

DESIGN EXCEPTION #DE 11-05

To: Mark Relph, Director of Public Works & Utilities
Bob Blanchard, Director of Community Development
Rick Beaty, Fire Chief

From: Tim Moore, Public Works Manager

Copy to: Justin Vansel, Project Engineer

Date: March 30, 2005

RE: Bus Pull-Out Length on 5th Street

DESCRIPTION OF THE SITUATION

The upcoming improvements to 5th Street provide an opportunity to develop off-stream turn outs for the Grand Valley Transit System. Currently, the bus stop on 5th Street is north of Grand Avenue and stops in the north bound traffic lane. The requested TEDS Exception is to construct an off stream bus pull-out at the current stop location that would include a 45 foot bay that is 10 feet wide and includes a 20 foot acceleration transition taper. TEDS requires a 60 foot bay 12 feet wide with 30 foot tapers.

EXCEPTION CONSIDERATIONS

1. Will the exception compromise safety?

Staff does not believe the proposed configuration will create future safety issues. The ability to incorporate a bus pull-out will improve the efficiency and safety.

2. Have other alternatives been considered that would meet the standard?

The alternative would be to relocate the existing shelter and construct the pull-out farther north.

3. Has the proposed design been used in other areas?

There may be other locations that have been modified but do not meet the 45 foot bay and 12 feet wide criteria.

4. Will the exception require CDOT or FHWA coordination?

No

5. Is this a one-time exception or a manual revision?

Staff is suggesting that the TEDS manual be revised to consider more flexibility in the design of bus pull outs.

Staff Recommendation

Staff recommends approval of the exception request with the understanding that the completed project will actually provide for a safer situation than currently exists.

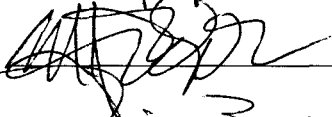
Recommended by: _____

Approved as Requested:

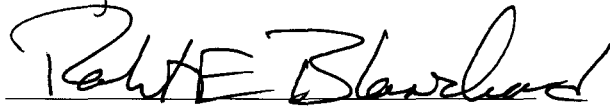
Approved as Modified:

Denied

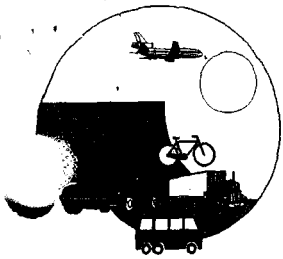
Dated: 4/13/05







\\DE#10-05 Bus Pull-Out on 5th St. 3-05



Mesa County
Regional Transportation Planning Office

750 Main Street, 1st Floor, Grand Junction, CO 81501
P O Box 20,000-5093, Grand Junction, CO 81502-5093
Tele: 970 255-7188 Fax: 970 244-1769



March 17, 2005

Justin Vensel, Project Manager
City of Grand Junction
Public Works
250 N. 5th St.
Grand Junction, Colorado 81501

Dear Mr. Vensel:

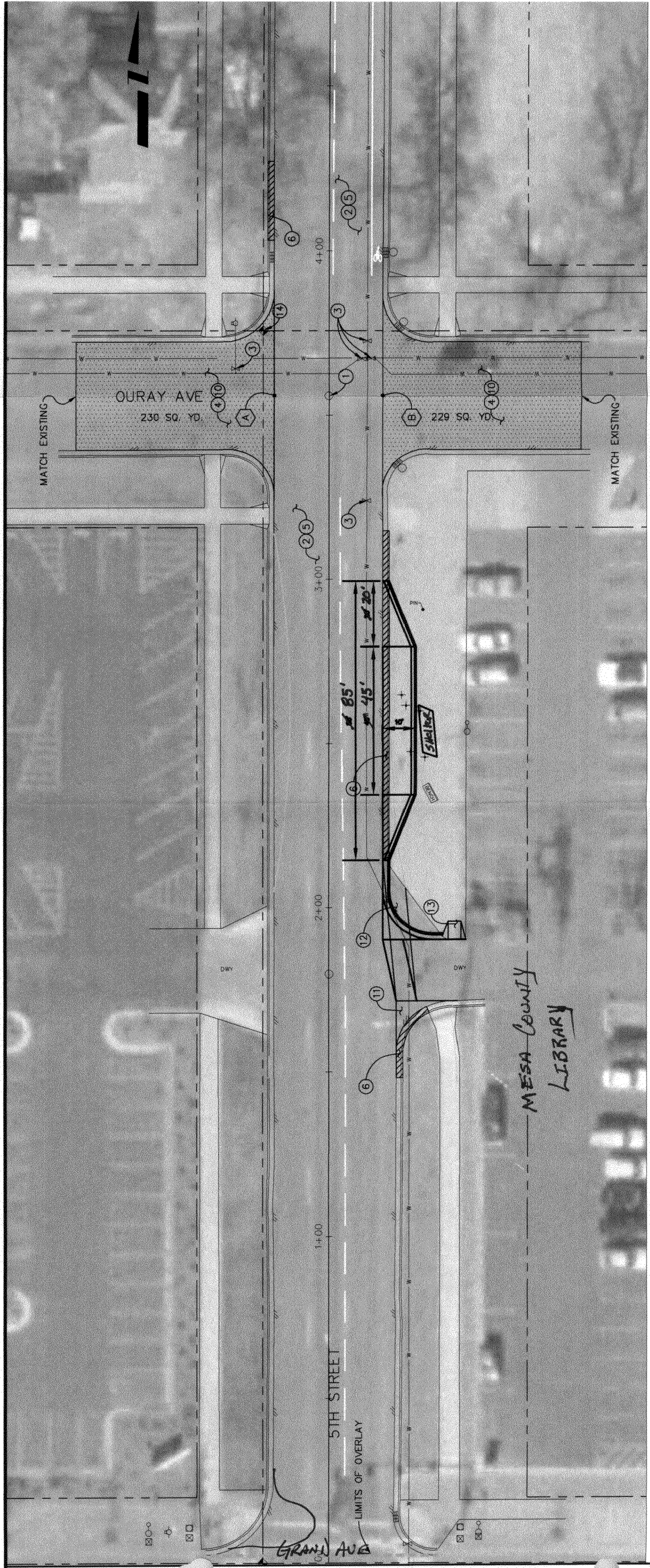
The Mesa County Regional Transportation Planning Office (RTPO) has reviewed the size needed for the 5th Street Overlay Project bus turnouts. Due to space constraints, the RTPO does not oppose the reduction in size from the Transit Engineering Design Standards (TEDS) length of 120 feet to 85 feet for this project.

A 45-foot bus bay with a 10-foot width and tapers of 20 feet will provide an en route bus with an off-street service point that will not interfere with traffic movement and still provide a safe waiting area for transit users.

I would ask that we continue to be informed as this project progresses so that we may notify the staff and riders involved in a timely manner. If you would like to discuss this further, please feel free to call me at 255-7168.

Sincerely,

Todd Hollenbeck, Transit Coordinator
Regional Transportation Planning Office



OURAY AVE
230 SQ. YD.

229 SQ. YD.

5TH STREET

MESA COUNTY
LIBRARY

LIMITS OF OVERLAY

GRAND AVE



Memorandum

TO: Tim Moore, Public Works Manager
FROM: Justin J. Vensel, Project Engineer *JJ*
DATE: April 8, 2005
SUBJECT: **TEDS Exception Bus Turnouts**

Project/Development: 5th Street Reconstruction from Grand Ave. to North Ave.

TEDS reference(s): Chapter 12, Transit Stop Design B. Off-Street Turnouts, 5th Street north of Grand Ave.

Description of exception: The current bus pull-out along 5th Street requires the buses to stop in the north bound traffic lane. The requested TEDS exception is to construct an off street bus pull-out smaller than the one depicted in the TEDS manual. The current off-stream turn outs as depicted in the TEDS manual are designed for full size transit buses. The turn-outs are designed for larger buses used by the Grand Valley Transits. In order to accommodate this pull-out removal of the flare driveway on the north end of the library entrance with a pan and radius to separate the driveway from the bus lane. The exception will be to install a 45 foot bay 10 feet in width with a 20 foot deceleration/acceleration transition taper.

