5. Local Loops
5.4 xDSL Qualified and Digital Designed Links

5.4.1	Description
A.	xDSL links provide transmission technology capable of supporting either Asymmetrical Digital Subscriber Line (ADSL) or High-Bit Rate Digital Subscriber Line (HDSL). ADSL is a transmission technology on twisted pair copper loop plant, which transmits an asymmetrical digital signal of up to 6 Mbps to the TC and up to 640 kbps from the TC using one of a variety of line codes as specified in ANSI standards T1.413-1995-007R2 and TR 72575, Issue 2. HDSL is a transmission technology which transmits up to 784 kbps over one pair or up to 1.5 Mbps over 2 twisted copper cable pairs, as specified in TR-72575, Issue 2, using the 2 Binary/1Quartenary (2B1Q) line code. Following are the types of xDSL links provided by the Telephone Company.
1.	**Digital Two-Wire Link (ADSL Qualified - less than 12,000 feet)**—Provides a channel equivalent to a two-wire, non-loaded, twisted copper pair loop of less than 12,000 feet, including bridged tap of less than 6,000 feet, from an end user's premises to a POI at a collocation arrangement in the Telephone Company's central office. These links are provisioned in accordance with the technical specifications described in TR 72575, Issue 2.
a.	The digital two-wire link (ADSL qualified) is available where facilities exist. The Telephone Company will not construct new copper facilities to provide these links.
2.	**Digital Two-Wire Link (ADSL Qualified - less than 18,000 feet)**—Provides a channel equivalent to a two-wire, non-loaded, twisted copper pair loop of less than 18,000 feet, including bridged tap of less than 6,000 feet, from an end user's premises to a POI at a collocation arrangement in the Telephone Company's central office. These links are provisioned in accordance with the technical specifications described in TR 72575, Issue 2.
a.	The digital two-wire link (ADSL qualified) is available where facilities exist. The Telephone Company will not construct new copper facilities to provide these links.
3.	**Digital Two-Wire Link (HDSL Qualified)**—Provides a channel equivalent to a two-wire, non-loaded, twisted copper pair loop of less than 12,000 feet, including bridged tap of less than 2,500 feet, from an end user's premises to a POI at a collocation arrangement in the Telephone Company's central office. These links, suitable for the transport of a HDSL 784 kbps digital signal, are provisioned in accordance with the technical specifications described in TR 72575, Issue 2.
a.	The digital two-wire link (HDSL qualified) is available where copper facilities exist. The Telephone Company will not construct new copper facilities to provide these links.
b.	Only non-loaded and non-repeated twisted cable pairs that do not exceed a technical length limitation can support HDSL capabilities.

5. Local Loops
5.4 xDSL Qualified and Digital Designed Links

5.4.1	Description
A.	(Continued)
4.	**Digital Four-Wire Link (HDSL Qualified)**—Provides a channel equivalent to two two-wire, non-loaded, twisted pair copper of less than 12,000 feet, including bridged tap of less than 2,500 feet, from an end user's premises to a POI at a collocation arrangement in the Telephone Company's central office. These links, suitable for the transport of a HDSL 1.568 Mbps digital signal, are provisioned in accordance with the technical specifications described in TR 72575, Issue 2.
a.	The digital four-wire link (HDSL qualified) is available where copper facilities exist. The Telephone Company will not construct new copper facilities to provide these links.
b.	Only non-loaded and non-repeated twisted cable pairs that do not exceed a technical length limitation can support HDSL capabilities.
5.	**Digital Designed Links**—At the option of the TC, the Telephone Company will condition ISDN, ADSL or HDSL links. The Telephone Company will also add ISDN range extensions to the copper portion of a two-wire digital ISDN capable link, if requested. The following link design options are available at additional charges to the TC. Requests for other link designs will be handled on a Bona Fide Request basis as specified in Part A, Section 2.
a.	Two-wire digital ADSL conditioned designed metallic link with total loop lengths of 18,000 to 30,000 feet, no load coils, with standard bridged tap of less than 6,000 feet.
b.	Two-wire ADSL qualified link of less than 18,000 feet with bridged tap removed.
c.	Two-wire ADSL qualified link of less than 12,000 feet with bridged tap removed.
d.	Two-wire HDSL qualified link of less than 12,000 feet with bridged tap removed.
e.	Four-wire HDSL qualified link of less than 12,000 feet with bridged tap removed.
f.	Two-wire digital designed metallic ISDN-capable link with Telephone Company placed ISDN loop extension electronics.

