020-08

STATEMENT OF ESTIMATED QUANTITIES

NOTES	ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL PROJECT QUANTITIES	100% RAMSEY COUNTY S.P. 62-646-12	73.4% RAMSEY COUNTY S.P. 62-646-12 19.9% NEW BRIGHTON 147-020-24 6.7% ARDEN HILLS 187-020-08	25% RAMSEY COUNTY S.P. 62-646-12 75% NEW BRIGHTON 147-020-24	25% RAMSEY COUNTY S.P. 62-646-12 75% ARDEN HILLS 187-020-08	100% RAMSEY COUNTY S.P. 62-646-12 STORM SEWER
				QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY
	2504.602	RELOCATE HYDRANT AND VALVE	EACH	1	1				
	2506.501	CONSTRUCT DRAINAGE STRUCTURE, DESIGN N	m	4.5					4.5
	2506.501	CONSTRUCT DRAINAGE STRUCTURE, DESIGN F	m	18.2					18.2
	2506.501	CONSTRUCT DRAINAGE STRUCTURE, DESIGN G	m	1.3					1.3
	2506.516	CASTING ASSEMBLY	EACH	11					11
	2506.522	ADJUST FRAME AND RING CASTING	EACH	2					2
	2521.501	100 mm CONCRETE WALK	m2	610			300	310	
	2531.501	CONCRETE CURB & GUTTER DESIGN B624	m	580			367	213	
	2531.507	150 mm CONCRETE DRIVEWAY PAVEMENT	m2	210	210				
	2531.507	200 mm CONCRETE DRIVEWAY PAVEMENT	m2	150	150				
	2531.602	PEDESTRIAN CURB RAMP	EACH	2	2				
	2554.501	TRAFFIC BARRIER DESIGN SPECIAL	m	30.4	30.4				
	2554.501	TRAFFIC BARRIER DESIGN A8307	m	330	330				
	2554.521	ANCHORAGE ASSEMBLY - PLATE BEAM	EACH	4	4				
	2554.523	END TREATMENT - ECCENTRIC LOADER BCT	EACH	3	3				
	2557.501	WIRE FENCE DESIGN 1.2-9322	m	168			130	38	
	2557.523	METAL BRACE ASSEMBLY (CHAIN LINK FENCE)	EACH	56			43	13	
	2557.527	ELECTRICAL GROUND	EACH	7			6	1	
11	2557.602	RELOCATE MAILBOX	EACH	6	6				
	2557.602	INSTALL METAL BRACE ASSEMBLIES	EACH	6	6				
12	2557.603	INSTALL CHAIN LINK FENCE	m	277	277				
13	2563.601	TRAFFIC CONTROL	LUMP SUM	1	1				
	2564.537	INSTALL SIGN TYPE C	EACH	15	15				
	2564.550	DELINEATOR TYPE IIA (X4-4)	EACH	4	4				
	2564.603	100 mm SOLID LINE YELLOW - EPOXY	m	540	540				
	2564.603	100 mm SOLID LINE WHITE - EPOXY	m	880	880				
	2564.603	100 mm BROKEN LINE YELLOW - EPOXY	m	70	70				
	2564.603	600 mm STOP LINE WHITE - EPOXY	m	10	10				
	2564.604	ZEBRA CROSSWALK WHITE-EPOXY	m2	10.3	10.3				
	2573.502	SILT FENCE, TYPE HEAVY DUTY	m	594	594				
	2575.501	SEEDING	ha	0.32	0.32				
	2575.502	SEED, MIXTURE 40A	kg	24	24				
	2575.505	SODDING TYPE LAWN	m2	1986	1986				
	2575.505	SODDING TYPE EROSION	m2	1385	1385				
	2575.523	EROSION CONTROL BLANKETS CATEGORY 3	m2	3109	3109				
	2575.532	COMMERCIAL FERTILIZER ANALYSIS 10-10-10	kg	140	140				

COMMON METRIC UNITS AND CONVERSIONS

QUANTITY	FROM ENGLISH	TO METRIC UNITS	MULTIPLY BY
LENGTH	MILE	km = kilometer	1.609344
	FOOT	m = meter	0.3048
	INCH	mm = millimeter	25.4
AREA	ACRE	ha = hectare	0.4046856
	SQUARE YARD	m2 = square meter	0.8361273
VOLUME	GALLON	L = liter	3.7831
	CUBIC YARD	m3 = cubic meter	0.764554
MASS	POUND	kg = kilogram	0.453592
	TON	t = metric ton	0.907184

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

DONE BY: JJB
DATE: 3-16-05

28-192

CONSTRUCTION NOTES

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSURE THAT ALL UTILITIES, INCLUDING TELEPHONE, UNDERGROUND POWER ARE LOCATED PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. GOPHER STATE ONE CALL 1-800-252-1166 OR 651-454-0002.
2. UTILITIES WITHIN THE PROJECT LIMITS INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING:
- | | |
|-------------------------------|----------------|
| CP RAILROAD | (612) 337-7681 |
| TELEPHONE - US WEST | (651) 730-1373 |
| FIBER OPTICS - SPRINT | (651) 772-6714 |
| ELECTRIC - NSP | (612) 347-9499 |
| GAS - NSP | (651) 229-2328 |
| CABLE TV - MEREDITH | (612) 483-3233 |
| WATERMAIN - NEW BRIGHTON | (651) 631-3736 |
| WATERMAIN - ARDEN HILLS | (651) 633-5676 |
| SANITARY SEWER - NEW BRIGHTON | (651) 631-3736 |
| SURVEY MONUMENT | (651) 266-2620 |
3. SUITABLE GRADING MATERIAL ON THIS PROJECT SHALL CONSIST OF ALL SOILS ENCOUNTERED WITH THE EXCEPTION OF SLOPE DRESSING, DEBRIS, ORGANIC MATERIAL, MUCK AND OTHER UNSUITABLE MATERIAL.
4. SELECT GRANULAR MATERIAL SHALL MEET THE REQUIREMENTS OF SPEC. 3149.2B
5. SELECT GRANULAR MATERIAL MODIFIED SHALL MEET THE REQUIREMENTS OF SPEC. 3149.2B MODIFIED TO NO MORE THAN 10 PERCENT PASSING THE NO. 200 SIEVE.
6. WHERE MATCHING INTO EXISTING ROADWAYS AT THE LIMIT OF CONSTRUCTION, CUT VERTICALLY TO THE TOP OF THE GRADING SUBGRADE AND THEN AT A 20:1 TAPER TO THE BOTTOM OF THE RECOMMENDED SUBGRADE EXCAVATION (AS SHOWN ON THE PROFILES). PROVIDE 20:1 TRANSITION TAPERS BETWEEN ALL CHANGES IN SUBGRADE EXCAVATION DEPTHS.
7. USE TACK COAT BETWEEN ALL BITUMINOUS MIXTURES.
8. WHENEVER THE WORD "INCIDENTAL" IS USED IN THIS PLAN, IT SHALL MEAN THIS WORK WILL BE INCLUDED WITH APPROPRIATE ITEMS FOR WHICH NO DIRECT COMPENSATION WILL BE MADE.

⑥ EARTHWORK SUMMARY

EXCAVATION 4011 m ³ (EV)	400 m ³ TOPSOIL (EV)
	3611 m ³ SUITABLE GRADING MATERIAL (EV)
① EMBANKMENT 9256 m ³	550 m ³ TOPSOIL (CV)
	3685 m ³ SELECT GRANULAR BORROW (CV)
	2855 m ³ SELECT GRANULAR BORROW (MOD) (CV)
	2165 m ³ SUITABLE GRADING MATERIAL (CV)
BALANCE	230 m ³ TOPSOIL BORROW (CV)
	3685 m ³ SELECT GRANULAR BORROW (CV)
	2855 m ³ SELECT GRANULAR BORROW (MOD) (CV)
	720 m ³ SUITABLE GRADING MATERIAL (EXCESS)

NOTES:

- ① SELECT GRANULAR BORROW AND SELECT GRANULAR BORROW (MOD) MATERIAL IS NOT INCLUDED IN THE CROSS SECTION VOLUMES.
- ② 125% SHRINKAGE FACTOR FROM EXCAVATED VOLUME (EV) TO COMPACTED VOLUME (CV).

THE FOLLOWING PLATES, APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION, SHALL APPLY ON THIS PROJECT

STANDARD PLATES

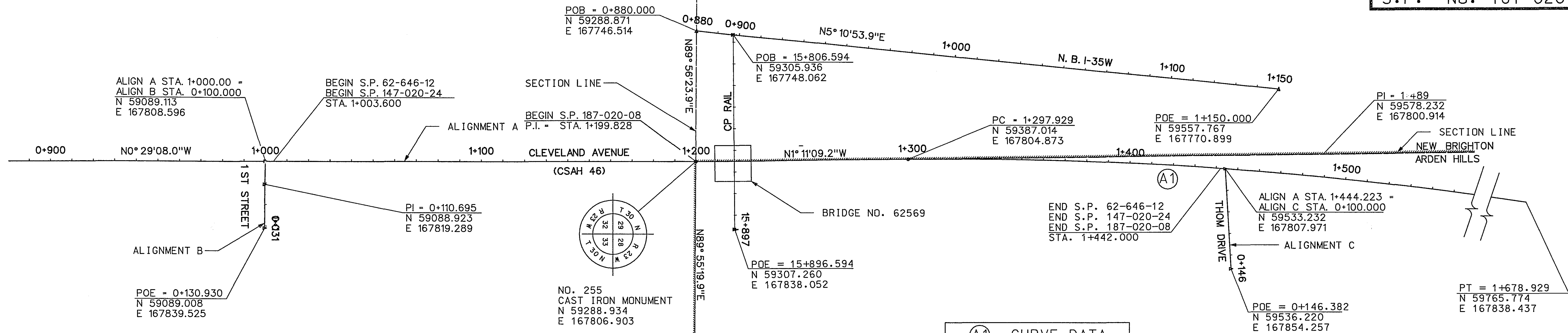
PLATE NO.	DESCRIPTION
M 7036 D	PEDESTRIAN CURB RAMP
M 7100 G	CONCRETE CURB AND GUTTER
M 8000 I	STANDARD BARRICADES
M 8307 P	STEEL PLATE BEAM GUARDRAIL (2 SHEETS)
M 8318 C	GUARDRAIL ANCHORAGE PLATE FOR BRIDGES AND BCT'S
M 8329 G	ECCENTRIC LOADER BREAKAWAY CABLE TERMINAL (ELT) (4 SHEETS)
M 3000 L	REINFORCED CONCRETE PIPE (5 SHEETS)
M 3006 G	GASKET JOINT FOR R.C. PIPE (2SHEETS)
M 3007 C	SHEAR REINFORCEMENT FOR PRECAST DRAINAGE STRUCTURES
M 3100 G	CONCRETE APRON FOR REINFORCED CONCRETE PIPE
M 3145 E	CONCRETE PIPE TIES
M 4003 B	30" PRECAST CATCH BASIN
M 4005 L	MANHOLE OR CATCH BASIN
M 4006 L	PRECAST MANHOLE OR CATCH BASIN
M 4010 H	CONC. SHORT CONE & ADJUSTING RING (SECTIONAL CONCRETE)
M 4011 E	PRECAST CONCRETE BASE
M 4101 D	RING CASTING FOR MANHOLE OR CATCH BASIN
M 4110 F	COVER CASTING FOR MANHOLE
M 4125 D	CATCH BASIN FRAME CASTING
M 4129 G	CATCH BASIN FRAME CASTING (FOR SQUARE GRATE)
M 4133 A	CURB BOX CASTING FOR CATCH BASIN
M 4140 D	SPECIAL GRATE CASTINGS FOR CATCH BASIN
M 4154 B	CATCH BASIN GRATE CASTING
M 4160 D	CURB BOX CASTING FOR CATCH BASIN
M 4180 J	MANHOLE OR CATCH BASIN STEP
M 8318 C	GUARDRAIL ANCHORAGE PLATE FOR BRIDGES AND BCT'S
M 9102 D	TURF ESTABLISHMENT AREAS (AT PIPE CULVERT ENDS)
M 9322 J	CHAIN LINK FENCE

NOTE: ANY STANDARD PLATE THAT REFERENCES TO ENGLISH UNITS SHALL BE CONVERTED TO METRIC (SI) UNITS

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

DONE BY: *DJB*
DATE: 3-16-05

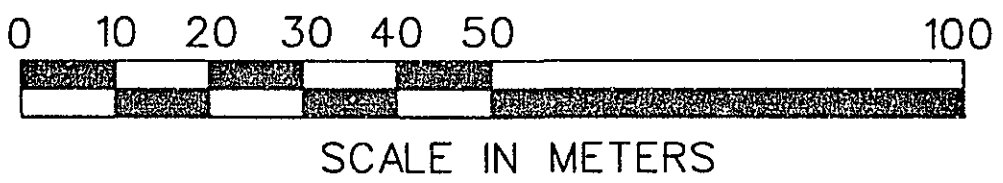
28-192



A1 CURVE DATA	
RADIUS	1746.376 m
LENGTH	381.000 m
TANGENT	191.259 m
CHORD	380.245 m
DELTA	12°30'00.0"

NOTES

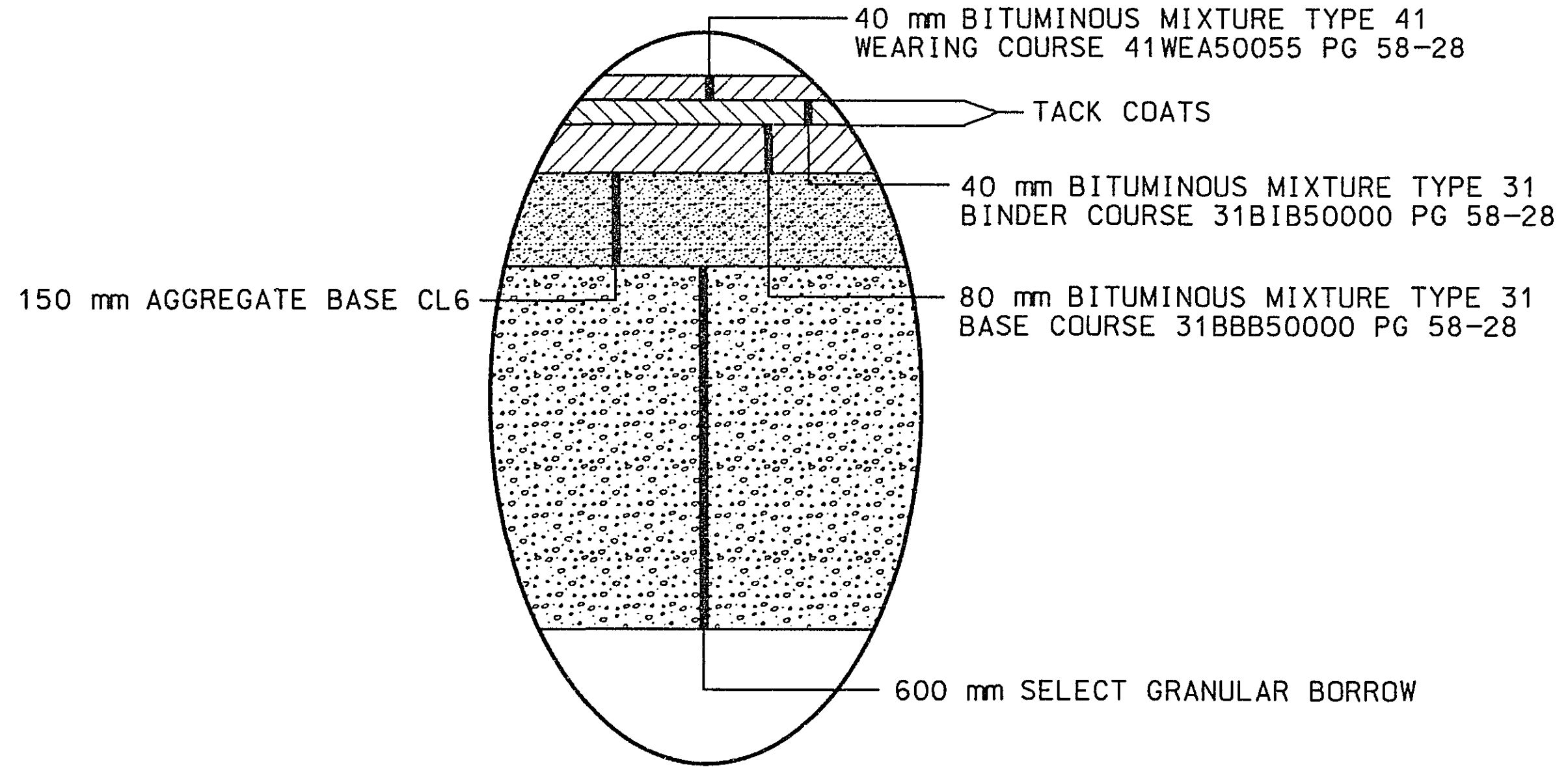
1. RAMSEY COUNTY MONUMENT 255
AS PUBLISHED AS THE "RAMSEY COUNTY
PUBLIC WORKS LAND SURVEY DIVISION
NORTH AMERICAN DATUM OF 1983
COORDINATES." CONVERSION TO
METRIC COORDINATES WITH THE U.S.
SURVEY FOOT DEFINED AS 1200/3937 m.
2. CONTACT RAMSEY COUNTY SURVEYOR
PRIOR TO DISTURBANCE OF MONUMENT.
651-266-2620
3. MN/DOT MONUMENT DISC STAMPED 'JOHANNA AZ MARK'
STA. 1+151.88, 6.05m LT (287.116 ELEV.) TO BE
REMOVED & SALVAGED BY CONTRACTOR. REMOVAL OF
MONUMENT SHALL BE CONDUCTED IN SUCH A MANNER
THAT WILL NOT CAUSE DAMAGE TO THE STAMPED CAP.
CONTRACTOR SHALL SEND BRASS CAP DISC TO:
GEODETIC UNIT - ATTN: CHUCK BRYANT
MS 641
395 JOHN IRELAND BLVD
ST. PAUL, MN 55155



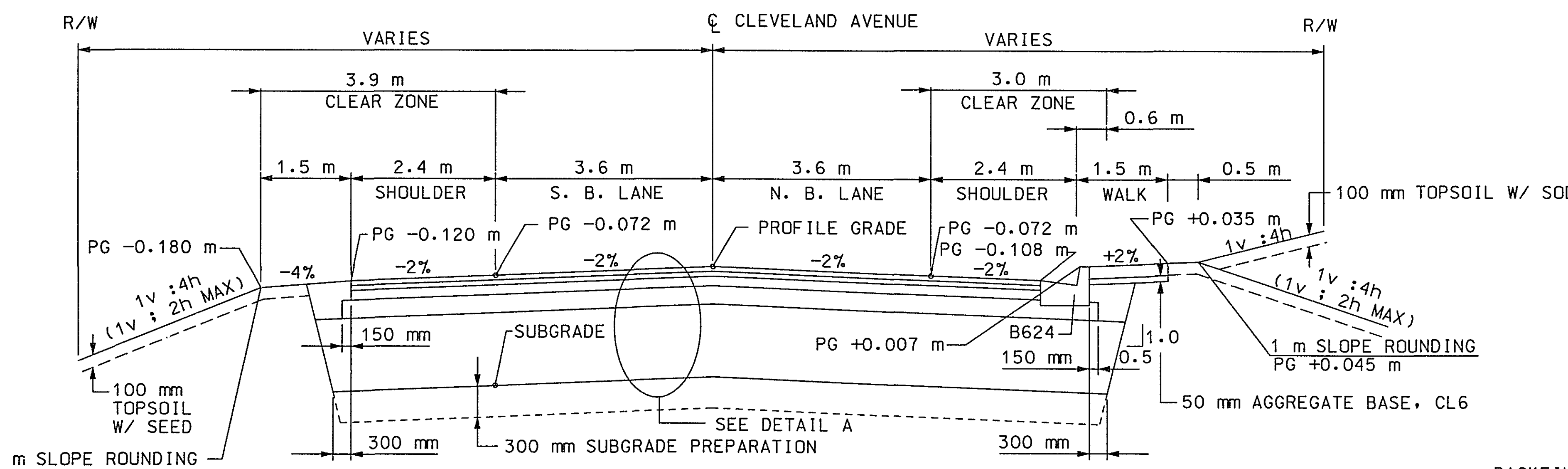
ADJUST PLAN
CONFORMING TO
C.A.R. RECORDS

DONE BY: *[Signature]*
DATE: 3-16-05

DETAIL A



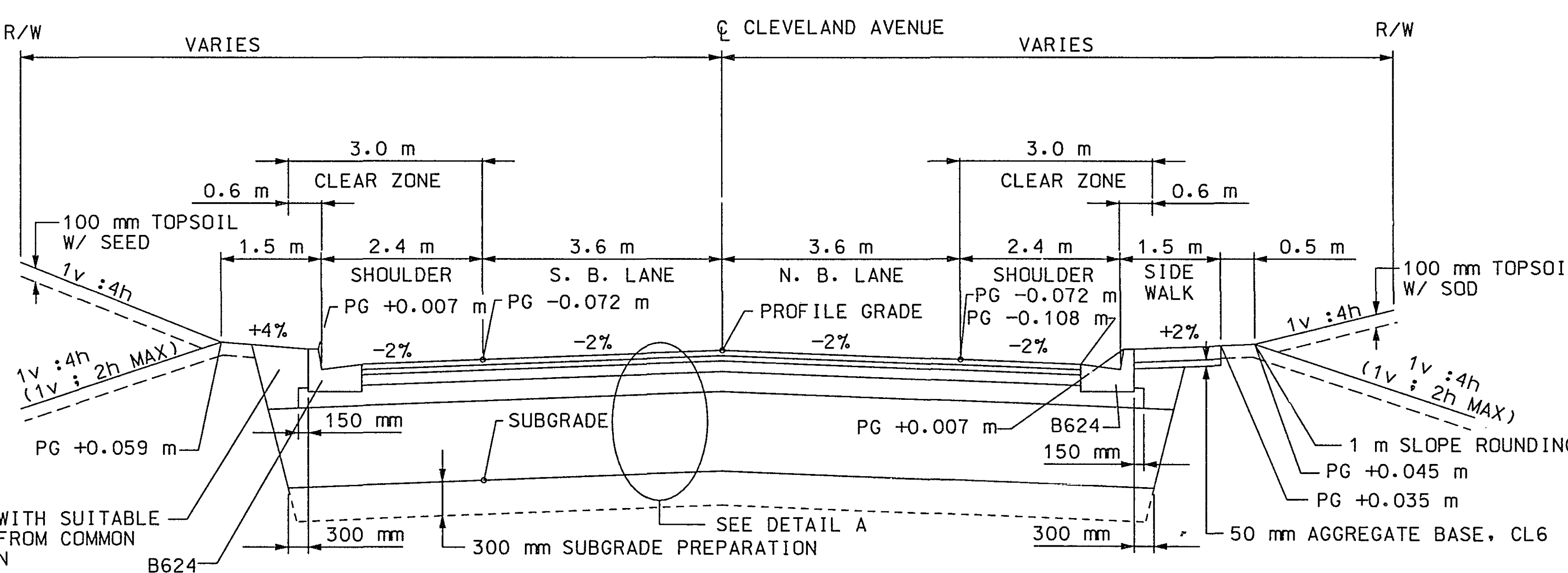
NORTH



PROPOSED TYPICAL SECTION

STA. 1+003 TO STA. 1+034
STA. 1+224 TO STA. 1+442

SOUTH



PROPOSED TYPICAL SECTION

STA. 1+034 TO STA. 1+210

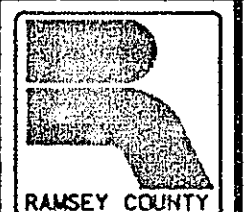
28-192

REVISIONS	DATE	BY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

[Signature]

REG. NO. 22628
DATE 11/15/99



TYPICAL SECTIONS AND
ALIGNMENT PLAN

DES: JSS	DR: JSS	APPROVED: JAB
CHK: GLS	CHK: JAB	
SHEET NO. 5 of 28 SHEETS		



C EXISTING UTILITIES			
LOCATION ON CLEVELAND AVE NB	ITEM IN PLACE	NOTES	REMARKS
FIBRE OPTIC (NEW BRIGHTON)			
1+204.0 11.6m LT. TO 1+204.0 10.6m RT.	BURIED		KEEP AS IS
WATER (NEW BRIGHTON)			
1+003.6 6.1m RT. TO 1+140.7	BURIED		KEEP AS IS
@ 1+140.0 6.6m RT. FIRE HYDRANT & VALVE			RELOCATE
WATER (ARDEN HILLS)			
1+245.4 50.0m RT. TO 1+245.4 12.0m RT.(ELBOW)	BURIED		KEEP AS IS
1+245.4 12.0m RT. TO 1+300.0 12.0m RT.			KEEP AS IS
1+300.0 12.0m - 11.3m RT. TO 1+350.0	BURIED		KEEP AS IS
@ 1+347.0 12.4m RT. FIRE HYDRANT & VALVE			KEEP AS IS
1+350.0 11.3m - 10.4m RT. TO 1+400.0	BURIED		KEEP AS IS
1+400.0 10.4m - 9.7m RT. TO 1+442.0 (END CONST.)	BURIED		KEEP AS IS
@ 1+435.0 9.6m RT. WATER VALVE			KEEP AS IS
NSP GAS LINE (NEW BRIGHTON)			
1+003.6 4.0m RT. TO 1+050.0	BURIED		RELOCATE
@ 1+050.0 GAS LINE TO HOUSE:	BURIED	SERVICE LINE	RELOCATE
1+047.6 24.5m RT. TO 1+050.0 4.0m RT.	BURIED		RELOCATE
1+050.0 4.0m RT. TO 1+100.0	BURIED		RELOCATE
1+100.0 4.0m RT. TO 1+120.7	BURIED		RELOCATE
@ 1+106.5 GAS LINE TO HOUSE:	BURIED	SERVICE LINE	RELOCATE
1+106.3 28.0m RT. TO 1+106.5 4.0m RT.	BURIED		RELOCATE
POWER POLE LOCATIONS (NEW BRIGHTON)			
1+016.8 9.6m LT.	AERIAL POWER		ADJUST
1+040.0 8.1m RT.	AERIAL POWER	SERVICE POLE	RELOCATE
1+060.0 7.6m LT.	AERIAL POWER		RELOCATE
1+062.3 7.9m RT.	AERIAL POWER	SERVICE POLE	RELOCATE
1+100.0 9.8m LT.	AERIAL POWER	RELOCATE	RELOCATE
1+103.4 7.8m RT.	AERIAL POWER	2 SERVICE LINES	RELOCATE
1+146.9 7.3m RT.	AERIAL POWER		RELOCATE
1+192.2 7.1m RT.	AERIAL POWER		RELOCATE
1+240.0 9.3m LT.	AERIAL POWER		RELOCATE
POWER POLE LOCATIONS (ARDEN HILLS)			
* 3 POLE GROUP :	AERIAL POWER		RELOCATE
1+240.0 6.7m RT.	AERIAL POWER		RELOCATE
1+242.3 6.7m RT.	AERIAL POWER		RELOCATE
1+244.3 6.7m RT.	AERIAL POWER		RELOCATE

C EXISTING UTILITIES			
LOCATION ON CLEVELAND AVE NB	ITEM IN PLACE	NOTES	REMARKS
TELEPHONE - SPRINT (ARDEN HILLS)			
1+200.0 39.7m LT. TO 1+250.0 24.1m LT.	BURIED		KEEP AS IS
1+250.0 24.1m LT. TO 1+290.0 11.2m LT.	BURIED		KEEP AS IS
1+290.0 11.2m LT. TO 1+295.0 9.7m LT.	BURIED		KEEP AS IS
1+295.0 9.7m LT. TO 1+300.0 9.5m LT.	BURIED		KEEP AS IS
1+300.0 9.5m LT. TO 1+350.0 8.4m LT.	BURIED		KEEP AS IS
1+350.0 8.4m LT. TO 1+400.0 8.8m LT.	BURIED		KEEP AS IS
1+400.0 8.8m LT. TO 1+420.0 9.4m LT.	BURIED		KEEP AS IS

B CLEARING AND GRUBBING				
ALIGNMENT	STATION	LOCATION	CLEAR (TREE)	GRUB (TREE)
CLEVELAND AVE	1+053	RT	1	1
CLEVELAND AVE	1+060	RT	3	3
CLEVELAND AVE	1+072	LT	2	2
CLEVELAND AVE	1+126	RT	1	1
CLEVELAND AVE	1+119	RT	1	1
CLEVELAND AVE	1+189	LT	1	1
CLEVELAND AVE	1+238	RT	1	1
CLEVELAND AVE	1+274	RT	1	1
CLEVELAND AVE	1+278	RT	1	1
CLEVELAND AVE	1+287	RT	1	1
CLEVELAND AVE	1+304	RT	1	1
CLEVELAND AVE	1+307	RT	1	1
CLEVELAND AVE	1+316	RT	1	1
TOTAL			16	16

J BRIDGE APPROACH PANELS	
LOCATION	AREA
NORTHBOUND APPROACH	127.4 m2
SOUTHBOUND APPROACH	127.4 m2

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

DONE BY: *SLB*
DATE: 3-16-05

NOTES:

1. RELOCATION OF POWER POLES, GAS LINES, TELEPHONE CABLES, CABLE TV, AND FIBRE OPTIC LINES, IF REQUIRED, SHALL BE DONE BY OTHERS.

T SIGN REMOVAL				
LOCATION	STATION	OFFSET	DESCRIPTION	REMARKS
1ST STREET	0+110	6.1m LT	STOP SIGN NO PARKING	REMOVE
CLEVELAND AVE	1+005	6.6m LT	PED CROSSING DOWN ARROW	REMOVE
CLEVELAND AVE	1+008	8.7m RT	STREET NAME SIGNS "NEIGHBORHOOD WATCH" SIGN	RELOCATE
CLEVELAND AVE	1+009	7.7m RT	PED CROSSING DOWN ARROW	REMOVE
CLEVELAND AVE	1+039	6.5m LT	"CITY OF NEW BRIGHTON"	REMOVE
CLEVELAND AVE	1+041	6.4m RT	SPEED LIMIT 40 NO PARKING	REMOVE
CLEVELAND AVE	1+190	6.5m RT	DELINEATOR RIGHT	REMOVE
CLEVELAND AVE	1+190	6.5m LT	DELINEATOR LEFT	REMOVE
CLEVELAND AVE	1+200	6.5m RT	"BRIDGE WEIGHT LIMIT"	REMOVE
CLEVELAND AVE	1+235	6.5m LT	"BRIDGE WEIGHT LIMIT"	REMOVE
CLEVELAND AVE	1+240	6.5m RT	DELINEATOR LEFT	REMOVE
CLEVELAND AVE	1+240	6.5m LT	DELINEATOR RIGHT	REMOVE
CLEVELAND AVE	1+425	6.5m LT	SPEED LIMIT 40	REMOVE

A EXISTING DRAINAGE ITEMS				
ALIGNMENT	STA. - STA.	LOCATION	EXISTING ITEM	REMARKS
CLEVELAND AVE	1+438 TO 1+452	11.1 m RT	450 mm	KEEP AS IS

D EXISTING SANITARY SEWER STRUCTURES						
LOCATION	STATION	OFFSET	PROPOSED RIM ELEVATION	EXISTING RIM ELEVATION	ADJUST CASTING	REMARKS
CLEVELAND AVE	1+067	7.7 m LT	284.117 m	284.088 m	1	
CLEVELAND AVE	1+067	9.2 m RT	283.478 m	283.461 m	1	
CLEVELAND AVE	1+137	12.0 m RT		283.570 m		KEEP AS IS
TOTAL					2	

28-192

S.P. NO. 62-646-12
S.P. NO. 147-020-24
S.P. NO. 187-020-08

MISCELLANEOUS REMOVAL AND SAWING							
			REMOVE				SAWING
ALIGNMENT	STA. - STA.	LOCATION	BITUMINOUS PAVEMENT	CONCRETE DRIVEWAY PAVEMENT	CURB & GUTTER	PLATE BEAM GUARDRAIL	BIT PAVEMENT
			(m ²)	(m ²)	(m)	(m)	(m)
CLEVELAND	1+139 TO 1+193	LT				54	
CLEVELAND	1+103 TO 1+193	RT				90	
CLEVELAND	1+234 TO 1+442	LT				209	
CLEVELAND	1+234 TO 1+275	RT				41	
CLEVELAND	1+003.6 TO 1+201		2400				
CLEVELAND	1+233 TO 1+442		2520				
CLEVELAND	1+003.6 TO 1+009	RT			8		
DRIVEWAY #3650	1+377.3	RT		84			
BEGIN CONST.	1+003.6	LT TO RT					15.37
END CONST.	1+442	LT TO RT					20.24
DRIVEWAY #3622	1+282	RT	215				5.9
DRIVEWAY #3630	1+343	RT	110				3.6
DRIVEWAY #3670	1+399.5	21.5m RT	102				
DRIVEWAY #50, #60, #70	1+060 TO 1+106.5	6m-15m RT	200				
TOTAL			5547	84	8	394	45.12

TRAFFIC BARRIER (GUARDRAIL)							
ALIGNMENT	STA. - STA.	LOCATION	CITY	ANCHORAGE ASSEMBLY	DESIGN A8307	DESIGN SPECIAL	ECCENTRIC LOADER BCT
				EACH	(m)	m	EACH
CLEVELAND AVE	1+065 TO 1+200	RT	NEW BRIGHTON	1	115	7.6	1
CLEVELAND AVE	1+176 TO 1+200	LT	NEW BRIGHTON	1		7.6	1
CLEVELAND AVE	1+238 TO 1+442	LT	NEW BRIGHTON	1	195	7.6	
CLEVELAND AVE	1+238 TO 1+277	RT	ARDEN HILLS	1	20	7.6	1
TOTAL				4	330	30.4	3

FENCE									
ALIGNMENT	STA. - STA.	LOCATION	CITY	WIRE FENCE (CHAIN LINK)			SALVAGE METAL BRACE ASSEMBLY (EACH)	METAL BRACE ASSEMBLY (EACH)	ELECTRICAL GROUND (EACH)
				SALVAGE (m)	INSTALL (m)	DESIGN (m)			
CLEVELAND AVE	1+088.645 - 1+186.850	LT	NEW BRIGHTON	98.205	98.205		3		2
CLEVELAND AVE	1+263.510 - 1+442 (END)	LT	NEW BRIGHTON	178.490	178.490		3		2
CLEVELAND AVE	1+068.000 - 1+197.492	RT	NEW BRIGHTON			129.57		43	2
CLEVELAND AVE	1+237.691 - 1+275.000	RT	ARDEN HILLS			38.426		13	1
TOTAL				276.695	276.695	167.996	6	56	7

Q TURF ESTABLISHMENT / EROSION CONTROL								
ALIGNMENT	STA. - STA.	LOCATION	SEEDING MIXTURE 40A kg	SILT FENCE HEAVY DUTY (m)	EROSION CONTROL BLANKET TYPE CATEGORY 3 (m2)	SODDING		COMMERCIAL FERTILIZER kg
						TYPE EROSION (m2)	TYPE LAWN (m2)	
CLEVELAND	1+003.6 TO 1+017	RT					58	
CLEVELAND	1+003.6 TO 1+192	LT	11		1363			61
CLEVELAND	1+038 TO 1+066	RT					114	
CLEVELAND	1+057 TO 1+183	RT					319	
CLEVELAND	1+085 TO 1+212	LT		133				
CLEVELAND	1+109 TO 1+212	RT		105				
CLEVELAND	1+182 TO 1+211	RT				449		
CLEVELAND	1+187 TO 1+213	LT				382		
CLEVELAND	1+221 TO 1+239	RT				213		
CLEVELAND	1+222 TO 1+274	RT		57				
CLEVELAND	1+223 TO 1+244	LT		225		325		
CLEVELAND	1+238 TO 1+280	RT					381	
CLEVELAND	1+239 TO 1+442	LT	13		1746			79
CLEVELAND	1+284 TO 1+341	RT					719	
CLEVELAND	1+288 TO 1+328	RT		40				
CLEVELAND	1+338 TO 1+372	RT		34				
CLEVELAND	1+344 TO 1+375	RT					152	
CLEVELAND	1+373 TO 1+393	RT					103	
CLEVELAND	1+392 TO 1+442	RT					140	
CLEVELAND	1+104	47 m LT				8		
CLEVELAND	1+438	12 m RT				8		
TOTAL			24	594	3109	1385	1986	140

F AGGREGATE AND BITUMINOUS SUMMARY									
ALIGNMENT	STA. - STA.	AGGREGATE	BITUMINOUS				150mm CONCRETE	200mm CONCRETE	TACK COAT
		BASE CLASS 6	TYPE 31 BASE	TYPE 41 WEAR	TYPE 31 BINDER	TYPE 31 WEAR			
		m3	+	+	+	+			
CLEVELAND	1+003.6 TO 1+201	406	583	270	270				1105
CLEVELAND	1+233 TO 1+442	430	617	286	286				1105
DRIVEWAY	#50, #60, #70	98			75	75		68	121
DRIVEWAY	#81	33			17	17		82	27
DRIVEWAY	#3630	22			19	19			30
DRIVEWAY	#3650	11					75		
DRIVEWAY	#3622	42			17	17	135		27
DRIVEWAY	#3670	9			7	7			12
TOTAL		1051	1200	556	692	136	210	150	2427

