ADDENDUM NO. 2 December 12, 2017
Appoquinimink School District
Fairview Campus – Bid Package 'B'
Page 1

The bid due date remains unchanged.
Bids are being received until 2:00 p.m. on Wednesday, December 20, 2017.

NOTICE: Attach this addendum to the project manual for this project. It modifies and becomes a part of the contract documents. Work for materials not specifically mentioned herein are to be described in the main body of the specifications and as shown on the drawings. Bidders shall acknowledge receipt of this addendum on the space provided on the Bid Form. Failure to do so may subject the bidder to disqualification.

Whenever this Addendum modifies a portion of the Project Manual added information is shown as **Bold** and deleted information is shown as ~~strikethrough~~.

The contract documents for the above referenced project are amended as follows:

GENERAL CLARIFICATIONS:

1. None to Report

QUESTIONS AND ANSWERS:

1. General : no dimensioning is provided on the structural drawings. Please provide column line dimensioning along with interior dimensions that affect the design on all structural floor plans.
    a. Dimensioning of structural drawings was provided in Sheets S101 through S108A included as part of Addendum #1.
2. The detail for PC6 shown on S003 is missing information on the reinforcing steel. Please provide.
    a. Missing information for the reinforcing steel of PC6 was provided in the updated Sheet S003 included as part of Addendum #1.
3. General Notes G12 through G14 on Sheet S002 is missing information on the load schedule. Please provide.
    a. Load Schedules are shown on Drawings S003. We will provide correct reference on Sheet S002 in Addendum #3.
4. Structural design of orchestra pit does not match architectural. Please coordinate.
    a. Orchestra Pit Extents is Being Revised. We will provide additional information in Addendum #3.

5. Section 1/S505 – need to expand to show grade beam and retaining wall beneath stage. Also, need to show details on the cantilevered stage over the orchestra pit.
    a. Additional Detail was provided in Addendum #1.
6. Provide a design/slab type for the cantilevered slabs overhanging the lower orchestra pit at the north and south ends of the pit.
    a. Additional Cantilever Slab Design / Detail provided in Addendum #1.
7. Provide details/cuts through end walls of the orchestra pit (north and south)
    a. We will provide additional details in Addendum #3 once revisions to the extent of the pit is completed.
8. Provide slab types for rooms adjacent to orchestra pit including bottom landings of stairs.
    a. Slab Type S1 at bottom landing of stairs. See Addendum #2.
9. Current structural design of the orchestra pit has steel columns located in the middle of planned doorways. Please coordinate between architectural and structural design.
    a. Orchestra Pit Extents is being revised. We will provide additional information in Addendum #3.
10. The concrete slab at the stage is called to be S6 which is a 12" thick slab. Is this correct?
    a. See Addendum #1.
11. The slab in the middle school gymnasium is shown to be type S1. Should this be S5 to match the main gymnasium floor slab type and to allow a recess for the wood flooring?
    a. The middle school gymnasium floor is to be recessed a maximum of Slab Type S5; however, final floor system may not be a wood floor. Therefore, keep Slab Type S1 but provide a recessed floor similar to Slab Type S5 for bidding.
12. Areas C and D (Sheets S113 and S114) need more detailing of the foundation walls to allow for bidding. Please provide section and wall cuts for the exterior and interior walls.
    a. See updated drawings included in Addendum #1. Additional details are to be provided in Addenda #2 and 3.
13. No slab type is provided for the tiered seating audience area of the PAC. Please provide slab types and a section through this tiered area.
    a. See updated drawings included in Addendum #1.
14. The flooring alternate (to provide terrazzo tile in lieu of resilient tile) needs to be coordinated between the architectural and structural drawings. The description of the alternate is incorrect in the structural plans – it should read that no recess is required as part of base bid and recessing of the slab is needed for the terrazzo tile add alternate.
    a. All floor slabs / recesses / alternates have been coordinated with architect. See Addendum #1.
15. Provide section cuts through elevator pits.
    a. Elevator Pit sections are shown on Typical Foundation Details. Additional cuts shown in Addendum #1 at lifts.

16. Piles are shown beneath the exterior masonry site walls in the loading dock areas of Area D. Are these necessary?
    a. Yes.
17. Area H – Provide sections/cuts through the interior masonry walls at the perimeter of the gymnasium.
    a. See updated drawings included in Addendum #1.
18. Individual Piles are not shown beneath the run of interior grade beams. This is most evident in the floor plans or Areas B, D, G, and H. Are piles required beneath these grade beams?
    a. No.
19. Sheet S118.A needs much more detailing. All notes appear to be pointing at wrong locations, individual piles are not called out, and details/sections are required at exterior and interior foundation walls. In addition, the gymnasium slab type called out on Sheet S118A does not match the slab type of the original gymnasium slab.
    a. Sections & Slabs will be coordinated in Addendum #3. Provide similar details shown on Sheet S118.
20. Layering appears to be off in Section 3/S507. The rebar is all shown beneath the footer. Please correct.
    a. See updated drawings included in Addendum #1.
21. The ramps, stairs, and canopies at the ends of Areas A and G were not shown previously. The new ramp being installed to Area G has a masonry retaining walls with individual piles along the length of the ramp's grade beams. Are piles necessary for this installation or would standard spread footings work? Are the masonry walls needed or can the ramp and associated walls be formed concrete?
    a. Yes, provide as shown.
22. Page 004100-9 – Alternate No. 3 and No 4 are listed but we do not see Alternate No. 1 and No2. Please confirm that these do not exist.
    a. Alternates 1 and 2 do exist. Alternate #1 is for additional sidewalks within the campus green and Alternate #2 is to change the lacrosse/field hockey fields to synthetic turf. Neither of these alternates affect Contract B-03: Timber Driven Piles, so they were not included in that contract's bid form.
23. Page 004100-10 – Lists items 16. And 17. asking for piling per each (16) and One linear foot (17). Please clarify the description of these items, specifically the meaning of "BULK" and "TRENCH". Also please provide a description to calculate cubic yardage for these items as none can be found in the Technical Specification.
    a. Please see the bid form reissued in Addendum #1. All reference to "Bulk" and "Trench" and cubic yardage have been removed from the Timber Driven Pile bid form.
24. A note stipulates that the price between the ADD and DEDUCT "should" not exceed 15%. Please confirm the use of the word "should" as opposed to the word "shall".
    a. The latter is correct. The difference in price between Add and Deduct unit prices **shall** not exceed 15%.

25. Please confirm that contract b-02 site work does not include providing power to the pumping stations and automatic gates.
    a. Correct. Power to the pumping stations and automatic gates will be provided by the electrical contract which will be included in Bid Package 'C'.
26. Are the pile shoes prescriptive? We generally use a ¼" thick hot-rolled steel matching the 8" diameter of the tip.
    a. That pile shoe is acceptable.
27. For the timber pile unit pricing requests, do you have a baseline number of timber pile or lineal feet from which we add/deduct?
    a. Per bullet #6 in the Timber Driven Pile scope of work, all piles are to be estimated as 35' long. This is the baseline linear feet from which the add/deduct linear feet unit price will be utilized. The number of piles is based upon the drawings. If a pile is not shown on the foundation plans or not listed as typical or if a pile shown is deleted per the design team's direction, then the add/deduct unit price for each additional pile will apply.
28. Timber pile specification has language about driving shoes. The summary of work does not indicate that driving shoes are required. Please advise if driving shoes are required.
    a. Yes, provide pile shoes.
29. Number 5 of the summary of work indicates that a PDA (dynamic pile testing) is to be used during 16 EA probe (test) pile installation. Section 3.2C indicates that dynamic pile testing is to be done during initial driving and restrike on 3% of the piles. 3% of the total pile quantity is much greater than 16 EA. Please clarify how many probe (test) piles are to be driven. Please clarify is dynamic pile testing is only to be performed on the probe (test) piles.
    a. Dynamic pile testing performed on test piles (Total of 16). Restrike test piles only (total of 16).
30. Are we to include restrikes on all probe (test) piles? Is dynamic pile testing to be performed during all restrikes?
    a. Restrike required on Test Piles (Total of 16) only.
31. Are we to include restrikes on any production piles? If so, how many and will dynamic monitoring be required?
    a. Restrike required on Test Piles (Total of 16) only.
32. Is the Contractor or Owner responsible for hiring and paying for the dynamic testing consultant?
    a. The owner will provide a geotechnical engineer to perform the dynamic testing and to monitor the production piles.
33. The bid form has a unit price (add & deduct) per LF of timber pile. The summary of work requires that bids are to be based on 40' long test piles. Please confirm that the deduct unit price WILL NOT be applied to test pile cutoff lengths.
    a. Deduct unit prices will not be applied to the test piles.
34. The bid form has a unit price (add & deduct) per LF of timber pile. The summary of work requires that bids are to be based on 35' long production piles. Actual production pile lengths

will be determined from the test pile results. Please confirm that the deduct unit price WILL NOT be applied to ordered production pile cutoff lengths.

a. The deduct unit price will be applied for the difference between the bid length of 35' and the actual production pile length based upon the test pile results. For instance, if the test piles show that all piles can be ordered shorter than the estimated 35', then a credit is to be issued based upon the difference in length and the unit cost proposed.

35. How much topsoil & common is on site for use in grading?
    a. The cadd files issued contain updated existing contours that reflect the as-built contours of the stockpile to date.
36. Do we own moving the current stock piles to new locations? The current stockpile locations look to be in the way of the athletic fields and upper part of stadium way, also there doesn't seem to be any stock pile locations on the E&S plans.
    a. Yes, locations and coordination should be coordinated with EDiS project schedule
37. Does outlet structure 3 not exist?
    a. There is no OS#3
38. Will the section detail for "concrete pad" be released in the next addendum?
    a. The concrete pads for the portable bleachers are not included in this contract – they will be installed with the athletic facilities
39. Are we to assume that all roadway striping is to follow DelDOT spec for epoxy painting?
    a. Yes, all signing and striping is to be in accordance with DelDOT spec.
40. Does the site work contractor own the "proposed wall" in front of the school along the walks?
    a. No. Contract B-04 : Concrete is to provide excavation, installation, and backfill of the concrete foundation for this wall as detailed on Sheet S302. Masonry for this wall will be included in the masonry contract of Bid Package 'D'.
41. The civil drawings still appear to show the natatorium along with associated utilities and paving that was removed as part of Value Engineering. Please delete this from the drawings or cloud the area to show as future work not included in this bid package. If the natatorium is deleted, should the utilities still be run to this future location and capped off as part of this package?
    a. The natatorium area items were clouded as part of Addendum #1 and labeled NIC. The 6" water service to and including the fire hydrant must be installed. The 6" service to the natatorium does not need to be installed.
42. The civil drawings still appear to show storage sheds at the auxiliary football field and lacrosse fields that were removed as part of Value Engineering. Please delete this from the drawings or cloud the area to show as future work not included in this bid package.
    a. The sheds were clouded as part of Addendum #1 and labeled NIC. The sheds needed to remained on civil plans in order to preserve the square footage and design approval with the review agencies should ASD decide to install them in the future.
43. Is additional piping and hose bibbs required to feed sprinklers at the courtyard and the Green? Or is the expectation that ASD can utilize hose bibbs at the perimeter of the buildings?

a. Landmark expects that the courtyard area can utilize hose bibb(s) on the building if they are being provided for in the MEP design. One hose bib has been added within the Green. See Sheet C-126 that was issued with Addendum #2.

44. There is an error in the revised civil drawings issued in Addendum #1. The Storm Drain Schedule is still not complete. Please provide the completed schedule asap.
    a. A revised Sheet C-154 has been issued with Addendum #2. This now includes complete charts for storm drainage and roof leader systems.
45. What type of paint is used for the line striping, latex, solvent based, or epoxy? The existing elementary school is using solvent based paint.
    a. Please see General Construction Note 15 on Sheet C-001
46. What type of paint are the stop bars, crosswalks and fire lane wording, latex or thermoplastic?
    a. Please see General Construction Note 15 on Sheet C-001

MODIFICATIONS TO SPECIFICATIONS:

1) SPECIFICATION SECTION 011100 : Summary of Work – Contract B-02 : Sitework
    a. Page 12 –Add Bullet #50:
        "50. Provide concrete sidewalks, grading, topsoil, and seeding within open courtyards within the school perimeter."

2) SPECIFICATION SECTION 011100 : Summary of Work – Contract B-04 : Concrete
    a. Page 18 –Add Bullet #42:
        "42. Provide concrete grade beams, pile caps, and slabs associated with exterior patios and ramps at the ends of Areas A and G and with all walk-out slabs at exterior doorways as shown on the structural plans."
    b. Page 18 –Add Bullet #43:
        "43. Provide excavation, installation, and backfill for the concrete foundations and reinforcing steel associated with the masonry walls at the high school and middle school entrances as shown on Sheet S302."

3) SPECIFICATION SECTION 013700 : BIM Coordination
    a. Insert Specification Section 013700 into the project manual.

MODIFICATIONS TO DRAWINGS:

1) Civil Drawings
    a. Delete Sheet C111, and replace with Sheet C111, Revision 2, dated 12/08/2017, attached to this Addendum.
    b. Delete Sheet C113, and replace with Sheet C113, Revision 2, dated 12/08/2017, attached to this Addendum.

c. Delete Sheet C114, and replace with Sheet C114, Revision 2, dated 12/08/2017, attached to this Addendum.
d. Delete Sheet C117, and replace with Sheet C117, Revision 2, dated 12/08/2017, attached to this Addendum.
e. Delete Sheet C118, and replace with Sheet C118, Revision 2, dated 12/08/2017, attached to this Addendum.
f. Delete Sheet C121, and replace with Sheet C121, Revision 2, dated 12/08/2017, attached to this Addendum.
g. Delete Sheet C122, and replace with Sheet C122, Revision 2, dated 12/08/2017, attached to this Addendum.
h. Delete Sheet C125, and replace with Sheet C125, Revision 2, dated 12/08/2017, attached to this Addendum.
i. Delete Sheet C126, and replace with Sheet C126, Revision 2, dated 12/08/2017, attached to this Addendum.
j. Delete Sheet C154, and replace with Sheet C154, Revision 2, dated 12/08/2017, attached to this Addendum.
k. Delete Sheet C500, and replace with Sheet C500, Revision 2, dated 12/08/2017, attached to this Addendum.
l. Delete Sheet C502, and replace with Sheet C502, Revision 2, dated 12/08/2017, attached to this Addendum.
m. Delete Sheet C543, and replace with Sheet C543, Revision 2, dated 12/08/2017, attached to this Addendum.

2) <u>Architectural Drawings</u>

a. Nothing to Report

3) <u>Structural Drawings</u>

a. Delete Sheet S003, and replace with Sheet S003, Revision 2, dated 12/11/2017, attached to this Addendum.
b. Delete Sheet S113, and replace with Sheet S113, Revision 2, dated 12/11/2017, attached to this Addendum.
c. Delete Sheet S114, and replace with Sheet S114, Revision 2, dated 12/11/2017, attached to this Addendum.
d. Delete Sheet S302, and replace with Sheet S302, Revision 2, dated 12/11/2017, attached to this Addendum.
e. Delete Sheet S303, and replace with Sheet S303, Revision 2, dated 12/11/2017, attached to this Addendum.
f. Delete Sheet S304, and replace with Sheet S304, Revision 2, dated 12/11/2017, attached to this Addendum.
g. Delete Sheet S501, and replace with Sheet S501, Revision 2, dated 12/11/2017, attached to this Addendum.

h. Delete Sheet S509, and replace with Sheet S509, Revision 2, dated 12/11/2017, attached to this Addendum.

