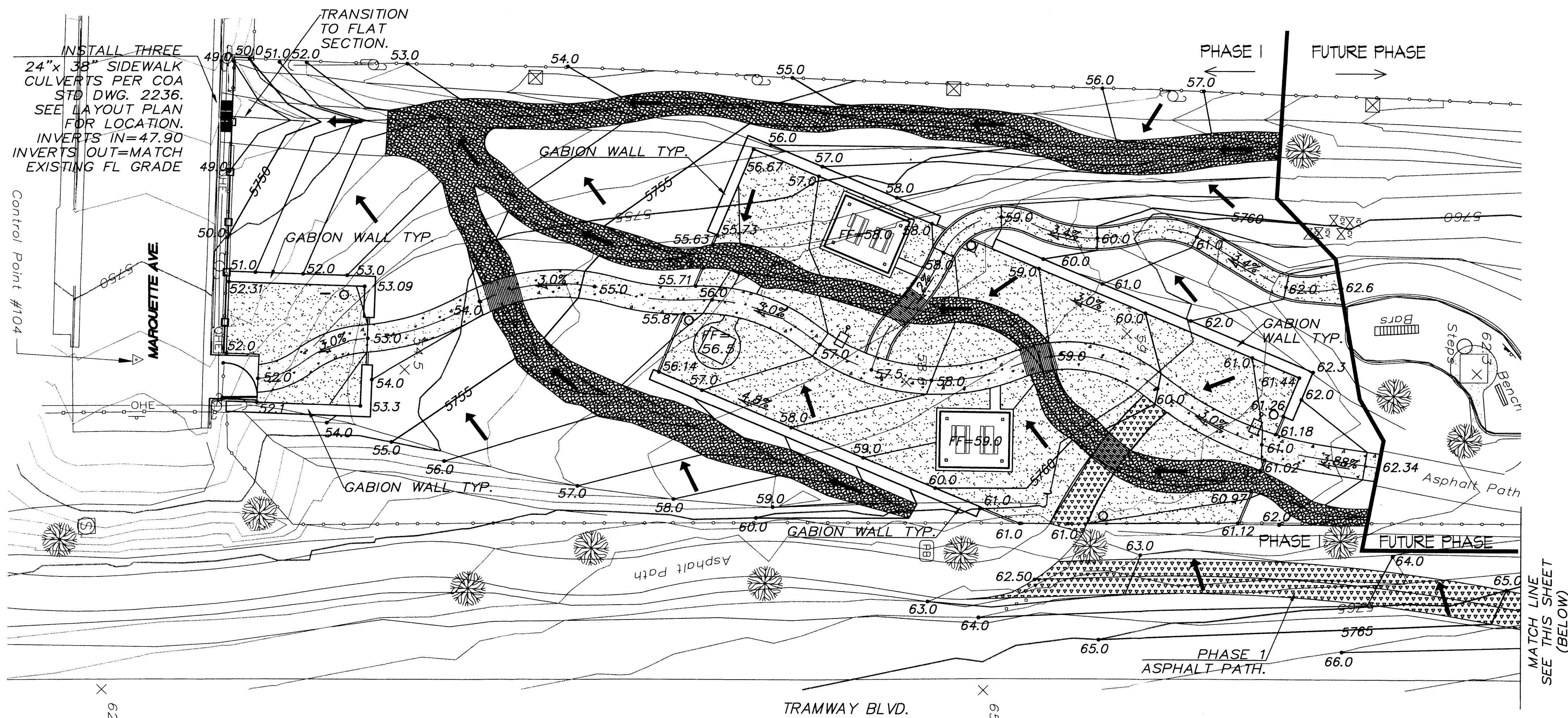
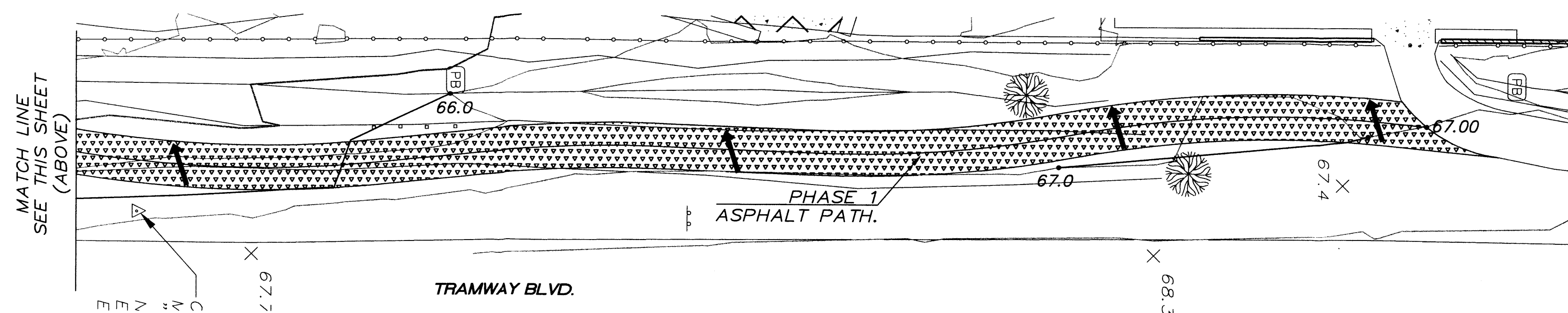
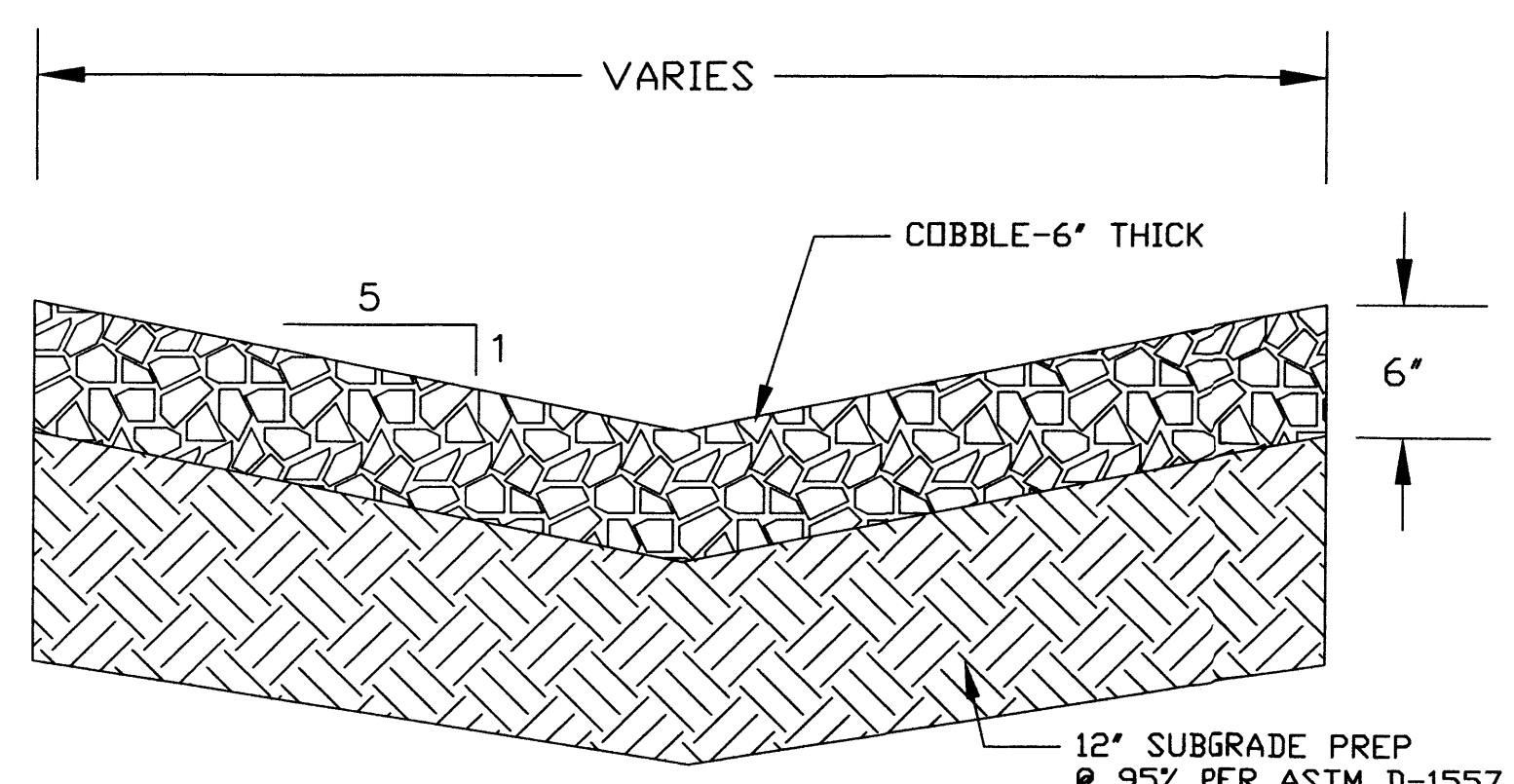




