Attachment A

CITY OF COUNCIL BLUFFS - CITY PLANNING COMMISSION CASES #ZC-20-008 AND #MIS-20-006 LOCATION/ZONING MAP

Legend

- Subject Properties (rezone from C-2 and R-1 to A-P & adopt site-specific development plan)
- City of Council Bluffs Corporate Limits

0 245 490

1 Inch = 500 Feet

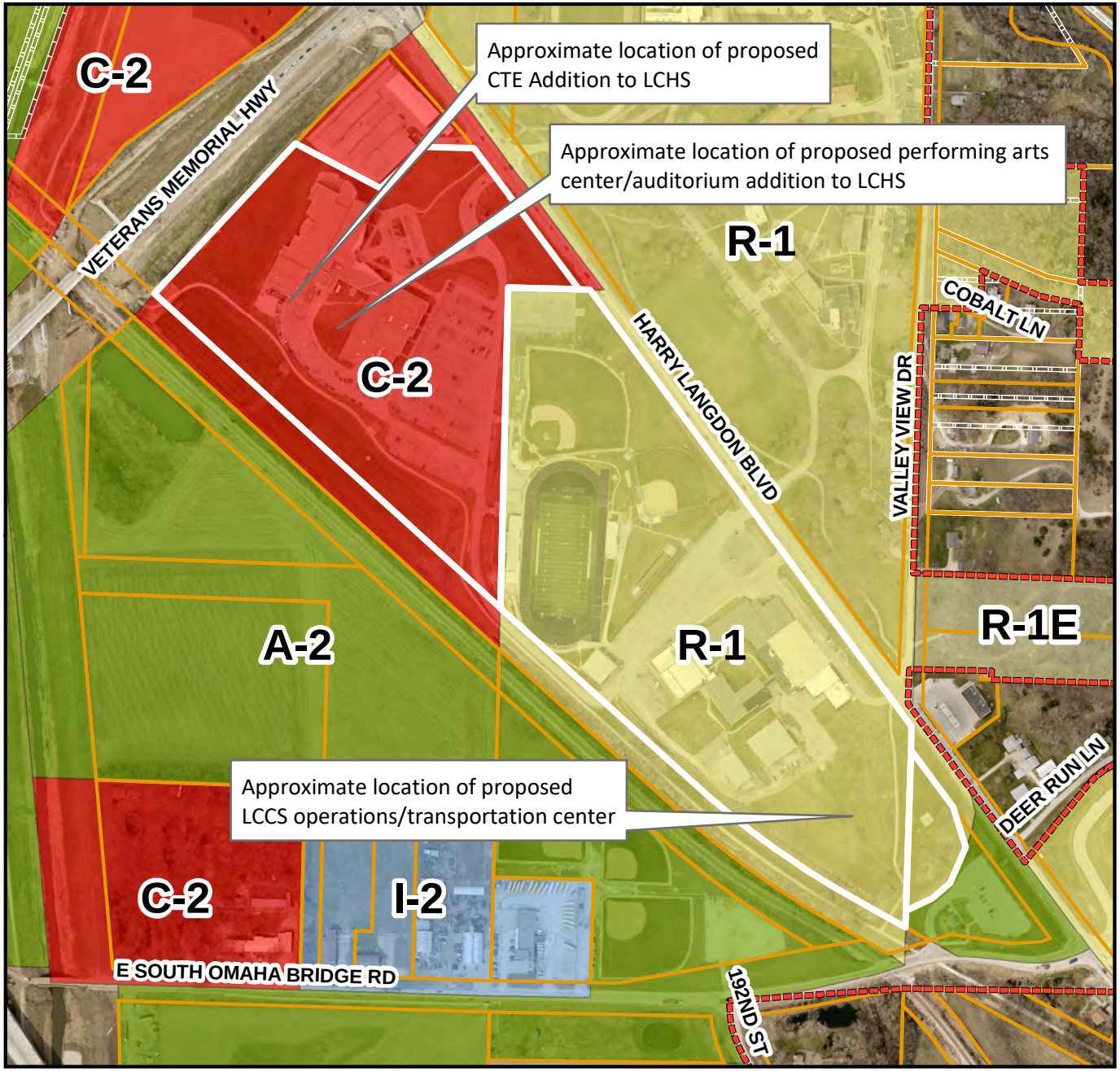


Last Amended: 6/25/2020

Council Bluffs Community Development Department
209 Pearl Street
Council Bluffs, IA 51503
Telephone: (712) 890-5350

DISCLAIMER

This map is prepared and compiled from City documents, plans and other public records data. Users of this map are hereby notified that the City expressly denies any and all responsibilities for errors, if any, in the information contained on this map of the misuse of the same by the user or anyone else. The user should verify the accuracy of information/data contained on this map before using it. The City assumes no legal responsibility for the information contained on this map.



Attachment B

LAMP RYNEARSON

14710 W. Dodge Rd., Ste. 100
Omaha, NE 68154
[P] 402.496.2498
[F] 402.496.2730
LampRynearson.com

June 16, 2020

Mr. Christopher Gibbons, AICP
Planning Manager
Community Development Department
City of Council Bluffs
209 Pearl Street
Council Bluffs, IA 51503

REFERENCE: Lewis Central Community Schools High School and Middle School Campus
Rezoning Application, Text Amendment Application & Development Plan Application
Job No. 0118180.02-020

Dear Mr. Gibbons:

Submitted herewith are rezoning application materials for Lewis Central Community School (LCCS), High School and Central Middle School, located near E. South Omaha Bridge Road and Harry Langdon Boulevard. The Applicant is Lewis Central Community Schools, 4121 Harry Langdon Blvd., Council Bluffs, IA 51503. The architect is BVH, 901 Jones St, Omaha, NE 68102. The engineer is Lamp Rynearson, 14710 W Dodge Rd Ste. 100, Omaha, NE 68154.

Documents enclosed are as follows:

1. Rezoning Application.
2. Text Amendment Application.
3. Planned Commercial Development Plan Application.
4. Check for the application fees in the amount of $750.00.
5. High School Site Exhibit including zoning compliance plan, architectural elevations, signage analysis, and site perspective drawing.
6. Middle School Site Exhibit including zoning compliance plan, architectural elevations, signage analysis, and site perspective drawing.
7. Overall Site Map and property legal description.
8. Geotechnical Reports.
9. Preliminary Drainage report.

As requested, below is letter of intent stating the proposed uses, improvements necessary to serve the development, construction time frame, and phasing:

Rezoning Application Narrative for LCHS Auditorium and Construction Technology Education (CTE) Additions

The proposed additions to Lewis Central High School consist of a 33,775 SF, 1,100 seat Auditorium addition with flyloft, balcony seating, orchestra pit, multipurpose room and full complement of back of house functionality and an 11,575 SF CTE addition consisting of woodshop expansion, scene shop and scene storage for the theater department. Due to the height required for the fly loft (70') and auditorium seating (50') a decision was made to utilize precast concrete as a primary material due to its ability to be fabricated off site and provide a nice interior / exterior finish. In addition to precast, the base of the Auditorium addition and the majority of the CTE addition exterior walls have a brick finish that matches the existing school. Exterior entry systems are highlighted with either architectural metal panels or glass curtainwall. The proposed construction schedule for this project is starting in May 2020 and planned completion in June 2021 for the CTE Addition and planned completion for April 2020 for the Auditorium.

Rezoning Application Narrative for New LCCS Operations Building

The proposed Lewis Central Community School District Operations building is a 25,500 SF multi-function building intended to house the District's Facilities and Transportation Management operations. The building will include building and maintenance management offices and support spaces, and includes Grounds Maintenance (mowing, landscaping and snow removal equipment). The Transportation and dispatch functions will also be housed in this building, including vehicle maintenance, bus and van driver training and testing, an automated bus wash system, and associated support spaces. District-wide storage will also be housed in this building to serve all District-owned buildings. Parking for school buses, vans and employees will be on site, including secured areas for after hours parking.

Exterior materials to be used include: Architectural precast concrete, architectural grade metal wall panels, potentially some brick, and aluminum-framed door and window systems. Maintenance areas will include pre-finished steel overhead doors and color-coated fiberglass doors and frames. The proposed construction schedule for this project is starting in May 2020 and planned completion in September 2021.

Rezoning Application Narrative for Addressing Construction in Floodplain

The only portions of the proposed additions to Lewis Central High School and Middle School below the floodplain elevation are within the Auditorium and CTE additions to the High School. Inside the Auditorium addition, there will be an elevator pit and the orchestra pit. Both of these elements will be protected by being constructed from cast-in-place reinforced concrete walls and slabs designed to withstand hydrostatic pressure. In addition, the walls and slabs will have waterstops at all joints. The walls will be coated with a bentonite, water-activated sheet waterproofing and the slab will have a permanent under-slab drainage system that ties into a sump pump.

Inside of the CTE addition, there will be a sewage ejector pump contained in a basin. The basin itself is watertight and can withstand hydrostatic pressure. It will be anchored to prevent hydrostatic forces to cause it to float, and sealed at the floor slab to prevent water seepage.

Please place this project on the July 2020 Council Bluffs Planning Commission Agenda. Please call if you have any questions.

Sincerely,

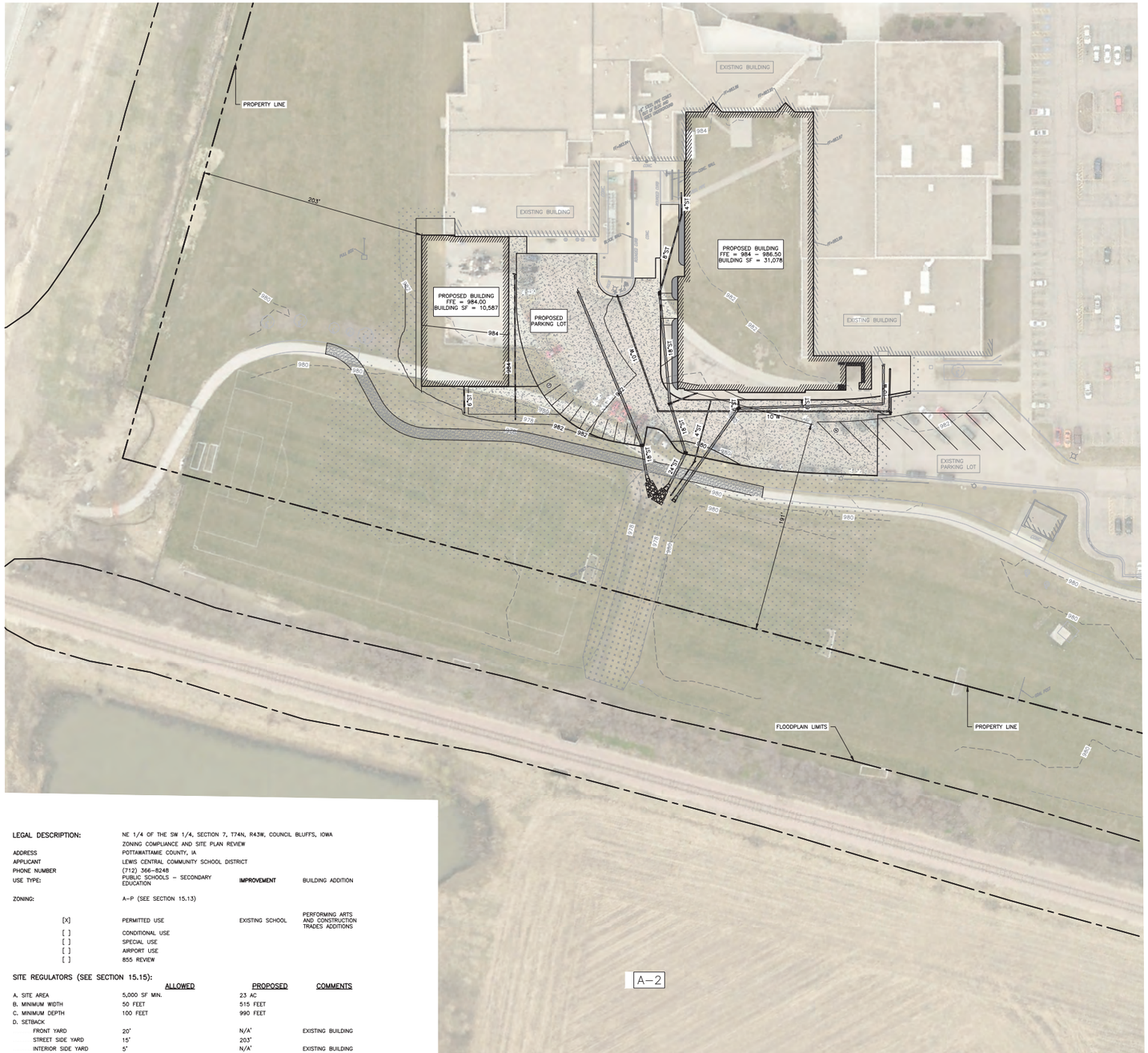
LAMP RYNEARSON, INC



Joseph Zadina, P.E.
Senior Project Manager

Enclosures

kmp\L:\Engineering\0118180 LCCSD Lewis Central HS Performing Arts\DOCUMENTS\LETTERS\XMTL Gibbons PrelimApps 200616.docx







LOCATION MAP

LEGAL DESCRIPTION:	NE 1/4 OF THE SW 1/4, SECTION 7, T74N, R43W, COUNCIL BLUFFS, IOWA		
	ZONING COMPLIANCE AND SITE PLAN REVIEW		
ADDRESS	POTTAWATTAMIE COUNTY, IA		
APPLICANT	LEWIS CENTRAL COMMUNITY SCHOOL DISTRICT		
PHONE NUMBER	(712) 366-8248		
USE TYPE:	PUBLIC SCHOOLS - SECONDARY EDUCATION	**IMPROVEMENT**	BUILDING ADDITION
ZONING:	A-P (SEE SECTION 15.13)		
[X]	PERMITTED USE	EXISTING SCHOOL	PERFORMING ARTS AND CONSTRUCTION TRADES ADDITIONS
[ ]	CONDITIONAL USE		
[ ]	SPECIAL USE		
[ ]	AIRPORT USE		
[ ]	855 REVIEW		

