

STATEMENT OF ESTIMATED QUANTITIES

SPEC. REF.	ITEM	UNIT	QUANTITIES			U.S.S.S. 204-020-01 (SIDEWALK)
			S.A.P. 71-601-13	STORM SEWER	OTHER	
2104.505 & SPEC	REMOVE EXISTING BIT. SURFACING	S.Y.	20330			
2104.503	REMOVE EXISTING CONC. DRIVEWAYS	S.F.	2520			
2105.501 & SPEC	COMMON EXCAVATION	C.Y.	15600			1500
2105.507 & SPEC	SUBGRADE EXCAVATION	C.Y.	14000			
2112.501	CONCRETE PREPARATION	RD. STA.	46.4			
2211.501	CLASS V AGGREGATE BASE	TON	15400			
2331.508 & SPEC	TYPE 41 BIT. WEAR COURSE MIX.	TON	2970			
2331.514 & SPEC	TYPE 31 BIT. BASE COURSE MIX.	TON	2970			
2357.502	BIT. MATERIAL FOR TACK COAT	GAL.	1210			
SPEC	4" CONC. SIDEWALK	S.F.		11300		15900
SPEC	6" CONC. SIDEWALK	S.F.				1370
SPEC	PEDESTRIAN RAMP	E.A.				14
2531.507	6" CONC. DRIVEWAY APRONS	S.Y.	141			
2531.507	8" CONC. DRIVEWAY APRONS	S.Y.	48			
2101.511	CLEARING & GRUBBING	L.S.	1			
SPEC	2" BIT. DRIVEWAY RESTORATION	S.Y.	65			
SPEC	6" CONC. DRIVEWAY RESTORATION	S.F.	1260			
2531.501	CONC. CURB & GUTTER DESIGN B624	L.F.	6382			
SPEC	CONC. VALLEY GUTTER	S.F.	170			
SPEC	TRIANGULAR CONC. VALLEY GUTTER SECTION	E.A.	4			
2575.505	SOD TYPE LAWN & BOULEVARD	S.Y.	2700			
SPEC	SEEDING	ACRE	1			
2564.531	SIGNING	S.F.	181			
SPEC	PAVEMENT MARKINGS	L.S.	1			
2130.501	WATER	1000 GAL.	50			
SPEC	CONCRETE SWALE	S.F.	72			
SPEC	CONNECT TO EXISTING SANITARY SEWER MH	E.A.		3		
SPEC	8" PVC PIPE 0'-8" DEPTH	L.F.		1086		
SPEC	8" PVC PIPE 8'-10" DEPTH	L.F.		160		
SPEC	8" PVC PIPE 10'-12" DEPTH	L.F.		150		
SPEC	8" PVC PIPE 12'-14" DEPTH	L.F.		82		
SPEC	STD. SANITARY SEWER MANHOLE (48" DIA.)	E.A.		8		
SPEC	MH EXTRA DEPTH (OVER 8')	L.F.		10		
SPEC	8"x4" SANITARY SERVICE WYE	E.A.		19		
SPEC	4" SANITARY SERVICE PIPE	L.F.		630		
SPEC	RECONNECTION OF EXIST. SAN. SERVICES	E.A.		19		
SPEC	REMOVE EXISTING SANITARY MANHOLE	E.A.		8		
SPEC	ABANDON & PLUG EXIST. SAN. SEWER	E.A.		1		
SPEC	6" D.I. WATERMAIN	L.F.		256		
SPEC	8" D.I. WATERMAIN	L.F.		96		
SPEC	10" D.I. WATERMAIN	L.F.		1320		
