

Standard Purchasing Resolution 2: Sole Bidder Meeting Specifications – TriCaster Equipment – Community Affairs Department

Resolution #2020-09-138-J-4a

RESOLVED, That Troy City Council hereby **AWARDS** a contract to furnish all equipment, material and labor to install TriCaster equipment for the City of Troy to the sole bidder, meeting all bid specifications; *Advanced Lighting and Sound of Troy, MI*, for an estimated total cost of \$26,399, at prices contained in the bid tabulation opened September 10, 2020, a copy of which shall be **ATTACHED** to the original Minutes of the meeting.

BE IT FINALLY RESOLVED, That the award is **CONTINGENT** upon the company's submission of properly executed bid and contract documents, including insurance certificates and all other specified requirements.

PURCHASE ORDER

No. 2021-00000420
 DATE: 09/28/2020
 PAGE: 1 of 1
 FOB DESTINATION

Ship To
 CITY OF TROY
 Community Affairs
 500 W BIG BEAVER RD
 TROY, MI 48084

Bill To
 CITY OF TROY
 Community Affairs
 500 W BIG BEAVER RD
 TROY, MI 48084

COUNCIL RESOLUTION
 2020-09-138-J-4a

VENDOR NO. 117773

Vendor
 ADVANCED LIGHTING & SOUND
 1026 MAPLELAWN DR
 TROY, MI 48084

QUANTITY	UNIT	DESCRIPTION	UNIT COST	TOTAL COST
1	Each	Tricaster Equipment for Cable Production To be delivered and installed as per all bid specifications and unit pricing of ITB-COT 21-09.	26,399.0000	\$26,399.00

Entered By: MaryBeth Murz

\$26,399.00

Special Instructions:

CITY COUNCIL AWARD DATE: 9/21/2020. CERTIFICATE OF INSURANCE and ENDORSEMENTS SHALL BE ON FILE FOR DURATION OF PROJECT.

TERMS & CONDITIONS

1. Purchases of Municipalities are exempt from State Sales and Federal Excise Taxes.
2. Prior to acceptance, vendor agrees to provide City with information under the Right-to-Know Law, P.A. 1986, No. 80, and fully comply with all terms and conditions of the Michigan Occupational Safety and Health Act, MCL 408.1001, et seq. including vendor shall provide City with an "MSDS". Vendor also agrees to be responsible for all required labeling.
3. In cases of emergency/disaster, the City can purchase up to six(6) times the order amount for a period of six(6) months at the price contained in the contract.
4. Purchase Orders are signed electronically based upon computer generated "on-line" authorized approvals. Authentic signatures are on file in the City of Troy Purchasing Department.

NOTICE: The City could put the vendor on notice that vendors will be held financially responsible for any claims or awards made against the City as a result of the vendor's action. If the City has to defend the initial lawsuit, the City will bring in the vendor as a co-defendant or sue the vendor, either as the result of settling a claim or the conclusion of the lawsuit.

I HEREBY CERTIFY THAT THIS ORDER IS PROPERLY AUTHORIZED AND APPROVED.

MaryBeth Murz

Opening Date: 09/10/2020
 Date Reviewed: 09/10/2020

CITY OF TROY
 BID TABULATION
 TRICASTER EQUIPMENT

VENDOR NAME: Advanced Lighting & Sound
 CITY: Troy, MI

PROPOSAL: Furnish TriCaster Equipment

Est. Qty	Mfer	Item #	Description: TriCaster Equipment	Unit Cost (Each)	Estimated Total Cost
1	Newtek	TC410PBB-R	TriCaster TC410 Plus BASE Bundle (includes TriCaster 410 Plus and TC1SP)	\$14,000.00	\$14,000.00
1	Newtek	NC1 I/O	Studio I/O Module (8 Channel)	\$9,100.00	\$9,100.00
4	Black	BMD-CONVMAAS2	Mini Converter - Analog to SDI 2 (1st floor cameras)	\$192.00	\$768.00
8	Laird	DIN18550BF-3	Laird HDBNC1505-BF03 High Density HD-BNC Male to Standard BNC Female 6G HD-SDI Cable - 3 Foot	\$19.00	\$152.00
1	Views	VA2446MH-LE	24" 1920x1080 LCD Monitor, HDMI & VGA	\$126.00	\$126.00
1	Kramer	C-DM/DM-15	DVI-D Dual link (Male - Male) Cable (15')	\$27.00	\$27.00
1	Logit	MK270	Logitech MK270 Wireless Keyboard and Mouse	\$25.00	\$25.00
			Installation Labor – Replace TriCaster with new system, add camera adapters & TriCaster Training.	\$1,050.00	
			Training- TriCaster Training to City Staff.	No Charge	
			Warranty- ProTek for TriCaster TC410 Plus (initial 2 year coverage)	\$1,151.00	
Total Cost:				\$26,399.00	

NOTE: Include all delivery costs, handling and packaging, charges in the unit cost (each) price.

Authorized Dealer:	Y or N	Y
Descriptive Literature:	Y or N	Y
Name:		Bob Sullivan
Hours of Operation:		8:30AM - 6:00PM
Contact Phone #:		248-817-2092
References:	Y or N	Y
Payment Terms:		N-30
Warranty:		As Specified
Delivery Date:		14 days ARO
Exceptions:	Y or N	N
Allow Bid to be broken up by item:	Y or N	N
Acknowledgement:	Y or N	Y
Addendum Attached:		Y
Forms:	Y or N	Y

Attest:

(*Bid Opening conducted via a Go-To Meeting)

Cindy Stewart
 Kristine Kallek
 Jackie Ahlstrom
 Beth Zaccardelli

MaryBeth Murz,
 Purchasing Manager

The **ELECTRONIC** Bid Proposal page has been **REVISED**. Please use the **REVISED ELECTRONIC** Bid Proposal page to provide pricing.

The undersigned proposes to furnish **TRICASTER EQUIPMENT**, in accordance with the bid specifications attached hereto, which are to be considered an integral part of this proposal, at the following prices:

COMPANY NAME: _____

PROPOSAL: FURNISH TRICASTER EQUIPMENT

The undersigned, as bidder, declares that he/she has examined the specifications, including related documents.

NO SUBSTITUTES OR ALTERNATES WILL BE ACCEPTED.