SITE REGULATORS (SEE SECTION 15.15):

	ALLOWED	PROPOSED	COMMENTS
A. SITE AREA	5,000 SF MIN.	23 AC	
B. MINIMUM WIDTH	50 FEET	515 FEET	
C. MINIMUM DEPTH	100 FEET	990 FEET	
D. SETBACK			
FRONT YARD	20'	N/A'	EXISTING BUILDING
STREET SIDE YARD	15'	203'	
INTERIOR SIDE YARD	5'	N/A'	EXISTING BUILDING
REAR YARD	20'	191'	
E. HEIGHT	50' MAX	70'	WAIVER NEEDED
F. LOT COVERAGE (% OF TOTAL)	50% MAX	14%	
G. PARKING REQUIREMENTS (SEE CHAPTER 15.23.060)	12 SPACES PER CLASSROOM/1 SPACE PER 4 PERSON CAPACITY	528 SPACES	536 EXISTING STALLS - 8 REMOVED
H. ACCESSIBLE PARKING (SEE SUDAS TABLE 8C-1.02)	2% OF TOTAL = 11 STALLS	16	16 EXISTING ADA STALLS

BUFFERYARD (SEE SECTION 15.23):

ADJACENT ZONING:	R-1 NORTH, A-2 SOUTH, A-P EAST AND C-2 WEST		
K. LANDSCAPED BUFFER YARD	N/A		

PARKING LANDSCAPE REQUIREMENTS (SEE SECTION 15.23):

L. STREET SIDE YARD	5'	203'	
M. INTERIOR SIDE YARD	5'	N/A'	EXISTING BUILDING
N. INTERIOR LANDSCAPING (%) (% OF PAVED AREA)	10%	12%	EXISTING PARKING LOT

LEGEND

- PROPERTY LINE
- 18"ST — PROPOSED STORM SEWER
- PROPOSED MANHOLE
- 8"SS — PROPOSED SANITARY SEWER
- 10"W — PROPOSED WATER
- PROPOSED F.E.S.
- PROPOSED CURB INLET (BY OTHERS)
- SECTION LINE
- SECTION CORNER
- FENCE LINE
- PROPOSED CONTOUR
- EXISTING CONTOUR
- FLOODPLAIN LIMITS
- PROPOSED 7" PCC PAVEMENT
- PROPOSED NATIVE WETLAND SEED MIX
- PROPOSED PLANTING BED

IOWA ONE CALL SM
1-800-292-8989
www.iowaonecall.com
811 Know what's below. Call before you dig.

LAMP RYNEARSON
14710 W. DODGE RD, STE. 100
OMAHA, NE 68154
402.496.2498
LampRynearson.com

DESIGNED / DRAWN
REVIEWED
PROJECT NUMBER
DATE 06/16/2020

COPYRIGHT 2020 LAMP RYNEARSON & ASSOCIATES, INC. ALL RIGHTS RESERVED. THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF SERVICE, IS THE PROPERTY OF LAMP RYNEARSON & ASSOCIATES, INC. AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF LAMP RYNEARSON & ASSOCIATES, INC.

BVH

ARCHITECT
BVH ARCHITECTURE
901 JONES STREET
OMAHA NE 68102
V 402 345 3060
F 402 345 7871
bvh.com

GEOTECHNICAL ENGINEER
THIELE GEOTECH INC.
13478 CHANDLER ROAD
OMAHA, NE 68138
V 402 556 2171
thielegeotech.com

CIVIL ENGINEER
LAMP RYNEARSON
14710 W DODGE RD #100
OMAHA, NE 68154
V 402 496 2498
lamprynearson.com

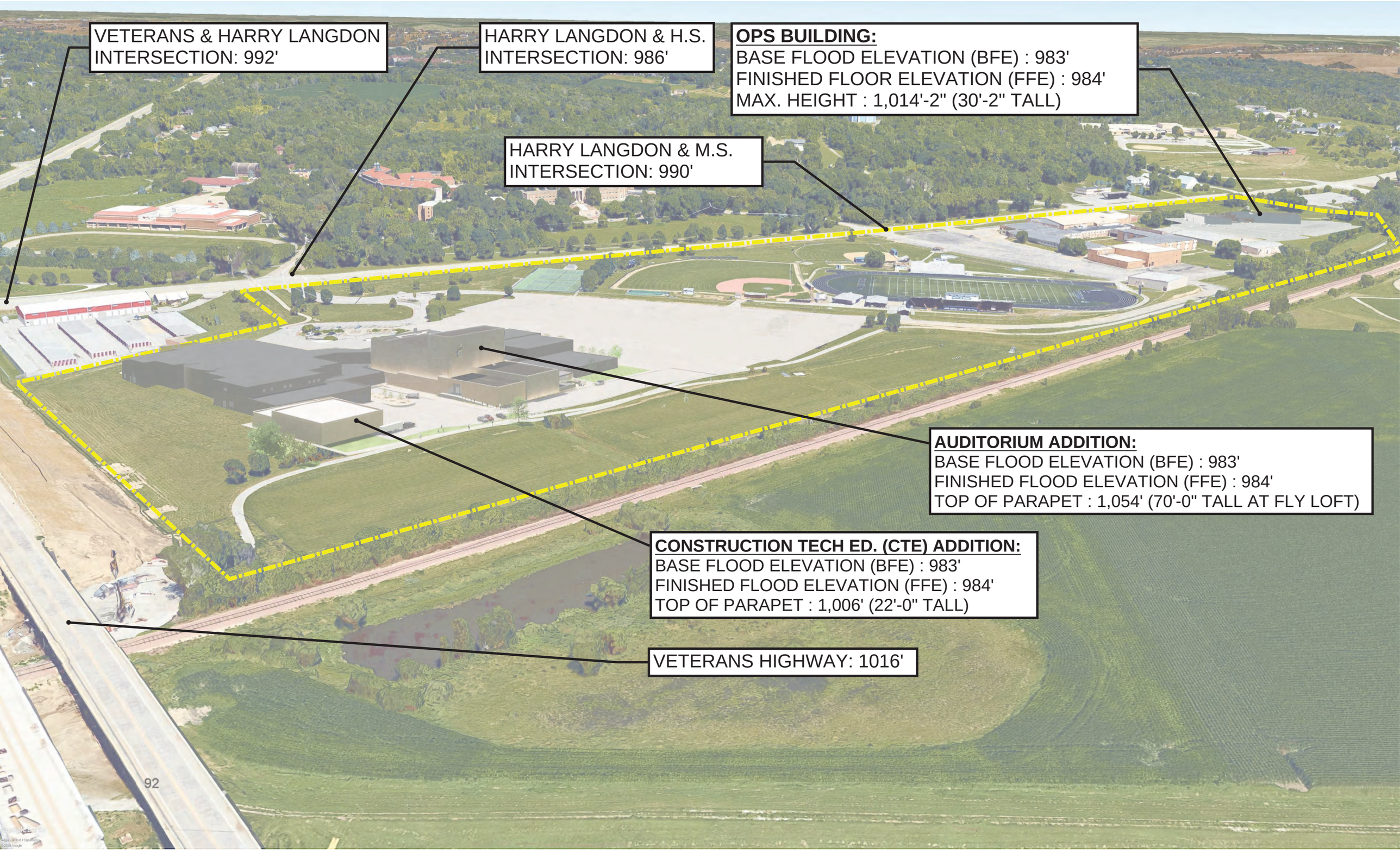
REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION

REZONING APPLICATION EXHIBIT

PROJECT: 18306-S **DATE: 06/16/2020**

© COPYRIGHT BVH ARCHITECTURE

HIGH SCHOOL SITE EXHIBIT


VETERANS & HARRY LANGDON
INTERSECTION: 992'
HARRY LANGDON & H.S.
INTERSECTION: 986'
OPS BUILDING:
BASE FLOOD ELEVATION (BFE) : 983'
FINISHED FLOOR ELEVATION (FFE) : 984'
MAX. HEIGHT : 1,014'-2" (30'-2" TALL)
HARRY LANGDON & M.S.
INTERSECTION: 990'
AUDITORIUM ADDITION:
BASE FLOOD ELEVATION (BFE) : 983'
FINISHED FLOOD ELEVATION (FFE) : 984'
TOP OF PARAPET : 1,054' (70'-0" TALL AT FLY LOFT)
CONSTRUCTION TECH ED. (CTE) ADDITION:
BASE FLOOD ELEVATION (BFE) : 983'
FINISHED FLOOD ELEVATION (FFE) : 984'
TOP OF PARAPET : 1,006' (22'-0" TALL)
VETERANS HIGHWAY: 1016'
92



SIGN #1

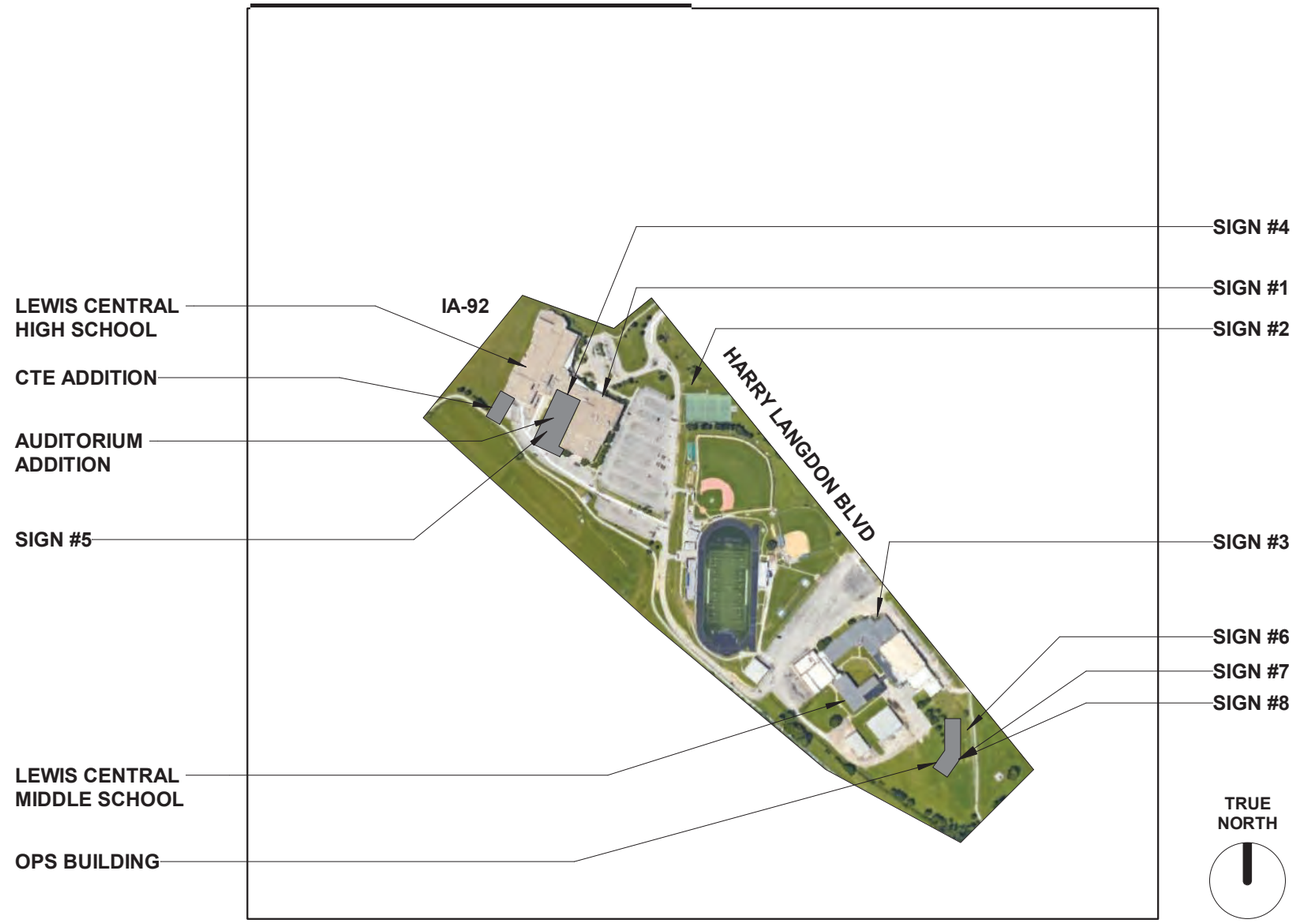


SIGN #2



SIGN #3

VICINITY PLAN



SIGNAGE SUMMARY

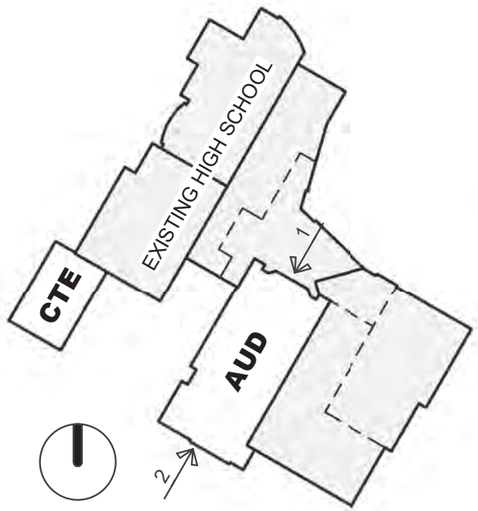
MARK	DESCRIPTION	SIZE	NOTE
SIGN #1	H.S. LETTERING	32 S.F.	SEE ABOVE
SIGN #2	MONUMENT SIGN	60 S.F.	SEE ABOVE
SIGN #3	M.S. LETTERING	32 S.F.	SEE ABOVE
SIGN #4	H.S. LETTERING	85 S.F.	SEE NEXT PAGE
SIGN #5	TITAN HEAD	200 S.F.	SEE NEXT PAGE
SIGN #6	VINYL LETTERING*	410 S.F.	SEE NEXT PAGE
SIGN #7	OPS LETTERING	50 S.F.	SEE NEXT PAGE
SIGN #8	ADDRESS NUMBERS	8 S.F.	SEE NEXT PAGE
	TOTAL	467 S.F.	