SPEC	12" D.I. WATERMAIN	L.F.		120		
SPEC	1" WATER SERVICE CONNECTION	E.A.		11		
SPEC	1" WATER SERVICE PIPE	L.F.		385		
SPEC	RECONNECTION OF EXIST. WATER SERVICES	E.A.		8		
SPEC	CONNECT TO EXISTING WATERMAIN	E.A.		8		
SPEC	4" VALVE	E.A.		1		
SPEC	6" VALVE	E.A.		7		
SPEC	8" VALVE	E.A.		2		
SPEC	10" VALVE	E.A.		4		
SPEC	HYDRANT WITH VALVE	E.A.		3		
SPEC	RELOCATE EXISTING HYDRANT	E.A.		3		
SPEC	FITTINGS	LBS.		3380		
SPEC	3" INSULATION	S.F.	20000			
SPEC	ABANDON & PLUG EXISTING WATERMAIN	L.S.		1		
SPEC	JACK-BORE 16" STEEL CASING	L.F.		80		
SPEC	GRANULAR FOUNDATION MATERIAL	TON		280	355	
2501.561	18" RC PIPE CL. III DESIGN 3006 JOINT	L.F.		242		
2501.561	24" RC PIPE CL. III DESIGN 3006 JOINT	L.F.		112		
2501.561	30" RC PIPE CL. III DESIGN 3006 JOINT	L.F.		80		
2501.561	36" RC PIPE CL. III DESIGN 3006 JOINT	L.F.		1355		
2501.561	15" RC PIPE CL. III DESIGN 3006 JOINT	L.F.		282		
2501.511	15" CM PIPE	L.F.		80		
SPEC	CATCH BASIN 27" DIA.	E.A.		5		
SPEC	STORM SEWER MANHOLE (48" DIA.)	E.A.		16		
2501.515	18" RC FLARED END SECTION	E.A.		2		
2501.515	24" RC FLARED END SECTION	E.A.		2		
2501.515	30" RC FLARED END SECTION	E.A.		2		
2501.515	36" RC FLARED END SECTION	E.A.		1		
2501.515	15" CM APRON	E.A.		4		
SPEC	REMOVE EXISTING STORM SEWER SIPHON	L.F.		44		
SPEC	REMOVE EXISTING STORM SEWER MH/CB	E.A.		3		
SPEC	JACK-BORE 24" STEEL PIPE	L.F.		75		
SPEC	RC TO STEEL PIPE ADAPTOR	E.A.		2		
2104.501	REMOVE EXISTING CONC. CURB & GUTTER	L.F.	1500			
2104.501	REMOVE EXISTING CM PIPE CULVERT	L.F.	146			
SPEC	REMOVE & REPLACE LOOP DETECTOR	L.S.		1		
2554.505	PERMANENT BARRICADE	L.F.		24		
SPEC	8"x6" SANITARY SERVICE WYE	E.A.		1		
SPEC	6" SERVICE PIPE	L.F.		40		
SPEC	2" WATER SERVICE CONNECTION	E.A.		1		
SPEC	2" WATER SERVICE PIPE	L.F.		55		
2531.501	CONC. CURB & GUTTER DESIGN B618	L.F.		60		
SPEC	TRAFFIC DETOUR SIGNING	L.S.		0.6		
2571.541	TRANSPLANT TREE	TREE		1		11
2340.501	CONTRACTOR TESTING	TON	5940			

