AGENDA FOR THE CITY COUNCIL
SEPTEMBER 2, 2025

PUBLIC HEARING

PUBLIC COMMENT

REGULAR AND PENDING EXECUTIVE SESSION MINUTES

1. -- June 11, 2024 and September 4, 2024 Executive Session Minutes - Reviewed and ready for partial release as of August 5, 2025

2. -- December 9, 2024 Finance Committee Executive Session Minutes - Reviewed and withheld in entirety as of August 5, 2025

3. August 5, 2025 meeting minutes

LAID ON THE TABLE

4. From City Clerk Brenna Murphy Leary and Admin. Assistant Jeffery Anderson-Burgos, minutes of February 18, 2025 meeting.

5. The Committee on Development and Governmental Relations to whom was referred a communication From Adam Mulcahy and Christina Guesk-Notification of Intent to sell under MGL
commended that the order be referred to the full Council without recommendation.

6. The Committee on Development and Governmental Relations to whom was referred a communication From Kestrel Land Trust, letter regarding right of first refusal for Mountain Road parcel under Chapter 61A
commended that the order be referred to the full Council without recommendation.

7. Bartley-City Council suspend its Rule 2-A., cancel its second meeting in September currently scheduled for Tuesday, September 16, 2025 and reschedule it. The reason for this request is that this date is set aside by The Big E as its traditional Salute to Holyoke / Salute to Rhode Island.

COMMUNICATIONS

8. From Mayor Joshua Garcia, letter appointing Jeff Burkott and Davin Pasek as the Fence Viewer Committee.

9. From Mayor Joshua Garcia, letter appointing Dr. David Owen to serve on the Local Historic District Commission. Mr. Owen will serve a three-year term expiring July 1, 2028.

10. From Fire Chief John Kadlewicz, report on condition of Old Bassett Rd for fire trucks

11. From Holyoke Health Benefit Committee, meeting minutes from June 2, 2025

12. From Board of Fire Commisioners, meeting minutes from July 23, 2025

PETITIONS

PRESIDENT'S REPORT

REPORTS OF COMMITTEES

13. The Committee on Ordinance to whom was referred a Special permit application of Sixan MA LLC at 15 Main Street (033-06-022) a recreational marijuana retail establishment per sec 7.10.
Recommended that the special permit be granted, carrying over the conditions from the previous owner.

14. The Committee on Ordinance to whom was referred an order That schedules B and C of ordinance 2-35 be updated as appropriate with competitive salaries to attract and retain employees.
Recommended that changes to the Mayor, Council, and Council President in Salary Schedule B be referred to the full Council without recommendation, and
Recommended that changes to Police Matron and Substitute Nurse in Salary Schedule C be adopted.

15. -- The Committee on Ordinance to whom was referred an order That Department heads be given the authority to hire Schedule A positions above mid-range up to no more than max without needing further approval from CC due to special circumstances.
Recommended that the order be referred to the full Council without recommendation.

16. The Committee on Ordinance to whom was referred an order that an ordinance be adopted authorizing newly hired employees to be paid above the mid range without approval of the City Council.
Recommended that the order be referred to the full Council without recommendation.

17. -- The Committee on Ordinance to whom was referred an order that the residency requirement for the CPO/Purchasing Director position be removed.
Recommended that the order, through a waiver option, be adopted.

18. The Committee on Ordinance to whom was referred an order that the Mayor be authorized to exceed the medium range hiring salary for the purpose of hiring a new Director of Public Works. This authorization shall expire upon said hiring and shall apply to no other positions.
Recommended that the order be adopted.

19. The Committee on Ordinance to whom was referred an order that the Director of Public Works be moved from Grade 14 to Grade 15 of Schedule A.
As reasons: The current grade 14 is $85,921.00-$102,391.00-$118,862.00.
Grade 15 is $94,521.00-$112,627.00-$130,733.00.
That grade 15 is clearly more appropriate given the fact that the City Engineer/Assistant Director is currently earning $125,000.00 and is getting paid more than than the Director can be paid right now.
Recommended that the order be adopted.

20. The Committee on Ordinance to whom was referred an order that a Handicap sign be installed at 3 Vernon St. for Angel Lopez
Recommended that the order be adopted.

21. -- The Committee on Ordinance to whom was referred an order That the City Solicitor be given the authority to hire a paralegal above mid range up to no more than max without needing further approval from CC due to special circumstances.
Recommended that the order be given a leave to withdraw.

22. The Committee on Ordinance to whom was referred an order that the City of Holyoke establish, in the Schedule A, a Homeless and Housing Liaison position.
Recommended that the order be given a leave to withdraw.

23. The Committee on Ordinance to whom was referred an order hat the Police Department be allowed to hire a Crime Analyst past the Grade 10 mid-range (which is $70,407) to $78,000.
Recommended that the order be given a leave to withdraw.

24. The Committee on Finance to whom was referred a communication From Fire Chief John Kadlewicz, Ambulance transport services feasibility study final report
Recommended that the order be referred to the full Council for referral to the Public Safety Committee.

25. The Committee on Finance to whom was referred an order that there be and is hereby appropriated by transfer in the fiscal year EIGHTY THREE THOUSAND SIX HUNDRED FIFTY SIX AND 00/100 Dollars ($83,656) as follows:
FROM

11511-51202 PT ASSOCIATE SOLICITOR		$83,656
	TOTAL	$83,656
TO:		
11511-51201 PT ASSISTANT SOLICITOR		$83,656
	TOTAL	$83,656

Recommended that the order be returned to the Auditor.

26. The Committee on Joint Committee of City Council and School to whom was referred an order HPS add signage to the west side of the Wm. Peck School stating the school's name.
Recommended that the order has been complied with.

27. The Committee on Joint Committee of City Council and School to whom was referred a communication From City Councilor Kevin Jourdain-School Budget Advisory Report 1 from School Budget Advisory Group
Recommended that the order has been complied with.

28. The Committee on Joint Committee of City Council and School to whom was referred an order that the Joint Committee on City Council and School Committee review with School leadership the final school budget for FY 26 and the final appropriations from the state. Committee also review expected state and federal grants to be received during

the upcoming fiscal year.
Recommended that the order has been complied with.

29. The Committee on Joint Committee of City Council and School to whom was referred a communication From Superintendent Anthony Soto EM - Receiver - Metcalf Working Group
Recommended that the order has been complied with.

30. The Committee on Joint Committee of City Council and School to whom was referred an order From DESE Interim Commissioner Patrick Tutwiler- Final Cover Memo for HPS Exit Assurances - Eng Sp
Recommended that the order has been complied with.

31. The Committee on Joint Committee of City Council and School to whom was referred an order From DESE- Final Exit Assurances Holyoke - updated post-mtg
Recommended that the order has been complied with.

32. The Committee on Joint Committee of City Council and School to whom was referred a communication From Councilor Jourdain-communication for Joint Committee agenda - request to discuss resource officers for New Peck Middle School
Recommended that the order has been complied with.

33. The Committee on Joint Committee of City Council and School to whom was referred an order Joint Committee on City Council and School Committee review with School leadership the opening of the new Peck School and ensure everything is remaining on track.
Recommended that the order has been complied with.

34. The Committee on Public Service to whom was referred a communication From Mayor Joshua Garcia, letter appointing Mr. Joseph Charles Mazzola to serve on the Local Historic District Commission. Mr. Mazzola will serve a three-year term expiring on July 1, 2028.
Recommended that the order be given a leave to withdraw.

35. The Committee on Public Service to whom was referred a communication From Mayor Joshua Garcia- letter appointing Ms. Heather Leenders of 11 Robert Drive to serve on the Commission on Disabilities. Ms Leenders will serve a three-year term, expiring March 2028.
Recommended that the order be given a leave to withdraw.

36. The Committee on Public Service to whom was referred a communication From Mayor Joshua Garcia, letter appointing Ms. Meghan Connolly of 9 McMahon Drive to serve on the Library Board. Ms. Connolly will replace Mr. Thoomas Gilchrist and will serve the remainder of his term expiring February 2027.
Recommended that the appointment be confirmed.

37. The Committee on Public Service to whom was referred a communication From Mayor Joshua Garcia- letter appointing Ms. Meghan Connolly of 9 McMahon Drive to serve on the Library Board of Directors. Ms. Connolly will replace Mr. Thomas Gilchrist and will

serve the remainder of his term expiring February 2026.
Recommended that the order has been complied with.

38. The Committee on Public Service to whom was referred a communication From Mayor Joshua Garcia, letter appointing Ms. Margaret Whitehead of 160 Pearl St. to serve on the Library Board. Ms. Whitehead will replace Ms. Blanchard and will serve a three year term expiring February 2028.
Recommended that the appointment be confirmed.

39. The Committee on Public Service to whom was referred a communication From Mayor Joshua Garcia, letter appointing Mr. Christian Carde-Guzman of 203 W Franklin St to serve on the Citizens Advisory Committee. Mr. Carde-Guzman's term will expire June 30, 2026.
Recommended that the appointment be confirmed.

40. The Committee on Public Service to whom was referred a communication From Mayor Joshua Garcia, letter appointing Mr. Christopher Gauthier to serve on Local Historic District Commission. Mr. Gauthier will serve a three-year term expiring on July 1, 2028.
Recommended that the appointment be confirmed.

41. The Committee on Public Service to whom was referred a communication From Mayor Joshua Garcia, letter appointing Ms. Laddy Rua of 15 Portland St. to serve as the Director of Veterans Services. Effective date April 28, 2025.
Recommended that the appointment be confirmed.

42. The Committee on Charter and Rules to whom was referred an order that the following Charter Change be adopted:
Charter Sec. 39. - City solicitor.
AMEND
FROM:
The city solicitor shall perform those all legal services in which the city is interested and attend to all proceedings at law or in equity to which the city is a party, and to all claims made to the city council. For these purposes he shall have sole charge of all such matters and proceedings. He shall give in writing his legal opinion upon any of the municipal affairs of the city, upon the request of the mayor or city council, and in addition shall give his opinion upon the law relating to municipal affairs in any department, upon request made by the head of such department.
TO:
The city solicitor shall perform those legal services in the city as the city council shall establish by ordinance. He or she shall give in writing their legal opinion upon any of the municipal affairs of the city, upon the request of the mayor or city council, and in addition shall give his opinion upon the law relating to municipal affairs in any department, upon request made by the head of such department.
Awaiting disposition

43. The Committee on Charter and Rules to whom was referred an order That Charter Sections 19 and 34 be amended and elsewhere as appropriate to allow for all appointments to the Fire Commission and DPW Commission to be appointed by the

Mayor subject to confirmation by the City Council.
Awaiting disposition

44. -- The Committee on Charter and Rules to whom was referred an order that section 13 of the Holyoke Charter - Rules of city council; president pro tempore; method of sitting; journal; roll-call votes; quorum; general powers; no compensation. - be amended using the attached language.
Awaiting disposition

45. -- The Committee on Charter and Rules to whom was referred an order that section 14 of the Holyoke Charter - Transactions by council or members in behalf of city prohibited, except in case of veterans' aid - be amended using the attached language.
Awaiting disposition

46. -- The Committee on Charter and Rules to whom was referred an order that section 22 of the Holyoke Charter - Power as to laying out, etc., of streets; damages; ordinances, etc., involving expenditures in excess of two hundred dollars.- be amended using the attached language
Awaiting disposition

47. -- The Committee on Charter and Rules to whom was referred an order that section 24 of the Holyoke Charter -Presentation of ordinances, orders, etc., to mayor; approval; veto; passage over veto - be amended using the attached language
Awaiting disposition

48. -- The Committee on Charter and Rules to whom was referred an order That section 41 of the Holyoke Charter be deleted.
Awaiting disposition

49. -- The Committee on Charter and Rules to whom was referred an order that section 49 of the Holyoke Charter - Transfers of appropriations; authorization of expenditures without appropriation; approval of bills, pay rolls and vouchers; fiscal year. - be amended using the attached language.
Awaiting disposition

50. -- The Committee on Charter and Rules to whom was referred an order that section 53 of the Holyoke Charter -Loans, bonds and notes. - be amended using the attached language.
Awaiting disposition

51. The Committee on Charter and Rules to whom was referred an order that the City of Holyoke shall create an Administrative and Finance Department. Said acceptance shall be subject to implementation by city ordinance and any necessary amendments to the City Charter. This order shall be referred concurrently to Charter and Rules and Ordinance to be considered jointly, with recommendations regarding implementation to be reported back to the City Council jointly. See attached: Municipal Modernization Act of 2025.
Awaiting disposition

52. The Committee on Charter and Rules to whom was referred an order that City Council adopt the attached Substitute Municipal Modernization Ordinance
Awaiting disposition

53. The Committee on Charter and Rules to whom was referred an order The City of Holyoke amends any charter, ordinance and any other regulations relative to its Tax Collector and combines the office with its City Treasurer so long as a charter change to appoint rather than elect Holyoke's City Treasurer is approved by the legislature and Holyoke voters.
Awaiting disposition

54. The Committee on Charter and Rules to whom was referred an order With community support, order that the following section of our Codes of Ordinances and charter be updated to reflect use of email as sufficient for special meeting notice:
Sec. 12. – Special meetings of city council.
The mayor may at any time call a special meeting of the city council by public posting through the city website along with written notifications thereof, together with a statement of the subjects to be considered thereat, to be deposited in the post office, postpaid and addressed to the persons to be notified, at least forty-eight hours before the time appointed for such meeting, or to be left at the usual place of residence of each member of the council, by email at least forty-eight hours before the time appointed for such meeting.
(Acts 1965, c. 187; Acts 1992, c. 189)
Awaiting disposition

55. The Committee on Charter and Rules to whom was referred an order that the City Council Charter & Rules committee discuss the Council's long history of interpretation relative to Section 22 of the Charter that a vote to pass the first and then a vote to pass the second reading are required before final passage may occur under the provisions of that Section. That the Council also continue to follow our current procedure if and until the Council votes to change that procedure and understanding of Section 22 through a lawful method to be determined up to and including a possible Charter Change.
Section 22 of the Charter
Sec. 22. - Power as to laying out, etc., of streets; damages; ordinances, etc., involving expenditures in excess of two hundred dollars.
The city council shall, with the approval of the mayor, have exclusive authority and power to order the laying out, locating anew or discontinuing of all streets and ways and highways within the limits of the city, and to assess the damage sustained by any person thereby, and further, except as herein otherwise provided, to act in all matters relating to such laying out, locating anew, altering or discontinuing. Any person aggrieved by the assessment of his damages, or other action of the city council under this section, shall have all the rights and privileges now allowed by law in such cases in appeals from decisions of the selectmen of towns. Any ordinance, order, resolution or vote involving the appropriation or expenditure of money to an amount which may exceed two hundred dollars, shall require for its passage the affirmative votes of a majority of all the members of the city council. Every such ordinance, order, resolution or vote shall be read twice, with an interval of at least three days between the two readings, before being finally passed; and the vote at its final passage shall be taken by roll call; provided, however, that upon and after the written recommendation of the mayor the city council may pass such ordinance, order, resolution or vote on the same day by a two-thirds yea and nay vote.
Awaiting disposition

56. -- The Committee on Charter and Rules to whom was referred an order Charter changes related to Municipal Modernization Package be adopted.
Awaiting disposition

57. The Committee on Charter and Rules to whom was referred an order that Rule 8M please be amended as follows:
Current:
M. Any ordinance, order, resolution, or vote involving the appropriation or expenditure of money to an amount which may exceed two hundred dollars, shall require for its passage the affirmative votes of a majority of all members of the City Council.
Every such ordinance, order, resolution, or vote shall be read twice, with an interval of at least three days between the two readings, before being finally passed; and the vote at its final passage shall be taken by roll call; provided, however, that upon and after the written recommendation of the Mayor, the City Council may pass such ordinance, order, resolution, or vote on the same day by a two-thirds yea and nay vote. {See City Charter s. 22}
New:
M. Any ordinance, order, resolution, or vote involving the appropriation or expenditure of money to an amount which may exceed two hundred dollars shall be considered as adopted by final action of the City Council only after passing the following two votes: (1) Motion to pass the first reading by a majority of all the members of the City Council, and (2) Motion to pass the second reading by a majority of all the members of the City Council on a roll call vote. Notwithstanding the preceding, if the Motion to pass the first reading and the Motion to pass the second reading occur within three days of each other then the Motion to pass the second reading shall require a two thirds majority of all the members of the City Council to be adopted. [Reference: City Charter Section 22, and MG.L. c. 44 § 1]
Awaiting disposition

MOTIONS, ORDERS AND RESOLUTIONS

58. Bartley- The city council issue a proclamation to DONOVAN'S on both its 25th anniversary in business and the 10th anniversary of the present owners (owners: Justine & Frank). A celebration weekend is planned at the Irish restaurant for Sept. 13-14, 2025. Receive and Adopt. (I'll get us the date to make the presentation at the restaurant.)

59. Bartley- The DPW review the standard "no parking from here to curb" signs on both sides of West Glen St. where it meets Northampton St. There should be no parking within 20' of the curb. Residents are concerned about the narrow roadway when cars are parked on both sides. Receive and Adopt. Refer to DPW.

60. Bartley- The City Engineer develop plans to slow traffic proximate to Elmwood Towers on South St. Residents are pleased that the pedestrian traffic light and the street markings are in place but feel motorists are still traveling too fast and it's making for a dangerous section. Please note – in 2024 there was a pedestrian fatality at South St./Charles St.

61. Bartley- The City Engineer review the parking situation on West Glen St. where is meets Northampton St. Residents feel with cars on both sides of the street it's too narrow a gap for more than one car to pass and is dangerous for first responders to navigate. Please determine whether the 20' limit enough. If not, please recommend any amendments. Refer to Ordinance and City Engineer. Please send a report prior to council by December 1 or sooner.

62. Bartley- The city of Holyoke adopt a 'home rule petition' to designate reduced motor vehicle speed within areas proximate to senior housing. This would be similar to the reduced speed limits within School Zones. In addition, the City Council adopt a resolution to submit to the state Legislature to adopt such a law statewide. Draft resolution attached.

63.

DEVINE - Ordered, that there be and is hereby appropriated by transfer in the fiscal year 2026, FORTY SEVEN THOUSAND TWO HUNDRED SIXTY NINE AND 36/100 Dollars ($47,269.36) as follows:

FROM

12101-51103 FIRE CAPTAIN		$12,300.24
12101-51104 FIRE LIEUTENANT		26,328.61
12101-51105 FIREFIGHTER		8,640.51
	TOTAL	$47,269.36

TO:

12101-51180 INJURED ON DUTY		$47,269.36
	TOTAL	$47,269.36

64.

DEVINE - Ordered, that there be and is hereby appropriated by transfer in the fiscal year 2026, FIFTY FIVE THOUSAND AND 00/100 Dollars ($55,000) as follows:

FROM

11751-51105 SR PROJECT MANAGER		$55,000
	TOTAL	$55,000

TO:

11751-51223 DEVELOPMENT SPECIALIST		$55,000
	TOTAL	$55,000

65.

DEVINE ORDERED: That the City appropriate the amount of Eight Million Six Hundred Ninety One Thousand Four Hundred and Five ($8,691,405) Dollars for the purpose of paying costs of a replacement of the Kelly Elementary School Roof, located at 216 West St, Holyoke, MA 01040. This replacement consists of the removal of existing EPDM roof and installing 68,000 SF of PVC membrane during the summer of 2026, including the

payment of all costs incidental or related thereto (the “Project”), which proposed repair project would materially extend the useful life of the school and preserve an asset that otherwise is capable of supporting the required educational program, and for which the City may be eligible for a grant from the Massachusetts School Building Authority (“MSBA”), said amount to be expended under the direction of Mayor Joshua Garcia.

To meet this appropriation the Treasurer, with the approval of the Mayor, is authorized to borrow said amount under M.G.L. Chapter 44 or pursuant to any other enabling authority. The City acknowledges that the MSBA’s grant program is a non-entitlement, discretionary program based on need, as determined by the MSBA, and any project costs the City incurs in excess of any grant approved by and received from the MSBA shall be the sole responsibility of the City; provided that any grant that the City may receive from the MSBA for the Project shall not exceed the lesser of (1) eighty percent (80%) of eligible, approved project costs, as determined by the MSBA, or (2) the total maximum grant amount determined by the MSBA; and that the amount of borrowing authorized pursuant to this vote shall be reduced by any grant amount set forth in the Project Funding Agreement that may be executed between the City and the MSBA.

FURTHER ORDERED: That the Treasurer is authorized to file an application to qualify under Chapter 44A of the General Laws any and all of the bonds or notes authorized to be issued pursuant to this Order, and to provide such information and execute such documents as may be required for such purposes.

FURTHER ORDERED: That there shall be no change in the purpose of this bond authorization without prior vote of approval by the Holyoke City Council

66.

DEVINE ORDERED: That the City appropriate the amount of Four Million Four Hundred Ninety Eight Thousand Four Hundred Ninety-Seven ($4,498,497) Dollars for the purpose of paying costs of a replacement of the Lt. Elmer J. McMahon Elementary School Roof, located at 75 Kane Rd, Holyoke, MA 01040. This replacement consists of the removal of existing EPDM roof and installing 35,000 SF of PVC membrane during the summer of 2026, including the payment of all costs incidental or related thereto (the “Project”), which proposed repair project would materially extend the useful life of the school and preserve an asset that otherwise is capable of supporting the required educational program, and for which the City may be eligible for a grant from the Massachusetts School Building Authority (“MSBA”), said amount to be expended under the direction of Mayor Joshua Garcia.

To meet this appropriation the Treasurer, with the approval of the Mayor, is authorized to borrow said amount under M.G.L. Chapter 44 or pursuant to any other enabling authority. The City acknowledges that the MSBA’s grant program is a non-entitlement, discretionary program based on need, as determined by the MSBA, and any project costs the City incurs in excess of any grant approved by and received from the MSBA shall be the sole responsibility of the City; provided that any grant that the City may receive from the MSBA for the Project shall not exceed the lesser of (1) eighty percent (80%) of eligible, approved project costs, as determined by the MSBA, or (2) the total

maximum grant amount determined by the MSBA; and that the amount of borrowing authorized pursuant to this vote shall be reduced by any grant amount set forth in the Project Funding Agreement that may be executed between the City and the MSBA.

FURTHER ORDERED: That the Treasurer is authorized to file an application to qualify under Chapter 44A of the General Laws any and all of the bonds or notes authorized to be issued pursuant to this Order, and to provide such information and execute such documents as may be required for such purposes.

FURTHER ORDERED: That there shall be no change in the purpose of this bond authorization without prior vote of approval by the Holyoke City Council

67.

DEVINE ORDERED: That the City appropriate the amount of Twelve Million Nine Hundred Forty-Five Thousand Six Hundred Ninety-Seven Dollars ($12,945,697) for the purpose of paying costs of a replacement of the Holyoke High School Roof, located at 500 Beech St, Holyoke, MA 01040. This replacement consists of the removal of existing EPDM roof and installing 168,000 SF of PVC membrane during the summer of 2026, including the payment of all costs incidental or related thereto (the “Project”), which proposed repair project would materially extend the useful life of the school and preserve an asset that otherwise is capable of supporting the required educational program, and for which the City may be eligible for a grant from the Massachusetts School Building Authority (“MSBA”), said amount to be expended under the direction of Mayor Joshua Garcia.

To meet this appropriation the Treasurer, with the approval of the Mayor, is authorized to borrow said amount under M.G.L. Chapter 44 or pursuant to any other enabling authority. The City acknowledges that the MSBA’s grant program is a non-entitlement, discretionary program based on need, as determined by the MSBA, and any project costs the City incurs in excess of any grant approved by and received from the MSBA shall be the sole responsibility of the City; provided that any grant that the City may receive from the MSBA for the Project shall not exceed the lesser of (1) eighty percent (80%) of eligible, approved project costs, as determined by the MSBA, or (2) the total maximum grant amount determined by the MSBA; and that the amount of borrowing authorized pursuant to this vote shall be reduced by any grant amount set forth in the Project Funding Agreement that may be executed between the City and the MSBA.

FURTHER ORDERED: That the Treasurer is authorized to file an application to qualify under Chapter 44A of the General Laws any and all of the bonds or notes authorized to be issued pursuant to this Order, and to provide such information and execute such documents as may be required for such purposes.

FURTHER ORDERED: That there shall be no change in the purpose of this bond authorization without prior vote of approval by the Holyoke City Council

68. Devine- ORDERED the the Law Department provide an opinion as to what the decibel level should be when a religious group receives a permit to organize on their property

with the following questions to be answered:
1) Are there specific hours and days that must be complied with?
2) What is the loudest decibel level that is allowed on religious property or other non-religious groups?
3) What is the charge, if any for a permit for religious or non-religious events?
4) Are there any fines if any group violates their permit?
5) is there a limit as to the number of people allowed under a permit?

69. Givner, Anderson Burgos - Ordered that the City enact the proposed Short Term Rental Ordinance approved by the Planning Board.

70. GIVNER - Ordered that the City Council authorize a sale of Holyoke Assessors Parcel 010-00-002, Cabot Street, Holyoke, MA to Jose A. Santos Suarez for $1,000.00. After the property was declared by the City Council to be surplus on October 6, 2020, the City sent notices to abutters that the property was available for sale. The City received a response from Mr. Santos Suarez as the only responding abutter. The property is valued under the procurement threshold.

71. Givner- Ordered, that the City Council approves the Resolution for the Certified Project Application and Special Tax Assessment (STA) Agreement with AM Lithography Corporation for the purpose of the company's property acquisition and expansion in Holyoke. The acquisition, expansion and STA apply to the following: 100 Appleton St., 110 Appleton St. and Appleton St. parcel 010 (Map 031, Block 01, Parcels 008, 009, and 010).

72. GIVNER - Ordered that the City Council authorize a sale of Holyoke Assessors Parcel 006-08-012, 106 Pine Street, Holyoke, MA to Alan Schneider, or his nominee, for $5,800.00. After the property was declared by the City Council to be surplus on February 5, 2019, the City sent notices to abutters that the property was available for sale. The City received a response from Mr. Schneider as the only responding abutter. The property is valued under the procurement threshold.
--

73. Magrath-Smith- ordered that Old Bassett Road be paved by the City of Holyoke.

74. Magrath-Smith - ordered, that the City Engineer and DPW report on the frequent flooding on Longfellow as to its severity and planned improvements to prevent future flooding.

75. Magrath-Smith - ordered, that the City Engineer report on possible improvements at the entrance to the Woodmar Glen neighborhood in order to safeguard life and property. Two bad car accidents in the last year have caused the neighborhood to have to pay to replace their sign twice.

76. Magrath-Smith- Ordered that the DPW remove the handicap sign at 71 Waldo St. The sign is no longer needed.

77. Magrath-Smith - ordered, that West Cherry be paved by the City of Holyoke.

78. Magrath-Smith - ordered, that Cedar Hill Road be accepted as a public road. If it cannot be accepted, ordered that it be paved by the City of Holyoke.

79. Murphy-Romboletti- Ordered that the position of combined Treasurer/Tax Collector is created by ordinance and added to Schedule A Grade 14

80. Murphy-Romboletti- Ordered that the city council issue a proclamation to Susan Turcotte Moriarty for being recognized as a Distinguished Bar Advocate by the Hampden County Bar Association.

81. Vacon- ORDER: that a portable speed feedback sign be installed on or near pole #39on Homestead Ave. as drivers are traveling at high speeds in the area per report.

82. Vacon- ORDER: that DPW/engineer evaluate lower Charles Hill Rd & recommend action to improve safety due to a reported concern that cars parked at the lower end near Homestead Ave. are reducing the road to only one lane for vehicles, entering into and exiting from Charles Hill, increasing the risk for accidents.

83. Vacon- ORDER: That a salary range be established for the Treasurer position, as the appointment of the position (rather than elected)was approved by voters.

LATE FILED ORDERS AND COMMUNICATIONS

Addendum:
Per City Council rule 2B, meeting shall end by 10 PM unless an extension is approved by a two-thirds majority of those present. If any items remain, those items will be added to the beginning of the next regular meeting.
The listing of matters are those reasonably anticipated by the chair which may be discussed at the meeting.
Not all items listed may in fact be discussed and other items not listed may also be brought up for discussion to the extent permitted by law

_____
City Clerk

REGULAR MEETING OF THE CITY COUNCIL

August 5, 2025

The meeting was called to order by President Murphy-Romboletti at 7:04 p.m.

The Clerk called the roll. Absent Members: 0 Present Members in person: 10 (Bartley, Givner, Greaney, Jourdain, Murphy-Romboletti, Ocasio, I. Rivera, J. Rivera, Sullivan, Vacon). Present Members on Zoom: 3 (Anderson-Burgos, Devine, Magrath-Smith)

The Pledge of Allegiance was recited.

President Murphy-Romboletti stated that there were special guests being honored for their service to the city. She then invited Councilor Jourdain to the podium.

Councilor Jourdain made a motion to suspend the necessary rules to take up item 84 out of order. Councilor Bartley seconded the motion.

Councilor Jourdain-That the City Council issue a proclamation to Brian Harris recognizing his 42 years of dedicated service to the City of Holyoke and the Holyoke School Department. The City Council thanks Brian for his dedication to our schools, students and athletes for so many years and we wish him much success and a happy healthy retirement.

Councilor Jourdain noted that Mr. Harris, as well as many family members and friends, were in attendance. He then noted he had known Mr. Harris for many years, adding that his years of service to the city was a testament to his contribution to the city.
---> Received and Adopted.

Mr. Harris was welcomed to the podium to be presented with a proclamation.

Councilor Jourdain presented a proclamation to Mr. Harris on behalf of the City Council in recognition of his 42 years of dedicated service at the Holyoke School Department.

B. Harris expressed his thanks for the recognition, as well as thanking his family and extended family for being in attendance. He then noted that Councilor Jourdain started his career in Holyoke as a summer custodian under his staff.

President Murphy-Romboletti offered thanks to Mr. Harris for his service, emphasizing that it was a long time to devote himself to the community that appreciated him.

Councilor Devine asked if item 75 would be able to be taken up out of order. She noted OPED Director, Aaron Vega, was in attendance with the hope that it could be voted on that night.

President Murphy-Romboletti noted that there was another proclamation and public comment to get through first. She then asked if Marilyn Turgeon or anyone for her was in attendance. Seeing that Ms.

Turgeon was not in attendance, she stated that Ms. Turgeon was another employee with long term service to the city.

Motion was made and seconded to take a roll call vote that for the purposes of this meeting would be applicable to all motions to receive, to refer items to committee, remove items from the table, place items on the table, package items together, comply with items, or suspend the rules, unless there is an objection.

President Murphy-Romboletti noted that this was done due to some councilors attending on Zoom. Motion adopted on a call of the roll of the yeas and nays--Yeas 12--Nays 0--Absent 1 (Councilor Anderson-Burgos).

The name of Councilor Anderson-Burgos was pulled to head the roll call voting.

PUBLIC COMMENT

(9:50)

Claire, Linwood Avenue, declined to share her last name and street address. She added that in a society where the Constitution was not respected, she would maintain her 4th Amendment rights.

Councilor Jourdain raised an objection to allowing Claire to speak without sharing her last name and address.

Motion was made and seconded to suspend the necessary rules to allow Atty Bissonnette to address the Council.

Atty Bissonnette stated that the 1st Amendment was at issue. He then explained there were rules for public speak out, but there was no provision requiring identification even though it had been the practice to ask for name and address in order to verify they were a resident of the city. He added that it had been said but it also was not in writing that non-residents needed leave of the Council in order to speak. He expressed hesitance in not allowing someone to speak. He also suggested a look at the rules to make things more enforceable.

Councilor Jourdain emphasized that a precedent would be established if one person was allowed to not share their name and address for the record. He also emphasized that the Council was not required to have public comment, and there was no public comment until ten years earlier when he led the effort to add it. He added that the Council had always required all speakers to share their full name and address.

Councilor I. Rivera made a motion to suspend the necessary rules to allow Claire to speak. Councilor Givner seconded the motion. He then briefly withdrew his motion to allow President Murphy-Romboletti to address the objection.

President Murphy-Romboletti stated that while she did not seek to stifle anyone seeking to speak, it was also her job to enforce City Council rules. She then suggested that just for the evening, she would ask for at least a first name and the name of a street and then work with the Law Department to look at the rules

before the next meeting. She then acknowledged the points Councilor Jourdain was making but would choose to take the advice of Atty Bissonnette and plan to have a set policy moving forward.

Councilor Jourdain stated that while he understood President Murphy-Romboletti was trying to do the right thing, there had been hundreds speak at public comment, and this had never been an issue.

President Murphy-Romboletti asked if nobody had ever questioned it.

Councilor Jourdain stated that nobody had ever had an issue with it. He then explained that minutes were kept, and people were supposed to be able to attribute comments back to a person.

President Murphy-Romboletti stated that she took notes on who commented and liked to follow up with people but understood both sides.

Councilor Jourdain questioned why the body wouldn't do the same thing it had always done.

President Murphy-Romboletti asked if the situation had happened before where someone did not want to state their name and address.

Councilor Jourdain stated that it had never been an issue.

President Murphy-Romboletti suggested that as it was the first time it happened, the rules could be suspended for this one night to give her a chance to check in with the Law Department.

Councilor I. Rivera made a motion to suspend the necessary rules to allow Claire to speak. Councilor Givner seconded the motion. Motion adopted.

Claire stated that the last time she spoke here, she was advocating for proper disbursement of opioid abatement funds. She then stated that she had since uncovered things since then. She added that she had professional expertise in the area. She then questioned what qualities someone needed for their life to matter in the city, whether it was based on birth, race, spoken language, or wealth. She then stated that at least 67 people had died in Holyoke while the city had the money, but was likely closer to 100 because not all overdoses were reported the same. She added that it would be higher if not for first responders, defined not as police, fire, or ambulance, but as the person who is there with Narcan, adding that police, fire, and ambulance would be the second responder in those situations.

Christian Carde-Guzman, 203 West Franklin Street, stated that he was requesting a special permit for a driveway on the right side of his property, which was categorized as a front yard due to corner lot zoning rules. He stated that it was necessary for safety, adding that living near the intersection did not allow for parking in front of his house on the West Franklin side and it was very limited and narrowed on the Linden side of his house. He added additional concern about large trucks that used Linden Street. He further explained it was not a request out of convenience but of safety and fairness.

President Murphy-Romboletti informed Mr. Guzman that the petition was item 32 on the agenda and would be referred to the Development and Governmental Relations Committee to be discussed there. She added that the administrative assistant would invite him.

Kristin Fontaine, 1 Meadow Street, stated that she filed a petition for a home occupancy. She then explained that she was just approved for a cottage license to bake bread. She noted that she lived at the end of a dead end street, had ample parking, and wanted customers to be able to come and pick up bread on Fridays. She added that she could do deliveries, but there were fees associated with that and this would give her the ability to provide healthy bread at a lower cost.

President Murphy-Romboletti stated that this was item 34 on the agenda, and informed Ms. Fontaine that it would be referred to committee for a longer discussion, a vote, and then be referred back to Council.

Erin Brunelle, 44 Norwood Terrace, asked the Council to approve item 39 and not item 40. She then offered thanks to councilors who were in support of the purchase and sale of the Mountain Road lot to go forward as planned. She also commended Councilor Vacon for asking the city solicitor for clarify on Chapter 61A, but noted he hadn't been given a chance to answer it. She then explained that 61A was agricultural for tax purposes, requiring a minimum of 5 acres and the land had to be farmed, meaning that not anyone could put their land into 61A. She further explained that when a property was removed from 61A, any wetlands currently protected would remain protected. She added that the buyer only planned to build a house on the front acreage and had no intention of disturbing the back acreage. She also suggested that it felt back door for Kestrel to attempt to purchase it through the city's right of first refusal. She noted it was on the market for 211 days with no offers.

Jose Ramos, 95 Congress Avenue, stated that he was seeking to purchase the Mountain Road property, and only wanted to build a house but did not want to interfere with the rest of the land.

Paul Alves, 216 Homestead Avenue, sought to speak regarding the opioid abatement funds. He noted that a meeting had taken place within the past month, he was unsure what actions had been taken, many people signed up on lists, but nobody had yet been contacted. He then sought to advocate for a committee that would be predominantly include people with living and lived experience and have a say in the use of the funds. He then questioned leaving it up to a single person who was not a subject matter expert, suggesting that it would likely escalate the problem rather than remediating it.

Toby Wilson, 21 Hamton Knolls Road, stated that he was there to represent Abbas Younis, who owned many businesses in the city. He then explained that Mr. Younis owned a property at 678-689 Main Street, and that he had not been able to get a permit to get the reverter to build a storage center. He added that the Council voted a few months earlier to clear the reverter but it was not being allowed.

Councilor Jourdain asked if he spoke with the Law Department.

T. Wilson stated that he had, but they were not happy with him because of one conversation in Housing Court. He then emphasized that the area needed more businesses, and was just looking to see the reverter done.

Motion was made and seconded to suspend the necessary rules to take up items 32 and 34 out of order as a package.

Petition of Christian Carde Guzman of 203 W Franklin St for a special permit for driveway construction
---> Received and referred to the Development and Governmental Relations Committee.

Petition from Kristin Fontaine of 1 Meadow St. for a Home Occupation for a Cottage Kitchen
---> Received and referred to the Development and Governmental Relations Committee.

Motion was made and seconded to suspend the necessary rules to take up item 75 out of order.

Devine-Ordered, that in accordance with M.G.L. Chapter 44 Sec. 53A, the City Council hereby accepts the provisions of the "FY2026 COMMUNITY MITIGATION FUND, $294,000, NO MATCH" grant and authorizes the establishment of a Fund or other method appropriate for the accounting of the receipts and expenditures of all resources associated with the administration of said grant.
Sec 2-509 - Grant Reporting
Any city department, of which has received grant funding by approval of the city council pursuant to Massachusetts General Laws, or any other authorizing criteria, shall within a reasonable period of time, but no later than 60 days from the conclusion of said grant, generate a detailed report which outlines the planned outcomes with the documented actual results. Said report shall be submitted to the city clerk for addition to the city council's next agenda.

To the City Council:

I hereby recommend the passage of the above order at the meeting of your Council to be held Tuesday, August 5, 2025.

Joshua A Garcia, Mayor

UNDER DISCUSSION:
Motion was made and seconded to suspend the necessary rules to allow OPED Director, Aaron Vega, to address the Council.

A. Vega stated that this was their 4th mitigation fund grant, which had been predominantly used for their tourism efforts like Explore Holyoke. He added that this one included a collaboration with the Holyoke Police Department for software upgrades to help with traffic mitigation. He added that this would also include efforts to support the Puerto Rican Cultural District and efforts to support Holyoke's sister cities relationship like Tralee in Ireland and Salinas in Puerto Rico.

Councilor Bartley asked if there was a reason to not send this to committee.

A. Vega state that they were looking to use the funds right away to save some time, particularly understanding the Council's summer schedule. He then explained that they were looking to use some of it within the next 30-60 days. He also suggested a separate order could be filed to invite him in to talk about their efforts around tourism.

Councilor Bartley stated that while he didn't have an issue with getting the money out right away but was looking for a commitment to discuss things in more detail in committee. He then expressed concern that other department heads would be looking for the same quick vote on grants.

President Murphy-Romboletti noted that the next Finance meeting was the following week, and those items would then go to the next full Council meeting on September 2nd.

Councilor Bartley made a motion to pass the first reading. Councilor Vacon seconded the motion.
---> Passed two readings and Adopted on a call of the roll of the yeas and nays--Yeas 13--Nays 0--Absent 0.

REGULAR AND PENDING EXECUTIVE SESSION MINUTES

(43:05)

Councilor Vacon made a motion to suspend the necessary rules to take up items 1 and 2 as a package and release those the Law Department recommended for release. Councilor Sullivan seconded the motion.

President Murphy-Romboletti stated that with the way they were listed on the agenda, they may not be grouped together.

November 1, 2022, December 5, 2023, February 6, 2024, and June 11, 2024 Executive Session Minutes - Reviewed and partially released as of April 15, 2025

January 22, 2024, September, 4, 2024 Executive Session and December 9, 2024 Finance Committee Executive Session Minutes - Reviewed and withheld in entirety as of April 15, 2025

UNDER DISCUSSION:
Councilor Vacon made a motion to release the minutes of November 1, 2022, December 5, 2023, February 6, 2024, and January 22, 2024. Councilor Bartley seconded the motion. Motion adopted.

President Murphy-Romboletti stated that she would be working with the Law Department to schedule an executive session in the fall and asked that councilors reach out to her about any matters they were looking to hear about.

Councilor Jourdain asked if that would be for a legal update.

President Murphy-Romboletti stated that was correct.

Councilor Jourdain stated that he would be looking for information about a case that was just in the newspaper regarding gun licensing and a lawsuit against the Holyoke Police Department.

Councilor Bartley stated that he was looking for an update on litigation in Land Court relative to the Begley Lawler Trust. He noted he had asked for it to be amended.

April 15, 2025 Executive Session minutes - not yet reviewed.
---> Laid on the table.

From City Clerk Brenna Murphy Leary and Admin. Assistant Jeffery Anderson-Burgos- meeting minutes from June 17, June 23, and June 30, 2025.
---> Received and Adopted.

LAID ON THE TABLE

(47:15)

From City Clerk Brenna Murphy Leary and Admin. Assistant Jeffery Anderson-Burgos, minutes of February 18, 2025 meeting.
---> Laid on the table.

COMMUNICATIONS

(47:30)

Motion was made and seconded to suspend the necessary rules to take up items 6 through 11 as a package.

From Mayor Joshua Garcia, letter reappointing Mr. Stephen Fay to serve on the Local Historic Commission. Mr. Fay will serve a three-year term expiring on July 1, 2028.
---> Received and appointment confirmed.

From Mayor Joshua Garcia, letter reappointing Ms. Helene Busby of 90 Brookline Ave to serve on the Board of Park and Rec. Ms. Busby will serve a three-year term expiring June 30, 2028.
---> Received and appointment confirmed.

From Mayor Joshua Garcia, letter reappointing Ms. Lauren Niles to serve as on the Local Historic District Commission. Ms. Niles will serve three-year term expiring on July 1, 2028.
---> Received and appointment confirmed.

From Mayor Joshua Garcia, letter reappointing Mr. Jeremy Smith of 485 Hillside Ave to serve on the Library Board. Mr. Smith will serve a year term expiring in February 26, 2026.
---> Received and appointment confirmed.

From Mayor Joshua Garcia, letter reappointing Mr. R. Andrew Parker of 170 Mountain View Dr. to serve on the Library Board. Mr. Parker will service a two-year term expiring February 2027.
---> Received and appointment confirmed.

From Mayor Joshua Garcia, letter reappointing Mr. Josh Knox of 40 Morgan St to serve on the Board of Appeals. Mr. Knox will serve a three-year term expiring July 1, 2028.
---> Received and appointment confirmed.

Motion was made and seconded to suspend the necessary rules to take up items 12 through 17 as a package.

From Mayor Joshua Garcia, letter appointing Mr. Christopher Gauthier to serve on Local Historic District Commission. Mr. Gauthier will serve a three-year term expiring on July 1, 2028.
---> Received and referred to the Public Service Committee.

From Mayor Joshua Garcia, letter appointing Ms. Margaret Whitehead of 160 Pearl St. to serve on the Library Board. Ms. Whitehead will replace Ms. Blanchard and will serve a three year term expiring February 2028.
---> Received and referred to the Public Service Committee.

From Mayor Joshua Garcia, letter appointing Mr. Joseph Charles Mazzola to serve on the Local Historic District Commission. Mr. Mazzola will serve a three-year term expiring on July 1, 2028.
---> Received and referred to the Public Service Committee.

From Mayor Joshua Garcia, letter appointing Ms. Meghan Connolly of 9 McMahon Drive to serve on the Library Board. Ms. Connolly will replace Mr. Thomas Gilchrist and will serve the remainder of his term expiring February 2027.
---> Received and referred to the Public Service Committee.

From Mayor Joshua Garcia, letter appointing Ms. Lauren Niles to serve as an Alternate of the Historical Commission. Ms. Niles will serve a three-year term expiring on July 1, 2028.
---> Received and referred to the Public Service Committee.

From Mayor Joshua Garcia, letter appointing Mr. Christian Carde-Guzman of 203 W Franklin St to serve on the Citizens Advisory Committee. Mr. Carde-Guzman's term will expire June 30, 2026.
---> Received and referred to the Public Service Committee.

From Councilor Bartley- Editorial - re Elmwood Forest

Councilor Bartley stated that this was an incredible unsigned editorial from the Springfield Republican. He emphasized one excerpt from it. “Our proposal is simple. Residents accept they hold a losing hand.”
---> Received and referred to the Development and Governmental Relations Committee.

From Councilor Barltey-Viewpoint - Garcia

Councilor Bartley expressed surprise at being called out 3 times by the mayor in this editorial.
---> Received and referred to the Development and Governmental Relations Committee.

From Councilor Jourdain-communication for Joint Committee agenda - request to discuss resource officers for New Peck Middle School

Councilor Jourdain noted that the Joint Committee would be meeting on Thursday, August 14th, at 6:30 p.m.
---> Received and referred to the Joint Committee of the City Council and School Committee.

From City Auditor Tanya Wdowiak: FY2025 & FY2026 YTD General Fund and Sewer Enterprise Budget vs Actual Expense Reports
---> Received and referred to the Finance Committee.

From Fire Chief John Kadlewicz, Ambulance transport services feasibility study final report

Councilor Jourdain asked if the chief would be coming in to discuss the report.

President Murphy-Romboletti stated that the mayor forwarded it to have it discussed in a committee.

Councilor Jourdain stated that it was an important issue that the Council was waiting for a report on.
---> Received and referred to the Finance Committee.

MDAR - Wedgewood Terrace- Animal Health Order

Councilor Bartley stated that Ordinance would be taking up the topic the following night, and this was on point with the feline safety matter.
---> Received and referred to the Ordinance Committee.

From Attorney Generals Office-OML 2025-100 - Holyoke City Council
---> Received.

From Community Preservation Act Committee-FY26 Operating Budget
---> Received and referred to the Finance Committee.

City of Holyoke Health Benefit Meeting- SIGNED TRUST MINUTES June 2, 2025
---> Received.

Motion was made and seconded to suspend the necessary rules to take up items 27 through 30 as a package.

From Board of Fire Commission- meeting minutes from May 21, 2025 and June 18, 2025.
---> Received.

Grant Completion Form - FY24 MEMA Program $9,500 grant
---> Received.

Grant Completion Form - FY25 Firefighter Safety Equipment Program Round 2 $11,660 grant
---> Received.

Grant Completion Form - FY25 Firefighter Safety Equipment Program Round 1 $24,081 grant

Councilor Bartley emphasized that the grant reports were the result of an ordinance change he proposed. He added that instead of fund balances going into deficits, they were ending at $0 rather than the boondoggle they used to be.
---> Received.

PETITIONS

(57:25)

Petition from Residents of Sequia Dr. and Cypress Rd- application for Speed Humps
---> Received and referred to the Ordinance Committee.

Petition from Raul Montes of 33 Mountainview St. Springfield for a Street Vendor Permit
---> Received and referred to the Development and Governmental Relations Committee.

PRESIDENT'S REPORT

(58:15)

President Murphy-Romboletti welcomed the body back after taking July off. She then offered congratulations to the committee that organized Fiestas Patronales de Holyoke for a great event the previous weekend. She noted that Councilor J. Rivera and Councilor Anderson-Burgos were involved in months of planning. She added it was a big boost to the local economy.

Councilor Anderson-Burgos thanked Councilor Devine, President Murphy-Romboletti, and Councilor Magrath-Smith for volunteering at the event. He emphasized that it took a lot of work and dedication to put on the event. He also thanked councilors who attended the event when local dignitaries were recognized.

President Murphy-Romboletti stated that the ribbon cutting for the new Peck Middle School would be taking place on August 14th at 2 p.m., with a tour to take place immediately after the press conference. She also stated that an email was circulated to councilors about walking in the Springfield Puerto Rican Paade on September 14th. She stated that everyone should be there to line up at 10:30 a.m. to step off at 11 a.m. She asked councilors to confirm with the administrative assistant of the mayor.
She also stated that a back to school event organized by the Holyoke Safe Neighborhood Initiative and OneHolyoke would take place on Saturday, August 16th. She noted that they were looking for volunteers. She then offered a reminder that the Community Preservation Act Committee were looking for public feedback about use of their funds through a survey that was available in English and Spanish on the city's website.
She then stated that the Rotary concerts would begin again for the season the following day.

Councilor Greaney stated that Bill Rigali, retired Holyoke High varsity basketball coach, as well as longtime teacher, had written a book called Get on the Purple Line. He explained it described the complexities of coaching and teaching young people of all different backgrounds. He highly recommended reading the book and expressed the community should be proud.

Councilor J. Rivera stated that she ran a summer program from July through August 14th, and they would be holding their back to school event on August 14th. She noted they served 200 students the previous year and expected to serve at least 300 this year. She then asked for volunteers to help hand out backpacks at Springdale Park on August 14th, 6 p.m. - 8 p.m.

Councilor Jourdain stated that Fiesta Patronales was an incredible event and great promotion for the community. He thanked everyone who helped organize and volunteer.
He also noted that Councilor Greaney's nephew, Bill Councilor Greaney, a longtime art teacher in Holyoke Public Schools, had done the artwork for Mr. Rigali's book.

REPORTS OF COMMITTEES

(1:07:20)

President Murphy-Romboletti stated that items 35, 36, and 37 remained in committee.

The Committee on Development and Governmental Relations to whom was referred a Special Permit Application of LN Berneche, Inc for a motor vehicle repair garage in the IG zone at 37 Appleton Street (036-01-002) per sec 7.2.13 (a).

have considered the same and Recommended that the special permit be granted with the following condition:
That the hours of operation be Monday through Saturday, 6 a.m. - 6 p.m.

Committee Members:

Kocayne Givner
Michael Sullivan
Carmen Ocasio
Juan Anderson-Burgos
Patricia Devine

UNDER DISCUSSION:
Councilor Givner stated that the business was coming together well. She then explained that it would be a repair shop in the right location for this kind of shop, located in an industrial zone. She added that there was plenty of parking. She also stated that the plans were in order and all of the questions raised by the committee were answered.

Councilor Sullivan stated that this had been the former site of Worthington Compressor, which was later bought by Atlas Copco. He explained that Worthington had been a historic employer for the city but when they moved out, underground storage tanks for oils and fuels were left in place and the building was abandoned for several years and then run by American Dream Modular until they went bankrupt. He then explained that the applicant saved the city up to $2 million in demolition and remediation costs, which was why they got the building for $1 from the Redevelopment Authority.

Councilor Bartley expressed full support for the special permit.

Councilor Givner asked why the items stated they were awaiting disposition.

President Murphy-Romboletti stated that the agenda had to be published before the committee's meeting was held.

Councilor Bartley asked if the hours of operation were correct.

Sulivan stated that they were.
---> Report of Committee received and recommendation Adopted on a call of the roll of the yeas and nays--Yeas 12--Nays 0--Absent 1 (J. Rivera).

Motion was made and seconded to suspend the necessary rules to take up items 39 and 40 as a package.

The Committee on Development and Governmental Relations to whom was referred a communication From Adam Mulcahy and Christina Guesk-Notification of Intent to sell under MGL

have considered the same and Recommended that the order be referred to the full Council without recommendation.

Committee Members:

Kocayne Givner
Michael Sullivan
Carmen Ocasio
Juan Anderson-Burgos
Patricia Devine

UNDER DISCUSSION:
Councilor Givner expressed her understanding that there was confusion and that this item should be received as a communication.

President Murphy-Romboletti stated that item 39 needed to be acted on and item 40 came in a communication.

Councilor Bartley stated that was what he had as well.

Councilor Givner stated that item 39 came in as a communication and item 40 needed to be acted on.

Councilor Bartley stated that it was the other way around.

Murphy--Romboletti stated that in looking at the agenda from the DGR meeting, it appeared to be the other way around.

Councilor Givner reiterated that the notification of intent to sell was to be received.

Councilor Bartley stated that it needed to be voted on.

Councilor Vacon asked if receiving item 39 would be accepting the purchase and sale agreement that was signed by the initial purchaser.

Councilor Bartley stated that in looking at the packet for item 39, there was a sheet asking for a vote record of the body. He added that item 40 was just a communication from Kestrel Land Trust stating they wanted to receive the assignment of Chapter 61A.

President Murphy-Romboletti illustrated an attachment with item 39 showing a list for councilors' names and a statement that Chapter 61A would not be exercised. She reiterated that item 40 was a communication.

Councilor Givner stated that item 39 was noticing the body of the intent to sell.

Councilor Bartley made a motion to suspend the necessary rules to take up item 40 to be read into the record and received, and then a vote could be taken on item 39.

Councilor Devine asked if item 39 was the one with the purchase and sales agreement.

President Murphy-Romboletti stated that it was.

Councilor Givner reiterated that she understood the Council needed to recognize the owner wanted to sell and then decide whether or not to give the right of first refusal to Kestrel, meaning item was the item the Council needed to vote on to give them that right.

Councilor Jourdain expressed his understanding that Councilor Givner was correct. He then stated that if nothing was done on item 39, it would expire in around 20 days. He added that it was just the body taking notice of it. He then stated item 40 was just a solicitation letter from Kestrel but there was no legal form for the Council to vote on. He added that the letter made various representations and promises, but it needed to be stated in an operative document between the city and Kestrel.

President Murphy-Romboletti stated that she would like to hear from the Law Department to clarify.

Motion was made and seconded to suspend the necessary rules to allow Atty Bissonnette to address the Council.

Atty Bissonnette explained that 61A came with a unique set of rules, with item 39 being the item that began the time clock that would run out at the end of the month, adding that a decision needed to be made by the Council to exercise the right of first refusal. He then stated that one option could be to transfer that right to a nonprofit conservation agent. He then explained the city had a limited role as just a pass through. He then stated that the other option would be to allow the right of first refusal to expire for the two private parties to proceed with their agreement.

President Murphy-Romboletti clarified that everyone appeared to be clear on that part of the process but there was some disagreement on whether it was item 39 or item 40 needed to be acted.

Atty Bissonnette stated that a vote was being taken on both item 39 and 40. He then stated that the body could take a vote to exercise the right of first refusal and transfer to Kestrel based on the conditions in their letter, and then any other conditions the body wanted to add.

Councilor Jourdain stated that he agreed with Atty Bissonnette but had questions about the letter from Kestrel Land Trust, item 40, particularly if the body could vote on the letter alone without having an operative document for the body to execute.

Atty Bissonnette stated that the vote would be the operative document authorizing the city to transfer the right of first refusal to Kestrel.

Councilor Jourdain stated that the body would generally prefer to have a draft document before taking a vote.

Councilor Bartley illustrated there was a document with item 39.

Councilor Jourdain stated that item 40 would be exercising the right of land, with a third party paying the bill. He then suggested that an interest in real estate would normally come with a draft document.

Councilor Givner reiterated her understanding that item 39 just needed to be acknowledged and item 40 needed to be voted on.

Councilor Devine asked if voting on 39 would give the initial buyer the ability to complete the purchase and sales agreement.

President Murphy-Romboletti stated that she was unsure how anything could be voted on for item 40 as it appeared to be just a communication.

Atty Bissonnette suggested figuring out how the body wanted to proceed. He then explained that if nothing happened on items 39 and 40 by the end of the month by way of the body voting to table them, the purchase and sale agreement would go forward as if the city was never involved. He added that if the motion to table failed, the body could then vote on whether to accept Kestrel's offer to take over the right of first refusal.

Councilor Vacon stated that she was in favor of the original purchase and sale agreement going forward. She then made a motion to lay items 39 and 40 on the table. Councilor Anderson-Burgos seconded the motion.

Councilor Magrath-Smith asked if the maker could withdraw the motion to lay on the table, noting that this was in her ward and she had not yet been able to speak on the topic.

Councilor Vacon withdrew her motion to lay on the table.

Councilor Bartley stated that this was a private contract between two people and the city was not planning to exercise the option to a right of first refusal until Kestrel Land Trust asked the city to step in. He added that there was no additional consideration or benefit to the city being offered to the city. He then emphasized that Mr. Ramos spoke during public comment explaining his desire to move the contract forward.

Councilor Magrath-Smith stated that the original land owner opted into 61A and as a result, the buyer putting in the offer knew that the property fell under 61A and the city had a right to exercise the option and consider a different use of the land. She then suggested that the benefit to the city would be that the 7 acres of conserved land would be publicly available rather than privately held. She also noted that this land was within a few miles of other areas of land that Kestrel was able to help the city protect in their efforts to connect land for wildlife and conservation. She also expressed concern that a fault in the process meant that neighbors in the area were not notified that this was happening.

Councilor Vacon recalled that Kestrel explained they did not initially bid on the property when it went up for sale because they didn't have the money to purchase it at the time, and they did not engage until they were approached by representatives from the city's Conservation Department and Planning Department. She then expressed her belief that it should go to the person who bid fairly on the property. She then made a motion to lay items 39 and 40 on the table. Councilor Bartley seconded the motion.
---> Laid on the table on a call of the roll of the yeas and nays--Yeas 11--Nays 2 (Givner, Magrath-Smith)--Absent 0.

The Committee on Development and Governmental Relations to whom was referred a communication From Kestrel Land Trust, letter regarding right of first refusal for Mountain Road parcel under Chapter 61A

have considered the same and Recommended that the order be referred to the full Council without recommendation.

Committee Members:

Kocayne Givner
Michael Sullivan
Carmen Ocasio
Juan Anderson-Burgos
Patricia Devine

---> Laid on the table on a call of the roll of the yeas and nays--Yeas 11--Nays 2 (Givner, Magrath-Smith)--Absent 0.

The Committee on Development and Governmental Relations to whom was referred an order that the City Clerk meet with the City Council to discuss the potential streamlining of poll locations in Wards 1, 2 and 5 as we have already done in Wards 3, 4, 6 and 7. All of these other Wards seem to function fine with one polling location and it would be a potential cost savings and less administrative burden to use the one location per ward method.

have considered the same and Recommended that the order has been complied with.

Committee Members:

Kocayne Givner
Michael Sullivan
Carmen Ocasio

Juan Anderson-Burgos
Patricia Devine

UNDER DISCUSSION:
Councilor Givner stated that this was sent back to committee with the intention of getting more information about merging wards with the hope that changing the location in Ward 4 would be a part of the discussion, but there was no additional information. She then explained that as it was not pressing and didn't need to be rushed, they decided that it could be filed and brought up again when it wasn't so close to election season.

Councilor Jourdain stated that they felt City Clerk Brenna Leary did a good presentation at a prior meeting to explain the savings as well as the logistical challenges that would be addressed by merging the polling locations in these wards. He added that they recognized it would be too late in the current year to make the changes, and they could come back to it with plenty of input and notice. He noted that some of the savings could be used to give more to the existing poll workers.

Councilor Vacon stated that she co-filed this because she was warm to some of the efficiencies without making it more difficult for voters. She also agreed that it was too late in the year to do it now, and her other order to provide more pay to the poll workers would have to be on hold for now. She also emphasized that there were many other options such as early voting on mail in voting.
---> Report of Committee received and recommendation Adopted.

President Murphy-Romboletti stated that item 42 remained in committee.

ORDERS AND TRANSFERS

(1:50:05)

Vacon- ORDER: that the conservation commission provide minutes of the process & summary of discussion & votes for the wetlands enforcement order at 77 Mayer Drive and provide any appeal process available to neighbors/abutters.
Send to Public Safety

Councilor Vacon requested a response from the Conservation Commission after their next meeting on the matter.
---> Received and referred to the Public Safety Committee.

Vacon- ORDER: that the temporary speed humps approved for Upland Road (for the petition that was filed in 2021), be installed as soon as possible. When the speed humps are installed, the engineer re-evaluate the need for "no parking" areas on Upland Rd. that were installed while waiting for the speed humps. Some residents are requesting the removal of the "no parking" areas.

Vacon stated that this included a request that the Engineer also evaluate the need for the current no parking spaces once the humps are installed. She noted there was some tension in the neighborhood about that.
---> Received and Adopted. Copy to DPW, Engineer.

Vacon- ORDER: that a portable speed feedback sign be installed on or near pole #52 on County Road as drivers are traveling at high speed in the area per multiple reports.

Councilor Vacon stated that she was unsure if these were installed by the Police Department or the DPW.

President Murphy-Romboletti expressed her understanding that it was the Police Department because they had been sending updates on these signs.
---> Received and Adopted. Copy to Holyoke Police Department.

Anderson-Burgos - Ordered that St. Jerome from Dwight to Sargeant be reduced from 30 mph to 25 mph. Speeding has been an issue and the limit being higher than the citywide limit seems to give drivers the sense they can go much faster. Send to Ord.

Councilor Anderson-Burgos asked if this could be adopted.

Councilor Bartley stated that they had to be done in Ordinance.

Councilor Jourdain added that it had to be done through legal form.
---> Received and referred to the Ordinance Committee.

Anderson-Burgos - Ordered that the DPW replace the stop sign on Linden at Mackenzie with a flashing stop sign.
Refer to public safety.
---> Received and referred to the Public Safety Committee.

Anderson-Burgos - Ordered that the City Engineer review Jarvis Avenue near Jarvis Heights to see if some of the no parking section that stretches from Alma to Cherry can be changed. There is a resident who needs handicap parking closer to their home because the available handicap parking in the complex is a long distance away.
---> Received and Adopted. Copy to DPW, Engineer.

Anderson-Burgos - Ordered that a new streetlight be installed proximate to 230 West Franklin Street at the corner of Sycamore.
---> Received and Adopted. Copy to HG&E.

Anderson-Burgos - Ordered that the sidewalk on the west side of St Jerome be repaired as the sidewalk is in very poor condition, forcing anyone in a wheelchair to go into the street.
---> Received and Adopted. Copy to DPW.

Anderson-Burgos - Ordered that the HPD monitor Linden Street from Sargeant to Mackenzie for speeding. Several constituents have expressed frustration with drivers speeding.
---> Received and Adopted. Copy to Holyoke Police Department.

Anderson-Burgos - Ordered that the trees on West Franklin from St Jerome to Beech be trimmed. Constituents have expressed concern about driving out of side streets and having their line of sight

impaired by the trees.
---> Received and Adopted. Copy to Forester.

Anderson-Burgos - Ordered that the sidewalks on both sides of Sycamore between West Franklin and Mackenzie Ave be redone. They are so narrow that a standard wheelchair does not fit and their conditions are a safety hazard.
---> Received and Adopted. Copy to DPW.

Bartley, Rivera, I.- The speed limit on Laurel Street be reduced to 25 MPH. Refer to Ordinance, City Engineer.
---> Received and referred to the Ordinance Committee. Copy to Engineer.

Bartley-City Council suspend its Rule 2-A., cancel its second meeting in September currently scheduled for Tuesday, September 16, 2025 and reschedule it. The reason for this request is that this date is set aside by The Big E as its traditional Salute to Holyoke / Salute to Rhode Island.

President Murphy-Romboletti stated that it was also the date of the preliminary election for wards 1 and 5.

Councilor Bartley asked if the meeting should be rescheduled.

President Murphy-Romboletti stated that they were likely going to meet the following date as long as the City Clerk was good with it. She then asked if the order should be amended to the 17th but would like to confirm with the City Clerk.

Councilor Bartley suggested it could be tabled.

Councilor Jourdain stated it could be handled at the first meeting in September.
---> Laid on the table.

Bartley- HPS add signage to the west side of the Wm. Peck School stating the school's name. Refer to Joint Committee.
---> Received and referred to the Joint Committee of the City Council and School Committee.

Bartley- Constituent (business) request. Ordered that the city engineer, DPW Highway Dept., develop a plan to install safety measures at the Northampton St. (Rt 5) and Beech St. (Rt 202) intersection. Specifically, create and implement a plan so that motorists traveling N on Rt. 5 who are turning right on red onto Rt. 202 North allow motorists traveling S on Rt. 5 who are turning Left on a green arrow onto Rt. 202 to turn safely. Per constituent, too many close calls. Refer to City Engineer and public safety committee.
---> Received and referred to the Public Safety Committee. Copy to City Engineer.

Bartley- The City Council issue a proclamation to the memory of USAF Major William H. Lloyd Jr., Holyoke resident, Vietnam War combat veteran (350 combat missions), and person who designed and created Holyoke's Vietnam War Memorial at Veterans' Park. He lived to 89. He passed away 7/15/2025. The proclamation can be presented to the War Memorial Commission at its upcoming Veterans' Day service.

Councilor Devine asked who this would be given to.

Councilor Bartley stated that he would present it to the commissioners of the War Memorial Building to give to the family.
---> Received and Adopted.

Bartley, Vacon- ORDER The sidewalk on the west side of Holyoke Street (street leading to the Mall) is difficult to navigate due to the vegetation overgrowth. DPW plans to cut the vegetation back; ordered that a communication be sent by DPW to city council advising of status.

Councilor Bartley stated that this was taken care of and the trees were already cut back thanks to Mike Gallagher.
---> Received and complied with.

Devine- ORDERED: an addition to the sidewalk list: ordered that the sidewalk in front of Holyoke Media on Suffolk Street be repaired.
---> Received and Adopted. Copy to DPW.

Devine- That Pouliot Pool be opened until after Labor Day if possible.

Councilor Jourdain stated that it would great if it can be done.

Councilor Bartley stated that he was blown away by the pool and found it to be beautiful. He added that a lot of out of towners were using it. He also recalled that Councilor Jourdain led the charge to get the pool back up and running.

Councilor Jourdain recalled a bond was approved in one week. He added that getting the lifeguards would be the challenge because many were going back to school.
---> Received and Adopted. Copy to Parks and Rec.

Devine, Magrath-Smith-Ordered that the Fire Department drive up Old Basset Road and report back as to the status of the road in relation to the larger fire trucks/engines re: safety/turning around, water etc. The report should reference whether the road should be paved.
---> Received and Adopted. Copy to Holyoke Fire Department, City Engineer.

Devine, Councilor Vacon-ORDERED: that a proclamation be given to Gary Rome in recognition of being named the 2025 Hyundai dealer of the year and the Board of Excellence award from Hyundai.
---> Received and Adopted.

Devine, Councilor Magrath-Smith-Ordered that if Basset Road is declare a state road, then the State should pave it asap.
---> Received and Adopted. Copy to state delegation.

Devine- ORDERED: That the DGR Committee meet with the owner of 689 Main Street (Assessors Map 055 Block 00, Parcel 009) to discuss the minutes of 5/21/2024 which seem to reflect that the DGR

Committee and full council voted to remove any reverter clause that was previously released on this property.

Councilor Bartley stated that he would abstain from voting on this item due to a conflict.

Councilor Jourdain noted that this was addressed by Atty Toby Wilson during public comment. He then stated that the open question was why there was a delay on this when the releases had been approved by the Council. He then stated that the Law Department should provide a report back on where this stood.

President Murphy-Romboletti asked if the mayor had been called.

Councilor Jourdain stated that he had just learned about it earlier that day.

Councilor I. Rivera asked who would be in charge of this.

Councilor Jourdain stated that the Council passed something and one of the parties was asking about it, but there now seemed to be issues with the Law Department. He added that another party was also involved.

Councilor I. Rivera stated that he was seeking to understand where the loose end was.

Councilor Jourdain expressed his expectation that the issue would be with the Law Department, or they would at least know if the objection was with another department, or even a non-city issue.
---> Received and referred to the Development and Governmental Relations Committee. Copy to Law Department.

Devine-Ordered that forestry department trim the 2 trees on the tree belt in front of 202 Locust Street. Thank you.
---> Received and Adopted. Copy to DPW, Forester.

Devine- ORDER that the Council approve the changes to Holyoke Code of Ordinances Chapter 86 Schedule IV: Stop Streets associated with implementation of all-way stop control at the following locations as detailed in the memorandum of changes associated with the MassDOT All-Way Stop Control (ASWC) Program prepared by the Assistant City Engineer, dated July 29, 2025:

- Appleton Street at Elm Street
- Cabot Street at Nick Cosmos Way
- Dwight Street at Pine Street
- Sargeant Street at Commercial Street
- Sargeant Street at Elm Street
- Sargeant Street at Sycamore Street
- West Franklin Street at Linden Street

---> Received and referred to the Ordinance Committee.

Devine- The City issue a proclamation for Marilyn Turgeon who is retiring on July 15. She has been with the City for over 40 years!
---> Received and Adopted.

Devine-ORDERED that the ordinance committee review the ordinance for repairing cars on city streets or in driveways, particularly the changes that were made a few years ago that allowed certain repairs to be made on the street or in driveways.
---> Received and referred to the Ordinance Committee.

Devine, Anderson-Burgos - Ordered that 2 lanes from Linden Street onto Beech Street be designated as a left turn lane and a right turn lane and painted with the appropriate turn arrows.
---> Received and referred to the Ordinance Committee. Copy to City Engineer.

Devine- ORDER that the various traffic schedules contained in Holyoke Code of Ordinances Chapter 86 Article IX be updated as detailed in the memorandum of changes required by the upcoming City Center Connector Project prepared by the Assistant City Engineer, dated July 29, 2025.
---> Received and referred to the Ordinance Committee.

Motion was made and seconded to suspend the necessary rules to take up items 72, 73, 74, 76, 77, and late file 96 as a package.

DEVINE - Ordered, that there be and is hereby appropriated by transfer in the fiscal year 2026, NINE THOUSAND THREE HUNDRED FORTY-TWO AND 11/100 Dollars ($9,342.11) as follows:

FROM	
12401-51103 CHIEF INSPECTOR OF WIRES	$9,342.11
TOTAL	$9,342.11
TO:	
12402-53050 INSPECTIONS-ELECTRIC	$9,342.11
TOTAL	$9,342.11

To the City Council:

I hereby recommend the passage of the above order at the meeting of your Council to be held Tuesday, August 5, 2025.

Joshua A Garcia, Mayor

---> Received and referred to the Finance Committee.

Devine-Ordered, that in accordance with M.G.L. Chapter 44 Sec. 53A, the City Council hereby accepts the provisions of the "MASSACHUSETTS SAFE & SUCCESSFUL YOUTH INITIATIVE (SSYI), $709,700, NO MATCH" grant and authorizes the establishment of a Fund or other method appropriate for the accounting of the receipts and expenditures of all resources associated with the administration of said grant.
Sec 2-509 - Grant Reporting
Any city department, of which has received grant funding by approval of the city council pursuant to Massachusetts General Laws, or any other authorizing criteria, shall within a reasonable period of time, but no later than 60 days from the conclusion of said grant, generate a detailed report which outlines the planned outcomes with the documented actual results. Said report shall be submitted to the city clerk for addition to the city council's next agenda.

To the City Council:

I hereby recommend the passage of the above order at the meeting of your Council to be held Tuesday, August 5, 2025.

Joshua A Garcia, Mayor

---> Received and referred to the Finance Committee.

Devine- Ordered, that in accordance with M.G.L. Chapter 44 Sec. 53A, the City Council hereby accepts the provisions of the REVISED "FY2023 SAFE STREETS AND ROADS FOR ALL, $197,850, LOCAL FUNDS $24,570 / IN KIND MATCH $15,000" grant and authorizes the establishment of a Fund or other method appropriate for the accounting of the receipts and expenditures of all resources associated with the administration of said grant.
Sec 2-509 - Grant Reporting
Any city department, of which has received grant funding by approval of the city council pursuant to Massachusetts General Laws, or any other authorizing criteria, shall within a reasonable period of time, but no later than 60 days from the conclusion of said grant, generate a detailed report which outlines the planned outcomes with the documented actual results. Said report shall be submitted to the city clerk for addition to the city council's next agenda.

To the City Council:

I hereby recommend the passage of the above order at the meeting of your Council to be held Tuesday, August 5, 2025.

Joshua A Garcia, Mayor

---> Received and referred to the Finance Committee.

Devine-Ordered, that in accordance with M.G.L. Chapter 44 Sec. 53A, the City Council hereby accepts the provisions of the "FY23 COPS OFFICE ANTI-HEROIN TASK FORCE PROGRAM, $10,000, NO MATCH" grant and authorizes the establishment of a Fund or other method appropriate for the accounting of the receipts and expenditures of all resources associated with the administration of said grant.
Sec 2-509 - Grant Reporting
Any city department, of which has received grant funding by approval of the city council pursuant to Massachusetts General Laws, or any other authorizing criteria, shall within a reasonable period of time, but no later than 60 days from the conclusion of said grant, generate a detailed report which outlines the planned outcomes with the documented actual results. Said report shall be submitted to the city clerk for addition to the city council's next agenda.

To the City Council:

I hereby recommend the passage of the above order at the meeting of your Council to be held Tuesday, August 5, 2025.

Joshua A Garcia, Mayor

---> Received and referred to the Finance Committee.

Devine- Ordered, that the amount of THREE THOUSAND TWO HUNDRED FIFTY AND 00/100 Dollars ($3,250.00) be authorized from the BUILDING Department's ELECTRICAL INSPECTIONS (12402-53050) appropriation in fiscal year 2026 for services rendered in fiscal year 2025 which were unencumbered at the 2025 fiscal year end.

To the City Council:

I hereby recommend the passage of the above order at the meeting of your Council to be held Tuesday, August 5, 2025.

Joshua A Garcia, Mayor

---> Received and referred to the Finance Committee.

DEVINE - Ordered, that there be and is hereby appropriated by transfer in the fiscal year 2026, TWO HUNDRED FIFTY THOUSAND AND 00/100 Dollars ($250,000) as follows:

FROM	
12101-51117 DISPATCH	$ 50,000
12101-51105 SERGEANTS	50,000
12101-51107 PATROLMEN	100,000
12101-51103 CAPTAINS	50,000
TOTAL	$250,000
TO:	
12101-51300 HPD OVERTIME	$250,000
TOTAL	$250,000

To the City Council:

I hereby recommend the passage of the above order at the meeting of your Council to be held Tuesday, August 5, 2025.

Joshua A Garcia, Mayor

---> Received and referred to the Finance Committee.

Devine- ORDER that the Council approve the changes to Holyoke Code of Ordinances Chapter 86 Schedule IV: Stop Streets associated implementation of stop control on local side streets intersection Homestead Ave between Westfield Rd and Cherry St as detailed in the memorandum prepared by the Assistant City Engineer, dated July 29, 2025.
---> Received and referred to the Ordinance Committee.

Councilor Givner- order that Ward 4 polling location switch to YMCA from St. Paul's Church Parish, 485 Appleton St to improve accessibility.
---> Received and referred to the Development and Governmental Relations Committee.

Givner- In service of health and safety, order to install no parking pavement paint and signage at both sides of the driveway to the building at 156 Oak St. The building dumpster is accessed through the driveway. Service vehicles are unable to access dumpsters, due to unenforced minimum parking distance to driveway violations, causing health concerns and fees to the property owner.
---> Received and referred to the Ordinance Committee.

Greaney - Ordered that the Board of Health Director come before the City Council ASAP to discuss the department's operations.
---> Received and referred to the Public Service Committee.

Jourdain- Joint Committee on City Council and School Committee review with School leadership the final school budget for FY 26 and the final appropriations from the state. Committee also review expected state and federal grants to be received during the upcoming fiscal year.
---> Received and referred to the Joint Committee of the City Council and School Committee.

Jourdain- Joint Committee on City Council and School Committee review with School leadership the opening of the new Peck School and ensure everything is remaining on track.
---> Received and referred to the Joint Committee of the City Council and School Committee.

Jourdain, et al - That a section of Pine Street extended from Resnic Blvd to the back parking lot of the high school be dedicated and named "Ronald Collamore Way" in honor of Ronald Collamore and his over four decades of service to the Holyoke public schools as a member of the School Committee. Please see attached highlighted map for a further description.

All councilors asked to be added to the order.

Councilor Jourdain stated that Mr. Collamore was not running for reelection this year after a long time of service in the School Committee. He added that Mr. Collamore had a statewide record of holding in his position.

Councilor Sullivan stated that Mr. Collamore was the longest serving elected official in the state.

Councilor Jourdain stated that Mr. Collamore was a Holyoke legend that really cared about the kids and schools, and it will be different not to see him after making a tremendous contribution to the city.
---> Received and Adopted. Copy to DPW.

Jourdain- That Ordinance 2-421 regarding times when meetings are to be conducted be amended to add the elected multi-member bodies of city including the City Council and School Committee.

Councilor Jourdain explained that this was the rule requiring multimember bodies to meet after 5 p.m. unless they get an exemption, but the School Committee and City Council were exempted from the ordinance.
---> Received and referred to the Ordinance Committee.

Magrath-Smith-Ordered, that the City Council approve for their consideration $15,000 from the CPA budget to be used for "small grants" as outlined in the attached letter from the Holyoke Community Preservation Committee.

Councilor Sullivan made a motion to adopt, noting that this had been done before. He explained that this was setting aside a small portion to speed through some small appropriations, adding that none of the small ones would come before the Council anyway.

Councilor Jourdain stated that there wasn't a list of what they were requesting. He added that it should go to Finance.

President Murphy-Romboletti stated that the item was in the packets.

Councilor I. Rivera recalled that Community Preservation Act Committee usually set aside a little for smaller grants and smaller projects that still fell under the same guidelines, usually in the $3,000-$5,000 range.

Councilor Vacon stated that it may seem like small money to councilors, but it wouldn't be small money to taxpayers.

Councilor Sullivan reiterated that the Council had approved this in the past so that the CPA could approve the funding as the projects came in. He explained that none of them could exceed $6,000. He added that if the money wasn't spent at the end of the year, it would go back into the CPA fund. He reiterated that none of the individual projects ever come before the Council.

Councilor Vacon expressed her understanding that all of the CPA expenses were seen by the Council.

Councilor Sullivan stated that they were reported, but the larger ones had to come before the Council for a vote while these smaller ones did not. He reiterated the lump sum of $15,000 had been approved in the past so it was available to committee to award as those smaller projects came through.

Councilor Vacon stated that she would rather see it.

Councilor Greaney stated that $3,000-$7,000 was a lot of money and it should be accounted for.

Councilor Jourdain stated that it should be discussed in Finance. He then suggested that if they wanted to have a small grant program, they should have a deadline set for the money to be applied for, and then have the CPA report on who they were approving rather than giving the CPA $15,000 to spend however they wanted. He emphasized that the statute stated that the CPA recommended the funding and the Council approved it,

Councilor I. Rivera emphasized that this was not the first time this had happened, but likely the 3rd or 4th time. He also stated that it was still accounted for, but it allowed them to fund small projects without getting bogged down by having to go through the same process as larger projects asking for as much as $100,000 or more. He then stated that he was not against having a discussion in Finance, but he understood this was not new.

Councilor Sullivan reiterated that the Council had done this before. He then made a motion to suspend the rules to take final action. Councilor Givner seconded the motion.

Motion to suspend the rules to take final action failed on a call of the roll of the yeas and nays--Yeas 7--Nays 4 (Greaney, Jourdain, Ocasio, Vacon)--Absent 2 (Bartley, Magrath-Smith).

A brief back and forth ensued on whether two-thirds was achieved.
---> Received and referred to the Finance Committee.

Magrath-Smith - Ordered, that the City Council consider for its approval the FY26 budget from the Holyoke Community Preservation Committee. Note, this is the last budget that will be funded under the previous 1.5% surcharge. The FY27 budget will decrease by approximately one-third.
---> Received and referred to the Finance Committee.

Magrath-Smith - Ordered, that the Ordinance Committee revise Section 74-98 of our ordinances concerning private property and vegetation to balance the need for public health and safety with emergent gardening practices focused on ecological stewardship. Revise the current language to create clarity concerning exemptions or alternative compliance measures for properties dedicated to native landscaping, pollinator habitats, or organic gardening practices.
---> Received and referred to the Ordinance Committee.

Magrath-Smith - An order to declare Parcel Holyoke Assessors Map 144, Block 00, Parcel 057, Easthampton Road, Holyoke, MA as surplus property. The City has been approached by an abutter looking to purchase the property to combine the lots and build a home on the same. The property is vacant land and currently assessed at $8,500.00.
---> Received and referred to the Development and Governmental Relations Committee.

Murphy-Romboletti-Ordered That the Polling Place for each of the voting precinct in the City of Holyoke for the Preliminary Election to be held Tuesday, Sept. 16, 2025, be and the same are hereby designated as follows:
ORDENA, que los lugares para cada recinto en la Ciudad de Holyoke para las Elecciones Preliminar Esta que se llevaran a cabo el Martes, 16 de Septiembre 2025 sea y al igual, por este medio designado lo siguente:
WARD ONE BARRIO UNO
PRECINCT A – Rosary Towers Recreation Room 21 Bowers St..
RECINTO A—Rosary Towers Recreation Room 21 de la Calle Bowers
PRECINCT B— Holyoke City Hall, 536 Dwight St.
RECINTO B— Holyoke City Hall, 536 Dwight St
WARD FIVE BARRIOS CINCO
PRECINCT A – Lt. Elmer J. McMahon School Gym, Kane Rd.
RECINTO A—Gimnasio de la Escuela McMahon, en la Calle Kane
PRECINCT B – Maurice A. Donahue School Gym, Whiting Farms Rd.
RECINTO B—Gimnasio de la Escuela Donahue, en la Calle Whiting Farms
---> Received and Adopted.

Murphy-Romboletti Ordered That the Preliminary Election in the City of Holyoke for the choice of City Officers be, and the same is hereby called to be held on Tuesday, September 16, 2025 in one polling place as designated by the City Council. The poll will be opened at 7:00 a.m. in the forenoon and closed at 8:00 p.m. of said day, and all the voters in ward 1 and ward 5 in which they are entitled to vote,

between said hours, may cast their votes by voting machines and paper ballots for the election of:
CITY COUNCILOR WARD ONE(1)
SCHOOL COMMITTEE WARD FIVE (5)
---> Received and Adopted.

Rivera, J- Order that the City of Holyoke install a handicap parking sign in front of 34 North Summer Street, where Mr. Jose Guzman resides. Additionally, that the pedestrian crosswalk lines near this address be repainted to ensure safety for residents and pedestrians in the area.
---> Received and referred to the Ordinance Committee.

Rivera, J- Ordered That the City of Holyoke place appropriate signage designating a “Loading and Unloading Zone for Deliveries” at the side entrance of the Cayey Social Club, located on Hamilton Street, which serves as the delivery access point for the club located at 273 Main Street. This designation is being requested to facilitate the safe and efficient delivery of supplies to the Cayey Social Club and to prevent congestion or improper parking in the area.
---> Received and referred to the Ordinance Committee.

LATE FILED ORDERS AND COMMUNICATIONS

(2:34:15)

DEVINE - Ordered, that there be and is hereby appropriated by transfer in the fiscal year 2026, TWENTY FOUR THOUSAND ONE HUNDRED FORTY SIX AND 64/100 Dollars ($24,146.64) as follows:

FROM		
12101-51104 LIEUTENANTS	$ 4,261.81	
12101-51105 SERGEANTS	3,689.65	
12101-51107 PATROLMEN	16,195.18	
TOTAL	$24,146.64	
TO:		
12101-51180 INJURED ON DUTY		$24,146.64
TOTAL	$24,146.64	

To the City Council:

I hereby recommend the passage of the above order at the meeting of your Council to be held Tuesday, August 5, 2025.

Joshua A Garcia, Mayor

UNDER DISCUSSION:

---> Passed two readings and Adopted on a call of the roll of the yeas and nays--Yeas 11--Nays 0--Absent 2 (Bartley, Magrath-Smith).

Brenna Murphy Leary

Adjourned at 9:39 p.m.

MAYOR JOSHUA A. GARCIA

CITY OF HOLYOKE

RECEIVED

AUG 05 2025

Holyoke City Clerk's
Holyoke, MA

August 1, 2025

The Honorable City Councilors
City of Holyoke
Holyoke, MA 01040

Dear Councilors,

Subject to your approval and in accordance with MGL c.49, Section 1, I hereby appoint the following individuals to the Fence Viewer committee:

Jeff Burkott, Assistant Director of Planning, Principal Planner	Davin Pasek, Zoning Enforcement Officer

Both members will serve a one-year term; said term will expire July 1, 2029.

Respectfully submitted,

Joshua A. Garcia, Mayor
JAG/nmo

MAYOR JOSHUA A. GARCIA

CITY OF HOLYOKE

RECEIVED

AUG 15 2025

Holyoke City Clerk's
Holyoke, MA

August 14, 2025

The Honorable City Councilors
City of Holyoke
Holyoke, MA 01040

Dear Councilors,

Subject to your approval and in accordance with Chapter 18 Article III sec. 18-95, I hereby appoint the following individual to the Local Historic District Commission (Fairfield Avenue):

Mr. David Owen
12 Mason Road
Holyoke, MA 01040

Mr. Owen will serve a three-year term; said term will expire July 1, 2028.

Respectfully submitted,

Joshua A. Garcia, Mayor
JAG/nmo

CC: Ms. Lauren Niles
Aaron Vega, Director Planning & Economic Dev

Mayor Joshua A. Garcia

CITY OF HOLYOKE
FIRE DEPARTMENT HEADQUARTERS

JOHN KADLEWICZ
CHIEF OF THE DEPARTMENT

August 18, 2025
Honorable City Council

Councilors,

In accordance with Councilor Devine and Councilor Magrath-Smiths Order we went to Old Basset Road and assessed its status in relation to Fire Department operations. The road is in very poor condition. The lower portion of the road is hardpack and gravel and then transition to pavement as you go up the hill. However, it would not keep us from going up to the houses with an engine company, but it would be slow going. We would be unable to bring a ladder truck up the street though. There is a hydrant at the corner of Old Basset Rd and Jarvis Ave on the same side of the road. It would be an approximately 960 foot lay to reach the top of the street where the houses are located. We carry 1000 feet of 5-inch supply hose on our Engine Companies. It would be advantageous for our firefighting operations if the road were both widened and repaved.

