



Council Agenda Report

From: Dick McKinley, Public Works Director
Ditas Esperanza, Capital Projects Engineer

Subject: Sherwood Road Improvements

Date: July 18, 2017

Facts

1. Updating Sherwood Road is one of the major projects authorized by the Council shortly after the approval of the supplemental sales tax. Design work has been underway for several years.
2. In early 2017, staff began a series of meetings with adjacent businesses and Quail Run residents. Comments, concerns, and suggestions were received and incorporated, which culminated in a conceptual design presented to the City Council on May 16, 2017.
3. At the May 16, 2017 meeting, Council identified several issues for consideration and requested a Council study session in order to take additional public comment and address those issues. Specifically, Councilmembers expressed concerns over the lane width in an industrial area, and the turning movements onto southbound Commerce with the narrowed intersection.
4. On June 16, 2017, the City Council held the study session and went to Sherwood and Commerce to visually review the existing conditions. The City Council returned to Council Chambers for further deliberation of the design concepts and provided additional direction to staff for options. The Council examined concerns related to truck traffic from the Commerce Way industrial area, future residential growth on the east side of the City, and the need to plan for potential traffic congestion at City build-out on this segment of Sherwood Road.
5. At the conclusion of the special meeting, Council directed that at least two options be considered and brought back to Council:
 - a. Retain the existing curb-line, reconfigure Sherwood to 2 travel lanes with turn pockets and striped/raised medians, each lane being 11 to 12 feet in width (preferably 12'), with no parking on either side west of Commerce, with parking on the south side east of Commerce, and without narrowing Commerce.
 - b. Retain the existing curb-line, reconfigure Sherwood to 4 travel lanes with turn pockets and striped (not raised) medians, each lane being 11 to 12 feet in width (preferably 12'), with no parking on either side west of Commerce, with parking on the south side east of Commerce, and without narrowing Commerce.
5. An assumption underlying both of those options when proposed was that there is up to 70 feet of pavement curb to curb. Since the existing curb-to-curb dimension for Sherwood is limited to 64 feet, both options had to be slightly modified during the analysis.

Options

Option 1: Two travel lanes and turn pockets

Creston to Commerce:

- | | |
|--------------------------|---------|
| (2) 12-foot travel lanes | 24 feet |
| (2) 6-foot bike lanes | 12 feet |

(2) 1.5-foot buffers	3 feet
Median	<u>25 feet</u>
Total	64 feet (Note: no parking on either side)

The southwest curb at Commerce would remain in its present location but would be modified to meet the Americans with Disabilities Act (ADA) requirements.

Commerce to Fontana:

(2) 12-foot travel lanes	24 feet
(2) 6-foot bike lanes	12 feet
(2) 1.5-foot buffers	3 feet
(1) Parking lane (south side)	7 feet
Median	<u>18 feet</u>
Total	64 feet

Option 2: Four travel lanes and turn pockets

Creston to Commerce:

(4) 11-foot travel lanes	44 feet
(2) 4.5-foot bike lanes	9 feet
Median	<u>11 feet</u>
Total	64 feet (Note: no parking on either side)

The southwest curb at Commerce would remain in its present location but would be modified to meet the Americans with Disabilities Act (ADA) requirements.

Commerce to Fontana:

(2) 11-foot travel lanes	22 feet
(2) 4.5-foot bike lanes	9 feet
(1) Parking lane (south side)	7 feet
Median	<u>26 feet</u>
Total	64 feet

Analysis and Conclusions

Option 1--Two travel lanes and turn pockets: This option would meet the City's adopted Traffic Circulation needs up through General Plan build-out (2045). It also would meet the City's adopted Bikeway Master Plan. It also closely matches the existing configuration for the roadway: two travel lanes each way and a striped median. However, the 12-foot travel lanes deviate from the Council's 2013 adopted policy. This is a more attractive street design, an important consideration given that this will be the major entrance into Chandler Ranch. It will also have lower long-term maintenance costs, while still having sufficient traffic capacity to meet current and full-buildout needs.

Option 2--Four travel lanes and turn pockets: This option would also meet the City's adopted Traffic Circulation needs up through General Plan build-out and the City's adopted Bikeway Master Plan. This proposed road cross-section is a substantial deviation from the existing road, but would generally match the configuration at the east end of Niblick Road. Currently, as Quail Run residents make a left turn movement as they enter and or exit their facility, they are crossing through one travel lane. With this 4-lane option, they would need to cross two travel lanes with the associated impact of waiting for two travel lanes to clear before making the left turn movements in and out of Quail Run. Furthermore, this option would not have a buffer area between the travel lane and the bike lane, would provide additional traffic capacity with less beautification and higher long-term maintenance costs.