THE FOLLOWING STANDARD PLATES, AS APPROVED BY THE FHWA SHALL APPLY

PLATE NO.	DESCRIPTION
0005A	SPECIFICATION REFERENCE TO STANDARD PLATES
3000K	REINFORCED CONCRETE PIPE
3006F	CAST IRON JOINT FOR RC PIPE
3100G	CONCRETE APRON FOR REINFORCED CONCRETE PIPE
8000J	STANDARD BARRICADES
7100F	CONCRETE CURB & GUTTERS
9102C	SODDING AT PIPE CULVERT ENDS
3145E	CONCRETE PIPE TIES
3133B	RIP RAP AT RC PIPE OUTLETS
4010C	CONCRETE SHORT CONE AND ADJUSTING RINGS
4005K	MANHOLE AND CATCH BASIN
4101C	RING CASTING FOR MANHOLE OR CATCH BASIN
4142D	BEEHIVE GRATE CASTINGS FOR CATCH BASINS
4180H	MANHOLE OR CATCH BASIN STEP
7035J	CONCRETE WALK & CURB RETURNS AT ENTRANCES
7036C	PEDESTRIAN CURB RAMP FOR THE HANDICAPPED
8002F	PERMANENT BARRICADE

BASIS OF PLANNED QUANTITIES

AGGREGATE BASE, CLASS 5
 COMPACTED DRY DENSITY 1.86 TON/C.Y.

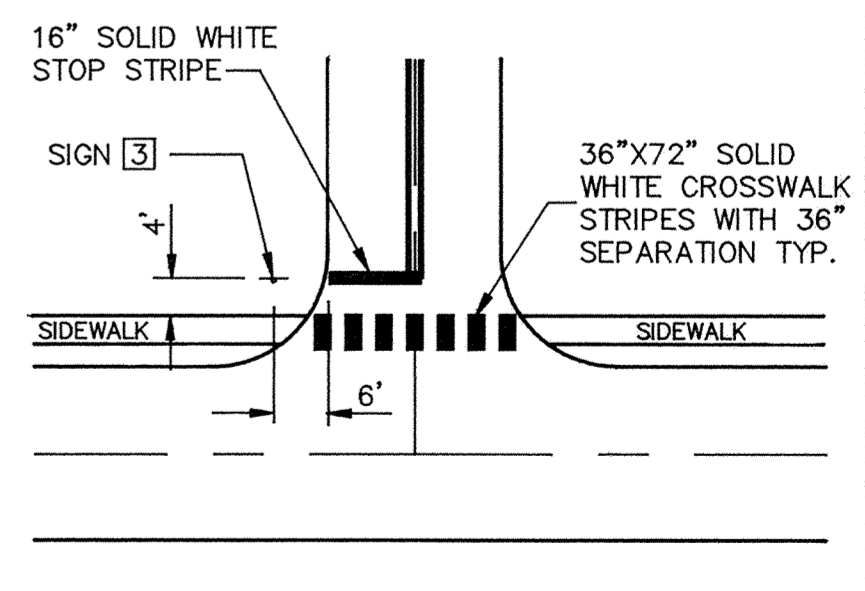
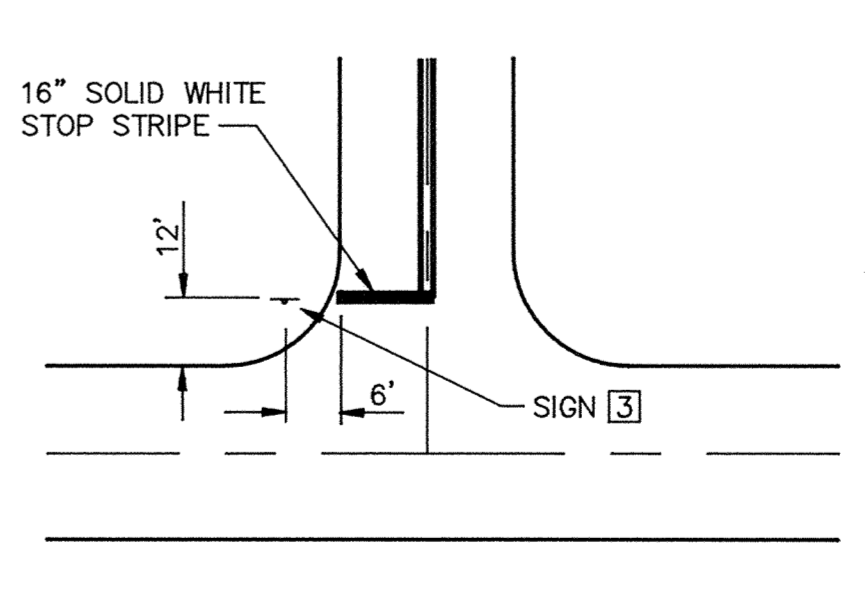
2331 TYPE 31 BITUMINOUS BASE COURSE:
 BITUMINOUS MATERIAL - 5.3% OF MIXTURE BY WEIGHT
 BITUMINOUS MIXTURE - 110 LBS./S.Y./INCH OF DEPTH