Respectfully

John Kadlewicz
Fire Chief

"PRESERVING LIFE AND PROPERTY SINCE 1851"
600 HIGH STREET - HOLYOKE, MASSACHUSETTS 01040
PHONE: (413) 534-2250 - FAX: (413) 534-2247
EMAIL: KADLEWICZJ@HOLYOKE.ORG

City of Holyoke Health Benefit Meeting
June 2, 2025
City Hall, Old Tax Collector's Office

RECEIVED

JUL 2 8 2025

Holyoke City Clerk's
Holyoke, MA

The meeting was called to order by **Quentin** at **5:00** PM

In attendance:
PEC Representatives: Chris Butler-Fire Dept

City Representatives: Tanya Wdowiak-City Auditor, Sean Mangano- HPS CFO, Dazhana Argueta-Personnel Specialist

Others: Quentin Donohue - Chair, Steve Corbin - Dowd Insurance, Kelly Curran - HR Director, Rebecca Sutter - Dowd, Rory Casey - Treasurer

Receive minutes from 04/07/25 meeting

Quetin was open to a motion to accept last meeting minutes.
MOTION: Chris Butler made a motion to accept last minutes. **Tanya Wdowiak** seconded. Motion carried **unanimously**

Broker Update

Broker Update Discussion regarding claims. Dental-Started with 62K left over after claim paid off. Monthly vs funding that is coming in. Dental claims running high. Multiple months over 100k in claims. Steve's guess is that it will even out. Quentin felt strongly about having a clear balance of trust. Tanya will close off 2024 and if there is a balance in 2024 for dental trust from 2024 and we can decide where we want to put it. Quentin wants 2024 balance.

Quentin felt strongly about referring to the dental account as a trust and getting the balance.

Medical- 436k rebate meaning people are using expensive drugs. 8.8million Health 4.2 million RX in claims 800k in RX rebate. 16.5 projected to EOY.

Discussion regarding high cost claimants. 2 above 350k and so we will get reimbursed. Over 100k claims predictions are a lot less than previous years. Discussed maybe paying penalties to get all retirees on Medex.

GLP1 Drugs report showing those used for weight loss and those used for Diabetes. BCBS formulary will not include weight loss. Can add riders as we are doing today. 3m prior to January trust needs to make a decision. Rider is the cost of drugs which is what is currently done with self funding. CB would like to review GLP 1 programs to save since BCBS is now removing GLP1 for weight loss from their formulary.
Rory had an idea that we can decide to not cover and use a program like lilylilly where the cost of GLP is around 500 as amount to the high cost using the Pharmacy. We won't save a ton but can save some.

Kelly Curran started discussion to use wellness money for YMCA. Holyoke YMCA enrollment has doubled enrollment. CB asked if we can get a filer or poster and get the word out. The Fire Dept asked about using wellness funds for gym equipment. Purchase 1 or 2 pieces of equipment and then maybe some for the Police Dept but it does not benefit everyone.

Sean Mangano mentioned maybe staff proposing for a grant to use wellness credits on.

Quentin asked if anyone wants to make a motion to use wellness credit for the Fire dept

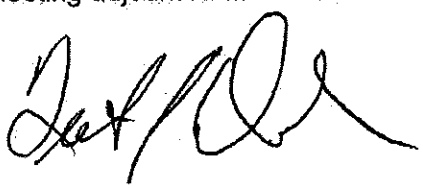
MOTION: Chris Butler made a motion to use wellness credits from this year for the FireDepartment and start the grant process next year. The Trust should take lead on grants. **Dazhana Argueta** seconded. Motion carried **Unanimously**

Quentin brought up the order in front of the finance committee- Kelly Curran said they just want to know how we came up with the decision. Power to choose the broker was in Mayor's hand and was moved to Trust.

YMCA offering CPR training to their package.

Quentin welcomed a motion to adjourn
MOTION: Sean Mangano made a motion to adjourn. Trustee **Chris Butler** seconded. Motion carried **unanimously.**

The meeting adjourned at **5:51** PM



Board of Fire Commission Meeting Minutes		Date: July 23, 2025 Time: 5:00 p.m. Location: Fire Department Headquarters	
Meeting called by:	Chairman Mettey	Note taker: D. Glenn	
Type of meeting:	Regular Monthly	Timekeeper: D. Glenn	
Facilitator:	Chief Kadlewicz		**Approved**
Attendees:	George Mettey, Nelson Lopez, Jeffrey Trask via Zoom		
Absent:			
Staff in Attendance:	Chief John Kadlewicz and Dale Glenn		
Also: Angel Collazo, City Councilor Patti Devine, Raul Maldonado, William Alicea			

A. Opening of Meeting	Chairman Mettey	Time: 5:00 p.m.

Discussion: #1 on the agenda Commissioner Mettey opened the meeting of the Board of Fire Commissioners with a verbal roll call of those present along with the pledge of allegiance and a prayer.

RECEIVED
AUG 21 2025
Holyoke City Clerk's
Holyoke, MA

#2 agenda item – Minutes: The Board of Fire Commissioners reviewed the minutes from June 18, 2025

#3 on the agenda – Fire Chief's Report:

- Injured on Duty/Light Duty/Administrative Duty/Administrative Leave
- Overtime Expenditures

#4 Old Business:

- 1 Firefighter requested to come before the Board to request a 1 year extension for his EMT Certification.
- Capital Outlay – Approved by City Council – Chief Procurement Officer is starting the process for the RFP for Station #3
- Removing the Fire Chief's position from Civil Service proposed by Councilor Jordain. City Councilor Patti Devine came to discuss this issue with the Board. Commissioner Mettey and Commissioner Trask were invited last minute to a meeting at the City Council to participate in a discussion regarding this matter. No advaned information was provided to the commissioners. Councilor Devine stated that removing this position from civil service is a direct violation of the collective barganing unit. It was rushed and the City Council wasn't given the opportunity to review this issue. She also informed the Commission it was the voters of the City of Holyoke that voted for this position to be civil service. Councilor Jordain indicated this wouldn't take affect until after the current Fire Chief retired. Commissioner Trask stated that the Board did not vote on this matter. The Commission does not support this issue. Union President Alicea stated that City Councilor Jordain stated that the Fire Chief will be hired the same way as the Police Chief. The City Council has brought it to the Senate and the House of Representatives. City Councilor Devine will investigate further on this matter and update the Board. Union President Alicea said "its in the legislature. The act has been filed. It is House Bill 4299 and is on a homeroom petition. This still has multiple steps." Union President Alicea also stipulated the membership of the firefighters wants to keep the Fire Chief's position within Civil Service and part of the Department. Commissioner Trask stated the City Council can refuse to adopt it and the Mayor can refusse to sign it. Commissioner Trask stated the board should have a legal opinion on this matter and everyone involved should have the chance to weigh in such as the Board of Fire Commissioners, Fire Chief, Firefighters Union and the Legal Department. Councilor Devine is going to request from the Clerk of the City Council the minutes from the meeting this issue was discussed.
- Commissioner Mettey suggested drafting a letter to Senator Velis showing opposition to it while it is in legislation it potentially does not make it out of the Senate/House of Represenatitives.

#5 New Business: Holyoke Fire Department Rules & Regulations

- Fire Chief Kadlewicz gave the Rules & Regulations to the Board of Fire Commissioners for their reivew and vote.
- Hiring process for the EVT – Emergency Vehicle Technician – This person would work directly under the direction of the Fire Chief.

#6 Exective Session – not needed

#7 Close Meeting

Motions

Motions: Commissioner Mettey entertained a motion to accept the minutes from June 18, 2025, Commissioner Lopez made the motion and was 2nd byCommissioner Trask; motion carried

Commissioner Mettey entertained a motion to approve the request by 1 Firefighter Angel Collazo to extend his EMT requirement for their certification for one (1) year; Commissioner Lopez made the motion and was 2nd by Commissioner Trask; motion carried. Roll call vote Commissioner Mettey yes, Commissioner Lopez yes and Commissioner Trask yes. Unanimous decision.

Commissioner Mettey entertained a motion to send a letter to the Senate/House of Representatives opposing Bill #4299, Commissioner Lopez made the motion and was 2nd by Commissioner Trask; motion carried.

Commissioner Mettey entertained a motion to accept the Fire Chief's report, Commissioner Lopez made the motion and was 2nd by Commissioner Trask; motion carried.

Commissioner Mettey entertained a motion to approve the revised the Rules & Regulations of the Holyoke Fire Department; Commissioner Lopez made the motion and was 2nd by Commissioner Trask; motion carried.

Commissioner Mettey entertained a motion to adjourn, Commissioner Lopez made the motion and was 2nd by Commissioner TRask; motion carried. Meeting adjourned at 5:50pm

Wednesday, July 23, 2025

Injured on Duty
1 Fire Captain
2 Fire Lieutenant

Light Duty
1 Firefighter

FMLA

Overtime Budget	$461,766.00
Transfers In	$0.00
Revised Budget	$0.00
Currently Expended	$461,766.00
Available Balance	$372,144.03

Average Expended Per Pay Period	$44,810.98

Last Pay Period	$42,392.43

DRAFT

RESOLUTION

Whereas the City of Holyoke has within its city limits ___ residential towers that are primarily populated by senior citizens; and

Whereas public safety in and around these properties is paramount; and

Whereas the City of Holyoke presently designates Speed Limits on streets proximate to its numerous public and private schools

That now, be it here **RESOLVED** that the City Council of the City of Holyoke requests the Legislature grant either a Home Rule Petition to allow the City Council to limit the speed in which motorists may travel on public ways near Senior Citizen residential properties in the same manner in which speed limits are in place relative to School Zones or, in the alternative, pass an amendment to our General Laws to so designate a Senior Citizen Speed Limit Zone statewide that may be adopted by municipal government as a local option.

In City Council passed by a vote of ___ Yeas and ___ Nays on this ___ day of September 2025.

In recognition of the above vote the following affix their seals:

_____
City Clerk

_____
City Council President

_____
Ward 1

_____
Ward 2

_____
Ward 3

_____

Ward 4

_____

Ward 5

_____

Ward 6

_____

Ward 7

_____

At-Large

_____

At-Large

_____

At-Large

_____

At-Large

_____

At-Large

_____

At-Large

DRAFT

RESOLUTION

Whereas the City of Holyoke has within its city limits ___ residential towers that are primarily populated by senior citizens; and

Whereas public safety in and around these properties is paramount; and

Whereas the City of Holyoke presently designates Speed Limits on streets proximate to its numerous public and private schools

That now, be it here **RESOLVED** that the City Council of the City of Holyoke requests the Legislature grant either a Home Rule Petition to allow the City Council to limit the speed in which motorists may travel on public ways near Senior Citizen residential properties in the same manner in which speed limits are in place relative to School Zones or, in the alternative, pass an amendment to our General Laws to so designate a Senior Citizen Speed Limit Zone statewide that may be adopted by municipal government as a local option.

In City Council passed by a vote of ___ Yeas and ___ Nays on this ___ day of September 2025.

In recognition of the above vote the following affix their seals:

_____
City Clerk

_____
City Council President

_____
Ward 1

_____
Ward 2

_____
Ward 3

_____

Ward 4

_____

Ward 5

_____

Ward 6

_____

Ward 7

_____

At-Large

_____

At-Large

_____

At-Large

_____

At-Large

_____

At-Large

_____

At-Large

City of Holyoke

Request for Appropriation Transfer
Within a Classification

Dept. Name Fire Date 08 / 14 / 2025

I hereby respectfully request that the following amounts be transferred ***within one*** of the following indicated (**X**) appropriation classifications within my department and as further detailed below:

Personal Services X **Expenses** ____ **Capital Outlay** ____

Account No.			$ Amount	
Organization	Object	Account Name	From	To
12201	51103	Fire Captain	(12,300.24)	
12201	51104	Fire Lieutenant	(26,328.61)	
12201	51105	Firefighter	(8,640.51)	
12201	51180	IOD	( )	47,269.36
			( )	
			( )	
			( )	
			( )	
			( )	
			( )	
			( )	
			( )	

Reason for request:
IOD PP #'s 1, 2, 3, and 4

Head of Department

Mayor

Form TR-1 (6/92)

2.0.

City of Holyoke

Request for Appropriation Transfer
Between Classifications

Dept. Name OPED Date 7/29/25

Use as a basis for preparing a financial order to be placed in front of City Council. I hereby respectfully request that the following amounts be transferred ***between two or more*** of the following indicated (**X**) appropriation classifications and as further detailed below:

Personal Services X **Expenses** _____ **Capital Outlay** _____

Account No. Organization	Object	Account Name	$ Amount From	To
01751	00175-51105	Sr Project Manager	(55,000)	
01751	00175-51223	Development Specialist	( )	55,000
			( )	
			( )	
			( )	
			( )	
			( )	
			( )	
			( )	
			( )	
			( )	
			( )	
			( )	

Reason for request:
Due to staff turn over OPED need to bring on a development Specialist, entry level position, before a Sr Project Manager.

Head of Department

Mayor

Form TR-1 (6/92)

RECEIVED
AUG 06 2025
BY

Total Project Budget

City of Holyoke — **8/20/2025**

Marcella R. Kelly Elementary School — **MSBA ID:** 202401370040

	Total Project Budget: All costs associated with the project are subject to 963 CMR 2.17(5)	Estimated Budget	Scope Items Excluded from the Basis of Estimated Total Facilities Grant or Otherwise Ineligible	Basis of Estimated Total Facilities Grant[1]	Estimated Maximum Total Facilities Grant[1]
	Feasibility Study Agreement				
1	*OPM Feasibility Study*	$5,000		$5,000	
2	*A&E Feasibility Study*	$95,000		$95,000	
3	*Env. & Site*			$0	
4	*Other*			$0	
5	**Feasibility Study Agreement Subtotal**	**$100,000**	**$0**	**$100,000**	**$80,000**
	Administration				
6	**Legal Fees**			$0	**$0**
	Owner's Project Manager				
7	*Design Development*			$0	
8	*Construction Contract Documents*	$51,068		$51,068	
9	*Bidding*	$34,045		$34,045	
10	*Construction Contract Administration*	$221,293		$221,293	
11	*Closeout*	$34,045		$34,045	
12	*Extra Services*			$0	
13	*Reimbursable & Other Services*			$0	
14	*Cost Estimates*			$0	
15	**Advertising**	$5,000		$5,000	
16	**Permitting**			$0	
17	**Owner's Insurance**			$0	
18	**Other Administrative Costs**			$0	
19	**Administration Subtotal**	**$345,451**	**$0**	**$345,451**	**$276,361**
	Architecture and Engineering				
20	**Basic Services**				
21	*Design Development*			$0	
22	*Construction Contract Documents*	$395,109		$395,109	
23	*Bidding*	$15,804		$15,804	
24	*Construction Contract Administration*	$105,362		$105,362	
25	*Closeout*	$10,536		$10,536	
26	*Other Basic Services*			$0	
27	**Basic Services Subtotal**	**$526,811**	**$0**	**$526,811**	
	Reimbursable Services				
28	*Construction testing*	$7,500		$7,500	
29	*Printing (over minimum)*	$5,000		$5,000	
30	*Other Reimbursable Costs*			$0	
31	*Hazardous Materials*	$7,500		$7,500	
32	*Geotech & Geo-Env.*			$0	
33	*Site Survey*			$0	
34	*Wetlands*			$0	
35	*Traffic Studies*			$0	
36	**Architectural/Engineering Subtotal**	**$546,811**	**$0**	**$546,811**	**$437,449**
	CM & Risk Preconstruction Services				
37	Pre-Construction Services			$0	**$0**
	Site Acquisition				
38	Land/Building Purchase			$0	
39	Appraisal Fees			$0	
40	Recording fees			$0	
41	**Site Acquisition Subtotal**	**$0**	**$0**	**$0**	**$0**
	Construction Costs				
42	Construction Budget				
43	GMP Fee				
44	GMP Insurance				
45	GMP Contingency				
46	Division 1 - General Requirements	$1,893,102			
47	Division 2 - Existing Conditions	$631,409			
48	Division 3 - Concrete	$0			
49	Division 4 - Masonry	$202,358			
50	Division 5 - Metals	$122,010			
51	Division 6 - Woods, Plastics and Composites	$38,761			
52	Division 7 - Thermal and Moisture Protection	$2,344,738			
53	Division 8 - Openings	$333,810			
54	Division 9 - Finishes	$372,757			
55	Division 10 - Specialities	$144,615			
56	Division 11 - Equipment	$0			
57	Division 12 - Furnishings	$258,605			
58	Division 13 - Special Construction	$35,000			
59	Division 14 - Conveying Systems	$40,000			
60	Division 21 - Fire Suppression				
61	Division 22 - Plumbing	$263,550			
62	Division 23 - HVAC	$53,200			
63	Division 25 - Integrated Automation				
64	Division 26 - Electrical	$175,100			
65	Division 27 - Communications				
66	Division 28 - Electronic Safety and Security				
67	Division 31 - Earthwork				
68	Division 32 - Exterior Improvements				
69	Division 33 - Utilities				
70	**Construction Budget**	**$6,909,015**	**$0**	**$6,909,015**	**$5,527,212**

Cells highlighted in yellow include equations established for the calculation of the project's Maximum Total Facilities Grant and for the analysis of the project's budget. The equations in the highlighted cells should not be changed.

OPM:	**PCA 360**
Designer:	**Mount Vernon Group Architects, Inc.**
Cost Estimator:	**Fennessy Consulting Services**
Scope:	**Roof**

Table 1.

Soft Cost Exclusion for Spaces Ineligible per Regulations or Scope Outside of ARP (apply exclusion percentage to soft cost budget lines if applicable)

Total Construction Budget Costs	$6,909,015
Applicable Ineligible Budget Costs	$0
Ratio for Soft Cost Exclusions	0.00%

Table 2.

Consultant Fee Table - for Informational Use Only

	Construction Budget	$6,909,015		
OPM Services	Eligible Fees	Total % of Constr	OPM Fee @	10.00%
Basic Services	$345,451	$345,451	5.00%	$690,902
Extra Services	$0		0.00%	
Designer Services	Eligible Fees	Total % of Constr	Dsgr Fee @	15.00%
Basic Services	$621,811	$621,811	9.00%	$1,036,352
Extra Services	$20,000		0.29%	

Table 3.

Board Memo - Cost Breakdown by Scope

	Windows	Marked up Cost	Roof	Marked up Cost	Solar Readiness	Marked up Cost	ADA	Marked up Cost	Other/Misc. Scope	Marked
						mark-up %				
Div 2		$0	$577,450	$795,391		$0	$53,959	$74,324		
Div 3		$0		$0		$0		$0		
Div 4		$0		$0		$0	$202,358	$278,732		
Div 5		$0	$34,660	$47,741		$0	$87,350	$120,318		
Div 6		$0	$26,592	$36,628		$0	$12,169	$16,762		
Div 7		$0	$2,333,086	$3,213,638		$0	$11,652	$16,050		
Div 8		$0	$0	$0		$0	$333,810	$459,796		
Div 9		$0	$309,420	$426,201		$0	$63,337	$87,242		
Div 10		$0		$0		$0	$144,615	$199,195		
Div 11		$0		$0		$0		$0		
Div 12		$0	$0	$0		$0	$258,605	$356,207		
Div 13		$0	$35,000	$48,210		$0		$0		
Div 14		$0		$0		$0	$40,000	$55,097		
Div 21		$0		$0		$0		$0		
Div 22		$0	$47,250	$65,083		$0	$216,300	$297,936		
Div 23		$0	$23,200	$31,956		$0	$30,000	$41,323		
Div 25		$0		$0		$0		$0		
Div 26		$0	$9,000	$12,397		$0	$166,100	$228,789		
Div 27		$0		$0		$0		$0		
Div 28		$0		$0		$0		$0		
Div 31		$0		$0		$0		$0		
Div 32		$0		$0		$0		$0		
Div 33		$0		$0		$0		$0		
Totals	$0	$0	$3,395,658	$4,677,245	$0	$0	$1,620,255	$2,231,770	$0	
						Total construction budget				

Table 4.

Mark-up Exclusion (Div. 1)

Mark-up Calculation =	37.74%
Ineligible Scope =	
Ineligible Mark-up =	$0

Building Value	30%	ADA (Y/N)
$4,239,800	$1,271,940	ADA Work

Table 5.

Potentially Eligible Roof Costs

Marked-Up Roof Replacement Costs =	$4,677,245
Ineligible Roof Replacement Costs (w/ mark-up) =	$344,355
Potentially Eligible Roof Replacement Costs =	$4,332,890

Table 6.

Budget Exclusion for Roof Scope That Doesn't Meet Age Req'ts or Spaces Ineligible per Regulations

2024 ARP: Roofs < 25 years old

Total Roof Area =	70,411 sf
Area of Ineligible Roof =	sf
Ineligible Roof Area/Total Roof Area =	0.00%
Potentially Eligible Roof Costs =	$4,332,890
Exclusion for Roof Service Life/Ineligible Spaces =	$0

Table 7.

Total Roof Cost Cap Exclusion (Div. 7)

70,411	eligible sq.ft.
$100.00	/sq.ft roof cost cap
$7,041,100	Total eligible roof cost cap
$4,332,890	Revised Potentially Eligible Roof Costs

Table 8.

Alternates Tracking Table

Alternate Number	Alternate Description	Estimated Budget	Scope Items Ineligible
Alternates Included in the Total Project Budget			
Alt. 1			
Alt. 2			
Alt. 3			
Alternates Excluded from the Total Project Budget			
Alt. 1			
Alt. 2			
Alt. 3			

	project are subject to 963 CMR 2.17(5)	Estimated Budget	Estimated Total Facilities Grant or Otherwise Ineligible	Grant[1]	Total Facilities Grant[1]
	Alternates (see Table 8)				
72	*Alternates Included in the Total Project Budget*	$0	$0	$0	
73	*Alternates Excluded from the Total Project Budget*	$0	$0	$0	
74	**Alternates Subtotal[3]**	**$0**	**$0**	**$0**	**$0**
	Miscellaneous Project Costs				
75	*Utility company Fees*			$0	
76	*Testing Services*			$0	
77	*Swing Space/Modulars*			$0	
78	*Other Project Costs (Mailing & Moving)*			$0	
79	**Misc. Project Costs Subtotal**	**$0**	**$0**	**$0**	**$0**
	Furnishings and Equipment				
80	*Furnishings*			$0	
81	*Equipment*			$0	
82	*Computer Equipment*			$0	
83	**FF&E Subtotal**	**$0**	**$0**	**$0**	**$0**
84	**Project Budget**	**$7,901,277**	**$0**	**$7,901,277**	**$6,321,022**

	Board Authorization	
85	Project Budget (excluding Contingencies)	$7,901,277
86	Scope Items Excluded or Otherwise Ineligible	$0
87	Third Party Funding (Ineligible)	$0
88	Basis of Estimated Total Facilities Grant[1]	$7,901,277
89	Reimbursement Rate	80.00%
90	Estimated Maximum Total Facilities Grant[1]	$6,321,022

91	Total Construction Contingency[2]	$690,902
92	Ineligible Construction Contingency[2]	$345,451
93	Potentially Eligible Construction Contingency[2]	$345,451
94	Total Owner's Contingency[2]	$99,226
95	Ineligible Owner's Contingency[2]	$64,681
96	Potentially Eligible Owner's Contingency[2]	$34,545
97	Total Construction and Owner's Contingency[2]	$790,128
98	Total Ineligible Contingency[2]	$410,132
99	Total Potentially Eligible Contingency[2]	$379,996
100	Reimbursement Rate	80.00%
101	Potential Additional Contingency Grant Funds[2]	$303,997
102	Maximum Total Facilities Grant	$6,625,019
103	Total Project Budget	$8,691,405

Table 10.

Contingency Cap Calculations	
Eligible Construction Budget	$6,909,015
Eligible Constr Cont Cap @ 5%	$345,451
Eligible Construction Budget	$6,909,015
Eligible Owner's Cont Cap @ 0.5%	$34,545

104 This document was prepared by the MSBA based on a preliminary review of information and estimates provided by the Owner's Project Manager of (District) for the (School) project. Based on this preliminary review, certain budget, cost and scope items have been determined to be ineligible for reimbursement, however, this document does not contain a final, exhaustive list of all budget, cost and scope items which may be ineligible for reimbursement by the MSBA. Nor is it intended to be a final determination of which budget, cost and scope items may be eligible for reimbursement by the MSBA. All project budget, cost and scope items shall be subject to review and audit by the Authority, and the Authority shall determine, in its sole discretion whether any such budget, cost and scope items are eligible for reimbursement. The MSBA may determine that certain additional budget, cost and scope items are ineligible for reimbursement.

105 1. The estimated maximum facilities grant established for the Project Funding Agreement does not include any potentially eligible contingency funds and is subject to review and audit by the MSBA. At the time of PFA Bid Amendment, the Estimated Maximum Facilities Grant and the Maximum Total Facilities Grant will be adjusted to account for any budget revision requests submitted and approved by the MSBA at the time of establishing the Amendment.

106 2. Pursuant to Section 3.20 of the Project Funding Agreement and the applicable policies and guidelines of the Authority, any project costs associated with the reallocation or transfer of funds from either the Owner's contingency or the Construction contingency to other budget line items shall be subject to review by the Authority to determine whether any such costs are eligible for reimbursement by the Authority. All costs are subject to review and audit by the MSBA.

107

Cost Estimator:	**Fennessy Consulting Services**
Scope:	**Roof**
($2,708,210)	Roof Cap Exclusion (negative indicates no exclusion)

Table 9.

Soft Cost Reimbursement (Calculates Soft Cost Exclusion Cap if necessary)

Est'd Budget	Excluded	Eligible Soft Costs	Category
$350,451	$0	$350,451	-Administration
$641,811	$0	$641,811	-A/E Services
	Ineligible therefore not included in calculation		-Site Acquisition
$0	$0	$0	-Miscellaneous Proj Costs
$0	$0	$0	-FFE
$99,226	$64,681	$34,545	-Potentially Eligible Owner's Contingency
		$1,026,807	**Total Eligible Soft Costs**

Construction Costs associated with Soft Cost Cap Calculation

Est'd Eligible Budget	Eligible Constr. Costs	Category
$0	$0	-CM Preconstruction services
$6,909,015	$6,909,015	-Construction Cost
	Not included in this calculation	-Construction Contingency
	$6,909,015	**Total Eligible Construction Cost**
	20%	**Soft Cost Allowance**
	$1,381,803	**Reimbursable Soft Cost**

-If Eligible minus Reimbursable is negative, then no exclusion is applied.
-If Eligible minus Reimbursable is positive, then reduce Potentially Eligible Owner's Contingency until 0. If Eligible minus Reimbursable remains positive, then distribute the remaining exclusion to non-basic service soft cost budget lines. If exclusion remains, apply to basic service lines. When applying the exclusion to budget lines in column D, please highlight cells in purple (same as K109).

	-$354,996	**Eligible minus Reimbursable**
Step 1.		**20% Soft Cost Exclusion** (hard-key value from K108 if positive)
		Reduce Eligible Owner's Contingency until $0:
	$34,545	**Eligible Owner's Contingency Cap (for reference from Table 10)**
Step 2.	$0	**Reduce Eligible Owner's Contingency due to Soft Cost Exclusion**
Step 3.	$0	**Remaining Soft Cost Cap**
		If remaining soft cost cap (cell K113 > $0), deduct from soft cost budget lines:
	$0	**Should = $0**

MARCELLA R. KELLY ELEMENTARY SCHOOL
CITY OF HOLYOKE

ROOF REPLACEMENT PROJECT

SCHEMATIC DESIGN DOCUMENT SUBMISSION

JUNE 26, 2025

Massachusetts School Building Authority
Funding Affordable, Sustainable, and Efficient Schools in Partnership with Local Communities

PCA360

MVG
MOUNT VERNON GROUP ARCHITECTS

TABLE OF CONTENTS

Module	Description	Tab
SD-1	**Project Narratives**	
	• Existing Conditions Assessment	1.1
	• Plumbing Report	1.2
	• Structural Analysis	1.3
	• Hazardous Materials Report	1.4
	• HVAC Report	1.5
	• Proposed Recommendations and Certification	1.6
	• CMR 521 Accessibility Upgrades Review	1.7
SD-2	**Code Analysis**	
	• Code Analysis Narrative	2.1
SD-3	**Schematic Design Drawings**	
	• Existing Roof Plan, Photos, Proposed Roof Plan	3.1
SD-4	**Cost Estimate**	
	• Designer Cost Estimate	4.1
SD-5	**Total Project Budget**	
	• Form 3011 – Project Budget	5.1
SD-6	**Project Cash Flow**	
	• District Project Cash Flow	6.1
SD-7	**Project Schedule**	
	• OPM Project Schedule	7.1
SD-8	**Project Reimbursement Rate**	
	• Reimbursement Rate Certification	8.1
SD-9	**Project Scope and Budget Vote Language**	
	• Project Scope and Budget Vote Language	9.1

SD-10 **Schematic Design checklist**

- Schematic Design Submission Checklist 10.1

SD-1 **Project Narratives**

1.1 Existing Conditions Assessment

The design team made site visits on April 16 & 28, and May 8, 2025, to review, document and assess the existing conditions of the existing roof areas. The roof is comprised of 9 different roof elevation levels on 13 separate but adjacent roof areas totaling approximately 70,411 square feet in area. There are two interior courtyards that subtract from the overall building footprint. The building sits on a sloped site with roof elevations ranging from 12'-0" on the low side to 34'-0" on the high side above the adjacent grade.

The building was originally constructed in 1974 with a gravel surfaced built-up roof applied over a sloped lightweight insulating concrete and 1-inch-thick metal formdeck. Since the original roof installation, the built-up roof and its gravel surfacing was removed (except at one encapsulated area) and replaced with the current roofing system consisting of a Sarnafil PVC roof membrane mechanically attached within membrane laps to the structural formdeck with 8-inch long #12 fasteners spaced on approximate 6-inch centers over either a single layer of 2-inch thick insulation or a double layer of 2-inch (4-inches total) rigid insulation. Typical membrane width within field: 6 feet. Membrane width at perimeters and corners: 3 feet. Three side-by-side "half" or 3-foot-wide sheets are normally installed at perimeters and corners.

Field measurements were taken to determine the overall area of all the different roof sections, as well as the location, size and type of equipment that either penetrated or rested on the roof. Photos were taken of existing conditions to identify areas of deficiency such as roof membrane damage, water ponding, inadequate slope to drains, roof penetration seals and flashings conditions, and possible specialty conditions that require remedial work to accommodate the new roof system. Also, to identify equipment to be removed that may have been abandoned in place during or after the last re-roof work took place.

A structural analysis of the existing structure also took place through the examination of existing drawings where available, visual inspections, and confirmation of built conditions. (See also the Structural Code Review report for additional information contained in this submission in section 1.3)

Testing for asbestos containing materials was performed as part of the roof inspections. Samples were taken from several locations in the roof system and at typical flashing locations and sent to the lab for analysis to determine the potential existence of asbestos. (See also the report for asbestos containing materials for additional information contained in this submission in section 1.4)

Observations

- The overall roof membrane appears to be in fair condition, with areas of ponding and debris observed and documented.
- The overall roof appeared to be spongy in some areas, indicating a breakdown in insulation or presence of moisture.
- The existing roof insulation is not consistent across the roofs with thickness of 2" in areas and 4" in others.
- The roof drains appear to have insert drains installed within the original drain reducing drainage flow. All drain bowls should be replaced to match the existing drainpipe size. Additional roof drains may be required to meet the updated rainfall drainage requirements.

- Based on the lack of roof insulation to meet the current energy code, most of the rooftop equipment, ladders, curbs, electrical conduit, and roof vents will need to be adjusted and/or raised.
- The mechanical curb adjacent to the large skylight may need to be redesigned to accommodate more roof insulation.
- A wall mounted exhaust fan adjacent to the roof access hatch is missing its shroud.
- Some of the middle sized and smaller mechanical equipment sit on exposed wood sleepers. This equipment will need to be removed as part of the work and reinstalled on protected sleepers after the new roof assembly is installed.
- The larger mechanical roof equipment and miscellaneous exhaust fans sit on adequate curbs. Most exhaust fan curbs may need to be replaced with new to keep them above potential snow levels.
- Several plumbing vent stacks are below the 18-inch minimal height requirement above the existing roof requiring extensions.
- The fixed roof ladders should be replaced with ships ladders or standard ladders to accommodate the numerous roof levels.
- No roof guardrails or roof life safety anchors observed.
- The access panels to the four mechanical rooms over the stairs were not opened but appear to be difficult to access with a screwdriver.
- Per 521 CMR 5.00 the estimated roof replacement costs exceed 30% of the assessed value of the building. The accessibility of the building will be fully assessed. Items observed during our site visit are as follows: The door hardware throughout the school will need lever sets, guardrails and extensions will be required at stairs and ramps. Toilet grab bars and accessories will need to be installed and/or adjusted. Restroom doors may need to be removed or have electrified openers installed. Classroom sinks and restrooms do not appear to meet current standards.
- MSBA requires the school roof to be assessed for solar readiness. The structure and electrical will be reviewed for solar compatibility.

Overall, the existing roof system has reached its warranty lifespan, and a roof replacement is recommended. Also, refer to section 3.1 of this submission containing the Existing Roof Plan A1.01, Existing Conditions Photos A1.02 & A1.03 and Proposed Roof Plan A1.04 for additional information. See section 1.5 of this submission for the proposed recommendations.

Marcella R. Kelly Elementary

SD-1 **Project Narratives**

1.2 Existing Plumbing Conditions Assessment

C.A. Crowley Engineering Inc made a visit to the site on May 21, 2025, to determine the location, type and condition of existing roof drains and plumbing vents throughout**.** The roof is comprised of 9 different roof elevation levels on 13 separate but adjacent roof areas approximately 70,411 square feet in area.

The building was originally constructed in 1970.

Plumbing Observations

The existing rooftop plumbing components at Holyoke Kelly Elementary School consist of the following: Roof drains, and sanitary vents.

Roof Drains:

The roof drains appear to have been installed during the original construction of the building and are in good condition. They comprise of multiple different types and sizes. Piping is assumed to be cast iron yet could not be observed due to insulation covering the piping. The insulation appears to be fiberglass.

Example 1: Typical Roof Drain

Example 2: Storm Piping Insulation

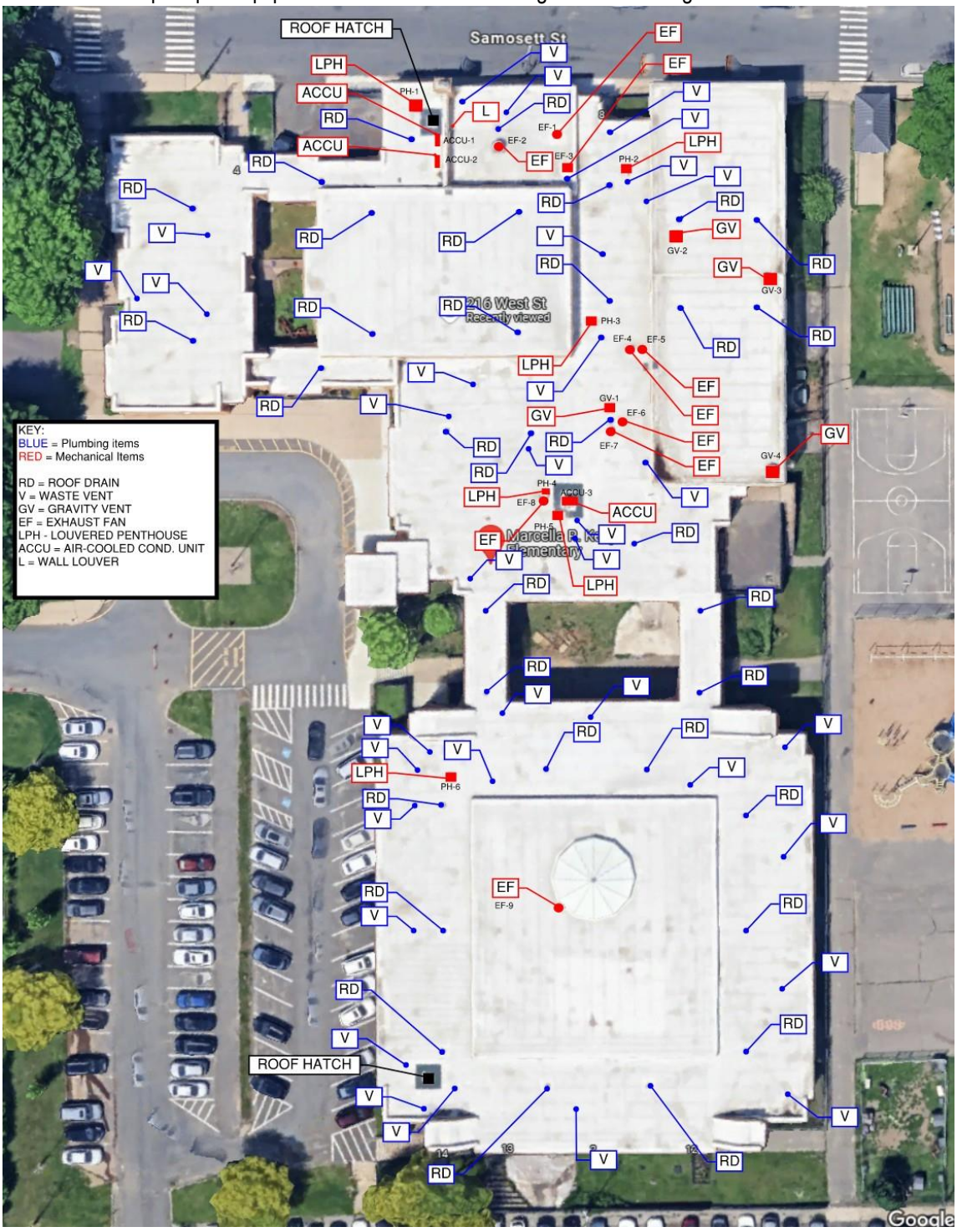
Plumbing vents:

Throughout the roof areas, there are several plumbing sanitary vents. The vents appear to be in good condition.

Example 3: Typical Louvered Plumbing Vent

Rooftop Equipment Map:

Below is a rooftop map of equipment found on the roof during our site investigation for reference.



Plumbing Recommendations:

Roof drains:

The roof drains should be removed and replaced with new, to accommodate the proposed roof replacement.

Plumbing Vents:

The existing plumbing vents are in good condition yet should be cut to below the roof and a new pipe be installed, of same size, through the roof to a height of 18" above the roof. This is to accommodate the proposed roof replacement and added insulation on the roof.

S T & P

1 Cranberry Hill, Suite 301
Lexington, Massachusetts 02421
souzatrue@souzatrue.com
(617) 926-6100

SOUZA, TRUE
AND PARTNERS, INC.
STRUCTURAL ENGINEERS

TERRY A. LOUDERBACK, PE
JEROME A. YURKOSKI, PE
LISA A. BOHLIN, PE
TODD P. BLAKE, PE
CHRIS M. MOTTO, PE
MARTIN F. FINN, PE

June 18, 2025

Mount Vernon Group Architects, Inc.
1350 Main Street, Suite 1110
Springfield, MA 01103

Attention: Mr. John Landry

Reference: Roof Replacement Project Structural Impact
Kelly Elementary School
Holyoke, Massachusetts

Dear Mr. Landry:

At your request, we have completed our review of the existing structural documentation to determine if the existing structure can accommodate the proposed new roof system and to determine if the project will require other Code required structural upgrades to the existing building. As part of this exercise, we reviewed the existing roof structural framing to support new PV arrays.

We did not visit the existing building as a condition assessment was not warranted. Our understanding of most of the existing structure is based on the information provided in the original existing structural design documents completed by Reinhardt Associates Architects and Engineers in the drawings entitled, “West Street Elementary School, Holyoke, Massachusetts” dated February 8, 1974.

The East High Roof is not part of this set of drawings. Our understanding of the East High Roof structure is based on the information and field measurements provided to us by Mount Vernon Group.

Our conclusions and recommendations regarding the structure are based on our review of the existing listed structural documentation, or provided information, only. We did not complete any specific probes or lab tests on the building.

General Roof Framing Construction

The Kelly Elementary School is essentially a two story building with one story areas that are predominantly the core areas that require larger spaces such as the gymnasium.

Roof framing is consistent throughout the facility and consists of open web steel joists generally at a 5'-0" spacing supported by steel wide flange beams or masonry bearing walls. Steel beams are supported by a combination of tubular steel columns.

Proposed Renovations and Alterations

It is our understanding that this is a roof replacement project only and will be considered a Level 1 alternation in accordance with Chapter 7 of the 2021 International Building Code along with the amendments defined in Chapter 34 of the 10th Edition Massachusetts State Building Code.

There is no new structural work included in the scope of work (such as new mechanical units, new openings, etc.). However, roof replacement projects specifically require certain specific structural evaluations as noted below.

Existing Roof Gravity Elements to support the New Roof

We understand the original roofing system consisted of the following:

5 ply Asphalt & Gravel Roofing	6.0 psf
4.5" Asphaltic Insulating Concrete (average)	7.5 psf*
Existing Steel Deck	3.0 psf
Total Weight	16.5 psf

* Based on a density of 20 pcf.

The proposed new roofing system will consist of the following:

80 mil PVC membrane	0.5 psf
½" gypsum coverboard	2.0 psf
6" Sika RMAX Polyiso insulation	1.0 psf
4.5" Asphaltic Insulating Concrete (average)	7.5 psf
Existing Steel Deck	3.0 psf
Total Weight	14.0 psf

Furthermore, the minimum roof live load per sheet S-9 of the existing drawings is 30 psf. Dead loads used during design are not listed. For these calculations, we are using a collateral dead load for services of 7 psf.

Per the Massachusetts State Building Code (10th Edition), the design snow load for Holyoke, MA is now 35 psf.

Therefore, the new total load to be placed on the roofs is 14 psf + 7 psf + 35 psf = 56 psf.

The result of the new roof configuration results in a 4.7% increase from the original designed load.

Per Section 706.2 (Addition or replacement of roofing or replacement of equipment), existing structural members where the additional dead load from the roofing does not increase the force in the element by more than 5% are exempt from having to comply with the gravity load requirements of the International Building Code.

Therefore, the structural roof framing complies with the Code to support the new proposed roof system.

Masonry Parapets

Per Section 706.3.1 (Bracing for unreinforced masonry bearing wall parapets), existing unreinforced masonry parapets must be braced if the roof is reroofed and if the structure will be assigned to Seismic Design Category D, E, or F.

Based on a Soil Profile Type of D (assumed), the S_{ds} and S_{d1} values will be 0.177 and 0.088 respectively placing this structure is Seismic Design Category B.

As a result, the existing masonry parapets are not required to be reviewed to determine if additional bracing is required.

Roof Diaphragm Resisting Wind Loads

If the existing roof is to be replaced, then the requirements of Section 706.3.2 (Roof Diaphragms Resisting Wind Loads in High-Wind Regions) must be met.

Roof diaphragms and roof-to-wall connections shall be evaluated for the wind loads specified in the International Building Code in areas where the V_{ult} is greater than 130 mph and the building is in Risk Category III or IV.

Holyoke High School is in Risk Category III, but V_{ult} is only 123 mph. Therefore, the requirements of 302.7 do not apply and the roof diaphragm connection and the roof-to-wall connections are not required to be evaluated.

Existing Roof Gravity Elements to support the new PV Arrays

Per the 2021 International Existing Building Code, including the 10th Edition Amendments per the Massachusetts State Building Code, when new loads are added to an existing structural element, the existing elements must be treated as if they are new elements.

Therefore, in addition to the PV Arrays, the roof must be able to support a snow load in conformance with the latest Code. In this case, the existing roof structure must be able to support a roof snow load of 35 psf, plus the effects of drift.

Most PV Array systems will vary in weight between 7 and 10 psf. The exact weight of the system is directly dependent on the manufacturer and layout of the system. Since we do not know the specific weight of the PV Arrays, we completed an analysis of the existing structural members on each roof to determine the residual capacity of each roof to support additional loads. Where the existing roof framing system can accommodate additional load, we will indicate the maximum recommended additional load that can be applied to that area of the building.

To clearly indicate our recommendations for the existing roofs to support new PV arrays, we correlated our recommendations with the labeling identified in the Roof Key Plan provided on sheet A2.00 of the architectural drawings entitled, “Kelly Elementary Roof Replacement” by Mount Vernon Group Architects.

General Requirements for all roofs supporting new PV Arrays

In all cases, the existing steel roof decks should not be considered to have sufficient capacity to support the new PV Arrays directly. The PV arrays should be supported directly from the main structural elements (i.e. the joists, beams, or girders). In cases where a PV Array support is located directly over the deck, sleepers shall be added to transfer the load to the nearest main structural element.

Additionally, new PV arrays should not be placed in areas of the existing roof where the existing structural members currently support snow drift loads.

Finally, local chord reinforcement may be required at existing steel joists if the point loads from the PV Arrays are appreciable and if the PV arrays are not located directly over panel points. If the support is between panel points, a new panel point may need to be created, usually with a new L2x2 angles extending from the support point on the top chord to the nearest bottom chord panel point. This requirement will depend on the final PV weight and configuration.

The following are our specific recommendations for each roof section.

Classroom Side Roofs ***(see Figure 1)***

On the classroom side of the building, there is a central library with a long clear span roof central to the area (aka the Skylight Roof) and this roof higher than the surrounding roofs by approximately 3'-0".

Surrounding the library are classroom areas. These roofs are identified as the Southwest Roof, South Roof, Southeast Roof, and the Courtyard South Roof.

The beams that support the high Skylight roof also support the lower classroom roofs with hangers.

Many of these beams, and columns that support these beams, are currently at capacity. There is no residual capacity to support PV arrays on these roofs. We do not recommend placing any PV arrays on these roofs unless the existing steel framing is reinforced to accommodate the new loads.

Additionally, we do not recommend placing PV arrays on the Bridge A, Bridge B, and the various penthouse roofs due to the size, configuration, and/or uses of these roofs.

East High Roof ***(see Figure 2)***

The South Addition Roof was reportedly constructed in or around 1972. Existing structural drawings for the East High Roof have not been provided. Based on the field measurements provided by Mount Vernon Group and the presumed age of construction, it appears that the structural roof framing consists of 28LJ steel joists at a spacing of 4'-0". Joists are supported by masonry bearing walls.

The lightest 28LJ joist fabricated at this general time would be a 28LJ06 joist. Based on a span of approximately 51'-0", the capacity of a 28LJ06 in 1972 would be approximately 233 lb/foot.

Based on the reported joist spacing of 4’-0”, the demand on the joists would be a 280 lb/foot, which is close to capacity.

The residual capacity of this roof would be 2.3 psf., which is insufficient to support PV arrays.

We do not recommend placing PV arrays on the East High Roof without reinforcing all joists that support those PV arrays.

North High Roof ***(see Figure 2)***

The North High Roof (over the auditorium) is at a higher elevation than all surrounding roofs and is therefore not impacted by snow drift.

The North High Roof framing consists of 32LJ12 joists spaced at 5’-0” and spanning approximately 64’-0” across the full width of the auditorium. Joists are supported by masonry bearing walls on all sides.

The capacity of a 32LJ12 spanning 64’-0” is approximately 349 lb/foot. Based on a spacing of 5’-0”, the demand on the joists would be 280 lb/foot.

The residual capacity of these joists would be approximately 13 psf. While the calculated residual capacity is approximately 13 psf, we recommend limiting the weight of the new PV arrays to a maximum total weight of 10 psf.

However, the area over the stage may have hung loading as part of the stage sets. We do not recommend placing any PV arrays over the stage for this reason.

North Low Roof, North Mid Roof, Bridge C & D roofs ***(see Figure 2)***

The North Low Roof and the North Mid Roof are heavily impacted by snow drift that builds up on these roofs adjacent to the North High Roof.

Joist framing on these roofs are already near or at capacity. There is no residual capacity to support PV arrays on these roofs. We do not recommend placing any PV arrays on these roofs unless the existing joist framing is reinforced to accommodate the new loads.

Additionally, we do not recommend placing PV arrays on the roofs of Bridge C or Bridge D due to sizes, shapes, and/or uses of these roofs.

West Mid Roof ***(see Figure 2)***

The West Mid Roof is not impacted by drift except for a small portion near Bridge D.

In general, the West Mid Roof framing consists of 28LJ09 joists spaced at 5'-0" and spanning approximately 51'-0" (at the widest). Joists are supported by masonry bearing walls on all sides.

The capacity of a 28LJ09 spanning 51'-0" is approximately 336 lb/foot. Based on a spacing of 5'-0", the demand on the joists would be 280 lb/foot.

The residual capacity of these joists would be approximately 11 psf. While the calculated residual capacity is approximately 11 psf, we recommend limiting the weight of the new PV arrays to a maximum total weight of 7 psf due to the possibility of some hanging partition loads and the small amount of drift near Bridge D.

Main Level Roof, High Step Roof, and Low Step Roof ***(see Figure 2)***

The Main Level Roof is heavily impacted by snow drift loads along the areas adjacent to the East High Roof, the North High Roof, and the Low Step Roof.

Structural steel and joist framing that supports snow drift loads are already near or at capacity. There is no residual capacity in framing members that already support snow drift loads to also support PV arrays.

Structural steel joist and joist framing that do not already support snow drift loads have some residual capacity to support additional loads. We recommend limiting the weight of the new PV arrays in areas away from the snow drift to a maximum total weight of 7 psf.

Do the configurations of the roofs, we do not recommend placing PV arrays on the High Step Roof or the Low Step Roof.

SUMMARY

- The proposed roofing system will be heavier than the original system by 4.7%. However, per Section 706.2 (Addition or replacement of roofing or replacement of equipment), existing structural members where the additional dead load from the roofing does not increase the force in the element by more than 5% are exempt from having to comply with the gravity load requirements of the

International Building Code. Therefore, the structural roof framing complies with the Code to support the new proposed roof system.

- This building will be in Seismic Category B. Existing masonry parapets are not required to be braced.

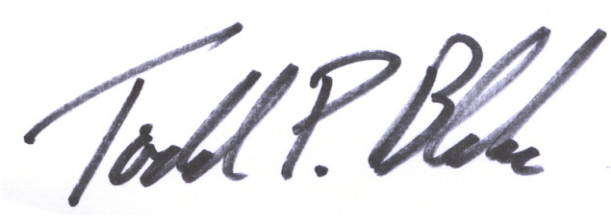
- Even though this is a Risk Category III building, the V_{ult} is only 123 mph. Since this is less than 130 mph, this building is not considered to be in a high wind region. The roof diaphragms and roof-to-diaphragm connections do not need to be evaluated for wind loads per the IBC.

- The majority of the school is at or near capacity. PV arrays may be added is select areas. Please see Figures 1 and 2 for more information.

If you have any questions or concerns, please do not hesitate to call or email.

Sincerely,

SOUZA, TRUE AND PARTNERS, INC.



Todd P. Blake, P. E.
Principal

Attachments: Figures 1 and 2

I:\2025\25152 - Holyoke Roof Replacements\Documents\Reports\Kelly School Roof Assessment.docx

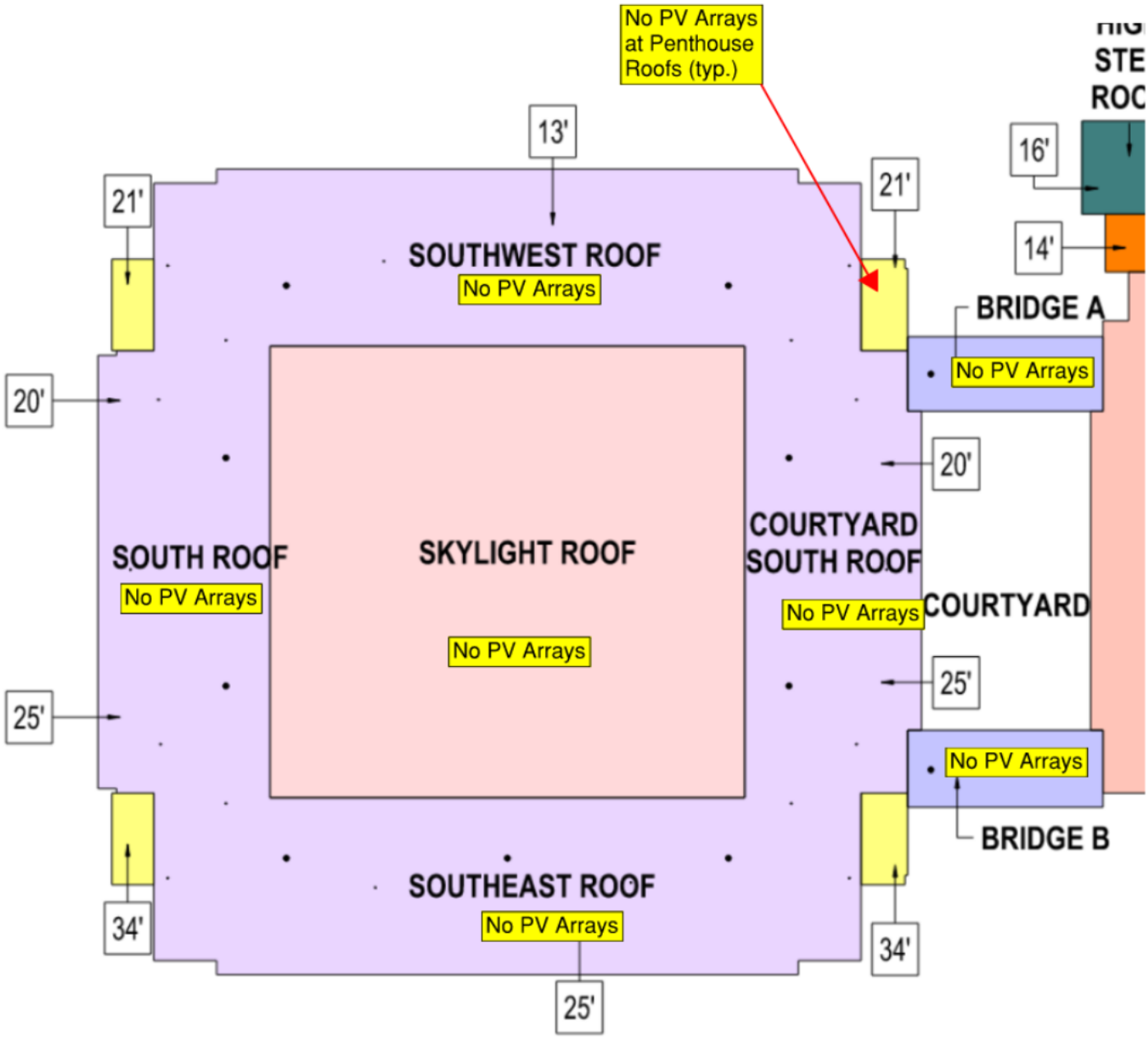

No PV Arrays at Penthouse Roofs (typ.)
13'
21'
21'
SOUTHWEST ROOF
No PV Arrays
16'
14'
BRIDGE A
No PV Arrays
20'
20'
SOUTH ROOF
No PV Arrays
SKYLIGHT ROOF
No PV Arrays
COURTYARD SOUTH ROOF
No PV Arrays
COURTYARD
25'
25'
No PV Arrays
BRIDGE B
SOUTHEAST ROOF
No PV Arrays
34'
34'
25'

Figure 1

Maximum PV Array Load = 7 psf
WEST MID ROOF
16'
13'
No PV Arrays at these roofs.
No PV Arrays on North High Roof over the stage area.
COURTYARD
BRIDGE C
BRIDGE D
13'
HIGH STEP ROOF
No PV Arrays in hatched area of Main Level Roof
3'
No PV Arrays at these roofs.
22
NORTH HIGH ROOF
Maximum PV Array Load = 10 psf
NORTH MID ROOF
12'
17
NORTH LOW ROOF
Maximum PV Array Load = 7 psf
20'
MAIN LEVEL ROOF
14'
No PV Arrays in hatched area of Main Level Roof
EAST HIGH ROOF
No PV Arrays on this roof.
18'
20
25'
20'

Figure 2

The Aulson Company, Inc

May 12, 2025 | 31 Photos

Universal Environmental Consultants

216 West St • Holyoke, MA 01040

1

N1 metal deck,4 inch soft cement board, 2 inch insulation, white rubber

Project: J25102
Date: May 8, 2025, 8:36 AM
Creator: Arsen Veizi

2

N 2 metal deck, 4 inch soft cement, inch insulation, white rubber

Project: J25102
Date: May 8, 2025, 8:45 AM
Creator: Arsen Veizi

3

N1 after

Project: J25102
Date: May 8, 2025, 8:50 AM
Creator: Arsen Veizi

4

N 2 after

Project: J25102
Date: May 8, 2025, 8:53 AM
Creator: Arsen Veizi

5

N 3 the same

Project: J25102
Date: May 8, 2025, 8:55 AM
Creator: Arsen Veizi

6

N 3 after

Project: J25102
Date: May 8, 2025, 9:02 AM
Creator: Arsen Veizi

7

N4 same

Project: J25102
Date: May 8, 2025, 9:06 AM
Creator: Arsen Veizi

8

N 4 after

Project: J25102
Date: May 8, 2025, 9:11 AM
Creator: Arsen Veizi

9

N 5 same

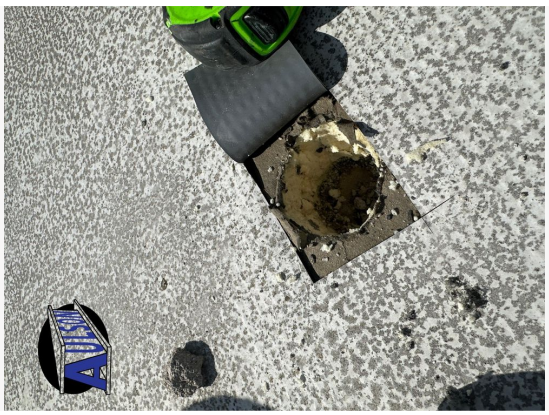
Project: J25102
Date: May 8, 2025, 9:13 AM
Creator: Arsen Veizi

10

N 6 same

Project: J25102
Date: May 8, 2025, 9:16 AM
Creator: Arsen Veizi

11



N 7 metal deck, soft concrete board, tar, 2 inch insulation. White

Project: J25102
Date: May 8, 2025, 9:20 AM
Creator: Arsen Veizi

12

N 5 after

Project: J25102
Date: May 8, 2025, 9:23 AM
Creator: Arsen Veizi

13

N 6 after

Project: J25102
Date: May 8, 2025, 9:25 AM
Creator: Arsen Veizi

14

N 7 after

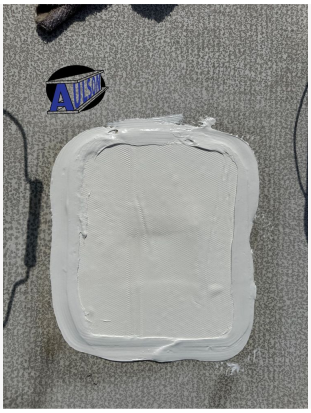
Project: J25102
Date: May 8, 2025, 9:27 AM
Creator: Arsen Veizi

15

N 8 metal deck, 4 inch soft cement board, 2 inch insulation,white

Project: J25102
Date: May 8, 2025, 9:29 AM
Creator: Arsen Veizi

16



N8 after

Project: J25102
Date: May 8, 2025, 9:35 AM
Creator: Arsen Veizi

17

N 9 metal deck, 5 insulation, white

Project: J25102
Date: May 8, 2025, 9:39 AM
Creator: Arsen Veizi

18

N9 after

Project: J25102
Date: May 8, 2025, 9:44 AM
Creator: Arsen Veizi

19

N 10 metal deck,4 inch soft cement, 2 insulation,white

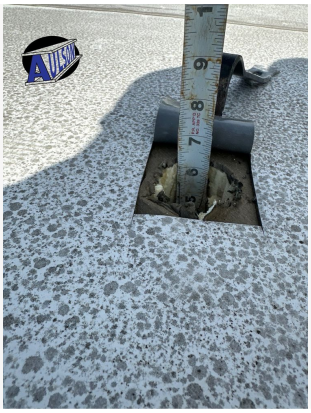
Project: J25102
Date: May 8, 2025, 9:49 AM
Creator: Arsen Veizi

20

N 10 after

Project: J25102
Date: May 8, 2025, 9:55 AM
Creator: Arsen Veizi

21



N 11 same

Project: J25102
Date: May 8, 2025, 9:59 AM
Creator: Arsen Veizi

22

11 after

Project: J25102
Date: May 8, 2025, 10:04 AM
Creator: Arsen Veizi

23

N 12 same

Project: J25102
Date: May 8, 2025, 10:05 AM
Creator: Arsen Veizi

24

N 13 same

Project: J25102
Date: May 8, 2025, 10:07 AM
Creator: Arsen Veizi

25

same as rest of roof

Project: J25102
Date: May 8, 2025, 10:11 AM
Creator: Mike Cahill

26

N 12 after

Project: J25102
Date: May 8, 2025, 10:12 AM
Creator: Arsen Veizi

27

N 13 after

Project: J25102
Date: May 8, 2025, 10:15 AM
Creator: Arsen Veizi

28

N 14 after

Project: J25102
Date: May 8, 2025, 10:18 AM
Creator: Arsen Veizi

29

N 15 same

Project: J25102
Date: May 8, 2025, 10:23 AM
Creator: Arsen Veizi

30

N 15 after

Project: J25102
Date: May 8, 2025, 10:29 AM
Creator: Arsen Veizi

31

Project: J25102
Date: May 8, 2025, 10:51 AM
Creator: Arsen Veizi

Asbestos Identification Laboratory.

165 New Boston St., Ste 227
Woburn, MA 01801
781-932-9600

Web: www.asbestosidentificationlab.com Email: mikemanning@asbestosidentificationlab.com

NVLAP® Testing Lab Code: 200919-0

Batch: 135201

Ammar Dieb
Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Project Information

Marcella R. Kelly Elementary School,
Holyoke,
MA

Method: BULK PLM ANALYSIS, EPA/600/R-93/116

Dear Ammar Dieb,

Asbestos Identification Laboratory has completed the analysis of the samples from your office for the above referenced project. The Analysis Method is BULK PLM ANALYSIS, EPA/600/R-93/116The information and analysis contained in this report have been generated using the EPA /600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials. Materials or products that contain more than 1% of any kind or combination of asbestos are considered an asbestos containing building material as determined by the EPA. This Polarized Light Microscope (PLM) technique may be performed either by visual estimation or point counting. Point counting provides a determination of the area percentage of asbestos in a sample. If the asbestos is estimated to be less than 10% by visual estimation of friable material, the determination may be repeated using the point counting technique. The results of the point counting supersede visual PLM results. Results in this report only relate to the items tested. This report may not be used by the customer to claim product endorsement by NVLAP or any other U.S. Government Agency.

The EPA recommends you should assume vermiculite contains asbestos and not to disturb it. Airborne asbestos fibers present a health risk through inhalation, so the first step is to not disturb the material, which could release fibers into the air. If you disturb the insulation, you may inhale some asbestos fibers. The degree of health risk depends on how much and how often this occurred. If you choose to remove the vermiculite insulation, this work should be done by a trained and accredited asbestos abatement contractor that is separate and independent from the company that performed the assessment of the vermiculite insulation to avoid any conflict of interest. Link: "https://www.epa.gov/asbestos/my-attic-has-vermiculite-insulation-it-am-i-risk-should-i-take-it-outld I take it out? | US EPA"

Laboratory results represent the analysis of samples as submitted by the customer. Information regarding sample location, description, area, volume, etc., was provided by the customer. Information provided by the customer can affect the validity of results. Asbestos Identification Laboratory is not responsible for sample collection activities or analytical method limitations. Unless notified in writing to return samples, Asbestos Identification Laboratory discards customer samples after 30 days. Samples containing subsamples or layers will be analyzed separately when applicable. Reports are kept at Asbestos Identification Laboratory for three years. All customer information will be maintained in confidentiality. This report shall not be reproduced, except in full, without the written consent of Asbestos Identification Laboratory.

- NVLAP Lab Code: 200919-0
- Massachusetts Certification License: AA000208
- State of Connecticut, Department of Public Health Approved Environmental Laboratory Registration Number: PH-0142
- State of Maine, Department of Environmental Protection Asbestos Analytical Laboratory License Number: LB-0078(Bulk) LA-0087(Air)
- State of Rhode Island and Providence Plantations. Department of Health Certification: AAL-121
- State of Vermont, Department of Health Environmental Health License AL934461

Thank you Ammar Dieb for your business.

Michael Manning
Owner/Director

Ammar Dieb
Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Project Information

Marcella R. Kelly Elementary School,
Holyoke,
MA

Method: BULK PLM ANALYSIS, EPA/600/R-93/116

FieldID / LabID	Material	Location	Color	Non-Asbestos %	Asbestos %
1 / 1518499	Soft Cement Board	Under Foam Insulation Roof Cut #1	gray	Cellulose 5 Non-Fibrous 95	None Detected
2 / 1518500	Soft Cement Board	Under Foam Insulation Roof Cut #2	gray	Cellulose 5 Non-Fibrous 95	None Detected
3 / 1518501	Soft Cement Board	Under Foam Insulation Roof Cut #3	gray	Cellulose 5 Non-Fibrous 95	None Detected
4 / 1518502	Soft Cement Board	Under Foam Insulation Roof Cut #4	gray	Cellulose 5 Non-Fibrous 95	None Detected
5 / 1518503	Soft Cement Board	Under Foam Insulation Roof Cut #5	gray	Cellulose 5 Non-Fibrous 95	None Detected
6 / 1518504	Caulking	Bottom Wall Elevation Roof Cut #1	black	Non-Fibrous 97	**Detected** **Chrysotile 3**
7 / 1518505	Caulking	Bottom Wall Elevation Roof Cut #1	black	Non-Fibrous 97	**Detected** **Chrysotile 3**
8 / 1518506	Soft Cement Board	Under Foam Insulation Roof Cut #6	gray	Cellulose 5 Non-Fibrous 95	None Detected
9 / 1518507	Tar Roof	Under Foam Insulation Roof Cut #7	black	Non-Fibrous 97	**Detected** **Chrysotile 3**
10 / 1518508	Soft Cement Board	Under Tar Roof Cut #7	gray	Cellulose 5 Non-Fibrous 95	None Detected
11 / 1518509	Soft Cement Board	Under Foam Insulation Roof Cut #8	gray	Cellulose 5 Non-Fibrous 95	None Detected
12 / 1518510	Soft Cement Board	Under Foam Insulation Roof Cut #10	gray	Cellulose 5 Non-Fibrous 95	None Detected
13 / 1518511	Soft Cement Board	Under Foam Insulation Roof Cut #11	gray	Cellulose 5 Non-Fibrous 95	None Detected
14 / 1518512	Soft Cement Board	Under Foam Insulation Roof Cut #12	gray	Cellulose 5 Non-Fibrous 95	None Detected
15 / 1518513	Caulking	Around Chimney Roof	multi	Non-Fibrous 100	None Detected
16 / 1518514	Caulking	Around Chimney Roof	multi	Non-Fibrous 100	None Detected

Sampled: May 08, 2025 **Received:** May 09, 2025 **Analyzed:** May 09, 2025

Monday 12 May 2025

Analyzed by: Elaine Maple **Batch:** 135201

Ammar Dieb
Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Project Information

Marcella R. Kelly Elementary School,
Holyoke,
MA

Method: BULK PLM ANALYSIS, EPA/600/R-93/116

FieldID / LabID	Material	Location	Color	Non-Asbestos %	Asbestos %
17 / 1518515	Soft Cement Board	Under Foam Insulation Roof Cut #13	gray	Cellulose 5 Non-Fibrous 95	None Detected
18 / 1518516	Soft Cement Board	Under Foam Insulation Roof Cut #14	gray	Cellulose 5 Non-Fibrous 95	None Detected
19 / 1518517	Soft Cement Board	Under Foam Insulation Roof Cut #15	gray	Cellulose 5 Non-Fibrous 95	None Detected

Sampled: May 08, 2025 **Received:** May 09, 2025 **Analyzed:** May 09, 2025

Monday 12 May 2025

Analyzed by: Elaine Maple **Batch:** 135201

CHAIN OF CUSTODY

Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702
Tel: (508) 628-5486 - Fax: (508) 628-5488
adleb@uec-env.com

Next Day Results

Town/City: Holyoke MA Building Name Mercella R Kelly Elementary Schoo

Sample #	Description of Material	Sample Location
1	Soft cement board / under foam insulation	Roof Cut # 1
2	Soft Cement board / under foam insulation	Roof Cut # 2
3	Soft Cement board / under foam insulation	Roof Cut # 3
4	Soft Cement board / under foam insulation	Roof Cut # 4
5	Soft cement board / under foam insulation	Roof Cut # 5
6	Caulking / Bottom wall Elevation	Roof Cut # 1
7	Caulking / Bottom wall Elevation	Roof Cut # 1
8	Soft Cement Board / under foam insulation	Cut roof #6
9	Tar roof / under foam insulation	Roof Cut # 7
10	Soft cement board / under Tar roof	Cut # 7
11	Soft Cement board / under foam insulation	roof Cut # 8
12	Soft Cement board / under foam insulation	roof Cut # 10
13	Soft cement board / under foam insulation	roof Cut # 11
14	Soft cement board / Under foam insulation	roof Cut # 12
15	Caulking / Around chimney	roof
16	Caulking / Around chimney	roof
17	Soft Cement Board / under foam insulation	roof Cut 13
18	Soft Cement Board / under foam insulation	roof Cut # 14
19	Soft Cement board / under foam insulation	roof Cut 15

Reported By: Erica Estrada Date: 5-8-25 Due Date: .....

Received By: ..... Date: 5/9/25

SD-1 **Project Narratives**

1.5 Existing Mechanical Conditions Assessment

C.A. Crowley Engineering Inc made a visit to the site on May 12, 2025 to determine the location, type and condition of existing mechanical equipment, roof drains and plumbing vents throughout**.** The roof is comprised of 9 different roof elevation levels on 13 separate but adjacent roof areas approximately 70,411 square feet in area.

The building was originally constructed in 1970 and featured gas fired boiler heating system using perimeter radiation, cabinet unit heaters and unit ventilators. Other equipment includes: Air Handling Units, condensing unit, inline exhaust fans and rooftop exhaust fans.

Mechanical Observations

EXHAUST FANS:

The rooftop exhaust equipment consists of seven (7) down-blast centrifugal exhaust fans on the gym/administrative wing of the building that serves bathrooms, utility spaces, and offices. One (1) down-blast exhaust fan is located on the classroom wing and provides ventilation to the large glass dome at the center of the classroom wing. There is one (1) up-blast kitchen exhaust fan located on the roof above the school kitchen, serving a kitchen exhaust hood within. The exhaust fans are by a variety of manufacturers such as: Cook, Greenheck, Emerson and Dayton. Most exhaust fans appear to range from 15+ years old to 5+ years old. Most fans appear to be in good-to-fair physical condition. All exhaust fans are mounted on curbs of various heights, with the exception of the exhaust fan serving the dome; which is mounted on a plenum and ducted into the side of the structure.

Example 1: Typical down-blast centrifugal fans

Example 2: Plenum-mounted EF at Dome

PASSIVE INTAKE/EXHAUST VENTS:

For passive equipment there are three (3) gravity ventilator hoods of various sizes, and six (6) louvered penthouses that provide intake or relief air to systems contained within the school. Many are in fair condition with some dents, loose parts, and rusting.

Example 3: Typical Louvered Penthouse

Example 4: Typical Gravity Ventilator

REFRIGERATION CONDENSING UNTIS:

The last remaining category of equipment found on the roof of the Marcella R. Kelly Elementary School is two (2) refrigeration condensing units that serve kitchen coolers/freezers, and (1) defunct R-22 based Carrier condensing unit that serves an air handling unit for the administrative section of the building.

The refrigeration condensing units are mounted on 4x4 sleepers on the roof directly above the kitchen. According to the serial number these units were installed sometime in 2024 and appear to be in excellent condition. The refrigerant lines are routed across the roof on sleepers and have foam insulation that appears to be the same vintage as the equipment and are also in excellent shape.

Continued on next page

Example 5: Bally refrigeration condensing units

COMFORT COOLING CONDENSING UNITS:

The single comfort-cooling air conditioning condensing unit is located above the administrative offices and is a Carrier model from 1974. The unit uses R-22 Refrigerant and it appears to be in very rough shape. It is unclear if the unit is still functional. Based on its age and refrigerant, this equipment is well beyond its useful life. The unit is mounted on sleepers that have been incorporated into the roofing system and provided with flashing. The refrigerant lineset leaves the unit and immediately drops through the roof.

Example 6: Defunct Carrier condensing unit

OTHER ITEMS OF MENTION:

While it is not technically installed on the roof system, it is a cause of concern mechanically speaking: there is an exhaust fan inside the building that discharges through an old wall mounted fan housing. It is very restrictive and does not protect against water penetration or pest infestation.

Example 7: Old fan Housing used as louver

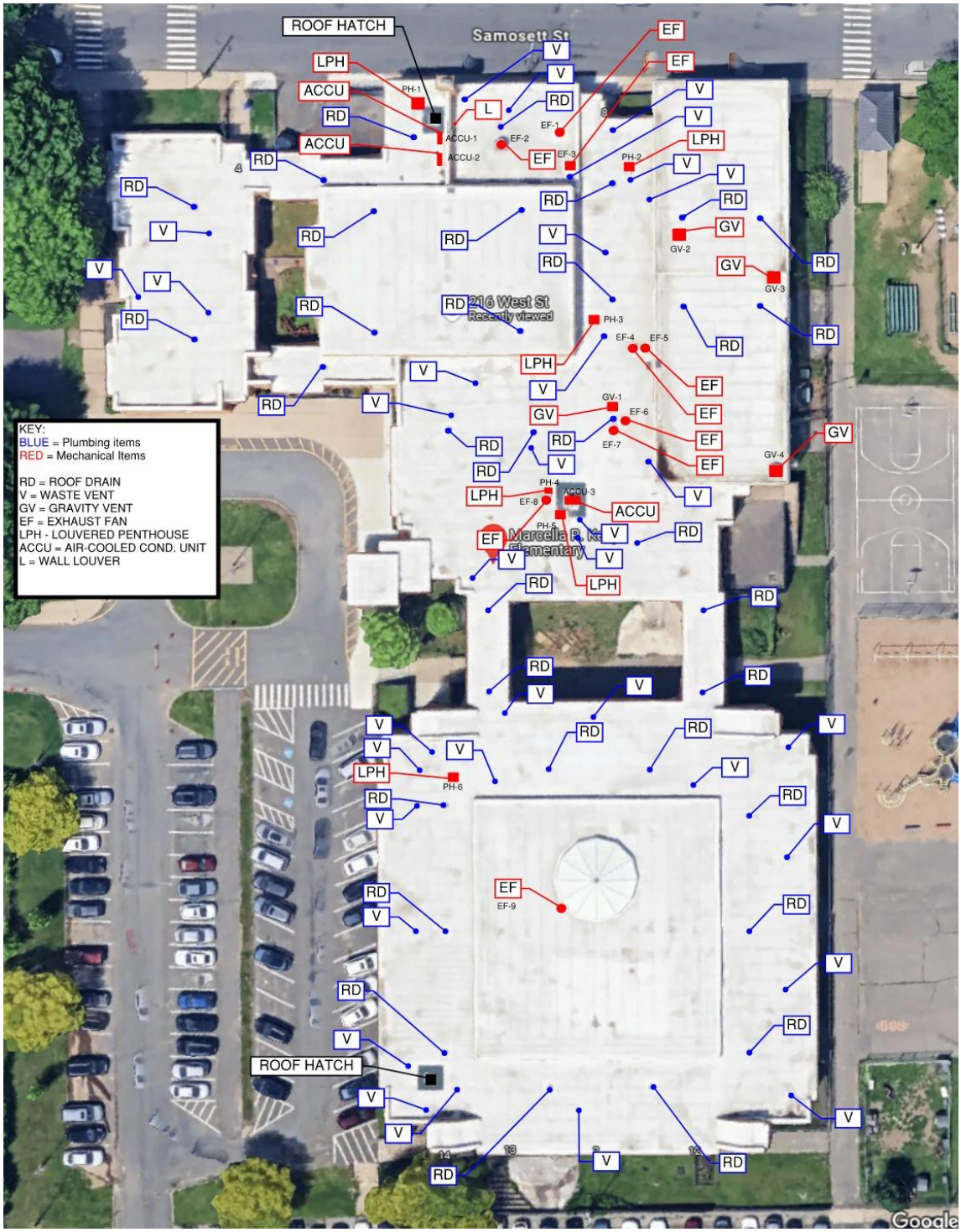
Recommendations

It is recommended that the following items be addressed during this roof project:

1. If the old Carrier AC condenser is still functional, or if the school would like to have functioning AC for the associated AHU; Then this unit and the associated AHU should be replaced with a new R32 or R454b type AC system. This work would require additional effort to include as part of this project. If the school has abandoned the equipment or is cooling offices by other means, then the unit can be removed permanently.
2. Gravity ventilators and louvered penthouses that are excessively rusty or dented should be replaced with new as part of this project.
3. The old side-wall exhaust fan housing connected to an existing exhaust fan inside the building should be removed and a louver installed in the opening to protect from rain and pests.
4. Reconditioning of existing equipment that will be reinstalled, which should include (but not limited to): Belt replacement, bearing replacement (depending on age), lubrication, cleaning of internal components and housings, securing any loose panels.
5. Re-Balancing of equipment.
6. Any equipment the school has found to be problematic or has a history of extensive service should be replaced in-like-kind.
7. Any equipment that is older than 20 years old should be replaced to save on additional expense in the future.
8. All equipment shall receive curbs that extend equipment 18” beyond the finished roof surface. Ductwork and Piping is to be extended as required.

Rooftop Equipment Map

Below is a rooftop map of equipment found on the roof during our site investigation for reference.


ROOF HATCH
Samosett St
LPH
ACCU
RD
V
L
EF
GV
PH-1
ACCU-1
ACCU-2
EF-1
EF-2
EF-3
PH-2
GV-1
GV-2
GV-3
GV-4
PH-3
EF-4
EF-5
EF-6
EF-7
PH-4
ACCU-3
PH-5
EF-8
PH-6
EF-9
216 West St
Recently viewed
Marcella R. Kelly Elementary
KEY:
BLUE = Plumbing items
RED = Mechanical Items
RD = ROOF DRAIN
V = WASTE VENT
GV = GRAVITY VENT
EF = EXHAUST FAN
LPH - LOUVERED PENTHOUSE
ACCU = AIR-COOLED COND. UNIT
L = WALL LOUVER
ROOF HATCH
Google

SD-1 **Project Narratives**

1.6 Proposed Recommendations

The existing roof system has been installed for approximately twenty-seven years (warrantee expired in 2016) and has outlasted its typical service life. And, based on the information obtained during the site visits, as well as the analysis and testing performed, we recommend the existing roof system be removed down to the structural deck and replaced with a modern reinforced PVC roof system like the roof system that was previously installed. This will provide the Owner with a fully warranted roof system meeting the current life safety requirements.
The new roof system should consist of the following components:

- Fully adhered 80-mil reinforced PVC membrane – recommended for future PV array installation and heavier foot traffic.
- ½-inch thick high density polyisocyanurate cover board adhered.
- Double layer 3-inch thick polyisocyanurate rigid insulation, bottom layer mechanically attached, top layer adhered. Provide code compliant polyisocyanurate insulation which meets the requirements for minimum U or R values at drains.
- Tapered insulation crickets where required providing positive pitch to roof drain locations.
- Tapered insulation sumps at all roof drains with a depth of 2". The use of tapered insulation with ½":12" slope is typical (9'-4" x 9'-4" sump plan dimensions). Sumps with larger areas and more gradual slopes may also be recommended at locations of existing flat structure, existing ponding, or where there are long distances between drain locations. ¼":12" (17'-4" x 17'-4") or 1/8":12" (33'-4" x 33'-4").
- Polyethylene vapor barrier over the existing structural roof decking.
- Provide new expansion joint assemblies in the new roof system at existing expansion joint locations.
- Some areas of the brick veneer between the upper and lower roof levels should be covered with a mechanically fastened ¾-inch thick plywood sheathing to allow the roof membrane to be continuous from one roof level to another, thereby reducing the possibility of future failure where new roof-to-wall flashings would have to be provided in the existing veneer.
- Remove/replace existing ceiling tiles to access work related to the roof drain replacement. Replace any damaged ceiling tiles because of the remove/replace work.
- Replace all existing roof drain bowls with new drain bowls and strainers. New drain outlets to match the diameter of existing roof leaders.
- HVAC - Provide new 24-inch-high mechanical curbs mechanically attached to the roof deck. HVAC - Provide new insulation at existing refrigeration lines and/or exposed ductwork. Replacement of any broken, problematic or old equipment (20 years or older) is recommended. Reconditioning and service of equipment less than 20 years old prior to reinstalling is recommended. Rebalance equipment after reinstallation. All equipment should be reinstalled a minimum of 18" above the finished roof. Extend ductwork and piping as required. Refer to mechanical report.
- Extend pipe vent penetrations where minimal flashing height does not exist.

- Replace fixed roof ladders at roof level transitions with compliant ladders. Install new ships ladders at noted locations.
- Provide required OSHA compliant self-supporting guardrails at courtyard roof edges and at any mechanical equipment within 10 feet of roof perimeter.
- Replace existing roof hatch/hatches with energy-efficient thermally broken roof hatch/hatches, safety railings, and telescoping safety post.
- Install walkway pads to/from and around mechanical equipment, ladders, and hatches to minimize roof membrane wear and damage as well as providing a non-slip walk/work surface where needed.
- Provide roof penetration housings with 24-inch curbs at all mechanical roof penetrations less than 2-inch diameter. Mechanically attached curbs to roof deck.
- Provide new flashings at miscellaneous roof penetrations.
- Mechanically attach new blocking to existing perimeter blocking, deck, and/or structure. Replace deteriorated blocking. Provide additional blocking to maximum height of insulation at perimeter.
- Provide new ANSI/SPRI/FM 4435/ES-1 compliant snap-on roof edge trim to roof perimeter.
- Provide new duct insulation and PVC weatherproof wrap at exposed ductwork locations.
- Solar Ready Electrical – The future solar system shall be integrated into the existing electrical system. The potential future solar project shall provide all required additional equipment as part of the solar project, including an emergency disconnect on the exterior wall adjacent to the existing electrical meter. All solar system equipment shall be mounted on the exterior walls, ballasted on the roof, or use the limited space within the existing main electrical room. All future conduits shall be exterior-type and mounted to the exterior walls or ballasted on the roof system. Ballasted components shall be placed on a protective membrane over the roof membrane. The future conduit routes shall run across the roof, down walls between roof levels (between windows as necessary) and terminate at the main electrical room as shown on the drawings. The future solar project shall provide wall penetrations to extend the conduit into the electrical room. The connection between the future solar system and existing electrical system will occur within the existing main electrical room. There is currently available wall space for some additional electrical devices. No roof penetrations or interior conduits are recommended to prepare for the potential future solar project. No modifications to the existing electrical system are recommended to prepare for the for the potential future solar project. No cost is included in the estimate for electrical solar readiness.

- Solar Ready Structure – The existing building's roofs have been evaluated for solar readiness and can accept solar arrays in limited areas with no modification to the existing structure. No structural modification work is recommended. The suitable areas identified provide ample space for solar arrays. Refer to the structural report and architectural drawing SR1.00. No cost is included in the estimate for structural solar readiness.

- Solar Ready Architectural – The proposed roof membrane is 80 mil thickness. This is recommended for the base project scope of work and makes the building's roofs solar ready. No additional cost is included in the estimate for architectural solar readiness. The proposed solar arrays are shown and described on drawing SR1.00.
- ADA upgrades (required per 521 CMR 3.3.2) consisting of the following: install lever handles at doors throughout school that have not previously been updated. Install toilet grab bars and appropriate height toilet accessories as

required. Provide or adjust compliant restroom lavatories. Remove restroom doors or install electrified door openers where appropriate. Install guardrails and handrail extensions at stairs and ramps. Provide accessible work surfaces, countertops, cabinets, and sinks as appropriate. Renovate restroom layouts as appropriate. Refer to the schematic Accessibility Upgrades narrative for more detail on the proposed work. Refer to the table below regarding proposed plumbing fixtures to meet accessibility requirements.

Kelly Elementary School - Facilities for Occupancy	**Qty**
Maximum Occupancy (per Table 1004.5)	2650
Current Population - Building Occupants	554
Toilets & Urinals	
Required Toilets & Urinals for Max. Occ. (248 CMR 10.10)	79
Existing Toilets & Urinals	53
Required Toilets & Urinals for Population (248 CMR 10.10)	**26**
Proposed Toilets & Urinals	**50**
Lavatories	
Required Lavatories for Max. Occ. (248 CMR 10.10)	94
Existing Lavatories	23
Required Lavatories for Population (248 CMR 10.10)	**26**
Proposed Lavatories	**27**

Designer Certification

Mount Vernon Group Architects, Inc. hereby certifies that to the best of our knowledge, the recommendations for the proposed solution to install a new PVC roof system at the **Marcella R. Kelly Elementary School** shall meet the requirements of 2021 IECC International Energy Conservation Code with MA amendments, Ma 10th edition Building Code and/or the 780 CMR Massachusetts Stretch Energy Code.

Frank Tedesco AIA, LEED AP
President

Mount Vernon Group Architects
200 Harvard Mill Square
Suite 410
Wakefield, MA 01880

SD-1 1.7 - CMR 521 Accessibility Upgrades Review

General

Refer to the interior reference drawings in this submittal. The building (within exterior walls) was reviewed, and the following includes notes from the review and schematic descriptions of the scope of work required for this project to comply with 521 CMR 3.3.2. The description includes general notes and is organized by room. Existing items noted "- OK" do not require modification or work.