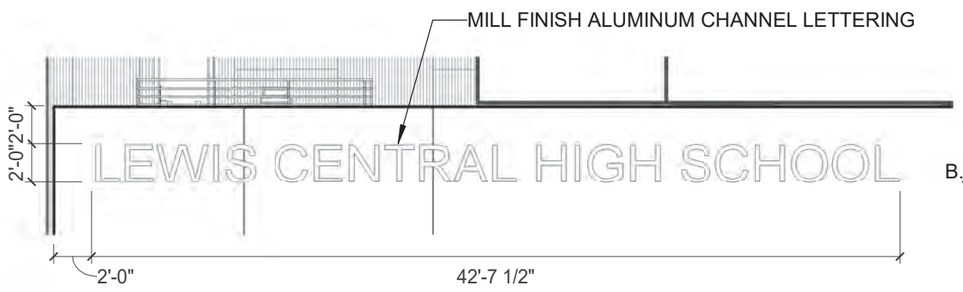
**VINYL LETTERING APPLIED TO INTERIOR OF GLASS, NOT PART OF TOTAL*

BVH

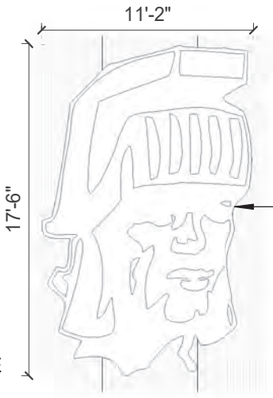
LCCS AUDITORIUM AND CTE ADDITIONS
EXTERIOR SIGNAGE KEY

06/13/20





B.O. SIGNAGE
149'-0"



B.O. SIGNAGE
141'-6"

1A EXTERIOR SIGNAGE - SCHOOL NAME

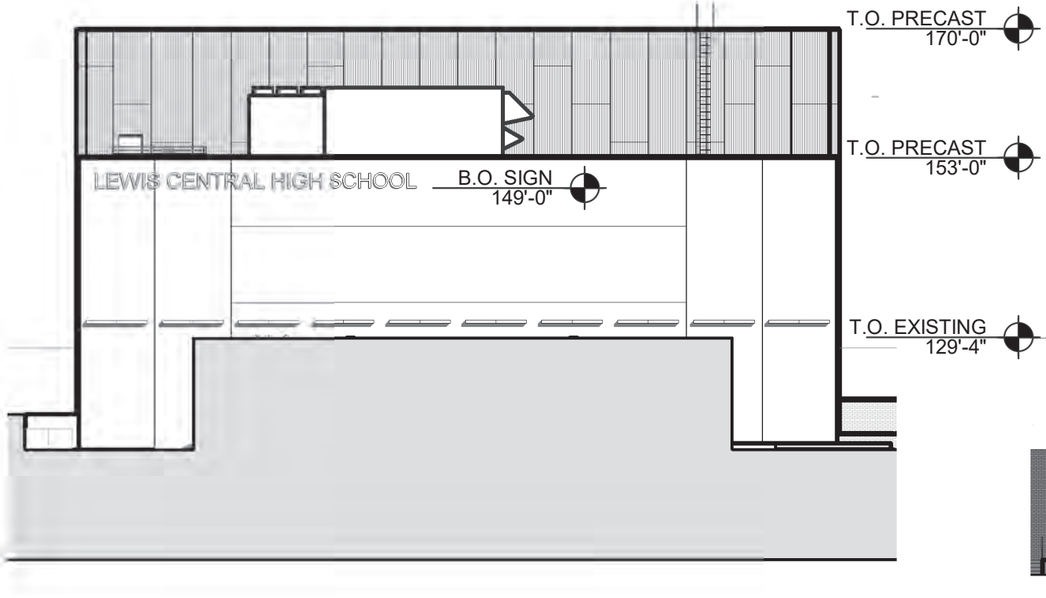
1/8" = 1'-0"

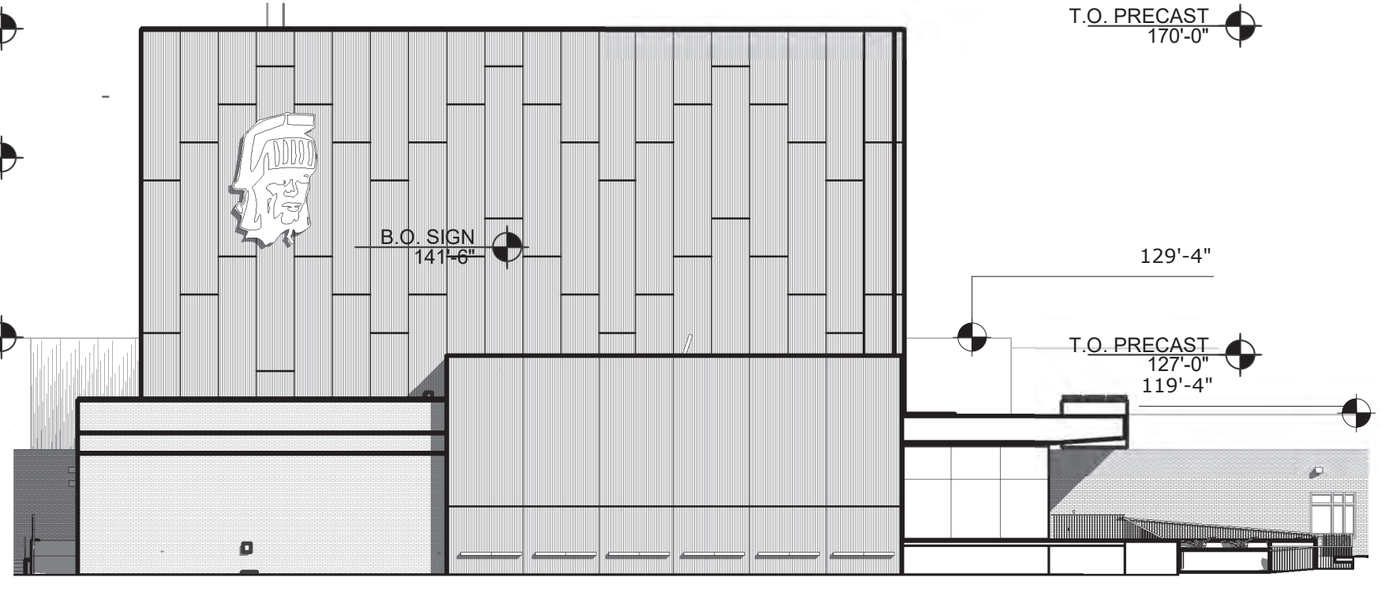
SIGN #4

2A EXTERIOR SIGNAGE - TITAN LOGO

1/8" = 1'-0"

SIGN #5





1 EXTERIOR SIGNAGE - NORTH

1" = 20'-0"

SIGN #4

2 EXTERIOR SIGNAGE - SOUTH

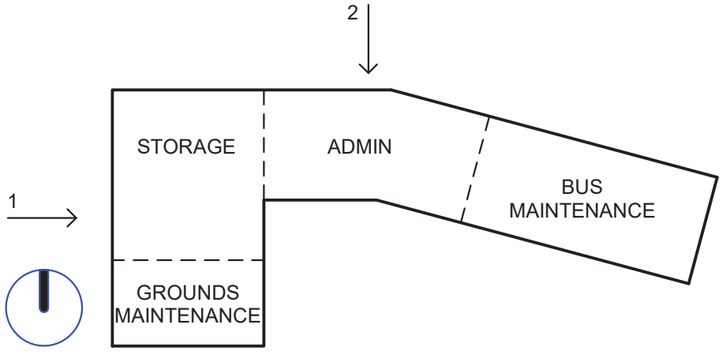
1" = 20'-0"

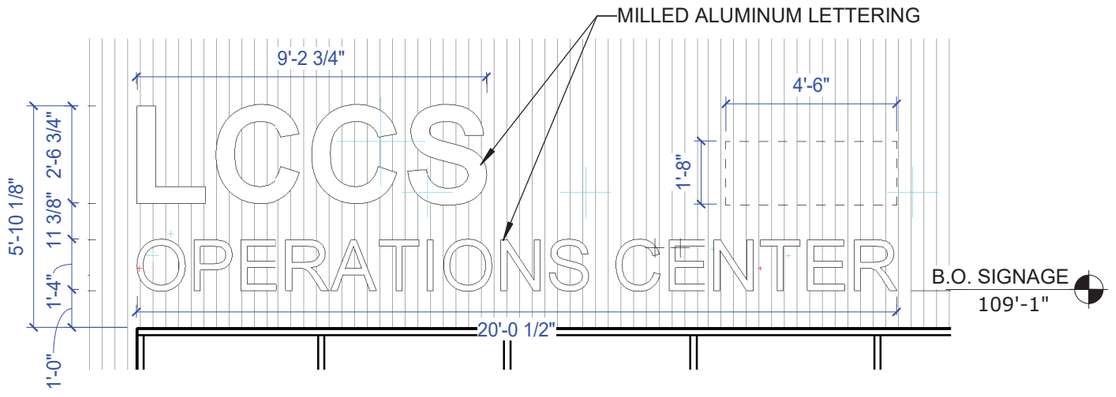
SIGN #5

BVH

LCCS AUDITORIUM AND CTE ADDITIONS
EXTERIOR SIGNAGE

06/09/20

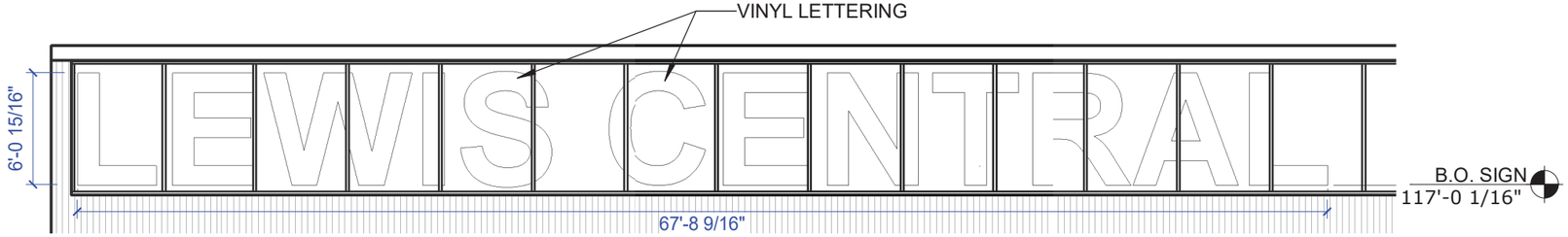




2A EXTERIOR SIGNAGE - BLDG NAME

1/4" = 1'-0"

SIGN #7 + #8

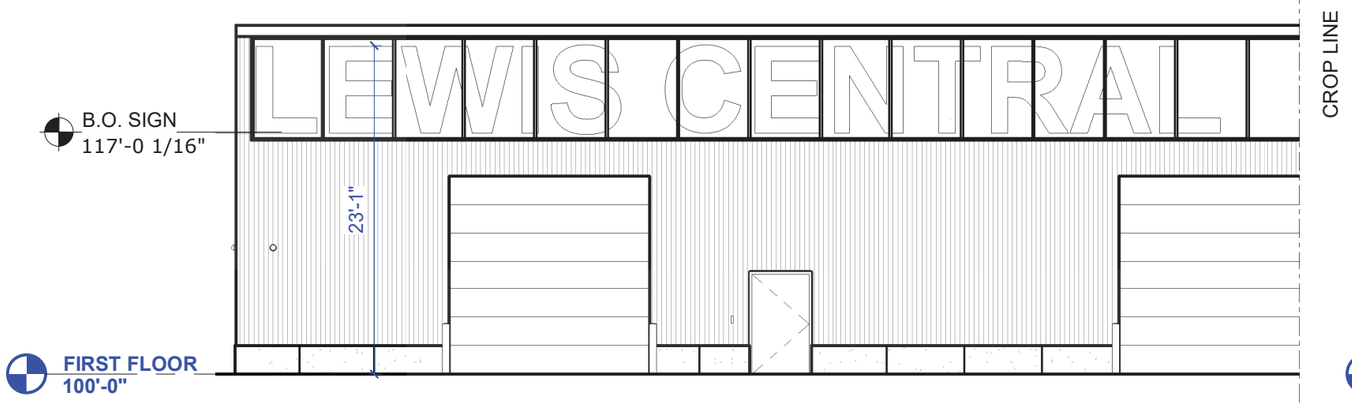


1A EXTERIOR SIGNAGE - SCHOOL NAME

1/8" = 1'-0"

SIGN #6

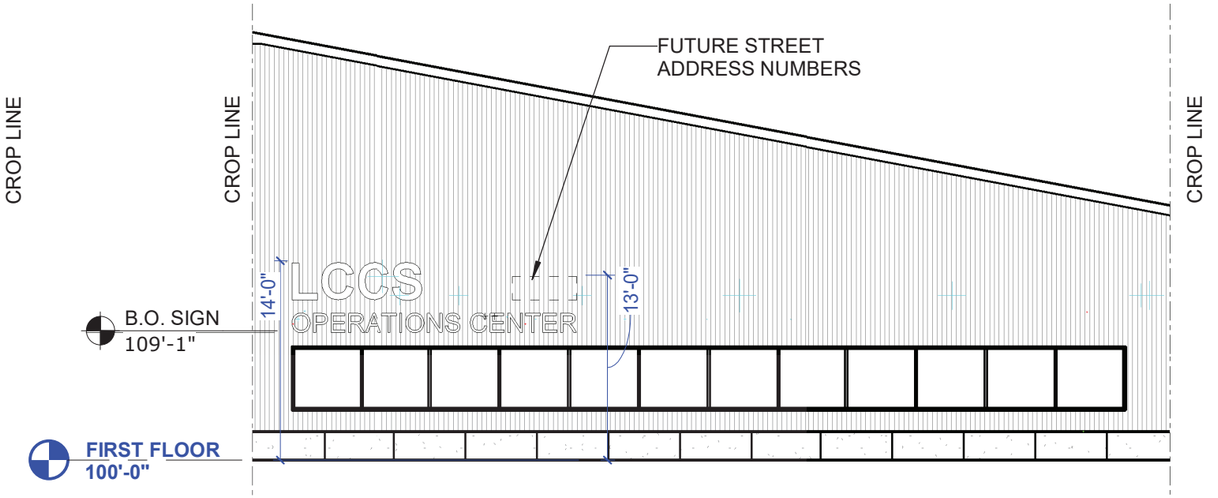
NOTE: PER COUNCIL BLUFFS CITY ORDINANCE, LETTERING APPLIED TO THE INTERIOR FACE OF GLAZING DOES NOT QUALIFY AS SIGNAGE AND IS NOT PART OF SIGNAGE CALCULATIONS.



