

EARTHWORK SUMMARY

STATION	FINISHED GRADE	DISTANCE	COMMON EXCAVATION		EMBANKMENT		SUBBASE OF CRUSHED GRAVEL		STONE FILL TYPE I	
			AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME
BOX CUT										
0+12	700.3		30	0	0	25	0	0	0	0
0+50	698.6	38	41	50	0	14	13	0	0	0
0+75	697.35	25	15	26	30	14	13	0	0	0
1+00	696.1	25	0	7	150	14	83	13	0	0
1+25	694.85	25	10	5	150	13	13	29	13	13
1+50	693.6	25	0	5	120	13	12	23	24	24
1+75	692.35	25	0	0	35	11	11	33	26	26
2+00	691.1	25	0	0	40	12	21	24	24	24
2+50	688.6	50	0	0	37	11	19	2	5	5
3+00	688.1	50	0	0	19	10	19	3	3	3
3+50	684.5	50	3	3	14	10	18	0	2	2
4+00	684.6	50	0	0	17	9	16	2	11	11
4+50	685.5	50	0	0	9	8	19	10	9	9
5+00	686.3	50	8	7	0	21	23	0	0	0
5+50	686.4	50	0	0	23	13	24	0	0	0
6+00	685.8	50	0	0	34	13	24	0	0	0
6+50	685.1	50	0	0	23	13	40	0	0	0
7+00	684.3	50	0	0	50	30	38	0	0	0
7+50	683.5	50	0	0	6	11	20	0	5	5
8+00	685.0	50	0	0	22	11	19	5	17	17
8+50	686.4	50	0	0	20	9	17	13	13	13
9+00	686.6	33	0	0	14	9	11	1	1	1
9+33	685.96	17	15	9	0	9	6	0	0	0
9+50	685.4	17	7	7	8	9	0	0	0	0
10+00	683.0	50	0	0	34	11	4	8	8	8
10+27	681.8	23	0	0	34	11	12	9	9	9
10+50	680.7	40	0	0	25	11	8	6	6	6
10+90	681.0	10	0	0	5	12	4	0	0	0
11+00	681.4	27	27	5	2	12	11	0	2	2
11+25	682.1	5	43	8	0	12	2	4	1	1
11+30		20	0	0	0	12	8	4	3	3
11+50	683.0	3	7	1	0	9	1	5	1	1
11+53	683.0	0	0	0	0	0	0	0	0	0
PROJECT TOTALS			191 CY	1162 CY	516 CY	213 CY				

NOTE:
CHARLES GRENIER CONSULTING ENGINEER, P.C. WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS THAT ARISE FROM THE FAILURE OF THE CONTRACTOR TO FOLLOW THE PLANS, SPECIFICATIONS AND THE DESIGN INTENT THAT THE PLANS CONVEY.

LANDSCAPING SPECIFICATIONS SEEDING FORMULA, ITEM 651.15

% WT.	LBS./A.	NAME	PUR %	GERM %
37.5	30	CREeping RED FESCUE	88	85
31.25	25	KENTUCKY BLUE GRASS	85	75
31.25	25	PERENNIAL RYE GRASS	95	90
100.00	80			

THE SEED MIXTURE SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS WEED SEED.

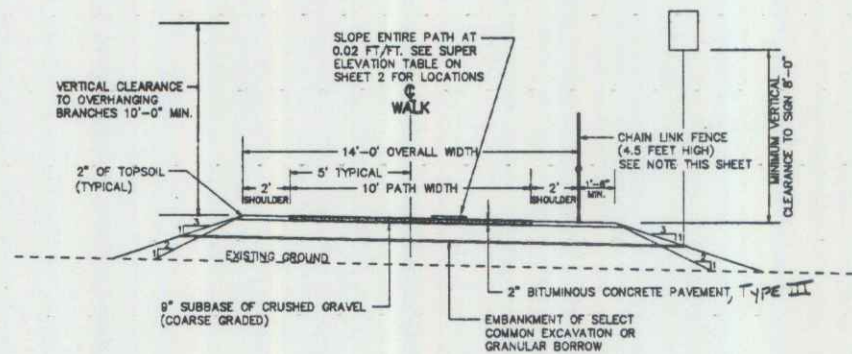
SEED - TO BE APPLIED PER SEEDING FORMULAS DIRECTED BY THE ENGINEER.

FERTILIZER - FORMULA 10-20-10 TO BE USED WITH SEED, APPLIED AT A RATE OF 500 LBS./ACRE.

AGRICULTURAL LIMESTONE - TO BE APPLIED AT THE RATE OF 2 TONS/ACRE OR AS DIRECTED BY THE ENGINEER.