ATTACHMENTS

- SPECIFICATION SECTION 013700 : BIM COORDINATION (pages 1 – 60)

- SHEET C111 – SITE LAYOUT AND UTILITY PLAN
- SHEET C113 – SITE LAYOUT AND UTILITY PLAN
- SHEET C114 – SITE LAYOUT AND UTILITY PLAN
- SHEET C117 – SITE LAYOUT AND UTILITY PLAN
- SHEET C118 – SITE LAYOUT AND UTILITY PLAN
- SHEET C121 – SITE LAYOUT AND UTILITY PLAN
- SHEET C122 – SITE LAYOUT AND UTILITY PLAN
- SHEET C125 – SITE LAYOUT AND UTILITY PLAN
- SHEET C126 – SITE LAYOUT AND UTILITY PLAN
- SHEET C154 – LINES AND GRADES PLAN
- SHEET C500 – SITE DETAILS AND SECTIONS
- SHEET C502 – SITE DETAILS AND SECTIONS
- SHEET C543 – CONSTRUCTION SITE DETAILS AND NOTES

- SHEET S003 - PROJECT SCHEDULES
- SHEET S113 – FOUNDATION PLAN - AREA C
- SHEET S114 – FOUNDATION PLAN - AREA D
- SHEET S302 – PARTIAL PLANS
- SHEET S303 – PARTIAL PLANS
- SHEET S304 – PARTIAL PLANS
- SHEET S501 – TYPICAL FOUNDATION DETAILS
- SHEET S509 – FOUNDATION SECTIONS AND DETAILS

End of Addendum No. 2

BIM EXECUTION PLAN

Fairview Campus
New Middle School
and
High School

Appoquinimink School District

EDiS Company and EDiS BIM Services

BIM PROCESS IS MANDATORY

SECTION 013700 - BIM COORDINATION

1. CONTRACTOR 3D MODEL RESPONSIBILITY
   The purpose of this three dimensional construction model is to aid in project review at a level of detail 200. Contractors, as part of the Fairview Campus Middle and High Schools project, hold direct responsibility to adhere to AIA G202-2013 Project Building Information Modeling Protocol Form Matrix while creating their BIM model respectively. BIM models developed by Contractors shall reflect the two dimensional contract drawings provided in bidding package. EDiS Company's referenced and shared three dimensional model is only utilized as a visual aid to begin per matrix LOD required by Contractor. EDiS Company relieves themselves from all responsibility of any conflicts within the LOD 200 model delivered as a reference model to Contractors.

2. DEFINITIONS
   2.1. **Base Structural Model** – the structural steel mill order drawing file showing all structural elements. This model is not necessarily fully detailed with all connections.
   2.2. **Base Architectural Model** – a combination of the Base Structural Model and key architectural elements. This model is to be used by all coordination participants as the background file in which to develop their work. No information within this model will be changed through the coordination process. It is for reference only.
   2.3. **Base Composite Model** – this model includes all trade drawing files within the Base Architectural Model as a representation of the completed systems. This model is used to run the intermediate clash reports and is considered a work in progress.
   2.4. **Final Coordination Model** – this model shows all trades' systems fully coordinated within the Base Architectural Model. All clashes have been resolved. No further coordination is required. The work shown within this model represents the upcoming installations of each system.
   2.5. **Completed Coordination Model** – this model is the close-out submittal to the Owner and includes the information within the Final Coordination Model as well as any project updates that have taken place during installations such as RFI responses, as-built conditions, etc.
   2.6. **Building Information Model -** A Building Information Model(s) is a digital representation of the physical and functional characteristics of the Project and is referred to in this document as the "Model(s)," which term may be used herein to describe a Model Element, a single Model or multiple Models used in the aggregate. "Building Information Modeling" means the process and technology used to create the Model.
   2.7. **Level of Development** - The Level(s) of Development (LOD) describes the level of completeness to which a Model Element is developed.
   2.8. **Model Element** - A Model Element is a portion of the Building Information Model representing a component, system or assembly within a building or building site. Model Elements are represented by the Construction Specifications Institute (CSI) UniFormat™ classification system in the Model Element Table in Exhibit 1 - Article 3.
   2.9. **Model Element Author** - The Model Element Author is the party responsible for developing the content of a specific Model Element to the LOD required for a particular

phase of the Project. Model Element Authors are identified in the Model Element Table in Exhibit 1 - Article 3.

2.10. **Model User** - The Model User refers to any individual or entity authorized to use the Model on the Project for analysis, estimating, or scheduling.

2.11. **TCD** – Trade contract drawings developed by MEP contractor.

3. COORDINATION DRAWING PROCESS – GENERAL REQUIREMENTS.

3.1. The coordination model shall be derived from the design base composite model which shall be in a (Program File Format – Ex: Revit 2017) format and utilized by all coordination participants. The A/E is to provide this base composite model as needed at each plan deliverable for coordination efforts. This model will be utilized to establish field installation sequence, resolve trade coordination issues prior to installation, and to make the most efficient use of installation space without sacrificing system performance for mechanical, electrical, structural and architectural systems. (Program File Format – Ex: NAVISWORKS or IFC) design review software will be used to document, identify and resolve interferences between all trades.

3.2. Communication is a critical element to the success of this coordination process. All project team members must be in constant communication to keep the process moving forward according to the sign-off schedule (5.1). Constant collaboration is expected of all team participants and each participant should be proactive in identifying and resolving design, engineering, and model interferences. Contractors avoiding the coordination process shall receive liquidated damages for missing meetings and negatively impacting project completion.

3.3. All trade contractors own their respective modeling for their contract work. EDiS Company will facilitate and lead the 3D coordination modeling process. It is the responsibility of all coordination participants to resolve discrepancies pertaining to their own model. All trades shall be responsible for collisions/clashes/coordination issues involving their respective trade(s) and proposed work. Coordinated work takes precedence over field routed systems. Each Contractor to provide LOD 350 total coordination models for sign off.

3.4. Coordination meetings will occur weekly starting TBD. Selected coordination team members are required to generate a clash-free model inclusive of all systems. The following participants are required to attend the weekly coordination meetings:

3.5. A mandatory coordination kick-off meeting for all participants will review; team collaboration, the execution process, the coordination schedule, establishing zones per system, use of the coordinated elements during construction, project specific information and requirements, and model/document standards.

3.6. Coordination meetings will be held at Virtual Goto Meeting to review the model's progress per the schedule and process indicated.

3.7. Utility corridors and above ceiling space for each trade, will be established by the group at the beginning of the process. These zones will be adjusted through the coordination process to meet installation requirements and feasibility.

3.8. All participants are required to identify the submittals required for accurate detailing of the coordination model (such as equipment, light fixtures, etc.) and to obtain final approval so the information can be incorporated into the modeling process.

3.9. The 3D coordination modeling process does not replace the standard submittal process and will not be considered as a submittal. Exceptions: The submittals issued to reflect the 3D model content issued to A/E.

3.10. Meeting Procedures:

Meeting Type	Project Stage	Frequency	Participants	Location
BIM Requirement Kick-off	Construction	Once	EDiS Team & Contracts #	Fairview Campus Site Trailer
BIM Coordination	Construction	Weekly	EDiS Team & Contracts #	Fairview Campus Site Trailer
BIM Clash Detection	Construction	Weekly	EDiS Team Issue to Contracts	Fairview Campus Site Trailer
Field Installation Process Coordination Meetings	Construction	Weekly	EDiS Team & Contracts #	Fairview Campus Site Trailer
TCD Drawings	Construction	Weekly	Contracts Mechanical	Fairview Campus Site Trailer
Sign off on TCD Drawings	Construction	At completion	All Parties w/Contract	Fairview Campus Site Trailer

NOTES: all contracted parties involved with coordination are required to sign off on all coordinated models via sign off TCD drawings.

3.11. The coordination meeting:

3.11.1. The purpose is to review and resolve items on the current clash report in conjunction with the project coordination schedule. The meetings will focus on clashes that cannot be resolved by internal collaboration. EDiS Company will facilitate the meeting and will make final decisions on clash resolution that are the least impact to the project as a whole. COORDINATION MEETINGS WILL NOT BE USED TO RESOLVE INDIVIDUAL MODELER'S/ENGINEER'S/ARCHITECTURE'S/CONTRACTOR'S WORK. If a Contractor does not post a clash-free system of its own work or that only contains a very limited number of clashes internally (Example: Fire Sprinkler Clashing with Fire Sprinkler), that Contractor will be considered unprepared for the meeting and will be responsible for any delays to the project schedule and any associated costs due to that delay which shall be determined by EDiS Company.

3.11.2. Each team participant will review the clash report prior to the subsequent coordination meeting in order to clean up any clashes that can be made without review by all participants.

3.11.3. All project participants are expected to be prepared for the meeting with new drawing work of the next area to be coordinated per the coordination schedule and any drawing changes based on the published clash report. Each participant will have available any shop model, submittals or other materials required to solve identified or potential conflicts.

3.11.4. The coordination schedule will be maintained and all identified conflicts addressed and resolved per the construction schedule. The coordination schedule may change as a result of design and/or model changes requested and made by the Owner, Architect or Engineer. In addition, the coordination schedule assumes selection of equipment is made within the time frame of the construction schedule as needed so it is incorporated into the coordination efforts without delay.

3.11.5. All agreed upon corrections to identified clashes determined by the team at the Coordination Meeting are to be updated and resolved prior to the next meeting.

3.12. When an area of the model is fully coordinated and clash-free, each participant agrees:

3.12.1. That each trades work is fully coordinated and will be installed per the signed off area as reflected in the coordination model. Sign off drawings from each trade are turned over in PDF form with projects title block. EDiS Company will include legend and title block for trade PDF file.

3.12.2. All trades to provide Total Coordination drawings at the time of sign off. TCD's are drawings which include all trades sign off models. Models are submitted for turn over to EDiS Company. The purpose for TCD's is to provide coordinated building models for jobsite coordination. Models from Contractors to include all but not limited to: item elevations, product type and all equipment tags.

3.12.3. During the installation of each trade's work, EDiS Company will refer to the signed off report and the 3D model to resolve any conflicts. Each installation firm agrees to install all work per the signed off drawings/model, without deviation. If a deviation, during installation, takes place without prior approval from all detailing parties, it will be the responsibility of the installing contractor to tear out the work and install it as shown on the signed off drawings/coordination model. The cost of this work will be evaluated when the issues arise; however, the party responsible for the conflict will be responsible for the cost of the fix, including the additional detailing time of all parties involved.

3.12.4. The model is not considered to be the final coordination model until the BIM Coordinator, EDiS Company's Project Manager, A/E, and Owner has approved all clash free systems and routings and documents are signed off by all parties (contractors).

3.13. Should a conflict arise during installation that was missed during the coordination process, and not a result of deviating from the signed off area, the coordination team will work together to find a solution that is optimal for all trades and the project.

3.14. The final coordination model shall be kept up to date by all participants during construction to include as-built information and any other pertinent data that is essential to the project. The data will be submitted electronically in Revit, AutoCAD, NWC, PDF format. Items to be included are:

3.14.1. RFI responses.

3.14.2. Design change orders or designs that are in addition to the original contract documents.

3.14.3. Equipment will be tagged with all (Owner required) identification information within the model (ex. Equipment schedule information and O&M Manuals). This identification information will be the same and correspond to all other close-out documentation. This close-out documentation including O&M manuals, maintenance information, etc. will be included in PDF form.

3.14.4. EDiS will provide a location for the Contractor to submit the required documentation at a later time. EDiS will generate the completed coordination model based on these documents for turn-over to the owner.

3.14.5. Tekla or Navisworks will be utilized to link PDF closeout documents, select RFI's, select Images, etc., to the closeout model. Contractors need to provide closeout documents in the format requested by EDiS for the closeout model as well as adding smart data to other model type files as determined necessary by EDiS within the time frame A/E dictates. For example, if Revit files are needed to produce the closeout model, EDiS may direct Contractor to set up certain Revit views for the exporting of files which make up the as-built models. A/E may also request that the Contractor create viewpoints for their equipment in as-built model.

3.15. Data for coordination will be available on the Box.com, to be referenced by the other participants. Models and drawing files will never be tampered with by non-owners of the file. If a mistake occurs and a drawing is inadvertently modified, the responsible party is required to alert the project team. (See attachment)

3.16. The Owner's commissioning agent can attend the coordination meeting to review the detailing effort for commissioning related items.

3.17. All trades will provide Level of Development (LOD) (350) models for weekly coordination meeting.

4. REQUIREMENTS OF THE LEAD COORDINATOR

4.1. The Lead Coordinator will be EDiS Company.

4.2. Identification of a common insertion point for all drawing files. (Utilize Revit Models origin)

4.3. A/E to provide Lead Coordinator model exports to 2D/3D CAD of each trade component as needed to coordination. Origins to be maintained in exports.

4.4. Using the A/E's files, the Lead Coordinator will utilize & maintain the base architectural model.

4.4.1. The base architectural model is a combination of the base structural model and other architectural elements. These architectural elements will include all elevated 3D architectural elements including, but not limited to, all walls that extend to the deck, fire and smoke walls, soffits and associated framing, ceiling planes, and finish floor planes.

4.4.2. This model will consist of cleaned-up floor plans void of any excessive notations, leaders, bubbles, marks, grid lines, etc. that are not required for detailing development and that may potentially cause a conflict in the base composite model.

4.4.3. In the event of changes to the A/E's contract documents, the A/E must revise the base architectural model/MEP/structural models and distributed to all

coordination participants. This will require Contractor participation as need by A/E to complete the revised models for directive. Revision work will be directed by Owner through an executed change order.

4.4.4. The base architectural models will be distributed and maintained by EDiS Company.

4.5. Collation of all trades' detailing models as posted to the project's web-based posting site into a Base Composite Model thru the use of Navisworks 2017.

4.5.1. Establish a standard two inch (2") soft tolerance within the clash detection software. This tolerance will result in a reported clash for any elements drawn closer than two inches (2") to one another.

4.5.2. Assess and include most current clash files including the generation of a clash reports and distribution to all project participants per the coordination schedule.

4.5.3. Collect final as-built files from all trades and generate a Final Coordination Model to submit to CM as part of the close-out requirements.

4.5.4. Coordination meeting minutes shall be kept by EDiS Company Lead Coordinator or EDiS' Project Manager showing issues and resolution dates.

5. REQUIREMENTS OF THE STRUCTURAL STEEL CONTRACTOR

5.1. Obtain from the A/E Structural Revit files to be used in the generation of the base structural model.

5.2. The structural Contractor will develop and provide the base structural model within the time frame dictated by EDiS and provide structural model updates to ensure the coordination team is coordinating the MEP/FP to the most up-to-date structural model.

5.3. All structural framing members in the final sizes and locations (typically referred to as a "mill order" or "procurement" model) will be shown in the model as 3D objects with surfaces. At the discretion of the lead coordinator, this model may be void of all hardware and secondary structural steel but should include the major components: primary steel, metal decking, slab on metal decking, and gusset plates.

5.4. The structural insertion/datum point must match the architectural insertion/datum location. No detailing work shall take place until the insertion points of the architectural and structural models match.

5.5. The steel Contractor is responsible for resolving their own modeling issues (i.e.: steel not to scale, missing key structural components, missing surface data, and model showing as wire frame data, model exported to proper file format, etc.). The steel Contractor is responsible to provide a steel design model in a usable format for all coordination participants to reference as the base structural model.

5.6. A FINAL 3D steel model and 2D shop drawings shall be submitted to the structural engineer of record, and used for field erection. It must be completed and submitted in accordance to the BIM schedule. This model shall consist of:

5.6.1. All primary and secondary steel including metal deck, slab on metal deck, actual gusset plate sizes, connection details, edge of slab details (pour stop), brick relief angles, embeds, anchor bolts, and other miscellaneous metals. Curtain Wall embeds modeled by others.