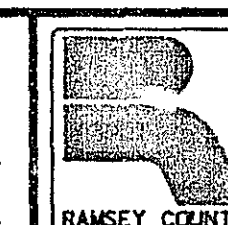
CURB & GUTTER AND WALK					
ALIGNMENT	STA. - STA.	LOCATION	CITY	DESIGN B624	100 mm CONCRETE WALK
				(m)	(m ²)
CLEVELAND AVE	1+033.6 TO 1+200	RT	NEW BRIGHTON	166.4	
CLEVELAND AVE	1+003.6 TO 1+200	LT	NEW BRIGHTON	200.4	
CLEVELAND AVE	1+234.6 TO 1+443.3	RT	ARDEN HILLS	212.7	
CLEVELAND AVE	1+005 TO 1+200	RT	NEW BRIGHTON		300
CLEVELAND AVE	1+233 TO 1+437	RT	ARDEN HILLS		310
TOTAL				579.5	610

ASBULT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: JAB
DATE: 3-16-05

REVISIONS	DATE	BY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

REG. NO. 2262e
DATE 11/15/90



QUANTITY TABULATIONS

DES: JSS	DR: JSS	APPROVED: JAB
CHK: GLS	CHK: JAB	

SHEET NO. 7 of 28 SHEETS

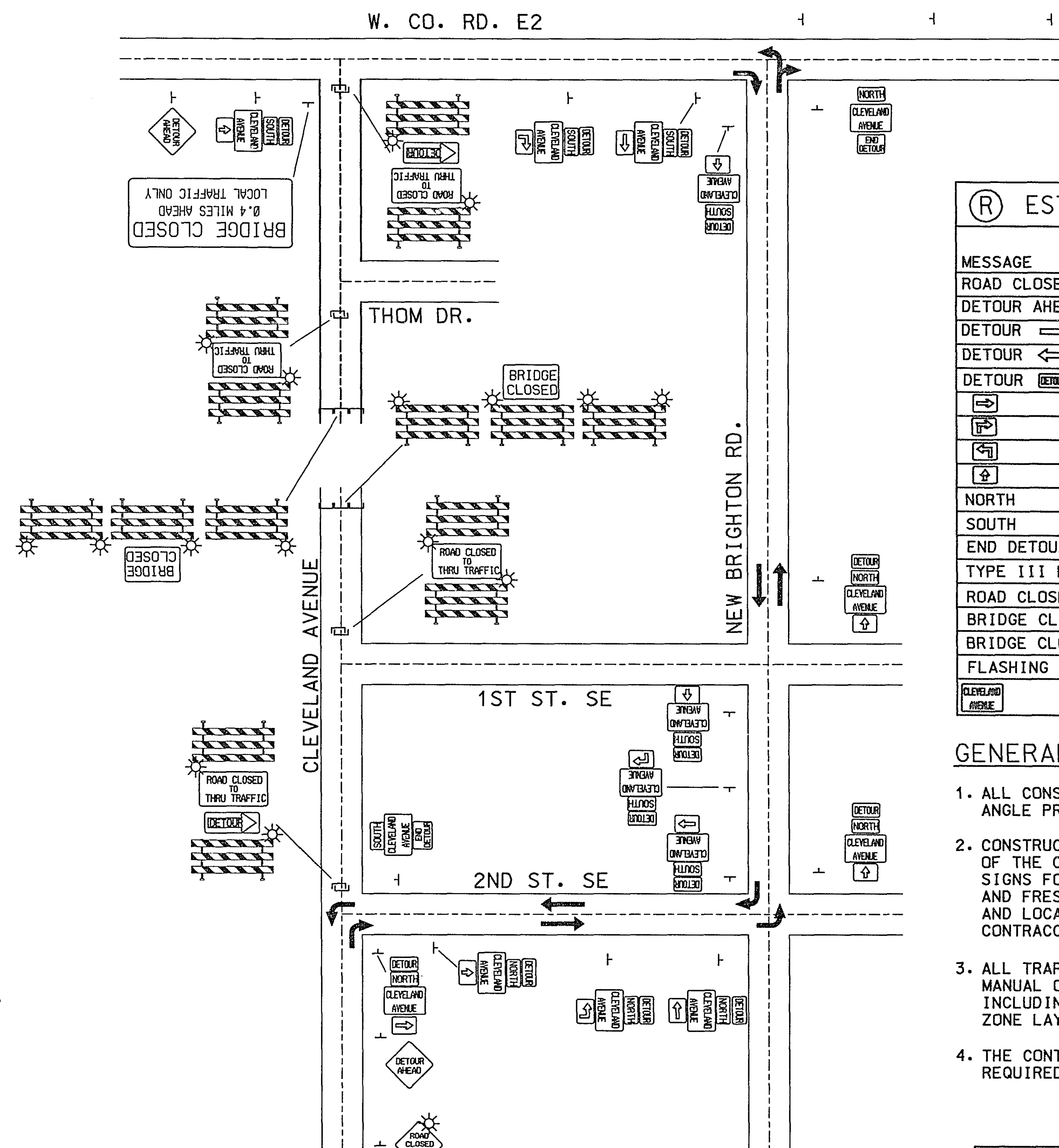
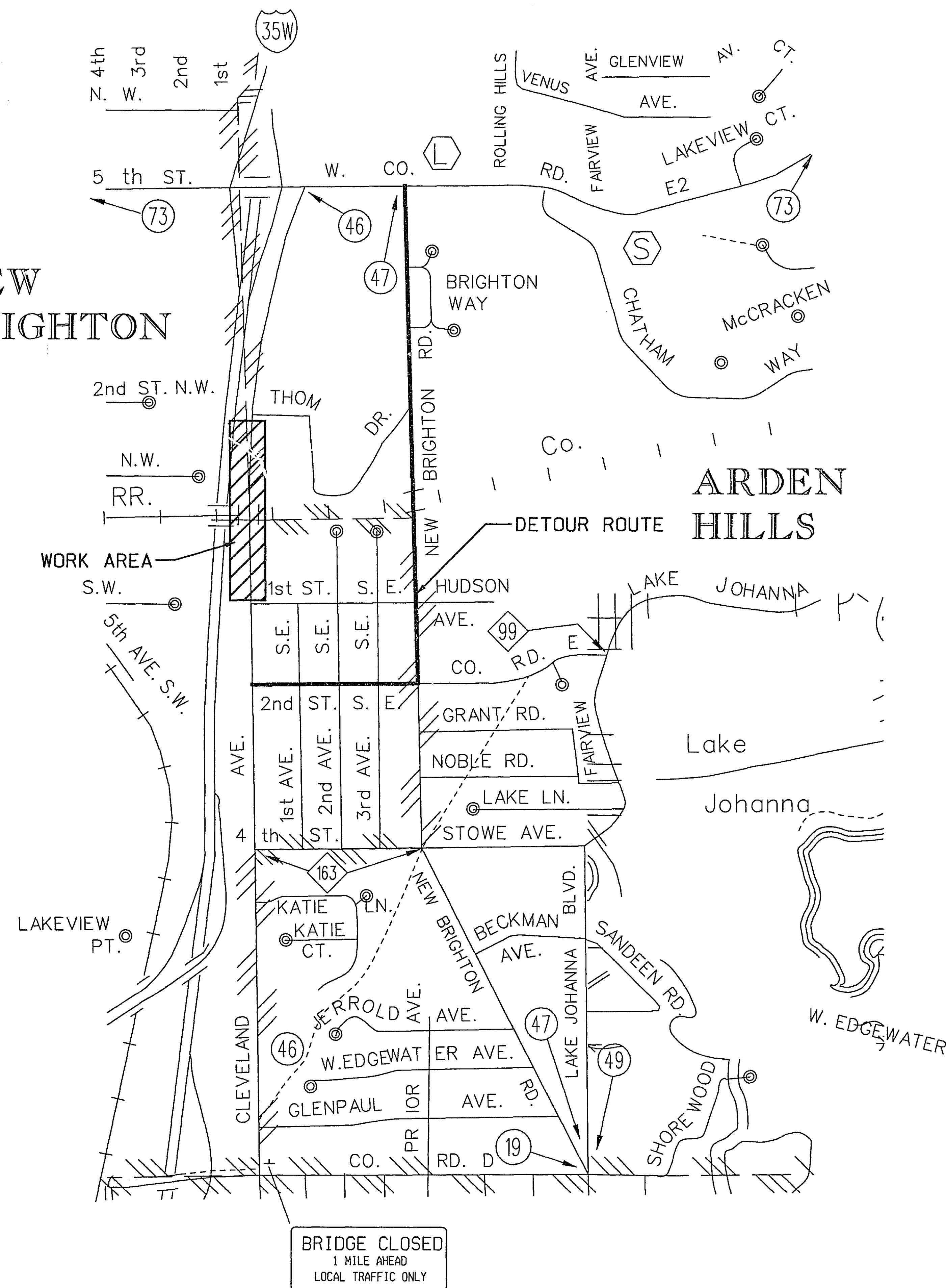


28-192

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S.P. NO. 62-646-12
S.P. NO. 147-020-24
S.P. NO. 187-020-08

NEW BRIGHTON

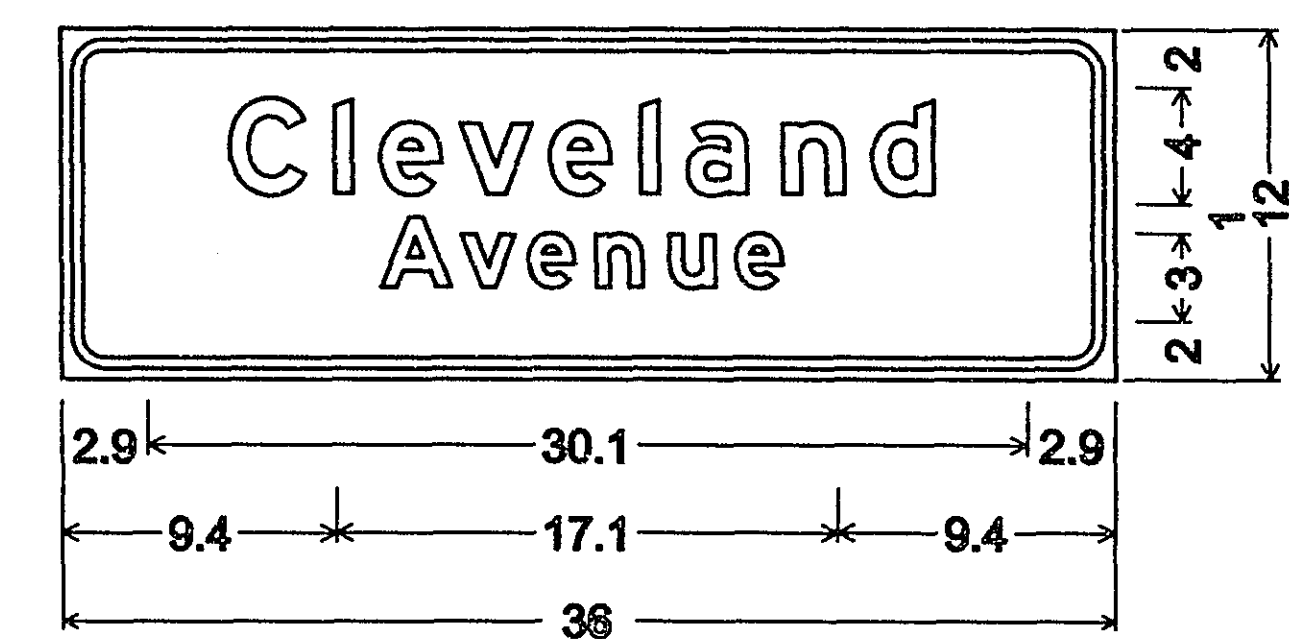


ESTIMATED QUANTITIES FOR TRAFFIC CONTROL

MESSAGE	SIGN NO.	SIZE (in)		NO. REQ'D
		STD	OPT	
ROAD CLOSED AHEAD	W20-3	48X48	36X36	1
DETOUR AHEAD	W20-2	48X48	36X36	3
DETOUR	M4-10R	48X18		1
DETOUR	M4-10L	48X18		1
DETOUR	M4-8	24X12		15
	M6-1	21X15		5
	M5-1R	21X15		2
	M5-1L	21X15		2
	M6-3	21X15		6
NORTH	M3-1	24X12		7
SOUTH	M3-3	24X12		10
END DETOUR	M4-8a	24X18		2
TYPE III BARRICADES				
ROAD CLOSED TO THRU TRAFFIC	R11-4	60X30		4
BRIDGE CLOSED	R11-2A	48X30		2
BRIDGE CLOSED -- MILES AHEAD	R11-3A	72X30		2
FLASHING AMBER WARNING LIGHTS				17
CLEVELAND AVENUE	SEE DETAIL	36X12		17

GENERAL NOTES:

- ALL CONSTRUCTION ZONE SIGNING SHALL USE WIDE ANGLE PRISMATIC (DIAMOND GRADE) SHEETING.
- CONSTRUCTION ZONE SIGNING WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND WILL INCLUDE, BUT NOT LIMITED TO, SIGNS FOR LANE CLOSURES, LOW SHOULDER, UN-EVEN LANES AND FRESH OIL (OTHER ITEMS AS APPLICABLE). THE NUMBER AND LOCATION OF THESE SIGNS WILL BE DETERMINED BY THE CONTRACTOR'S OPERATIONS.
- ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), INCLUDING THE FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS - JANUARY 1998.
- THE CONTRACTOR WILL FURNISH, INSTALL AND MAINTAIN ALL REQUIRED TRAFFIC CONTROL SIGNS AND DEVICES.



Cleveland Avenue

1.5" Radius, 0.4" Border, 0.4" Indent, White on Green;
"Cleveland" E Mod; "Avenue" E Mod;
Table of letter and object lefts.

C	l	e	v	e	l	a	n	d
2.9	7.4	9.4	12.9	16.7	20.5	22.5	26.6	30.5
A	v	e	n	u	e			
9.4	12.9	15.8	18.7	21.8	24.8			

SIGN DETAIL (DIMENSIONS IN INCHES)

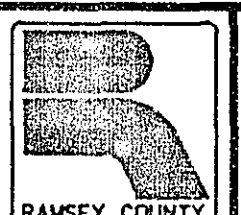
ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: SJB
DATE: 3-16-05

28-192

ARCHITECTS ENGINEERS PLANNERS
3400 W. 66th Street, Suite 250, Minneapolis, Minnesota 55435 (612) 920-4666

REVISIONS	DATE	BY

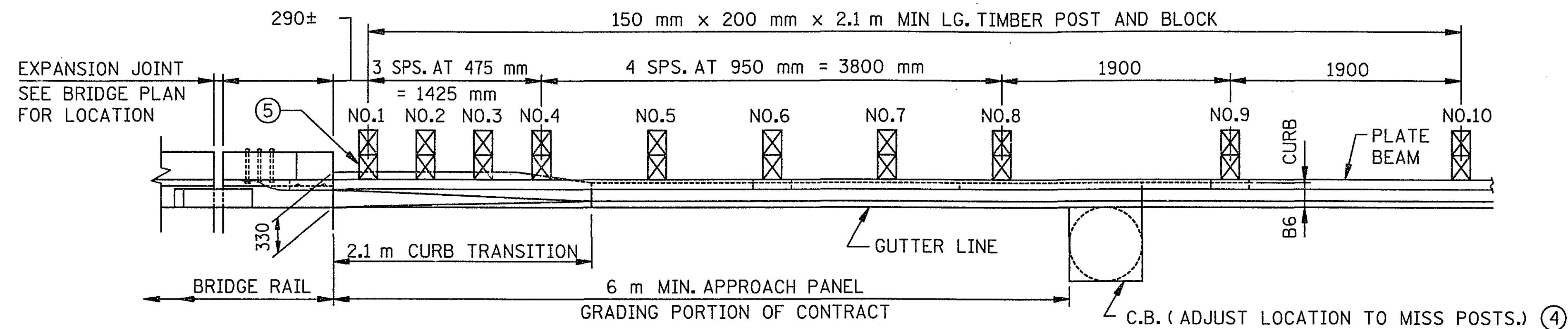
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
REG. NO. 22628
DATE 11/15/99



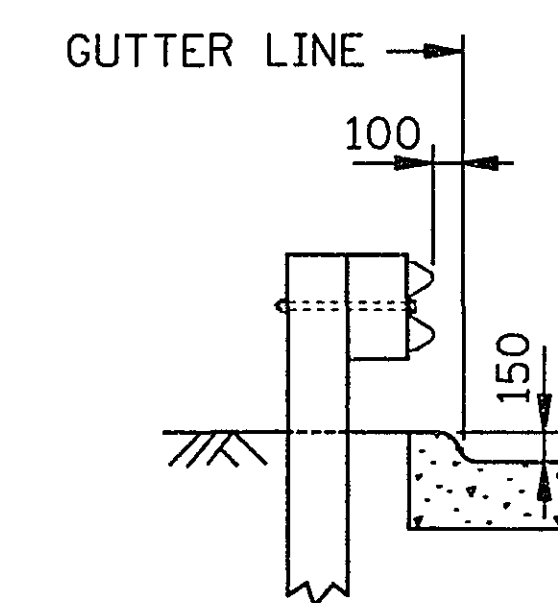
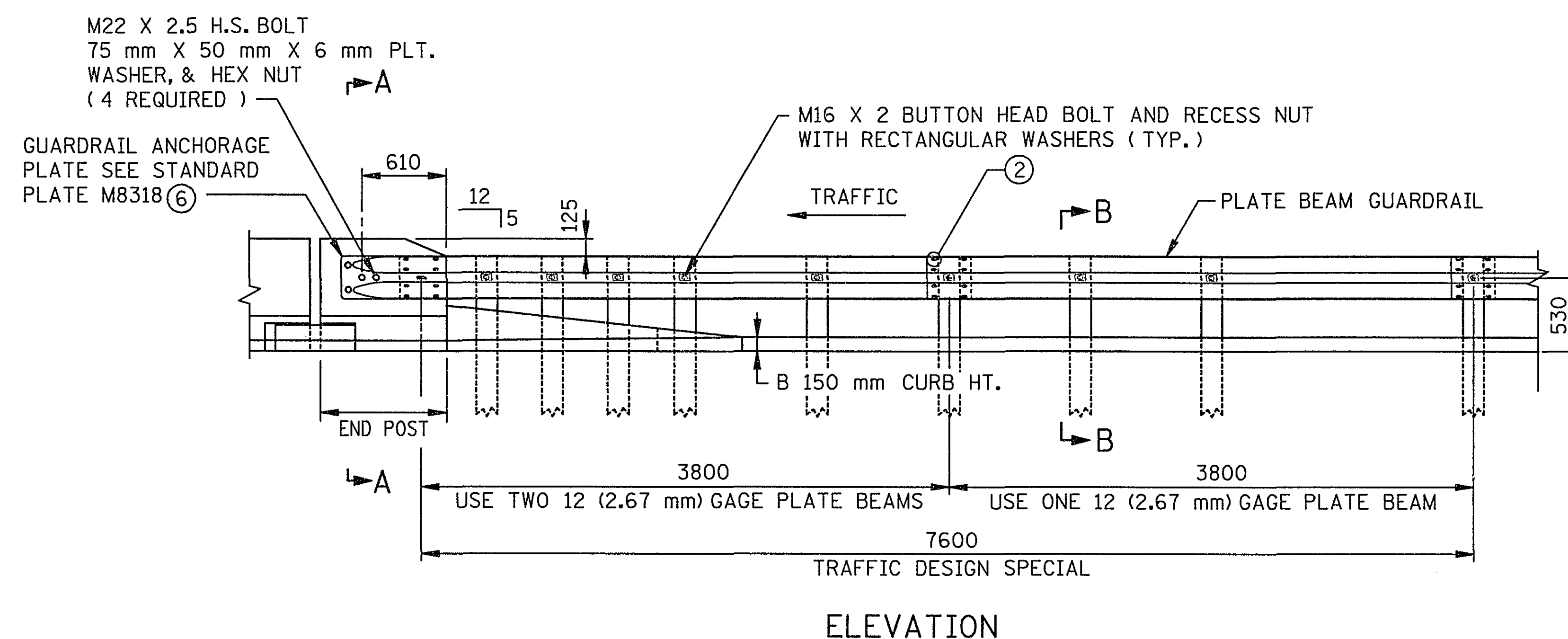
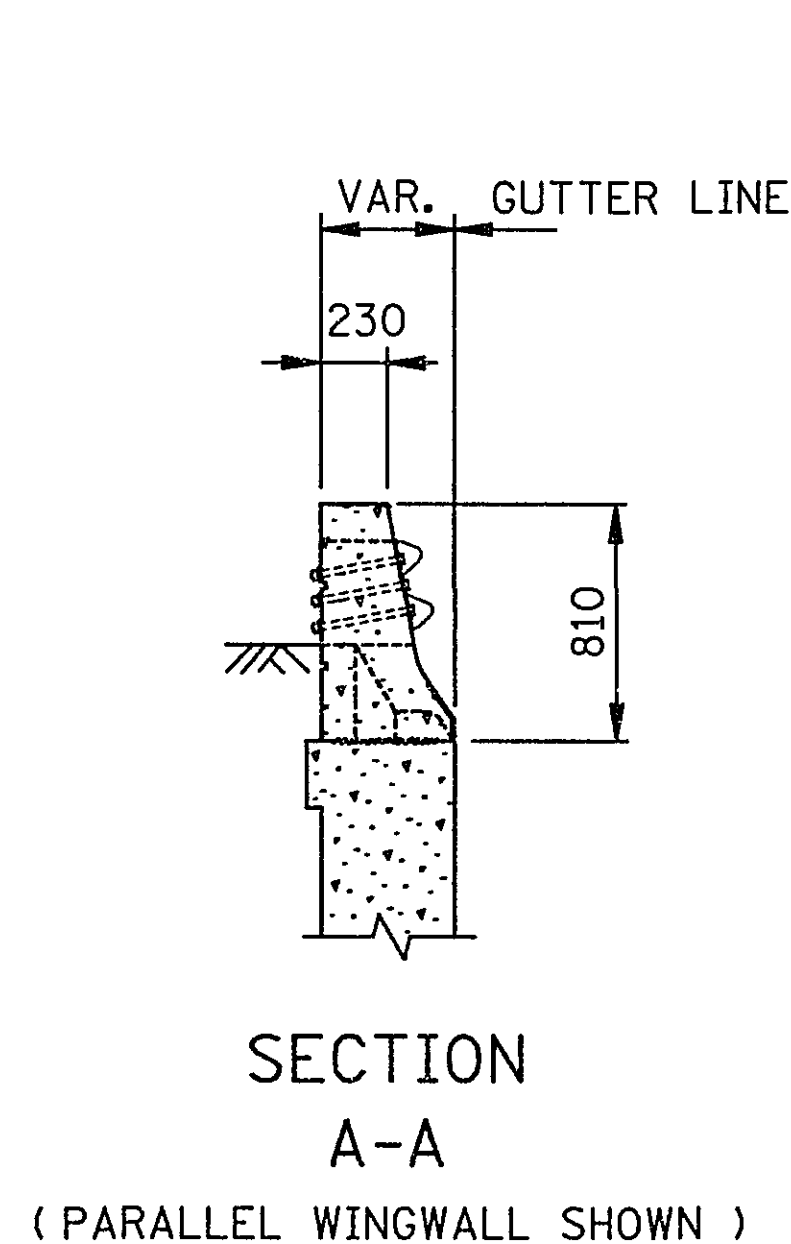
TRAFFIC CONTROL PLAN

DES: JSS DR: JSS APPROVED: JAB
CHK: GLS CHK: JAB
SHEET NO. 8 of 28 SHEETS





PLAN



NOTES:

- ① END OF TRANSITION TO MATCH BRIDGE RAIL SURFACE.
- ② M16 X 2 X 32 mm LG. BUTTON HEAD BOLTS AND NUTS TYPICAL AT SPLICES.
- ③ REINFORCEMENT TO BE EPOXY COATED AS PER SPEC. 3301.
- ④ SEE ROAD PLANS TO VERIFY ACTUAL DIMENSION AND LOCATION.
- ⑤ ADDITIONAL BLOCKING MAY BE REQUIRED TO CLEAR BRIDGE STRUCTURE. VERIFY IN FIELD.
- ⑥ SANDWICH ANCHOR PLATE BETWEEN RAIL BEAMS.

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

DONE BY: *P/B*
DATE: 3-16-05

28-192
TRAFFIC BARRIER DESIGN SPECIAL

NOTE: ALL DIMENSIONS ARE IN MILLIMETERS, EXCEPT AS NOTED.

MODIFIED

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

REG. NO. 22628
DATE 7/27/99

S.P. NO. 62-646-12
S.P. NO. 147-020-24
S.P. NP. 187-020-08

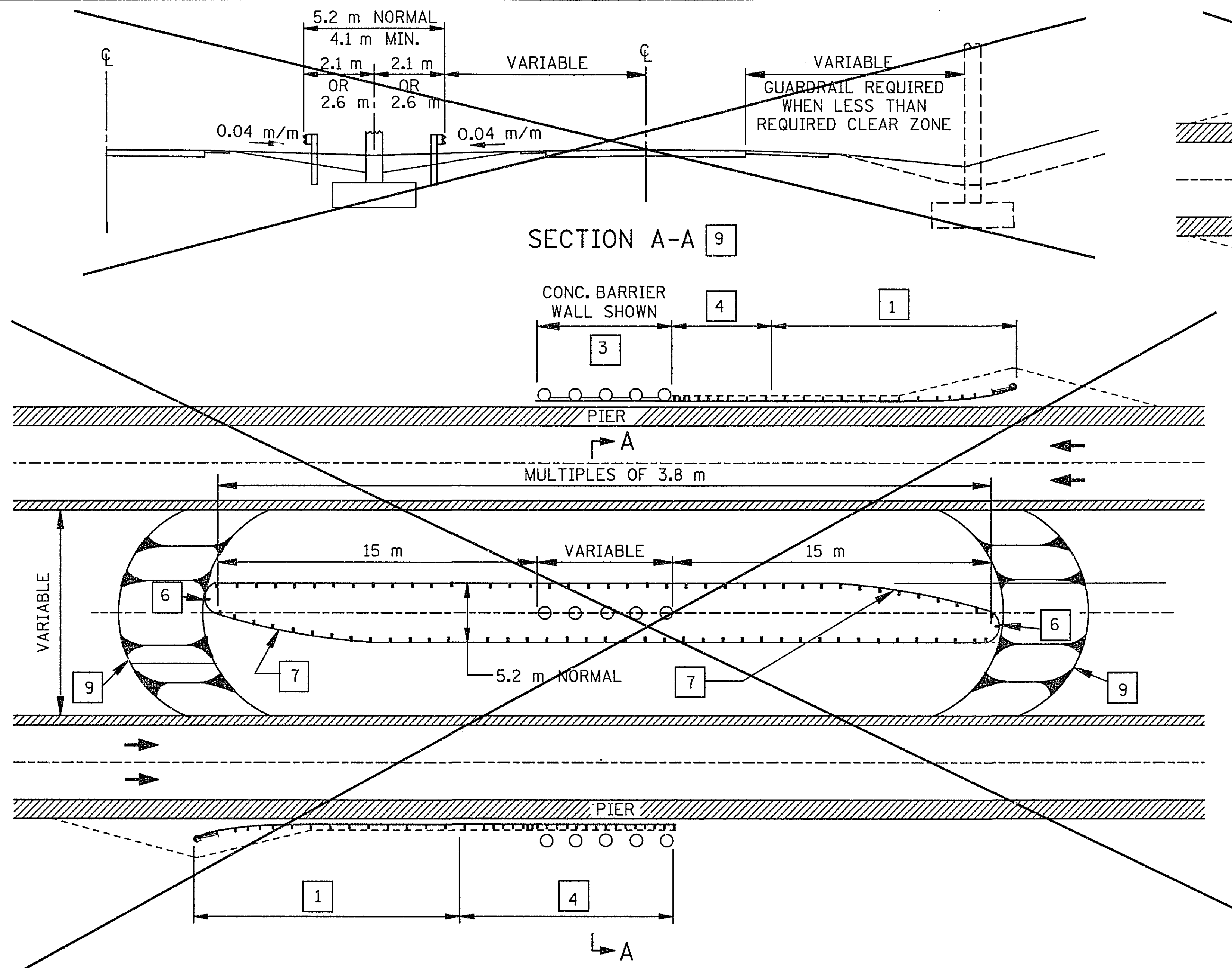
MINNESOTA
REVISION DATE
9-8-98

STANDARD SHEET NO.
5-297.605M
STANDARD APPROVED:
JANUARY 23, 1992

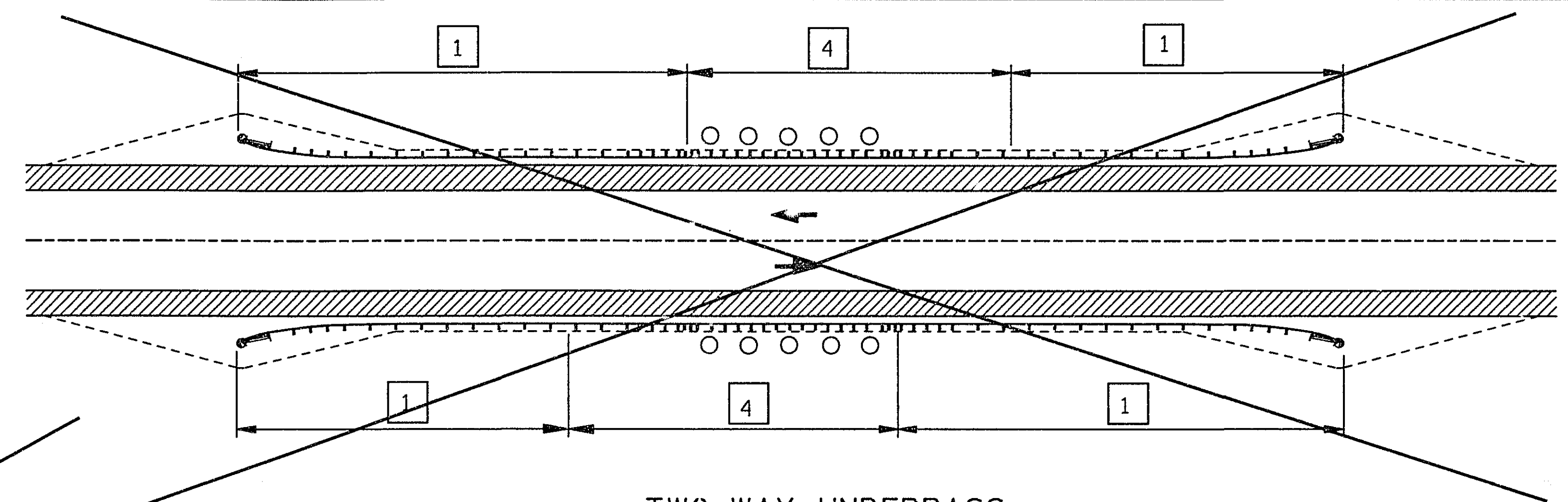
TITLE:
GUARDRAIL TRANSITION FOR CONCRETE
SAFETY SHAPED BARRIER WITH APPROACH CURB

SHEET NO. 9 OF 28 SHEETS

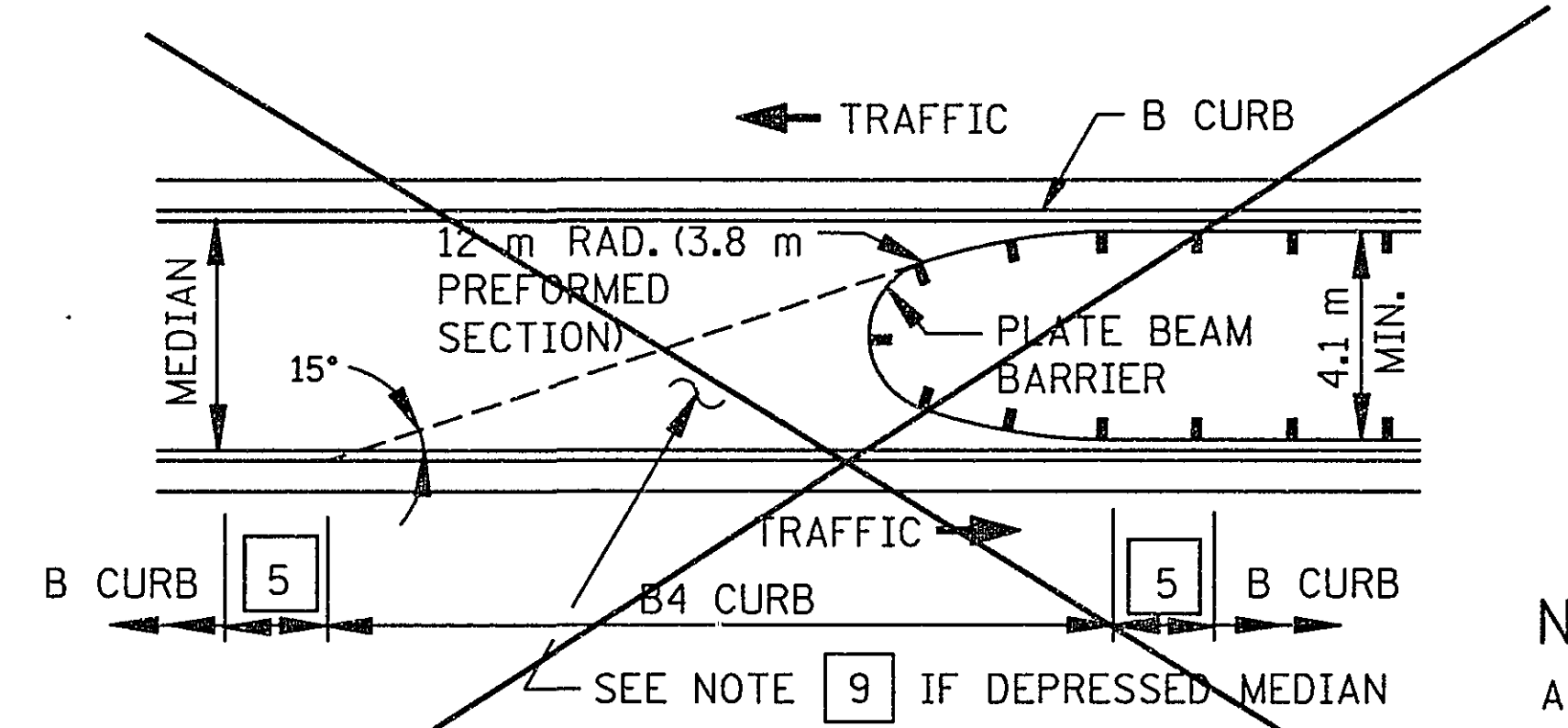
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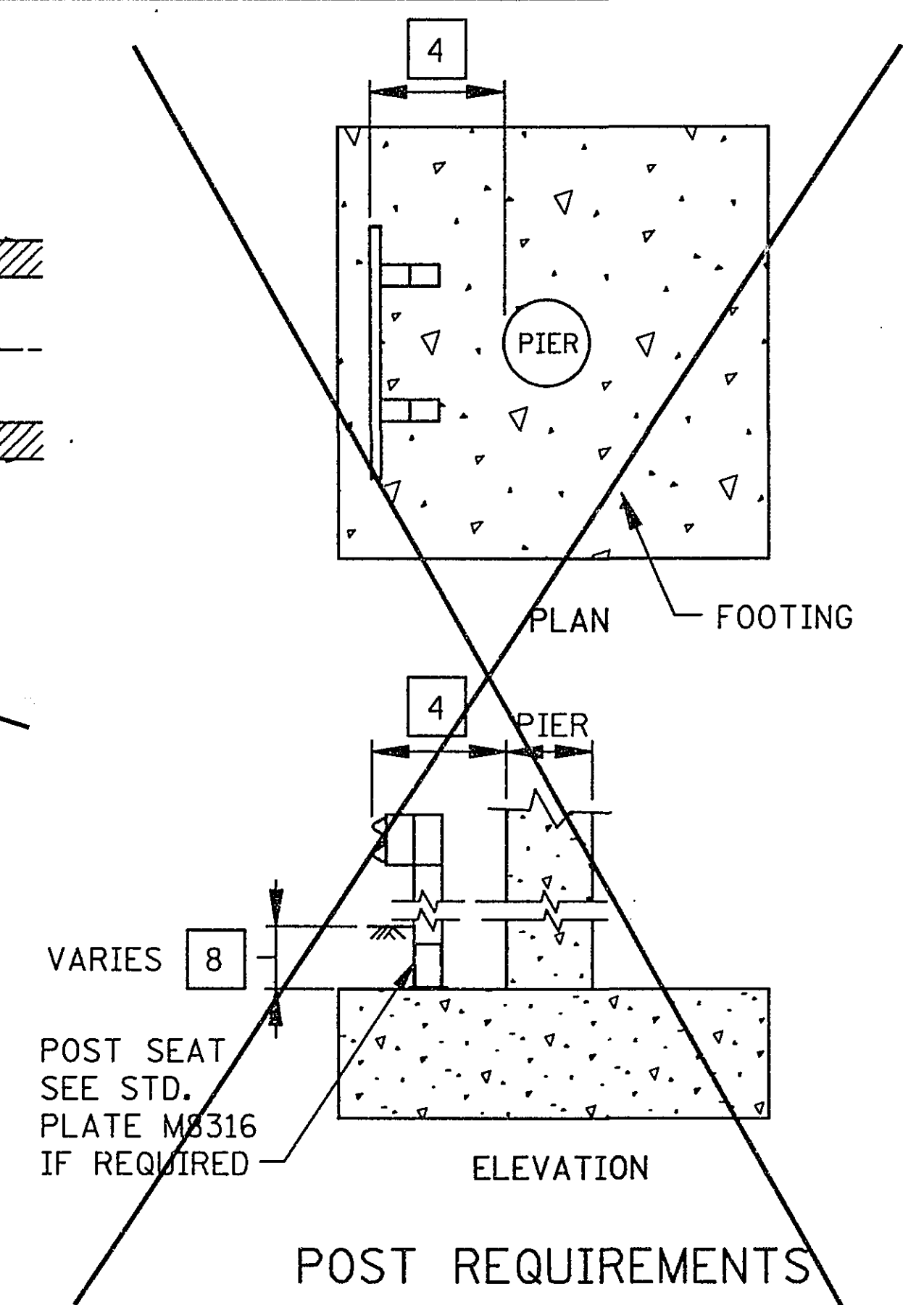
UNDERPASS-DEPRESSED MEDIAN
(DESIGN SPECIAL SHOWN)



TWO-WAY UNDERPASS
(DESIGN SPECIAL SHOWN)



MODIFIED CURB AT MEDIAN
(OPTIONAL GUARDRAIL PLACEMENT SHOWN)



NOTES:

ALL GUARDRAIL POSTS SHALL BE 1.9 m CTR. TO CTR., EXCEPT WHERE NOTED.
THE LATEST APPROVED VERSION OF STANDARD PLATES SHOWN OR AS INDICATED IN THE PLANS SHALL APPLY.
WHEN THE APPROACHING PLATE BEAM FLARE CAN BE BURIED IN THE BACKSLOPE ELIMINATE THE END TREATMENT AND ADD REQUIRED RAIL LENGTH TO REACH BACKSLOPE.