Scope Description:

- GENERAL: PERFORM DEMOLITION AS REQUIRED TO PERFORM PROPOSED MODIFICATIONS.
- GENERAL: DOOR HARDWARE
  - INTERIOR - REPLACE ALL KNOB HARDWARE WITH NEW LEVERSETS: APPROX 180 DOORS.
- GENERAL: PLUMBING FIXTURE UPDATES
  - DRINKING FOUNTAINS: ADD 3 LOCATIONS
  - SEE TOILET ROOMS FOR UPDATES
  - SEE ROOMS WITH CASEWORK SCOPE FOR UPDATES
- STAIRS #10, 11, 12, 13, 3, 7 (CAF), 6 (CAF).
  - DEMO EXISTING RAILS.
  - PROVIDE NEW GUARDRAILS AND CONTINUOUS HANDRAILS WITH EXTENSIONS.
- 133. GIRLS TOILET
  - VESTIBULE: 2 DOORS PROVIDE AUTO OPENERS
  - 6 TOILETS - REPLACE WITH NEW, LOWER TO CHILD HEIGHT
    - RELOCATE ADA TOILET TO COMPLY W/ CODE REQUIRED DISTANCE FROM WALL / COMPARTMENT PARTITION.
  - 4 LAVS
    - REMOVE 1 FROM CURRENT ADA STALL
    - REPLACE 3 WITH NEW & RELOCATE/ADJUST TO COORD. W/ NEW ADA STALL
  - NO MIRRORS
  - 6 NEW TOILET COMPARTMENTS
    - 1 ADA
    - 1 AMBULATORY
  - REPLACE AND RELOCATE RADIATOR UNIT
  - NEW ACCESSORIES - MOUNT AT CORRECT HEIGHTS
    - 4 - 42" GRAB BARS
    - 6 - TOILET PAPER DISPENSERS
      - MOUNT BELOW GRAB BARS
    - 6 - SANITARY DISPOSALS
    - 2 - SOAP DISPENSERS
- 119. BOYS TOILET
  - VESTIBULE: 2 DOORS PROVIDE AUTO OPENERS
  - 3 TOILETS - REPLACE WITH NEW, LOWER TO CHILD HEIGHT
    - RELOCATE ADA TOILET TO COMPLY W/ CODE REQUIRED DISTANCE FROM WALL / COMPARTMENT PARTITION.

- 6 URINALS - OK
- 4 LAVS
  - REMOVE 1 FROM CURRENT ADA STALL
  - REPLACE 3. MOUNT AT CHILD HEIGHT. INCLUDE ADA FAUCETS.
- NO MIRRORS
- 1 NEW ADA TOILET COMPARTMENT
- NEW ACCESSORIES - MOUNT AT CORRECT HEIGHTS
  - 4 - 42" GRAB BARS
  - 6 - TOILET PAPER DISPENSERS
    - MOUNT BELOW GRAB BARS
  - 6 - SANITARY DISPOSALS
  - 2 - SOAP DISPENSERS

- G-139. GIRLS TOILET
  - VESTIBULE: 2 DOORS PROVIDE AUTO OPENERS
  - 6 TOILETS - REPLACE WITH NEW, LOWER TO CHILD HEIGHT
    - RELOCATE ADA TOILET TO COMPLY W/ CODE REQUIRED DISTANCE FROM WALL / COMPARTMENT PARTITION.
  - 4 LAVS
    - REMOVE 1 FROM CURRENT ADA STALL
    - REPLACE 3 WITH NEW & RELOCATE/ADJUST TO COORD. W/ NEW ADA STALL
  - NO MIRRORS
  - 6 NEW TOILET COMPARTMENTS
    - 1 ADA
    - 1 AMBULATORY
  - NEW ACCESSORIES - MOUNT AT CORRECT HEIGHTS
    - 4 - 42" GRAB BARS
    - 6 - TOILET PAPER DISPENSERS
      - MOUNT BELOW GRAB BARS
    - 6 - SANITARY DISPOSALS
    - 2 - SOAP DISPENSERS

- G-122. BOYS TOILET
  - VESTIBULE: 2 DOORS PROVIDE AUTO OPENERS
  - 3 TOILETS - REPLACE WITH NEW, LOWER TO CHILD HEIGHT
    - RELOCATE ADA TOILET TO COMPLY W/ CODE REQUIRED DISTANCE FROM WALL / COMPARTMENT PARTITION.
  - 6 URINALS - OK
  - 4 LAVS
    - REMOVE 1 FROM CURRENT ADA STALL
    - REPLACE 3. MOUNT AT CHILD HEIGHT. INCLUDE ADA FAUCETS.
  - NO MIRRORS
  - 1 NEW ADA TOILET COMPARTMENT
  - NEW ACCESSORIES - MOUNT AT CORRECT HEIGHTS
    - 4 - 42" GRAB BARS
    - 6 - TOILET PAPER DISPENSERS
      - MOUNT BELOW GRAB BARS
    - 6 - SANITARY DISPOSALS
    - 2 - SOAP DISPENSERS

- G-137. TOILET AT TEACHERS LOUNGE
  - CURRENT ROOM DIMENSIONS NOT ABLE TO MEET CODE REQUIREMENTS.
  - FULL RENOVATION TO FIT LARGER (6'X7.5') ACCESSIBLE TOILET ROOM IN SUITE.
    - ADJACENT ELECTRICAL ROOM TO BE PART OF RENOVATION. MOVE PANELS.
    - TOILET
    - LAV
    - 2 - 42" GRAB BARS
    - TOILET PAPER DISPENSER
    - PAPER TOWEL DISPENSER
    - WASTE RECEPTACLE
    - SANITARY DISPOSAL
    - FINISHES
    - MEPF

- 130. TOILET AT TEACHERS LOUNGE
  - CURRENT ROOM DIMENSIONS NOT ABLE TO MEET CODE REQUIREMENTS.
  - FULL RENOVATION TO FIT LARGER (6'X7.5') ACCESSIBLE TOILET ROOM IN SUITE.
    - TOILET
    - LAV
    - 2 - 42" GRAB BARS
    - TOILET PAPER DISPENSER
    - PAPER TOWEL DISPENSER
    - WASTE RECEPTACLE
    - SANITARY DISPOSAL
    - FINISHES
    - MEPF

- 44. NURSE TOILET
  - CURRENT ROOM DIMENSIONS NOT ABLE TO MEET CODE REQUIREMENTS.
  - FULL RENOVATION TO FIT LARGER (6'X7.5') ACCESSIBLE TOILET ROOM IN SUITE.
    - TOILET
    - LAV
    - 2 - 42" GRAB BARS
    - TOILET PAPER DISPENSER
    - PAPER TOWEL DISPENSER
    - WASTE RECEPTACLE
    - SANITARY DISPOSAL
    - FINISHES
    - MEPF

- 73 & 74. KINDERGARTEN (75) BOYS & GIRLS TOILET ROOMS
  - EXISTING ROOMS ARE TOO SMALL TO MAKE ACCESSIBLE
  - FULL RENOVATION. DEMOLISH EXISTING PARTITIONS BETWEEN TOILET ROOMS AND MAIN KINDERGARTEN ROOM.
  - CONSTRUCT NEW ACCESSIBLE SINGLE TOILET ROOM (6' X 9'-9"). KINDERGARTEN MOUNTING HEIGHTS.
    - TOILET
    - LAV
    - 2 - 42" GRAB BARS
    - TOILET PAPER DISPENSER

- PAPER TOWEL DISPENSER
- WASTE RECEPTACLE
- SANITARY DISPOSAL
- FINISHES
- MEPF

- 71 & 72. KINDERGARTEN (70) GIRLS & BOYS TOILET ROOMS
  - EXISTING ROOMS ARE TOO SMALL TO MAKE ACCESSIBLE
  - FULL RENOVATION. DEMOLISH EXISTING PARTITIONS BETWEEN TOILET ROOMS AND MAIN KINDERGARTEN ROOM.
  - CONSTRUCT NEW ACCESSIBLE SINGLE TOILET ROOM (6' X 9'-9"). KINDERGARTEN MOUNTING HEIGHTS.
    - TOILET
    - LAV
    - 2 - 42" GRAB BARS
    - TOILET PAPER DISPENSER
    - PAPER TOWEL DISPENSER
    - WASTE RECEPTACLE
    - SANITARY DISPOSAL
    - FINISHES
    - MEPF

- 67 & 68. KINDERGARTEN (65) BOYS & GIRLS TOILET ROOMS
  - EXISTING ROOMS ARE TOO SMALL TO MAKE ACCESSIBLE
  - FULL RENOVATION. DEMOLISH EXISTING PARTITIONS BETWEEN TOILET ROOMS AND MAIN KINDERGARTEN ROOM.
  - CONSTRUCT NEW ACCESSIBLE SINGLE TOILET ROOM (6' X 9'-9"). KINDERGARTEN MOUNTING HEIGHTS.
    - TOILET
    - LAV
    - 2 - 42" GRAB BARS
    - TOILET PAPER DISPENSER
    - PAPER TOWEL DISPENSER
    - WASTE RECEPTACLE
    - SANITARY DISPOSAL
    - FINISHES
    - MEPF

- 2. GIRLS TOILET
  - RENOVATED IN 2019. NO SCOPE OF WORK.

- 13. BOYS TOILET
  - RENOVATED IN 2019. NO SCOPE OF WORK.

- 53. WOMENS TOILET
  - DOOR: PROVIDE AUTO OPENER
  - 2 TOILETS

        - RELOCATE ADA TOILET TO COMPLY W/ CODE REQUIRED DISTANCE FROM WALL / COMPARTMENT PARTITION.
    - 2 EXISTING LAVS
        - DEMO BOTH EXISTING
        - ONLY REPLACE 1
    - 2 NEW TOILET COMPARTMENTS
        - 1 ADA
    - NEW ACCESSORIES - MOUNT AT CORRECT HEIGHTS
        - 2 - 42" GRAB BARS
        - 2 - TOILET PAPER DISPENSERS
            - MOUNT BELOW GRAB BARS
        - 2 - SANITARY DISPOSALS
        - 1 - SOAP DISPENSERS
        - 1 - MIRRORS

- 52. MENS TOILET
    - DOOR: PROVIDE AUTO OPENER
    - 1 TOILET
        - RELOCATE ADA TOILET TO COMPLY W/ CODE REQUIRED DISTANCE FROM WALL / COMPARTMENT PARTITION.
    - 1 URINAL
        - DEMO EXISTING
        - NEW LOCATION AT ADA HEIGHT
    - 2 EXISTING LAVS
        - DEMO BOTH EXISTING
        - ONLY REPLACE 1
    - 1 NEW ADA TOILET COMPARTMENT
    - NEW ACCESSORIES - MOUNT AT CORRECT HEIGHTS
        - 2 - 42" GRAB BARS
        - 1 - TOILET PAPER DISPENSERS
            - MOUNT BELOW GRAB BARS
        - 1 - SOAP DISPENSERS
        - 1 – ADA MIRROR

- 82. EMPLOYEE TOILET
    - EXISTING ROOM IS TOO SMALL TO MAKE FULLY ACCESSIBLE
    - MODIFICATIONS TO ENLARGE ROOM ARE TECHNICALLY INFEASIBLE DUE TO EXISTING FLOOR PLAN AND STRUCTURAL LAYOUT.
    - DOOR: PROVIDE AUTO OPENER
    - REPLACE TOILET & RELOCATE TO COMPLY W/ CODE REQUIRED DISTANCE FROM WALL / COMPARTMENT PARTITION.
    - REPLACE LAV WITH NEW AT ADA HEIGHT W/ COMPLIANT FAUCET
    - NEW ACCESSORIES - MOUNT AT CORRECT HEIGHTS
        - 2 - 42" GRAB BARS. INSTALL AS CLOSE TO REQUIREMENTS AS POSSIBLE.
        - 1 - TOILET PAPER DISPENSERS
            - MOUNT BELOW GRAB BAR
        - 1 - SOAP DISPENSERS
        - 1 - MIRRORS
        - 1 - PAPER TOWEL DISPENSER

        - 1 - WASTE RECEPTACLE

- 24. STORAGE (PREVIOUSLY BOYS SHOWER)
    - NO SCOPE

- 20. STORAGE (PREVIOUSLY BOYS DRESSING)
    - NO SCOPE

- 19. STAFF TOILET
    - EXISTING ROOM IS TOO SMALL TO MAKE FULLY ACCESSIBLE
    - AN ADA TOILET WILL BE AVAILABLE IN ADJACENT ROOMS 52 & 53.
    - NO SCOPE OF WORK

- 5. STORAGE (PREVIOUSLY GIRLS SHOWER)
    - NO SCOPE

- 4. STORAGE (PREVIOUSLY GIRLS DRESSING)
    - NO SCOPE

- 7. STORAGE (PREVIOUSLY GIRLS LOCKER ROOM)
    - NO SCOPE

- 43. EXAMINATION (NURSE)
    - REPLACE CASEWORK (LOWERS & UPPERS) & SINK WITH ADA. 7'-0"L.

- VESTIBULES - ADD AUTO OPENERS
    - G-110
    - G-120
    - G-141
    - G-146
    - 1

- MUSIC PRACTICE ROOMS (G-129, G-130): 8.5' X 10' EACH
    - DEMOLISH NON-ADA MODULAR ACOUSTICAL ENCLOSURES (WALLS, FLOOR, CEILINGS).
    - RENOVATE SPACES WITH TRADITIONAL CONSTRUCTION TO CREATE ACOUSTICAL ISOLATED ROOMS. INCLUDE MEPF, ETC.

- 61. PLATFORM
    - ADD WHEELCHAIR LIFT UP TO PLATFORM ELEVATION
    - STAIRS (2)
        - REPLACE HANDRAILS WITH NEW CONTINUOUS HANDRAILS WITH EXTENSIONS.

- EXISTING RAMPS: NO WORK
    - NEW COMPLIANT RAILS WERE INSTALLED IN 2019.
    - 5 OF THE 6 RAMPS DO NOT COMPLY WITH THE 1:12 SLOPE REQUIREMENT.
    - THE EXISTING FLOOR PLAN AND STRUCTURAL LAYOUT MAKE THE MODIFICATIONS OF THE NONCOMPLIANT RAMPS TECHNICALLY INFEASIBLE PER 306.7.

- G-136. TEACHERS LOUNGE

- REPLACE CASEWORK (LOWERS & UPPERS) & SINK WITH ADA. 7'-0"L.
- ADD DOOR OPENER

- G-133. SCIENCE WORKROOM
  - REPLACE CASEWORK (LOWERS & UPPERS) & 1 SINK WITH ADA. 45'-0"L.

- G-132. AV WORKROOM
  - REPLACE CASEWORK (LOWERS & UPPERS) & 1 SINK WITH ADA. 30'-0"L.
  - ADD DOOR OPENER

- G-148. OFFICE
  - ADD DOOR OPENERS (2)

- G-128. LIBRARY WORKROOM
  - REPLACE CASEWORK (LOWERS & UPPERS) & 1 SINK WITH ADA. 40'-0"L.
  - ADD DOOR OPENER

- 131. TEACHERS LOUNGE
  - REPLACE CASEWORK (LOWERS & UPPERS) & SINK WITH ADA. 7'-0"L.
  - ADD DOOR OPENER

- 123. TEACHERS WORKROOM
  - REPLACE CASEWORK (LOWERS & UPPERS) & SINK WITH ADA. 7'-0"L.
  - ADD DOOR OPENER

- 29. CONFERENCE
  - REPLACE CASEWORK (LOWERS & UPPERS) & SINK WITH ADA. 8'-0"L.

- 36. WAITING ROOM
  - REPLACE RECEPTION CASEWORK WITH NEW, INCLUDING ADA SERVICE COUNTER HEIGHT PORTION. 12 LF.

SD-2 **Code Analysis**

2.1 Code Analysis & Narrative

The proposed roof replacement work to take place at the existing Kelly Elementary School shall be considered an Alteration-Level 1 scope of work per 2021 IEBC International Existing Building Code and related 780 CMR Mass. Building Code Amendments (10th Edition). The City of Holyoke has adopted the Stretch energy Code.

The proposed reroof project is to remove the existing roof assembly system down to the structural deck. All the roof top elements will need to be raised to accommodate the thicker code required roof insulation. The roof hatches will be replaced with insulated and thermally broken roof hatches including curb mounted guardrails, with gates. The roof access ladders will either be replaced or raised based on whether they currently meet the building code requirements for ladders. Ballasted guardrails will be installed at all courtyard roof edges and at locations where mechanical equipment or roof hatches are within 10' of a roof edge. Any short height masonry wall sections between lower and higher roofs are to be covered with ¾" plywood and roofing membrane where not visible from the street. Install larger roof drains to match the leader diameters. Any mechanical equipment that was removed to accommodate the reroofing will be serviced or replaced based on a 20-year life cycle. Mechanical curbs and duct and/or pipe insulation are to be replaced. This school meets the 30% trigger of bringing the entire school up to the current accessibility codes. Door hardware throughout is proposed to be replaced with lever handles, restrooms grab bars, sinks, and stair guardrails will be included. Door clearance requirements will require restroom door removal or electrified door openers.

2021 IEBC

503.1 General
Alterations to any building or structure shall comply with the requirements of the International Building Code for new construction. Alterations shall be such that the existing building or structure is not less complying with the provisions of the International Building Code than the existing building or structure was prior to the alteration.
Exceptions:

1. An existing stairway shall not be required to comply with the requirements of Section 1011 of the International Building Code where the existing space and construction does not allow a reduction in pitch or slope.
2. Handrails otherwise required to comply with Section 1011.11 of the International Building Code shall not be required to comply with the requirements of Section 1014.6 of the International Building Code regarding full extension of the handrails where such extensions would be hazardous because of plan configuration.
3. Where provided in below-grade transportation stations, existing and new escalators shall be permitted to have a clear width of less than 32 inches (815 mm).

Provisions of Chapter 7, Section 705 REROOFING & Section 706 STRUCTURAL of the IEBC, and materials and methods used for replacing an existing roof covering complying with the requirements of Chapter 15 of the 2021 International Building Code shall be followed for any roof recovering or replacement. See below for excerpts of the IEBC;

705.1 General

Materials and methods of application used for recovering or replacing an existing roof covering shall comply with the requirements of Chapter 15 of the International Building Code.

Exceptions:

1. Roof replacement or roof recover of existing low-slope roof coverings shall not be required to meet the minimum design slope requirement of 1/4 unit vertical in 12 units horizontal (2-percent slope) in Section 1507 of the International Building Code for roofs that provide positive roof drainage.
2. Recovering or replacing an existing roof covering shall not be required to meet the requirement for secondary (emergency overflow) drains or scuppers in Section 1502 of the International Building Code for roofs that provide for positive roof drainage. For the purposes of this exception, existing secondary drainage or scupper systems required in accordance with this code shall not be removed unless they are replaced by secondary drains or scuppers designed and installed in accordance with Section 1502 of the International Building Code.

705.2 Roof Replacement

Roof replacement shall include the removal of all existing layers of roof coverings down to the roof deck.

Exception: Where the existing roof assembly includes an ice barrier membrane that is adhered to the roof deck, the existing ice barrier membrane shall be permitted to remain in place and covered with an additional layer of ice barrier membrane in accordance with Section 1507 of the International Building Code.

705.5 Flashings

Flashings shall be reconstructed in accordance with approved manufacturer's installation instructions. Metal flashing to which bituminous materials are to be adhered shall be primed prior to installation.

706.1 General

Where alteration work includes replacement of equipment that is supported by the building or where a reroofing permit is required, the provisions of this section shall apply.

706.2 Addition or Replacement of Roofing or Replacement of Equipment

Any existing gravity load-carrying structural element for which an alteration causes an increase in design gravity load shall be replaced or altered as needed to carry the gravity loads required by the International Building Code for new structures. The increase in gravity loads shall account for the cumulative effects of additions since original construction.
Exceptions:

1. Buildings of Group R occupancy with not more than five dwelling or sleeping units used solely for residential purposes where the altered building complies with the conventional light-frame construction methods of the International Building Code or the provisions of the International Residential Code.
2. Buildings in which the increased dead load is due entirely to the addition of a second layer of roof covering weighing 3 pounds per square foot (0.1437 kN/m2) or less over an existing single layer of roof covering. Insulation shall not be added such that it increases the thermal factor Ct in accordance with ASCE 7-16 Table 7.3-2 without checking capacity of existing structure.
3. Structural elements whose demand capacity ratio is not increased by more than 5%.

Section 708 ENERGY CONSERVATION allows the alterations to conform without requiring the entire building or structure to conform to the energy requirements. See excerpt below for IEBC.

708.1 Minimum Requirements
Level 1 alterations to existing buildings or structures do not require the entire building or structure to comply with the energy requirements of the International Energy Conservation Code or International Residential Code. The alterations shall conform to the energy requirements of the International Energy Conservation Code or International Residential Code as they relate to new construction only.

MA 2025 Commercial Stretch Code IECC2021 w/Ma amendments

C303.2.2 Multiple Layers of Continuous Insulation Board

Where two or more layers of continuous insulation board are used in a construction assembly, the continuous insulation boards shall be installed in accordance with Section C303.2. Where the continuous insulation board manufacturer's instructions do not address installation of two or more layers, the edge joints between each layer of continuous insulation boards shall be staggered.

C503.2.1 Roof Replacement

Roof replacements shall comply with Section C402.1.3, C402.1.4, C402.1.5 or C407 where the existing roof assembly is part of the building thermal envelope and contains insulation entirely above the roof deck. In no case shall the R-value of the roof insulation be reduced or the U-factor of the roof assembly be increased as part of the roof replacement.

2021 IBC

TABLE 1004.5
MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT

FUNCTION OF SPACE	OCCUPANT LOAD FACTORa
Accessory storage areas, mechanical equipment room	300 gross
Assembly	
Gaming floors (keno, slots, etc.)	11 gross
Exhibit gallery and museum	30 net

Assembly with fixed seats	See Section 1004.6
Assembly without fixed seats	
Concentrated (chairs only—not fixed)	7 net
Standing space	5 net
Unconcentrated (tables and chairs)	15 net
Business areas	150 gross
Educational	
Classroom area	20 net
Shops and other vocational room areas	50 net
Library	
Reading rooms	50 net
Stack area	100 gross
Kitchens, commercial	200 gross
Locker rooms	50 gross
Stages and platforms	15 net

1015.6 Mechanical Equipment, Systems and Devices

Guards shall be provided where various components that require service are located within 10 feet (3048 mm) of a roof edge or open side of a walking surface and such edge or open side is located more than 30 inches (762 mm) above the floor, roof or grade below. The guard shall extend not less than 30 inches (762 mm) beyond each end of such components. The guard shall be constructed so as to prevent the passage of a sphere 21 inches (533 mm) in diameter.
Exception: Guards are not required where personal fall arrest anchorage connector devices that comply with ANSI/ASSE Z 359.1 are installed.

1015.7 Roof Access
Guards shall be provided where the roof hatch opening is located within 10 feet (3048 mm) of a roof edge or open side of a walking surface and such edge or open side is located more than 30 inches (762 mm) above the floor, roof or grade below. The guard shall extend not less than 30 inches (762 mm) beyond each end of the hatch parallel to the roof edge. The guard shall be constructed so as to prevent the passage of a sphere 21 inches (533 mm) in diameter.

Exception: Guards are not required where personal fall arrest anchorage connector devices that comply with ANSI/ASSE Z359.1 are installed.

Chapter 29 Plumbing Systems
User note:

About this chapter: Plumbing systems are another key element of any building. Chapter 29 provides the necessary number of plumbing fixtures, including water closets, lavatories, bathtubs and showers. The quality and design of each fixture must be in accordance with the International Plumbing Code®.

248 CMR 10.00: Uniform State Plumbing Code

10.01 Scope and Jurisdiction

(1) Scope

248 CMR 10.00 governs the requirements for the installation, alteration, removal, replacement, repair, or construction of all plumbing.

(2) Jurisdiction

(a)
Nothing in 248 CMR 10.00 shall be construed as applying to:

1. refrigeration,
2. heating,
3. cooling,
4. ventilation or fire sprinkler systems beyond the point where a direct connection is made with the potable water distribution system.

(b)
Sanitary drains, storm water drains, hazardous waste drainage systems, dedicated systems, potable and non-potable water supply lines and other connections shall be subject to 248 CMR 10.00.

10.10 Plumbing Fixture

(15) Minimum Facilities

(a)

All inhabited buildings and structures shall contain plumbing facilities including persons with disabilities as required in 521 CMR. 248 CMR 10.10 shall apply to new buildings, additions, and changes where a plumbing permit is required.

(c) Establishing Fixture Requirements

1. Total fixture requirements shall be determined by using 50 percent male and 50 percent female. The occupancy ratio of 50% for each sex shall not be required when statistical data indicates the occupancy of the facility would be other than 50% for each sex.

   a. In buildings or structures containing multiple classifications under 248 CMR 10.10 Table 1, all classifications shall be satisfied when determining the total fixture requirements.

2. If a fraction should occur while determining the number of plumbing fixtures required in 248 CMR 10.10 (14): Table 1 Minimum Facilities for Building Occupancy, rounding up to the next fixture shall be required.

4.In establishments other than residential, rest room facilities shall be clearly designated and no further than four hundred feet in developed direct distance away from the regular place of daily work activity of any person for whose use it is required. Elevator usage may be taken into consideration when determining the developed direct distance. In multi-story buildings, access to the required toilet facilities shall not exceed one vertical story. Access to the required toilet facilities for customers shall not include passing through areas designated as for employee use only such as kitchens, food preparation areas, storage rooms, closets, or similar spaces. Toilet facilities accessible only to private offices shall not be included to determine compliance with this section.

10.

For Places of Assembly, the minimum fixture requirements shall be determined by:

a) The number of seats in the establishment and,
b) The maximum number of employees on duty at any one time.
c) For establishments serving food and/or beverages which may be consumed and the premises, inside and outside seating shall be included when determining fixture requirements if the outside seating is provided by the establishment for use by patrons only.

12.
For Educational Facilities, the minimum fixture requirements shall be determined by:

1. Pre-School & Day Care
    1. The total combined number of staff and children
    2. Refer to 606 CMR 7.00: Standards for the licensure or approval of family child-care, small group and school age and large group and school age child-care programs for requirements regarding additional plumbing fixtures in this type of occupancy.
2. Public & Private Kindergarten through Post-Secondary (Students)
    1. Seating capacity
3. Public & Private Kindergarten through Post-Secondary (Staff)
    1. The maximum number of staff on duty at any one time
4. Students Six Years of Age or Younger
    1. Unisex/gender-neutral toilet facilities may be installed.

2. Lavatories may be installed in classroom areas or the toilet rooms.

5. Public and private schools, kindergarten, elementary, middle, and high schools:
    1. Separate toilet facilities shall be provided for teachers and other staff employees on every other floor-level.
    2. Rest rooms for students shall be provided on every floor level.
6. Post-Secondary schools:
    1. Separate toilet facilities shall not be required for teachers and other staff employees
    2. Rest rooms for students shall be required on every other floor level.
7. All secondary and post-secondary schools that conduct sporting programs or physical activities on the school premises or grounds and include a gymnasium where the activities may be conducted shall provide separate men and women shower facilities to accommodate the students.
8. Where core rest rooms are installed, lavatories may be installed in an area common to both males and females directly outside the toilet facilities within the rest room area. The minimum number of lavatories shall be determined by the total fixture count as required in 248 CMR 10.10 Table 1.

10.10 TABLE 1: MINIMUM FACILITIES FOR BUILDING OCCUPANCY

Educational Facilities	Public and Private Pre-School and Day Care	One per 20 Children & Staff	One per 20 Children & Staff		1 per 10	1 per 10	One for each set of rest rooms		One Mop Sink per Floor	One single user rest room allowed for up to 20 children and staff combined.
	Public & Private Schools. Kindergarten, Elementary, Middle & High School	1-25 up to 100 Over 100 add 1 for every 50	1-25 up to 100 Over 100 add 1 for every 50	Up to 50%	1 per 25	1 per 25	One for each set of rest rooms		One Mop Sink per Floor	

521 CMR 5.00 Architectural Access Board

3.3 Existing Buildings

All additions to, reconstruction, remodeling, and alterations or repairs of existing public buildings or facilities, which require a building permit or which are so defined by a state or local inspector, shall be governed by all applicable subsections in 521 CMR 3.00: JURISDICTION.

3.3.1

If the work being performed amounts to less than 30% of the full and fair cash value of the building and

1. if the work costs less than $100,000, then only the work being performed is required to comply with 521 CMR

   or

2. if the work costs $100,000 or more, then the work being performed is required to comply with 521 CMR. In addition, an accessible public entrance and an accessible toilet room, telephone, drinking fountain (if toilets, telephones and drinking fountains are provided) shall also be provided in compliance with 521 CMR.
3.

Exception: General maintenance and on-going upkeep of existing, underground transit facilities will not trigger the requirement for an accessible entrance and toilet unless the cost of the work exceeds $500,000 or unless work is being performed on the entrance or toilet.
Exception: Whether performed alone or in combination with each other, the following types of alterations are not subject to 521 CMR 3.3.1, unless the cost of the work exceeds $500,000 or unless work is being performed on the entrance or toilet. (When performing exempted work, a memo stating the exempted work and its costs must be filed with the permit application, or a separate building permit must be obtained.)

1. Curb Cuts: The construction of curb cuts shall comply with 521 CMR 21.00: CURB CUTS.
2. Alteration work which is limited solely to electrical mechanical, or plumbing systems; to abatement of hazardous materials; or retrofit of automatic sprinklers and does not involve the alteration of any elements or spaces required to be accessible under 521 CMR. Where electrical outlets and controls are altered, they must comply with 521 CMR.
3. Roof repair or replacement, window repair or replacement, repointing and masonry repair work.
4. Work relating to septic system repairs, (including Title V, 310 CMR 15.00, improvements) site utilities and landscaping.

3.3.2

If the work performed, including the exempted work, amounts to 30% or more of the full and fair cash value (see 521 CMR 5.38) of the building the entire building is required to comply with 521 CMR.

a. Where the cost of constructing an addition to a building amounts to 30% or more of the full and fair cash value of the existing building, both the addition and the existing building must be fully accessible.

521 CMR 30.00: PUBLIC TOILET ROOMS

30.1 GENERAL Each public toilet room provided on a site or in a building shall comply with 521 CMR.

a. In each adult public toilet room, at least one water closet and one sink in each location shall be accessible to persons in wheelchairs, or a separate accessible unisex toilet room shall be provided at each location. Adult water closets shall comply with the provisions of521 CMR 30.1 through 30.13.

b. Where children's toilet rooms are provided, at least one water closet and one sink in each location shall be accessible to children in wheelchairs, or a separate accessible unisex toilet room shall be provided at each location. Children's toilet rooms shall comply with the provisions of521 CMR 30.14 through 30.20. For purposes of 521 CMR, pre-kindergarten school is

defined as a school which serves children from infancy up until but not including kindergarten. Elementary school is defined as a school which serves grades kindergarten through six.

527 CMR 1.00 Massachusetts Comprehensive Fire Safety Code, Adopts with Amendments NFPA 1, 2021

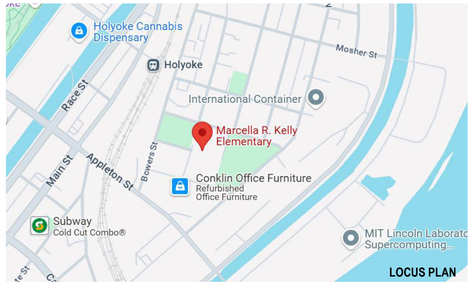
10.11.4.1

Any inner court not protected by a roof shall have a parapet or guard at least 42 inches high.

M. R. KELLY ELEMENTARY SCHOOL - ROOF REPLACEMENT

216 WEST ST, HOLYOKE, MA 01040

JUNE 18, 2025 - SCHEMATIC DESIGN



LOCUS PLAN

OWNER

CITY OF HOLYOKE

HOLYOKE PUBLIC SCHOOLS
57 SUFFOLK STREET, HOLYOKE, MA 01040

ARCHITECT

MVG

MOUNT VERNON GROUP ARCHITECTS
200 HARVARD MILLS SQUARE
WAKEFIELD, MA 01880
(781) 213-5030

CONSULTANTS

MECHANICAL, PLUMBING, FIRE PROTECTION ENGINEERS
C.A. CROWLEY ENGINEERING
645 County St Ste 6
Taunton, MA 02780
(508) 884-5094

HAZARDOUS MATERIALS
UNIVERSAL ENVIRONMENTAL
12 Brewster Road
Framingham, MA 01702
(508) 628-5486

STRUCTURAL ENGINEER
SOUZA TRUE & PARTNERS, INC.
265 Waltham Street, Third Floor
Waltham, MA 02451
(617) 926-6100

ROOF CONSULTANT
EWING ASSOCIATES
515 Converse St
Longmeadow, MA 01106
(413) 567-9544

COST ESTIMATOR
FENNESSY CONSULTING
27 Glen Street, Suite 8
Stoughton, MA 02072
(781)-344-4464

SYMBOLS

MATERIAL SYMBOL KEY

- UNDISTURBED OR COMPACTED SOIL
- CONCRETE
- MASONRY (CMU OR BRICK)
- EXPOSED WOOD TRIM
- WOOD FRAMING
- WOOD SHIM
- PLYWOOD
- PLYWOOD
- GWB
- BATT INSULATION
- RIGID INSULATION
- 1/2" SEALANT JOINT WITH BACKER ROD

ROOM NAME 101 A1 — ROOM NAME, AND FINISH NUMBER

0 SIM / A01.01 — WALL TYPE INDICATOR, SEE WALL TYPES SHEET

01 A01.01 / 01 A01.01 — BUILDING SECTION

01 A01.01 — WALL SECTION

01 A01.01 — DETAIL CUT

0 / 0 A01.01 0 / 0 OR 01 A01.01 — INTERIOR / EXTERIOR ELEVATION / ELEVATION

1 A01.01 — DETAIL

CPT / E-VCT — FLOOR MATERIAL BREAK

T O SLAB 100'-6" OR 15'-8" — REFERENCE ELEVATION

OR — WORK POINT

FEC OR FE-K — SEMI - RECESSED FIRE EXTINGUISHER CABINET w/ FIRE EXTINGUISHER

FE — SURFACE MOUNTED FIRE EXTINGUISHER

CG — CORNER GUARD

EJ — EXPANSION JOINT

CJ — CONTROL JOINT

ICE/WATER SHIELD, MOISTURE BARRIER, AIR BARRIER, DAMP PROOFING, WATER PROOFING

101 — DOOR TAG

W01 — CURTAIN WALL, STOREFRONT OR FIBERGLASS WINDOW TYPE

L01 — LOUVER TYPE

101 — BORROWED LIGH TYPE

DX — KEYED NOTE

XX.X — CENTER LINE OF COLUMN GRIDDS NEW COLUMN NAME

01 A0.01 — EXISTING CONDITIONS PHOTOS

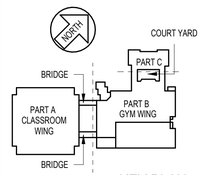
*NOTE: SEE INDIVIDUAL DRAWINGS FOR LEGENDS & DEFINITION OF POCHE USED TO REPRESENT LARGE AREAS OF REPETITIVE MATERIALS.

ABBREVIATIONS

@	AT
AB	ANCHOR BOLT
ACOUST	ACOUSTICAL
ACP	ACCESS PANEL
ACT	ACOUSTICAL CEILING TILE
AD	AREA DRAIN
ADO	AUTO DOOR OPENER
ADJ	ADJUSTABLE
AED	AUTOMATIC EMERGENCY DEFIBRILLATOR/CABINET
AFF	ABOVE FINISH FLOOR
ALUM	ALUMINUM
ANOD	ANODIZED
ASPH	ASPHALT
ASSY	ASSEMBLY
ATTACH	ATTACHMENT
ALT	ALTERNATE
BD OR BRD	BOARD
BF	BARRIER FREE
BITUM	BITUMINOUS
BLDG	BUILDING
BLKG	BLOCKING
BM	BEAM
BO	BOTTOM OF
BOD	BOTTOM OF DECK
BOTT	BOTTOM
BTWN	BETWEEN
CB	CATCH BASIN
CEM	CEMENT
CFMF	COLD FORM METAL FRAMING
CG	CORNER GUARD (SS)
CJ	CONTROL JOINT
CLG	CEILING
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
CONC	CONCRETE
CORR	CORRIDOR
CL	CENTER LINE
CLR	CLEAR
CONN	CONNECT
CONT	CONTINUOUS
CP	CEMENT PLASTER
CPT	CARPET
CSK	COUNTERSINK
CT	CERAMIC TILE
CW	CURTAINWALL
D	CLOTHES DRYER
DBL	DOUBLE
DEMO	DEMOLISH
DF	DRINKING FOUNTAIN
DIA, Ø	DIAMETER
DN	DOWN
DO	DITTO OR REPEAT ADJACENT ELEMENT
DR	DOOR
DS	DOWNSPOUT
DWGS	DRAWINGS
EA	EACH
EIFS	EXTERIOR INSULATION FINISH SYSTEM
EJ	EXPANSION JOINT
ELECT	ELECTRICAL
ELEV OR EL	ELEVATION
EMER	EMERGENCY
EMBED	EMBEDMENT
EN	ENAMEL
ENL	ENLARGED
EPS	EXPANDED POLYSTYRENE
EQ	EQUAL
EQUIP	EQUIPMENT
ETR	EXISTING TO REMAIN
EXP	EXPANSION
EXIST OR (E)	EXISTING
EXT	EXTERIOR
EXTR	EXTRUDED
FB	ELECTRICAL FLOOR BOX
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER - SEE SYMBOLS
FE-K	FIRE EXTINGUISHER - KITCHEN TYPE - SEE SYMBOLS
FEC	FIRE EXTINGUISHER CABINET - SEE SYMBOLS
FF	FACTORY FINISH
FH	FIRE HYDRANT
FIN	FINISH(ED)
FLASH('G)	FLASHING
FLR	FLOOR
FM	FACTORY MUTUAL
FOIC	FURNISHED BY CONTRACTOR INSTALLED BY CONTRACTOR
FOIC	FURNISHED BY OWNER INSTALLED BY CONTRACTOR
FOIO	FURNISHED BY OWNER INSTALLED BY OWNER
FOM	FACE OF MASONRY
FO	FACE OF
FOB	FACE OF BRICK
FO CMU	FACE OF CMU
FP	FIREPLACE
FRMG	FRAMING
FRP	FIBERGLAS REINFORCED PANEL(S)
FT	FOOT OR FEET
FTR	FIN TUBE RADIATION
GA	GAUGE
GALV	GALVANIZED
GL	GLASS
GLB	GLUE LAMINATED BEAM
GWB	GYPSUM WALL BOARD
GYP	GYPSUM
HBD	HARDBOARD
HC	HANDICAP
HD	HOOD
HDW	HARDWARE
HGT	HEIGHT
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HR	HOUR
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
INT	INTERIOR
IFP	INTERACTIVE FLAT PANEL
INSUL	INSULATION
INSTALL OR INS	INSTALLATION
JAN	JANITOR
JT	JOINT
L	ANGLE
LAM	LAMINATE
LB OR #	POUND
LLH	LONG LEG HORIZONTAL
LOC	LOCATION
LLV	LONG LEG VERTICAL
MATL	MATERIAL
MAX	MAXIMUM
MB	MACHINE BOLT
MECH	MECHANICAL
ME/P OR MEP	MECHANICAL, ELECTRICAL, AND PLUMBING
MFR	MANUFACTURER
MH	MANHOLE
MIB	MOISTURE INFILTRATION BARRIER
MICRO	MICROWAVE
MIN	MINIMUM
MLDG	MOLDING
MTL	METAL
NATL	NATURAL
NC	NONCOMBUSTIBLE
NIC	NOT IN CONTRACT
NO	NUMBER
NP	NO PAINT
NR	NOT RATED
NOM	NOMINAL
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
ODC	OVERFLOW DRAIN CAP
OHVD	OVERHEAD
OPER	OPERABLE
OPP	OPPOSITE HAND
OPNG	OPENING
OTS	OPEN TO STRUCTURE-PAINT TYP
OTA	OPEN TO ABOVE
OVHG	OVERHANG
PENE	PENETRATION
PERF	PERFORATED
PFMU	POLISHED FINISH MASONRY UNIT
PI	POST INDICATOR
PJSC	PROJECTION SCREEN
PL	PLATE
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PNL	PANEL
PNT	PAINT
POLY	EXTRUDED POLYSTYRENE
PR	PAIR
PROT	PROTECTION
PSI	POUND PER SQUARE INCH
PT	PRESSURE TREATED
PTN	PARTITION
PVC	POLYVINYL CHLORIDE
PW OR PLYWD	PLYWOOD
QT	QUARRY TILE
RCP	REFLECTED CEILING PLAN
RAD	RADIUS
RD	ROOF DRAIN
RE	REFER TO
REF	REFRIGERATOR
RES	RESILIENT FLOORING
REQD	REQUIRED
RM	ROOM
RUB	RUBBER FLOORING
RWL	RAIN WATER LEADER
SAC	SUSPENDED ACOUSTICAL CEILING
SAM	SELF ADHERED MEMBRANE
SCHED	SCHEDULE
SC	SOLID CORE
SD	SMOKE DETECTOR
SEC	SECURITY
SF	STOREFRONT
SG	STEEL CORNER GUARD
SHEATH	SHEATHING
SHT	SHEET
SHM	SECURITY HOLLOW METAL
SIM	SIMILAR
SPEC	SPECIFICATION
SPK	SPEAKER
SQ	SQUARE
S/S OR SS	STAINLESS STEEL
STC	SOUND TRANSMISSION COEFFICIENT
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURAL
SUSP	SUSPENDED
SV	SLEEVE
T & G	TONGUE & GROOVE
TERM	TERMINATION
THRESH	THRESHOLD
TO	TOP OF
TOS	TOP OF SLAB
TRTD	TREATED
TYP	TYPICAL
TS	TUBE STEEL
UL	UNDERWRITERS LABORATORY
UNO	UNLESS NOTED OTHERWISE
U/S	UNDER SIDE
VCT	VINYL COMPOSITION TILE
VIF	VERIFY IN FIELD
V PLAS	VENEER PLASTER
VERT	VERTICAL
VWC	VINYL WALL COVERING
W	WASHING MACHINE
W/	WITH
WB	WHITE BOARD
WC	WATER CLOSET
WF	WIDE FLANGE
WDO	WINDOW
WD	WOOD
WHS	WELDED HEAD STUD
WOM	WALK OFF MAT
WP	WALL PAD
WR	WATER RESISTANT
WWF	WELDED WIRE FABRIC

DRAWING LIST

SHEET NUMBER	SHEET NAME
A0.00	COVER SHEET
A2.00	OVERALL ROOF PLAN
A2.01	PROPOSED ROOF PLAN PART A
A2.02	PROPOSED ROOF PLAN PART B
A2.03	PROPOSED ROOF PLAN PART C
A2.04	ROOF DETAILS
A2.05	ROOF DETAILS
EX.01	EXISTING CONDITIONS PART A
EX.02	EXISTING CONDITIONS PART B
EX.03	EXISTING CONDITIONS PART C
EX1.00	EXISTING GROUND FLOOR - INTERIOR REFERENCE PLAN
EX1.01	EXISTING FIRST FLOOR - INTERIOR REFERENCE PLAN
EX1.02	EXISTING FIRST FLOOR - GYM WING - INTERIOR REFERENCE PLAN



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02024.28

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

KELLY ELEMENTARY ROOF REPLACEMENT

216 WEST ST. HOLYOKE, MA 01040

DRAWING TITLE

COVER SHEET

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main street, suite 1110
Springfield MA 01103
413 592 9700 T
info@mvgarchitects.com E

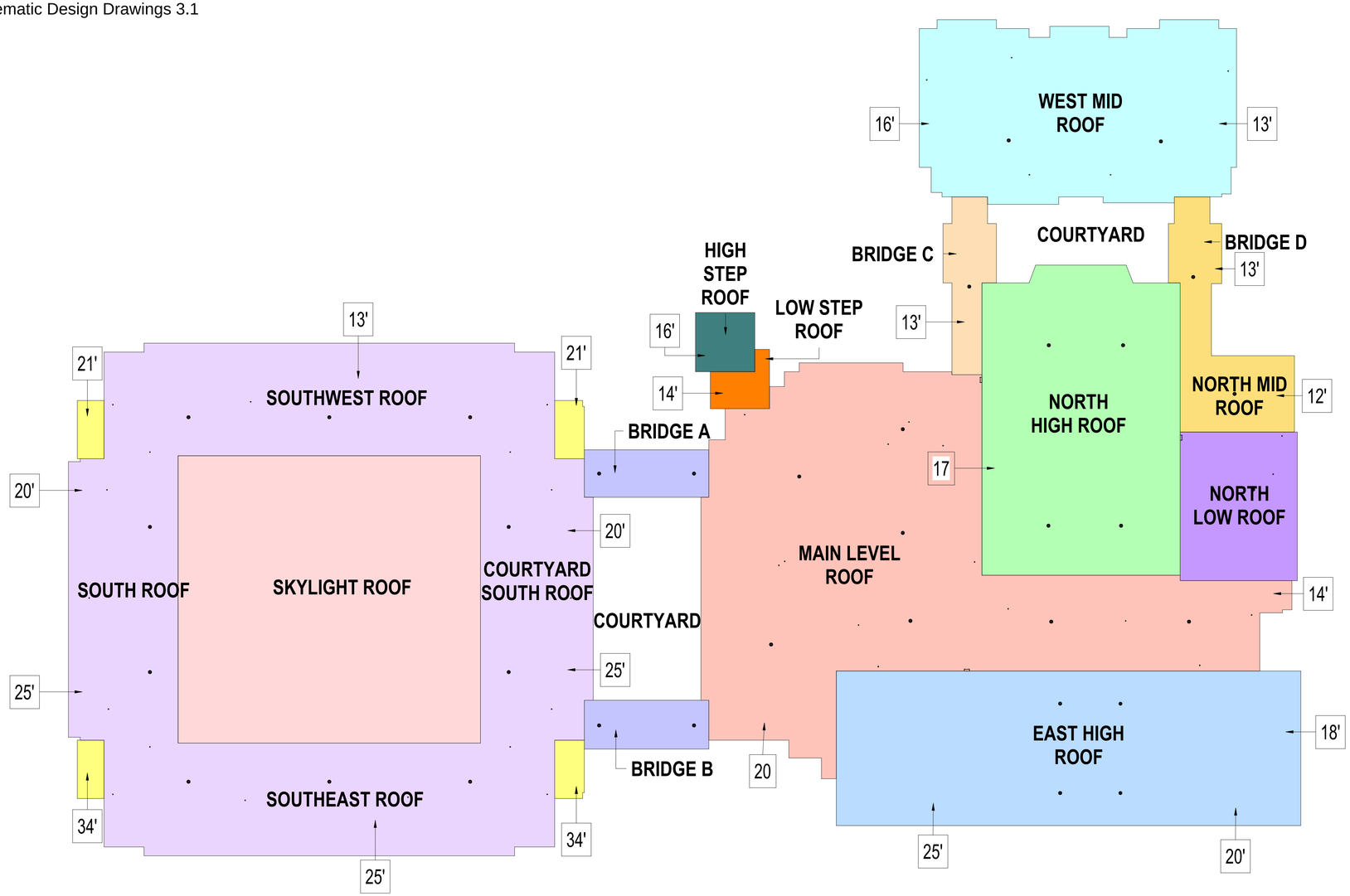
STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	DL, RS, OJ
CHECKED	JL
DATE	JUNE 18, 2025

DRAWING NUMBER

A0.00



1 OVERALL ROOF PLAN
1" = 20'-0"

CONSTRUCTION KEYNOTE LEGEND

0	PROVIDE ROOF SYSTEM TYPE "A" OVER ENTIRE EXISTING ROOF AREA.
1	PROVIDE ROOF SYSTEM TYPE "B" OVER ENTIRE EXISTING ROOF AREA.
2	PROVIDE ADDITIONAL 1/2":12" TAPERED INSULATION AT ROOF AREA AS IDENTIFIED ON PLANS
4	PROVIDE NEW ROOF DRAIN FIXTURE. INCLUDE MAINTENANCE MARKER. PROVIDE INSULATION SUMP AS INDICATED ON PLANS. MODIFY EXISTING ROOF SUBSTRATE AS REQUIRED TO ACCEPT NEW ROOF DRAIN FIXTURE. REFER TO DETAILS, SPECIFICATIONS, AND PLUMBING DRAWINGS. EXTEND PLUMBING AND MAKE CONNECTIONS AS REQUIRED.
5	MECHANICAL UNIT - CONDENSER: PROVIDE NEW PROTECTED PT 2X LUMBER CURB/SLEEPERS (UNDER NEW ROOF MEMBRANE). MOUNT TO EXISTING BLOCKING AS APPLICABLE. TERMINATE NEW ROOF MEMBRANE ON NEW CURB AND SEAL COMPLETELY. REINSTALL AND RESEAL SALVAGED UNIT. RECONNECT MECHANICAL, ELECTRICAL, AND/OR PLUMBING AS REQUIRED.
6	MECHANICAL UNIT - EXHAUST FAN: PROVIDE NEW CURB AND FLASHING. MOUNT TO EXISTING BLOCKING. TERMINATE NEW ROOF MEMBRANE ON NEW CURB AND SEAL COMPLETELY. REINSTALL AND RESEAL SALVAGED UNIT. RECONNECT MECHANICAL AND ELECTRICAL AS REQUIRED.
7	MECHANICAL UNIT - VENTILATOR: PROVIDE NEW CURB AND FLASHING. MOUNT TO EXISTING BLOCKING. TERMINATE NEW ROOF MEMBRANE ON NEW CURB AND SEAL COMPLETELY. REINSTALL AND RESEAL SALVAGED UNIT. RECONNECT MECHANICAL AND ELECTRICAL AS REQUIRED.
8	REINSTALL AND RESEAL SALVAGED SKYLIGHT AND SAFETY COVER OVER NEW ROOF MEMBRANE ON EXISTING CURB.
9	PROVIDE NEW PT 2X LUMBER CURB BUILD-UP AT EXISTING ROOF HATCH LOCATION. TERMINATE NEW ROOF MEMBRANE ON NEW BUILT-UP CURB. REINSTALL AND RESEAL SALVAGED ROOF HATCH (AND INTEGRAL CURB AS APPLICABLE). SIZE = 30" x 36". REFER TO DETAILS. COORDINATE WITH CURB DETAILS AND EXISTING CONDITIONS. PROVIDE NEW ROOF HATCH SAFETY RAILING SYSTEM ACCESSORY (BIL-GUARD 2.0 OR EQUAL).
10	PROVIDE NEW 30" X 36" THERMALLY BROKEN ALUMINUM ROOF HATCH WITH INTEGRAL/PREFABRICATED INSULATED CURB. COORDINATE WITH CURB DETAILS AND EXISTING CONDITIONS. BILCO MODEL XX-XXTB OR EQUAL. INCLUDE ROOF HATCH SAFETY RAILING SYSTEM ACCESSORY (BIL-GUARD 2.0 OR EQUAL).
11	PROVIDE NEW INTERIOR ROOF ACCESS LADDER AT HATCH. MOUNT TO EXISTING STRUCTURE AND FLOOR BELOW. HEIGHT APPROX. 14'-0 (V.I.F.). O'KEEFFE'S 500 ACCESS LADDER OR EQUAL. PROVIDE TELESCOPING SAFETY POST MOUNTED TO TOP TWO RUNGS OF LADDER (BILCO LADDERUP SAFETY POST, OR EQUAL BY O'KEEFFE'S OR OTHERS).
11A	PROVIDE NEW INTERIOR ROOF ACCESS LADDER AT HATCH. MOUNT TO EXISTING STRUCTURE AND FLOOR BELOW. HEIGHT APPROX. 22'-0" (V.I.F.). O'KEEFFE'S 500 ACCESS LADDER OR EQUAL. PROVIDE TELESCOPING SAFETY POST MOUNTED TO TOP TWO RUNGS OF LADDER (BILCO LADDERUP SAFETY POST, OR EQUAL BY O'KEEFFE'S OR OTHERS).
12	PROVIDE NEW EXTERIOR ROOF ACCESS LADDER. HEIGHT APPROX. 8'-0" (V.I.F.). O'KEEFFE'S 502 ACCESS LADDER OR EQUAL. INCLUDE ALL INTERMEDIATE BRACKETS, EXTENDED BRACKETS, AND OFF-FLOOR MOUNTING BRACKETS AS REQUIRED. INCLUDE RAIL AND HARNESS FALL ARREST SYSTEM (OKEEFFES SAF-T-CLIMB POST ACCESSORY, OR EQUAL). FASTEN INTO EXISTING SUBSTRATE WITH EPOXY ADHESIVE ANCHORS. MOUNT LOWEST BRACKETS ABOVE ROOF SYSTEM TERMINATIONS AND AVOID FASTENING BRACKETS THROUGH ROOF MEMBRANE WHERE POSSIBLE. SEAL BRACKET FASTENERS IF MOUNTED THROUGH NEW ROOF SYSTEM MEMBRANE.
12A	PROVIDE NEW EXTERIOR ROOF ACCESS LADDER. HEIGHT APPROX. 5'-0" (V.I.F.). O'KEEFFE'S 502 ACCESS LADDER OR EQUAL. INCLUDE ALL INTERMEDIATE BRACKETS, EXTENDED BRACKETS, AND OFF-FLOOR MOUNTING BRACKETS AS REQUIRED. INCLUDE RAIL AND HARNESS FALL ARREST SYSTEM (OKEEFFES SAF-T-CLIMB POST ACCESSORY, OR EQUAL). FASTEN INTO EXISTING SUBSTRATE WITH EPOXY ADHESIVE ANCHORS. MOUNT LOWEST BRACKETS ABOVE ROOF SYSTEM TERMINATIONS AND AVOID FASTENING BRACKETS THROUGH ROOF MEMBRANE WHERE POSSIBLE. SEAL BRACKET FASTENERS IF MOUNTED THROUGH NEW ROOF SYSTEM MEMBRANE.
13	PROVIDE NEW EXTERIOR SHIP LADDER. HEIGHT APPROX. 4'-0" (V.I.F.). O'KEEFFE'S 322A ACCESS LADDER OR EQUAL. PROVIDE NEW 2X12 LUMBER CURB WITH 22 GA. STAINLESS STEEL CAP FLASHING. CURB TO BE WRAPPED IN ROOF MEMBRANE / WELDABLE FLASHING. FASTEN LADDER THROUGH BUTYL TAPE TO TOP OF CURB ASSEMBLY . PROVIDE 4"X4"X1/4" STEEL ANGLE REINFORCEMENT BELOW DECK AT CURB LOCATION.

GENERAL NOTES

1. VERIFY ALL EXISTING CONDITIONS IN FIELD, TYPICAL.
2. ELEVATIONS PROVIDED ARE TO THE TOP OF EXISTING STEEL ROOF JOISTS, UNLESS NOTED OTHERWISE.
3. THE EXISTING ROOF DECK IS 1-1/2" CORRUGATED METAL, TYPICAL AT ALL LOCATIONS UNLESS NOTED OTHERWISE.
4. ALL HEIGHTS ABOVE GRADE PROVIDED ARE APPROXIMATE. VERIFY IN FIELD.

ROOF AREAS

SKYLIGHT ROOF: 9,894 SF
PART A
ELEVATION: 123'-2"
TYP. HEIGHT ABOVE GRADE: 27'-8"

SOUTHWEST / SOUTH/ COURTYARD SOUTH/ SOUTHEAST ROOF: 18,529 SF
PART A
ELEVATION: 120'-2 1/2"
TYP. HEIGHT ABOVE GRADE: 24'-8 1/2"

PENTHOUSE ROOFS: 745 SF
PART D
ELEVATION: 126'-10 1/2"
TYP. HEIGHT ABOVE GRADE: 31'-4 1/2"

BRIDGE A/ BRIDGE B ROOF: 1,381 SF
PARTS A, B
ELEVATION: 120'-2 1/2"
TYP. HEIGHT ABOVE GRADE: 24'-8 1/2"

MAIN ROOF: 13,437 SF
PART B
ELEVATION: 120'-6"
TYP. HEIGHT ABOVE GRADE: 12'-6"

BRIDGE C ROOF: 782 SF
PARTS B, C
ELEVATION: 123'-6"
TYP. HEIGHT ABOVE GRADE: XXX

NORTH MID ROOF/ BRIDGE D: 1,720 SF
PARTS B, C
ELEVATION: 127'-6"
TYP. HEIGHT ABOVE GRADE: xx

NORTH HIGH ROOF: 6,791 SF
PART B
ELEVATION: 131'-7 1/2"
TYP. HEIGHT ABOVE GRADE: XXX

NORTH LOW ROOF 1,983 SF
PART B
ELEVATION: 121'-4"
TYP. HEIGHT ABOVE GRADE: XXX

EAST HIGH ROOF: 8,172 SF
PART B
ELEVATION: 128'-6"
TYP. HEIGHT ABOVE GRADE: XXX

HIGH STEP ROOF: 400 SF
PART B
ELEVATION: 128'-6"
TYP. HEIGHT ABOVE GRADE: 16'-2"

LOW STEP ROOF: 286 SF
PARTS B
ELEVATION: 128'-6"
TYP. HEIGHT ABOVE GRADE: 14'-4"

WEST MID ROOF: 6,218 SF
PART C
ELEVATION: 223'-1"
TYP. HEIGHT ABOVE GRADE: 28'-0"

TOTAL ROOF AREA: 70,320 SF

##' APPROX. HEIGHT ABOVE GRADE

MATCH LINE FOR PARTIAL PLANS

PROJECT NORTH NORTH

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
SCHEMATIC DESIGN

PROJECT NUMBER
02024.28

OWNER / PROJECT NAME / LOCATION
CITY OF HOLYOKE
KELLY ELEMENTARY ROOF REPLACEMENT
216 WEST ST. HOLYOKE, MA 01040

DRAWING TITLE
OVERALL ROOF PLAN

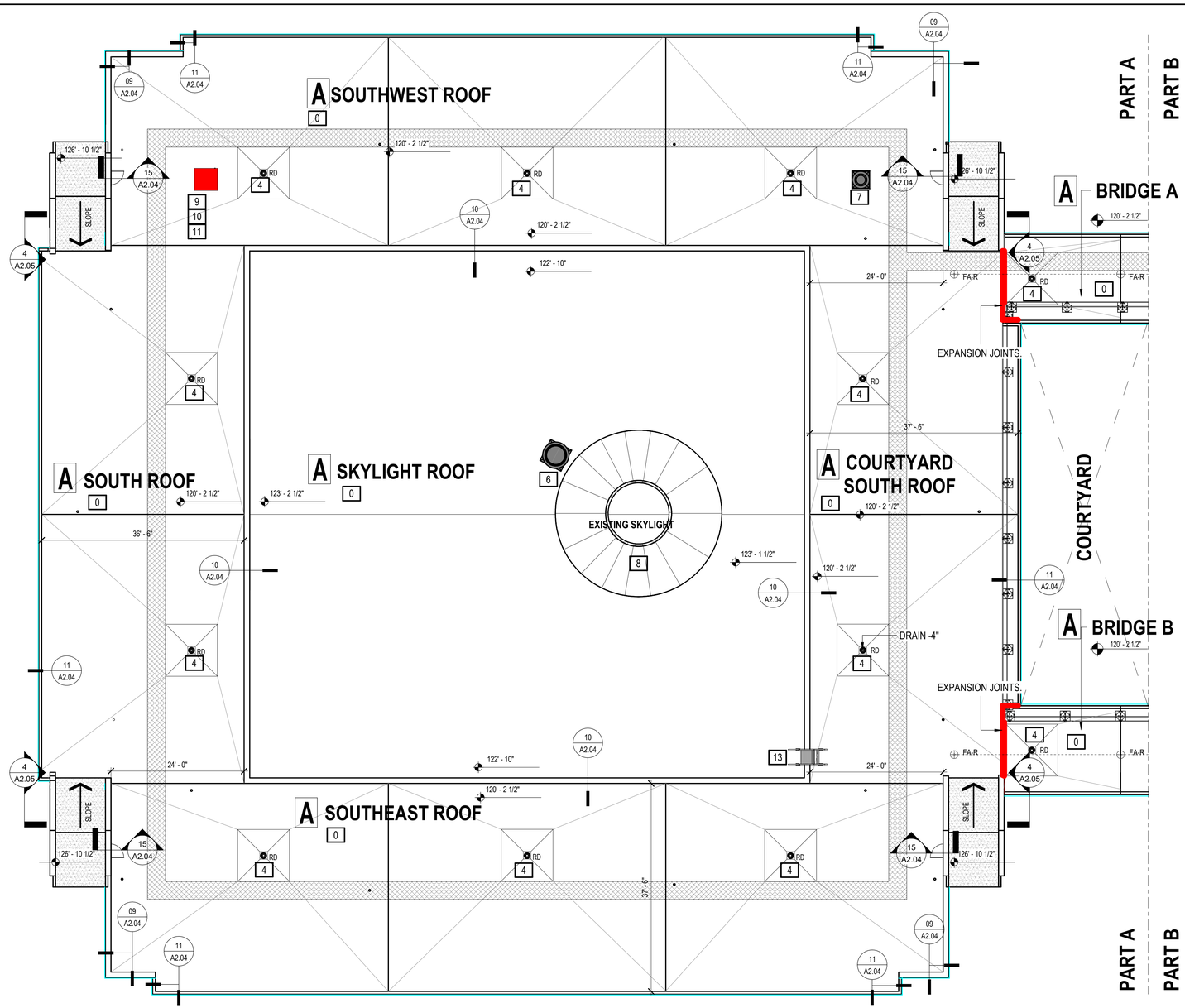
MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main street, suite 1110
Springfield MA 01103
413 592 9700 T
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	DL, RS, OJ
CHECKED	JL
DATE	JUNE 18, 2025

DRAWING NUMBER
A2.00



1 ROOF PLAN - PART A
3/32" = 1'-0"

GENERAL ROOF NOTES

1. REFER TO DRAWING A2.04 AND A2.05 FOR TYPICAL ROOF DETAILS.
2. SEE ROOF DETAILS AND SPECIFICATIONS FOR MORE INFORMATION.
3. VERIFY ALL DIMENSIONS OF EXISTING CONDITIONS IN FIELD, TYPICAL.
4. FOAM ALL GAPS IN SUBSTRATES, ROOF INSULATION BOARDS, BETWEEN BLOCKING / CURBS / PIPING AND ROOF INSULATION, AND BETWEEN PARAPETS AND ROOF INSULATION. TYPICAL.
5. EXISTING ROOF SUBSTRATES MAY HAVE UNEVEN SURFACES WITH PROTRUSIONS AND/OR DEPRESSIONS UNCOVERED DURING DEMOLITION. CUT AND COPE NEW INSULATION AS REQUIRED AT PROTRUSIONS. BUILD-UP NEW INSULATION AS REQUIRED AT DEPRESSIONS TO ELIMINATE ANY POTENTIAL PONDING AREAS. REFER TO LOCATIONS OF PONDING ON EXISTING ROOF PLANS.

ROOF TYPE — **ROOF TYPE ASSEMBLY**

SEE ROOF SYSTEM ASSEMBLY PROFILES ON A2.04

A — TYPE A - FLAT ROOF

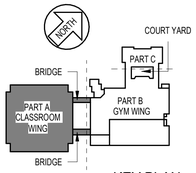
- *FULLY ADHERED 80 MIL PVC MEMBRANE & ADHERED FLASHING SYSTEM* - (COLOR: REFLECTIVE GRAY).
- 1/2" OVERLAYMENT BOARD (DENSDECK PRIME OR EQUAL), MECHANICALLY FASTENED.
- TAPERED RIGID INSULATION TOP LAYER (REFER TO PLANS FOR LOCATIONS & SLOPE, TYP.),
  3" RIGID INSULATION TOP LAYER / INTERMEDIATE LAYER(S) ADHERED / FASTENED PER MFR., AND
  3" RIGID INSULATION BOTTOM LAYER MECHANICALLY FASTENED.
  INCLUDE 9'-4" x 9'-4" INSULATION DRAIN SUMPS, (REFER TO DETAILS); MIN THICKNESS OF 4" AT ROOF DRAIN.
  INCLUDE INSULATION CRICKETS AS SHOWN AT SUMPS AND AT EQUIPMENT AND HATCHES (REFER TO PLANS).
- SELF-ADHERED MOD. BIT. VAPOR RETARDER / TEMPORARY ROOFING.
- PRIMER FOR VAPOR RETARDER.
- EXISTING SUBSTRATE SCARIFIED, GROUND, AND PREPARED TO RECEIVE PRIMER / SURFACE CONDITIONER.
- EXISTING ASPHALTIC INSULATED CONCRETE OVER 1.5" METAL DECK

B — TYPE B - PLACEHOLDER

- TBD

ROOF SYMBOL LEGEND

- RD — ROOF DRAIN (RD) / ROOF DRAIN WITH OVERFLOW DRAIN (RD/ORD) & SUMP, SEE DETAILS: 01 A2.04 AND 02 A2.04 (ALL SUMP LOCATIONS SHALL HAVE A MIN. SLOPE OF 1/2" PER FT, TYP.)
- A — ROOF TYPE AREA DESIGNATION (SEE ROOF TYPE ASSEMBLY SUMMARY)
- 30" — TAPERED INSULATION CRICKET. PROVIDE SIZE AND SLOPE AS REQUIRED. (1/2" PER FT SLOPE, TYP. 1/4" PER FT MIN. UNLESS NOTED OTHERWISE, REFER TO PLANS) POOLING / FREESTANDING WATER SHALL NOT BE ACCEPTED (CRICKET SLOPE, TYP)
- WELDABLE WALKWAYS, 39" WIDE (FROM ROOF ACCESS TO SERVICEABLE SIDE OF ALL ROOF TOP EQUIPMENT, TYPICAL)
- EXISTING VENT PIPING THRU ROOF or EXHAUST FLUES, SEE DETAILS: 14 A2.04 13 A2.04 EXTEND ALL VENT PIPING AS REQUIRED.
- SLOPE 1/4" / 12" — DIRECTION OF ROOF SLOPE / TAPERED INSULATION
- 30'-0" — ROOF ELEVATIONS ABOVE FIRST FLOOR (NOTED ELEVATIONS ARE APPROXIMATE)
- FA-R — FALL PROTECTION ROOF ANCHOR, SEE: 07 A2.04
- FALL PROTECTION SYSTEM CABLE
- ROOF HATCH. SEE DETAIL: 02 A2.05 AND 01 A2.05
- ROOF LADDER. SEE DETAILS: **A7.01.1**
- EXPANSION JOINTS
- NEW FASCIA ROOF EDGE METAL



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02024.28

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

KELLY ELEMENTARY ROOF REPLACEMENT

216 WEST ST. HOLYOKE, MA 01040

DRAWING TITLE

PROPOSED ROOF PLAN PART A

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main street, suite 1110
Springfield MA 01103
413 592 9700 T
info@mvgarchitects.com E

STAMP

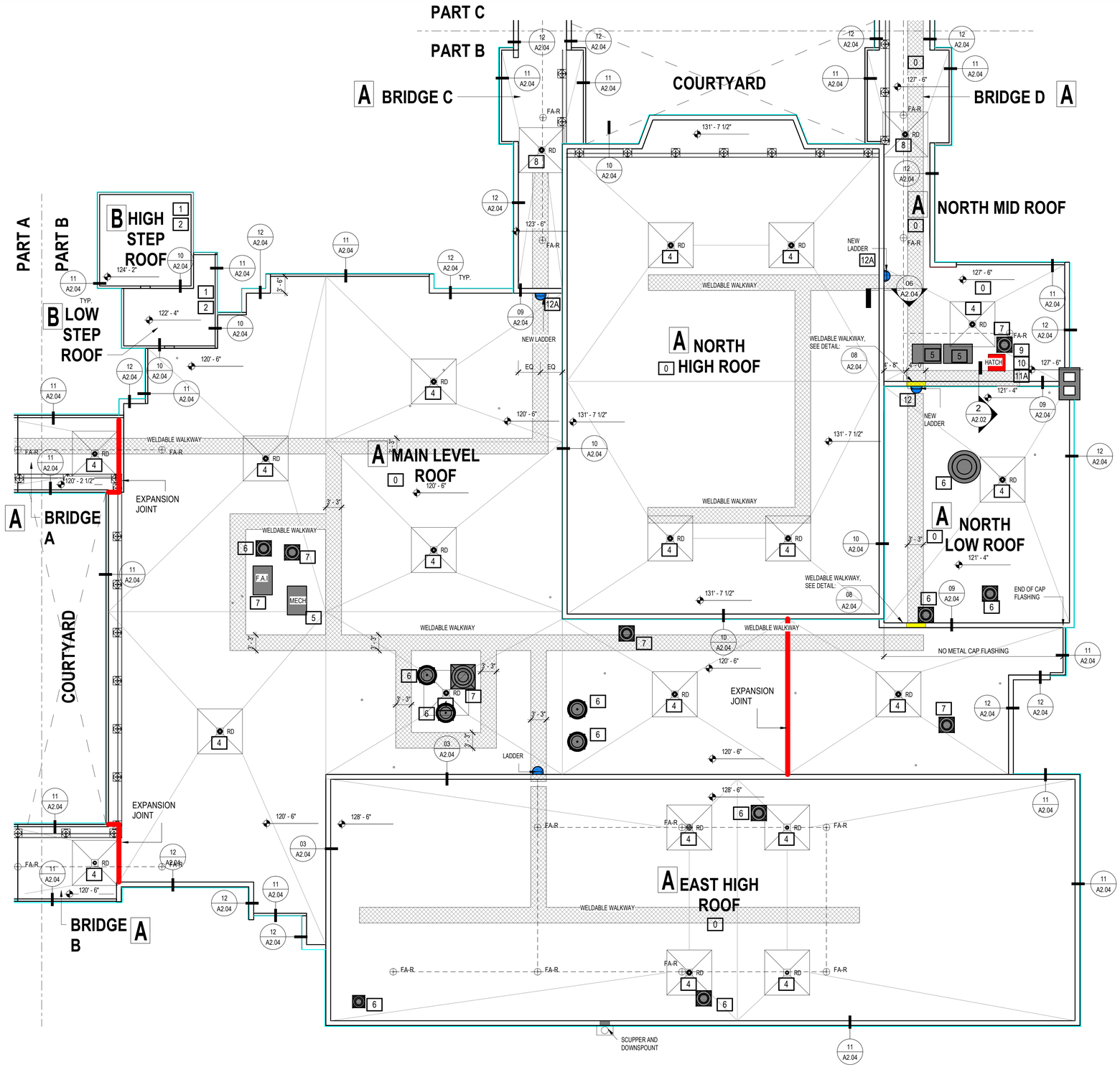
DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	DL, RS, OJ
CHECKED	JL
DATE	JUNE 18, 2025

DRAWING NUMBER

A2.01

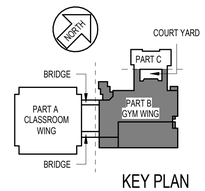
PROJECT NORTH NORTH



1 ROOF PLAN - PART B
3/32" = 1'-0"

GENERAL ROOF NOTES

1. REFER TO DRAWING A2.04 AND A2.05 FOR TYPICAL ROOF DETAILS.
2. SEE ROOF DETAILS AND SPECIFICATIONS FOR MORE INFORMATION.
3. VERIFY ALL DIMENSIONS OF EXISTING CONDITIONS IN FIELD, TYPICAL.
4. FOAM ALL GAPS IN SUBSTRATES, ROOF INSULATION BOARDS, BETWEEN BLOCKING / CURBS / PIPING AND ROOF INSULATION, AND BETWEEN PARAPETS AND ROOF INSULATION. TYPICAL.
5. EXISTING ROOF SUBSTRATES MAY HAVE UNEVEN SURFACES WITH PROTRUSIONS AND/OR DEPRESSIONS UNCOVERED DURING DEMOLITION. CUT AND COPE NEW INSULATION AS REQUIRED AT PROTRUSIONS. BUILD-UP NEW INSULATION AS REQUIRED AT DEPRESSIONS TO ELIMINATE ANY POTENTIAL PONDING AREAS. REFER TO LOCATIONS OF PONDING ON EXISTING ROOF PLANS.



KEY PLAN

ROOF TYPE

A

ROOF TYPE ASSEMBLY

SEE ROOF SYSTEM ASSEMBLY PROFILES ON A2.04

TYPE A - FLAT ROOF

- *FULLY ADHERED 80 MIL PVC MEMBRANE & ADHERED FLASHING SYSTEM* - (COLOR: REFLECTIVE GRAY).
- 1/2" OVERLAYMENT BOARD (DENSDECK PRIME OR EQUAL), MECHANICALLY FASTENED.
- TAPERED RIGID INSULATION TOP LAYER (REFER TO PLANS FOR LOCATIONS & SLOPE, TYP.), 3" RIGID INSULATION TOP LAYER / INTERMEDIATE LAYER(S) ADHERED / FASTENED PER MFR., AND 3" RIGID INSULATION BOTTOM LAYER MECHANICALLY FASTENED. INCLUDE 9'-4" x 9'-4" INSULATION DRAIN SUMPS, (REFER TO DETAILS); MIN THICKNESS OF 4" AT ROOF DRAIN. INCLUDE INSULATION CRICKETS AS SHOWN AT SUMPS AND AT EQUIPMENT AND HATCHES (REFER TO PLANS).
- SELF-ADHERED MOD. BIT. VAPOR RETARDER / TEMPORARY ROOFING.
- PRIMER FOR VAPOR RETARDER.
- EXISTING SUBSTRATE SCARIFIED, GROUND, AND PREPARED TO RECEIVE PRIMER / SURFACE CONDITIONER.
  - EXISTING ASPHALTIC INSULATED CONCRETE OVER 1.5" METAL DECK

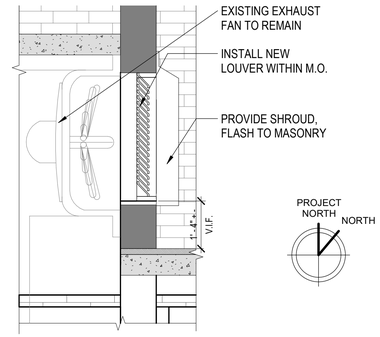
B

TYPE B - PLACEHOLDER

- TBD

ROOF SYMBOL LEGEND

- RD — ROOF DRAIN (RD) / ROOF DRAIN WITH OVERFLOW DRAIN (RD/ORD) & SUMP, SEE DETAILS: 01 A2.04 AND 02 A2.04 (ALL SUMP LOCATIONS SHALL HAVE A MIN. SLOPE OF 1/2" PER FT, TYP.)
- A — ROOF TYPE AREA DESIGNATION (SEE ROOF TYPE ASSEMBLY SUMMARY)
- 30" — TAPERED INSULATION CRICKET. PROVIDE SIZE AND SLOPE AS REQUIRED. (1/2" PER FT SLOPE, TYP. 1/4" PER FT MIN. UNLESS NOTED OTHERWISE, REFER TO PLANS) POOLING / FREESTANDING WATER SHALL NOT BE ACCEPTED (CRICKET SLOPE, TYP)
- WELDABLE WALKWAYS, 39" WIDE (FROM ROOF ACCESS TO SERVICEABLE SIDE OF ALL ROOF TOP EQUIPMENT, TYPICAL)
- EXISTING VENT PIPING THRU ROOF or EXHAUST FLUES, SEE DETAILS: 14 A2.04 AND 13 A2.04. EXTEND ALL VENT PIPING AS REQUIRED.
- SLOPE 1/4" / 12" — DIRECTION OF ROOF SLOPE / TAPERED INSULATION
- 30'-0" — ROOF ELEVATIONS ABOVE FIRST FLOOR (NOTED ELEVATIONS ARE APPROXIMATE)
- FA-R — FALL PROTECTION ROOF ANCHOR, SEE: 07 A2.04
- FALL PROTECTION SYSTEM CABLE
- ROOF HATCH. SEE DETAIL: 02 A2.05 AND 01 A2.05
- ROOF LADDER. SEE DETAILS: **A7.01.1**
- EXPANSION JOINTS
- NEW FASCIA ROOF EDGE METAL



2 KELLY SECTION LOW NORTH ROOF VENT
1/2" = 1'-0"

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02024.28

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

KELLY ELEMENTARY ROOF REPLACEMENT

216 WEST ST. HOLYOKE, MA 01040

DRAWING TITLE

PROPOSED ROOF PLAN PART B

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main street, suite 1110
Springfield MA 01103
413 592 9700 T
info@mvgarchitects.com E

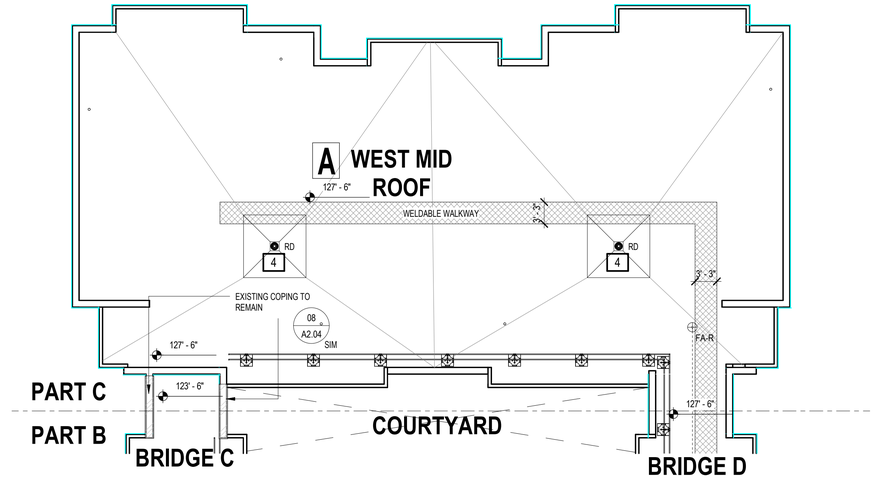
STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	DL, RS, OJ
CHECKED	JL
DATE	JUNE 18, 2025

DRAWING NUMBER

A2.02



1 ROOF PLAN - PART C
3/32" = 1'-0"

GENERAL ROOF NOTES

1. REFER TO DRAWING A2.04 AND A2.05 FOR TYPICAL ROOF DETAILS.
2. SEE ROOF DETAILS AND SPECIFICATIONS FOR MORE INFORMATION.
3. VERIFY ALL DIMENSIONS OF EXISTING CONDITIONS IN FIELD, TYPICAL.
4. FOAM ALL GAPS IN SUBSTRATES, ROOF INSULATION BOARDS, BETWEEN BLOCKING / CURBS / PIPING AND ROOF INSULATION, AND BETWEEN PARAPETS AND ROOF INSULATION. TYPICAL.
5. EXISTING ROOF SUBSTRATES MAY HAVE UNEVEN SURFACES WITH PROTRUSIONS AND/OR DEPRESSIONS UNCOVERED DURING DEMOLITION. CUT AND COPE NEW INSULATION AS REQUIRED AT PROTRUSIONS. BUILD-UP NEW INSULATION AS REQUIRED AT DEPRESSIONS TO ELIMINATE ANY POTENTIAL PONDING AREAS. REFER TO LOCATIONS OF PONDING ON EXISTING ROOF PLANS.

ROOF TYPE

ROOF TYPE ASSEMBLY

SEE ROOF SYSTEM ASSEMBLY PROFILES ON A2.04

A

TYPE A - FLAT ROOF

- *FULLY ADHERED 80 MIL PVC MEMBRANE & ADHERED FLASHING SYSTEM* - (COLOR: REFLECTIVE GRAY).
- 1/2" OVERLAYMENT BOARD (DENSDECK PRIME OR EQUAL), MECHANICALLY FASTENED.
- TAPERED RIGID INSULATION TOP LAYER (REFER TO PLANS FOR LOCATIONS & SLOPE, TYP.).
  3" RIGID INSULATION TOP LAYER / INTERMEDIATE LAYER(S) ADHERED / FASTENED PER MFR., AND
  3" RIGID INSULATION BOTTOM LAYER MECHANICALLY FASTENED.
  INCLUDE 9'-4" x 9'-4" INSULATION DRAIN SUMPS, (REFER TO DETAILS); MIN THICKNESS OF 4" AT ROOF DRAIN.
  INCLUDE INSULATION CRICKETS AS SHOWN AT SUMPS AND AT EQUIPMENT AND HATCHES (REFER TO PLANS).
- SELF-ADHERED MOD. BIT. VAPOR RETARDER / TEMPORARY ROOFING.
- PRIMER FOR VAPOR RETARDER.
- EXISTING SUBSTRATE SCARIFIED, GROUND, AND PREPARED TO RECEIVE PRIMER / SURFACE CONDITIONER.
  - EXISTING ASPHALTIC INSULATED CONCRETE OVER 1.5" METAL DECK

B

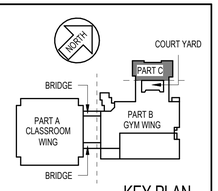
TYPE B - PLACEHOLDER

- TBD

ROOF SYMBOL LEGEND

- RD — ROOF DRAIN (RD) / ROOF DRAIN WITH OVERFLOW DRAIN (RD/ORD) & SUMP, SEE DETAILS: 01 A2.04 AND 02 A2.04 (ALL SUMP LOCATIONS SHALL HAVE A MIN. SLOPE OF 1/2" PER FT, TYP.)
- A — ROOF TYPE AREA DESIGNATION (SEE ROOF TYPE ASSEMBLY SUMMARY)
- 1/2" — TAPERED INSULATION CRICKET. PROVIDE SIZE AND SLOPE AS REQUIRED. (1/2" PER FT SLOPE, TYP. 1/4" PER FT MIN. UNLESS NOTED OTHERWISE, REFER TO PLANS) POOLING / FREESTANDING WATER SHALL NOT BE ACCEPTED (CRICKET SLOPE, TYP)
- WELDABLE WALKWAYS, 39" WIDE (FROM ROOF ACCESS TO SERVICEABLE SIDE OF ALL ROOF TOP EQUIPMENT, TYPICAL)
- EXISTING VENT PIPING THRU ROOF or EXHAUST FLUES, SEE DETAILS: 14 A2.04 13 A2.04 EXTEND ALL VENT PIPING AS REQUIRED.
- SLOPE 1/4" / 12" — DIRECTION OF ROOF SLOPE / TAPERED INSULATION
- 30'-0" — ROOF ELEVATIONS ABOVE FIRST FLOOR (NOTED ELEVATIONS ARE APPROXIMATE)
- FA-R — FALL PROTECTION ROOF ANCHOR, SEE: 07 A2.04
- FALL PROTECTION SYSTEM CABLE
- ROOF HATCH. SEE DETAIL: 02 A2.05 AND 01 A2.05
- ROOF LADDER. SEE DETAILS: **A7.01.1**
- EXPANSION JOINTS
- NEW FASCIA ROOF EDGE METAL

PROJECT NORTH / NORTH



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02024.28

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

KELLY ELEMENTARY ROOF REPLACEMENT

216 WEST ST. HOLYOKE, MA 01040

DRAWING TITLE

PROPOSED ROOF PLAN PART C

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main street, suite 1110
Springfield MA 01103
413 592 9700 T
info@mvgarchitects.com E

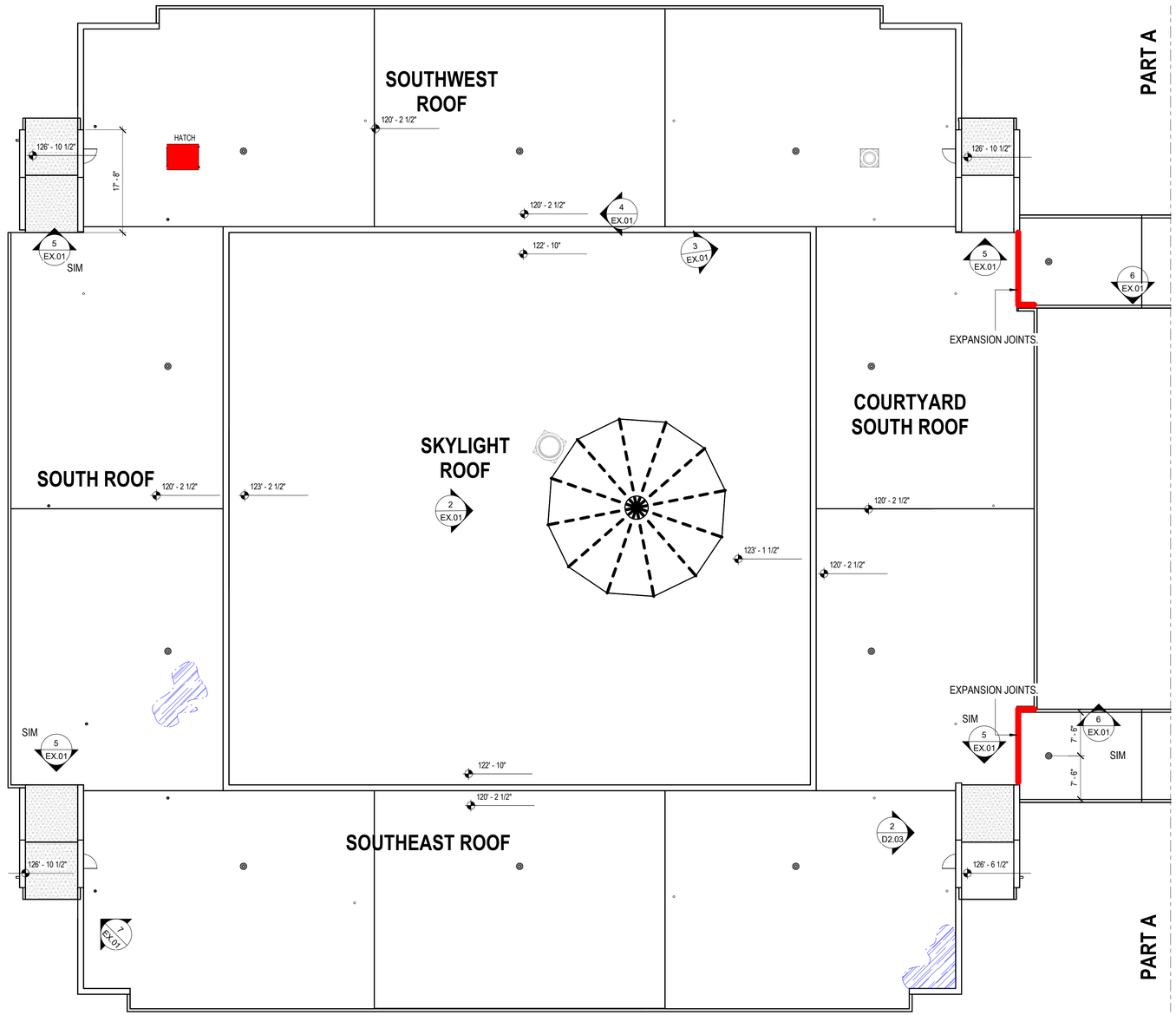
STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	DL, RS, OJ
CHECKED	JL
DATE	JUNE 18, 2025

DRAWING NUMBER

A2.03



1 DEMOLITION ROOF PLAN - PART A
3/32" = 1'-0"

2 EX. SKYLIGHT AT SKYLIGHT ROOF
N.T.S.

3 EX. SOUTHWEST ROOF
N.T.S.

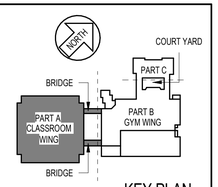
4 EX. HATCH
N.T.S.

