## **PROJECT DESCRIPTION – CONSTRUCTION SCHEDULE/SPECIFICATIONS**

T-Mobile West LLC ("T-Mobile" or "Company") provides the following Project Description – Construction Schedule/Specifications for Census Tract T53025010100, pursuant to the requirements of 47 C.F.R. § 54.1005(b) and the *Mobility Fund Winning Bid Public Notice*.<sup>1</sup>

I. Project Description [Mobility Fund Winning Bid Public Notice at para. 17]

T-Mobile will use the Mobility Fund Phase I support received for Census Tract T53025010100 to construct new wireless facilities to provide 3G wireless service to approximately 556.12 unserved road miles in the census tract. Assuming T-Mobile is authorized to receive support in 1Q2013, the Company anticipates that it will commence the build out of network facilities in 1Q2013 and conclude in 1Q2015. T-Mobile plans to deploy new 3G services primarily by collocating new cell sites on existing facilities and constructing a new cell site. T-Mobile will validate coverage using a combination of industry standard computer modeling and drive testing the new network.

## II. Network Specifications and Feasibility [Mobility Fund Winning Bid Public Notice at para. 18]

T-Mobile is a well-established, national facilities-based wireless service provider in the United States. This project to deploy new wireless facilities primarily by collocating new cell sites on existing facilities and constructing a new cell site to provide 3G service in unserved areas in Census Tract T53025010100 is well within the technical capability of the Company.

<sup>&</sup>lt;sup>1</sup> Mobility Fund Phase I Auction Closes, Public Notice, DA 12-1566 (rel. Oct. 3, 2012) ("Mobility Fund Winning Bid Public Notice").

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#### **Project Description**

T-Mobile will deploy 3G "UMTS" technology in the unserved areas of Census Tract T53025010100. Depending on the outcome of engineering design work, the Company will use either Personal Communications Service ("PCS") spectrum at 1900 MHz or Advanced Wireless Services ("AWS") spectrum at 1.7/2.1 GHz to provide 3G service in Census Tract T53025010100.<sup>2</sup> UMTS technology will be deployed using the Company's PCS and/or AWS spectrum and the Company will meet all of its public interest obligations, including the roaming and collocation requirements under the Mobility Fund rules. The use of UMTS technology will enable the Company to meet or exceed the threshold data transmission rates of 50 Kbps uplink and 200 Kbps downlink for 3G services.

Preliminary computer modeling of the radio frequency ("RF") design for providing 3G service in unserved areas within Census Tract T53025010100 indicates that approximately three (3) new cell site facilities will be required. Connectivity to T-Mobile's nationwide network will be provided through either new or existing backhaul facilities using either copper, fiber, or microwave connections. All newly-constructed sites will be connected to, and integrated with, T-Mobile's existing network and switching infrastructure in Washington.

No major problems are anticipated for completing this project on time and within budget. However, there are a number of challenges to overcome, including the acquisition and construction of the required new sites, which may raise zoning, construction, and backhaul issues. T-Mobile's prior extensive experience building network facilities will help resolve any unforeseen problems or delays that may be encountered in completing this project.

 $<sup>^{2}</sup>$  As demonstrated in the Spectrum Access exhibit, the Company has access to a sufficient amount of spectrum to provide the planned 3G service.

# III. Project Budget and Disbursements [Mobility Fund Winning Bid Public Notice at para 19 and 21]

T-Mobile has established a budget of approximately \$960,975 for capital expenditures for this project, which is consistent with the amount of Mobility Fund Phase I support to be received. At this time, T-Mobile does not anticipate that it will need additional funds for capital expenditures to meet the build-out requirements in 47 C.F.R. § 54.1006, but, to the extent additional funding is required, either for capital expenditures or for operational expenses, it will be provided by the Company.

The budget for the project is as follows:

- Existing Site Upgrades: \$0
- New Sites: Colocations: \$400,000
- New Sites Greenfield : \$350,000
- Drive Testing and Labor : \$17,440
- Design Modifications and Miscellaneous Expenses (including maintenance): \$193,535

T-Mobile plans to provide service in the unserved areas in Census Tract T53025010100 with 3G service within two (2) years from its start of work, which is anticipated to begin in the first quarter of 2013 after T-Mobile is authorized to receive Mobility Fund Phase I support. T-Mobile expects to cover 50% of the road miles in Census Tract T53025010100 by the end of the first quarter of 2014, thereby meeting the threshold to receive the second disbursement of Mobility Fund Phase I support. The remaining road miles (between 75% and 100%) will be covered by the first quarter of 2015, thereby meeting the threshold to receive the final disbursement of support.

IV. Project Plan [Mobility Fund Winning Bid Public Notice at para. 16]

The project is divided into five phases: (1) network design; (2) site acquisition; (3) pre-

construction; (4) construction; and (5) drive testing/site integration and deployment.<sup>3</sup> There

will be some overlap between the phases of the project because some sites will progress faster

than others. The following is the initial schedule for the project:

- Network design: Start and End in 1Q13
  - Includes RF design work and computer modeling, identifying areas of interest for new sites.
- Site Acquisition: Start 1Q13; End 1Q14
  - Includes gathering potential site candidates within the areas of interest identified by RF design.
- Pre-Construction: Start 3Q13; End 2Q14
  - Once a final site candidate has been selected, this phase includes gathering RFPs from vendors that would build the site, and negotiating contracts with them.
- Construction: Start 3Q13; End 3Q14
  - Includes building the sites to T-Mobile's specifications.
- Drive Testing/Site Integration and Deployment: Start 3Q13; End 1Q15
  - Includes integrating sites into our network and testing sites to ensure they meet RF design requirements.
- Meet requirement of 50% road miles covered: by end of 1Q14
- Meet requirement of at least 75% road miles covered: by end of 1Q15

<sup>&</sup>lt;sup>3</sup> The *Mobility Fund Winning Bid Public Notice* also identifies "maintenance" as a phase of the project. T-Mobile anticipates that maintenance activities will take place throughout all phases of the project, as well as beyond the initial construction and deployment phase.

The estimated budget per quarter per phase of the project is as follows (rounded to the nearest thousand dollars):

ltem	1Q13	2Q13	3Q13	4Q13	1Q14	2Q14	3Q14	4Q14	1Q15
Existing Site									
Upgrades	\$0 K	\$0 K	\$0 K	\$0 K	\$0K	\$0 K	\$0 K	\$0 K	\$0K
New Sites:									
Colocations	\$60 K	\$80 K	\$80 K	\$140 K	\$40 K	\$0 K	\$0 K	\$0 K	\$0 K
New Sites -									
Greenfield	\$35 K	\$53 K	\$70 K	\$70 K	\$35 K	\$35 K	\$35 K	\$18 K	\$0 K
Drive Testing									
and Labor	\$0 K	\$0 K	\$2 K	\$3 K	\$3 K	\$3 K	\$3 K	\$3 K	\$3 K
Design									
Modification									
and									
Miscellaneous									
Expenses	\$0 K	\$0 K	\$19K	\$39 K	\$58 K	\$58 K	\$19 K	\$0 K	\$0 K

## Budget

All project timelines, milestones, new cell sites designed to meet coverage requirements, and costs are estimated to the best of T-Mobile's ability as of November 1, 2012, and are subject to

change as the project progresses.