2331 TYPE 41 BITUMINOUS WEAR COURSE:
 BITUMINOUS MATERIAL - 6.1% OF MIXTURE BY WEIGHT
 BITUMINOUS MIXTURE - 110 LBS./S.Y./INCH OF DEPTH

BITUMINOUS TACK COAT:
 0.05 GAL./S.Y.

SIGN SCHEDULE

KEY	PLATE CODE	DESCRIPTION/MESSAGE	SIZE	QUANTITY
1	R2-1	"SPEED LIMIT 30"	24"x30"	4
1A	R2-X2	"1/4 MILE" SUPPLEMENTAL PLATE	24"x12"	1
2	R7-1A	"NO PARKING ANYTIME"	12"x18"	32
3	R1-1	"STOP"	30"x30"	8
3A	R1-3	"4-WAY" SUPPLEMENTAL PLATE	12"x6"	4
4	W10-1	RAILROAD ADVANCE WARNING	36" DIAMETER	2
5	S1-1	SCHOOL ADVANCE	36" PENTAGON	2
6	W3-1	"STOP AHEAD"	36"x36"	1
7	W1-6	LARGE ARROW - SINGLE HEAD	48"x24"	1
8	W4-2R	PAVEMENT WIDTH TRANSITION	36"x36"	1



TYPICAL SIGNING & STRIPING DETAIL "A"

TYPICAL SIGNING & STRIPING DETAIL "B"

RECORD PLAN Nov. 1991

TYPICAL NOTES:

- IN ADDITION TO PROPOSED SIGNING, THE CONTRACTOR SHALL REINSTALL SOME EXISTING SIGNS AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL COORDINATE RELOCATION OF EXISTING POWER & LIGHT POLES WITH THE PROPER UTILITY COMPANIES TO PROVIDE THE REQUIRED CLEAR ZONE AS SHOWN ON THE TYPICAL STREET SECTIONS.
- THE CONTRACTOR SHALL COORDINATE ALL WORK RELATED TO THE RAILROAD CROSSING WITH BURLINGTON NORTHERN RAILROAD, INCLUDING TRACK REMOVAL, SIGNAL INSTALLATION, PIPE JACKING, AND SURFACING ADJACENT TO TRACKS.

