ABBREVIATIONS

AATCC .................................. American Association of Textile Chemists & Colorists
A/E .................................. Architect/Engineer
AABC .................................. Association Air Balance Council
ABB .................................. Asea Brown Boveri
ABS .................................. Acrylonitrile Butadiene Styrene
ACH .................................. Air Changes per Hour
ACI .................................. American Concrete Institute
ACM .................................. Asbestos Containing Materials
ACNS .................................. Academic Computing and Networking Services
ADA .................................. Americans with Disabilities Act
AED .................................. Automated External Defibrillator
AFF .................................. Above Finished Floor
AIA .................................. American Institute of Architects
AIHA .................................. American Industrial Hygienist Association
AISC .................................. American Institute of Steel Construction
AITC .................................. American Institute of Timber Construction
ALCC .................................. Association of Landscape Contractors of Colorado
AMCA .................................. Air Movement and Control Association
AMI .................................. Advanced Metering Infrastructure
AMRL .................................. AASHTO Materials Reference Laboratory
ANSI .................................. American National Standard Institute
ARI .................................. American Refrigeration Institute
ASHRAE .................................. American Society of Heating, Refrigeration & Air Conditioning Engineers
ASME .................................. American Society of Mechanical Engineers
ASNT .................................. American Society for Nondestructive Testing
ASTM .................................. American Society for Testing & Materials
AWG .................................. American Wire Gauge
AWS .................................. American Welding Society
AWWA .................................. American Water Works Association
BAS .................................. Building Automation System
BCSI .................................. Building Component Safety Information
BIA .................................. Brick Institute of America
BIM .................................. Building Information Modeling
BIR .................................. Building Inspection Record
BOG .................................. Board of Governors
BTU .................................. British Thermal Units
BTUH .................................. British Thermal Units per Hour
CAD .................................. Computer Aided Drafting
CAR .................................. Corrective Action Report
CAS .................................. Card Access System
CC .................................. Center of Tree Center
CCHE .................................. Colorado Commission on Higher Education
CCR .................................. Code of Colorado Regulations
CCRL .................................. Cement and Concrete Reference Laboratory
CDC .................................. Center for Disease Control
CDLE .................................. Colorado Department of Labor and Employment
CDSR .................................. Contract Data Submittal Report
CDPHE .................................. Colorado Department of Public Health & Environment
CE .................................. Center of Tree Edge
CF .................. Cubic Feet
CFC .................. Chlorofluorocarbon
CFM .................. Cubic Feet per Minute
CSU FACILITIES PLANNING, DESIGN AND CONSTRUCTION STANDARDS

ADDITIONAL DOCUMENTS

CHW.................................Chilled Water
COB.................................Change Order Bulletin
CPM.................................Critical Path Method
CQC.................................Contractor Quality Control
CRI.................................Color Rendering Index
CRS.................................Colorado Revised Statutes
CSA.................................Canadian Standards Association
CSI.................................Construction Specification Institute
CSU.................................Colorado State University
CSUPD..............................Colorado State University Police Department
dB.................................Decibels
DC.................................Direct Current
DDC.................................Direct Digital Control
DI.................................Deionized Water
DIP.................................Ductile Iron Pipe
DOT.................................Department of Transportation
DRC.................................Design Review Committee
DV/DT...............................Differential Voltage / Differential Time
DWG.................................Drawing (AutoCAD format)
ECM.................................Electrically Commutated Motor
EE.................................Edge of Tree to Edge
EFCO...............................Emergency Field Change Order
EHS.................................Environmental Health Services
EMI.................................Electrical Magnetic Interference
EMT.................................Electrical Metallic Tubing
ENT.................................Electrical Nonmetallic Tubing
EOL.................................End of Line Resistor
EPD.................................Environmental Product Declarations
EPDM...............................Ethylene Propylene Diene Monomer
EPA.................................Environmental Protection Agency
F.................................Fahrenheit
FACP...............................Fire Alarm Control Panel
FACU...............................Fire Alarm Control Unit
FAS.................................Fire Alarm System
FM.................................Facilities Management
FPM.................................Feet per Minute
FR.................................Flame Retardant
FRP.................................Fiberglass Reinforced Plastic
FT/ft’.................................Feet
GAL.................................Gallon
GCC.................................General Conditions of Contract
GE.................................General Electric
GFCI.................................Ground Fault Circuit Interrupter
GFI.................................General Fault Indicator
GIS.................................Geographic Information System
GPM.................................Gallons per Minute
GSF.................................Gross Square Feet
HBRB...............................Historic Building Review Board
HDS.................................Housing and Dining Services/Facilities
HHS.................................Health and Human Services
HM.................................Hollow Metal
HP/hp...............................Horse Power
HR/hr...............................Hour
HVAC...............................Heating, Ventilating & Air Conditioning
ADDITIONAL DOCUMENTS

HZ..........................Hertz
IA..........................Irrigation Association
IAPMO..........................International Association of Plumbing & Mechanical Officials
ICC..........................International Code Council
IDC..........................Indicating Device Circuits
IDF..........................Intermediate Distribution Frame
IECC..........................International Energy Conservation Code
IEEE..........................Institute of Electrical & Electronic Engineers
IES..........................Illuminating Engineering Society
IFC..........................International Fire Code
IGBT..........................Insulated Gate Bipolar Transistor
IN/in”..........................Inch
IPVCC..........................Inclusive Physical and Virtual Campus Committee
ISO..........................International Organization for Standardization
JCI..........................Johnson Control, Inc.
