

SUMMARY OF SURFACING QUANTITIES

NOTE: Quantities shown in the summaries for surface materials are theoretical and used for estimating purposes only. Actual spreads shall be varied as required to obtain the depths of the various courses shown on the typical section sheet.

ITEM	TOTAL	UNIT
<u>TYPE 2 CLASS B AGGREGATE BASE</u> (Quantities include 8% by weight for moisture content).		
<u>6" DEPTH</u>		
Foundation blanket under R.C.B.'s (Moana Ln.) 6,555 sq. yds. @ 0.3330 tons per sq. yd. (cul-de-sac - Gentry Way) 1,028 sq. yds. @ 0.3330 tons per sq. yd.	497 2,183 343	Ton Ton Ton
<u>2" DEPTH</u>		
Area under sidewalks (Moana & Plumb) Median (Moana Ln.)	86 36	Ton Ton
<u>4" DEPTH</u>		
(Plumb Ln.) 17,795 sq. yds. @ 0.2214 tons per sq. yd. (Area under curbs - Plumb Ln.) 471 sq. yds	3,940 104	Ton Ton
<u>13" DEPTH</u>		
(Median islands - Plumb Ln.) 690 sq. yds.	498	Ton
<u>9" DEPTH</u>		
(Median island - Plumb) (Area under curbs - Moana)	625 174	Ton Ton
<u>PLATMIX BITUMINOUS SURFACE</u> <u>(TYPE II)</u>		
<u>9" DEPTH</u>		
(Moana Ln.) 6,555 sq. yds. @ 0.4624 tons per sq. yd. (Patching) 30 sq. yds.	3,031 14	Ton Ton
<u>6" DEPTH</u>		
(Plumb Ln.) 17,795 sq. yds. @ 0.309 tons per sq. yd. (cul-de-sac) 972 sq. yds.	5,499 300	Ton Ton
<u>2" DEPTH</u>		
(Median Moana Ln.) 320 sq. yds. (Median Plumb Ln.) 690 sq. yds.	33 72	Ton Ton
	8,949 8,950	Ton Ton
	TOTAL USE TOTAL	

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THEORETICAL APPLICATION OF SURFACING MATERIALS

Emulsified Asphalt, Type SS-1h (Diluted)
(Tack Coat) (Open-Graded Surface)
Emulsified Asphalt, Type SS-1h (Diluted)
(Tack Coat) (Plantmix Surface)
Asphalt Cement, Grade AR-4000 (Plantmix Surface)
Asphalt Cement, Grade AR-4000 (Open-Graded)
Mineral Filler
Liquid Asphalt, Type MC-70 (Prime)
Liquid Asphalt, Type MC-250 (Seal Coat, Median
Islands & Cul-de-sac)
Plantmix Bituminous Open-Graded Surface,
Aggregate & Asphalt
Specific Gravity Used

.07 gal. per sq. yd.
.05 gal. per sq. yd.
6.0 percent
6.5 percent
1.0 percent
0.375 gal. per sq. yd.
0.125 gal. per sq. yd.
70 lb. per sq. yd.
2.44

SUMMARY OF EARTHWORK

ITEM	TOTAL	UNIT
<u>Roadway Excavation:</u> (Main Line) (Ramps) (Moana Ln.) (Plumb Ln.)	9,012 2,221 2,577* 2,120**	cu. yds. cu. yds. cu. yds. cu. yds.
* Includes 75 cu. yds. from (cul-de-sac - "p" Line) ** To be placed minimum of 2' under main line subgrade	TOTAL USE TOTAL	cu. yds. cu. yds.
<u>Borrow:</u> ***Main Line Soundwall Berms Ramps	238,065 13,021 44,620	cu. yds. cu. yds. cu. yds.
***Includes quantity for 12" blanket over drain backfill	TOTAL USE TOTAL	cu. yds. cu. yds.
<u>Selected Borrow:</u> Structure I-1248 (Moana)	17,965	cu. yds.
	TOTAL USE TOTAL	cu. yds. cu. yds.
<u>Drain Backfill:</u> Main Line (12" min. blanket over fabric) French Drains & P.C.M.P. Pipe Foundation Material, Type B (R.C.B.'s)	13,800 1,970 1,570	cu. yds. cu. yds. cu. yds.

