APPENDIX A

EQUIPMENT SPECIFICATIONS

The following are the specific requirements of the Voice Recorder System (VRS):

1. Interact with a recently installed Nortel Networks CS1000 System.

2. Record every part of the conversation. In-bound and out-bound calling and called party's conversations are stored on the server for future reference in easy-to-use WAV and MP3 file format.

3. Review conversations on the server or desktop using Standard Media Player. Mark conversations as "reviewed" or previously read. Users must have the ability to replay a message from a remote PC workstation via the Internet.

4. Share files easily via e-mail and Internet connection.

5. Connect and provide live recording to the following type of devices:

    a. VOIP
    b. Analog lines
    c. Digital lines
    d. Radio frequencies (connecting directly to the frequency, or utilizing an scanner device)

6. Capture every number dialed and automatically attach the number to a particular conversation. Capture set display information, number dialed, incoming number, and digits entered during any conversation.

7. Provide the following features:

    a. Analog Extension Tapping
    b. Analog Trunk Tapping
    c. Archive to Media
    d. Archive to Server
    e. Archived Monitoring Records

f. Auto Record
g. Automatic Gain Control – increase/decrease volume of local and remote conversations by channel
h. Automatic Recording
i. Automatic Scheduled Backup of conversations and comments
j. Bookmark Recordings
k. Call Data Capture
l. Caller ID Capture
m. Centrex Tapping
n. Compression Rate 13kb/s (4GB=680 hours)
o. Connectivity:
    - Analog Telephone Sets
    - Digital Telephone Sets
    - Radio – two way
    - T1/E1
    - VOIP
p. Definable Administrative Permissions
q. Definable User Permissions
r. Desktop Monitor Search, Retrieval, Playback, and Record
s. Digital Extension Tapping*
t. Digital Trunk Tapping T1, PRI, EM, DNIS, E1
u. Display Status In, Out, Start, End, DTMF, Caller ID
v. DTMF Capture
w. E1 Trunk Recording
x. E-mail Message Delivery/Dissemination
y. Error Log
z. Event Log
aa. Flexible Storage Perimeters
bb. Hardware
cc. Indexed Media Player
dd. Live Monitoring (listen to conversations as they happen over a network)
ee. Manual E-mail Forward and Store Conversations
ff. Network Client Interface
gg. Network Ready (TCPIP)
hh. One-Touch Record /Desktop Activation
ii. Open Architecture:
    - Easy to Use
    - Intel Processor/Main Board
    - Microsoft O/S (Windows XP or Higher)
    - PC Based
    - Proven Technology
    - Scalable

jj. Passive Monitoring
kk. Password Protected
ll. Permission Based Programming
mm. Play Alert Tones*
nn. Playback of Archived Recordings (Server/Desktop/E-mail)
oo. Quality of Service (QOS) Monitoring (from any remote on or off-premises phone)
pp. Real-Time Display/Recording
qq. Recording Data (transaction numbers, names, comments, dispositions)
rr. Record By Code
ss. Record On Loop Connection
tt. Record On Voice Detection
uu. Remote Activation
vv. Remote Administration
ww. Remote Monitoring
xx. Remote Manager (view extension or channel status in real time)
yy. Reports by:
    - ANI
    - Caller ID
    - Comment
    - Date
    - Display
    - Extension
    - Name
    - Time
    - Trunk
zz. Save Recordings and Associated Data to any Media Device (DVDRW, CDRW, Memory Stick, Hard Drive, Network, Etc.)
aaa. Scheduled Recording Options
bbb. Screen Capture
ccc. Screen Pop Capability
ddd. Simple System Programming
eee. Stores Monitoring Records
fff. System Password Protection
ggg. T1 Trunk Recording
hhh. Tag Comments and Names to Conversations
iii. User Definable Reports
jjj. User Password Protection
kkk. User Ranking System
lll. Variable VOX Sensitivity Settings (by channel)
mmm. Volume Control
nnn. Wav File Save, Store, and E-Mail

8. The VRS is required to be able to record from the following trigger events:

    a. Call line ID, DNIS
    b. Desktop or networked activation (on demand)
    c. DTMF (code input)
    d. Loop Current
    e. Manual
    f. Off hook
    g. Station display
    h. Time of day
    i. VOX (Voice Activation)
    j. Voltage change

9. VRS software is required to be able to do search utilizing any of the following criteria:

    a. Group
    b. Extension
    c. Day
    d. Month
    e. Agent’s comment or notes
    f. Number dialed
    g. Caller ID
    h. Caller’s name

10. VRS software is required to search specific incidents, retrieve specific incidents, and email conversation at any time.

11. VRS software is required to be able to access remotely, from the Desktop providing control access with different levels of security access.

12. VRS software is required to provide the following information:

    a. Who is on the phone
    b. The start and stop time of the last call made, in-or-out, from any extension connected to the Call Logger server
    c. Number dialed or originated caller’s number
    d. Real time digital telephone display status

13. VRS software is required to be able to provide tamper proof coding when information is accessed in software.

14. VRS software is required to be able to have up to six (6) month of storage.

15. The system is required to be capable of synchronization to designated SNTP-NTP server(s).

16. The system is required to have diagnostics and alarms that can alert the user of a problem, system malfunction, or archive drive attention.

17. The system is required to have the following hard drive specifications and archive:

    a. Each VRS recording module must be capable of being configured with internally mounted hard drive(s). Each recording module must be capable of storing up to 80,000 channel hours per recorder.
    b. To maximize hard drive efficiency and provide a very high level of security, the VRS recording module must write voice to an unformatted partition on the local HDD, RAID 1 or RAID 5 disk array.
    c. In the event that the VRS recording module hard disk is approaching 100% full of unarchived data and there is no archive available, the recorder must initiate an alarm warning that data will be lost if a new archive is not enabled.
    d. For security reasons, it must not be possible to manually delete specific individual messages from the VRS hard drive(s).
    e. The operating system, primary recorder software, recordings and associated call records must be striped across multiple hard disks when the recorder is configured with a RAID 5 subsystem.
    f. The VRS recording module must be capable of supporting single or dual archive decks. In dual deck mode it must be possible to operate the decks in sequential or parallel mode.