5.6.2. Submit final approved files to Lead Coordinator for insertion into the coordinated model, and to the design team in the form of shop drawings and/or Navisworks compatible model.

6. DETAILING REQUIREMENTS OF ALL PARTICIPANTS

6.1. File sharing information:

6.1.1. Site Contractor (SIT-1)

- Attend BIM trade coordination meetings
- Deliver three dimensional model to coordination team
- Required to deliver items identified in G201 matrix such as
- Develop appropriate tie-in locations of utilities with trades. Site contractor required to deliver main connections in model format
- Site underground items outside direct tie in locations not required in three dimensional models.
- Sanitary piping tie-in
- Storm water tie-in
- Domestic water tie-in

6.1.2. The in-progress (Coordination Software – Ex: IFC/NWC/Cad) naming convention will be: project-trade-level. Example:
Project Designation -MechPipe-1
Project Designation -HVAC-1
Project Designation –Fire Protection-1
Project Designation -Elec-1
Project Designation -Plumbing-1
Project Designation -TeleCom-1 or AV-1
Project Designation –Pneumatic Tube-1, etc.
Additional designations may be added based on project specific scope and deliverable requirements and/or deemed as a critical component to the coordination process.

6.1.3. Each model posted by the contractor shall contain sub-layers for the purpose of system identification and isolation during the clash detection process. Example:
HVAC-1 shall contain sub-layers for:

- Supply
- Return
- Exhaust
- Fire Smoke-Dampers
- VAV clearance
- AC Door Access
- Fan Coil Units
- FCU Access
- Equipment
- Equipment Pads
- Equipment Clearances
- Hangers (designated per system)

MechPipe-1 shall contain sub-layers for:

- Hydronic Pipe Supply
- Hydronic Pipe Return
- Chilled Pipe Supply
- Chilled Pipe Return
- Shutoff Access
- Equipment
- Equipment Pads
- Equipment Clearances
- Hangers

Plumbing-1 shall contain sub-layers for:

- Domestic Water Supply
- Domestic Water Return (with additional layer designations for hot and cold)
- Gas
- Med-Gas
- Shutoff Access (designated per system)
- Sanitary
- Vent
- Roof Drain
- Rain Conductors
- Equipment
- Equipment Pads
- Equipment Clearances
- Hangers (designated per system)

Elec-1 shall contain sub-layers for:

- Lights
- Light Clearance
- Conduit (with additional layer designation for power and data)
- Cable Tray
- Cable Tray Access Clearance
- Pull Boxes
- Pull Box Access Clearance
- J-Boxes
- Elec. Panels
- Elec. Panel Access Clearance
- Elec. Troughs
- Elec. Trough Access Clearance
- Equipment
- Equipment Clearances
- Equipment Pads
- Hangers

Fire Protection1 shall contain sub-layers for:

- Mains
- Branches
- Shutoff Access

- Hangers

Pneumatic Tube-1 shall contain sub-layers for:

- Equipment
- Equipment Access
- Hangers

Additional sub layers may be added based on project specific scope and deliverable requirements and/or deemed as a critical component to the coordination process.

6.1.4. Clash detection files will be posted to **BuildingBlok.com** before **12:00 PM**, on **Wednesday and Friday** by each of the trades. The lead coordinator will also post updated coordination models as needed. The lead coordinator will maintain the master coordination files. The weekly coordination model will be name abbreviated Project Name-Floor-Coordination Model-Month-Day-Year.

All coordination participants will maintain a current control copy of their own drawing files outside of the project's web-based posting site. Control drawings are to include all previously posted files.

6.2. Trade Colors in the Coordination environment:

- Duct Supply – Dark Green
- Duct Return- Light Blue
- Duct Exhaust –Light Green
- Mech Pipe- Orange
- Pressure lines/Gas – Tan
- Sanitary/Vent – Brown
- Rain Conductors/Roof Drains – Maroon
- Domestic Water- Blue
- Fire – Red
- Pneumatic – Purple
- Electrical – Yellow
- All Base Architectural Elements (walls, soffits, ceiling & floor planes, etc.) will assume Arch model color scheme saved in the export or Lead Coordinator will modify select color scheme in the coordination model.
- Steel – Dark Grey
- Any hangers and equipment (that is fed per the designated system) will assume the same color of that system it is associated with. Additional color schemes may be added based on project specific scope and deliverable requirements and/or deemed as a critical component to the coordination process.

6.3. When posting drawing files for coordination:

6.3.1. Posted Contractor coordination files of each trades system should be clash-free with in their respective data. To clarify; trades should refrain from posting data that shows their systems clashing with itself.

6.3.2. When coordination of an area is completed there should not be any unresolved clashes remaining.

6.3.3. These files should be void of any text, dimensions or any other notations.

6.4. Each coordination participant is required to submit three (3) complete sets of installation drawings as well as electronic PDF's prior to any work being installed in the field. If A/E spec requires more or less than that will govern over this document. These complete

drawings are to be fully dimensioned and notated. Items to be noted in the final, fully coordinated drawing paper and electronic files of each system include:

6.4.1. Bottom and top elevations of duct, pipe, conduit racks, cable trays etc. must be indicated (where applicable).

6.4.2. Dimensions shall be shown from the gridlines to the centerline of each element drawn (round duct, pipe, cable tray, etc.) and from finished floor.

6.4.3. Height to top of light housing assembly must be indicated.

6.4.4. Labeling of all equipment.

6.5. During the coordination drawing effort, priority will be given to those systems that have the least flexibility. The following list is a descending order of the system priority and shall be used as a general guideline. Throughout the coordination drawing effort, adjustments and deviations to this list can be made with the approval of EDiS Company. (0′- 6″) clear above the ceiling shall be maintained for access and construction of the ceiling, whenever possible. Required maintenance and/or code access spaces and set-backs take precedence over all systems.

6.5.1. Gravity Pipe

6.5.2. Plumbing Vent

6.5.3. Ductwork and appurtenances

6.5.4. Cable tray

6.5.5. Recessed light fixtures

6.5.6. Fire protection piping and fixtures

6.5.7. Electrical conduit over (3/4″) in diameter

6.5.8. Pneumatic tube and other record or material conveying systems

6.5.9. HVAC piping

6.5.10. Plumbing, supply and medical gas piping

6.5.11. Electrical conduit smaller than 3/4″ in diameter

6.5.12. Above ceiling miscellaneous metal supports

6.5.13. Provide all copper tube routes (racks) for mechanical systems, including valves, clearance zones and hangers.

6.6. Items to be included in the detailed drawing progress include:

6.6.1. All systems must be fully detailed and shown as individual elements including ductwork, all piping 3/4″ and larger, pneumatic tubing, exterior wall connections, any piping that is smaller than ½″ that is racked or banked, etc.

6.6.2. Ductwork is to include size, layout and routing of all metal and flex ductwork, re-heat coils, terminal units, filters registers, grilles, diffusers, and similar features; provide notation for diffuser boot sizes and heights and any other special features

6.6.3. All valves, dampers and VAV's or heat pumps will note any items requiring access for service and maintenance as well as access doors in inaccessible ceilings.

6.6.4. All piping valves, boxes, supports, etc. are to be fully detailed

6.6.5. Sprinkler head locations shall be shown on ceiling plans.

6.6.6. All electrical conduits two inches (2″) or more in diameter are to be modeled and shown in addition to smaller diameter conduit that is racked or banked.

6.6.7. Electrical items such as hangers, supports, electrical fixtures, lights, speakers, detectors, sensors, cable trays, raceways, sleeves, pull boxes, and access space claims, etc. must be shown.

6.6.8. If an element is not shown, under the lead coordinators approval, it will be assumed to be field routed and to not interfere with the other elements that are shown or within code clearances. Contractors who field route their elements are responsible to ensure their installation will be feasible and void of creating a clash in the field. Coordinated items take precedence over field routing.

6.6.9. All major hangers and supports (including sway bracing, equipment bracing, hangers, etc.), penetrations, openings must be shown for all systems. Sharing of supports with other systems is discouraged, but can be accomplished with prior owner and/or field inspector approval.

6.6.10. All insulation must be shown with appropriate thicknesses. All insulation & clearance zones will be modeled or accounted for during the clash detection process.

6.6.11. Fire spray: If required by your building type, establish a safe thickness from all structural objects with which to run your clashes. Assume fire spray will be two inches (2″) thick.

6.6.12. Engineered stud framing must be modeled for king studs and doors.

6.6.13. Code clearances and maintenance access clearances must be shown and maintained; these include, but are not limited to access to VAVs, air handling units, egresses around pumps and tanks, smoke FDs, electrical panels, pneumatic tube transfer units, cable tray access, pull boxes, valve access, etc.

6.6.14. All trades must coordinate and detail their systems with the intent of installing each system at the optimal elevation above ceiling, taking into consideration, access to equipment for maintenance, repairs, connections, filters and removal while eliminating or minimizing the impact to surrounding components.

6.7. Established Clash Files are to be incorporated to ensure proper coordination. List of those files to be provided by the Lead Coordinator.

6.8. Refer to Appendix B – Soft Clash Requirements for additional soft-clash requirements.

7. SCHEDULE OF DRAWING COMPLETION AND SIGN-OFF

7.1. The participants should plan on the coordination process taking three (3) months. The coordination schedule is as follows:

This table will be populated at the BIM Coordination Kick-off Meeting. OR Schedule to be developed as part of the master construction schedule development (see Section 00230).

Zone	Floor	Coordination Meeting	Sign-Off Date

7.2. At the completion of each floor, the team will determine the specific "priority walls" that will be constructed full-height ahead of other interior partitions and MEP installations.

7.3. 3D MEP/FP Coordination Team

7.3.1. The goal of the coordination team will be to integrate the architectural, structural, mechanical, electrical, fire protection, and project specific elements into a collaborative 3D model to identify and resolve issues pertaining to MEP/FP systems and to ensure succinct and expedited field installations of these systems following the release of each zone/floor after clash free conditions are met. (Filled out at BIM Coordination Kick-off Meeting)

7.3.2.

BIM Coordinator	**EDiS Company**
Main Contact	Chris Donahue
Phone Number	302-421-2963
Email Address	cdonahue@ediscompany.com
Project Manager	**EDiS Company**
Main Contact	Andrew Hickey
Phone Number	302-304-4420
Email Address	ahickey@ediscompany.com
Project Engineer	**TBD**
Main Contact	
Phone Number	
Email Address	
Project Superintendent	**EDiS Company**
Main Contact	Dave Filippone
Phone Number	302-299-2353
Email Address	dfilippone@ediscompany.com
Site Contractor	**TBD**
Main Contact	
Phone Number	
Email Address	
HVAC	**TBD**
Main Contact	
Phone Number	
Email Address	
Electrical	**TBD**
Main Contact	

Phone Number	
Email Address	
Concrete	**TBD**
Main Contact	
Phone Number	
Email Address	
Plumbing and Piping	**TBD**
Main Contact	
Phone Number	
Email Address	
Architectural	**TBD**
Main Contact	
Phone Number	
Email Address	
MEP/FP Engineers	**TBD**
Main Contact	
Phone Number	
Email Address	
Structural Steel	**TBD**
Main Contact	
Phone Number	
Email Address	
Miscellaneous Steel	**TBD**
Main Contact	
Phone Number	
Email Address	

EXHIBIT 1

ARTICLE 1: GENERAL PROVISIONS

1.1 This document defines protocols, expected levels of development, and authorized uses of Building Information Models on this Project. It assigns specific responsibility for the development of each Model Element to a defined Level of Development at each Project phase. Where a provision in this Exhibit conflicts with a provision in the Agreement into which this Exhibit is incorporated, the provision in this Exhibit will prevail.

1.1.1 The parties agree to incorporate this Exhibit by reference into any other agreement for services or construction for the Project.

ARTICLE 2: LEVEL OF DEVELOPMENT (LOD)

2.1 The following LOD descriptions identify the specific content requirements and associated authorized uses for each Model Element at five progressively detailed levels of completeness. Each subsequent LOD builds on the previous level and includes all the characteristics of previous levels.

2.2 **LOD 350**

2.2.1 **Model Content Requirements**. Overall building massing indicative of area, height, volume, location, and orientation may be modeled in three dimensions or represented by other data.

2.2.2 **Authorized Uses**

2.2.2.1 **Analysis**. The Model may be analyzed based on volume, area and orientation by application of generalized performance criteria assigned to the representative Model Elements.

2.2.2.2 **Cost Estimating**. The Model may be used to develop a cost estimate based on current area, volume or similar conceptual estimating techniques (e.g., square feet of floor area, condominium unit, hospital bed, etc.).

2.2.2.3 **Schedule**. The Model may be used for project phasing and overall duration.

2.3 **LOD 300 and 350**

2.4.1 **Model Content Requirements**. Model Elements are modeled as specific assemblies accurate in terms of quantity, size, shape, location, and orientation. Existing building elements are modeled as shown on building record drawings. Non-geometric information such as object description and object tags (door number, equipment number, etc) and quantities should be included with each object. Examples of the details required for systems modeled to LOD 300 include, but are not limited to:

- Site Utilities (see matrix and 6.1 front end)
- Masonry
- Steel decking
- Correct slopes for gravity piping for sanitary, storm or wet fire suppression systems.

- Piping materials specifically called out on documents included with model element attributes (generic manufacturer for system components are acceptable).
- Insulation around Pipe and Ducting.
- Duct dampers included with the duct system.
- Doors/Frames (hollow metal and storefront)
- Owner Furnished Fixtures, Equipment, etc. generically modeled as space claims by the Model Element Author (MEA).
- Concrete
- Anchor bolts
- Structural steel
- Steel stairs, handrails
- Floor/roof penetration steel
- Significantly sized support hangers and sleeves for all systems
- Uni-Strut associated with system components if it is located in a tight overhead space (case by case basis)
- Architectural millwork/casework
- Metal panels and support steel
- Curtainwall system
- Steel stud framing including kickers and trusses at floor penetrations.
- Valve locations (clearance)
- Access panels (these should be modeled with the system they provide access to).
- Conduit racks or other substantially wide / bundled electrical routing. (these can be generically modeled, i.e. extruded boxes, space claims)
- Single conduit runs associated with any system (lighting, power, controls, etc) if needed to coordinate concrete coring.
- Kitchen equipment
- MEP/FP & Low Voltage Equipment
- MEP/FP & Low Voltage Systems
- Pull box locations and any extra space claims for their access.
- Telecom & Data

2.4.2 **Authorized Uses**

2.4.2.1 **Construction**. Suitable for the generation of traditional construction documents. Contractors may utilize this model for coordination purposes and creation of shop drawings.

2.4.2.2 **Analysis**. The Model may be analyzed for performance of selected systems by application of specific performance criteria assigned to the representative Model Elements.

2.4.2.3 **Schedule**. The Model may be used to show ordered, time-scaled appearance of detailed elements and systems.

ARTICLE 3: MODEL ELEMENTS

3.1 **Reliance on EDiS Company's Model Element Matrix**

3.1.1 The EDiS Company Model Element Matrix at the end of this section identifies (1) the LOD required for each Model Element at the end of each Project phase, and (2) the Model Element Author responsible for developing the Model Element to the LOD identified. Each Model Element Author's content is intended to be shared with subsequent Model Element Authors and Model Users throughout the course of the Project.

3.1.2 It is understood that while the content of a specific Model Element may include data that exceeds the required LOD identified in the Model Element Table for a particular phase, Model Users and subsequent Model Element Authors may rely on the accuracy and completeness of a Model Element consistent only with the content required for a LOD identified in the Model Element Table.