SUMMARY OF PLANTMIXING MISCELLANEOUS AREAS

ITEM	TOTAL	UNIT
Median Islands (Moana & Plumb) Patching Around Median & Traffic Islands (Moana & Plumb)	1,013 30	sq. yds. sq. yds.
	TOTAL USE TOTAL	sq. yds. sq. yds.

SUMMARY OF CONSTRUCTION SIGNS AND BARRICADES

NOTE: Quantities shown are approximate and are subject to increase or decrease. Additional signs, not listed, may be required as directed by the engineer.

SIGN NO. & MESSAGE	PANEL SIZE	NO. OF SIGNS	SQ. FT. OF EACH	TOTAL SQ. FT.
G20-1 (Road Construction)	60" x 36"	2	15.00	30.00
G20-2 (End Construction)	60" x 24"	4	10.00	40.00
W13-1 (Advisory Speed Plate)	24" x 24"	2	4.00	8.00
W20-1 (Road Construction Ahead)	48" x 48"	7	16.00	112.00
W20-5 (Rt. Lane Closed Ahead)	48" x 48"	2	16.00	32.00
W20-5 (Lt. Lane Closed Ahead)	48" x 48"	2	16.00	32.00
W20-7 (Flagman Ahead)	48" x 48"	4	16.00	64.00
W21-2 (Fresh Oil)	30" x 30"	3	6.25	18.75
R-11-2 (Street Closed)	48" x 30"	4	10.00	40.00
W8-6 (Truck Crossing)	30" x 30"	2	6.25	12.50
R-1-1 (Stop)	30" x 30"	1	6.25	6.25
R-11-3 (Street Closed 1000' Ahead, Local Traffic Only)	60" x 30"	4	12.50	50.00
			TOTAL USE TOTAL	509.50 510.00

TYPE II BARRICADES (EACH)	BARRICADE WARNING LIGHTS (TYPE A) (EACH)	TRAFFIC CONES (EACH)	TYPE III BARRICADES (LIN. FT.)
30	30	125	22@ 10' = 220'

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GENERAL NOTES

1. Alignment and grades are subject to adjustment by the engineer. Field adjustment of line or grade shall not reduce sight distance below minimum requirements of adopted design.
2. Depth of base and surface is compacted thickness.
3. Location of underground utilities as shown on the plans is approximate only. It shall be the responsibility of the contractor to contact the utility company for the exact location and depth of the utility.
4. Construction signs and barricades shall conform to the requirements of the M.U.T.C.D., 1971 Edition, and Nevada's supplement thereto.
5. Final location of driveway and curb cut ramps are to be determined by the engineer at time of construction.
6. State forces shall furnish and install all mileposts.
7. For location of structure details see storm drain schedule.

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ESTIMATE OF QUANTITIES
Quantities Shown are Approximate Only and are Subject to Increase or Decrease
TO BE CONTRACTED