Est. Qty	Manufa cturer	Item #	Description: Tricaster Equipment	Unit Cost (Each)	Estimated Total Cost
1	Newtek	TC410PBB-R	TriCaster TC410 Plus BASE Bundle (includes TriCaster 410 Plus and TC1SP)	\$	\$ 14,000.00
1	Newtek	NC1 I/O	Studio I/O Module (8 Channel)	\$	\$ 9,100.00
4	Black	BMD-CONVMAAS2	Mini Converter - Analog to SDI 2 (1st floor cameras)	\$ 192.00	\$ 768.00
8	Laird	DIN18550BF-3	Laird HDBNC1505-BF03 High Density HD-BNC Male to Standard BNC Female 6G HD-SDI Cable - 3 Foot	\$ 19.00	\$ 152.00
1	Views	VA2446MH-LE	24" 1920x1080 LCD Monitor, HDMI & VGA	\$	\$ 126.00
1	Kramer	C-DM/DM-15	DVI-D Dual link (Male - Male) Cable (15')	\$	\$ 27.00
1	Logit	MK270	Logitech MK270 Wireless Keyboard and Mouse	\$	\$ 25.00
Installation Labor – Replace Tricaster with new system add camera adapters & Tricaster Training.					\$ 1,050.00
Training- Tricaster Training to City Staff.					\$ NO CHARGE
Warranty- ProTek for TriCaster TC410 Plus (initial 2 year coverage).					\$ 1,151.00

NOTE: Include all delivery costs, handling and packaging, charges in the unit cost (each) price.

UNIT PRICES:

Unit prices prevail. The City of Troy Purchasing Department will correct all mathematical errors.

AUTHORIZED DEALER:

- (X) Our company is an authorized distributor of this equipment
- () Our company is not an authorized distributor of this equipment.

ADDITIONAL INFORMATION:

For questions about the specifications, please contact Cindy Stewart, Community Affairs Director at (248) 524-1147 between the hours of 8:00 AM and 4:00 PM, Monday through Friday.

CONTRACT FORMS:

Bidders should complete and sign the Legal Status of Bidder, Non-Collusion Affidavit, Certification regarding Debarment, the Certification regarding "Iran Linked Business" and the Familial Disclosure Forms and return with your bid proposal. Due to COVID-19 restrictions the City is waiving Notary requirements; but note that all forms must be signed and dated

DELIVERY:

All items will be FOB delivered freight paid delivered and installed, to the City of Troy City Hall 500 West Big Beaver Road, Troy MI 48084. ATTN: Cindy Stewart

WARRANTY:

ProTek for TriCaster TC410 Plus (initial 2 year coverage). **NOTE:** This was added as a line item.

DOWN-PAYMENTS OR PREPAYMENTS:

Any bid proposal submitted which requires a down-payment or prepayment prior to delivery and full acceptance of the item(s) as being in conformance with specifications will not be considered for award.

AWARD:

The evaluation and award of this bid shall be a combination of factors, including but not limited to: cost, professional competence, warranties, and the correlation of the proposal submitted to the needs of the City of Troy.

The City of Troy reserves the right to award this bid to the lowest responsible bidder meeting specifications to reject low bids which have major deviations from the specifications; to accept a higher bid which has only minor deviations, in whatever manner is deemed to be in the City of Troy's best interest.

LOCAL PREFERENCE:

The City of Troy reserves the right to award a contract to a local business, one which pays City of Troy taxes (real and/or personal), if the bid of a local vendor is within 5% of the lowest responsive and responsible non-local bidder, then the local vendor is given one chance to match the low bid.

DOWN PAYMENTS AND PREPAYMENTS:

Any proposal submitted which requires a down payment or prepayment of any kind prior to delivery and acceptance of the items as being in conformance with specifications will not be considered for award.

ALTERNATES:

No substitutes or alternates will be accepted.

DESCRIPTIVE LITERATURE:

Please attach descriptive or pertinent literature specification or cut sheet(s) relevant to your company's bid proposal at the time of bid submission. It is attached and marked Literature for identification.

PURCHASE ORDER:

After approval of the successful bidder by the Troy City Council, the purchase order issued from the City of Troy will create a bilateral contract between the parties and commit the successful bidder to perform the contract in accordance with specifications. A contract document/ agreement will not be issued.

CONTACT INFORMATION:

Name(s): Bob Sullivan 24 Hr. Phone No. 248-817-2092

Hours of operation: 8:30am - 6:00pm

COMPANY NAME: Advanced Lighting & Sound

REFERENCES

Please list at least three (3) companies that have had similar work completed by your company.

COMPANY: City of Sterling Heights
ADDRESS: 40555 Utica Rd. Sterling Heights, 48311
CONTACT: Dan Rizek PHONE: (586) 446-2479
EMAIL: drizek@sterling-heights.net

COMPANY: Bloomfield Community Television
ADDRESS: 4200 Telegraph, Bloomfield Hills MI 48303
CONTACT: Steve Rota PHONE: (248) 433-7790
EMAIL: SRota@bloomfieldtwp.org

COMPANY: City of Pleasant Ridge
ADDRESS: 23925 Woodward Ave. Pleasant Ridge, MI 48069
CONTACT: James Breuckman PHONE: (248) 541-2901
EMAIL: citymanager@cityofpleasantridge.org

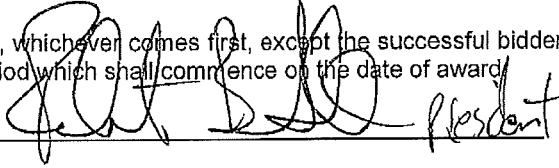
COMPANY NAME: Advanced Lighting & Sound

SIGNATURE PAGE

PRICES:

Prices shall remain firm for 60 days or bid award, whichever comes first, except the successful bidder whose prices shall remain firm for the entire contract period which shall commence on the date of award.

SIGNATURE OF AUTHORIZED COMPANY REPRESENTATIVE:

 President

NOTE:

The undersigned has checked carefully the bid figures and understands that he/she shall be responsible for any error or omission in this bid offer and is in receipt of all addenda as issued.

TAX ID#: 38-3295987

COMPANY NAME: Advanced Lighting & Sound

ADDRESS 1026 Maplelawn CITY Troy STATE MI ZIP 48084

PHONE NUMBER 248-817-2092 FAX NUMBER 248-817-2093

REPRESENTATIVE'S NAME Robert B Sullivan

(Print)

SIGNATURE OF AUTHORIZED COMPANY REPRESENTATIVE

PAYMENT TERMS: N-30 WARRANTY: As Specified

E-MAIL: bobs@go-als.com DELIVERY DATE: 14 days ARO

EXCEPTIONS:

Any exceptions, substitutions, deviations, etc., from the City specifications and this proposal must be stated below. The reason(s) for the exceptions, substitutions, and/or deviations are an integral part of this bid proposal offer:

No exceptions

Check this box if your bid is not to be broken up by item and based on an all or none award.