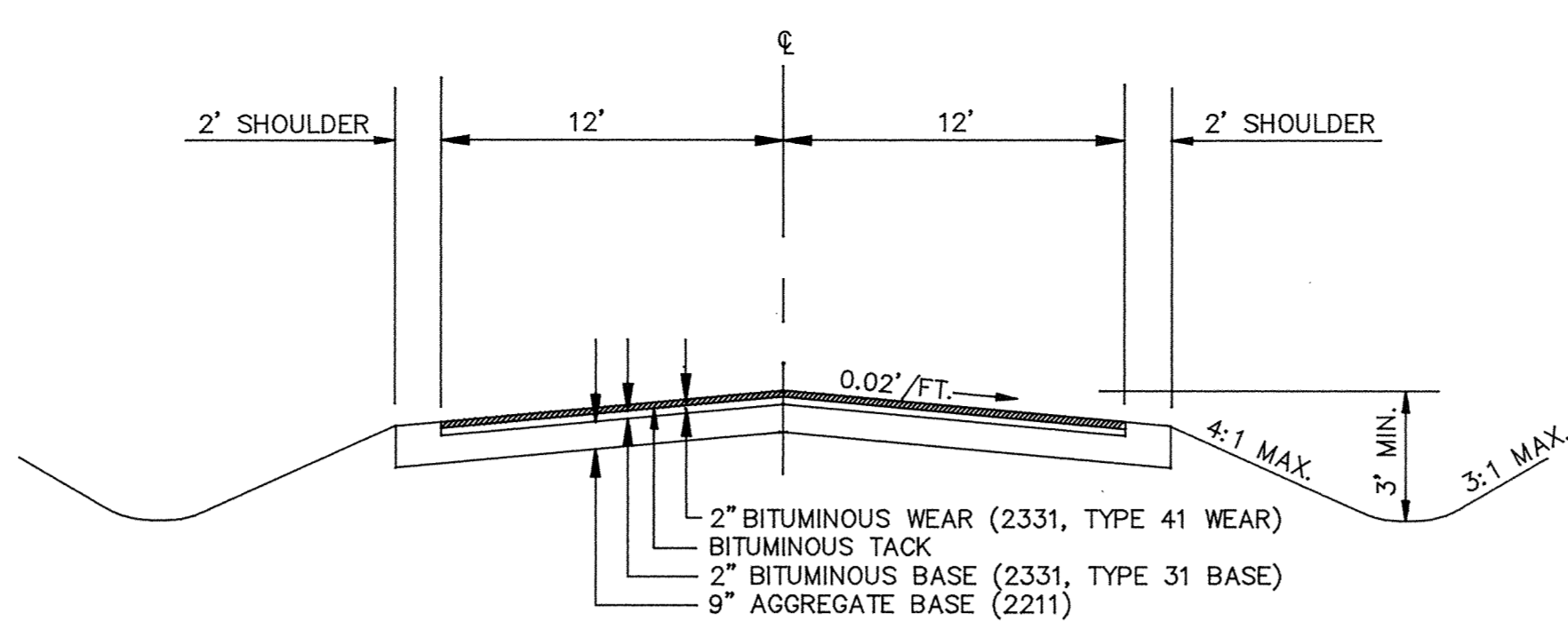
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Vincent S. Hopkins
 DATE 3/20/91 REG. NO. 19941

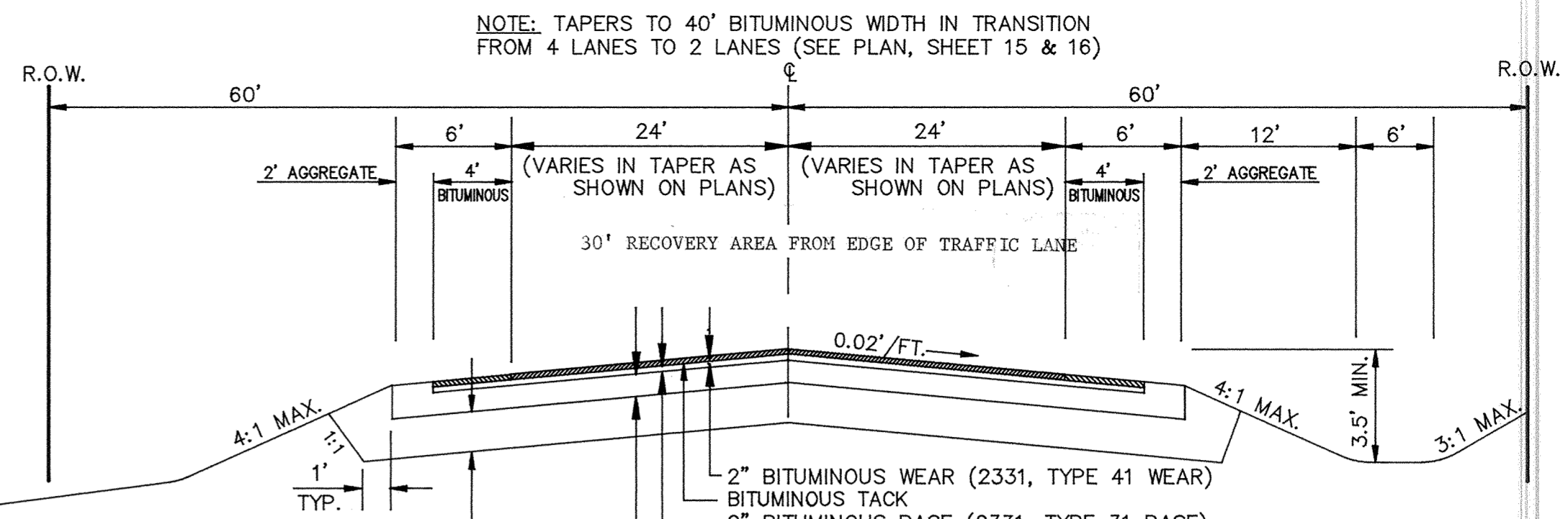
Maier Stewart & Associates Inc.
 CONSULTING ENGINEERS
 9800 SHELARD PARKWAY (612) 546-0432 MINNEAPOLIS, MINNESOTA 55441
 1959 SLOAN PLACE (612) 774-6021 ST. PAUL, MINNESOTA 55117

