CITY OF LEE'S SUMMIT
PUBLIC WORKS DEPARTMENT
TRAFFIC ENGINEERING

APPROVED MATERIALS LIST FOR TRAFFIC SIGNALS

This document is provided as a benefit to contractors and suppliers who are performing work in the City of Lee's Summit. Only products identified on this list will be approved for installation on City traffic signal projects. This list shall not be used as a substitute for catalog cuts or material approval. This list is updated periodically. The models indicated on the list are approved, but are subject to final field inspection before acceptance.

The department may test new products and equipment for traffic signals. These new products may be installed on a traffic signal project or purchased on parts orders. Vendors may also submit items, at no cost to the City, for evaluation. Only a limited number of units will be accepted for evaluation until an item is added to the Approved Materials List. A vendor wishing to introduce a new product shall contact the City Traffic Engineer. Minor model changes do not require an evaluation, although the vendor shall submit specification sheets and a sample of the product for the City to inspect.

All equipment evaluations are coordinated through the City Traffic Engineer. The vendor supplying the equipment shall provide equipment specifications and a certification that the equipment meets and or exceeds City specifications before any testing is performed. The equipment may be tested for a period up to one-year, unless otherwise specified on the Approved Materials List. Products that are not performing satisfactorily will be replaced with an approved product if the vendor cannot provide timely correction of the problem or if unsatisfactory operation of the intersection results. In lieu of a testing period the vendor may supply proof of successful testing at other locations within the Kansas City metropolitan area.

If a vendor is proposing a product that does not meet City specifications, an explanation of why the product meets or exceeds the current specifications must be provided by the vendor in writing to the City Traffic Engineer. If approved, the product may be tested for the specified period as described above. If the product is satisfactory, the City will consider a revision to the applicable specifications. Products will not be added to the Approved Materials List that do not meet City specifications.

Products not performing as required or not supported by vendors or manufacturers are subject to removal form the Approved Materials List. Grounds for removal of products may include, but are not limited to:

- Significant change in product specifications or design without notification to the City,
- Failure to correct or replace products that are defective in manufacturing or workmanship,
- Repeated patterns of malfunction of a product not adequately corrected by vendor,
- Unreasonable pricing or timing of repair parts or repair work,
- Excessive delivery times for purchases.
- Removal from the Missouri Department of Transportation Approved Products List

Changes in standard specifications may also necessitate removal of specific products from the Approved Materials List. If this occurs, there will be a grace period where the product will be retained on the list after the specifications are changed and the product will be removed if it is not revised to meet the new criteria.

I. TRAFFIC SIGNAL EQUIPMENT

CONTROLLERS

NEMA TS1 CONTROLLERS	MODEL
Eagle	EPAC M52

NEMA ON-STREET MASTER CONTROLLER	MODEL
Eagle	MARC 360

CABINETS AND BACK PANELS

Note: Cabinets and Back Panels that meet City of Lee's Summit specifications from the following manufacturers will be accepted. All other manufacturers must provide a model that meets specifications and complete a satisfactory one-year evaluation as described above to be added to the list.

NEMA CABINET AND BACK PANEL ASSEMBLIES	MODEL
Siemens/Eagle	Meets Specifications

CONFLICT MONITORS

NEMA CONFLICT MONITORS	MODEL
Eberle Design Incorporated (EDI)	NSM-6
Eberle Design Incorporated (EDI)	NSM-12
Eberle Design Incorporated (EDI)	SSM-12LE
Power Distribution & Control (PDC)	CM82-03
Power Distribution & Control (PDC)	CM82-06
Power Distribution & Control (PDC)	CM82-12
Traffic Control Technologies (TCT)	LNM Series

CABINET ACCESSORIES

AUXILIARY TIME CLOCK	MODEL
Eltec	NTC-17E
Eltec	TC-14

EXTERNAL T.B.C. COORDINATORS	MODEL
Eltec	TC-14

FLASHERS (NEMA)	MODEL
Eberle Design Incorporated (EDI)	810
Power Distribution & Control (PDC)	SSF-86
Power Distribution & Control (PDC)	SSF-88