- 1 FOR REQUIRED L LENGTH SEE DESIGN MANUAL 10-7.03 FOR DESIGN PARAMETERS SEE STD. PLATE M8329 FOR END TREATMENT SHOWN.
- 2 SET EDGE OF EXTRUDER BOX 230 mm FROM FACE OF RAIL EXTENDED FROM POST NO. 9.
- 3 CONCRETE BARRIER WALL BETWEEN PIER COLUMNS MAY BE USED. SEE SHEET NO. -- OF -- FOR WALL DETAILS. CONNECT GUARDRAIL TO BARRIER WALL ANCHORAGE PLATE SEE SHEET NO. -- OF -- FOR DETAILS.
- 4

DISTANCE FROM FACE OF RAIL TO HAZARD	GUARDRAIL POST SPACING
OVER 1.2 m	1.9 m
1.2 m TO 600 mm	950 mm
LESS THAN 600 mm	DESIGN SPECIAL B & 3

- 5 1.5 m CURB TRANSITION, USE IF ADJACENT CURB IS A DIFFERENT TYPE OR HEIGHT.
- 6 1.5 m RADIUS NOSE SECTION (3.8 m PREFORMED CURVED RAIL SECTION, SEE DETAIL, ON SHEET 2 OF 2).
- 7 7.6 m OF PREFORMED (12 m RADIUS) RAIL SECTIONS.
- 8 IF EMBEDMENT IS GREATER THAN 915 mm OR IF EMBEDMENT IS 760 mm TO 915 mm AND ADJACENT POSTS ARE EMBEDDED 915 mm OR MORE, POST SEAT IS NOT REQUIRED.
- 9 THE MEDIAN DITCH SHALL BE FILLED TO PROVIDE AN ELEVATION OF GUARDRAIL APPROXIMATELY (WITHIN 150 mm) THE SAME AS IF INSTALLED ON THE SHOULDER. EXTEND FILL TO GUARDRAIL NOSE AND TAPER TO MEDIAN DITCH ON 1:10 SLOPE.
- 10 IF 150 mm+ HIGH CURB, MILL TO 75 mm HEIGHT. NEW: CONSTRUCT 100 mm HIGH CURB.
- 11 SNOW PLOW MARKER (X4-5) WITH A 3 kg/m DELINEATOR POST 2.4 m LG. (SPEC. 3401) DRIVEN INTO GROUND. EXTEND 915 mm ABOVE TERMINAL.
- 12 SET EDGE OF EXTRUDER BOX 230 mm FROM FACE OF CURB.

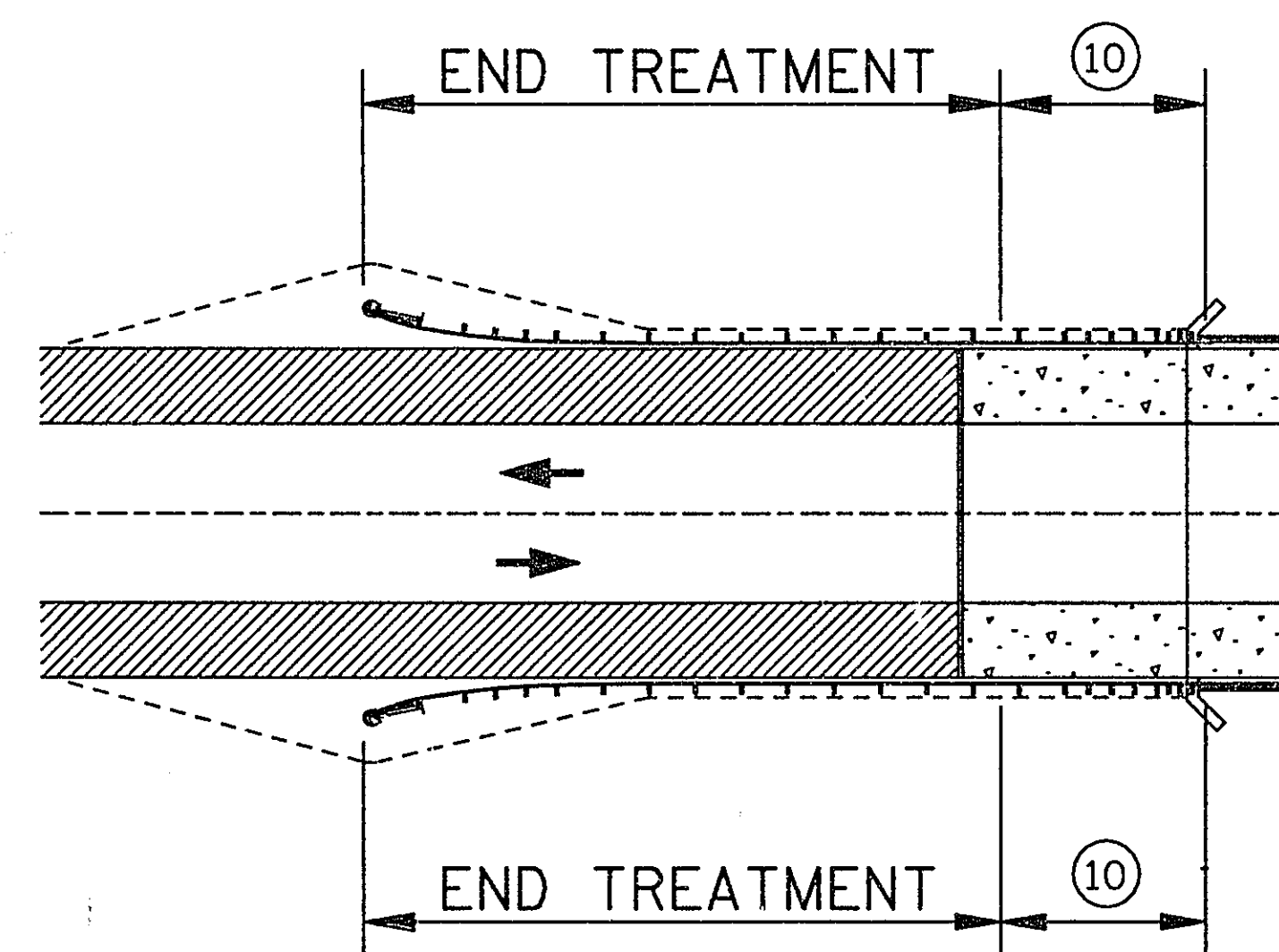
ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: JAB
DATE: 3-16-05

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
REG. NO. 22628
DATE 7/27/99

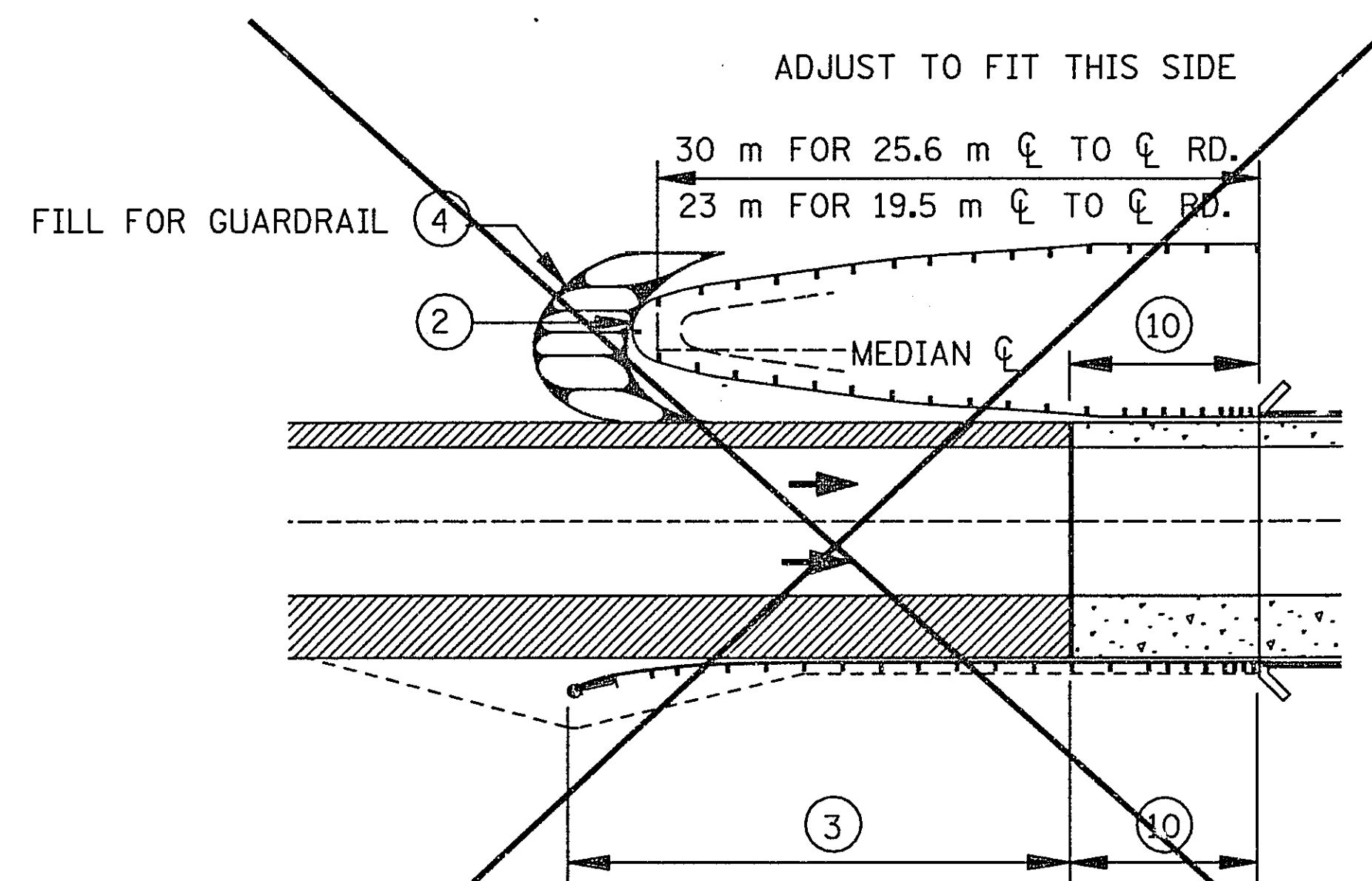
S.P. NO. 62-646-12
S.P. NO. 147-020-24
S.P. NO. 187-020-08

STANDARD SHEET NO. 5-297.601M (1 OF 2)
STANDARD APPROVED: OCTOBER 13, 1995
REVISION DATE 9-10-98

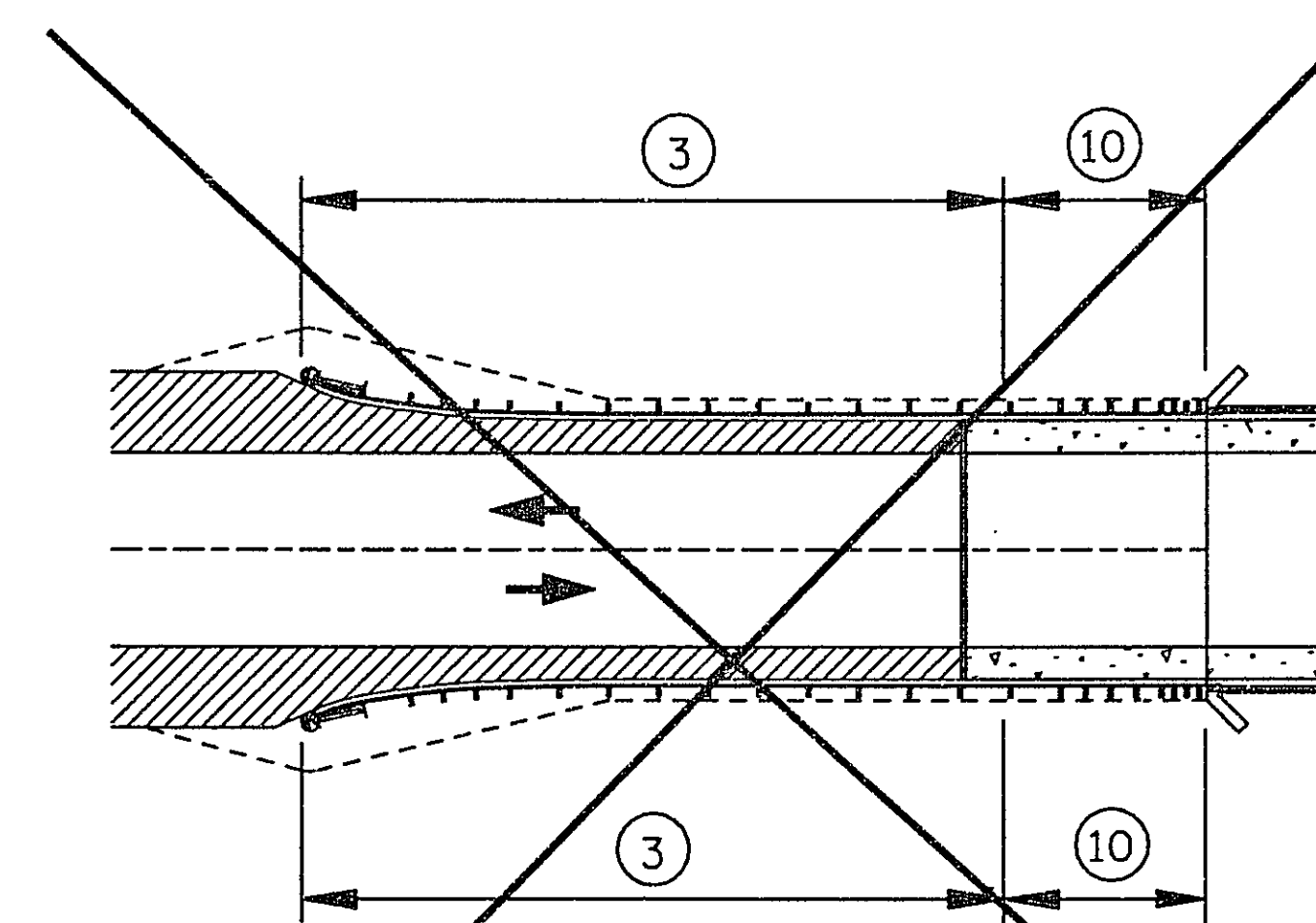
28-192
NOTE: ALL DIMENSIONS ARE IN MILLIMETERS, EXCEPT AS NOTED.
TITLE: GUARDRAIL INSTALLATIONS AT MEDIANS AND END TREATMENTS
SHEET NO. 10 OF 28 SHEETS



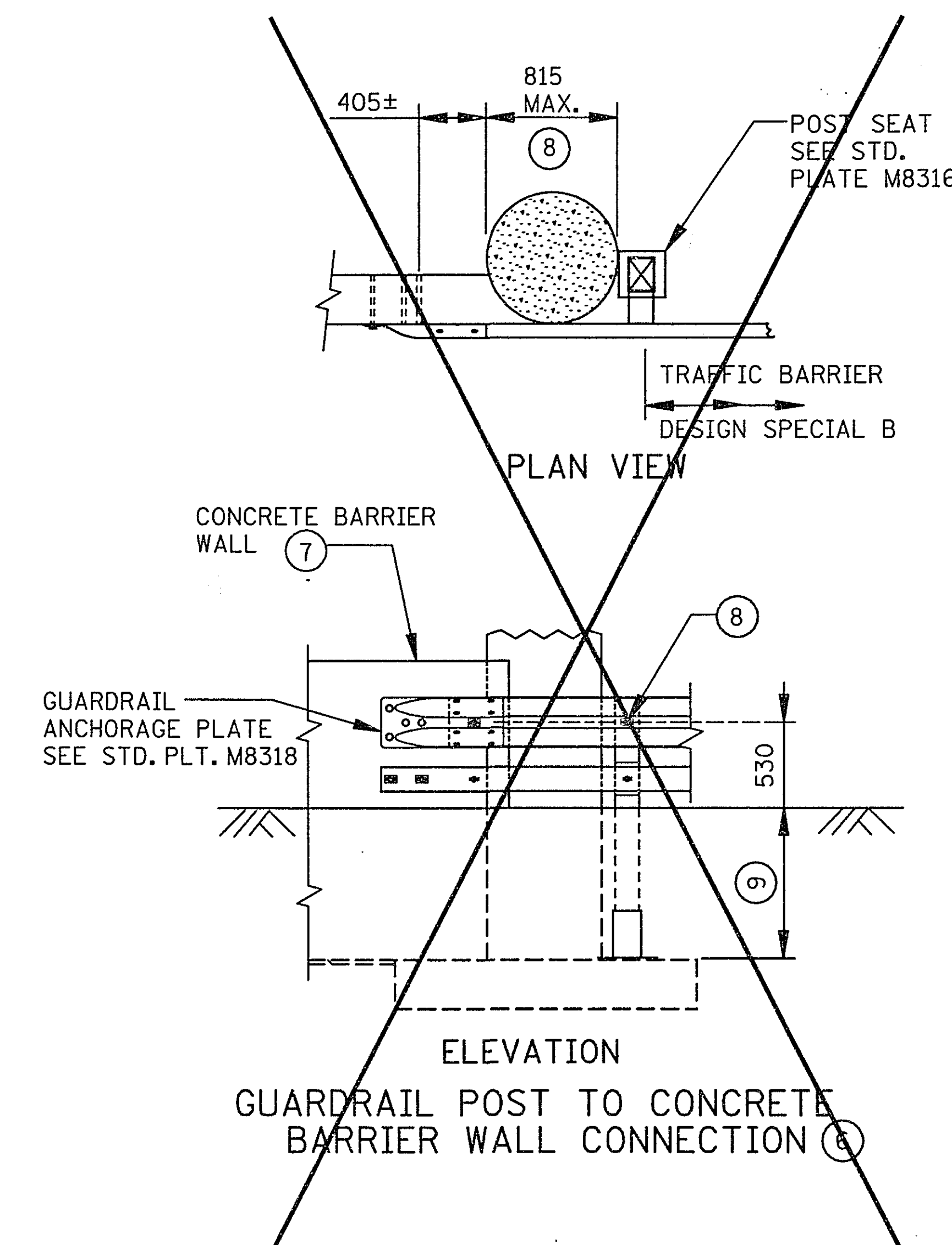
TWO - WAY BRIDGE
WITH FULL SHOULDERS



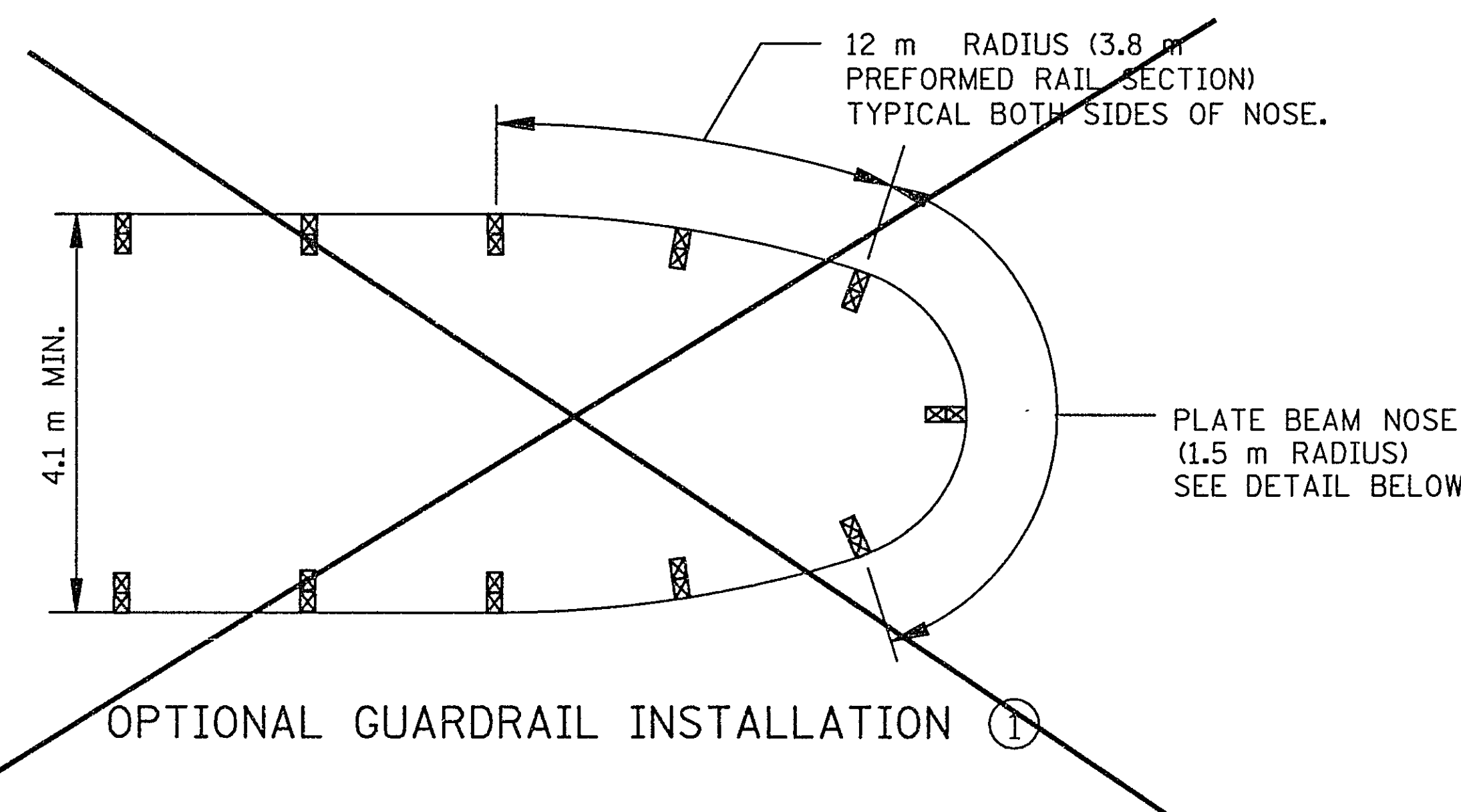
ONE - WAY BRIDGE
WITH FULL RIGHT SHOULDER



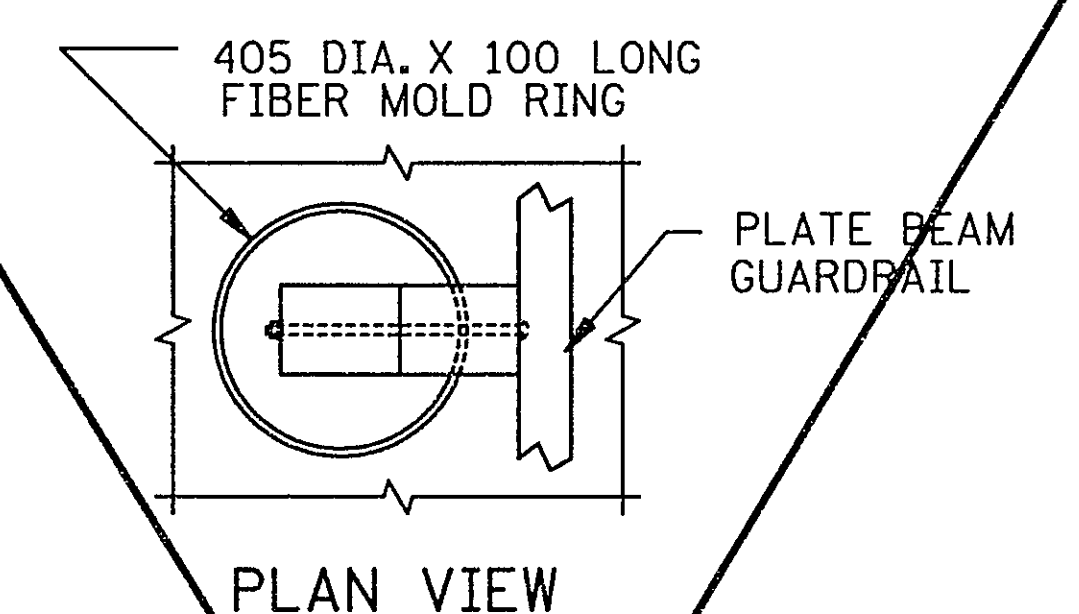
TWO - WAY BRIDGE
WITHOUT FULL SHOULDERS



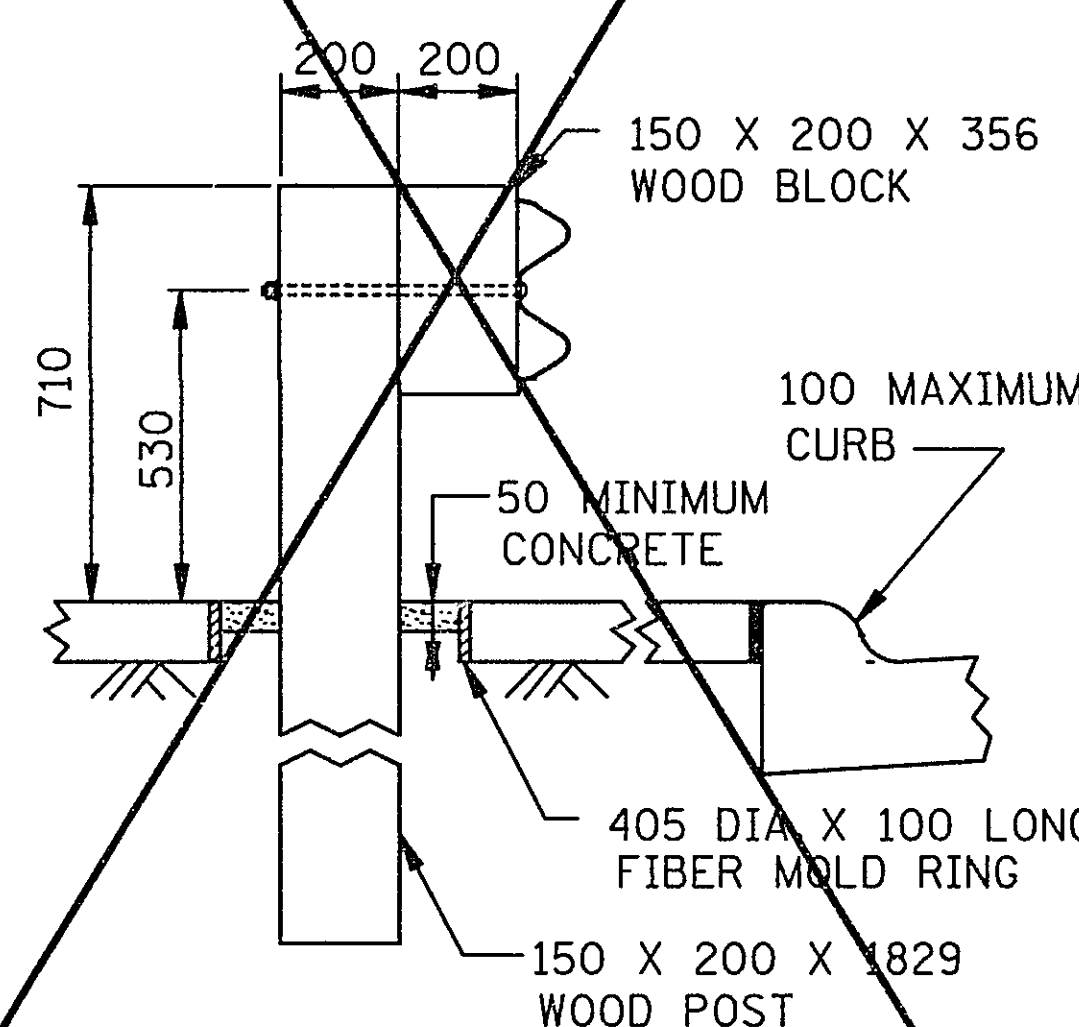
GUARDRAIL POST TO CONCRETE
BARRIER WALL CONNECTION



OPTIONAL GUARDRAIL INSTALLATION ①



PLAN VIEW



ELEVATION

TYPICAL SECTION AT POST
SET IN CONCRETE

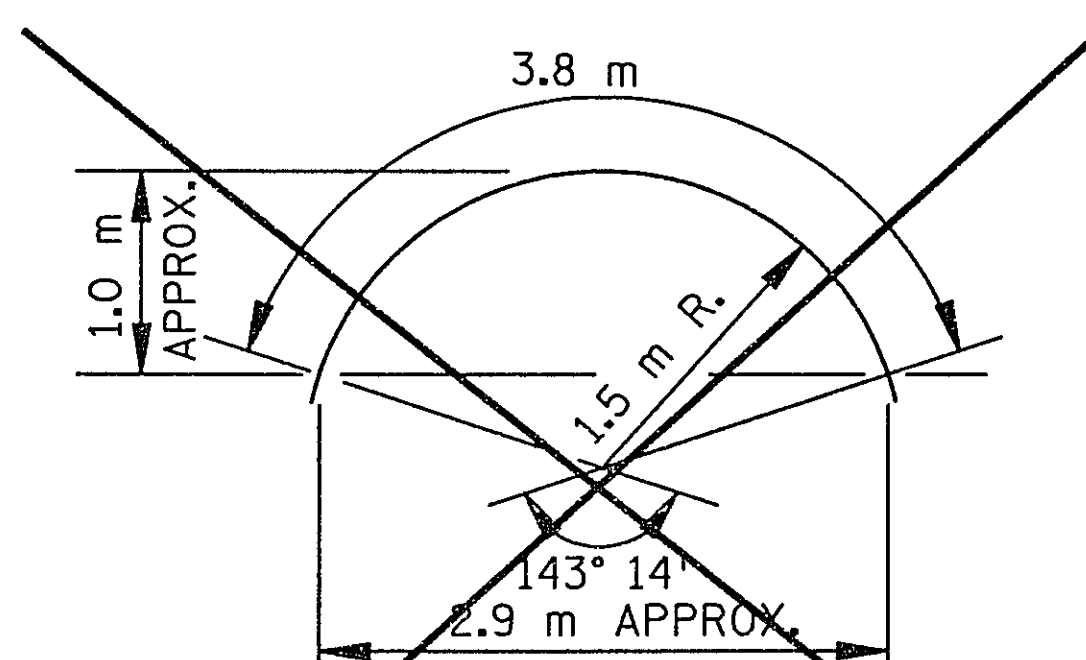


PLATE BEAM NOSE ⑤
(1.5 m RADIUS)

NOTES:

ALL GUARDRAIL POSTS SHALL BE 1.9 m CTR. TO CTR., EXCEPT WHERE NOTED.
WHEN THE APPROACHING PLATE BEAM FLARE CAN BE BURIED IN THE BACKSLOPE
ELIMINATE THE END TREATMENT AND ADD REQUIRED RAIL LENGTH TO REACH BACKSLOPE.
THE LATEST APPROVED VERSION OF STANDARD PLATES SHOWN OR AS INDICATED
IN THE PLANS SHALL APPLY.

- ① OPTIONAL GUARDRAIL AS DETERMINED BY THE DESIGNER AND SPECIFIED ON SHEET NO. _____ OF _____.
- ② 1.5 m RADIUS NOSE SECTION (3.8 m PREFORMED CURVED RAIL SECTION, SEE DETAIL).
- ③ FOR THE REQUIRED L LENGTH SEE ROAD DESIGN MANUAL 10-7.03 FOR DESIGN PARAMETERS, SEE STANDARD PLATE M8329 FOR END TREATMENT SHOWN.
- ④ THE MEDIAN DITCH SHALL BE FILLED TO PROVIDE AN ELEVATION OF GUARDRAIL APPROXIMATELY (WITHIN 150 mm±) THE SAME AS IF INSTALLED ON THE SHOULDER. EXTEND FILL TO GUARDRAIL NOSE AND TAPER TO MEDIAN DITCH ON 1:10 SLOPE.
- ⑤ STANDARD PLATE BEAM GUARDRAIL SECTION HAVING STANDARD PUNCHING AT BOTH ENDS WITH INTERMEDIATE 19 mm X 62 mm SLOT. SEE STANDARD PLATE M8307.
- ⑥ NOTE ⑦, AND ALTERNATE GUARDRAIL AS DETERMINED BY THE DESIGNER AND SPECIFIED ON SHEET NO. _____.
- ⑦ CONCRETE BARRIER WALL BETWEEN BRIDGE PIER COLUMNS. SEE SHEET NO. _____ FOR WALL DETAILS.
- ⑧ FOR COLUMN DIAMETERS LARGER THAN 815 mm, FIELD PUNCH THE GUARDRAIL FOR THE FIRST POST AS SHOWN.
- ⑨ IF EMBEDMENT IS GREATER THAN 915 mm OR IF EMBEDMENT IS 760 mm TO 915 mm AND ADJACENT POSTS ARE EMBEDDED 915 mm OR MORE, POST SEAT IS NOT REQUIRED.
- ⑩ DESIGN SPECIAL OR DESIGN SPECIAL A.

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DATE: 3-16-05

28-192

MODIFIED

NOTE: ALL DIMENSIONS ARE IN MILLIMETERS, EXCEPT AS NOTED.