The City Council requested the above information to help inform design decisions for the improvement of Sherwood Road. Considerations include design facts, including traffic modeling based on projected

City build-out, the basis for the need for certain design features, and the community's expectations for safe, attractive, "gateway" infrastructure design, and long-term costs.

In regard to truck traffic for the Commerce Way area, and the safe, comfortable maneuvering of trucks and other large vehicles, a 12-foot lane width is not required – it's a Caltrans standard used for high-volume, high-speed highways and freeways. "In-town" City traffic does not require this wide of a street lane for safety or access, even for trucks, as demonstrated by the daily use of Niblick Road (with an 11-foot wide lane width) by large delivery trucks for daily access to the Woodland Plaza shopping centers.

In regard to traffic congestion, Niblick Road is currently congested during morning and evening peak hours, as well as the mid-afternoon, due to two factors: (1) it is a major arterial that collects traffic from all southeast neighborhoods and funnels them through this section of town towards Highway 101; and (2) Paso Robles High School exacerbates peak hour congestion by creating a bottleneck in the middle of the road segment. However, traffic inputs east of Creston Road on Sherwood Road have very different contributing factors that affect it now, and into the future. The City's traffic model for the 2011 Circulation Element, as well as early feedback on the 2017 Circulation Element Update, indicate that future eastside development will not result in significant traffic congestion (due to development buildout east of Creston Road) that would warrant four (two east-, and two westbound) travel lanes. This segment would collect traffic from Airport Road south of Linne Road, future Chandler Ranch and Olsen Ranch development, and some County traffic, but it would not become a collector of several other neighborhoods such as how Niblick Road functions, and therefore, east of Creston Road is not projected to deteriorate traffic flow to the extent that it would necessitate four travel lanes. There is no evidence for the need for this design parameter, and it would not serve the actual and future needs of the community.

Additionally, pedestrian safety as well as community design are important issues that could be remedied for this unattractive section of road with context-sensitive road design solutions. Surrounding neighbors currently have difficulty traversing across this wide section of road to walk from transit stops, and for neighbors south of Sherwood Road to walk to the retail center. Future development to the east (e.g., Chandler Ranch) will look forward to being able to comfortably and safely walk to retail businesses as well. Solutions such as narrowing street crossings and providing pedestrian mid-street refuges add safety measures, especially for senior citizens and children. (The City's efforts underway with the Pedestrian Master Plan clearly articulates the purpose and need for safe street crossings. This plan will be moving forward for public review in September 2017.)

The City's Gateway Design Standards identify this road segment as a major gateway entrance (Gateway J) into the City. Gateways announce the arrival into a place, and provide an immediate sense of local aesthetics and investment. An entry boulevard experience with landscaping, street trees and pedestrian facilities would transition the rural-to-urban experience with beauty. The eastern edge of the City includes plans to develop two high-quality residential developments, Chandler Ranch and Olsen Ranch. Sherwood Road will be the entrance to these areas, and could add value to these new neighborhoods. Airport Road south of Linne Road provides a nice example of a beautiful residential collector street with some of the design features mentioned above.

Airport Road



Concern was also expressed that the City should not landscape Sherwood Road, in order to save water. The City waters young trees and drought-tolerant landscaping only for the first few years. The amount of water required for the proposed landscaping would equate to only two single-family homes, and only for the first few years. After that, the water usage will drop to almost zero.

Fiscal Impact

Supplemental Sales Tax funds (General Fund), have been identified with this project (no grant funds). Both proposed options can have striped medians or landscaped medians. Although the initial cost for a landscaped median is more than for striping the existing pavement, maintaining pavement is significantly more expensive than maintaining landscaping. Analysis has shown that it costs about \$15 per square foot to maintain landscaping and \$27 per square foot to maintain pavement. For a single 12-foot-wide lane, 100 feet long, total costs over the 25-year lifetime of the pavement would be \$32,625. For the same area, landscaping with drought-tolerant trees and shrubs, the 25-year maintenance costs are only \$17,650.