3.1.3 Any use of, or reliance on, a Model Element inconsistent with the LOD indicated in the Model Element Table by subsequent Model Element Authors or Model Users shall be at their sole risk and without liability to the Model Element Author. To the fullest extent permitted by law, subsequent Model Element Authors and Model Users shall indemnify and defend the Model Element Author from and against all claims arising from or related to the subsequent Model Element Author's or Model User's modification to, or unauthorized use of, the Model Element Author's content.

3.2 **Table Instructions**

3.2.1 The Model Element Table at the end of this section indicates the LOD to which each Model Element Author (MEA) is required to develop the content of the Model Element at the conclusion of each phase of the Project. EDiS Company holds the rights of this table and all ownership right for edits are performed via EDiS Company.

3.3 EDiS Company's Model Element Matrix AIA Document G202-2013 (attached).

3.4 Insertion Point (attached).

Appoquinimink School District
Fairview Campus Middle School and High School
Project Building Information Modeling (BIM)
Scope Participant List

Contract: B-02: Sitework (Campus)
Contract: B-03: Driven Timber Piles (Campus)
Contract: B-04: Foundation Concrete & Waterproofing (Campus)
Contract: B-05: Foundation Masonry & Dampproofing (Campus)

AIA® Document G202™ – 2013

Project Building Information Modeling Protocol Form

PROJECT: *(Name and address)*
Fairview Campus
New Middle School and High School
Tony Marchio Drive
Townsend, Delaware 19734

PROTOCOL VERSION NUMBER:

DATE: December 1, 2017

PREPARED BY: Christopher Donahue/Jackie McKee

DISTRIBUTION TO: *(List each individual to whom this protocol is distributed. Include individuals listed in Section 1.1, or reference Section 1.1, along with any additional recipients.)*

TABLE OF ARTICLES

ARTICLE 1 GENERAL PROVISIONS

§ 1.1 For each Project Participant that has incorporated the Project specific AIA Document E203™–2013, Building Information Modeling and Digital Data Protocol Exhibit, dated December 1, 2017 into its agreement for the Project, identify and provide the contact information for individuals responsible for implementation of the Modeling protocols. If, for any Project Participant, more than one individual will be responsible for implementation of the Modeling protocols, list each individual separately and describe the unique Modeling Role assigned to each individual.

Modeling Role	Project Participant	Individual Responsible	Contact Information
BIM Manager	EDiS BIM Services	Chris Donahue	EDiS Company 110 S Poplar Street, Suite 300 Wilmington, De 19801 302-421-2963 cdonahue@ediscompany.com

ADDITIONS AND DELETIONS:
The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

This document is intended to be used in conjunction with a Project specific AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, which the Parties will incorporate into their agreement for the Project, and a Project specific AIA Document G201™–2013, Project Digital Data Protocol Form.

§ 1.2 This document establishes the Modeling protocols for the Project. For purposes of these protocols, the Model is comprised of the following information and other data sets:
(Indicate disciplines, separate models, and other data that will be included within the Model and governed by the Modeling protocols.)

§ 1.3 Collaboration Protocols. The Project Participants' protocols for the collaborative utilization of the Model, if any, including communications protocols, a collaboration meeting schedule and colocation requirements, are as follows:

§ 1.4 Technical Requirements. The technical requirements relating to the utilization of Building Information Modeling, including specific software and hardware requirements are as follows:

§ 1.5 Training and Support. NOT USED

§ 1.6 Model Standard. The Model shall be developed in accordance with the following Model Standard, if any:

§ 1.7 Model Management Protocols and Processes
The following Model Management Protocols and Processes shall apply to the Project only if specifically designated in the table below as being applicable.
(Designate the Model Management Protocols and Processes applicable to the Project in the second column of the table below. In the third column, indicate whether the detailed description of the Model Management Protocol or Process is located in Section 1.8 or in an attached exhibit. If in an exhibit, identify the exhibit.)

Model Management Protocols and Processes		Applicability to Project *(Applicable or Not Applicable)*	Location of Detailed Description *(Section 1.8 below or in an attachment to this exhibit identified below)*
§ 1.7.1	Model origin point, coordinate system, precision, file formats and units	Applicable	0, 0, 0
§ 1.7.2	Model file storage location(s)	Applicable	EDiS BIM Services
§ 1.7.3	Processes for transferring and accessing Model files	Applicable	Drop Box & BuildingBlok
§ 1.7.4	Naming conventions	Applicable	EDiS Standard
§ 1.7.5	Processes for aggregating Model files from varying software platforms		Autodesk CAD MEP & Navisworks
§ 1.7.6	Model access rights	N/A	
§ 1.7.7	Design coordination and clash detection procedures.	Applicable	EDiS
§ 1.7.8	Model security requirements	Applicable	Confidential

§ 1.8 Insert a description of each Model Management Protocol and Process identified in Section 1.7, if not further described in an exhibit attached to this document:

See attached document.

§ 1.9 Terms in this document shall have the same meaning as those in AIA Document E203–2013.

ARTICLE 2 LEVEL OF DEVELOPMENT

§ 2.1 The Level of Development (LOD) descriptions, included in Section 2.2 through Section 2.6 below, identify the specific minimum content requirements and associated Authorized Uses for each Model Element at five progressively detailed levels of completeness. The Parties shall utilize the five LOD descriptions in completing the Model Element Table at Section 3.3.

§ 2.2 LOD 100

§ 2.2.1 Model Element Content Requirements. The Model Element may be graphically represented in the Model with a symbol or other generic representation, but does not satisfy the requirements for LOD 200. Information related to the Model Element (i.e., cost per square foot, tonnage of HVAC, etc.) can be derived from other Model Elements.

§ 2.2.2 Authorized Uses

§ 2.2.2.1 Analysis. The Model Element may be analyzed based on volume, area and orientation by application of generalized performance criteria assigned to other Model Elements.

§ 2.2.2.2 Cost Estimating. The Model Element may be used to develop a cost estimate based on current area, volume or similar conceptual estimating techniques (e.g., square feet of floor area, condominium unit, hospital bed, etc.).

§ 2.2.2.3 Schedule. The Model Element may be used for Project phasing and determination of overall Project duration.

§ 2.2.2.4 Other Authorized Uses. Additional Authorized Uses of the Model Element developed to LOD 100, if any, are as follows:

§ 2.3 LOD 200 (DM) Design Model

§ 2.3.1 Model Element Content Requirements. The Model Element is graphically represented within the Model as a generic system, object, or assembly with approximate quantities, size, shape, location, and orientation. Non-graphic information may also be attached to the Model Element.

§ 2.3.2 Authorized Uses

§ 2.3.2.1 Analysis. The Model Element may be analyzed for performance of selected systems by application of generalized performance criteria assigned to the representative Model Elements.

§ 2.3.2.2 Cost Estimating. The Model Element may be used to develop cost estimates based on the approximate data provided and quantitative estimating techniques (e.g., volume and quantity of elements or type of system selected).

§ 2.3.2.3 Schedule. The Model Element may be used to show ordered, time-scaled appearance of major elements and systems.

§ 2.3.2.4 Coordination. The Model Element may be used for general coordination with other Model Elements in terms of its size, location and clearance to other Model Elements.

§ 2.3.2.5 Other Authorized Uses. Additional Authorized Uses of the Model Element developed to LOD 200, if any, are as follows:

§ 2.4 LOD 300 and 350 (DM) Design Model – Refer to Section 01370 – BIM Coordination (attached)

§ 2.4.1 Model Element Content Requirements. The Model Element is graphically represented within the Model as a specific system, object or assembly in terms of quantity, size, shape, location, and orientation. Non-graphic information may also be attached to the Model Element.

§ 2.4.2 Authorized Uses

§ 2.4.2.1 Analysis. The Model Element may be analyzed for performance of selected systems by application of specific performance criteria assigned to the representative Model Element.

§ 2.4.2.2 Cost Estimating. The Model Element may be used to develop cost estimates suitable for procurement based on the specific data provided.

§ 2.4.2.3 Schedule. The Model Element may be used to show ordered, time-scaled appearance of detailed elements and systems.

§ 2.4.2.4 Coordination. The Model Element may be used for specific coordination with other Model Elements in terms of its size, location and clearance to other Model Elements including general operation issues.

§ 2.4.2.5 Other Authorized Uses. Additional Authorized Uses of the Model Element developed to LOD 300, if any, are as follows:

§ 2.5 LOD 400
§ 2.5.1 Model Element Content Requirements. The Model Element is graphically represented within the Model as a specific system, object or assembly in terms of size, shape, location, quantity, and orientation with detailing, fabrication, assembly, and installation information. Non-graphic information may also be attached to the Model Element.

§ 2.5.2 Authorized Uses
§ 2.5.2.1 Analysis. The Model Element may be analyzed for performance of systems by application of actual performance criteria assigned to the Model Element.

§ 2.5.2.2 Cost Estimating. Costs are based on the actual cost of the Model Element at buyout.

§ 2.5.2.3 Schedule. The Model may be used to show ordered, time-scaled appearance of detailed specific elements and systems including construction means and methods.

§ 2.5.2.4 Coordination. The Model Element may be used for coordination with other Model Elements in terms of its size, location and clearance to other Model Elements, including fabrication, installation and detailed operation issues.

§ 2.5.2.5 Other Authorized Uses. Additional Authorized Uses of the Model Element developed to LOD 400, if any, are as follows:

§ 2.6 LOD 500
§ 2.6.1 Model Element Content Requirements. The Model Element is a field verified representation in terms of size, shape, location, quantity, and orientation. Non-graphic information may also be attached to the Model Elements.

§ 2.6.2 Authorized Uses. Specific Authorized Uses of the Model Element developed to LOD 500, if any, are as follows:

ARTICLE 3 MODEL ELEMENTS
§ 3.1 Reliance on Model Elements
§ 3.1.1 At any particular Project milestone, a Project Participant may rely on the accuracy and completeness of a Model Element only to the extent consistent with the minimum data required for the Model Element's LOD for that Project milestone as identified below in the Model Element Table, even if the content of a specific Model Element includes data that exceeds the minimum data required for the identified LOD.

§ 3.1.2 Coordination and Model Refinement
Where conflicts are found in the Model, regardless of the phase of the Project or LOD, the Project Participant that identifies the conflict shall promptly notify the Model Element Authors and the Project Participant identified in AIA Document E203–2013 Section 4.8 as being responsible for Model management. Upon such notification, the Model

Element Author(s) shall act promptly to evaluate, mitigate and resolve the conflict in accordance with the processes established in Section 1.7.7, if applicable.

§ 3.2 Table Instructions

§ 3.2.1 The Model Element Table in Section 3.3 indicates the LOD to which each Model Element shall be developed at each identified Project milestone and the Model Element Author.

§ 3.2.2 Abbreviations for each Model Element Author to be used in the Model Element Table are as follows:
(Provide abbreviations, such as "A—Architect," or "C—Contractor.")

Abbreviation	Model Element Author (MEA)
EDiS	EDiS Company
BP	Bid Package
BSA	Buck Simpers & Associates
ABHA	Anderson Brown Higley Architects
LSE	Landmark Science & Engineering
DA	Duffield Associates
ME	MacIntosh Engineering
FA	Furlow Associates
DM	Design Model
B-#	Contract Responsible Party

§ 3.3 Model Element Table

Identify (1) the LOD required for each Model Element at each Project milestone, (2) the Model Element Author, and (3) references to any applicable notes found in Section 3.4.

Insert abbreviations for each MEA identified in the table below, such as "A – Architect," or "C – Contractor."

NOTE: LODs must be adapted for the unique characteristics of each Project.

Model Elements Utilizing CSI UniFormat™	Construction Documents Bid Package B LOD	MEA	Notes	Notes (See Sec 3.4)
A SUBSTRUCTURE				
A10 FOUNDATIONS				
A1010 Standard Foundations				
A1010.10 Wall Foundations	350	B-04		
A1010.30 Column Foundations				
A1010.90 Standard Foundation Supplementary Components				
A1020 Special Foundations				
A1020.10 Driven Piles	350	B-03		
A1020.15 Bored Piles				
A1020.20 Caissons				

§ 3.3 Model Element Table

Identify (1) the LOD required for each Model Element at each Project milestone, (2) the Model Element Author, and (3) references to any applicable notes found in Section 3.4.

Insert abbreviations for each MEA identified in the table below, such as "A – Architect," or "C – Contractor."

NOTE: LODs must be adapted for the unique characteristics of each Project.

Model Elements Utilizing CSI UniFormat™	Construction Documents Bid Package B LOD	MEA	Notes	Notes (See Sec 3.4)
A1020.30 Special Foundation Walls				
A1020.40 Foundation Anchors	350	B-04		
A1020.50 Underpinning				
A1020.60 Raft Foundations				
A1020.70 Pile Caps	350	B-04		
A1020.80 Grade Beams				
A20 SUBGRADE ENCLOSURES				
A2010 Walls for Subgrade Enclosures				
A2010.10 Subgrade Enclosure Wall Construction				
A2010.20 Subgrade Enclosure Wall Interior Skin				
A2010.90 Subgrade Enclosure Wall Supplementary Components				
A40 SLABS-ON-GRADE				
A4010 Standard Slabs-on-Grade	350	B-04		
A4020 Structural Slabs-on-Grade	350	B-04		
A4030 Slab Trenches				
A4040 Pits and Bases	350	B-04		
A4090 Slab-On-Grade Supplementary Components				
A4090.10 Perimeter Insulation	350	B-04		
A4090.20 Vapor Retarder				
A4090.30 Waterproofing				
A4090.50 Mud Slab				
A4090.60 Subbase Layer				
A60 WATER AND GAS MITIGATION				
A6010 Building Subdrainage				
A6010.10 Foundation Drainage	350	B-04		
A6010.20 Underslab Drainage	350	B-04		
A6020 Off-Gassing Mitigation				

§ 3.3 Model Element Table

Identify (1) the LOD required for each Model Element at each Project milestone, (2) the Model Element Author, and (3) references to any applicable notes found in Section 3.4.

Insert abbreviations for each MEA identified in the table below, such as "A – Architect," or "C – Contractor."

NOTE: LODs must be adapted for the unique characteristics of each Project.

Model Elements Utilizing CSI UniFormat™			Construction Documents Bid Package B			Notes (See Sec 3.4)
			LOD	MEA	Notes	
	A6020.10	Radon Mitigation				
	A6020.50	Methane Mitigation				
A90	**SUBSTRUCTURE RELATED ACTIVITIES**					
A9010	**Substructure Excavation N/A**					
	A9010.10	Backfill and Compaction				
A9020	**Construction Dewatering N/A**					
A9030	**Excavation Support N/A**					
	A9030.10	Anchor Tiebacks				
	A9030.20	Cofferdams				
	A9030.40	Cribbing and Walers				
	A9030.60	Ground Freezing				
	A9030.70	Slurry Walls				
A9040	**Soil Treatment**					
B	**SHELL**					
B10	**SUPERSTRUCTURE**					
B1010	**Floor Construction**					
	B1010.10	Floor Structural Frame				
	B1010.20	Floor Decks, Slabs, and Toppings	350	B-04		
	B1010.30	Balcony Floor Construction				
	B1010.40	Mezzanine Floor Construction				
	B1010.50	Ramps (concrete)	350	B-04		
	B1010.90	Floor Construction Supplementary Components				
B1020	**Roof Construction**					
	B1020.10	Roof Structural Frame				
	B1020.20	Roof Decks, Slabs, and Sheathing				
	B1020.30	Canopy Construction				
	B1020.90	Roof Construction Supplementary Components				

§ 3.3 Model Element Table

Identify (1) the LOD required for each Model Element at each Project milestone, (2) the Model Element Author, and (3) references to any applicable notes found in Section 3.4.