1 EXTERIOR SIGNAGE - WEST

3/32" = 1'-0"

SIGN #6



2 EXTERIOR SIGNAGE - NORTH

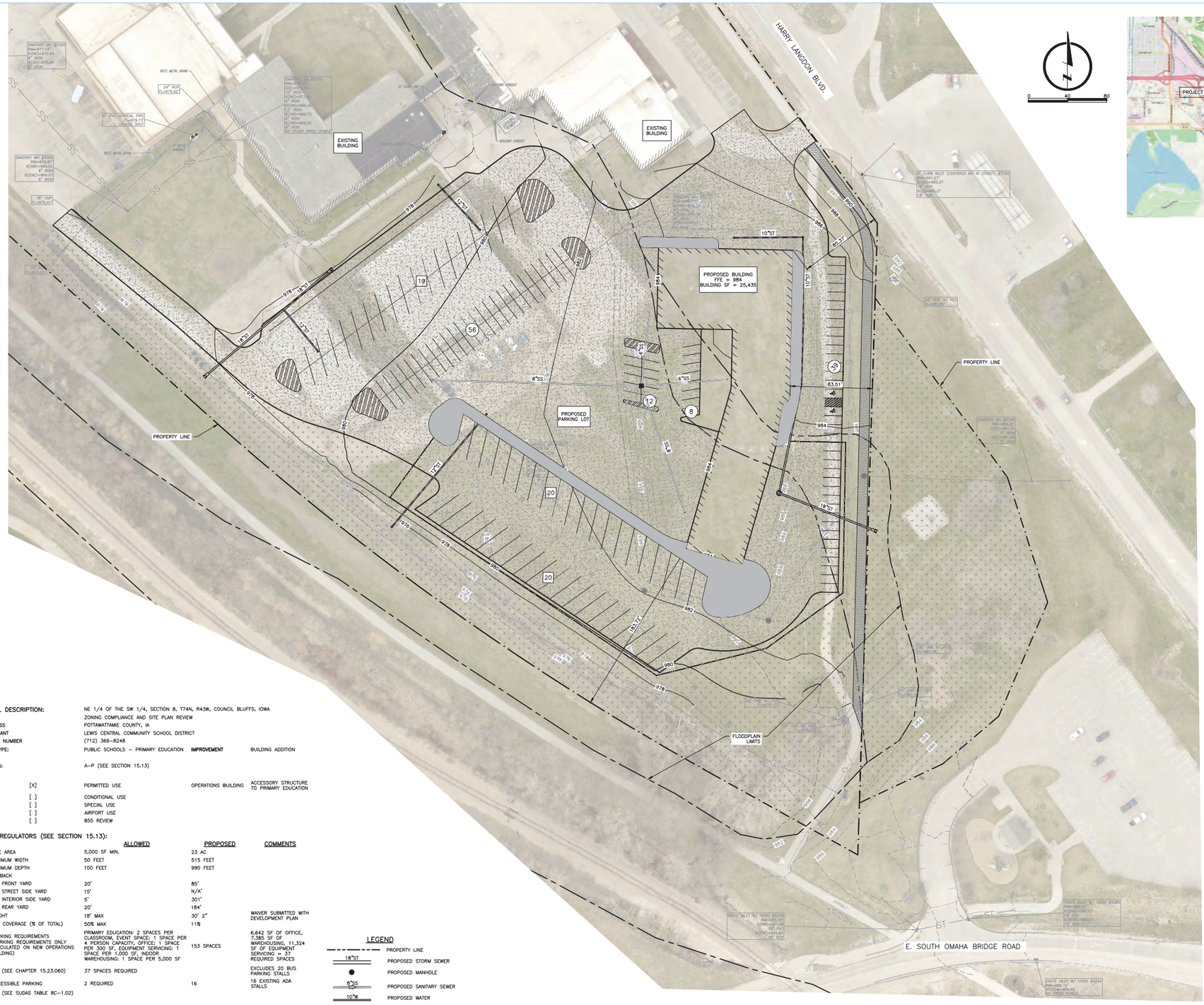
3/32" = 1'-0"

SIGN #7 + #8

BVH

LCCS OPERATIONS CENTER
EXTERIOR SIGNAGE

06/09/20





LOCATION MAP

BVH

ARCHITECT
BVH ARCHITECTURE
901 JONES STREET
OMAHA NE 68102
V 402 345 3060
F 402 345 7871
bvh.com

GEOTECHNICAL ENGINEER
THIELE GEOTECH INC.
13478 CHANDLER ROAD
OMAHA, NE 68138
V 402 556 2171
thielegeotech.com

CIVIL ENGINEER
LAMP RYNEARSON
14710 W DODGE RD #100
OMAHA, NE 68154
V 402 496 2498
lamprynearson.com

LEGAL DESCRIPTION: NE 1/4 OF THE SW 1/4, SECTION 8, T74N, R43W, COUNCIL BLUFFS, IOWA

ZONING COMPLIANCE AND SITE PLAN REVIEW

ADDRESS	POTTAWATTAMIE COUNTY, IA
APPLICANT	LEWIS CENTRAL COMMUNITY SCHOOL DISTRICT
PHONE NUMBER	(712) 366-8248
USE TYPE:	PUBLIC SCHOOLS – PRIMARY EDUCATION **IMPROVEMENT** BUILDING ADDITION
ZONING:	A-P (SEE SECTION 15.13)

[X]	PERMITTED USE	OPERATIONS BUILDING	ACCESSORY STRUCTURE TO PRIMARY EDUCATION
[ ]	CONDITIONAL USE		
[ ]	SPECIAL USE		
[ ]	AIRPORT USE		
[ ]	855 REVIEW		

SITE REGULATORS (SEE SECTION 15.13):

	ALLOWED	PROPOSED	COMMENTS
A. SITE AREA	5,000 SF MIN.	23 AC	
B. MINIMUM WIDTH	50 FEET	515 FEET	
C. MINIMUM DEPTH	100 FEET	990 FEET	
D. SETBACK			
FRONT YARD	20'	85'	
STREET SIDE YARD	15'	N/A'	
INTERIOR SIDE YARD	5'	301'	
REAR YARD	20'	184'	
E. HEIGHT	18' MAX	30' 2"	WAIVER SUBMITTED WITH DEVELOPMENT PLAN
F. LOT COVERAGE (% OF TOTAL)	50% MAX	11%	
G. PARKING REQUIREMENTS (PARKING REQUIREMENTS ONLY CALCULATED ON NEW OPERATIONS BUILDING)	PRIMARY EDUCATION: 2 SPACES PER CLASSROOM, EVENT SPACE: 1 SPACE PER 4 PERSON CAPACITY, OFFICE: 1 SPACE PER 300 SF, EQUIPMENT SERVICING: 1 SPACE PER 1,000 SF, INDOOR WAREHOUSING: 1 SPACE PER 5,000 SF	153 SPACES	6,642 SF OF OFFICE, 7,385 SF OF WAREHOUSING, 11,324 SF OF EQUIPMENT SERVICING = 37 REQUIRED SPACES
(SEE CHAPTER 15.23.060)	37 SPACES REQUIRED		EXCLUDES 20 BUS PARKING STALLS
H. ACCESSIBLE PARKING (SEE SUDAS TABLE 8C-1.02)	2 REQUIRED	16	16 EXISTING ADA STALLS

BUFFERYARD (SEE SECTION 15.23):

ADJACENT ZONING:	R-1 NORTH, A-2 SOUTH, A-2 EAST AND A-P WEST
K. LANDSCAPED BUFFER YARD	N/A

PARKING LANDSCAPE REQUIREMENTS (SEE SECTION 15.23):

L. STREET SIDE YARD	5'	N/A'	EXISTING BUILDING
M. INTERIOR SIDE YARD	5'	200'	EXISTING BUILDING ASSUMING EXISTING PARKING LOT OMITTED.
N. INTERIOR LANDSCAPING (%) (% OF PAVED AREA)	10%	10%	INTERIOR LANDSCAPE PERCENTAGE CALCULATED ON PROPOSED PARKING LOT

LEGEND

- PROPERTY LINE
- PROPOSED STORM SEWER
- PROPOSED MANHOLE
- PROPOSED SANITARY SEWER
- PROPOSED WATER
- PROPOSED F.E.S.
- PROPOSED CURB INLET (BY OTHERS)
- SECTION LINE
- SECTION CORNER
- FENCE LINE
- PROPOSED CONTOUR
- EXISTING CONTOUR
- FLOODWAY
- PROPOSED 7" PCC PAVEMENT
- PROPOSED SEED MIX
- PROPOSED PLANTING BED

IOWA ONE CALL
1-800-292-8989
www.iowaonecall.com
811 Iowa One Call

REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION

REZONING APPLICATION EXHIBIT

PROJECT: 18306-S DATE: 06/16/2020

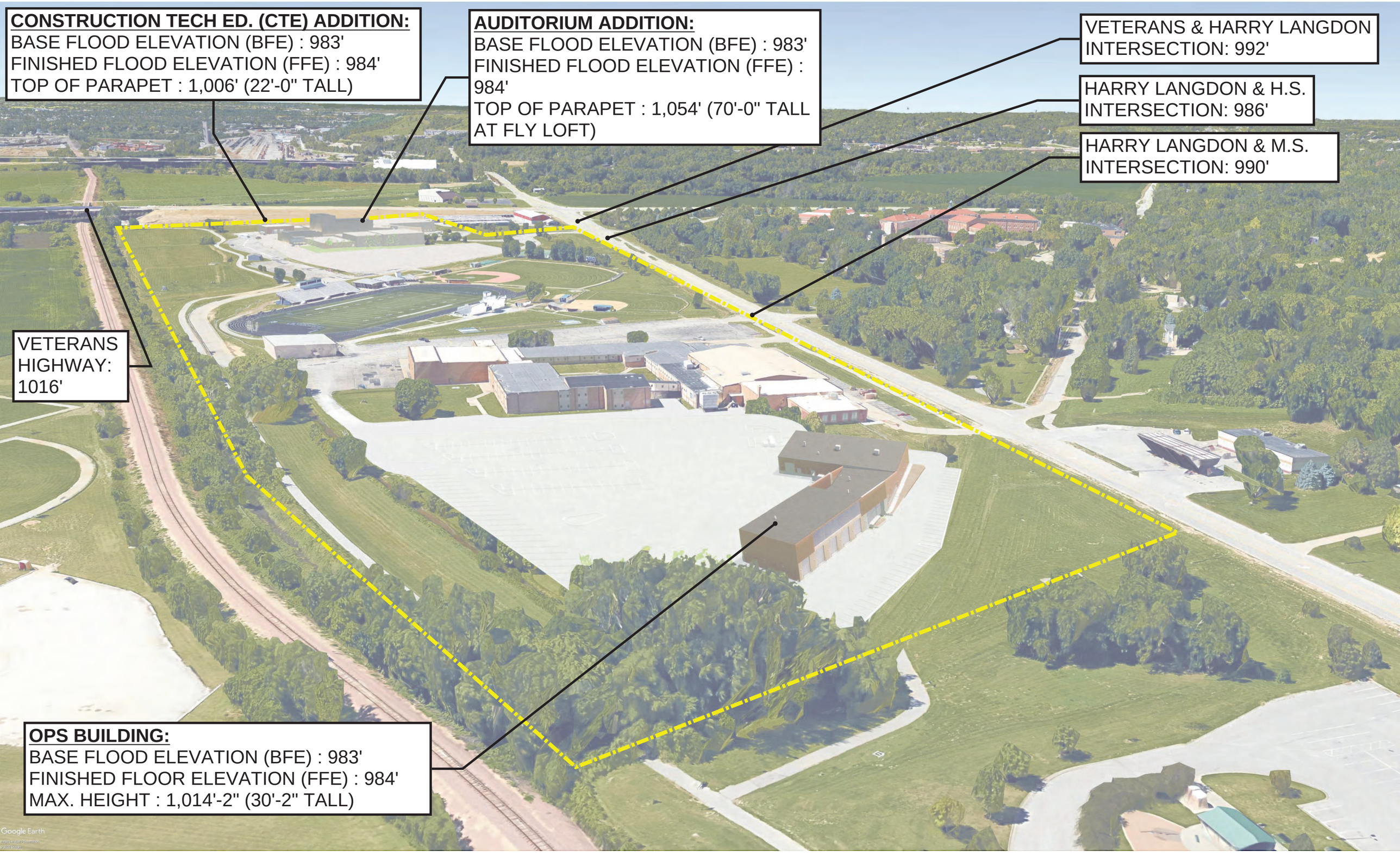
© COPYRIGHT BVH ARCHITECTURE

MIDDLE SCHOOL SITE EXHIBIT

LAMP RYNEARSON
14710 W. DODGE RD. STE. 100
OMAHA, NE 68154
402.496.2498
LampRynearson.com

