To —

Head quarters, Army in the Field

City Point, July 3rd 1864

In order to be enabled to have a clear judgement on the progress of the mining work in front of Major General Burnside's siege posts, I should like to be furnished with:

1. A rough longitudinal section made on a certain scale and labeled: our works, neighboring the mine, then the mine gallery and then the enemy's work to be attached by the mine. This section with all important incidents inserted will show besides the profiles of our and the enemy's works, the location of the mine gallery entrance with reference to our own defensive line, the arrangement of the entrance whether by a shaft or by an inclined gallery to the height of the gallery in both the places not framed and such and supplied with fanmics, the length of the intended gallery, its depth under the natural horizontal near the entrance and near the powder chamber and the location, length, and height of the latter, and a profile of the gallery showing its width in framed and unframed places, and the truth of the powder chamber.

2. When was the mining work begun? State day and hour.
General Barnard on the Mine at Petersburg

July 15th

Has it been continued night and day and hour without any interruption, and have many men more and are engaged in it at the same time. What kind of vault is probably to be expected around the powder chamber?

5 ft. Which is the intended height of the charge and which is the expected diameter of the crater measured on its surface?

5 ft. By which means shall the mine be fired, supposed that it shall be fired as soon as practicable and with the least loss of time?

What means shall be used for lifting the mine and at what length shall this be done?

7 ft. Where shall be the stand points of the miners joining the charge and at what time in any day shall the mine be fired?

9 ft. What measures are promulgated by the Engineer Department in accordance with the Commanding General to secure the preservation of the crater affirmed by the mine and to facilitate its defense?

The questions above should be answered without delay, and as short as possible, only with reference to its number 1, 2, 3, 4, 5.

I am very respectfully,

Chief Eng'g US Armies in the field.

The above is copied from the original composed and in the hand writing of Capt. Munson, (the aide de camp of Gen. Barnard,) who put it in my possession Nov. 16th, 1864 J.R.
General Barnard on the Mine at Petersburg

The following is copied from a copy of the original in the hand writing of Capt. Munson. (Note. The Mine was fired on the 20th July 1864.)

Head Quarters 78th Penn. Vol. Inf. (Signed) Henry Pleasant
Near Petersburg Oga. July 7th 1864.

Answer to question 2. — The gallery or tunnel is supported by props along its whole course, at a distance from each other ranging from three to thirty feet, according to the nature of the roof. When the tunnel reaches a point immediately underneath the enemy's breastwork, it is proposed to drive two galleries, each about a hundred feet in length, whose position will he immediately under the enemy's feet and breastwork.

Answer to question 3. (a) At 12 o'clock on the 25th of June 1864.
(b) The mining has been carried on without interruption since its war began. There are 210 men employed every 24 hours, but only two can churn at a time at the extremity of the work.
(c) The tunnel will reach the enemy's work in about seven or eight days.

Answer to question 4. Sandy Vale.

Answer to question 5. b. 7. 8. 9 and 10. Still under consideration.

The mine is ventilated by means of an air shaft with a furnace to raise the air boxes to convey the gasses from the interior of the gallery to the shafts.

(Signed) Henry Pleasant
Leesburg Co. 48th N.Y. Vol.
Under date of the 6th Sept. 1864, or seven days after the mine had been exploded, and the failure of the assault. Caspar Munthe wrote a criticism on Sherman and the operations. He made the following remarks.

The assault on Petersburg LGA on the 30th July 1864.

All the assault should follow immediately and really followed. The explosion of a mine, the gallery of which had been prepared in front of the 2nd division of the 4th Corps, since June 25th, and as strategic movements ordered by Lieut. General U.S. Grant, preceded the explosion of the mine and the assault, in order to drive away as many troops of the enemy as possible from the proper point of assault and its vicinity; the following orders of contemplations on the assault seem to suggest itself.

1. The mining operations in special, and the Engineer operations generally or they really have been, and as they should have been executed.

2. The strategic movements in the Army of the Potomac Browne.

3. The assault.

3½. The tactical dispositions for the assault and theirs execution.

The mining in special and the Engineer operations generally as they really have been and as they should have been executed.

Before turning to this:

After giving his reflections on the preceding three different heads, General Barnard reviews the whole paper and endorses upon it as follows:

The following conditions are to be born in mind, which are not
General Barnard—on the Mine at Petersburg

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fully considered.

1st. The importance was attached to the mine which Colonel Pleasant was permitted to make, either by General Grant or General Meade. It was never looked upon as a prime or essential agent of attack. If it should be executed, very well. Perhaps we might use it, just to blow up the world and scare the enemy. Perhaps not use it at all. Since my entire forgetfulness of it after I had been temporarily relieved from duty.

3rd. The very fact that a mine like this one is so exceptional, so unprecedented, placed its “hors de règle.” The ordinary rules of mining did not apply. Moreover, we knew that the enemy had no professional miners, either military or civil. Another reason why the prescribed precautions might be neglected.

5th. When the garrison reached the enemy’s works July 17th, Gen. Grant did not choose to make any use of it. Perhaps he never would have permitted it to be used unless, perhaps for the object, mentioned in 3d par, had not an unexpected disposition of the enemy’s forces occurred which seemed to justify an assault on Petersburg.

To prevent Lee from sending more troops to Early when threatening Washington, General Grant threw Hancock’s Corps over the James by threatening Richmond.

The enemy appeared to be greatly alarmed, looked upon it as a serious attack on Richmond, withdrew so much force from Petersburg.
General Barnard on the Mine at Petersburg. July 1864

as to justify an assault. There and not before General Grant deter-
mined to use the mine as an agent.

I have never seen General Meade's order for the operation,
but General Grant assures me that it contained most of the
essential provisions I

3/10 - 64

(Signed) H.H.

Note: Barnard was relieved from duty with the army before Petersburg on
the 5th of July, and returned, resuming his duties on the evening of the
29th July, when the time for firing the mine had been fixed for 3 A.M. the
next morning.
Extract from a letter written by General Barnard to Mrs. Barnard, dated: Camp on Boydton plank road 8 miles west of Petersburg

Sunday evening April 9th [1865]

The enemy seemed to be able to extend as far as we did and to meet us obstinately everywhere. Sheridan on our extreme left had been firmly met and even driven back. But yesterday morning Warren's corps (the 9th) was detached and sent to his aid. He recaptured his ground and then gave battle at the "Five forks" 8 miles a little west of north of "Dinwiddie Court House". They resisted firmly for half an hour, but when he carried a portion of their works they broke in a rout and he captured over 5,000 prisoners, and much artillery.

This was the turning event of the Campaign. Lee had stripped his lines and sent a heavy force (Bushrod Johnson's and Pickett's divisions of infantry and 2 divisions of cavalry). The two Lees, and Roper's divisions...
The news ran along our 35 or more miles of line in cheeries of troops. As rapidly as it came by courier, Gen. Grant at once resolved to take advantage, and ordered Wright and Parke to break through their lines about Petersburg, and extending parallel to the Boydton road.

and which they had held against us all winter. Parke broke through the fortifications of Petersburg, but was checked by an inner line.

Wright attacked the position which they had made to cover the Boydton Road, and the Southside R. R. Wright broke through—turned to his left, and swept their lines towards the River, captured over 5,000 prisoners and compelled the abandonment of all their works outside of the Petersburg fortifications.
This cut off all the troops that had been fighting with Sheridan yesterday. Wright, then closed up on Petersburg (occupying the dotted blue line). Miles' Div. of Humphreys' 2nd Corps was attached to Sheridan's command last night and moved across Hatcher's Run by the 'Chalorome Road' where it fell in with Heth and Wilson's divisions and had a heavy fight, but held out till Humphreys got back to his support with another division. We have not heard from Sheridan, but he has a large force & presume he has been after the isolated troops of Crittett & Johnston. He has lost at least 20,000 men, (we must have taken 12,000 prisoners—much artillery (He lost 3,000 a week ago in attacking us.) Since the 29th March.

I should mention that there was an advanced works this side of Petersburg fortifications about a half a miles distant. As we came up at 11 this morning, Foster's division of Ord, attacked, or rather Ander's Brigade. The work first attacked had a very heavy parapet and deep ditch, no abattis. The garrison of 300 men made a desperate resistance, holding out 25 minutes after our troops got on the parapet. I never saw so many dead in so small a space lying just where they had fallen. The sketch on the other page
is made without ever looking at the map but will give you a tolerable idea.

The fortifications of Petersburg which confront our new lines are nothing like what they are on parts where we have confronted each other so long. But they are strongly situated - a deep ravine lying between us. Our troops are too tried to attack today, and I see we may not attack at all. I don't think Lee can hold Petersburg long any way. Besides we have now 3 corps and Sheridan's cavalry free to move anywhere and may cross the Appomattox at once. I consider the "corn dolly grace" given - Lee may stagger a few days longer but he must reel to his fall. What is left of his army is demoralized. By another Sunday I think we will be in Richmond. This may not happen but I don't see how they can hold out. Lee's army is used up.

2nd J. F. B.
Feb 14th 74

My dear Sir,

Have the C.S. information in our possession of the Gympsea Shoal S.E., or the "Mountains" Industry S.E.? I ask the question because the question of Light House is discussed sometimes.

Very sincerely,
J. C. Barlow
have any characteristic of permanence.

The L. Ship men as lanes stick them (Hants.)

say that that is very changeable. Have you any data about that?

Now any study ever made as to the

laws of currents or wind, tides, which forms these currents in the coast

sandbars between edges

Hatteras, Lookout.
Dear Roman,

At each cape of the three land the immediate sound waves projecting several miles into the sea, indicates some well-defined meeting of different wave faces.

Yours truly,

[Signature]

F. D. [Name]

[Signature]