



November 28, 2018

Colorado Division of Reclamation, Mining and Safety
Attn: Mr. Tim Cazier
1313 Sherman St, Rm. 215
Denver, Colorado 80203

RE: 11-16-2018 Technical Revision Response
File No. M2006-017 Jemadojin Sand Mine

Dear Mr. Cazier:

On behalf of Hourglass Sands, LLC, we are hereby submitting responses to the adequacy letter for the technical revision dated November 16, 2018.

The answers to the responses are as follows:

- 1) Figures/Maps: From this point forward, all maps will be numbered with a date or revision number to accurately track the evolution as the permit progresses. A north arrow and scale will be placed on each map. A new backfill plan has been included with a north arrow and scale.
- 2) Commitments: Per our conversation on or about 11/02/2018, it was agreed that Hourglass will not commit to haul back of waste sand to the operation. It was discussed that the upcoming amendment will address backfilling of sand in the pit. The quantities needed for backfill are not required at this time. An updated reclamation plan has been included to show the progressive mining and backfill plan. As shown, the North, East and South highwalls will be progressively mined and reclaimed at a minimum 3:1 slope. The initial West wall will be mined at the angle of repose (1.7:1). Once mining has progressed and the pit opened to give enough room for mining the wall will be pushed in and reclaimed at a minimum of 3:1 slope.
- 3) Reclamation Cost Estimate: Per our conversation on 11/28/2018, the reclamation bond will be reduced to exclude backfilling and only include final grade pushing on the west wall of the pit.



Should you have any further questions or comments feel free to contact me by phone at (812) 299-2800 ext. 217 or by email: jsmcguire@hourglassands.com.

Sincerely,

A handwritten signature in blue ink, reading "J. Scott McGuire".

J. Scott McGuire
Director of Engineering

cc: Brent Bilsland, Hourglass Sands; Larry Martin, Hourglass Sands

Mining and Reclamation Plan

Progressive Mining & Backfill Plan

Jemadojin Mine
M-2006-017
11/28/2018

- Affected Area
- Limit of Proposed Mining

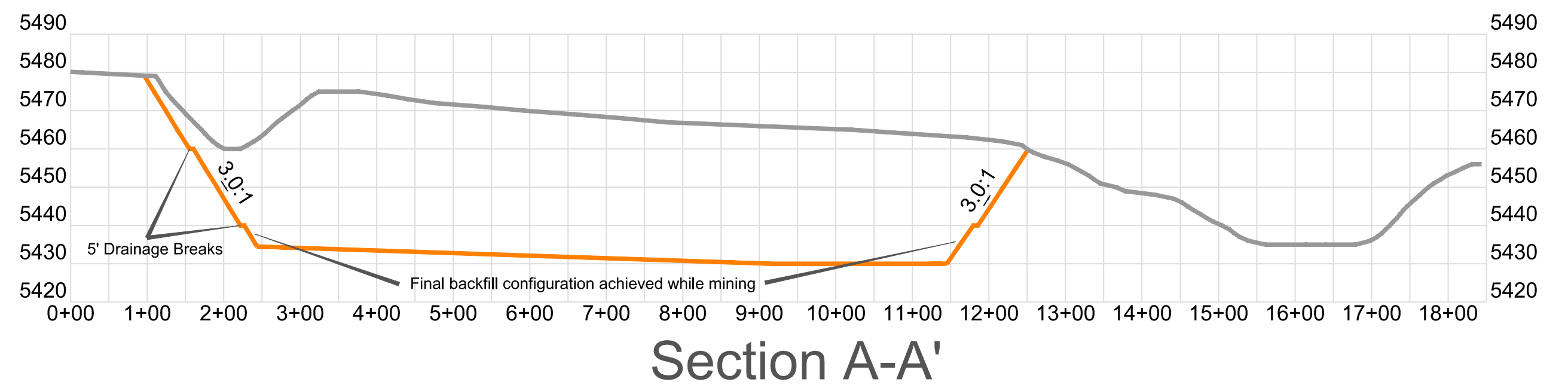
NOTE: Area will be returned to the PMLU of Rangeland per the approved permit.
At least 4 inches of topsoil will be replaced per the approved reclamation plan.