5. Local Loops
5.4 xDSL Qualified and Digital Designed Links

5.4.2	Ordering Service
A.	xDSL links must be pre-qualified to ensure that the loop being provisioned meets the technical characteristics of a link able to support compatible ADSL or HDSL signals, as applicable.
1.	**Mechanized Pre-Qualification Database**—The TC must utilize this database in advance of submitting an order to determine whether a given loop is qualified for ADSL/HDSL per Telephone Company standards (yes or no). Loop length information is included. This database is currently being built on a central office by central office basis.
a.	If the TC submits an order for an ADSL or HDSL link that is not qualified, the Telephone Company will respond back to the TC with a non-qualified indicator.
b.	The TC may request manual loop qualification where the mechanized loop qualification database is not available.
2.	**Manual Loop Qualification**—If the mechanized database shows that a loop does not qualify, the TC may request manual loop qualification to determine the cause. Total metallic loop length (including bridged taps) that is greater than 18,000 feet, presence of load coils (yes or no), presence of digital loop carrier (yes or no), and qualification for ADSL/HDSL per Telephone Company standards (yes or no) is included. This additional information may be used by the TC when ordering a digital designed link.
a.	The TC may either request an engineering query or submit an order for conditioning a loop to make ADSL or HDSL compatible as a digital designed link.
3.	**Engineering Query**—The TC may request information about a link from Telephone Company records beyond that supplied by manual loop qualification. Information such as length, number and location of bridged taps, number and location of load coils, location of digital loop carrier, or cable gauge at specific locations from Telephone Company cable records may be requested.
4.	**Engineering Work Order**—When the TC orders digital designed links, an engineering work order is required in order to verify facilities availability, write the work order, and prepare the special bill generated as a result of construction.

5.4.3	Responsibility of the Telephone Company
A.	The Telephone Company will make trouble report status available to the TC.
B.	The suspension/termination of a TC's link for non-payment or for a cause other than non-payment will result in the suspension/termination of the link. The Telephone Company will notify the TC prior to the termination date. The Telephone Company reserves the right to terminate the TC's link if it creates interference or impairment with other Telephone Company facilities or services.

5. Local Loops
5.4 xDSL Qualified and Digital Designed Links

5.4.4	Responsibility of the TC
A.	The TC is responsible for coordinating with the Telephone Company to ensure that the unbundled element is installed in accordance with the TC's request.
B.	The TC is responsible for initiating, testing and sectionalizing (isolating) all end user trouble reports. The Telephone Company is responsible for testing, if necessary, with the TC to clear a trouble when the trouble has been previously sectionalized to the link.
C.	The TC is responsible for providing a contact number that is readily accessible 24 hours a day, 7 days a week.

5.4.5	Regulations
A.	All preordering, ordering, provisioning, maintenance and billing requests will be handled through the use of the Telephone Company's Direct Customer Access Service (DCAS) System.
B.	A change from one TC to another is considered a disconnect of the xDSL qualified link from the original TC and a connect of an xDSL qualified link with the new TC.
C.	At the request of the TC, the Telephone Company will provide continuity testing with the TC.

5.4.6	Conditioning Options
A.	**Remove Load Coils**—Telephone Company removal of load coils on a loop at the request of the TC.
B.	**Remove Bridged Taps**—Telephone Company removal of single or multiple bridged taps at the request of the TC.
C.	**Addition of ISDN Extensions**—Telephone Company electronics added to the copper portion of a two-wire digital ISDN-capable link so that it may provide service at lengths greater than 18,000 feet.

5.4.7	Application of Rates and Charges
A.	The following NRCs apply (refer to Part A, Section 3.3).
1.	Service Order (on a standard basis or an expedited basis, as appropriate).
2.	Service Connection-Central Office Wiring
3.	Service Connection-Other
4.	Manual Intervention Surcharges (on a standard basis or an expedited basis, as appropriate).
5.	Installation Dispatch Out

5. Local Loops
5.4 xDSL Qualified and Digital Designed Links

5.4.7	Application of Rates and Charges
A.	(Continued)
6.	Customer Misdirect-In
7.	Customer Misdirect-Out
8.	Customer Not Ready-Out
9.	Dispatch Out of Hours
B.	**Cooperative Testing**—NRC applies when the Telephone Company provides continuity testing.
C.	The following loop qualification rates and charges apply as appropriate.
1.	**Mechanized Loop Qualification Monthly Rate** applies per link pre-qualified using the Telephone Company's mechanized qualification database.
2.	**Manual Loop Qualification NRC** applies per link prequalified using manual process.
3.	**Engineering Query NRC** applies per link when a TC requests loop information from Telephone Company records beyond that supplied by manual loop qualification. This charge always applies when a TC orders a digital designed link.
D.	The following digital designed link rates and charges apply as appropriate. These rates and charges are in addition to all monthly rates and NRCs associated with the underlying xDSL links.
1.	**Engineering Work Order NRC** applies per digital designed link ordered.
2.	**Remove Load Coil NRC** applies per link requested. NRC varies depending on the length of the link. No charge applies for removal of load coils on links of less than 18,000 feet.
3.	**Addition of ISDN Loop Extension Electronics NRC** applies per link requested.
4.	**Remove Bridged Taps NRC** per link requested. There is one NRC for removal of a single, bridged tap. There is a different NRC if multiple bridged taps are removed. This NRC will not apply when a loop of less than 18,000 feet has bridged taps above 6,000 feet removed so that the total bridged tap length does not exceed 6,000 feet.
E.	Geographically deaveraged monthly rates apply per link.
F.	Service access charge and interconnection access charge elements contained in Part E (collocation) also apply.