

# MEETING MINUTES AND NOTES

Lindhout Associates architects aia pc  
10465 citation drive, brighton, michigan 48116

www.lindhout.com

810-227-5668 (fax) 810-227-5855



**PROJECT NAME BAS 2019 Bond**

**COMM. NO. 20012**

**DATE:** April 21, 2020

**MEETING LOCATION:** Remote call-in/video

**PARTICIPANTS:**

Dr. Greg Gray	BAS Superintendent	grayg@brightonk12.com
Elizabeth Mosher	BAS Superintendent of Instruction	moshere@brightonk12.com
Tracy Taylor	T2 Designs	tracy@t2designsinc.com
Johanna Luke	T2 Designs	johanna@t2designsinc.com
Ken Stahl	School Board Member	stahlk@brightonk12.com
Brian Jessie	Barton Malow	brian.jessie@bartonmalow.com
Matt Jourden	BHS Engineering/CAD Teacher	jourdem@brightonk12.com
Chris Turner	BAS Director of Technology	turnerc@brightonk12.com
Scott Hoeft	IDI	scott@intdesigns.com
Adam Manty	IDI	adam@intdesigns.com
Jason McIntyre	Lindhout Associates	djm@lindhout.com
Josh Hendershot	Lindhout Associates	jlh@lindhout.com
Piet Lindhout	Lindhout Associates	pwl@lindhout.com

## **STEAM Engineering Program General Discussion Topics** Discussion in Blue

1. General overview of second drawings & layout
2. Flex Space
  - a. Furniture types and layout are in-process.
  - b. Break-out and smaller group meeting arrangements will be accomplished with adaptive furniture.
  - c. Soft but resilient seating mixed w/ stackable chairs, movable dividers, tackable & write-able surfaces, re-configurable are all characteristics being considered.
3. Engineering lab layout
  - a. Instructional space
    - i. Teacher's area
      1. Additional instructional desk for instruction prep
      2. Emergency power shut-off to first floor Dirty Lab is required.
      3. Display of first floor's Dirty Lab security/safety camera(s) required.
    - ii. Demonstration area
      1. Digital interactive display(s) ideal on north instruction wall along w/ whiteboard
      2. No overhead/ceiling mounted projector required.
      3. Ability to project or cast demonstration work surface to digital displays is required

# MEETING MINUTES AND NOTES

Lindhout Associates architects aia pc  
10465 citation drive, brighton, michigan 48116

www.lindhout.com

810-227-5668 (fax) 810-227-5855



**PROJECT NAME BAS 2019 Bond**

**COMM. NO. 20012**

4. Matt Jourden to review onsite display technology (currently in BHS library) & other options with Chris Turner and Barton Malow.
- iii. Student area
  1. Tables can be pushed closer to instructional area to allow demonstration space between computer lab and instruction area.
  2. Tables and chairs to be on casters for flexibility
- iv. Display, storage, & common space
  1. Eastern bank of low millwork and counter meets needs for storage.
  2. Western wall for whiteboard & pin-up space works nicely.
4. Computer lab layout
  - a. Computer area
    - i. Switching to or displaying students computer monitors is a request.
    - ii. Pilot program, samples, display technology to be explored between Chris Turner Matt Jourden and Barton Malow.
    - iii. Eliminate millwork printer stations. Replace with furniture print stations.
    - iv. Provide power and data high & above computer stations along south wall for digital displays/monitors.
    - v. Dimmable LED fixtures. Verify occupancy sensor locations & coverage.
    - vi. Fire extinguisher required.
    - vii. Floor cores/outlets needed for central computer banks and flexibility.
  - b. Display, Storage, & common spaces
    - i. Storage room to remain open to computer lab. Locking & access control handled via locking storage cabinets.
5. Maker Space
  - a. 3D printing, tooling & finishing, large automation, and wet/exhaust areas
    - i. General layouts & locations okay.
    - ii. Ionized water note required.
    - iii. Compressed air line for blowing off work surfaces required.
    - iv. All equipment to be powered via outlets.
    - v. Floor cores/outlets ideal for central equipment.
    - vi. Ceiling mounted junction boxes, circuiting and sub-panel required for future use.
    - vii. No ceiling mounted power reels at this time.
    - viii. Eye wash station needed
    - ix. Two standard fire extinguishers required.
    - x. Standing work surfaces only. Only sitting/low surfaces should be at computer work stations.
    - xi. Task lighting at solder station, in addition to general room lighting.

# MEETING MINUTES AND NOTES

Lindhout Associates architects aia pc  
10465 citation drive, brighton, michigan 48116

www.lindhout.com

810-227-5668 (fax) 810-227-5855



**PROJECT NAME BAS 2019 Bond**

**COMM. NO. 20012**

## 6. Miscellaneous Items

- a. Security/safety cameras required in majority of spaces. Display of the cameras should be on a monitor w/in the Engineering Lab.
- b. Emergency eyewash & shower will be included w/in first floor Dirty Lab
- c. Safety glasses storage cabinets should be at access doors to Dirty Lab and Maker Space.
- d. Fire safety storage cabinet should be included w/in equipment list & shown in Dirty Lab and Maker Space.
- e. Keycard access to equipment w/in the Dirty Lab. None required in Maker Space. Keycard entry access only at two main entries to addition.
- f. Water jet CNC to be in first floor Dirty Lab
- g. Plasma cutter to be in first floor Dirty Lab
- h. ADA desks & work surfaces to be provided.
- i. 1<sup>st</sup> floor display monitor showing Maker Space activities, 3D printing, modeling, etc. a feature to explore.