DATE	DESCRIPTION	DESIGNED VGH
		CHECKED <i>Vincent S. Hopkins</i>
		DRAWN GG
		GRAPHIC SCALE
		VERT. NONE

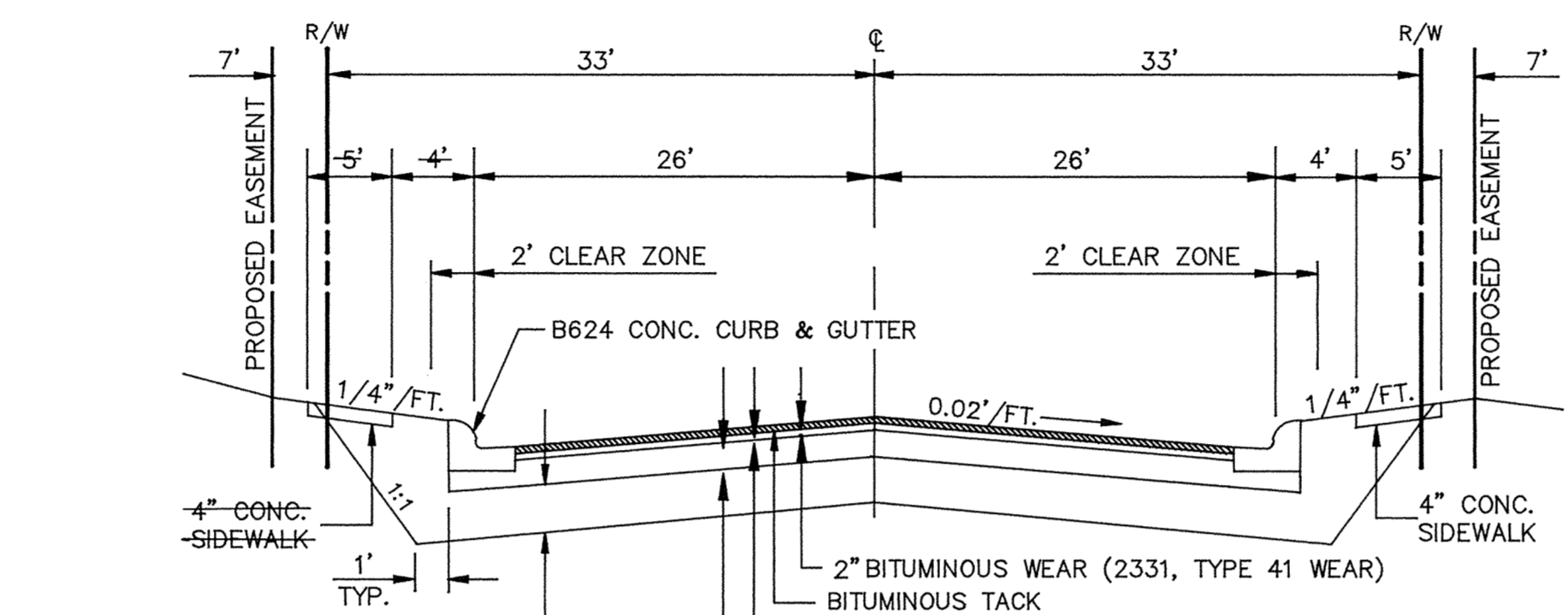
SHERBURNE COUNTY			
C.S.A.H. NO. 1 IMPROVEMENTS			
S.A.P. 71-601-13			
ESTIMATED QUANTITIES, NOTES, SECTIONS & DETAILS			
DATE	FEB. 1991	SHEET	2 OF 28 SHEETS
PROJECT NO.	231-001		