Justification: The turn-outs are designed for larger buses than used by Grand Valley Transits uses. Written approval from Mesa County Regional Transportation Planning Office has already been obtained with the above mentioned modifications incorporated.

Exhibits: Plan view

Off street turnouts allow buses to pull out of the traffic stream. The geometric layout is shown in Figure 4. Turnouts should not be located where there are potential rear sight distance problems. The desirable surface material for turnouts is concrete pavement. If asphalt pavement is used, the pavement design must be structurally sufficient for the shear forces created by buses turning into and out of the turnout.

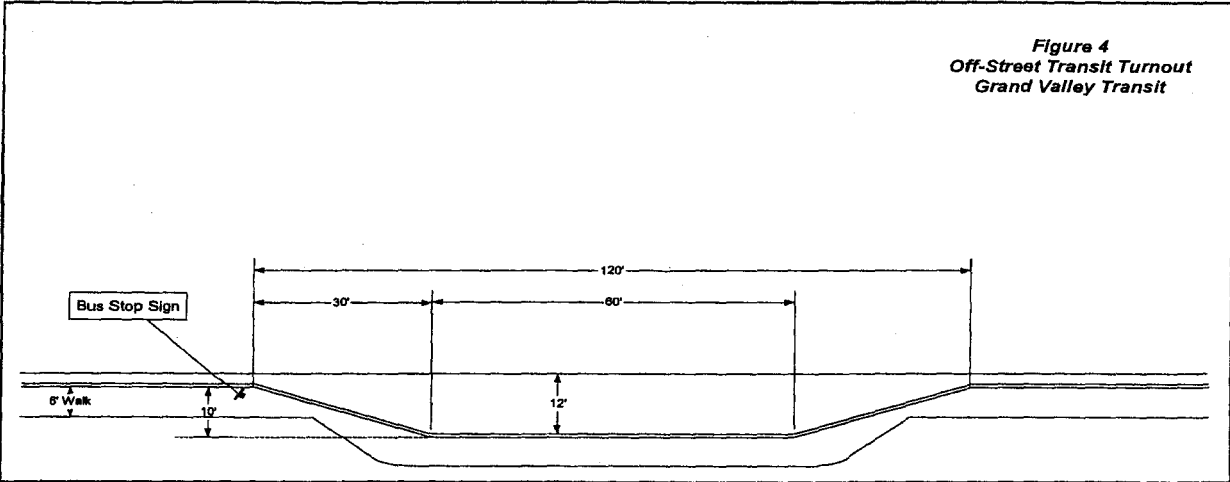


Figure 4
Off-Street Transit Turnout
Grand Valley Transit

C. Facility Access

Transit stops shall be connected with an accessible route to all streets, sidewalks and/or trails within the site boundary. The site boundary defined by the beginning and end of the transit stop, the adjacent street and the right-of-way line for the street segment. Where a transit stop serves as a transfer point, the site boundary and an accessible route shall extend to the connecting route bus stops. Where a bus stop is the closest stop to an intersection, major generator or other private development, it is necessary to extend the site boundary and route to the generator or development. In the case of a mid-block stop with no adjacent sidewalk or trail, it is desirable to provide an accessible route to the nearest intersection or signalized crosswalk.

Accessible routes shall meet adopted standards for sidewalks and trails, including accessible standards for grades and ramps.

D. Transit Stop Amenities

Amenities include the following:

1. **Waiting Areas.** The stop should include adequate area and clearance for passenger access to buses, other amenities, and connecting sidewalks and trails.
2. **Benches.** Bench placement shall be no closer than five feet from the curb where the posted speed limit is 35 MPH or less; no closer than 10 feet from the curb where the posted speed limit is greater than 35 MPH; and no closer than 10 feet where there is no curb. Bench design and construction must conform to the applicable Zoning and Development Code.
3. **Shelters.** Shelter placement shall meet the minimum standards established for benches. Shelters need to be aesthetically and functionally compatible with nearby uses. A shelter should not severely affect an adjacent residence or business use. Shelters should be