DESIGNED / DRAWN
REVIEWED
PROJECT MANAGER
DATE 06/16/2020

Attachment D


CONSTRUCTION TECH ED. (CTE) ADDITION:
BASE FLOOD ELEVATION (BFE) : 983'
FINISHED FLOOD ELEVATION (FFE) : 984'
TOP OF PARAPET : 1,006' (22'-0" TALL)
AUDITORIUM ADDITION:
BASE FLOOD ELEVATION (BFE) : 983'
FINISHED FLOOD ELEVATION (FFE) : 984'
TOP OF PARAPET : 1,054' (70'-0" TALL AT FLY LOFT)
VETERANS & HARRY LANGDON INTERSECTION: 992'
HARRY LANGDON & H.S. INTERSECTION: 986'
HARRY LANGDON & M.S. INTERSECTION: 990'
VETERANS HIGHWAY: 1016'
OPS BUILDING:
BASE FLOOD ELEVATION (BFE) : 983'
FINISHED FLOOR ELEVATION (FFE) : 984'
MAX. HEIGHT : 1,014'-2" (30'-2" TALL)
Google Earth

AUDITORIUM EXTERIOR MATERIALS ANALYSIS

TOTAL EXTERIOR MATERIAL SQUARE FOOTAGE: 31,526

PRECAST: 24,682 SF / 78%
BRICK: 5,036 SF / 16%
METAL PANEL: 781 SF / 3%
GLAZING: 738 SF / 2%
EIFS: 289 SF / 1%

PRELIMINARY MATERIALS LIST

1A 034500 ARCHITECTURAL PRECAST CONCRETE:
MFR: TBD
COLOR: TBD
FINISH: ACID ETCHED

1B 034500 ARCHITECTURAL PRECAST CONCRETE:
MFR: TBD
COLOR: TBD
FINISH: FORM LINER

2 033000 CAST-IN-PLACE CONCRETE:
MFR:
COLOR: STANDARD GREY
FINISH: RUBBED AT EXPOSED SURFACES

3 042000 BRICK VENEER:
MFR: TBD
COLOR: TBD
MORTAR: COLORED
HORIZONTAL REVEALS

4 074213 METAL PANEL WALL SYSTEM:
MFR: FIRESTONE
PRODUCT: FLAT-LOCK METAL PANELS
SIZE: 16" X 48" PANELS
COLOR: CHARCOAL GRAY

5 07XXXX EXTERIOR INSULATING FINISH (EIFS):
MFR: TBD
PRODUCT:
COLOR: MATCH P-8

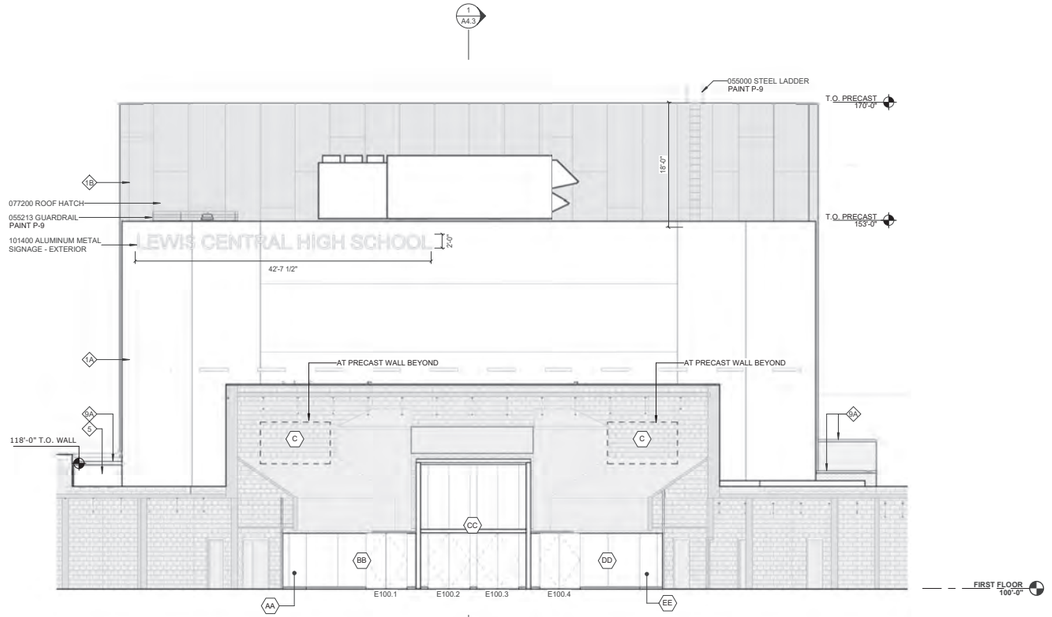
6 084313 ALUMINUM FRAMED STOREFRONT:
MFR: KAWNEER
PRODUCT: 451T FRONT GLAZED
COLOR: CLEAR ANODIZED

7 084413 ALUMINUM FRAMED CURTAINWALL:
MFR: KAWNEER
PRODUCT: 1600 FRONT GLAZED
MULLIONS: SSG VERTICAL MULLIONS
COLOR: CLEAR ANODIZED

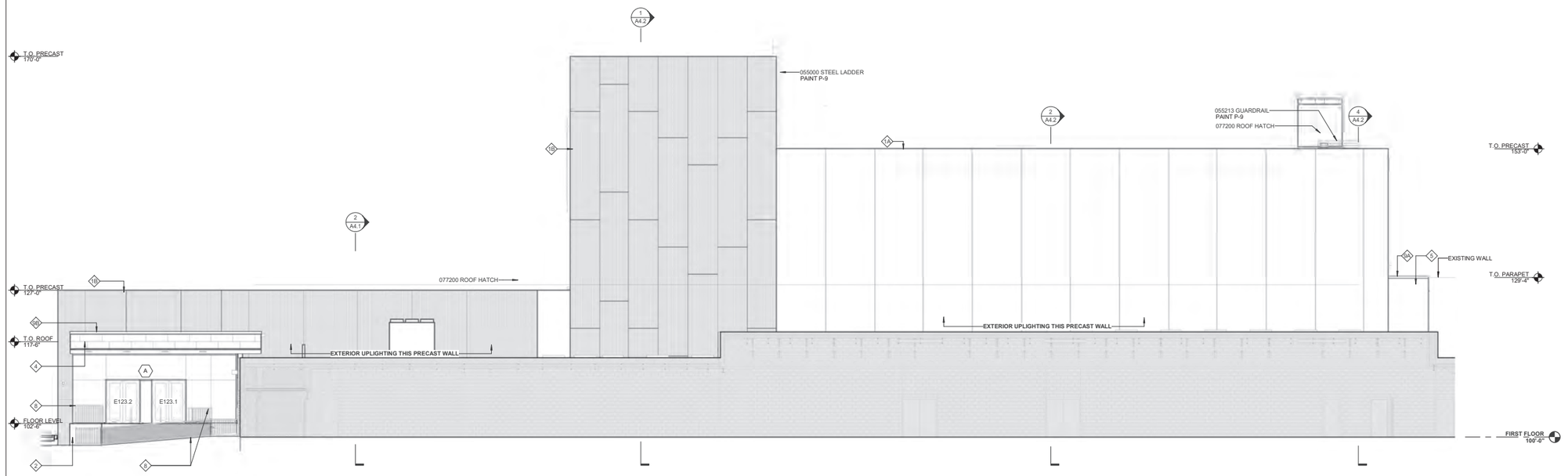
8 METAL GUARD & HANDRAILS:
MFR: TBD
FINISH: GALVANIZED, PAINTED P-7
RECTANGULAR BAR RAILS & BALLASTERS

9A 076200 SHEET METAL CAP FLASHING:
MFR: FIRESTONE
COLOR: MATCH P-8
LOCATION: AT EIFS & BRICK PARAPETS

9B 076200 SHEET METAL CAP FLASHING:
MFR: FIRESTONE
COLOR: MATCH P-7
LOCATION: AT METAL PANEL PARAPETS



1 NORTH ELEVATION
1/8" = 1'-0"



2 EAST ELEVATION
1/8" = 1'-0"

6/17/2020, 10:14:48 PM

ARCHITECT
BVH ARCHITECTURE
901 JONES STREET
OMAHA NE 68102
V 402 345 3060
F 402 345 7871
bvh.com

MEP ENGINEER
ALVINE ENGINEERING
1201 CASS ST
OMAHA, NE 68102
V 402 346 7007
alvine.com

STRUCTURAL ENGINEER
LANGE STRUCTURAL GROUP
3616 POTOMAC LANE
LINCOLN NE 68516
V 402 421 9540
langestructuralgroup.com

CIVIL ENGINEER
LAMP RYNEARSON
14710 W DODGE RD #100
OMAHA, NE 68154
V 402 496 2498
lamprynearson.com

ACOUSTICAL/AVIT CONSULTANT
IP DESIGN GROUP
1201 CASS ST
OMAHA, NE 68102
V 402 346 7007
ipdesigngroup.com

THEATRICAL & SEATING DESIGN CONSULTANT
SCHULER SHOOK
750 N ORLEANS #400
CHICAGO, IL 60654
V 312 944 8230
schulershook.com

REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION

LCCS AUDITORIUM AND CTE ADDITIONS

PROJECT: 18306 **DATE:** 06/29/2020

© COPYRIGHT BVH ARCHITECTURE

DRAFT

BUILDING ELEVATIONS

A3.1

AUDITORIUM EXTERIOR MATERIALS ANALYSIS

TOTAL EXTERIOR MATERIAL SQUARE FOOTAGE: 31,526

PRECAST: 24,682 SF / 78%
BRICK: 5,036 SF / 16%
METAL PANEL: 781 SF / 3%
GLAZING: 738 SF / 2%
EIFS: 289 SF / 1%

PRELIMINARY MATERIALS LIST

1A **034500 ARCHITECTURAL PRECAST CONCRETE:**
MFR: TBD
COLOR: TBD
FINISH: ACID ETCHED

3 **042000 BRICK VENEER:**
MFR: TBD
COLOR: TBD
MORTAR: COLORED
HORIZONTAL REVEALS

6 **084313 ALUMINUM FRAMED STOREFRONT:**
MFR: KAWNEER
PRODUCT: 451T FRONT GLAZED
COLOR: CLEAR ANODIZED

9A **076200 SHEET METAL CAP FLASHING:**
MFR: FIRESTONE
COLOR: MATCH P-8
LOCATION: AT EIFS & BRICK PARAPETS

1B **034500 ARCHITECTURAL PRECAST CONCRETE:**
MFR: TBD
COLOR: TBD
FINISH: FORM LINER

4 **074213 METAL PANEL WALL SYSTEM:**
MFR: FIRESTONE
PRODUCT: FLAT-LOCK METAL PANELS
SIZE: 16" X 48" PANELS
COLOR: CHARCOAL GRAY

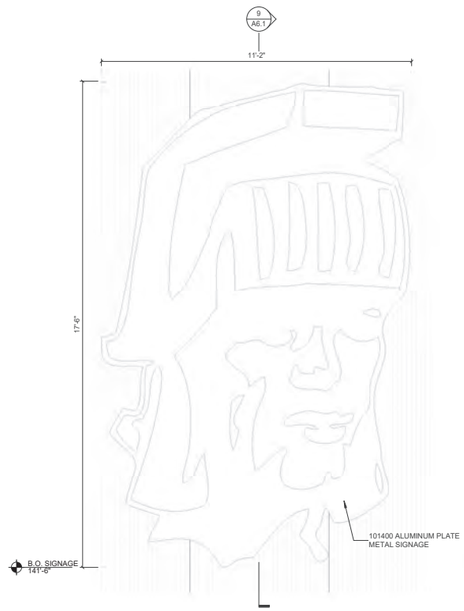
7 **084413 ALUMINUM FRAMED CURTAINWALL:**
MFR: KAWNEER
PRODUCT: 1600 FRONT GLAZED
MULLIONS: SSG VERTICAL MULLIONS
COLOR: CLEAR ANODIZED

9B **076200 SHEET METAL CAP FLASHING:**
MFR: FIRESTONE
COLOR: MATCH P-7
LOCATION: AT METAL PANEL PARAPETS

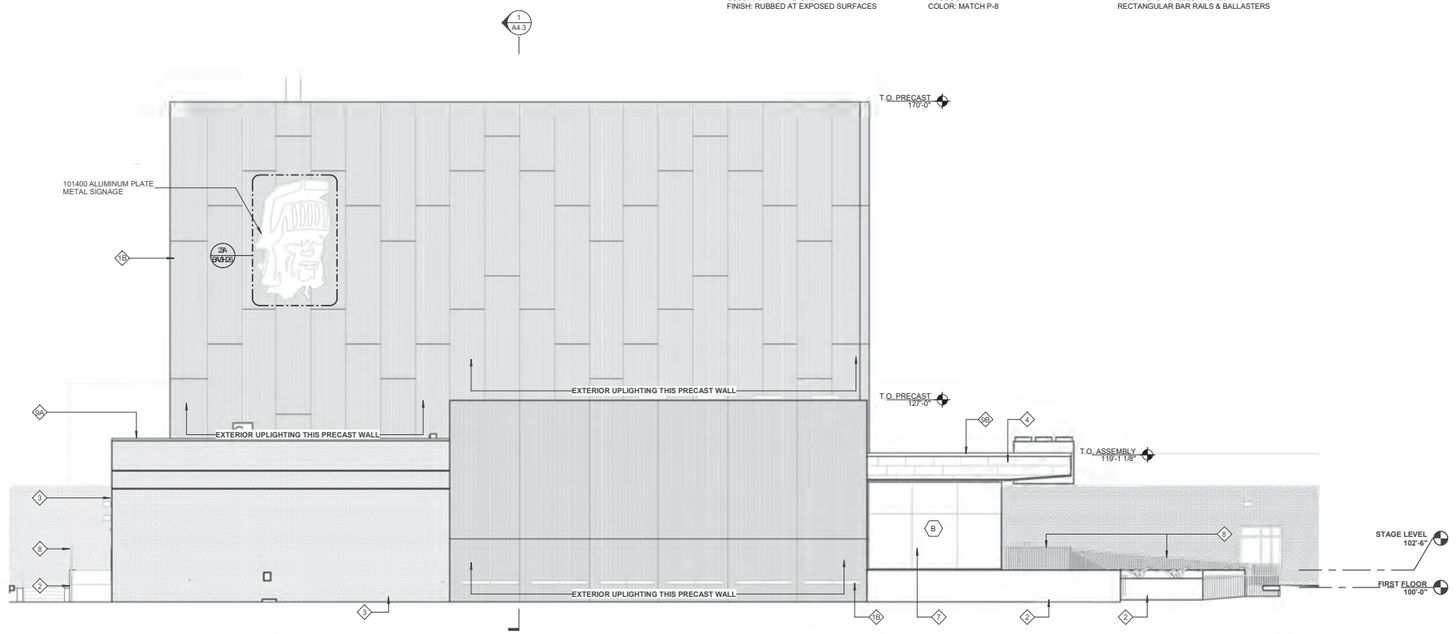
2 **033000 CAST-IN-PLACE CONCRETE:**
MFR:
COLOR: STANDARD GREY
FINISH: RUBBED AT EXPOSED SURFACES