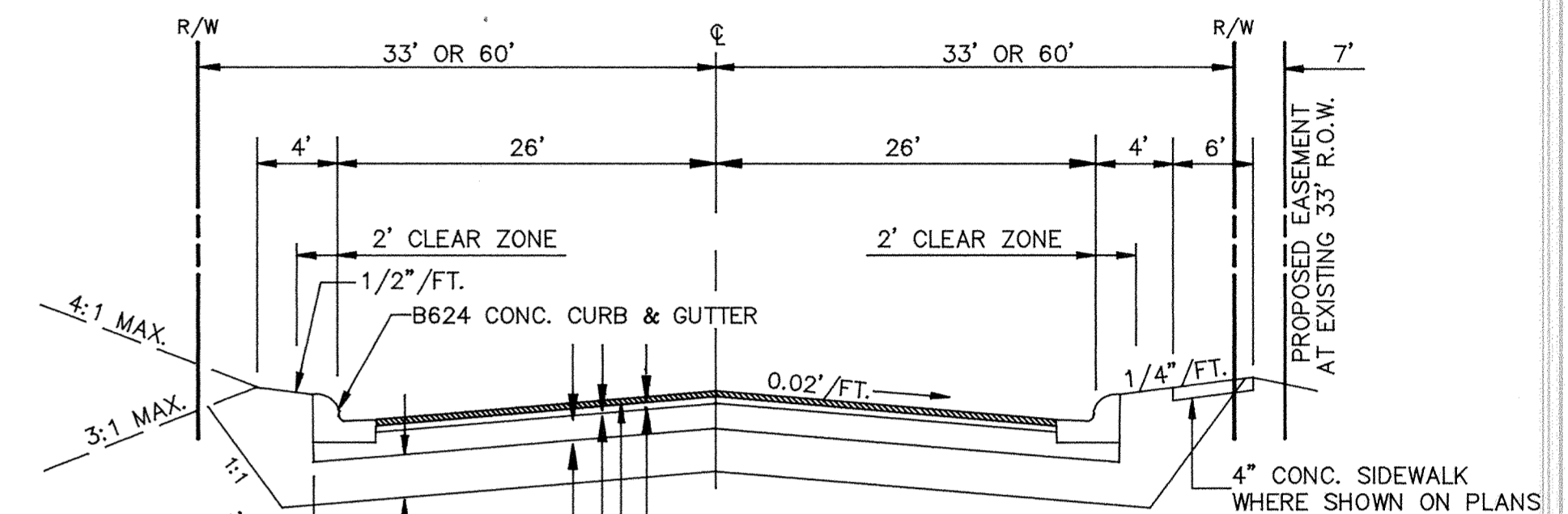
TYPICAL STREET SECTION
 ACCESS TO PUBLIC UTILITIES BUILDING



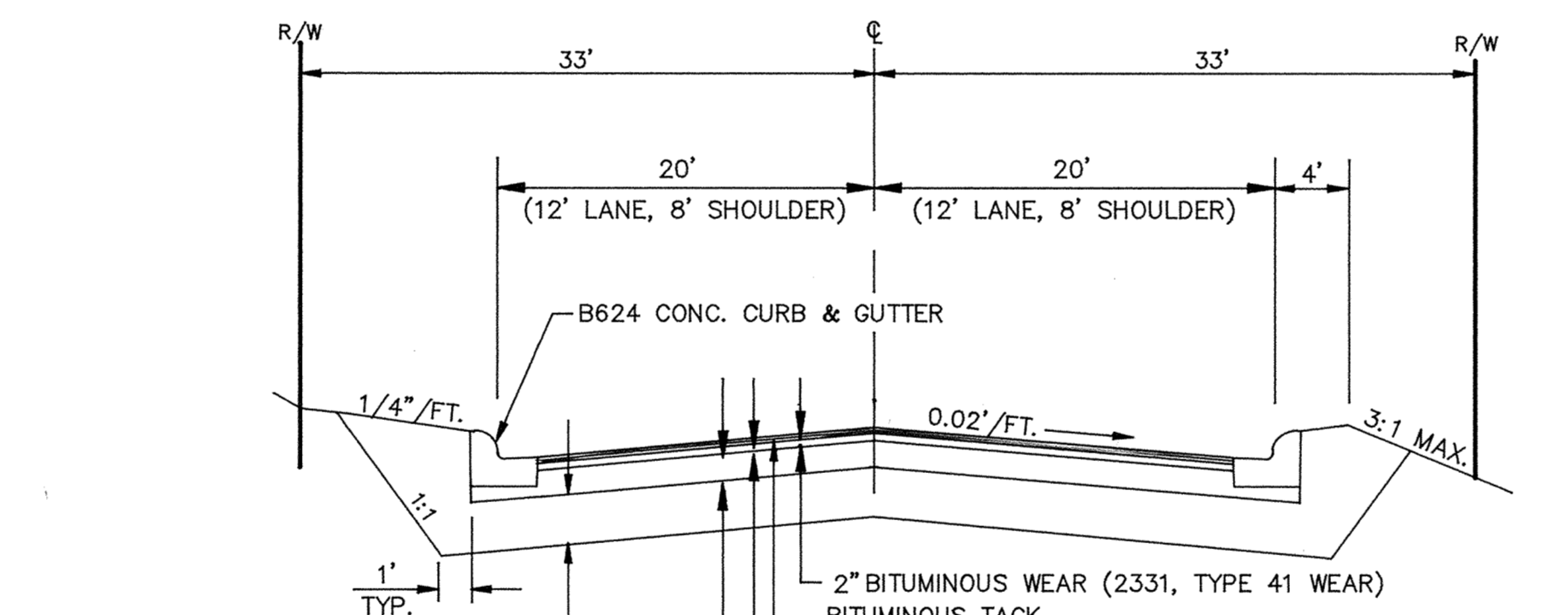
TYPICAL STREET SECTION
 C.S.A.H. NO. 1 (STA. 17+00 TO STA. 23+60)



TYPICAL STREET SECTION
 C.S.A.H. NO. 1 (SCHOOL ST. SOUTH TO 6TH ST.)



TYPICAL STREET SECTION
 C.S.A.H. NO. 1 (SCHOOL ST. NORTH TO STA. 17+00)



TYPICAL STREET SECTION
 CO. RD. 77 REALIGNMENT

STRIPING SCHEDULE

KEY	DESCRIPTION
1	4" SKIP WHITE LANE LINE (10' STRIPE, 40' GAP)
2	DOUBLE 4" YELLOW LANE LINE
3	4" SOLID WHITE LANE LINE
4	ONLY
5	9'6"
6	8'0"