FLASH TRANSFER RELAYS	MODEL
AMECO	136-4962
Magnacraft	W21ACPX-2
Magnacraft	W21ACPXD-5

Mid-Tex 136-62T-3A1
Power Distribution & Control (PDC) ..... FTR 91

LOAD SWITCHES (NEMA) **MODEL**
Eberle Design Incorporated (EDI) 510
Power Distribution & Control (PDC) SSS-86
Power Distribution & Control (PDC) SSS-88
Traffic Control Technologies (TCT) SSS-86

SURGE PROTECTORS **MODEL**
Edco SHA-1210
Edco SHA-1250

SURRESTOR **MODEL**
Edco PC-642

TONE RECEIVERS **MODEL**
Iniven IR30M-05-30

TONE TRANSMITTERS **MODEL**

Iniven IT30

OPTICOM (DISCRIMINATOR) **MODEL**

3M (2-Channel Phase Selector) 752
3M (4-Channel Phase Selector) 754

DETECTION

MICROWAVE DETECTORS **MODEL**

Microwave Sensors TC-26B
Electronic Integrated Systems, Inc. (EIS) ..... RTMS X-2

MICROLOOP, PROBE **MODEL**

3M ..... Canoga 701

OPTICOM (EMERGENCY PREEMPTION)
3M (One-Way Detector) 721
3M (Two-Way Detector) 722

OPTICOM (EMERGENCY PREEMPTION) CARD RACK
3M 760

PEDESTRIAN PUSH BUTTONS **MODEL**

Pelco (Round Pole Mount) SE-2102-00
Pelco (Flat Mount) SE-2102-01

Polara Bull Dog (ADA Compliant)..... BDLM2-B/PBC-B

POWER SUPPLY FOR CARD RACK DETECTORS (NEMA) MODEL

Detector Systems..... 205
Eberle Design Incorporated (EDI)..... PS-150
ICC..... PS24
PGK PS-1.2

SINGLE CHANNEL SHELF MOUNT DETECTORS, STANDARD MODEL

Detector Systems..... 910
Eberle Design Incorporated (EDI)..... LM301
Sarasota..... 535B/MS

SINGLE CHANNEL SHELF MOUNT DETECTORS, TIME DELAY MODEL

Detector Systems..... 913
Eberle Design Incorporated (EDI)..... LM301T
Sarasota..... 535T/MS

ULTRASONIC DETECTORS MODEL

Microwave Sensors..... TC-30

VIDEO DETECTION SYSTEM MODEL

Iteris ..... Vantage Edge 2
Econolite ..... Autoscope 2020
Econolite ..... Autoscope Solo Terra
Econolite……..Autoscope RackVision
Econolite……..Autoscope RackVision Terra

VIDEO RACK
Siemens/Eagle..... VDR116

2-CHANNEL CARD RACK COUNTING
DETECTORS, DUAL OUTPUT MODEL

Eberle Design Incorporated (EDI)..... LM632

2-CHANNEL CARD RACK COUNTING
DETECTORS, SINGLE OUTPUT PULSE MODE (NEMA) MODEL

Eberle Design Incorporated (EDI)..... LM632t
ICC..... S27B
Reno A & E C

2-CHANNEL CARD RACK DETECTORS, STANDARD (NEMA) **MODEL**

Eberle Design Incorporated (EDI)..... LM602
ICC..... S27B
Reno A & E C
Reno A & E ..... G

2-CHANNEL CARD RACK DETECTORS, TIME DELAY (NEMA) **MODEL**

3M..... Canoga C800 Series
Eberle Design Incorporated (EDI)..... LM602T

PULL BOXES

PREFORMED CLASS 1 **MODEL**

STRAIGHT
Armorcast Products Company (Box & Lid) A6001640TAPCX22
Carson Industries (Box)..... H1730-24
Carson Industries (Lid) H1730-PI
Strongwell/Quazite (Box)..... PG1730B532
Strongwell/Quazite (Lid) PG1730H511
Strongwell/Quazite (Series) PG1730BA
Synertech (Box) S1730B24AA
Synertech (Lid) S1730HBB0A