5 **07XXXX EXTERIOR INSULATING FINISH (EIFS):**
MFR: TBD
PRODUCT:
COLOR: MATCH P-8

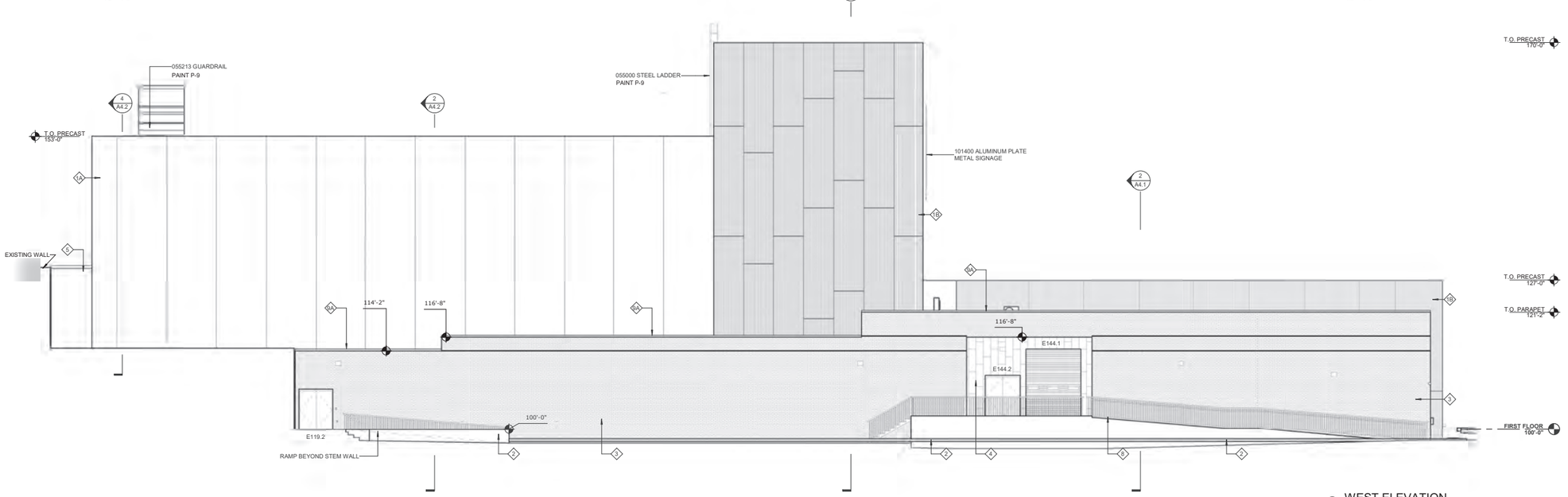
8 **METAL GUARD & HANDRAILS:**
MFR: TBD
FINISH: GALVANIZED, PAINTED P-7
RECTANGULAR BAR RAILS & BALLASTERS



3 ENL ELEV - TITAN HEAD LOGO
1/2" = 1'-0"



1 SOUTH ELEVATION
1/8" = 1'-0"



2 WEST ELEVATION
1/8" = 1'-0"

ARCHITECT
BVH ARCHITECTURE
901 JONES STREET
OMAHA NE 68102
V 402 345 3060
F 402 345 7871
bvh.com

MEP ENGINEER
ALVINE ENGINEERING
1201 CASS ST
OMAHA, NE 68102
V 402 346 7007
alvine.com

STRUCTURAL ENGINEER
LANGE STRUCTURAL GROUP
3616 POTOMAC LANE
LINCOLN NE 68516
V 402 421 9540
langestructuralgroup.com

CIVIL ENGINEER
LAMP RYNEARSON
14710 W DODGE RD #100
OMAHA, NE 68154
V 402 496 2498
lamprynearson.com

ACOUSTICAL/AVIT CONSULTANT
IP DESIGN GROUP
1201 CASS ST
OMAHA, NE 68102
V 402 346 7007
ipdesigngroup.com

THEATRICAL & SEATING DESIGN CONSULTANT
SCHULER SHOOK
750 N ORLEANS #400
CHICAGO, IL 60654
V 312 944 8230
schulershook.com

REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION

LCCS AUDITORIUM AND CTE ADDITIONS

PROJECT: 18306 **DATE:** 06/29/2020

© COPYRIGHT BVH ARCHITECTURE

DRAFT

BUILDING ELEVATIONS

A3.2

8/31/2020 10:15:02 PM

CTE EXTERIOR MATERIALS ANALYSIS

TOTAL EXTERIOR MATERIAL SQUARE FOOTAGE: 7,246

BRICK: 6,993 SF / 97%
METAL PANEL: 253 SF / 3%

PRELIMINARY MATERIALS LIST

1A 034500 ARCHITECTURAL PRECAST CONCRETE:
MFR: TBD
COLOR: TBD
FINISH: ACID ETCHED

1B 034500 ARCHITECTURAL PRECAST CONCRETE:
MFR: TBD
COLOR: TBD
FINISH: FORM LINER

2 033000 CAST-IN-PLACE CONCRETE:
MFR:
COLOR: STANDARD GREY
FINISH: RUBBED AT EXPOSED SURFACES

3 042000 BRICK VENEER:
MFR: TBD
COLOR: TBD
MORTAR: COLORED
HORIZONTAL REVEALS

4 074213 METAL PANEL WALL SYSTEM:
MFR: FIRESTONE
PRODUCT: FLAT-LOCK METAL PANELS
SIZE: 16" X 48" PANELS
COLOR: CHARCOAL GRAY

5 07XXXX EXTERIOR INSULATING FINISH (EIFS):
MFR: TBD
PRODUCT:
COLOR: MATCH P-8

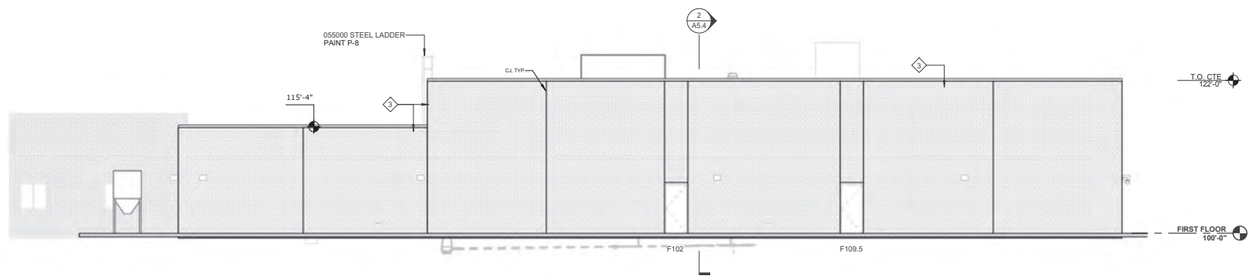
6 084313 ALUMINUM FRAMED STOREFRONT:
MFR: KAWNEER
PRODUCT: 451T FRONT GLAZED
COLOR: CLEAR ANODIZED

7 084413 ALUMINUM FRAMED CURTAINWALL:
MFR: KAWNEER
PRODUCT: 1600 FRONT GLAZED
MULLIONS: SSG VERTICAL MULLIONS
COLOR: CLEAR ANODIZED

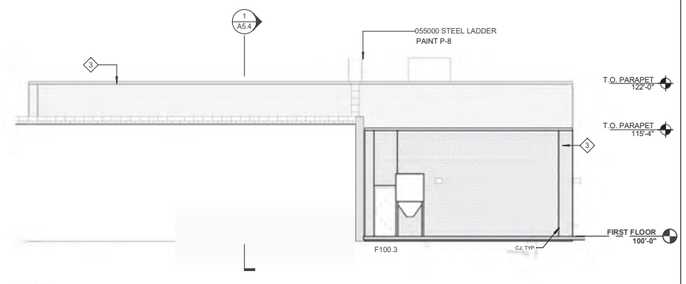
8 METAL GUARD & HANDRAILS:
MFR: TBD
FINISH: GALVANIZED, PAINTED P-7
RECTANGULAR BAR RAILS & BALLASTERS

9A 076200 SHEET METAL CAP FLASHING:
MFR: FIRESTONE
COLOR: MATCH P-8
LOCATION: AT EIFS & BRICK PARAPETS

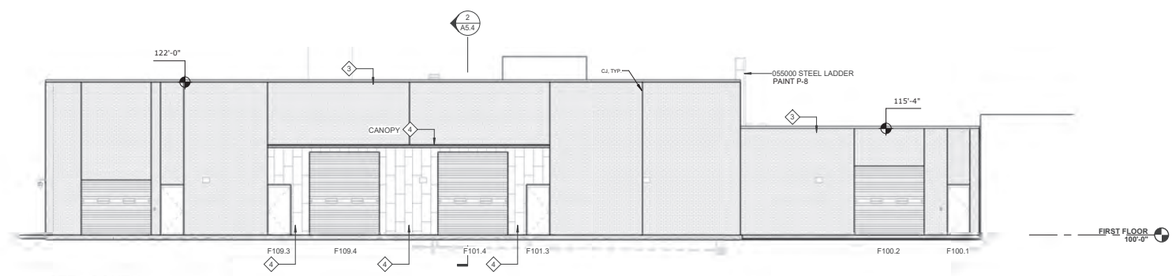
9B 076200 SHEET METAL CAP FLASHING:
MFR: FIRESTONE
COLOR: MATCH P-7
LOCATION: AT METAL PANEL PARAPETS



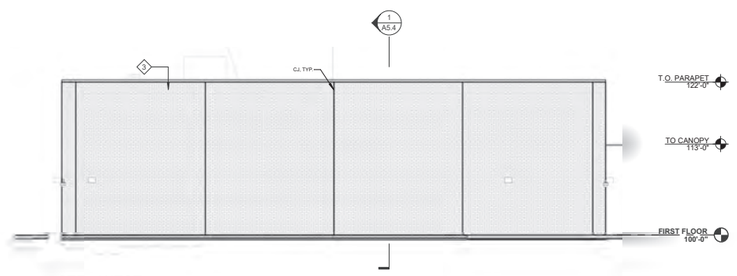
2 CTE - NORTH
1/8" = 1'-0"



4 CTE - EAST
1/8" = 1'-0"



1 CTE - SOUTH
1/8" = 1'-0"



3 CTE - WEST
1/8" = 1'-0"

ARCHITECT
BVH ARCHITECTURE
901 JONES STREET
OMAHA NE 68102
V 402 345 3060
F 402 345 7871
bvh.com

MEP ENGINEER
ALVINE ENGINEERING
1201 CASS ST
OMAHA, NE 68102
V 402 346 7007
alvine.com

STRUCTURAL ENGINEER
LANGE STRUCTURAL GROUP
3616 POTOMAC LANE
LINCOLN NE 68516
V 402 421 9540
langestructuralgroup.com

CIVIL ENGINEER
LAMP RYNEARSON
14710 W DODGE RD #100
OMAHA, NE 68154
V 402 496 2498
lamprynearson.com

ACOUSTICAL/AVIT CONSULTANT
IP DESIGN GROUP
1201 CASS ST
OMAHA, NE 68102
V 402 346 7007
ipdesigngroup.com

THEATRICAL & SEATING DESIGN CONSULTANT
SCHULER SHOOK
750 N ORLEANS #400
CHICAGO, IL 60654
V 312 944 8230
schulershook.com

REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION

LCCS AUDITORIUM AND CTE ADDITIONS

PROJECT: 18306 **DATE:** 06/29/2020

© COPYRIGHT BVH ARCHITECTURE

DRAFT

BUILDING ELEVATIONS

A3.3

6/11/2020 10:15:07 PM

OPERATIONS BUILDING EXTERIOR MATERIALS ANALYSIS

TOTAL EXTERIOR MATERIALS SQUARE FOOTAGE: 19,210 SF

PRECAST: 4,404 SF / 23%
METAL PANEL: 11,718 SF / 61%
GLAZING: 3,088 SF / 16%

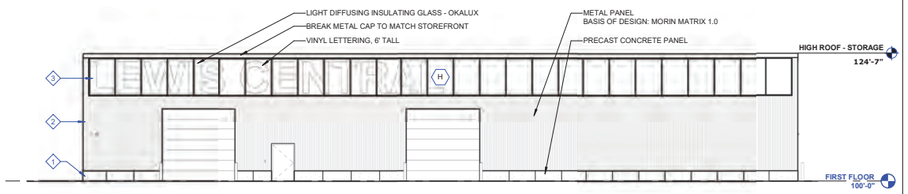
PRELIMINARY MATERIALS LIST

1 034510 ARCHITECTURAL PRECAST CONCRETE:
MFR: TBD
COLOR: TBD
FINISH: MEDIUM SANDBLAST

2 074213 METAL WALL PANELS:
MFR: MORIN
PRODUCT: MATRIX SERIES MX1.0
SIZE: 12" NOMINAL WIDTH
COLOR: TBD

3 084313 METAL FRAMED STOREFRONTS
MFR: KAWNEER
PRODUCT: 451T
COLOR: CLEAR ANODIZED

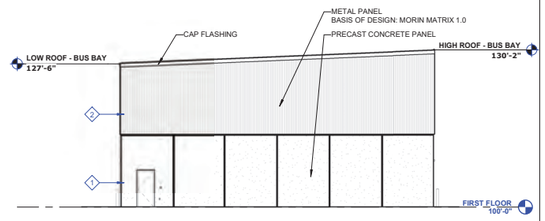
4 084413 ALUMINUM CURTAINWALL
MFR: KAWNEER
PRODUCT: 1600 FRONT-GLAZED
COLOR: CLEAR ANODIZED