ACKNOWLEDGEMENT:

I, Robert Sullivan, certify that I have read the Instructions to Bidders (2 Pages) and that the bid proposal documents contained herein were obtained directly from the City's Purchasing Department or MITN website, www.mtn.info and is an official copy of the Authorized Version.

SIGNATURE OF AUTHORIZED COMPANY REPRESENTATIVE:

 President

NOTE: The City of Troy, at their discretion, may require the bidder to supply a Financial Report from an impartial Financial Credit Reporting Service before award of contract at no cost to the City.

IMPORTANT: All City of Troy purchases require a **SAFETY DATA SHEET**, where applicable, in compliance with the MIOSHA "Right to Know" Law. Please include a copy of any relevant SDS at the time of bid submission.

U.S. CURRENCY: All figures quoted are to be in U.S. Funds.



Legal Status of Bidder:

The Bidder shall fill out the appropriate form and strike out the other two:

A **corporation** duly organized and doing business under the laws of the State of Michigan
for whom Robert B. Sullivan, bearing the office title of President,
whose signature is affixed to this proposal, is duly authorized to execute contracts.

A ~~partnership~~, all members of which, with addresses, is:

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

AN ~~INDIVIDUAL~~, WHOSE SIGNATURE IS AFFIXED TO THE PROPOSAL:

_____	_____
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CITY OF TROY
OAKLAND COUNTY, MICHIGAN
NON-COLLUSION AFFIDAVIT

TO WHOM IT MAY CONCERN:

Robert B Sullivan, being duly sworn deposed, says that he/she
(Print Full Name)

is the President. The party making the foregoing proposal or bid,
(State Official Capacity in Firm)

that such bid is genuine and not collusion or sham; that said bidder has not colluded, conspired, connived, or agree, directly or indirectly, with any bidder or person, to put in a sham bid or to refrain from bidding and has not in any manner directly or indirectly sought by agreement or collusion, or communication or conference, with any person to fix the bid price or affiant or any other bidder, or to fix any overhead, profit, or cost element of said bid price, or that of any other bidder, or to secure the advantage against the City of Troy or any person interested in the proposed contract; and that all statements contained in said proposal or bid are true.

Robert B Sullivan president

SIGNATURE OF PERSON SUBMITTING BID

Susan Holiday

NOTARY'S SIGNATURE

Subscribed and sworn to before me this 9th day of
September, 2020 in and for
Oakland
County.

My commission expires:

10-23-2025



**CERTIFICATION REGARDING
DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS**

The prospective participant certifies, to the best of its knowledge and belief, that it and its principals:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in transactions under any non-procurement programs by any federal, state or local agency.
2. Have not, within the three year period preceding, had one or more public transactions (federal, state, or local) terminated for cause or default; and
3. Are not presently indicted or otherwise criminally or civilly charged by a government entity (federal, state, or local) and have not, within the three year period preceding the proposal, been convicted of or had a civil judgment rendered against it:
 - a. For the commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public transaction (federal, state, or local), or a procurement contract under such a public transaction;
 - b. For the violation of federal, or state antitrust statutes, including those proscribing price fixing between competitors, the allocation of customers between competitors, or bid rigging; or
 - c. For the commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.

I understand that a false statement on this certification may be grounds for the rejection of this proposal or the termination of the award. In addition, the general grant of this authority exists within the City's Charter, Chapter 12, Section 12.2- Contracts.

I am able to certify to the above statements.

Advanced Lighting & Sound

Name of Agency/Company/Firm *(Please Print)*

Robert B. Sullivan - President

Name and title of authorized representative *(Please Print)*

Signature of authorized representative

Date **9-9-2020**

I am unable to certify to the above statements. Attached is my explanation.



**VENDOR CERTIFICATION
THAT IT IS NOT AN
"IRAN LINKED BUSINESS"**

Pursuant to Michigan law, (the Iran Economic Sanctions Act, 2012 PA 517, MCL 129.311 et seq.), before accepting any bid or proposal, or entering into any contract for goods or services with any prospective Vendor, the Vendor must first certify that it is not an "IRAN LINKED BUSINESS", as defined by law.

Vendor	
Legal Name	Advanced Lighting & Sound Inc.
Street Address	1026 Maplelawn
City	Troy
State, Zip	MI. 48084
Corporate I.D. Number/State	38-3295987
Taxpayer I.D. #	38-3295987

The undersigned, with: 1.) full knowledge of all of Vendors business activities, 2.) full knowledge of the requirements and possible penalties under the law MCL 129.311 et seq. and 3.) the full and complete authority to make this certification on behalf of the Vendor, by his/her signature below, certifies that: the Vendor is NOT an "IRAN LINKED BUSINESS" as require by MCL 129.311 et seq., and as such that Vendor is legally eligible to submit a bid and be considered for a possible contract to supply goods and/or services to the City of Troy.

Signature of Vendor's Authorized Agent: _____

Printed Name of Vendor's Authorized Agent: Robert B. Sullivan

Witness Signature: _____

Printed Name of Witness: Shawn Watts



Proposer's Sworn and Notarized Familial Disclosure
(to be provided by the Proposer)

The undersigned, the owner or authorized officer of Advanced Lighting & Sound (the "Proposer"), pursuant to the familial disclosure requirement provided in the Request for Proposal, hereby represent and warrant, except as provided below, that no familial relationships exist between the owner(s) or any employees of Advanced Lighting & Sound and any member of the City of Troy City Council or City of Troy management.