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

REG. NO. 22628
DATE 7/27/99

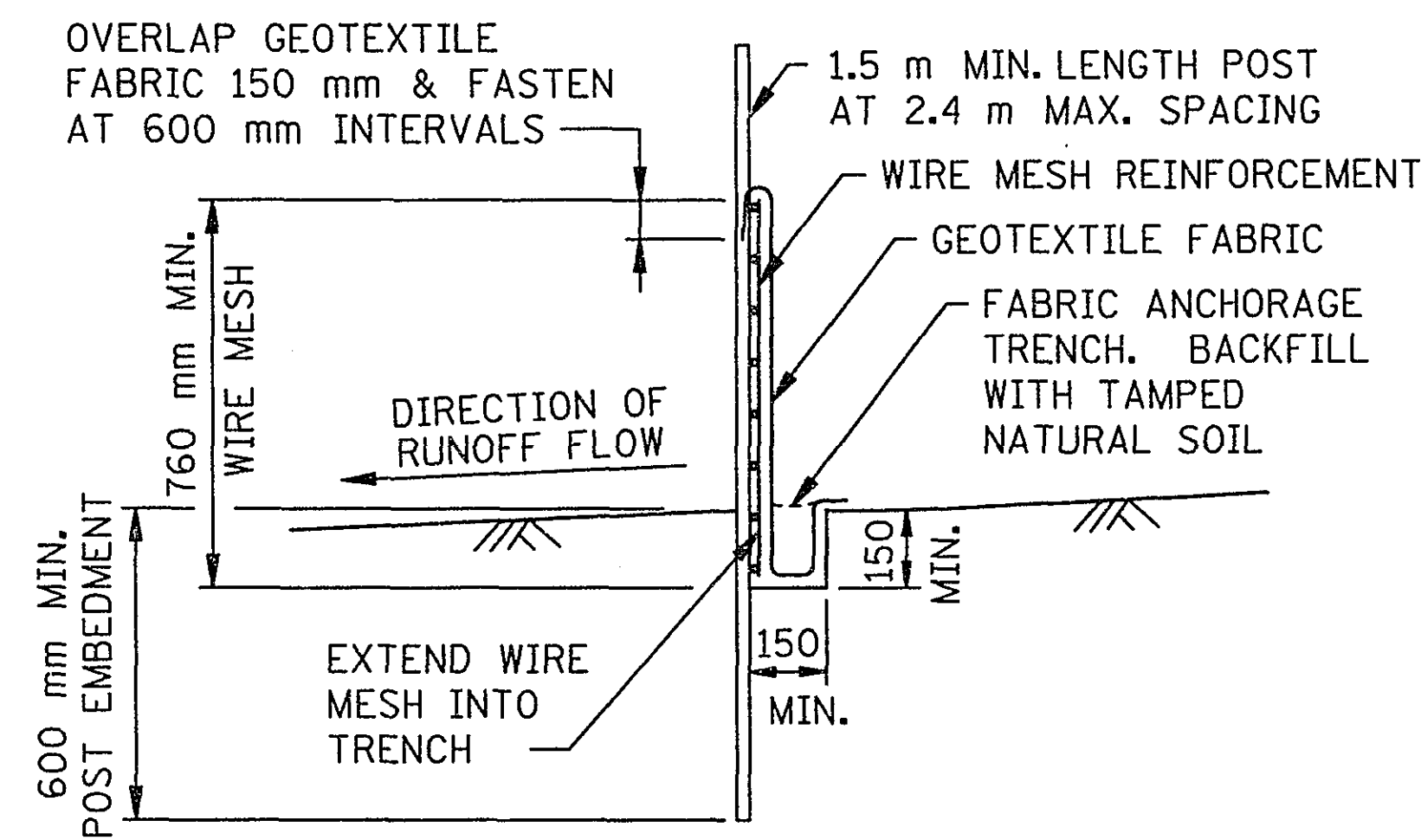
S.P. NO. 62-646-12
S.P. NO. 147-020-24
S.P. NO. 187-020-08

MINNESOTA
REVISION DATE
9-16-98

STANDARD SHEET NO.
5-297.601M (2 OF 2)
STANDARD APPROVED:
OCTOBER 13, 1995

GUARDRAIL INSTALLATIONS AT MEDIANS
AND END TREATMENTS

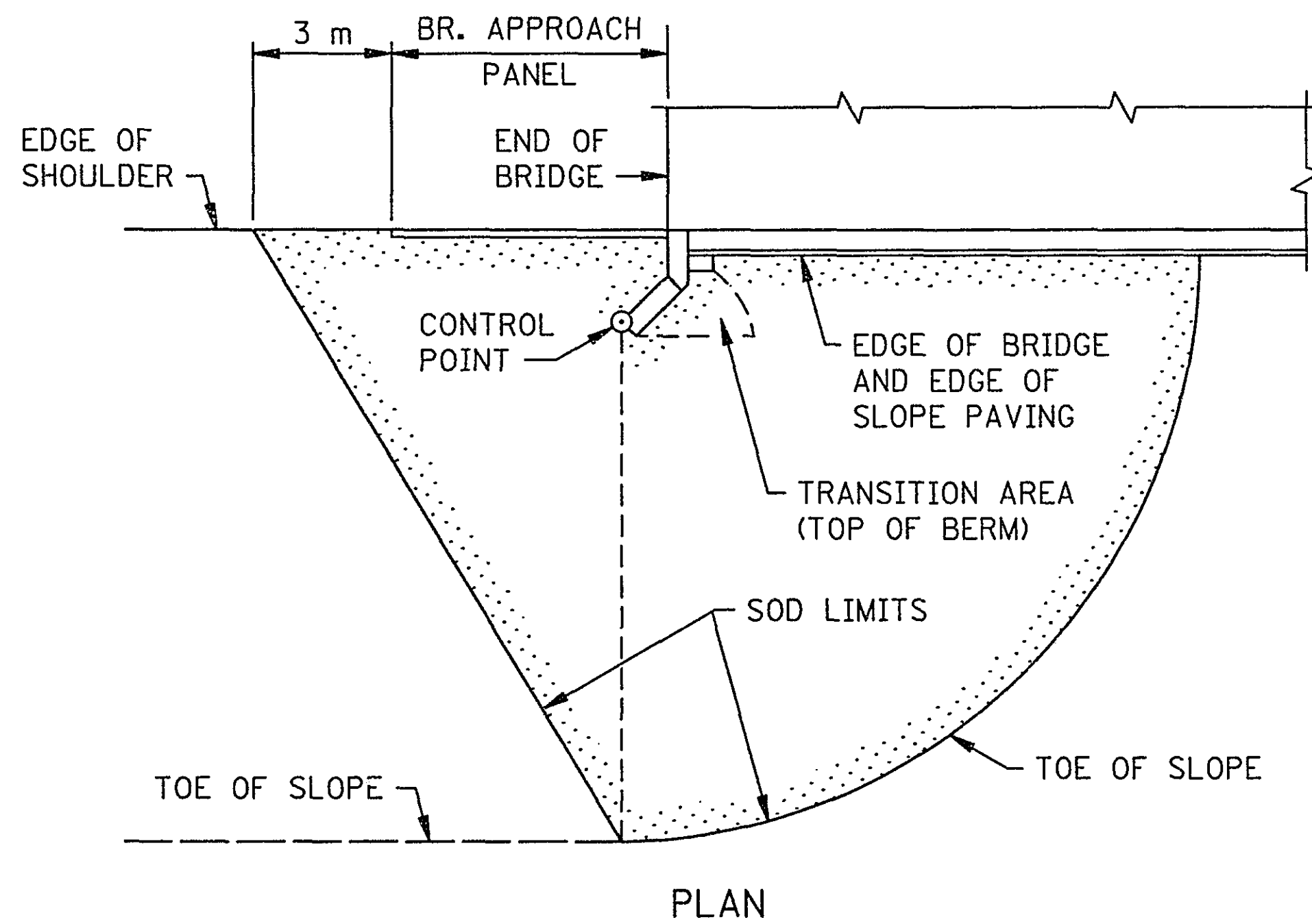
SHEET NO. 11 OF 28 SHEETS



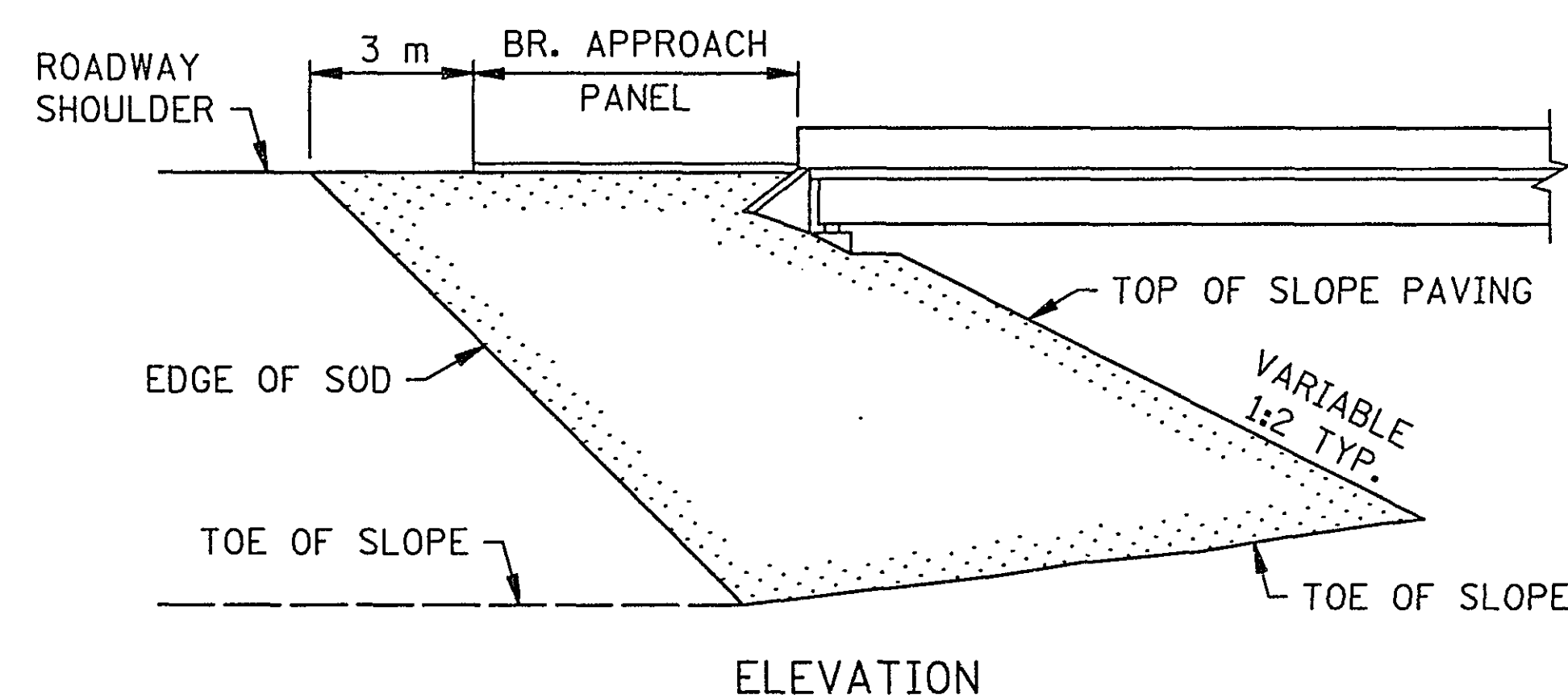
HEAVY DUTY

SILT FENCE DETAILS
TO PROTECT AREAS FROM SHEET FLOW
(SEE SPEC. 3886)

DESIGN CRITERIA:
MAXIMUM CONTRIBUTING AREA: 1.2 ha



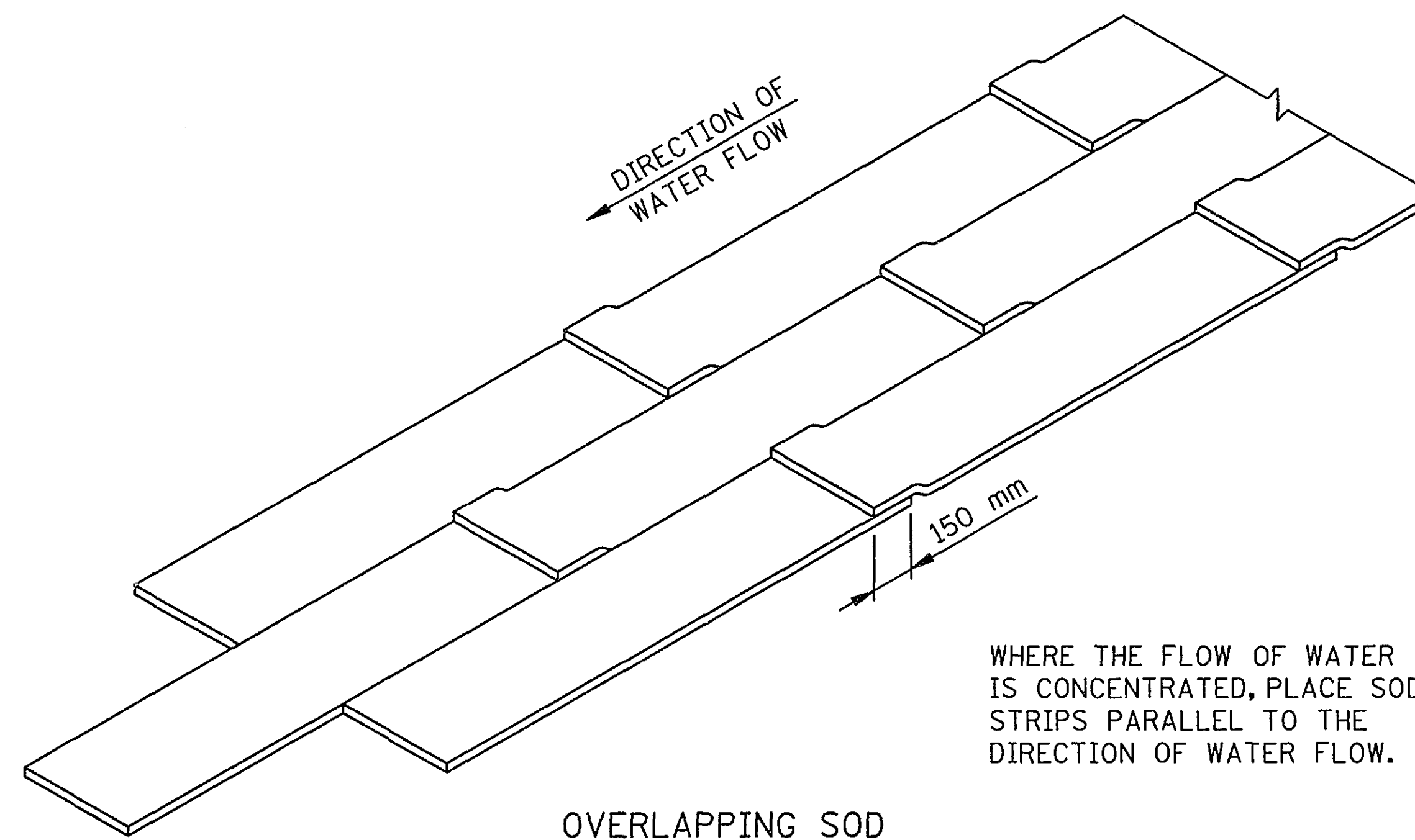
PLAN



ELEVATION

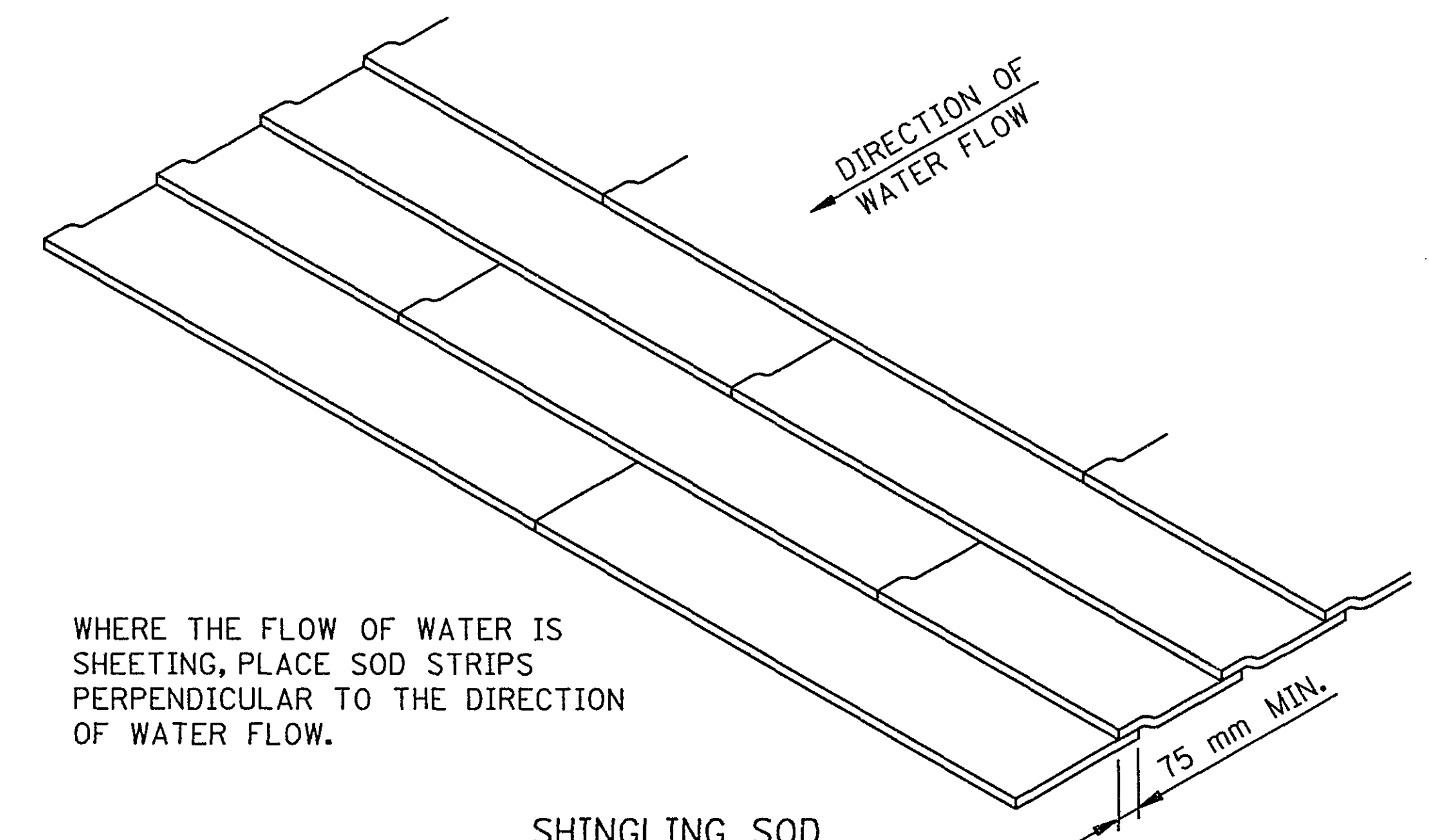
SODDING LIMITS AT BRIDGE APPROACH FILLS

TEMPORARY EROSION CONTROL



OVERLAPPING SOD

WHERE THE FLOW OF WATER IS CONCENTRATED, PLACE SOD STRIPS PARALLEL TO THE DIRECTION OF WATER FLOW.



SHINGLING SOD

WHERE THE FLOW OF WATER IS SHEETING, PLACE SOD STRIPS PERPENDICULAR TO THE DIRECTION OF WATER FLOW.

SPECIAL SOD PLACEMENT TECHNIQUES

PERMANENT EROSION CONTROL

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

DONE BY: *SPB*
DATE: 3-16-05

28-192

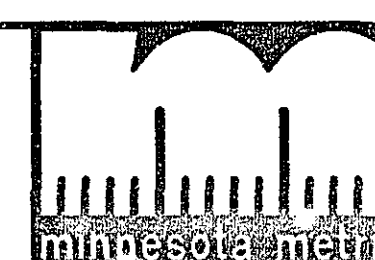
NOTE: ALL DIMENSIONS ARE IN MILLIMETERS, EXCEPT AS NOTED.

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DAILY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

REG. NO. 22628

DATE 7/27/99

S.P. NO. 62-646-12
S.P. NO. 147-020-24
S.P. NO. 187-020-08

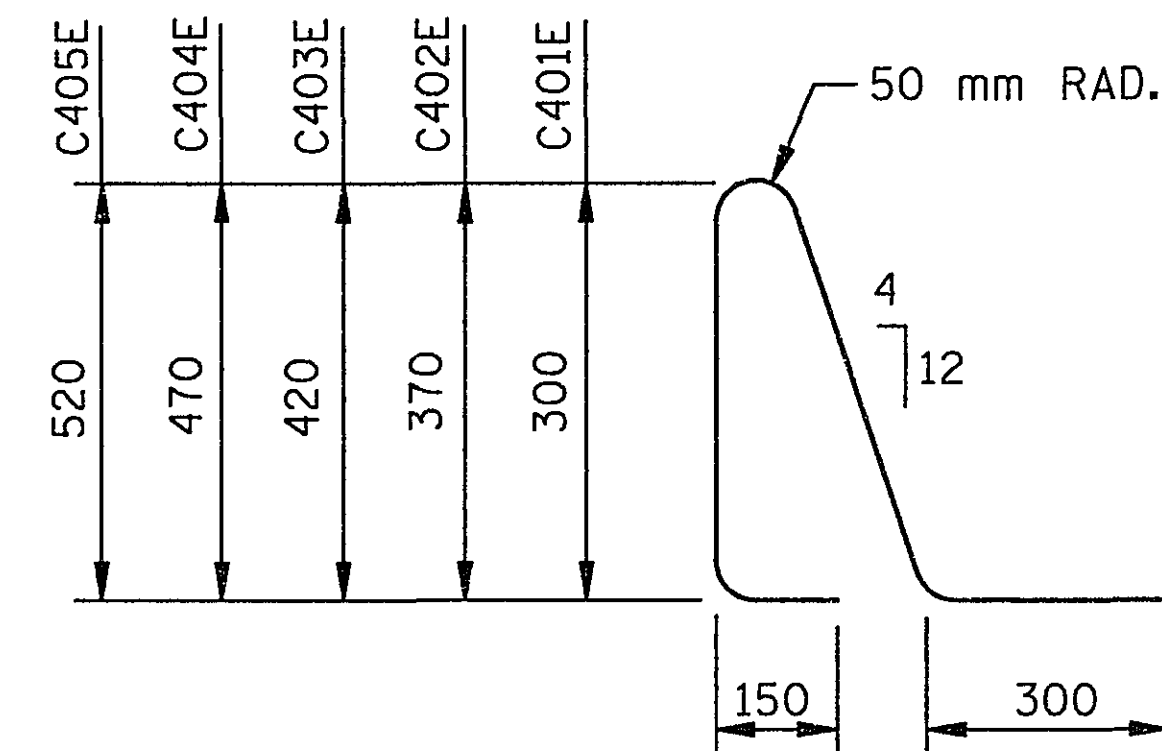
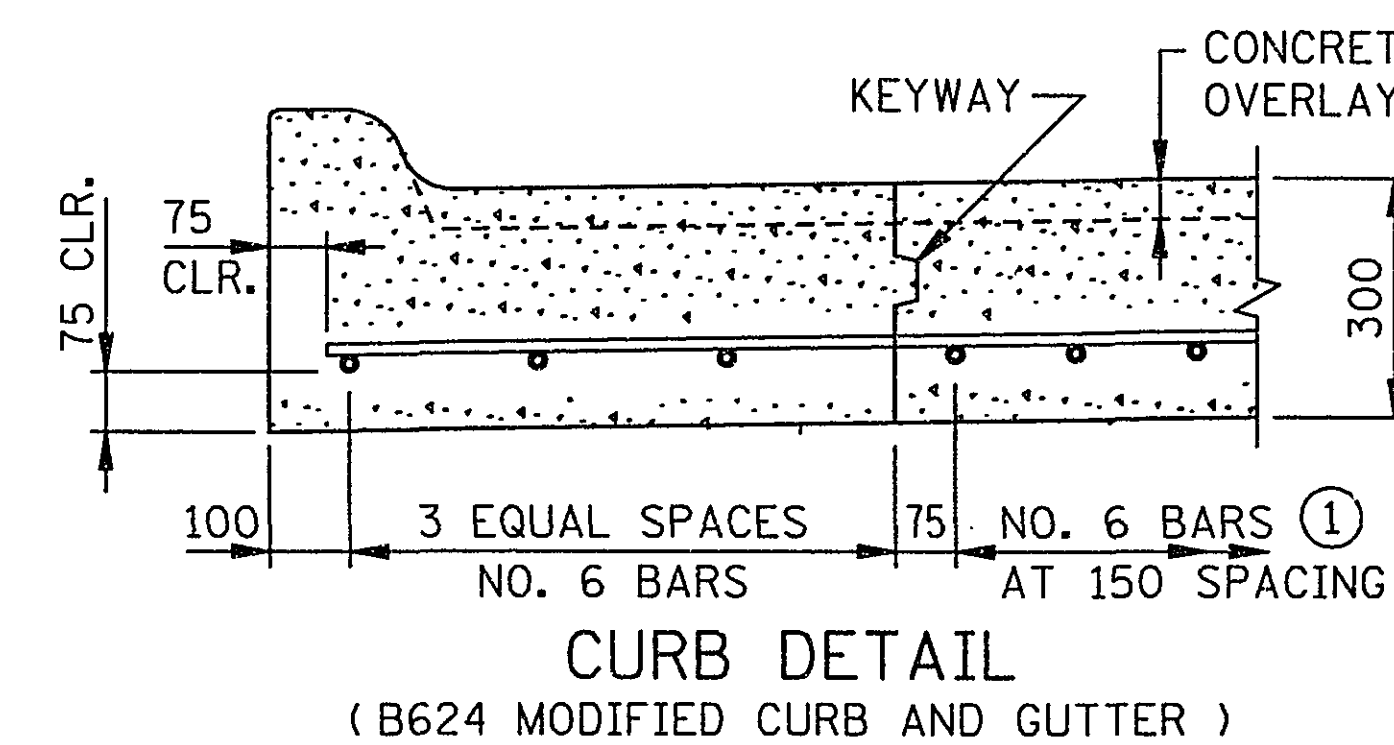
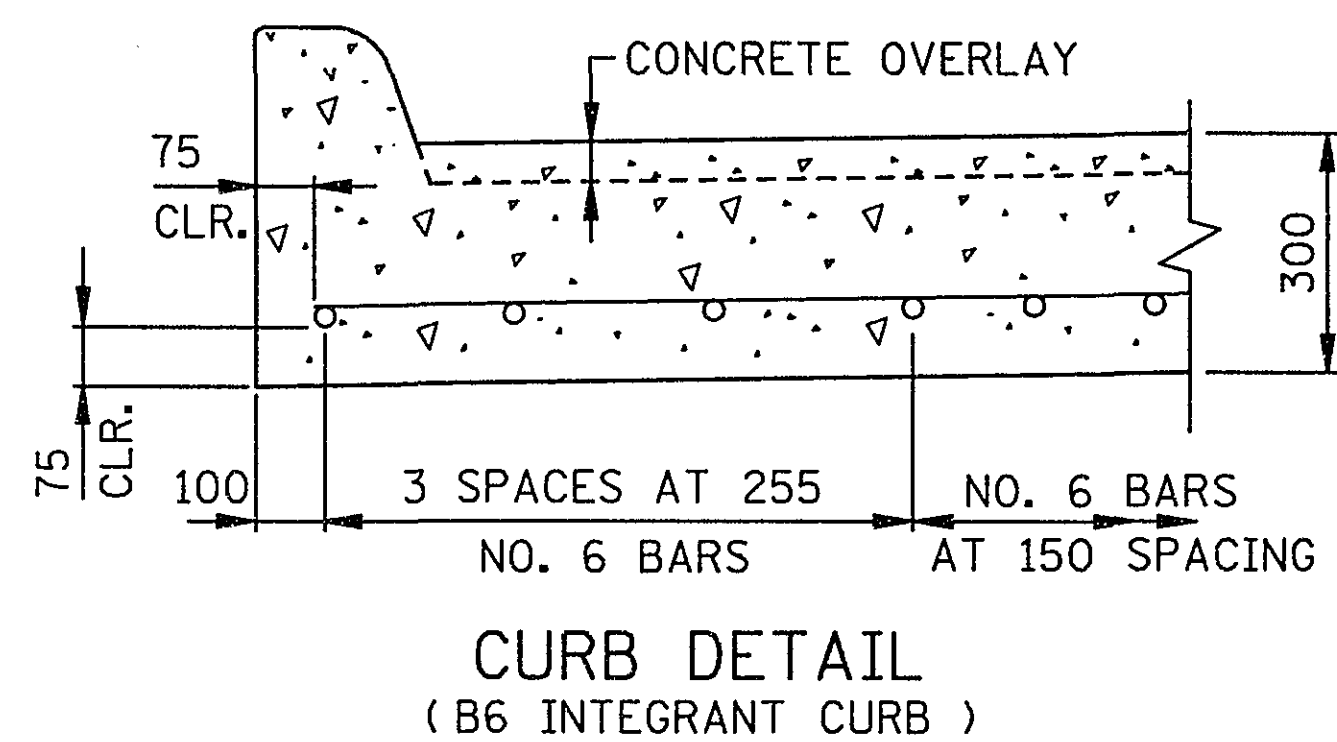
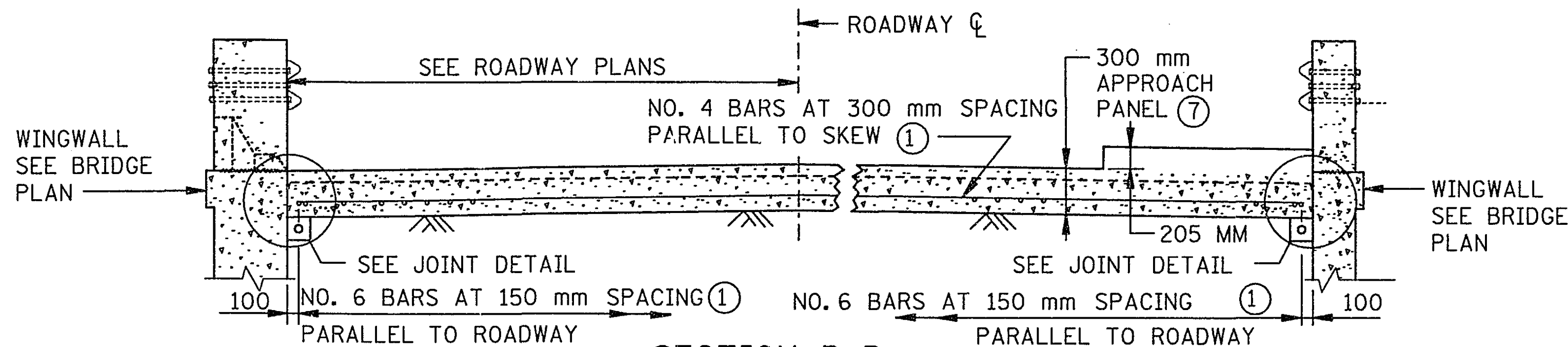
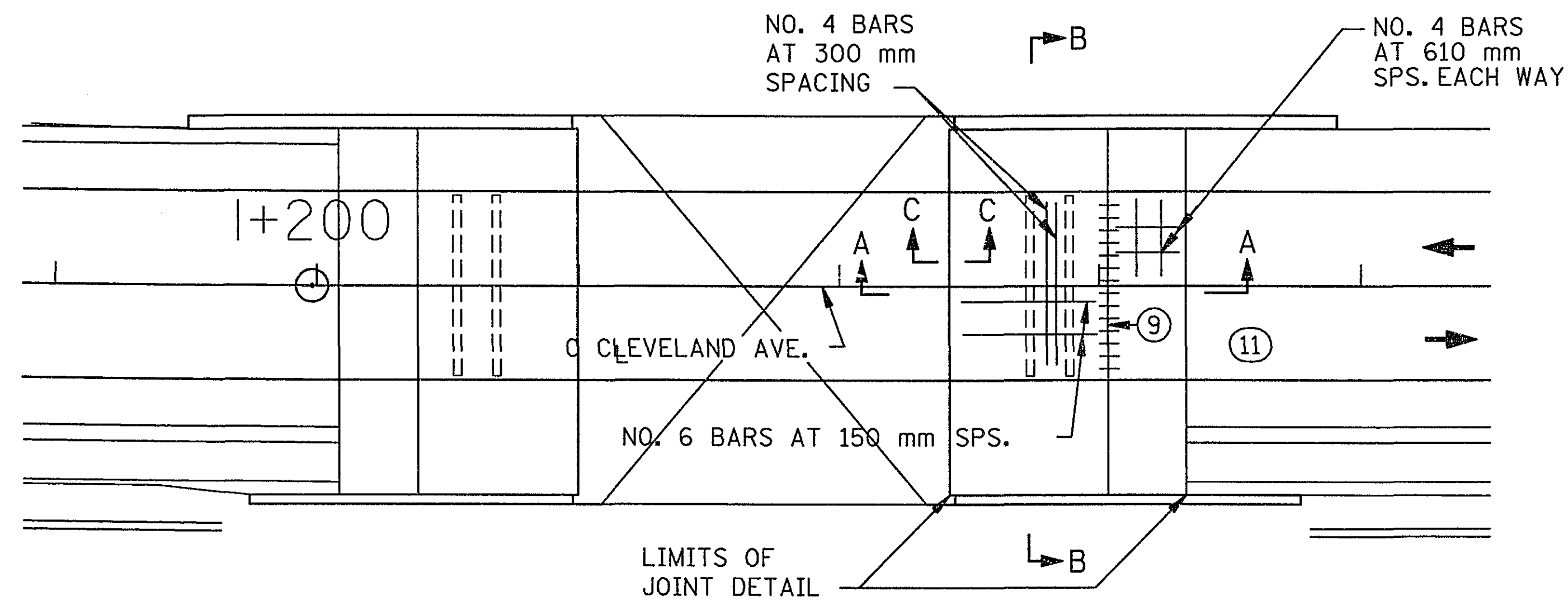


STANDARD SHEET NO. (MOD.)
5-297.405M & 5-297.406M
STANDARD APPROVED:
MAY 1, 1995

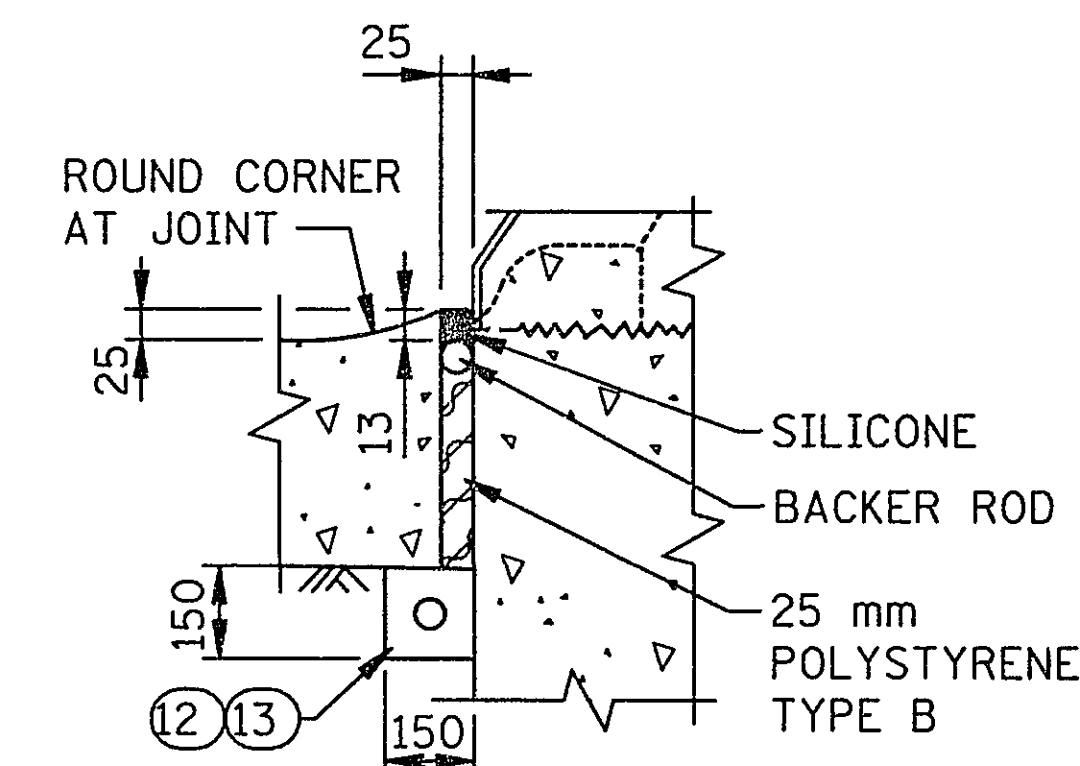
TITLE:

EROSION CONTROL DETAILS

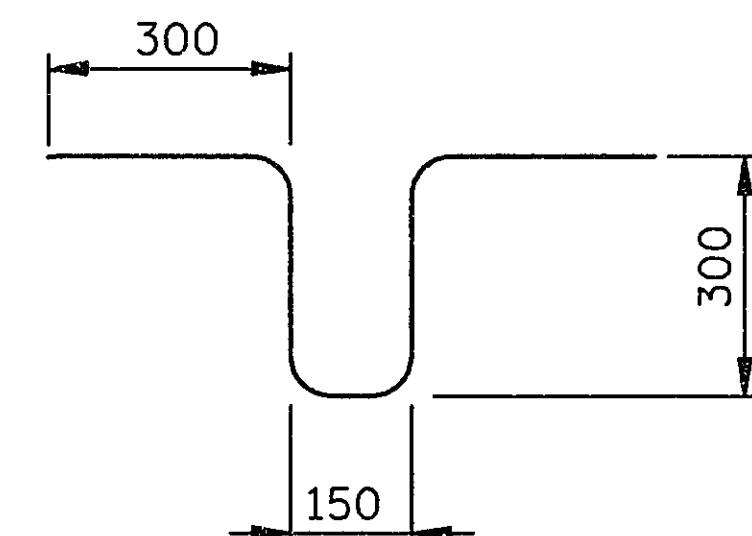
SHEET NO. 12 OF 28 SHEETS



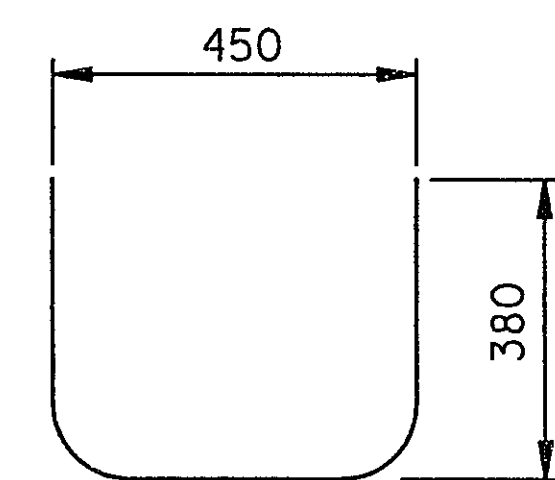
C401E- C405E ①



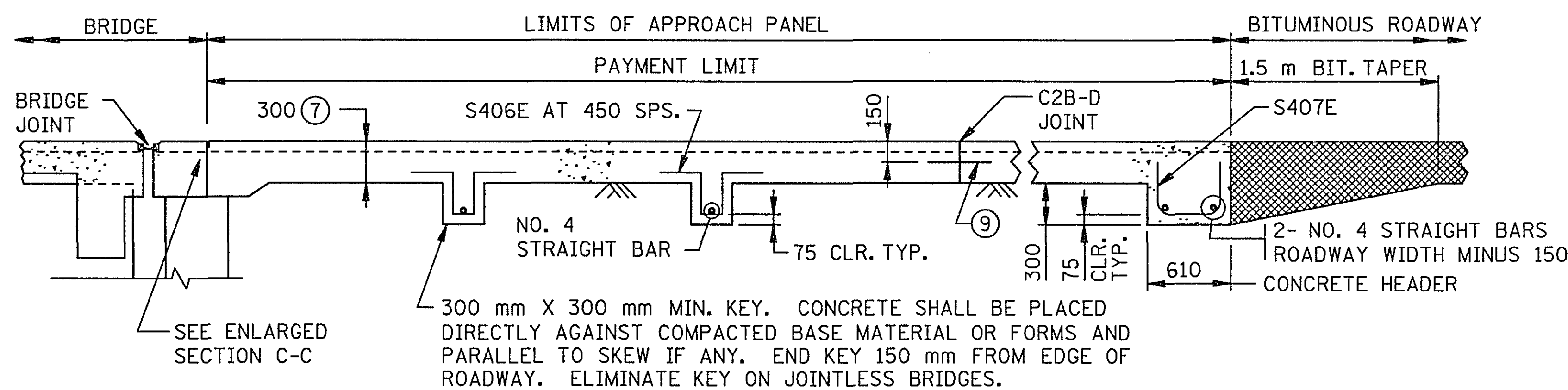
JOINT DETAIL
(AT PARALLEL WINGWALLS)



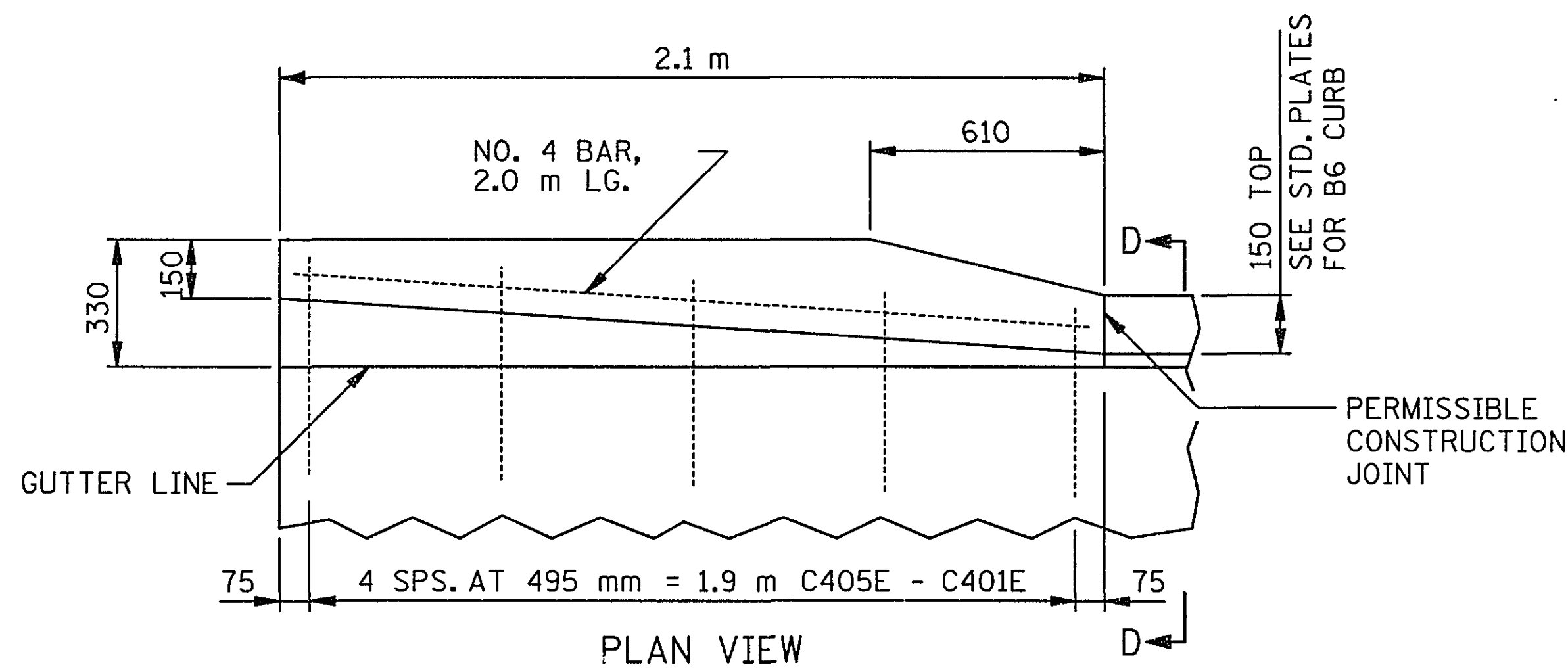
S406E



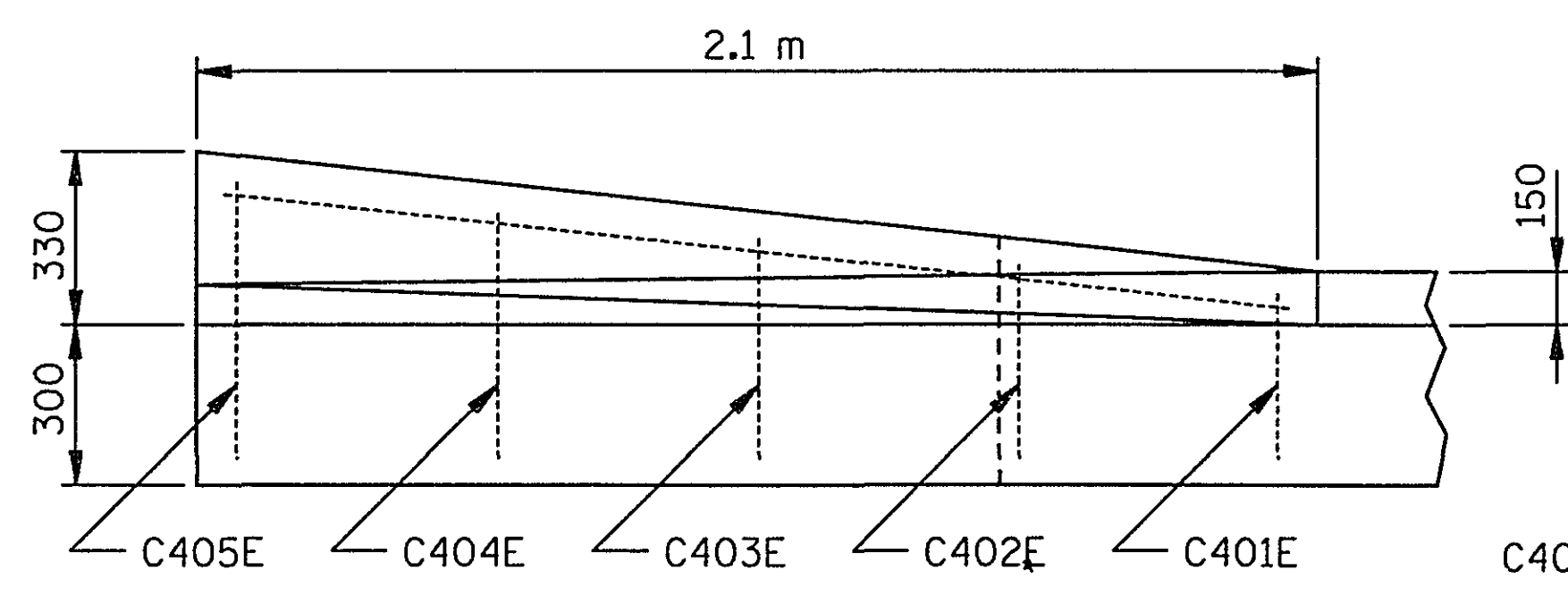
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SECTION A-A
(SOME REINFORCEMENT NOT SHOWN)

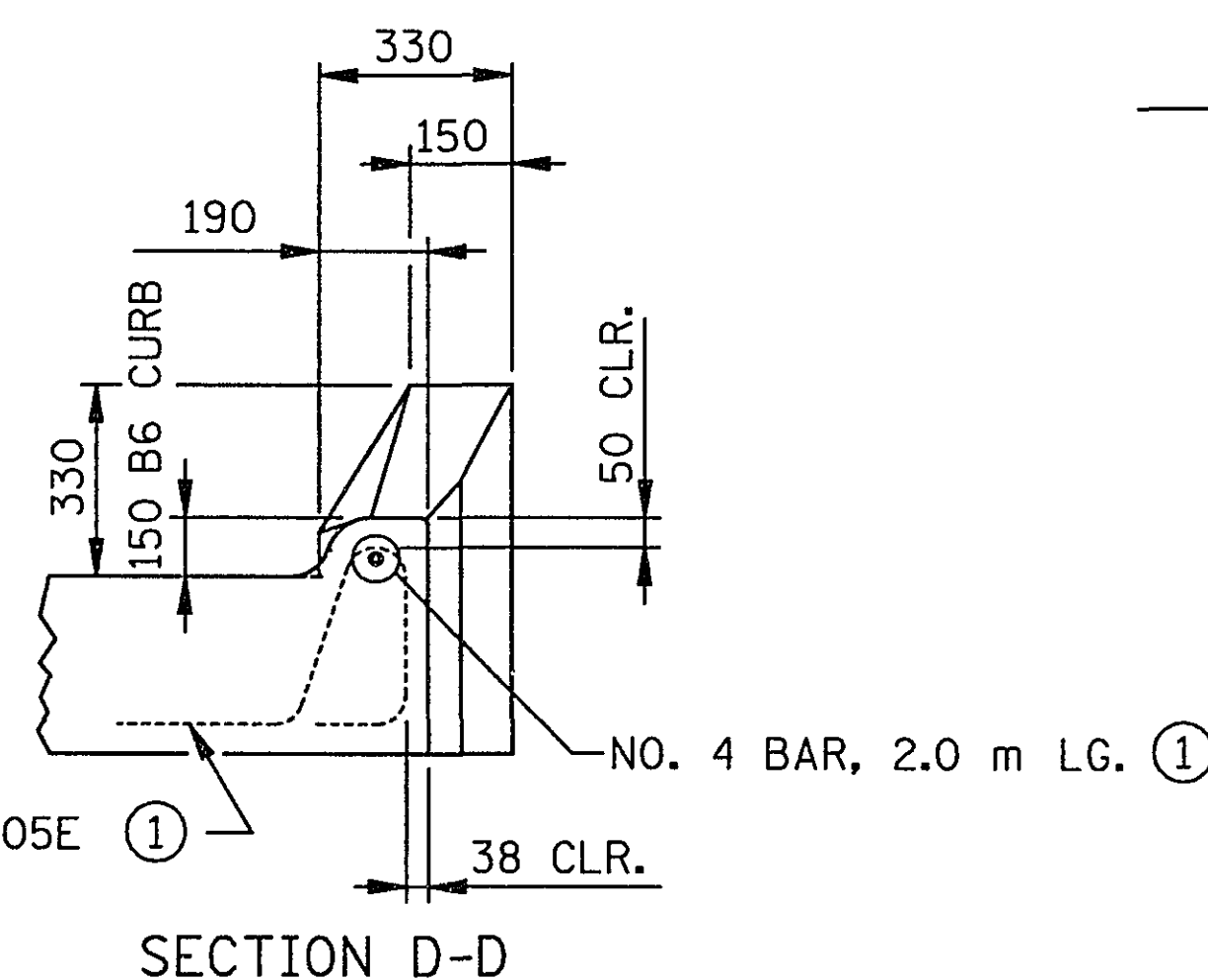


PLAN VIEW

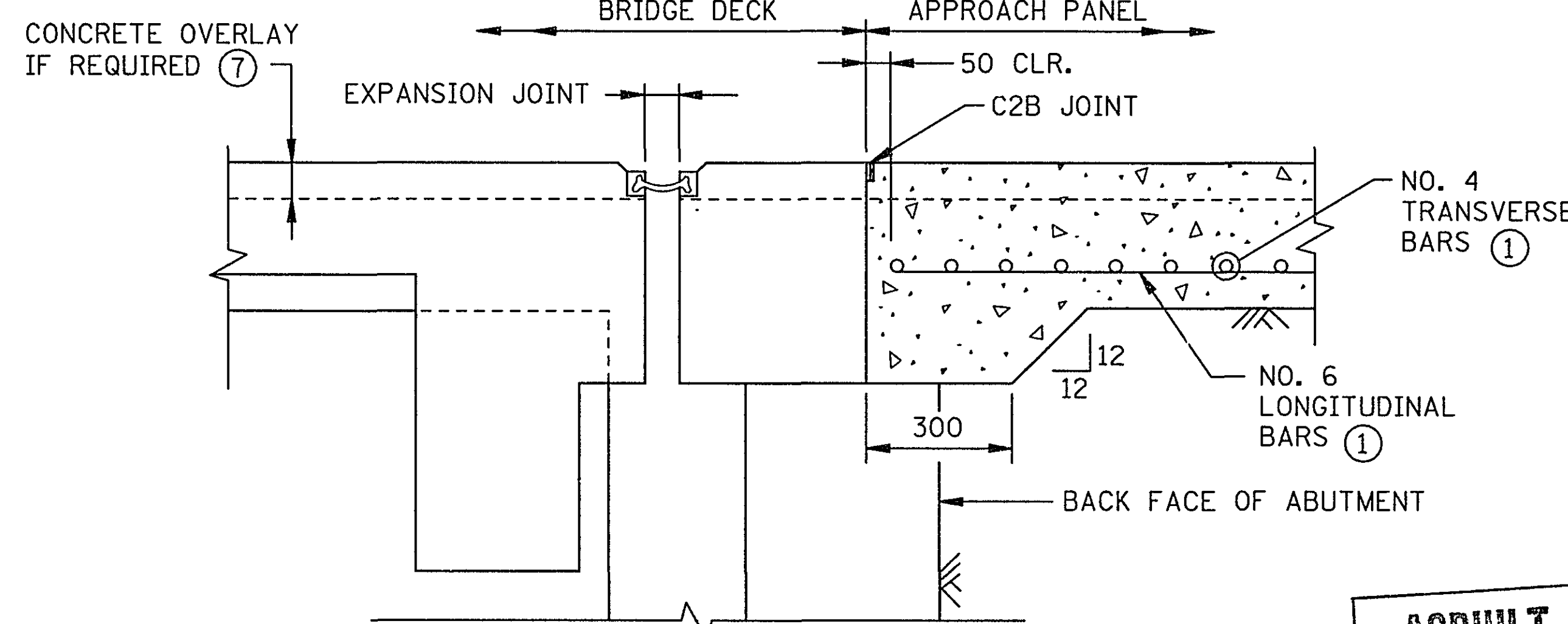


INSIDE ELEVATION

CURB TRANSITION DETAILS



SECTION D-D



SECTION C-C
(PARAPET ABUTMENT SHOWN)

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

REG. NO. 22628

DATE 7/27/99

S.P. NO. 62-646-12
S.P. NO. 147-020-24
S.P. NO. 187-020-08

REVISION DATE 2-16-96

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: RAB
DATE: 3-16-05

MODIFIED

STANDARD SHEET NO. 5-297.224M (MOD)
STANDARD APPROVED: FEBRUARY 24, 1994

NOTE: ALL DIMENSIONS ARE IN MILLIMETERS, EXCEPT AS NOTED.

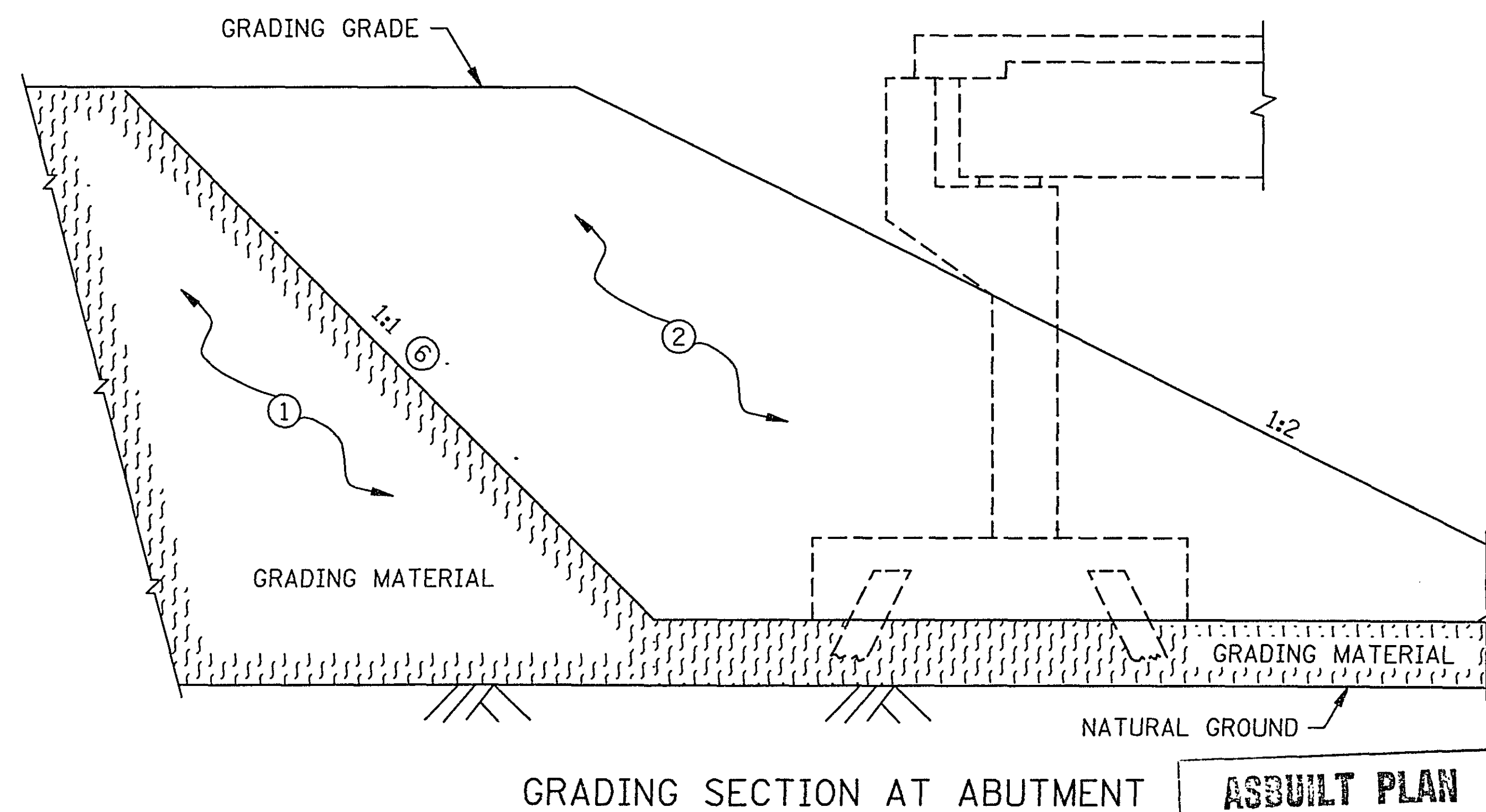
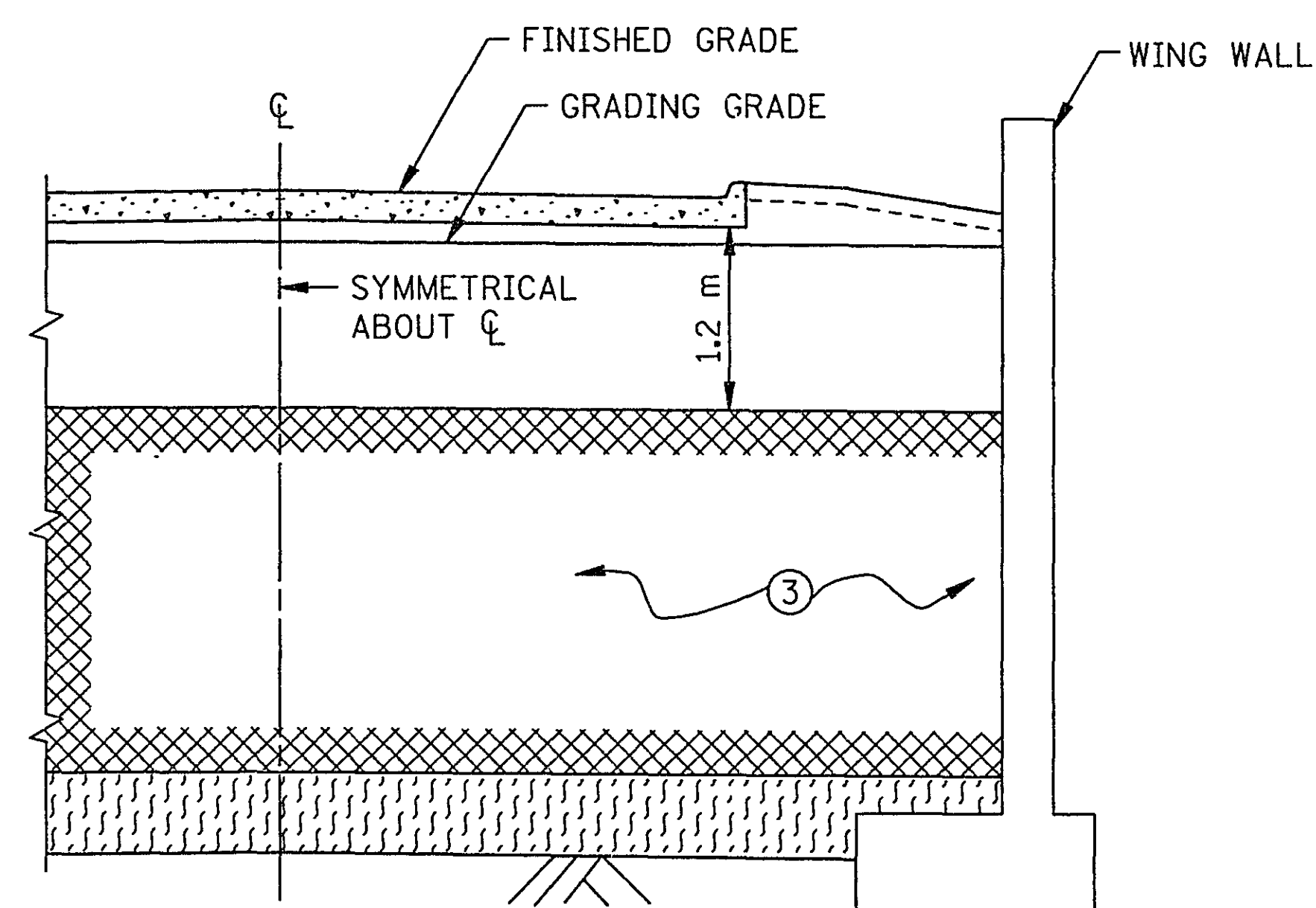
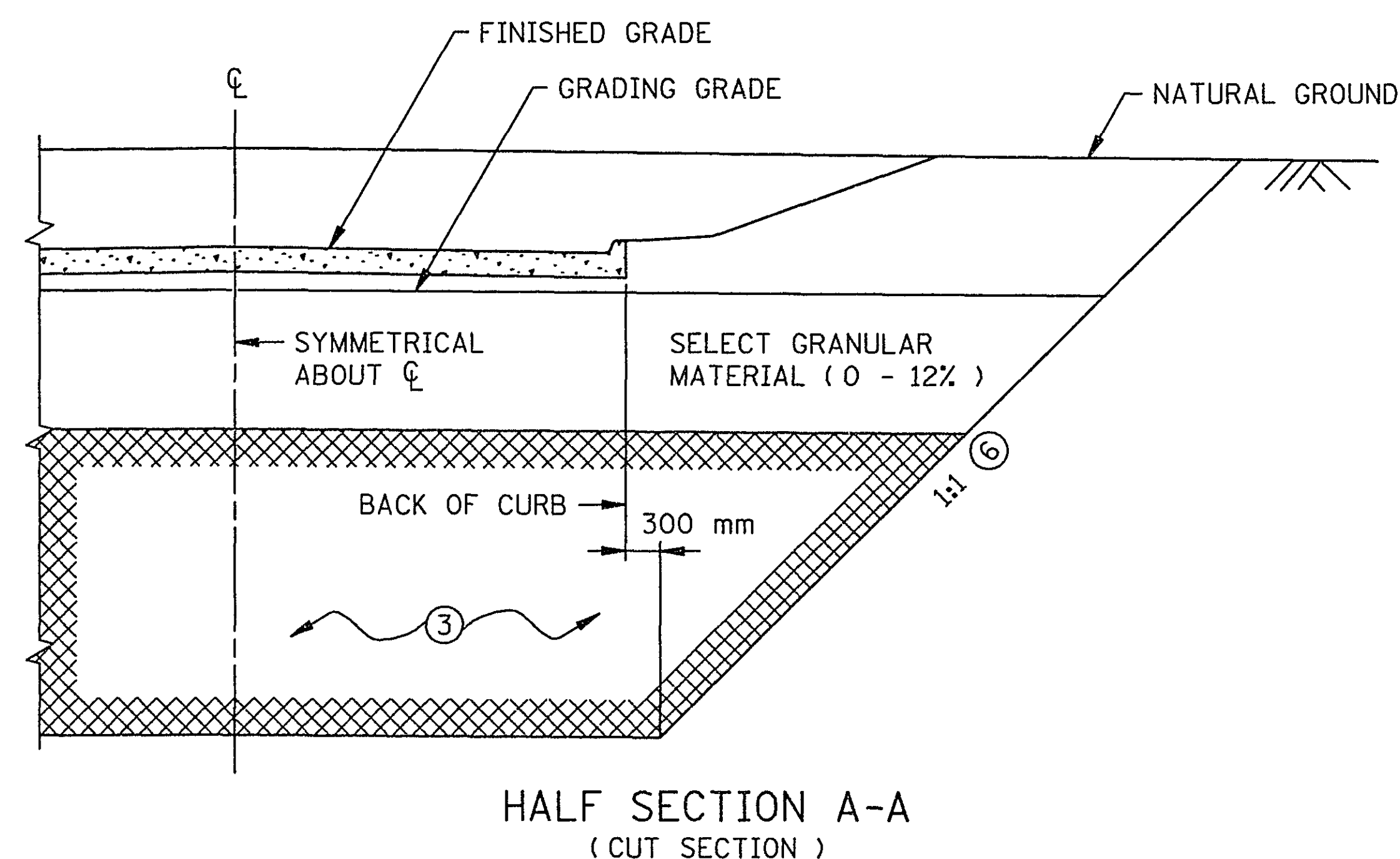
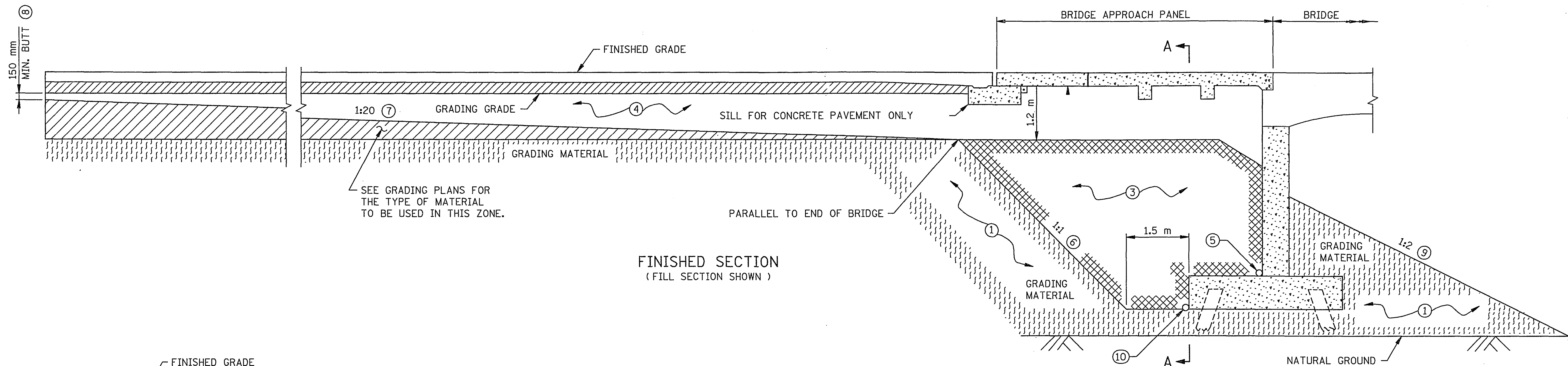
TITLE: BRIDGE APPROACH PANEL
WITH OR WITHOUT CONCRETE OVERLAY
BITUMINOUS ROADWAY

SHEET NO. 13 OF 28 SHEETS

NOTES:

- ① ALL REINFORCEMENT IN APPROACH PANEL, SILL AND CURB SHALL BE GRADE 60 AND EPOXY COATED AS PER SPEC. 3301.
- ② TRANSITION FACE OF 100 mm CURB INTO PROFILE OF BRIDGE RAILING. SEE CURB TRANSITION DETAILS.
- ③ TRANSITION APPROACH PANEL CURB HEIGHT 100 mm TO 0 mm WHERE THERE IS NO ROADWAY CURB.
- ⑦ APPROACH SLAB THICKNESS SHOWN INCLUDES ANY CONCRETE OVERLAY THAT MAY BE REQUIRED. SEE BRIDGE PLANS FOR REQUIREMENTS. CONCRETE OVERLAYS TO BE INCLUDED IN BRIDGE QUANTITIES AND DONE AT THE SAME TIME BY BRIDGE CONTRACTOR.
- ⑨ CONTRACTION JOINT C2B-D WITH 38 mm DIA. X 460 mm LG. EPOXY COATED DOWEL BARS AT 305 mm SPACING PARALLEL TO ϕ OF ROADWAY. CAGES NOT REQUIRED.
- ⑪ SEE STANDARD PLAN SHEET 14 FOR BRIDGE APPROACH TRANSITION INFORMATION.
- ⑫ 50 mm NOMINAL DIA. THERMOPLASTIC PIPE, AS PER ASTM D1785M, SCHEDULE 40. SLOPE PIPE TO DITCH ON LOW SIDE. FURNISHING AND INSTALLING DRAIN SYSTEM SHALL BE INCIDENTAL, WITH NO DIRECT PAYMENT. WRAP PERFORATED PIPE WITH GEOTEXTILE AS PER SPEC. 3733. 3 mm PER 300 mm MINIMUM SLOPE.
- ⑬ BACKFILL WITH FINE AGGREGATE, SPEC. 3149, MODIFIED TO 0-3% PASSING A 75 μ m SIEVE.

28-192



ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

DONE BY: *248*
DATE: 3-16-05

- NOTES:
- ① GRADING MATERIAL PLACED BY THE CONTRACTOR.
 - ② GRADING MATERIAL CONSTRUCTED BY THE CONTRACTOR PRIOR TO THE BRIDGE CONSTRUCTION. TO BE REMOVED LATER BY THE CONTRACTOR.
 - ③ SELECT GRANULAR MATERIAL MODIFIED SHALL COMPLY WITH SPEC. 3149.2B, MODIFIED TO 10% OR LESS PASSING THE NUMBER 75 μ m SIEVE. MATERIAL SHALL BE PLACED BY THE CONTRACTOR AFTER COMPLETION OF THE ABUTMENT.
 - ④ BACKFILL PLACED BY THE CONTRACTOR. MATERIAL SHALL COMPLY WITH SPEC. 3149.2B (SELECT GRANULAR BORROW).
 - ⑤ DRAIN IF REQUIRED. SEE BRIDGE STANDARD DETAIL B910.
 - ⑥ ACTUAL SLOPE TO BE DETERMINED DURING CONSTRUCTION BY THE CONTRACTOR, DEPENDING ON INSITU SOIL PROPERTIES AND/OR SAFETY FACTORS. (USE 1:1 FOR DESIGN)
 - ⑦ START 1:20 TAPER AT END OF APPROACH PANELS ON SKEWED BRIDGES.
 - ⑧ GRADING TO BE SQUARED OFF ON SKEWED APPROACHES.
 - ⑨ SEE BRIDGE PLANS FOR SLOPE PAVING.
 - ⑩ SUBSURFACE PIPE DRAIN WHEN REQUIRED AS DIRECTED BY THE DISTRICT SOILS ENGINEER. 100 mm NOM. DIA. PLASTIC PIPE PER SPEC. 3245 PLACED BY THE CONTRACTOR. PERFORATED PIPE TO BE WRAPPED WITH GEOTEXTILE MEETING THE REQUIREMENTS OF SPEC. 3733 TYPE 1. FOUNDATION SHALL BE SHAPED TO FIT LOWER ONE THIRD CIRCUMFERENCE OF PIPE.

