

**BTCA Area H – Snow Storage Areas.**

This ASCA consists of 8 areas where snow removed from the roads will be stored while it melts. The areas are shown on Plates 7-1 and a description of the roads treated by the areas is described below.

- Area 1. This area stores snow from the primary haul road.
- Area 2. This area stores snow from the #3 mine access road between the WHR turnoff and the bin.
- Area 3. This area stores snow from the #3 mine access road between the bin and the switchback above the bin.
- Area 4. This area stores snow from the #3 mine access road starting at the switchback above the bin and going up to halfway between the switchback above the bin and the WHR TS turnoff.
- Area 5. This area stores snow from #3 mine access road starting halfway between the switchback above the bin and the WHR Tank Seam turnoff and going up to the WHR Tank Seam turnoff.
- Area 6. This area stores snow from the #3 Mine pad and the road between the #3 mine pad and the WHR tank seam turnoff.
- Area 7. This area stores snow from the road from the WHR Tanks Seam turnoff to the last switchback below the #4 pad.
- Area 8. This area stores snow from the #4 mine pad the the access road between the last switchback and the # 4 pad.

Run-off from these areas will only be treated while snow is stored there. The treatments for each of the areas is described below.

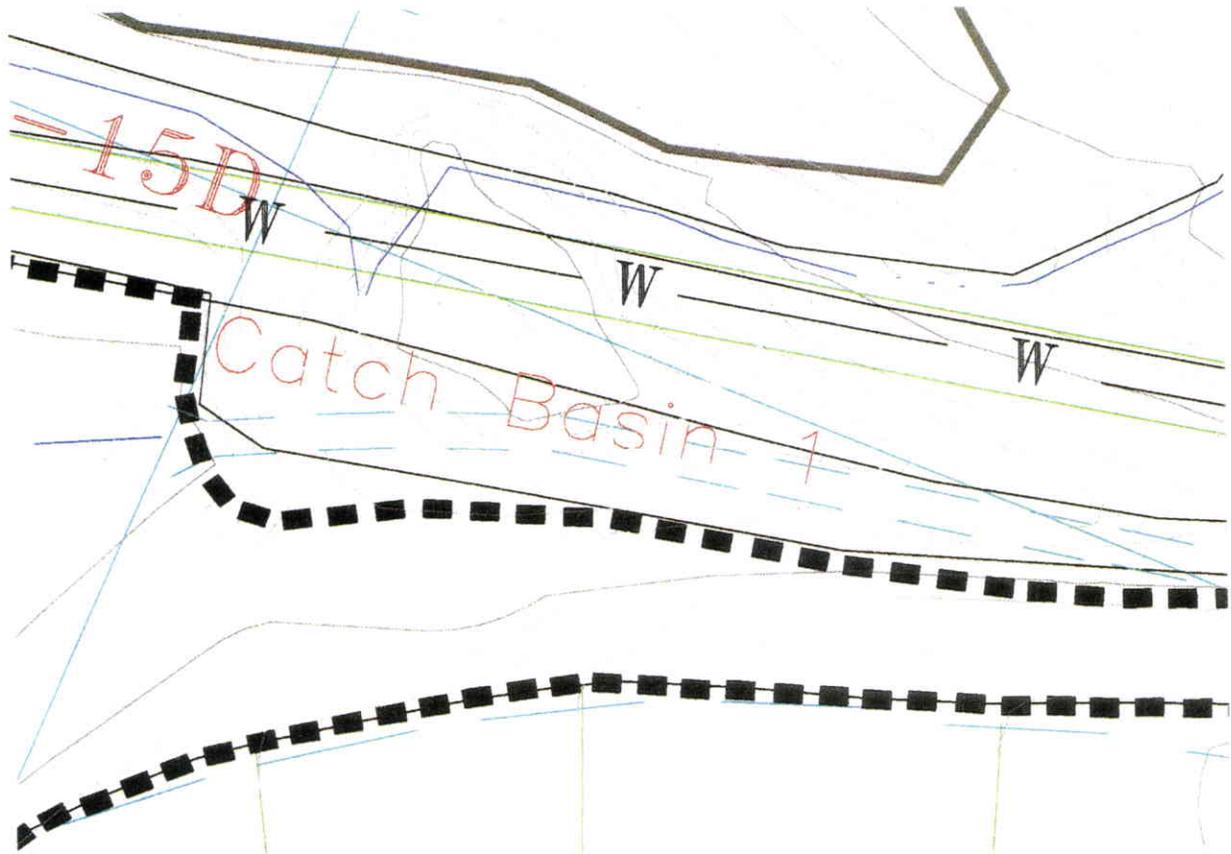
- Area 1 will drain into Sediment Pond B.
- Area 2 will be drain into Catch Basin 1.
- Area 3 will be treated by either silt fences or straw bails placed in ditch D-25U.
- Area 4 will be treated by a silt fence placed at the outlet of ditch D-30U
- Area 5 will be treated by a silt fence placed at the outlet of ditch D-34U
- Area 6 will drain into Sediment Pond D.
- Area 7 treated by a silt fence placed at the outlet of ditch D-37U
- Area 8 will drain into Catch Basin 3.

