

SECTION 2 – TECHNICAL SPECIFICATIONS

The following listed specifications and attachments cover the requirements for CCTV System Design, Engineering, Hardware, Installation Tech. Support & Test

2.1 ATTACHMENTS

2.1.1 DATASHEETS (In native format, Word or Excel)

| NUMBER | REVISION | DESCRIPTION | ADDED IN MR REVISION |
|------------------------|----------|----------------------------|----------------------|
| 24852-RD-JDD-J07-J0001 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0002 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0003 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0004 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0005 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0006 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0007 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0008 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0009 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0010 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0011 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0012 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0013 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0014 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0201 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0202 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0203 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0204 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0205 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0206 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0207 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0208 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0209 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0210 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0211 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0212 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0213 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0214 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0215 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0216 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0217 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0218 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0219 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0220 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0221 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0222 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0223 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0224 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0225 | A | Data Sheet for CCTV Camera | 0 |

| NUMBER | REVISION | DESCRIPTION | ADDED IN MR REVISION |
|------------------------|----------|----------------------------|----------------------|
| 24852-RD-JDD-J07-J0226 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0227 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0228 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0229 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0230 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0231 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0232 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0233 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0234 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0301 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0302 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0303 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0304 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0305 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0306 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0307 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0308 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0309 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0310 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0311 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0312 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0313 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0314 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0315 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0316 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0317 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0318 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0319 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0320 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0321 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0322 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0323 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0324 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0325 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0326 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0327 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0328 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0329 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0330 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0331 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0332 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0333 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0334 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0335 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0336 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0337 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0338 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0339 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0340 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0341 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0342 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0343 | A | Data Sheet for CCTV Camera | 0 |

| NUMBER | REVISION | DESCRIPTION | ADDED IN MR REVISION |
|------------------------|----------|----------------------------|----------------------|
| 24852-RD-JDD-J07-J0344 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0345 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0346 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0347 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0348 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0349 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0350 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0351 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0352 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0353 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0354 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0355 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0356 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0357 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0358 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0359 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0360 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0361 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0362 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0363 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0364 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0365 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0366 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0367 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0368 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0369 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0370 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0371 | A | Data Sheet for CCTV Camera | 0 |
| 24852-RD-JDD-J07-J0372 | A | Data Sheet for CCTV Camera | 0 |

2.1.2 SPECIFICATIONS (In PDF format)

| NUMBER | REVISION | DESCRIPTION | ADDED IN MR REVISION |
|------------------------|----------|---|----------------------|
| 24852-RD-3PS-000-A0190 | 0 | Piping and Equipment Coatings in Category A and B Areas | 0 |
| 24852-RD-3PS-000-A0200 | 0 | Piping and Equipment Coatings in Category C and D Areas | 0 |
| 24852-RD-3PS-000-S0001 | 0 | Engineering Specification for Seismic Protection of Equipment | 0 |
| 24852-RD-3PS-000-T0001 | 1 | Engineering Specification for Supplier Quality Assurance Program Requirements | 0 |
| 24852-RD-3PS-000-T0002 | 2 | Engineering Specification for General Project Requirements | 0 |
| 24852-RD-3PS-000-T0004 | 1 | General Engineering Specification for Document Requirements | 0 |
| 24852-RD-3PS-000-J0004 | C | Engineering Specification for Closed Circuit Television Requirements | 0 |

2.1.3 DRAWINGS (In PDF format)

| NUMBER | REVISION | DESCRIPTION | ADDED IN MR REVISION |
|--------------------------|----------|---|----------------------|
| 24852-RD-JD-J01-J0001001 | C | Control Support Building, Control System Architecture Block Diagram | |
| 24852-RD-JD-J01-J0002 | C | Enhanced Configur Bldg Control System Architecture Block Diagram | |
| 24852-RD-JD-J01-J0006 | C | Treaty Control System Architecture Block Diagram | |
| 24852-RD-JD-J01-J0011 | B | Central Control Room, Engineering Room Layout | 0 |
| 24852-RD-JD-J07-J0021 | C | CCTV System Block Diagram | 0 |
| 24852-RD-JD-J07-J0022 | C | CCTV System Outdoor Cameras Location Plan | 0 |
| 24852-RD-JD-J07-J0023 | B | CCTV System Energetics Processing Building Camera Location Plan | 0 |
| 24852-RD-JD-J07-J0024 | B | CCTV System Agents Processing Building Camera Location Plan | 0 |