Insert abbreviations for each MEA identified in the table below, such as "A – Architect," or "C – Contractor."

NOTE: LODs must be adapted for the unique characteristics of each Project.

Model Elements Utilizing CSI UniFormat™	Construction Documents Bid Package B			Notes *(See Sec 3.4)*
	LOD	MEA	Notes	
B1080 Stairs				
B1080.10 Stair Construction				
B1080.30 Stair Soffits				
B1080.50 Stair Railings				
B1080.60 Fire Escapes				
B1080.70 Metal Walkways				
B1080.80 Ladders				
B20 EXTERIOR VERTICAL ENCLOSURES				
B2010 Exterior Walls				
B2010.10 Exterior Wall Veneer				
B2010.20 Exterior Wall Construction				
B2010.30 Exterior Wall Interior Skin				
B2010.40 Fabricated Exterior Wall Assemblies				
B2010.50 Parapets				
B2010.60 Equipment Screens				
B2010.80 Exterior Wall Supplementary Components				
B2010.90 Exterior Wall Opening Supplementary Components				
B2020 Exterior Windows				
B2020.10 Exterior Operating Windows				
B2020.20 Exterior Fixed Windows				
B2020.30 Exterior Window Wall				
B2020.50 Exterior Special Function Windows				
B2050 Exterior Doors and Grilles				
B2050.10 Exterior Entrance Doors				
B2050.20 Exterior Utility Doors				
B2050.30 Exterior Oversize Doors				
B2050.40 Exterior Special Function Doors				

§ 3.3 Model Element Table

Identify (1) the LOD required for each Model Element at each Project milestone, (2) the Model Element Author, and (3) references to any applicable notes found in Section 3.4.

Insert abbreviations for each MEA identified in the table below, such as "A – Architect," or "C – Contractor."

NOTE: LODs must be adapted for the unique characteristics of each Project.

Model Elements Utilizing CSI UniFormat™			Construction Documents Bid Package B			Notes (See Sec 3.4)
			LOD	MEA	Notes	
	B2050.60	Exterior Grilles				
	B2050.70	Exterior Gates				
	B2050.90	Exterior Door Supplementary Components				
B2070	**Exterior Louvers and Vents**					
	B2070.10	Exterior Louvers				
	B2070.50	Exterior Vents				
B2080	**Exterior Wall Appurtenances**					
	B2080.10	Exterior Fixed Grilles and Screens				
	B2080.30	Exterior Opening Protection Devices				
	B2080.50	Exterior Balcony Walls and Railings				
	B2080.70	Exterior Fabrications				
	B2080.80	Bird Control Devices				
B2090	**Exterior Wall Specialties**					
B30	**EXTERIOR HORIZONTAL ENCLOSURES**					
B3010						
	B3010.10					
	B3010.50					
	B3010.70					
	B3010.90					
B3020						
	B3020.10					
	B3020.30					
	B3020.70	Rainwater Management				
B3040	**Traffic Bearing Horizontal Enclosures N/A**					
	B3040.10	Traffic Bearing Coatings				
	B3040.30	Horizontal Waterproofing Membrane				
	B3040.50	Wear Surfaces				

§ 3.3 Model Element Table

Identify (1) the LOD required for each Model Element at each Project milestone, (2) the Model Element Author, and (3) references to any applicable notes found in Section 3.4.

Insert abbreviations for each MEA identified in the table below, such as "A – Architect," or "C – Contractor."

NOTE: LODs must be adapted for the unique characteristics of each Project.

Model Elements Utilizing CSI UniFormat™		Construction Documents Bid Package B			Notes (See Sec 3.4)
		LOD	MEA	Notes	
	B3040.90 Horizontal Enclosure Supplementary Components				
B3060	**Horizontal Openings N/A**				
	B3060.10 Roof Windows and Skylights				
	B3060.50 Vents and Hatches				
	B3060.90 Horizontal Opening Supplementary Components				
B3080	**verhead Exterior Enclosures**				
	B3080.10 Exterior Ceilings				
	B3080.20 Exterior Soffits				
	B3080.30 Exterior Bulkheads				
C INTERIORS					
C10	**INTERIOR CONSTRUCTION**				
C1010	**Interior Partitions**				
	C1010.10 Interior Fixed Partitions				
	C1010.20 Interior Glazed Partitions				
	C1010.40 Interior Demountable Partitions				
	C1010.50 Interior Operable Partitions				
	C1010.70 Interior Screens				
	C1010.90 Interior Partition Supplementary Components				
C1020	**Interior Windows**				
	C1020.10 Interior Operating Windows				
	C1020.20 Interior Fixed Windows				
	C1020.50 Interior Special Function Windows				
	C1020.90 Interior Window Supplementary Components				
C1030	**Interior Doors**				
	C1030.10 Interior Swinging Doors				
	C1030.20 Interior Entrance Doors				
	C1030.25 Interior Sliding Doors				

§ 3.3 Model Element Table

Identify (1) the LOD required for each Model Element at each Project milestone, (2) the Model Element Author, and (3) references to any applicable notes found in Section 3.4.

Insert abbreviations for each MEA identified in the table below, such as "A – Architect," or "C – Contractor."

NOTE: LODs must be adapted for the unique characteristics of each Project.

Model Elements Utilizing CSI UniFormat™			Construction Documents Bid Package B LOD	MEA	Notes	Notes (See Sec 3.4)
	C1030.30	Interior Folding Doors				
	C1030.40	Interior Coiling Doors				
	C1030.50	Interior Panel Doors				
	C1030.70	Interior Special Function Doors				
	C1030.80	Interior Access Doors and Panels				
	C1030.90	Interior Door Supplementary Components				
C1040	**Interior Grilles and Gates**					
	C1040.10	Interior Grilles				
	C1040.50	Interior Gates				
C1060	**Raised Floor Construction**					
	C1060.10	Access Flooring				
	C1060.30	Platform/Stage Floors				
C1070	**Suspended Ceiling Construction**					
	C1070.10	Acoustical Suspended Ceilings				
	C1070.20	Suspended Plaster and Gypsum Board Ceilings				
	C1070.50	Specialty Suspended Ceilings				
	C1070.70	Special Function Suspended Ceilings				
	C1070.90	Ceiling Suspension Components				
C1090	**Interior Specialties**					
	C1090.10	Interior Railings and Handrails				
	C1090.15	Interior Louvers				
	C1090.20	Information Specialties				
	C1090.25	Compartments and Cubicles				
	C1090.30	Service Walls				
	C1090.35	Wall and Door Protection				
	C1090.40	Toilet, Bath, and Laundry Accessories				
	C1090.45	Interior Gas Lighting				

§ 3.3 Model Element Table

Identify (1) the LOD required for each Model Element at each Project milestone, (2) the Model Element Author, and (3) references to any applicable notes found in Section 3.4.

Insert abbreviations for each MEA identified in the table below, such as "A – Architect," or "C – Contractor."

NOTE: LODs must be adapted for the unique characteristics of each Project.

Model Elements Utilizing CSI UniFormat™			Construction Documents Bid Package B			Notes (See Sec 3.4)
			LOD	MEA	Notes	
	C1090.50	Fireplaces and Stoves				
	C1090.60	Safety Specialties				
	C1090.70	Storage Specialties				
	C1090.90	Other Interior Specialties				
C20	**INTERIOR FINISHES**					
C2010	**Wall Finishes**					
	C2010.10	Tile Wall Finish				
	C2010.20	Wall Paneling				
	C2010.30	Wall Coverings				
	C2010.35	Wall Carpeting				
	C2010.50	Stone Facing				
	C2010.60	Special Wall Surfaeing				
	C2010.70	Wall Painting and Coating				
	C2010.80	Acoustical Wall Treatment				
	C2010.90	Wall Finish Supplementary Components				
C2020	**Interior Fabrications**					
C2030	**Flooring – ALL RECESSED FLOORS IDENTIFIED IN MODEL**					
	C2030.10	Flooring Treatment				
	C2030.20	Tile Flooring				
	C2030.30	Specialty Flooring				
	C2030.40	Masonry Flooring				
	C2030.45	Wood Flooring				
	C2030.50	Resilient Flooring				
	C2030.60	Terrazzo Flooring				
	C2030.70	Fluid-Applied Flooring				
	C2030.75	Carpeting				
	C2030.80	Athletic Flooring				

§ 3.3 Model Element Table

Identify (1) the LOD required for each Model Element at each Project milestone, (2) the Model Element Author, and (3) references to any applicable notes found in Section 3.4.

Insert abbreviations for each MEA identified in the table below, such as "A – Architect," or "C – Contractor."

NOTE: LODs must be adapted for the unique characteristics of each Project.

Model Elements Utilizing CSI UniFormat™	Construction Documents Bid Package B			Notes *(See Sec 3.4)*
	LOD	MEA	Notes	
C2030.85 Entrance Flooring				
C2030.90 Flooring Supplementary Components				
C2040 Stair Finishes				
C2040.20 Tile Stair Finish				
C2040.40 Masonry Stair Finish				
C2040.45 Wood Stair Finish				
C2040.50 Resilient Stair Finish				
C2040.60 Terrazzo Stair Finish				
C2040.75 Carpeted Stair Finish				
C2050 Ceiling Finishes				
C2050.10 Plaster and Gypsum Board Finish				
C2050.20 Ceiling Paneling				
C2050.70 Ceiling Painting and Coating				
C2050.80 Acoustical Ceiling Treatment				
C2050.90 Ceiling Finish Supplementary Components				
C2090 Interior Finish Schedules				
D SERVICES				
D10 CONVEYING				
D1010 Vertical Conveying Systems				
D1010.10 Elevators				
D1010.20 Lifts				
D1010.30 Escalators				
D1010.50 Dumbwaiters				
D1010.60 Moving Ramps				
D1030 Horizontal Conveying				
D1030.10 Moving Walks				
D1030.30 Turntables				

§ 3.3 Model Element Table

Identify (1) the LOD required for each Model Element at each Project milestone, (2) the Model Element Author, and (3) references to any applicable notes found in Section 3.4.

Insert abbreviations for each MEA identified in the table below, such as "A – Architect," or "C – Contractor."

NOTE: LODs must be adapted for the unique characteristics of each Project.

Model Elements Utilizing CSI UniFormat™	Construction Documents Bid Package B LOD	MEA	Notes	Notes (See Sec 3.4)
D1030.50 Passenger Loading Bridges				
D1030.70 People Movers				
D1050 Material Handling				
D1050.10 Cranes				
D1050.20 Hoists				
D1050.30 Derricks				
D1050.40 Conveyors				
D1050.50 Baggage Handling Equipment				
D1050.60 Chutes				
D1050.70 Pneumatic Tube Systems				
D1080 Operable Access Systems				
D1080.10 Suspended Scaffolding				
D1080.20 Rope Climbers				
D1080.30 Elevating Platforms				
D1080.40 Powered Scaffolding				
D1080.50 Building Envelope Access				
D20 PLUMBING				
D2010 Domestic Water Distribution				
D2010.10 Facility Potable-Water Storage Tanks				
D2010.20 Domestic Water Equipment				
D2010.40 Domestic Water Piping				
D2010.60 Plumbing Fixtures				
D2010.90 Domestic Water Distribution Supplementary Components				
D2020 Sanitary Drainage				
D2020.10 Sanitary Sewerage Equipment				
D2020.30 Sanitary Sewerage Piping				
D2020.90 Sanitary Drainage Supplementary Components				

§ 3.3 Model Element Table

Identify (1) the LOD required for each Model Element at each Project milestone, (2) the Model Element Author, and (3) references to any applicable notes found in Section 3.4.

Insert abbreviations for each MEA identified in the table below, such as "A – Architect," or "C – Contractor."

NOTE: LODs must be adapted for the unique characteristics of each Project.

Model Elements Utilizing CSI UniFormat™	Construction Documents Bid Package B LOD	MEA	Notes	Notes (See Sec 3.4)
D2030 Building Support Plumbing Systems				
D2030.10 Stormwater Drainage Equipment				
D2030.20 Stormwater Drainage Piping				
D2030.30 Facility Stormwater Drains				
D2030.60 Gray Water Systems				
D2030.90 Building Support Plumbing System Supplementary Components				
D2050 General Service Compressed-Air				
D2060 Process Support Plumbing Systems				
D2060.10 Compressed-Air Systems				
D2060.20 Vacuum Systems				
D2060.30 Gas Systems				
D2060.40 Chemical-Waste Systems				
D2060.50 Processed Water Systems				
D2060.90 Process Support Plumbing System Supplementary Components				
D30 HEATING, VENTILATION, AND AIR CONDITIONING (HVAC)				
D3010 Facility Fuel Systems				
D3010.10 Fuel Piping				
D3010.30 Fuel Pumps				
D3010.50 Fuel Storage Tanks				
D3020 Heating Systems				
D3020.10 Heat Generation				
D3020.30 Thermal Heat Storage				
D3020.70 Decentralized Heating Equipment				
D3020.90 Heating System Supplementary Components				
D3030 Cooling Systems				
D3030.10 Central Cooling				
D3030.30 Evaporative Air-Cooling				

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§ 3.3 Model Element Table

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Insert abbreviations for each MEA identified in the table below, such as "A – Architect," or "C – Contractor."

NOTE: LODs must be adapted for the unique characteristics of each Project.

Model Elements Utilizing CSI UniFormat™		Construction Documents Bid Package B			Notes (See Sec 3.4)
		LOD	MEA	Notes	
	D3030.50 Thermal Cooling Storage				
	D3030.70 Decentralized Cooling				
	D3030.90 Cooling System Supplementary Components				
D3050	**Facility HVAC Distribution Systems**				
	D3050.10 Facility Hydronic Distribution				
	D3050.30 Facility Steam Distribution				
	D3050.50 HVAC Air Distribution				
	D3050.90 Facility Distribution Systems Supplementary Components				
D3060	**Ventilation**				
	D3060.10 Supply Air				
	D3060.20 Return Air				
	D3060.30 Exhaust Air				
	D3060.40 Outside Air				
	D3060.60 Air-to-Air Energy Recovery				
	D3060.70 HVAC Air Cleaning				
	D3060.90 Ventilation Supplementary Components				
D3070	**Special Purpose HVAC Systems**				
	D3070.10 Snow Melting				
D40	**FIRE PROTECTION**				
D4010	**Fire Suppression – (Contract A-17 owner is required to maintain coordination progress)**				
	D4010.10 Water-Based Fire-Suppression				
	D4010.50 Fire-Extinguishing				
	D4010.90 Fire Suppression Supplementary Components				
D4030	**Fire Protection Specialties**				
	D4030.10 Fire Protection Cabinets				
	D4030.30 Fire Extinguishers				
	D4030.50 Breathing Air Replenishment Systems				

§ 3.3 Model Element Table

Identify (1) the LOD required for each Model Element at each Project milestone, (2) the Model Element Author, and (3) references to any applicable notes found in Section 3.4.

Insert abbreviations for each MEA identified in the table below, such as "A – Architect," or "C – Contractor."

NOTE: LODs must be adapted for the unique characteristics of each Project.