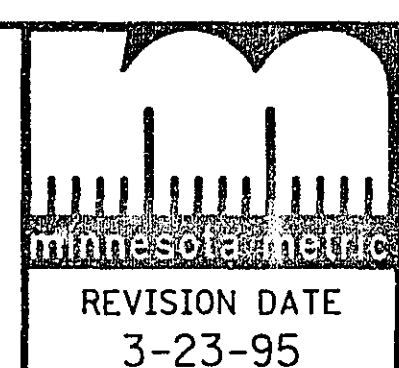
MODIFIED

28-192

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REG. NO. 22628
DATE 7/27/99

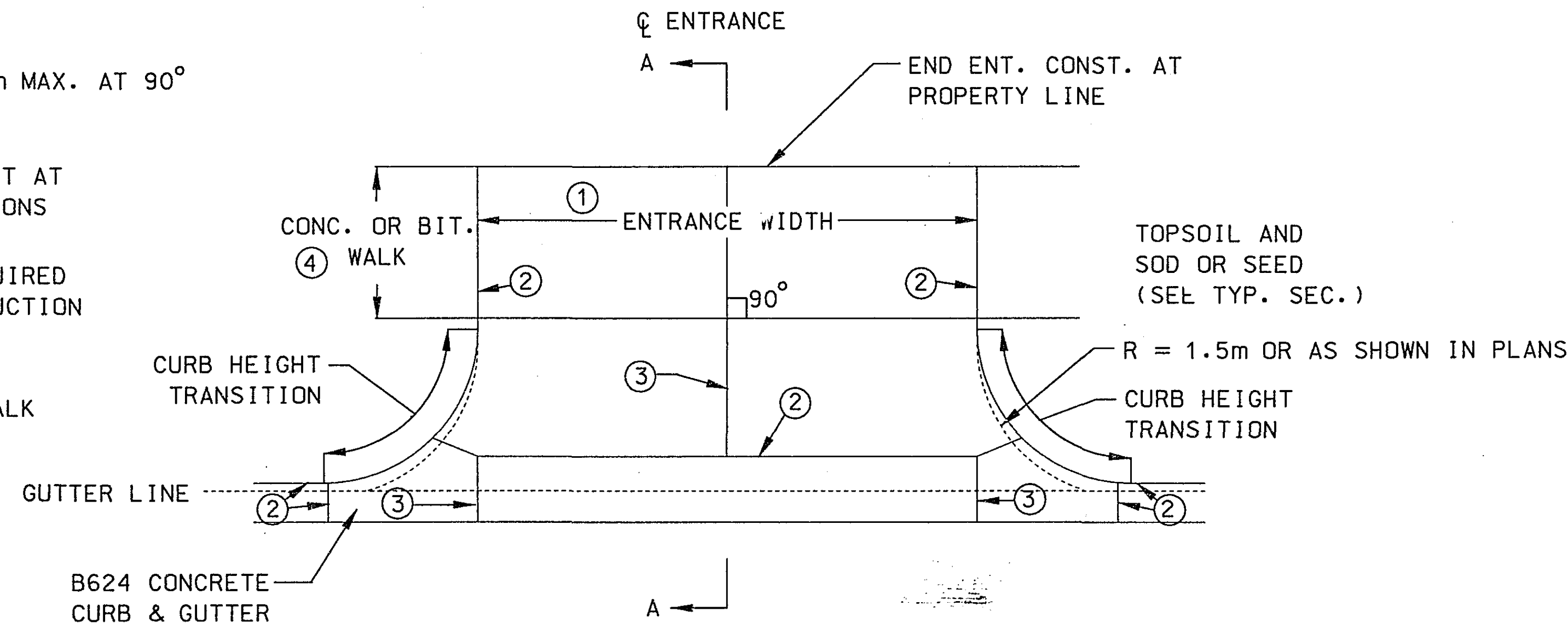
S.P. NO. 62-646-12
S.P. NO. 147-020-12
S.P. NO. 187-020-08



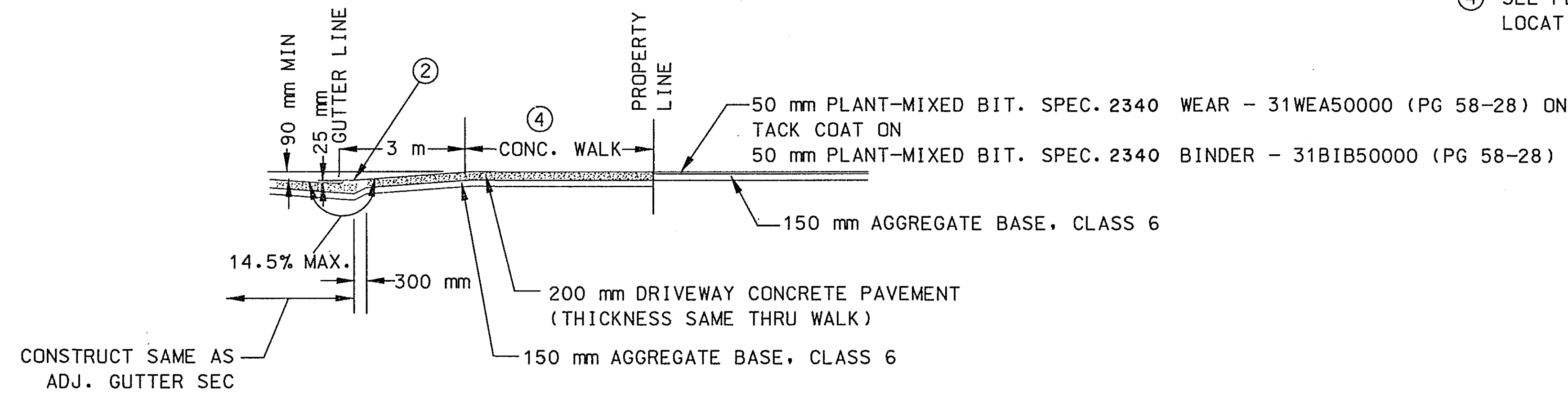
STANDARD SHEET NO. 5-297.225M
STANDARD APPROVED: AUGUST 4, 1992
REVISION DATE 3-23-95

TITLE: BRIDGE APPROACH TREATMENT FOR BOTH HIGH AND LOW ABUTMENTS ON PILING
SHEET NO. 14 OF 28 SHEETS

- ① ENTRANCE WIDTHS
COMMERCIAL - 9.8 m MAX. AT 90°
- ② 12 mm EXPANSION JOINT AT
CONCRETE WALK LOCATIONS
- ③ PLACE JOINTS AS REQUIRED
FOR CONCRETE CONSTRUCTION
- ④ SEE PLANS FOR SIDEWALK
LOCATION

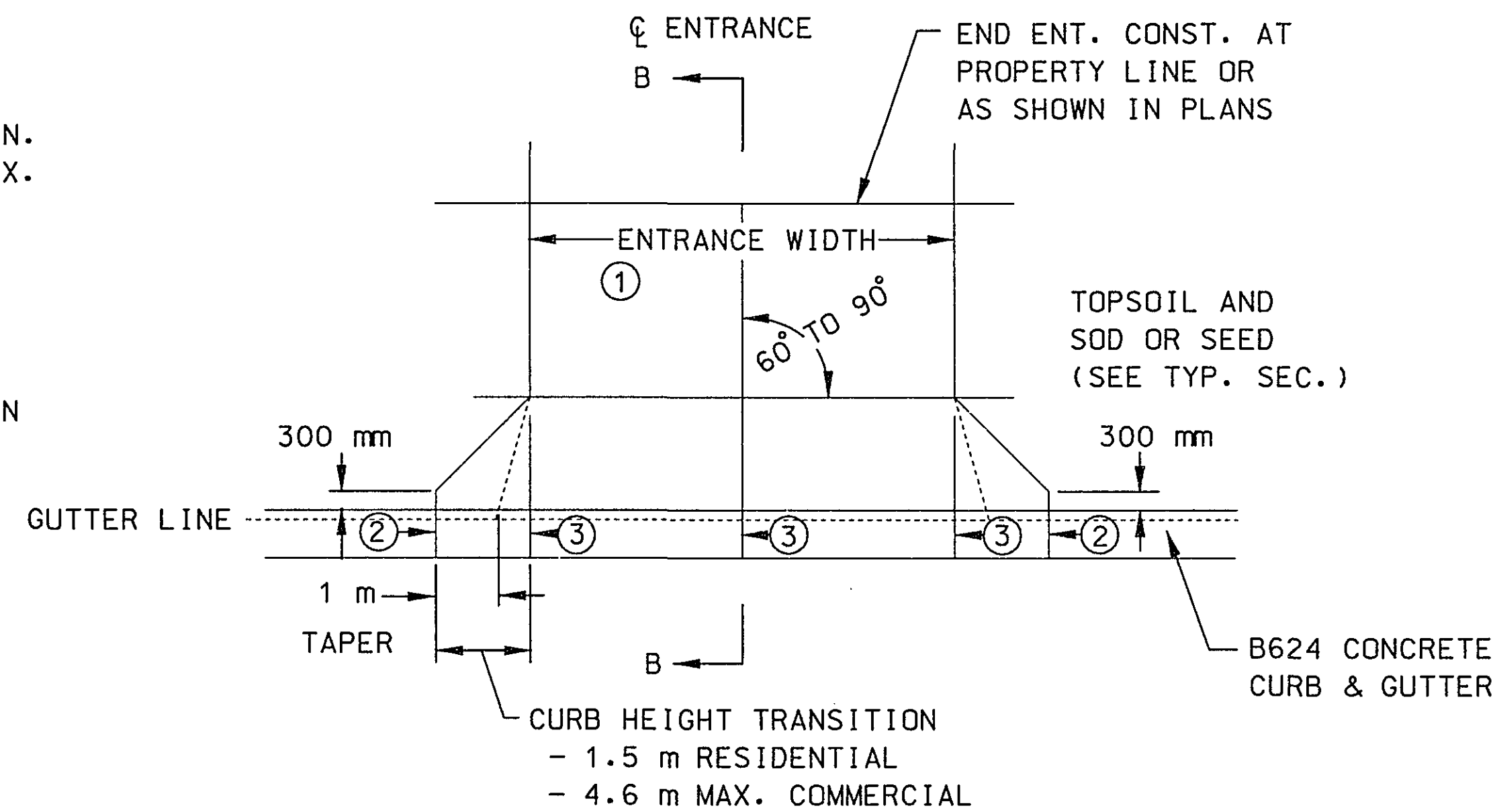


COMMERCIAL CONCRETE ENTRANCE DETAIL

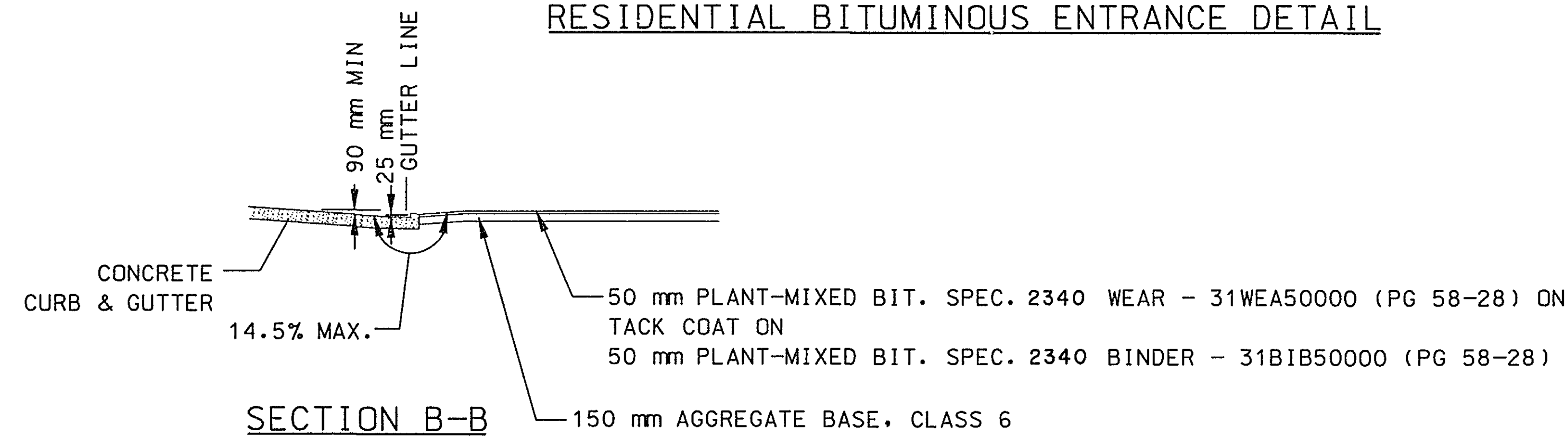


SECTION A-A

- ① ENTRANCE WIDTHS
RESIDENTIAL - 3.6 m MIN.
- 8.0 m MAX.
- ② 12 mm EXPANSION JOINT
- ③ PLACE JOINTS AS REQUIRED
FOR CONCRETE CONSTRUCTION

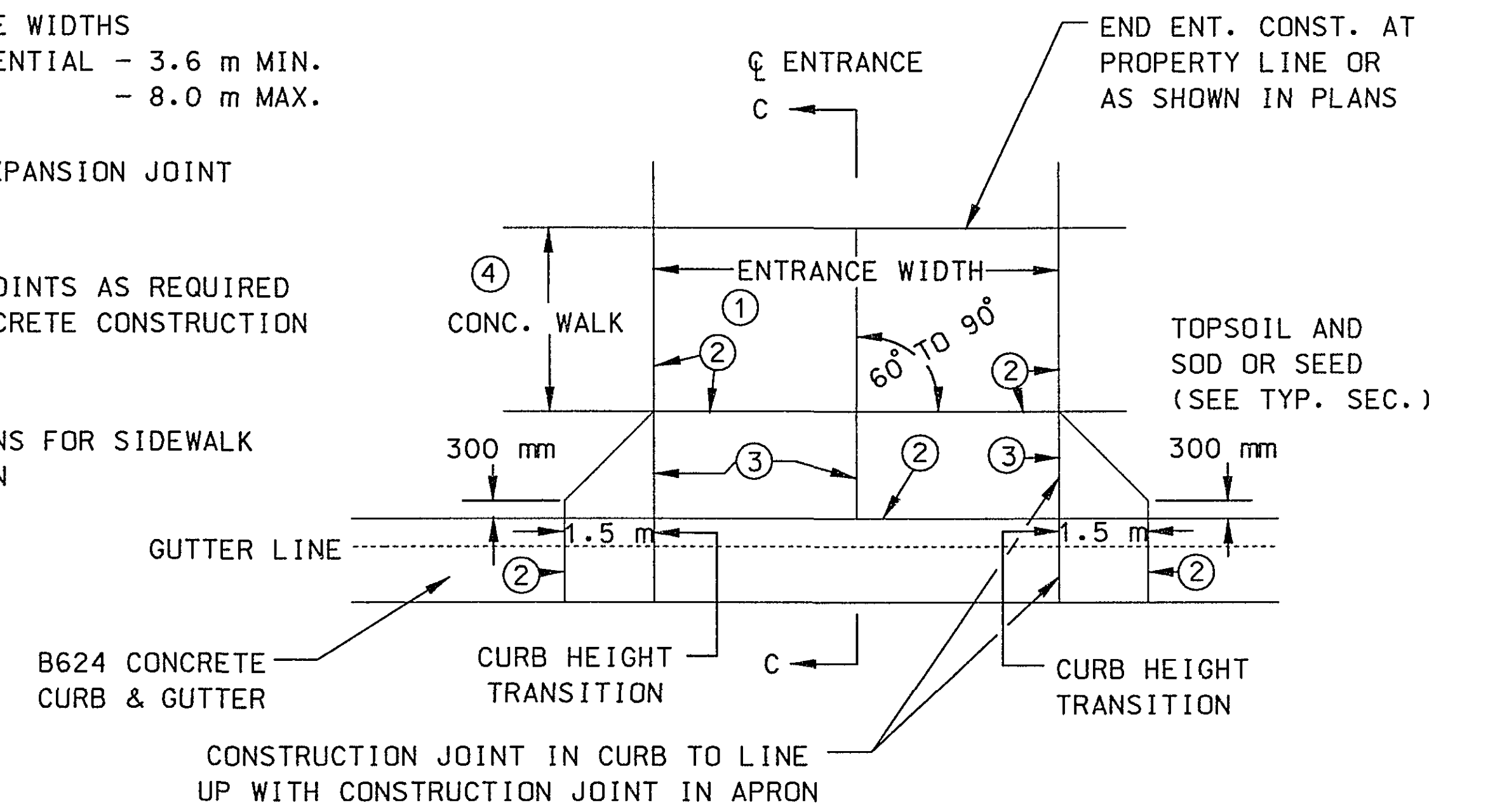


RESIDENTIAL BITUMINOUS ENTRANCE DETAIL

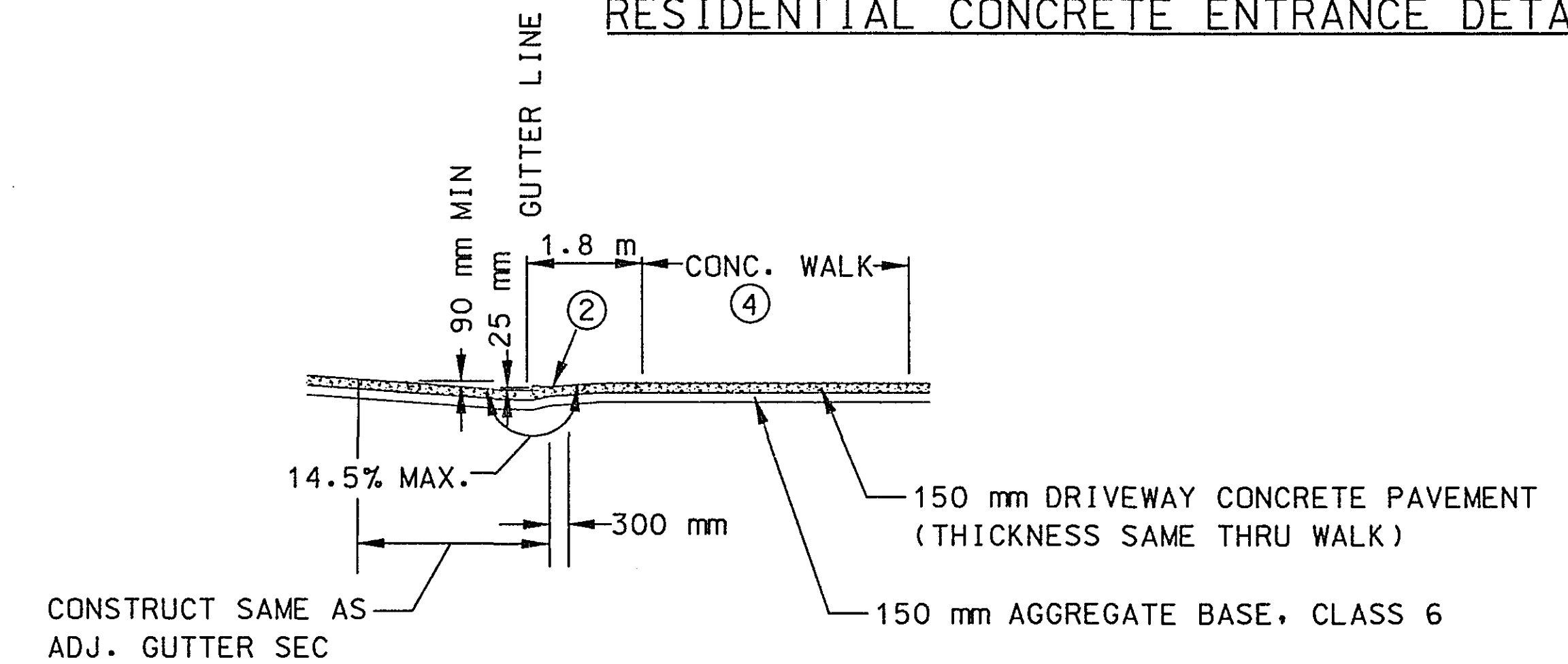


SECTION B-B

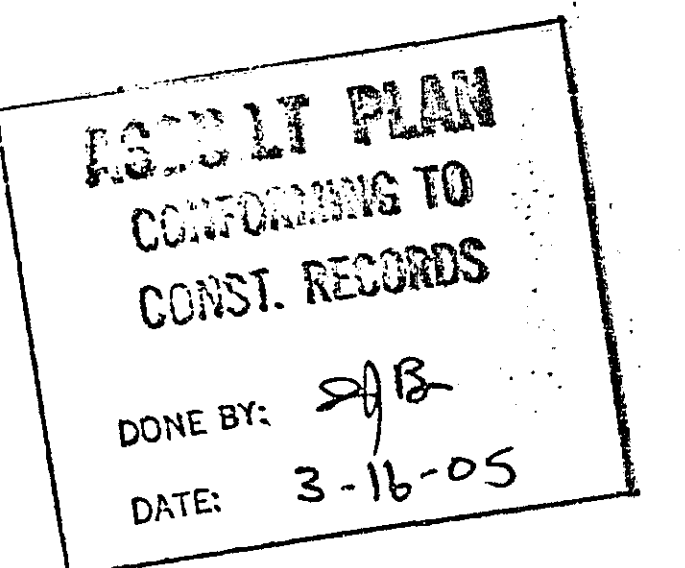
- ① ENTRANCE WIDTHS
RESIDENTIAL - 3.6 m MIN.
- 8.0 m MAX.
- ② 12 mm EXPANSION JOINT
- ③ PLACE JOINTS AS REQUIRED
FOR CONCRETE CONSTRUCTION
- ④ SEE PLANS FOR SIDEWALK
LOCATION



RESIDENTIAL CONCRETE ENTRANCE DETAIL



SECTION C-C

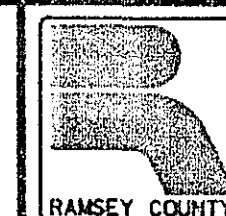


28-192

REVISIONS	DATE	BY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

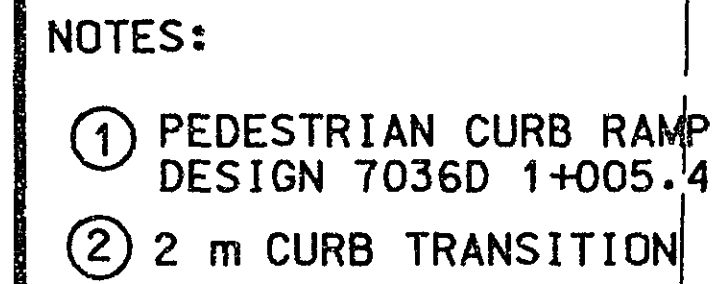
REG. NO. 22628
DATE 7/27/99



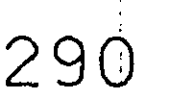
ENTRANCE DETAILS

DES: JSS	DR: JSS	APPROVED: JAB
CHK: GLS	CHK: JAB	
SHEET NO. 15 of 28 SHEETS		





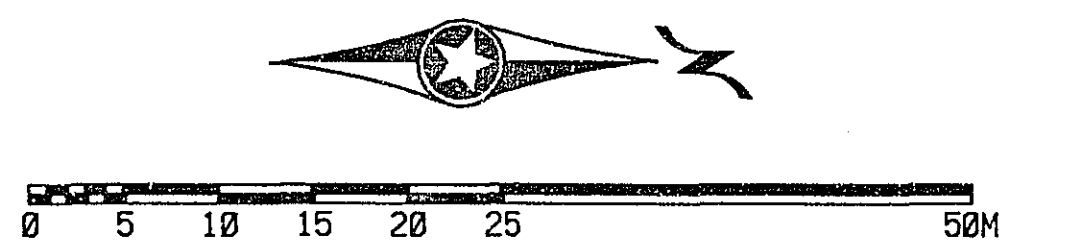
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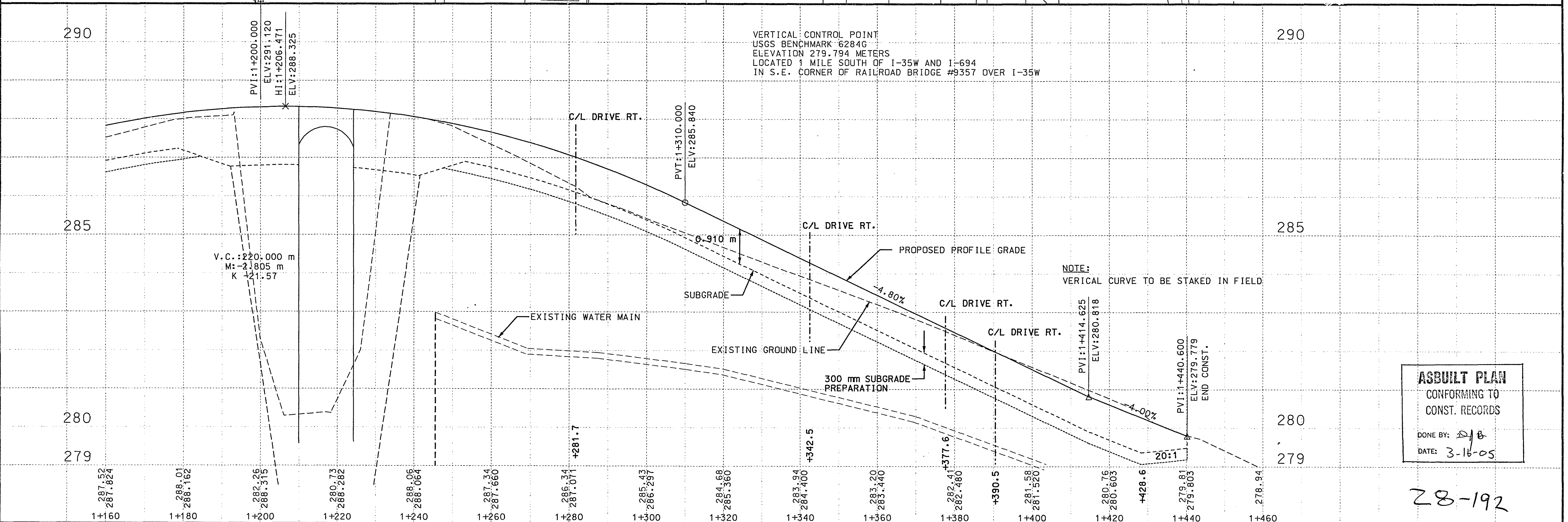
DONE BY: 29 B
DATE: 3-16-05

28-192

S.P. NO. 62-646-12
S.P. NO. 147-020-24
S.P. NO. 187-020-08



- NOTES:
- ① PEDESTRIAN CURB RAMP DESIGN 7036D
 - ② 2 m CURB TRANSITION
 - ③ RESIDENTIAL BITUMINOUS DRIVEWAY
 - ④ RESIDENTIAL CONCRETE DRIVEWAY



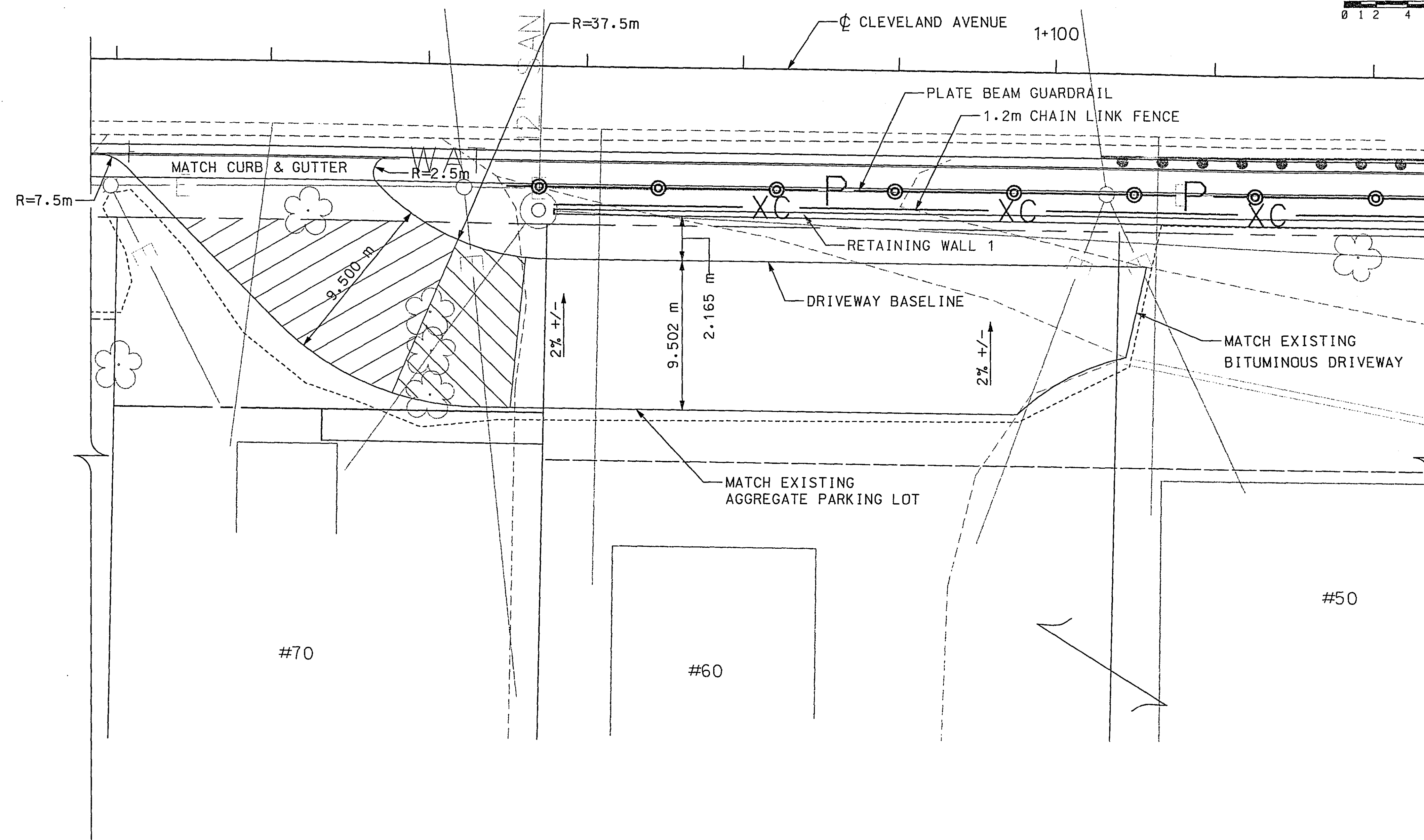
ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: *DJB*
DATE: 3-16-05

28-192

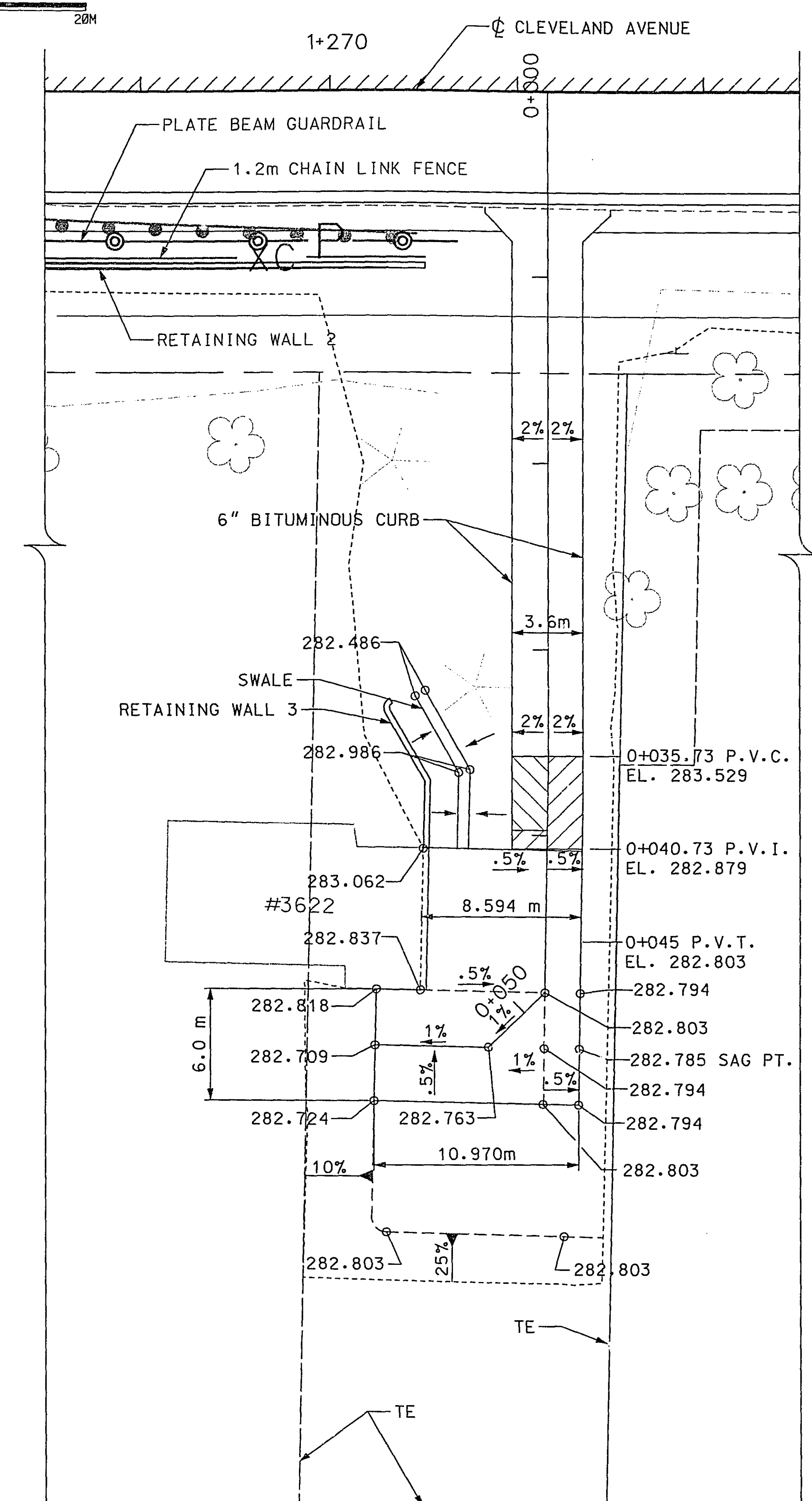
HNTB ARCHITECTS ENGINEERS PLANNERS The HNTB Companies 3400 W. 66th Street, Suite 250, Minneapolis, Minnesota 55435 (612) 920-4666	REVISIONS <table border="1"> <tr><th>NO.</th><th>DATE</th><th>BY</th></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </table>		NO.	DATE	BY							DATE <i>3/15/99</i>	BY <i>JAB</i>	I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. REG. NO. 22628 DATE 11/15/99	PLAN AND PROFILE STA. 1+300 TO 1+450	DES: JSS CHK: GLS	DR: JSS CHK: JAB	APPROVED: JAB	SHEET NO. 17 of 28 SHEETS
	NO.	DATE	BY																

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S.P. NO. 62-646-12
S.P. NO. 147-020-24
S.P. NO. 187-020-08



#50, #60 AND #70 CLEVELAND AVE



#3622 CLEVELAND AVE

28-192

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

DONE BY: *[Signature]*
DATE: 3-16-05

DESIGN FILE: F:\21928\1\cd\cp\cvpc03.dgn
PLOTTED: 15-NOV-1999 15:18
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HNTB ARCHITECTS ENGINEERS PLANNERS
The HNTB Companies
3400 W. 66th Street, S.W. 250, Minneapolis, Minnesota 55435 (612) 920-4666

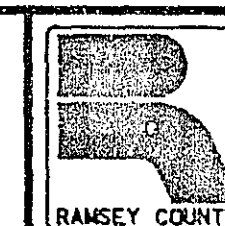
REVISIONS

DATE BY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

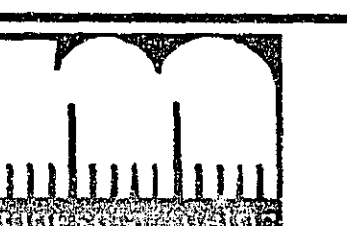
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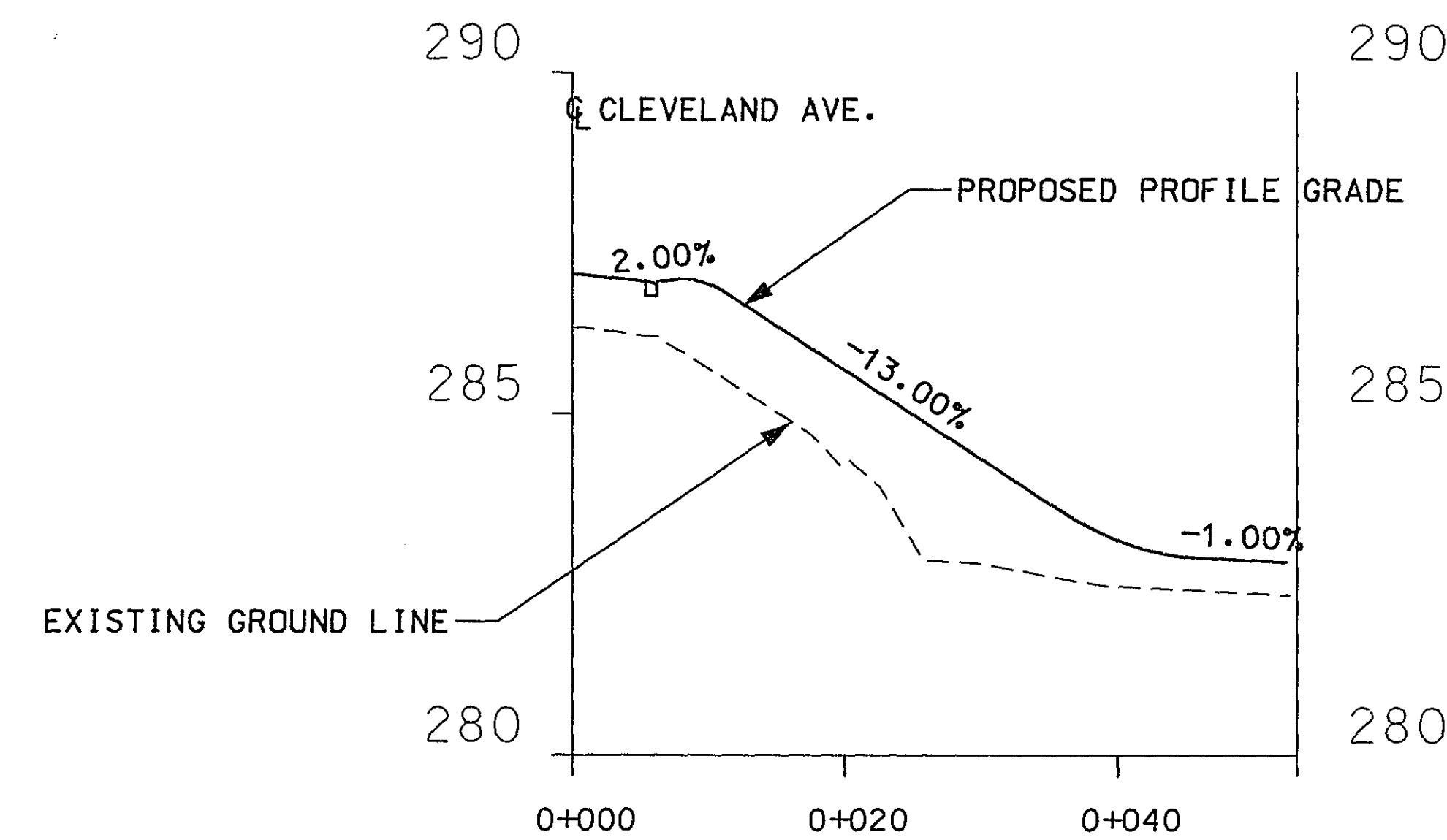
REG. NO. 22620
DATE 11/15/99