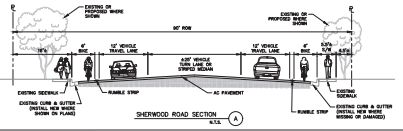
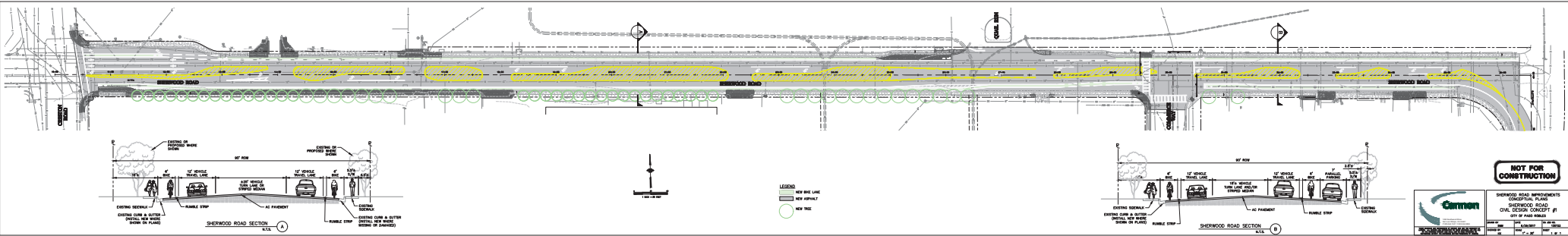
Thus, life-cycle costs for a landscaped median are actually less than for a flush, paved median. As the City is currently struggling to have enough funding for pavement maintenance, having more pavement is likely to make funding even more difficult in the future.

Recommendation

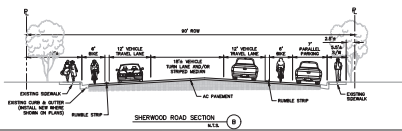
Approve two travel lanes and turn pockets (Option 1) for the Sherwood Road design and direct staff to finalize the design.

Attachments

1. Option 1 design diagram
2. Option 2 design diagram
3. Original conceptual design



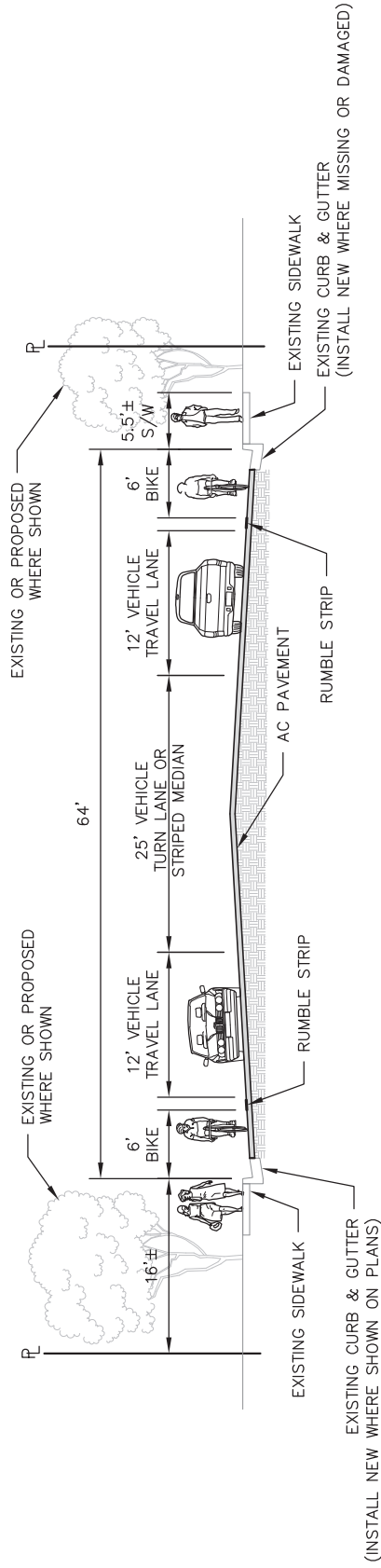
LEGEND
 NEW SIDE LINE
 NEW SIGNAL
 NEW TREE