ITEM NO.	TOTAL	UNIT	ITEM	FED. RD. REG. NO.	STATE	PROJECT NO.	COUNTY	SHEET NO.
110 0100	3,000	hour	Training (3 Trainees)	9	NEVADA	I-580-1(5)1	WASHOE	3C
201 6010	F.A.	---	Urban Clearing					
202 2800	18,690	sq yd	Removal of Bituminous Surface					
202 3100	15,510	sq yd	Removal of Base Course					
202 3400	93	sq yd	Removal of Sidewalk					
202 3600	6,280	lin ft	Removal of Curb and Gutter					
202 4300	8	each	Removal of Manholes					
202 4401	1	each	Removal of Portion of Drop Inlet					
202 6300	1,390	lin ft	Removal of Chain Link Fence					
202 6400	615	lin ft	Removal of Median Islands					
203 0100	15,930	cu yd	Roadway Excavation					
203 0200	370	cu yd	Drainage Excavation					
203 0501	295,710	cu yd	Borrow					
203 0601	17,970	cu yd	Selected Borrow					
203 1601	1,570	ton	Foundation Material, Type B					
206 0100	25,810	cu yd	Structure Excavation					
207 0200	22,500	cu yd	Granular Backfill					
209 0100	15,770	cu yd	Drain Backfill					
211 1100	30,950	sq yd	Nonwoven Fabric					
213 0002	1,620	lin ft	1/4-inch Polyvinyl Chloride Pipe (Flexible)					
213 0107	1,550	lin ft	3/4-inch Polyvinyl Chloride Pipe					
213 0110	1,390	lin ft	1-inch Polyvinyl Chloride Pipe					
213 0112	200	lin ft	1-1/4-inch Polyvinyl Chloride Pipe					
213 0115	130	lin ft	1-1/2-inch Polyvinyl Chloride Pipe					
213 0120	780	lin ft	2-inch Polyvinyl Chloride Pipe					
213 0303	225	each	Sprinkler (Type C) (Pop-up)					
213 0611	7	each	Concrete Valve Box					
213 6005	6	each	1/2-inch Gate Valve					
213 6608	1	each	Eight Station Automatic Controller					
213 6815	6	each	1-1/2-inch Hydraulic Control Valve					
213 7005	13	each	1/2-inch Automatic Ball Check Drain Valve					
213 8915	1	each	1-1/2-inch Backflow Preventer Assembly (Type B)					
213 9702	F.A.	---	Adjust Irrigation System					
302 0200	8,490	ton	Type 2 Class B Aggregate Base					
401 0100	98	ton	Mineral Filler					
402 0400	590	ton	Asphalt Cement Grade AR-4000					
402 4020	8,950	ton	Plantmix Bituminous Surface Aggregate (Type 2)					
402 5000	1,050	sq yd	Plantmix Bituminous Areas					
403 2375	810	ton	Plantmix Bituminous Open-Graded Surface Aggregate (3/8-inch)					
405 5430	14	ton	Emulsified Asphalt, Type SS-lh (Diluted)					
406 3100	39	ton	Liquid Asphalt, Type MC-70					
407 3200	2	ton	Liquid Asphalt, Type MC-250					
407 9000	8	ton	Sand Blotter					
495 0100	Lump Sum	---	Prestressing Cast-in-Place Concrete					
502 0110	1,575	cu yd	Class AA Concrete (Major)					
502 0111	39	cu yd	Class AA Concrete (Minor)					
502 0671	238	lin ft	Compression Joint Seal					
502 3110	1,306	cu yd	Class AA Concrete, Modified (Major)					
502 3410	37	cu yd	Class DA Concrete, Modified (Major)					
502 3510	813	cu yd	Class EA Concrete, Modified (Major)					
505 0100	533,210	lb	Reinforcing Steel					
505 0101	115,020	lb	Reinforcing Steel (Epoxy Coated)					
505 0200	1,380	sq yd	Mesh Reinforcing					
506 0100	800	lb	Structural Steel					
508 0700	1,350	lin ft	Furnish Cast in Drilled Hole					
603 0013	1,402	lin ft	Concrete Piles					
603 0015	576	lin ft	12-inch Reinforced Concrete Pipe, Class III					
603 0033	2,421	lin ft	12-inch Reinforced Concrete Pipe, Class V					
603 0053	1,628	lin ft	18-inch Reinforced Concrete Pipe, Class III					
603 0055	264	lin ft	24-inch Reinforced Concrete Pipe, Class III					
603 0093	221	lin ft	36-inch Reinforced Concrete Pipe, Class III					
603 0163	395	lin ft	60-inch Reinforced Concrete Pipe, Class III					
603 9900	F.A.	---	Locate Existing Waterline					
605 0093	256	lin ft	10-inch Corrugated Aluminum Pipe					
607 0240	1,080	lin ft	24-inch Perforated Corrugated Metal Pipe for Underdrains					
608 0150	2	each	Anchor Assembly					
608 0281	38	lin ft	8-inch Downdrain Pipe (Dipped)					
609 0200	6,100	lb	Structural Steel Grates					
609 0403	2	each	Pipe Riser Inlet, Type 3					
609 0481	8	each	48-inch Precast Reinforced Concrete Manhole, Type 1					
609 0484	5	each	48-inch Precast Reinforced Concrete Manhole, Type 4					