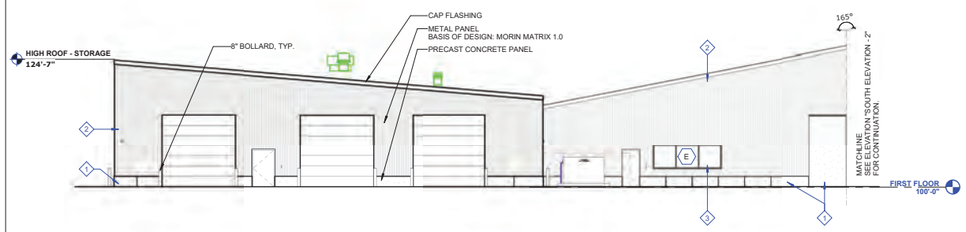
1 WEST ELEVATION - STORAGE
3/32" = 1'-0"



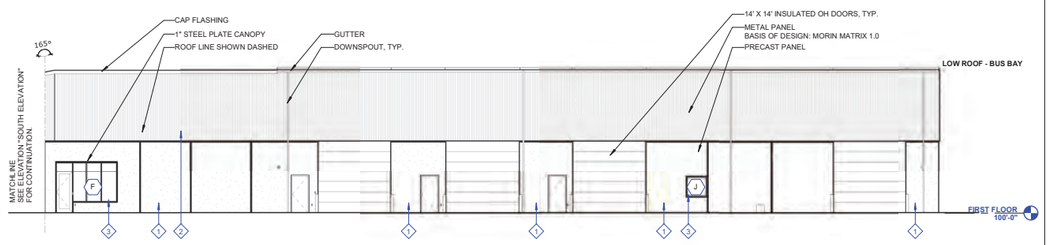
2 EAST ELEVATION - STORAGE
3/32" = 1'-0"



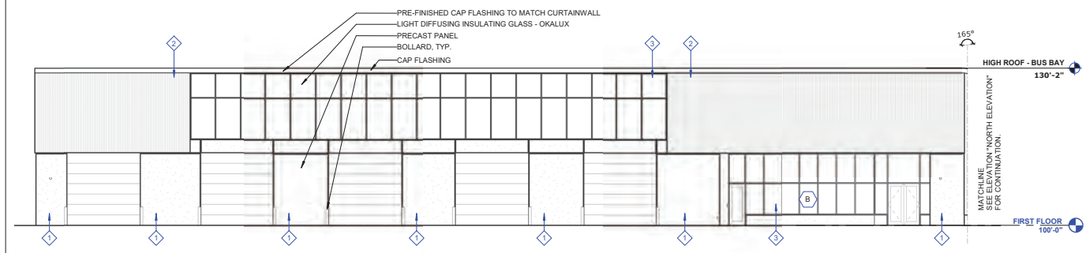
3 EAST ELEVATION - BUS BAY
3/32" = 1'-0"



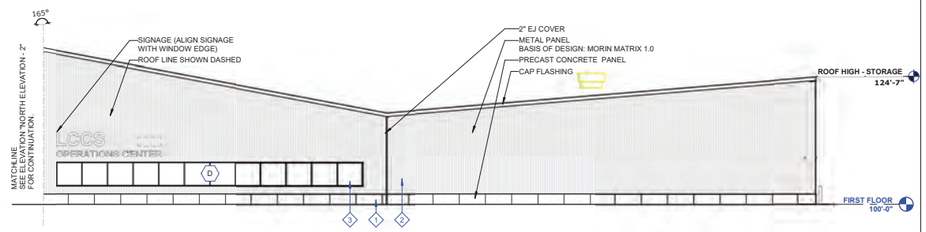
4 SOUTH ELEVATION
3/32" = 1'-0"



5 SOUTH ELEVATION - CONT.
3/32" = 1'-0"



6 NORTH ELEVATION
3/32" = 1'-0"



7 NORTH ELEVATION - CONT.
3/32" = 1'-0"

ARCHITECT
BVH ARCHITECTURE
440 N 8TH ST STE 100
LINCOLN NE 68508
V 402 475 4551
F 402 475 0226
bvh.com

MEP
ALVINE ENGINEERING
1102 DOUGLAS ST
OMAHA, NE 68102
V 402 346 7007
alvine.com

STRUCTURAL
LANGE STRUCTURAL GROUP
3616 POTOMAC LANE
LINCOLN NE 68516
V 402 421 9540
langestructuralgroup.com

CIVIL
LAMP RYNEARSON
14710 W DODGE RD #100
OMAHA, NE 68154
V 402.496.2498
lra-inc.com

REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION

LCCS OPERATIONS CENTER

PROJECT: 18305 **DATE:** 4/29/2020

© COPYRIGHT BVH ARCHITECTURE

DRAFT

BUILDING ELEVATIONS

PROJECT NORTH TRUE NORTH

A3.1

4/3/2020 3:51:11 PM

Attachment E

CERTIFICATE OF OWNERSHIP

FILE NO: 0289104

TO: Lamp, Rynearson & Associates, Inc.
Joe Zadina

Nebraska Title Company, authorized to engage in the business of abstracting in the State of Nebraska under Certificate of Authority No. 716, hereby certifies that the records of POTTAWATTAMIE County, Nebraska have been carefully examined with reference to the following described property, and from such examination finds as follows:

LEGAL DESCRIPTION:

Parcel 1:

Part of the East Half of Section 7, Township 74 North, Range 43 West of the 5th Principal Meridian, and Part of the West Half of Section 8, Township 74 North, Range 43 West of the 5th Principal Meridian, as surveyed and recorded in Pottawattamie County, Iowa, being more particularly described as follows:

Commencing at the East Quarter corner of said Section 7, thence North 89° 58' 26" West (Assumed bearing), along the North line of the Northeast Quarter of the Southeast Quarter if said Section 7, a distance of 120.64 feet to a point on the West line of Highway 375, said point being the true point of beginning; thence Southeasterly, along said West line and along a 114,531.56 foot radius curve to the right, an arc distance of 201.47 feet (said curve has a chord bearing South 38° 04' 39" East and a chord distance of 201.47 feet); thence South 38° 02' 08" East along said West line a distance of 361.44 feet; thence North 89° 59' 18" East, along said West line, a distance of 34.28 feet; thence South 37° 48' 44" East, along said West line, a distance of 1,738.47 feet; thence South 00° 03' 10" West a distance of 647.06 feet to a point on the Northerly line of the former Great Western Railway Company of Iowa Railroad Right of Way, known as the Wabash Trace Nature Trail; thence Northwesterly, along said Northerly line and along a 2,914.79 foot radius curve to the right an arc distance of 825.26 feet (said curve has a chord bearing North 57° 00' 22" West and a chord distance of 822.50 feet); thence North 49° 10' 34" West, along said Northerly line, a distance of 2,333.99 feet to a point on the Southeasterly line of Highway 92; thence North 41° 25' 41" East, along said Southerly line, a distance of 656.12 feet; thence South 64° 13' 06° East a distance of 455.02 feet; thence North 25° 52' 28 West, a distance of 219.99 feet to a point on the North line of the Northeast Quarter of the Southeast Quarter of said Section 7, thence South 89° 58' 26" East, along said North line, a distance of 262.90 feet to the point of beginning.

And

A parcel of land located in part of the Northeast Quarter of the Southeast Quarter of Section 7, Township 74 North, Range 43 West of the 5th Principal Meridian, Pottawattamie County, Iowa, said parcel being more fully described as follows:

Commencing at the East Quarter corner of said Section 7; thence South 89° 25' 00" West along the North line of said Northeast Quarter of the Southeast Quarter a distance of 279.10 feet; thence South 44° 44' 07" West a distance of 99.45 feet to the point of beginning; thence continuing South 44°44'07" West a distance of 93.63 feet; thence South 64° 48' 06" East a distance of 142.85 feet; thence North 26° 27' 20" West a distance of 142.23 feet to the point of beginning.

Note: The North line of the Northeast Quarter of the Southeast Quarter of said Section 7 is assumed to bear South 89° 25' 00West for this discription.

Except

A Parcel of land located in part of the Northeast Quarter of the Southeast Quarter of Section 7, Township 74 North, Range 43 West of the 5th Principal Meridian, Pottawattamie County, Iowa, said parcel being more fully described as follows:

Commencing at the East Quarter corner of said Section 7; thence South 89° 25' 00" West along the North line of said Northeast Quarter of the Southeast Quarter a distance of 279.10 feet to the point of beginning; thence South 44° 44' 07" West a distance of 99.45 feet; thence North 26° 27' 20" a distance of 77.72 feet to said North line; thence North 89° 25' 00" East along said North line a distance of 104.63 feet to the point of beginning.

Note: The North line of the Northeast Quarter of the Southeast Quarter of Section 7 is assumed to bear South 89° 25' 00" West for this description.

And further except that part Deeded to the City of Council Bluffs for road purposes at Warranty Deed in Book 99, Page 67388 recorded June 30, 1999, in the records of Pottawattamie County, Iowa.

Parcel 2:

A Parcel of land located in the Southeast Quarter of the Southwest Quarter of Section 8, Township 74 North, Range 43 West of the 5th Principal Meridian, Pottawattamie County, Iowa, said parcel is more particularly described as follows:

Commencing at the Southwest corner of said Southeast Quarter of the Southwest Quarter; thence North 0° 00' East, 240.0 feet along the West line of said Southeast Quarter of the Southwest Quarter to the point of beginning; thence continuing North 0° 00' East, 528.6 feet along said West line; thence South 37° 28 1/2' 238.5 feet; thence South 19° 08' East, 135.5 feet; thence South 21° 58 1/2' West 127.9 feet; thence South 48° 17' West, 76.0 feet; thence South 63° 38' West, 94.8 feet to a point on the West line of said Southeast Quarter of the Southwest Quarter, said point also being the point of beginning.

Address: , , IA

GRANTEE IN LAST DEED OF RECORD:

Parcel 1:

Lewis Central Community School District, School Township of Lewis and Lewis Township School District

Parcel 2:

United States of America

Effective Date: June 4, 2020 at 8:00 am

Attachment F

LEWIS CENTRAL COMMUNITY SCHOOLS CAMPUS PROJECTS
3504 Harry Langdon Blvd, Council Bluffs, IA 51503
Lamp Rynearson Job No. 0118180.02 & 0119077.01

PRELIMINARY DRAINAGE STUDY

May 4, 2020

Prepared by Lamp Rynearson

Caleb Van Weelden, E.I.
Project Engineer

Joe Zadina, P.E.
Senior Project Manager

TABLE OF CONTENTS

	SECTION
SUMMARY	A
SITE CHARACTERISTICS	B
POST-CONSTRUCTION RUNOFF ANALYSIS	C
STORMWATER CONVEYANCE DESIGN	D
STORMWATER MANAGEMENT DESIGN	E
REFERENCES	F
APPENDIX	G

SECTION A
SUMMARY

SUMMARY

Note: This drainage study is being submitted as part of an early grading package. Final plans and an updated drainage study for both the Operations Center and the High School additions will be provided at a later date.

Lewis Central Community Schools is proposing two projects on their High School/Middle School campus located between Harry Langdon Boulevard, Highway 92, and vacated railroad right of way. One project consists of a performing arts and construction trades additions on the south side of the High School. This package will also include reconstruction of part of the high school parking lots. The other phase of these improvements is a new operations building located southeast of the middle school. This will serve as a bus depot and maintenance facility. Both projects will occur simultaneously. The site lies within the City of Council Bluffs' jurisdiction and the proposed improvements conform to the Statewide Urban Design and Specifications (SUDAS) as well as the City of Council Bluffs municipal code. The site is bounded on the northwest by Highway 92, on the north by StorageMart storage facility, on the east by Harry Langdon Boulevard and Iowa School for the Deaf, on the southeast by Iowa West Foundation Trailhead Park, and on the southwest by vacated railroad right of way followed by agricultural fields to Mosquito Creek. The project will involve demolition of two existing buildings southeast of the middle school, along with site demolition, paving and utilities, south of both the middle and high schools. After demolition will be an early grading package to place surcharge for future building construction. This will be followed by construction of new building additions and parking lot on the high school, and a new operations center building southeast of the middle school. Site paving, landscaping, utilities, and post-construction stormwater BMP's will also be included with both projects.

This drainage study analyzes the existing and proposed site conditions and provides computations and methodology for the proposed BMP's. Calculations for runoff coefficients, time of concentration, BMP storage volume, and peak discharge will be provided at a later date, when the project design is complete, and the formal PCSMP submittal is provided to the City for review and approval.