NOT FOR CONSTRUCTION

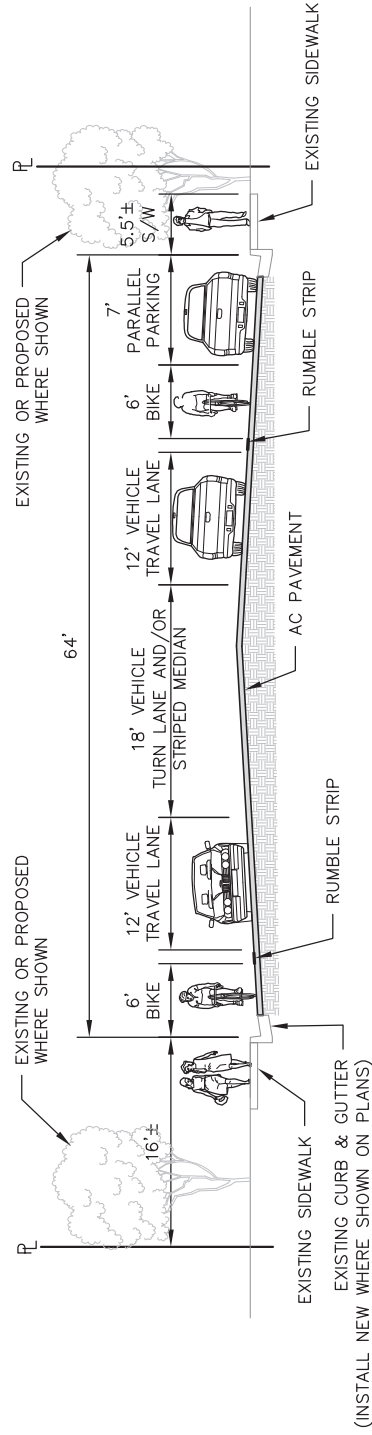
SHERWOOD ROAD IMPROVEMENTS CONCEPT PLAN
SHERWOOD ROAD CIVIL DESIGN CONCEPT #1
 100% OF ROAD WIDTH

DATE	11/11/2014
BY	J. J. W.
CHECKED BY	J. J. W.
SCALE	AS SHOWN



SHERWOOD ROAD SECTION (WEST OF COMMERCE)

N.T.S.

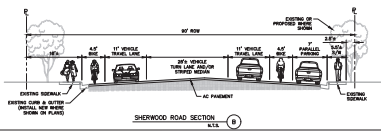
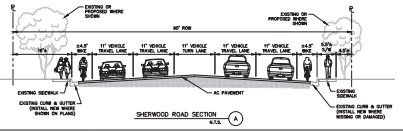
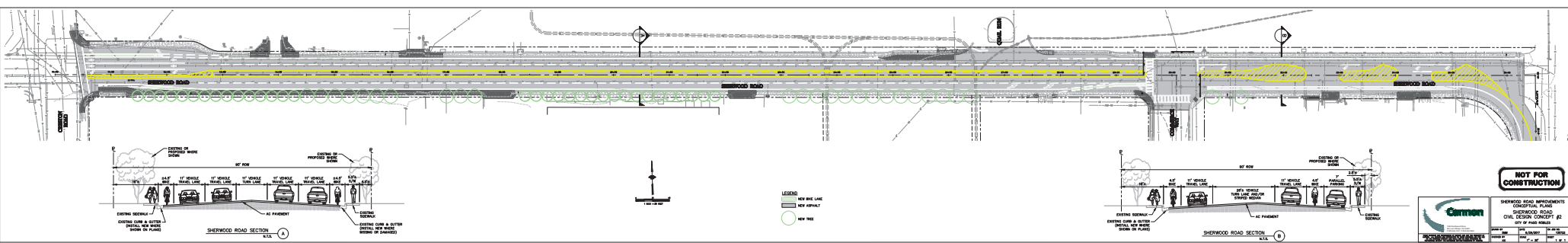


SHERWOOD ROAD SECTION (EAST OF COMMERCE)

N.T.S.