kW..........................Kilowatt
kWh..........................Kilowatt Hour
LACS..........................Laboratory Air Control Systems
LBS..........................Pounds
LCD..........................Liquid Crystal Display
LED..........................Light Emitting Diode
LEED..........................Leadership in Energy and Environmental Design
LF/lf..........................Linear Foot
LIN..........................Linear
LPG..........................Liquid Petroleum Gas
LVT..........................Luxury Vinyl Tile
MBtu..........................Thousand British Thermal Units
MDF..........................Main Distribution Frame
MDP..........................Medium Density Industrial Particle Board
mils..........................One Thousands of an Inch
MPC..........................Master Plan Committee
MRL..........................Machine Room–Less
MS..........................Microsoft
MSDS..........................Material Safety Data Sheet
MUTCD..........................Manual on Uniform Traffic Control Devices
NAC..........................Notification Appliance Circuits
NANSR..........................Non Attainment New Source Review
NASF..........................Net Assignable Square Feet
NCMA..........................National Concrete Masonry Association
NCR..........................Nonconformance Report
NCS..........................National CAD Standard
NEBB..........................National Environmental Balancing Bureau
NEC..........................National Electric Code
NEII..........................National Electrical Illumination Institute
NEMA..........................National Electrical Manufacturers Associations
NFP..........................National Fire Protection Association
NICET..........................National Institute for Certification in Engineering Technologies
NIH..........................National Institute of Health
NIST..........................National Institute of Standards and Technology
NM..........................Non-Metallic
NM-C..........................Non-Metallic Cable
NRMCA..........................National Ready Mixed Concrete Association
NSF..........................National Sanitation Foundation
NTP..........................Notice to Proceed
### ADDITIONAL DOCUMENTS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>O&amp;M</td>
<td>Operations &amp; Maintenance</td>
</tr>
<tr>
<td>OAC</td>
<td>Owner, Architect and Contractor</td>
</tr>
<tr>
<td>OC/oc</td>
<td>On Center</td>
</tr>
<tr>
<td>OPS</td>
<td>Division of Oil and Public Safety</td>
</tr>
<tr>
<td>ORP</td>
<td>Oxidation-Reduction Potential</td>
</tr>
<tr>
<td>OSA</td>
<td>Office of the State Architect</td>
</tr>
<tr>
<td>OS&amp;Y</td>
<td>Outside Stem and Yoke</td>
</tr>
<tr>
<td>OSHA</td>
<td>Occupational Safety &amp; Health Administration</td>
</tr>
<tr>
<td>OZ</td>
<td>Ounce</td>
</tr>
<tr>
<td>PICV</td>
<td>Pressure Independent Control Valve</td>
</tr>
<tr>
<td>PC</td>
<td>Personal Computer</td>
</tr>
<tr>
<td>PCA</td>
<td>Sheet Metal and Air Conditioning Contractors National Association</td>
</tr>
<tr>
<td>PE</td>
<td>Professional Engineer</td>
</tr>
<tr>
<td>PFA</td>
<td>Poudre Fire Authority</td>
</tr>
<tr>
<td>PDC</td>
<td>Physical Development Committee</td>
</tr>
<tr>
<td>PDF</td>
<td>Portable Document Format</td>
</tr>
<tr>
<td>PSD</td>
<td>Prevention of Significant Deterioration</td>
</tr>
<tr>
<td>PSI</td>
<td>Pounds per Square Inch</td>
</tr>
<tr>
<td>PSIG</td>
<td>Pounds per Square Inch Gauge</td>
</tr>
<tr>
<td>PTS</td>
<td>Parking Transportation Services</td>
</tr>
<tr>
<td>PVC</td>
<td>Polyvinyl Chloride</td>
</tr>
<tr>
<td>QC</td>
<td>Quick Response</td>
</tr>
<tr>
<td>RAR</td>
<td>Remedial Action Request</td>
</tr>
<tr>
<td>RCP</td>
<td>Reinforced Concrete Pipe</td>
</tr>
<tr>
<td>RCV</td>
<td>Remote Control Valve</td>
</tr>
<tr>
<td>RFI</td>
<td>Radio Frequency Interference</td>
</tr>
<tr>
<td>RMI</td>
<td>Risk Management &amp; Insurance</td>
</tr>
<tr>
<td>RMC</td>
<td>Rigid Metal Conduit</td>
</tr>
<tr>
<td>RPM</td>
<td>Revolutions per Minute</td>
</tr>
<tr>
<td>RS</td>
<td>Recommended Standard</td>
</tr>
<tr>
<td>SBP</td>
<td>State Buildings Program</td>
</tr>
<tr>
<td>SCR</td>
<td>Silicone Control Rectifiers</td>
</tr>
<tr>
<td>SCM</td>
<td>Stormwater Control Measures</td>
</tr>
<tr>
<td>SDI</td>
<td>Steel Door Institute</td>
</tr>
<tr>
<td>SEFA</td>
<td>Scientific Equipment and Furniture Association</td>
</tr>
<tr>
<td>SF/sf</td>
<td>Square Feet</td>
</tr>
<tr>
<td>SGC</td>
<td>Supplementary General Conditions</td>
</tr>
<tr>
<td>SIN</td>
<td>Sprinkler Information Number</td>
</tr>
<tr>
<td>SJI</td>
<td>Steel Joist Institute</td>
</tr>
<tr>
<td>SLC</td>
<td>Signaling Line Circuits</td>
</tr>
<tr>
<td>SMACNA</td>
<td>Sheet Metal and Air Conditioning Contractors National Association</td>
</tr>
<tr>
<td>SWP</td>
<td>Standard Working Pressure</td>
</tr>
<tr>
<td>TAB</td>
<td>Testing, Adjusting &amp; Balancing</td>
</tr>
<tr>
<td>TCP</td>
<td>Traffic Control Plan</td>
</tr>
<tr>
<td>TFE</td>
<td>Teflon</td>
</tr>
<tr>
<td>THHN</td>
<td>Thermoplastic High Heat-resistant Nylon-coated</td>
</tr>
<tr>
<td>TPI</td>
<td>Truss Plate Institute</td>
</tr>
<tr>
<td>TPO</td>
<td>Thermoplastic Olefin</td>
</tr>
<tr>
<td>TSI</td>
<td>Thermal/Mechanical System Insulation</td>
</tr>
<tr>
<td>TVSS</td>
<td>Transient Voltage Surge Suppression</td>
</tr>
<tr>
<td>UAS</td>
<td>Unmanned Aircraft System</td>
</tr>
<tr>
<td>UF</td>
<td>Underground Feeder</td>
</tr>
<tr>
<td>UFC</td>
<td>Uniform Fire Code</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>UHF</td>
<td>Ultra High Frequency</td>
</tr>
<tr>
<td>UL</td>
<td>Underwriters Laboratory</td>
</tr>
<tr>
<td>UPS</td>
<td>Uninterruptible Power Supply</td>
</tr>
<tr>
<td>USDA</td>
<td>United States Department of Agriculture</td>
</tr>
<tr>
<td>VAV</td>
<td>Variable Air Volume</td>
</tr>
<tr>
<td>VFD</td>
<td>Variable Frequency Drive</td>
</tr>
<tr>
<td>VPUO</td>
<td>Vice President of University Operations</td>
</tr>
<tr>
<td>W</td>
<td>Watt</td>
</tr>
<tr>
<td>WOG</td>
<td>Water, Oil or Gas</td>
</tr>
<tr>
<td>2D</td>
<td>Two Dimension</td>
</tr>
<tr>
<td>3D</td>
<td>Three Dimension</td>
</tr>
</tbody>
</table>