Snow is mostly air so it can be compressed up to 90% once it falls. The amount of compression snow undergoes during plowing is almost impossible to calculate until after the snow has fallen because it is dependent upon temperature, aging of snow, humidity, amount of conditioning, moisture content, pressure applied to it, and the amount of traffic that has already driven on the snow. Despite this fact we have done our best to guess the conditions of the snow that we will receive. For our calculations we used the average snow pack of 30 inches as described in Appendix 7L Gentry Mountain CHIA. We assumed the plowing process only carried 75% of the snow to the storage area. 10% would remain behind either side cast against the berm and the mountain side or compacted as a layer of ice above the road surface, and 15% would melt due to salt treatment and heat from the sun. We then assumed 80% compaction during the plowing process and the the piles we be between 8 and 10 feet high with a 45° slope. We did not account for any melting of the pile between snow storms. A table detailing the results is shown below.

Snow Area	Treated Area (ft <sup>2</sup> )	Snow Volume (ft <sup>3</sup> )	Storage Area Size			Storage volume(ft <sup>3</sup> )	Remaining Volume(ft <sup>3</sup> )
			Length (ft)	Width (ft)	Hight (ft)		
1	30,330	11,374	145	20	8	18,560	7,186
2	37,026	13,885	240	22	8	34,560	20,675
3a	16,110	6,041	10	30	8	8,480	2,438
3b			50	20	8		
4	10,944	4,104	30	40	10	10,500	6,396
5	10,620	3,983	15	45	10	6,000	2,018
6	29,413	11,030	40	40	10	14,000	2,970
7	23,220	8,708	90	20	10	13,500	4,793
8	7,707	2,890	20	20	10	3,000	110

Because of the many unknowns described above it is possible that our storage capacity might be exceeded. In the event that any one of the areas reaches 90% of its design capacity C. W. Mining will transport the snow to the entrance of Sediment Pond A, B, or C based on the available capacity of the ponds.

Figure 7K-2 Catch Basin 1



Stage-Capacity

Basin Information

<u>Elevation</u>	<u>Area (sq ft)</u>	<u>Vol (cu Ft)</u>
7226	2,204	----
7224	1,126	3,150
7222	749	1,875
7220	430	1,179
7218	40	470
<b>Total Volume</b>		<b>6,674</b>

<b>Bottom of Basin Elev:</b>	<b>7218</b>
<b>Spillway Elev:</b>	<b>7226</b>
<b>Top of Dam Elev:</b>	<b>7227</b>
<b>Basin Volumes:</b>	<b>4,690</b>
<b>Required Volume:</b>	<b>4,072</b>