5 EX. TOP STAIRS
N.T.S.

6 EX. BRIDGE
N.T.S.

7 EX. METAL EXTERIOR
N.T.S.

PROJECT NORTH NORTH



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02024.28

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

KELLY ELEMENTARY ROOF REPLACEMENT

216 WEST ST. HOLYOKE, MA 01040

DRAWING TITLE

EXISTING CONDITIONS PART A

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main street, suite 1110
Springfield MA 01103
413 592 9700 T
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	DL, RS, OJ
CHECKED	JL
DATE	JUNE 18, 2025

DRAWING NUMBER

EX.01

2 NORTH MID ROOF MECH
N.T.S.

3 NORTH MID-LOW ROOF LADDER
N.T.S.

4 COURTYARD PART B AND C
N.T.S.

5 MAIN LEVEL ROOF MECH
N.T.S.

8 BRIDGE END PART B AND C
N.T.S.

7 HIGH-LOW STEP ROOF
N.T.S.

9 MAIN LEVEL ROOF
N.T.S.

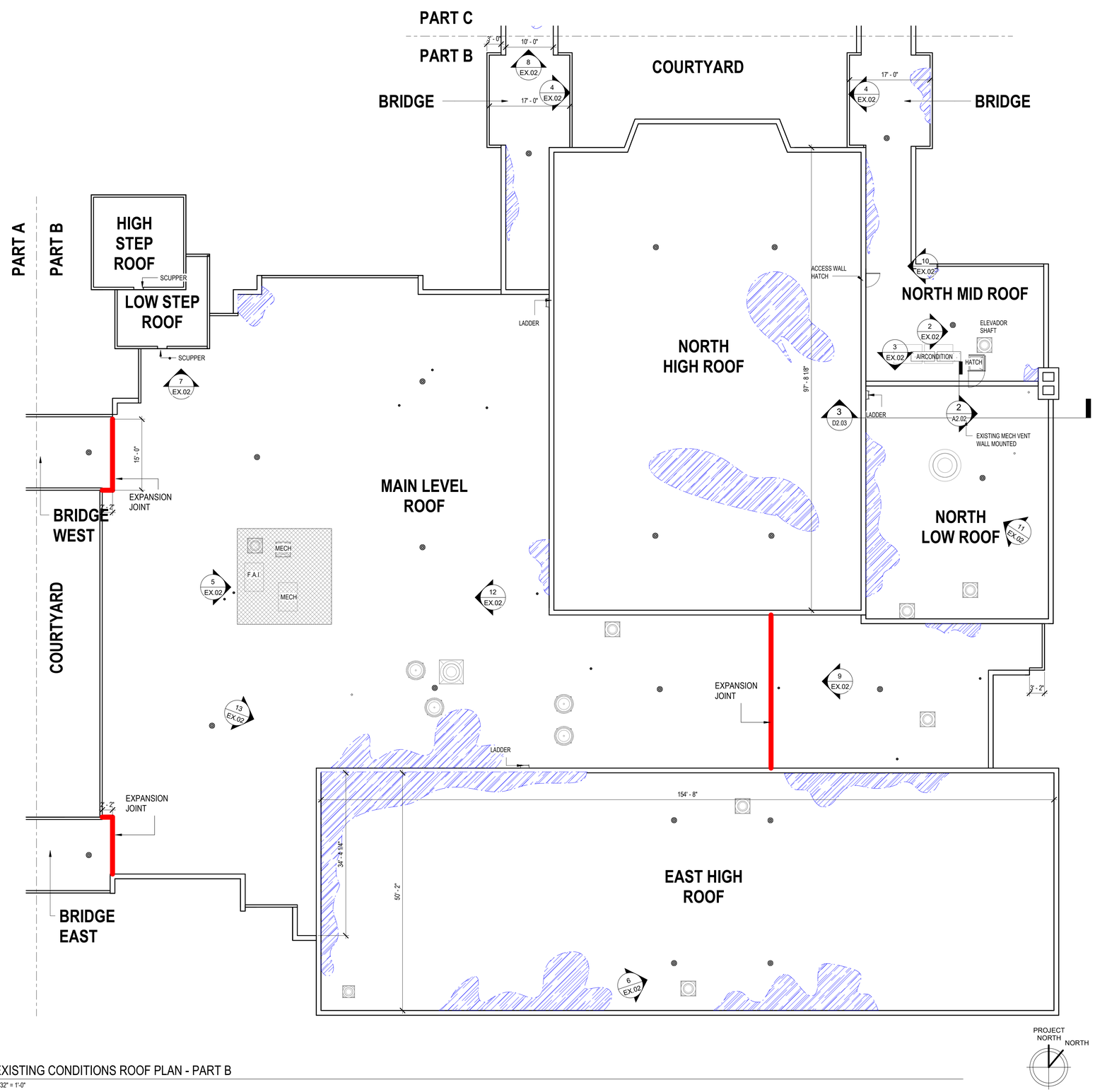
6 EAST HIGH ROOF
N.T.S.

10 HATCH DOOR NORTH HIGH ROOF
N.T.S.

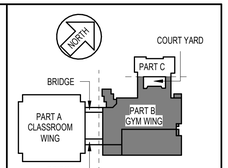
11 OVERALL NORTH LOW ROOF
N.T.S.

12 OVERALL MAIN ROOF
N.T.S.

13 EAST HIGH ROOF
N.T.S.



1 EXISTING CONDITIONS ROOF PLAN - PART B
3/32" = 1'-0"



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02024.28

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

KELLY ELEMENTARY ROOF REPLACEMENT

216 WEST ST. HOLYOKE, MA 01040

DRAWING TITLE

EXISTING CONDITIONS PART B

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main street, suite 1110
Springfield MA 01103
413 592 9700 T
info@mvgarchitects.com E

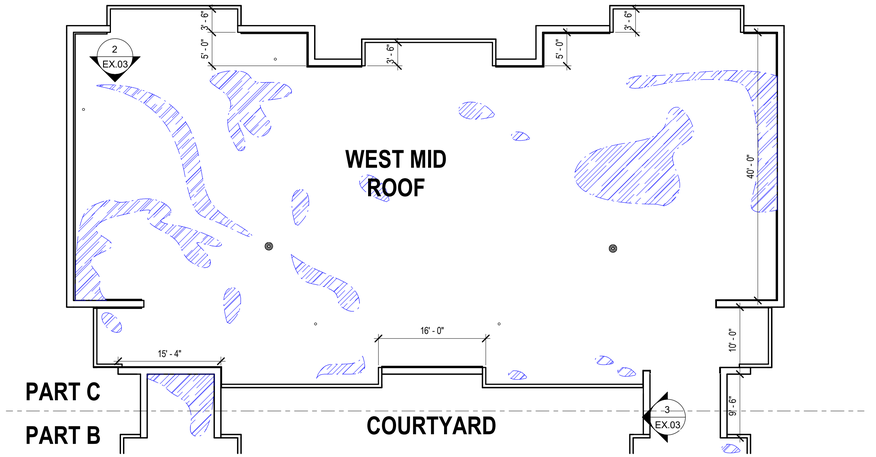
STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	DL, RS, OJ
CHECKED	JL
DATE	JUNE 18, 2025

DRAWING NUMBER

EX.02

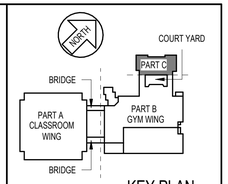


1 EXISTING CONDITIONS ROOF PLAN - PART C
3/32" = 1'-0"

2 COURT YARD PART B AND C
N.T.S.

3 COURT YARD PART B AND C
N.T.S.

PROJECT NORTH
NORTH



KEY PLAN

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02024.28

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

KELLY ELEMENTARY
ROOF REPLACEMENT

216 WEST ST. HOLYOKE,
MA 01040

DRAWING TITLE

EXISTING CONDITIONS
PART C

MVG
MOUNT VERNON GROUP
ARCHITECTS
1350 Main street, suite 1110
Springfield MA 01103

413 592 9700 T
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	DL, RS, OJ
CHECKED	JL
DATE	JUNE 18, 2025

DRAWING NUMBER

EX.03

GENERAL NOTE:
REFER TO SCHEMATIC DESIGN SUBMITTAL NARRATIVES AND CMR 521 ACCESSIBILITY UPGRADES REVIEW

GENERAL STORAGE G-126
GENERAL STORAGE & MECHANICAL G-127
LIBRARY WORKROOM G-128
AUTO-VISUAL WORKROOM G-132
STORAGE G-150
OFFICE G-149
SCIENCE WORKROOM G-133
TEACHERS LOUNGE G-136
ELEC PANEL RM G-151
TOILET G-137
MECH RM G-135
GIRLS TOILET G-139
STAIR #13 G-138
PASSAGE G-134
ELEV
VESTIBULE G-140
STAIR #12 G-121
BOYS TOILET G-122
JANITOR G-125
PASSAGE G-124
VESTIBULE G-123
OFFICE G-124
OFFICE G-148
MUSIC PRACTICE G-129
MUSIC PRACTICE G-130
VESTIBULE G-120
COORIDOR G-131
VESTIBULE G-141
BRIDGE ABOVE
CLASSROOM G-118
MINI TEACHING SPACE G-119
CLASSROOM G-142
CLASSROOM G-117
COORIDOR G-116
MINI TEACHING SPACE G-115
LIBRARY G-114
BENCH
PLANTER
RAMP UP
COORIDOR G-143
CLASSROOM G-144
CLASSROOM G-111
MINI TEACHING SPACE G-112
CLASSROOM G-145
VESTIBULE G-110
COORIDOR G-105
VESTIBULE G-146
BRIDGE ABOVE
STAIR #11 G-109
CLASSROOM G-108
CLASSROOM G-107
CLASSROOM G-106
CLASSROOM G-104
CLASSROOM G-103
CLASSROOM G-102
STAIR #10 G-101
MATCH LINE
MATCH LINE
MATCH LINE

2' 4' 8' 16' 32'

1 EXISTING GROUND FLOOR - INTERIOR REFERENCE PLAN
1/8" = 1'-0"

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
SCHEMATIC DESIGN

PROJECT NUMBER
02024.28

OWNER / PROJECT NAME / LOCATION
CITY OF HOLYOKE
KELLY ELEMENTARY ROOF REPLACEMENT
216 WEST ST. HOLYOKE, MA 01040

DRAWING TITLE
EXISTING GROUND FLOOR - INTERIOR REFERENCE PLAN

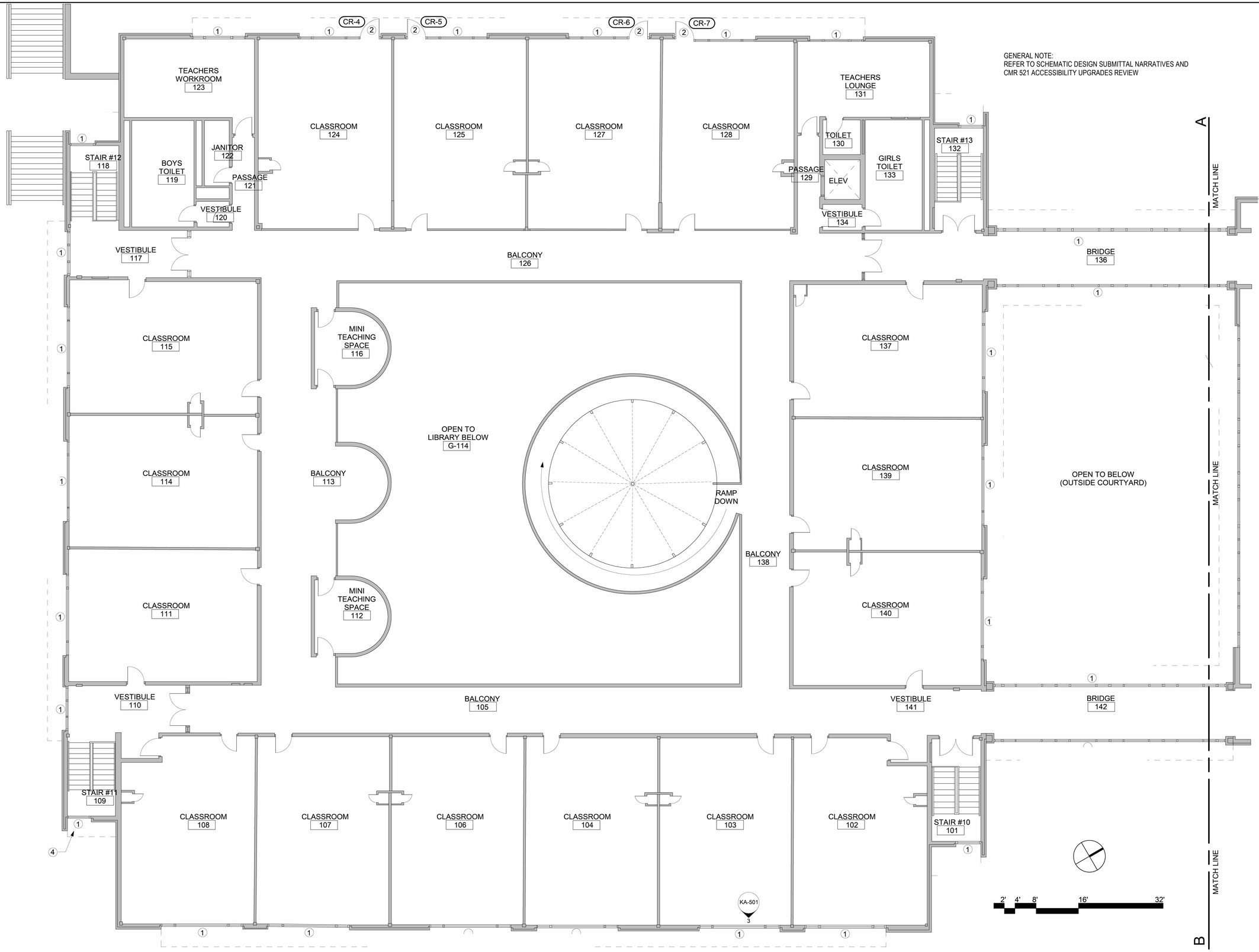
MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main street, suite 1110
Springfield MA 01103
413 592 9700 T
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE	1/8" = 1'-0"
DRAWN BY	DL, RS, OJ
CHECKED	JL
DATE	JUNE 18, 2025

DRAWING NUMBER
EX1.00



GENERAL NOTE:
REFER TO SCHEMATIC DESIGN SUBMITTAL NARRATIVES AND CMR 521 ACCESSIBILITY UPGRADES REVIEW

1 EXISTING FIRST FLOOR - INTERIOR REFERENCE PLAN
1/8" = 1'-0"

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02024.28

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

KELLY ELEMENTARY ROOF REPLACEMENT

216 WEST ST. HOLYOKE, MA 01040

DRAWING TITLE

EXISTING FIRST FLOOR - INTERIOR REFERENCE PLAN

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main street, suite 1110
Springfield MA 01103
413 592 9700 T
info@mvgarchitects.com E

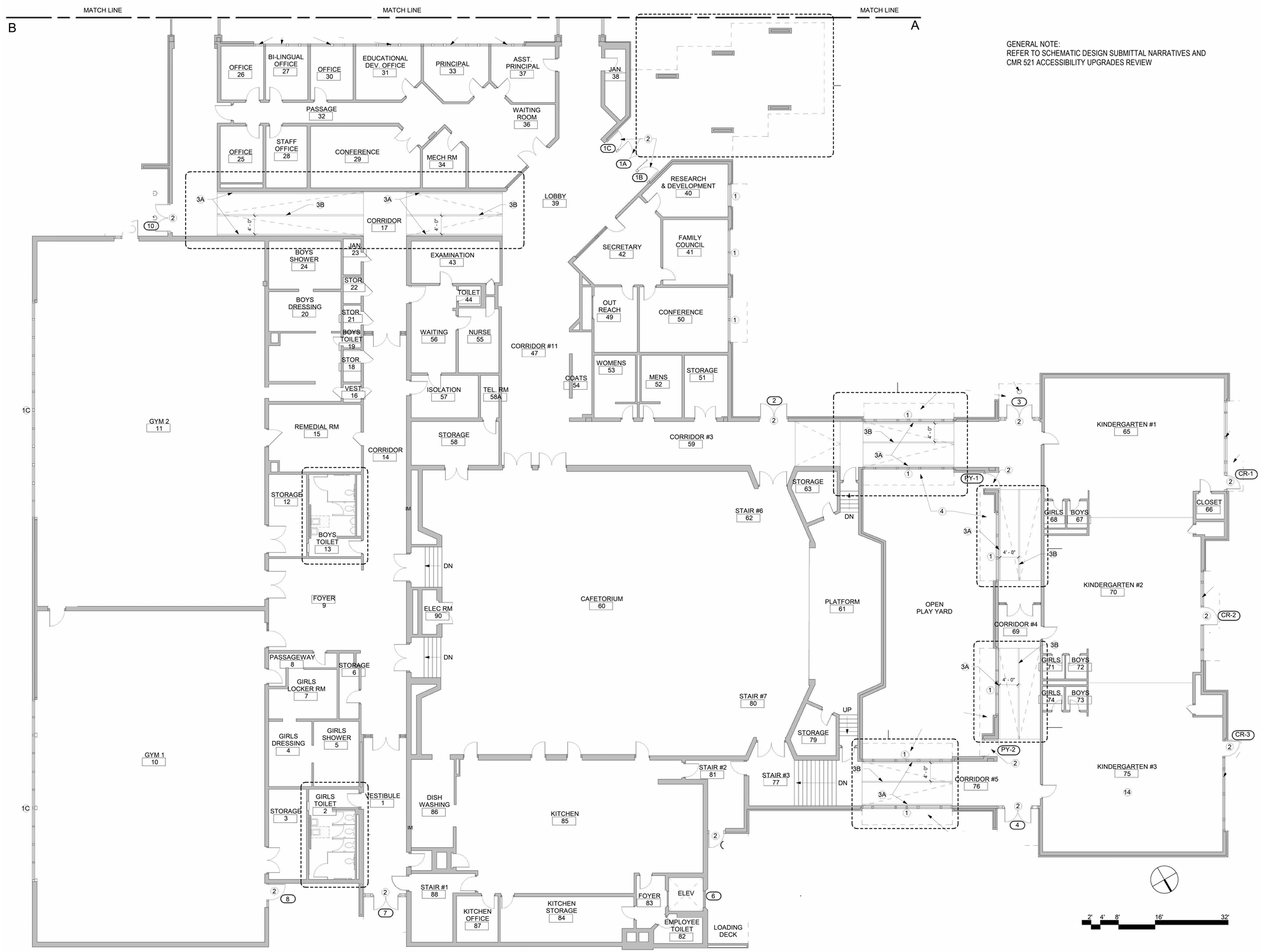
STAMP

DRAWING INFORMATION

SCALE	1/8" = 1'-0"
DRAWN BY	DL, RS, OJ
CHECKED	JL
DATE	JUNE 18, 2025

DRAWING NUMBER

EX1.01



GENERAL NOTE:
REFER TO SCHEMATIC DESIGN SUBMITTAL NARRATIVES AND CMR 521 ACCESSIBILITY UPGRADES REVIEW

1 EXISTING FIRST FLOOR - GYM WING - INTERIOR REFERENCE PLAN
1" = 10'-0"

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02024.28

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

KELLY ELEMENTARY ROOF REPLACEMENT

216 WEST ST. HOLYOKE, MA 01040

DRAWING TITLE

EXISTING FIRST FLOOR - GYM WING - INTERIOR REFERENCE PLAN

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main street, suite 1110
Springfield MA 01103
413 592 9700 T
info@mvgarchitects.com E

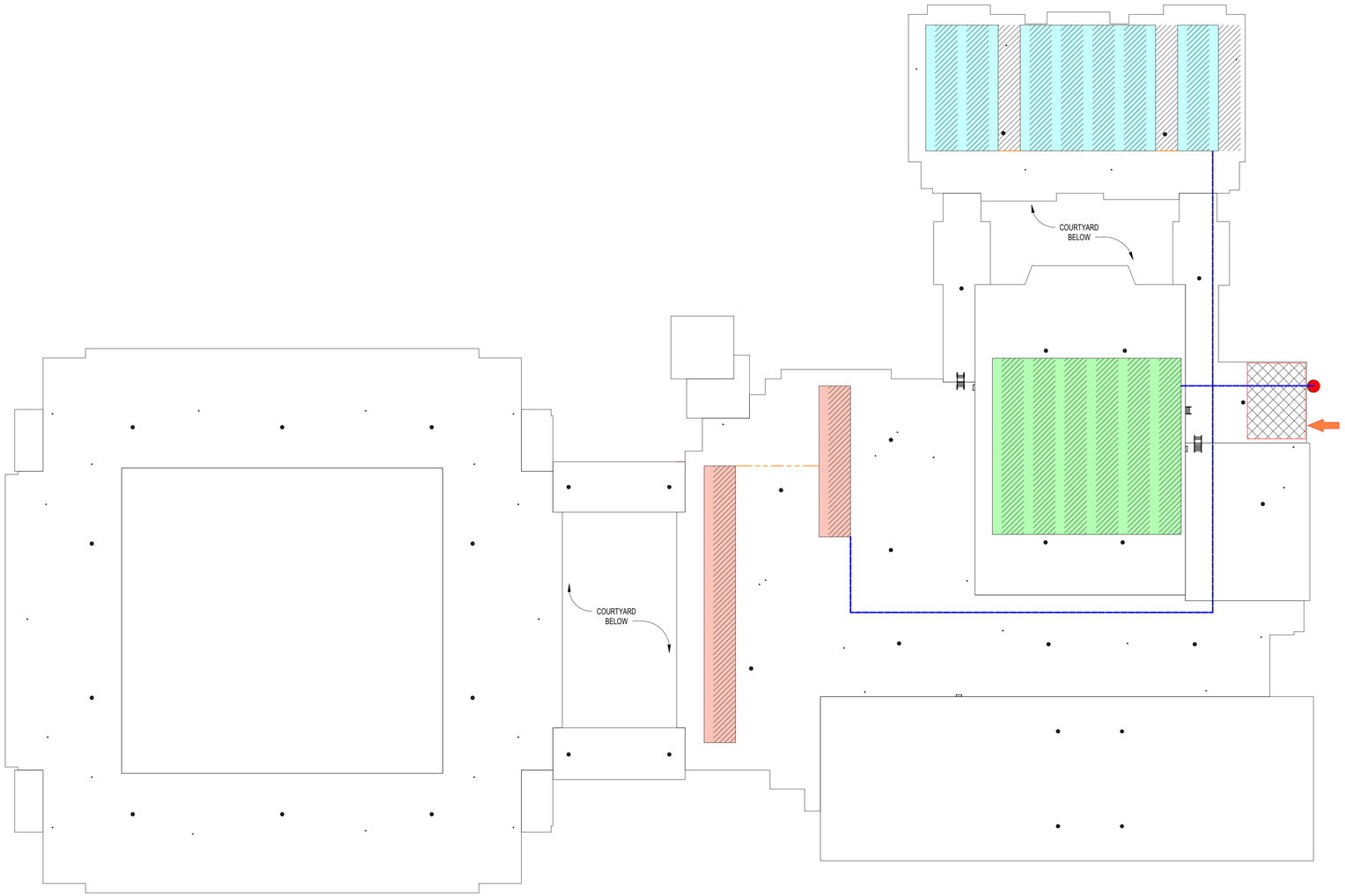
STAMP

DRAWING INFORMATION

SCALE	1" = 10'-0"
DRAWN BY	DL, RS, OJ
CHECKED	JL
DATE	JUNE 18, 2025

DRAWING NUMBER

EX1.02



1 SOLAR READINESS PLAN
1" = 20'-0"

GENERAL NOTES

1. SCHEMATIC SOLAR DESIGN IS BASED ON THE FOLLOWING PV MODULE PRODUCT:
   a. **MANUFACTURER:** HELIENE
      MODEL: 156HC M10 NTYP SL BIFACIAL MODULE
      A. 156 Half-Cut Monocrystalline 635W
      B. WIDTH = 45" x LENGTH = 98" x DEPTH = 1 3/8"
      C. MAX POWER (NMOT) = 482W
2. TYPICAL ARRAY:
      A. TYPE = FIXED, BALLASTED-ROOF, OPEN-RACK
      B. SYSTEM LOSSES = 14.08%
      C. DC TO AC SIZE RATIO = 1.2
      D. INVERTER EFFICIENCY = 96%
      E. TILTED PANEL WIDTH = 3'-0"
      F. SHADOW LENGTH BETWEEN ROWS = 7'-0"
3. CALCULATIONS ARE BASED ON DATA FROM THE NATIONAL RENEWABLE ENERGY LABORATORY:
      A. *PVWATTS.NREL.GOV*
4. ALL VALUES ARE APPROXIMATE. VERIFY ALL DIMENSIONS IN FIELD AND COORDINATE WITH SELECTED VENDOR / MANUFACTURER.
5. NO STRUCTURAL MODIFICATION SCOPE IS REQUIRED AT SOLAR READY LOCATIONS. REFER TO SCHEMATIC STRUCTURAL REPORT.
6. NO ROOF PENETRATIONS. THE SOLAR PROJECT SHALL PROVIDE EXTERIOR CONDUIT BALLASTED ON EXISTING ROOF, MOUNTED TO EXISTING EXTERIOR WALL, OR MOUNTED TO EXISTING EXTERIOR SOFFITS.
7. NO MODIFICATIONS TO EXISTING ELECTRICAL SYSTEM ARE ANTICIPATED TO BE REQUIRED TO MAKE THE BUILDING SOLAR-READY TO ACCEPT THE PROPOSED ZONES. THE FUTURE SOLAR PROJECT SHALL PROVIDE ALL REQUIRED ADDITIONAL EQUIPMENT AS PART OF THE SOLAR SCOPE OF WORK. THE FUTURE SOLAR PROJECT SHALL INTEGRATE THE NEW SOLAR SYSTEM WITH THE EXISTING ELECTRICAL SYSTEM AS REQUIRED.
8. MAX. ARRAY LOAD = AS NOTED BELOW

PV ZONES LEGEND

WEST MID ROOF, KINDERGARTEN (6,218 SF)
SOLAR READY AREA = 3,160 SF (51%)
QTY OF MODULES = 50
TILT (DEG) = 40°
AZIMUTH (DEG) = 194°
DC SYSTEM SIZE = 24 kW
ANNUAL OUTPUT = 32,152 kWh/yr
MAX. ARRAY LOAD = 7 PSF

NORTH HIGH ROOF, CAFETORIUM (6,791 SF)
SOLAR READY AREA = 3,360 SF (51%)
QTY OF MODULES = 42
TILT (DEG) = 40°
AZIMUTH (DEG) = 194°
DC SYSTEM SIZE = 20 kW
ANNUAL OUTPUT = 27,013 kWh/yr
MAX. ARRAY LOAD = 10 PSF

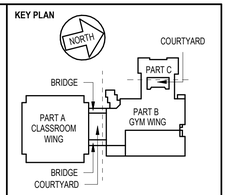
MAIN ROOF (13,437 SF)
SOLAR READY AREA = 1,360 SF (10%)
QTY OF MODULES = 17
TILT (DEG) = 40°
AZIMUTH (DEG) = 194°
DC SYSTEM SIZE = 8 kW
ANNUAL OUTPUT = 10,950 kWh/yr
MAX. ARRAY LOAD = 7 PSF

TOTAL BUILDING ROOF AREA	=	70,320 SF
TOTAL SOLAR READY AREA	**=**	**7,880 SF (11%)**
TOTAL DC SYSTEMS' SIZE	=	52 kW
TOTAL ANNUAL OUTPUT	**=**	**70,115 kWh/yr**

PLAN LEGEND

- FUTURE CONDUIT EXTERIOR WALL PENETRATION (BY SOLAR PROJECT)
- EXISTING ELEC. ROOM BELOW
- SHADOW OF PV MODULE ROW (SPACE BETWEEN ROWS)
- FUTURE FD DISCONNECT ON EXTERIOR WALL (BY SOLAR PROJECT)
- FUTURE EXTERIOR CONDUIT (BY SOLAR PROJECT)
  ROOF-BALLASTED / WALL-MOUNTED / SOFFIT-MOUNTED
- FUTURE BALLASTED CONDUIT FOR ARRAY INTERCONNECTION (BY SOLAR PROJECT)

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02024.28

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

KELLY ELEMENTARY ROOF REPLACEMENT

216 WEST ST. HOLYOKE, MA 01040

DRAWING TITLE

SOLAR READINESS PLAN

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main street, suite 1110
Springfield MA 01103

413 592 9700 T
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	DL
CHECKED	JL
DATE	7/25/25

DRAWING NUMBER

SR1.00

Fennessy Consulting Services

DESIGN DEVELOPMENT CONSTRUCTION COST REPORT

Roofing and Code Upgrades Project

at

M R Kelly Elementary School

June 16, 2025

Fennessy Consulting Services
27 Glen Street, Suite 8, Stoughton, MA 02072
www.fennessyconsulting.com

June 16, 2025

John Landry
Mount Vernon Group Architects
1350 Main Street
Suite 1110
Springfield, MA 01103

M R KELLY ELEMENTARY SCHOOL - Roofing and Code Upgrades Project, Holyoke, MA

Dear John:

Please find enclosed our Construction Cost Model for the above referenced project based on schematic design information prepared by your office and design team,dated June 3, 2025.

The financial summary of this cost model is outlined below, however we recommend you review the Executive Summary to fully understand the basis of this report and the included and excluded financial impacts contained therein.

	Const. Start	Gross Floor Area	$/sf	Estimated Cost
Roof Replacement	*Jun-26*			*$4,677,245*
Code Upgrades	*Jun-26*			*$2,231,770*
ESTIMATED CONTRACT AWARD				***$6,909,015***

Alternates
None considered at this time

Bidding conditions are expected to reflect competitive bidding to pre-qualified general contractors, open bidding to prequalified sub-contractors, open specifications for materials and manufactures.

This estimate includes all direct construction costs, general contractor's overhead and profit and design contingency. Cost escalation impacts have been included in this report.

Excluded from the estimate are: construction contingency, loose furnishings and equipment, architect's and engineer's fees, moving, administrative and financing costs. Please refer to Exclusions section of the attached report for further information.

Contractors are not required to be signatory to any labor union, however they will be required to pay prevailing wage rates as set forth by the Commonwealth of Massachusetts for construction in Holyoke. This cost report represents a reasonable opinion of cost. It is not a prediction of the successful bid from a contractor as bids will vary due to fluctuating market conditions, errors and omissions, proprietary specifications, lack or surplus of bidders, perception of risk, etc. Consequently the estimate is expected to fall within the range of bids from a number of competitive contractors or subcontractors, however we do not warrant that bids or negotiated prices will not vary from the final construction cost estimate.

If you have any questions or require further analysis please do not hesitate to contact us.

Sincerely,

Seamus Fennessy

Seamus Fennessy MRICS
Principal/Owner

Enclosures

M R KELLY ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Contents

	Page No.
Executive Summary	*1*
Basis of Construction Cost Report	*4*
Exclusions	*6*
Areas Calculation	*7*
Overall Summary	*8*
Roof Replacement	*9*
Code Upgrades	*14*
CSI Summary	*20*
Filed Sub-bid Summary	*22*

Fennessy Consulting Services

M R KELLY ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Executive Summary

The Project
This project in Holyoke, Massachusetts comprises of the replacement of the existing roof at the Kelly School. The replaced roof area totals 67,800 sf.

Due to the assessed value of the existing building, code upgrades will be triggered. at the Kelly School.

Financial Status
Our construction cost model for the entire project is in the order of ***$6.91MM.*** *Within this totals we are including a design contingency of $313.9K , and $316.4K for future price escalation reflecting the construction schedule outlined herein.*

Risk
A formal risk analysis has not been performed for this project. Some risk factors to be considered at this time include:
- Design Contingency
- Escalation/Market risk
- Construction/Payment default
- Approvals process/Funding
- Unforeseen conditions
- Tariffs

Design Contingency
This construction cost model is based on design development documentation. Due to this incomplete nature of the design we have utilized historic data and personal experience to complete this cost model. To help alleviate possible cost increases as a result of design completion we recommend a ***design contingency of 5%.*** *We have included this contingency in our cost model. As design progresses this contingency will reduce.*

Escalation/Market Risk
The construction industry faced a tougher year in 2024 that the previous year, which was evident in a stabilization and in some regions a static price escalation. The industry is forecast to show signs of growth in 2025 as economic conditions improve. The OECD are expecting short-term interest rates to continue to drop. While they are still higher than before the Covid-19 pandemic, it looks like inflation is starting to come under control, and are projected to fall to 2.1% by the end of 2025.

The impact will vary across the different segments of the construction marketplace. Commercial projects are likely to continue to reduce. Despite surges due to the Infrastructures Bill, highway work is expected to drop but other transportation projects will experience some growth. Work in education and healthcare are expected to remain at similar levels. Public safety and manufacturing is expected to increase.

Residential projects are expected to remain flat but this sector is heavily influenced by local demands. For example, Arizona, New York, New Jersey, South Carolina and Texas all saw significant growth, while Florida, Colorado, Oregon all saw contraction.

Fennessy Consulting Services

Continued shipping and other logistical issues (primarily driven by piracy at the Suez Canal) will continue to put upwards pressures on material prices Suez Canal traffic which used to accommodate 12% of global trade has plummeted by 66%. The longer, more costly routes around the Cape of Good Hope continues to impact prices and delivery times. After two years of record drought conditions which decimated vessel transits, the Panama Canal is experiencing a trade rebound.

Another consideration is how material suppliers are reacting to the current marketplace. A national construction materials distributor has recently announced a 5 - 10% increase in material prices.

Some projects will not experience the same inflationary pressures as others The projects that fall into this category encompass "clean" renovation less complex new construction projects. These types of projects limit risk/exposure and maximize profit generation potential. Complex new and renovation projects are likely to draw limited competition and as such likely to experience higher price levels. This project is likely to fall into the former category.

For these reasons we are continuing to recommend an annual escalation factor of 5% for the next twelve months dropping to 4% thereafter. We have ***included an escalation factor of 4.3%*** *in this cost report. As we move closer to bid date we will continue to review and adjust the escalation factor as appropriate. It is possible that a higher escalation factor will be required for later years.*

<u>Construction/Payment Default</u>
There is a real risk of contractors, subcontractors and material suppliers ceasing to exist due to their inability to honor low bids as material and labor prices increase. We highly recommend that each project has adequate protection in the form of sub guard (preferred) or bonding for both performance and payment.

<u>Approvals Process/Funding.</u>
For the purpose of this report we have included both of these categories together. The risk here is that the funding and approvals process will take significantly longer than expected and hence subject this project to increases in price escalation. We have not included any such pressures in this cost model.

<u>Unforeseen Conditions</u>
The scope of work outlined in these design documents involves partial renovation within an existing space and on "old" roof structure. Despite best efforts and limited destructive exploration during the design phase it will not be possible to accurately determine the true nature and dimensions of existing conditions. For this reason we recommend that the owner carry a 7% change order contingency (not included in this cost model) in the overall project budget.

Tariffs
It is too early to comprehend or understand the full effect of proposed government tariffs if they even happen at all. More than likely, they will have a significant impact on construction pricing. Not only could it impact materials overseas, but it will impact products manufactured here but utilize components from overseas. In addition, the machinery that drives a manufacturing economy here is also dependent on overseas components for operation, and all distribution networks within the USA are also dependent on materials, components and finished products made overseas. While the

Peer/Comparable Projects
We at Fennessy Consulting Services do not like to compare individual projects against some perceived cost/sf. Our reasoning for this is based on the fact that no two projects are the same and as such a typical cost/sf is not all that applicable or reliable. We treat each project as a unique entity.

As a quality control measure we make comparisons of the various building component costs in this estimate against others. We make this comparison to verify that nothing is out of the ordinary. If we come across an abnormal component cost we double check this cost to ensure its accuracy.

M R KELLY ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Basis of Cost Estimate

Cost Estimate Prepared From	*Dated*	*Received*
Design development design documentation:		
Design development design documentation:		
Architecture by Mount Vernon Group	*05/09/25*	*06/03/25*
Structure by Souza True & Partners	*06/18/25*	*06/06/25*
Discussions with the Project Architect and Engineers		

Conditions of Construction
The pricing is based on the following general conditions of construction

A start date of June 2026
A construction period of 4-6 months
The general contract will be competitively bid to qualified general contractors and subcontractors.
There will not be small business set aside requirements.
Contractors are not required to be signatory to labor unions, however they will be required to pay prevailing wage rates as set forth by the Commonwealth of Massachusetts for construction in Holyoke.
There are no phasing requirements.
Contractors will have full access to the site during normal business hours.

The Cost Plan is based on the following conditions:
The costs in this report covers construction costs only calculated at current bidding price level (reflecting the current projected construction schedule) with a separate allowance for cost escalation.

Cost escalation is included to the mid point of the construction schedule. Unit rates in the body of the report include appropriate escalation allowances to deliver specific trades within the prescribed schedule if the project were to commence today.

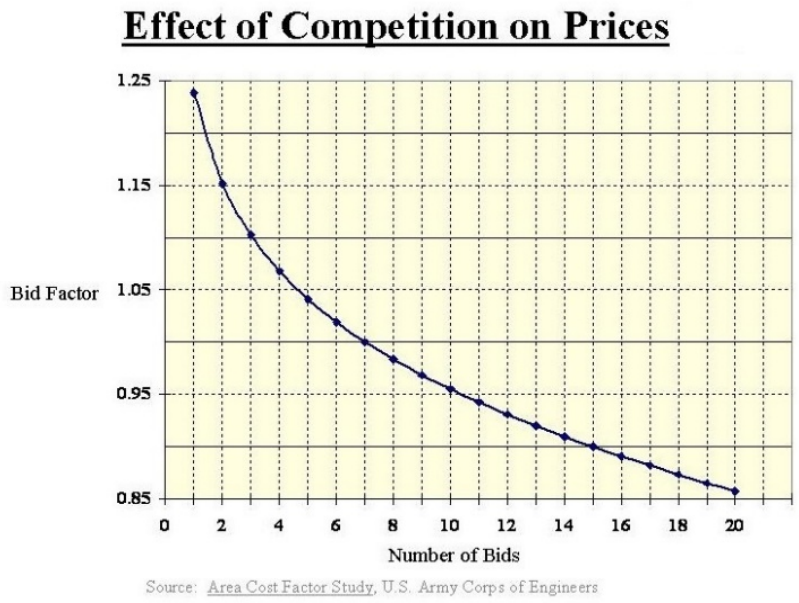
Cost associated with additional escalation required for future start date are included as a below the line markup. This report has included this additional escalation to the scheduled start date of construction noted in this report.

Bidding Process - Market Conditions
This document is based on the measurement and pricing of quantities wherever information is provided and/or reasonable assumptions for other work not covered in the drawings or specifications, as stated within this document. Unit rates have been obtained from historical records and/or discussion with contractors. The unit rates reflect current bid costs in the area.

All unit rates relevant to subcontractor work include the subcontractors overhead and profit unless otherwise stated. The mark-ups cover the costs of field overhead, home office overhead and profit and range from 15% to 25% of the cost for a particular item of work.

Basis of Cost Estimate

Pricing reflects probable construction costs obtainable in the project locality on the date of this statement of probable costs. This estimate is a determination of fair market value for the construction of this project. It is not a prediction of low bid. Pricing assumes competitive bidding for every portion of the construction work for all subcontractors and general contractors, with a minimum of 5 bidders for all items of work. Experience and research indicates that a fewer number of bidders may result in higher bids, conversely an increased number of bidders may result in more competitive bids.



Exclusions

The following cost items have been excluded from this report. Many of these will in fact be required and should be budgeted within the "Soft Cost" component of the project budget

- *Owner supplied and installed furniture, fixtures and equipment*
- *Loose furniture and equipment except as specifically identified*
- *Security head-end equipment and devices*
- *Tele/data head end equipment and devices*
- *Audio visual equipment*
- *Compression of schedule, premium or shift work, and restrictions on the contractor's working hours*
- *Design, testing, inspection or construction management fees*
- *Architectural and design fees*
- *Scope change and post contract contingencies*
- *Assessments, taxes, finance, legal and development charges*
- *Environmental impact mitigation*
- *Builder's risk, project wrap-up and other owner provided insurance program*
- *Land and easement acquisition*
- *Cost escalation beyond a start date of June 2026*
- *Sales tax*

M R KELLY ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Areas Calculation

	Area	Area	Total
AREAS			
Roof	*67,800*		
ADA Upgrades		*10,331*	
TOTAL AREAS	*67,800*	*10,331*	

M R KELLY ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Overall Summary

		Roof Replacement	Code Upgrades	Total
A10 FOUNDATIONS		$0	$0	$0
A20 BASEMENT CONSTRUCTION		$0	$0	$0
B10 SUPERSTRUCTURE		$0	$7,500	$7,500
B20 EXTERIOR CLOSURE		$29,250	$48,000	$77,250
B30 ROOFING		$2,672,258	$0	$2,672,258
C10 INTERIOR CONSTRUCTION		$0	$671,419	$671,419
C20 STAIRCASES		$2,250	$82,200	$84,450
C30 FINISHES		$0	$46,172	$46,172
D10 CONVEYING SYSTEMS		$0	$40,000	$40,000
D20 PLUMBING		$47,250	$216,300	$263,550
D30 HVAC		$23,200	$30,000	$53,200
D40 FIRE PROTECTION		$0	$0	$0
D50 ELECTRICAL		$9,000	$166,100	$175,100
E10 EQUIPMENT		$0	$0	$0
E20 FURNISHINGS		$0	$258,605	$258,605
F10 SPECIAL CONSTRUCTION		$35,000	$0	$35,000
F20 SELECTIVE BUILDING DEMOLITION		$577,450	$53,959	$631,409
Total Building Construction		**$3,395,658**	**$1,620,255**	**$5,015,913**
G10 SITE PREPARATION		$0	$0	$0
G20 SITE IMPROVEMENTS		$0	$0	$0
G30 SITE MECHANICAL UTILITIES		$0	$0	$0
G40 SITE ELECTRICAL		$0	$0	$0
G90 OTHER SITE CONSTRUCTION		$0	$0	$0
Total Site Construction		**$0**	**$0**	**$0**
TOTAL BUILDING & SITE		**$3,395,658**	**$1,620,255**	**$5,015,913**
MARKUPS		**$854,837**	**$407,890**	**$1,262,727**
General conditions & project requirements	18.0%	$611,218	$291,646	$902,864
Bond and insurance	2.0%	$80,138	$38,238	$118,376
Building permit	0.0%	$0	$0	$0
Prime contractor's head office overhead and profit (Fee)	4.0%	$163,481	$78,006	$241,487
PLANNED CONSTRUCTION COST	**Jun-25**	**$4,250,495**	**$2,028,145**	**$6,278,640**
CONTINGENCIES/ESCALATION		**$426,750**	**$203,625**	**$630,375**
Design & pricing contingency	5.0%	$212,525	$101,407	$313,932
Gmp contingency	0.0%	$0	$0	$0
Escalation to start date (June 2026)	4.8%	$214,225	$102,218	$316,443
ESTIMATED CONTRACT AWARD	**Jun-26**	**$4,677,245**	**$2,231,770**	**$6,909,015**
	Area	10,331	4,149	
	$/sf	$452.74	$537.91	

Fennessy Consulting Services

M R KELLY ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Roof Replacement - Summary

	Total	GFA $/sf	67,800 %
A10 Foundations	***$0***	***$0.00***	***0.00%***
A1010 Foundations	$0	$0.00	0.00%
A1020 Special Foundations	$0	$0.00	0.00%
A1030 Slab on Grade	$0	$0.00	0.00%
A20 Basement Construction	***$0***	***$0.00***	***0.00%***
A2010 Basement Earthwork	$0	$0.00	0.00%
A2020 Basement Walls	$0	$0.00	0.00%
B10 Superstructure	***$0***	***$0.00***	***0.00%***
B1010 Floor Construction	$0	$0.00	0.00%
B1020 Roof Construction	$0	$0.00	0.00%
B20 Exterior Closure	***$29,250***	***$0.43***	***0.69%***
B2010 Exterior Walls	$29,250	$0.43	0.69%
B2020 Windows	$0	$0.00	0.00%
B2030 Exterior Doors	$0	$0.00	0.00%
B30 Roofing	***$2,672,258***	***$39.41***	***62.87%***
B3010 Roof Covering	$2,666,758	$39.33	62.74%
B3020 Roof Openings	$5,500	$0.08	0.13%
C10 Interior Construction	***$0***	***$0.00***	***0.00%***
C1010 Partitions	$0	$0.00	0.00%
C1020 Interior Doors	$0	$0.00	0.00%
C1030 Specialties	$0	$0.00	0.00%
C20 Staircases	***$2,250***	***$0.03***	***0.05%***
C2010 Stair Construction	$2,250	$0.03	0.05%
C2020 Stair Finishes	$0	$0.00	0.00%
C30 Finishes	***$0***	***$0.00***	***0.00%***
C3010 Wall Finishes	$0	$0.00	0.00%
C3020 Floor Finishes	$0	$0.00	0.00%
C3030 Ceiling Finishes	$0	$0.00	0.00%
D10 Conveying Systems	***$0***	***$0.00***	***0.00%***
D1010 Elevators and Lifts	$0	$0.00	0.00%
D1020 Escalators and Moving Walkways	$0	$0.00	0.00%
D1030 Other Conveying Systems	$0	$0.00	0.00%
D20 Plumbing	***$47,250***	***$0.70***	***1.11%***
D2010 Plumbing Complete	$47,250	$0.70	1.11%
D30 Heating, Ventilation & Air Conditioning	***$23,200***	***$0.34***	***0.55%***
D3010 HVAC, Complete	$23,200	$0.34	0.55%
D40 Fire Protection	***$0***	***$0.00***	***0.00%***
D4010 Fire Protection, Complete	$0	$0.00	0.00%
D50 Electrical	***$9,000***	***$0.13***	***0.21%***
D5010 Electrical, Complete	$9,000	$0.13	0.21%
E10 Equipment	***$0***	***$0.00***	***0.00%***
E1010 Commercial Equipment	$0	$0.00	0.00%
E1020 Institutional Equipment	$0	$0.00	0.00%
E1030 Vehicular Equipment	$0	$0.00	0.00%
E1090 Other Equipment	$0	$0.00	0.00%
E20 Furnishings	***$0***	***$0.00***	***0.00%***
E2010 Fixed Furnishings	$0	$0.00	0.00%
E2020 Loose Furnishings	$0	$0.00	0.00%

M R KELLY ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Roof Replacement - Summary

		Total	GFA 67,800 $/sf	%
F10 Special Construction		***$35,000***	***$0.52***	***0.82%***
F1010 Special Structures		*$35,000*	*$0.52*	*0.82%*
F1020 Integrated Construction		*$0*	*$0.00*	*0.00%*
F1030 Special Systems and Facilities		*$0*	*$0.00*	*0.00%*
F20 Selective Building Demolition		***$577,450***	***$8.52***	***13.59%***
F2010 Building Elements Demolition		*$273,750*	*$4.04*	*6.44%*
F2020 Hazardous Components Abatement		*$303,700*	*$4.48*	*7.15%*
TOTAL BUILDING CONSTRUCTION		***$3,395,658***	***$50.08***	***79.89%***
Total Site Construction		***$0***	***$0.00***	***0.00%***
TOTAL BUILDING & SITE		***$3,395,658***	***$50.08***	***79.89%***
Markups		***$854,837***	***$12.61***	***20.11%***
General Conditions				
General conditions and project requirements	*18.0%*	*$611,218*	*$9.02*	*14.38%*
Bond and insurance	*2.0%*	*$80,138*	*$1.18*	*1.89%*
Building permit	*0.0%*	*$0*	*$0.00*	*0.00%*
Overhead and profit				
Prime contractor's head office overhead and profit (Fee)	*4.0%*	*$163,481*	*$2.41*	*3.85%*
PLANNED CONSTRUCTION COST	***Jun-25***	***$4,250,495***	***$62.69***	***100.00%***
Contingencies/Escalation		***$426,750***	***$6.29***	
Contingencies				
Design and pricing contingency	*5.0%*	*$212,525*	*$3.13*	
Gmp contingency	*0.0%*	*$0*	*$0.00*	
Escalation				
Escalation to start date (June 2026)	*4.8%*	*$214,225*	*$3.16*	
ESTIMATED CONTRACT AWARD	***Jun-26***	***$4,677,245***	***$68.99***	

Roof Replacement - Estimate Detail

	Quantity	Unit	Rate	Total
B2010 EXTERIOR WALL				
Rails and the like				
Life safety anchors	45	EA	650.00	29,250
Subtotal				**$29,250**
B3010 ROOF COVERING				
Membrane roofing				
PVC	68,760	SF	16.00	1,100,160
Abutment of flat roof with adjacent walls	1,108	LF	15.00	16,620
Allowance for working membrane roofing around pipe and duct penetrations	1	LS	110,016.00	110,016
Air barrier	68,760	SF	4.50	309,420
Insulation	68,760	SF	7.00	481,320
Roof sheathing	68,760	SF	4.50	309,420
Rough blocking	3,324	LF	8.00	26,592
Miscellaneous roofing				
Weldable walkways, 39" wide	3	EA	60.00	180
Flashings				
Flashings	1,108	LF	15.00	16,620
Edge treatment				
Edge trim/stop	1,400	LF	30.00	42,000
Parapet coping	3,350	LF	75.00	251,250
Expansion joint cover	79	LF	40.00	3,160
Subtotal				**$2,666,758**
B3020 ROOF OPENINGS				
Roof hatch/ vents	2	EA	2,750.00	5,500
Subtotal				**$5,500**
C2010 STAIR CONSTRUCTION				
Miscellaneous steps and ladders				
Roof ladder	1	EA	2,250.00	2,250
Complete	1			
Subtotal				**$2,250**
D2010 PLUMBING				
Plumbing				
Roof drain, including connection to adjacent piping	35	EA	1,200.00	42,000
Remove existing roof drains	33	EA	150.00	4,950
Extend vent piping	3	EA	100.00	300
Subtotal				**$47,250**
D3010 HVAC				
Hvac				
Remove, store and reinstall mechanical equipment	2	EA	2,500.00	5,000
Louver	12	SF	100.00	1,200
Shroud flash	29	SF	250.00	7,250

M R KELLY ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Roof Replacement - Estimate Detail

	Quantity	Unit	Rate	Total
Relocate radiator, including piping modifications	1	EA	750.00	750
Testing	1	LS	1,500.00	1,500
Crane associated with equipment removal	1	LS	7,500.00	7,500
Subtotal				**$23,200**
D5010 ELECTRICAL				
Electrical installation				
Disconnect and reconnect mechanical equipment	18	EA	500.00	9,000
Subtotal				**$9,000**
F1010 SPECIAL STRUCTURES				
Staging				
Allowance for staging, including access staircase	1	LS	35,000.00	35,000
Subtotal				**$35,000**
F2010 BUILDING ELEMENTS DEMOLITION				
Roof demolition				
Membrane roofing down to roof deck substrate	67,800	SF	3.00	203,400
Protect existing roofing	67,800	SF	1.00	67,800
Roof hatch	3	EA	500.00	1,500
Roof ladder	3	EA	350.00	1,050
Subtotal				**$273,750**
F2020 HAZARDOUS COMPONENTS ABATEMENT				
Hazardous materials abatement				
Black tar on roof deck/substrate	67,800	SF	4.00	271,200
Black tar mastic on all copper/sheet-metal, equipment, flashing	1	LS	15,000.00	15,000
Sealants at all flashings, termination bars, roof edge systems, equipment and piping penetrations	1	LS	17,500.00	17,500
Subtotal				**$303,700**
MARKUPS				
General conditions and project requirements				
General conditions and requirements	18.0%		3,395,658	611,218
Bond and Insurance	2.0%		4,006,876	80,138
Building permit	0.0%		4,087,014	
Overhead and Profit				
Prime contractor's head office overhead and profit (Fee)	4.0%		4,087,014	163,481
Subtotal				**$854,837**

M R KELLY ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Roof Replacement - Estimate Detail

	Quantity	Unit	Rate	Total
CONTINGENCIES/ESCALATION				
Contingencies				
Design contingency	5.0%		4,250,495	212,525
Prime contractor's contingency	0.0%		4,463,020	
Escalation				
Escalation to Start Date (June 2026)	4.8%		4,463,020	214,225
Subtotal				**$426,750**

M R KELLY ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Code Upgrades - Summary

	Total	GFA $/sf	4,149 %
A10 Foundations	***$0***	***$0.00***	***0.00%***
A1010 Foundations	$0	$0.00	0.00%
A1020 Special Foundations	$0	$0.00	0.00%
A1030 Slab on Grade	$0	$0.00	0.00%
A20 Basement Construction	***$0***	***$0.00***	***0.00%***
A2010 Basement Earthwork	$0	$0.00	0.00%
A2020 Basement Walls	$0	$0.00	0.00%
B10 Superstructure	***$7,500***	***$1.81***	***0.00%***
B1010 Floor Construction	$7,500	$1.81	0.00%
B1020 Roof Construction	$0	$0.00	0.00%
B20 Exterior Closure	***$48,000***	***$11.57***	***0.00%***
B2010 Exterior Walls	$0	$0.00	0.00%
B2020 Windows	$0	$0.00	0.00%
B2030 Exterior Doors	$48,000	$11.57	0.00%
B30 Roofing	***$0***	***$0.00***	***0.00%***
B3010 Roof Covering	$0	$0.00	0.00%
B3020 Roof Openings	$0	$0.00	0.00%
C10 Interior Construction	***$671,419***	***$161.83***	***33.11%***
C1010 Partitions	$215,593	$51.96	10.63%
C1020 Interior Doors	$292,845	$70.58	14.44%
C1030 Specialties	$162,981	$39.28	8.04%
C20 Staircases	***$82,200***	***$19.81***	***4.05%***
C2010 Stair Construction	$69,400	$16.73	3.42%
C2020 Stair Finishes	$12,800	$3.09	0.63%
C30 Finishes	***$46,172***	***$11.13***	***2.28%***
C3010 Wall Finishes	$23,582	$5.68	1.16%
C3020 Floor Finishes	$15,345	$3.70	0.76%
C3030 Ceiling Finishes	$7,245	$1.75	0.36%
D10 Conveying Systems	***$40,000***	***$9.64***	***1.97%***
D1010 Elevators and Lifts	$40,000	$9.64	1.97%
D1020 Escalators and Moving Walkways	$0	$0.00	0.00%
D1030 Other Conveying Systems	$0	$0.00	0.00%
D20 Plumbing	***$216,300***	***$52.13***	***10.66%***
D2010 Plumbing Complete	$216,300	$52.13	10.66%
D30 Heating, Ventilation & Air Conditioning	***$30,000***	***$7.23***	***1.48%***
D3010 HVAC, Complete	$30,000	$7.23	1.48%
D40 Fire Protection	***$0***	***$0.00***	***0.00%***
D4010 Fire Protection, Complete	$0	$0.00	0.00%
D50 Electrical	***$166,100***	***$40.03***	***8.19%***
D5010 Electrical, Complete	$166,100	$40.03	8.19%
E10 Equipment	***$0***	***$0.00***	***0.00%***
E1010 Commercial Equipment	$0	$0.00	0.00%
E1020 Institutional Equipment	$0	$0.00	0.00%
E1030 Vehicular Equipment	$0	$0.00	0.00%
E1090 Other Equipment	$0	$0.00	0.00%
E20 Furnishings	***$258,605***	***$62.33***	***12.75%***
E2010 Fixed Furnishings	$258,605	$62.33	12.75%
E2020 Loose Furnishings	$0	$0.00	0.00%

M R KELLY ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Code Upgrades - Summary

		Total	GFA $/sf	4,149 %
F10 Special Construction		***$0***	***$0.00***	***0.00%***
F1010 Special Structures		*$0*	*$0.00*	*0.00%*
F1020 Integrated Construction		*$0*	*$0.00*	*0.00%*
F1030 Special Systems and Facilities		*$0*	*$0.00*	*0.00%*
F20 Selective Building Demolition		***$53,959***	***$13.01***	***2.66%***
F2010 Building Elements Demolition		*$53,959*	*$13.01*	*2.66%*
F2020 Hazardous Components Abatement		*$0*	*$0.00*	*0.00%*
TOTAL BUILDING CONSTRUCTION		***$1,620,255***	***$390.52***	***79.89%***
Total Site Construction		***$0***	***$0.00***	***0.00%***
TOTAL BUILDING & SITE		***$1,620,255***	***$390.52***	***79.89%***
Markups		***$407,890***	***$98.31***	***20.11%***
General Conditions				
General conditions and project requirements	*18.0%*	*$291,646*	*$70.29*	*14.38%*
Bond and insurance	*2.0%*	*$38,238*	*$9.22*	*1.89%*
Building permit	*0.0%*	*$0*	*$0.00*	*0.00%*
Overhead and profit				
Prime contractor's head office overhead and profit (Fee)	*4.0%*	*$78,006*	*$18.80*	*3.85%*
PLANNED CONSTRUCTION COST	***Jun-25***	***$2,028,145***	***$488.83***	***100.00%***
Contingencies/Escalation		***$203,625***	***$49.08***	
Contingencies				
Design and pricing contingency	*5.0%*	*$101,407*	*$24.44*	
Gmp contingency	*0.0%*	*$0*	*$0.00*	
Escalation				
Escalation to start date (June 2026)	*4.8%*	*$102,218*	*$24.64*	
ESTIMATED CONTRACT AWARD	***Jun-26***	***$2,231,770***	***$537.91***	

M R KELLY ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Code Upgrades - Estimate Detail

	Quantity	Unit	Rate	Total
B1010 FLOOR CONSTRUCTION				
Wood construction				
Wheelchair platform/modifications				
Complete	1	LS	7,500.00	7,500.00
Subtotal				**$7,500**
B2030 EXTERIOR DOORS				
Miscellaneous				
Add door operators to existing doors	6	EA	8,000.00	48,000
Subtotal				**$48,000**
C1010 PARTITIONS				
Partitions, masonry				
Type ?	2,234	SF	55.00	122,870
Type ?, 6"	1,656	SF	48.00	79,488
Rails and handrails, painted metal				
Rails at access ramps	19	LF	250.00	4,750
Paint	19	LF	10.00	190
Miscellaneous				
Sealants and caulking at partitions	10,331	SF	0.50	5,166
Rough blocking	447	LF	7.00	3,129
Subtotal				**$215,593**
C1020 INTERIOR DOORS				
Wood doors				
Single leaf				
Type	11	EA	600.00	6,600
Hollow metal door frame				
Frames to single leaf doors				
Type	11	EA	510.00	5,610
Hardware				
Set ?	11	EA	1,600.00	17,600
New lever sets, including removal of existing	180	EA	500.00	90,000
Add door operators to existing doors	20	EA	8,000.00	160,000
Specialty doors				
Access panels at the four mechanical rooms over the stairs	4	EA	1,500.00	6,000
Miscellaneous				
Paint to doors	15	EA	150.00	2,250
Paint to frames	11	EA	175.00	1,925
Sealants and caulking	11	EA	120.00	1,320
Wood blocking at openings	11	EA	140.00	1,540
Subtotal				**$292,845**

M R KELLY ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Code Upgrades - Estimate Detail

	Quantity	Unit	Rate	Total
C1030 SPECIALTIES				
Specialties				
Toilet partitions, phenolic, handicapped	6	EA	2,000.00	12,000
Toilet partitions, phenolic, ambulatory	2	EA	2,000.00	4,000
Toilet partitions, phenolic, regular	14	EA	1,800.00	25,200
Toilet partitions, phenolic, urinal screens	1	EA	500.00	500
Miscellaneous metal to ceiling supported toilet partitions	22	EA	600.00	13,200
Toilet accessories				
Grab bars	30	EA	150.00	4,500
Counter support	23	EA	150.00	3,450
Trap pipe protection	25	EA	150.00	3,750
Soap dispenser	17	EA	120.00	2,040
Paper towel dispenser	19	EA	350.00	6,650
Toilet paper dispenser	2	EA	150.00	300
Recessed trash can	7	EA	250.00	1,750
Hooks	31	EA	25.00	775
Sanitary disposal	21	EA	150.00	3,150
Mirrors	20	EA	400.00	8,000
Mirrors, install only	4	EA	150.00	600
Mirrors, ADA	1	EA	150.00	150
Signage/Directories	67,800	GSF	1.00	67,800
Miscellaneous				
Miscellaneous sealants throughout building	10,331	SF	0.50	5,166
Subtotal				**$162,981**
C2010 STAIR CONSTRUCTION				
Egress staircases				
Stair rails and handrail modifications	4	FLT	15,600.00	62,400
Miscellaneous steps and ladders				
Replace rails at platform stairs	2	SET	3,500.00	7,000
Subtotal				**$69,400**
C2020 STAIR FINISHES				
Egress staircases				
Stair rails and handrail modifications				
Paint	4	FLT	2,700.00	10,800
Platform steps				
Paint	2	SET	1,000.00	2,000
Subtotal				**$12,800**
C3010 WALL FINISHES				
Paint				
To masonry	5,258	SF	1.75	9,202
Tile				
Ceramic tile	288	SF	35.00	10,080

Code Upgrades - Estimate Detail

	Quantity	Unit	Rate	Total
Panels				
Fabric, acoustic	86	SF	50.00	4,300
Subtotal				**$23,582**
C3020 FLOOR FINISHES				
Floor tile				
Ceramic tile	312	SF	35.00	10,920
Bases to walls				
Ceramic tile	177	LF	25.00	4,425
Subtotal				**$15,345**
C3030 CEILING FINISHES				
Acoustical ceiling tile				
2' x 2', assumed	483	SF	15.00	7,245
Subtotal				**$7,245**
D1010 ELEVATORS AND LIFTS				
Lifts				
Wheelchair lift	1	EA	40,000.00	40,000
Subtotal				**$40,000**
D2010 PLUMBING				
Plumbing				
New sink, including local piping	7	EA	2,800.00	19,600
New water closet, including local piping	28	EA	3,200.00	89,600
Relocate water closet	5	EA	1,200.00	6,000
New lavatory, including local piping	22	EA	3,000.00	66,000
New shower, including local piping	2	EA	4,800.00	9,600
Drinking fountains, including piping	3	EA	6,500.00	19,500
Miscellaneous demolition	1	EA	6,000.00	6,000
Subtotal				**$216,300**
D3010 HVAC				
Other hvac modifications in areas requiring remodel	6	LS	5,000.00	30,000
Subtotal				**$30,000**
D5010 ELECTRICAL				
Electrical installation				
Electrical connections to wheelchair lift	1	EA	3,500.00	3,500
Electrical connections to door operators	26	EA	1,500.00	39,000
Electrical connections to plumbing fixtures	58	EA	1,200.00	69,600
Other electrical modifications in areas requiring remodeling	6	LS	9,000.00	54,000
Subtotal				**$166,100**

M R KELLY ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Code Upgrades - Estimate Detail

	Quantity	Unit	Rate	Total
E2010 FIXED FURNISHINGS				
Miscellaneous casework				
Base storage units	273	LF	375.00	102,375
Counter top	273	LF	200.00	54,600
Wall storage units	273	LF	310.00	84,630
Reception desk	12	LF	1,000.00	12,000
Other	1	LS	5,000.00	5,000
Subtotal				**$258,605**
E2020 LOOSE FURNISHINGS				
Loose furnishings				
By owner				
Subtotal				**$0**
F2010 BUILDING ELEMENTS DEMOLITION				
Interior demolition				
Partitions	3,580	SF	10.00	35,800
Toilet compartment partitions and doors	18	EA	150.00	2,700
Floor and ceiling finishes	171	SF	10.00	1,710
Casework and specialties	285	LF	15.00	4,275
Louvers	1	LS	150.00	150
Rails at stairs	152	LF	12.00	1,824
MEP systems	1	LS	7,500.00	7,500
Subtotal				**$53,959**
MARKUPS				
General conditions and project requirements				
General conditions and requirements	18.0%		1,620,255	291,646
Bond and Insurance	2.0%		1,911,901	38,238
Building permit	0.0%		1,950,139	
Overhead and Profit				
Prime contractor's head office overhead and profit (Fee)	4.0%		1,950,139	78,006
Subtotal				**$407,890**
CONTINGENCIES/ESCALATION				
Contingencies				
Design contingency	5.0%		2,028,145	101,407
Prime contractor's contingency	0.0%		2,129,552	
Escalation				
Escalation to Start Date (June 2026)	4.8%		2,129,552	102,218
Subtotal				**$203,625**

M R KELLY ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

CSI Summary

		Roof Replacement	Code Upgrades	Total Estimate
	Gross Area:	10,331 SF	4,149 SF	14,480 SF
DIVISION 1 - GENERAL REQUIRMENTS				
01-00-00	General Conditions	See Below	See Below	See Below
DIVISION 2 - EXISTING CONDITIONS		**577,450**	**53,959**	**631,409**
02-40-00	Selective Demolition	273,750	53,959	327,709
02-60-00	Hazardous Materials Abatement/Removal	303,700	0	303,700
DIVISION 3 - CONCRETE		**0**	**0**	**0**
DIVISION 4 - MASONRY		**0**	**202,358**	**202,358**
04-22-00	Concrete Masonry Units	0	202,358	202,358
DIVISION 5 - METAL		**34,660**	**87,350**	**122,010**
05-50-00	Metal Fabrications	29,250	13,200	42,450
05-60-00	Metal Rails and Handrails	0	74,150	74,150
05-80-00	Expansion Joints	5,410	0	5,410
DIVISION 6 - WOOD & PLASTICS		**26,592**	**12,169**	**38,761**
06-10-00	Rough Carpentry	26,592	12,169	38,761
DIVISION 7 - THERMAL & MOISTURE PROTECTION		**2,333,086**	**11,652**	**2,344,738**
07-10-00	Damp proofing and Waterproofing	309,420	0	309,420
07-50-00	Membrane Roofing	1,708,296	0	1,708,296
07-60-00	Flashing and Sheet Metal	309,870	0	309,870
07-70-00	Roofing and Wall Specialties and Accessories	5,500	0	5,500
07-90-00	Joint Sealants	0	11,652	11,652
DIVISION 8 - DOORS & WINDOWS		**0**	**333,810**	**333,810**
08-10-00	Metal Doors and Frames	0	5,610	5,610
08-20-00	Wood Doors and Frames	0	6,600	6,600
08-30-00	Specialty Doors and Frames	0	6,000	6,000
08-70-00	Hardware	0	315,600	315,600
DIVISION 9 - FINISHES		**309,420**	**63,337**	**372,757**
09-20-00	Gypsum Wallboard Assemblies	309,420	0	309,420
09-30-00	Tiling	0	25,425	25,425
09-51-00	Acoustical Ceilings	0	7,245	7,245
09-80-00	Acoustic Treatment	0	4,300	4,300
09-90-00	Painting and Coating	0	26,367	26,367
DIVISION 10 - SPECIALTIES		**0**	**144,615**	**144,615**
10-15-00	Signage	0	67,800	67,800
10-21-00	Toilet and Shower Partitions	0	41,700	41,700
10-28-00	Toilet & Bathroom Accessories	0	35,115	35,115
DIVISION 11 - EQUIPMENT		**0**	**0**	**0**

M R KELLY ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

CSI Summary

		Roof Replacement	Code Upgrades	Total Estimate
	Gross Area:	10,331 SF	4,149 SF	14,480 SF
DIVISION 12 - FURNISHINGS		**0**	**258,605**	**258,605**
12-30-00	Casework	0	258,605	258,605
DIVISION 13 - SPECIAL CONSTRUCTION		**35,000**	**0**	**35,000**
13-90-00	Unassigned	35,000	0	35,000
DIVISION 14 - CONVEYING SYSTEMS		**0**	**40,000**	**40,000**
14-40-00	Lifts	0	40,000	40,000
DIVISION 21 - FIRE SUPPRESSION		**0**	**0**	**0**
DIVISION 22 - PLUMBING		**47,250**	**216,300**	**263,550**
22-00-00	Plumbing	47,250	216,300	263,550
DIVISION 23 - HVAC		**23,200**	**30,000**	**53,200**
23-00-00	HVAC	23,200	30,000	53,200
DIVISION 26 - ELECTRICAL		**9,000**	**166,100**	**175,100**
26-00-00	Electrical	9,000	166,100	175,100
DIVISION 31 -EARTHWORK		**0**	**0**	**0**
DIVISION 32 -EXTERIOR IMPROVEMENTS		**0**	**0**	**0**
DIVISION 33 -UTILITIES		**0**	**0**	**0**
TOTAL DIRECT WORK		**$3,395,658**	**$1,620,255**	**$5,015,913**
MARKUPS		**854,837**	**407,890**	**1,262,727**
01-10-00	General Conditions and Project Requirements	611,218	291,646	902,864
01-20-00	Insurance, Bond	80,138	38,238	118,376
01-30-00	Permits	0	0	0
01-40-00	Prime Contractor's Head Office Overhead & Profit (Fee)	163,481	78,006	241,487
PLANNED CONSTRUCTION COST (June 2025)		**$4,250,495**	**$2,028,145**	**$6,278,640**
CONTINGENCIES/ESCALATION		**426,750**	**203,625**	**630,375**
50-10-00	Design Contingency	212,525	101,407	313,932
50-20-00	Construction Contingency	0	0	0
50-30-00	Escalation	214,225	102,218	316,443
ESTIMATED CONTRACT AWARD (June 2026)		**$4,677,245**	**$2,231,770**	**$6,909,015**

M R KELLY ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
45824

Filed Sub-Bid Summary

		Roof Replacement	Code Upgrades	Total Estimate
	Gross Area:	10,331 SF	4,149 SF	14,480 SF
04-10-00	**Masonry**	**0**	**202,358**	**202,358**
04-22-00	Concrete Masonry Units	0	202,358	202,358
05-50-00	**Miscellaneous Metals**	**29,250**	**87,350**	**116,600**
05-50-00	Metal Fabrications	29,250	13,200	42,450
05-60-00	Metal Rails and Handrails	0	74,150	74,150
07-10-00	**Waterproofing, Dampproofing & Caulking**	**309,420**	**11,652**	**321,072**
07-10-00	Dampproofing and Waterproofing	309,420	0	309,420
07-90-00	Joint Sealants	0	11,652	11,652
07-50-00	**Roofing**	**2,018,166**	**0**	**2,018,166**
07-50-00	Membrane Roofing	1,708,296	0	1,708,296
07-60-00	Flashing and Sheet Metal	309,870	0	309,870
08-10-00	**Windows**	**0**	**0**	**0**
08-80-00	**Glass and Glazing**	**0**	**0**	**0**
09-10-00	**Plaster**	**0**	**0**	**0**
09-30-00	**Tile**	**0**	**25,425**	**25,425**
09-30-00	Tiling	0	25,425	25,425
09-66-00	**Terrazzo**	**0**	**0**	**0**
09-51-00	**Acoustic Ceilings**	**0**	**7,245**	**7,245**
09-51-00	Acoustical Ceilings	0	7,245	7,245
09-65-00	**Resilient Flooring**	**0**	**0**	**0**
09-68-00	**Carpet**	**0**	**0**	**0**
09-90-00	**Painting**	**0**	**26,367**	**26,367**
09-90-00	Painting and Coating	0	26,367	26,367
14-20-00	**Conveying**	**0**	**0**	**0**
21-00-00	**Fire Protection**	**0**	**0**	**0**
22-00-00	**Plumbing**	**47,250**	**216,300**	**263,550**
22-00-00	Plumbing	47,250	216,300	263,550

M R KELLY ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
45824

Filed Sub-Bid Summary

		Gross Area:	***Roof Replacement*** *10,331 SF*	***Code Upgrades*** *4,149 SF*	***Total Estimate*** *14,480 SF*
23-00-00	***Hvac***		***23,200***	***30,000***	***53,200***
23-00-00	*HVAC*		*23,200*	*30,000*	*53,200*
26-00-00	***Electrical***		***9,000***	***166,100***	***175,100***
26-00-00	*Electrical*		*9,000*	*166,100*	*175,100*
TOTAL FILED SUB-BID WORK			***$2,436,286***	***$772,797***	***$3,209,083***

Schematic Design Submission Checklist
MSBA Accelerated Repair Program

District: _____

School: _____

Scope: _____

Schematic Design Deliverables:

OPM	District	
☐	☐	Project Narrative: - Existing conditions analysis (hazardous materials, structural, etc.) - Explanation of proposed solution - Designer statement that the proposed solution meets the Massachusetts Stretch Energy Code and/or the International Energy Conservation Code
☐	☐	Code Analysis
☐	☐	Schematic Design Drawings
☐	☐	Cost Estimate (CSI Format) - Include all Proposed Alternates
☐	☐	Form 3011 – Total Project Budget
☐	☐	Project Cash Flow (cumulative line chart illustrating Total Project Budget)
☐	☐	Project Schedule (Gantt Chart)
☐	☐	Accelerated Repair Program Reimbursement Rate Certification signed by the District
☐	☐	Proposed project scope and budget vote language in compliance with MSBA standard vote language

Program Guidelines and Project Funding Agreement:

OPM	District	
☐	☐	MSBA Board of Directors authorization to execute a Project Funding Agreement is tied to the specific project scope and budget presented in the Schematic Design.
☐	☐	The portion of the Construction Contingency potentially eligible for reimbursement is set at 5% of the total estimated eligible construction costs as included in the PFA's Total Project Budget and is intended for hard costs only. The MSBA will complete one Change Order review per district in which the MSBA will review Change Orders for eligibility not validity. All ineligible costs will not be reimbursed.
☐	☐	The portion of the Owner's Contingency potentially eligible for reimbursement is set at 0.5% of the total estimated eligible construction costs as included in the PFA's Total Project Budget and is intended for soft costs only. All ineligible costs will not be reimbursed.
☐	☐	Prior to securing project funding, the district will draft proposed project scope and budget vote language in compliance with MSBA standard vote language and will provide the vote language to the MSBA for review and approval prior to taking the vote.
☐	☐	After bids have been received and actual construction costs are established, the district's potential Project Funding Agreement must be revised to reflect the actual construction costs in accordance with paragraph 2.3 of the Project Funding Agreement. If there are bid savings, the MSBA shares in the cost savings by reducing the maximum facilities grant to reflect reimbursable costs. If there is a bid overage, construction contingency is transferred to the construction budget to reflect the additional costs and is deemed ineligible. The transfer of construction contingency due to the bid overage results in a reduction to the maximum facilities grant.
☐	☐	MSBA's standardized Schedule of Values will be used by the district to ensure that all budget entries in the MSBA's ProPay system mirror the Total Project Budget Form 3011 following the PFA Bid Amendment. The MSBA will only reimburse eligible costs if they are entered to the correct cost codes in the Total Project Budget.
☐	☐	Budget Revision Requests will be submitted by the district in a timely manner to reflect changes to the Total Project Budget. After a Budget Revision Request is executed, the district will enter the Budget Revision Request into the ProPay system for approval by the MSBA.

☐	☐	MSBA's Audit Department will review requests for reimbursement in the ProPay system of $50,000 or more. All reimbursement requests which are less than $50,000 will be returned to the district without review. All districts are encouraged to attend ProPay training conducted by the Audit Department following the execution of a Project Funding Agreement.
☐	☐	OPM monthly reporting begins when the OPM contract is executed and continues until the project receives Board of Directors approval of the final audit. Failure to submit timely and complete reports may impact district reimbursement review and payment. OPM monthly reporting supports MSBA review of reimbursement requests.

I certify, as evidenced by the boxes set forth under the heading, "Schematic Design Deliverables," which I have checked above, that I have fulfilled all requirements described in Section 8.2 of the MSBA Standard Contract for Project Management Services (Accelerated Repair Program) by submitting the listed deliverables by the established deadline to the MSBA. I further certify, as evidenced by the boxes set forth under the heading, "Program Guidelines and Project Funding Agreement," which I have checked above, that I have explained the Program Guidelines and Project Funding Agreement to the district.

I understand that if a conflict is created between this form and the Project Funding Agreement, the Project Funding Agreement is the controlling document. I also understand that if a conflict is created between this form and the MSBA Standard Contract for Project Management Services (Accelerated Repair Program), the MSBA Standard Contract is the controlling document. I further recognize that the purpose of this form is to further understand the Project Funding Agreement and the MSBA Standard Contract for Project Management Services (Accelerated Repair Program).

_____

Title: Project Director, Owner's Project Manager
Firm:
Date:

I certify, as evidenced by the boxes set forth under the heading, "Program Guidelines and Project Funding Agreement," which I have checked above, that I have read and understand the Program Guidelines and Project Funding Agreement. I certify, as evidenced by the boxes set forth under the heading, "Schematic Design Deliverables," which I have checked above, that I have reviewed the enumerated deliverables within the Schematic Design Submittal with the Owner's Project Manager and Designer. I further

certify, as evidenced by the boxes set forth under the heading, "Schematic Design Deliverables," which I have checked above, that the OPM has explained to me the OPM's responsibilities as described in Section 8.2 of the MSBA Standard Contract for Project Management Services (Accelerated Repair Program) to submit the designer's deliverables listed above.

I understand that if a conflict is created between this form and the Project Funding Agreement, the Project Funding Agreement is the controlling document. I also understand that if a conflict is created between this form and the MSBA Standard Contract for Project Management Services (Accelerated Repair Program), the MSBA Standard Contract is the controlling document. I further recognize that the purpose of this form is to further understand the Project Funding Agreement and the MSBA Standard Contract for Project Management Services (Accelerated Repair Program).

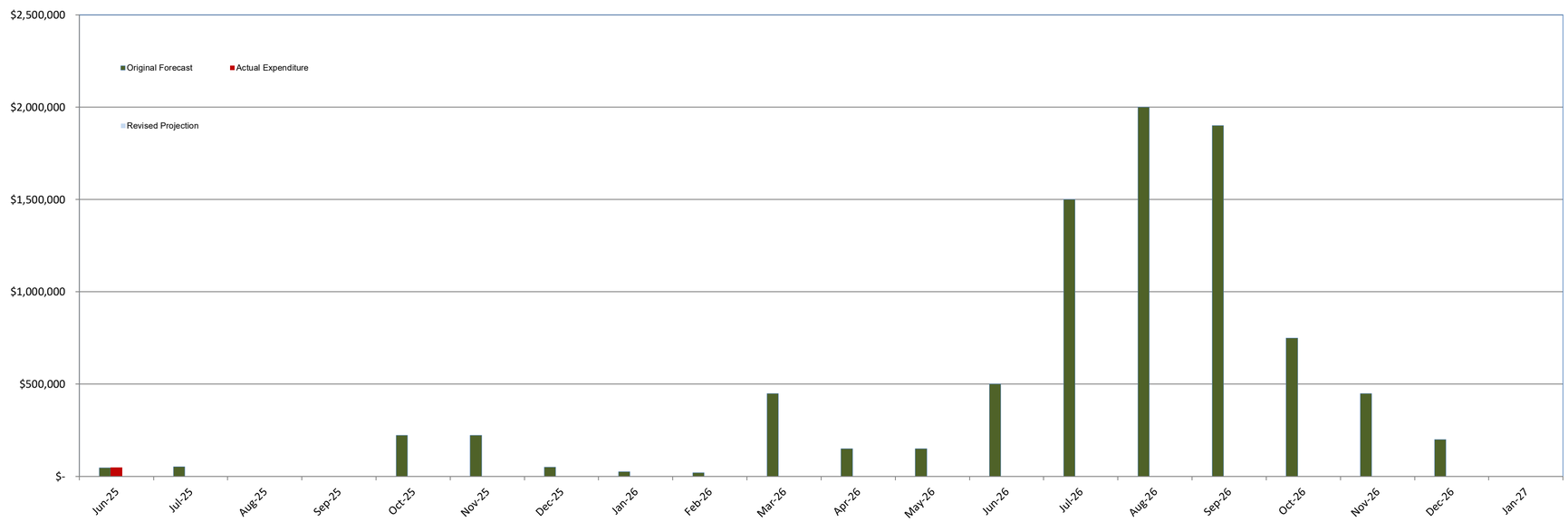
_____

Title: Superintendent of Schools
Date:

Kelly Elementary School Roof Replacement

Monthly Cash Flow	July 1, 2025		
Date	Original Forecast	Actual Expenditure	Revised Projection
Jun-25	$ 47,500	$ 47,500	
Jul-25	$ 52,500	$ -	
Aug-25	$ -	$ -	
Sep-25	$ -	$ -	
Oct-25	$ 223,089	$ -	
Nov-25	$ 223,088	$ -	
Dec-25	$ 49,849	$ -	
Jan-26	$ 25,000	$ -	
Feb-26	$ 20,000	$ -	
Mar-26	$ 450,000	$ -	
Apr-26	$ 150,000	$ -	
May-26	$ 150,000	$ -	
Jun-26	$ 500,000	$ -	
Jul-26	$ 1,500,000	$ -	
Aug-26	$ 2,000,000	$ -	
Sep-26	$ 1,900,000	$ -	
Oct-26	$ 750,000	$ -	
Nov-26	$ 450,000	$ -	
Dec-26	$ 200,379	$ -	
Jan-27	$ -	$ -	
Total	$ 8,691,405	$ 47,500	$ -

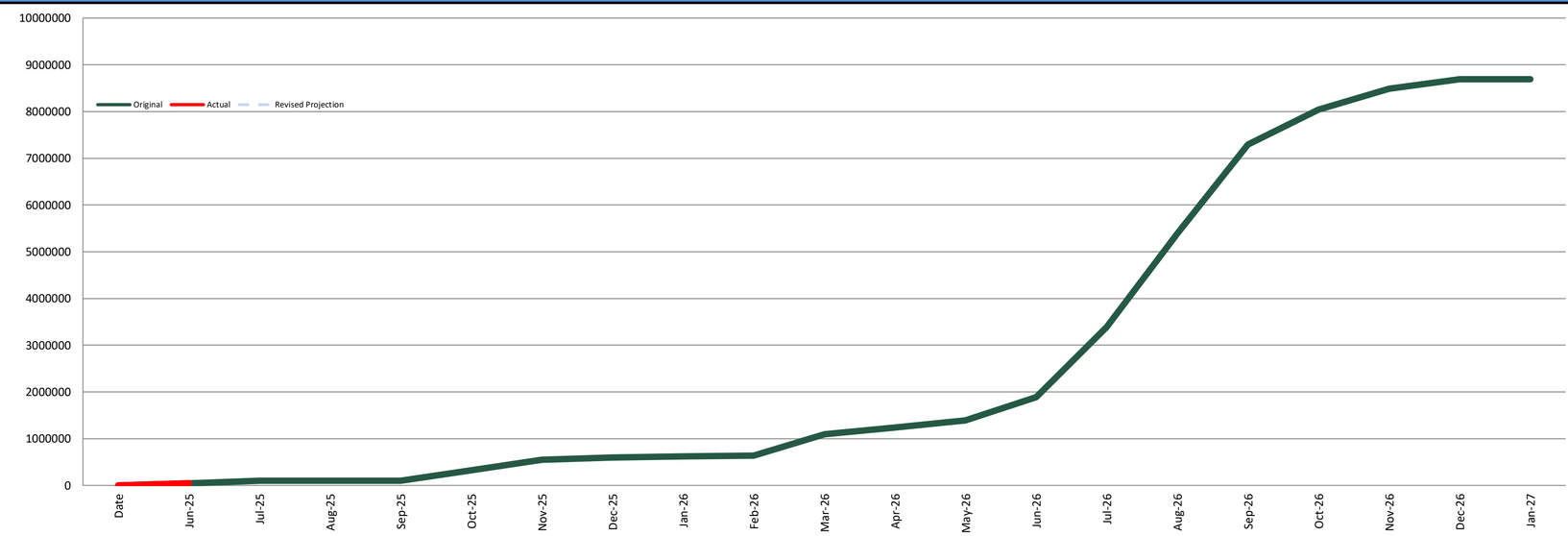
Projected Cash Flow Forecast



Kelly Elementary School Roof Replacement

Cumulative Cash Flow	July 1, 2025		
Date	Original Forecast	Actual Expenditure	Revised Projection
Jun-25	$ 47,500	$ 47,500	
Jul-25	$ 100,000		
Aug-25	$ 100,000		
Sep-25	$ 100,000		
Oct-25	$ 323,089		
Nov-25	$ 546,177		
Dec-25	$ 596,026		
Jan-26	$ 621,026		
Feb-26	$ 641,026		
Mar-26	$ 1,091,026		
Apr-26	$ 1,241,026		
May-26	$ 1,391,026		
Jun-26	$ 1,891,026		
Jul-26	$ 3,391,026		
Aug-26	$ 5,391,026		
Sep-26	$ 7,291,026		
Oct-26	$ 8,041,026		
Nov-26	$ 8,491,026		
Dec-26	$ 8,691,405		
Jan-27	$ 8,691,405		

Projected Cash Flow Forecast



Total Project Budget

City of Holyoke — **8/20/2025**

Lt. Elmer J. McMahon Elementary — **MSBA ID:** 202401370015

	Total Project Budget: All costs associated with the project are subject to 963 CMR 2.17(5)	Estimated Budget	Scope Items Excluded from the Basis of Estimated Total Facilities Grant or Otherwise Ineligible	Basis of Estimated Total Facilities Grant[1]	Estimated Maximum Total Facilities Grant[1]
	Feasibility Study Agreement				
1	*OPM Feasibility Study*	$5,000		$5,000	
2	*A&E Feasibility Study*	$60,000		$60,000	
3	*Env. & Site*			$0	
4	*Other*			$0	
5	**Feasibility Study Agreement Subtotal**	**$65,000**	**$0**	**$65,000**	**$52,000**
	Administration				
6	**Legal Fees**			$0	**$0**
	Owner's Project Manager				
7	*Design Development*			$0	
8	*Construction Contract Documents*	$25,990		$25,990	
9	*Bidding*	$17,327		$17,327	
10	*Construction Contract Administration*	$112,625		$112,625	
11	*Closeout*	$17,327		$17,327	
12	*Extra Services*			$0	
13	*Reimbursable & Other Services*			$0	
14	*Cost Estimates*			$0	
15	**Advertising**	$5,000		$5,000	
16	**Permitting**			$0	
17	**Owner's Insurance**			$0	
18	**Other Administrative Costs**			$0	
19	**Administration Subtotal**	**$178,269**	**$0**	**$178,269**	**$142,615**
	Architecture and Engineering				
20	**Basic Services**				
21	*Design Development*			$0	
22	*Construction Contract Documents*	$195,664		$195,664	
23	*Bidding*	$7,827		$7,827	
24	*Construction Contract Administration*	$52,177		$52,177	
25	*Closeout*	$5,218		$5,218	
26	*Other Basic Services*			$0	
27	**Basic Services Subtotal**	**$260,886**	**$0**	**$260,886**	
	Reimbursable Services				
28	*Construction testing*	$7,500		$7,500	
29	*Printing (over minimum)*	$5,000		$5,000	
30	*Other Reimbursable Costs*	$7,500		$7,500	
31	*Hazardous Materials*			$0	
32	*Geotech & Geo-Env.*			$0	
33	*Site Survey*			$0	
34	*Wetlands*			$0	
35	*Traffic Studies*			$0	
36	**Architectural/Engineering Subtotal**	**$280,886**	**$0**	**$280,886**	**$224,709**
	CM & Risk Preconstruction Services				
37	Pre-Construction Services			$0	**$0**
	Site Acquisition				
38	Land/Building Purchase			$0	
39	Appraisal Fees			$0	
40	Recording fees			$0	
41	**Site Acquisition Subtotal**	**$0**	**$0**	**$0**	**$0**
	Construction Costs				
42	Construction Budget				
43	GMP Fee				
44	GMP Insurance				
45	GMP Contingency				
46	Division 1 - General Requirements	$976,933			
47	Division 2 - Existing Conditions	$459,652			
48	Division 3 - Concrete	$0			
49	Division 4 - Masonry	$134,944			
50	Division 5 - Metals	$40,650			
51	Division 6 - Woods, Plastics and Composites	$15,968			
52	Division 7 - Thermal and Moisture Protection	$1,268,516			
53	Division 8 - Openings	$122,550			
54	Division 9 - Finishes	$238,166			
55	Division 10 - Specialities	$20,149			
56	Division 11 - Equipment	$0			
57	Division 12 - Furnishings	$23,060			
58	Division 13 - Special Construction	$35,000			
59	Division 14 - Conveying Systems	$40,000			
60	Division 21 - Fire Suppression	$0			
61	Division 22 - Plumbing	$73,550			
62	Division 23 - HVAC	$37,750			
63	Division 25 - Integrated Automation	$0			
64	Division 26 - Electrical	$78,500			
65	Division 27 - Communications	$0			
66	Division 28 - Electronic Safety and Security	$0			
67	Division 31 - Earthwork	$0			
68	Division 32 - Exterior Improvements	$0			
69	Division 33 - Utilities				
70	**Construction Budget**	**$3,565,388**	**$0**	**$3,565,388**	**$2,852,310**

Cells highlighted in yellow include equations established for the calculation of the project's Maximum Total Facilities Grant and for the analysis of the project's budget. The equations in the highlighted cells should not be changed.