Model Elements Utilizing CSI UniFormat™			Construction Documents Bid Package B			Notes (See Sec 3.4)
			LOD	MEA	Notes	
	D4030.70	Fire Extinguisher Accessories				
D50	**ELECTRICAL**					
D5010	**Facility Power Generation**					
	D5010.10	Packaged Generator Assemblies				
	D5010.20	Battery Equipment				
	D5010.30	Photovoltaic Collectors				
	D5010.40	Fuel Cells				
	D5010.60	Power Filtering and Conditioning				
	D5010.70	Transfer Switches				
	D5010.90	Facility Power Generation Supplementary Components				
D5020	**Electrical Service and Distribution**					
	D5020.10	Electrical Service (from main connection)				
	D5020.30	Power Distribution				
	D5020.70	Facility Grounding				
	D5020.90	Electrical Service and Distribution Supplementary Components				
D5030	**General Purpose Electrical Power**					
	D5030.10	Branch Wiring System				
	D5030.50	Wiring Devices				
	D5030.90	General Purpose Electrical Power Supplementary Components				
D5040	**Lighting**					
	D5040.10	Lighting Control				
	D5040.20	Branch Wiring for Lighting				
	D5040.50	Lighting Fixtures				
	D5040.90	Lighting Supplementary Components				
D5080	**Miscellaneous Electrical Systems**					
	D5080.10	Lightning Protection				
	D5080.40	Cathodic Protection				

§ 3.3 Model Element Table

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Insert abbreviations for each MEA identified in the table below, such as "A – Architect," or "C – Contractor."

NOTE: LODs must be adapted for the unique characteristics of each Project.

Model Elements Utilizing CSI UniFormat™	Construction Documents Bid Package B LOD	MEA	Notes	Notes (See Sec 3.4)
D5080.70 Transient Voltage Suppression				
D5080.90 Miscellaneous Electrical Systems Supplementary Components				
Lighting Clearances				
D60 COMMUNICATIONS				
D6010 Data Communications				
D6010.10 Data Communications Network Equipment				
D6010.20 Data Communications Hardware				
D6010.30 Data Communications Peripheral Data Equipment				
D6010.50 Data Communications Software				
D6010.60 Data Communication Program and Integration Services				
D6020 Voice Communications				
D6020.10 Voice Communications Switching and Routing Equipment				
D6020.20 Voice Communications Terminal Equipment				
D6020.30 Voice Communications Messaging				
D6020.40 Call Accounting				
D6020.50 Call Management				
D6030 Audio-Video Communication				
D6030.10 Audio-Video Systems				
D6030.50 Electronic Digital Systems				
D6060 Distributed Communications and Monitoring				
D6060.10 Distributed Audio-Video Communications Systems				
D6060.30 Healthcare Communications and Monitoring				
D6060.50 Distributed Systems				
D6090 Communications Supplementary Components				
D6090.10 Supplementary Components				
D70 ELECTRONIC SAFETY AND SECURITY				
D7010 Access Control and Intrusion Detection				

§ 3.3 Model Element Table

Identify (1) the LOD required for each Model Element at each Project milestone, (2) the Model Element Author, and (3) references to any applicable notes found in Section 3.4.

Insert abbreviations for each MEA identified in the table below, such as "A – Architect," or "C – Contractor."

NOTE: LODs must be adapted for the unique characteristics of each Project.

Model Elements Utilizing CSI UniFormat™			Construction Documents Bid Package B LOD	MEA	Notes	Notes (See Sec 3.4)
	D7010.10	Access Control				
	D7010.50	Intrusion Detection				
D7030	**Electronic Surveillance**					
	D7030.10	Video Surveillance				
	D7030.50	Electronic Personal Protection				
D7050	**Detection and Alarm**					
	D7050.10	Fire Detection and Alarm				
	D7050.20	Radiation Detection and Alarm				
	D7050.30	Fuel-Gas Detection and Alarm				
	D7050.40	Fuel-Oil Detection and Alarm				
	D7050.50	Refrigeration Detection and Alarm				
	D7050.60	Water Intrusion Detection and Alarm				
D7070	**Electronic Monitoring and Control**					
	D7070.10	Electronic Detention Monitoring and Control				
D7090	**Electronic Safety and Security Supplementary Components**					
	D7090.10	Supplementary Components				
D80	**INTEGRATED AUTOMATION**					
D8010	**Integrated Automation Facility Controls**					
	D8010.10	Integrated Automation Control of Equipment				
	D8010.20	Integrated Automation Control of Conveying Equipment				
	D8010.30	Integrated Automation Control of Fire-Suppression Systems				
	D8010.40	Integrated Automation Control of Plumbing Systems				
	D8010.50	Integrated Automation Control of HVAC Systems				
	D8010.60	Integrated Automation Control of Electrical Systems				
	D8010.70	Integrated Automation Control of Communication Systems				
	D8010.80	Integrated Automation Control of Electronic Safety and Security Systems				
	D8010.90	Integrated Automation Supplementary Components				

§ 3.3 Model Element Table

Identify (1) the LOD required for each Model Element at each Project milestone, (2) the Model Element Author, and (3) references to any applicable notes found in Section 3.4.

Insert abbreviations for each MEA identified in the table below, such as "A – Architect," or "C – Contractor."

NOTE: LODs must be adapted for the unique characteristics of each Project.

Model Elements Utilizing CSI UniFormat™	Construction Documents Bid Package B			Notes (See Sec 3.4)
	LOD	MEA	Notes	
E EQUIPMENT AND FURNISHINGS				
E10 EQUIPMENT				
E1010 Vehicle and Pedestrian Equipment				
E1010.10 Vehicle Servicing Equipment				
E1010.30 Interior Parking Control Equipment				
E1010.50 Loading Dock Equipment				
E1010.70 Interior Pedestrian Control Equipment				
E1030 Commercial Equipment				
E1030.10 Mercantile and Service Equipment				
E1030.20 Vault Equipment				
E1030.25 Teller and Service Equipment				
E1030.30 Refrigerated Display Equipment				
E1030.35 Commercial Laundry and Dry Cleaning Equipment				
E1030.40 Maintenance Equipment				
E1030.50 Hospitality Equipment				
E1030.55 Unit Kitchens				
E1030.60 Photographic Processing Equipment				
E1030.70 Postal, Packaging, and Shipping Equipment				
E1030.75 Office Equipment				
E1030.80 Foodservice Equipment				
E1040 Institutional Equipment				
E1040.10 Educational and Scientific Equipment				
E1040.20 Healthcare Equipment				
E1040.40 Religious Equipment				
E1040.60 Security Equipment				
E1040.70 Detention Equipment				
E1060 Residential Equipment				

§ 3.3 Model Element Table

Identify (1) the LOD required for each Model Element at each Project milestone, (2) the Model Element Author, and (3) references to any applicable notes found in Section 3.4.

Insert abbreviations for each MEA identified in the table below, such as "A – Architect," or "C – Contractor."

NOTE: LODs must be adapted for the unique characteristics of each Project.

Model Elements Utilizing CSI UniFormat™	Construction Documents Bid Package B			Notes *(See Sec 3.4)*
	LOD	MEA	Notes	
E1060.10 Residential Appliances				
E1060.50 Retractable Stairs				
E1060.70 Residential Ceiling Fans				
E1070 Entertainment and Recreational Equipment				
E1070.10 Theater and Stage Equipment				
E1070.20 Musical Equipment				
E1070.50 Athletic Equipment				
E1070.60 Recreational Equipment				
E1090 Other Equipment				
E1090.10 Solid Waste Handling Equipment				
E1090.30 Agricultural Equipment				
E1090.40 Horticultural Equipment				
E1090.60 Decontamination Equipment				
E20 FURNISHINGS				
E2010 Fixed Furnishings				
E2010.10 Fixed Art				
E2010.20 Window Treatments				
E2010.30 Casework				
E2010.70 Fixed Multiple Seating				
E2010.90 Other Fixed Furnishings				
E2050 Movable Furnishings				
E2050.10 Movable Art				
E2050.30 Furniture				
E2050.40 Accessories				
E2050.60 Movable Multiple Seating				
E2050.90 Other Movable Furnishings				
F SPECIAL CONSTRUCTION AND DEMOLITION				

§ 3.3 Model Element Table

Identify (1) the LOD required for each Model Element at each Project milestone, (2) the Model Element Author, and (3) references to any applicable notes found in Section 3.4.

Insert abbreviations for each MEA identified in the table below, such as "A – Architect," or "C – Contractor."

NOTE: LODs must be adapted for the unique characteristics of each Project.

Model Elements Utilizing CSI UniFormat™	Construction Documents Bid Package B LOD	MEA	Notes	Notes (See Sec 3.4)
F10 SPECIAL CONSTRUCTION				
F1010 Integrated Construction				
F1010.10 Building Modules				
F1010.50 Manufactured/Fabricated Rooms				
F1010.70 Modular Mezzanines				
F1020 Special Structures				
F1020.10 Fabric Structures				
F1020.20 Space Frames				
F1020.30 Geodesic Structures				
F1020.40 Manufacturer-Engineered Structures				
F1020.60 Manufactured Canopies				
F1020.65 Rammed Earth Construction				
F1020.70 Towers				
F1030 Special Function Construction				
F1030.10 Sound and Vibration Control				
F1030.30 Seismic Control				
F1030.50 Radiation Protection				
F1050 Special Facility Components				
F1050.10 Pools				
F1050.20 Interior Fountains				
F1050.30 Interior Water Features				
F1050.40 Aquariums				
F1050.50 Amusement Park Structures and Equipment				
F1050.60 Ice Rinks				
F1050.70 Animal Containment				
F1060 Athletic and Recreational Special Construction				
F1060.10 Indoor Soccer Boards				

§ 3.3 Model Element Table

Identify (1) the LOD required for each Model Element at each Project milestone, (2) the Model Element Author, and (3) references to any applicable notes found in Section 3.4.

Insert abbreviations for each MEA identified in the table below, such as "A – Architect," or "C – Contractor."

NOTE: LODs must be adapted for the unique characteristics of each Project.

Model Elements Utilizing CSI UniFormat™			Construction Documents Bid Package B LOD	MEA	Notes	Notes (See Sec 3.4)
	F1060.20	Safety Netting				
	F1060.30	Arena Football Boards				
	F1060.40	Floor Sockets				
	F1060.50	Athletic and Recreational Court Walls				
	F1060.60	Demountable Athletic Surfaces				
F1080	**Special Instrumentation**					
	F1080.10	Stress Instrumentation				
	F1080.20	Seismic Instrumentation				
	F1080.40	Meteorological Instrumentation				
	F1080.60	Earth Movement Monitoring				
F20	**FACILITY REMEDIATION**					
F2010	**Hazardous Materials Remediation**					
	F2010.10	Transportation and Disposal of Hazardous Materials				
	F2010.20	Asbestos Remediation				
	F2010.30	Lead Remediation				
	F2010.40	Polychlorinate Biphenyl Remediation				
	F2010.50	Mold Remediation				
F30	**DEMOLITION**					
F3010	**Structure Demolition**					
	F3010.10	Building Demolition				
	F3010.30	Tower Demolition				
	F3010.50	Bridge Demolition				
	F3010.70	Dam Demolition				
F3030	**Selective Demolition**					
	F3030.10	Selective Building Demolition				
	F3030.30	Selective Interior Demolition				
	F3030.50	Selective Bridge Demolition				

§ 3.3 Model Element Table

Identify (1) the LOD required for each Model Element at each Project milestone, (2) the Model Element Author, and (3) references to any applicable notes found in Section 3.4.

Insert abbreviations for each MEA identified in the table below, such as "A – Architect," or "C – Contractor."

NOTE: LODs must be adapted for the unique characteristics of each Project.

Model Elements Utilizing CSI UniFormat™			Construction Documents Bid Package B			Notes (See Sec 3.4)
			LOD	MEA	Notes	
	F3030.70	Selective Historic Demolition				
F3050	**Structure Moving**					
	F3050.10	Structure Relocation				
	F3050.30	Structure Raising				
G SITEWORK						
G10	**SITE PREPARATION**					
G1010	**Site Clearing**					
	G1010.10	Clearing and Grubbing				
	G1010.30	Tree and Shrub Removal and Trimming				
	G1010.50	Earth Stripping and Stockpiling				
G1020	**Site Elements Demolition**					
	G1020.10	Utility Demolition				
	G1020.30	Infrastructure Demolition				
	G1020.50	Selective Site Demolition				
G1030	**Site Element Relocations**					
	G1030.10	Utility Relocation				
G1050	**Site Remediation**					
	G1050.10	Physical Decontamination				
	G1050.15	Chemical Decontamination				
	G1050.20	Thermal Decontamination				
	G1050.25	Biological Decontamination				
	G1050.30	Remediation Soil Stabilization				
	G1050.40	Site Containment				
	G1050.45	Sinkhole Remediation				
	G1050.50	Hazardous Waste Drum Handling				
	G1050.60	Contaminated Site Material Removal				

§ 3.3 Model Element Table

Identify (1) the LOD required for each Model Element at each Project milestone, (2) the Model Element Author, and (3) references to any applicable notes found in Section 3.4.

Insert abbreviations for each MEA identified in the table below, such as "A – Architect," or "C – Contractor."

NOTE: LODs must be adapted for the unique characteristics of each Project.

Model Elements Utilizing CSI UniFormat™			Construction Documents Bid Package B			Notes (See Sec 3.4)
			LOD	MEA	Notes	
	G1050.80	Water Remediation				
G1070	**Site Earthwork**					
	G1070.10	Grading				
	G1070.20	Excavation and Fill				
	G1070.30	Embankments				
	G1070.35	Erosion and Sedimentation Controls				
	G1070.40	Soil Stabilization				
	G1070.45	Rock Stabilization				
	G1070.50	Soil Reinforcement				
	G1070.55	Slope Protection				
	G1070.60	Gabions				
	G1070.65	Riprap				
	G1070.70	Wetlands				
	G1070.80	Earth Dams				
	G1070.90	Site Soil Treatment				
G20	**SITE IMPROVEMENTS**					
G2010	**Roadways**					
	G2010.10	Roadway Pavement				
	G2010.20	Roadway Curbs and Gutters				
	G2010.40	Roadway Appurtenances				
	G2010.70	Roadway Lighting				
	G2010.80	Vehicle Fare Collection				
G2020	**Parking Lots**					
	G2020.10	Parking Lot Pavement				
	G2020.20	Parking Lot Curbs and Gutters				
	G2020.40	Parking Lot Appurtenances				
	G2020.70	Parking Lot Lighting				

§ 3.3 Model Element Table

Identify (1) the LOD required for each Model Element at each Project milestone, (2) the Model Element Author, and (3) references to any applicable notes found in Section 3.4.

Insert abbreviations for each MEA identified in the table below, such as "A – Architect," or "C – Contractor."

NOTE: LODs must be adapted for the unique characteristics of each Project.

Model Elements Utilizing CSI UniFormat™		Construction Documents Bid Package B			Notes (See Sec 3.4)
		LOD	MEA	Notes	
	G2020.80 Exterior Parking Control Equipment				
G2030	**Pedestrian Plazas and Walkways**				
	G2030.10 Pedestrian Pavement				
	G2030.20 Pedestrian Pavement Curbs and Gutters				
	G2030.30 Exterior Steps and Ramps				
	G2030.40 Pedestrian Pavement Appurtenances				
	G2030.70 Plaza and Walkway Lighting				
	G2030.80 Exterior Pedestrian Control Equipment				
G2040	**Airfields**				
	G2040.10 Aviation Pavement				
	G2040.20 Aviation Pavement Curbs and Gutters				
	G2040.40 Aviation Pavement Appurtenances				
	G2040.70 Airfield Lighting				
	G2040.80 Airfield Signaling and Control Equipment				
G2050	**Athletic, Recreational, and Playfield Areas**				
	G2050.10 Athletic Areas				
	G2050.30 Recreational Areas				
	G2050.50 Playfield Areas				
G2060	**Site Development**				
	G2060.10 Exterior Fountains				
	G2060.20 Fences and Gates	350	B-02		
	G2060.25 Site Furnishings	350	B-02		
	G2060.30 Exterior Signage				
	G2060.35 Flagpoles	350	B-02		
	G2060.40 Covers and Shelters				
	G2060.45 Exterior Gas Lighting				
	G2060.50 Site Equipment	350	B-02		

§ 3.3 Model Element Table

Identify (1) the LOD required for each Model Element at each Project milestone, (2) the Model Element Author, and (3) references to any applicable notes found in Section 3.4.