FLARED
Armorcast Products Company (Box & Lid) A6001640TAX24
Associated Plastics/New Basis (Box & Lid) FCA173022CC4126-62
Associated Plastics/New Basis (Box & Lid) FCA173022CC4749-61
Associated Plastics/New Basis (Box & Lid) FCA173024CC40303
CDR (Box & Lid – Series)..... SA12-1730-22
Pencell Plastics (Box & Lid)..... PEM-1830-PCX

PREFORMED CLASS 2 **MODEL**

STRAIGHT
Armorcast Products Company (Box & Lid) A6001974TAPCX26
Armorcast Products Company (Box & Lid) A6001974TAPCX24
Carson Industries (Box)..... H2436-24
Carson Industries (Lid) H2436-PI
Strongwell/Quazite (Box) PG2436B539
Strongwell/Quazite (Lid) PG2436H508
Strongwell/Quazite (Series) PG2436BA
Synertech (Box) S2436B26AA
Synertech (Lid) S2436HCB0A

FLARED
Armorcast Products Company (Box & Lid) A6001974TAX26
Armorcast Products Company (Box & Lid) A6001974TAX24

Associated Plastics/New Basis (Box & Lid) FCA243630CC4126-61
Associated Plastics/New Basis (Box & Lid) FCA243630CC4749-61
Associated Plastics/New Basis (Box & Lid) FCA243624T
CDR (Box & Lid – Series)..... SA12-2436-24
Pencell Plastics (Box & Lid)..... PEM-2436-36
Pencell Plastics (Box & Lid) PEM-2436-PCX-24
Synertech (Box) S2436B24AA
Synertech (Lid) S2436HCB0A

PREFORMED CLASS 3 **MODEL**

STRAIGHT
Armorcast Products Company (Box & Lid) A6001430TAPCX36
Carson Industries (Box)..... H3048-36
Carson Industries (Lid) H3048-P1
Strongwell/Quazite (Box)..... PF3048B560
Strongwell/Quazite (Lid) PG3048H517
Strongwell/Quazite (Series) PG3048BA
Synertech (Box) S3048B36AA
Synertech (Lid) S3048HCB0A

FLARED
Armorcast Products Company (Box & Lid) A6001550TAX36
Associated Plastics/New Basis (Box & Lid) FCA304836EE4749-61
Associated Plastics/New Basis (Box & Lid) FCA304836EE40304
Associated Plastics/New Basis (Box & Lid) FCA304824T
CDR (Box & Lid - Series) SA12-3048-36W
Pencell Plastics (Box & Lid)..... PEM-3048-36-PCX-SPLIT

PREFORMED CLASS 5 **MODEL**

FLARED
Armorcast Products Company (Box & Lid) A6001466TA
Armorcast Products Company (Box & Lid) A6000172TAX36
CDR (Box & Lid)..... SA12-3000-36
New Basis (Box & Lid) FCA540036C4800

POSTS AND MAST ARMS

Note: Posts and Mast Arms do not require an evaluation period. Posts and Mast Arms shall be fabricated in accordance with City of Lee's Summit specifications and standards. Posts and Mast Arms shall be pre-approved as required by the City of Lee's Summit Standards and Specifications to be added to the list. The following manufacturers have pre-approved fabrication details. Posts and Mast Arms are subject to field inspection before acceptance.

STEEL POSTS AND MAST ARMS **MODEL**
Valmont Industries ..... Meets Specifications

PEDESTAL POSTS	MODEL
Pelco	PB-5102

PEDESTAL BASES	MODEL
Component Products	CPI-BAS-1
Pelco	PB5336
Pelco	PB5337
Pelco	PB5340
Pelco	PB5341
Traffic Parts	TP 289X

SIGNAL HEADS

BACKPLATES	MODEL
Gades Sales/Neodesia Plastics	BP Series
Pelco	BK-100x Series
Traffic Parts/Chapel Hill	44xx Series

LOUVERS	MODEL
Pelco	GPL

POLYCARBONATE SIDE-MOUNT BRACKETS WITH RELATED HARDWARE	MODEL
Component Products	Any
Eagle	UKS1452AB