Pre Mining Contours

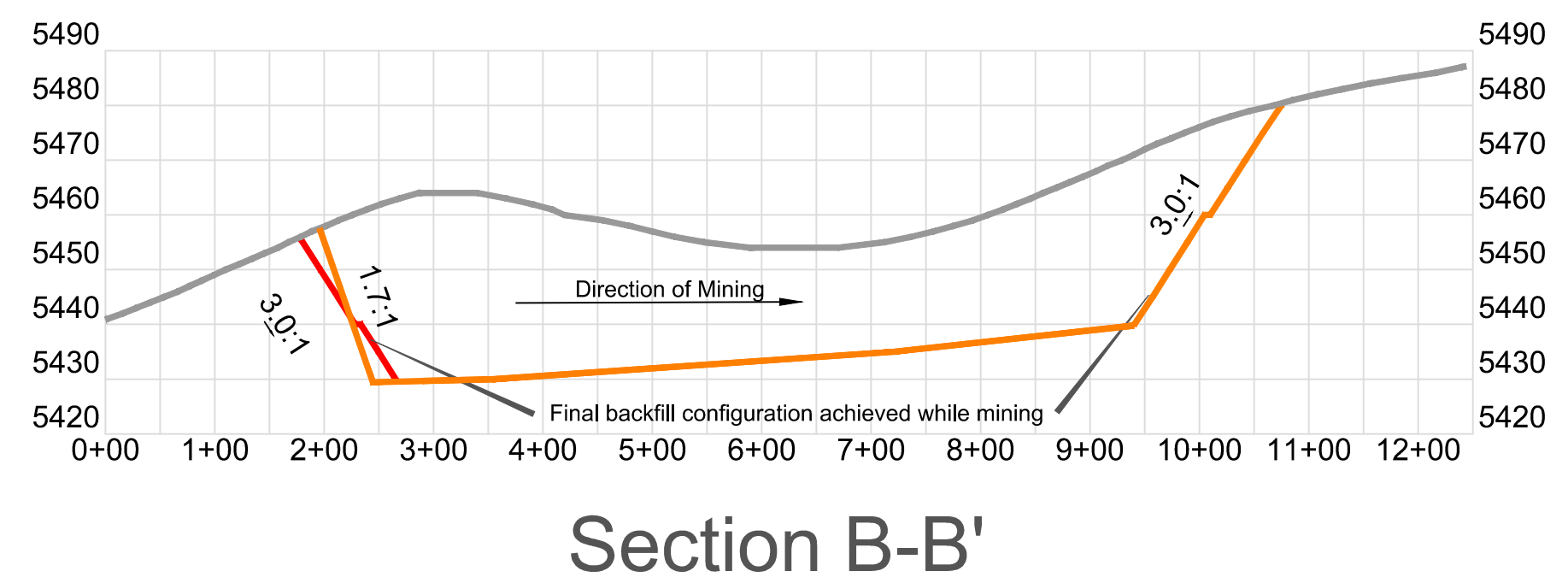
Post Mining Contours
Final Contours on
North, West and South Walls
5' Drainage Breaks in Red

Final Post Reclamation Contours

5' Drainage Breaks in Red



Original Ground
Final Backfill Push
Cut Section
Final Backfill w/o Fines





STATE OF
COLORADO

Cazier - DNR, Tim <tim.cazier@state.co.us>

Response letter

1 message

Scott McGuire <jsmcguire@hourglasssands.com>
To: "Tim Cazier (tim.cazier@state.co.us)" <tim.cazier@state.co.us>
Cc: Bruce Humphries <hlhumphries2@comcast.net>

Wed, Nov 28, 2018 at 1:16 PM

Tim and Bruce:

Attached is the response letter and final reclamation map. If there are text in the original permit to change to match the map, please email Bruce and let him change it. Just keep me in the loop on the emails.

Thanks,

Scott McGuire, PE

Director of Engineering | Hourglass Sands, LLC

1183 E. Canvasback Drive | Terre Haute, IN 47802

Cell (859) 227-4118 | Fax (812) 299-2810 | Direct (812) 298-3717



2 attachments



11-28-18 Response Letter.pdf
451K



REC_PLAN_FINAL_11-28-18.pdf
413K