List any Familial Relationships:

BIDDER:

Advanced Lighting & Sound

By: Robert B. Sullivan

Its: President

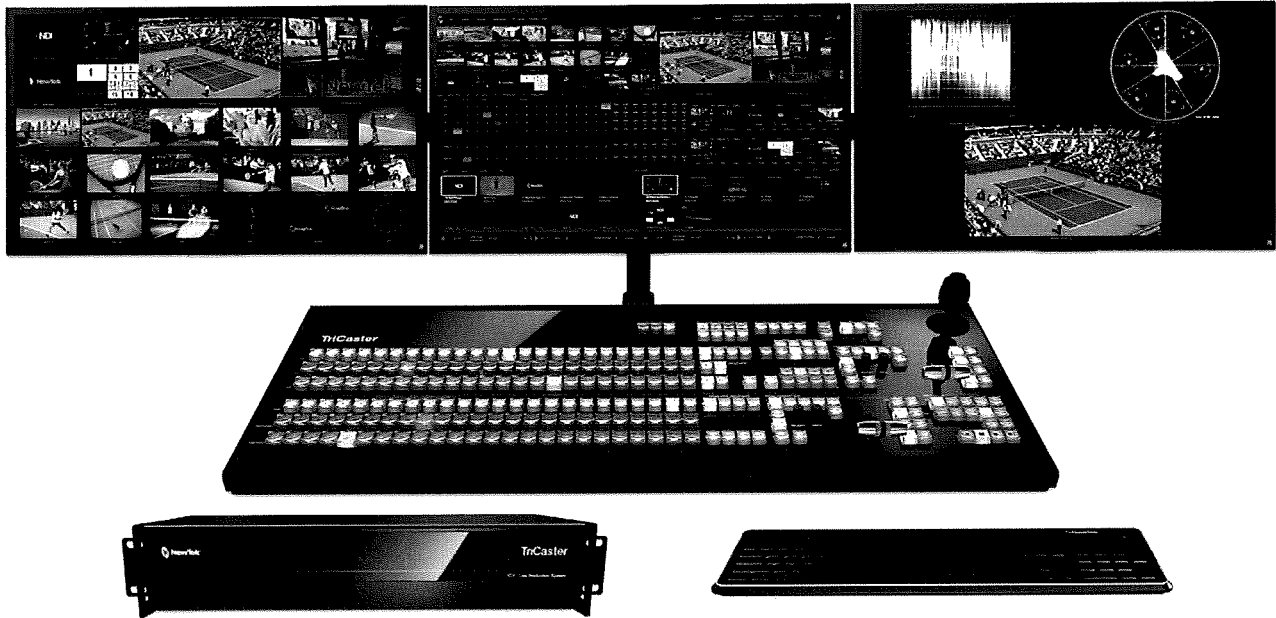
STATE OF MICHIGAN)

)ss.

COUNTY OF Oakland)

This instrument was acknowledged before me on the 9th day of September, 2020,

by Ausan Hladay



Ordering Guide: TriCaster® TC410 Plus

TriCaster TC410 Plus Overview.....	Error! Bookmark not defined.
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TriCaster TC TC410 Control Panels.....	10
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Ordering Information.....	13

All information included in this Ordering Guide is subject to change without notice.

TriCaster TC Mini Overview

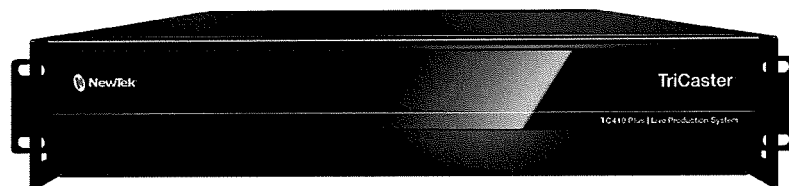
NewTek TriCaster TC410 Plus is a complete, cost-effective production solution that takes advantage of the industry's leading software-driven video technology and modern networking to provide users with advanced capabilities and future-ready capabilities for emerging production trends, while sustaining proven workflows and leveraging existing equipment and infrastructure.

With unprecedented power and uncompromising capability, TriCaster TC410 Plus permits today's professional producer, publisher, and content creator to take advantage of hundreds of future-ready capabilities using established and emerging workflows to produce incredible content, and empowers them to embrace new ideas, technologies, and platforms to reach their audiences—whenever and wherever they watch.

TriCaster TC410 Plus Product Highlights

TriCaster TC410 Plus represents the continued innovation of the iconic product that defined an industry. Equipped with hundreds of advanced capabilities for proven workflows and future-ready production, it has everything the modern producer, publisher, or content creator needs to deliver programs their way today—and tomorrow.

- Switching, streaming, recording, and delivery in HD and 3G at 60 fps
- True IP switching, with native software-driven processing for maximum production power and flexibility
- Native integration of NDI®, NewTek's innovative Network Device Interface technology, supporting video, audio, and data transmission over IP with near-zero latency
- Comprehensive camera coverage and compelling multi-source video mixing, including 8 external inputs
- Studio-grade Skype® video calling with a channel of Skype TX software integration
- Integrated video servers providing playback, replay, and live editing without any additional hardware
- Multi-channel ISO recording with NDI® and full-resolution QuickTime® and H.264 files for VOD, post-production, and archive
- A channel of live streaming to Facebook Live, Microsoft® Azure®, Periscope, Twitch, YouTube™ Live, and more
- Real-time social media sharing to Facebook, Imgur, LinkedIn, Twitter, Vimeo, YouTube, and more
- Powerful production automation with custom macro commands, sophisticated full-motion compositing, and flexible control options
- Advanced audio mixing with multi-source configuration and control, professional DSPs, and 4 x 4 x 4 channel routing
- Premier creative capabilities, including multi-bus mix effects, animated titles and transitions, advanced chromakeying, spectacular live virtual sets, and more
- Industry-standard 2RU hardware chassis



TriCaster TC410 Plus live production system (2RU)
System appearance subject to change without notice.

TriCaster TC410 Plus Key Features

Multi-Source Video Mixing

Viewers have their choice of devices. You should have options, too. With 27 source channels, including 8 external inputs, you can easily create compelling content using any combination of compatible video sources, including 3G-SDI, HD-SDI and PTZ cameras, mobile devices, Skype TX video calls, computers, gaming systems, streaming media, video files, graphics, images, animations and more.

Built-In Video Servers

No recorders needed—just add your files with two built-in video servers for ondemand and automated playback, including auto-advancing playlists, on-cue instant replay, live-edited highlight reels, and much more. With responsive player controls, presets, real-time editing tools, selectable transitions, and playlist effects, you have everything needed to make magic from your stored media.

Skype TX Software Integration

Conduct a live Skype video call with any remote guest, anywhere in the world. TriCaster TC410 Plus features a channel of direct Skype TX software integration. The studio-grade version of the popular app, Skype TX enhances the real-time interaction with broadcast-quality video and balanced audio, permitting you to present production-ready conversations, interviews, reports, and more—regardless of the caller's device.