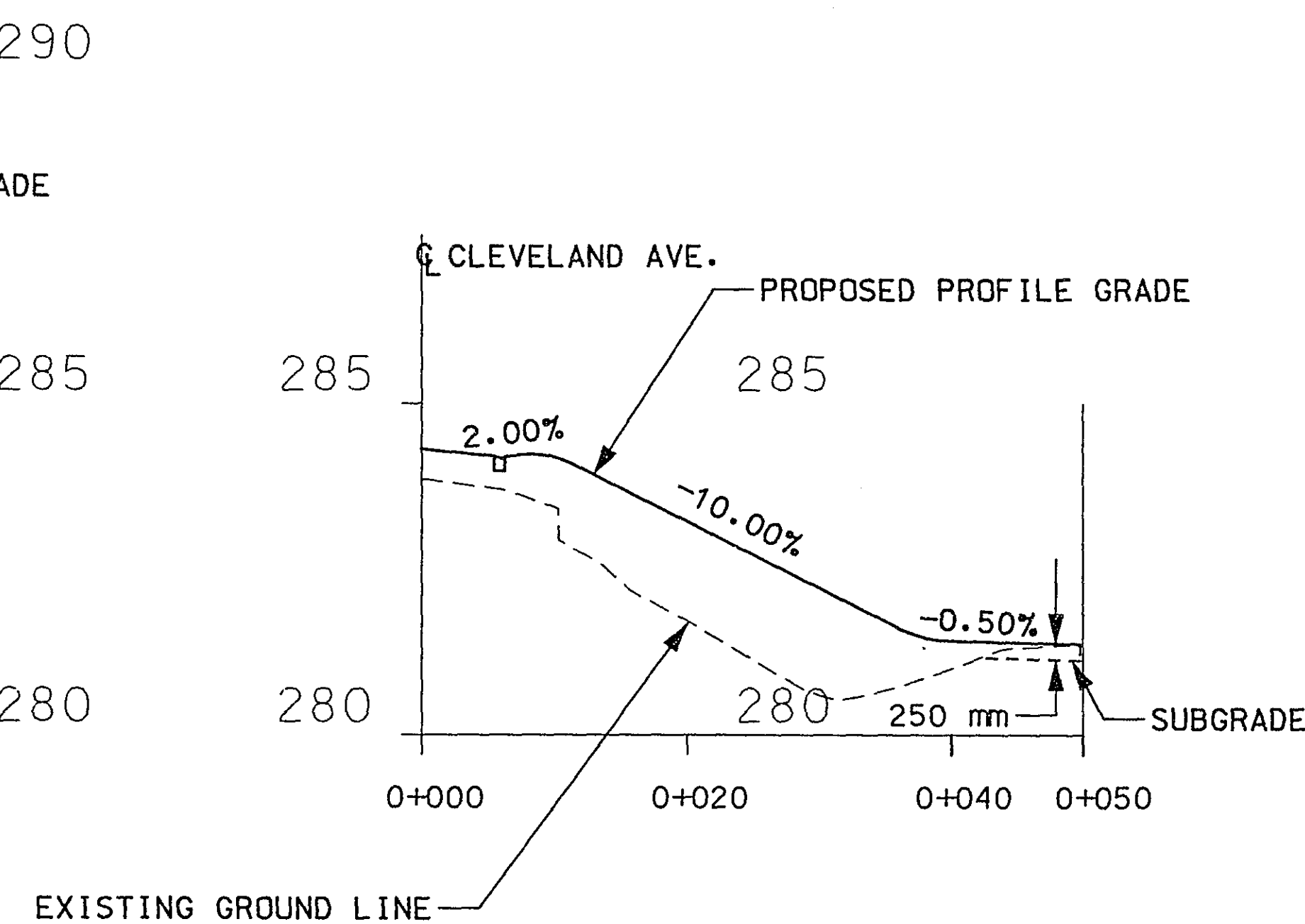
DRIVEWAY PLAN

DES: JSS DR: JSS APPROVED: JAB
CHK: GLS CHK: JAB
SHEET NO. 18 of 28 SHEETS

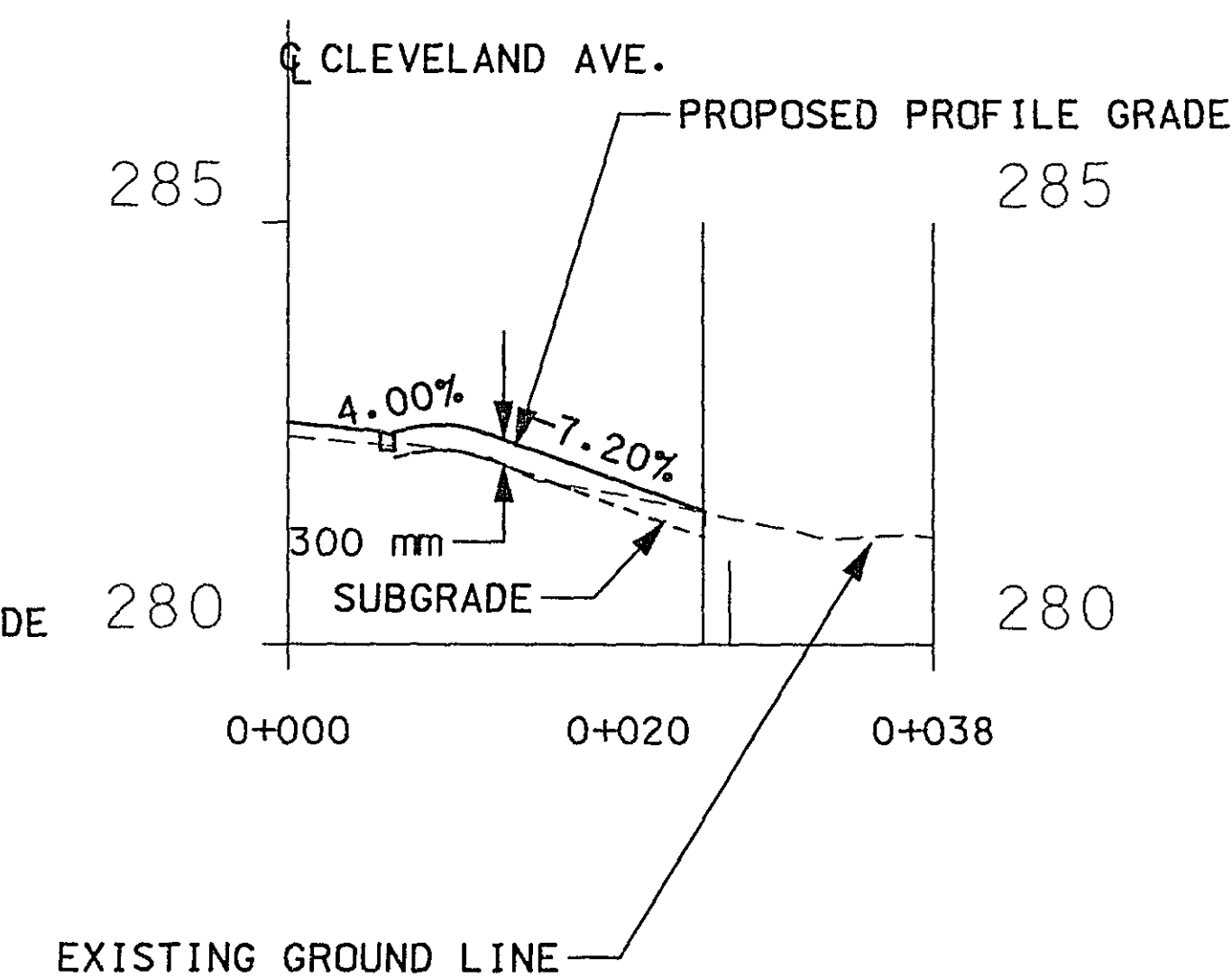




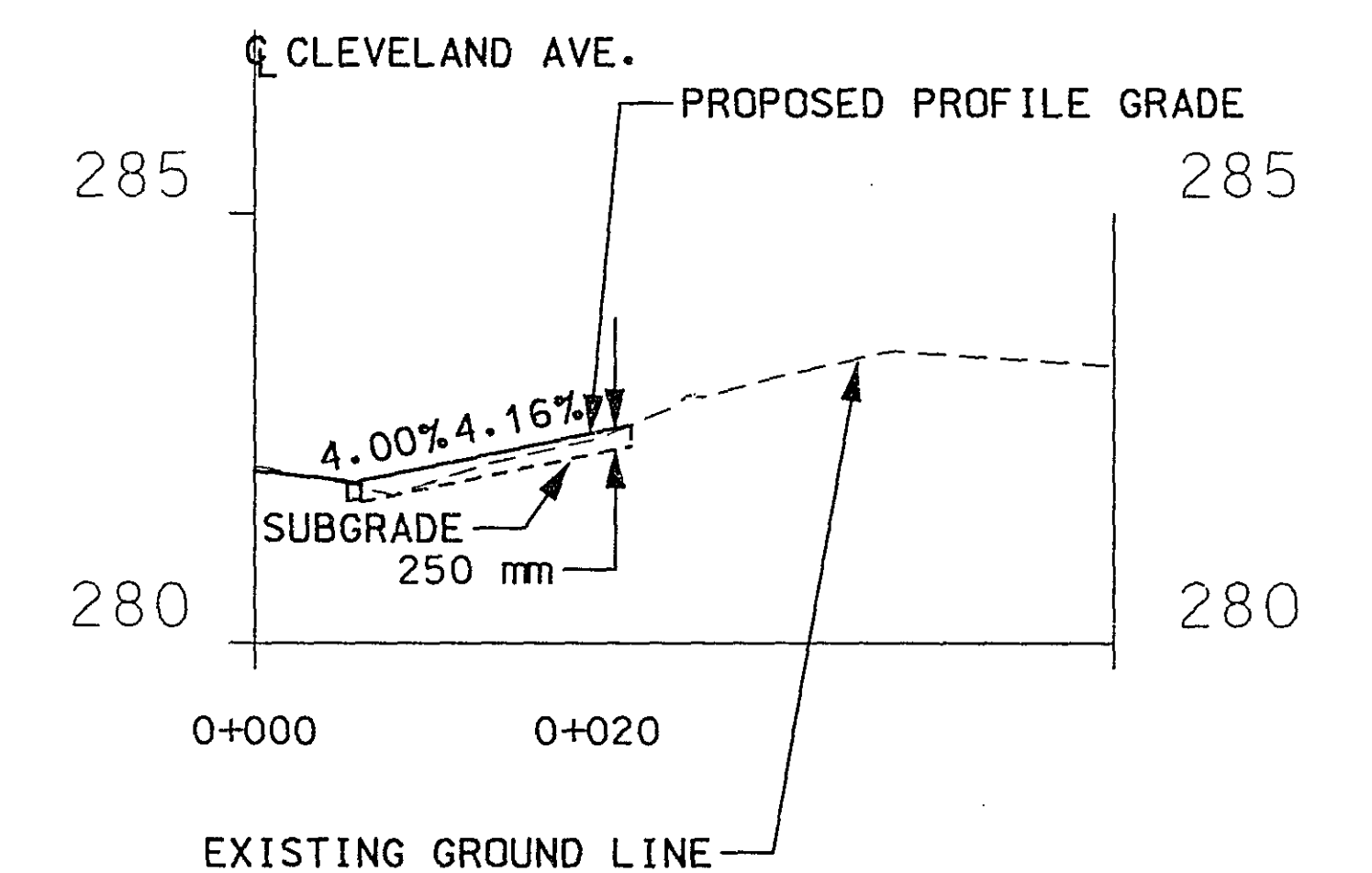
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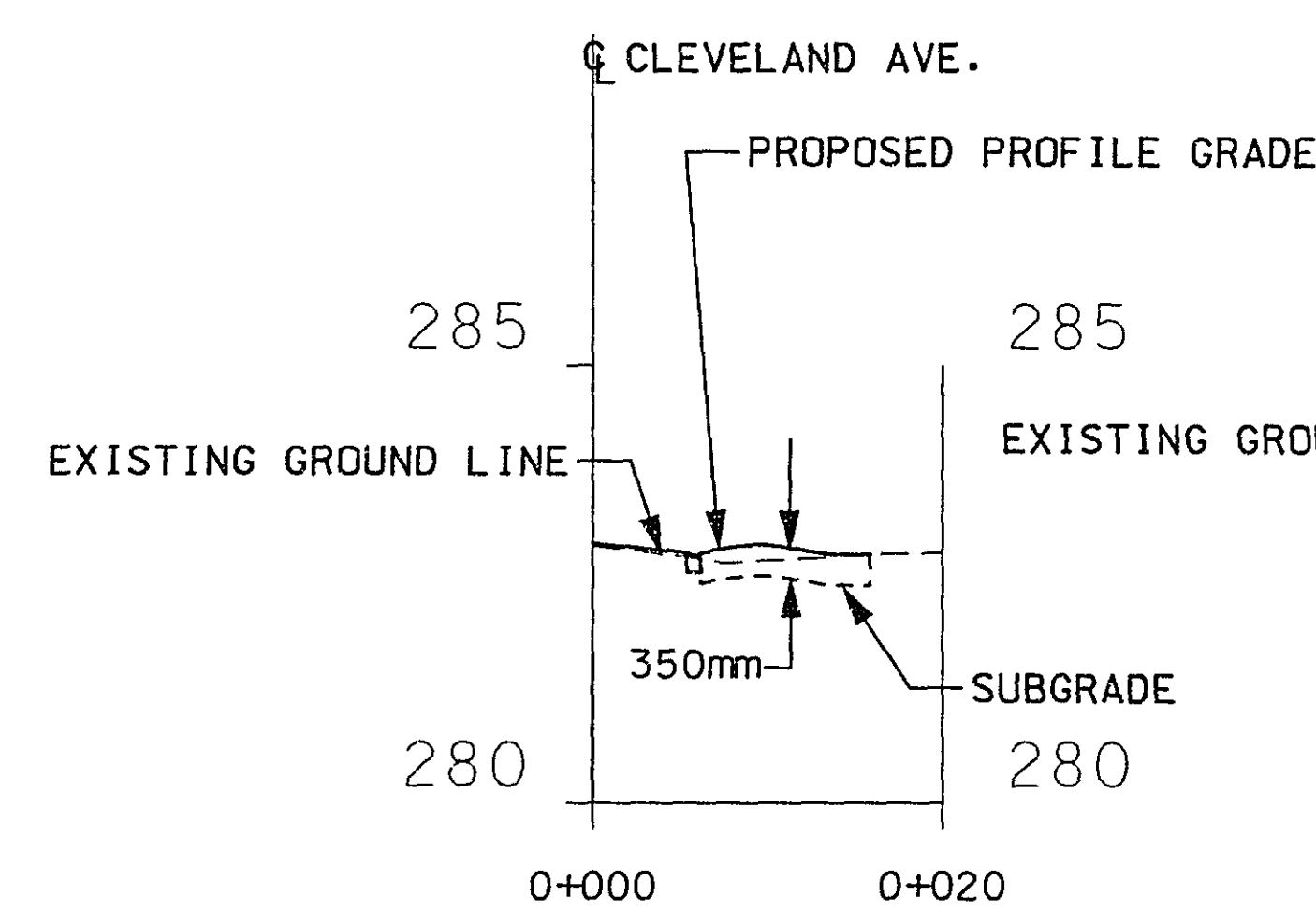
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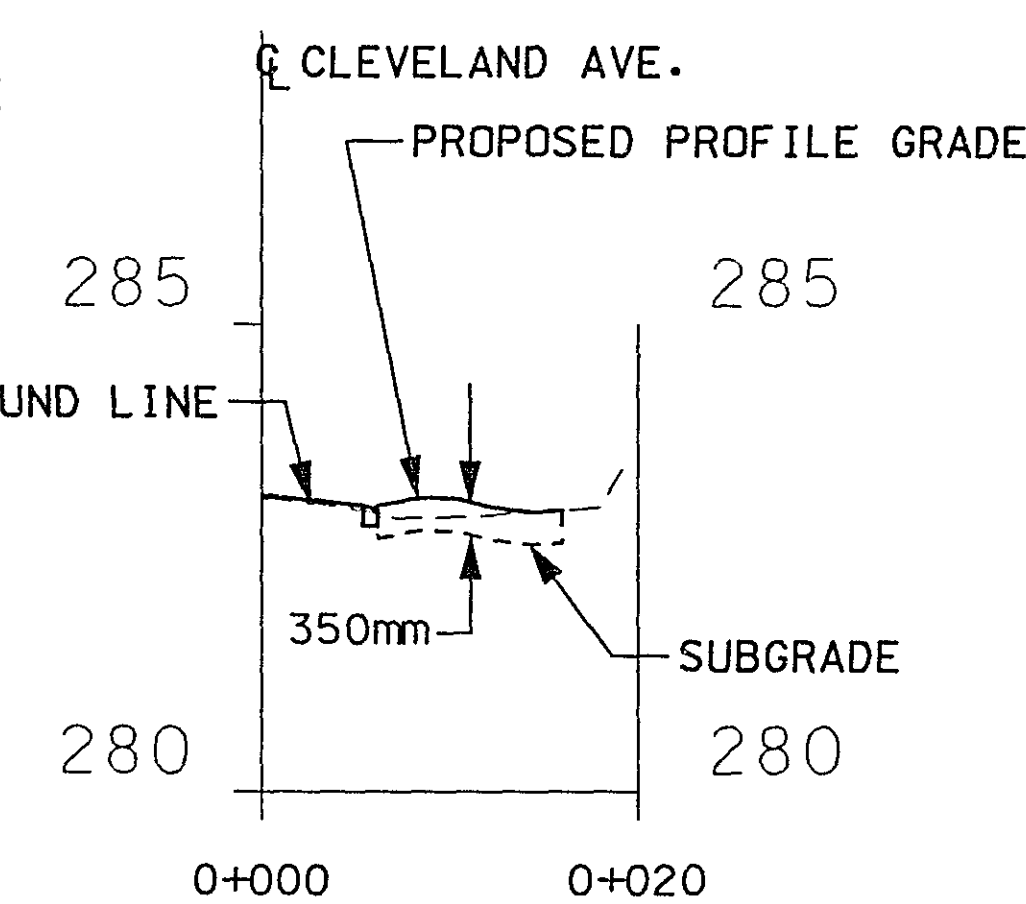
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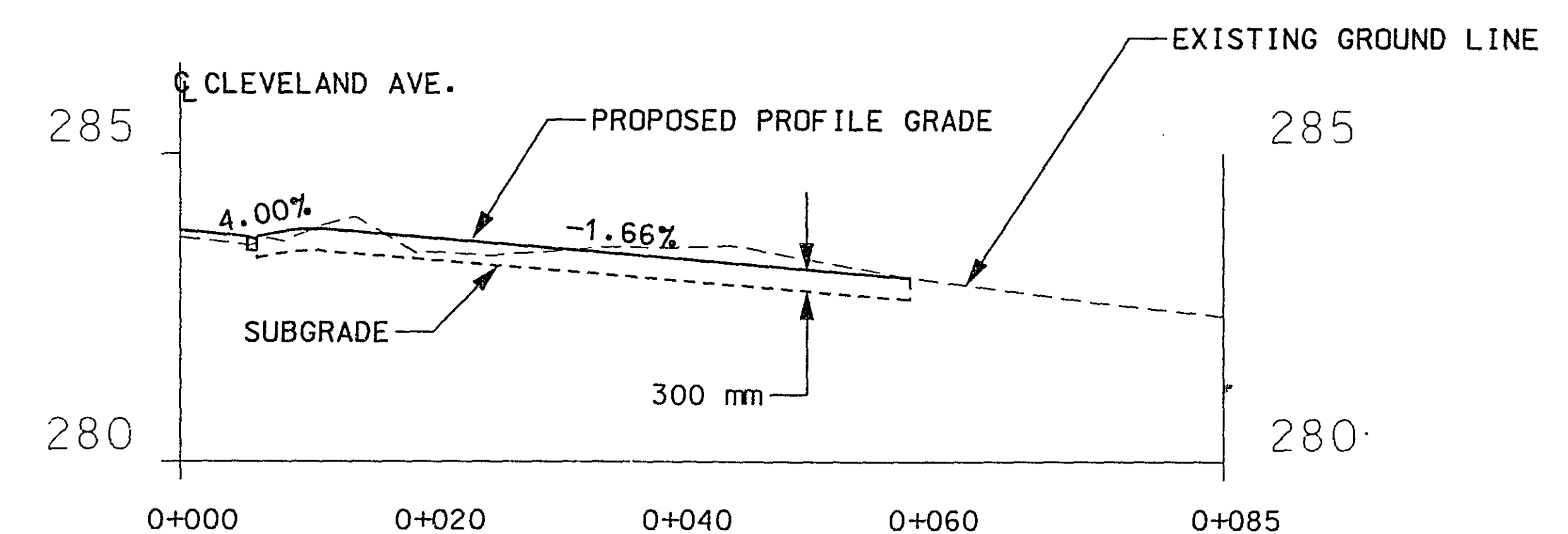
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#81 SOUTH



#81 NORTH



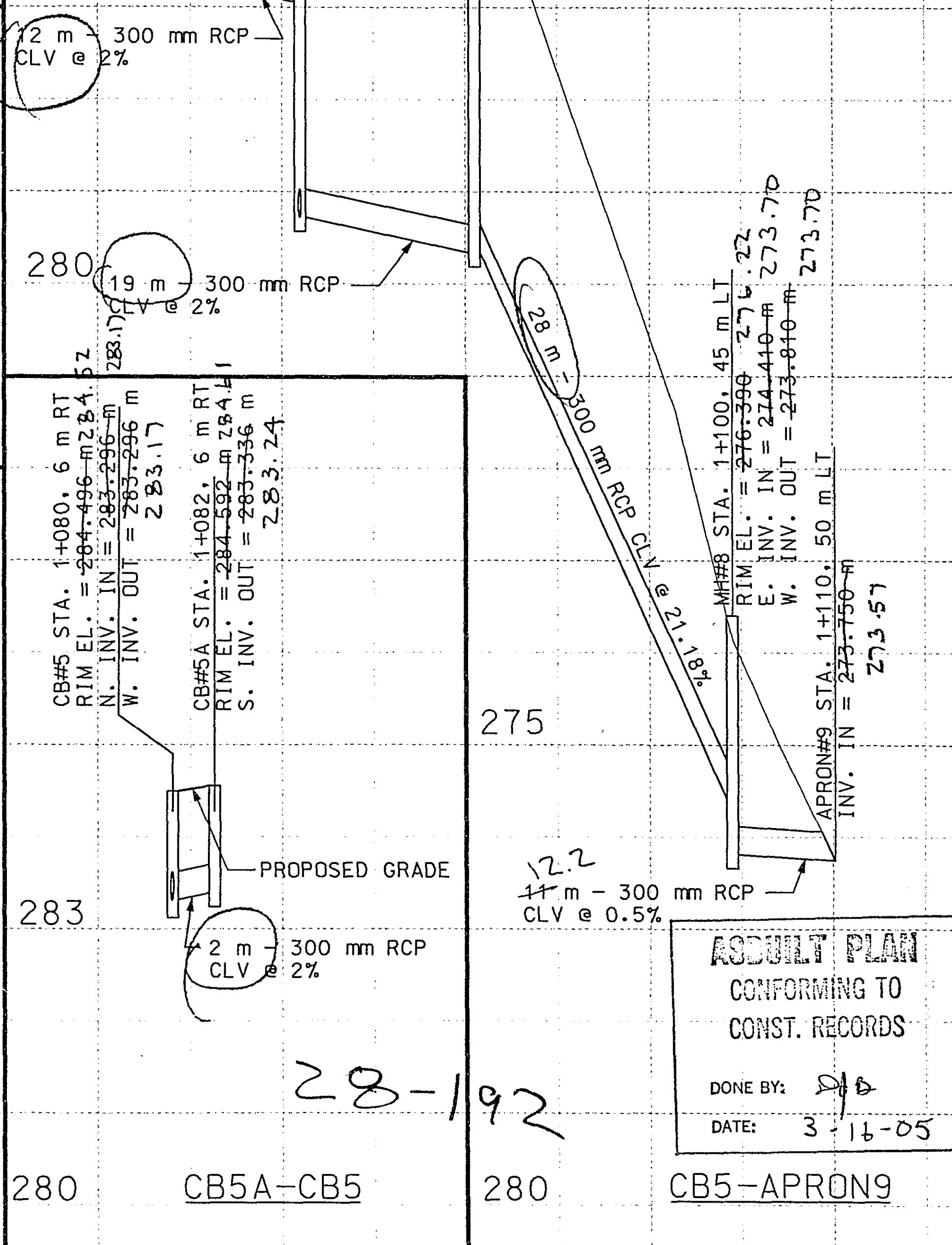
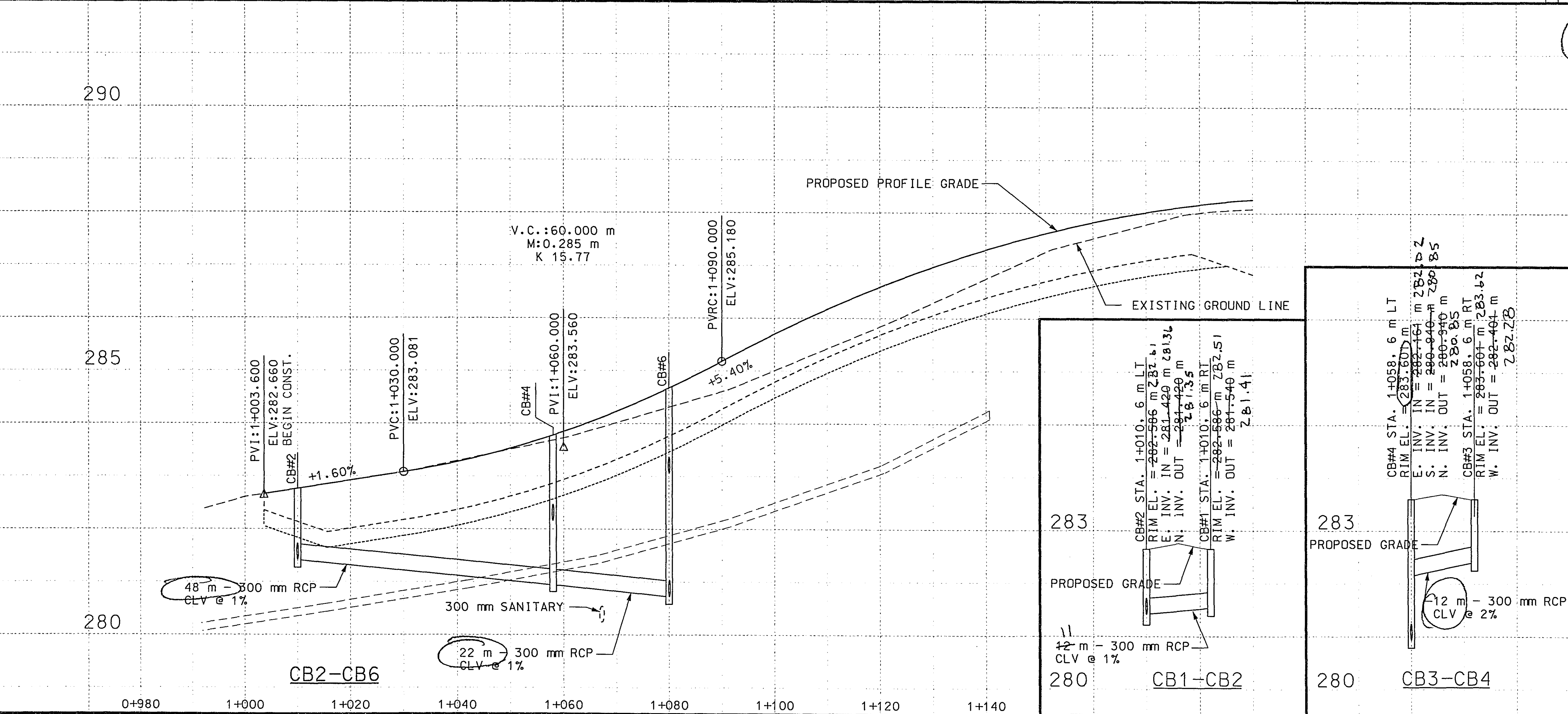
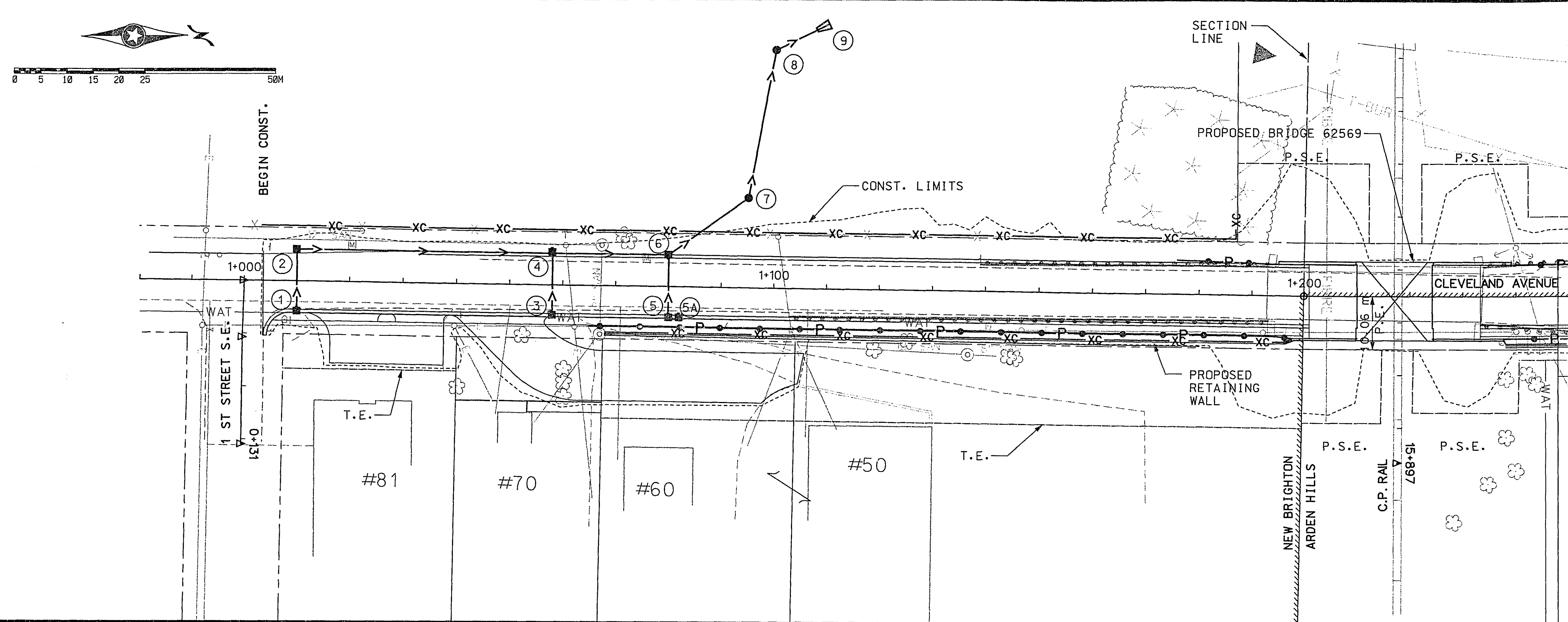
#50, #60, #70
(LEFT EDGE OF DRIVEWAY)

Z8-192

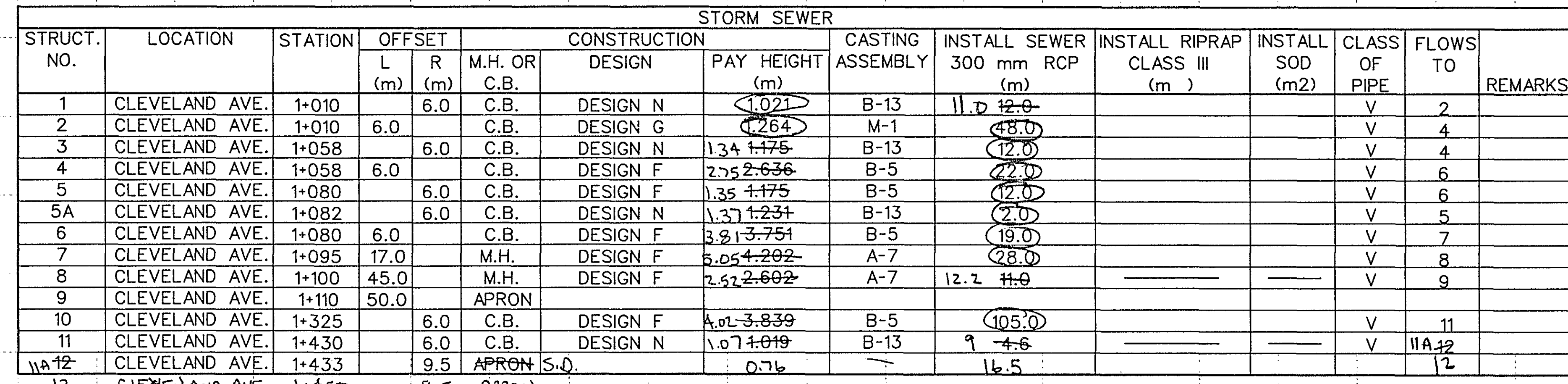
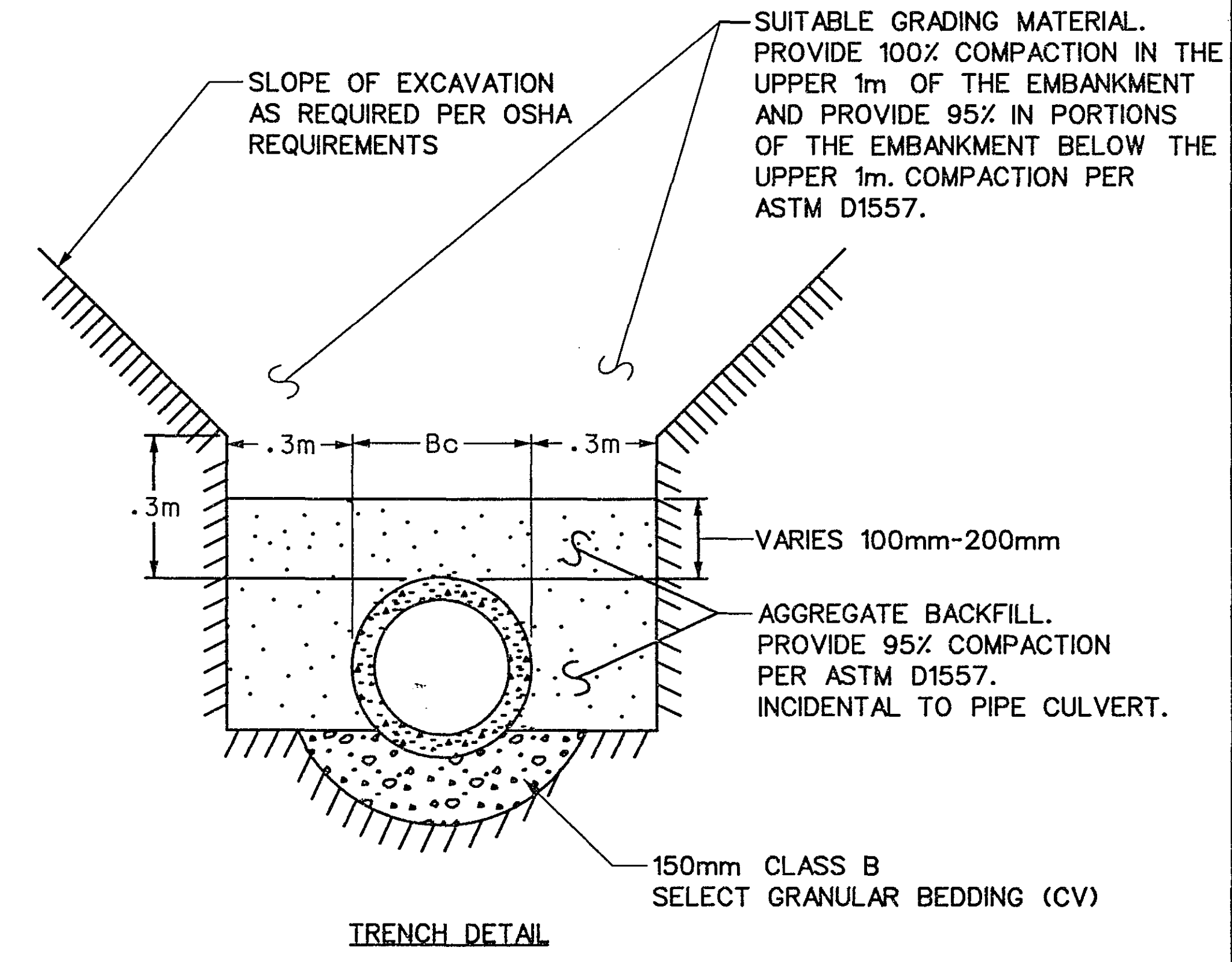
ASBUILT PLAN
CONFORMING TO
RECORDS