OPM:	**PCA 360**
Designer:	**Mount Vernon Group Architects, Inc.**
Cost Estimator:	**Fennessy Consulting Services**
Scope:	**Roof**

Table 1.

Soft Cost Exclusion for Spaces Ineligible per Regulations or Scope Outside of ARP
(apply exclusion percentage to soft cost budget lines if applicable)

Total Construction Budget Costs	$3,565,388
Applicable Ineligible Budget Costs	
Ratio for Soft Cost Exclusions	0.00%

Table 2.

Consultant Fee Table - for Informational Use Only

	Construction Budget	$3,565,388		
OPM Services		Eligible Fees	Total % of Constr	OPM Fee @ 10.00%
Basic Services	$178,269	$178,269	5.00%	$356,539
Extra Services	$0		0.00%	
Designer Services		Eligible Fees	Total % of Constr	Dsgr Fee @ 15.00%
Basic Services	$320,886	$320,886	9.00%	$534,808
Extra Services	$20,000		0.56%	

Table 3.

Board Memo - Cost Breakdown by Scope — mark-up %

	Windows	Marked up Cost	Roof	Marked up Cost	Solar Readiness	Marked up Cost	ADA	Marked up Cost	Other/Misc. Scope	Marked
Div 2		$0	$422,692	$582,224		$0	$36,960	$50,909		
Div 3		$0		$0		$0		$0		
Div 4		$0	$0	$0		$0	$134,944	$185,874		
Div 5		$0	$25,650	$35,331		$0	$15,000	$20,661		
Div 6		$0	$808	$1,113		$0	$15,160	$20,882		
Div 7		$0	$1,263,816	$1,740,805		$0	$4,700	$6,474		
Div 8		$0	$4,500	$6,198		$0	$118,050	$162,604		
Div 9		$0	$188,971	$260,292		$0	$49,195	$67,762		
Div 10		$0		$0		$0	$20,149	$27,754		
Div 11		$0		$0		$0		$0		
Div 12		$0		$0		$0	$23,060	$31,763		
Div 13		$0	$35,000	$48,210		$0		$0		
Div 14		$0		$0		$0	$40,000	$55,097		
Div 21		$0		$0		$0		$0		
Div 22		$0	$20,250	$27,893		$0	$53,300	$73,416		
Div 23		$0	$12,750	$17,562		$0	$25,000	$34,435		
Div 25		$0		$0		$0		$0		
Div 26		$0		$0		$0	$78,500	$108,127		
Div 27		$0		$0		$0		$0		
Div 28		$0		$0		$0		$0		
Div 31		$0		$0		$0		$0		
Div 32		$0		$0		$0		$0		
Div 33		$0		$0		$0		$0		
Totals	$0	$0	$1,974,437	$2,719,628	$0	$0	$614,018	$845,760	$0	

Total construction budget

Table 4.

Mark-up Exclusion (Div. 1)

Mark-up Calculation =	37.74%
Ineligible Scope =	
Ineligible Mark-up =	$0

Table 5.

Potentially Eligible Roof Costs

Marked-Up Roof Replacement Costs =	$2,719,628
Ineligible Roof Replacement Costs (w/ mark-up) =	$0
Potentially Eligible Roof Replacement Costs =	$2,719,628

Table 6.

Budget Exclusion for Roof Scope That Doesn't Meet Age Req'ts or Spaces Ineligible per Regulations
2024 ARP: Roofs < 25 years old

Total Roof Area =	51,325 sf
Area of Ineligible Roof =	sf
Ineligible Roof Area/Total Roof Area =	0.00%
Potentially Eligible Roof Costs =	$2,719,628
Exclusion for Roof Service Life/Ineligible Spaces =	$0

Table 7.

Total Roof Cost Cap Exclusion (Div. 7)

51,325	eligible sq.ft
$100.00	/sq.ft roof cost cap
$5,132,500	Total eligible roof cost cap
$2,719,628	Revised Potentially Eligible Roof Costs

Building Value	30%	ADA (Y/N)
$5,135,000	$1,540,500	ADA Work

Table 8.

Alternates Tracking Table

Alternate Number	Alternate Description	Estimated Budget	Scope Items Ineligible
Alternates Included in the Total Project Budget			
Alt. 1			
Alt. 2			
Alt. 3			
Alternates Excluded from the Total Project Budget			
Alt. 1			
Alt. 2			
Alt. 3			

Total Project Budget

	project are subject to 963 CMR 2.17(5)	Estimated Budget	Estimated Total Facilities Grant or Otherwise Ineligible	Grant[1]	Total Facilities Grant[1]
	Alternates (see Table 8)				
72	*Alternates Included in the Total Project Budget*	$0	$0	$0	
73	*Alternates Excluded from the Total Project Budget*	$0	$0	$0	
74	**Alternates Subtotal[3]**	**$0**	**$0**	**$0**	**$0**
	Miscellaneous Project Costs				
75	*Utility company Fees*			$0	
76	*Testing Services*			$0	
77	*Swing Space/Modulars*			$0	
78	*Other Project Costs (Mailing & Moving)*			$0	
79	**Misc. Project Costs Subtotal**	**$0**	**$0**	**$0**	**$0**
	Furnishings and Equipment				
80	*Furnishings*			$0	
81	*Equipment*			$0	
82	*Computer Equipment*			$0	
83	**FF&E Subtotal**	**$0**	**$0**	**$0**	**$0**
84	**Project Budget**	**$4,089,543**	**$0**	**$4,089,543**	**$3,271,634**

	Board Authorization	
85	Project Budget (excluding Contingencies)	$4,089,543
86	Scope Items Excluded or Otherwise Ineligible	$0
87	Third Party Funding (Ineligible)	$0
88	Basis of Estimated Total Facilities Grant[1, 3]	$4,089,543
89	Reimbursement Rate	80.00%
90	Estimated Maximum Total Facilities Grant[1]	$3,271,634

91	Total Construction Contingency[2]	$356,539
92	Ineligible Construction Contingency[2]	$178,270
93	Potentially Eligible Construction Contingency[2]	$178,269
94	Total Owner's Contingency[2]	$52,416
95	Ineligible Owner's Contingency[2]	$34,589
96	Potentially Eligible Owner's Contingency[2]	$17,827
97	Total Construction and Owner's Contingency[2]	$408,955
98	Total Ineligible Contingency[2]	$212,859
99	Total Potentially Eligible Contingency[2]	$196,096
100	Reimbursement Rate	80.00%
101	Potential Additional Contingency Grant Funds[2]	$156,877
102	Maximum Total Facilities Grant	$3,428,511
103	Total Project Budget	$4,498,498

Table 10.

Contingency Cap Calculations	
Eligible Construction Budget	$3,565,388
Eligible Constr Cont Cap @ 5%	$178,269
Eligible Construction Budget	$3,565,388
Eligible Owner's Cont Cap @ 0.5%	$17,827

Cost Estimator:	**Fennessy Consulting Services**
Scope:	**Roof**
($2,412,872)	Roof Cap Exclusion (negative indicates no exclusion)

Table 9.

Soft Cost Reimbursement (Calculates Soft Cost Exclusion Cap if necessary)

Est'd Budget	Excluded	Eligible Soft Costs	Category
$183,269	$0	$183,269	-Administration
$340,886	$0	$340,886	-A/E Services
	Ineligible therefore not included in calculation		-Site Acquisition
$0	$0	$0	-Miscellaneous Proj Costs
$0	$0	$0	-FFE
$52,416	$34,589	$17,827	-Potentially Eligible Owner's Contingency
		$541,982	**Total Eligible Soft Costs**

Construction Costs associated with Soft Cost Cap Calculation

Est'd Eligible Budget	Eligible Constr. Costs	Category
$0	$0	-CM Preconstruction services
$3,565,388	$3,565,388	-Construction Cost
	Not included in this calculation	-Construction Contingency
	$3,565,388	**Total Eligible Construction Cost**
	20%	**Soft Cost Allowance**
	$713,078	**Reimbursable Soft Cost**

-If Eligible minus Reimbursable is negative, then no exclusion is applied.
-If Eligible minus Reimbursable is positive, then reduce Potentially Eligible Owner's Contingency until 0. If Eligible minus Reimbursable remains positive, then distribute the remaining exclusion to non-basic service soft cost budget lines. If exclusion remains, apply to basic service lines. When applying the exclusion to budget lines in column D, please highlight cells in purple (same as K109).

	-$171,096	**Eligible minus Reimbursable**
Step 1.		**20% Soft Cost Exclusion** (hard-key value from K108 if positive)
		Reduce Eligible Owner's Contingency until $0:
	$17,827	**Eligible Owner's Contingency Cap (for reference from Table 10)**
Step 2.	$0	**Reduce Eligible Owner's Contingency due to Soft Cost Exclusion**
Step 3.	$0	**Remaining Soft Cost Cap**
		If remaining soft cost cap (cell K113 > $0), deduct from soft cost budget lines:
	$0	**Should = $0**

104 This document was prepared by the MSBA based on a preliminary review of information and estimates provided by the Owner's Project Manager of (District) for the (School) project. Based on this preliminary review, certain budget, cost and scope items have been determined to be ineligible for reimbursement, however, this document does not contain a final, exhaustive list of all budget, cost and scope items which may be ineligible for reimbursement by the MSBA. Nor is it intended to be a final determination of which budget, cost and scope items may be eligible for reimbursement by the MSBA. All project budget, cost and scope items shall be subject to review and audit by the Authority, and the Authority shall determine, in its sole discretion whether any such budget, cost and scope items are eligible for reimbursement. The MSBA may determine that certain additional budget, cost and scope items are ineligible for reimbursement.

105 1. The estimated maximum facilities grant established for the Project Funding Agreement does not include any potentially eligible contingency funds and is subject to review and audit by the MSBA. At the time of PFA Bid Amendment, the Estimated Maximum Facilities Grant and the Maximum Total Facilities Grant will be adjusted to account for any budget revision requests submitted and approved by the MSBA at the time of establishing the Amendment.

106 2. Pursuant to Section 3.20 of the Project Funding Agreement and the applicable policies and guidelines of the Authority, any project costs associated with the reallocation or transfer of funds from either the Owner's contingency or the Construction contingency to other budget line items shall be subject to review by the Authority to determine whether any such costs are eligible for reimbursement by the Authority. All costs are subject to review and audit by the MSBA.

107 3. The Alternate Subtotal budget line represents the scope of work that the District may bid as an alternate to the construction contract. When an alternate increases project scope (an "add" alternate), the amount of the alternate is not included within the Construction Budget. By contrast, when an alternate decreases project scope (a "deduct" alternate), the amount is included within the Construction Budget.

LT. ELMER J. MCMAHON ELEMENTARY SCHOOL
CITY OF HOLYOKE

ROOF REPLACEMENT PROJECT

SCHEMATIC DESIGN DOCUMENT SUBMISSION

JUNE 26, 2025

Massachusetts School Building Authority
Funding Affordable, Sustainable, and Efficient Schools in Partnership with Local Communities

PCA360

MVG
MOUNT VERNON GROUP ARCHITECTS

TABLE OF CONTENTS

Module	Description	Tab
SD-1	**Project Narratives**	
	• Existing Conditions Assessment	1.1
	• Plumbing Report	1.2
	• Structural Analysis	1.3
	• Hazardous Materials Report	1.4
	• HVAC Report	1.5
	• Proposed Recommendations and Certification	1.6
	• CMR 521 Accessibility Upgrades Review	1.7
SD-2	**Code Analysis**	
	• Code Analysis Narrative	2.1
SD-3	**Schematic Design Drawings**	
	• Existing Roof Plan, Photos, Proposed Roof Plan	3.1
SD-4	**Cost Estimate**	
	• Designer Cost Estimate	4.1
SD-5	**Total Project Budget**	
	• Form 3011 – Project Budget	5.1
SD-6	**Project Cash Flow**	
	• District Project Cash Flow	6.1
SD-7	**Project Schedule**	
	• OPM Project Schedule	7.1
SD-8	**Project Reimbursement Rate**	
	• Reimbursement Rate Certification	8.1
SD-9	**Project Scope and Budget Vote Language**	
	• Project Scope and Budget Vote Language	9.1

SD-10 **Schematic Design checklist**

- Schematic Design Submission Checklist 10.1

SD-1 **Project Narratives**

1.1 Existing Conditions Assessment

The design team made site visits on April 16, and May 8 & 12, 2025 to review, document and assess the existing conditions of the existing roof areas. The roof is comprised of 4 different roof areas on 4 separate but adjacent roof levels approximately 51,325 square feet in area. The upper roof section is comprised of four folding type 2:12 sloped roof sections with scuppers in the valleys that drain on to the low flat roof areas below. The building sits on a flat site with roof elevations ranging from 11' on the low side to 13' on the high side above the adjacent grade.

The building was originally constructed in 1960 with a gravel-surfaced built-up gravel roof system over a 1.5" thick metal deck. A 14,422 SF addition was installed (estimated construction in 1970's) to the north side after the original construction along a 194 SF freezer addition (constructed in 1916) on the east side. The current roofing system on the 1960 building consists of a Sarnafil PVC roof membrane mechanically attached to the structural deck within membrane laps with fasteners/plates spaced on approximate 6-inch centers. The addition's roof membrane is the same PVC membrane as the 1960 building; however, its insulation assembly consists of only one layer of 2-inch rigid insulation rather than two layers. Typical membrane width within field: 6 feet. Two side-by-side "half" or 3-foot-wide sheets are installed at perimeters and corners.

Field measurements were taken to determine the overall area of all the different roof sections, as well as the location, size and type of equipment that either penetrated or rested on the roof. Photos were taken of existing conditions to identify areas of deficiency such as roof membrane damage, water ponding, inadequate slope to drains, roof penetration seals and flashings conditions, and possible specialty conditions that require remedial work to accommodate the new roof system. Also, to identify equipment to be removed that may have been abandoned in place during or after the last re-roof work took place.

A structural analysis of the existing structure also took place through the examination of existing drawings where available, visual inspections, and confirmation of built conditions. (See also the Structural Code Review report for additional information contained in this submission in section 1.3)

Testing for asbestos containing materials was performed as part of the roof inspections. Samples were taken from several locations in the roof system and at typical flashing locations and sent to the lab for analysis to determine the potential existence of asbestos. (See also the report for asbestos containing materials for additional information contained in this submission in section 1.4)

Observations

- The overall roof membrane appears to be in fair condition, with areas of ponding observed and documented.
- The overall roof appeared to be spongy in some areas, indicating a breakdown in insulation or presence of moisture.
- The existing roof insulation is not consistent across the roofs with thickness of 2-inches in areas and 4-inches in others.

- The roof deck of the 1960 building is sloped positively at 1/8 inch per foot from the perimeter to bearing walls either side of corridors. Deck over corridors is flat with roof drains installed within the flat deck area.
- Tapered insulation/crickets not installed between roof drains over flat corridor areas on the 1960 building.
- The addition's roof deck is flat with internal roof drains.
- Additional roof drains may be required to meet the updated rainfall drainage requirements.
- Based on the lack of roof insulation to meet the current energy code, most of the rooftop equipment, ladders, curbs, electrical conduit, rising walls, and roof vents will need to be adjusted and/or raised.
- Several existing skylights with safety cages should be raised to accommodate thicker roof insulation.
- Some of the middle sized and smaller mechanical equipment sit on wood blocking that is not attached to the roof structure or roof deck. This equipment will have to be removed prior to work commencing and then reinstalled on mechanical roof curbs when the roof is complete.
- The larger mechanical roof equipment and miscellaneous exhaust fans sit on adequate curbs. Most exhaust fan curbs may need to be replaced with new ones to keep them above potential snow levels.
- Vandal resistant plumbing vent stacks are below minimal 18-inch height above the existing roof and will require extensions.
- The roof access ladder has an electrical conduit running in front of it that reduces the ladder clear opening depth to 20-inches creating a safety hazard. It should be relocated to meet code clearance requirements.
- A masonry chimney was observed having cracked and spalled concrete chimney cap as well as efflorescence. This should be repaired and/or covered as part of the reroofing project to prevent further deterioration.
- The drop off canopy at the front of the school has a gutter on one side, but the roof doesn't appear to slope towards it.
- Three ships ladders are recommended for safe access from the 1960 building to the addition, from the addition's upper roof to its lower roof, and from the addition to the 1960 building's folded roof.
- Fall protection was not provided surrounding interior courtyard and mechanical equipment within 10 feet of roof perimeter.

- Per 521 CMR 5.00 the estimated roof replacement costs do not exceed 30% of the assessed value of the building so ADA upgrades have not been considered at this school.
- MSBA requires the school roof to be assessed for solar readiness. The structure and electrical will be reviewed for solar compatibility.

Overall, the existing roof system has reached its lifespan and needs replacement. Also, refer section 3.1 of this submission containing to the Existing Roof Plan A1.01, Existing Conditions Photos A1.02 & A1.03 and Proposed Roof Plan A1.04 for additional information. See section 1.5 of this submission for the proposed recommendations.

Existing Plumbing Conditions Assessment

C.A. Crowley Engineering Inc made a visit to the site on May 21, 2025 to determine the location, type and condition of existing roof drains and plumbing vents throughout. The roof is comprised of 4 different roof areas on 4 separate but adjacent roof levels approximately 51,325 square feet in area.

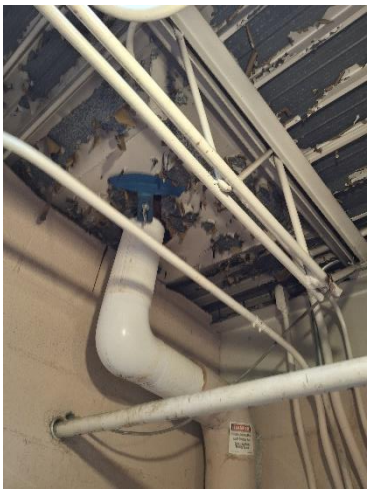
The building was originally constructed in 1960.

Plumbing Observations

The existing rooftop plumbing components at Holyoke McMahon Elementary School consists of the following: Roof drains, and sanitary vents.

Roof Drains:

The roof drains appear to be have been installed during the original construction of the building and are in good condition. They comprise of multiple different types and sizes. Piping is assumed to be cast iron, yet could not be observed due to insulation covering the piping. The insulation appears to be a combination on fiberglass, and ACM (asbestos containing material).



Example 1: Roof drain piping w/glass and ACM insulation.

Example 2: Typical Roof Drain

The roof drain system, with the exception of one area, appears to be in good working order. One area, on the far end of the addition, appears to have a clog in the storm piping system, causing three roof drains to not drain, and creating ponding on the roof.

Example 3: Roof drain tied to piping with clog

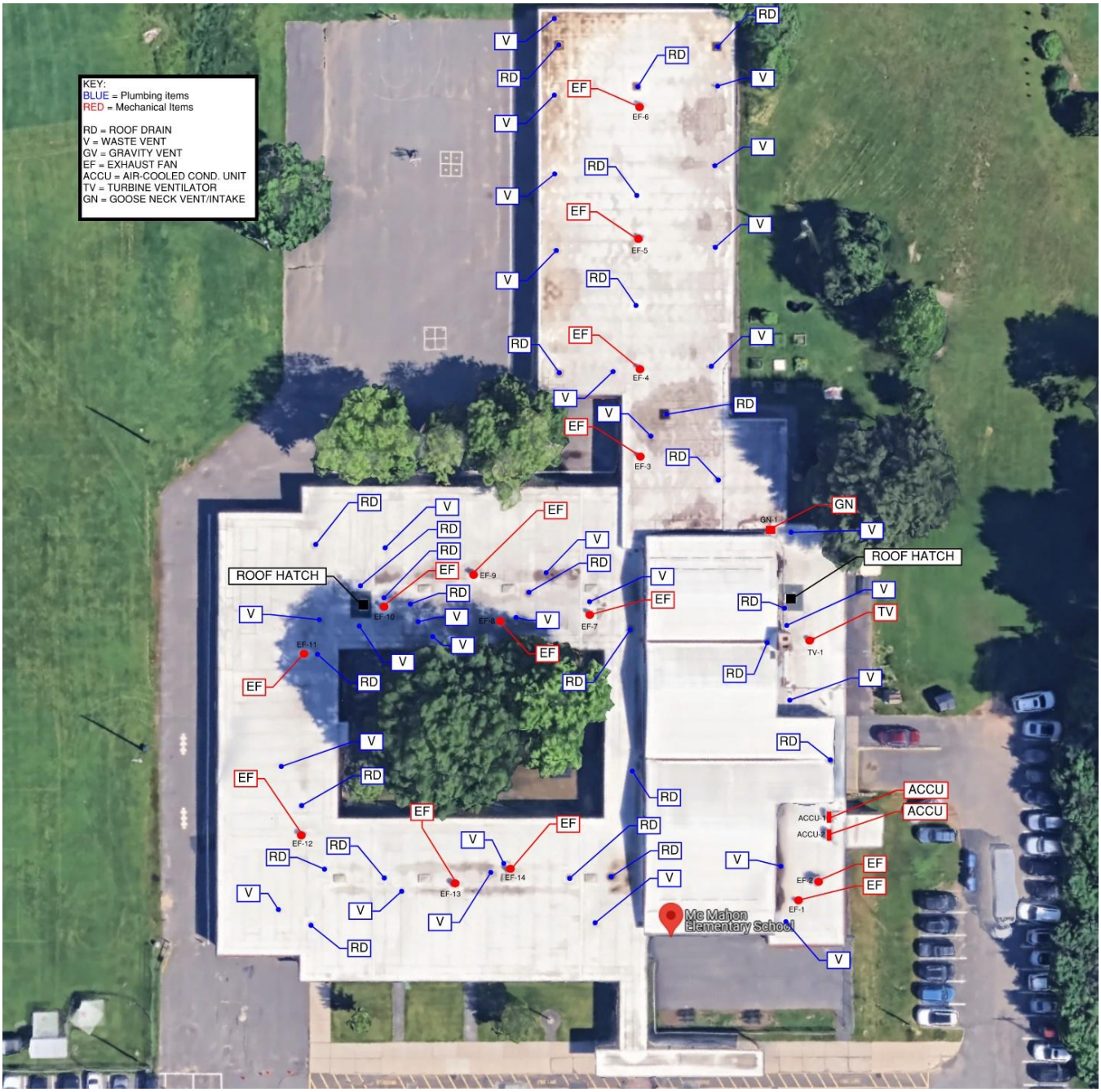
Example 4: Roof drain tied to piping with clog

Plumbing vents:

Throughout the roof areas, there are several plumbing sanitary vents. The vents appear to be in good condition.

Rooftop Equipment Map

On the following page is a rooftop map of equipment found on the roof during our site investigation for reference.



Plumbing Recommendations:

Roof drains:

The roof drains should be removed and replaced with new, to accommodate the proposed roof replacement.

In the area of ponding, due to clogged drain pipes, the piping should be cleared of any clogs.

All ACM insulation should be abated.

Plumbing Vents:

The existing plumbing vents are in good condition, yet should be cut to below the roof and a new pipe be installed, of same size, through the roof to a height of 18" above the roof. This is to accommodate the proposed roof replacement and added insulation on the roof.

S T & P

SOUZA, TRUE
AND PARTNERS, INC.
STRUCTURAL ENGINEERS

1 Cranberry Hill, Suite 301
Lexington, Massachusetts 02421
souzatrue@souzatrue.com
(617) 926-6100

TERRY A. LOUDERBACK, PE
JEROME A. YURKOSKI, PE
LISA A. BOHLIN, PE
TODD P. BLAKE, PE
CHRIS M. MOTTO, PE
MARTIN F. FINN, PE

June 18, 2025

Mount Vernon Group Architects, Inc.
1350 Main Street, Suite 1110
Springfield, MA 01103

Attention: Mr. John Landry

Reference: Roof Replacement Project Structural Impact
McMahon Elementary School
Holyoke, Massachusetts

Dear Mr. Landry:

At your request, we have completed our review of the existing structural documentation to determine if the existing structure can accommodate the proposed new roof system and to determine if the project will require other Code required structural upgrades to the existing building. As part of this exercise, we reviewed the existing roof structural framing to support new PV arrays.

We did not visit the existing building as a condition assessment was not warranted. Our understanding of most of the existing structure is based on the information provided in the original existing structural design documents completed by Alderman & MacNeish Architects and Engineers in the drawings entitled, “Elementary School, Kane Tract, Jackson Road & Homestead Avenue, Holyoke, Massachusetts” dated May 16, 1960, along with the existing structural design documents for the addition completed by Caolo & Bieniek Associates, Inc. These drawings are untitled and undated, but it is presumed that this addition was built soon after the original building was constructed no earlier than 1961 as this is the first year “H” series joists were used in construction.

Our conclusions and recommendations regarding the structure are based on our review of the existing listed structural documentation, or provided information, only. We did not complete any specific probes or lab tests on the building.

General Roof Framing Construction

The McMahon Elementary School is a one-story building. The original building includes classrooms, a gymnasium, and a cafeteria. The addition includes additional classrooms and the library.

Roof framing is consistent throughout the facility and consists of open web steel joists generally at a 4'-0" or 4'-6" spacing supported by steel wide flange beams or masonry bearing walls. Steel beams are supported by a combination of tubular steel columns.

Proposed Renovations and Alterations

It is our understanding that this is a roof replacement project only and will be considered a Level 1 alternation in accordance with Chapter 7 of the 2021 International Building Code along with the amendments defined in Chapter 34 of the 10th Edition Massachusetts State Building Code.

There is no new structural work included in the scope of work (such as new mechanical units, new openings, etc.). However, roof replacement projects specifically require certain specific structural evaluations as noted below.

Existing Roof Gravity Elements to support the New Roof

We understand the current roofing system consists of the following:

40-60 mil TPO membrane	0.3 psf
3" (ave) Insulation	4.5 psf
Existing Steel Deck	3.0 psf
Total Weight	7.8 psf

The proposed new roofing system will consist of the following:

80 mil PVC membrane	0.5 psf
½" gypsum coverboard	2.0 psf
6" Sika RMAX Polyiso insulation	1.0 psf
Existing Steel Deck	3.0 psf
Total Weight	6.5 psf

Furthermore, per sheet S-1 of the original drawings, the roof joist and beam framing were designed for a total load of 58 psf (min) which includes 40 psf of roof live (or snow load) and a 8 psf collateral dead for services.

Sheet S-1 of the addition notes the joists and beam framing were designed for a total load of 51 psf which includes 40 psf of roof live load (or snow load) and a 1 psf collateral dead for services. 1 psf collateral dead load appears light. For our calculations, we will use the same 8 psf for collateral dead load for both the original building and the addition.

Per the Massachusetts State Building Code (10th Edition), the design snow load for Holyoke, MA is now 35 psf.

Therefore, the new total load to be placed on the roofs is 6.5 psf + 8 psf + 35 psf = 49.5 psf.

The result of the new roof configuration in both cases results is a net **reduction** to the total load to be supported by the structural members at the roof.

Per Section 706.2 (Addition or replacement of roofing or replacement of equipment), existing structural members where the additional dead load from the roofing does not increase the force in the element by more than 5% are exempt from having to comply with the gravity load requirements of the International Building Code.

Therefore, the structural roof framing for the original building and the addition complies with the Code to support the new proposed roof system.

Masonry Parapets

Per Section 706.3.1 (Bracing for unreinforced masonry bearing wall parapets), existing unreinforced masonry parapets must be braced if the roof is reroofed and if the structure will be assigned to Seismic Design Category D, E, or F.

Based on a Soil Profile Type of D (assumed), the S_{ds} and S_{d1} values will be 0.177 and 0.088 respectively placing this structure is Seismic Design Category B.

As a result, the existing masonry parapets are not required to be reviewed to determine if additional bracing is required.

Roof Diaphragm Resisting Wind Loads

If the existing roof is to be replaced, then the requirements of Section 706.3.2 (Roof Diaphragms Resisting Wind Loads in High-Wind Regions) must be met.

Roof diaphragms and roof-to-wall connections shall be evaluated for the wind loads specified in the International Building Code in areas where the V_{ult} is greater than 130 mph and the building is in Risk Category III or IV.

Holyoke High School is in Risk Category III, but V_{ult} is only 123 mph. Therefore, the requirements of 302.7 do not apply and the roof diaphragm connection and the roof-to-wall connections are not required to be evaluated.

Existing Roof Gravity Elements to support the new PV Arrays

Per the 2021 International Existing Building Code, including the 10th Edition Amendments per the Massachusetts State Building Code, when new loads are added to an existing structural element, the existing elements must be treated as if they are new elements.

Therefore, in addition to the PV Arrays, the roof must be able to support a snow load in conformance with the latest Code. In this case, the existing roof structure must be able to support a roof snow load of 35 psf, plus the effects of drift.

Most PV Array systems will vary in weight between 7 and 10 psf. The exact weight of the system is directly dependent on the manufacturer and layout of the system. Since we do not know the specific weight of the PV Arrays, we completed a load comparison analysis on each roof to determine the residual capacity of each roof to support additional loads. Where the existing roof framing system can accommodate additional load, we will indicate the maximum recommended additional load that can be applied to that area of the building.

To clearly indicate our recommendations for the existing roofs to support new PV arrays, we correlated our recommendations with the labeling identified in the Roof Key Plan provided on sheet A2.00 of the architectural drawings entitled, “McMahon Elementary School” by Mount Vernon Group Architects.

General Requirements for all roofs supporting new PV Arrays

In all cases, the existing steel roof decks should not be considered to have sufficient capacity to support the new PV Arrays directly. The PV arrays should be supported directly from the main structural elements (i.e. the joists, beams, or girders). In cases where a PV Array support is located directly over the deck, sleepers shall be added to transfer the load to the nearest main structural element.

Additionally, new PV arrays should not be placed in areas of the existing roof where the existing structural members currently support snow drift loads.

Finally, local chord reinforcement may be required at existing steel joists if the point loads from the PV Arrays are appreciable and if the PV arrays are not located directly over panel points. If the support is between panel points, a new panel point may need to be created, usually with a new L2x2 angles extending from the support point on the top chord to the nearest bottom chord panel point. This requirement will depend on the final PV weight and configuration.

The following are our specific recommendations for each roof section.

Administration & Classroom Roof and Entry Canopy Roof ***(see Figure 1)***

The Administration & Classroom Roof is at a constant elevation. The Gym High Room to the east ranges from approximately 4'-0 to 10'-0" above this roof. The North Roof to the east is approximately 2'-0" higher than this roof.

The new total load on the roof is 49.5 psf, which is less than the design load indicated in the existing structural drawings (58 psf). Section 706.2 allows existing members to be considered adequate provided that the load does not increase by more than 5%. Based on a maximum PV array load of 10 psf, the total weight on the existing roof (in areas not impacted by snow drift) will not increase by more than 5% and is therefore in compliance with Section 706.2.

The portions of the Administration & Classroom Roof that are impacted by snow drift do not have residual capacity to support new loads. We do not recommend placing PV arrays on structural members in these areas.

The entry canopy is exterior of the building and has a too small of the footprint to add PV arrays. We do not recommend placing PV arrays on the Entry Canopy Roof.

Gym High Roof ***(see Figure 1)***

The Gym High Roof is the tallest roof elevation on the building. It is a sawtooth style roof with 6'-0"+/- elevation differences between the valleys and peaks of the sawtooth roof.

Since the PV arrays require the structure to be evaluated with the loads for new construction, the additional load that impact sawtooth roofs must now be included in the

analysis. Similar to drift loads, the snow builds up in the valleys of the roof resulting in snow loads that are double the base snow loads.

Because the Gym High Roof is already impacted by increased snow loads, there is no residual capacity to support new loads. We do not recommend placing PV arrays on the Gym High Roof.

East Roof and East Roof Kitchen Addition ***(see Figure 1)***

The East Roof consists of joists that span the full width of this roof. Snow drift loads can build up on this roof against the High Gym walls to the west that will impact all structural members on the East Roof.

Similarly, the East Roof Kitchen Addition is impacted by the East Roof as there is an elevation difference between these roofs.

Since all structural members are already impacted by new snow drift loads, we do not recommend placing PV arrays on any portion of these roofs.

North Roof ***(see Figure 2)***

The North Roof, which is the entirety of the addition to the original construction, is presumed to be constructed no earlier than 1961. Existing structural drawings indicate that the main roof joists are 18H05 joists with a maximum spacing of 4'-4" on center.

Based on a span of approximately 30'-6", the capacity of a 18H05 joist in 1961 would be approximately 233 lb/foot.

Based on the reported joist spacing of 4'-4", the demand on the joists would be 215 lb/foot.

The residual capacity of this roof would be 4.2 psf., which is insufficient to support PV arrays.

We do not recommend placing PV arrays on the majority of the High Roof without reinforcing all joists that support those PV arrays.

However, in the central corridor of the North High Roof that only spans 8'-8", the existing 8J02 joists at the same spacing do have sufficient residual capacity to support up the 10 psf new PV arrays.

SUMMARY

- The proposed roofing system will be lighter than the existing roofing system. Therefore, all existing structural members may be considered adequate to support the new proposed roofing system.

- This building will be in Seismic Category B. Existing masonry parapets are not required to be braced.

- Even though this is a Risk Category III building, the V_{ult} is only 123 mph. Since this is less than 130 mph, this building is not considered to be in a high wind region. The roof diaphragms and roof-to-diaphragm connections do not need to be evaluated for wind loads per the IBC.

- PV arrays that weigh 10 psf or less may be placed on the original building that are also not impacted by other loads such snow drift loads. Please see Figures 1 and 2 for more information.

- PV arrays may only be located above the corridor in the addition. Please see Figures 1 and 2 for more information.

If you have any questions or concerns, please do not hesitate to call or email.

Sincerely,

SOUZA, TRUE AND PARTNERS, INC.

Todd P. Blake, P. E.
Principal

Attachments: Figures 1 through 2

I:\2025\25152 - Holyoke Roof Replacements\Documents\Reports\McMahon Elementary School\McMahon School Roof Assessment.docx

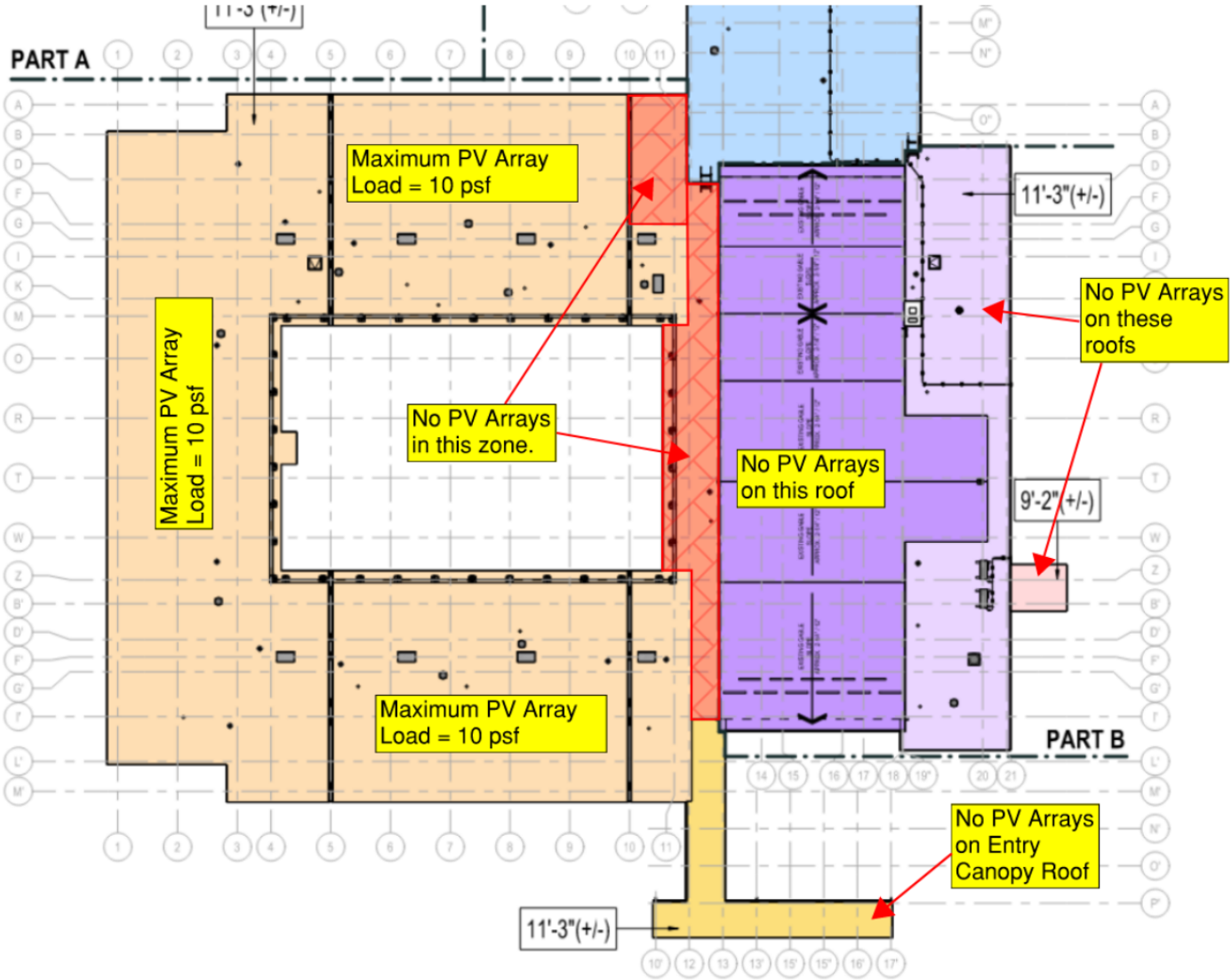

PART A
Maximum PV Array
Load = 10 psf
Maximum PV Array
Load = 10 psf
No PV Arrays
in this zone.
No PV Arrays
on this roof
11'-3"(+/-)
No PV Arrays
on these
roofs
9'-2"(+/-)
Maximum PV Array
Load = 10 psf
PART B
No PV Arrays
on Entry
Canopy Roof
11'-3"(+/-)

Figure 1

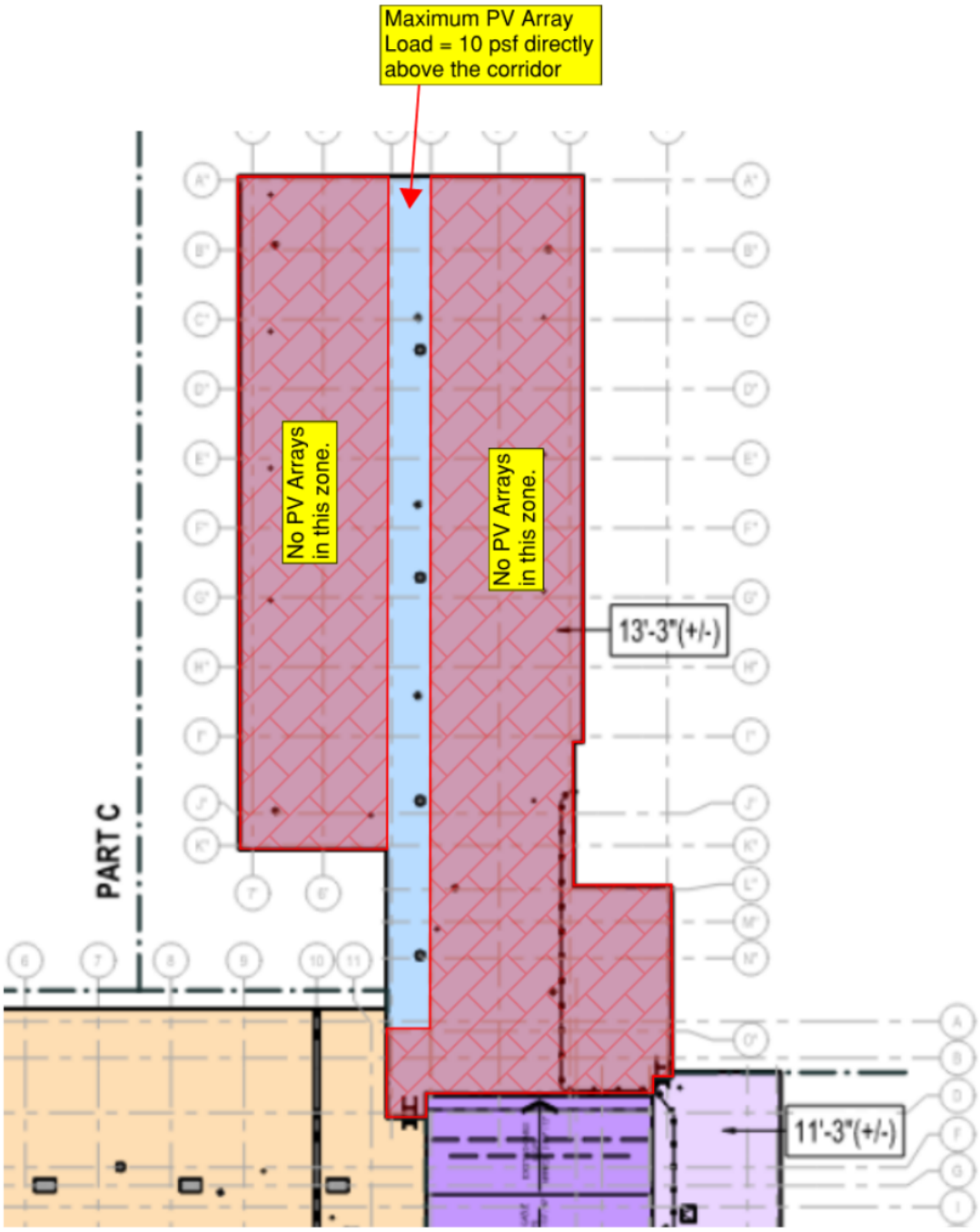

Maximum PV Array Load = 10 psf directly above the corridor
No PV Arrays in this zone.
No PV Arrays in this zone.
13'-3"(+/-)
11'-3"(+/-)
PART C

Figure 2

The Aulson Company, Inc

May 12, 2025 | 22 Photos

Universal Environmental Consultants

75 Kane Rd • Holyoke, MA 01040

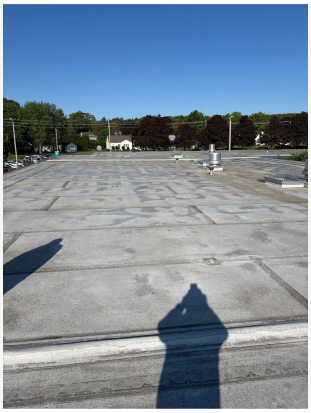
1

Project: 75 Kane Rd
Date: May 12, 2025, 7:53 AM
Creator: Devon Brown

2

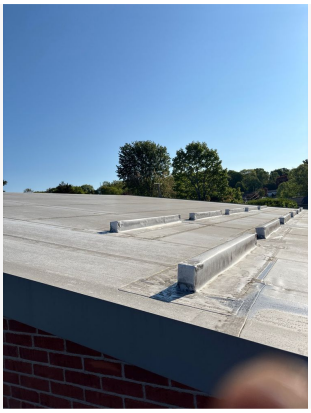
Project: 75 Kane Rd
Date: May 12, 2025, 8:05 AM
Creator: Devon Brown

3



Project: 75 Kane Rd
Date: May 12, 2025, 8:05 AM
Creator: Devon Brown

4



Project: 75 Kane Rd
Date: May 12, 2025, 8:06 AM
Creator: Devon Brown

5

N1 2 2 inch layers iso metal deck

Project: 75 Kane Rd
Date: May 12, 2025, 8:10 AM
Creator: Devon Brown

6

N2 same as n1

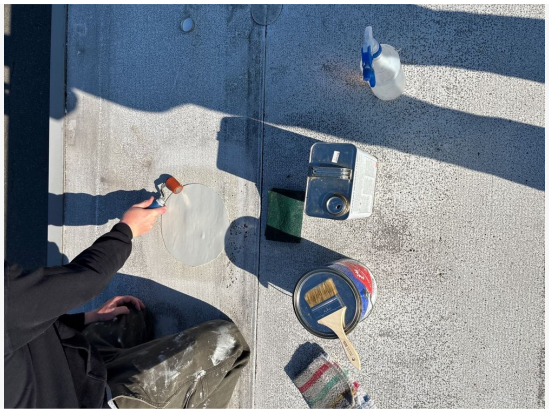
Project: 75 Kane Rd
Date: May 12, 2025, 8:14 AM
Creator: Devon Brown

7

N1 after

Project: 75 Kane Rd
Date: May 12, 2025, 8:17 AM
Creator: Devon Brown

8



N2 after

Project: 75 Kane Rd
Date: May 12, 2025, 8:21 AM
Creator: Devon Brown

9

N3 same as 1~2

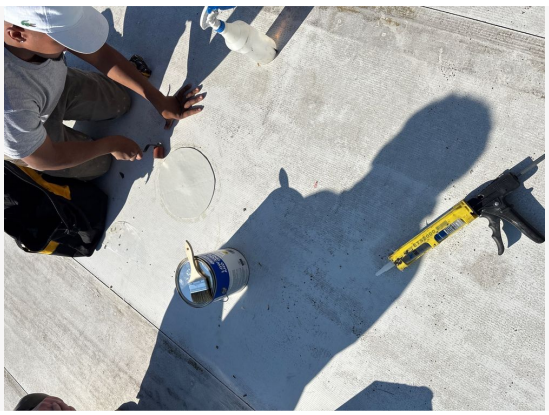
Project: 75 Kane Rd
Date: May 12, 2025, 8:23 AM
Creator: Devon Brown

10

N4 2inch iso metal deck

Project: 75 Kane Rd
Date: May 12, 2025, 8:29 AM
Creator: Devon Brown

11



N4 after

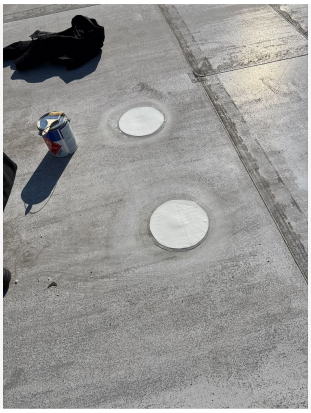
Project: 75 Kane Rd
Date: May 12, 2025, 8:37 AM
Creator: Devon Brown

12

N5 2 2inch ISO metal deck

Project: 75 Kane Rd
Date: May 12, 2025, 8:41 AM
Creator: Devon Brown

13



N5 after

Project: 75 Kane Rd
Date: May 12, 2025, 8:48 AM
Creator: Devon Brown

14

N6 2 inch iso metal deck

Project: 75 Kane Rd
Date: May 12, 2025, 8:50 AM
Creator: Devon Brown

15

N6 after

Project: 75 Kane Rd
Date: May 12, 2025, 8:59 AM
Creator: Devon Brown

16

N7 2 inch ISO metal deck

Project: 75 Kane Rd
Date: May 12, 2025, 9:00 AM
Creator: Devon Brown

17

N7 after

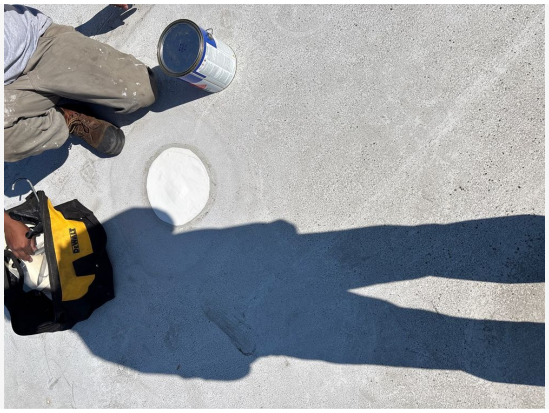
Project: 75 Kane Rd
Date: May 12, 2025, 9:05 AM
Creator: Devon Brown

18

N8 2inch iso metal deck

Project: 75 Kane Rd
Date: May 12, 2025, 9:06 AM
Creator: Devon Brown

19



N8 after

Project: 75 Kane Rd
Date: May 12, 2025, 9:08 AM
Creator: Devon Brown

20

N9 2 inch iso metal deck

Project: 75 Kane Rd
Date: May 12, 2025, 9:12 AM
Creator: Devon Brown

21

N10 2 2 inch iso metal deck

Project: 75 Kane Rd
Date: May 12, 2025, 9:17 AM
Creator: Devon Brown

22

N9 after

Project: 75 Kane Rd
Date: May 12, 2025, 9:19 AM
Creator: Devon Brown

Asbestos Identification Laboratory.

165 New Boston St., Ste 227
Woburn, MA 01801
781-932-9600

Web: www.asbestosidentificationlab.com Email: mikemanning@asbestosidentificationlab.com

NVLAP® Testing Lab Code: 200919-0

Batch: 135317

Ammar Dieb
Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Project Information

McMahon School,
Holyoke,
MA

Method: BULK PLM ANALYSIS, EPA/600/R-93/116

Dear Ammar Dieb,

Asbestos Identification Laboratory has completed the analysis of the samples from your office for the above referenced project. The Analysis Method is BULK PLM ANALYSIS, EPA/600/R-93/116The information and analysis contained in this report have been generated using the EPA /600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials. Materials or products that contain more than 1% of any kind or combination of asbestos are considered an asbestos containing building material as determined by the EPA. This Polarized Light Microscope (PLM) technique may be performed either by visual estimation or point counting. Point counting provides a determination of the area percentage of asbestos in a sample. If the asbestos is estimated to be less than 10% by visual estimation of friable material, the determination may be repeated using the point counting technique. The results of the point counting supersede visual PLM results. Results in this report only relate to the items tested. This report may not be used by the customer to claim product endorsement by NVLAP or any other U.S. Government Agency.

The EPA recommends you should assume vermiculite contains asbestos and not to disturb it. Airborne asbestos fibers present a health risk through inhalation, so the first step is to not disturb the material, which could release fibers into the air. If you disturb the insulation, you may inhale some asbestos fibers. The degree of health risk depends on how much and how often this occurred. If you choose to remove the vermiculite insulation, this work should be done by a trained and accredited asbestos abatement contractor that is separate and independent from the company that performed the assessment of the vermiculite insulation to avoid any conflict of interest. Link: "https://www.epa.gov/asbestos/my-attic-has-vermiculite-insulation-it-am-i-risk-should-i-take-it-outld I take it out? | US EPA"

Laboratory results represent the analysis of samples as submitted by the customer. Information regarding sample location, description, area, volume, etc., was provided by the customer. Information provided by the customer can affect the validity of results. Asbestos Identification Laboratory is not responsible for sample collection activities or analytical method limitations. Unless notified in writing to return samples, Asbestos Identification Laboratory discards customer samples after 30 days. Samples containing subsamples or layers will be analyzed separately when applicable. Reports are kept at Asbestos Identification Laboratory for three years. All customer information will be maintained in confidentiality. This report shall not be reproduced, except in full, without the written consent of Asbestos Identification Laboratory.

- NVLAP Lab Code: 200919-0
- Massachusetts Certification License: AA000208
- State of Connecticut, Department of Public Health Approved Environmental Laboratory Registration Number: PH-0142
- State of Maine, Department of Environmental Protection Asbestos Analytical Laboratory License Number: LB-0078(Bulk) LA-0087(Air)
- State of Rhode Island and Providence Plantations. Department of Health Certification: AAL-121
- State of Vermont, Department of Health Environmental Health License AL934461

Thank you Ammar Dieb for your business.

Michael Manning
Owner/Director

Ammar Dieb
Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Project Information

McMahon School,
Holyoke,
MA

Method: BULK PLM ANALYSIS, EPA/600/R-93/116

FieldID / LabID	Material	Location	Color	Non-Asbestos %	Asbestos %
1 / 1519652	Grey Caulk	Original Roof at Wall	gray	Non-Fibrous 100	None Detected
2 / 1519653	Grey Caulk	Original Roof at Wall	gray	Non-Fibrous 100	None Detected
3 / 1519654	Grey Caulk	Original Roof at Wall	gray	Non-Fibrous 100	None Detected
4 / 1519655	Wall Flashing Tar	Original Roof at Wall	black	Non-Fibrous 60	**Detected** Chrysotile 40
5 / 1519656	Wall Flashing Tar	Original Roof at Wall	black	Non-Fibrous 60	**Detected** Chrysotile 40
6 / 1519657	Wall Flashing Tar	Original Roof at Wall	black	Non-Fibrous 60	**Detected** Chrysotile 40
7 / 1519658	Vent Grill Caulk	Original Wall at Penthouse	tan	Non-Fibrous 97	**Detected** Chrysotile 3
8 / 1519659	Vent Grill Caulk	Original Wall at Penthouse	yellow	Non-Fibrous 97	**Detected** Chrysotile 3
9 / 1519660	Vertical Brick to Metal Caulk	Original Roof at Penthouse	gray	Non-Fibrous 98	**Detected** Chrysotile 2
10 / 1519661	Vertical Brick to Metal Caulk	Original Roof at Penthouse	gray	Non-Fibrous 98	**Detected** Chrysotile 2
11 / 1519662	Tar Residue on Metal Deck	Addition Roof Cut 6	black	Fiberglass 5 Non-Fibrous 95	None Detected
12 / 1519663	Tar Residue on Metal Deck	Addition Roof Cut 7	black	Fiberglass 5 Non-Fibrous 95	None Detected
13 / 1519664	Tar Residue on Metal Deck	Addition Roof Cut 8	black	Fiberglass 5 Non-Fibrous 95	None Detected

Sampled: May 12, 2025 **Received:** May 13, 2025 **Analyzed:** May 13, 2025

Tuesday 13 May 2025

Analyzed by:

Batch: 135317

CHAIN OF CUSTODY

Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702
Tel: (508) 628-5486 - Fax: (508) 628-5488
adieb@uec-env.com

PLM
24-hour TAT

Town/City: Holyoke, MA Building Name Mc Mahon School

Sample	Description of Material	Sample Location
1	Gray Caulk	original Roof at wall
2	"	"
3	"	"
4	wall Flashing tar	original Roof at wall
5	"	"
6	"	"
7	Vent Grill Caulk	original wall at Penthouse
8	"	"
9	vertical Brick to metal caulk	original Roof at Penthouse
10	"	
11	tar Residue on metal deck	Addition Roof cut 6
12	"	Addition Roof cut 7
13	"	Addition Roof cut 8

Reported By: Jason Berube Date: 5-12-25 5-13-25 1115 Due Date: **24-Hours**

Received By: Date: 5/13/25

SD-1 **Project Narratives**

1.5 Existing Mechanical Conditions Assessment

C.A. Crowley Engineering Inc made a visit to the site on May 12, 2025 to determine the location, type and condition of existing mechanical equipment, roof drains and plumbing vents throughout. The roof is comprised of 4 different roof areas on 4 separate but adjacent roof levels approximately 51,325 square feet in area.

The building was originally constructed in 1960 and featured gas fired boilers with perimeter radiation, H&V Units serving the gym, and general exhaust for toilets and classrooms.

Mechanical Observations

The rooftop mechanical equipment consists of thirteen (13) down-blast centrifugal exhaust fans (serving classrooms and bathrooms), one (1) up-blast centrifugal exhaust fan (serving kitchen), two (2) refrigeration condensing units (for walk-in coolers), one (1) turbine ventilator and a single (1) goose neck intake/exhaust duct.

EXHAUST FANS:

The exhaust fans all appear to be in good condition; the serial numbers potentially indicate the fans are 10 years old or less. All exhaust fans are mounted on curbs. All of the fans observed are manufactured by Dayton and most are belt driven.

Example 1: Down-blast Exhaust fan

Example 2: Up-blast Exhaust Fan

REFRIGERATION CONDENSING UNITS:

The two (2) refrigeration condensing units on the roof above the kitchen serve walk-in cooler and/or freezers and were manufactured in 2016. Both units are supported on 4x4 pressure treated sleepers and connected to the cooler evaporators with brazed refrigerant pipe (hard pipe). Refrigerant piping is supported by sleepers and have spots that are missing insulation, the pipes do not penetrate the roof, but rather drop along the face of the building before entering. Most of the insulation on the refrigerant piping is degraded and in poor condition.

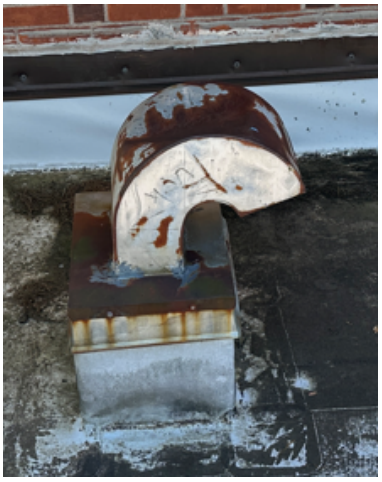
Example 3: Condensing units on sleepers

Example 4: Missing and degraded insulation

PASSIVE INTAKE/EXHAUST VENTS:

There are two passive-type vents in the roof: A turbine ventilator and a single intake/exhaust duct. The turbine ventilator serves the boiler room and does not appear to be functional as it is heavily corroded. The intake/exhaust duct (it wasn't determined which it is), is situated on the part of the roof where the original building connects to a past addition to the school. It is unclear what it serves but features a curb.

Example 5: Turbine Ventilator



Example 6: Intake/Exhaust Duct

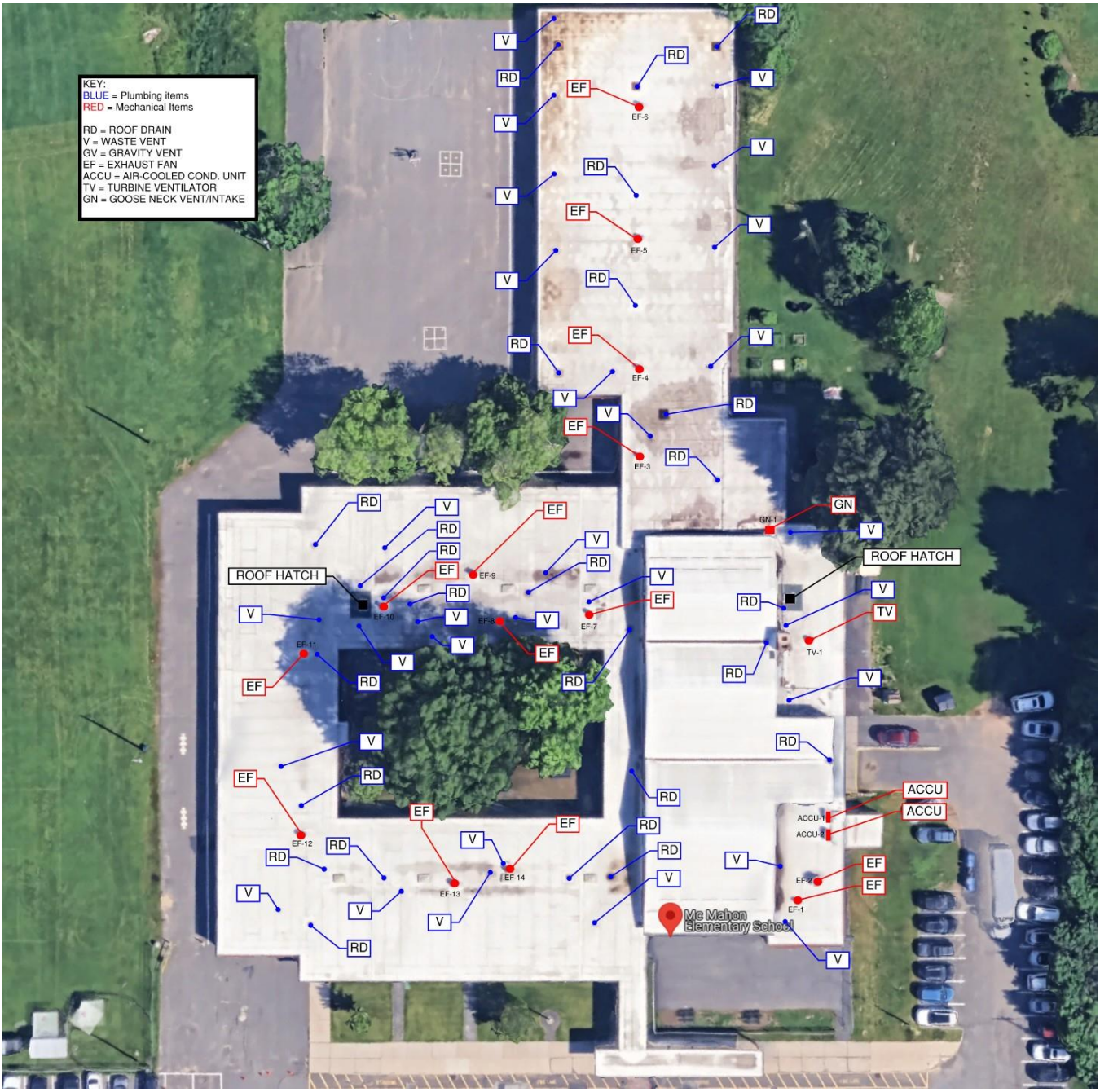
Recommendations

It is recommended that the following items be addressed during this roof project:

1. Replace insulation for condensing units serving coolers with new insulation and covering.
2. Replace defunct turbine ventilator with exhaust fan and reverse acting thermostat to help maintain comfortable temperature in boiler room.
3. Reconditioning of existing equipment that will be reinstalled, which should include (but not limited to): Belt replacement, bearing replacement (depending on age), lubrication, cleaning of internal components and housings, securing any loose panels.
4. Re-Balancing of equipment.
5. Any equipment the school has found to be problematic or has a history of extensive service should be replaced in-like-kind.
6. Any equipment that is older than 20 years old should be replaced to save on additional expense in the future.
7. All equipment shall receive curbs that extend equipment 18” beyond the finished roof surface. Ductwork and Piping is to be extended as required.

Rooftop Equipment Map

On the following page is a rooftop map of equipment found on the roof during our site investigation for reference.


KEY:
BLUE = Plumbing items
RED = Mechanical Items
RD = ROOF DRAIN
V = WASTE VENT
GV = GRAVITY VENT
EF = EXHAUST FAN
ACCU = AIR-COOLED COND. UNIT
TV = TURBINE VENTILATOR
GN = GOOSE NECK VENT/INTAKE
ROOF HATCH
ROOF HATCH
Mc Mahon Elementary School

SD-1 **Project Narratives**

1.6 Proposed Recommendations

The existing roof system has been installed for approximately twenty-seven years (warranty expired in 2016) and has outlasted its typical service life. And, based on the information obtained during the site visits, as well as the analysis and testing performed, we recommend the existing roof system be removed down to the structural deck and replaced with a modern reinforced PVC roof system like the roof system that was previously installed. This will provide the Owner with a fully warranted roof system meeting the current life safety requirements.
The new roof system should consist of the following components:

- Fully adhered 80-mil reinforced PVC membrane – recommended for future PV array installation and heavier foot traffic.
- ½-inch thick high density polyisocyanurate cover board.
- Double layer 3-inch thick polyisocyanurate rigid insulation, bottom layer mechanically attached, top layer adhered. Provide code compliant polyisocyanurate insulation which meets the requirements for minimum U or R values.

- Tapered insulation crickets where required providing positive pitch to roof drain locations.
- Tapered insulation sumps at all roof drains with a depth of 2". The use of tapered insulation with ½":12" slope is typical (9'-4" x 9'-4" sump plan dimensions). Sumps with larger areas and more gradual slopes are also recommended at various locations of existing flat structure, existing ponding, or where there are long distances between drain locations. ¼":12" (17'-4" x 17'-4") or 1/8":12" (33'-4" x 33'-4").
- Polyethylene vapor barrier over the existing structural roof decking.
- Provide new expansion joint assemblies in the new roof system at existing expansion joint locations.
- Some areas of the brick veneer between the upper and lower roof levels should be covered with a mechanically fastened ¾" plywood sheathing to allow the roof membrane to be continuous from one roof level to another, thereby reducing the possibility of future failure where new roof-to-wall flashings would have to be provided in the existing veneer.
- Replace all existing roof drain bowls with new drain bowls and strainers. New drain outlets to match diameter of existing roof leaders.
- Add additional wood blocking to existing skylight blocking to height of surrounding new roofing. Remount existing skylights including existing fall protection screening.
- Provide new 24 in. high mechanical curbs mechanically attached to roof deck.
- Extend pipe vent penetrations where minimal flashing height does not exist.
- Remove/replace existing ceiling tiles to access work related to the roof drain replacement. Replace any damaged ceiling tiles because of the remove/replace work.

- Replace the fixed roof ladder at the existing chimney and install a new cross-thru type ladder directly onto the upper gabled / folding-type roof. Install new ships ladders at noted locations on drawings. Two ships ladders are recommended for safe access from the 1960 building to the addition, one on each the east and west sides.
- Move and /or relocate the electrical conduit that is below the ceiling and adjacent to the east roof hatch access ladder. It currently is a code violation.
- Provide required OSHA compliant self-supporting guardrails at courtyard roof edges and any mechanical equipment within 10 feet of roof perimeter.
- Replace existing roof hatch/hatches with energy-efficient thermally broken roof hatch/hatches complete with safety railing, self-closing gate, and telescoping safety post.
- Install walkway pads to/from and around mechanical equipment, ladders, and hatches to minimize roof membrane wear and damage as well as providing a non-slip walk/work surface where needed.
- Provide roof penetration housings at all mechanical roof penetrations less than 2-inch diameter. Mechanically attach curbs to roof deck.
- Provide new flashings at miscellaneous roof penetrations.
- Mechanically attach new blocking to existing perimeter blocking, deck, and/or structure. Replace deteriorated blocking. Provide additional blocking to maximum height of insulation at perimeter.
- Install new ANSI/SPRI/FM 4435/ES-1 compliant snap-on roof edge trim to roof perimeter.
- HVAC - Provide new insulation at existing refrigeration lines and/or exposed ductwork. Replace any broken, problematic equipment or any equipment that is 20 years or older. Recondition and service equipment is less than 20 years old prior to reinstalling. Rebalance equipment after reinstallation. All equipment should be reinstalled a minimum of 18” above the finished roof. Extend ductwork and piping as required. Refer to mechanical report.
- Remove existing electrical conduit that runs across the top side of the roof and relocate it to the roof edge, refer to detail.
- The drop off canopy roof outer edge should be raised with tapered insulation to create a positive slope towards the gutters to eliminate ponding. Install the additional gutter section as noted on plan.
- Solar Ready Electrical – The future solar system shall be integrated into the existing electrical system. The potential future solar project shall provide all required additional equipment as part of the solar project, including an emergency disconnect on the exterior wall adjacent to the existing electrical meter. All solar system equipment shall be mounted on the exterior walls, ballasted on the roof, or use the limited space within the existing main electrical room. All future conduits shall be exterior-type and mounted to the exterior walls or ballasted on the roof system. Ballasted components shall be placed on a protective membrane over the roof membrane. The future conduit routes shall run across the roof, down walls between roof levels (between windows as necessary) and terminate at the main electrical room as shown on the drawings. The future solar project shall provide wall penetrations to extend the conduit into the electrical room. The connection between the future solar system and existing electrical system will occur within the existing main electrical room. There is currently available wall space for some additional electrical devices. No roof penetrations or interior conduits are recommended to prepare for the potential future solar project. No modifications to the existing electrical system are recommended to prepare for the for the potential future solar project. No cost is included in the estimate for electrical solar readiness.

- Solar Ready Structure – The existing building's roofs have been evaluated for solar readiness and can accept solar arrays in limited areas with no modification to the existing structure. No structural modification work is recommended. The suitable areas identified provide ample space for solar arrays. Refer to the structural report and architectural drawing SR1.00. No cost is included in the estimate for structural solar readiness.

- Solar Ready Architectural – The proposed roof membrane is 80 mil thickness. This is recommended for the base project scope of work and makes the building's roofs solar ready. No additional cost is included in the estimate for architectural solar readiness. The proposed solar arrays are shown and described on drawing SR1.00.

- ADA upgrades (required per 521 CMR 3.3.2) consisting of the following: install lever handles at doors throughout school that have not previously been updated. Install toilet grab bars and appropriate height toilet accessories as required. Provide or adjust compliant restroom lavatories. Remove restroom doors or install electrified door openers where appropriate. Install guardrails and handrail extensions at stairs and ramps. Provide accessible work surfaces, countertops, cabinets, and sinks as appropriate. Renovate restroom layouts as appropriate. Refer to the schematic Accessibility Upgrades narrative for more detail on the proposed work. Refer to the table below regarding proposed plumbing fixtures to meet accessibility requirements.

McMahon Elementary School - Facilities for Occupancy	**Qty**
Maximum Occupancy (per Table 1004.5)	1549
Current Population - Building Occupants	399
Toilets & Urinals	
Required Toilets & Urinals for Max. Occ. (248 CMR 10.10)	55
Existing Toilets & Urinals	39
Required Toilets & Urinals for Population (248 CMR 10.10)	**27**
Proposed Toilets & Urinals	**35**
Lavatories	
Required Lavatories for Max. Occ. (248 CMR 10.10)	60
Existing Lavatories	26
Required Lavatories for Population (248 CMR 10.10)	**26**
Proposed Lavatories	**30**

Designer Certification
Mount Vernon Group Architects, Inc. hereby certifies that to the best of our knowledge, the recommendations for the proposed solution to install a new PVC roof system at the **Lt. Elmer J. McMahon Elementary School** shall meet the requirements of 2021 IECC International Energy Conservation Code with MA amendments, Ma 10th edition Building Code and/or the 780 CMR Massachusetts Stretch Energy Code.

Frank Tedesco AIA, LEED AP
President

Mount Vernon Group Architects
200 Harvard Mill Square
Suite 410
Wakefield, MA 01880

SD-1 1.7 - CMR 521 Accessibility Upgrades Review

General

Refer to the interior reference drawings in this submittal. The building (within exterior walls) was reviewed, and the following includes notes from the review and schematic descriptions of the scope of work required for this project to comply with 521 CMR 3.3.2. The description includes general notes and is organized by room. Existing items noted "- OK" do not require modification or work.

Scope Description:

- PLUMBING FIXTURE UPDATES:
  - DRINKING FOUNTAINS: ADD 3 LOCATIONS
  - SEE TOILET ROOMS FOR UPDATES
  - SEE ROOMS WITH CASEWORK SCOPE FOR UPDATES

- GENERAL: PERFORM DEMOLITION AS REQUIRED TO PERFORM PROPOSED MODIFICATIONS.

- GENERAL: DOOR HARDWARE
  - INTERIOR - REPLACE ALL KNOB HARDWARE WITH NEW LEVERSETS: APPROX 40 DOORS.

- 148. SINGLE TOILET ROOM
  - SINK IS TOO HIGH AT 34" AFF. LOWER TO CHILDREN'S HEIGHT = 30".
  - REAR GRAB BAR TOO HIGH & CONFLICT WITH FLUSHOMETER. REPLACE WITH 36" LENGTH AT CHILD HEIGHT (25" AFF) AND MOUNT 3" CLEAR TO SIDE OF FLUSHOMETER, PER CMR 521.
  - 1 TOILET - OK
  - 1 LAV - OK

- 8. MEN / BOYS
  - RENOVATED PREVIOUSLY.
    - VESTIBULE DOORS REMOVED
    - EXISTING ADA STALL - DOES NOT MEET CMR 521, BUT OK PER A117.1.
      - TOILET PAPER DISPENSER SHOULD BE MOUNTED BELOW GRAB BAR. USE DIFFERENT MODEL.
      - REAR GRAB BAR TOO HIGH & CONFLICT WITH FLUSHOMETER. REPLACE WITH 36" LENGTH AT CHILD HEIGHT (25" AFF) AND MOUNT 3" CLEAR TO SIDE OF FLUSHOMETER, PER CMR 521.
  - 4 URINALS - OK
  - 5 LAVS - OK
  - 2 TOILETS - OK

- 5. WOMEN / GIRLS
  - RENOVATED PREVIOUSLY.
    - VESTIBULE DOORS REMOVED
    - EXISTING ADA STALL - DOES NOT MEET CMR 521, BUT OK PER A117.1.
      - TOILET PAPER DISPENSER SHOULD BE MOUNTED BELOW GRAB BAR. USE DIFFERENT MODEL.
      - REAR GRAB BAR TOO HIGH & CONFLICT WITH FLUSHOMETER. REPLACE WITH 36" LENGTH AT CHILD HEIGHT (25" AFF) AND MOUNT 3" CLEAR TO SIDE OF FLUSHOMETER, PER CMR 521.

- 5 LAVS - OK
- 3 TOILETS - OK

- 20. WOMEN
  - CURRENT ROOM DIMENSIONS NOT ABLE TO MEET CODE REQUIREMENTS.
  - RENOVATION TO FIT LARGER (6'X7.5') ACCESSIBLE TOILET ROOM. COORDINATE WITH MENS ROOM 19.
    - DEMOLISH EXISTING WALL AT STORAGE ROOM 18. REBUILD WALL TO ALLOW 7'-6" CLEAR INTERIOR DIMENSION TO WALL AT CORRIDOR 13.
    - DEMOLISH EXISTING COMPARTMENT
    - 1 TOILET - NEW & ADJUSTED LOCATION
    - 1 EXISTING LAV TO REMAIN
    - 2 - 42" GRAB BARS
    - TOILET PAPER DISPENSER - REMOUNT EXISTING AT ADA HEIGHT
    - PAPER TOWEL DISPENSER - REMOUNT EXISTING AT ADA HEIGHT
    - SOAP DISPENSER - REMOUNT EXISTING AT ADA HEIGHT
    - SANITARY DISPOSAL
    - NEW ADA MIRROR
    - PATCH TILE, PAINT, FINISHES, ETC.
    - REPLACE & RELOCATE FIN TUBE RADIATOR UNIT

- 19. MEN
  - CURRENT ROOM DIMENSIONS NOT ABLE TO MEET CODE REQUIREMENTS.
  - RENOVATION TO FIT LARGER (6'X7.5') ACCESSIBLE TOILET ROOM. COORDINATE WITH WOMENS ROOM 20.
    - DEMOLISH EXISTING WALL AT STORAGE ROOM 18. REBUILD WALL TO ALLOW 7'-6" CLEAR INTERIOR DIMENSION TO WALL AT CORRIDOR 13.
    - DEMOLISH EXISTING COMPARTMENT
    - 1 TOILET - NEW & ADJUSTED LOCATION
    - 1 EXISTING LAV TO REMAIN
    - 2 - 42" GRAB BARS
    - TOILET PAPER DISPENSER - REMOUNT EXISTING AT ADA HEIGHT
    - PAPER TOWEL DISPENSER - REMOUNT EXISTING AT ADA HEIGHT
    - SOAP DISPENSER - REMOUNT EXISTING AT ADA HEIGHT
    - NEW ADA MIRROR
    - PATCH TILE, PAINT, FINISHES, ETC.
    - REPLACE & RELOCATE FIN TUBE RADIATOR UNIT

- 151 & 153. TOILET ROOMS
  - NOT ACCESSIBLE, BUT ADJACENT 148 IS ACCESSIBLE.

- 154. GIRLS
  - VESTIBULE: 2 DOORS PROVIDE AUTO OPENERS
  - TOILET PAPER DISPENSER SHOULD BE MOUNTED BELOW GRAB BAR. USE DIFFERENT MODEL.
  - 3 LAVS - OK
  - 4 TOILETS - OK

- 155. BOYS
  - VESTIBULE: 2 DOORS PROVIDE AUTO OPENERS
  - TOILET PAPER DISPENSER SHOULD BE MOUNTED BELOW GRAB BAR. USE DIFFERENT MODEL.

- 5 URINALS - OK
- 2 TOILETS - OK
- 3 LAVS - OK

- CLASSROOMS 101, 104, 105
  - RENOVATION TO FIT LARGER (6'X7.5') ACCESSIBLE TOILET ROOM. DEMO EXISTING DOUBLE-DOOR-FRAME, PLASTIC PARTITION AND FLOOR CURB BETWEEN TOILETS.
    - 2 TOILETS
      - DELETE ONE
      - ONE NEW AT ADA LOCATION AND CHILD HEIGHT
    - ADD WALL TO CREATE 7'-6"x6'-0" ACCESSIBLE SINGLE TOILET ROOM
    - ADD LAV
    - ADD BUBBLER
    - NEW DOOR W/ LOUVER FOR AIR SUPPLY
    - 2 - 42" GRAB BARS
    - TOILET PAPER DISPENSER
    - PAPER TOWEL DISPENSER
    - SOAP DISPENSER
    - FINISHES
    - MEPF

- 119. NURSE TOILET ROOM
  - CURRENT ROOM DIMENSIONS NOT ABLE TO MEET CODE REQUIREMENTS.
  - RENOVATION TO FIT LARGER (6'X7.5') ACCESSIBLE TOILET ROOM IN NURSE SUITE. (COORDINATE WITH ADMIN TOILET ROOM 120)
    - ADJACENT ELECTRICAL ROOM TO BE PART OF RENOVATION. MOVE PANELS.
    - TOILET
    - LAV
    - 2 - 42" GRAB BARS
    - NEW ADA MIRROR
    - TOILET PAPER DISPENSER
    - PAPER TOWEL DISPENSER
    - WASTE RECEPTACLE
    - SANITARY DISPOSAL
    - FINISHES
    - MEPF

- 120. ADMIN TOILET ROOM
  - CURRENT ROOM DIMENSIONS NOT ABLE TO MEET CODE REQUIREMENTS.
  - RENOVATION TO FIT LARGER (6'X7.5') ACCESSIBLE TOILET ROOM IN NURSE SUITE. (COORDINATE WITH ADMIN TOILET ROOM 120)
    - ADJACENT ELECTRICAL ROOM TO BE PART OF RENOVATION. MOVE PANELS.
    - TOILET
    - LAV
    - 2 - 42" GRAB BARS
    - NEW ADA MIRROR
    - TOILET PAPER DISPENSER
    - PAPER TOWEL DISPENSER
    - WASTE RECEPTACLE
    - SANITARY DISPOSAL

- FINISHES
- MEPF

- 130. KITCHEN TOILET ROOM
  - DEMO TOILET PARTITION
  - 1 TOILET - OK
  - 1 - 42" GRAB BAR
  - 1 - 48" WALL TO FLOOR GRAB BAR
  - ADD LAV (CURRENTLY NO LAV / PLUMBING IN ROOM)
  - NEW ADA MIRROR
  - TOILET PAPER DISPENSER
  - PAPER TOWEL DISPENSER
  - WASTE RECEPTACLE
  - SANITARY DISPOSAL

- 136. GIRLS
  - NOT ACCESSIBLE, BUT ADJACENT 138 WILL BE MADE ACCESSIBLE

- 137. JANITOR TOILET ROOM
  - NOT ACCESSIBLE, BUT ADJACENT 138 WILL BE MADE ACCESSIBLE

- 138. BOYS
  - MAKE UNISEX ACCESSIBLE TOILET ROOM
  - 1 URINAL - DELETE
  - 1 TOILET - OK
  - 2 - 42" GRAB BARS
  - NEW ADA MIRROR
  - TOILET PAPER DISPENSER SHOULD BE MOUNTED BELOW GRAB BAR. USE DIFFERENT MODEL.

- 124. WAITING
  - REPLACE RECEPTION CASEWORK WITH NEW, INCLUDING ADA SERVICE COUNTER HEIGHT PORTION. 12 LF.

- RAMP AT CORRIDOR 13
  - ADD EXTENSIONS TO ENDS OF HANDRAILS (3)

- 126. PLATFORM
  - ADD WHEELCHAIR LIFT UP TO PLATFORM ELEVATION
  - STAIRS (2)
    - REPLACE RAILS WITH NEW GUARDRAILS AND CONTINUOUS HANDRAILS WITH EXTENSIONS.

- 114. EXAM ROOM
  - ADD DOOR OPENER

- 121. CONFERENCE ROOM
  - DOOR NOT ACCESSIBLE - NEW DOOR w/ OPENER
  - COORDINATE LAYOUT WITH RENOVATION OF ROOMS 120 & 119

- 117. NURSE
  - COORDINATE WITH WORK AT TOILET ROOMS.

- 21. LIBRARY
  - REPLACE 10’ OF LOWER CASEWORK AND SINK WITH NEW AT 2’-10” AFF.
- 149. OFFICE (FORMER WOMENS ROOM)
  - ADD DOOR OPENER
- 143, 144 & 145. OFFICE & STORAGE (FORMER SHOWER, DRESSING & TIOLET ROOMS)
  - NO SCOPE
- 128. OFFICE
  - ADD DOOR OPENER
- LOCKERS
  - RETROFIT 2 EXISTING LOCKERS WITH ADA KITS

SD-2 Code Analysis

2.1 Code Analysis & Narrative

The proposed roof replacement work to take place at the existing McMahon Elementary School shall be considered an Alteration-Level 1 scope of work per 2021 IEBC International Existing Building Code and related 780 CMR Mass. Building Code Amendments (10th Edition). The City of Holyoke has adopted the Stretch energy Code.

