



If you build it, they  
will complain.

Documentation & Communication

Katie Schwander

Group 1 Construction Engineer

Excellence in Transportation

Every Trip

Every Mode

Every Dollar

Everyone

An aerial photograph of a parking lot and surrounding area. In the top left, there is a building with a sign that says "M&T Bank". The parking lot contains several cars, including a white car, a red car, and a grey car. A road runs along the bottom of the image with a grey car driving. To the right, there is a large white tent. The text "Documentation and Communication" is overlaid in the center in a large, orange-outlined font. Below it, the words "Clear", "Correct", "Concise", and "Complete" are overlaid in a large, black font, arranged in a 2x2 grid.

# Documentation and Communication

**Clear**

**Correct**

**Concise**

**Complete**



The one constant through all the years has been [Construction]. America has rolled by like an army of steamrollers. It's been erased like a blackboard, rebuilt, and erased again. But [Construction] has marked the time. This [interchange], this [interstate] – it's a part of our past. It reminds us of all that once was good, and it could be again. Ohhh, people will [complain]. People will most definitely [complain].





# Words that can unintentionally cause liability

**Better**

**Essential**

**Is needed**

**Trap**

**Clearly**

**Excessive**

**Mandatory**

**Unsafe**

**Concern**

**Hazard**

**Obstacle**

**Worse**

**Danger/Dangerous**

**Hot Spot**

**Poor**

**Deficient**

**Imperative**

**Problem**

**Edge/Shoulder drop off**

**Inadequate**

**Require**

**Ensure**

**Insufficient**

**Risk/Risky**



# Examples

## Bad

MOT set up is **dangerous**.

Vegetation is **insufficient**.

Contractor left **edge drop off** more than 2”.

Gap in sign structure is **worse**.

**Trap** complete.

## Better

MOT set up contains two signs of incorrect size. Wording is correct. Notified John Deere (foreman) to replace signs before continuing.

Vegetation at Station 100+00 RT 25’ to Station 100+50 RT 25’ is less than 70%, approximately 20% growth currently.

3” **edge drop off** is behind barrier wall.

Gap in sign structure has expanded from ¼” to ½” after installation.

The sediment **trap** was installed at Sta 9+99.

Delaware Department of Transportation				
301002-00	0001	Graded Aggregate Base Course, Type B, Patching		
Date	Qty UOM	Total Qty	Over Run	Remarks
03/30/2020	7.150 CY	24.510		
03/31/2020	7.100 CY	31.610		
04/06/2020	25.440 CY	57.050		
04/07/2020	11.810 CY	68.860		
04/08/2020	5.610 CY	74.470		
04/16/2020	14.670 CY	89.140		
04/20/2020	16.430 CY	105.570		
04/23/2020	6.030 CY	111.600		
04/28/2020	1.120 CY	112.720		
05/05/2020	10.500 CY	123.220		
05/19/2020	9.220 CY	132.440		
05/20/2020	8.930 CY	141.370		
05/21/2020	3.030 CY	144.400		
05/26/2020	5.560 CY	149.960		
05/28/2020	12.510 CY	162.470		
05/28/2020	2.330 CY	164.800		
06/01/2020	9.750 CY	174.550		
06/02/2020	4.660 CY	179.210		
06/09/2020	6.340 CY	185.550		
06/10/2020	5.780 CY	191.330		
06/11/2020	4.510 CY	195.840		
06/16/2020	4.080 CY	199.920		
06/24/2020	2.360 CY	202.280		
06/25/2020	5.210 CY	207.490		
06/30/2020	4.610 CY	212.100		
07/15/2020	14.680 CY	226.780		
07/21/2020	8.080 CY	234.860		
08/05/2020	3.520 CY	238.380		

\* - denotes pay item from a non-approved IDR or QA  
 QA - denotes pay item from Quantity Adjustment

# Unifier & Reports



301001-00	0001	Graded Aggregate Base Course, Type B			\$44.40	2,347.000	\$104,206.80
Date	Qty UOM	Total Qty	Over Run	Remarks			
06/26/2020	26.750 CY	26.750		8-INCH MILLINGS OVER P212 AND DI212 & 213.			
09/11/2020	0.360 CY	27.110		Berm built to divert water flow towards filter logs.			
06/02/2021	0.000 CY	27.110		To be quantified when task complete			
06/03/2021	0.000 CY	27.110		Road box for East side approach to BR1-714A. To be quantified when task complete			
06/07/2021	0.000 CY	27.110		Millings placed at maintenance strip @ Sta 37+00. To be quantified when all tickets received.			
06/11/2021	286.850 CY	313.960		Millings placed as GABC between Stations 35+00 and 37+00 including the Phase 1 area of the maintenance ramp, 8-inch depth.			
10/12/2021	0.000 CY	313.960		Crew placed Millings between Station 26+00 and 27+70. This item is incomplete and will be quantified when complete.			
10/13/2021	10.670 CY	324.630		Crew placed Millings @ station 24+50 for undercut fill			
10/14/2021	0.000 CY	324.630		Millings placed in roadway. Will be quantified on 10/15/2021 when tickets received.			
10/15/2021	167.120 CY	491.750		Millings placed in roadway between Station 24+30 and 27+00. Left 6 inches in front of proposed curb unpaid to leave room for curb excavation.			
11/11/2021	126.210 CY	617.960		Source document attached.			
11/18/2021	63.480 CY	681.440		Source document attached. Contractor used millings in lieu of GABC			
12/13/2021	6.790 CY	688.230					
01/05/2022	17.180 CY	705.410		Source document attached. Millings used in lieu of GABC, from on-site stockpile Median area = 297.48 CY Maint. Strip = 6.94 CY Total = 304.42 CY			
05/17/2022	304.420 CY	1009.830					
06/09/2022	98.760 CY	1108.590					
06/22/2022	216.330 CY	1324.920		GABC Crushed Concrete from Diamond Materials			
06/22/2022	11.090 CY	1336.010		on site Asphalt Milling Used for GABC			
06/28/2022	0.000 CY	1336.010		Payable when sleeper slab completion			
07/05/2022	67.410 CY	1403.420		GABC Millings for Sleeper Pad Final grade. Pay			

Delaware Department of Transportation							
301001-00	0001	Graded Aggregate Base Course, Type B			\$34.00	23,167.000	\$787,678.00
Date	Qty UOM	Total Qty	Over Run	Remarks			
03/28/2022	0.000 CY	21276.350		AT CONTRACTOR'S EXPENSE Contractor did fine grading on Elkton rd SB at Dunking Donuts. Existing coarse millings approved as GABC were fine graded by dozer and excess material was removed by tracked excavator and hauled out by Hydrema. Area was then compacted by roller. Work was done to prepare area for PCC pavement.			
03/28/2022	0.000 CY	21276.350		AT CONTRACTOR'S EXPENSE Section of asphalt previously sawcut was removed to provide a smooth connection to the PCC pavement. INCIDENTAL: Contractor completed fine grading the GABC lift for the full width of PCC pavement, located along Elkton Rd SB from station: 6066+25.00+ to 6067+75.00+-. This is performed by using a milling machine that is guided by both GPS and their millimeter system. Contractor set the depth of cut to read approximately to 1.02 feet below final grade.			
03/29/2022	0.000 CY	21276.350		INCIDENTAL: Contractor began to fine grade the GABC lift for the PCC pavement, located along Elkton Rd. SB. This is performed by using a milling machine that is guided by both GPS and their millimeter system. Contractor started and completed milling the middle two thru-lanes starting from the FMC Delivery entrance towards Crossview Business Park. Contractor set the depth of cut to read approximately to 1.02-1.03 feet below final grade. **INCIDENTAL**			
03/29/2022	0.000 CY	21276.350		I completed a proof roll of the 8" GABC (recycled asphalt millings) lift of the SB mainline, between the intersections with Suburban dr, and FMC Delivery. Diamond Superintendent Fred Herron was present and followed along for the proof roll. A loaded tri-axle truck was used, and the proof roll was accepted.			
03/30/2022	0.000 CY	21276.350		INCIDENTAL: Contractor continued to fine grade the GABC lift for the PCC pavement, located along Elkton Rd. SB. This is performed by using a milling machine that is guided by both GPS and their millimeter system. Contractor began milling the right hand lane shoulder starting at the FMC Delivery entrance and ending at the Crossview Business Park. The contractor set the depth of cut to read approximately to 1.02-1.03 feet below final grade; however, they experienced several issues with their milling machine which set them back approximately 4 hours. The milling machine randomly changed the elevation of the milling drum, causing several areas to be off grade. Contractor was able to trouble shoot the area and was able to complete milling the right hand lane shoulder.			
03/30/2022	0.000 CY	21276.350		AT CONTRACTOR'S EXPENSE Contractor started to remove previously placed coarse milling material approved as GABC from residential entrance on Elkton road SB which was used to create a temporary entrance using wheeled excavator and a dozer. Material was then hauled out by tri axle dump truck. During this process excavated area was graded to GABC road box depth.(no compaction was done).			

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# Communication

**Public Notice**

**Emails**

**Social Media**

**Photos**

**Documentations**

**Contract Documents**

**Reports**

**Phone**

**Text**

**Face to Face**

**Body Language**

**Meetings**









REXING DASH CAM OMI/H 01/20/2023 07:24:46





A



B



C

Poll Question 2:

Which of these photos were taken in Delaware?



Long Beach, CA



Elkton, MD



Mexico





Why?



Transparent Efficient Accountable Measured



An aerial photograph of a highway interchange under construction. The main road is a multi-lane highway with a concrete barrier on the left. A bridge structure is being built over the highway, with a white tarp covering the top surface. Several construction vehicles, including a yellow excavator and a blue truck, are visible on the bridge. Orange traffic cones are placed along the edges of the bridge. In the background, there are green trees, a parking lot with several cars, and a large building with a green roof. The word "Questions?" is written in large, orange, outlined letters across the middle of the image.

# Questions?

Thank you:

Chance Malkin, Group 2 Construction (audio)

Vince Ruff, Group 1 Construction (audio)

Brian Locke, Group 1 Construction

Jackie Johnston, Group 1 Construction (video)

Alicia Howard, AECOM

The drone team for all project photos