Recording and Replay

Capture all the angles, recording multiple channels of full-resolution video to QuickTime® or H.264 files, or use NDI® sources and record to storage. From archiving the master cut for your content library, to ingesting the raw camera footage for post-production, to caching production extras and presentation materials for on-demand, TriCaster TC410 Plus easily handles the work of multiple professional recorders without the added expense. Insert instant replays from up to 8 NDI or SDI input recordings with a single click instantly; or cue to play on demand instead. Replays include custom in/out transitions and speed control. Create basic highlight clips for instant playback and publishing with shortcut commands

Live Streaming

Stream live to your choice of new media platforms, including user-friendly presets for Facebook Live, Microsoft® Azure®, Periscope, Twitch, YouTube™ Live, and more. With a streaming encoder included, you can easily deliver platform-specific content, while opening up new sponsorship and revenue opportunities.

<p>Social Media Integration</p>	<p>Share real-time updates and on-demand content across your social media accounts, uploading images and video directly to Facebook, Imgur, LinkedIn, Twitter, Vimeo, YouTube and more—complete with comments and hashtags. Plus, with integrated DataLink™, you can add posts and photos from your social networks in on-screen graphics for a truly interactive experience.</p>
<p>Next-Level Automation</p>	<p>Experience new levels of efficiency and productivity with a comprehensive macro automation system that permits you to record, store, edit, and automate your favorite settings and custom command sequences. You can even choose to</p> <p>run macros manually from any combination of compatible control interfaces—or set TriCaster TC410 Plus to perform actions automatically.</p>
<p>Live Sound Experience</p>	<p>Set the tone for your production with comprehensive audio integration, including a software-based audio mixer, support for digital, analog and network audio, professional DSPs, fader control, VU metering, Talk Back communication, and 4 x 4 x 4 channel routing to four audio mix outputs.</p>
<p>Phenomenal Creative Elements</p>	<p>With TriCaster TC410 Plus, you have the tools to turn every frame of video into an artistic masterpiece. Consider the screen a blank canvas and unleash your inner artist with multi-bus mix effects, real-time animated titles, data-driven graphics, custom animated transitions, a full-motion composition engine, and more. Let your imagination run wild.</p>
<p>Real-Time Monitoring and Multiviewers</p>	<p>See everything happening during your production with fully adjustable singlescreen or multi-screen monitoring. With three customizable multiviewers, configurable windows and workspace layouts, operator confidence monitors, visual indicators, scopes, and more, you can easily personalize the TriCaster TC410 Plus environment to your preference.</p>
<p>Studio-Grade Video Tools</p>	<p>Perfect your programs with configurable color correction tools, 3D object positioning, and smooth-edge cropping. Apply picture-in-picture effects with optional borders. Use key and fill to produce new composite scenes from different foreground and background elements. Even map live video to moving props and set pieces with real-time motion tracking. And so much more.</p>
<p>Spectacular Live Chromakeying</p>	<p>Think outside the box with real-time keying so crisp and clean, your viewers will never believe it's green screen. With NewTek's powerful LiveMatte™ technology built into every source channel and M/E, you have 16 fully configurable keyers to create composite scenes from live video, graphics and virtual sets for reports, presentations, demonstrations, and more.</p>

World-Class Live Virtual Sets Save on studio and set expenses without sacrificing production value. With integrated LiveSet™ technology and more than 30 included set designs, TriCaster TC410 Plus can transport your talent into professionally-designed virtual environments, complete with multiple angles, virtual camera movements, realtime reflections, specular highlights, animated lens flares and stunning augmented reality effects that blur the line between virtual and reality.

Interconnected Workflows You don't work in a silo. Neither should your equipment. With native integration of NDI®, NewTek's innovative Network Device Interface technology, TriCaster TC410 Plus connects to the most prolific IP-based workflow in the industry right out of the box, networking seamlessly with compatible products from hundreds of manufacturers and developers, including NewTek's NC1 Studio I/O Module, NC1 Studio Input Modules, and NewTek Connect Pro software.

Subject to change without notice.

TriCaster TC410 Plus Technical Specifications

Video Input	8 x simultaneous external video inputs, supporting any combination of compatible sources in resolutions up to 1080 up to 60fps
Network Video Input	8 x IP video inputs via NDI®, resolution-independent, with support for key and fill
SDI Video Input ¹	4 x 3G/HD/SD-SDI connections supporting video input in any combination of standard formats, resolutions, and frame rates ² <ul style="list-style-type: none"> • 1080p: 59.94, 50, 29.97, 25 • 1080i: 59.94, 50 • 720p: 59.94, 50, 29.97, 25 • 576i 50 • 480i 59.94
	¹ Available frame rates determined by session video standard (NTSC or PAL)
PTZ	Support for up to 8 simultaneous Pan-Tilt-Zoom (PTZ) robotic cameras via serial and network protocols, including RS232, RS422 and IP, with integrated controls and preset system
Skype TX	Native support for 1 Skype® video call input via Skype TX software integration, including tally and Talk Back communication
Video Output	Configurable for up to 4 independent video mix outputs, with simultaneous delivery via IP and SDI
Network Video Output	IP video output via NDI®, optionally configurable for: <ul style="list-style-type: none"> • 4 x independent video mix outputs
SDI Video Output	4 x 3G/HD/SD-SDI connections, optionally configurable for: <ul style="list-style-type: none"> • 2 x independent 3G/HD/SD video mix outputs
Stream Output	1 x resolution-independent streaming video output with simultaneous stream archive
Multiviewer Output	3 x multiviewer outputs supporting standard display resolutions

Mix/Effect Buses (M/E)	<p>4 x M/E buses supporting video re-entry</p> <ul style="list-style-type: none"> • 1 x Mix/Effect channel per bus with support for up to 2 sources • 2 x KEY layers per bus • 9 x memory slots per bus <p>1 x PREVIZ configuration and preview bus</p>
DSK Channels	2 x DSK channels
Media	<p>5 x media players</p> <ul style="list-style-type: none"> • 2 x DDR • 2 x GFX • 1 x Sound <p>15 x media buffers</p> <ul style="list-style-type: none"> • 5 x animation buffers • 10 x graphic buffers <p>30 x clip players (available for use as transitions or media depending on function)</p>
Keyers	<p>Integrated LiveMatte™ chroma and luma keying technology on all source channels and M/E buses</p> <ul style="list-style-type: none"> • 8 x input keyers • 4 x media player keyers • 4 x M/E keyers • 1 x PREVIZ keyer • 15 x buffer keyers
COMPs	<p>Integrated video composition engine on the switcher and each M/E bus to create, store, and apply layer configurations and DVE-style motion sequences</p> <ul style="list-style-type: none"> • 16 x configurable COMP presets per bus
Virtual Sets	Integrated LiveSet™ technology with 30+ live virtual sets and box effects included
DataLink	Integrated DataLink™ technology enabling real-time, automated data input from internal and external sources, including webpages, spreadsheets, scoreboards, databases, RSS feeds, watch files, XML, CSV, ASCII and more
Macros	<p>Record, store, edit and automate commands and user-configured operation sequences</p> <ul style="list-style-type: none"> • Attach to control panel buttons, keyboard shortcuts, hotspots, MIDI and X-keys® buttons or GPI triggers • Attach to internal events and state changes, including audio, media playback, tally and specific switcher actions • Supports control via web-based interface
Recording	<p>8 x records from NDI® sources</p> <p>5 x configurable video recording channels via IsoCorder™ technology</p> <ul style="list-style-type: none"> • 4 x QuickTime® archival video recorders (XDCAM HD compatible, 4:2:2 encoding, 24-bit audio, with timecode)³ • 2 x H.264 distribution video recorders (multiple profiles) • 1 x MP3 audio recorder <p>³QuickTime Player not required for playback in common NLE applications</p>

Storage	<p>1 x 3TB internal drive</p> <ul style="list-style-type: none"> Capacity varies by format, resolution and file specification Supports recording to external storage via USB 3.0 Supports shared storage integration and third-party partner solutions
Grab	Grab full-resolution, deinterlaced still images from external video sources and outputs
Export	Export video and image files to social media, FTP, local or external volumes, and network servers, with optional transcoding
Audio Mixer	Integrated multi-channel audio mixer with support for quad-channel audio, DSPs and 4x4x4 audio input routing
Local Audio Input	<p>4 x SDI embedded</p> <p>1 x Balanced XLR stereo pair (Line)</p> <p>3 x Balanced 1/4" stereo pairs (Line)</p>
Local Audio Output	<p>4 x SDI embedded</p> <p>1 x Balanced XLR stereo pair</p> <p>1 x Balanced 1/4" stereo pair</p> <p>1 x Stereo 1/4" (phones)</p>
Network Audio	<ul style="list-style-type: none"> Native support for network audio input and output via NDI® Embedded audio supported for all NDI® input and output video signals Integrated support⁴ for Dante™ networking protocol from Audinate® Support for AES67 protocol via compatible WDM audio drivers⁵ <p>⁴ Requires Dante Virtual Soundcard license from Audinate (sold separately)</p> <p>⁵ Requires third-party virtual sound card license (sold separately)</p>
Supported Media File Formats	<p>Import, store, and play back multimedia files, with optional transcoding, including:</p> <ul style="list-style-type: none"> Video: AVI, DV, DVCPro, DVCProHD, FLV, F4V, H.263, H.264, MOV, MKV, MJPEG, MPEG, MP4, WMV, WebM, and more Image: PSD, PNG, TGA, BMP, JPEG, JPEG-XR, JPEG2000, EXR, RAW, TIF, WebP, and more Audio: AIFF, MP3, WAV, and more
Monitoring	Support for up to 3 multiviewer displays with configurable workspaces and viewports
Signal Monitoring	Integrated waveform and vectorscope, full field rate with digital calibration, color preview and support for ITU-R Rec. 709
Processing	<p>Video: Floating Point YCbCr +A 4:4:4</p> <p>Audio: Floating Point, 96 kHz</p>
Throughput Latency	~1.0-1.5 frames
A/V Standards	<ul style="list-style-type: none"> 3G-SDI video conforms to SMPTE 424M (Level A) HD-SDI video conforms to SMPTE 292M SD video conforms to SMPTE 259M and ITU-R BT.656 Analog audio levels conform to SMPTE RP-155
Tally	Support for hardware tally via HD15 GPI connector, network tally via NDI®, and Blackmagic Design® SDI tally standard
Genlock	Genlock input supporting SD (Bi-level) or HD (Tri-level) reference signals
GPI	Supports GPI signals via JLCooper Electronics eBox GPI interface
MIDI	Support for standard MIDI protocol enabling third-party device control

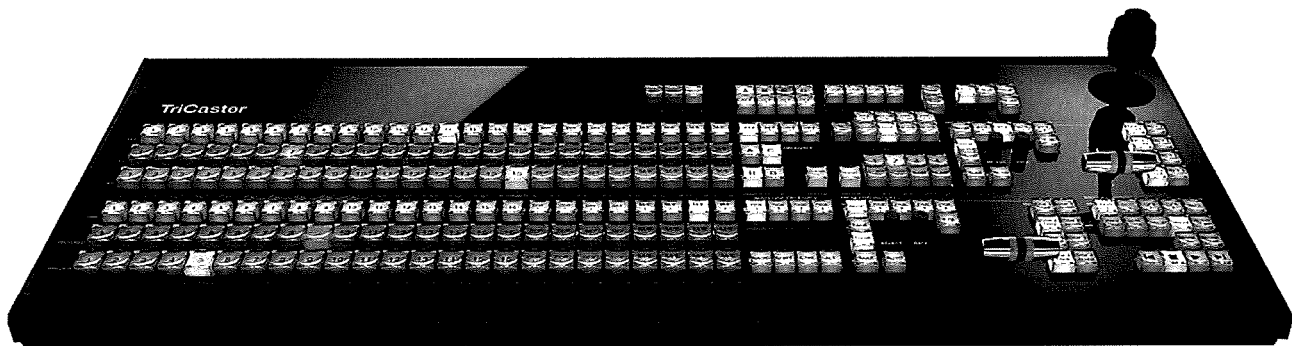
System Drive	250GB SSD
NIC	2 x 1 Gigabit NIC
System Physical	2RU chassis with 400W PSU and multi-tiered hardware and software fail-safe <ul style="list-style-type: none">• 19.0 x 3.5 x 19.57 in (48.3 x 8.9 x 49.7 cm) with rack ears attached• 26 lbs (12 kg)

Subject to change without notice.

TriCaster TC TC410 Control Panels

With TriCaster TC410 Plus, you have your choice of companion control panels to suit your workflow, environment, and budget. The TriCaster TC1LP and TC1SP control panels are expertly engineered to combine the comprehensive functionality, precision controls, premium hardware mechanics, and ergonomic design that operators need, with modern styling that appeals to clients and executives.

	TriCaster TC1LP Control Panel	TriCaster TC1SP Control Panel
Stripes	2 x panel stripes	1.5 x panel stripes
Source Buttons	24 x switcher source buttons 24 x M/E source buttons	14 x switcher source buttons 11 x M/E source buttons
Joystick	1 x multi-mode joystick (3-axis)	1 x multi-mode joystick (3-axis)
T-Bar	2 x multi-mode T-Bars	1 x multi-mode T-Bar
Connectivity	1 Gigabit NIC	USB
Physical	TriCaster TC1LP chassis with 25W PSU 34.69 x 13.96 x 5.47 in (88.11 x 35.46 x 13.9 cm)	TriCaster TC1SP chassis 23.31 x 12.01 x 5.28 in (59.2 x 30.51 x 13.41 cm)



TriCaster TC1LP control panel



TriCaster TC1SP control panel

Panel appearance subject to change without notice.

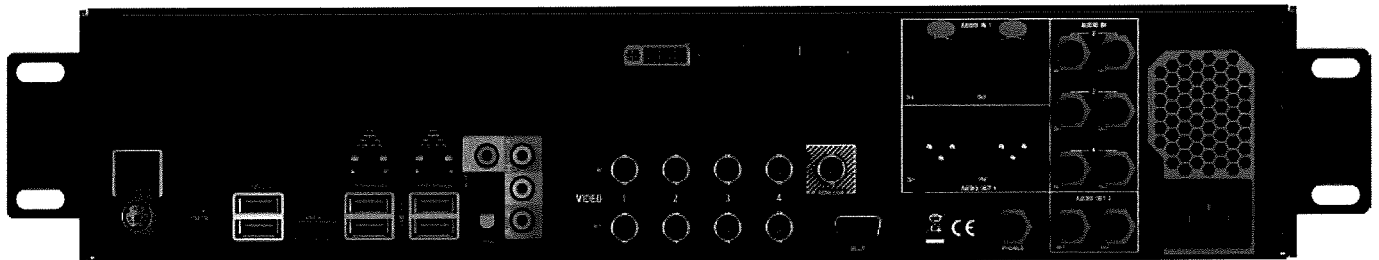
Reference

PRODUCT COMPARISON MATRIX			
	TriCaster TC410 Plus	TriCaster TC1	TriCaster Mini Advanced
4K UHD Capable	No	Yes	No
3G HD Capable	Yes	Yes	No
Source Channels	27	36	27
External Inputs	8 4 x 3G SDI	16 4 x 3G SDI	8 4 x 1.5G SDI
4K UHD Inputs	No	16	No
Skype TX Integration	1 channel	2 channels	No
Combined Outputs (max)	13	20	13
Video Mix Outputs	4 4 x 3G SDI (2 x Independent)	4 1 x 4K UHD or 4 x 3G HD	4 2 x 1.5G HD
Independent Stream Outputs	1	2	1
H.264 Recorders	2	2	2
M/Es	4	4	4

DSK's	2	4	2
Media Players	2 x DDRs 2 x GFX	2 x DDRs 2 x GFX	2 x DDRs 2 x GFX
Multiviewers	3	3	2
Network (NIC)	2 x 1 Gigabit	2 x 1 Gigabit	1 x 1 Gigabit
Audio Channels (per input)	4 channels	4 channels	4 channels
Audio Input Routing	4 x 4 x 4	4 x 4 x 4	4 x 4 x 4

Subject to change without notice.

NewTek TriCaster TC410 Plus Backplane (2RU)



Subject to change without notice.

Ordering Information

	TriCaster TC410 Plus Bundle
TC410PBB	TriCaster TC410 Plus BASE Bundle (includes TriCaster 410 Plus and TC1SP)
PTTC410P	ProTek for TriCaster TC410 Plus (initial 2 year coverage, includes CS)
PTPATC410PBB	ProTek with Premium Access for TriCaster TC410 Plus BASE Bundle (initial 2 year coverage, includes CS)
RPTTC410P	Renewal ProTek for TriCaster TC410 Plus (1 year renewal, includes CS)
RPTPATC410PBB	Renewal ProTek with Premium Access for TriCaster TC410 Plus BASE Bundle (1 year renewal, includes CS)
EHWTC410P	2-Year Hardware Warranty for TriCaster TC410 Plus (1 year Extension plus 1 year Standard Warranty, includes CS)
REHWTC410P	Renewal Extended Hardware Warranty for TriCaster TC410 Plus (1 year renewal, includes CS)
	TriCaster TC410 Plus "A la Carte"
TC410P	TriCaster TC410 Plus
PTTC410PA	ProTek for TriCaster TC410 Plus (initial 2 year coverage)
PTPATC410P	ProTek with Premium Access for TriCaster TC410 Plus (initial 2 year coverage)
RPTTC410PA	Renewal ProTek for TriCaster TC410 Plus (1 year renewal)
RPTPATC410P	Renewal ProTek with Premium Access for TriCaster TC410 Plus (1 year renewal)
EHWTC410PA	2-Year Hardware Warranty for TriCaster TC410 Plus (1 year Extension plus 1 year Standard Warranty)
REHWTC410PA	Renewal Extended Hardware Warranty for TriCaster TC410 Plus (1 year renewal)
	TriCaster TC410 Plus Control Panel
TC1SP	TriCaster TC1SP (14-Button Control Panel)
PTTC1SP	ProTek for TriCaster TC1SP (initial 2 year coverage)

RPTTC1SP	Renewal ProTek for TriCaster TC1SP (1 year renewal)
EHWTC1SP	2-Year Hardware Warranty for TriCaster TC1SP (1 year Extension plus 1 year Standard Warranty)
REHWTC1SP	Renewal Extended Hardware Warranty for TriCaster TC1SP (1 year renewal)
	TriCaster TC410 Plus Software Accessories
NPSubACC	NewTek Premium Access™ Subscription 1 Year Coupon Code for TC1, TC410Plus, TCAE3 and VMC1 (includes LiveGraphics™, LivePanel™, NDI® KVM, Advanced Audio, Virtual PTZ, and access to special LiveSet™ content)
NPSub2YCC	NewTek Premium Access™ Subscription 2 Year Coupon Code for TC1, TC410Plus, TCAE3 and VMC1 (includes LiveGraphics™, LivePanel™, NDI® KVM, Advanced Audio, Virtual PTZ, and access to special LiveSet™ content)
NPSub5YCC	NewTek Premium Access™ Subscription 5 Year Coupon Code for TC1, TC410Plus, TCAE3 and VMC1 (includes LiveGraphics™, LivePanel™, NDI® KVM, Advanced Audio, Virtual PTZ, and access to special LiveSet™ content)
	TriCaster TC410 Plus Hardware Accessories
TCXD850TWF	TriCaster 850 TW DDR Control Surface (available for all HD TriCaster units)
RR2RU3RU	Rack Rails for 2RU and 3RU (available for TriCaster TC1, TriCaster TC1R3, TriCaster 410 Plus, 3Play 3P1, VMC1 R Video Mix Engine and VMC1OUT Studio Expansion Module) Note: For use with roundhole broadcast racks only, not generic server racks.