The proposed reroof project is to remove the existing roof assembly system down to the structural deck. All the roof top elements will need to be raised to accommodate the thicker code required roof insulation. The roof hatches will be replaced with insulated and thermally broken roof hatches including curb mounted guardrails, with gates. The roof access ladders will either be replaced or raised based on whether they currently meet the building code requirements for ladders. Ballasted guardrails will be installed at all courtyard roof edges and at locations where mechanical equipment or roof hatches are within 10' of a roof edge. Any short height masonry wall sections between lower and higher roofs are to be covered with ¾" plywood and roofing membrane where not visible from the street. Install larger roof drains to match the leader diameters. Any mechanical equipment that was removed to accommodate the reroofing will be serviced or replaced based on a 20-year life cycle. Mechanical curbs and duct and/or pipe insulation are to be replaced. This school meets the 30% trigger of bringing the entire school up to the current accessibility codes. Some lever type door hardware is proposed to be replaced, restrooms grab bars, sinks, and stair guardrails will be included. Door clearance requirements will require restroom door removal or electrified door openers. There are classroom restrooms and sinks that will be included.

2021 IEBC

503.1 General
Alterations to any building or structure shall comply with the requirements of the International Building Code for new construction. Alterations shall be such that the existing building or structure is not less complying with the provisions of the International Building Code than the existing building or structure was prior to the alteration.
Exceptions:

1. An existing stairway shall not be required to comply with the requirements of Section 1011 of the International Building Code where the existing space and construction does not allow a reduction in pitch or slope.
2. Handrails otherwise required to comply with Section 1011.11 of the International Building Code shall not be required to comply with the requirements of Section 1014.6 of the International Building Code regarding full extension of the handrails where such extensions would be hazardous because of plan configuration.
3. Where provided in below-grade transportation stations, existing and new escalators shall be permitted to have a clear width of less than 32 inches (815 mm).

Provisions of Chapter 7, Section 705 REROOFING & Section 706 STRUCTURAL of the IEBC, and materials and methods used for replacing an existing roof covering complying with the requirements of Chapter 15 of the 2021 International Building Code shall be followed for any roof recovering or replacement. See below for excerpts of the IEBC;

705.1 General

Materials and methods of application used for recovering or replacing an existing roof covering shall comply with the requirements of Chapter 15 of the International Building Code.

Exceptions:

1. Roof replacement or roof recover of existing low-slope roof coverings shall not be required to meet the minimum design slope requirement of 1/4 unit vertical in 12 units horizontal (2-percent slope) in Section 1507 of the International Building Code for roofs that provide positive roof drainage.
2. Recovering or replacing an existing roof covering shall not be required to meet the requirement for secondary (emergency overflow) drains or scuppers in Section 1502 of the International Building Code for roofs that provide for positive roof drainage. For the purposes of this exception, existing secondary drainage or scupper systems required in accordance with this code shall not be removed unless they are replaced by secondary drains or scuppers designed and installed in accordance with Section 1502 of the International Building Code.

705.2 Roof Replacement

Roof replacement shall include the removal of all existing layers of roof coverings down to the roof deck.

Exception: Where the existing roof assembly includes an ice barrier membrane that is adhered to the roof deck, the existing ice barrier membrane shall be permitted to remain in place and covered with an additional layer of ice barrier membrane in accordance with Section 1507 of the International Building Code.

705.5 Flashings

Flashings shall be reconstructed in accordance with approved manufacturer's installation instructions. Metal flashing to which bituminous materials are to be adhered shall be primed prior to installation.

706.1 General

Where alteration work includes replacement of equipment that is supported by the building or where a reroofing permit is required, the provisions of this section shall apply.

706.2 Addition or Replacement of Roofing or Replacement of Equipment

Any existing gravity load-carrying structural element for which an alteration causes an increase in design gravity load shall be replaced or altered as needed to carry the gravity loads required by the International Building Code for new structures. The increase in gravity loads shall account for the cumulative effects of additions since original construction.
Exceptions:

1. Buildings of Group R occupancy with not more than five dwelling or sleeping units used solely for residential purposes where the altered building complies with the conventional light-frame construction methods of the International Building Code or the provisions of the International Residential Code.
2. Buildings in which the increased dead load is due entirely to the addition of a second layer of roof covering weighing 3 pounds per square foot (0.1437 kN/m2) or less over an existing single layer of roof covering. Insulation shall not be added such that it increases the thermal factor Ct in accordance with ASCE 7-16 Table 7.3-2 without checking capacity of existing structure.
3. Structural elements whose demand capacity ratio is not increased by more than 5%.

Section 708 ENERGY CONSERVATION allows the alterations to conform without requiring the entire building or structure to conform to the energy requirements. See excerpt below for IEBC.

708.1 Minimum Requirements
Level 1 alterations to existing buildings or structures do not require the entire building or structure to comply with the energy requirements of the International Energy Conservation Code or International Residential Code. The alterations shall conform to the energy requirements of the International Energy Conservation Code or International Residential Code as they relate to new construction only.

MA 2025 Commercial Stretch Code IECC2021 w/Ma amendments

C303.2.2 Multiple Layers of Continuous Insulation Board

Where two or more layers of continuous insulation board are used in a construction assembly, the continuous insulation boards shall be installed in accordance with Section C303.2. Where the continuous insulation board manufacturer's instructions do not address installation of two or more layers, the edge joints between each layer of continuous insulation boards shall be staggered.

C503.2.1 Roof Replacement

Roof replacements shall comply with Section C402.1.3, C402.1.4, C402.1.5 or C407 where the existing roof assembly is part of the building thermal envelope and contains insulation entirely above the roof deck. In no case shall the R-value of the roof insulation be reduced or the U-factor of the roof assembly be increased as part of the roof replacement.

2021 IBC

TABLE 1004.5
MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT

FUNCTION OF SPACE	OCCUPANT LOAD FACTORa
Accessory storage areas, mechanical equipment room	300 gross
Assembly	
Gaming floors (keno, slots, etc.)	11 gross
Exhibit gallery and museum	30 net

Assembly with fixed seats	See Section 1004.6
Assembly without fixed seats	
Concentrated (chairs only—not fixed)	7 net
Standing space	5 net
Unconcentrated (tables and chairs)	15 net
Business areas	150 gross
Educational	
Classroom area	20 net
Shops and other vocational room areas	50 net
Library	
Reading rooms	50 net
Stack area	100 gross
Kitchens, commercial	200 gross
Locker rooms	50 gross
Stages and platforms	15 net

1015.6 Mechanical Equipment, Systems and Devices

Guards shall be provided where various components that require service are located within 10 feet (3048 mm) of a roof edge or open side of a walking surface and such edge or open side is located more than 30 inches (762 mm) above the floor, roof or grade below. The guard shall extend not less than 30 inches (762 mm) beyond each end of such components. The guard shall be constructed so as to prevent the passage of a sphere 21 inches (533 mm) in diameter.
Exception: Guards are not required where personal fall arrest anchorage connector devices that comply with ANSI/ASSE Z 359.1 are installed.

1015.7 Roof Access
Guards shall be provided where the roof hatch opening is located within 10 feet (3048 mm) of a roof edge or open side of a walking surface and such edge or open side is located more than 30 inches (762 mm) above the floor, roof or grade below. The guard shall extend not less than 30 inches (762 mm) beyond each end of the hatch parallel to the roof edge. The guard shall be constructed so as to prevent the passage of a sphere 21 inches (533 mm) in diameter.
Exception: Guards are not required where personal fall arrest anchorage connector devices that comply with ANSI/ASSE Z359.1 are installed.

Chapter 29 Plumbing Systems
User note:

About this chapter: Plumbing systems are another key element of any building. Chapter 29 provides the necessary number of plumbing fixtures, including water closets, lavatories, bathtubs and showers. The quality and design of each fixture must be in accordance with the International Plumbing Code®.

248 CMR 10.00: Uniform State Plumbing Code

10.01 Scope and Jurisdiction

(1) Scope

248 CMR 10.00 governs the requirements for the installation, alteration, removal, replacement, repair, or construction of all plumbing.

(2) Jurisdiction

(a)
Nothing in 248 CMR 10.00 shall be construed as applying to:

1. refrigeration,
2. heating,
3. cooling,
4. ventilation or fire sprinkler systems beyond the point where a direct connection is made with the potable water distribution system.

(b)
Sanitary drains, storm water drains, hazardous waste drainage systems, dedicated systems, potable and non-potable water supply lines and other connections shall be subject to 248 CMR 10.00.

10.10 Plumbing Fixture

(15) Minimum Facilities

(a)

All inhabited buildings and structures shall contain plumbing facilities including persons with disabilities as required in 521 CMR. 248 CMR 10.10 shall apply to new buildings, additions, and changes where a plumbing permit is required.

(c) Establishing Fixture Requirements

1. Total fixture requirements shall be determined by using 50 percent male and 50 percent female. The occupancy ratio of 50% for each sex shall not be required when statistical data indicates the occupancy of the facility would be other than 50% for each sex.

a. In buildings or structures containing multiple classifications under 248 CMR 10.10 Table 1, all classifications shall be satisfied when determining the total fixture requirements.

2. If a fraction should occur while determining the number of plumbing fixtures required in 248 CMR 10.10 (14): Table 1 Minimum Facilities for Building Occupancy, rounding up to the next fixture shall be required.

4.In establishments other than residential, rest room facilities shall be clearly designated and no further than four hundred feet in developed direct distance away from the regular place of daily work activity of any person for whose use it is required. Elevator usage may be taken into consideration when determining the developed direct distance. In multi-story buildings, access to the required toilet facilities shall not exceed one vertical story. Access to the required toilet facilities for customers shall not include passing through areas designated as for employee use only such as kitchens, food preparation areas, storage rooms, closets, or similar spaces. Toilet facilities accessible only to private offices shall not be included to determine compliance with this section.

10.

For Places of Assembly, the minimum fixture requirements shall be determined by:

a) The number of seats in the establishment and,
b) The maximum number of employees on duty at any one time.
c) For establishments serving food and/or beverages which may be consumed and the premises, inside and outside seating shall be included when determining fixture requirements if the outside seating is provided by the establishment for use by patrons only.

12.
For Educational Facilities, the minimum fixture requirements shall be determined by:

1. Pre-School & Day Care
    1. The total combined number of staff and children
    2. Refer to 606 CMR 7.00: Standards for the licensure or approval of family child-care, small group and school age and large group and school age child-care programs for requirements regarding additional plumbing fixtures in this type of occupancy.
2. Public & Private Kindergarten through Post-Secondary (Students)
    1. Seating capacity
3. Public & Private Kindergarten through Post-Secondary (Staff)
    1. The maximum number of staff on duty at any one time
4. Students Six Years of Age or Younger
    1. Unisex/gender-neutral toilet facilities may be installed.
    2. Lavatories may be installed in classroom areas or the toilet rooms.
5. Public and private schools, kindergarten, elementary, middle, and high schools:
    1. Separate toilet facilities shall be provided for teachers and other staff employees on every other floor-level.
    2. Rest rooms for students shall be provided on every floor level.
6. Post-Secondary schools:
    1. Separate toilet facilities shall not be required for teachers and other staff employees

2. Rest rooms for students shall be required on every other floor level.

7. All secondary and post-secondary schools that conduct sporting programs or physical activities on the school premises or grounds and include a gymnasium where the activities may be conducted shall provide separate men and women shower facilities to accommodate the students.
8. Where core rest rooms are installed, lavatories may be installed in an area common to both males and females directly outside the toilet facilities within the rest room area. The minimum number of lavatories shall be determined by the total fixture count as required in 248 CMR 10.10 Table 1.

10.10 TABLE 1: MINIMUM FACILITIES FOR BUILDING OCCUPANCY

Educational Facilities	Public and Private Pre-School and Day Care	One per 20 Children & Staff	One per 20 Children & Staff		1 per 10	1 per 10	One for each set of rest rooms		One Mop Sink per Floor	One single user rest room allowed for up to 20 children and staff combined.
	Public & Private Schools. Kindergarten, Elementary, Middle & High School	1-25 up to 100 Over 100 add 1 for every 50	1-25 up to 100 Over 100 add 1 for every 50	Up to 50%	1 per 25	1 per 25	One for each set of rest rooms		One Mop Sink per Floor	

521 CMR 5.00 Architectural Access Board

3.3 Existing Buildings

All additions to, reconstruction, remodeling, and alterations or repairs of existing public buildings or facilities, which require a building permit or which are so defined by a state or local inspector, shall be governed by all applicable subsections in 521 CMR 3.00: JURISDICTION.

3.3.1

If the work being performed amounts to less than 30% of the full and fair cash value of the building and

1. if the work costs less than $100,000, then only the work being performed is required to comply with 521 CMR

or

2. if the work costs $100,000 or more, then the work being performed is required to comply with 521 CMR. In addition, an accessible public entrance and an accessible toilet room, telephone, drinking fountain (if toilets, telephones and drinking fountains are provided) shall also be provided in compliance with 521 CMR.

Exception: General maintenance and on-going upkeep of existing, underground transit facilities will not trigger the requirement for an accessible entrance and toilet unless the cost of the work exceeds $500,000 or unless work is being performed on the entrance or toilet.
Exception: Whether performed alone or in combination with each other, the following types of alterations are not subject to 521 CMR 3.3.1, unless the cost of the work exceeds $500,000 or unless work is being performed on the entrance or toilet. (When performing exempted work, a memo stating the exempted work and its costs must be filed with the permit application, or a separate building permit must be obtained.)

1. Curb Cuts: The construction of curb cuts shall comply with 521 CMR 21.00: CURB CUTS.
2. Alteration work which is limited solely to electrical mechanical, or plumbing systems; to abatement of hazardous materials; or retrofit of automatic sprinklers and does not involve the alteration of any elements or spaces required to be accessible under 521 CMR. Where electrical outlets and controls are altered, they must comply with 521 CMR.
3. Roof repair or replacement, window repair or replacement, repointing and masonry repair work.
4. Work relating to septic system repairs, (including Title V, 310 CMR 15.00, improvements) site utilities and landscaping.

3.3.2

If the work performed, including the exempted work, amounts to 30% or more of the full and fair cash value (see 521 CMR 5.38) of the building the entire building is required to comply with 521 CMR.

a. Where the cost of constructing an addition to a building amounts to 30% or more of the full and fair cash value of the existing building, both the addition and the existing building must be fully accessible.

521 CMR 30.00: PUBLIC TOILET ROOMS

30.1 GENERAL Each public toilet room provided on a site or in a building shall comply with 521 CMR.

a) a. In each adult public toilet room, at least one water closet and one sink in each location shall be accessible to persons in wheelchairs, or a separate accessible unisex toilet room shall be provided at each location. Adult water closets shall comply with the provisions of521 CMR 30.1 through 30.13.

b) b. Where children's toilet rooms are provided, at least one water closet and one sink in each location shall be accessible to children in wheelchairs, or a separate accessible unisex toilet room shall be provided at each location. Children's toilet rooms shall comply with the provisions of521 CMR 30.14 through 30.20. For purposes of 521 CMR, pre-kindergarten school is defined as a school which serves children from infancy up until but not including kindergarten. Elementary school is defined as a school which serves grades kindergarten through six.

527 CMR 1.00 Massachusetts Comprehensive Fire Safety Code, Adopts with Amendments NFPA 1, 2021

10.11.4.1

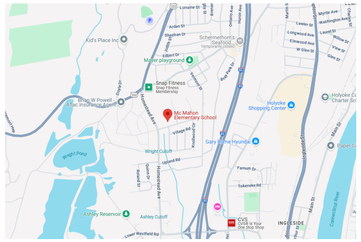
Any inner court not protected by a roof shall have a parapet or guard at least 42 inches high.

LT. ELMER J. MCMAHON ELEMENTARY SCHOOL ROOF REPLACEMENT

75 KANE RD, HOLYOKE, MA 01040

JUNE 18, 2025 - SCHEMATIC DESIGN

LOCUS PLAN



OWNER

CITY OF HOLYOKE

HOLYOKE PUBLIC SCHOOLS
57 SUFFOLK STREET, HOLYOKE, MA 01040

ARCHITECT

MVG

MOUNT VERNON GROUP ARCHITECTS
200 HARVARD MILLS SQUARE
WAKEFIELD, MA 01880
(781) 213-5030

CONSULTANTS

MECHANICAL, PLUMBING, FIRE PROTECTION ENGINEERS
C.A. CROWLEY ENGINEERING
645 County St Ste 6
Taunton, MA 02780
(508) 884-5094

HAZARDOUS MATERIALS
UNIVERSAL ENVIRONMENTAL
12 Brewster Road
Framingham, MA 01702
(508) 628-5486

STRUCTURAL ENGINEER
SOUZA TRUE & PARTNERS, INC.
265 Waltham Street, Third Floor
Waltham, MA 02451
(617) 926-6100

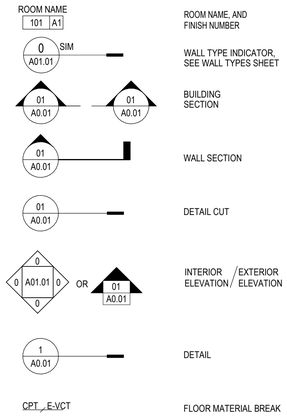
ROOF CONSULTANT
EWING ASSOCIATES
515 Converse St
Longmeadow, MA 01106
(413) 567-9544

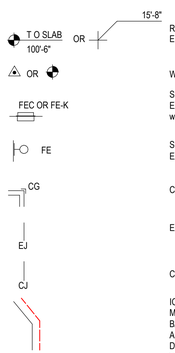
COST ESTIMATOR
FENNESSY CONSULTING
27 Glen Street, Suite 8
Stoughton, MA 02072
(781)-344-4464

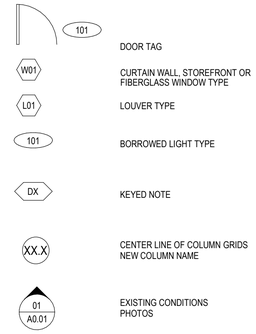
SYMBOLS

MATERIAL SYMBOL KEY

- UNDISTURBED OR COMPACTED SOIL
- CONCRETE
- MASONRY (CMU OR BRICK)
- EXPOSED WOOD TRIM
- WOOD FRAMING
- WOOD SHIM
- PLYWOOD
- PLYWOOD
- GWB
- BATT INSULATION
- RIGID INSULATION
- 1/2" SEALANT JOINT WITH BACKER ROD







*NOTE: SEE INDIVIDUAL DRAWINGS FOR LEGENDS & DEFINITION OF POCHE USED TO REPRESENT LARGE AREAS OF REPETITIVE MATERIALS.

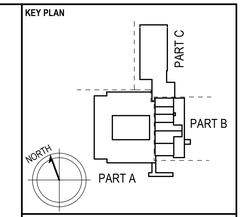
DRAWING LIST

SHEET NUMBER	SHEET NAME
A0.00	COVER SHEET - OVERALL
A2.00	OVERALL ROOF PLAN
A2.01	PROPOSED ROOF PLAN - PART A
A2.02	PROPOSED ROOF PLAN - PART B
A2.03	PROPOSED ROOF PLAN - PART C
EX.01	EXISTING CONDITIONS PART A
EX.02	EXISTING CONDITIONS PART B
EX.03	EXISTING CONDITIONS PART C
EX1.00	EXISTING FIRST FLOOR - INTERIOR REFERENCE PLAN
EX1.01	EXISTING NORTH ADDITION - INTERIOR REFERENCE PLAN

ABBREVIATIONS

@	AT
AB	ANCHOR BOLT
ACOUST	ACOUSTICAL
ACP	ACCESS PANEL
ACT	ACOUSTICAL CEILING TILE
AD	AREA DRAIN
ADO	AUTO DOOR OPENER
ADJ	ADJUSTABLE
AED	AUTOMATIC EMERGENCY DEFIBRILLATOR/CABINET
AFF	ABOVE FINISH FLOOR
ALUM	ALUMINUM
ANOD	ANODIZED
ASPH	ASPHALT
ASSY	ASSEMBLY
ATTACH	ATTACHMENT
ALT	ALTERNATE
BD OR BRD	BOARD
BF	BARRIER FREE
BITUM	BITUMINOUS
BLDG	BUILDING
BLKG	BLOCKING
BM	BEAM
BO	BOTTOM OF
BOD	BOTTOM OF DECK
BOTT	BOTTOM
BTWN	BETWEEN
CB	CATCH BASIN
CEM	CEMENT
CFMF	COLD FORM METAL FRAMING
CG	CORNER GUARD (SS)
CH	CONDUCTOR HEAD
CJ	CONTROL JOINT
CLG	CEILING
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
CONC	CONCRETE
CORR	CORRIDOR
CL	CENTER LINE
CLR	CLEAR
CONN	CONNECT
CONT	CONTINUOUS
CP	CEMENT PLASTER
CPT	CARPET
CSK	COUNTERSINK
CT	CERAMIC TILE
CW	CURTAINWALL
D	CLOTHES DRYER
DBL	DOUBLE
DEMO	DEMOLISH
DF	DRINKING FOUNTAIN
DIA, Ø	DIAMETER
DN	DOWN
DO	DITTO OR REPEAT ADJACENT ELEMENT
DR	DOOR
DS	DOWNSPOUT
DWGS	DRAWINGS
EA	EACH
EIFS	EXTERIOR INSULATION FINISH SYSTEM
EJ	EXPANSION JOINT
ELECT	ELECTRICAL
ELEV OR EL	ELEVATION
EMER	EMERGENCY
EMBED	EMBEDMENT
EN	ENAMEL
ENL	ENLARGED
EPS	EXPANDED POLYSTYRENE
EQ	EQUAL
EQUIP	EQUIPMENT
ETR	EXISTING TO REMAIN
EXP	EXPANSION
EXIST OR (E)	EXISTING
EXT	EXTERIOR
EXTR	EXTRUDED
FB	ELECTRICAL FLOOR BOX
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER - SEE SYMBOLS
FE-K	FIRE EXTINGUISHER - KITCHEN TYPE - SEE SYMBOLS
FEC	FIRE EXTINGUISHER CABINET - SEE SYMBOLS
FF	FACTORY FINISH
FH	FIRE HYDRANT
FIN	FINISH(ED)
FLASH'(G)	FLASHING
FLR	FLOOR
FM	FACTORY MUTUAL
FCIC	FURNISHED BY CONTRACTOR INSTALLED BY CONTRACTOR
FOIC	FURNISHED BY OWNER INSTALLED BY CONTRACTOR
FOIO	FURNISHED BY OWNER INSTALLED BY OWNER
FOM	FACE OF MASONRY
FO	FACE OF
FOB	FACE OF BRICK
FO CMU	FACE OF CMU
FP	FIREPLACE
FRMG	FRAMING
FRP	FIBERGLAS REINFORCED PANEL(S)
FT	FOOT OR FEET
FTR	FIN TUBE RADIATION
GA	GAUGE
GALV	GALVANIZED
GL	GLASS
GLB	GLUE LAMINATED BEAM
GWB	GYPSUM WALL BOARD
GYP	GYPSUM
HBD	HARDBOARD
HC	HANDICAP
HD	HOOD
HDW	HARDWARE
HGT	HEIGHT
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HR	HOUR
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
INT	INTERIOR
IFP	INTERACTIVE FLAT PANEL
INSUL	INSULATION
INSTALL OR INS	INSTALLATION
JAN	JANITOR
JT	JOINT
L	ANGLE
LAM	LAMINATE
LB OR #	POUND
LLH	LONG LEG HORIZONTAL
LOC	LOCATION
LLV	LONG LEG VERTICAL
MATL	MATERIAL
MAX	MAXIMUM
MB	MACHINE BOLT
MECH	MECHANICAL
ME/P OR MEP	MECHANICAL, ELECTRICAL, AND PLUMBING
MFR	MANUFACTURER
MH	MANHOLE
MIB	MOISTURE INFILTRATION BARRIER
MICRO	MICROWAVE
MIN	MINIMUM
MLDG	MOLDING
MTL	METAL
NATL	NATURAL
NC	NONCOMBUSTIBLE
NIC	NOT IN CONTRACT
NO	NUMBER
NP	NO PAINT
NR	NOT RATED
NOM	NOMINAL
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
ODC	OVERFLOW DRAIN CAP
OHVD	OVERHEAD
OPER	OPERABLE
OPP	OPPOSITE HAND
OPNG	OPENING
OTS	OPEN TO STRUCTURE-PAINT TYP
OTA	OPEN TO ABOVE
OVHG	OVERHANG
PENE	PENETRATION
PERF	PERFORATED
PFMU	POLISHED FINISH MASONRY UNIT
PI	POST INDICATOR
PJSC	PROJECTION SCREEN
PL	PLATE
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PNL	PANEL
PNT	PAINT
POLY	EXTRUDED POLYSTYRENE
PR	PAIR
PROT	PROTECTION
PSI	POUND PER SQUARE INCH
PT	PRESSURE TREATED
PTN	PARTITION
PVC	POLYVINYL CHLORIDE
PW OR PLYWD	PLYWOOD
QT	QUARRY TILE
RCP	REFLECTED CEILING PLAN
RAD	RADIUS
RD	ROOF DRAIN
RE	REFER TO
REF	REFRIGERATOR
RES	RESILIENT FLOORING
REQD	REQUIRED
RM	ROOM
RUB	RUBBER FLOORING
RWL	RAIN WATER LEADER
SAC	SUSPENDED ACOUSTICAL CEILING
SAM	SELF ADHERED MEMBRANE
SB	SPLASH BLOCK
SCHED	SCHEDULE
SC	SOLID CORE
SD	SMOKE DETECTOR
SEC	SECURITY
SF	STOREFRONT
SG	STEEL CORNER GUARD
SHEATH	SHEATHING
SHT	SHEET
SHM	SECURITY HOLLOW METAL
SIM	SIMILAR
SPEC	SPECIFICATION
SPK	SPEAKER
SQ	SQUARE
S/S OR SS	STAINLESS STEEL
STC	SOUND TRANSMISSION COEFFICIENT
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURAL
SUSP	SUSPENDED
SV	SLEEVE
T & G	TONGUE & GROOVE
TERM	TERMINATION
THRESH	THRESHOLD
TO	TOP OF
TOS	TOP OF SLAB
TRTD	TREATED
TYP	TYPICAL
TS	TUBE STEEL
UL	UNDERWRITERS LABORATORY
UNO	UNLESS NOTED OTHERWISE
U/S	UNDER SIDE
VCT	VINYL COMPOSITION TILE
VIF	VERIFY IN FIELD
V PLAS	VENEER PLASTER
VERT	VERTICAL
VWC	VINYL WALL COVERING
W	WASHING MACHINE
W/	WITH
WB	WHITE BOARD
WC	WATER CLOSET
WF	WIDE FLANGE
WDO	WINDOW
WD	WOOD
WHS	WELDED HEAD STUD
WOM	WALK OFF MAT
WP	WALL PAD
WR	WATER RESISTANT
WWF	WELDED WIRE FABRIC

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02024.28

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

MCMAHON E.S. ROOF REPLACEMENT

75 KANE RD. HOLYOKE, MA 01040

DRAWING TITLE

COVER SHEET - OVERALL

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main street, suite 1110
Springfield MA 01103
413 592 9700 T
info@mvgarchitects.com E

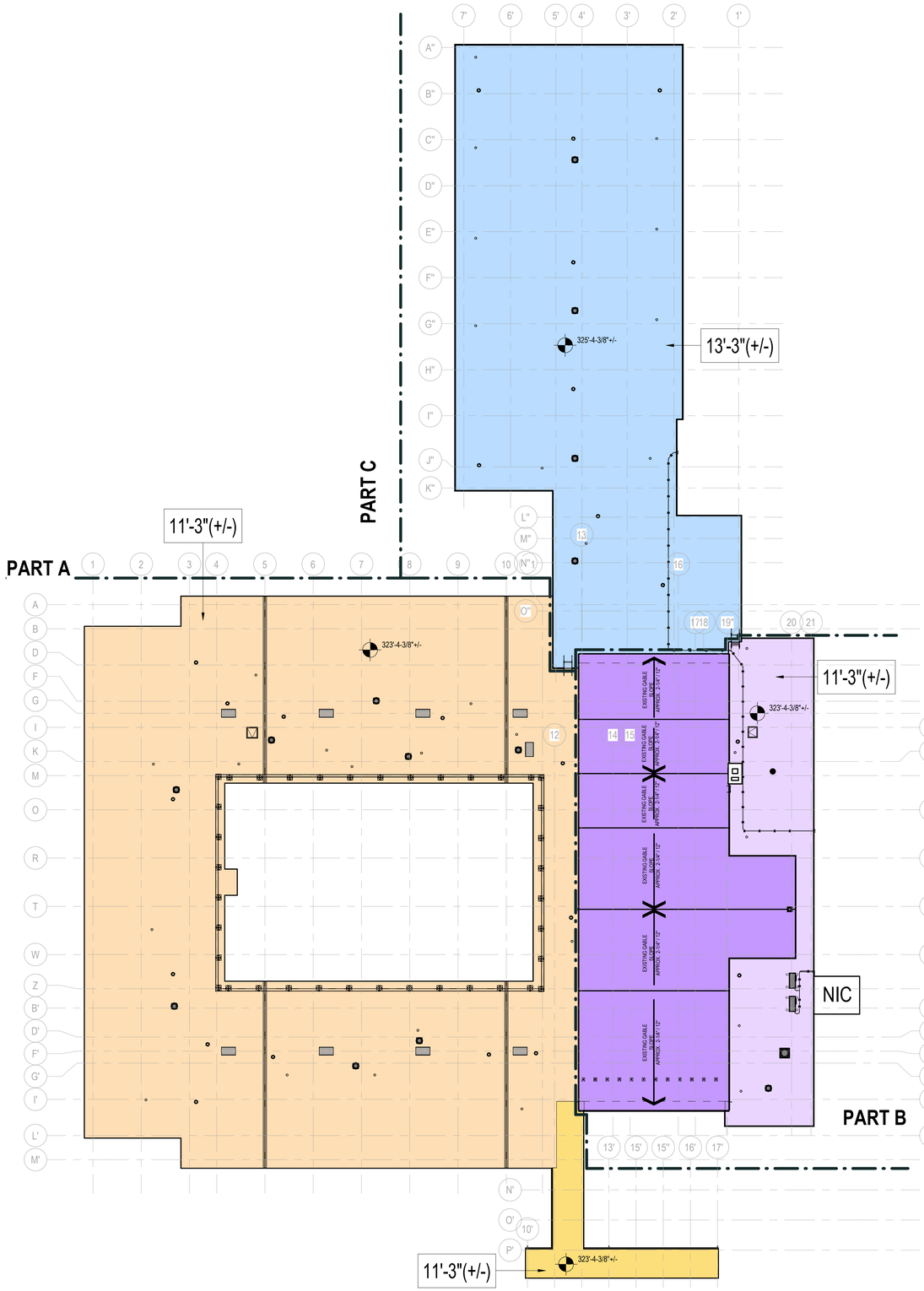
STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	OJ
CHECKED	JL
DATE	JUNE 18, 2025

DRAWING NUMBER

A0.00



1 OVERALL ROOF PLAN COLORED
1" = 20'-0"

GENERAL NOTES

1. VERIFY ALL EXISTING CONDITIONS IN FIELD, TYPICAL.
2. ELEVATIONS PROVIDED ARE TO THE TOP OF EXISTING STEEL ROOF JOISTS, UNLESS NOTED OTHERWISE.
3. THE EXISTING ROOF DECK IS 1-1/2" CORRUGATED METAL, TYPICAL AT ALL LOCATIONS UNLESS NOTED OTHERWISE.
4. ALL HEIGHTS ABOVE GRADE PROVIDED ARE APPROXIMATE. VERIFY IN FIELD.

ROOF AREAS LEGEND

ADMINISTRATION & CLASSROOMS ROOF: 23,413 SF
PART A
ELEVATION: 323'-4-3/8"+/-
TYP. HEIGHT ABOVE GRADE: 11'-3"

ENTRY CANOPY ROOF: 1,101 SF
PARTS A
ELEVATION: 323'-4-3/8"+/-
TYP. HEIGHT ABOVE GRADE: 11'-3"

GYM HIGH ROOF: 8,429 SF
PART B
ELEVATION: 323'-4-3/8"+/-
TYP. HEIGHT ABOVE GRADE: 11'-3"

EAST ROOF - STORAGE, KITCHEN : 3,792 SF
PART B
ELEVATION: 323'-4-3/8"+/-
TYP. HEIGHT ABOVE GRADE: 11'-3"

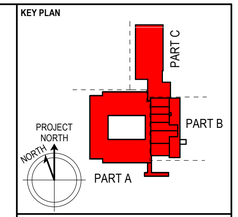
NORTH ROOF: 14,451 SF
PART C
ELEVATION: 325'-4-3/8"+/-
TYP. HEIGHT ABOVE GRADE: 13'-3"

TOTAL ROOF AREA: 51,186 SF

##' APPROX. HEIGHT ABOVE GRADE

MATCH LINE FOR PARTIAL PLANS

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
SCHEMATIC DESIGN

PROJECT NUMBER
02024.28

OWNER / PROJECT NAME / LOCATION
CITY OF HOLYOKE
MCMAHON E.S. ROOF REPLACEMENT
75 KANE RD. HOLYOKE, MA 01040

DRAWING TITLE
OVERALL ROOF PLAN

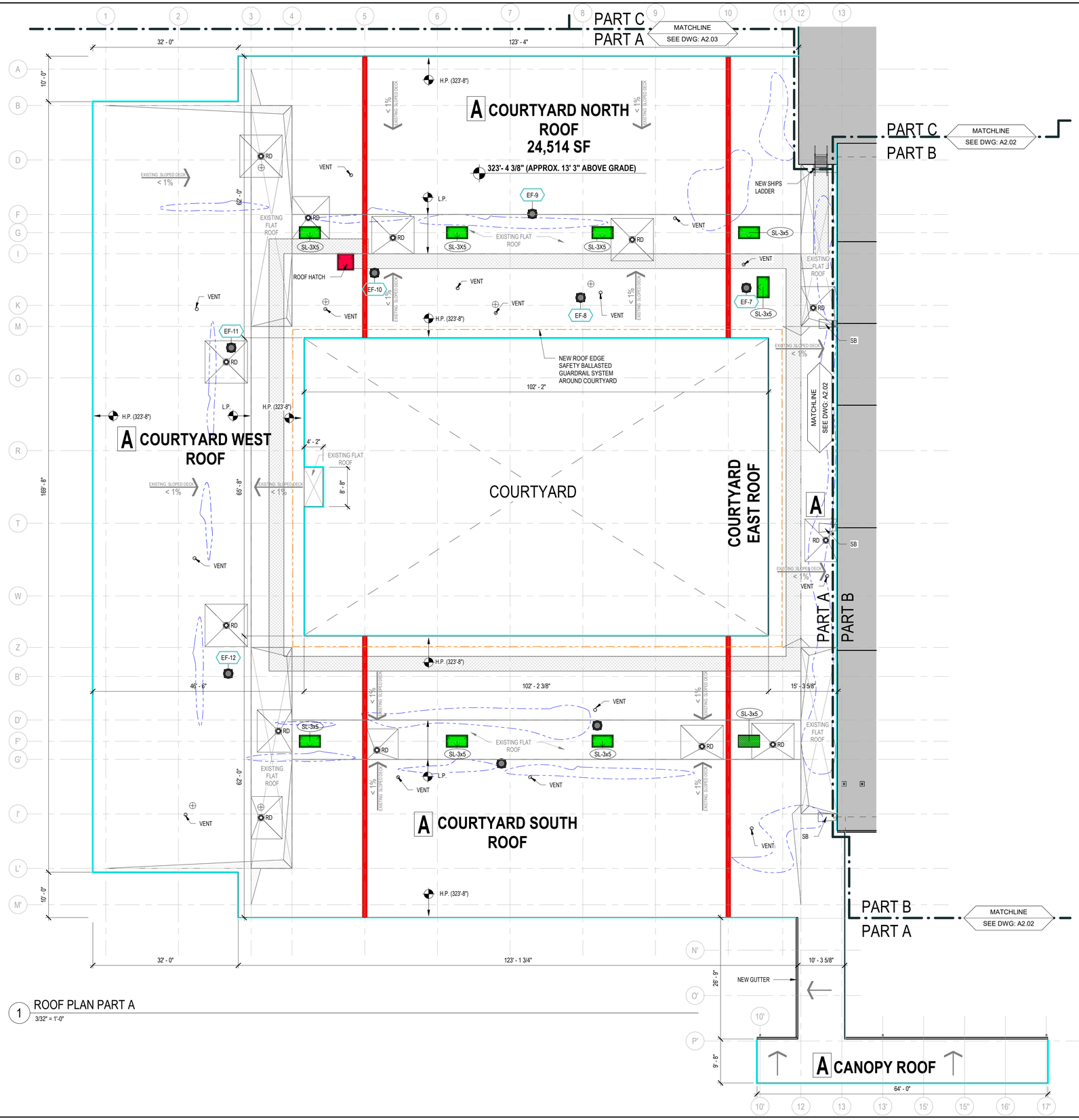
MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main street, suite 1110
Springfield MA 01103
413 592 9700 T
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	OJ
CHECKED	JL
DATE	JUNE 18, 2025

DRAWING NUMBER
A2.00



1 ROOF PLAN PART A
3/32" = 1'-0"

GENERAL ROOF NOTES

1. REFER TO DRAWING A2.XX AND A2.XX FOR TYPICAL ROOF DETAILS.
2. SEE ROOF DETAILS AND SPECIFICATIONS FOR MORE INFORMATION.
3. VERIFY ALL DIMENSIONS OF EXISTING CONDITIONS IN FIELD, TYPICAL.
4. FALL PROTECTION ANCHORS SHALL BE SPACED NO FURTHER THAN 30'-0" APART O.C. AND SHALL BE ATTACHED TO EXISTING STEEL STRUCTURE. VERIFY LOCATIONS OF EXISTING MEMBERS IN FIELD. REFER TO DETAILS & STRUCTURAL DRAWINGS FOR MORE INFORMATION.
5. FOAM ALL GAPS IN SUBSTRATES, ROOF INSULATION BOARDS, BETWEEN BLOCKING / CURBS / PIPING AND ROOF INSULATION, AND BETWEEN PARAPETS / ROOF EDGE BLOCKING AND ROOF INSULATION. TYPICAL.
6. EXISTING ROOF SUBSTRATES MAY HAVE UNEVEN SURFACES WITH PROTRUSIONS AND/OR DEPRESSIONS UNCOVERED DURING DEMOLITION. REVIEW EXISTING SUBSTRATES UPON EXPOSURE TO VIEW. CUT AND COPE NEW INSULATION AS REQUIRED AT PROTRUSIONS. BUILD-UP NEW INSULATION AS REQUIRED AT DEPRESSIONS. ENSURE POSITIVE DRAINAGE, TYPICAL. REFER TO PLAN FOR LOCATIONS OF EXISTING PONDING.
7. PROVIDE CRICKETS AT EQUIPMENT AND SKYLIGHTS (LOCATED ON SLOPED STRUCTURE OR WITHIN TAPERED INSULATION) ON THE HIGH SIDE OF THE UNIT IF PERPENDICULAR TO TO THE DRAINAGE SLOPE, TYPICAL. DO NOT EXCEED 2" CRICKET HEIGHT. 1/2":12" TAPERED INSULATION IS TYPICAL. USE 1/4":12 OR 1/8":12 INSULATION AS APPLICABLE.

ROOF TYPE

ROOF TYPE ASSEMBLY

SEE ROOF SYSTEM ASSEMBLY PROFILES ON A2.XX

A — **TYPE A - FLAT ROOF**

- *FULLY ADHERED 80 MIL PVC MEMBRANE & ADHERED FLASHING SYSTEM* - (COLOR: REFLECTIVE GRAY).
- 1/2" OVERLAYMENT BOARD (DENSDECK PRIME OR EQUAL), MECHANICALLY FASTENED.
- 3" RIGID INSULATION TOP LAYER LAYER ADHERED / FASTENED PER MFR., AND 3" RIGID INSULATION BOTTOM LAYER MECHANICALLY FASTENED. INCLUDE INSULATION DRAIN SUMPS (REFER TO PLANS & DETAILS); MIN THICKNESS OF 4" AT ROOF DRAIN, U.N.O. INCLUDE INSULATION CRICKETS AS SHOWN ON PLANS.
- SELF-ADHERED MOD. BIT. VAPOR RETARDER / TEMPORARY ROOFING.
- EXISTING 1-1/2" CORRUGATED METAL DECK TO REMAIN. REFER TO PLANS FOR EXISTING SLOPES OF STRUCTURE.

B — **TYPE B - SLOPED ROOF**

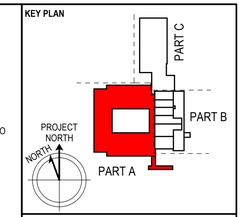
- *FULLY ADHERED 80 MIL PVC MEMBRANE & ADHERED FLASHING SYSTEM* - (COLOR: REFLECTIVE GRAY).
- 1/2" OVERLAYMENT BOARD (DENSDECK PRIME OR EQUAL), MECHANICALLY FASTENED.
- 3" RIGID INSULATION TOP LAYER LAYER ADHERED / FASTENED PER MFR., AND 3" RIGID INSULATION BOTTOM LAYER MECHANICALLY FASTENED. INCLUDE INSULATION DRAIN SUMPS (REFER TO PLANS & DETAILS); MIN THICKNESS OF 4" AT ROOF DRAIN, U.N.O. INCLUDE INSULATION CRICKETS AS SHOWN ON PLANS.
- SELF-ADHERED MOD. BIT. VAPOR RETARDER / TEMPORARY ROOFING.
- EXISTING 1-1/2" CORRUGATED METAL DECK TO REMAIN. REFER TO PLANS FOR EXISTING SLOPES OF STRUCTURE.

ROOF SYMBOL LEGEND

- RD — ROOF DRAIN (RD) / ROOF DRAIN WITH OVERFLOW DRAIN (RD/ORD) & SUMP. SEE DETAILS: 2 / A2.04 AND 1 / A2.04 (ALL SUMP LOCATIONS SHALL HAVE A MIN. SLOPE OF 1/2" PER FT, TYP.)
- A — ROOF TYPE AREA DESIGNATION (SEE ROOF TYPE ASSEMBLY SUMMARY)
- 30" — TAPERED INSULATION CRICKET. PROVIDE SIZE AND SLOPE AS REQUIRED. (1/2" PER FT SLOPE, TYP. 1/4" PER FT MIN. UNLESS NOTED OTHERWISE, REFER TO PLANS) POOLING / FREESTANDING WATER SHALL NOT BE ACCEPTED (CRICKET SLOPE, TYP)
- WELDABLE WALKWAYS, 39" WIDE (FROM ROOF ACCESS TO SERVICEABLE SIDE OF ALL ROOF TOP EQUIPMENT, TYPICAL)
- SB — SPLASH BLOCK OVER WELDED WALKING MAT, REFER TO TYPICAL DETAIL: - / ----
- EXISTING VENT PIPING THRU ROOF or EXHAUST FLUES, SEE DETAILS: 5 / A2.04 7 / A2.04 EXTEND ALL VENT PIPING AS REQUIRED.
- SLOPE 2-1/4" / 12" — DIRECTION OF ROOF SLOPE / TAPERED INSULATION
- 30'-0" — ROOF ELEVATIONS ABOVE FIRST FLOOR (NOTED ELEVATIONS ARE APPROXIMATE)
- FA-R — FALL PROTECTION ROOF ANCHOR, SEE: 8 / A2.04
- FA-W — FALL PROTECTION WALL ANCHOR, SEE: (NOT APPLICABLE IN PHASE 1) 20' MAX. SPACING OR MANUFACTURERS RECOMMENDED SPACING
- FALL PROTECTION SYSTEM CABLE
- ROOF HATCH. SEE DETAIL: 01 / A2.05 AND 02 / A2.05
- ROOF SKYLIGHT.
- ROOF LADDER. SEE DETAILS: **A7.01.1**
- EXPANSION JOINT:
- NEW FASCIA ROOF EDGE METAL
- BALLASTED COURTYARD GUARDRAIL SYSTEM, SEE DETAIL: - / ----
- LOCATION OF PONDING ON PREVIOUS ROOF SYSTEM. REVIEW EXISTING SUBSTRATE. REFER TO GENERAL NOTES.

PROJECT NORTH

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02024.28

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

MCMAHON E.S. ROOF REPLACEMENT

75 KANE RD. HOLYOKE, MA 01040

DRAWING TITLE

PROPOSED ROOF PLAN - PART A

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main street, suite 1110
Springfield MA 01103
413 592 9700 T
info@mvgarchitects.com E

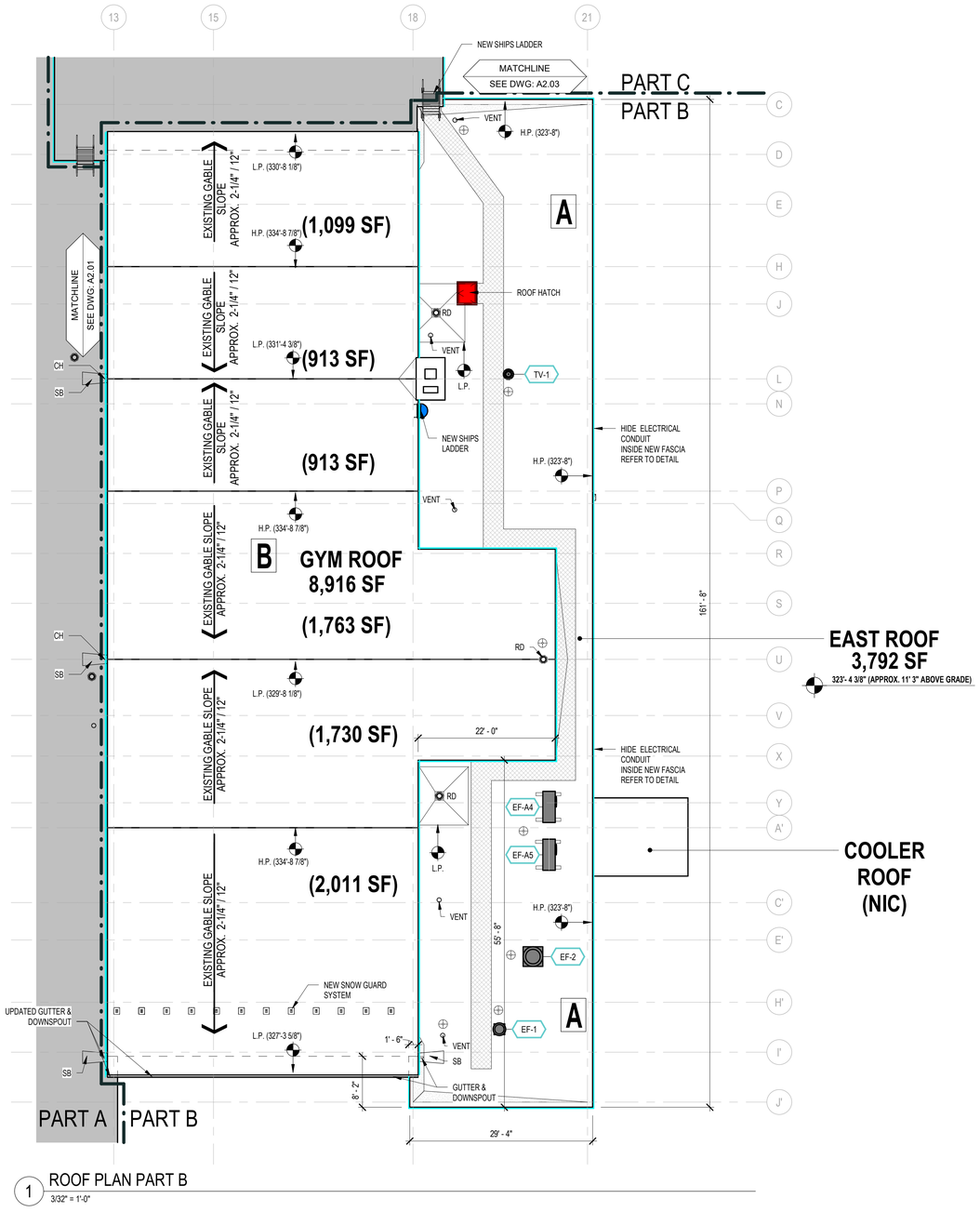
STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	DL, RS, OJ
CHECKED	JL
DATE	JUNE 18, 2025

DRAWING NUMBER

A2.01



1 ROOF PLAN PART B
3/32" = 1'-0"

GENERAL ROOF NOTES

1. REFER TO DRAWING A2.XX AND A2.XX FOR TYPICAL ROOF DETAILS.
2. SEE ROOF DETAILS AND SPECIFICATIONS FOR MORE INFORMATION.
3. VERIFY ALL DIMENSIONS OF EXISTING CONDITIONS IN FIELD, TYPICAL.
4. FALL PROTECTION ANCHORS SHALL BE SPACED NO FURTHER THAN 30'-0" APART O.C. AND SHALL BE ATTACHED TO EXISTING STEEL STRUCTURE. VERIFY LOCATIONS OF EXISTING MEMBERS IN FIELD. REFER TO DETAILS & STRUCTURAL DRAWINGS FOR MORE INFORMATION.
5. FOAM ALL GAPS IN SUBSTRATES, ROOF INSULATION BOARDS, BETWEEN BLOCKING / CURBS / PIPING AND ROOF INSULATION, AND BETWEEN PARAPETS / ROOF EDGE BLOCKING AND ROOF INSULATION. TYPICAL.
6. EXISTING ROOF SUBSTRATES MAY HAVE UNEVEN SURFACES WITH PROTRUSIONS AND/OR DEPRESSIONS UNCOVERED DURING DEMOLITION. REVIEW EXISTING SUBSTRATES UPON EXPOSURE TO VIEW. CUT AND COPE NEW INSULATION AS REQUIRED AT PROTRUSIONS. BUILD-UP NEW INSULATION AS REQUIRED AT DEPRESSIONS. ENSURE POSITIVE DRAINAGE, TYPICAL. REFER TO PLAN FOR LOCATIONS OF EXISTING PONDING.
7. PROVIDE CRICKETS AT EQUIPMENT AND SKYLIGHTS (LOCATED ON SLOPED STRUCTURE OR WITHIN TAPERED INSULATION) ON THE HIGH SIDE OF THE UNIT IF PERPENDICULAR TO TO THE DRAINAGE SLOPE, TYPICAL. DO NOT EXCEED 2" CRICKET HEIGHT. 1/2":12" TAPERED INSULATION IS TYPICAL. USE 1/4":12 OR 1/8":12 INSULATION AS APPLICABLE.

ROOF TYPE

ROOF TYPE ASSEMBLY

SEE ROOF SYSTEM ASSEMBLY PROFILES ON A2.XX

A **TYPE A - FLAT ROOF**

- *FULLY ADHERED 80 MIL PVC MEMBRANE & ADHERED FLASHING SYSTEM* - (COLOR: REFLECTIVE GRAY).
- 1/2" OVERLAYMENT BOARD (DENSDECK PRIME OR EQUAL), MECHANICALLY FASTENED.
- 3" RIGID INSULATION TOP LAYER LAYER ADHERED / FASTENED PER MFR., AND
  3" RIGID INSULATION BOTTOM LAYER MECHANICALLY FASTENED.
  INCLUDE INSULATION DRAIN SUMPS (REFER TO PLANS & DETAILS); MIN THICKNESS OF 4" AT ROOF DRAIN, U.N.O.
  INCLUDE INSULATION CRICKETS AS SHOWN ON PLANS.
- SELF-ADHERED MOD. BIT. VAPOR RETARDER / TEMPORARY ROOFING.
- EXISTING 1-1/2" CORRUGATED METAL DECK TO REMAIN. REFER TO PLANS FOR EXISTING SLOPES OF STRUCTURE.

B **TYPE B - SLOPED ROOF**

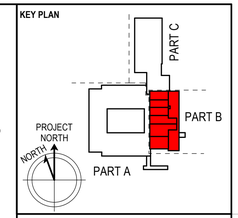
- *FULLY ADHERED 80 MIL PVC MEMBRANE & ADHERED FLASHING SYSTEM* - (COLOR: REFLECTIVE GRAY).
- 1/2" OVERLAYMENT BOARD (DENSDECK PRIME OR EQUAL), MECHANICALLY FASTENED.
- 3" RIGID INSULATION TOP LAYER LAYER ADHERED / FASTENED PER MFR., AND
  3" RIGID INSULATION BOTTOM LAYER MECHANICALLY FASTENED.
  INCLUDE INSULATION DRAIN SUMPS (REFER TO PLANS & DETAILS); MIN THICKNESS OF 4" AT ROOF DRAIN, U.N.O.
  INCLUDE INSULATION CRICKETS AS SHOWN ON PLANS.
- SELF-ADHERED MOD. BIT. VAPOR RETARDER / TEMPORARY ROOFING.
- EXISTING 1-1/2" CORRUGATED METAL DECK TO REMAIN. REFER TO PLANS FOR EXISTING SLOPES OF STRUCTURE.

ROOF SYMBOL LEGEND

- RD — ROOF DRAIN (RD) / ROOF DRAIN WITH OVERFLOW DRAIN (RD/ORD) & SUMP. SEE DETAILS: 1/A2.04 AND 2/A2.04 (ALL SUMP LOCATIONS SHALL HAVE A MIN. SLOPE OF 1/2" PER FT, TYP.)
- A — ROOF TYPE AREA DESIGNATION (SEE ROOF TYPE ASSEMBLY SUMMARY)
- 30" — TAPERED INSULATION CRICKET. PROVIDE SIZE AND SLOPE AS REQUIRED. (1/2" PER FT SLOPE, TYP. 1/4" PER FT MIN. UNLESS NOTED OTHERWISE, REFER TO PLANS) POOLING / FREESTANDING WATER SHALL NOT BE ACCEPTED (CRICKET SLOPE, TYP)
- WELDABLE WALKWAYS, 39" WIDE (FROM ROOF ACCESS TO SERVICEABLE SIDE OF ALL ROOF TOP EQUIPMENT, TYPICAL)
- SB — SPLASH BLOCK OVER WELDED WALKING MAT, REFER TO TYPICAL DETAIL: -/---
- EXISTING VENT PIPING THRU ROOF or EXHAUST FLUES. SEE DETAILS: 5/A2.04 7/A2.04 EXTEND ALL VENT PIPING AS REQUIRED.
- SLOPE 2-1/4" / 12" — DIRECTION OF ROOF SLOPE / TAPERED INSULATION
- 30'-0" — ROOF ELEVATIONS ABOVE FIRST FLOOR (NOTED ELEVATIONS ARE APPROXIMATE)
- FA-R — FALL PROTECTION ROOF ANCHOR, SEE: 8/A2.04
- FA-W — FALL PROTECTION WALL ANCHOR, SEE: (NOT APPLICABLE IN PHASE 1) 20' MAX. SPACING OR MANUFACTURERS RECOMMENDED SPACING
- FALL PROTECTION SYSTEM CABLE
- ROOF HATCH. SEE DETAIL: 01/A2.05 AND 02/A2.05
- ROOF SKYLIGHT.
- ROOF LADDER. SEE DETAILS: **A7.01.1**
- EXPANSION JOINT:
- NEW FASCIA ROOF EDGE METAL
- BALLASTED COURTYARD GUARDRAIL SYSTEM, SEE DETAIL: -/---
- LOCATION OF PONDING ON PREVIOUS ROOF SYSTEM. REVIEW EXISTING SUBSTRATE. REFER TO GENERAL NOTES.

PROJECT NORTH / NORTH

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02024.28

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

MCMAHON E.S. ROOF REPLACEMENT

75 KANE RD. HOLYOKE, MA 01040

DRAWING TITLE

PROPOSED ROOF PLAN - PART B

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main street, suite 1110
Springfield MA 01103
413 592 9700 T
info@mvgarchitects.com E

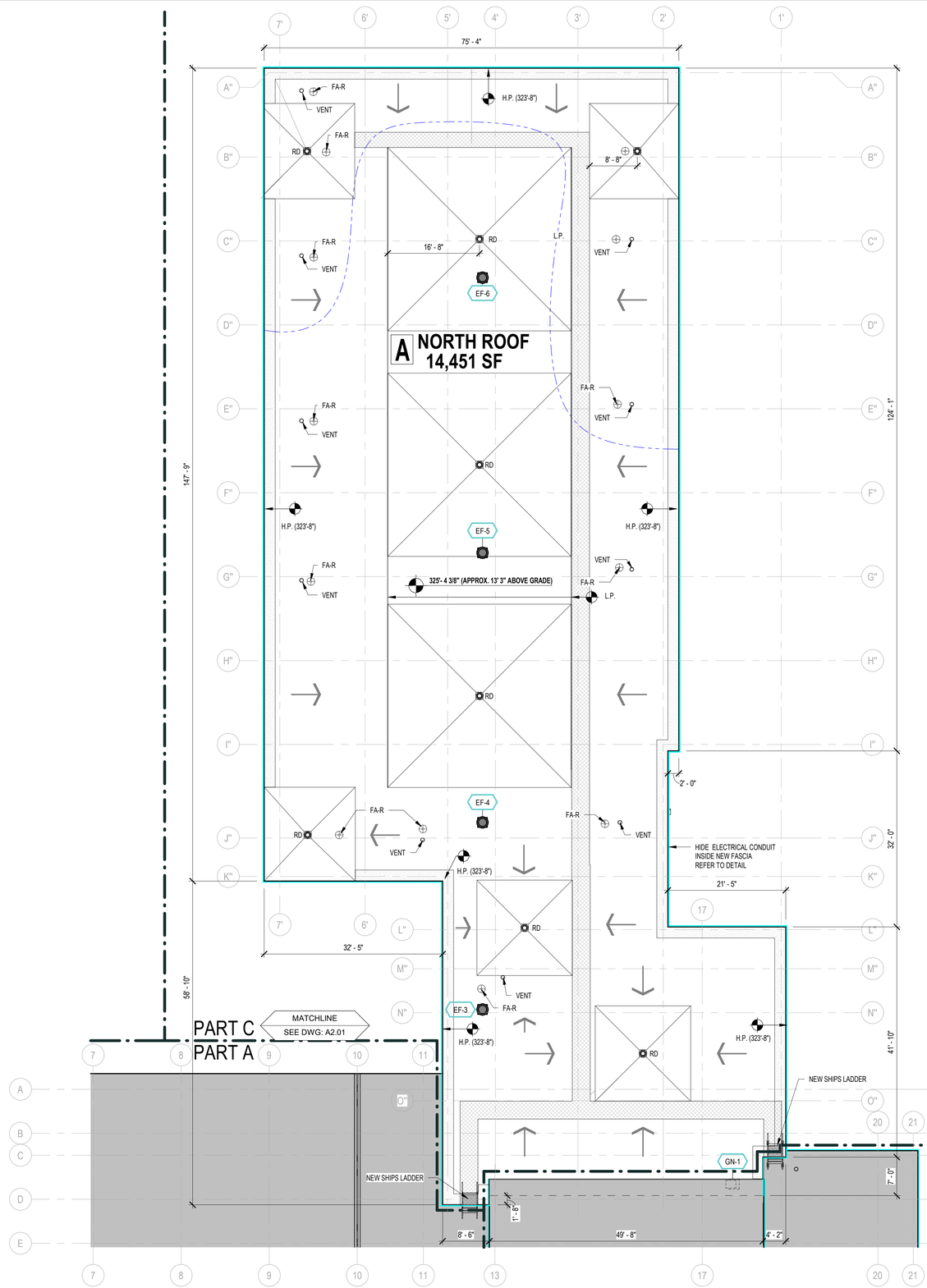
STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	DL, RS, OJ
CHECKED	JL
DATE	JUNE 18, 2025

DRAWING NUMBER

A2.02



1 ROOF PLAN PART C
3/32" = 1'-0"

GENERAL ROOF NOTES

1. REFER TO DRAWING A2.XX AND A2.XX FOR TYPICAL ROOF DETAILS.
2. SEE ROOF DETAILS AND SPECIFICATIONS FOR MORE INFORMATION.
3. VERIFY ALL DIMENSIONS OF EXISTING CONDITIONS IN FIELD, TYPICAL.
4. FALL PROTECTION ANCHORS SHALL BE SPACED NO FURTHER THAN 30'-0" APART O.C. AND SHALL BE ATTACHED TO EXISTING STEEL STRUCTURE. VERIFY LOCATIONS OF EXISTING MEMBERS IN FIELD. REFER TO DETAILS & STRUCTURAL DRAWINGS FOR MORE INFORMATION.
5. FOAM ALL GAPS IN SUBSTRATES, ROOF INSULATION BOARDS, BETWEEN BLOCKING / CURBS / PIPING AND ROOF INSULATION, AND BETWEEN PARAPETS / ROOF EDGE BLOCKING AND ROOF INSULATION. TYPICAL.
6. EXISTING ROOF SUBSTRATES MAY HAVE UNEVEN SURFACES WITH PROTRUSIONS AND/OR DEPRESSIONS UNCOVERED DURING DEMOLITION. REVIEW EXISTING SUBSTRATES UPON EXPOSURE TO VIEW. CUT AND COPE NEW INSULATION AS REQUIRED AT PROTRUSIONS. BUILD-UP NEW INSULATION AS REQUIRED AT DEPRESSIONS. ENSURE POSITIVE DRAINAGE, TYPICAL. REFER TO PLAN FOR LOCATIONS OF EXISTING PONDING.
7. PROVIDE CRICKETS AT EQUIPMENT AND SKYLIGHTS (LOCATED ON SLOPED STRUCTURE OR WITHIN TAPERED INSULATION) ON THE HIGH SIDE OF THE UNIT IF PERPENDICULAR TO TO THE DRAINAGE SLOPE, TYPICAL. DO NOT EXCEED 2" CRICKET HEIGHT. 1/2":12" TAPERED INSULATION IS TYPICAL. USE 1/4":12 OR 1/8":12 INSULATION AS APPLICABLE.

ROOF TYPE

ROOF TYPE ASSEMBLY

SEE ROOF SYSTEM ASSEMBLY PROFILES ON A2.XX

A — TYPE A - FLAT ROOF

- *FULLY ADHERED 80 MIL PVC MEMBRANE & ADHERED FLASHING SYSTEM* - (COLOR: REFLECTIVE GRAY).
- 1/2" OVERLAYMENT BOARD (DENSDECK PRIME OR EQUAL), MECHANICALLY FASTENED.
- 3" RIGID INSULATION TOP LAYER LAYER ADHERED / FASTENED PER MFR., AND
  3" RIGID INSULATION BOTTOM LAYER MECHANICALLY FASTENED.
  INCLUDE INSULATION DRAIN SUMPS (REFER TO PLANS & DETAILS); MIN THICKNESS OF 4" AT ROOF DRAIN, U.N.O.
  INCLUDE INSULATION CRICKETS AS SHOWN ON PLANS.
- SELF-ADHERED MOD. BIT. VAPOR RETARDER / TEMPORARY ROOFING.
- EXISTING 1-1/2" CORRUGATED METAL DECK TO REMAIN. REFER TO PLANS FOR EXISTING SLOPES OF STRUCTURE.

B — TYPE B - SLOPED ROOF

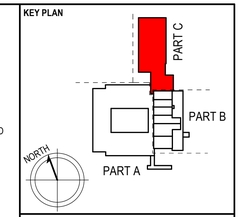
- *FULLY ADHERED 80 MIL PVC MEMBRANE & ADHERED FLASHING SYSTEM* - (COLOR: REFLECTIVE GRAY).
- 1/2" OVERLAYMENT BOARD (DENSDECK PRIME OR EQUAL), MECHANICALLY FASTENED.
- 3" RIGID INSULATION TOP LAYER LAYER ADHERED / FASTENED PER MFR., AND
  3" RIGID INSULATION BOTTOM LAYER MECHANICALLY FASTENED.
  INCLUDE INSULATION DRAIN SUMPS (REFER TO PLANS & DETAILS); MIN THICKNESS OF 4" AT ROOF DRAIN, U.N.O.
  INCLUDE INSULATION CRICKETS AS SHOWN ON PLANS.
- SELF-ADHERED MOD. BIT. VAPOR RETARDER / TEMPORARY ROOFING.
- EXISTING 1-1/2" CORRUGATED METAL DECK TO REMAIN. REFER TO PLANS FOR EXISTING SLOPES OF STRUCTURE.

ROOF SYMBOL LEGEND

- RD — ROOF DRAIN (RD) / ROOF DRAIN WITH OVERFLOW DRAIN (RD/ORD) & SUMP, SEE DETAILS: 1/A2.04 AND 2/A2.04 (ALL SUMP LOCATIONS SHALL HAVE A MIN. SLOPE OF 1/2" PER FT, TYP.)
- A — ROOF TYPE AREA DESIGNATION (SEE ROOF TYPE ASSEMBLY SUMMARY)
- 30" — TAPERED INSULATION CRICKET. PROVIDE SIZE AND SLOPE AS REQUIRED. (1/2" PER FT SLOPE, TYP. 1/4" PER FT MIN. UNLESS NOTED OTHERWISE, REFER TO PLANS) POOLING / FREESTANDING WATER SHALL NOT BE ACCEPTED (CRICKET SLOPE, TYP)
- WELDABLE WALKWAYS, 39" WIDE (FROM ROOF ACCESS TO SERVICEABLE SIDE OF ALL ROOF TOP EQUIPMENT, TYPICAL)
- SB — SPLASH BLOCK OVER WELDED WALKING MAT, REFER TO TYPICAL DETAIL: -/---
- EXISTING VENT PIPING THRU ROOF or EXHAUST FLUES, SEE DETAILS: 5/A2.04 7/A2.04 EXTEND ALL VENT PIPING AS REQUIRED.
- SLOPE 2-1/4" / 12" — DIRECTION OF ROOF SLOPE / TAPERED INSULATION
- 30'-0" — ROOF ELEVATIONS ABOVE FIRST FLOOR (NOTED ELEVATIONS ARE APPROXIMATE)
- FA-R — FALL PROTECTION ROOF ANCHOR, SEE: 8/A2.04
- FA-W — FALL PROTECTION WALL ANCHOR, SEE: (NOT APPLICABLE IN PHASE 1) 20' MAX. SPACING OR MANUFACTURERS RECOMMENDED SPACING
- FALL PROTECTION SYSTEM CABLE
- ROOF HATCH. SEE DETAIL: 01/A2.05 AND 02/A2.05
- ROOF SKYLIGHT.
- ROOF LADDER. SEE DETAILS: **A7.01.1**
- EXPANSION JOINT:
- NEW FASCIA ROOF EDGE METAL
- BALLASTED COURTYARD GUARDRAIL SYSTEM, SEE DETAIL: -/---
- LOCATION OF PONDING ON PREVIOUS ROOF SYSTEM. REVIEW EXISTING SUBSTRATE. REFER TO GENERAL NOTES.

PROJECT NORTH
NORTH

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02024.28

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

MCMAHON E.S. ROOF REPLACEMENT

75 KANE RD. HOLYOKE, MA 01040

DRAWING TITLE

PROPOSED ROOF PLAN - PART C

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main street, suite 1110
Springfield MA 01103
413 592 9700 T
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	DL, RS, OJ
CHECKED	JL
DATE	JUNE 18, 2025

DRAWING NUMBER

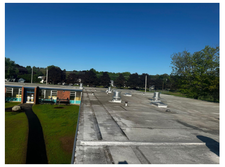
A2.03

2 PHOTO #2
N.T.S.

3 PHOTO #3
N.T.S.

4 PHOTO #4
N.T.S.

5 PHOTO #5
N.T.S.



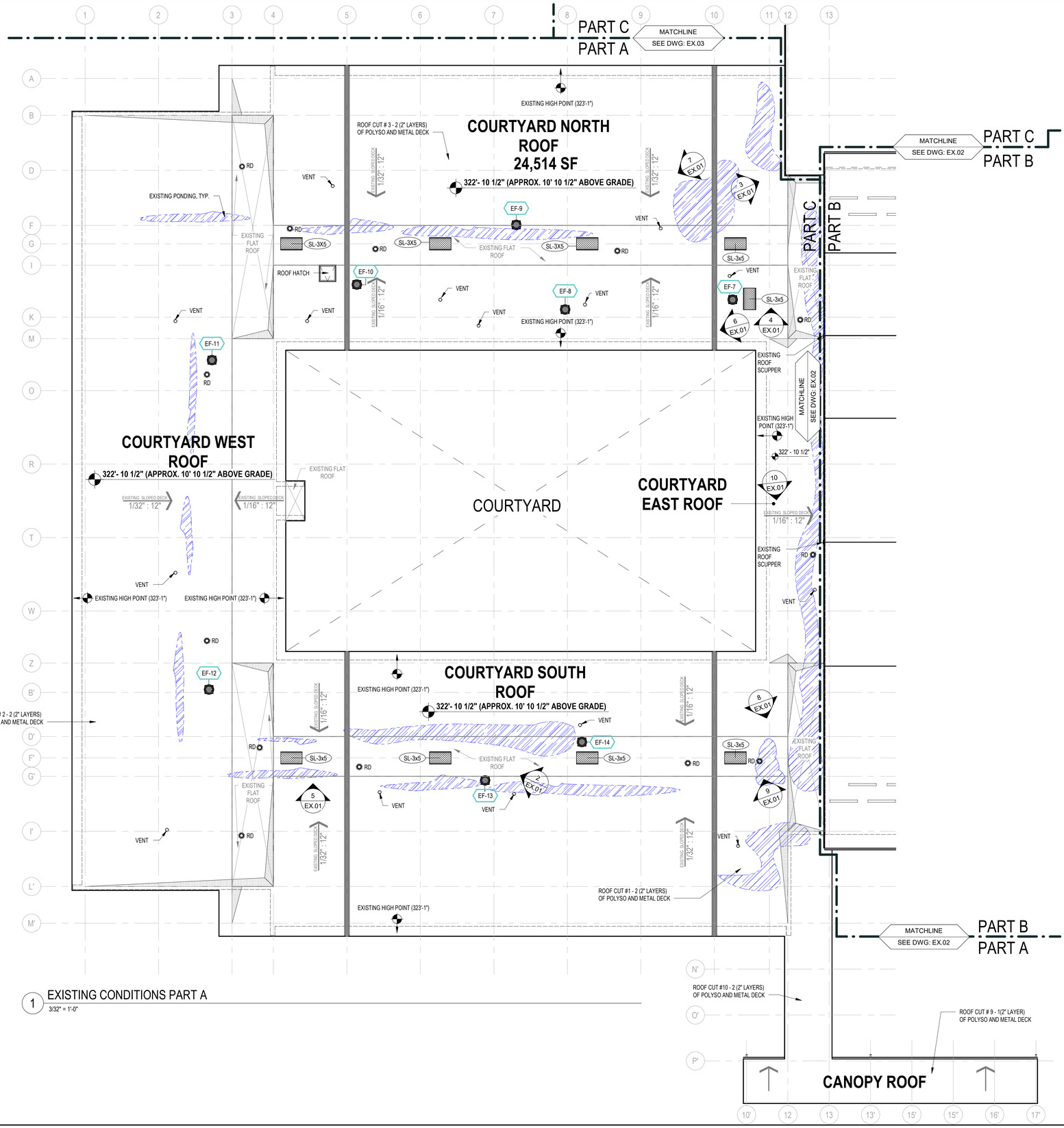
6 PHOTO #6
N.T.S.

7 PHOTO #7
N.T.S.

8 PHOTO #8
N.T.S.

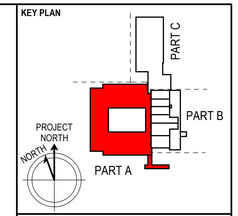
9 PHOTO #9
N.T.S.

10 PHOTO #10
N.T.S.



1 EXISTING CONDITIONS PART A
3/32" = 1'-0"

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02024.28

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

MCMAHON E.S. ROOF REPLACEMENT

75 KANE RD. HOLYOKE, MA 01040

DRAWING TITLE

EXISTING CONDITIONS PART A

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main street, suite 1110
Springfield MA 01103

413 592 9700 T
info@mvgarchitects.com E

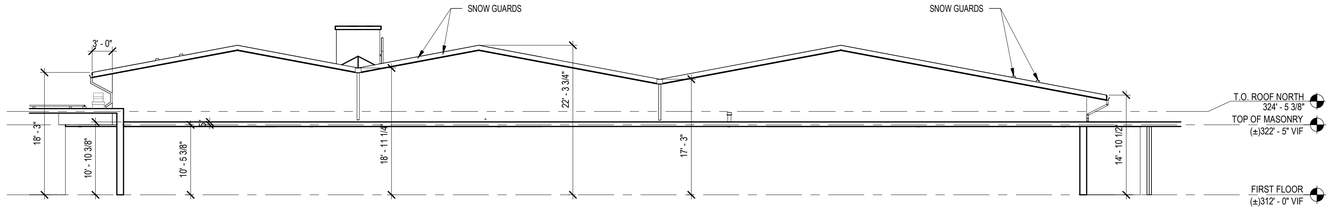
STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	OJ
CHECKED	JL
DATE	JUNE 18, 2025

DRAWING NUMBER

EX.01



2 WEST ELEVATION AT GYM SLOPES
3/32" = 1'-0"

3 1 ROOF PART B
N.T.S.

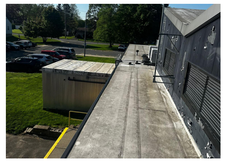
4 2 ROOF PART B
N.T.S.

5 3 ROOF PART B
N.T.S.

6 4 ROOF PART B
N.T.S.

7 5 ROOF PART B
N.T.S.

8 6 ROOF PART B
N.T.S.



9 7 ROOF PART B
N.T.S.

10 8 ROOF PART B
N.T.S.

11 9 ROOF PART B
N.T.S.

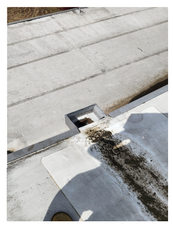
12 10 ROOF PART B
N.T.S.

13 11 ROOF PART B
N.T.S.

14 15 ROOF PART B
1/2" = 1'-0"

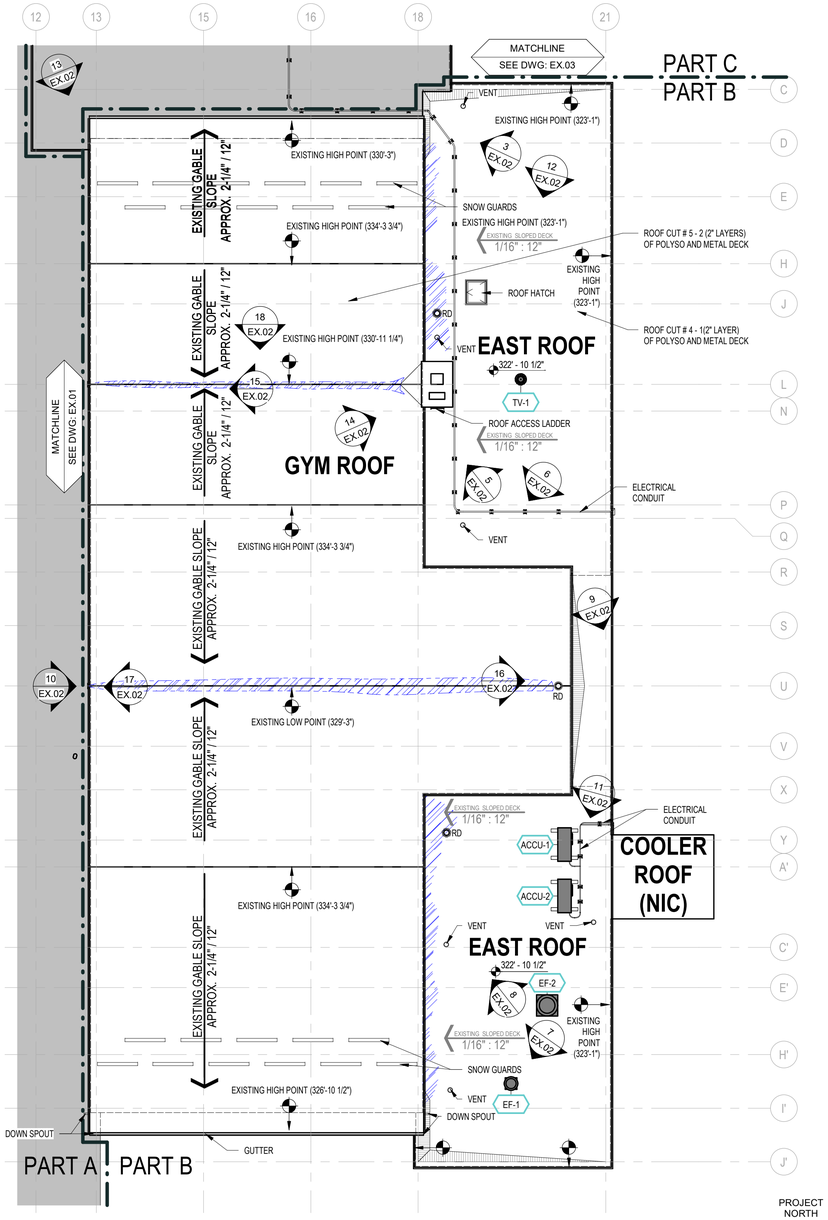
15 12 ROOF PART B
N.T.S.

16 13 ROOF PART B
N.T.S.



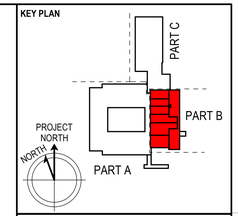
17 14 ROOF PART B
N.T.S.

18 16 ROOF PART B
N.T.S.



1 EXISTING CONDITIONS PART B
3/32" = 1'-0"

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02024.28

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

MCMAHON E.S. ROOF REPLACEMENT

75 KANE RD. HOLYOKE, MA 01040

DRAWING TITLE

EXISTING CONDITIONS PART B

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main street, suite 1110
Springfield MA 01103
413 592 9700 T
info@mvgarchitects.com E

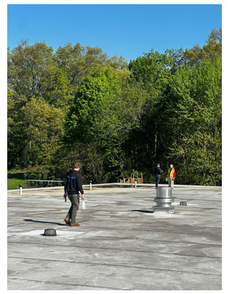
STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	DL, RS, OJ
CHECKED	JL
DATE	JUNE 18, 2025

DRAWING NUMBER

EX.02



2 2 ROOF PART C
N.T.S.

3 3 ROOF PART C
N.T.S.

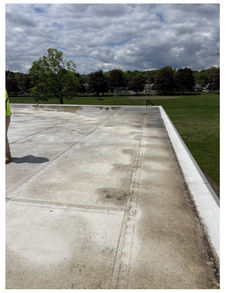
4 4 ROOF PART C
N.T.S.

5 5 ROOF PART C
N.T.S.

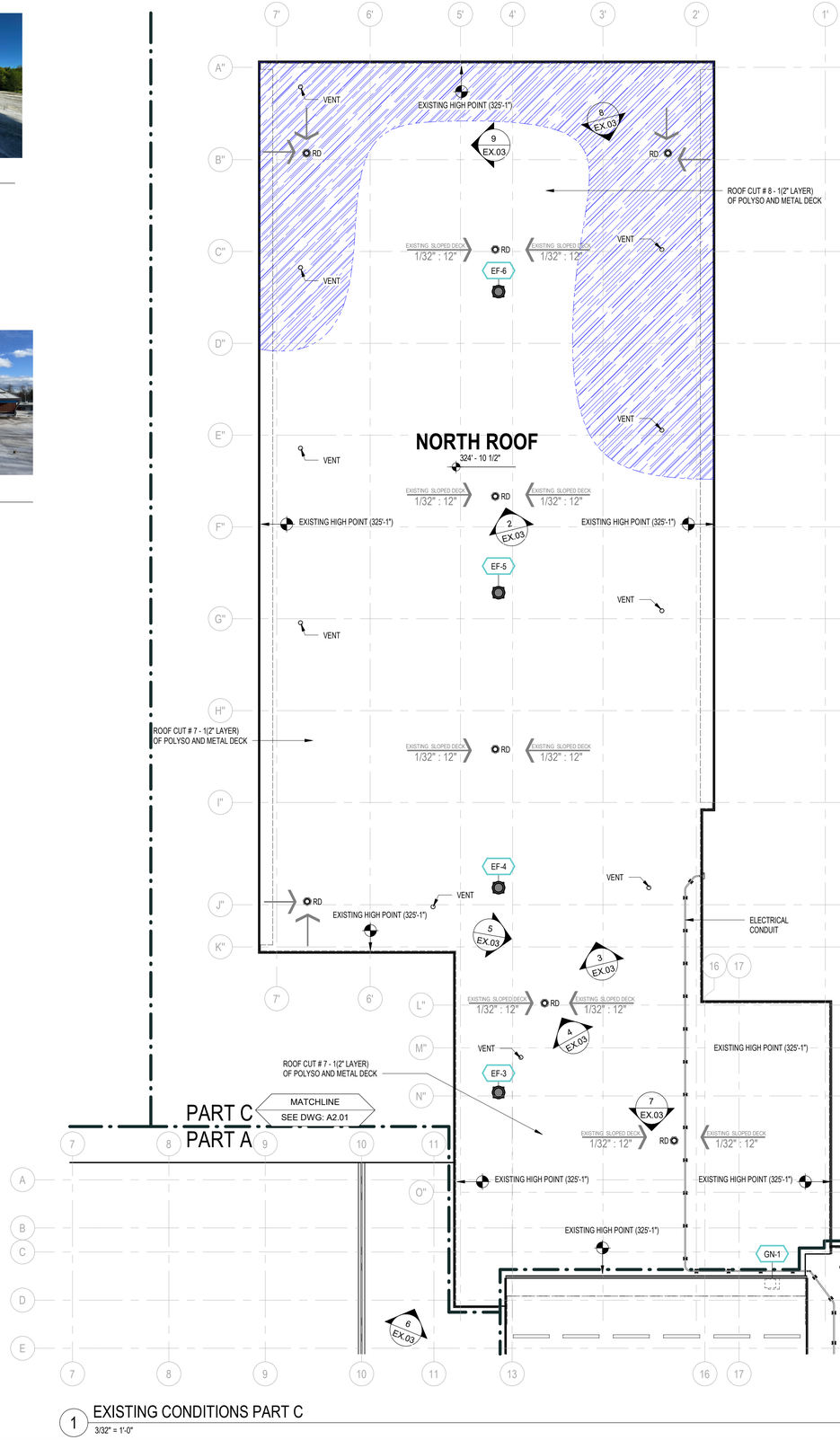
6 6 ROOF PART C
N.T.S.

7 7 ROOF PART C
N.T.S.

8 2 ROOF PART C
N.T.S.

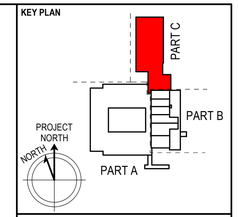


9 2 ROOF PART C
N.T.S.