Insert abbreviations for each MEA identified in the table below, such as "A – Architect," or "C – Contractor."

NOTE: LODs must be adapted for the unique characteristics of each Project.

Model Elements Utilizing CSI UniFormat™			Construction Documents Bid Package B			Notes (See Sec 3.4)
			LOD	MEA	Notes	
	G2060.60	Retaining Walls				
	G2060.70	Site Bridges				
	G2060.80	Site Screening Devices	350	B-02		
	G2060.85	Site Specialties				
G2080	**Landscaping**					
	G2080.10	Planting Irrigation				
	G2080.20	Turf and Grasses				
	G2080.30	Plants				
	G2080.50	Planting Accessories				
	G2080.70	Landscape Lighting				
	G2080.80	Landscaping Activities				
G30	**LIQUID AND GAS SITE UTILITIES**					
G3010	**Water Utilities**					
	G3010.10	Site Domestic Water Distribution	350	B-02		
	G3010.30	Site Fire Protection Water Distribution	350	B-02		
	G3010.50	Site Irrigation Water Distribution				
G3020	**Sanitary Sewerage Utilities**					
	G3020.10	Sanitary Sewerage Utility Connection	350	B-02		
	G3020.20	Sanitary Sewerage Piping	350	B-02		
	G3020.40	Utility Septic Tanks				
	G3020.50	Sanitary Sewerage Structures	350	B-02		
	G3020.60	Sanitary Sewerage Lagoons				
G3030	**Storm Drainage Utilities**					
	G3030.10	Storm Drainage Utility Connection	350	B-02		
	G3030.20	Storm Drainage Piping	350	B-02		
	G3030.30	Culverts				
	G3030.40	Site Storm Water Drains	350	B-02		

§ 3.3 Model Element Table

Identify (1) the LOD required for each Model Element at each Project milestone, (2) the Model Element Author, and (3) references to any applicable notes found in Section 3.4.

Insert abbreviations for each MEA identified in the table below, such as "A – Architect," or "C – Contractor."

NOTE: LODs must be adapted for the unique characteristics of each Project.

Model Elements Utilizing CSI UniFormat™	Construction Documents Bid Package B			Notes (See Sec 3.4)
	LOD	MEA	Notes	
G3030.50 Storm Drainage Pumps	350	B-02		
G3030.60 Site Subdrainage				
G3030.70 Storm Drainage Ponds and Reservoirs				
G3050 Site Energy Distribution				
G3050.10 Site Hydronic Heating Distribution				
G3050.20 Site Steam Energy Distribution				
G3050.40 Site Hydronic Cooling Distribution				
G3060 Site Fuel Distribution				
G3060.10 Site Gas Distribution				
G3060.20 Site Fuel-Oil Distribution				
G3060.30 Site Gasoline Distribution				
G3060.40 Site Diesel Fuel Distribution				
G3060.60 Site Aviation Fuel Distribution				
G3090 Liquid and Gas Site Utilities Supplementary Components				
G3090.10 Supplementary Components				
G40 ELECTRICAL SITE IMPROVEMENTS				
G4010 Site Electric Distribution Systems				
G4010.10 Electrical Utility Services				
G4010.20 Electric Transmission and Distribution				
G4010.30 Electrical Substations				
G4010.40 Electrical Transformers				
G4010.50 Electrical Switchgear and Protection Devices				
G4010.70 Site Grounding				
G4010.90 Electrical Distribution System Instrumentation and Controls				
G4050 Site Lighting				
G4050.10 Area Lighting				
G4050.20 Flood Lighting				

§ 3.3 Model Element Table *Identify (1) the LOD required for each Model Element at each Project milestone, (2) the Model Element Author, and (3) references to any applicable notes found in Section 3.4.* *Insert abbreviations for each MEA identified in the table below, such as "A – Architect," or "C – Contractor."* *NOTE: LODs must be adapted for the unique characteristics of each Project.*	Construction Documents Bid Package B			Notes *(See Sec 3.4)*
Model Elements Utilizing CSI UniFormat™	LOD	MEA	Notes	
G4050.50 Building Illumination				
G4050.90 Exterior Lighting Supplementary Components				
G50 SITE COMMUNICATIONS				
G5010 Site Communications Systems				
G5010.10 Site Communications Structures				
G5010.30 Site Communications Distribution				
G5010.50 Wireless Communications Distribution				
G90 MISCELLANEOUS SITE CONSTRUCTION				
G9010 Tunnels				
G9010.10 Vehicular Tunnels				
G9010.20 Pedestrian Tunnels				
G9010.40 Service Tunnels				
G9010.90 Tunnel Construction Related Activities				

§ 3.4 Model Element Table Notes

Notes:
(List by number shown on table.)

Model Element Table is an add on document to all bid package noted above and relating to all contractors scope of work. The table identifies all bid package requirements to provide Building Information Models (BIM) during the BIM coordination process. In addition, refer to BIM protocol instruction to see LOD descriptions.
Contractors refer back to Bid Package 'B' BIM Coordination Specification Section 01370
Contractors are required to attend coordination meetings, submit and post to BuildingBlok and maintain the BIM schedule production process.

AIA® Document G201™ – 2013

Project Digital Data Protocol Form

PROJECT: *(Name and address)*
Fairview Campus
New Middle School and High School
Tony Marchio Drive
Townsend, Delaware 19734

PROTOCOL VERSION NUMBER:

DATE: December 1, 2017

PREPARED BY: Christopher Donahue/Jackie McKee

DISTRIBUTION TO: *(List each individual to whom this protocol is distributed. Include individuals listed in Section 1.2, or reference Section 1.2, along with any additional recipients.)*

ADDITIONS AND DELETIONS:
The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

This document is intended to be used in conjunction with a project specific AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, which the Parties will incorporate into their Agreement for the Project.

TABLE OF ARTICLES

ARTICLE 1 GENERAL PROVISIONS REGARDING USE OF DIGITAL DATA

§ 1.1 List each Project Participant that has incorporated AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, dated , into its agreement for the Project:

Project Participant	Discipline

§ 1.2 Project Participants. For each Project Participant listed in Section 1.1, identify and provide contact information for the individuals responsible for implementation of the Digital Data protocols.

Project Participant	Individual Responsible	Contact Information

§ 1.3 Terms in this document shall have the same meaning as those in AIA Document E203–2013.

ARTICLE 2 DIGITAL DATA MANAGEMENT PROTOCOLS

§ 2.1.1 Electronic Document Management System. If, pursuant to Section 3.5.1 of the Project specific version of AIA Document E203–2013, the Project Participants indicated an intent to use a centralized electronic document management system on the Project, the requirements for the centralized electronic document management system are as follows:
(The requirements for the system shall address, among other things, access to and security of Digital Data.)

§ 2.1.2 System Startup Requirements. Initial training and other startup requirements to be implemented with respect to the use or management of Digital Data, if any, are as follows:
(Describe in detail any initial training or other startup requirements.)

§ 2.1.3 Ongoing System Requirements. Ongoing training or support programs to be implemented with respect to the use or management of Digital Data, if any, are as follows:
(Describe in detail any ongoing training or support programs to be implemented.)

§ 2.2 Digital Data Storage Requirements. The procedures and requirements for storing Digital Data during the course of the Project, if any, are as follows:
(Describe in detail the procedures and requirements for storing Digital Data during the course of the Project.)

§ 2.3 Digital Data Archiving Requirements. The procedures and requirements for archiving and preserving Digital Data during the course of the Project and following final completion of the Project, if any, are as follows:
(Describe in detail the procedures and requirements for archiving and preserving Digital Data during the course of the Project and following final completion.)

§ 2.4 Other Digital Data Management protocol requirements, if any, are as follows:
(Describe in detail any other requirements.)

ARTICLE 3 TRANSMISSION AND USE OF DIGITAL DATA

§ 3.1 Digital Data Protocol Table. The Project Participants shall comply with the data formats, transmission methods and Authorized Uses set forth in the Digital Data Protocol Table below when transmitting or using Digital Data on the Project.
(Complete the Digital Data Protocol Table by entering information in the spaces below. Adapt the table to the needs of the Project by adding, deleting or modifying the listed Digital Data as necessary. Use Section 3.2 Digital Data

Protocol Table Definitions and Notes to define abbreviations placed, and to record notes indicated, in the Digital Data Protocol Table.)

Digital Data	Digital Data Format	Transmission Method	Authorized Uses	Note Number *(See Sec. 3.2)*
§ 3.1.1 Project Agreements and Modifications	PDF	Email		
§ 3.1.2 Project communications	GOTO Meeting	Email & BB		
General communications		Email & BB		
Meeting notices	PDF	Email & BB		
Agendas	PDF	Email & BB		
Minutes	PDF	Email & BB		
Requests for information	BuildingBlok	Email & BB		
Architect's Supplemental Instructions	AIA G201 & Contract	Email & BB		
§ 3.1.3 Architect's pre-construction submittals	PDF & BB	Email & BB		
Schematic Design Documents		Email & BB		
Design Development Documents		Email & BB		
Construction Documents	PDF	Email & BB		
§ 3.1.4 Contract Documents	PDF	Email & BB		
Architect's Drawings	PDF	Email & BB		
Architect's Specifications	PDF	Email & BB		
§ 3.1.5 Contractor's submittals	PDF	Email & BB		
Product data	PDF	Email & BB		
Submitted by Contractor	PDF	Email & BB		
Returned by Architect	PDF	Email & BB		
Shop drawings	PDF	Email & BB		
Submitted by Contractor	PDF	Email & BB		
Returned by Architect	PDF	Email & BB		
§ 3.1.6 Subcontractor's submittals	Physical & PDF BB	Email & BB		
Product data	PDF & BB	Email & BB		
Submitted by Subcontractor	PDF & BB	Email & BB		
Returned by Contractor	BuildingBlok	Email & BB		
Shop drawings	PDF	Email & BB		
Submitted by Subcontractor	PDF	Email & BB		
Returned by Contractor	PDF	Email & BB		
§ 3.1.7 Modifications				

(Rows deleted)

Architect's order for a minor change in the Work	PDF	Email & BB		
		Email & BB		
Construction Change Directives	PDF	Email & BB		
Change Orders	PDF	Email & BB		
§ 3.1.8 Project payment documents				
§ 3.1.9 Notices and Claims				
§ 3.1.10 Closeout documents	Electronic Navisworks			
Record documents	PDF			
Operations and Maintenance Manual				

§ 3.2 Digital Data Protocol Table Definitions and Notes

Digital Data Format:
(Provide required data format, including software version, if applicable.)

Digital Data Format	Definition
Revit and Navisworks	

Transmission Method:
(Below are suggested abbreviations and definitions. Delete, modify or supplement, as necessary.)

Abbreviation	Definition
CD	Delivered via Compact Disk
EM	Via e-mail
DMS	Centralized Electronic Document Management System

Authorized Uses of Digital Data:
(Below are suggested abbreviations and definitions. Delete, modify or supplement, as necessary.)

Abbreviation	Definition
I	Integrate (incorporate additional digital data without modifying data received)
M	Modify as required to fulfill obligations for the Project
R	Reproduce and distribute
S	Store and view only

Notes:
(List by number shown on table.)

AIA® Document E203™ – 2013

Building Information Modeling and Digital Data Exhibit

This Exhibit dated the 1st day of December in the year 2017 is incorporated into the agreement (the "Agreement") between the Parties for the following Project:
(Name and location or address of the Project)

Fairview Campus
New Middle School and High School
Tony Marchio Drive
Townsend, Delaware 19734

TABLE OF ARTICLES

ADDITIONS AND DELETIONS:
The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

This document is intended to be incorporated into an agreement between the parties and used in conjunction with AIA Documents G201™–2013, Project Digital Data Protocol Form, and G202™–2013, Building Information Modeling Protocol Form. It is anticipated that other Project Participants will incorporate a project specific E203–2013 into their agreements, and that the Parties and other Project Participants will set forth the agreed-upon protocols in AIA Documents G201–2013 and G202–2013.

ARTICLE 1 GENERAL PROVISIONS

§ 1.1 This Exhibit provides for the establishment of protocols for the development, use, transmission, and exchange of Digital Data for the Project. If Building Information Modeling will be utilized, this Exhibit also provides for the establishment of the protocols necessary to implement the use of Building Information Modeling on the Project, including protocols that establish the expected Level of Development for Model Elements at various milestones of the Project, and the associated Authorized Uses of the Building Information Models.

§ 1.2 The Parties agree to incorporate this Exhibit into their agreements with any other Project Participants that may develop or make use of Digital Data on the Project. Prior to transmitting or allowing access to Digital Data, a Party may require any Project Participant to provide reasonable evidence that it has incorporated this Exhibit into its agreement for the Project, and agreed to the most recent Project specific versions of AIA Document G201™–2013, Project Digital Data Protocol Form and AIA Document G202™–2013, Project Building Information Modeling Protocol Form.

§ 1.2.1 The Parties agree that each of the Project Participants utilizing Digital Data on the Project is an intended third party beneficiary of the Section 1.2 obligation to incorporate this Exhibit into agreements with other Project Participants, and any rights and defenses associated with the enforcement of that obligation. This Exhibit does not create any third-party beneficiary rights other than those expressly identified in this Section 1.2.1.

§ 1.3 Adjustments to the Agreement

§ 1.3.1 If a Party believes that protocols established pursuant to Sections 3.2 or 4.5, and memorialized in AIA Documents G201–2013 and G202–2013, will result in a change in the Party's scope of work or services warranting an adjustment in compensation, contract sum, schedule or contract time, the Party shall notify the other Party. Failure to provide

notice as required in this Section 1.3 shall result in a Party's waiver of any claims for adjustments in compensation, contract sum, schedule or contract time as a result of the established protocols.

§ 1.3.2 Upon such notice, the Parties shall discuss and negotiate revisions to the protocols or discuss and negotiate any adjustments in compensation, contract sum, schedule or contract time in accordance with the terms of the Agreement.

§ 1.3.3 Notice required under this Section 1.3 shall be provided within thirty days of receipt of the protocols, unless otherwise indicated below:
(If the Parties require a notice period other than thirty days from receipt of the protocols, indicate the notice period below.)

§ 1.4 Definitions

§ 1.4.1 Building Information Model. A Building Information Model is a digital representation of the Project, or a portion of the Project, and is referred to in this Exhibit as the "Model," which term may be used herein to describe a Model Element, a single model or multiple models used in the aggregate, as well as other data sets identified in AIA Document G202–2013, Project Building Information Modeling Protocol Form.

§ 1.4.2 Building Information Modeling. Building Information Modeling or Modeling means the process used to create the Model.

§ 1.4.3 Model Element. A Model Element is a portion of the Model representing a component, system or assembly within a building or building site.

§ 1.4.4 Level of Development. The Level of Development (LOD) describes the minimum dimensional, spatial, quantitative, qualitative, and other data included in a Model Element to support the Authorized Uses associated with such LOD.

§ 1.4.5 Authorized Uses. The term "Authorized Uses" refers to the permitted uses of Digital Data authorized in the Digital Data and/or Building Information Modeling protocols established pursuant to the terms of this Exhibit.

§ 1.4.6 Model Element Author. The Model Element Author is the entity (or individual) responsible for managing and coordinating the development of a specific Model Element to the LOD required for an identified Project milestone, regardless of who is responsible for providing the content in the Model Element. Model Element Authors are to be identified in Section 3.3, Model Element Table, of AIA Document G202–2013.