SHERWOOD ROAD

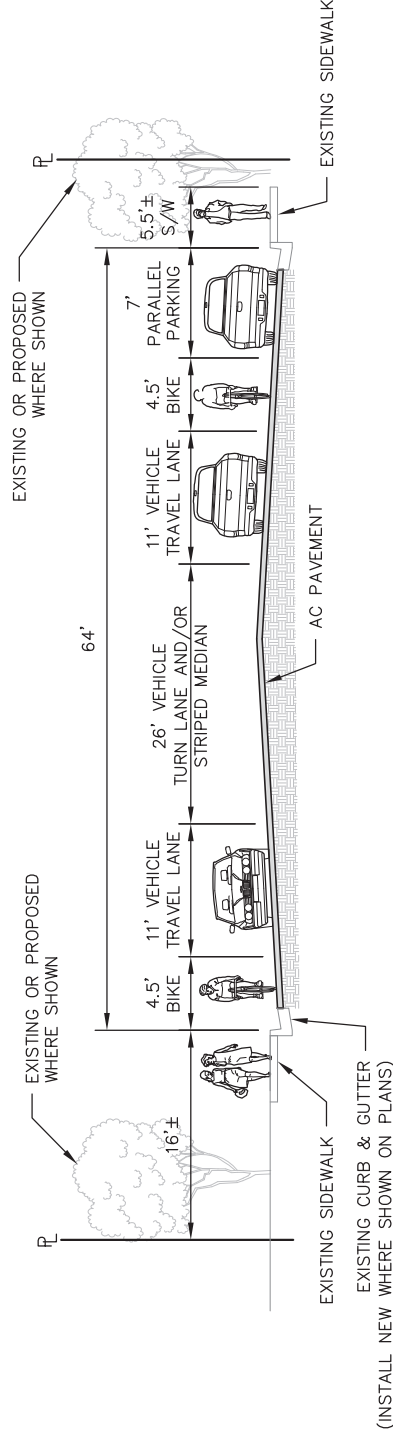
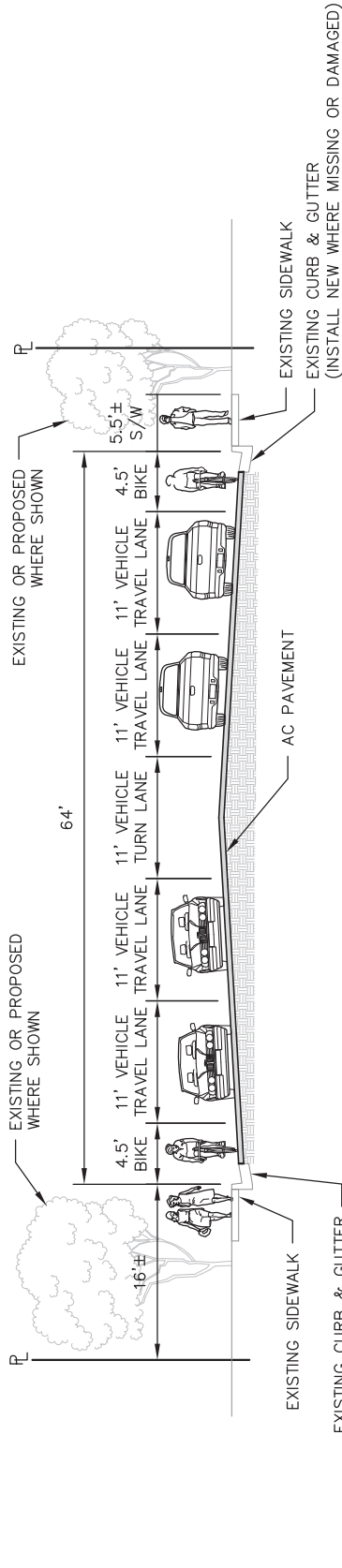
OPTION #1 CROSS SECTIONS



