

Haul Route Options Discussion

We have reviewed various options for transporting soil within the project area. A summary of these options as well as the advantages and disadvantages for each option has been organized into a “haul Routes Exhibit” spreadsheet. The various routes have been grouped to compare options between areas. A description of these options is provided here:

Transporting earth from Area A across Ballona channel to Area B. Approximately 800,000 to 1,000,000 cubic yards of material needs to be transported.

1. Use planned bicycle/trail bridge

The project proposes to construct a new pedestrian and bicycle bridge across the Ballona channel at the downstream side of the existing Culver Blvd Bridge. This bridge could be increased in size to accommodate dirt transport between Areas A and B

- a. Must construct bridge at beginning of project construction cycle.
- b. Must construct new pedestrian bridge for H20 truck loads.
- c. May transport earth materials in highway rated vehicles
- d. Must provide a bridge width for 2-way traffic.
- e. If scrapers are used for earth material transport, must increase bridge design loads.
- f. Must provide temporary access roads to and from bridge.
- g. Support piles into channel are required to support loads.
- h. Should match pile / foundation spacing to existing Culver Bridge configuration.

2. Use temporary pontoon bridge

This option involves installing a temporary pontoon bridge across the Ballona Creek waters to be used to transport earth materials.

- a. Would install a pontoon bridge across the wet channel surface.
- b. Pontoon bridge may need to be removed during wet season.
- c. Temporary ramps or access openings may need to be cut into the existing levees on both sides of the channel.
- d. Temporary access openings may need to be sealed during the wet season with riprap.
- e. Access ramps and roads are required on each side of the channel levee.
- f. This option allows deferred costs of building the permanent bridge and would allow the bridge to be less costly.
- g. The bike path would require closure or re-routing.

3. Use temporary modular truss bridge with support columns

This option proposes installation of a temporary truss type bridge across the Ballona Channel to be above the water elevation. The main advantage over a pontoon bridge is that it would not need to be removed during rain events.

- a. Construct temporary modular truss bridge from levee to levee.
- b. Bridge will require intermediate supports in Ballona Channel
- c. Bridge is intended to be used in both dry and wet seasons.
- d. Location of crossing should be close to the Culver Bridge and bridge supports should match spacing and location of Culver Bridge supports.
- e. Temporary access roadways required at each side of bridge.
- f. Bridge would be 20 feet wide minimum for 1-way traffic
- g. Preferred width 30 feet for 2-way traffic.
- h. A modular truss type bridge would most likely only be adequate for standard highway

4. Conveyor system

Install a conveyor system across Ballona channel to transfer earth materials from one side to the other.

- a. Provide loading area and material staging on Area A side
- b. Provide spoil area and truck staging on Area B side.
- c. Temporary supports required across channel.
- d. Temporary electrical service required for conveyor operations.
- e. Multiple handling of soils is required.

5. Hauling on public streets

This option would involve loading material on to highway rated vehicles and transporting on existing public roads.

- Identify preferred haul route including points of entry and exit for existing roads.
- Governmental approval for a haul route through City of Los Angeles is required.
- Possibly process CUP through County of Los Angeles because hauling volume exceeds 100,000 c.y.
- Obtain access location approval from Caltrans for access to Lincoln Blvd.
- Obtain access location approval for Jefferson Blvd. entry /exit location.
- Continuous street sweeping will be required.
- Hauling times will probably be limited to avoid peak hour traffic volumes.

Transporting earth from Area A to Area C – north side of Culver. Approximately 300,000 to 400,000 cubic yards of material needs to be transported.

1. Temporary truss bridge at existing Rail crossing abutments.

A temporary truss bridge may be constructed over Lincoln Boulevard adjacent to and north of the existing Culver Boulevard bridge.

- a. Place a modular steel truss bridge on the existing rail bridge abutments.
- b. Bridge would be a single span over Lincoln Blvd.
- c. Temporary access roads and ramps are required on both sides of Lincoln for access.
- d. Bridge width 20 feet for 1-way traffic or 30 feet for 2-way traffic.
- e. Bridge would be capable of carrying conventional highway trucks.
- f. If scrapers are used for earth material transport, increase bridge design loads.

2. Conveyor System

Install a conveyor system across Lincoln Boulevard at the same location as the old rail bridge just north of Culver Blvd.

- a. Provide loading area and material staging on Area A side
- b. Provide spoil area and truck staging on Area c side.
- c. Temporary supports truss structure required for Lincoln Blvd crossing.
- d. Temporary electrical service required for conveyor operations.

3. Hauling on public streets

This option would involve loading material on to highway rated trucks and transporting on existing public roads.

- Identify preferred haul route including points of entry and exit for existing roads.
- Process haul route approval through City of Los Angeles.
- Possibly process CUP through County of Los Angeles because hauling volume exceeds 100,000 c.y.
- Obtain access location approval from Caltrans for access to Lincoln Blvd.
- Obtain access location approval for Culver Blvd. entry /exit location.
- Continuous street sweeping will be required.
- Hauling times will probably be limited to avoid peak hour traffic volumes.
- Hauling times will be restricted by peak hour traffic conditions.
- Special traffic control measures required at entries and exits.

Transporting earth from Area A to Area C – south side of Culver. Approximately 300,000 to 400,000 cubic yards of material needs to be transported.

1. Modify and expand existing bike path crossings – north side Ballona channel under existing bridges.

This hauling option would use the existing bike trail and maintenance road on the north levee to pass under both Culver Blvd and Lincoln Blvd to access toe Area C south disposal site.

- a. Reconstruct existing bike trail/maintenance road under Culver and Lincoln to lower the road surface sufficiently to provide access clearance for either hauling trucks or scrapers.
- b. Temporary reconstruction of levee slope to widen trail to 20 feet for 1 way traffic.
- c. Hauling would not occur when there is a potential of storm flows.
- d. Temporary encroachments into channel may need to be removed in order to preserve flow capacity
- e. Rebuilding of the bike path may be necessary after construction

2. Public street haul

This option would involve loading material on to highway rated trucks and transporting on existing public roads.

- a. Identify preferred haul route including points of entry and exit for existing roads.
- b. Process haul route approval through City of Los Angeles.
- c. Possibly process CUP through County of Los Angeles because hauling volume exceeds 100,000 cy.
- d. Obtain access location approval from Caltrans for access to Lincoln Blvd.
- e. Obtain access location approval for Culver Blvd. entry /exit location.
- f. Continuous street sweeping will be required.
- g. Hauling times will probably be limited to avoid peak hour traffic volumes.

3. Use temporary bridge over Lincoln to North of Culver then establish a temporary traffic signal for the road crossing.

This option would use the temporary bridge installed to transport earth material to Area C – north side and then provide for a controlled intersection crossing of Culver Blvd. at a mid-point between the existing traffic signals at the Marina Freeway ramps and the Lincoln Blvd connector road.

- a. Use the same modular truss bridge and access roads that are discussed for Area C north side access.
- b. Install temporary traffic signal at a mid-point between Marina Freeway ramps and Lincoln Blvd Access road.
- c. Provide street maintenance at road crossing

- d. Earth material will be hauled in highway rated trucks.
 - e. Obtain Haul route approval from City of Los Angeles for Culver Blvd crossing.
4. Continue conveyor from Area C North, or under bridges.
- a. Provide loading area and material staging on Area A/ C North side
 - b. Provide spoil area and truck staging on Area C South side.
 - c. Temporary supports truss structure required for Culver Blvd crossing.
 - d. Temporary electrical service required for conveyor operations.
 - e. Closing bike lane would be required if under the existing bridges.