



# HERMOSA

## ROUTE SELECTION

# THE CHALLENGE

MOVE CONCENTRATE TO MARKET WITH  
MINIMAL IMPACT TO LOCAL COMMUNITIES

## THE PROCESS

### COMMUNITY BASELINE ASSESSMENTS

- In 2019, we conducted **public surveys and targeted stakeholder interviews** in the community to understand more about local concerns related to the Hermosa Project.
- A key concern? **Traffic and transport routes.**

### CIVIC MEETINGS AND OPEN HOUSES

- During 2019 and early 2020, we also attended local **town and county government meetings** and hosted **open house events** to share project updates and gather concerns.
- A key concern echoed there? **Traffic and transport routes.**

### MULTIYEAR ROUTE STUDY

- Starting in 2019 and continuing into 2021, we conducted a **comprehensive study** to evaluate every *potentially* viable route option for Hermosa, and **community input** was reflected in our decision inputs.

## POTENTIAL MODES

In addition to over-the-road trucking, we also explored the possibility of using other modes, particularly rail, which community members have proposed as an option in a number of our engagements around route selection (specially the Lochiel route). Rail would require reliance on the Mexico government for upgrades to the rail system. Moreover, it would result in significant disturbance of U.S. Forest land. We are supporting efforts for a multi-modal facility in Santa Cruz County.



### DECISION: ELECTRIC TRUCKS

We'll be going with over-the-road trucking with rotainers and noiseless, emission-less electric semitrucks that we expect to be commercially available by the time we're ready. Though we have not committed to a particular manufacturer at this stage, below is a good conceptual representation of both an electric semitruck cab (left) and a fully sealable rotainer (right). The exact size of the rotainer will be finalized during our next phase of studies but is roughly 20 feet long and 8 feet wide and will fit on a flatbed semitruck, looking like standard shipping containers we see every day on the highway.



# POTENTIAL ROUTES

## ROUTE STUDY | DECISION INPUTS

### EXISTING ROAD CONDITIONS

- Curvature & horizontal alignment, SAFETY Earthwork/Topography
- SCC road classification
- Surfacing
- Connection to SR82
- Drainage crossings

### OTHER

- FEMA floodway
- Existing utilities
- Existing buildings and homes
- Vegetative cover
- Sound (Barrier)
- Cost



## Route Study & Selection

### TRAVEL & SURROUNDINGS

- Travel time
- Current traffic studies
- Forest disturbance / Natural resource impacts
- Port

### LAND OWNERSHIP

- Santa Cruz County ROW
- USFS routes
- Private property

Additional criteria included pedestrian and recreational use of land and roadways, as well as proximity to community and specifically conservation properties.

## PROCESS OF ELIMINATION (2020)

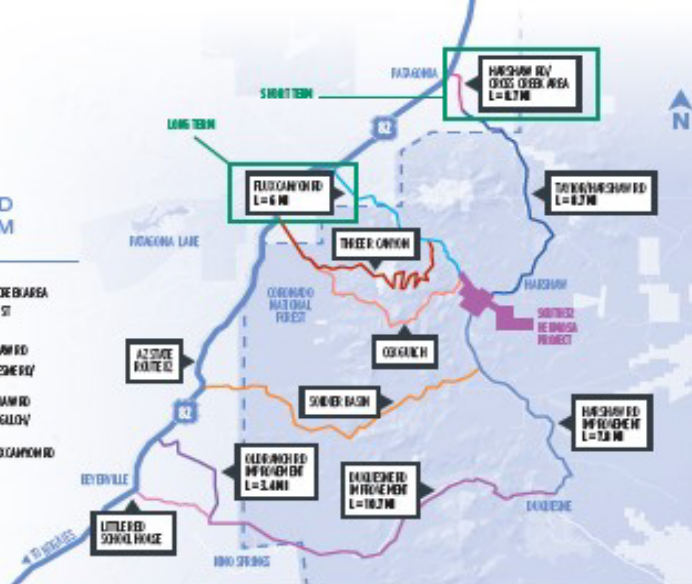
Some route options were eliminated based on the selection criteria. Others were ruled out based on information from other route studies and road management plans from other entities, specifically the U.S. Forest Service Transportation Plan. Several roads, such as road No. 4681 (commonly referred to as Soldier Basin), were not pursued because the extensive disturbance on U.S. Forest Service land needed to connect and extend the existing road.