§ 1.4.7 Digital Data. Digital Data is information, including communications, drawings, specifications and designs, created or stored for the Project in digital form. Unless otherwise stated, the term Digital Data includes the Model.

§ 1.4.8 Confidential Digital Data. Confidential Digital Data is Digital Data containing confidential or business proprietary information that the transmitting party designates and clearly marks as "confidential."

§ 1.4.9 Written or In Writing. In addition to any definition in the Agreement to which this Exhibit is attached, for purposes of this Exhibit and the Agreement, "written" or "in writing" shall mean any communication prepared and sent using a transmission method set forth in this Exhibit, or the protocols developed pursuant to this Exhibit, that permits the recipient to print the communication.

§ 1.4.10 Written Notice. In addition to any terms in the Agreement to which this Exhibit is attached, for purposes of this Exhibit and the Agreement, "written notice" shall be deemed to have been duly served if transmitted electronically to an address provided in this Exhibit or the Agreement using a transmission method set forth in this Exhibit that permits the recipient to print the communication.

§ 1.4.11 Party and Parties. The terms "Party" and "Parties" refer to the signing parties to the Agreement.

§ 1.4.12 Project Participant. A Project Participant is an entity (or individual) providing services, work, equipment or materials on the Project and includes the Parties.

ARTICLE 2 TRANSMISSION AND OWNERSHIP OF DIGITAL DATA

§ 2.1 The transmission of Digital Data constitutes a warranty by the Party transmitting Digital Data to the Party receiving Digital Data that the transmitting Party is the copyright owner of the Digital Data, or otherwise has permission to transmit the Digital Data for its use on the Project in accordance with the Authorized Uses of Digital Data established pursuant to the terms of this Exhibit.

§ 2.2 If a Party transmits Confidential Digital Data, the transmission of such Confidential Digital Data constitutes a warranty to the Party receiving such Confidential Digital Data that the transmitting Party is authorized to transmit the Confidential Digital Data. If a Party receives Confidential Digital Data, the receiving Party shall keep the Confidential Digital Data strictly confidential and shall not disclose it to any other person or entity except as set forth in Section 2.2.1.

§ 2.2.1 The receiving Party may disclose Confidential Digital Data as required by law or court order, including a subpoena or other form of compulsory legal process issued by a court or governmental entity. The receiving Party may also disclose the Confidential Digital Data to its employees, consultants or contractors in order to perform services or work solely and exclusively for the Project, provided those employees, consultants and contractors are subject to the restrictions on the disclosure and use of Confidential Digital Data as set forth in this Exhibit.

§ 2.3 By transmitting Digital Data, the transmitting Party does not convey any ownership right in the Digital Data or in the software used to generate the Digital Data. Unless otherwise granted in a separate license, the receiving Party's right to use, modify, or further transmit Digital Data is specifically limited to designing, constructing, using, maintaining, altering and adding to the Project consistent with the terms of this Exhibit, and nothing contained in this Exhibit conveys any other right to use the Digital Data.

§ 2.4 Where a provision in this Article 2 conflicts with a provision in the Agreement into which this Exhibit is incorporated, the provision in this Article 2 shall prevail.

ARTICLE 3 DIGITAL DATA PROTOCOLS

§ 3.1 Anticipated Types of Digital Data. The anticipated types of Digital Data to be used on the Project are as follows: *(Indicate below the information on the Project that shall be created and shared in a digital format. If the Parties indicate that Building Information Modeling will be utilized on the Project, the Parties shall also complete Article 4.)*

Anticipated Digital Data	Applicability to the Project *(Indicate Applicable or Not Applicable)*	Location of Detailed Description *(Section 3.1.1 below or in an attachment to this exhibit and identified below)*
Project Agreements and Modifications	Applicable	
Project communications	Via Email & BuildingBlok	
Architect's pre-construction submittals	Not Applicable	Via Email & BuildingBlok
Contract Documents	Applicable	
Contractor's submittals	Applicable	
Subcontractor's submittals	Applicable	
Modifications	Applicable	
Project payment documents	Applicable	
Notices and claims	Applicable	
Building Information Modeling	Applicable	

§ 3.1.1 Insert a detailed description of the anticipated Digital Data identified in Section 3.1, if not further described in an attachment to this Exhibit.

See attached Exhibit

§ 3.2 As soon as practical following execution of the Agreement, the Parties shall further describe the uses of Digital Data, and establish necessary protocols governing the transmission and Authorized Uses of Digital Data, in consultation with the other Project Participants that are expected to utilize Digital Data on the Project.

Init.
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§ 3.2.1 Unless another Project Participant is identified below, the Architect shall prepare and distribute to the other Project Participants Digital Data protocols for review, revision and approval.
(If a Project Participant other than the Architect shall be responsible for preparing draft and final Digital Data protocols, identify that Project Participant.)

EDiS Company

§ 3.2.2 The agreed upon Digital Data protocols shall be set forth in AIA Document G201–2013 and each Project Participant shall memorialize their agreement in writing to such Digital Data protocols.

§ 3.2.3 The Parties, together with the other Project Participants, shall review and, if necessary, revise the Digital Data protocols at appropriate intervals as required by the conditions of the Project.

§ 3.3 The Parties shall transmit, use, store and archive Digital Data in accordance with the Digital Data protocols set forth in the latest version of AIA Document G201–2013 agreed to by the Project Participants.

§ 3.4 Unauthorized Use
§ 3.4.1 Prior to Establishment of Digital Data Protocols
If a Party receives Digital Data prior to the agreement to, and documentation of, the Digital Data protocols in AIA Document G201–2013, that Party is not authorized to use or rely on the Digital Data. Any use of, or reliance on, such Digital Data is at that Party's sole risk and without liability to the other Party and its contractors, consultants, agents and employees.

§ 3.4.2 Following Establishment of Digital Data Protocols
Following agreement to, and documentation of, the Digital Data protocols in AIA Document G201–2013, if a Party uses Digital Data inconsistent with the Authorized Uses identified in the Digital Data protocols, that use shall be at the sole risk of the Party using the Digital Data.

§ 3.5 Digital Data Management
§ 3.5.1 Centralized electronic document management system use on the Project shall be:
(Check the appropriate box. If the Parties do not check one of the boxes below, the default selection shall be that the Parties will not utilize a centralized electronic document management system on the Project.)

[X] The Parties intend to use a centralized electronic document management system on the Project.

[ ] The Parties do not intend to use a centralized electronic document management system on the Project.

§ 3.5.2 If the Project Participants intend to utilize a centralized electronic document management system on the Project, the Project Participants identified in Section 3.5.3 shall be responsible for managing and maintaining such system. The Project Participants responsible for managing and maintaining the centralized electronic document management system shall facilitate the establishment of protocols for transmission, use, storage and archiving of the centralized Digital Data and assist the Project Participants identified in Section 3.2.1 above in preparing Digital Data protocols. Upon agreement to, and documentation of, the Digital Data protocols in AIA Document G201–2013, the Project Participants identified in Section 3.5.3 shall manage and maintain the centralized electronic document management system consistent with the management protocols set forth in the latest version of G201–2013 approved by the Project Participants.

§ 3.5.3 Unless responsibility is assigned to another Project Participant, the Architect shall be responsible for managing and maintaining the centralized electronic document management system. If the responsibility for management and maintenance will be assigned to another Project Participant at an identified Project milestone, indicate below the Project Participant who shall assume that responsibility, and the Project milestone.
(Identify the Project Participant responsible for management and maintenance only if the Parties intend to utilize a centralized electronic document management system on the Project.)

Responsible Project Participant	Project Milestone
EDiS Company	

ARTICLE 4 BUILDING INFORMATION MODELING PROTOCOLS

§ 4.1 If the Parties indicate in Section 3.1 that Building Information Modeling will be used on the Project, specify below the extent to which the Parties intend to utilize Building Information Modeling and identify the provisions of this Article 4 governing such use:

[ ] The Parties shall utilize Building Information Modeling on the Project for the sole purpose of fulfilling the obligations set forth in the Agreement without an expectation that the Model will be relied upon by the other Project Participants. Unless otherwise agreed in writing, any use of, transmission of, or reliance on the Model is at the receiving Party's sole risk. The remaining sections of this Article 4 shall have no force or effect.

[ ] The Parties shall develop, share, use and rely upon the Model in accordance with Sections 4.2 through 4.10 of this Exhibit.

§ 4.2 Anticipated Building Information Modeling Scope. Indicate below the portions of the Project for which Modeling will be used and the anticipated Project Participant responsible for that Modeling.

Project Portion for Modeling	Responsible Project Participant
See AIA G202 Building Information Modeling Protocol Form Matrix	Christopher D. Donahue

§ 4.3 Anticipated Model Authorized Uses. Indicate below the anticipated Authorized Uses of the Model for the Project, which Authorized Uses will be agreed upon by the Project Participants and further described for each LOD in AIA Document G202–2013.

§ 4.4 Ancillary Modeling Activities. Indicate additional Modeling activities agreed upon by the Parties, but not to be included in AIA Document G202–2013, if any.
(Describe any Modeling activities, such as renderings, animations, performance simulations, or other similar use, including the anticipated amount and scope of any such Modeling activities.)

All parties identified in contract scopes and AIA E203 4.2 are required to provide 3D modeled electronic document in Autocad, Navisworks and /or Revit to participate in Building Information Modeling construction coordination process.

§ 4.5 Modeling Protocols. As soon as practical following execution of the Agreement, the Parties shall, in consultation with the other Project Participants that are expected to utilize Building Information Modeling on the Project, further describe the Authorized Uses of the Model and establish necessary protocols governing the development of the Model utilizing AIA Document G202–2013.

§ 4.5.1 The Modeling protocols shall address the following:

.1 Identification of the Model Element Authors;
.2 Definition of the various LOD for the Model Elements and the associated Authorized Uses for each defined LOD;
.3 Identification of the required LOD of each Model Element at each identified Project milestone;
.4 Identification of the construction classification systems to be used on the Project;
.5 The process by which Project Participants will exchange and share the Model at intervals not reflected in Section 3.3, Model Element Table, of AIA Document G202–2013;
.6 The process by which the Project Participants will identify, coordinate and resolve changes to the Model;
.7 Details regarding any anticipated as-designed or as-constructed Authorized Uses for the Model, if required on the Project;
.8 Anticipated Authorized Uses for facilities management or otherwise, following completion of the Project; and
.9 Other topics to be addressed by the Modeling protocols: *(Identify additional topics to be addressed by the Modeling Protocols.)*

§ 4.5.2 Unless responsibility is assigned to another Project Participant identified below, the Architect shall prepare and distribute Modeling protocols to the other Project Participants for review, revision and approval.
(If a Project Participant other than the Architect shall be responsible for preparing draft and final Modeling protocols, identify that Project Participant.)

§ 4.5.3 The agreed upon Modeling protocols shall be set forth in AIA Document G202–2013 and each Project Participant shall memorialize their agreement in writing to such Modeling protocols.

§ 4.5.4 The Parties, together with the other Project Participants, shall review, and if necessary, revise the Modeling protocols at appropriate intervals as required by the conditions of the Project.

§ 4.6 The Parties shall develop, use and rely on the Model in accordance with the Modeling protocols set forth in the latest version of AIA Document G202–2013, which document shall be included in or attached to the Model in a manner clearly accessible to the Project Participants.

§ 4.7 Unauthorized Use

§ 4.7.1 Prior to Establishment of Modeling Protocols

If a Party receives any Model prior to the agreement to, and documentation of, the Modeling protocols in AIA Document G202–2013, that Party is not authorized to use, transmit, or rely on the Model. Any use, transmission or reliance is at that Party's sole risk and without liability to the other Party and its contractors, consultants, agents and employees.

§ 4.7.2 Following Establishment of Modeling Protocols

Following agreement to, and documentation of, the Modeling protocols in AIA Document G202–2013, if a Party uses or relies on the Model inconsistent with the Authorized Uses identified in the Modeling protocols, such use or reliance shall be at the sole risk of the Party using or relying on the Model. A Party may rely on the Model Element only to the extent consistent with the minimum data required for the identified LOD, even if the content of a specific Model Element includes data that exceeds the minimum data required for the identified LOD.

§ 4.8 Model Management

§ 4.8.1 The requirements for managing the Model include the duties set forth in this Section 4.8. Unless assigned to another Project Participant, the Architect shall manage the Model from the inception of the Project. If the responsibility for Model management will be assigned to another Project Participant, or change at an identified Project milestone, indicate below the identity of the Project Participant who will assume that responsibility, and the Project milestone.

Responsible Project Participant	**Project Milestone**
Christopher D. Donahue, Contract Coordinator	

§ 4.8.2 Model Management Protocol Establishment. The Project Participant responsible for managing the Model, in consultation with the other Project Participants that are expected to utilize Building Information Modeling on the Project, shall facilitate the establishment and revision of Model management protocols, including the following:

.1 Model origin point, coordinate system, precision, file formats and units
.2 Model file storage location(s)
.3 Processes for transferring and accessing Model files
.4 Naming conventions
.5 Processes for aggregating Model files from varying software platforms
.6 Model access rights
.7 Identification of design coordination and clash detection procedures.
.8 Model security requirements
.9 Other: *(Identify additional Model management protocols to be addressed.)*

§ 4.8.3 Ongoing Responsibilities. The Project Participant responsible for managing the Model shall do so consistent with the Model management protocols, which shall also include the following ongoing responsibilities:

.1 Collect incoming Models:
  .1 Coordinate submission and exchange of Models
  .2 Create and maintain a log of Models received
  .3 Review Model files for consistency with Sections 4.8.2.1 through 4.8.2.5
  .4 Maintain a record copy of each Model file received
.2 Aggregate Model files and make them available for Authorized Uses
.3 Maintain Model Archives and backups consistent with the requirements of Section 4.8.4 below
.4 Manage Model access rights
.5 Other: *(Identify additional responsibilities.)*

.6 Attend and participate in BIM coordination meetings is mandatory, liquidated damages apply for avoiding BIM process.

§ 4.8.4 Model Archives. The individual or entity responsible for Model management as set forth in this Section 4.8 shall compile a Model Archive at the end of each Project milestone and shall preserve it without alteration as a record of Model completion as of that Project milestone.

§ 4.8.4.1 Additional Model Archive requirements, if any, are as follows:

§ 4.8.4.2 The procedures for storing and preserving the Model(s) upon final completion of the Project are as follows:

§ 4.9 Post-Construction Model. The services associated with providing a Model for post-construction use shall only be required if specifically designated in the table below as a Party's responsibility.
(Designate below any anticipated post-construction Model and related requirements, the Project Participant responsible for creating or adapting the Model to achieve such uses, and the location of a detailed description of the anticipated scope of services to create or adapt the Model as necessary to achieve such uses.)

Post-Construction Model	Applicability to Project *(Applicable or Not Applicable)*	Responsible Project Participant	Location of Detailed Description of Requirements and Services *(Section 4.10 below or in an attachment to this exhibit and identified below)*
§ 4.9.1 Remodeling	Not Applicable		
§ 4.9.2 Wayfinding and Mapping	Not Applicable		
§ 4.9.3 Asset/FF & E Management	Not Applicable		
§ 4.9.4 Energy Management	Not Applicable		
§ 4.9.5 Space Management	Not Applicable		
§ 4.9.6 Maintenance Management	Not Applicable		

§ 4.10 Insert a detailed description of the requirements for each Post-Construction Model identified in Section 4.9 and the anticipated services necessary to create each Post-Construction Model, if not further described in an attachment to this Exhibit.

ARTICLE 5 OTHER TERMS AND CONDITIONS

Other terms and conditions related to the transmission and use of Digital Data are as follows: