



# Bullitt County Public Schools

1040 Highway 44 East  
Shepherdsville, Kentucky 40165

Phone: 502-869-8000  
Fax: 502-543-3608  
[www.bullittschools.org](http://www.bullittschools.org)

TO: Dr. Jesse Bacon *JB*  
FROM: Bret Highley *BH*  
DATE: May 7, 2021  
RE: New 800 student elementary school BG 20-142

I am at this time asking the Bullitt County School Board to approve a Change Order to ECS Southeast LLC. This will be to cover the additional special inspection for the storm shelter in the new 800 student elementary school. During the design phase of the project and approval from the state it was documented that a special structural inspector would be needed for the project. It wasn't until after the project was bid out that we were told by the state that ECS would need to have another engineer to inspect the storm shelter part of the project. The cost of this is \$16,600.00 and will come out of contingency funds. Now the contingency amount is \$1,347,575.14 and after the approval of this request will leave \$1,330,975.14.

If you have any questions please call me at 502-921-3659

ATTACHMENT:

- Change Order from ECS Southeast ready to sign

*Uenis  
B. Syton*



## CHANGE ORDER

ECS Southeast, LLP (ECS) has enjoyed working with Studio Kremer and Bullitt County Public Schools on the New Bullitt County Public Schools Elementary School. This Change Order includes requested supplementary Inspections and Testing services.

### Project Information

<b>Project Name</b>	New BCPS Elementary School						
<b>Project Street Address</b>	1040 KY-44				<b>ECS Project Number</b>	61:2434	
<b>City</b>	Shepherdsville	<b>County</b>	Bullitt	<b>State</b>	Kentucky	<b>Zip</b>	40165

### Client Billing/Invoice Information

<b>Firm</b>	Bullitt County Public Schools			<b>Attn.</b>	Bret Highey		<b>Client ID</b>	61:6G64-00	
<b>Mailing Address</b>	1040 KY-44								
<b>City</b>	Shepherdsville			<b>State</b>	KY	<b>Zip</b>	40165	<b>Phone</b>	502-869-8000
<b>Email</b>	Bret.higley@bullitt.kyschools.us				<b>Cell</b>		<b>Fax</b>		

This requested change order includes budget estimates for the additional scopes of service that were not originally included in our proposal for the referenced project. No costs associated with any of the additional scopes have been incurred as of this date. These services will be provided on a will-call basis and in general accordance with the Fee Schedule and Terms and Conditions of Service included with our project proposal (ECS Proposal No. 61: P2130) as amended or supplemented by the additional tasks and billing rates included below.

### Additional Scope of Services and Corresponding Fees:

- Storm Shelter Structural Inspections – ECS will subcontract the required structural inspections for the structural elements of the storm shelter based on the ICC 500 code to KPFF (the structural engineer of record). A written report documenting the conditions observed during each visit will be provided to ECS for review and distribution to the project team. These services are expected to include (**Budget Estimate - \$12,600**):
  - Concrete foundations, prior to pouring (2 trips)
  - ICF wall construction (2 visits)
  - Precast double tee connection to wall panels and connection between tees (2 visits)
  - 2<sup>nd</sup> floor diaphragm connections (1 visit)
  - Roof diaphragm connections (2 visits)
  - Protective steel shroud installation (2 visits)
  - Connections between the main building structure and the storm shelter (1 visit)
  - These services will be billed in general accordance with the following rates:
    - Structural Principal In-Charge.....\$ 235.00
    - Senior Level Structural Professional.....\$ 200.00
    - Structural Project Manager.....\$ 180.00
    - Structural Project Engineer.....\$ 165.00
    - Structural Designer.....\$ 140.00
    - BIM Modeler.....\$ 135.00
    - Structural Administrative/Secretary.....\$ 90.00



- Firestopping inspections – ECS will provide experienced personnel to perform 3<sup>rd</sup> party firestop inspection services in accordance with ASTM E2174: On-Site Inspection of Installed Firestops. Approved firestop assemblies documentation should be provided to ECS 10 days prior to the first inspection. These inspections include (**Budget Estimate - \$4,000**):
  - Randomly witness a minimum of 10% of each type of firestop system being installed.
  - Inspect a minimum of 2% of each type of firestop system through destructive testing after installation.
  - If destructive testing is performed, the inspection areas will be divided into areas of approximately 10,000 square feet or less for each floor per the ASTM requirements.
  - A representative of the firestop installer should walk with the inspector during the inspection to patch the destructive testing areas and answer questions about each installation.
  - If non-compliance occurs on 10% or more of the quantity of firestop areas inspected, the inspection shall cease and the installer shall inspect their own work prior to re-commencement of inspections.
  - Our budget assumes 8 visits at 4.25 hours of on-site, travel and report time per visit by a firestop inspector.
  - ECS's billing rate for our firestop inspector is \$80.00 per hour.

**Summary of Services:**

Original Services Estimate	\$ 125,000.00
Requested Change Order	\$ 16,600.00
<b>Revised Contract Amount</b>	<b>\$ 141,600.00</b>

We appreciate the opportunity to be of continued service to you. Please acknowledge your acceptance of this change order by signing below and returning a copy of the signed change order to us. If you have any questions regarding this document, please contact us.

**Work Authorized by:**

Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
 Print Name: \_\_\_\_\_ Title: \_\_\_\_\_

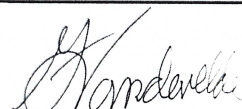
Signatory warrants his/her authority to bind the entity represented.

**Work Estimate/Authorization Prepared by:**

 for

Liz Newcomb, PE | Branch Manager  
 Date: March 11, 2021

**Work Estimate/Authorization Reviewed by:**



Jerry Vandeveld, PE | Chief Engineer | VP  
 Date: March 11, 2021

May 6, 2021



**TO:** Bullitt County Schools  
Bret Highley, Construction Manager  
1040 Highway 44 East  
Shepherdsville, KY 40165

**REFERENCE:** Special Inspection Services for:  
**New 800-Student Elementary School**  
New Construction | Mt Washington, Kentucky  
BG# 20-142 | ska# 2019-50

Mr. Highley:

ECS has provided a Change Order request for additional scope of services and corresponding fees. The additional services described here and outlined in the attached Change Order are required under the 2018 Kentucky Building Code. These services were not included in the original ECS proposal approved by the Bullitt County Board of Education on November 23, 2020. An explanation for each scope of work is included herein.

**Storm Shelter Special Inspections by a Professional Structural Engineer - Budget Estimate - \$12,600**

Initially, it was assumed the engineers on staff at ECS Southeast would meet the inspection requirements of the ICC 500-2014 Standard for the Design and Construction of Storm Shelters. After the proposal was approved, it was determined by the third-party Peer Reviewer, Star Consultants, that a Registered Design Professional is required for all visual inspections of the shelter. ECS reviewed their local staff credentials and found they would not meet the intent of the code. It was determined that subcontracting KPFF Structural Engineers would be the most cost-effective strategy to provide these services as KPFF is familiar with the project and is already present on-site as a design professional. The budget amount proposed here includes both KPFF's assumed time for visual inspections and ECS's time to manage and distribute information. ECS will continue to perform materials inspections following code requirements and KPFF will perform the visual structural inspections.

**Fire-Rated Construction-Special Inspections per IBC Chapter 17 - Budget Estimate - \$4,000**

Following the 2015 International Building Code Chapter 17 requirements as well as the Department of Housing Building and Construction's plan review comments received on 12-10-2020, special inspections are required for all fire-rated construction. The project contains (4) areas with fire-rated construction – the classroom wing firewall; the records room, the fire sprinkler riser room, and the north wall of the Storm Shelter. ECS meets the requirements to perform these services and is already contracted to perform other special inspection services on site. The familiarity ECS inspectors and engineers have with the design and construction workflow is advantageous from a cost-efficiency standpoint since inspectors and engineers reviewing the work will already be on-site to review other work which eliminates extra travel expenses. This scope of services was not included in the initial ECS proposal but is required following the Department of Housing, Building, and Construction's plan review comments received on 12-10-2020. The estimated budget for these services is \$4,000.

studio kremer architects

1231 S Shelby St, Louisville, KY 40203  
TEL 502.499.1100 FAX 502.499.1101

ECS Southeast's services are provided on an hourly basis. This is typical for special inspection services as the construction schedule, poor weather conditions, or other unforeseen issues may result in the need for adjustments in testing and scope. ECS Southeast's initial proposal and subsequent Change Order are not a guaranteed lump sum. The amount Bullitt County Public Schools will pay may increase or decrease from these listed values. As ECS Southeast notes in their email correspondence— they track their time and expenditures closely and will keep the team updated regarding any changes to scope or budget estimates.

If you have any questions or comments, please do not hesitate to me.

Sincerely,  
Studio Kremer Architects

A handwritten signature in black ink, reading "Cate Noble Ward". The signature is fluid and cursive, with the first name "Cate" being the most prominent.

Cate Noble Ward | AIA  
Associate

enclosures —

- a. Special Inspections Services – Change Order – March 11, 2021
- b. ECS Email Correspondence Describing Storm Shelter Inspection Services
- c. Department of Housing, Building and Construction Plan Review Comments Dated 12-10-2020.



Andy Beshear  
Governor  
  
Kerry B. Harvey  
Secretary  
  
Ray Perry  
Deputy Secretary

**PUBLIC PROTECTION CABINET**  
**Department of Housing, Buildings and Construction**  
**Building Codes Enforcement**  
500 Mero Street, FL 1  
Frankfort, KY 40601-1298  
Phone: 502-573-0373 Fax: 502-573-1059  
<http://dhbc.ky.gov>

Rick Rand  
Commissioner  
  
Max Fuller  
Deputy Commissioner

December 10, 2020

Cate Ward  
1231 S Shelby Street  
LOUISVILLE, KY 40203

RE: 2009-000987  
Bullitt Co Elementary School  
New School 2020  
**Building New**  
Golden Wing Road  
Mt Washington, KY 40047 / Bullitt County  
Code Year: 2018 Kentucky Building Code  
**Conditional Approval**  
Expiration Date: 05/15/2021

Dear Cate Ward,

The Division of Building Code Enforcement has reviewed the plans submitted by your organization.

This letter is authorization to start or continue with the construction of the project as listed above and subject to any conditions listed below. Failure of this office to note all violations in the review of plans and specifications does not relieve contractors of the responsibility of complying with the applicable Codes and Regulations.

This authorization does not release the owner from complying with local planning and/or zoning requirements or the requirement to obtain a local building permit. Permits shall be obtained from the respective agencies prior to the installation of plumbing, mechanical, or electrical wiring.

Sincerely,

Toya Spalding, Plan Reviewer  
[toya.spalding@ky.gov](mailto:toya.spalding@ky.gov)

CC: Bullitt Co Board of Education, Owner  
Kelly Meadows, Field Inspector



Andy Beshear  
Governor

Kerry B. Harvey  
Secretary

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Deputy Secretary

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Rick Rand  
Commissioner

Max Fuller  
Deputy Commissioner

**General Review Note:** This the full building review of a new 88,967 square foot, IIB,2-story, primary educational facility with a 2-story storm shelter. Deferred submittals of fire alarm, sprinkler, bleacher and range hoods shall be submitted and approved by this office prior to installation.

**Deficiency List:**

1. Drawing details show the storm shelter doors 200f and 100f are swinging against the flow of the required egress pathway and once latched will prevent the ability from utilizing them as the required exit. Educational occupancies with an occupant load of fifty-(50) or more persons require all egress doors to be equipped with panic hardware, and occupancies with an occupant load above 10 persons requires all egress doors to be side-hinge swinging in the direction of egress travel and equipped with accessible hardware without use of key special knowledge from egress side. Sections 107.1, 1010, 1010.1.2 and 1010.1.9 and Table 1006.3.2(2), 2018 KBC.
2. The provided required fire-suppression design-criteria (FSDC) form details insufficient water to sustain the required demand for the proposed fire suppression-system design. Submit a revised fire suppression flow-test design criteria form with provisions documenting the method being utilized to achieve the required water flow demand for review and approval details as noted in KRS198B.565. The form shall be completed, sealed, and signed by an engineer or NICET Level 3 or 4 layout technicians. Section 107.2.2, 903.1.1, 2018 KBC, KRS 198B.565, Section 11.2.1.1, 2013 NFPA 13 (Go to forms and publications on [dhbc.ky.gov/bce](http://dhbc.ky.gov/bce) and download the Fire Suppression Design Criteria form).
3. The kitchen floor plan shows the kitchen restroom facility exiting into the kitchen. Toilet rooms shall not open directly into a room used for food preparation service to the public. Submit revised kitchen layout showing these changes. Section 107.1 and 1210.4, 2018 Kentucky Building Code.
4. Be advised In buildings assigned to Risk Category III or IV in accordance with Section 1604.5, special inspections for through-penetrations, membrane penetration firestops, fire resistance joint systems, and perimeter fire barrier systems that are tested and listed in accordance Section 714.3.1.2, 714.4.1.2, 715.3, and 715.4, shall be in accordance with Section 1705.17.1 or 1705.17.2. Provide a revised letter of special inspections to include that special inspections will be performed on all fire penetrations, joint systems, and perimeter fire barriers systems. Section 1705.17, 2018 KBC.
5. Be advised that upon the completion of project, a signed and sealed final report of special inspections shall be submitted to this office, prior to issuance of a Certificate of Occupancy. Sections 1704.2.3, 1704.2.4, and 1704.3, 2018 KBC.
6. Be advised any penetrations of fire assemblies shall be provided with an approved through fire stop system. Please provide the type of penetration and method of fire stopping including a nationally recognized tested system. Cut sheets for each type of penetration system shall be provided to the field inspector at the job site illustrating that its listing complies with the type of penetration it serves. (Section 714.3 and 714.4, 2013 KBC).
7. Submit separate payment and signed sealed structural shop drawing details of proposed bleachers as note in Sections 107 and 121.3.17, 2013 KBC.
8. Submitted separate payment and the fire alarm system for review and approval prior to system installation. Construction documents shall include, but not be limited to, a floor plan indicating the use of all rooms, locations of alarm-initiating and notification appliances, alarm control and trouble signaling equipment, annunciation, power connection, battery calculations, conductor type and sizes, voltage drop calculations, manufacturers, model numbers and listing information for equipment, devices materials, details of ceiling height and construction, and the interface of fire safety control functions. Section 901.6 and 907, 2013 KBC
9. Submit separate payment and signed and sealed fire suppression system shop drawing details, hydraulic calculations and the manufacturer's cut-sheets prior to installation fire suppression system as noted in Section 107.2.2, 2013 Kentucky Building Code (KBC). Ensure that all system drawing details meet requirements of Section 903.1, 2013 KBC.
10. Type 1 hood: Please submit separate payment and complete shop drawings and specifications for the required Type I commercial kitchen range hood(s) and related ductwork system, along with the signed and sealed shop drawings for the range-hood fire suppression system. These drawings shall be submitted for review and approval, prior to the installation of the range hoods. Sections 2801.1, 2013 Kentucky Building Code (KBC) and Sections 506 thru 509, 2012



Andy Beshear  
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- International Mechanical Code (IMC), and Section 904.11, 2013 Kentucky Building Code (KBC).
11. Type 2 hood: Please submit separate payment and complete shop drawings and specifications for the required Type II commercial kitchen range hood(s) and related ductwork system. These drawings shall be submitted for review and approval, prior to the installation of the range hoods. Sections 2801.1, 2013 Kentucky Building Code (KBC) and Sections 506 thru 508, 2012 International Mechanical Code (IMC).

*Be advised that in the event that a required detail is not initially ascertained. Doesn't alleviate the detail from being required. Therefore, upon review of additional construction documents additional deficiencies may be noted. Section 107.3, 2018 KBC.*



## Cate Noble Ward

---

**From:** Jerry Vandavelde, P.E. <JVandavelde@ecslimited.com>  
**Sent:** Wednesday, March 17, 2021 2:26 PM  
**To:** Cate Noble Ward  
**Cc:** Liz Blandford Newcomb, P.E.; Highley, Bret; Sexton, Becky; Jeremy Adams; Steven Ward; Logan Greene  
**Subject:** RE: BCPS Elementary School - Special Inspections

Cate,

In comparing the scope of services for the storm shelter that KPFF included in their estimate, it appears that the overlap is limited to inspections of foundations and ICF walls. Since both of those require materials testing (only provided by ECS) in addition to reinforcing steel and other inspections, only a partial overlap appears to exist. If we assume KPFF will handle all the reinforcing steel and formwork in those items and ECS would only sample and test the concrete or grout placed, it would reduce our estimate by about 7 hours. Using the rates included in our proposal the potential cost reduction would be about \$380. It should be noted that since we still have to be on site to sample and test the placed materials even if someone else is doing inspections, the cost savings is less than if we could eliminate the site visit entirely. As you stated, our proposal included an estimate, so the actual cost could be more or less depending on how the contractor executes the work. We will track the budget and project progress and if it appears the budget is being consumed at a higher rate than the construction is being completed (due to delays or less work completed prior to each site visit) we will advise you so that we can adjust our scope or the budget. Please let me know if you have any questions about this.

Thanks  
Jerry

**JERRY VANDEVELDE, P.E.** | Office Manager  
**ECS SOUTHEAST, LLP** | T 502.493.7100 | D 502.208.2242 | C 502.817.3281  
www.ecslimited.com

*Confidential/proprietary message/attachments. Delete message/attachments if not intended recipient.*

**From:** Cate Noble Ward <cate@studiokremer.com>  
**Sent:** Monday, March 15, 2021 9:03 AM  
**To:** Jerry Vandavelde, P.E. <JVandavelde@ecslimited.com>  
**Cc:** Liz Blandford Newcomb, P.E. <LNewcomb@ecslimited.com>; Highley, Bret <bret.highley@bullitt.kyschools.us>; Sexton, Becky <becky.sexton@bullitt.kyschools.us>; Jeremy Adams <jeremy@studiokremer.com>; Steven Ward <steven@studiokremer.com>  
**Subject:** RE: BCPS Elementary School - Special Inspections

Hello Jerry,

Thanks for sending this over – I have forwarded it to BCPS for their review.

I do have an information request – ECS had included visual storm shelter inspections in their original proposal for OMES. When having to reassign those inspections to KPFF (a Registered Design Professional) some scope/time was taken away from the original contract with BCPS. Can ECS provide a cost/time estimate of the hours involved for that scope that had been previously assumed. We understand ECS's contract is based on hourly services performed, so this figure is just for BCPS's reference and when reviewing the CO Request.

Both the CO Request and original proposal are attached for reference.

Thanks!

**Cate Noble Ward**, AIA, LEED AP  
Architect | Associate



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**From:** Jerry Vandevelde, P.E. <[JVandevelde@ecslimited.com](mailto:JVandevelde@ecslimited.com)>  
**Sent:** Thursday, March 11, 2021 2:21 PM  
**To:** Cate Noble Ward <[cate@studiokremer.com](mailto:cate@studiokremer.com)>  
**Cc:** Liz Blandford Newcomb, P.E. <[LNewcomb@ecslimited.com](mailto:LNewcomb@ecslimited.com)>  
**Subject:** BCPS Elementary School

Cate,

Liz is out this week and asked me to forward this to you. Attached is our change order request for the supplementary services on the proposed Elementary School. Please return a signed copy of the change order to us for our files. Let us know if you have questions or need anything else.

Thanks  
Jerry

**JERRY VANDEVELDE, P.E.** | Office Manager  
**T** 502.493.7100 | **D** 502.208.2242 | **C** 502.817.3281  
1762 Watterson Trail | Louisville | KY | 40299

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