## PRELIMINARY DECISION (2021): TWO POTENTIALLY VIABLE ROUTES

In the end, we had two potentially viable options, but a Cross Creek area road emerged as the preferred option for initial construction and production traffic, followed by Flux Canyon long-term.

## SHORT AND LONG-TERM ROUTES

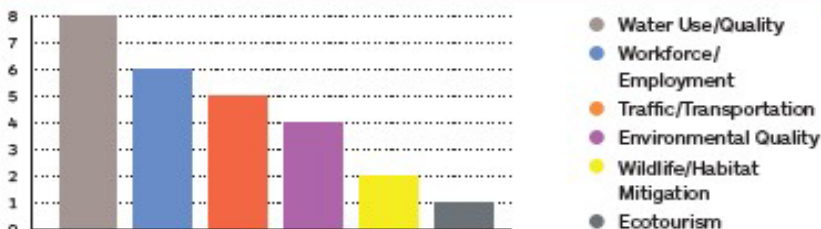
- HARSHAM RD/CROSS CREEK AREA
- HARSHAM RD/TAYLOR ST
- FLOO CANYON RD
- DUKESME RD/HARSHAM RD
- OLD BRANCH RD/DUKESME RD/HARSHAM RD
- SOLDIER BASIN/HARSHAM RD
- THREE R. CANYON/CORRAL GULLY FLOO CANYON RD
- THREE R. CANYON/FLOO CANYON RD



## CIRCLING BACK TO THE COMMUNITIES

Starting in late 2020 and continuing through 2021, we sat down again with neighbors and the larger community to hear their questions and concerns about our preference to construct and use a Cross Creek area road. They voiced concerns about the possibility of environmental impacts, dust, noise, vibration—all of which we believe can be mitigated and controlled through design factors and by controlling truck speeds. And the Santa Cruz County Advisory Panel to the South32 Hermosa Project, formed in 2021, noted these top Hermosa-related concerns and priorities:

### TOP ISSUES NAMED IMPORTANT TO PANELISTS



# SHORT-TERM AND LONG-TERM

## SHORT TERM: HARSHAW ROAD/CROSS CREEK AREA ROAD

- Yet to be constructed
- Road for initial construction and production traffic only
- Honors the community's preference to keep traffic outside the Town of Patagonia limits
- Avoids school traffic and pedestrian risks
- Minimal permanent improvements – reduced earthwork, reduced speed limits, and unpaved
- 12-foot travel lanes with 2-3 foot shoulders with drainage crossings
- Road to be ultimately converted to a trail or if desired, restored and rehabilitated following use.

## FUTURE, LONGER TERM: FLUX CANYON

- Yet to be constructed
- Requires federal permitting
- Long-term production traffic

## WHERE WE ARE NOW

- Looking to the Cross Creek area road as a temporary route to be used only for construction and initial production traffic
- Working through volumes and estimates to determine if we can manage our traffic and deliveries within the parameters of the existing Town of Patagonia trucking ordinance—which would reduce the time of use of this route
- Looking to Flux Canyon as a longer-term route, timelines yet to be determined based on feasibility study

# WHEN AND HOW CAN YOU COMMENT?

## 2 FORMAL PUBLIC INPUT PROCESSES

**1 Cross Creek area road (short-term route)**  
South32 has proposed a transfer of land to Santa Cruz County for a park subject to temporary use of the road through the transferred land. Public comment opportunities will be available through the normal County process.

**2 Flux Canyon (long-term route)**  
Requires federal permitting. The U.S. Forest Service will run a National Environmental Policy Act (NEPA) process, which includes an opportunity for the public to provide feedback to the Forest Service before a decision is made.

**We have time to work through this together.** Please email [askhermosa@south32.net](mailto:askhermosa@south32.net) or contact Melanie Lawson at 520-419-5021 or [melanie.lawson@south32.net](mailto:melanie.lawson@south32.net) to learn more about future community meetings regarding routes.



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