2.1.4 OTHERS (In native format)

| NUMBER | REVISION | DESCRIPTION | ADDED IN MR REVISION |
|--------|----------|--|----------------------|
| NA | | Supplier Deviation Disposition Request (SDDR) Form(Refer to Engineering Specification for Supplier Quality Assurance Program Requirements, 24852-RD-3PS-000-T0001) | 0 |
| NA | | Document Transmittal Sheet and Schedule(Refer to General Engineering Specification for Seller Document Requirements 24852-RD-3PS-000-T0004) | 0 |
| NA | | Databases or spreadsheets to be used and/or completed by the Seller(Refer to Section 3.3 of this document) | 0 |

2.2 TECHNICAL NOTES:

- A. The Bidder shall complete the CCTV System questionnaire, in attached "Technical Form of Proposal" file.
- B. The Bidder shall modify the Buyer's conceptual CCTV Block Diagram, Dwg. 24852-JD-J07-J0021 based on the proposed system and specific equipment/models and provide them with the Proposal.
- C. The Bidder shall provide a typical preliminary CCTV Cabinets and Field Enclosures and Camera Control Receiver layout with dimensions with the Proposal.

- D. The Bidder shall provide a typical CCTV Cabinet and Field Enclosure wiring diagram format drawing with the Proposal.
- E. The Bidder shall provide a typical connection box detail for camera plug in with the Proposal.
- F. The Bidder shall provide typical cable harness showing conductor make up with the Proposal.
- G. The Bidder shall provide typical connectors drawings of each type proposed for camera to cable harness and connection box to cable harness.
- H. The Bidder shall provide the physical standard (e.g. RS232, RS422, RS485, etc.) and the communications protocol used in the CCTV system with the Proposal.
- I. Bidder shall provide power requirements/consumption and environmental conditions for all proposed equipment, cabinets, workstations, etc
- J. Bidder shall base the proposed price on their published price list with fixed percent discounts that shall be valid through the end of 2008. Such discounts shall be applied to all the CCTV components proposed to be fabricated or provided by the Bidder, specified or not specified presently in this requisition. If different discount percentages are to be applied to different categories of products, they shall be clearly indicated. Similar pricing factors shall be applied to the control cabinets.
- K. The Seller shall be responsible for providing a complete and accurate design based upon the specifications. See specification 24852-RD-3PS-J0004, section 1. Scope. As such the Seller shall
1. correct/modify item descriptions where applicable.
 2. add/delete items where applicable.
 3. update drawings to provide the exact locations of all items, in 3D.
 4. identify all items with make, model, and part number, where applicable.
 5. provide all required dimensions, lengths, conductor sizes/counts, fiber counts, connector types, connector counts.
- L. The following work is not included and will be provided by others:
1. Equipment unloading, storage, and installation at the construction site
 2. Wiring and conduit external to the CCTV system
 3. 120Vac/60Hz power and system grounding sources external to the CCTV system
 4. Communication and remote I/O cables external to the CCTV system. (However, Bidder shall specify requirements to field network cables).
- M. In case of conflict within this requisition or between the requisition, the accompanying drawings, documents, data sheets and any other supplemental specifications, the Seller shall immediately refer the matter in writing to the Buyer who will make a determination and written clarification.
- N. The Seller shall have overall responsibility for the operation of the installed and integrated CCTV system, including providing to the Buyer recommendations for the Buyer-furnished cables.
- O. The Seller shall identify all components that are required for the overall system to function, whether or not such components are specifically mentioned in this requisition.
- P. The Seller shall be responsible for furnishing all the software and accessories required for the system configuration and programming.