1 EXISTING CONDITIONS PART C
3/32" = 1'-0"

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02024.28

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

MCMAHON E.S. ROOF REPLACEMENT

75 KANE RD. HOLYOKE, MA 01040

DRAWING TITLE

EXISTING CONDITIONS PART C

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main street, suite 1110
Springfield MA 01103
413 592 9700 T
info@mvgarchitects.com E

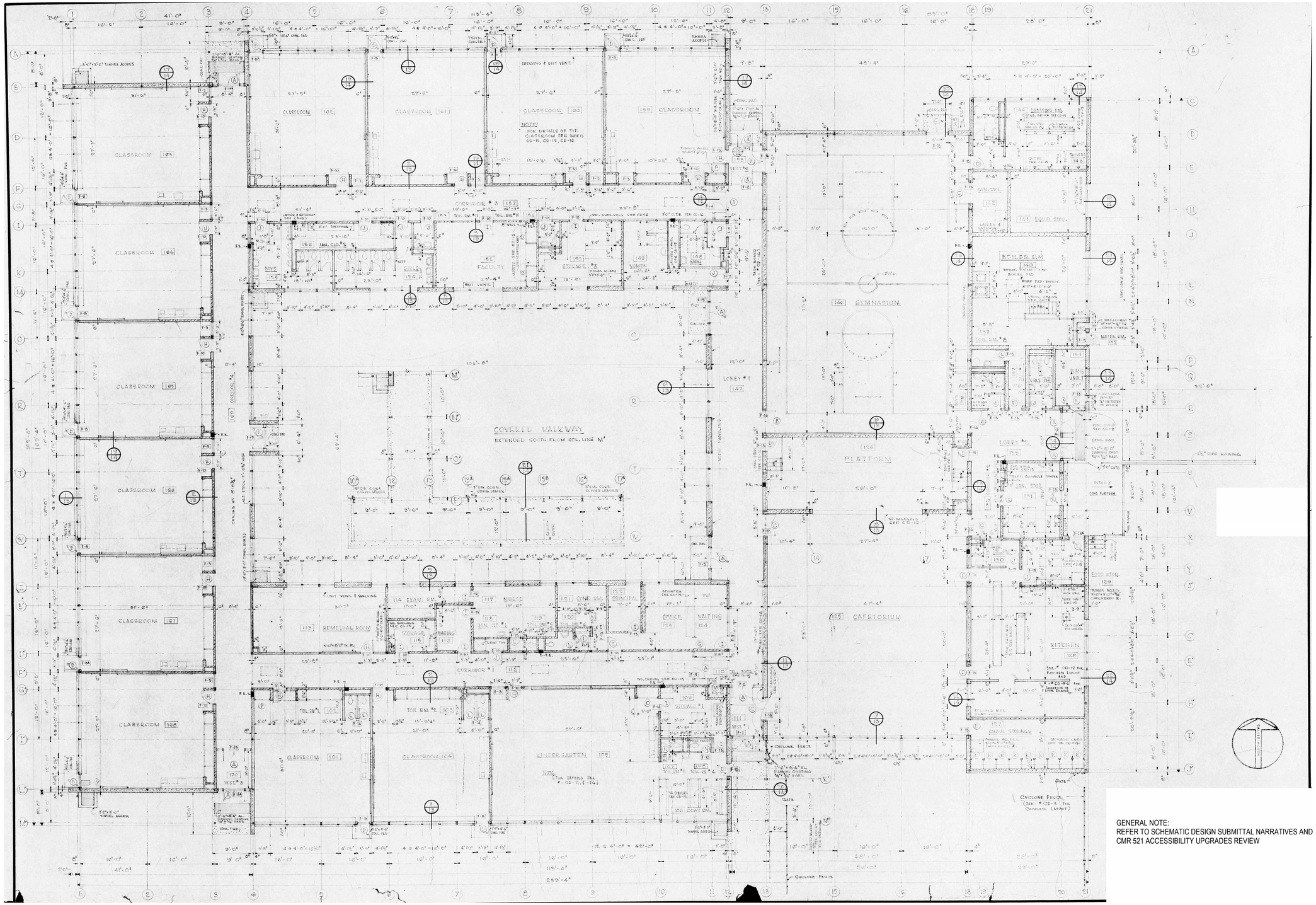
STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	DL, RS, OJ
CHECKED	JL
DATE	JUNE 18, 2025

DRAWING NUMBER

EX.03



1 EXISTING FIRST FLOOR - INTERIOR REFERENCE PLAN
3/32" = 1'-0"

GENERAL NOTE:
REFER TO SCHEMATIC DESIGN SUBMITTAL NARRATIVES AND CMR 521 ACCESSIBILITY UPGRADES REVIEW

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02024.28

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

MCMAHON E.S. ROOF REPLACEMENT

75 KANE RD. HOLYOKE, MA 01040

DRAWING TITLE

EXISTING FIRST FLOOR - INTERIOR REFERENCE PLAN

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main street, suite 1110
Springfield MA 01103

413 592 9700 T
info@mvgarchitects.com E

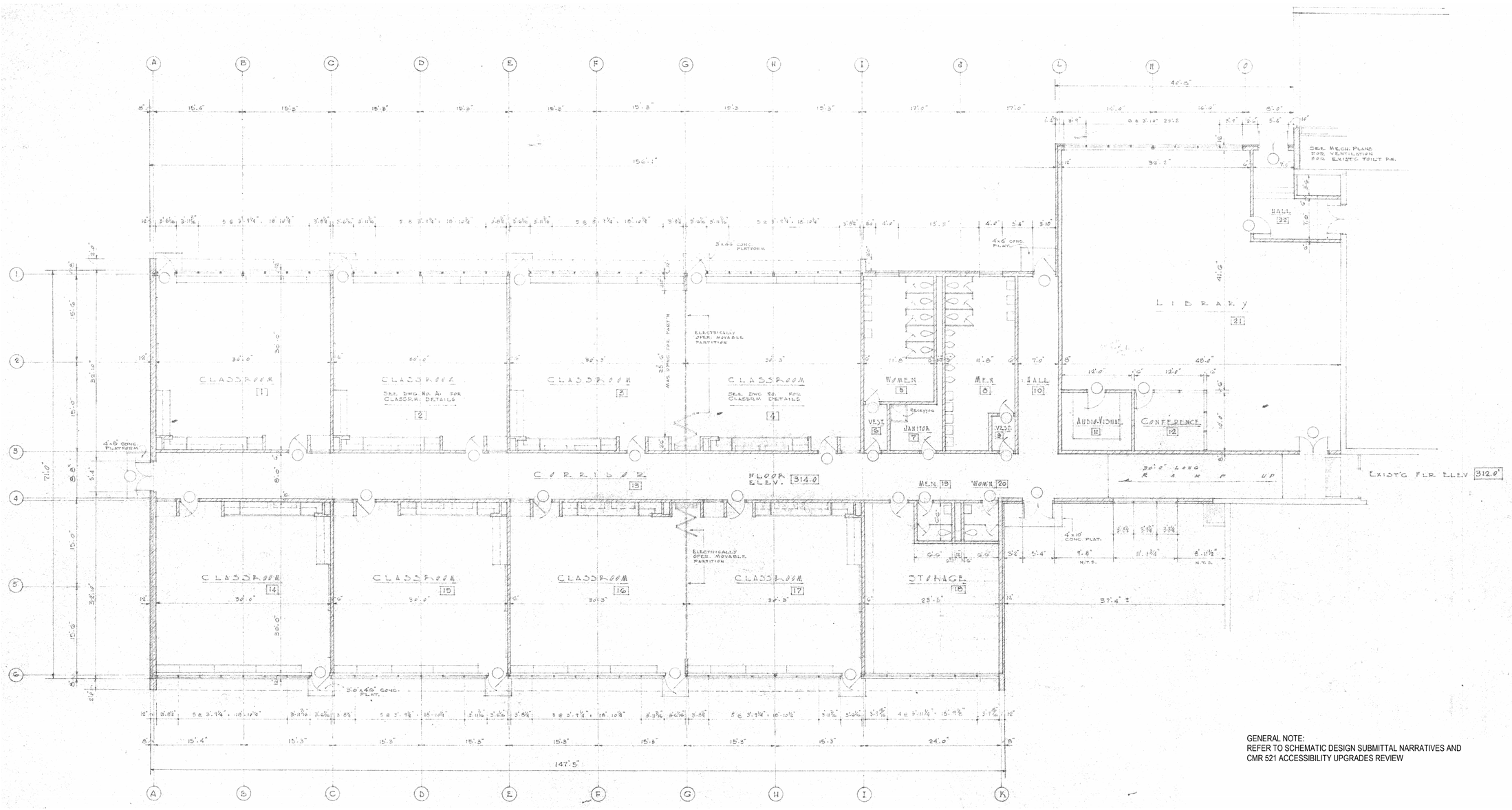
STAMP

DRAWING INFORMATION

SCALE	3/32" = 1'-0"
DRAWN BY	Author
CHECKED	Checker
DATE	JUNE 18, 2025

DRAWING NUMBER

EX1.00



GENERAL NOTE:
REFER TO SCHEMATIC DESIGN SUBMITTAL NARRATIVES AND CMR 521 ACCESSIBILITY UPGRADES REVIEW

1 EXISTING NORTH ADDITION - INTERIOR REFERENCE PLAN
3/32" = 1'-0"

REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02024.28

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

MCMAHON E.S. ROOF REPLACEMENT

75 KANE RD. HOLYOKE, MA 01040

DRAWING TITLE

EXISTING NORTH ADDITION - INTERIOR REFERENCE PLAN

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main street, suite 1110
Springfield MA 01103

413 592 9700 T
info@mvgarchitects.com E

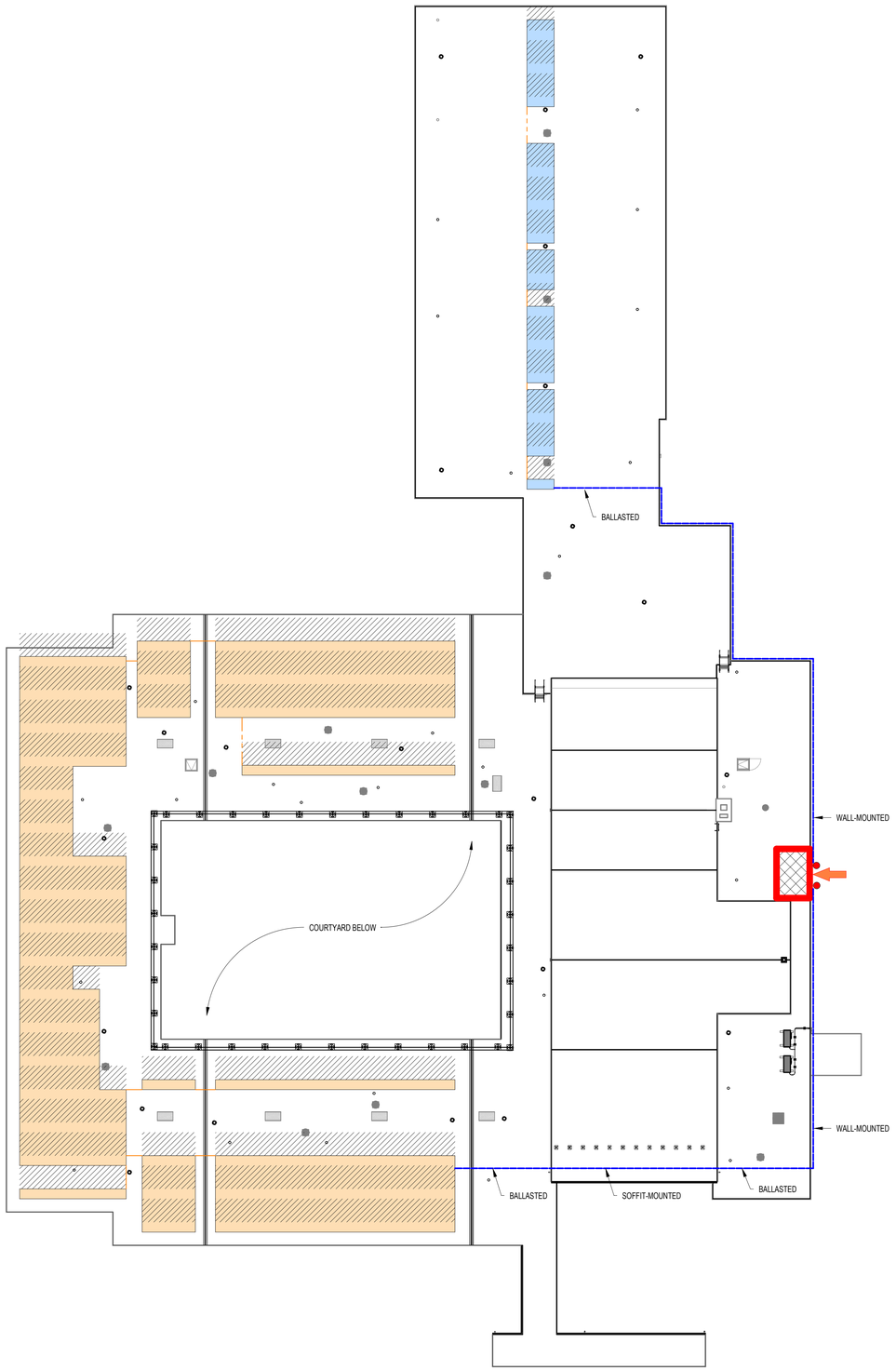
STAMP

DRAWING INFORMATION

SCALE	3/32" = 1'-0"
DRAWN BY	Author
CHECKED	Checker
DATE	JUNE 18, 2025

DRAWING NUMBER

EX1.01



1 SOLAR READINESS PLAN
1" = 20'-0"

GENERAL NOTES

1. SCHEMATIC SOLAR DESIGN IS BASED ON THE FOLLOWING PV MODULE PRODUCT:
   a. **MANUFACTURER:** HELIENE
      MODEL: 156HC M10 NTYP SL BIFACIAL MODULE
      A. 156 Half-Cut Monocrystalline 635W
      B. WIDTH = 45" x LENGTH = 98" x DEPTH = 1 3/8"
      C. MAX POWER (NMOT) = 482W
2. TYPICAL ARRAY:
   A. TYPE = FIXED, BALLASTED-ROOF, OPEN-RACK
   B. SYSTEM LOSSES = 14.08%
   C. DC TO AC SIZE RATIO = 1.2
   D. INVERTER EFFICIENCY = 96%
   E. TILTED PANEL WIDTH = 3'-0"
   F. SHADOW LENGTH BETWEEN ROWS = 7'-0"
3. CALCULATIONS ARE BASED ON DATA FROM THE NATIONAL RENEWABLE ENERGY LABORATORY:
   A. *PVWATTS.NREL.GOV*
4. ALL VALUES ARE APPROXIMATE. VERIFY ALL DIMENSIONS IN FIELD AND COORDINATE WITH SELECTED VENDOR / MANUFACTURER.
5. NO STRUCTURAL MODIFICATION SCOPE IS REQUIRED AT SOLAR READY LOCATIONS. REFER TO SCHEMATIC STRUCTURAL REPORT.
6. NO ROOF PENETRATIONS. THE SOLAR PROJECT SHALL PROVIDE EXTERIOR CONDUIT BALLASTED ON EXISTING ROOF, MOUNTED TO EXISTING EXTERIOR WALL, OR MOUNTED TO EXISTING EXTERIOR SOFFITS.
7. NO MODIFICATIONS TO EXISTING ELECTRICAL SYSTEM ARE ANTICIPATED TO BE REQUIRED TO MAKE THE BUILDING SOLAR-READY TO ACCEPT THE PROPOSED ZONES. THE FUTURE SOLAR PROJECT SHALL PROVIDE ALL REQUIRED ADDITIONAL EQUIPMENT AS PART OF THE SOLAR SCOPE OF WORK. THE FUTURE SOLAR PROJECT SHALL INTEGRATE THE NEW SOLAR SYSTEM WITH THE EXISTING ELECTRICAL SYSTEM AS REQUIRED.
8. SOLAR ARRAY SYSTEM MAX. LOAD = 10 PSF, TYPICAL.

PV ZONES LEGEND

ZONE 1: ADMINISTRATION & CLASSROOMS ROOF (23,413 SF)
SOLAR READY AREA = 8,710 SF (38%)
QTY OF MODULES = 146
TILT (DEG) = 40°
AZIMUTH (DEG) = 200°
DC SYSTEM SIZE = 71 kW
ANNUAL OUTPUT = 92,977 kWh/yr

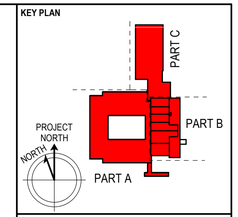
ZONE 2: NORTH ROOF (14,451 SF)
SOLAR READY AREA = 932 SF (7%)
QTY OF MODULES = 13
TILT (DEG) = 40°
AZIMUTH (DEG) = 200°
DC SYSTEM SIZE = 6 kW
ANNUAL OUTPUT = 8,325 kWh/yr

TOTAL BUILDING ROOF AREA	=	51,186 SF
TOTAL SOLAR READY AREA	**=**	**9,642 SF (19%)**
TOTAL DC SYSTEMS' SIZE	=	77 kW
TOTAL ANNUAL OUTPUT	**=**	**101,302 kWh/yr**

PLAN LEGEND

- FUTURE CONDUIT EXTERIOR WALL PENETRATION (BY SOLAR PROJECT)
- EXISTING ELEC. ROOM BELOW
- SHADOW OF PV MODULE ROW (SPACE BETWEEN ROWS)
- FUTURE FD DISCONNECT ON EXTERIOR WALL (BY SOLAR PROJECT)
- FUTURE EXTERIOR CONDUIT (BY SOLAR PROJECT) *ROOF-BALLASTED / WALL-MOUNTED / SOFFIT-MOUNTED*
- FUTURE BALLASTED CONDUIT FOR ARRAY INTERCONNECTION (BY SOLAR PROJECT)

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
SCHEMATIC DESIGN

PROJECT NUMBER
02024.28

OWNER / PROJECT NAME / LOCATION
CITY OF HOLYOKE
MCMAHON E.S. ROOF REPLACEMENT
75 KANE RD. HOLYOKE, MA 01040

DRAWING TITLE
SOLAR READINESS PLAN

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main street, suite 1110
Springfield MA 01103
413 592 9700 T
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	Author
CHECKED	Checker
DATE	JUNE 25, 2025

DRAWING NUMBER
SR1.00

Fennessy Consulting Services

DESIGN DEVELOPMENT CONSTRUCTION COST REPORT

Roofing and Code Upgrades Project

at

McMahon Elementary School

June 16, 2025

Fennessy Consulting Services
27 Glen Street, Suite 8, Stoughton, MA 02072
www.fennessyconsulting.com

June 16, 2025

John Landry
Mount Vernon Group Architects
1350 Main Street
Suite 1110
Springfield, MA 01103

MCMAHON ELEMENTARY SCHOOL - Roofing and Code Upgrades Project, Holyoke, MA

Dear John:

Please find enclosed our Construction Cost Model for the above referenced project based on schematic design information prepared by your office and design team,dated June 3, 2025.

The financial summary of this cost model is outlined below, however we recommend you review the Executive Summary to fully understand the basis of this report and the included and excluded financial impacts contained therein.

	Const. Start	Gross Floor Area	$/sf	Estimated Cost
Roof Replacement	*Jun-26*			*$2,719,628*
Code Upgrades	*Jun-26*			*$845,760*
ESTIMATED CONTRACT AWARD				***$3,565,388***

Alternates
None considered at this time

Bidding conditions are expected to reflect competitive bidding to pre-qualified general contractors, open bidding to prequalified sub-contractors, open specifications for materials and manufactures.

This estimate includes all direct construction costs, general contractor's overhead and profit and design contingency. Cost escalation impacts have been included in this report.

Excluded from the estimate are: construction contingency, loose furnishings and equipment, architect's and engineer's fees, moving, administrative and financing costs. Please refer to Exclusions section of the attached report for further information.

Contractors are not required to be signatory to any labor union, however they will be required to pay prevailing wage rates as set forth by the Commonwealth of Massachusetts for construction in Holyoke. This cost report represents a reasonable opinion of cost. It is not a prediction of the successful bid from a contractor as bids will vary due to fluctuating market conditions, errors and omissions, proprietary specifications, lack or surplus of bidders, perception of risk, etc. Consequently the estimate is expected to fall within the range of bids from a number of competitive contractors or subcontractors, however we do not warrant that bids or negotiated prices will not vary from the final construction cost estimate.

If you have any questions or require further analysis please do not hesitate to contact us.

Sincerely,

Seamus Fennessy

Seamus Fennessy MRICS
Principal/Owner

Enclosures

MCMAHON ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Contents

	Page No.
Executive Summary	*1*
Basis of Construction Cost Report	*4*
Exclusions	*6*
Areas Calculation	*7*
Overall Summary	*8*
Roof Replacement	*9*
Code Upgrades	*14*
CSI Summary	*20*
Filed Sub-bid Summary	*22*

Fennessy Consulting Services

MCMAHON ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Executive Summary

The Project
This project in Holyoke, Massachusetts comprises of the replacement of the existing roof at the McMahon School. The replaced roof area totals 41,549 sf.

Due to the assessed value of the existing building, code upgrades will be triggered at the McMahon School.

Financial Status
Our construction cost model for the entire project is in the order of ***$3.57MM.*** *Within this totals we are including a design contingency of $162.0K, and $163.3K for future price escalation reflecting the construction schedule outlined herein.*

Risk
A formal risk analysis has not been performed for this project. Some risk factors to be considered at this time include:
- Design Contingency
- Escalation/Market risk
- Construction/Payment default
- Approvals process/Funding
- Unforeseen conditions
- Tariffs

Design Contingency
This construction cost model is based on design development documentation. Due to this incomplete nature of the design we have utilized historic data and personal experience to complete this cost model. To help alleviate possible cost increases as a result of design completion we recommend a ***design contingency of 5%.*** *We have included this contingency in our cost model. As design progresses this contingency will reduce.*

Escalation/Market Risk
The construction industry faced a tougher year in 2024 that the previous year, which was evident in a stabilization and in some regions a static price escalation. The industry is forecast to show signs of growth in 2025 as economic conditions improve. The OECD are expecting short-term interest rates to continue to drop. While they are still higher than before the Covid-19 pandemic, it looks like inflation is starting to come under control, and are projected to fall to 2.1% by the end of 2025.

The impact will vary across the different segments of the construction marketplace. Commercial projects are likely to continue to reduce. Despite surges due to the Infrastructures Bill, highway work is expected to drop but other transportation projects will experience some growth. Work in education and healthcare are expected to remain at similar levels. Public safety and manufacturing is expected to increase.

Residential projects are expected to remain flat but this sector is heavily influenced by local demands. For example, Arizona, New York, New Jersey, South Carolina and Texas all saw significant growth, while Florida, Colorado, Oregon all saw contraction.

Continued shipping and other logistical issues (primarily driven by piracy at the Suez Canal) will continue to put upwards pressures on material prices Suez Canal traffic which used to accommodate 12% of global trade has plummeted by 66%. The longer, more costly routes around the Cape of Good Hope continues to impact prices and delivery times. After two years of record drought conditions which decimated vessel transits, the Panama Canal is experiencing a trade rebound.

Another consideration is how material suppliers are reacting to the current marketplace. A national construction materials distributor has recently announced a 5 - 10% increase in material prices.

Some projects will not experience the same inflationary pressures as others The projects that fall into this category encompass "clean" renovation less complex new construction projects. These types of projects limit risk/exposure and maximize profit generation potential. Complex new and renovation projects are likely to draw limited competition and as such likely to experience higher price levels. This project is likely to fall into the former category.

For these reasons we are continuing to recommend an annual escalation factor of 5% for the next twelve months dropping to 4% thereafter. We have ***included an escalation factor of 4.8%*** *in this cost report. As we move closer to bid date we will continue to review and adjust the escalation factor as appropriate. It is possible that a higher escalation factor will be required for later years.*

<u>Construction/Payment Default</u>
There is a real risk of contractors, subcontractors and material suppliers ceasing to exist due to their inability to honor low bids as material and labor prices increase. We highly recommend that each project has adequate protection in the form of sub guard (preferred) or bonding for both performance and payment.

<u>Approvals Process/Funding.</u>
For the purpose of this report we have included both of these categories together. The risk here is that the funding and approvals process will take significantly longer than expected and hence subject this project to increases in price escalation. We have not included any such pressures in this cost model.

<u>Unforeseen Conditions</u>
The scope of work outlined in these design documents involves partial renovation within an existing space and on "old" roof structure. Despite best efforts and limited destructive exploration during the design phase it will not be possible to accurately determine the true nature and dimensions of existing conditions. For this reason we recommend that the owner carry a 7% change order contingency (not included in this cost model) in the overall project budget.

Tariffs
It is too early to comprehend or understand the full effect of proposed government tariffs if they even happen at all. More than likely, they will have a significant impact on construction pricing. Not only could it impact materials overseas, but it will impact products manufactured here but utilize components from overseas. In addition, the machinery that drives a manufacturing economy here is also dependent on overseas components for operation, and all distribution networks within the USA are also dependent on materials, components and finished products made overseas. While the

Peer/Comparable Projects
We at Fennessy Consulting Services do not like to compare individual projects against some perceived cost/sf. Our reasoning for this is based on the fact that no two projects are the same and as such a typical cost/sf is not all that applicable or reliable. We treat each project as a unique entity.

As a quality control measure we make comparisons of the various building component costs in this estimate against others. We make this comparison to verify that nothing is out of the ordinary. If we come across an abnormal component cost we double check this cost to ensure its accuracy.

MCMAHON ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Basis of Cost Estimate

Cost Estimate Prepared From	*Dated*	*Received*
Design development design documentation:		
Design development design documentation:		
Architecture by Mount Vernon Group	*04/21/25*	*06/03/25*
Structure by Souza True & Partners	*06/18/25*	*06/06/25*
Discussions with the Project Architect and Engineers		

Conditions of Construction
The pricing is based on the following general conditions of construction

A start date of June 2026
A construction period of 4-6 months
The general contract will be competitively bid to qualified general contractors and subcontractors.
There will not be small business set aside requirements.
Contractors are not required to be signatory to labor unions, however they will be required to pay prevailing wage rates as set forth by the Commonwealth of Massachusetts for construction in Holyoke.
There are no phasing requirements.
Contractors will have full access to the site during normal business hours.

The Cost Plan is based on the following conditions:
The costs in this report covers construction costs only calculated at current bidding price level (reflecting the current projected construction schedule) with a separate allowance for cost escalation.

Cost escalation is included to the mid point of the construction schedule. Unit rates in the body of the report include appropriate escalation allowances to deliver specific trades within the prescribed schedule if the project were to commence today.

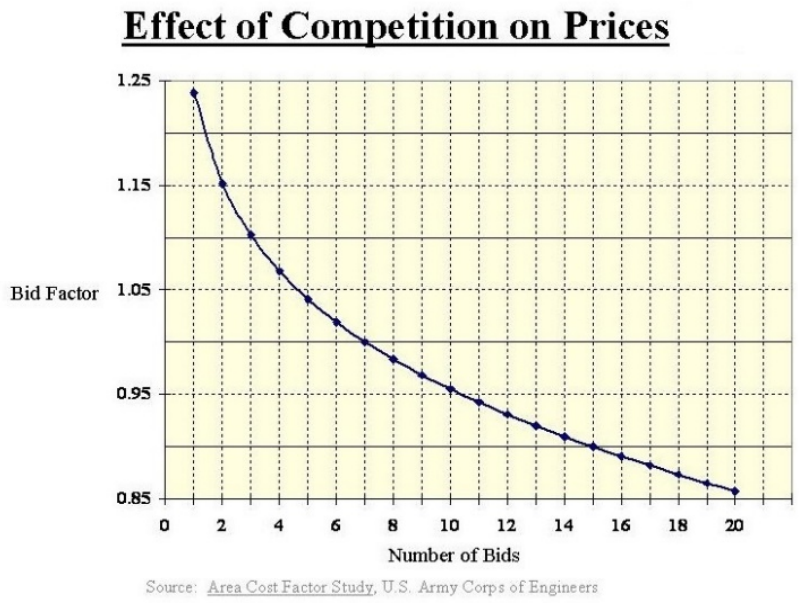
Cost associated with additional escalation required for future start date are included as a below the line markup. This report has included this additional escalation to the scheduled start date of construction noted in this report.

Bidding Process - Market Conditions
This document is based on the measurement and pricing of quantities wherever information is provided and/or reasonable assumptions for other work not covered in the drawings or specifications, as stated within this document. Unit rates have been obtained from historical records and/or discussion with contractors. The unit rates reflect current bid costs in the area.

All unit rates relevant to subcontractor work include the subcontractors overhead and profit unless otherwise stated. The mark-ups cover the costs of field overhead, home office overhead and profit and range from 15% to 25% of the cost for a particular item of work.

Basis of Cost Estimate

Pricing reflects probable construction costs obtainable in the project locality on the date of this statement of probable costs. This estimate is a determination of fair market value for the construction of this project. It is not a prediction of low bid. Pricing assumes competitive bidding for every portion of the construction work for all subcontractors and general contractors, with a minimum of 5 bidders for all items of work. Experience and research indicates that a fewer number of bidders may result in higher bids, conversely an increased number of bidders may result in more competitive bids.



Exclusions

The following cost items have been excluded from this report. Many of these will in fact be required and should be budgeted within the "Soft Cost" component of the project budget

- *Owner supplied and installed furniture, fixtures and equipment*
- *Loose furniture and equipment except as specifically identified*
- *Security head-end equipment and devices*
- *Tele/data head end equipment and devices*
- *Audio visual equipment*
- *Compression of schedule, premium or shift work, and restrictions on the contractor's working hours*
- *Design, testing, inspection or construction management fees*
- *Architectural and design fees*
- *Scope change and post contract contingencies*
- *Assessments, taxes, finance, legal and development charges*
- *Environmental impact mitigation*
- *Builder's risk, project wrap-up and other owner provided insurance program*
- *Land and easement acquisition*
- *Cost escalation beyond a start date of June 2026*
- *Sales tax*

MCMAHON ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Areas Calculation

	Areas	Affected area	Total
AREAS			
ADA Upgrades	*46,500*	*4,149*	
Roof	*41,549*		
TOTAL		*4,149*	

MCMAHON ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Overall Summary

		Roof Replacement	Code Upgrades	Total
A10 FOUNDATIONS		$0	$0	$0
A20 BASEMENT CONSTRUCTION		$0	$0	$0
B10 SUPERSTRUCTURE		$0	$7,500	$7,500
B20 EXTERIOR CLOSURE		$23,400	$0	$23,400
B30 ROOFING		$1,456,095	$0	$1,456,095
C10 INTERIOR CONSTRUCTION		$0	$287,278	$287,278
C20 STAIRCASES		$4,250	$20,400	$24,650
C30 FINISHES		$0	$42,020	$42,020
D10 CONVEYING SYSTEMS		$0	$40,000	$40,000
D20 PLUMBING		$20,250	$53,300	$73,550
D30 HVAC		$61,500	$25,000	$86,500
D40 FIRE PROTECTION		$0	$0	$0
D50 ELECTRICAL		$7,500	$78,500	$86,000
E10 EQUIPMENT		$0	$0	$0
E20 FURNISHINGS		$0	$23,060	$23,060
F10 SPECIAL CONSTRUCTION		$35,000	$0	$35,000
F20 SELECTIVE BUILDING DEMOLITION		$366,442	$36,960	$403,402
Total Building Construction		**$1,974,437**	**$614,018**	**$2,588,455**
G10 SITE PREPARATION		$0	$0	$0
G20 SITE IMPROVEMENTS		$0	$0	$0
G30 SITE MECHANICAL UTILITIES		$0	$0	$0
G40 SITE ELECTRICAL		$0	$0	$0
G90 OTHER SITE CONSTRUCTION		$0	$0	$0
Total Site Construction		**$0**	**$0**	**$0**
TOTAL BUILDING & SITE		**$1,974,437**	**$614,018**	**$2,588,455**
MARKUPS		**$497,053**	**$154,575**	**$651,628**
General conditions & project requirements	18.0%	$355,399	$110,523	$465,922
Bond and insurance	2.0%	$46,597	$14,491	$61,088
Building permit	0.0%	$0	$0	$0
Prime contractor's head office overhead and profit (Fee)	4.0%	$95,057	$29,561	$124,618
PLANNED CONSTRUCTION COST	**Jun-25**	**$2,471,490**	**$768,593**	**$3,240,083**
CONTINGENCIES/ESCALATION		**$248,138**	**$77,167**	**$325,305**
Design & pricing contingency	5.0%	$123,575	$38,430	$162,005
Gmp contingency	0.0%	$0	$0	$0
Escalation to start date (June 2026)	4.8%	$124,563	$38,737	$163,300
ESTIMATED CONTRACT AWARD	**Jun-26**	**$2,719,628**	**$845,760**	**$3,565,388**
	Area	41,549	46,500	
	$/sf	$65.46	$18.19	

Fennessy Consulting Services

MCMAHON ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Roof Replacement - Summary

	Total	Roof Area $/sf	41,549 %
A10 Foundations	***$0***	***$0.00***	***0.00%***
A1010 Foundations	$0	$0.00	0.00%
A1020 Special Foundations	$0	$0.00	0.00%
A1030 Slab on Grade	$0	$0.00	0.00%
A20 Basement Construction	***$0***	***$0.00***	***0.00%***
A2010 Basement Earthwork	$0	$0.00	0.00%
A2020 Basement Walls	$0	$0.00	0.00%
B10 Superstructure	***$0***	***$0.00***	***0.00%***
B1010 Floor Construction	$0	$0.00	0.00%
B1020 Roof Construction	$0	$0.00	0.00%
B20 Exterior Closure	***$23,400***	***$0.56***	***0.95%***
B2010 Exterior Walls	$23,400	$0.56	0.95%
B2020 Windows	$0	$0.00	0.00%
B2030 Exterior Doors	$0	$0.00	0.00%
B30 Roofing	***$1,456,095***	***$35.05***	***58.92%***
B3010 Roof Covering	$1,446,595	$34.82	58.53%
B3020 Roof Openings	$9,500	$0.23	0.38%
C10 Interior Construction	***$0***	***$0.00***	***0.00%***
C1010 Partitions	$0	$0.00	0.00%
C1020 Interior Doors	$0	$0.00	0.00%
C1030 Specialties	$0	$0.00	0.00%
C20 Staircases	***$4,250***	***$0.10***	***0.17%***
C2010 Stair Construction	$2,250	$0.05	0.09%
C2020 Stair Finishes	$2,000	$0.05	0.08%
C30 Finishes	***$0***	***$0.00***	***0.00%***
C3010 Wall Finishes	$0	$0.00	0.00%
C3020 Floor Finishes	$0	$0.00	0.00%
C3030 Ceiling Finishes	$0	$0.00	0.00%
D10 Conveying Systems	***$0***	***$0.00***	***0.00%***
D1010 Elevators and Lifts	$0	$0.00	0.00%
D1020 Escalators and Moving Walkways	$0	$0.00	0.00%
D1030 Other Conveying Systems	$0	$0.00	0.00%
D20 Plumbing	***$20,250***	***$0.49***	***0.82%***
D2010 Plumbing Complete	$20,250	$0.49	0.82%
D30 Heating, Ventilation & Air Conditioning	***$61,500***	***$1.48***	***2.49%***
D3010 HVAC, Complete	$61,500	$1.48	2.49%
D40 Fire Protection	***$0***	***$0.00***	***0.00%***
D4010 Fire Protection, Complete	$0	$0.00	0.00%
D50 Electrical	***$7,500***	***$0.18***	***0.30%***
D5010 Electrical, Complete	$7,500	$0.18	0.30%
E10 Equipment	***$0***	***$0.00***	***0.00%***
E1010 Commercial Equipment	$0	$0.00	0.00%
E1020 Institutional Equipment	$0	$0.00	0.00%
E1030 Vehicular Equipment	$0	$0.00	0.00%
E1090 Other Equipment	$0	$0.00	0.00%
E20 Furnishings	***$0***	***$0.00***	***0.00%***
E2010 Fixed Furnishings	$0	$0.00	0.00%
E2020 Loose Furnishings	$0	$0.00	0.00%

MCMAHON ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Roof Replacement - Summary

		Total	Roof Area $/sf	41,549 %
F10 Special Construction		***$35,000***	***$0.84***	***1.42%***
F1010 Special Structures		*$35,000*	*$0.84*	*1.42%*
F1020 Integrated Construction		*$0*	*$0.00*	*0.00%*
F1030 Special Systems and Facilities		*$0*	*$0.00*	*0.00%*
F20 Selective Building Demolition		***$366,442***	***$8.82***	***14.83%***
F2010 Building Elements Demolition		*$167,746*	*$4.04*	*6.79%*
F2020 Hazardous Components Abatement		*$198,696*	*$4.78*	*8.04%*
TOTAL BUILDING CONSTRUCTION		***$1,974,437***	***$47.52***	***79.89%***
Total Site Construction		***$0***	***$0.00***	***0.00%***
TOTAL BUILDING & SITE		***$1,974,437***	***$47.52***	***79.89%***
Markups		***$497,053***	***$11.96***	***20.11%***
General Conditions				
General conditions and project requirements	*18.0%*	*$355,399*	*$8.55*	*14.38%*
Bond and insurance	*2.0%*	*$46,597*	*$1.12*	*1.89%*
Building permit	*0.0%*	*$0*	*$0.00*	*0.00%*
Overhead and profit				
Prime contractor's head office overhead and profit (Fee)	*4.0%*	*$95,057*	*$2.29*	*3.85%*
PLANNED CONSTRUCTION COST	***Jun-25***	***$2,471,490***	***$59.48***	***100.00%***
Contingencies/Escalation		***$248,138***	***$5.97***	
Contingencies				
Design and pricing contingency	*5.0%*	*$123,575*	*$2.97*	
Gmp contingency	*0.0%*	*$0*	*$0.00*	
Escalation				
Escalation to start date (June 2026)	*4.8%*	*$124,563*	*$3.00*	
ESTIMATED CONTRACT AWARD	***Jun-26***	***$2,719,628***	***$65.46***	

MCMAHON ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Roof Replacement - Estimate Detail

	Quantity	Unit	Rate	Total
B2010 EXTERIOR WALL				
Rails and the like				
Life safety anchors	36	EA	650.00	23,400
Subtotal				**$23,400**
B3010 ROOF COVERING				
Membrane roofing				
PVC	41,549	SF	16.00	664,784
Abutment of flat roof with adjacent walls	34	LF	15.00	510
Allowance for working membrane roofing around pipe and duct penetrations	1	LS	66,478.40	66,478
Air barrier	41,549	SF	4.50	186,971
Insulation	41,549	SF	7.00	290,843
Roof sheathing	41,549	SF	4.50	186,971
Rough blocking	101	LF	8.00	808
Miscellaneous roofing				
Flashings				
Flashings	34	LF	15.00	510
Edge trim/stop	1,624	LF	30.00	48,720
Subtotal				**$1,446,595**
B3020 ROOF OPENINGS				
Skylight system, complete	1	LS	4,500.00	4,500
Roof hatch (assumed)	1	EA	3,500.00	3,500
Roof hatch (reuse)	1	EA	1,500.00	1,500
Subtotal				**$9,500**
C2010 STAIR CONSTRUCTION				
Miscellaneous steps and ladders				
Roof ladder	1	EA	2,250.00	2,250
Complete	1			
Subtotal				**$2,250**
C2020 STAIR FINISHES				
Platform steps				
Paint	2	SET	1,000.00	2,000
Subtotal				**$2,000**
D2010 PLUMBING				
Plumbing				
Roof drain, including connection to adjacent piping	15	EA	1,200.00	18,000
Remove existing roof drains (assumed)	15	EA	150.00	2,250
Subtotal				**$20,250**

MCMAHON ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Roof Replacement - Estimate Detail

	Quantity	Unit	Rate	Total
D3010 HVAC				
Hvac				
Remove, store and reinstall mechanical equipment	15	EA	2,500.00	37,500
Reinstall on new curb	15	EA	750.00	11,250
Testing	1	LS	750.00	750
Crane associated with equipment removal	1	LS	12,000.00	12,000
Subtotal				**$61,500**
D5010 ELECTRICAL				
Electrical installation				
Disconnect and reconnect mechanical equipment	15	EA	500.00	7,500
Subtotal				**$7,500**
F1010 SPECIAL STRUCTURES				
Staging				
Allowance for staging, including access staircase	1	LS	35,000.00	35,000
Subtotal				**$35,000**
F2010 BUILDING ELEMENTS DEMOLITION				
Roof demolition				
Membrane roofing down to roof deck substrate	41,549	SF	3.00	124,647
Protect existing roofing	41,549	SF	1.00	41,549
Roof hatch, store for reuse	1	EA	500.00	500
Roof ladder	3	EA	350.00	1,050
Subtotal				**$167,746**
F2020 HAZARDOUS COMPONENTS ABATEMENT				
Hazardous materials abatement				
Black tar on roof deck/substrate	41,549	SF	4.00	166,196
Black tar mastic on all copper/sheet-metal, equipment, flashing	1	LS	15,000.00	15,000
Sealants at all flashings, termination bars, roof edge systems, equipment and piping penetrations	1	LS	17,500.00	17,500
Subtotal				**$198,696**
MARKUPS				
General conditions and project requirements				
General conditions and requirements	18.0%		1,974,437	355,399
Bond and Insurance	2.0%		2,329,836	46,597
Building permit	0.0%		2,376,433	
Overhead and Profit				
Prime contractor's head office overhead and profit (Fee)	4.0%		2,376,433	95,057
Subtotal				**$497,053**

MCMAHON ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Roof Replacement - Estimate Detail

	Quantity	Unit	Rate	Total
CONTINGENCIES/ESCALATION				
Contingencies				
Design contingency	*5.0%*		*2,471,490*	*123,575*
Prime contractor's contingency	*0.0%*		*2,595,065*	
Escalation				
Escalation to Start Date (June 2026)	*4.8%*		*2,595,065*	*124,563*
Subtotal				***$248,138***

MCMAHON ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Code Upgrades - Summary

	Total	GFA $/sf	46,500 %
A10 Foundations	***$0***	***$0.00***	***0.00%***
A1010 Foundations	$0	$0.00	0.00%
A1020 Special Foundations	$0	$0.00	0.00%
A1030 Slab on Grade	$0	$0.00	0.00%
A20 Basement Construction	***$0***	***$0.00***	***0.00%***
A2010 Basement Earthwork	$0	$0.00	0.00%
A2020 Basement Walls	$0	$0.00	0.00%
B10 Superstructure	***$7,500***	***$0.16***	***0.00%***
B1010 Floor Construction	$7,500	$0.16	0.00%
B1020 Roof Construction	$0	$0.00	0.00%
B20 Exterior Closure	***$0***	***$0.00***	***0.00%***
B2010 Exterior Walls	$0	$0.00	0.00%
B2020 Windows	$0	$0.00	0.00%
B2030 Exterior Doors	$0	$0.00	0.00%
B30 Roofing	***$0***	***$0.00***	***0.00%***
B3010 Roof Covering	$0	$0.00	0.00%
B3020 Roof Openings	$0	$0.00	0.00%
C10 Interior Construction	***$287,278***	***$6.18***	***37.38%***
C1010 Partitions	$139,931	$3.01	18.21%
C1020 Interior Doors	$125,123	$2.69	16.28%
C1030 Specialties	$22,224	$0.48	2.89%
C20 Staircases	***$20,400***	***$0.44***	***2.65%***
C2010 Stair Construction	$15,000	$0.32	1.95%
C2020 Stair Finishes	$5,400	$0.12	0.70%
C30 Finishes	***$42,020***	***$0.90***	***5.47%***
C3010 Wall Finishes	$21,245	$0.46	2.76%
C3020 Floor Finishes	$15,945	$0.34	2.07%
C3030 Ceiling Finishes	$4,830	$0.10	0.63%
D10 Conveying Systems	***$40,000***	***$0.86***	***5.20%***
D1010 Elevators and Lifts	$40,000	$0.86	5.20%
D1020 Escalators and Moving Walkways	$0	$0.00	0.00%
D1030 Other Conveying Systems	$0	$0.00	0.00%
D20 Plumbing	***$53,300***	***$1.15***	***6.93%***
D2010 Plumbing Complete	$53,300	$1.15	6.93%
D30 Heating, Ventilation & Air Conditioning	***$25,000***	***$0.54***	***3.25%***
D3010 HVAC, Complete	$25,000	$0.54	3.25%
D40 Fire Protection	***$0***	***$0.00***	***0.00%***
D4010 Fire Protection, Complete	$0	$0.00	0.00%
D50 Electrical	***$78,500***	***$1.69***	***10.21%***
D5010 Electrical, Complete	$78,500	$1.69	10.21%
E10 Equipment	***$0***	***$0.00***	***0.00%***
E1010 Commercial Equipment	$0	$0.00	0.00%
E1020 Institutional Equipment	$0	$0.00	0.00%
E1030 Vehicular Equipment	$0	$0.00	0.00%
E1090 Other Equipment	$0	$0.00	0.00%
E20 Furnishings	***$23,060***	***$0.50***	***3.00%***
E2010 Fixed Furnishings	$23,060	$0.50	3.00%
E2020 Loose Furnishings	$0	$0.00	0.00%

MCMAHON ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Code Upgrades - Summary

		Total	GFA 46,500 $/sf	%
F10 Special Construction		***$0***	***$0.00***	***0.00%***
F1010 Special Structures		*$0*	*$0.00*	*0.00%*
F1020 Integrated Construction		*$0*	*$0.00*	*0.00%*
F1030 Special Systems and Facilities		*$0*	*$0.00*	*0.00%*
F20 Selective Building Demolition		***$36,960***	***$0.79***	***4.81%***
F2010 Building Elements Demolition		*$36,960*	*$0.79*	*4.81%*
F2020 Hazardous Components Abatement		*$0*	*$0.00*	*0.00%*
TOTAL BUILDING CONSTRUCTION		***$614,018***	***$13.20***	***79.89%***
Total Site Construction		***$0***	***$0.00***	***0.00%***
TOTAL BUILDING & SITE		***$614,018***	***$13.20***	***79.89%***
Markups		***$154,575***	***$3.32***	***20.11%***
General Conditions				
General conditions and project requirements	*18.0%*	*$110,523*	*$2.38*	*14.38%*
Bond and insurance	*2.0%*	*$14,491*	*$0.31*	*1.89%*
Building permit	*0.0%*	*$0*	*$0.00*	*0.00%*
Overhead and profit				
Prime contractor's head office overhead and profit (Fee)	*4.0%*	*$29,561*	*$0.64*	*3.85%*
PLANNED CONSTRUCTION COST	***Jun-25***	***$768,593***	***$16.53***	***100.00%***
Contingencies/Escalation		***$77,167***	***$1.66***	
Contingencies				
Design and pricing contingency	*5.0%*	*$38,430*	*$0.83*	
Gmp contingency	*0.0%*	*$0*	*$0.00*	
Escalation				
Escalation to start date (June 2026)	*4.8%*	*$38,737*	*$0.83*	
ESTIMATED CONTRACT AWARD	***Jun-26***	***$845,760***	***$18.19***	

MCMAHON ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Code Upgrades - Estimate Detail

	Quantity	Unit	Rate	Total
B1010 FLOOR CONSTRUCTION				
Wood construction				
Wheelchair platform/modifications				
Complete	1	LS	7,500.00	7,500.00
Subtotal				**$7,500**
C1010 PARTITIONS				
Partitions, masonry				
Type ?	2,080	SF	55.00	114,400
Type ?, 6"	403	SF	48.00	19,344
Patch at locations of removed partitions	2	LOC	600.00	1,200
Miscellaneous				
Sealants and caulking at partitions	4,149	SF	0.50	2,075
Rough blocking	416	LF	7.00	2,912
Subtotal				**$139,931**
C1020 INTERIOR DOORS				
Hollow metal doors				
Double leaf, accessible				
Type	1	PR	1,200.00	1,200
Glazing to doors				
Large	2	EA	540.00	1,080
Wood doors				
Single leaf, with louver				
Type ?	4	EA	650.00	2,600
Hollow metal door frame				
Frames to double leaf doors				
Type	1	EA	630.00	630
Glazing to frames				
Large	1	EA	540.00	540
Wood door frames and associated trim				
Frames to single leaf doors				
Type	4	EA	1,037.00	4,148
Hardware				
Set ?	5	EA	1,600.00	8,000.00
New lever sets, including removal of existing	80	EA	500.00	40,000
Add door operators to existing doors	8	EA	8,000.00	64,000
Miscellaneous				
Paint to doors	6	EA	150.00	900
Paint to frames	5	EA	175.00	875
Sealants and caulking	5	EA	110.00	550
Wood blocking at openings	5	EA	120.00	600
Subtotal				**$125,123**
C1030 SPECIALTIES				
Toilet accessories				
Grab bars	21	EA	150.00	3,150
Counter support	6	EA	150.00	900

Code Upgrades - Estimate Detail

	Quantity	Unit	Rate	Total
Trap pipe protection	6	EA	150.00	900
Soap dispenser	5	EA	150.00	750
Soap dispenser install only	2	EA	150.00	300
Toilet paper dispenser	8	EA	150.00	1,200
Toilet paper dispenser, install only	2	EA	75.00	150
Paper towel dispenser	6	EA	350.00	2,100
Paper towel dispenser, install only	2	EA	150.00	300
Recessed trash can	3	EA	250.00	750
Hooks	6	EA	25.00	150
Sanitary disposal	4	EA	150.00	600
Mirrors	9	EA	400.00	3,600
Mirrors, install only	3	EA	150.00	450
Lockers				
ADA locker kits	2	EA	350.00	700
Signage/Directories	4,149	SF	1.00	4,149
Miscellaneous				
Miscellaneous sealants throughout building	4,149	SF	0.50	2,075
Subtotal				**$22,224**
C2010 STAIR CONSTRUCTION				
Egress staircases				
Extend rails	2	FLT	7,500.00	15,000
Subtotal				**$15,000**
C2020 STAIR FINISHES				
Egress staircases				
Stair rails and handrail modifications				
Paint	2	FLT	2,700.00	5,400
Subtotal				**$5,400**
C3010 WALL FINISHES				
Paint				
To concrete masonry units	3,740	SF	1.75	6,545
Tile				
Ceramic tile	420	SF	35.00	14,700
Subtotal				**$21,245**
C3020 FLOOR FINISHES				
Floor tile				
Ceramic tile	322	SF	35.00	11,270
Base				
Ceramic tile	187	LF	25.00	4,675
Subtotal				**$15,945**
C3030 CEILING FINISHES				
Acoustical ceiling tile				
2' x 2'	322	SF	15.00	4,830
Subtotal				**$4,830**

MCMAHON ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Code Upgrades - Estimate Detail

	Quantity	Unit	Rate	Total
D1010 ELEVATORS AND LIFTS				
Lifts				
Wheelchair lift	1	EA	40,000.00	40,000
Subtotal				**$40,000**
D2010 PLUMBING				
Plumbing				
New water closet, including local piping	7	EA	3,200.00	22,400
Relocate water closet	2	EA	1,200.00	2,400
New lavatory, including local piping	3	EA	3,000.00	9,000
Relocate lavatory, including local piping	1	EA	3,000.00	3,000
Drinking fountains, including piping	2	EA	6,500.00	13,000
Miscellaneous demolition	1	EA	3,500.00	3,500
Subtotal				**$53,300**
D3010 HVAC				
Hvac				
Other hvac modifications in areas requiring remodeling	5	LS	5,000.00	25,000
Subtotal				**$25,000**
D5010 ELECTRICAL				
Electrical installation				
Electrical connections to wheelchair lift	1	EA	3,500.00	3,500
Electrical connections to door operators	8	EA	1,500.00	12,000
Electrical connections to plumbing fixtures	15	EA	1,200.00	18,000
Other electrical modifications in areas requiring remodeling	5	LS	9,000.00	45,000
Subtotal				**$78,500**
E2010 FIXED FURNISHINGS				
Miscellaneous casework				
Base storage units	16	LF	375.00	6,000
Counter top	16	LF	200.00	3,200
Wall storage units	6	LF	310.00	1,860
Reception desk	12	LF	1,000.00	12,000
Subtotal				**$23,060**
E2020 LOOSE FURNISHINGS				
Loose furnishings				
By owner				
Subtotal				**$0**

MCMAHON ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Code Upgrades - Estimate Detail

	Quantity	Unit	Rate	Total
F2010 BUILDING ELEMENTS DEMOLITION				
Interior demolition				
Remove partitions and doors	3,341	SF	10.00	33,410
Remove floor and ceiling finishes	357	SF	5.00	1,785
Remove casework and specialties	21	SF	15.00	315
Remove MEP systems	290	SF	5.00	1,450
Subtotal				**$36,960**
MARKUPS				
General conditions and project requirements				
General conditions and requirements	18.0%		614,018	110,523
Bond and Insurance	2.0%		724,541	14,491
Building permit	0.0%		739,032	
Overhead and Profit				
Prime contractor's head office overhead and profit (Fee)	4.0%		739,032	29,561
Subtotal				**$154,575**
CONTINGENCIES/ESCALATION				
Contingencies				
Design contingency	5.0%		768,593	38,430
Prime contractor's contingency	0.0%		807,023	
Escalation				
Escalation to Start Date (June 2026)	4.8%		807,023	38,737
Subtotal				**$77,167**

MCMAHON ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

CSI Summary

		Roof Replacement	Code Upgrades	Total Estimate
	Gross Area:	10,331 SF	4,149 SF	14,480 SF
DIVISION 1 - GENERAL REQUIRMENTS				
01-00-00	General Conditions	See Below	See Below	See Below
DIVISION 2 - EXISTING CONDITIONS		**422,692**	**36,960**	**459,652**
02-40-00	Selective Demolition	223,996	36,960	260,956
02-60-00	Hazardous Materials Abatement/Removal	198,696	0	198,696
DIVISION 3 - CONCRETE		**0**	**0**	**0**
DIVISION 4 - MASONRY		**0**	**134,944**	**134,944**
04-22-00	Concrete Masonry Units	0	134,944	134,944
DIVISION 5 - METAL		**25,650**	**15,000**	**40,650**
05-50-00	Metal Fabrications	23,400	0	23,400
05-60-00	Metal Rails and Handrails	0	15,000	15,000
05-80-00	Expansion Joints	2,250	0	2,250
DIVISION 6 - WOOD & PLASTICS		**808**	**15,160**	**15,968**
06-10-00	Rough Carpentry	808	11,012	11,820
06-20-00	Finish Carpentry	0	4,148	4,148
DIVISION 7 - THERMAL & MOISTURE PROTECTION		**1,263,816**	**4,700**	**1,268,516**
07-10-00	Damp proofing and Waterproofing	186,971	0	186,971
07-50-00	Membrane Roofing	1,022,615	0	1,022,615
07-60-00	Flashing and Sheet Metal	49,230	0	49,230
07-70-00	Roofing and Wall Specialties and Accessories	5,000	0	5,000
07-90-00	Joint Sealants	0	4,700	4,700
DIVISION 8 - DOORS & WINDOWS		**4,500**	**118,050**	**122,550**
08-10-00	Metal Doors and Frames	0	1,830	1,830
08-20-00	Wood Doors and Frames	0	2,600	2,600
08-60-00	Roof Windows and Skylights	4,500	0	4,500
08-70-00	Hardware	0	112,000	112,000
08-80-00	Glazing	0	1,620	1,620
DIVISION 9 - FINISHES		**188,971**	**49,195**	**238,166**
09-20-00	Gypsum Wallboard Assemblies	186,971	0	186,971
09-30-00	Tiling	0	30,645	30,645
09-51-00	Acoustical Ceilings	0	4,830	4,830
09-90-00	Painting and Coating	2,000	13,720	15,720
DIVISION 10 - SPECIALTIES		**0**	**20,149**	**20,149**
10-15-00	Signage	0	4,149	4,149
10-28-00	Toilet & Bathroom Accessories	0	15,300	15,300
10-51-00	Lockers	0	700	700
DIVISION 11 - EQUIPMENT		**0**	**0**	**0**

Fennessy Consulting Services

MCMAHON ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

CSI Summary

		Roof Replacement	Code Upgrades	Total Estimate
	Gross Area:	10,331 SF	4,149 SF	14,480 SF
DIVISION 12 - FURNISHINGS		**0**	**23,060**	**23,060**
12-30-00	Casework	0	23,060	23,060
DIVISION 13 - SPECIAL CONSTRUCTION		**35,000**	**0**	**35,000**
13-90-00	Unassigned	35,000	0	35,000
DIVISION 14 - CONVEYING SYSTEMS		**0**	**40,000**	**40,000**
14-40-00	Lifts	0	40,000	40,000
DIVISION 21 - FIRE SUPPRESSION		**0**	**0**	**0**
DIVISION 22 - PLUMBING		**20,250**	**53,300**	**73,550**
22-00-00	Plumbing	20,250	53,300	73,550
DIVISION 23 - HVAC		**12,750**	**25,000**	**37,750**
23-00-00	HVAC	12,750	25,000	37,750
DIVISION 26 - ELECTRICAL		**0**	**78,500**	**78,500**
26-00-00	Electrical	0	78,500	78,500
DIVISION 31 -EARTHWORK		**0**	**0**	**0**
DIVISION 32 -EXTERIOR IMPROVEMENTS		**0**	**0**	**0**
DIVISION 33 -UTILITIES		**0**	**0**	**0**
TOTAL DIRECT WORK		**$1,974,437**	**$614,018**	**$2,588,455**
MARKUPS		**497,053**	**154,575**	**651,628**
01-10-00	General Conditions and Project Requirements	355,399	110,523	465,922
01-20-00	Insurance, Bond	46,597	14,491	61,088
01-30-00	Permits	0	0	0
01-40-00	Prime Contractor's Head Office Overhead & Profit (Fee)	95,057	29,561	124,618
PLANNED CONSTRUCTION COST (June 2025)		**$2,471,490**	**$768,593**	**$3,240,083**
CONTINGENCIES/ESCALATION		**248,138**	**77,167**	**325,305**
50-10-00	Design Contingency	123,575	38,430	162,005
50-20-00	Construction Contingency	0	0	0
50-30-00	Escalation	124,563	38,737	163,300
ESTIMATED CONTRACT AWARD (June 2026)		**$2,719,628**	**$845,760**	**$3,565,388**

Fennessy Consulting Services

MCMAHON ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Filed Sub-Bid Summary

		Roof Replacement	Code Upgrades	Total Estimate
04-10-00	**Masonry**	**0**	**134,944**	**134,944**
04-22-00	Concrete Masonry Units	0	134,944	134,944
05-50-00	**Miscellaneous Metals**	**23,400**	**15,000**	**38,400**
05-50-00	Metal Fabrications	23,400	0	23,400
05-60-00	Metal Rails and Handrails	0	15,000	15,000
07-10-00	**Waterproofing, Dampproofing & Caulking**	**186,971**	**4,700**	**191,671**
07-10-00	Dampproofing and Waterproofing	186,971	0	186,971
07-90-00	Joint Sealants	0	4,700	4,700
07-50-00	**Roofing**	**1,071,845**	**0**	**1,071,845**
07-50-00	Membrane Roofing	1,022,615	0	1,022,615
07-60-00	Flashing and Sheet Metal	49,230	0	49,230
08-10-00	**Windows**	**0**	**0**	**0**
08-80-00	**Glass and Glazing**	**0**	**1,620**	**1,620**
08-80-00	Glazing	0	1,620	1,620
09-10-00	**Plaster**	**0**	**0**	**0**
09-30-00	**Tile**	**0**	**30,645**	**30,645**
09-30-00	Tiling	0	30,645	30,645
09-66-00	**Terrazzo**	**0**	**0**	**0**
09-51-00	**Acoustic Ceilings**	**0**	**4,830**	**4,830**
09-51-00	Acoustical Ceilings	0	4,830	4,830
09-65-00	**Resilient Flooring**	**0**	**0**	**0**
09-68-00	**Carpet**	**0**	**0**	**0**
09-90-00	**Painting**	**2,000**	**13,720**	**15,720**
09-90-00	Painting and Coating	2,000	13,720	15,720
14-20-00	**Conveying**	**0**	**0**	**0**
21-00-00	**Fire Protection**	**0**	**0**	**0**
22-00-00	**Plumbing**	**20,250**	**53,300**	**73,550**
22-00-00	Plumbing	20,250	53,300	73,550
23-00-00	**Hvac**	**12,750**	**25,000**	**37,750**
23-00-00	HVAC	12,750	25,000	37,750
26-00-00	**Electrical**	**0**	**78,500**	**78,500**

MCMAHON ELEMENTARY SCHOOL
Roofing and Code Upgrades Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Filed Sub-Bid Summary

		Roof Replacement	*Code Upgrades*	*Total Estimate*
26-00-00	*Electrical*	*0*	*78,500*	*78,500*
TOTAL FILED SUB-BID WORK		***$1,317,216***	***$362,259***	***$1,679,475***

Schematic Design Submission Checklist
MSBA Accelerated Repair Program

District: _____

School: _____

Scope: _____

Schematic Design Deliverables:

OPM	District	
☐	☐	Project Narrative: - Existing conditions analysis (hazardous materials, structural, etc.) - Explanation of proposed solution - Designer statement that the proposed solution meets the Massachusetts Stretch Energy Code and/or the International Energy Conservation Code
☐	☐	Code Analysis
☐	☐	Schematic Design Drawings
☐	☐	Cost Estimate (CSI Format) - Include all Proposed Alternates
☐	☐	Form 3011 – Total Project Budget
☐	☐	Project Cash Flow (cumulative line chart illustrating Total Project Budget)
☐	☐	Project Schedule (Gantt Chart)
☐	☐	Accelerated Repair Program Reimbursement Rate Certification signed by the District
☐	☐	Proposed project scope and budget vote language in compliance with MSBA standard vote language

Program Guidelines and Project Funding Agreement:

OPM	District	
☐	☐	MSBA Board of Directors authorization to execute a Project Funding Agreement is tied to the specific project scope and budget presented in the Schematic Design.
☐	☐	The portion of the Construction Contingency potentially eligible for reimbursement is set at 5% of the total estimated eligible construction costs as included in the PFA's Total Project Budget and is intended for hard costs only. The MSBA will complete one Change Order review per district in which the MSBA will review Change Orders for eligibility not validity. All ineligible costs will not be reimbursed.
☐	☐	The portion of the Owner's Contingency potentially eligible for reimbursement is set at 0.5% of the total estimated eligible construction costs as included in the PFA's Total Project Budget and is intended for soft costs only. All ineligible costs will not be reimbursed.
☐	☐	Prior to securing project funding, the district will draft proposed project scope and budget vote language in compliance with MSBA standard vote language and will provide the vote language to the MSBA for review and approval prior to taking the vote.
☐	☐	After bids have been received and actual construction costs are established, the district's potential Project Funding Agreement must be revised to reflect the actual construction costs in accordance with paragraph 2.3 of the Project Funding Agreement. If there are bid savings, the MSBA shares in the cost savings by reducing the maximum facilities grant to reflect reimbursable costs. If there is a bid overage, construction contingency is transferred to the construction budget to reflect the additional costs and is deemed ineligible. The transfer of construction contingency due to the bid overage results in a reduction to the maximum facilities grant.
☐	☐	MSBA's standardized Schedule of Values will be used by the district to ensure that all budget entries in the MSBA's ProPay system mirror the Total Project Budget Form 3011 following the PFA Bid Amendment. The MSBA will only reimburse eligible costs if they are entered to the correct cost codes in the Total Project Budget.
☐	☐	Budget Revision Requests will be submitted by the district in a timely manner to reflect changes to the Total Project Budget. After a Budget Revision Request is executed, the district will enter the Budget Revision Request into the ProPay system for approval by the MSBA.

☐	☐	MSBA's Audit Department will review requests for reimbursement in the ProPay system of $50,000 or more. All reimbursement requests which are less than $50,000 will be returned to the district without review. All districts are encouraged to attend ProPay training conducted by the Audit Department following the execution of a Project Funding Agreement.
☐	☐	OPM monthly reporting begins when the OPM contract is executed and continues until the project receives Board of Directors approval of the final audit. Failure to submit timely and complete reports may impact district reimbursement review and payment. OPM monthly reporting supports MSBA review of reimbursement requests.

I certify, as evidenced by the boxes set forth under the heading, "Schematic Design Deliverables," which I have checked above, that I have fulfilled all requirements described in Section 8.2 of the MSBA Standard Contract for Project Management Services (Accelerated Repair Program) by submitting the listed deliverables by the established deadline to the MSBA. I further certify, as evidenced by the boxes set forth under the heading, "Program Guidelines and Project Funding Agreement," which I have checked above, that I have explained the Program Guidelines and Project Funding Agreement to the district.

I understand that if a conflict is created between this form and the Project Funding Agreement, the Project Funding Agreement is the controlling document. I also understand that if a conflict is created between this form and the MSBA Standard Contract for Project Management Services (Accelerated Repair Program), the MSBA Standard Contract is the controlling document. I further recognize that the purpose of this form is to further understand the Project Funding Agreement and the MSBA Standard Contract for Project Management Services (Accelerated Repair Program).

_____

Title: Project Director, Owner's Project Manager
Firm:
Date:

I certify, as evidenced by the boxes set forth under the heading, "Program Guidelines and Project Funding Agreement," which I have checked above, that I have read and understand the Program Guidelines and Project Funding Agreement. I certify, as evidenced by the boxes set forth under the heading, "Schematic Design Deliverables," which I have checked above, that I have reviewed the enumerated deliverables within the Schematic Design Submittal with the Owner's Project Manager and Designer. I further

certify, as evidenced by the boxes set forth under the heading, "Schematic Design Deliverables," which I have checked above, that the OPM has explained to me the OPM's responsibilities as described in Section 8.2 of the MSBA Standard Contract for Project Management Services (Accelerated Repair Program) to submit the designer's deliverables listed above.

I understand that if a conflict is created between this form and the Project Funding Agreement, the Project Funding Agreement is the controlling document. I also understand that if a conflict is created between this form and the MSBA Standard Contract for Project Management Services (Accelerated Repair Program), the MSBA Standard Contract is the controlling document. I further recognize that the purpose of this form is to further understand the Project Funding Agreement and the MSBA Standard Contract for Project Management Services (Accelerated Repair Program).

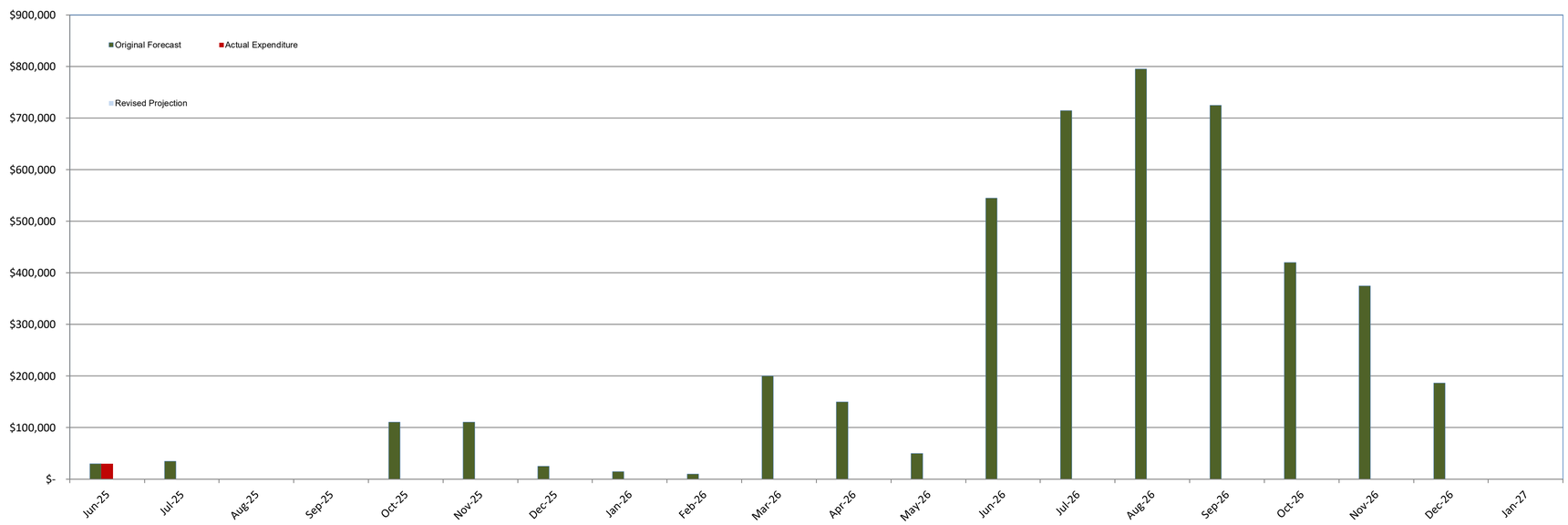
_____

Title: Superintendent of Schools
Date:

Lt. Elmer J. McMahon Elementary School Roof Replacement

Monthly Cash Flow	July 1, 2025		
Date	Original Forecast	Actual Expenditure	Revised Projection
Jun-25	$ 30,000	$ 30,000	
Jul-25	$ 35,000	$ -	
Aug-25	$ -	$ -	
Sep-25	$ -	$ -	
Oct-25	$ 110,827	$ -	
Nov-25	$ 110,827	$ -	
Dec-25	$ 25,154	$ -	
Jan-26	$ 15,000	$ -	
Feb-26	$ 10,000	$ -	
Mar-26	$ 200,000	$ -	
Apr-26	$ 150,000	$ -	
May-26	$ 50,000	$ -	
Jun-26	$ 545,000	$ -	
Jul-26	$ 715,000	$ -	
Aug-26	$ 795,000	$ -	
Sep-26	$ 725,000	$ -	
Oct-26	$ 420,000	$ -	
Nov-26	$ 375,000	$ -	
Dec-26	$ 186,689	$ -	
Jan-27	$ -	$ -	
Total	$ 4,498,497	$ 30,000	$ -

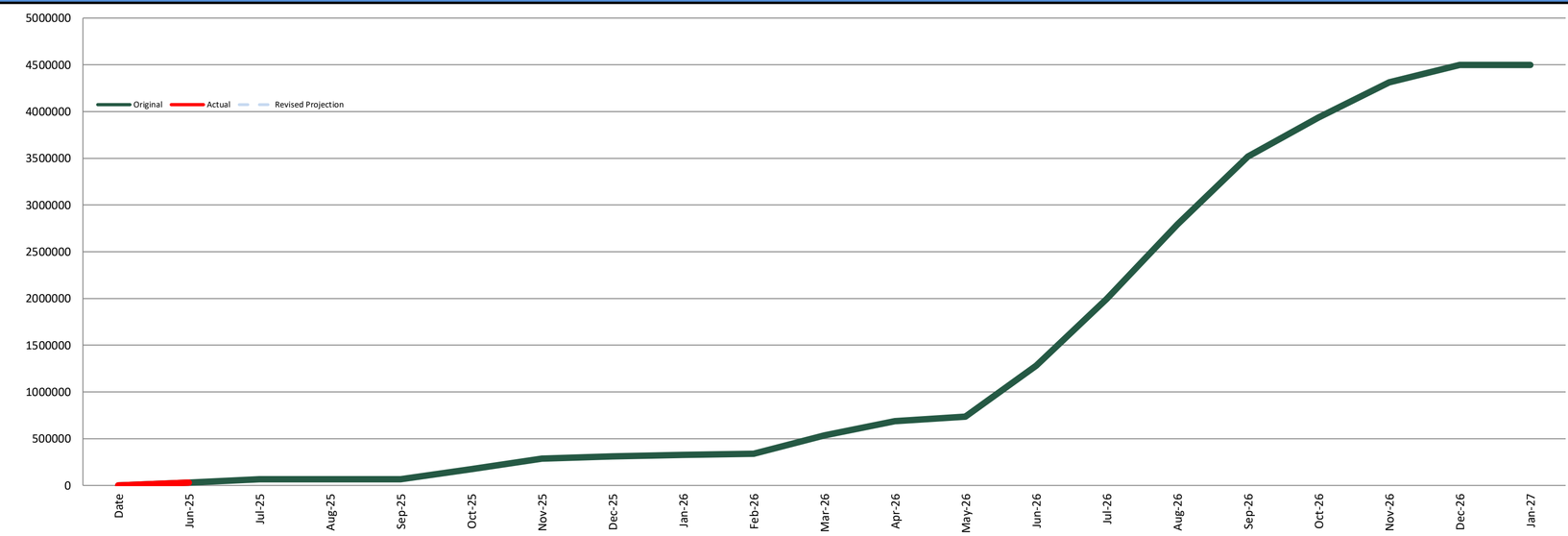
Projected Cash Flow Forecast



Lt. Elmer J. McMahon Elementary School Roof Replacement

Cumulative Cash Flow	July 1, 2025		
Date	Original Forecast	Actual Expenditure	Revised Projection
Jun-25	$ 30,000	$ 30,000	
Jul-25	$ 65,000		
Aug-25	$ 65,000		
Sep-25	$ 65,000		
Oct-25	$ 175,827		
Nov-25	$ 286,654		
Dec-25	$ 311,808		
Jan-26	$ 326,808		
Feb-26	$ 336,808		
Mar-26	$ 536,808		
Apr-26	$ 686,808		
May-26	$ 736,808		
Jun-26	$ 1,281,808		
Jul-26	$ 1,996,808		
Aug-26	$ 2,791,808		
Sep-26	$ 3,516,808		
Oct-26	$ 3,936,808		
Nov-26	$ 4,311,808		
Dec-26	$ 4,498,497		
Jan-27	$ 4,498,497		

Projected Cash Flow Forecast



Total Project Budget

City of Holyoke — **8/20/2025**

Holyoke High — **MSBA ID:** 202401370505

	Total Project Budget: All costs associated with the project are subject to 963 CMR 2.17(5)	Estimated Budget	Scope Items Excluded from the Basis of Estimated Total Facilities Grant or Otherwise Ineligible	Basis of Estimated Total Facilities Grant[1]	Estimated Maximum Total Facilities Grant[1]
	Feasibility Study Agreement				
1	*OPM Feasibility Study*	$10,000		$10,000	
2	*A&E Feasibility Study*	$140,000		$140,000	
3	*Env. & Site*			$0	
4	*Other*			$0	
5	**Feasibility Study Agreement Subtotal**	**$150,000**	**$0**	**$150,000**	**$120,000**
	Administration				
6	**Legal Fees**			$0	**$0**
	Owner's Project Manager				
7	*Design Development*			$0	
8	*Construction Contract Documents*	$76,102		$76,102	
9	*Bidding*	$50,735		$50,735	
10	*Construction Contract Administration*	$329,777		$329,777	
11	*Closeout*	$50,735		$50,735	
12	*Extra Services*			$0	
13	*Reimbursable & Other Services*			$0	
14	*Cost Estimates*			$0	
15	**Advertising**	$5,000		$5,000	
16	**Permitting**			$0	
17	**Owner's Insurance**			$0	
18	**Other Administrative Costs**			$0	
19	**Administration Subtotal**	**$512,349**	**$0**	**$512,349**	**$409,879**
	Architecture and Engineering				
20	**Basic Services**				
21	*Design Development*			$0	
22	*Construction Contract Documents*	$554,620		$554,620	
23	*Bidding*	$22,184		$22,184	
24	*Construction Contract Administration*	$147,899		$147,899	
25	*Closeout*	$14,790		$14,790	
26	*Other Basic Services*			$0	
27	**Basic Services Subtotal**	**$739,493**	**$0**	**$739,493**	
	Reimbursable Services				
28	*Construction testing*	$7,500		$7,500	
29	*Printing (over minimum)*	$5,000		$5,000	
30	*Other Reimbursable Costs*			$0	
31	*Hazardous Materials*	$7,500		$7,500	
32	*Geotech & Geo-Env.*			$0	
33	*Site Survey*			$0	
34	*Wetlands*			$0	
35	*Traffic Studies*			$0	
36	**Architectural/Engineering Subtotal**	**$759,493**	**$0**	**$759,493**	**$607,594**
	CM & Risk Preconstruction Services				
37	Pre-Construction Services			$0	**$0**
	Site Acquisition				
38	Land/Building Purchase			$0	
39	Appraisal Fees			$0	
40	Recording fees			$0	
41	**Site Acquisition Subtotal**	**$0**	**$0**	**$0**	**$0**
	Construction Costs				
42	Construction Budget				
43	GMP Fee				
44	GMP Insurance				
45	GMP Contingency				
46	Division 1 - General Requirements	$2,835,118			
47	Division 2 - Existing Conditions	$819,793			
48	Division 3 - Concrete	$0			
49	Division 4 - Masonry	$21,000			
50	Division 5 - Metals	$270,330			
51	Division 6 - Woods, Plastics and Composites	$58,243			
52	Division 7 - Thermal and Moisture Protection	$5,395,167			
53	Division 8 - Openings	$14,600			
54	Division 9 - Finishes	$774,032			
55	Division 10 - Specialties	$0			
56	Division 11 - Equipment	$0			
57	Division 12 - Furnishings	$0			
58	Division 13 - Special Construction	$50,000			
59	Division 14 - Conveying Systems	$0			
60	Division 21 - Fire Suppression	$0			
61	Division 22 - Plumbing	$75,100			
62	Division 23 - HVAC	$31,600			
63	Division 25 - Integrated Automation	$0			
64	Division 26 - Electrical	$1,990			
65	Division 27 - Communications	$0			
66	Division 28 - Electronic Safety and Security	$0			
67	Division 31 - Earthwork	$0			
68	Division 32 - Exterior Improvements	$0			
69	Division 33 - Utilities	$0			
70	**Construction Budget**	**$10,346,973**	**$0**	**$10,346,973**	**$8,277,578**

Cells highlighted in yellow include equations established for the calculation of the project's Maximum Total Facilities Grant and for the analysis of the project's budget. The equations in the highlighted cells should not be changed.

OPM:	**PCA 360**
Designer:	**Mount Vernon Group Architects, Inc.**
Cost Estimator:	**Fennessy Consulting Services**
Scope:	**Roof**

Table 1.

Soft Cost Exclusion for Spaces Ineligible per Regulations or Scope Outside of ARP (apply exclusion percentage to soft cost budget lines if applicable)

Total Construction Budget Costs	$10,346,973
Applicable Ineligible Budget Costs	$0
Ratio for Soft Cost Exclusions	0.00%

Table 2.

Consultant Fee Table - for Informational Use Only

	Construction Budget	$10,346,973			
OPM Services		Eligible Fees	Total % of Constr	OPM Fee @	10.00%
Basic Services	$517,349	$517,349	5.00%	$1,034,697	
Extra Services	$0		0.00%		
Designer Services		Eligible Fees	Total % of Constr	Dsg'r Fee @	15.00%
Basic Services	$879,493	$879,493	8.50%	$1,552,046	
Extra Services	$20,000		0.19%		

Table 3.

Board Memo - Cost Breakdown by Scope

	Windows	Marked up Cost	Roof	Marked up Cost	Solar Readiness	Marked up Cost	ADA	Marked up Cost	Other/Misc. Scope	mark-up % Marked
Div 2		$0	$819,793	$1,129,199		$0		$0		
Div 3		$0	$0	$0		$0		$0		
Div 4		$0		$0		$0		$0	$21,000	
Div 5		$0	$270,330	$372,358		$0		$0		
Div 6		$0	$58,243	$80,225		$0		$0		
Div 7		$0	$5,395,167	$7,431,406		$0		$0		
Div 8		$0	$14,600	$20,110		$0		$0		
Div 9		$0	$774,032	$1,066,167		$0		$0		
Div 10		$0		$0		$0		$0		
Div 11		$0		$0		$0		$0		
Div 12		$0		$0		$0		$0		
Div 13		$0		$0		$0		$0	$50,000	
Div 14		$0		$0		$0		$0		
Div 21		$0		$0		$0		$0		
Div 22		$0	$75,100	$103,444		$0		$0		
Div 23		$0	$31,600	$43,526		$0		$0		
Div 25		$0	$1,990	$2,741		$0		$0		
Div 26		$0		$0		$0		$0		
Div 27		$0		$0		$0		$0		
Div 28		$0		$0		$0		$0		
Div 31		$0		$0		$0		$0		
Div 32		$0		$0		$0		$0		
Div 33		$0		$0		$0		$0		
Totals	$0	$0	$7,440,855	$10,249,176	$0	$0	$0	$0	$71,000	

Total construction budget

Table 4.

Mark-up Exclusion (Div. 1)

Mark-up Calculation =	37.74%
Ineligible Scope =	$0
Ineligible Mark-up =	$0

Building Value	30%	ADA (Y/N)
$63,073,500	$18,922,050	No ADA work

Table 5.

Potentially Eligible Roof Costs

Marked-Up Roof Replacement Costs =	$10,249,176
Ineligible Roof Replacement Costs (w/ mark-up) =	$344,355
Potentially Eligible Roof Replacement Costs =	$9,904,821

Table 6.

Budget Exclusion for Roof Scope That Doesn't Meet Age Req'ts or Spaces Ineligible per Regulations
2024 ARP: Roofs < 25 years old

Total Roof Area =	167,025 sf
Area of Ineligible Roof =	sf
Ineligible Roof Area/Total Roof Area =	0.00%
Potentially Eligible Roof Costs =	$9,904,821
Exclusion for Roof Service Life/Ineligible Spaces =	$0

Table 7.

Total Roof Cost Cap Exclusion (Div. 7)

167,025	eligible sq.ft
$100.00	/sq.ft roof cost cap
$16,702,500	Total eligible roof cost cap
$9,904,821	Revised Potentially Eligible Roof Costs

Table 8.

Alternates Tracking Table

Alternate Number	Alternate Description	Estimated Budget	Scope Items Ineligible
Alternates Included in the Total Project Budget			
Alt. 1			
Alt. 2			
Alt. 3			
Alternates Excluded from the Total Project Budget			
Alt. 1			
Alt. 2			
Alt. 3			

	Total Project Budget for costs associated with the project are subject to 963 CMR 2.17(5)	Estimated Budget	Estimated Total Facilities Grant or Otherwise Ineligible	Grant[1]	Total Facilities Grant[1]
	Alternates (see Table 8)				
72		$0	$0	$0	
73		$0	$0	$0	
74	**Alternates Subtotal[3]**	**$0**	**$0**	**$0**	**$0**
	Miscellaneous Project Costs				
75	*Utility company Fees*			$0	
76	*Testing Services*			$0	
77	*Swing Space/Modulars*			$0	
78	*Other Project Costs (Mailing & Moving)*			$0	
79	**Misc. Project Costs Subtotal**	**$0**	**$0**	**$0**	**$0**
	Furnishings and Equipment				
80	*Furnishings*			$0	
81	*Equipment*			$0	
82	*Computer Equipment*			$0	
83	**FF&E Subtotal**	**$0**	**$0**	**$0**	**$0**
84	**Project Budget**	**$11,768,815**	**$0**	**$11,768,815**	**$9,415,052**

	Board Authorization	
85	Project Budget (excluding Contingencies)	$11,768,815
86	Scope Items Excluded or Otherwise Ineligible	$0
87	Third Party Funding (Ineligible)	
88	Basis of Estimated Total Facilities Grant[1, 3]	$11,768,815
89	Reimbursement Rate	80.00%
90	Estimated Maximum Total Facilities Grant[1]	$9,415,052

91	Total Construction Contingency[2]	$1,034,697
92	Ineligible Construction Contingency[2]	$517,348
93	Potentially Eligible Construction Contingency[2]	$517,349
94	Total Owner's Contingency[2]	$142,184
95	Ineligible Owner's Contingency[2]	$90,449
96	Potentially Eligible Owner's Contingency[2]	$51,735
97	Total Construction and Owner's Contingency[2]	$1,176,881
98	Total Ineligible Contingency[2]	$607,797
99	Total Potentially Eligible Contingency[2]	$569,084
100	Reimbursement Rate	80.00%
101	Potential Additional Contingency Grant Funds[2]	$455,267
102	Maximum Total Facilities Grant	$9,870,319
103	Total Project Budget	$12,945,696

Table 10.

Contingency Cap Calculations	
Eligible Construction Budget	$10,346,973
Eligible Constr Cont Cap @ 5%	$517,349
Eligible Construction Budget	$10,346,973
Eligible Owner's Cont Cap @ 0.5%	$51,735

104 This document was prepared by the MSBA based on a preliminary review of information and estimates provided by the Owner's Project Manager of (District) for the (School) project. Based on this preliminary review, certain budget, cost and scope items have been determined to be ineligible for reimbursement, however, this document does not contain a final, exhaustive list of all budget, cost and scope items which may be ineligible for reimbursement by the MSBA. Nor is it intended to be a final determination of which budget, cost and scope items may be eligible for reimbursement by the MSBA. All project budget, cost and scope items shall be subject to review and audit by the Authority, and the Authority shall determine, in its sole discretion whether any such budget, cost and scope items are eligible for reimbursement. The MSBA may determine that certain additional budget, cost and scope items are ineligible for reimbursement.

105 1. The estimated maximum facilities grant established for the Project Funding Agreement does not include any potentially eligible contingency funds and is subject to review and audit by the MSBA. At the time of PFA Bid Amendment, the Estimated Maximum Facilities Grant and the Maximum Total Facilities Grant will be adjusted to account for any budget revision requests submitted and approved by the MSBA at the time of establishing the Amendment.

106 2. Pursuant to Section 3.20 of the Project Funding Agreement and the applicable policies and guidelines of the Authority, any project costs associated with the reallocation or transfer of funds from either the Owner's contingency or the Construction contingency to other budget line items shall be subject to review by the Authority to determine whether any such costs are eligible for reimbursement by the Authority. All costs are subject to review and audit by the MSBA.

107 3. The Alternate Subtotal budget line represents the scope of work that the District may bid as an alternate to the construction contract. When an alternate increases project scope (an "add" alternate), the amount of the alternate is not included within the Construction Budget. By contrast, when an alternate decreases project scope (a "deduct" alternate), the amount is included within the Construction Budget.

Cost Estimator: Fennessy Consulting Services

Scope: Roof

($6,797,679) Roof Cap Exclusion (negative indicates no exclusion)

Table 9.