SIGNAL HEADS - ALUMINUM CONVENTIONAL	MODEL
Automatic/Eagle	SIG Series
McCain	MTSA Series
Safetrans/IDC	ST Series
Traffic Control Technologies (TCT)	HSS Series

SIGNAL HEADS - ALUMINUM PEDESTRIAN	MODEL
Automatic/Eagle	SIG Series

SIGNAL HEADS - OPTICALLY LIMITED	MODEL
3M	HVS 131 Series
McCain	HPTS Series

SIGNAL HEADS - POLY CONVENTIONAL	MODEL
Chapel Hill	SIG-TPB-305-CTN-NVN-0N

Chapel Hill	SIG-TPB-586-CTN-NVN-0N
Siemens/Eagle	SA Series
General Traffic Equipment Corp	T-30 POLY
IDC/Safetrans	LT Series
McCain	MTSTP Series
Traffic Control Technologies (TCT)	PSS Series

PEDESTRIAN HEAD – POLY 1-SECTION	**MODEL**
McCain (clamshell mount left)	M32258L
McCain (clamshell mount right)	M32258R
McCain (side-of-pole mount)	M32258

PEDESTRIAN HEAD MOUNTING – CLAMSHELL	**MODEL**
McCain	P9050B

PEDESTRIAN LED SIGNAL INDICATION	**MODEL**
GE	PS7-CFF1-26A
Dialight	430-6473-001X
Leotek	TSL-PED-16-CIL-9

SIGNAL INDICATIONS

LIGHT EMITTING DIODES (LED)	**MODEL**
Dialight (Yellow Arrow)	431-3334-901XOD
Dialight (Green Arrow)	432-2324-001XOD
GE (Yellow Arrow)	DR6-YTAAN-17A-YX
GE (Green Arrow)	DR6-GTAAN-17A
Dialight (Red Ball)	433-1210-003XL
Dialight (Green Ball)	433-2220-001XL
Dialight (Yellow Ball)	433-3230-901XL
GE (Red Ball)	DR6-RTFB-17A
GE (Green Ball)	DR6-GTFB-17A-40
GE (Yellow Ball)	DR6-YTFB-17A-YX1
Leotek (Red Ball)	TSL-12R-LX-IL3-A1
Leotek (Green Ball)	TSL-12G-LX-IL3-A1
Leotek (Yellow Ball)	TSL-12Y-LX-IL3-A1

MISCELLANEOUS

CABLE	**MODEL**
Cable	Meets Specifications
Belden (Opticom Cable)	580461 - 138
3M (Opticom Cable)	M-138
Belden (Iteris Video Detection System)	8281
Isotec (Iteris Video Detection System)	X531787-00
Isotec (Iteris Video Detection System)	159PVCC-00

CONDUIT	MODEL
Conduit	Meets Specifications

HARDWARE/BRACKETS	MODEL
Pelco	Meets Specifications
Reliable 3/8” Strandvise	5202
Reliable ¼” Strandvise	5200

UTILITY ENCLOSURE PEDESTAL	MODEL
Meyers	Meets Specifications (No fused contactors)
Millbank	Meets Specifications (No fused contactors)
Pacific Utility Products (PUP)	USPA-MODOT

LOOP SEALANTS	MODEL
3M	5000
Bondo	560
Bondo	575
Bondo	P606
Chemque	290S
Chemque	296-06
Durant Paints	Stat-A-Flex Polyseal
RAI Products	Pro-Seal 6006

SPLICE KITS (DETECTOR LEAD-IN)	MODEL
3M	DBY Series
HOMAC HMC Industries	RAB 1/0 Series

BATTERY BACK-UP SYSTEM	MODEL
Alpha Technologies (UPS Power Module)	FXM1100
Alpha Technologies (By Pass Switch)	MBP
Alpha Technologies (Battery)	180-GXL-4
Alpha Technologies (Battery Enclosure)	BSM-4

INTERNALLY ILLUMINATED STREET NAME SIGNS	MODEL
Carmanah	Meets Specifications