ESTIMATE OF QUANTITIES (Cont.)

ITEM NO.	TOTAL	UNIT	ITEM
609 2000	3	each	Special Manhole
611 0111	130	cu yd	Class AA Concrete Slope Pavement
613 1113	4,870	lin ft	Class AA Concrete Curb (Type 3)
613 1311	3,250	lin ft	Class AA Concrete Curb and Gutter (Type 1)
613 1318	270	lin ft	Class AA Concrete Curb and Gutter (Type 8)
613 1414	840	sq yd	Class AA Concrete Sidewalk (4-inch)
616 2720	4,450	lin ft	72-inch Chain Link Fence
616 5100	7	each	10-Foot Metal Drive Gate
616 8000	2,430	lin ft	Reconstruct Fence
619 0602	11	each	Object Markers, Type 2
620 0100	27	each	Right of Way Markers
621 0200	10	each	Survey Monuments
623 0110	475	lin ft	1-inch Conduit
623 0115	1,945	lin ft	1-1/2-inch Conduit
623 0120	1,370	lin ft	2-inch Conduit
623 0130	630	lin ft	3-inch Conduit
623 1008	1,800	lin ft	No. 8 Conductor
623 1010	880	lin ft	No. 10 Conductor
623 1266	3,200	lin ft	6 Pair Conductor No. 16 Cable
623 2035	18	each	No. 3-1/2 Pull Box
623 2050	13	each	No. 5 Pull Box
623 2100	14	each	Junction Box
623 3004	2	each	Mercury Vapor Luminaire, 400 Watt
623 3103	10	each	Sodium Vapor Luminaire, 250 Watt
623 4071	8	each	Steel Pole, Type 7 with Safety Base
623 7000	60	each	Loop Detector (6-Foot x 6-Foot)
623 7001	5	each	Loop Detector (A)
623 7100	2,280	lin ft	Lead-in Cable for Loop Detectors
623 7504	2	each	Modify Traffic Actuated Controller
624 0200	3,500	hour	Flagman
624 0400	F.A.	---	Maintain Base
625 0110	510	sq ft	Rent Construction Signs
625 0112	220	lin ft	Rent Construction Barricades (Type III)
625 0113	30	each	Rent Construction Barricades (Type II)
625 0114	125	each	Rent Traffic Cones
625 0117	30	each	Rent Barricade Warning Lights (Type A)
627 0110	49	sq ft	Permanent Signs (Ground Mounted) (Metal Supports)
627 0140	58	sq ft	Permanent Signs, Remove
628 0100	Lump Sum	---	Mobilization
633 0304	289	sta	Temporary Pavement Striping/Tape (Pilot Line - 25 ft)
637 0001	F.A.	---	Temporary Pollution Control
637 0100	68	ton	Dust Palliative
638 0080	660	lin ft	8-inch Ductile Iron Pipe
638 0120	260	lin ft	12-inch Ductile Pipe
638 0160	280	lin ft	16-inch Ductile Iron Pipe
638 0180	762	lin ft	18-inch Ductile Iron Pipe
640 0100	47,690	sq ft	Masonry Retaining Wall

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