DONE BY: JAB
DATE: 3-16-05

S.P. NO. 62-646-12
S.P. NO. 147-020-24
S.P. NO. 187-020-08



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PLOTTED: 15-NOV-1999 16:27
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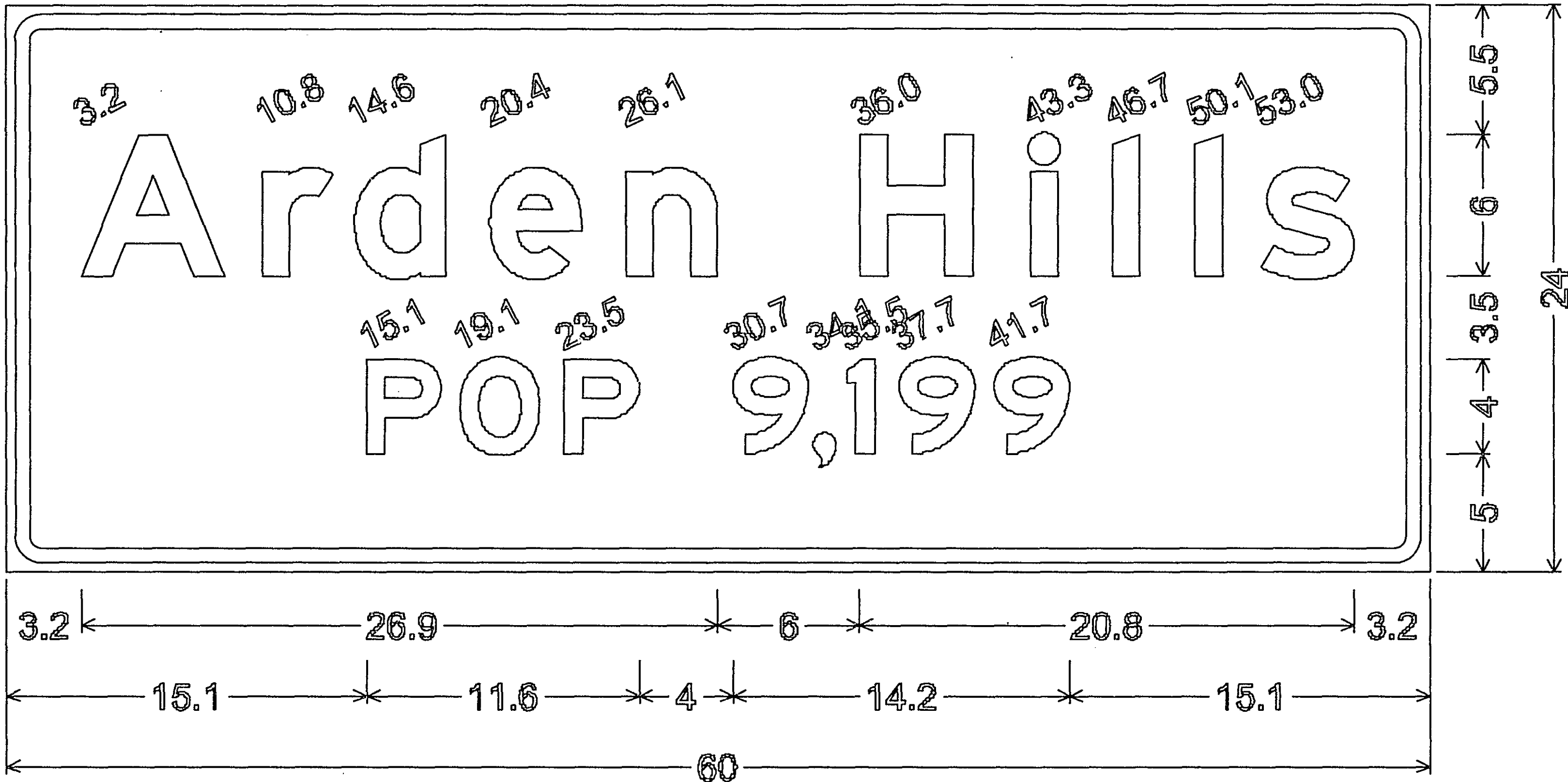
STORM SEWER CASTING DETAILS			
CASTING ASSEMBLY	QUANTITY	CASTING	STANDARD PLATES
B-5	4	FRAME No. 802A CURB BOX 823 GRATE 816	M4129G M4160D M4154B
A-7	2	FRAME 700-7 GRATE 716	M4101C M4110F
M-1	1	FRAME 700-4 GRATE 720	M4101C M4140D
B-13	4	FRAME No. 806 CURB BOX 824 GRATE 816	M4125D M4133A M4154B

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

DONE BY: *SPD*
DATE: *3-16-05*

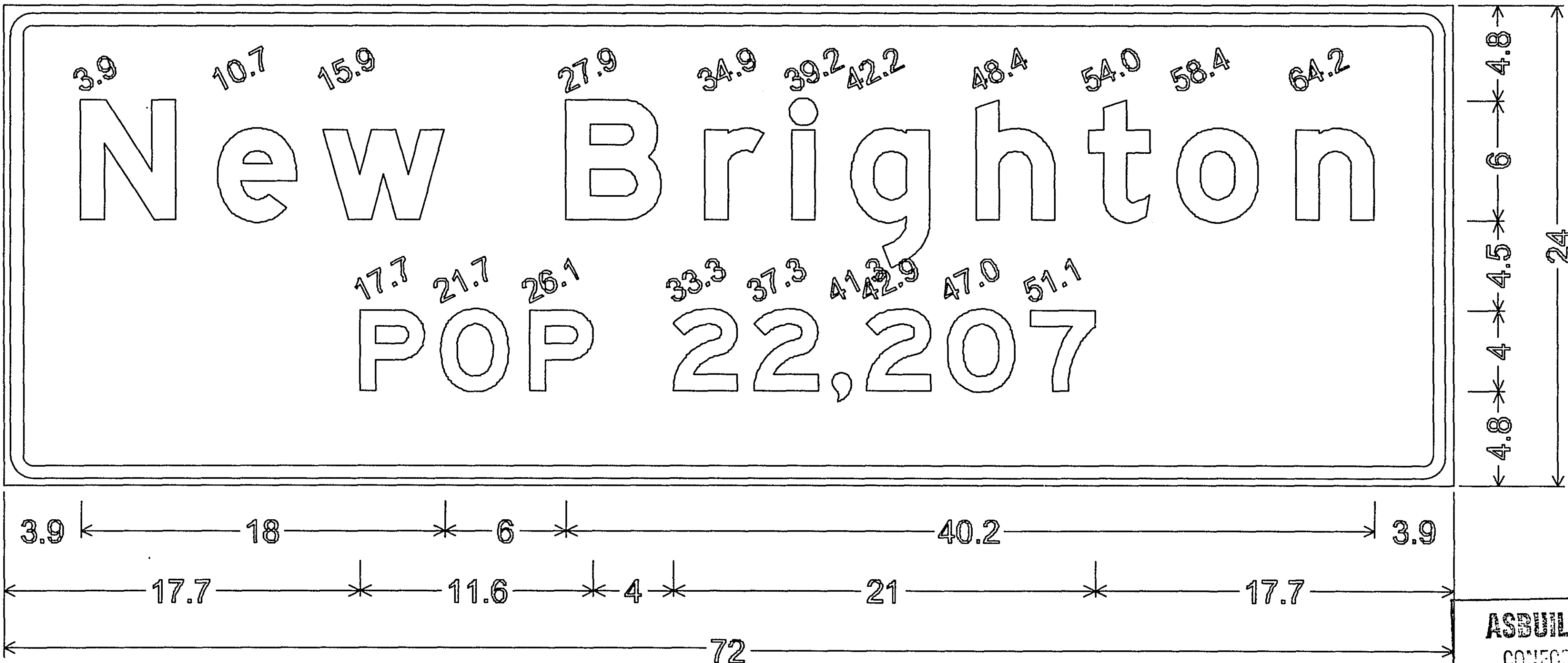
⑤ PERMANENT SIGNING & STRIPING TABULATIONS					
ITEM	DESCRIPTION	SIZE (in)	COLOR	UNIT	AMOUNT
R1-1	STOP SIGN	30X30	WHITE ON RED	EACH	2
R2-1A	SPEED LIMIT 40	24X30	BLACK ON WHITE	EACH	2
R8-3A	NO PARKING	24X24	BLACK & RED ON WHITE	EACH	2
R8-3aP	"BETWEEN SIGNS"	24X12	RED ON WHITE	EACH	2
W11-2	PED CROSSING ADVANCE	30X30	BLACK ON FLOURESCENT YELLOW-GREEN	EACH	1
W11-2A	PED CROSSING	30X30	BLACK ON FLOURESCENT YELLOW-GREEN	EACH	2
S2-P2	DOWN ARROW	24X18	BLACK ON FLOURESCENT YELLOW-GREEN	EACH	2
I2-3	CITY SIGN-ARDEN HILLS, (9,199)	60X24	WHITE ON GREEN	EACH	1
I2-3	CITY SIGN-NEW BRIGHTON, (22,207)	72X24	WHITE ON GREEN	EACH	1
X4-4L	DELINEATOR (LEFT)	12X36	YELLOW ON BLACK	EACH	2
X4-4R	DELINEATOR (RIGHT)	12X36	YELLOW ON BLACK	EACH	2
	100mm SOLID LINE YELLOW - EPOXY			m	540
	100mm SOLID LINE WHITE - EPOXY			m	880
	100mm BROKEN LINE YELLOW - EPOXY			m	70
	ZEBRA CROSSWALK WHITE - EPOXY			m2	10.3
	600mm STOP LINE - EPOXY			m	10

NOTE: ALL PERMANENT SIGNS SHALL HAVE V.I.P. SHEETING.



1.5" Radius, 0.6" Border, 0.4" Indent, White on Green;
"Arden Hills" E Mod; "POP 9,199" E Mod;

ALL DIMENSIONS ARE IN INCHES



1.5" Radius, 0.6" Border, 0.4" Indent, White on Green;
"New Brighton" E Mod; "POP 22,207" E Mod;

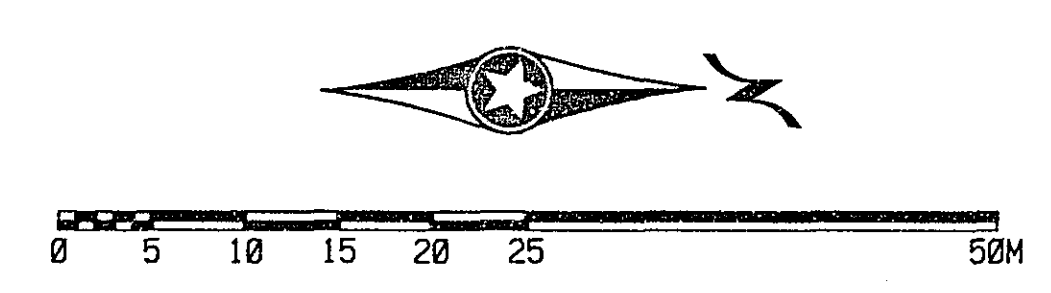
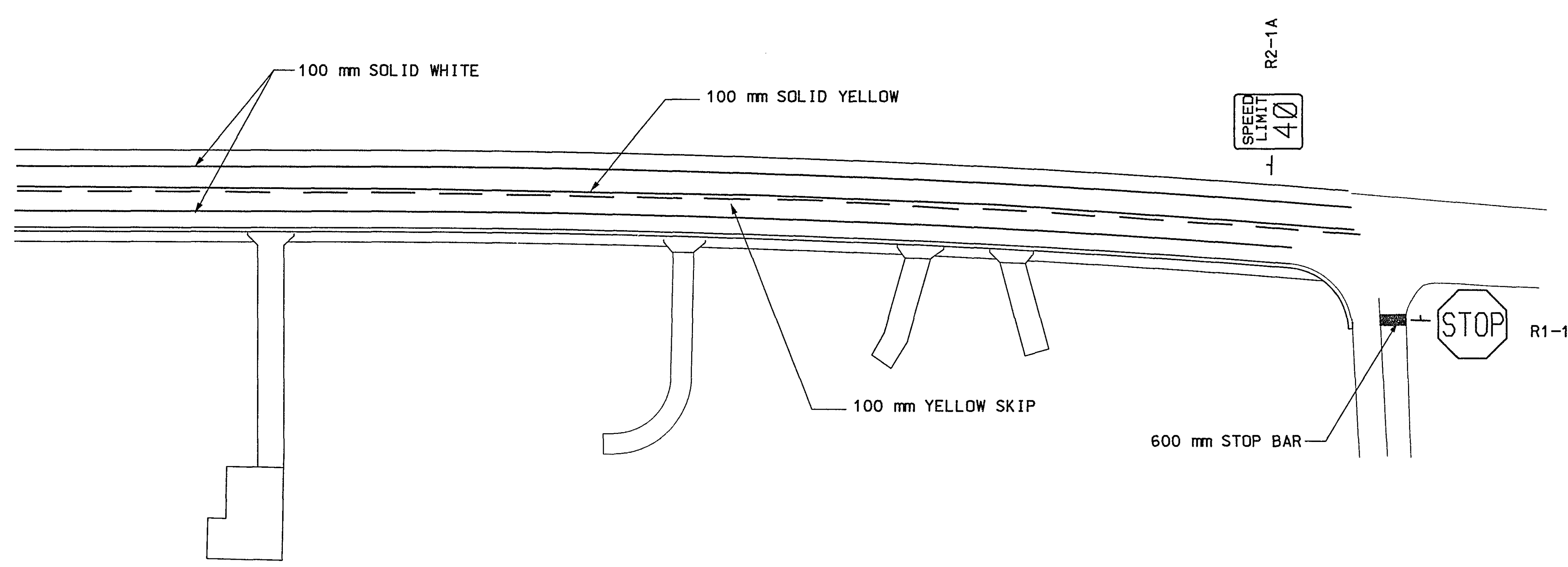
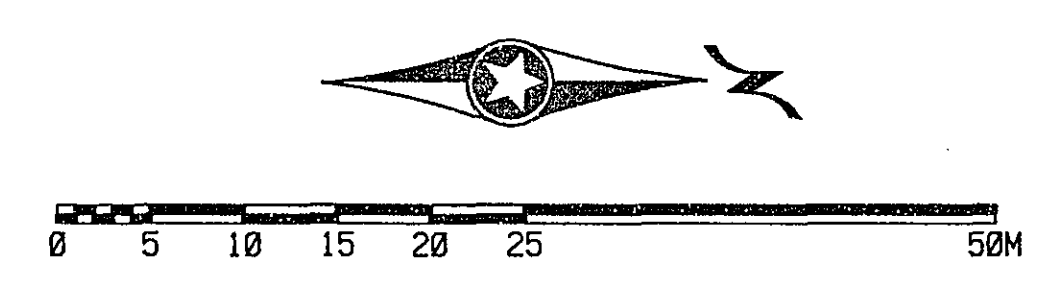
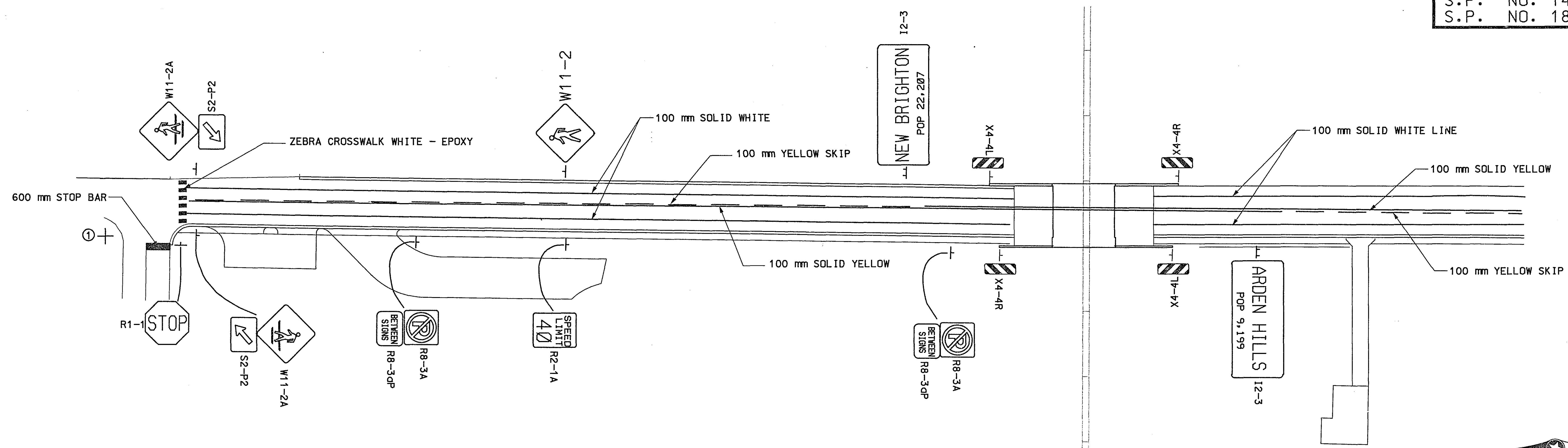
ALL DIMENSIONS ARE IN INCHES

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

DONE BY: *DJB*
DATE: 3-16-05

28-192

S.P. NO. 62-646-12
S.P. NO. 147-020-24
S.P. NO. 187-020-08



NOTES:
① RELOCATE CITY STREET NAME
SIGNS AND NEIGHBORHOOD
WATCH SIGN TO THIS LOCATION

ALL PERMANENT SIGNS SHALL HAVE
V.I.P. SHEETING

28-192

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

DONE BY: JAB
DATE: 3-16-05

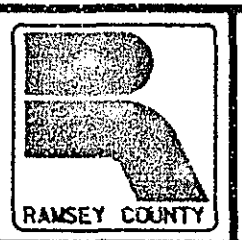
HNTB ARCHITECTS ENGINEERS PLANNERS
The HNTB Companies
3400 W. 66th Street, Suite 250, Minneapolis, Minnesota 55435 (612) 920-4666

REVISIONS	DATE	BY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

REG. NO. 22628
DATE 11/18/99

JAB

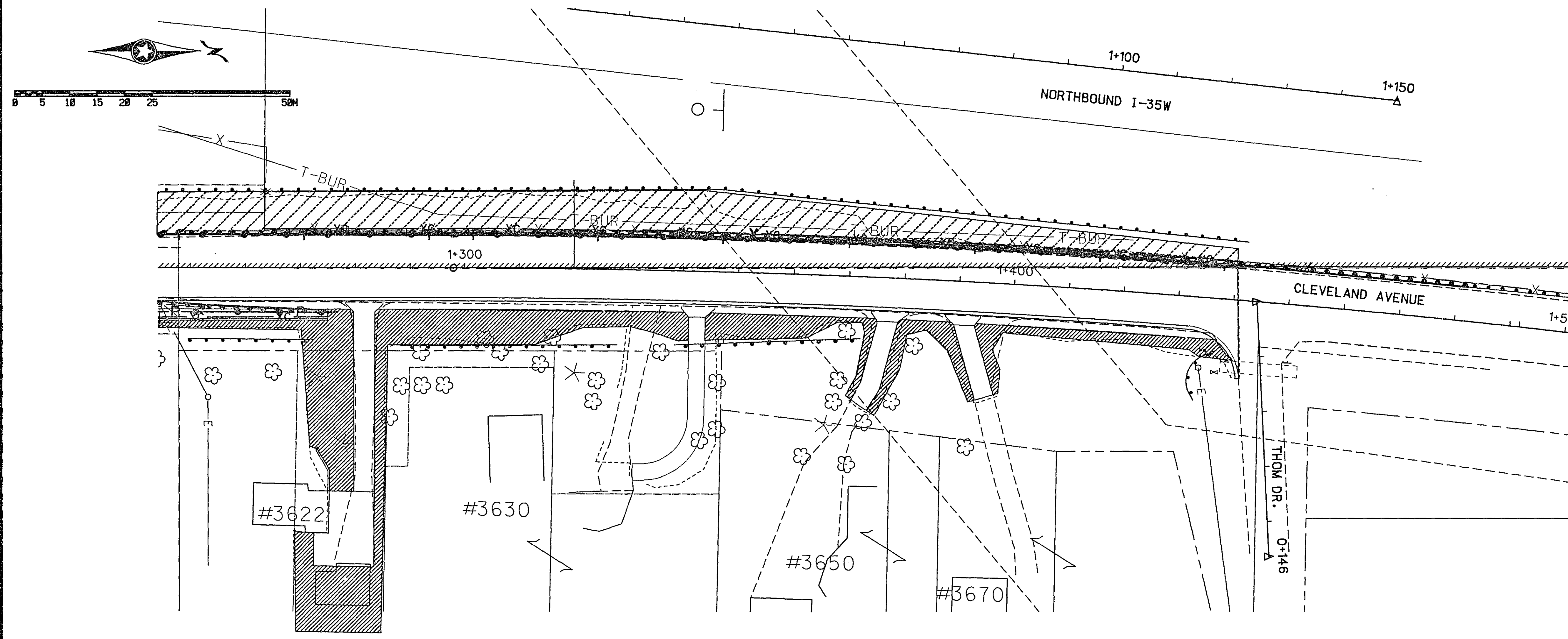
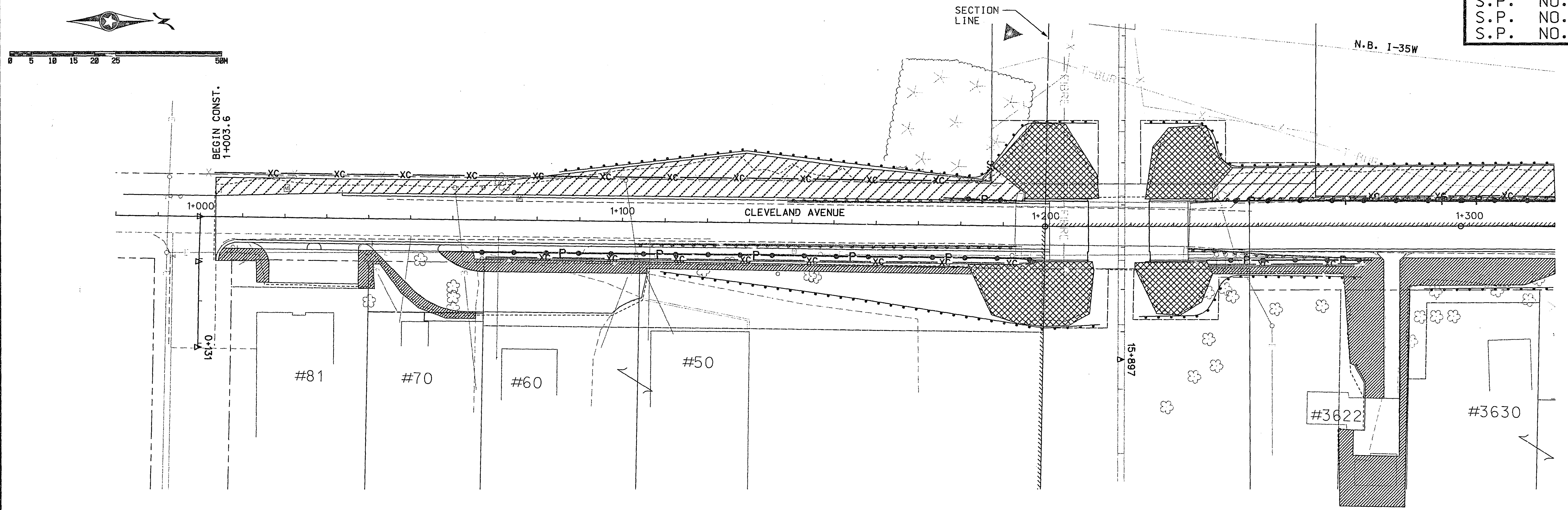


PAVEMENT SIGNING & STRIPING

DES: JSS DR: JSS APPROVED: JAB
CHK: GLS CHK: JAB
SHEET NO. 23 of 28 SHEETS



S.P. NO. 62-646-12
 S.P. NO. 147-020-24
 S.P. NO. 187-020-08



- SILT FENCE TYPE HEAVY DUTY
- SODDING TYPE LAWN
- SODDING TYPE EROSION CONTROL
- SEED, MIX 40A AND EROSION CONTROL BLANKET CATEGORY 3

ASBUILT PLAN
 CONFORMING TO
 CONST. RECORDS
 DONE BY: *DJB*
 DATE: 3-16-05

28-192

DESIGN FILE: F:\21928\1\cd\cp\cv\is01.dgn
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NOTES:

EXCAVATION	EMBANKMENT
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60				108
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T.E	25.06	m	RT.
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37				111
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T.E	25.06	m	RT.
-----	-------	---	-----

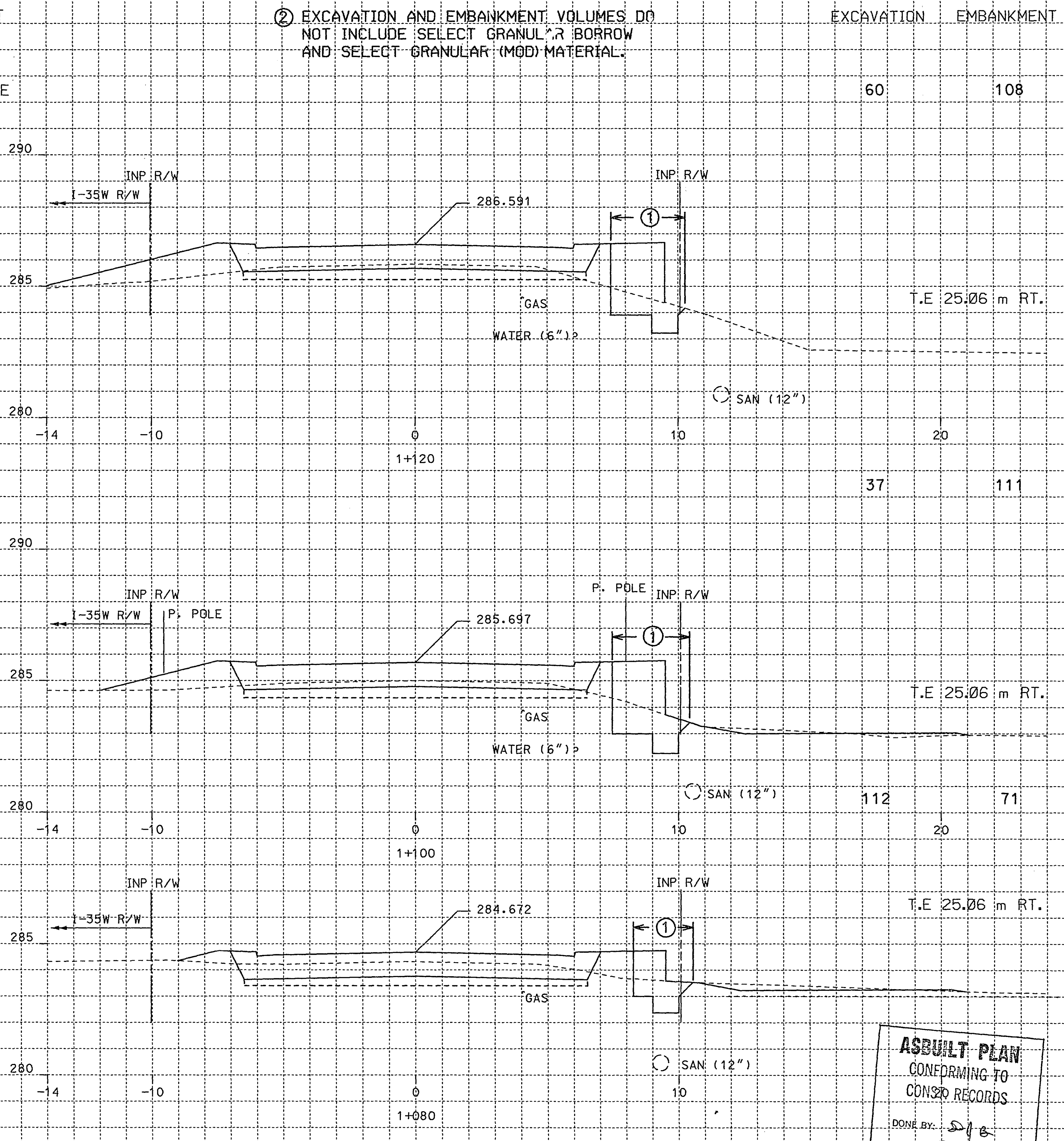
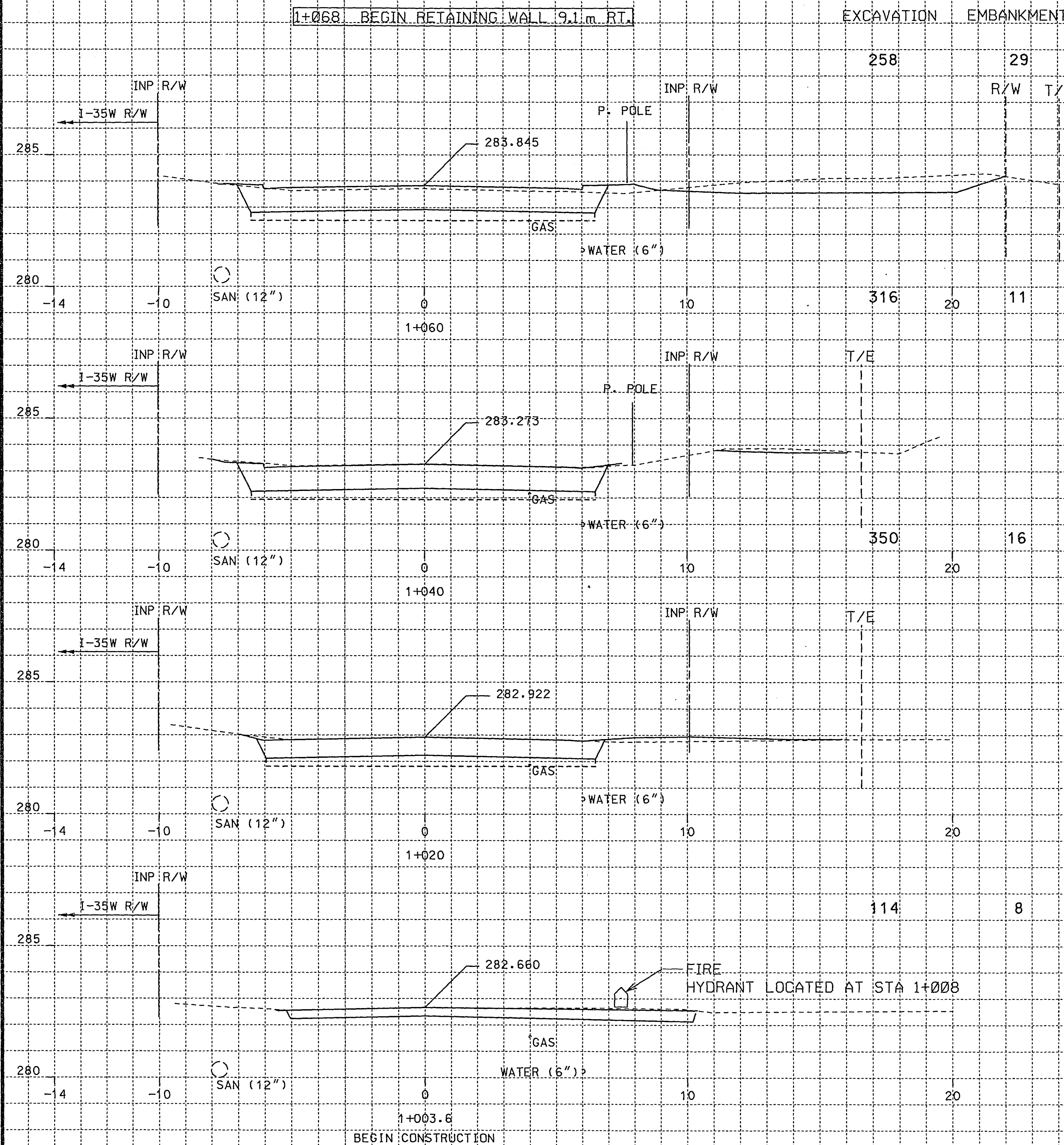
112			71
-----	--	--	----

T.E	25.06	m	RT.
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ASBUILT PLAN
CONFIRMING TO
CONS20 RECORDS

DONE BY: 21 B
DATE: 3-11-95

28-192

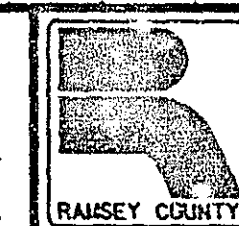


REVISIONS

DATE	BY
------	----

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

REG. NO. 22628
DATE 11/15/99



CLEVELAND AVE. CROSS SECTIONS
STA. 1+004 TO 1+120

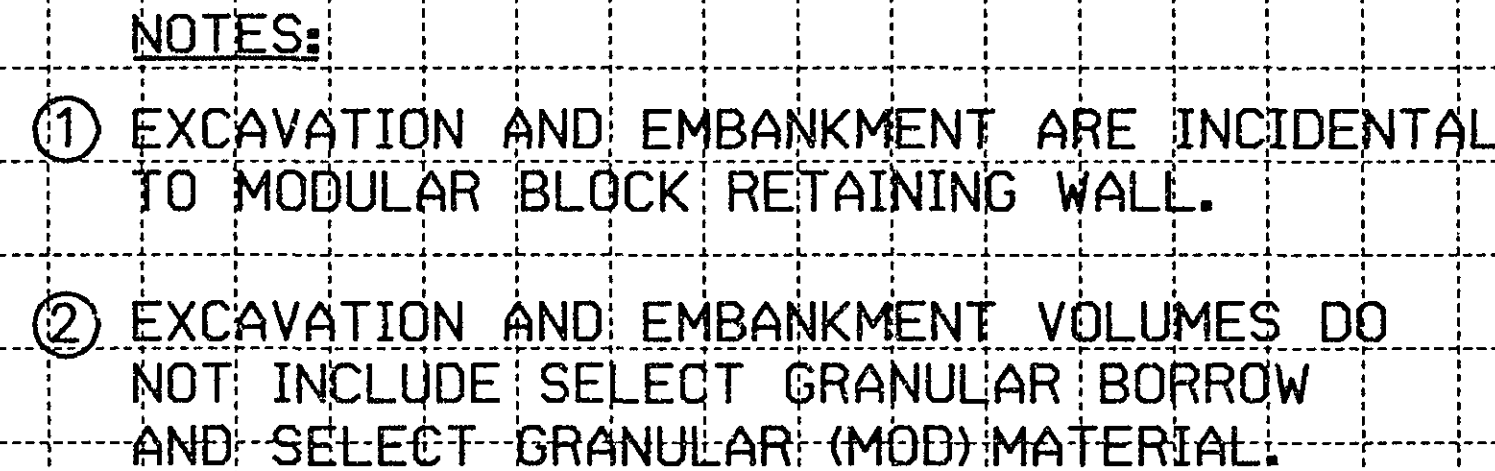
DES:	JAB	DR:	JSS
CHK:	GLS	CHK:	JAB

APPROVED:
JAB

SHEET NO. 25 of 28 SHEETS



NEW BRIGHTON	ARDEN HILLS
--------------	-------------



ASBUILT PLAN
10 CONFIRMED
C. RECORDS
DONE BY: 213
DATE: 3-16-05

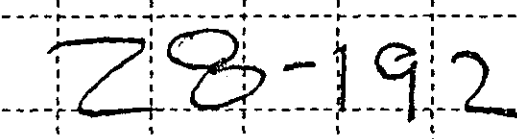
94 712
28-192

NEW BRIGHTON

ARDEN HILLS

- ① EXCAVATION AND EMBANKMENT ARE INCIDENTAL TO MODULAR BLOCK RETAINING WALL.
- ② EXCAVATION AND EMBANKMENT VOLUMES DO NOT INCLUDE SELECT GRANULAR BORROW AND SELECT GRANULAR (MOD) MATERIAL.

EXCAVATION	EMBANKMENT
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
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100	100



ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

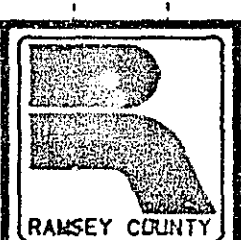
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3-16-0

HNTB ARCHITECTS ENGINEERS PLANNERS
The HNTB Companies
3400 W. 66th Street, Suite 250, Minneapolis, Minnesota 55435 (612) 920-4666

REVISIONS	DATE	BY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

 REG. NO. 22628
DATE 11/15/99



CLEVELAND AVE. CROSS SECTIONS
STA. 1+224 TO 1+320

DES: JAB	DR: JSS	DATE: 11/1/01
CHK: GLS	CHK: JAB	APPROVED: JAB
SHEET NO. 27 of 28 SHEETS		



NOTES:

-
- NEW BRIGHTON ARDEN HILLS
- EXCAVATION EMBANKMENT
- 233 15
- 285
- INP R/W
- I-35W R/W
- 282.660
- R/W 27.5M RT.
- 280
- INP R/W
- I-35W R/W
- 279.803
- 290
- 1+380
- 1+440
- 316 2
- 193 48
- 285
- INP R/W
- I-35W R/W
- 282.480
- R/W 26.0M RT.
- 280
- INP R/W
- I-35W R/W
- 280.603
- 290
- 1+360
- 1+420
- 267 4
- 143 96
- 285
- INP R/W
- I-35W R/W
- 281.520
- R/W 29.0M RT.
- 280
- INP R/W
- I-35W R/W
- 284.400
- 28-192
- ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

28-192

ASSAULT PLAN
CONFORMING TO
CONST. RECORDS.

DONE BY: D/B
DATE: 3-16-05

 ARCHITECTS ENGINEERS PLANNERS <i>The HNTB Companies</i> 3400 W. 56th Street, Suite 250, Minneapolis, Minnesota 55435 (612) 920-4666	REVISIONS	DATE	BY	I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.  REG. NO. 22629 DATE 11/15/99		CLEVELAND AVE. CROSS SECTIONS STA. 1+340 TO 1+440	DES: JAB	DR: JSS	APPROVED:	
							CHK: GLS	CHK: JAB	JAB	