500 West Big Beaver
Troy, MI 48084
troymi.gov

CITY COUNCIL AGENDA ITEM

Date: September 10, 2020

To: Mark F. Miller, City Manager

From: Robert J. Bruner, Assistant City Manager
Rob Maleszyk, Chief Financial Officer
Lisa Burnham, Controller
Gert Paraskevin, Information Technology Director
Cindy Stewart, Community Affairs Director
MaryBeth Murz, Purchasing Manager

Subject: Standard Purchasing Resolution 2 – Sole Bidder Meeting Specifications – TriCaster Equipment – Community Affairs Department

History

- The Tricaster runs all recordings, cameras & graphics for the City's Cable Channel WTRY including City Council, Planning, Zoning Board of Appeals Meetings in either the Council Chambers, Council Board Room, or Lower Level Conference Room.
- The cable channel is one of the ways the City of Troy communicates with its citizens.
- The City cannot videotape meetings without the Tricaster which has been especially important during the COVID pandemic when virtual Council meetings are necessary.
- The current equipment is 10 years old and is running on Windows 7. The IT Department has recommended that we no longer run anything on Windows7.
- The existing Tricaster equipment has been repaired three - four times in the past few years and it cannot be repaired any more. The current Tricaster equipment has reached the end of its lifecycle.
- If the Tricaster equipment fails again, we will not be able to fix it and will not be able to record any City Council, Planning Commission, and Zoning Board of Appeals Meetings.
- PEG funds from the Cable companies are allocated for Cable equipment and staffing.
- Currently the City receives PEG funds from the three cable companies and part of this money should be designated for cable equipment.

Purchasing

On September 10, 2020, a bid opening was conducted as required by City Charter and Code to furnish all equipment, material and labor to install TriCaster equipment for the City of Troy. The bid was posted on the Michigan Inter-governmental Trade Network (MITN) website; www.mitn.info. One (1) bid response was received. Below is a detailed summary of potential vendors:



500 West Big Beaver
 Troy, MI 48084
 troymi.gov

CITY COUNCIL AGENDA ITEM

Purchasing (continued)

Companies notified via MITN	342	<p>MITN provides a resourceful online platform to streamline the procurement process, reduce costs, and make it easier and more transparent for vendors to do business with the City of Troy.</p> <p>Active MITN members with a current membership and paying annual dues receive automatic electronic notification which allows instant access to Bids, RFPS and Quote opportunities with the City.</p> <p>Active MITN non-paying members are responsible to monitor and check the MITN website for opportunities to do business with the City.</p> <p>Inactive MITN member status can occur when a company does not renew their account upon expiration. Inactive members cannot be notified of solicitations or access any bid information.</p>
Troy Companies notified via MITN	9	
Troy Companies - Active email Notification	7	
Troy Companies - Active Free	2	
Companies that viewed the bid	13	
Troy Companies that viewed the bid	1	

- *Advanced Lighting and Sound of Troy, MI* is the sole bidder and meets all bid specifications and is being recommended to furnish all equipment, material and labor to install TriCaster equipment for the City of Troy.
- The total cost of the equipment and install is \$26,399; which includes a 2-year warranty.
- *Advanced Lighting and Sounds* has successfully completed other projects for the City.

Financial

Funds are budgeted and available in the Capital Fund under the City Manager's Department Project Number 2021C001 for the 2021 Fiscal Year. Expenditures will be charged to account number 401.172.7978.010.

Recommendation

City management recommends awarding a contract to furnish all equipment, material and labor to install TriCaster equipment for the City of Troy to the sole bidder, meeting all bid specifications; *Advanced Lighting and Sound of Troy, MI* for an estimated total cost of \$26,399; at prices contained in the bid tabulation dated September 10, 2020.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

OTHER INSURANCE – ADDITIONAL INSUREDS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

PROVISIONS

COMMERCIAL GENERAL LIABILITY CONDITIONS (Section **IV**), Paragraph 4. (**Other Insurance**), is amended as follows:

1. The following is added to Paragraph **a. Primary Insurance**:

However, if you specifically agree in a written contract or written agreement that the insurance provided to an additional insured under this Coverage Part must apply on a primary basis, or a primary and non-contributory basis, this insurance is primary to other insurance that is available to such additional insured which covers such additional insured as a named insured, and we will not share with that other insurance, provided that:

- a. The "bodily injury" or "property damage" for which coverage is sought occurs; and

- b. The "personal injury" or "advertising injury" for which coverage is sought arises out of an offense committed

subsequent to the signing and execution of that contract or agreement by you.

2. The first Subparagraph **(2)** of Paragraph **b. Excess Insurance** regarding any other primary insurance available to you is deleted.

3. The following is added to Paragraph **b. Excess Insurance**, as an additional subparagraph under Subparagraph **(1)**:

That is available to the insured when the insured is added as an additional insured under any other policy, including any umbrella or excess policy.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

BLANKET ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

PROVISIONS:

1. WHO IS AN INSURED (SECTION II) is amended to include as an insured any person or organization (called hereafter "additional insured") whom you have agreed in a written contract, executed prior to loss, to name as additional insured, but only with respect to liability arising out of "your work" or your ongoing operations for that additional insured performed by you or for you.
2. With respect to the insurance afforded to Additional Insureds the following conditions apply:
 - a. Limits of Insurance – The following limits of liability apply:
 1. The limits which you agreed to provide; or
 2. The limits shown on the declarations, whichever is less.
 - b. This insurance is excess over any valid and collectible insurance unless you have agreed
- in a written contract for this insurance to apply on a primary or contributory basis.
3. This insurance does not apply:
 - a. on any basis to any person or organization for whom you have purchased an Owners and Contractors Protective policy.
 - b. to "bodily injury," "property damage," "personal injury," or "advertising injury" arising out of the rendering of or the failure to render any professional services by or for you, including:
 1. The preparing, approving or failing to prepare or approve maps, drawings, opinions, reports, surveys, change orders, designs or specifications; and
 2. Supervisory, inspection or engineering services.