NOT FOR CONSTRUCTION

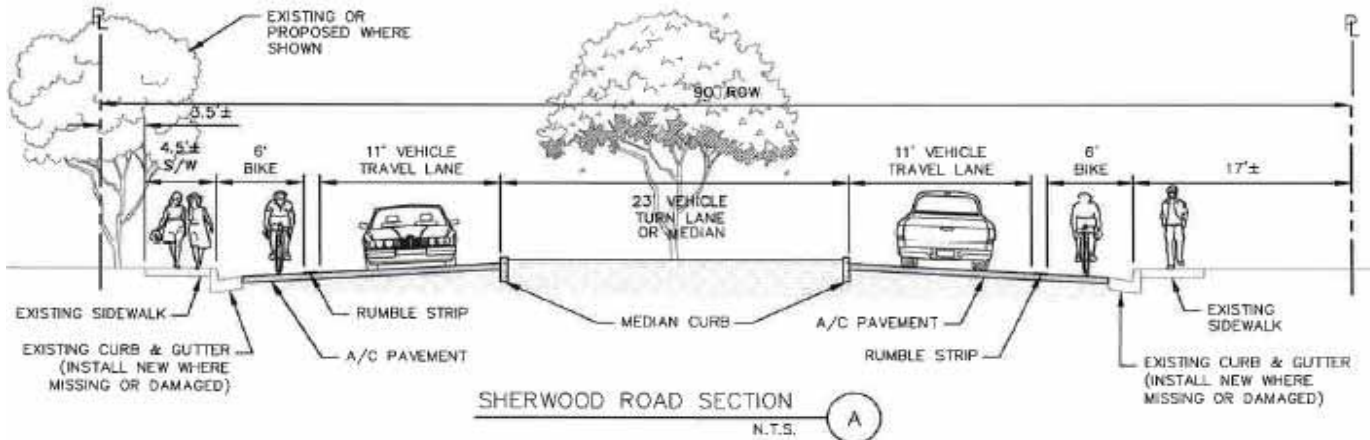
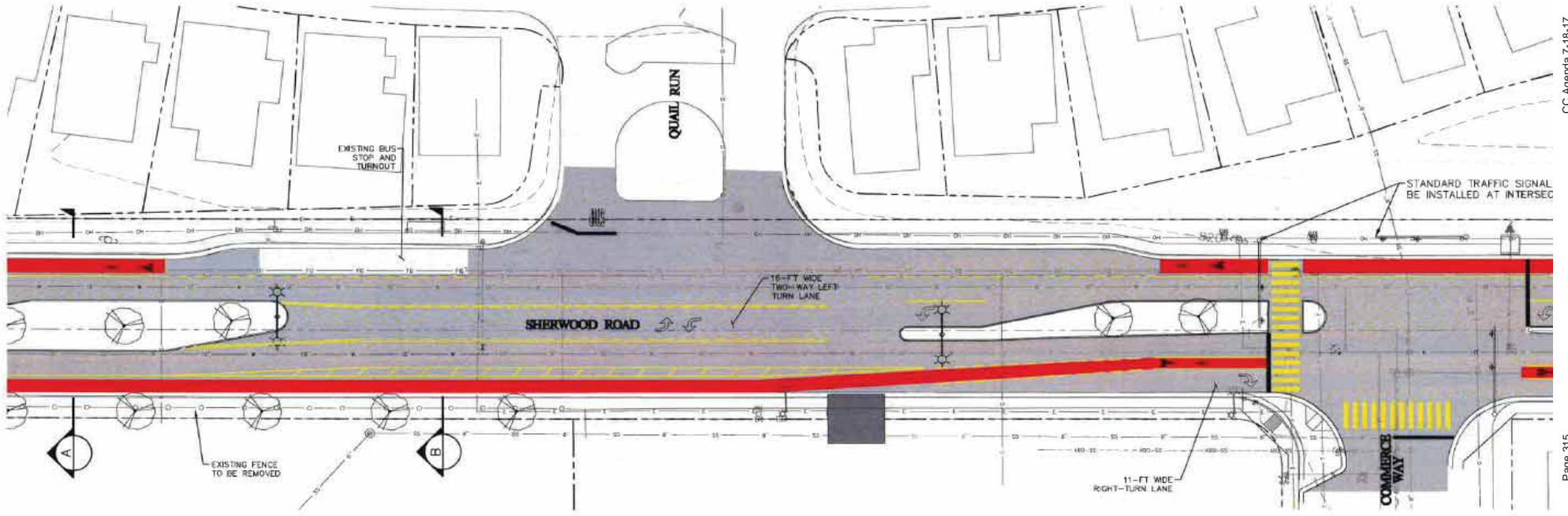
SHERWOOD ROAD IMPROVEMENTS
CONCEPT PLAN
SHERWOOD ROAD
CIVIL DESIGN CONCEPT #2
DATE: 10/15/2014

PROJECT NO.	14-001
DATE	10/15/2014
SCALE	1" = 100'



SHERWOOD ROAD

OPTION #2 CROSS SECTIONS



NOT FOR CONSTRUCTION

SHERWOOD ROAD IMPROVEMENTS
CONCEPTUAL PLANS
QUAIL RUN MODIFICATIONS
OPTION 2
CITY OF PINE BLUFF

DATE	BY	CHKD BY	DATE
08/15/17	AW/STP	AW/STP	08/15/17
SCALE	SHEET NO. 1 OF 1		