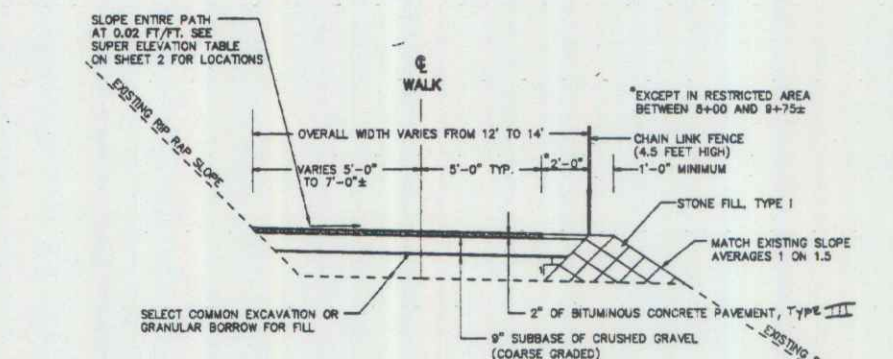
HAY MULCH - TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE, OR AS DIRECTED BY THE ENGINEER.

SLOPE ROUNDING - ALL CUT SLOPES TO BE ROUNDED IN ACCORDANCE WITH STANDARD SHEET B-5.



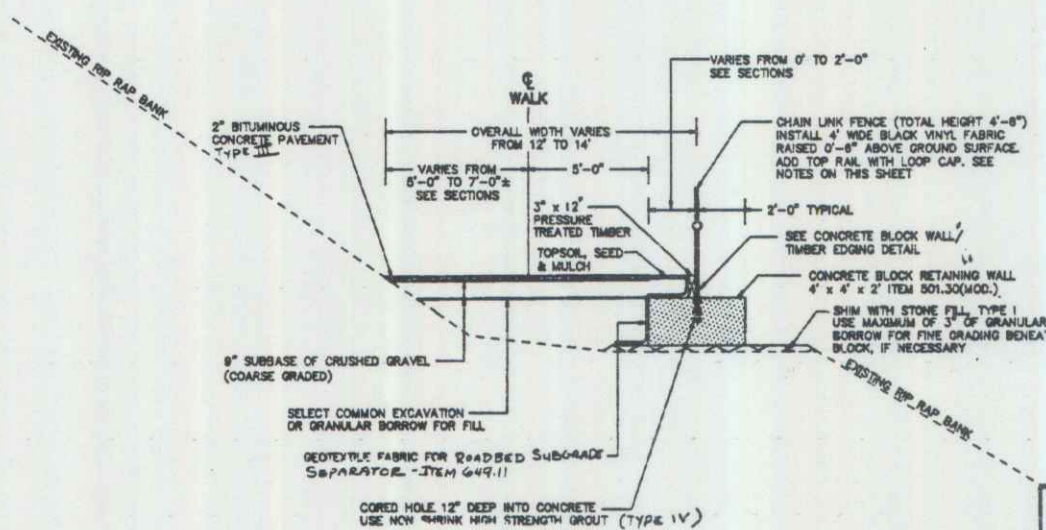
BIKE PATH TYPICAL

FOR STATION 0+00 TO 1+52 AND 5+00 TO 7+50



BIKE PATH TYPICAL

FOR STATIONS 4+44 TO 5+00 AND 7+50 TO 8+00



1. BECAUSE OF THE SHORTAGE OF AVAILABLE TOPSOIL, THE COMMON EXCAVATION WHICH INCLUDES THE TOPSOIL SHALL BE USED IN THE EMBANKMENT AREAS. NEW TOPSOIL SHALL BE TRUCKED onto THE SITE FOR USE ON THE FINISHED SLOPE WITH PAYMENT UNDER ITEM 651.35.

2. THE COST OF TRAFFIC CONTROL IS SUBSIDIARY TO OTHER PAY ITEMS. SEE STANDARDS E100, E101, E102, E106, E107, E107A, AND E110 FOR DETAILS.

3. THE BITUMINOUS CONCRETE PAVEMENT FOR THE PATH SHALL BE PLACED IN ONE 2" THICK LIFT.

4. ITEM 501.30 CONCRETE, CLASS C SHALL BE MODIFIED AS FOLLOWS:
THE CONCRETE BLOCK RETAINING WALLS SHALL BE CONSTRUCTED WITH LARGE CONCRETE BLOCKS WITH DIMENSIONS OF 4' x 4' x 2', OR 2' x 2' x 4'. A 1" DIMENSION TOLERANCE IS ALLOWED. THESE BLOCKS ARE TO BE CONSTRUCTED OF WASTE CONCRETE FROM AREA SUPPLIERS. THE BLOCKS SHALL BE PLACED WITH THE SMOOTHEST FACE OUTWARD. EACH BLOCK SHALL HAVE LIFTING HOOKS WHICH SHALL BE REMOVED AFTER THE BLOCKS ARE IN PLACE. NO REINFORCING STEEL IS NECESSARY. ALL COSTS ASSOCIATED WITH SUPPLYING, DELIVERING, AND PLACING THE BLOCKS AT THE LOCATION AND GRADE SHOWN ON THE PLANS IS INCLUDED IN THE PER CUBIC YARD COST FOR THIS ITEM. THE EXCAVATION NECESSARY TO SET THE BLOCK WALL SHALL BE INCLUDED IN THE COST OF COMMON EXCAVATION. THE COST OF BACKFILLING AGAINST THE BACK OR BASE OF THE WALLS HAS BEEN INCLUDED IN THE COST OF SUBBASE OF CRUSHED GRAVEL, OR STONE FILL, TYPE I.

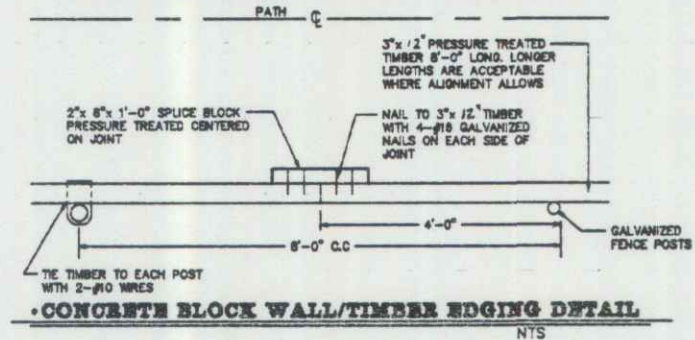
ESTIMATED QUANTITY:

1+52 TO 4+44 RIGHT (TOP ROW)	292' x 4' x 2' + 27' =	86.5 CY
1+58 TO 2+82 RIGHT (BOTTOM ROW)	124' x 4' x 2' + 27' =	36.7 CY
3+46 TO 3+54 LEFT	8' x 4' x 2' + 27' =	2.4 CY
3+46 TO 3+54 LEFT	8' x 2' x 2' + 27' =	1.2 CY
8+00 TO 11+20 RIGHT	320' x 4' x 2' + 27' =	94.8 CY
10+90 TO 11+26 LEFT (14 BLOCKS)	14 x 2' x 2' x 4' + 27' =	8.3 CY
TOTAL =		229.9 CY

ITEM 620.11 CHAIN LINKED FENCE, 4 FEET SHALL BE MODIFIED AS FOLLOWS.

STANDARD F2 SHALL BE FOLLOWED EXCEPT THAT THE POST SPACING SHALL BE 8'-0" CENTER TO CENTER THROUGHOUT THE PROJECT AS OPPOSED TO THE NORMAL SPACING OF 10'-0". THE FENCING MATERIAL SHALL BE BLACK VINYL COATED FABRIC. THE CHAIN LINK FABRIC SHALL MEET THE REQUIREMENTS OF 727.02. IN ADDITION, A 1-1/2" DIAMETER GALVANIZED TOP RAIL SHALL BE INSTALLED THROUGH A LOOP CAP ON TOP OF EACH POST. FROM STATION 1+52 TO 4+44 AND 8+00 TO 11+20 THE FENCING WILL BE INSTALLED BY DRILLING INTO THE CONCRETE BLOCK RETAINING WALL. THE BLOCKS ARE 4' IN LENGTH AND THE POSTS WILL BE 8' ON CENTER. THE POSTS SHALL BE DRILLED IN THE GEOMETRIC CENTER OF EACH OF THE 4' BLOCKS AND SHALL BE VERTICAL. A 2-1/4" MINIMUM DIAMETER HOLE SHALL BE DRILLED INTO EACH CONCRETE BLOCK TO A DEPTH OF 12". THE POST SHALL BE SET INTO THE HOLE AND PACKED WITH A NON SHRINK HIGH STRENGTH GROUT SUCH AS MASTERFLOW 713 (MASTER BUILDERS) OR EQUIVALENT. THE HEIGHT OF THE TOP BAR OF THE FENCE SHALL BE 4'-6" ABOVE THE GROUND SURFACE. A 4" WIDE SHEET OF WIRE FABRIC SHALL BE USED WITH A 6" SPACE AT THE BOTTOM ABOVE THE GROUND SURFACE. ALL COSTS ASSOCIATED WITH SUPPLYING AND INSTALLING THE 3" x 6" PRESSURE TREATED PLANK BETWEEN THE POSTS ON THE CONCRETE BLOCK RETAINING WALLS SHALL BE INCLUDED IN THE COST OF THIS ITEM. SEE DETAIL THIS SHEET. IT HAS BEEN ESTIMATED THAT THERE IS 612 FEET OF FENCING TO BE INSTALLED INTO THE CONCRETE BLOCK WALL AND 467 FEET INTO NORMAL GROUND AND/OR THE EXISTING RIP RAP. THE CONTRACTOR SHALL ALLOW FOR THE DIFFERENCE IN WORK DURING BIDDING.

*THIS TYPICAL WAS USED ALONG 800' LAKE FRONT WALL FOR BURLINGTON BIKE PATH



AUG 9 1994

JUN 30 1992



TOWN OF STOWE - RIVER WALK
EARTHWORK & TYPICAL SECTIONS

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DATE 10-25-91
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SCALE A/N
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