Per meeting with City of Council Bluffs staff, this site will treat water runoff to the maximum extent practice. Both the middle and high school properties have very little vertical relief over the Mosquito Creek channel system. Meetings and coordination with the City of Council Bluffs Public Works Department took place in early 2020 to determine stormwater BMP selection and the maximum extent practical for stormwater management. It was determined that water quantity treatment is not feasible for this site. There is not enough height above the existing discharge points to install any sort of detention system to limit 2, 10, and 100 year runoff to pre-construction levels. There is also a concern about the existing problems with flooding in this area and having water detention onsite could be a contribution factor to future flood events.

In general, the property is very flat. The site slopes from Harry Langdon Boulevard southwest towards a ditch along the vacated rail road right of way. This ditch flows into a system of ditches eventually leading to Mosquito Creek. This ditch system fills and drains in correspondence with the seasonal water level of the Missouri River and Mosquito Creek. There is some storm sewer infrastructure on the high school property, and very little storm sewer on the middle school. Both buildings runoff leads to the ditch system described above. Because the entire site eventually drains to the ditch system, the site is assumed to be one watershed and was analyzed as such. Multiple stormwater BMP's were evaluated for this site and it was decided that a vegetated strips and increased plantings will serve as the water quality treatment for this site. Forebays will be installed where possible to catch fugitive sediments before it can enter the swale system. As all runoff pre and post drains into the Mosquito Creek ditch system the existing downstream stormwater infrastructure is assumed to be adequate for the proposed design.

SECTION B
SITE CHARACTERISTICS

SITE CHARACTERISTICS

EXISTING CONDITIONS

The current site is comprised of Lewis Central Community Schools high school, middle school, and athletic facilities. The property includes parking lots and connecting street between the two facilities. A series of ditches lead from the rear of both buildings to the ditch system along the vacated rail road right of way eventually leading to Mosquito creek. See the Appendix for an existing conditions site map.

See the Appendix for a copy of the geotechnical investigation report.

PRE-DEVELOPMENT RUNOFF ANALYSIS

WATERSHED AREA: The watershed generally slopes to the southwest towards a ditch along the vacated rail road right of way which leads to a ditch system which enters Mosquito Creek which eventually leads to the Missouri River.

TIME OF CONCENTRATION: The time of concentration was determined to be 5 minutes (see the existing site conditions map for flow paths. There is also a time of concentration calculation sheet in the Hydraflow summary in the Appendix.

PRECIPITATION MODEL: The precipitation model used was the NRCS Type-II distribution model with the 24-hour rainfall amounts for Region 7 from the ISMM for the one-year, two-year, five-year, ten-year, twenty-five-year, fifty-year, and one hundred-year return periods.

RUNOFF MODEL: The Hydraflow Hydrographs stormwater modeling program was used to analyze the site for runoff. The program uses the NRCS TR-55 method to model watershed runoff.

SUMMARY OF PRE-DEVELOPMENT RUNOFF: A complete Hydraflow report can be seen in the Appendix. A summary of the runoff for the given return periods is presented in the hydrology summary table.

TO BE SUBMITTED WITH FINAL PCSMP DESIGN DRAINAGE STUDY

CONTRIBUTING OFF-SITE DRAINAGE

Based on a GIS map of the surrounding property, minimal offsite runoff is directed through the project site. Runoff from Harry Langdon and the neighboring properties will continue to drain towards the Mosquito Creek ditch system.

FLOODWAYS, FLOODPLAINS, AND WETLANDS

According to the Flood Insurance Rate Map (FIRM) panel 19155C0577E, effective on 02/04/2005, the floodway overlaps the proposed site. The site is mostly Zone AO and a little Zone X. A floodplain development permit is going to be submitted to the City of Council Bluffs. The design regulations based on floodplain zoning have been followed as necessary.

No wetlands have been identified on the site in the development area.

PROPOSED CONDITIONS

A majority of the existing infrastructure will remain in place. The storm sewer infrastructure of the south side of the high school will be modified to accommodate the new building additions. Storm sewer infrastructure in the parking lot will also be modified to accommodate the new layout. Discharge points will remain the same. Storm sewer infrastructure will be added around the new operations center building and will still discharge into the existing ditch along the rail road right of way. Existing sanitary, water, and gas will be modified slightly to accommodate new construction. Improvements will include a new building and building additions, new parking lots and drives for both projects, and new landscaping. See the proposed site conditions map in the Appendix for further information.

Stormwater runoff will be directed to vegetated swales. Forebays will be installed where possible to catch fugitive sediments before it can enter the swale system. This BMP's will treat the stormwater for water quality across all paved areas of the site. All runoff from improved areas of the site lead into a ditch along the vacated rail road right of way.

SECTION C

POST-DEVELOPMENT RUNOFF ANALYSIS

POST-DEVELOPMENT RUNOFF ANALYSIS

WATERSHED AREA

The watershed boundary will not change as a result of the proposed improvements. A proposed site conditions map is presented in the Appendix and shows that the area will remain the same.

TIME OF CONCENTRATION

The time of concentration (T_c) was determined t[illegible]ce proposed site conditions map for travel path; also, in the Hydraflow Summ[illegible] Appendix is a time of concentration calculation sheet.

TO BE SUBMITTED WITH FINAL
PCSMP DESIGN DRAINAGE STUDY

PRECIPITATION MODEL

The model for post-develop[illegible]vas the same as for pre-development analysis.

CURVE NUMBE[illegible]

A breakdown of th[illegible]mber (CN) and calculations for the cumulative CN is presented on the proposed site cond[illegible]ns map. The decrease in the curve number is a result of an increased amount of landscaping and pervious and lawn areas.

RUNOFF MODEL

The model for post-development analysis was the same as for pre-development analysis.

SUMMARY OF POST-CONSTRUCTION RUNOFF

A complete report can be seen in the Appendix. A summary of the runoff for the given return periods is presented in the hydrology summary in Section A.

SECTION D
STORMWATER CONVEYANCE DESIGN

STORMWATER CONVEYANCE DESIGN

DESIGN INFORMATION REFERENCES

Stormwater conveyance was designed to the standards of the Iowa Stormwater Management Manual (ISMM) and the City of Council Bluffs.

STORM SEWER

The storm sewer system was designed to the standards of SUDAS. Historical flow path will not be changed and, existing downstream infrastructure does not need to be modified. The existing 100-year flow paths would also not change.

Additional storm sewer is proposed internal to the site; this storm sewer will provide drainage of the proposed facilities and will reduce stormwater from ponding across the impervious areas of the site.

CULVERTS

There are no culverts with the proposed improvements.

OPEN CHANNEL FLOW – SWALES AND DITCHES

The existing ditches are largely left in their current state and new overland flow swales have been constructed leading into the existing ditch system. Swales have been designed to convey runoff off property into the ditch along the vacated rail road right of way. It is understood that as the Mosquito Creek ditch system backs up the property may be impacted. Existing site conditions do not allow alternate measures of stormwater discharge.

STORM WATER OUTLETS AND DOWNSTREAM ANALYSIS

The proposed storm sewer outlets are designed to prevent erosion through the use of a rip-rap aprons. All outlet pipes lead to the ditch system along the vacated rail road right of way and into the ditch system leading to Mosquito Creek.

SECTION E
STORMWATER MANAGEMENT DESIGN

STORMWATER MANAGEMENT DESIGN

DESIGN STANDARDS

Stormwater management was designed to the maximum extend practice giving the existing site challenges with the direction of the City of Council Bluffs. The criterion established was that the post-developed runoff shall be treated as in enters the Mosquito Creek ditch system to the maximum extent practical.

SPILLWAY AND EMBANKMENT PROTECTION

The interior and exterior sides of the all proposed swales will be vegetated to protect them from erosion. For slopes greater than 4:1 erosion control mating will also be used.

VEGETATIVE SWALES AND PLANTINGS

Plantings are designed using native species that are capable of being submerged or partially submerged for long periods of time. These plantings will help retain the soil, slow stormwater runoff, treat stormwater runoff, and catch sediments and trash before it can enter the Mosquito Creek ditch system. A registered landscape architect has helped complete the design of the vegetative swales and plantings.

TO BE SUBMITTED WITH FINAL PCSMP DESIGN DRAINAGE STUDY

SECTION F
REFERENCES

REFERENCES

The references used are in this report are:

Iowa Statewide Urban Design and Specifications, 2020 Edition

Iowa Stormwater Management Manual, Version 1: April 1, 2010 including updated chapters 3, 8, and 9

SECTION G
APPENDIX



LAMP RYNEARSON

14710 W. DODGE RD, STE. 100
OMAHA, NE 68154
402.496.2498
LampRynearson.com

N

0 50 100

PRELIMINARY

NOT RELEASED FOR CONSTRUCTION

EXISTING CONDITIONS SITE MAP

LEWIS CENTRAL COMMUNITY SCHOOLS
3504 HARRY LANGDON BLVD, COUNCIL BLUFFS, IOWA

811 Know what's **below.** **Call** before you dig.

ALL UTILITIES ARE SHOWN BASED ON THE INFORMATION AVAILABLE TO THE ENGINEER. THERE IS NO GUARANTEE ALL UTILITIES ARE SHOWN OR THAT THE LOCATION, DEPTH, AND SIZE OF EACH FACILITY IS CORRECT. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES AND SERVICE LINES PRIOR TO CONSTRUCTION.

REVISIONS

DESIGNER / DRAFTER
CDV
DATE
05/04/2020
PROJECT NUMBER
0118180
BOOK AND PAGE

SHEET
1 OF 2

L:\Engineering\0118180 LCCSD Lewis Central HS Performing Arts\DOCUMENTS\REPORTS AND STUDIES\DRAINAGE STUDY\0118180-EXISTING CONDITIONS.dwg, 5/4/2020 12:21:29 PM, CALEB VANREESEN, LAMP RYNEARSON



LAMP RYNEARSON

14710 W. DODGE RD, STE. 100
OMAHA, NE 68154
402.496.2498
LampRynearson.com

0 50 100

PRELIMINARY

NOT RELEASED FOR CONSTRUCTION

EXISTING CONDITIONS SITE MAP

LEWIS CENTRAL COMMUNITY SCHOOLS
3504 HARRY LANGDON BLVD, COUNCIL BLUFFS, IOWA

811 Know what's **below.** **Call** before you dig.

ALL UTILITIES ARE SHOWN BASED ON INFORMATION AVAILABLE TO THE ENGINEER. THERE IS NO GUARANTEE ALL FACILITIES ARE SHOWN OR THAT THE LOCATION, DEPTH, AND SERVICE EACH IS CORRECT. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES AND SERVICE LINES PRIOR TO CONSTRUCTION.

REVISIONS

DESIGNER / DRAFTER
CDV
DATE
05/04/2020
PROJECT NUMBER
0118180
BOOK AND PAGE

SHEET
2 OF 2

L:\Engineering\0118180 LCCSD Lewis Central HS Performing Arts\DOCUMENTS\REPORTS AND STUDIES\DRAINAGE STUDY\0118180-EXISTING CONDITIONS.dwg, 5/4/2020 12:21:53 PM, CALEB VANNELLEVEN, LAMP RYNEARSON



NOTE:
FINAL DESIGN OF SITE STORM SEWER AND PAVING TO BE COMPLETED WITH SUBSEQUENT PLANS AND PROVIDED ALONG WITH FINAL PCSMP DESIGN SUBMITTAL. STORM SEWER AND PAVING SHOWN ON THIS PLAN ARE IN PROGRESS AND NOT FINAL

LAMP RYNEARSON
14710 W. DODGE RD, STE. 100
OMAHA, NE 68154
402.496.2498
LampRynearson.com

0 50 100

PRELIMINARY

NOT RELEASED FOR CONSTRUCTION

PROPOSED CONDITIONS SITE MAP

LEWIS CENTRAL COMMUNITY SCHOOLS
3504 HARRY LANGDON BLVD, COUNCIL BLUFFS, IOWA

811 Know what's below. Call before you dig.
ALL UTILITIES ARE SHOWN AS LOCATED ON THE INFORMATION AVAILABLE TO THE ENGINEER. THERE IS NO GUARANTEE ALL FACILITIES ARE SHOWN OR THAT THE LOCATION, DEPTH, AND CONDITION OF EACH FACILITY IS CORRECT. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES AND SERVICE LINES PRIOR TO CONSTRUCTION.

REVISIONS

DESIGNER / DRAFTER
CDV
DATE
05/04/2020
PROJECT NUMBER
0118180
BOOK AND PAGE

SHEET
1 OF 2

L:\Engineering\0118180 LCCSD Lewis Central HS Performing Arts\DOCUMENTS\REPORTS AND STUDIES\DRAINAGE STUDY\0118180-PROPOSED CONDITIONS.dwg, 5/4/2020 12:7:51 PM, CALEB VANKEULEN, LAMP RYNEARSON



LAMP RYNEARSON
14710 W. DODGE RD, STE. 100
OMAHA, NE 68154
402.496.2498
LampRynearson.com

0 50 100

PRELIMINARY

NOT RELEASED FOR CONSTRUCTION

PROPOSED CONDITIONS SITE MAP

LEWIS CENTRAL COMMUNITY SCHOOLS
3504 HARRY LANGDON BLVD, COUNCIL BLUFFS, IOWA

811 Know what's **below.** **Call** before you dig.

ALL UTILITIES ARE SHOWN BASED ON THE INFORMATION AVAILABLE AT THE TIME OF SURVEY. THERE IS NO GUARANTEE ALL FACILITIES ARE SHOWN, OR THAT THE LOCATION, DEPTH, AND SIZE OF EACH FACILITY IS ACCURATE. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES AND SERVICE LINES PRIOR TO CONSTRUCTION.

REVISIONS

DESIGNER / DRAFTER
CDV
DATE
05/04/2020
PROJECT NUMBER
0118180
BOOK AND PAGE

SHEET
2 OF 2

L:\Cityofbluffs\0118180 LCCSD Lewis Central HS Parking Area\DOCUMENTS\REPORTS AND STUDIES\DRAINAGE STUDY\0118180-PROPOSED CONDITIONS.dwg, 5/4/2020 12:18:05 PM, CALEB WHEELDON, LAMP RYNEARSON