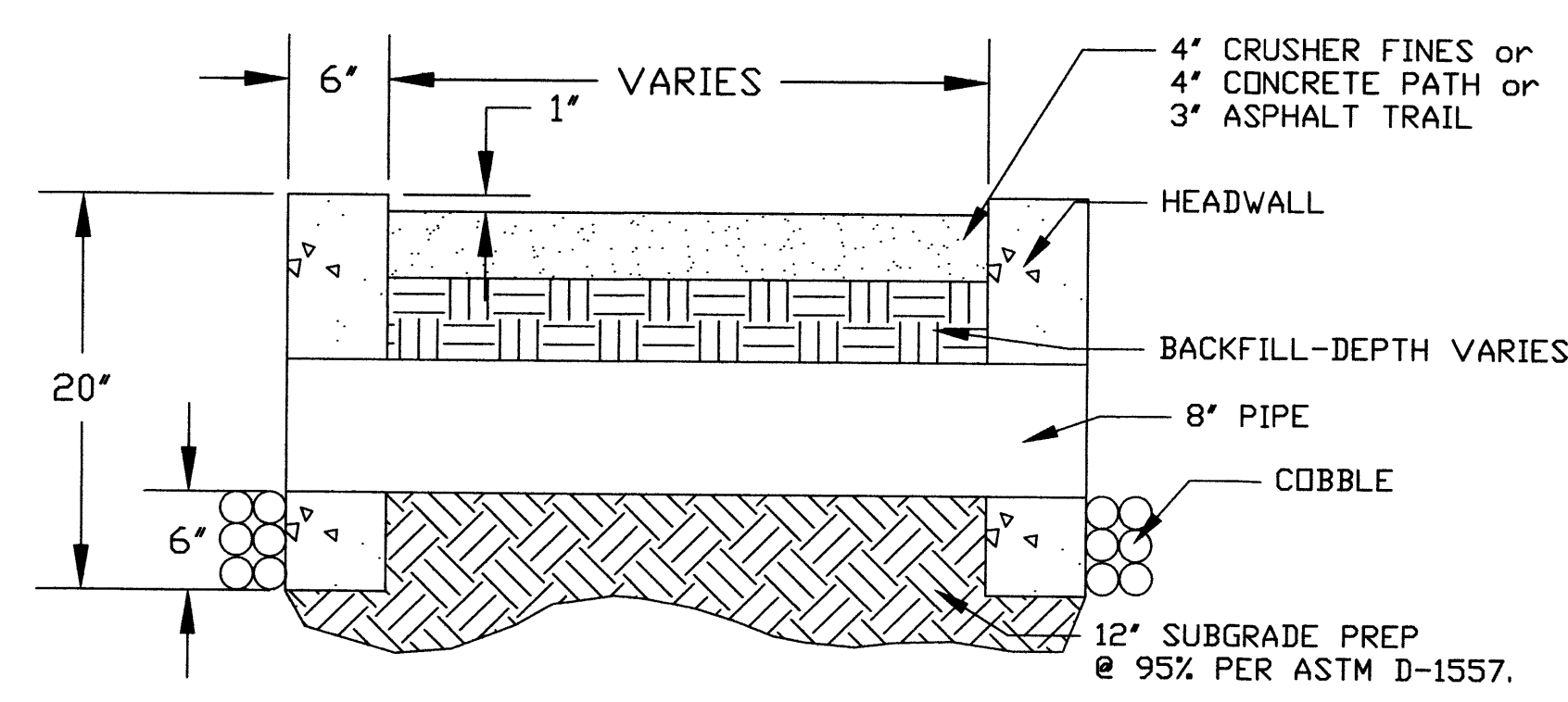
- LEGEND**
- PROPOSED 3" ASPHALT
 - PROPOSED 4" CONCRETE
 - PROPOSED 4" CRUSHER FINES
 - PROPOSED COBBLE SWALE
 - SWALE CROSSING STRUCTURE
 - 50.0 PROPOSED SPOT ELEVATION
 - 1.00% PROPOSED SLOPE
 - PROPOSED FLOW DIRECTION



- Drainage Facilities within City Right-of-Way Notice to Contractor (SO-19)**
1. An excavation permit will be required before beginning any work within City Right-Of-Way.
 2. All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations concerning construction safety and health.
 3. Two working days prior to any excavation, the contractor must contact the line locating service, New Mexico One Call 260-1990, (NM one call "811") for the location of existing utilities.
 4. Prior to construction, the contractor shall excavate and verify the locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
 5. Backfill compaction shall be according to traffic/street use.
 6. Maintenance of the facility shall be the responsibility of the owner of the property being served.
 7. Work on arterial streets shall be performed on a 24-hour basis.



TYPICAL SWALE SECTION
NOT TO SCALE



TYPICAL SWALE CROSSING DETAIL
NOT TO SCALE

SCALE: 1"=20'

RECEIVED FEB 25 2010

SEC JOB 696192

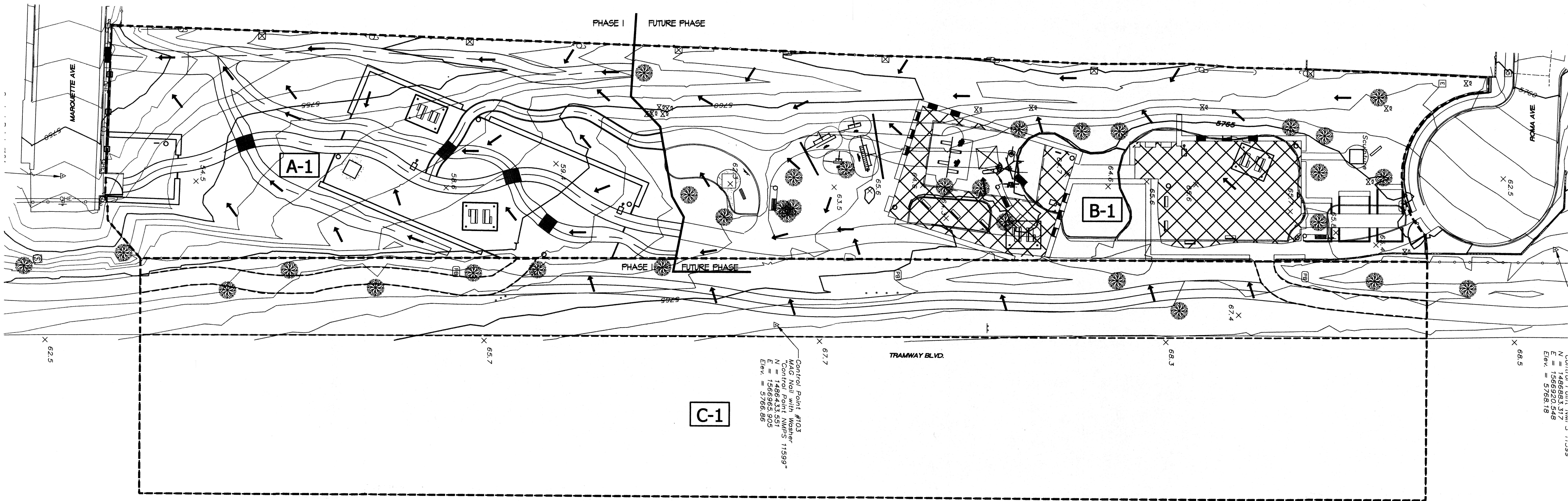
Smith Engineering Company
A Full Service Engineering Company
2000 New Mexico, N.E. Hwy. 24, Suite 200 Albuquerque, New Mexico 87112

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
PUBLIC ART PROGRAM

TITLE: TRAMWAY LINEAR PARK - PHASE I
GRADING PLAN

Design Review Committee City Engineer Approval

City Project No. 696192 Zone Map No. K-22 Sheet 9 of 13



GENERAL:

The Tramway Linear Park will be constructed for the City of Albuquerque Parks department. The proposed site is 2.11 acres in size and will be constructed in two phases. The site will include bike and pedestrian paths as well as seating areas. Future phases will include bike and pedestrian paths as well as playground equipment and to the west of Tramway Blvd. The zone atlas map is K-22-Z.

HYDROLOGIC ANALYSIS:

The project area is located in the City of Albuquerque in Bernalillo County on the north east side of Albuquerque. The project limits are Marquette Avenue to the south, Roma Avenue to the north and Tramway Boulevard to the east. The site is in Precipitation Zone 4. AHYMO was used to calculate the peak runoff and volume of runoff. The design storm was the 100-Year, 24-hour storm.

Existing conditions: The site is owned by the City of Albuquerque and is currently developed as a park. The existing ground slopes from east to west. The peak flow generated from the site is 9.30 cfs and the volume of runoff is 0.25 acre-feet.

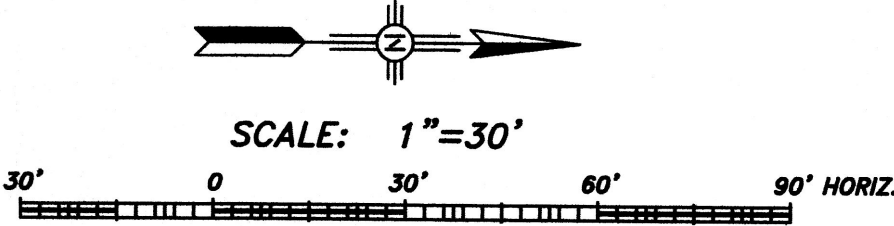
Phase 1 and 2 Conditions: The development of the proposed site is broken into phases. Phase 1 consist of bike and pedestrian paths as well as seating areas. Phase 2 will consist of bike and pedestrian paths as well as playground equipment and seating areas. Areas that do not receive new treatment will be landscaped. The peak flow generated from the revised land use of the site is 9.34 cfs (an increase of 0.04 cfs) and the volume of runoff is 0.25 acre-feet, an increase of 0.004 acre-feet. ALL of this increase will be directed to Marquette Ave. to the south of the site.

ONSITE BASIN HYDROLOGY - EXISTING CONDITIONS						
BASIN	AREA (ACRES)	LAND USE AREA (ACRES)				EXISTING Q100-YR (CFS)
		A	B	C	D	
PHASE 1	0.94	0	0.80	0	0.14	4.15
PHASE 1 & 2	2.11	0	1.80	0	0.31	9.30
OFFSITE	1.13	0	0.21	0	0.92	6.38
TOTAL	4.18					19.83

ONSITE BASIN HYDROLOGY – PHASE 1 AND 2 CONDITIONS								
	BASIN	AREA (ACRES)	LAND USE AREA (ACRES)				DEVELOPED Q 100–YR (CFS)	DEVELOPED VOLUME 100–YR (AC–FT)
			A	B	C	D		
PHASE 1	A–1	0.94	0	0.85	0	0.09	4.06	0.10
PHASE 1 & 2	B–1	2.11	0	1.77	0	0.34	9.34	0.25
OFFSITE	C–1	1.13	0	0.11	0	1.02	6.46	0.28
TOTAL		4.18					19.86	0.63

LEGEND

- A-1 BASIN DESIGNATION
BASIN BOUNDARY
FLOW ARROW

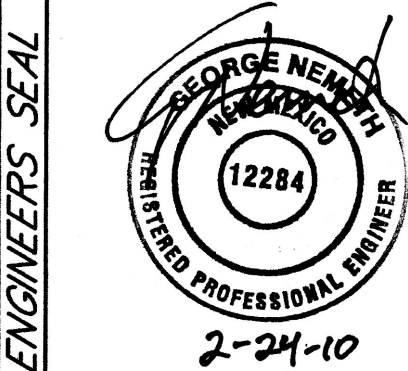


Drainage Facilities within City Right-of-Way Notice to Contractor (SO-19)

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4. Prior to construction, the contractor shall excavate and verify the locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
5. Backfill compaction shall be according to traffic/street use.
6. Maintenance of the facility shall be the responsibility of the owner of the property being served.
7. Work on arterial streets shall be performed on a 24-hour basis.

THIS PLAN SHEET IS FOR DRAINAGE INFORMATION ONLY.

SEC JOB # 109621	
Smith Engineering Company A Full Service Engineering Company	
CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT PUBLIC ART PROGRAM	
TITLE: TRAMWAY LINEAR PARK - PHASE 1 & PHASE 2 DRAINAGE PLAN	
Design Review Committee	City Engineer Approval
City Project No. 696192	Zone Map No. K-22
Sheet 10	Of 13



SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
NO.	DATE	CONTRACTOR	Coordinates shown herein are modified (surface)	CONTRACTOR	DATE
BY		WORK	N.M. State Plane Coordinates - Central Zone, NAD 83 and were derived by scaling State Plane grid coordinates by the project average combined factor of CF = 1.000365864 around an origin of 0.0. Elevations are NAVD 88, and are adjusted to the NGS control station "2-123, 1982" (published elevation = 5771.99'). The coordinates and elevations are US Survey Feet.	WORK	DATE
		INSPECTOR'S		INSPECTOR'S	DATE
		FIELD		FIELD	DATE
		VERIFICATION		VERIFICATION	DATE
		CORRECTED BY		CORRECTED BY	DATE
					DATE

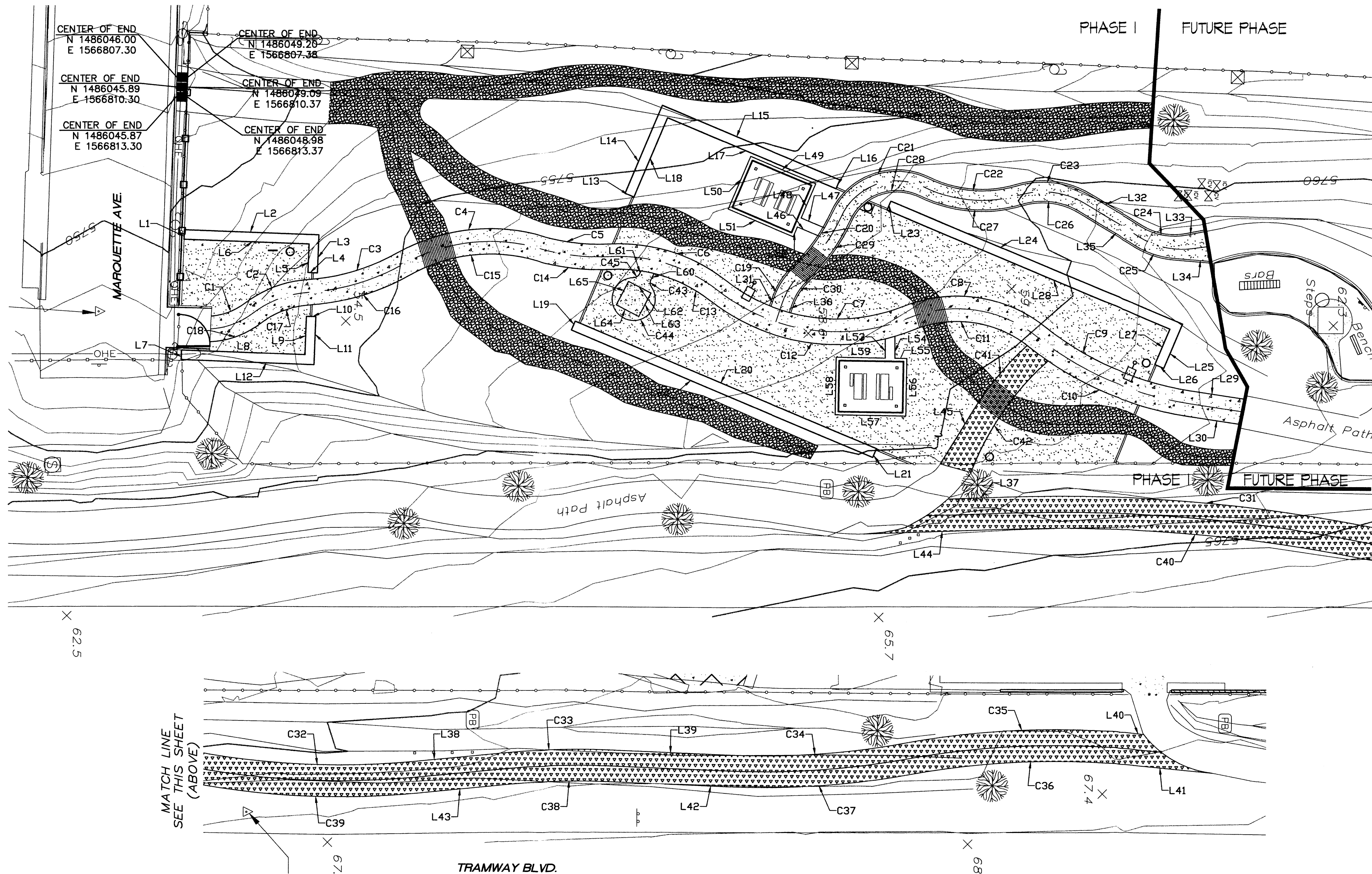
RECORD DRAWINGS

PROJECT #696192
JANUARY 14, 2010

TRAMWAY LINEAR PARK -
PHASE 1

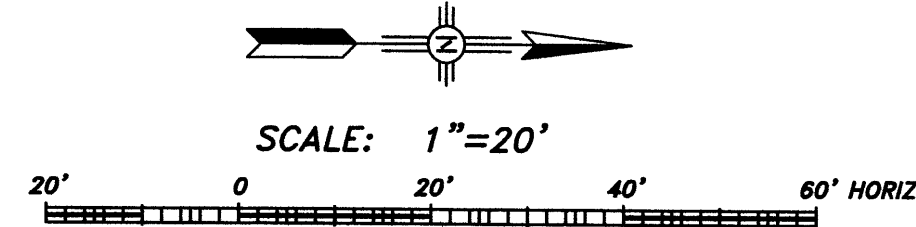
FINAL FOR CONSTRUCTION

LINE DATA TABLE				
NUMBER	LENGTH (FT.)	BEARING	Starting Northing/Easting	Ending Northing/Easting
L1	3.00	S87° 52' 25.45"E	N:1486048.37/E:1566855.23	N:1486048.26/E:1566858.23
L2	41.99	S2° 07' 34.55"W	N:1486090.33/E:1566856.79	N:1486048.37/E:1566855.23
L3	12.00	N87° 52' 25.45"W	N:1486089.89/E:1566868.78	N:1486090.33/E:1566856.79
L4	3.00	S2° 07' 34.55"W	N:1486089.89/E:1566868.78	N:1486086.89/E:1566868.67
L5	9.00	N87° 52' 25.45"W	N:1486086.89/E:1566868.67	N:1486087.22/E:1566859.67
L6	38.99	S2° 07' 34.55"W	N:1486087.22/E:1566859.67	N:1486048.26/E:1566858.23
L7	3.00	S87° 52' 25.45"E	N:1486047.50/E:1566893.01	N:1486047.39/E:1566896.01
L8	38.50	N2° 07' 34.55"E	N:1486047.50/E:1566893.01	N:1486085.98/E:1566894.44
L9	12.00	N87° 52' 25.45"W	N:1486085.98/E:1566894.44	N:1486086.42/E:1566882.45
L10	3.00	N2° 07' 34.55"E	N:1486086.42/E:1566882.45	N:1486089.42/E:1566882.56
L11	15.00	N87° 52' 25.45"W	N:1486088.87/E:1566897.55	N:1486089.42/E:1566882.56
L12	41.50	N2° 07' 34.55"E	N:1486047.39/E:1566896.01	N:1486088.87/E:1566897.55
L13	3.00	S22° 43' 33.23"W	N:1486188.73/E:1566844.88	N:1486185.97/E:1566843.73
L14	30.00	N67° 16' 26.77"W	N:1486185.97/E:1566843.73	N:1486197.56/E:1566816.05
L15	60.00	N22° 43' 39.55"E	N:1486197.56/E:1566816.05	N:1486252.90/E:1566839.23
L16	3.00	N67° 16' 26.77"W	N:1486251.74/E:1566842.00	N:1486252.90/E:1566839.23
L17	57.00	S22° 43' 39.59"W	N:1486199.16/E:1566819.98	N:1486199.16/E:1566819.98
L18	27.00	N67° 16' 26.77"W	N:1486188.73/E:1566844.88	N:1486199.16/E:1566819.98
L19	3.00	N87° 16' 26.77"W	N:1486169.37/E:1566886.65	N:1486170.53/E:1566883.88
L20	102.00	S22° 43' 33.23"W	N:1486264.61/E:1566923.29	N:1486170.53/E:1566883.88
L21	3.00	N67° 16' 26.77"W	N:1486263.46/E:1566926.05	N:1486264.61/E:1566923.29
L22	102.00	S22° 43' 33.23"W	N:1486263.46/E:1566926.05	N:1486169.37/E:1566886.65
L23	3.00	S67° 16' 26.77"E	N:1486268.79/E:1566845.89	N:1486267.63/E:1566848.66
L24	99.00	N22° 43' 39.55"E	N:1486268.79/E:1566845.89	N:1486360.11/E:1566884.14
L25	15.00	S67° 16' 26.77"E	N:1486360.11/E:1566884.14	N:1486354.31/E:1566897.98
L26	3.00	S22° 43' 33.23"W	N:1486354.31/E:1566897.98	N:1486351.54/E:1566896.82
L27	12.00	S67° 16' 26.77"E	N:1486356.18/E:1566885.75	N:1486351.54/E:1566896.82
L28	96.00	S22° 43' 39.59"W	N:1486356.18/E:1566885.75	N:1486267.63/E:1566848.66
L29	17.17	S8° 38' 47.87"W	N:1486378.31/E:1566915.50	N:1486361.34/E:1566912.92
L30	17.17	S8° 38' 47.87"W	N:1486378.31/E:1566915.50	N:1486361.34/E:1566912.92
L31	2.38	S71° 39' 48.77"E	N:1486232.31/E:1566876.67	N:1486231.56/E:1566878.92
L32	19.29	N31° 00' 05.33"E	N:1486330.57/E:1566843.83	N:1486347.11/E:1566853.77
L33	6.23	S10° 53' 06.05"E	N:1486367.30/E:1566855.09	N:1486361.18/E:1566856.27
L34	11.66	N4° 34' 32.86"E	N:1486357.50/E:1566863.80	N:1486369.12/E:1566864.53
L35	20.81	N31° 00' 05.33"E	N:1486327.48/E:1566848.98	N:1486345.31/E:1566859.69
L36	2.38	S71° 39' 48.77"E	N:1486238.00/E:1566878.55	N:1486237.25/E:1566880.81
L37	17.83	N2° 00' 08.96"W	N:1486286.89/E:1566938.95	N:1486304.70/E:1566938.33
L38	27.99	N5° 38' 13.31"W	N:1486486.06/E:1566949.95	N:1486513.91/E:1566947.20
L39	37.18	N1° 58' 57.77"E	N:1486547.78/E:1566946.12	N:1486584.93/E:1566947.41
L40	3.20	N5° 28' 29.81"E	N:1486710.51/E:1566940.03	N:1486713.70/E:1566940.34
L41	25.77	S5° 28' 29.81"W	N:1486735.22/E:1566952.45	N:1486709.56/E:1566949.99
L42	37.18	S1° 58' 57.77"W	N:1486584.93/E:1566957.40	N:1486547.43/E:1566956.11
L43	27.99	S5° 38' 13.31"E	N:1486514.89/E:1566957.15	N:1486487.04/E:1566959.90
L44	44.44	S2° 00' 08.96"E	N:1486305.05/E:1566948.32	N:1486260.64/E:1566949.87
L45	19.31	N58° 35' 11.22"W	N:1486284.46/E:1566928.02	N:1486294.53/E:1566911.54
L46	7.44	N22° 43' 33.23"E	N:1486239.72/E:1566853.95	N:1486246.59/E:1566856.83
L47	7.91	N22° 43' 33.23"E	N:1486240.88/E:1566851.19	N:1486248.18/E:1566854.24
L48	11.67	S67° 16' 26.77"E	N:1486245.39/E:1566840.43	N:1486240.88/E:1566851.19
L49	22.00	S22° 43' 33.23"W	N:1486245.39/E:1566840.43	N:1486225.10/E:1566831.93
L50	18.00	N67° 16' 26.77"W	N:1486218.14/E:1566848.53	N:1486225.10/E:1566831.93
L51	22.00	S22° 43' 33.23"W	N:1486238.44/E:1566857.03	N:1486218.14/E:1566848.53
L52	3.33	S67° 16' 26.77"E	N:1486239.72/E:1566853.95	N:1486238.44/E:1566857.03
L53	6.00	N90° 00' 00.00"W	N:1486267.22/E:1566894.95	N:1486267.22/E:1566894.95
L54	6.86	N90° 00' 00.00"W	N:1486270.22/E:1566894.99	N:1486270.22/E:1566894.99
L55	3.71	N0° 49' 30.26"E	N:1486270.22/E:1566894.99	N:1486273.93/E:1566895.05
L56	18.00	S89° 10' 29.74"E	N:1486273.93/E:1566895.05	N:1486273.67/E:1566913.05
L57	22.00	S0° 49' 30.26"W	N:1486273.67/E:1566913.05	N:1486251.67/E:1566912.73
L58	18.00	N89° 10' 29.74"W	N:1486251.67/E:1566912.73	N:1486251.93/E:1566894.73
L59	15.29	N0° 49' 30.26"E	N:1486251.93/E:1566894.73	N:1486267.22/E:1566894.95
L60	2.31	N62° 45' 59.29"W	N:1486194.09/E:1566870.85	N:1486195.15/E:1566868.80
L61	1.15	S62° 45' 59.29"E	N:1486191.06/E:1566868.00	N:1486190.54/E:1566869.02
L62	7.93	N27° 14' 00.71"E	N:1486187.13/E:1566871.34	N:1486194.18/E:1566874.97
L63	8.30	S62° 45' 59.29"E	N:1486194.18/E:1566874.97	N:1486190.39/E:1566882.35
L64	7.93	S27° 14' 00.71"W	N:1486190.39/E:1566882.35	N:1486183.33/E:1566878.72
L65	8.30	N62° 45' 59.29"W	N:1486183.33/E:1566878.72	N:1486187.13/E:1566871.34



CURVE DATA TABLE						
NUMBER	DELTA ANGLE	CHORD DIRECTION	TANGENT (FT.)	RADIUS (FT.)	ARC LENGTH (FT.)	CHORD LENGTH (FT.)
C1	32°52'17"	N21° 14' 56"W	5.90'	20.00	11.47	11.32
C2	33°51'59"	S20° 45' 05"E	10.96'	38.00	21.28	20.97
C3	25°45'32"	N16° 41' 52"W	14.86'	65.00	29.22	28.98
C4	45°53'35"	S6° 37' 50"E	24.98'	59.00	47.26	46.00
C5	19°43'11"	N6° 27' 22"E	10.60'	61.00	20.99	20.89
C6	41°22'23"	S17° 16' 58"W	20.39'	54.00	38.99	38.15
C7	60°02'00"	N7° 57' 09"E	32.35'	56.00	58.68	56.03
C8	60°42'00"	S8° 17' 09"W	25.78'	44.00	46.61	44.46
C9	29°59'22"	N23° 38' 29"E	25.71'	96.00	50.25	49.68
C10	29°59'22"	N23° 38' 29"E	27.86'	104.00	54.43	53.82
C11	60°42'00"	S8° 17' 09"W	21.08'	36.00	38.14	36.38
C12	60°02'00"	N7° 57' 09"E	36.98'	64.00	67.06	64.03
C13	41°22'23"	S17° 16' 58"W	17.37'	46.00	33.22	32.50
C14	19°43'11"	N6° 27' 22"E	11.99'	69.00	23.75	23.63
C15	45°53'35"	S6° 37' 50"E	21.59'	51.00	40.85	39.77
C16	25°45'32"	N16° 41' 52"W	16.69'	73.00	32.82	32.54
C17	33°51'59"	S20° 45' 05"E	8.52'	28.00	16.55	16.31
C18	34°59'10"	N20° 11' 29"W	8.82'	28.00	17.10	16.83
C19	27°09'19"	S58° 05' 10"E	8.04'	25.00	11.85	11.74
C20	20°48'52"	N54° 54' 57"W	10.84'	59.00	21.43	21.32
C21	91°28'04"	S19° 35' 21"E	22.57'	22.00	35.12	31.51
C22	42°48'25"	N4° 44' 29"E	14.89'	38.00	28.39	27.73
C23	47°45'12"	S7° 12' 52"W	12.39'	28.00	23.34	22.67

CURVE DATA TABLE						
NUMBER	DELTA ANGLE	CHORD DIRECTION	TANGENT (FT.)	RADIUS (FT.)	ARC LENGTH (FT.)	CHORD LENGTH (FT.)
C24	41°53'11"	N10° 03' 30"E	7.65'	20.00	14.62	14.30
C25	26°25'32"	N17° 47' 19"E	6.57'	28.00	12.91	12.80
C26	47°45'12"	S7° 12' 52"W	9.74'	22.00	18.34	17.81
C27	42°48'25"	N4° 44' 29"E	17.25'	44.00	32.87	32.11
C28	91°28'04"	S19° 35' 21"E	16.42'	16.00	25.54	22.92
C29	20°48'52"	N54° 54' 57"W	11.94'	65.00	23.61	23.48
C30	27°09'19"	S58° 05' 10"E	4.59'	19.00	9.00	8.92
C31	12°44'00"	S4° 21' 51"W	56.35'	505.00	112.23	112.00
C32	16°22'04"	N2° 32' 49"E	35.23'	245.00	69.99	69.75
C33	7°37'11"	S1° 49' 38"E	16.98'	255.00	33.91	33.89
C34	12°40'33"	N4° 21' 19"W	27.21'	245.00	54.20	54.09
C35	16°10'05"	S2° 36' 33"E	36.22'	255.00	71.96	71.72
C36	16°10'05"	S2° 36' 33"E	34.80'	245.00	69.14	68.91
C37	12°40'33"	N4° 21' 19"W	28.32'	255.00	56.42	56.30
C38	7°37'11"	S1° 49' 38"E	16.32'	245.00	32.58	32.56
C39	16°22'04"	N2° 32' 49"E	36.67'	255.00	72.85	72.60
C40	12°44'00"	S4° 21' 51"W	55.23'	495.00	110.01	109.78
C41	15°39'38"	S50° 45' 22"E	13.48'	98.00	26.79	26.70
C42	27°12'54"	S55° 36' 13"E	21.79'	90.00	42.75	42.35
C43	62°45'35"	N85° 51' 13"E	1.22'	2.00	2.19	2.08
C44	305°31'09"	N27° 14' 01"E	3.47'	6.74	35.93	6.17
C45	62°45'35"	N31° 23' 12"W	1.22'	2.00	2.19	2.08



SEC JOB # 109621

Smith Engineering Company

A Full Service Engineering Company

800 Rue Piche, P.E. Box 40, Delta BC, V9B 5Y5

CITY OF ALBUQUERQUE

DEPARTMENT OF MUNICIPAL DEVELOPMENT

PUBLIC ART PROGRAM

TITLE:

TRAMWAY LINEAR PARK - PHASE 1

LAYOUT PLAN

Design Review Committee

City Engineer Approval

City Project No.

696192

Zone Map No.

K-22

Sheet

11

of

13

CONTRACTOR

AS BUILT INFORMATION

CONTRACTOR

AS BUILT INFORMATION

CONTRACTOR

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