Soft Cost Reimbursement (Calculates Soft Cost Exclusion Cap if necessary)

Est'd Budget	Excluded	Eligible Soft Costs	Category
$522,349	$0	$522,349	-Administration
$899,493	$0	$899,493	-A/E Services
Ineligible therefore not included in calculation			-Site Acquisition
$0	$0	$0	-Miscellaneous Proj Costs
$0	$0	$0	-FFE
$142,184	$90,449	$51,735	-Potentially Eligible Owner's Contingency
		$1,473,577	**Total Eligible Soft Costs**

Construction Costs associated with Soft Cost Cap Calculation

Est'd Eligible Budget	Eligible Constr. Costs	Category
$0	$0	-CM Preconstruction services
$10,346,973	$10,346,973	-Construction Cost
	Not included in this calculation	-Construction Contingency
	$10,346,973	**Total Eligible Construction Cost**
	20%	**Soft Cost Allowance**
	$2,069,395	**Reimbursable Soft Cost**

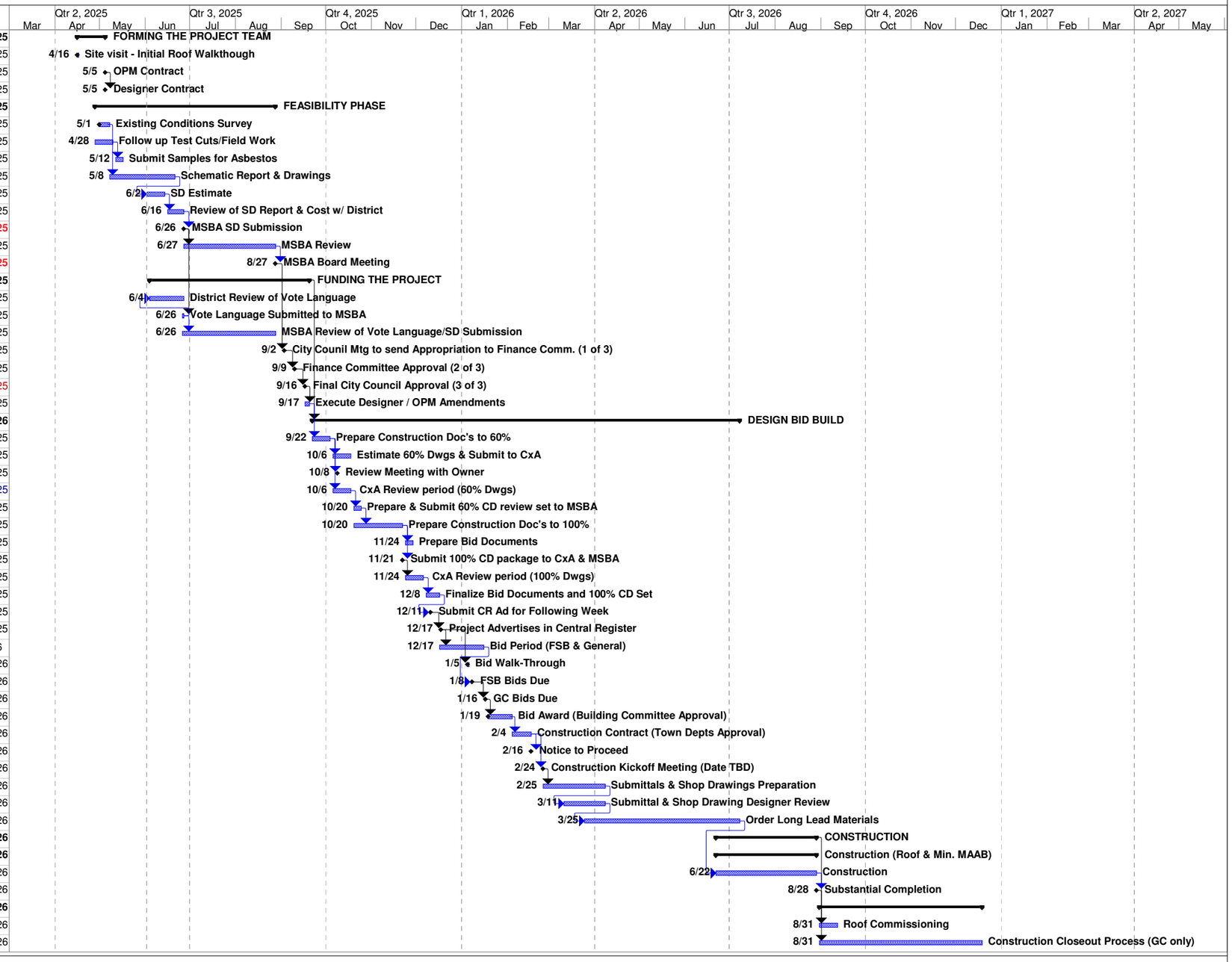
-If Eligible minus Reimbursable is negative, then no exclusion is applied.
-If Eligible minus Reimbursable is positive, then reduce Potentially Eligible Owner's Contingency until 0. If Eligible minus Reimbursable remains positive, then distribute the remaining exclusion to non-basic service soft cost budget lines. If exclusion remains, apply to basic service lines. When applying the exclusion to budget lines in column D, please highlight cells in purple (same as K109).

	-$595,818	**Eligible minus Reimbursable**
Step 1.		**20% Soft Cost Exclusion** (hard-key value from K108 if positive)
		Reduce Eligible Owner's Contingency until $0:
	$51,735	**Eligible Owner's Contingency Cap (for reference from Table 10)**
Step 2.	$0	**Reduce Eligible Owner's Contingency due to Soft Cost Exclusion**
Step 3.	$0	**Remaining Soft Cost Cap**
		If remaining soft cost cap (cell K113 > $0), deduct from soft cost budget lines:
	$0	**Should = $0**

City of Holyoke
Holyoke High School
Roof Replacement Project

PCA360

ID	Task Name	Duration	Start	Finish
1	**FORMING THE PROJECT TEAM**	**13 days**	**Wed 4/16/25**	**Mon 5/5/25**
2	Site visit - Initial Roof Walkthough	1 day	Wed 4/16/25	Wed 4/16/25
3	OPM Contract	0 days	Mon 5/5/25	Mon 5/5/25
4	Designer Contract	0 days	Mon 5/5/25	Mon 5/5/25
5	**FEASIBILITY PHASE**	**88 days**	**Mon 4/28/25**	**Wed 8/27/25**
6	Existing Conditions Survey	5 days	Thu 5/1/25	Wed 5/7/25
7	Follow up Test Cuts/Field Work	10 days	Mon 4/28/25	Fri 5/9/25
8	Submit Samples for Asbestos	5 days	Mon 5/12/25	Fri 5/16/25
9	Schematic Report & Drawings	32 days	Thu 5/8/25	Fri 6/20/25
10	SD Estimate	10 days	Mon 6/2/25	Fri 6/13/25
11	Review of SD Report & Cost w/ District	9 days	Mon 6/16/25	Thu 6/26/25
12	**MSBA SD Submission**	**0 days**	**Thu 6/26/25**	**Thu 6/26/25**
13	MSBA Review	44 days	Fri 6/27/25	Wed 8/27/25
14	**MSBA Board Meeting**	**0 days**	**Wed 8/27/25**	**Wed 8/27/25**
15	**FUNDING THE PROJECT**	**78 days**	**Wed 6/4/25**	**Fri 9/19/25**
16	District Review of Vote Language	17 days	Wed 6/4/25	Thu 6/26/25
17	Vote Language Submitted to MSBA	1 day	Thu 6/26/25	Thu 6/26/25
18	MSBA Review of Vote Language/SD Submission	45 days	Thu 6/26/25	Wed 8/27/25
19	City Counil Mtg to send Appropriation to Finance Comm. (1 of 3)	0 days	Tue 9/2/25	Tue 9/2/25
20	Finance Committee Approval (2 of 3)	0 days	Tue 9/9/25	Tue 9/9/25
21	Final City Council Approval (3 of 3)	0 days	Tue 9/16/25	Tue 9/16/25
22	Execute Designer / OPM Amendments	3 days	Wed 9/17/25	Fri 9/19/25
23	**DESIGN BID BUILD**	**207 days**	**Mon 9/22/25**	**Tue 7/7/26**
24	Prepare Construction Doc's to 60%	2 wks	Mon 9/22/25	Fri 10/3/25
25	Estimate 60% Dwgs & Submit to CxA	2 wks	Mon 10/6/25	Fri 10/17/25
26	Review Meeting with Owner	0 days	Wed 10/8/25	Wed 10/8/25
27	CxA Review period (60% Dwgs)	2 wks	Mon 10/6/25	Fri 10/17/25
28	Prepare & Submit 60% CD review set to MSBA	1 wk	Mon 10/20/25	Fri 10/24/25
29	Prepare Construction Doc's to 100%	5 wks	Mon 10/20/25	Fri 11/21/25
30	Prepare Bid Documents	1 wk	Mon 11/24/25	Fri 11/28/25
31	Submit 100% CD package to CxA & MSBA	0 days	Fri 11/21/25	Fri 11/21/25
32	CxA Review period (100% Dwgs)	2 wks	Mon 11/24/25	Fri 12/5/25
33	Finalize Bid Documents and 100% CD Set	7 days	Mon 12/8/25	Tue 12/16/25
34	Submit CR Ad for Following Week	0 days	Thu 12/11/25	Thu 12/11/25
35	Project Advertises in Central Register	0 days	Wed 12/17/25	Wed 12/17/25
36	Bid Period (FSB & General)	23 days	Wed 12/17/25	Fri 1/16/26
37	Bid Walk-Through	1 day	Mon 1/5/26	Mon 1/5/26
38	FSB Bids Due	0 days	Thu 1/8/26	Thu 1/8/26
39	GC Bids Due	0 days	Fri 1/16/26	Fri 1/16/26
40	Bid Award (Building Committee Approval)	12 days	Mon 1/19/26	Tue 2/3/26
41	Construction Contract (Town Depts Approval)	9 days	Wed 2/4/26	Mon 2/16/26
42	Notice to Proceed	0 days	Mon 2/16/26	Mon 2/16/26
43	Construction Kickoff Meeting (Date TBD)	0 days	Tue 2/24/26	Tue 2/24/26
44	Submittals & Shop Drawings Preparation	6 wks	Wed 2/25/26	Tue 4/7/26
45	Submittal & Shop Drawing Designer Review	4 wks	Wed 3/11/26	Tue 4/7/26
46	Order Long Lead Materials	15 wks	Wed 3/25/26	Tue 7/7/26
47	**CONSTRUCTION**	**50 days**	**Mon 6/22/26**	**Fri 8/28/26**
48	**Construction (Roof & Min. MAAB)**	**50 days**	**Mon 6/22/26**	**Fri 8/28/26**
49	Construction	10 wks	Mon 6/22/26	Fri 8/28/26
50	Substantial Completion	0 days	Fri 8/28/26	Fri 8/28/26
51	**CLOSE OUT**	**80 days**	**Mon 8/31/26**	**Fri 12/18/26**
52	Roof Commissioning	2 wks	Mon 8/31/26	Fri 9/11/26
53	Construction Closeout Process (GC only)	16 wks	Mon 8/31/26	Fri 12/18/26



Date Updated: Mon 6/2/25

Task	Rolled Up Task	Split	Group By Summary	Manual Task	Manual Summary	External Tasks	
Milestone	Rolled Up Milestone	External Tasks	Inactive Milestone	Duration-only	Start-only	External Milestone	
Summary	Rolled Up Progress	Project Summary	Inactive Summary	Manual Summary Rollup	Finish-only	Progress	

HOLYOKE HIGH SCHOOL
CITY OF HOLYOKE

ROOF REPLACEMENT PROJECT

SCHEMATIC DESIGN DOCUMENT SUBMISSION

JUNE 26, 2025

Massachusetts School Building Authority
Funding Affordable, Sustainable, and Efficient Schools in Partnership with Local Communities

PCA360

MVG
MOUNT VERNON GROUP
ARCHITECTS

TABLE OF CONTENTS

Module	Description	Tab
SD-1	**Project Narratives**	
	• Existing Conditions Assessment	1.1
	• Plumbing Report	1.2
	• Structural Analysis	1.3
	• Hazardous Materials Report	1.4
	• HVAC Report	1.5
	• Proposed Recommendations and Certification	1.6
	• CMR 521 Accessibility Upgrades Review	1.7
SD-2	**Code Analysis**	
	• Code Analysis Narrative	2.1
SD-3	**Schematic Design Drawings**	
	• Existing Roof Plan, Photos, Proposed Roof Plan	3.1
SD-4	**Cost Estimate**	
	• Designer Cost Estimate	4.1
SD-5	**Total Project Budget**	
	• Form 3011 – Project Budget	5.1
SD-6	**Project Cash Flow**	
	• District Project Cash Flow	6.1
SD-7	**Project Schedule**	
	• OPM Project Schedule	7.1
SD-8	**Project Reimbursement Rate**	
	• Reimbursement Rate Certification	8.1
SD-9	**Project Scope and Budget Vote Language**	
	• Project Scope and Budget Vote Language	9.1

SD-10 **Schematic Design checklist**

- Schematic Design Submission Checklist 10.1

SD-1 **Project Narratives**

1.1 Existing Conditions Assessment

The design team made site visits on April 16 & 28, and May 8 & 12, 2025 to review, document and assess the existing conditions of the existing roof areas. The roof is comprised of 11 different roof areas on 8 separate but adjacent roof levels approximately 167,025 square feet in area. The building sits on a sloped site which creates a roof elevation range from 12' on the low side to 35' on the high side above the adjacent grade.

The building was originally constructed in 1963 with a gravel-surfaced built-up roof system over a 1.5-inch-deep metal deck. The current roofing system consists of a Sarnafil PVC roof membrane mechanically attached to the structural deck within membrane laps with fasteners/plates spaced on approximate 6-inch centers. The roof warranty expired in 2016. The existing roof system was installed in 1997. The roof assembly contains either one layer of 2-inch-thick rigid insulation or a double layer of 2-inch rigid insulation depending upon the height of existing rising wall through-wall flashing. Typical membrane width within field: 6 feet. Three side-by-side "half" or 3-foot-wide sheets are installed at perimeters and corners. Roberts Field House addition was added in 2003 which was constructed with an EPDM roof membrane, this roof membrane is now 23 years old.

Field measurements were taken to determine the overall area of all the different roof sections, as well as the location, size, and type of equipment that either penetrated or rested on the roof. Photos were taken of existing conditions to identify areas of deficiency such as roof membrane damage, water ponding, inadequate slope to drains, roof penetration seals and flashings conditions, and possible specialty conditions that require remedial work to accommodate the new roof system. Also, to identify equipment to be removed that may have been abandoned in place during or after the last re-roof work took place

A structural analysis of the existing structure also took place through the examination of existing drawings where available, visual inspections, and confirmation of built conditions. (See also the Structural Code Review report for additional information contained in this submission in section 1.3)

Testing for asbestos containing materials was performed as part of the roof inspections. Samples were taken from several locations in the roof system and at typical flashing locations and sent to the lab for analysis to determine the potential existence of asbestos. (See also the report for asbestos containing materials for additional information contained in this submission in section 1.4)

Observations

- The overall roof membrane appears to be in fair condition, with areas of ponding observed and documented.
- The overall roof appeared to be spongy in some areas, indicating a breakdown in insulation or presence of moisture.
- Most roof areas have 2-way drainage created by sloped structure. Tapered insulation crickets not evident between drains creating ponding conditions within valleys.
- Recent repair along perimeter of south elevation of swimming pool roof appears to have been an attempt to repair damage most likely due to a wind event.
- The existing roof drains have insert drains inserted into their outlets reducing drainage flow and should be replaced and upsized to match the existing drainpipe size. Additional roof drains may be required to meet the updated rainfall drainage requirements.

- Based on the lack of roof insulation to meet the current energy code, most of the rooftop equipment, ladders, curbs, and roof vents will need to be adjusted and/or raised as well as some thru-wall flashings.
- Several existing skylights with safety cages should be raised to accommodate thicker roof insulation.
- Some of the middle sized and smaller mechanical equipment sit on wood blocking that is not attached to the roof structure or roof deck. This equipment will have to be removed prior to work commencing and then reinstalled on mechanical roof curbs when the roof is complete.
- The larger mechanical roof equipment and miscellaneous exhaust fans sit on adequate curbs. Most exhaust fan curbs may need to be replaced with new ones to keep them above potential snow levels.
- Pitch pans are used to seal thru-roof mechanical penetrations. All pitch pans should be eliminated and replaced with pipe chase housings.
- Several plumbing vent stacks are of a minimal height above the existing roof and require extensions.
- Thru-wall fresh air intakes for interior under-window heaters low to roof.
- Large swimming pool roof-top Seresco dehumidification unit has large under-unit supply duct approximately 6-8 inches above existing roof surface. We recommend raising the unit and reworking the ductwork to provide adequate working space below the unit.
- Auditorium brick wall between roof levels that has been displaced outward and should be removed and rebuilt to bring it back in alignment with the adjacent walls.
- A masonry chimney was observed having cracked and spalled brick and mortar. This should be repointed and repaired as part of the reroofing project.
- The drop off canopy at the front of the school has what appears to be a structural sag, a roof drain was installed in a low area and connected to a downspout pipe. There is an area of ponding at the center of the canopy. It appears that the roof structure has settled so the roof in this area should be raised with tapered insulation to create a positive slope towards the gutters, roof drain, and to eliminate the ponding area.
- Exterior fixed roof ladders need to be replaced with ships ladders modified or adjusted to accommodate any additional roof thickness which may increase to meet the updated energy code requirements for roof insulation.
- Fall protection has not been provided surrounding the interior courtyards and mechanical equipment within 10 feet of roof perimeter. No roof guardrails or roof safety anchors were observed.
- The single scupper at the small rear addition was blocked by a water bottle and cleared. The need for a larger scupper and/or emergency overflow on this roof section is recommended.
- Louver vents in existing masonry elevator shafts were observed to be stuffed with insulation closing the vents.
- A couple of masonry chimneys were observed to have cracks, spalling and efflorescence.
- Per 521 CMR 5.00 the estimated roof replacement costs do not exceed 30% of the assessed value of the building so ADA upgrades have not been considered at this school.

- MSBA requires the school roof to be assessed for solar readiness. The structure and electrical will be reviewed for solar compatibility.

Overall, the existing roof system has reached its lifespan and needs replacement. Also, refer section 3.1 of this submission containing to the Existing Roof Plan A1.01, Existing Conditions Photos A1.02 & A1.03 and Proposed Roof Plan A1.04 for additional information. See section 1.5 of this submission for the proposed recommendations.

SD-1 **Project Narratives**

1.2 Existing Plumbing Conditions Assessment

C.A. Crowley Engineering Inc made a visit to the site on May 21, 2025, to determine the location, type and condition of existing roof drains, and plumbing vents. The roof is comprised of 11 different roof areas on 8 separate but adjacent roof levels approximately 167,025 square feet in area.

The building was originally constructed in 1963.

Plumbing Observations

The existing rooftop plumbing components at Holyoke Highschool consists of the following: Roof drains, and sanitary vents.

Roof drains:

The roof drains appear to have been installed during the original construction of the building. They comprise of multiple different types and sizes. Piping appeared to be cast iron, with hub and spigot type fittings. No insulation on any of the storm piping was observed.

There have been multiple repairs to the roof drain system, due to leaks at the roof level. Some of these repairs have resulted in piping being installed from the existing roof drain to the existing internal roof drain piping, in a smaller size than the original pipe installed. Multiple roof drain domes are damaged, removed, and/or obstructed by debris.

Examples 1, 2 & 3: Roof drain piping repair, ponding from improper insulation pitch, and roof drain dome debris build-up.

Throughout the building's multiple roof levels, there are several instances of ponding. This ponding is a result of clogged drains, obstructed roof drain domes, improper pitch of roof insulation to drain, raised expansion joints impeding water flow, and drains that have been covered by roofing material.

Examples 4 & 5: Water ponding on roof.

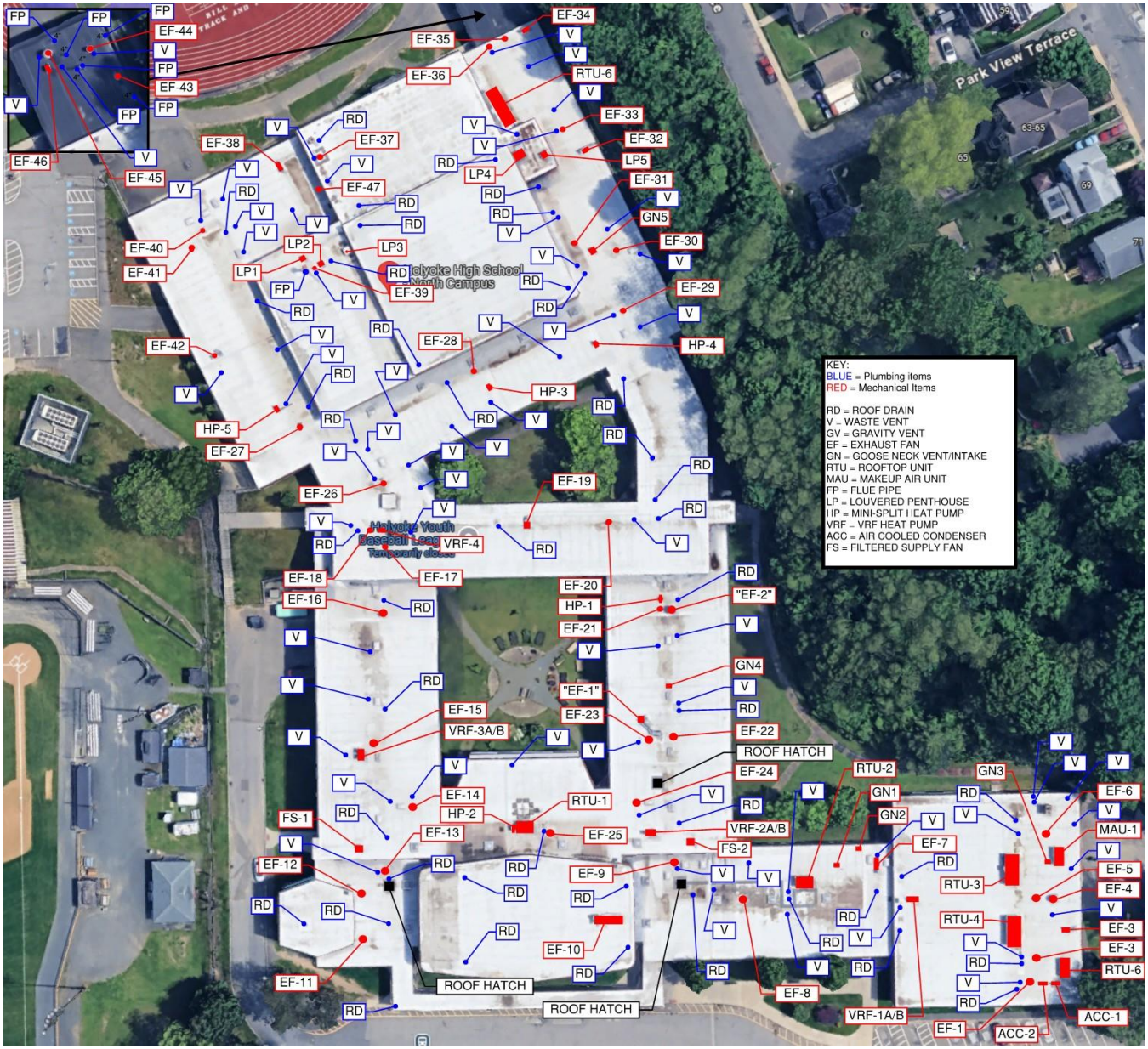
Plumbing Vents:

Throughout the roof areas, there are several plumbing sanitary vents. The vents appear to be in good condition.

Examples 6: Typical plumbing vent through the roof.

Rooftop Equipment Map

On the following page is a rooftop map of equipment found on the roof during our site investigation for reference.



Plumbing Recommendations:

Roof drains:

The roof drains should be removed and replaced with new, to accommodate the proposed roof replacement.

Calculations should be made to ensure the existing roof drains are of adequate size, per 248CMR.

Additional roof drains may be necessary to provide adequate drainage, in areas of ponding. New roof drains may need to be piped separate from the existing roof drain piping system, due to the lack of documentation, and/or existing drawings. The existing pipe sizes will need to be confirmed to determine if they are adequate, and if the storm piping is combined with the sanitary sewer piping system.

Plumbing Vents:

The existing plumbing vents are in good condition but should be raised to a height of 18" above the roof. This is to accommodate the proposed roof replacement and added insulation on the roof.

S T & P

1 Cranberry Hill, Suite 301
Lexington, Massachusetts 02421
souzatrue@souzatrue.com
(617) 926-6100

SOUZA, TRUE
AND PARTNERS, INC.
STRUCTURAL ENGINEERS

TERRY A. LOUDERBACK, PE
JEROME A. YURKOSKI, PE
LISA A. BOHLIN, PE
TODD P. BLAKE, PE
CHRIS M. MOTTO, PE
MARTIN F. FINN, PE

June 18, 2025

Mount Vernon Group Architects, Inc.
1350 Main Street, Suite 1110
Springfield, MA 01103

Attention: Mr. John Landry

Reference: Roof Replacement Project Structural Impact
Holyoke High School
Holyoke, Massachusetts

Dear Mr. Landry:

At your request, we have completed our review of the existing structural documentation to determine if the existing structure can accommodate the proposed new roof system and to determine if the project will require other Code required structural upgrades to the existing building. As part of this exercise, we reviewed the existing roof structural framing to support new PV arrays.

We did not visit the existing building as a condition assessment was not warranted. Our understanding of most of the existing structure is based on the information provided in the original existing structural design documents completed by Alderman & MacNeish Architects and Engineers in the drawings entitled, “Holyoke High School, Beech Street, Holyoke, Massachusetts” dated June 18, 1963.

The South Addition Roof is not part of this set of drawings. Our understanding of the structure of the South Addition roof structure is based on the information and field measurements provided to us by Mount Vernon Group.

Our conclusions and recommendations regarding the structure are based on our review of the existing listed structural documentation, or provided information, only. We did not complete any specific probes or lab tests on the building.

General Roof Framing Construction

The Holyoke High School is essentially a one-story or two-story building that "steps" with the slope of the terrain. The one-story areas include the auditorium, pool, gymnasium, etc. The two-story areas include the classrooms and administration areas.

Roof framing is consistent throughout the facility and consists of open web steel joists generally at a 4'-0" spacing supported by steel wide flange beams. Steel beams are supported by a combination of tubular steel columns and wide flange steel columns.

Proposed Renovations and Alterations

It is our understanding that this is a roof replacement project only and will be considered a Level 1 alternation in accordance with Chapter 7 of the 2021 International Building Code along with the amendments defined in Chapter 34 of the 10th Edition Massachusetts State Building Code.

There is no new structural work included in the scope of work (such as new mechanical units, new openings, etc.). However, roof replacement projects specifically require certain specific structural evaluations as noted below.

Existing Roof Gravity Elements to support the New Roof

We understand the current roofing system consists of the following:

40-60 mil TPO membrane	0.3 psf
4" Insulation	6.0 psf
Existing Steel Deck	3.0 psf
Total Weight	9.3 psf

The proposed new roofing system will consist of the following:

80 mil PVC membrane	0.5 psf
½" gypsum coverboard	2.0 psf
6" Sika RMAX Polyiso insulation	1.0 psf
Existing Steel Deck	3.0 psf
Total Weight	6.5 psf

Furthermore, per sheet S-5 of the existing drawings, the roof joist and beam framing were designed for a total load of 58 psf which includes 40 psf of roof live (or snow load) and a 7 psf services dead load.

Per the Massachusetts State Building Code (10th Edition), the design snow load for Holyoke, MA is now 35 psf.

Therefore, the new total load to be placed on the roofs is 6.5 psf + 7 psf + 35 psf = 48.5 psf.

The result of the new roof configuration is a net **reduction** to the total load to be supported by the structural members at the roof.

Per Section 706.2 (Addition or replacement of roofing or replacement of equipment), existing structural members where the additional dead load from the roofing does not increase the force in the element by more than 5% are exempt from having to comply with the gravity load requirements of the International Building Code.

Therefore, the structural roof framing complies with the Code to support the new proposed roof system.

Masonry Parapets

Per Section 706.3.1 (Bracing for unreinforced masonry bearing wall parapets), existing unreinforced masonry parapets must be braced if the roof is reroofed and if the structure will be assigned to Seismic Design Category D, E, or F.

Based on a Soil Profile Type of D (assumed), the S_{ds} and S_{d1} values will be 0.177 and 0.088 respectively placing this structure is Seismic Design Category B.

As a result, the existing masonry parapets are not required to be reviewed to determine if additional bracing is required.

Roof Diaphragm Resisting Wind Loads

If the existing roof is to be replaced, then the requirements of Section 706.3.2 (Roof Diaphragms Resisting Wind Loads in High-Wind Regions) must be met.

Roof diaphragms and roof-to-wall connections shall be evaluated for the wind loads specified in the International Building Code in areas where the V_{ult} is greater than 130 mph and the building is in Risk Category III or IV.

Holyoke High School is in Risk Category III, but V_{ult} is only 123 mph. Therefore, the requirements of 302.7 do not apply and the roof diaphragm connection and the roof-to-wall connections are not required to be evaluated.

Existing Roof Gravity Elements to support the new PV Arrays

Per the 2021 International Existing Building Code, including the 10th Edition Amendments per the Massachusetts State Building Code, when new loads are added to an existing structural element, the existing elements must be treated as if they are new elements.

Therefore, in addition to the PV Arrays, the roof must be able to support a snow load in conformance with the latest Code. In this case, the existing roof structure must be able to support a roof snow load of 35 psf, plus the effects of drift.

Most PV Array systems will vary in weight between 7 and 10 psf. The exact weight of the system is directly dependent on the manufacturer and layout of the system. Since we do not know the specific weight of the PV Arrays, we completed a load comparison analysis on each roof to determine the residual capacity of each roof to support additional loads. Where the existing roof framing system can accommodate additional load, we will indicate the maximum recommended additional load that can be applied to that area of the building.

To clearly indicate our recommendations for the existing roofs to support new PV arrays, we correlated our recommendations with the labeling identified in the Roof Key Plan provided on sheet A2.00 of the architectural drawings entitled, “Holyoke High School Roof Replacement” by Mount Vernon Group Architects.

General Requirements for all roofs supporting new PV Arrays

In all cases, the existing steel roof decks should not be considered to have sufficient capacity to support the new PV Arrays directly. The PV arrays should be supported directly from the main structural elements (i.e. the joists, beams, or girders). In cases where a PV Array support is located directly over the deck, sleepers shall be added to transfer the load to the nearest main structural element.

Additionally, new PV arrays should not be placed in areas of the existing roof where the existing structural members currently support snow drift loads.

Finally, local chord reinforcement may be required at existing steel joists if the point loads from the PV Arrays are appreciable and if the PV arrays are not located directly over panel points. If the support is between panel points, a new panel point may need to be created, usually with a new L2x2 angles extending from the support point on the top chord to the nearest bottom chord panel point. This requirement will depend on the final PV weight and configuration.

The following are our specific recommendations for each roof section.

Cafeteria Roof (Part A, ***see Figure 1)***

The Cafeteria Roof extends above the surrounding roofs. Therefore, no drift snow load will accumulate on the Cafeteria Roof.

The new total load on the roof is 48.5 psf, which is less than the design load indicated in the existing structural drawings (58 psf). Section 706.2 allows existing members to be considered adequate provided that the load does not increase by more than 5%. Based on a maximum PV array load of 10 psf, the total weight on the existing roof will not increase by more than 5% and is therefore in compliance with Section 706.2.

The Cafeteria Roof may be considered adequate to support PV Arrays that have a maximum total weight of 10 psf.

Administration Roof (Part B, ***see Figure 2)***

This roof is set between the Cafeteria Roof to the west, the Auditorium Roof to the east and a portion of the North Roof to the south. At each of these junctures, the Administration Roof is lower than the adjacent roofs.

The new total load on the roof is 48.5 psf, which is less than the design load indicated in the existing structural drawings (58 psf). Section 706.2 allows existing members to be considered adequate provided that the load does not increase by more than 5%. Based on a maximum PV array load of 10 psf, the total weight on the existing roof (in areas not impacted by snow drift) will not increase by more than 5% and is therefore in compliance with Section 706.2.

The portions of the Administration Roof that are impacted by snow drift do not have residual capacity to support new loads. We do not recommend placing PV arrays on structural members in these areas.

Entry Canopy and Auditorium Roofs (Part C, ***see Figure 3)***

The Auditorium Roof extends above the surrounding roofs. Therefore, no drift snow load can accumulate on the Auditorium Roof.

The new total load on the roof is 48.5 psf, which is less than the design load indicated in the existing structural drawings (58 psf). Section 706.2 allows existing members to be considered adequate provided that the load does not increase by more than 5%. Based on a maximum PV array load of 10 psf, the total weight on the existing roof will not increase by more than 5% and is therefore in compliance with Section 706.2.

The Auditorium Roof may be considered adequate to support PV Arrays that have a maximum total weight of 10 psf.

However, we do not recommend placing any new loads over the stage because the roof framing members may already be affected by hanging loads associates with the various productions.

The entry canopy is exterior of the building and has a too small of the footprint to add PV arrays. We do not recommend placing PV arrays on the Entry Canopy Roof.

Northeast and Band Room Roofs (Part D, ***see Figure 4)***

The Band Room Roof extends above the surrounding roofs. Therefore, no drift snow load can accumulate on the Band Room Roof.

The new total load on the roof is 48.5 psf, which is less than the design load indicated in the existing structural drawings (58 psf). Section 706.2 allows existing members to be considered adequate provided that the load does not increase by more than 5%. Based on a maximum PV array load of 10 psf, the total weight on the existing roof will not increase by more than 5% and is therefore in compliance with Section 706.2.

The Band Room Roof may be considered adequate to support PV Arrays that have a maximum total weight of 10 psf.

The Northeast Roof is lower than the Auditorium Roof to the west, the Band Room Roof to the east, and the North Roof to the south. As a result, most of this roof is impacted by drift loads on all sides. PV arrays should not be placed on structural members that also support snow drift loads.

Due to the configuration of this roof, all structural members are already supporting drift loads. We do not recommend placing PV arrays on the Northeast Roof.

*North Roof (Part E, **see Figure 5**)*

The North Roof extends above the Administration Roof and Northeast Roof but below the Auditorium Roof to the north. And to the south, the South Roof extends above the North Roof.

The new total load on the roof is 48.5 psf, which is less than the design load indicated in the existing structural drawings (58 psf). Section 706.2 allows existing members to be considered adequate provided that the load does not increase by more than 5%. Based on a maximum PV array load of 10 psf, the total weight on the existing roof (in areas not impacted by snow drift) will not increase by more than 5% and is therefore in compliance with Section 706.2.

The portions of the North Roof that are impacted by snow drift do not have residual capacity to support new loads. We do not recommend placing PV arrays on structural members in these areas.

*South Roof (Parts G through M, **see Figure 6**)*

The South Roof extends above the North Roof to the north. Central to the South Roof, the Gym, Pool, and Gym High Roofs extend above the South Roof.

The new total load on South Roof is 48.5 psf, which is less than the design load indicated in the existing structural drawings (58 psf). Section 706.2 allows existing members to be considered adequate provided that the load does not increase by more than 5%. Based on a maximum PV array load of 10 psf, the total weight on the existing South Roof (in areas not impacted by snow drift) will not increase by more than 5% and is therefore in compliance with Section 706.2.

The portions of the South Roof that are impacted by snow drift do not have residual capacity to support new loads. We do not recommend placing PV arrays on structural members in these areas.

South Roof Addition (Parts G through M, ***see Figure 6)***

The South Addition Roof is approximately co-planar with the South Roof and is not impacted by snow drifts.

The South Addition Roof appears to have been constructed in or around 2003. Existing structural drawings for the South Roof Addition have not been provided. Based on the field measurements provided by Mount Vernon Group and the presumed age of construction, it appears that the structural roof framing consists of 30K steel joists at a spacing of 5'-0".

The lightest 30K joist fabricated at this general time would be a 30K7 joist. Based on a span of 41'-0", the capacity of a 30K7 in 2003 would be approximately 303 lb/foot and a live load capacity of 217 lb/foot.

As was the case in 2003 (in conformance with the 6th Edition of the Massachusetts State Building Code), the design snow load for Holyoke, Massachusetts is 35 psf.

The dead loads on this roof are assumed to be as follows:

Proposed New Roofing System	6.5 psf
Services	7.0 psf
PV Arrays	10.0 psf
Total Dead Load Weight	23.5 psf

Based on the reported joist spacing of 5'-0", the demand on the joists would be a 175 lb/foot live load and a 292.5 lb/foot total load.

In both cases, the new load on the joists, including the load due to the PV arrays, does not exceed the expected capacity of the existing joists.

The South Addition Roof may be considered adequate to support PV Arrays that have a maximum total weight of 10 psf.

Gym & Pool Roof and Gym High Roof (Parts G through M, ***see Figure 6)***

The Gym and Pool Roofs are set at the same elevation, extend above the South Roof but are below the Gym High Roof.

The new total load on the roof is 48.5 psf, which is less than the design load indicated in the existing structural drawings (58 psf). Section 706.2 allows existing members to be considered adequate provided that the load does not increase by more than 5%. Based on a maximum PV array load of 10 psf, the total weight on the existing roof (in areas not impacted by snow drift) will not increase by more than 5% and is therefore in compliance with Section 706.2.

The portions of the Gym Roof that are impacted by snow drift do not have residual capacity to support new loads. We do not recommend placing PV arrays on structural members in these areas.

The Pool Roof structural framing consists of long span joists over the full width of the space. As a result, all members are impacted by drifts. We do not recommend placing any PV arrays on the Pool Roof.

The High Gym Roof extends above the surrounding roofs. Therefore, no drift snow load will accumulate on the Cafeteria Roof.

The High Gym Roof may be considered adequate to support PV Arrays that have a maximum total weight of 10 psf.

SUMMARY

- The proposed roofing system will be lighter than the existing roofing system. Therefore, all existing structural members may be considered adequate to support the new proposed roofing system.

- This building will be in Seismic Category B. Existing masonry parapets are not required to be braced.

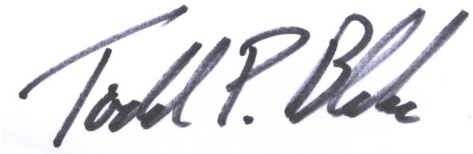
- Even though this is a Risk Category III building, the V_{ult} is only 123 mph. Since this is less than 130 mph, this building is not considered to be in a high wind region. The roof diaphragms and roof-to-diaphragm connections do not need to be evaluated for wind loads per the IBC.

- PV arrays that weigh 10 psf or less may be placed in areas that are also not impacted by other loads such as hung loads in the auditorium or snow drift loads. Please see Figures 1 though 6 for more information.

If you have any questions or concerns, please do not hesitate to call or email.

Sincerely,

SOUZA, TRUE AND PARTNERS, INC.



Todd P. Blake, P. E.
Principal

Attachments: Figures 1 through 6

I:\2025\25152 - Holyoke Roof Replacements\Documents\Reports\Holyoke High School Roof Assessment.docx

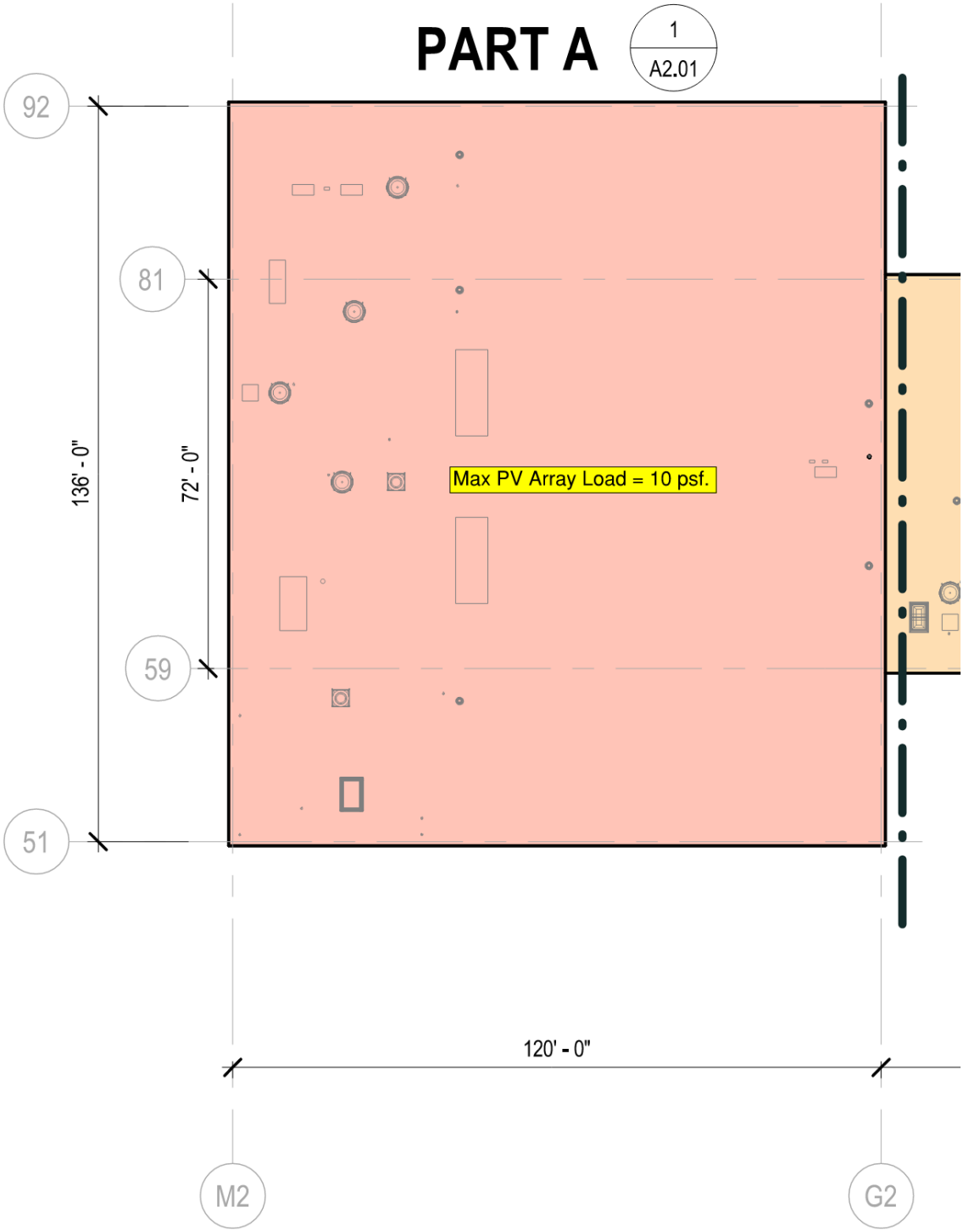


Figure 1: Cafeteria Roof (Part A)

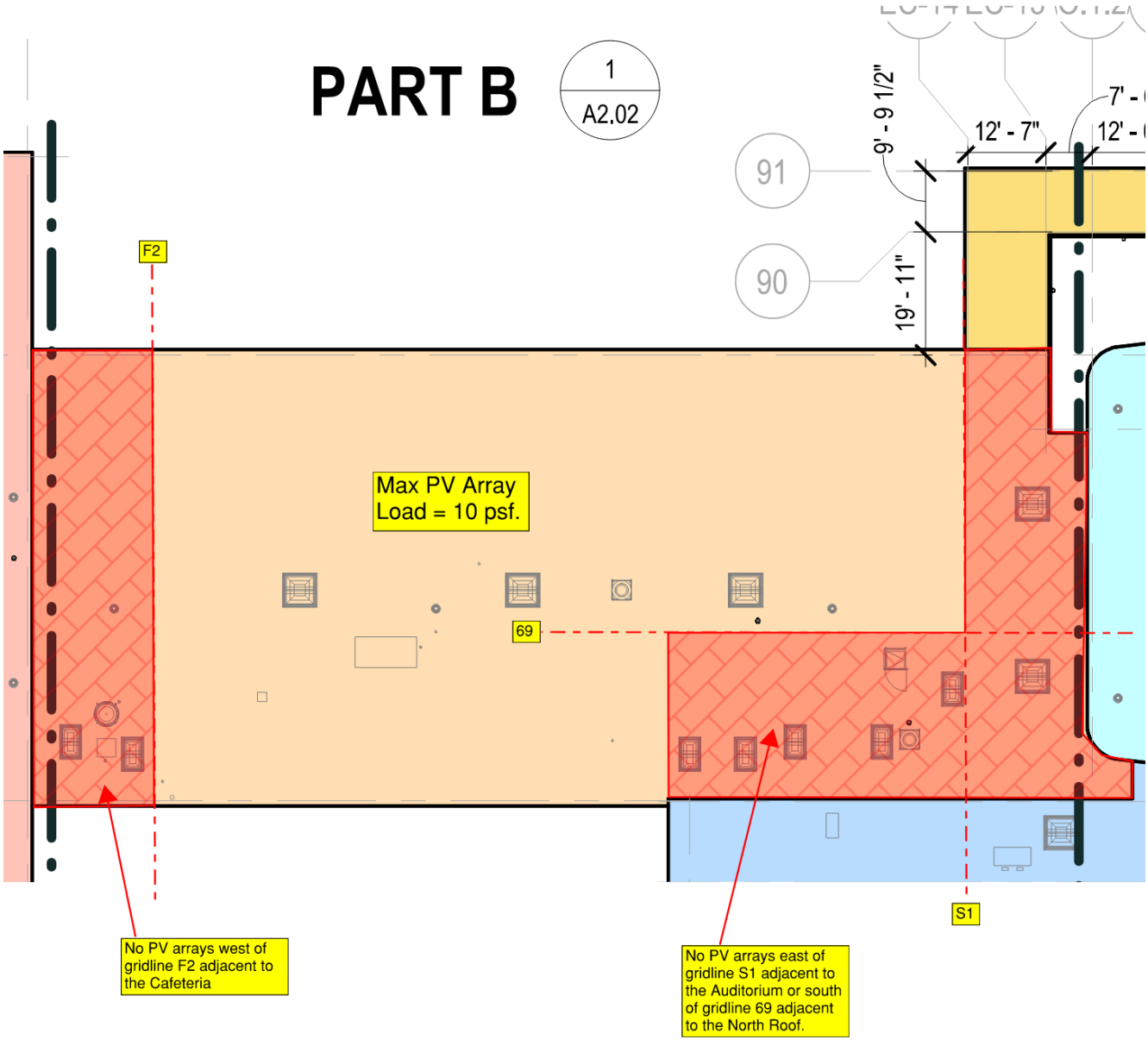


Figure 2: Administration Roof (Part B)

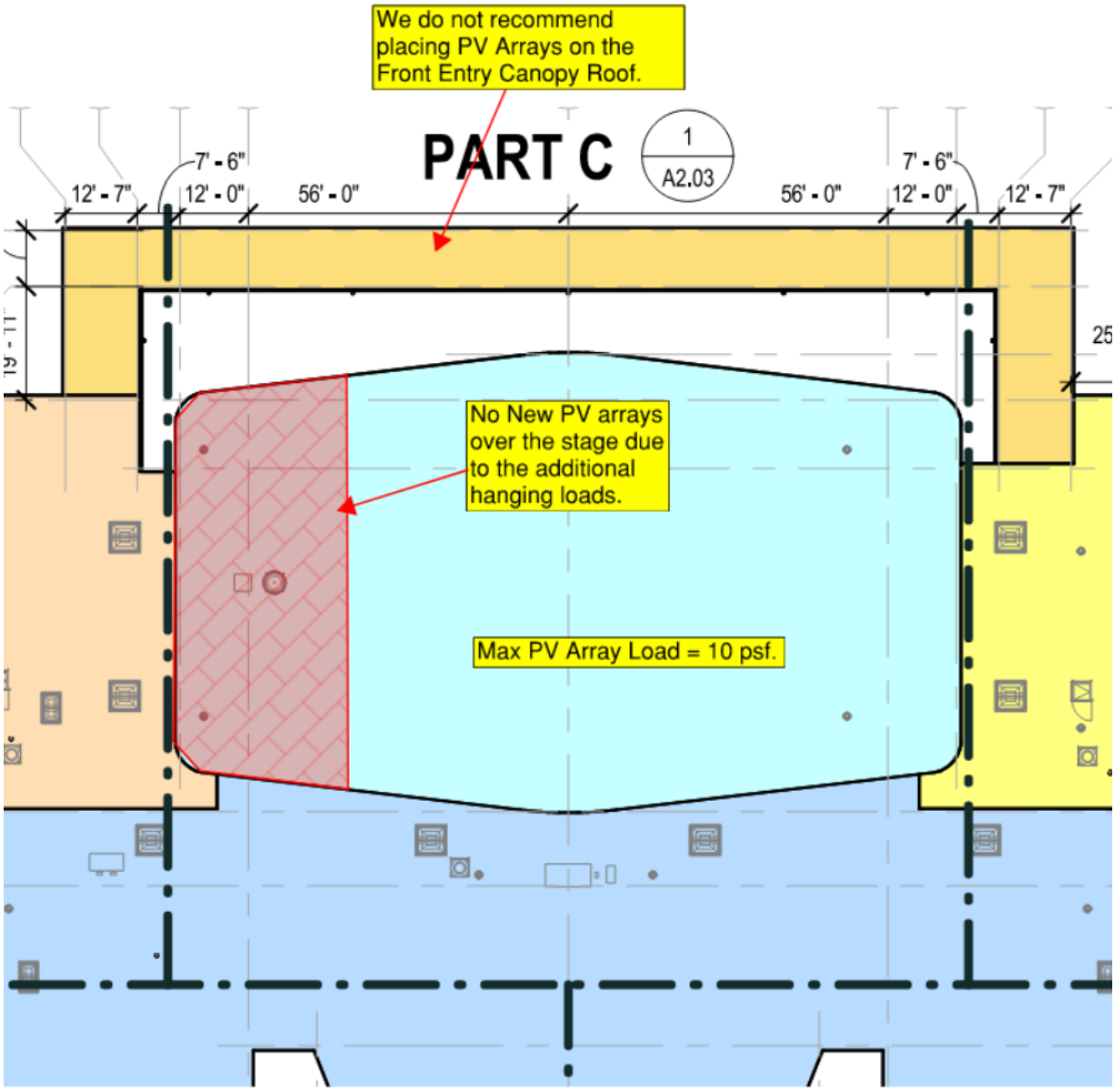


Figure 3: Entry Canopy and Auditorium Roofs (Part C)

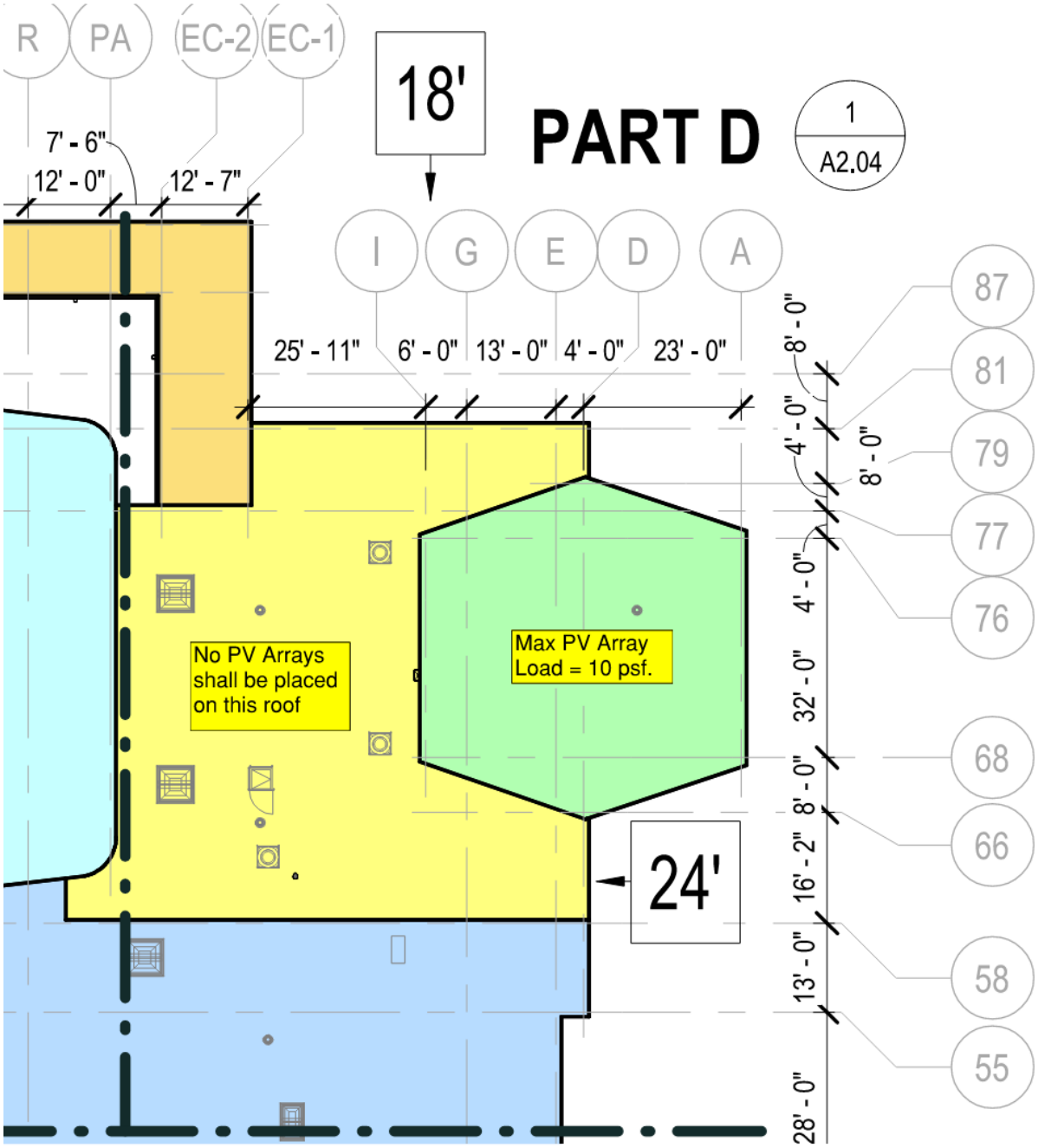


Figure 4: Northeast and Band Room Roofs (Part D)

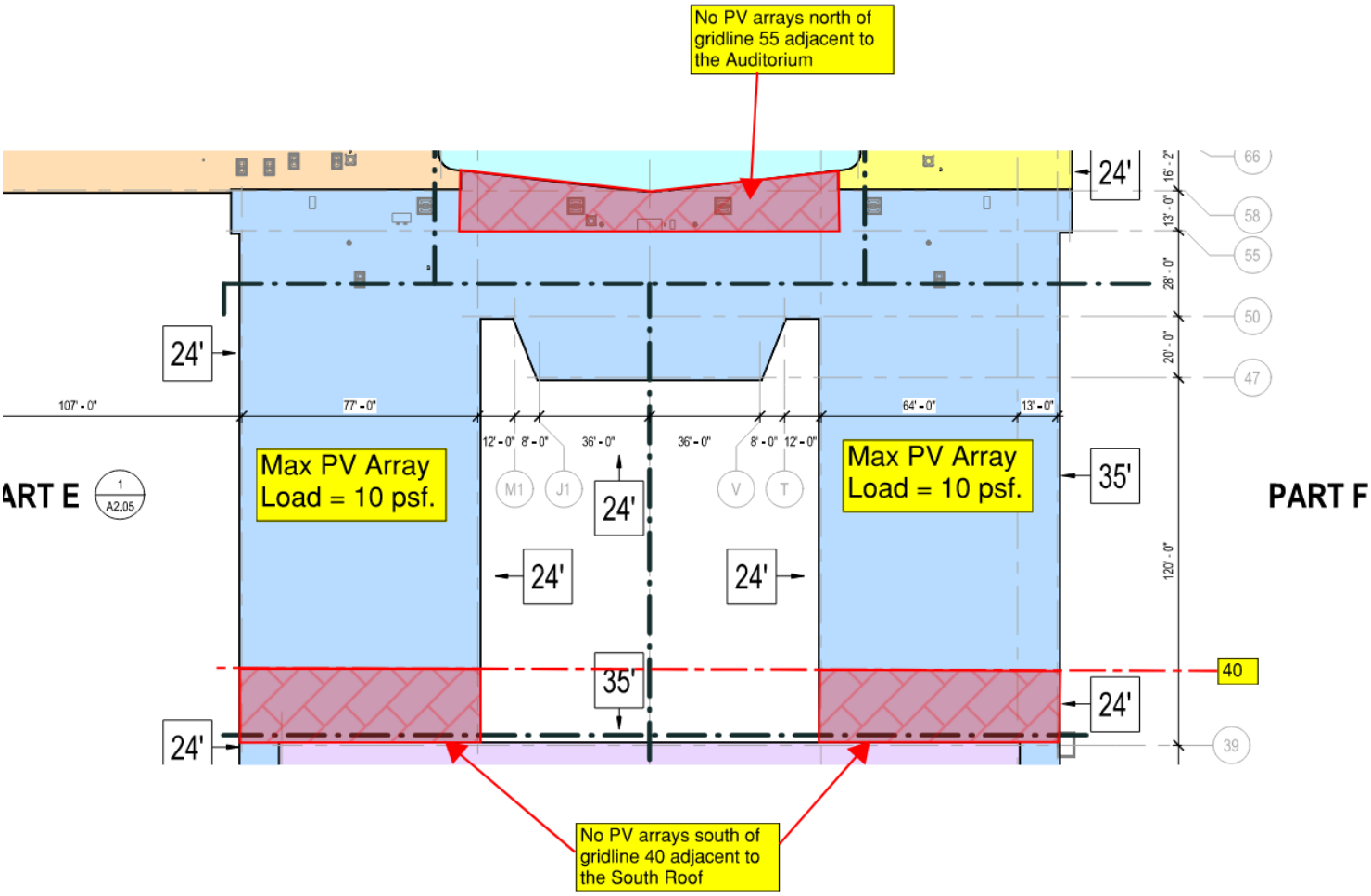


Figure 5: North Roof (Parts E & F)

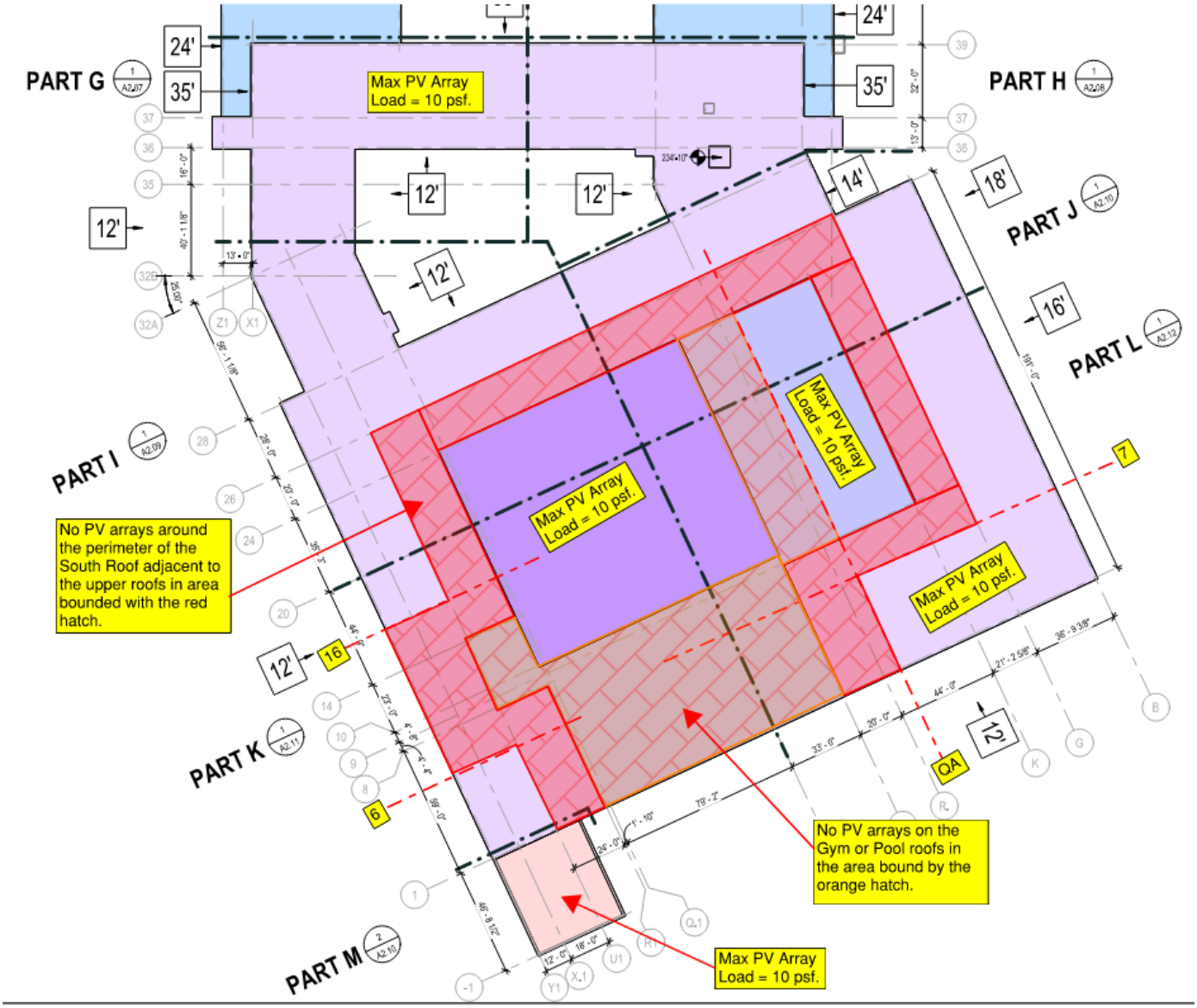


Figure 6: South Roof, Gym & Pool Roof, Gym High Roof, and South Addition Roof (Parts G through M)

The Aulson Company, Inc

May 12, 2025 | 46 Photos

Universal Environmental Consultants

500 Beach st • Holyoke, MA 01040

1

Project: Holyoke High School
Date: May 12, 2025, 9:40 AM
Creator: Devon Brown

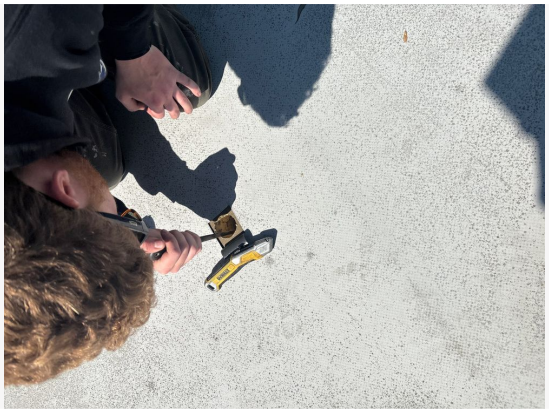
2

Project: Holyoke High School
Date: May 12, 2025, 9:43 AM
Creator: Devon Brown

3

Project: Holyoke High School
Date: May 12, 2025, 9:43 AM
Creator: Devon Brown

4



2 2 inch ISO metal deck

Project: Holyoke High School
Date: May 12, 2025, 9:48 AM
Creator: Devon Brown

5

Project: Holyoke High School
Date: May 12, 2025, 9:50 AM
Creator: Devon Brown

6

N1 after

Project: Holyoke High School
Date: May 12, 2025, 9:54 AM
Creator: Devon Brown

7

N2 same as 1

Project: Holyoke High School
Date: May 12, 2025, 9:56 AM
Creator: Devon Brown

8

N2 after

Project: Holyoke High School
Date: May 12, 2025, 9:58 AM
Creator: Devon Brown

9

N3 1 inch iso metal deck

Project: Holyoke High School
Date: May 12, 2025, 10:00 AM
Creator: Devon Brown

10

N3 after

Project: Holyoke High School
Date: May 12, 2025, 10:02 AM
Creator: Devon Brown

11

N4 2 2 inch iso metal deck

Project: Holyoke High School
Date: May 12, 2025, 10:03 AM
Creator: Devon Brown

12

N4

Project: Holyoke High School
Date: May 12, 2025, 10:04 AM
Creator: Devon Brown

13

N4 after

Project: Holyoke High School
Date: May 12, 2025, 10:07 AM
Creator: Devon Brown

14

N5 1inch iso metal deck

Project: Holyoke High School
Date: May 12, 2025, 10:10 AM
Creator: Devon Brown

15

N5 after

Project: Holyoke High School
Date: May 12, 2025, 10:11 AM
Creator: Devon Brown

16

N6 2 2 inch ISO metal deck

Project: Holyoke High School
Date: May 12, 2025, 10:15 AM
Creator: Devon Brown

17

N6 after

Project: Holyoke High School
Date: May 12, 2025, 10:16 AM
Creator: Devon Brown

18

N7 1 inch ISO metal deck

Project: Holyoke High School
Date: May 12, 2025, 10:19 AM
Creator: Devon Brown

19

N7 after

Project: Holyoke High School
Date: May 12, 2025, 10:22 AM
Creator: Devon Brown

20

N8 2 2 inch iso metal deck

Project: Holyoke High School
Date: May 12, 2025, 10:23 AM
Creator: Devon Brown

21

N8 after

Project: Holyoke High School
Date: May 12, 2025, 10:28 AM
Creator: Devon Brown

22

N9 2 2 inch ISO metal deck

Project: Holyoke High School
Date: May 12, 2025, 10:30 AM
Creator: Devon Brown

23

N9 after

Project: Holyoke High School
Date: May 12, 2025, 10:31 AM
Creator: Devon Brown

24

N10 2 2 inch ISO metal deck

Project: Holyoke High School
Date: May 12, 2025, 10:35 AM
Creator: Devon Brown

25

N 10 after

Project: Holyoke High School
Date: May 12, 2025, 10:40 AM
Creator: Devon Brown

26

N11 2 2 inch ISO metal deck

Project: Holyoke High School
Date: May 12, 2025, 10:42 AM
Creator: Devon Brown

27

N11 after

Project: Holyoke High School
Date: May 12, 2025, 10:47 AM
Creator: Devon Brown

28

N12 2 2 inch ISO metal deck

Project: Holyoke High School
Date: May 12, 2025, 10:49 AM
Creator: Devon Brown

29

N12 after

Project: Holyoke High School
Date: May 12, 2025, 10:56 AM
Creator: Devon Brown

30

N13 1 inch ISO metal deck

Project: Holyoke High School
Date: May 12, 2025, 10:59 AM
Creator: Devon Brown

31

N13 after

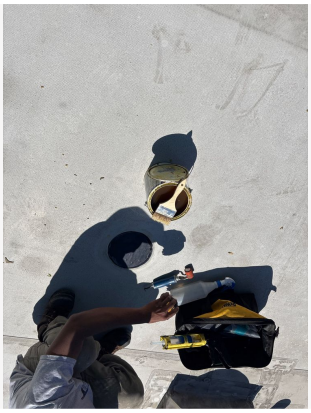
Project: Holyoke High School
Date: May 12, 2025, 11:01 AM
Creator: Devon Brown

32

N14 2 inch iso metal deck

Project: Holyoke High School
Date: May 12, 2025, 11:03 AM
Creator: Devon Brown

33



N 14 after

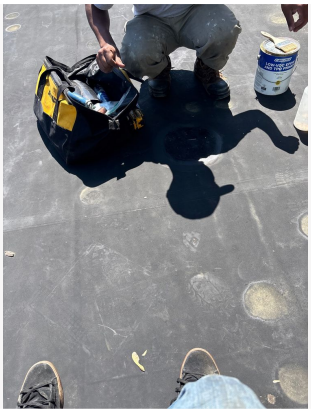
Project: Holyoke High School
Date: May 12, 2025, 11:06 AM
Creator: Devon Brown

34

N15 2 2 inch ISO metal deck epdm

Project: Holyoke High School
Date: May 12, 2025, 11:08 AM
Creator: Devon Brown

35



N15 after

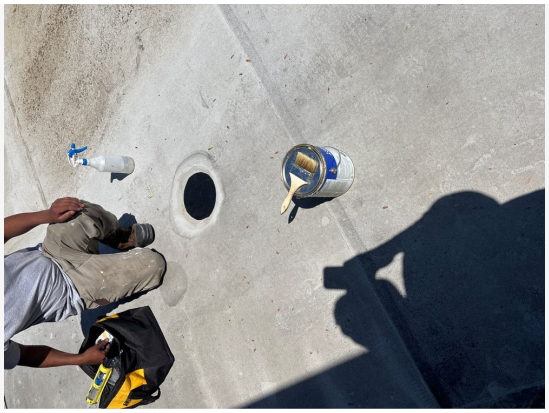
Project: Holyoke High School
Date: May 12, 2025, 11:11 AM
Creator: Devon Brown

36

N16 1 inch iso metal deck

Project: Holyoke High School
Date: May 12, 2025, 11:15 AM
Creator: Devon Brown

37



N16 after

Project: Holyoke High School
Date: May 12, 2025, 11:18 AM
Creator: Devon Brown

38

N17 2 2 inch ISO metal deck

Project: Holyoke High School
Date: May 12, 2025, 11:21 AM
Creator: Devon Brown

39

N17 after

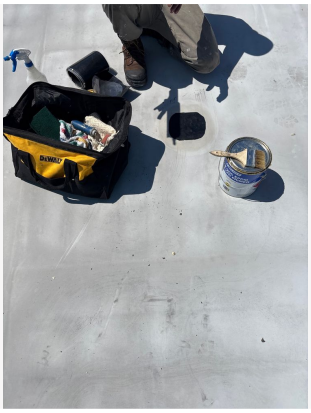
Project: Holyoke High School
Date: May 12, 2025, 11:24 AM
Creator: Devon Brown

40

N18 2 2-1/2 iso tar paper metal deck

Project: Holyoke High School
Date: May 12, 2025, 11:26 AM
Creator: Devon Brown

41



N18 after

Project: Holyoke High School
Date: May 12, 2025, 11:30 AM
Creator: Devon Brown

42

N19 1 inch iso metal deck

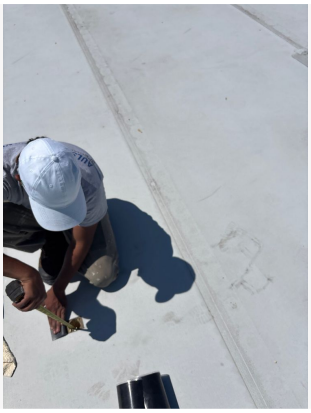
Project: Holyoke High School
Date: May 12, 2025, 11:31 AM
Creator: Devon Brown

43

N19 after

Project: Holyoke High School
Date: May 12, 2025, 11:33 AM
Creator: Devon Brown

44



Project: Holyoke High School
Date: May 12, 2025, 11:35 AM
Creator: Devon Brown

45

N20 2 2 inch ISO metal deck

Project: Holyoke High School
Date: May 12, 2025, 11:36 AM
Creator: Devon Brown

46

N20 after

Project: Holyoke High School
Date: May 12, 2025, 11:38 AM
Creator: Devon Brown

Asbestos Identification Laboratory.

165 New Boston St., Ste 227
Woburn, MA 01801
781-932-9600

Web: www.asbestosidentificationlab.com Email: mikemanning@asbestosidentificationlab.com

NVLAP® Testing Lab Code: 200919-0

Batch: 135332

Ammar Dieb
Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Project Information

High School,
Holyoke,
MA

Method: BULK PLM ANALYSIS, EPA/600/R-93/116

Dear Ammar Dieb,

Asbestos Identification Laboratory has completed the analysis of the samples from your office for the above referenced project. The Analysis Method is BULK PLM ANALYSIS, EPA/600/R-93/116The information and analysis contained in this report have been generated using the EPA /600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials. Materials or products that contain more than 1% of any kind or combination of asbestos are considered an asbestos containing building material as determined by the EPA. This Polarized Light Microscope (PLM) technique may be performed either by visual estimation or point counting. Point counting provides a determination of the area percentage of asbestos in a sample. If the asbestos is estimated to be less than 10% by visual estimation of friable material, the determination may be repeated using the point counting technique. The results of the point counting supersede visual PLM results. Results in this report only relate to the items tested. This report may not be used by the customer to claim product endorsement by NVLAP or any other U.S. Government Agency.

The EPA recommends you should assume vermiculite contains asbestos and not to disturb it. Airborne asbestos fibers present a health risk through inhalation, so the first step is to not disturb the material, which could release fibers into the air. If you disturb the insulation, you may inhale some asbestos fibers. The degree of health risk depends on how much and how often this occurred. If you choose to remove the vermiculite insulation, this work should be done by a trained and accredited asbestos abatement contractor that is separate and independent from the company that performed the assessment of the vermiculite insulation to avoid any conflict of interest. Link: "https://www.epa.gov/asbestos/my-attic-has-vermiculite-insulation-it-am-i-risk-should-i-take-it-outld I take it out? | US EPA"

Laboratory results represent the analysis of samples as submitted by the customer. Information regarding sample location, description, area, volume, etc., was provided by the customer. Information provided by the customer can affect the validity of results. Asbestos Identification Laboratory is not responsible for sample collection activities or analytical method limitations. Unless notified in writing to return samples, Asbestos Identification Laboratory discards customer samples after 30 days. Samples containing subsamples or layers will be analyzed separately when applicable. Reports are kept at Asbestos Identification Laboratory for three years. All customer information will be maintained in confidentiality. This report shall not be reproduced, except in full, without the written consent of Asbestos Identification Laboratory.

- NVLAP Lab Code: 200919-0
- Massachusetts Certification License: AA000208
- State of Connecticut, Department of Public Health Approved Environmental Laboratory Registration Number: PH-0142
- State of Maine, Department of Environmental Protection Asbestos Analytical Laboratory License Number: LB-0078(Bulk) LA-0087(Air)
- State of Rhode Island and Providence Plantations. Department of Health Certification: AAL-121
- State of Vermont, Department of Health Environmental Health License AL934461

Thank you Ammar Dieb for your business.

Michael Manning
Owner/Director

Ammar Dieb
Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Project Information

High School,
Holyoke,
MA

Method: BULK PLM ANALYSIS, EPA/600/R-93/116

FieldID / LabID	Material	Location	Color	Non-Asbestos %	Asbestos %
1 / 1519712	Black Paper Residue	Roof Cut 8	black	Cellulose 58 Non-Fibrous 40	**Detected** **Chrysotile 2**
2 / 1519713	Black Paper Residue	Roof Cut 11	black	Cellulose 20 Non-Fibrous 20	**Detected** **Chrysotile 60**
3 / 1519714	Black Tar Paper	Roof Cut 17	black	Fiberglass 40 Non-Fibrous 60	None Detected
4 / 1519715	Black Tar Paper	Roof Cut 17	black	Fiberglass 40 Non-Fibrous 60	None Detected
5 / 1519716	Gray Caulk	Roof at Chimney	gray	Non-Fibrous 100	None Detected
6 / 1519717	Gray Caulk	Roof at Chimney	gray	Non-Fibrous 100	None Detected
7 / 1519718	Gray Caulk	Roof at Chimney	gray	Non-Fibrous 100	None Detected
8 / 1519719	Gray Caulk	Roof at Pipe	gray	Non-Fibrous 100	None Detected
9 / 1519720	Gray Caulk	Roof at HVAC Curb	gray	Non-Fibrous 100	None Detected
10 / 1519721	Edge Metal Caulk	Roof at Brick	gray	Non-Fibrous 98	**Detected** **Chrysotile 2**
11 / 1519722	Edge Metal Caulk	Roof at Brick	gray	Non-Fibrous 98	**Detected** **Chrysotile 2**
12 / 1519723	Edge Metal Caulk	Roof at Brick	gray	Non-Fibrous 98	**Detected** **Chrysotile 2**
13 / 1519724	Skylight Caulk	Roof	black	Non-Fibrous 100	None Detected
14 / 1519725	Skylight Caulk	Roof	black	Non-Fibrous 100	None Detected
15 / 1519726	Skylight Caulk	Roof	black	Non-Fibrous 100	None Detected
16 / 1519727	Wall Flashing Tar	Roof at Wall	black	Non-Fibrous 80	**Detected** **Chrysotile 20**

Sampled: May 12, 2025 **Received:** May 13, 2025 **Analyzed:** May 13, 2025

Tuesday 13 May 2025

Analyzed by: David Thomas **Batch:** 135332

Ammar Dieb
Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Project Information

High School,
Holyoke,
MA

Method: BULK PLM ANALYSIS, EPA/600/R-93/116

FieldID / LabID	Material	Location	Color	Non-Asbestos %	Asbestos %
17 / 1519728	Wall Flashing Tar	Roof at Wall	black	Non-Fibrous 90	Detected Chrysotile 10
18 / 1519729	Wall Flashing Tar	Roof at Wall	black	Non-Fibrous 80	Detected Chrysotile 20

Sampled: May 12, 2025 **Received:** May 13, 2025 **Analyzed:** May 13, 2025

Tuesday 13 May 2025

Analyzed by: David Thomas **Batch:** 135332

CHAIN OF CUSTODY

Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702
Tel: (508) 628-5486 - Fax: (508) 628-5488
adieb@uec-env.com

PLM
24-hour TAT

Town/City: Holyoke, MA Building Name High School

Sample	Description of Material	Sample Location
1	Black paper Residue	Roof cut 8
2	" "	Roof cut 11
3	Black tar paper	Roof cut 17
4	" "	" "
5	Gray caulk	Roof at chimney
6	" "	" "
7	" "	" "
8	" "	Roof at Pipe
9	" "	Roof at HVAC curb
10	Edge metal caulk	Roof at Brick
11	" "	" "
12	" "	" "
13	Skylight caulk	Roof
14	" "	" "
15	" "	" "
16	wall flashing tar	Roof at wall
17	" "	" "
18	" "	" "

Reported By: Jason Beaulieu Date: 5-12-25 5-13-25 1115 Due Date: **24-Hours**

Received By: JR Date: 5/13/25

Existing Mechanical Conditions Assessment

C.A. Crowley Engineering Inc made a visit to the site on May 12, 2025 to determine the location, type and condition of existing mechanical equipment, roof drains and plumbing vents throughout. The roof is comprised of 11 different roof areas on 8 separate but adjacent roof levels approximately 167,025 square feet in area.

The building was originally constructed in 1963….

Mechanical Observations

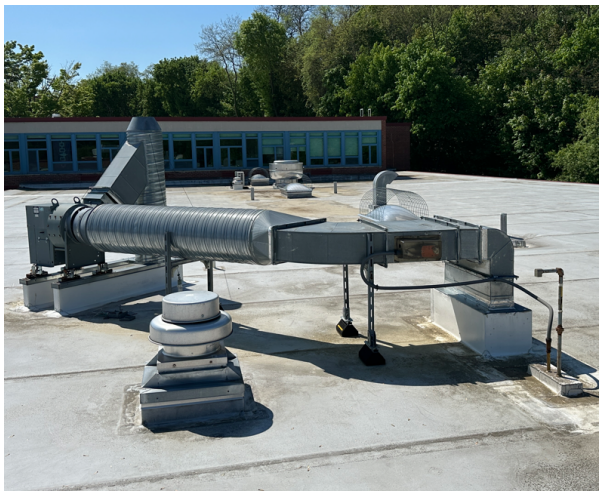
The existing rooftop equipment at Holyoke Highschool consists of the following: Thirty-Six (36) down-blast centrifugal exhaust fans, Ten (10) Utility set exhaust fans, Three (3) up-blast centrifugal exhaust fans, One (1) Makeup Air unit, Six (6) Rooftop Air Handling Units, Seven (7) VRF Outdoor Condensing units, Two (2) Refrigeration Condensers (for walk-in coolers), Five (5) Mini-split Heat pump outdoor condensing units, Five (5) Louvered penthouses, and Five (5) Goose neck duct terminations.

EXHAUST FANS:

The Thirty-Six (36) down-blast centrifugal exhaust fans are by various manufacturers such as Greenheck, Cook, Dayton, and Emerson. Greenheck models account for the majority of the down-blast fans and were installed in 2009 (16 years old). The oldest examples currently on the roof are manufactured by Cook and are older than 2003 based on the serial numbers (likely 20+ years old). All of the fans are supported on the same size 24”x24” curb throughout. Most fans appeared to be in good condition for their age. Some were nosier than others due to older worn bearings or loose belts.

Examples 1, 2 & 3: Typical down-blast centrifugal exhaust fans on roof

The Nine (9) of the Ten (10) utility set exhaust fans on the roof are manufactured by Greenheck and were installed in 2009 (16 years old). These units features an oversized 24”x24” curb for the duct penetration through the roof, while the fan itself rests on sleepers. One (1) of the utility set fans is manufactured by Cook and was installed in 2011 (14 years old). Most utility set fans were generally in good shape with only EF-7 making excessive noise.



Examples 4 & 5: Greenheck and Cook utility set exhaust fan types

Of the Three (3) up-blast exhaust fans two (2) of them are manufactured by Greenheck and were installed between 2008 and 2009 (16-17 years old). The remaining up-blast exhaust fan was manufactured by Cook and installed in 2011 (14 years old).These fans are also provided the site-standard 24”x24” curb. Fans appear to be in good condition.

Examples 6 & 7: Greenheck and Cook up-blast centrifugal exhaust fan types.

ROOFOPT UNITS:

There are a total of six (6) rooftop air handling units (RTUs) and (1) makeup air unit (MUA) on the roof of the high school. All of the units appeared to be in fair shape.

RTU-1 is located above the corridor to the lecture hall. It is a 12.5-Ton Trane Precedent Model # TCD150E40ABB, This unit was manufactured 2010 (15 Years old).

RTU-2 is located above the administrative wing between the cafeteria and school entrance. It is a 17.5-Ton Trane Precedent Model # TCD210E40AB. This unit was manufactured 2010 (15 Years old).

RTU-3&4 are located above the student cafeteria and is heating only, McQuay RoofPak Model # RDS800CYY. Based on serial number, these units were also installed in 2010 (15 Years old).

RTU-5 is located above the faculty dining area and is a semi-custom, heating only, McQuay Skyline Model # OAH004GDAM.

RTU-6 is located above the locker rooms adjacent to the gym and is manufactured by Seresco. It looks newer than the RTUs, however its exact age could not be determined due to missing/inaccessible equipment data plate on the exterior of the unit. This has supply air ductwork that is discharged from the bottom of the unit. A new roof drain will be installed below this unit. As part of this project RTU-6 can remain as-is, but will require the supply ductwork to be removed and reinstalled, sealed and insulated to facilitate the installation of the new drain.

On the same roof, MAU-1 is a Direct-Fired, Modine Model # MDB118 located among the RTUs, positioned above the kitchen, serving as makeup air for the kitchen exhaust hood. Based on the serial number, this unit was likely installed sometime in 2010 (15 years old).

Example 8: RTU-1

Example 9: RTU-2

Example 10: RTU-3

Example 11: RTU-4

Example 12: RTU-5

Example 13: RTU-6

Example 14: MAU-1

REFRIGERATION CONDENSING UNTIS:

There are (2) refrigeration condensing units (ACC-1 & 2) are mounted on 4x4 sleepers on the roof above the kitchen. According to the serial number these units were installed sometime in 2021 and 2022 and appear to be in excellent condition. The refrigerant lines are routed across the roof on sleepers and have foam insulation that appears to be the same vintage as the equipment and are also in fair shape.

Example 15: Bally Condensing units for kitchen cooler

MINI-SPLIT HEAT PUMP OUTDOOR UNTIS:

There are five (5) mini-split heat pump systems with outdoor units scattered across the roof. All heat pump units are mounted on wooden sleepers placed on roof (with exception for "HP-3" and "HP-5" which are on simple plastic pad) with refrigerant lines penetrating roof directly next to unit. These units did not have tags, so for the purposes of this report numbers have been assigned to identify the units. Refer to the rooftop map at the end of this report for locations.

Heat pump "HP-1" is a 1.5-Ton system manufactured by Daikin (model #: RXS18DVJU) and is located above a classroom at the southwest corner of the main courtyard (A). The equipment label on the unit has disintegrated but a manufacture date of 2010 (15 years) was present. The unit appears to be in good shape.

Heat pump "HP-2" is a 3-Ton system manufactured by Mitsubishi (model #: PUY-A36NHA4) and is located next to RTU-1. Based on the physical condition and serial number, it is assumed this unit was installed sometime in 2013 (12 years old). The unit appears to be in good fair overall condition with visible weathering. The unit is missing insulation on the refrigeration piping.

Heat pump “HP-3” is manufactured by Daikin and is located above a lab just south of the small courtyard (B). The unit’s equipment tag has completely disintegrated, therefore its exact age and capacity could not be determined. Based on the units physical appearance, it appears to be a slightly older if not same vintage as the other two Daikin units found at the site.

Heat pump “HP-4” is a 1.5-Ton system manufactured by Daikin (model #: RXS18DVJU) and is located at the southern corner of the small courtyard (B) in the vicinity of “HP-3”. The equipment label is partially disintegrated however, there is a manufacture date of 2010 (15 years old). The unit appears to be in fair condition.

Heat pump “HP-5” is a 2-Ton system located above the metal shop and is manufactured by Fujitsu (model #: AOU24RLXFZ). The serial number of Fujitsu equipment does not include manufacture year, however based on similar serial numbers from other projects it is assumed to have been installed sometime between 2014 and 2016 (9 to 11 years old). The unit appears to be in good shape with refrigerant insulation in fair-to-poor shape.

Example 16: “HP-1” outdoor unit

Example 17: “HP-2” outdoor unit

Continued on next page

Example 18: "HP-3" outdoor unit

Example 19: "HP-4" outdoor unit

Example 20: "HP-5" outdoor unit

Continued on next page

VRF OUTDOOR UNTIS

There are a total of seven (7) VRF outdoor units on the roof of the school. All of them are manufactured by Daikin and are of the same vintage with two different product families represented (REY & REM). All units use R-410A refrigerant. These units did not have tags, so for the purposes of this report numbers have been assigned to identify the units. Refer to the rooftop map at the end of this report for locations. Units that are paired together on the same skid will be identified using the suffix “A” and “B”. All unit skids are mounted on recessed sleepers that have been roofed over. None of the units have serial numbers or manufacture dates, therefore an age could not be determined. Based on physical condition it is likely these units are at least 10 years old. Several units had missing hardware and loose access panels

Units “VRF-1A & 1B” are located above the cafeteria and are 10-Ton (20 tons total) Daikin Model #: REYQ120PYDN. The units appears to be in good shape however, the insulation covering the refrigerant piping has degraded and fallen off.

Units “VRF-2A & 2B” are located adjacent to the auditorium and are 8-Ton (16 tons total) Daikin Model #: REMQ96PYDN. The units appears to be in good shape however, the insulation covering the refrigerant piping has degraded and fallen off.

Units “VRF-3A & 3B” are located above classrooms on the east side of the main courtyard (A) and are 10-Ton (20 tons total) Daikin Model #: REYQ120PYDN. The units appears to be in good shape however, the insulation covering the refrigerant piping has degraded and fallen off.

Unit “VRF-4” is located above a lobby on the east side of the small courtyard (B) and is a 6-ton Daikin Model #: REYQ120PYDN. The unit appears to be in good shape however, the insulation covering the refrigerant piping has degraded and fallen off.

Example 21: "VRF-1A & 1B"

Example 22: "VRF-2A & 2B"

Example 23: "VRF-3A & 3B"

Example 24: "VRF-4"

PASSIVE INTAKE/EXHAUST VENTS:

For passive equipment there is a total of five (5) goose-neck turn-down vents and five (5) louvered penthouses scattered across the rooftop all of which rise through roof via smaller curbs. All observed were in fair condition.

Examples 25, 26 & 27: Typical Louvered penthouses and goose-neck intake/exhausts.

There are a total of two (2) Filter Supply Fans on the roof of the school. Both of them are manufactured by Emerson, model #: 5FSU10BB and have a date code that suggests they were installed sometime around 2008 (17 years old). These units did not have tags, so for the purposes of this report numbers have been assigned to identify the units. Refer to the rooftop map at the end of this report for locations.

Example 28: Filtered Supply Fan

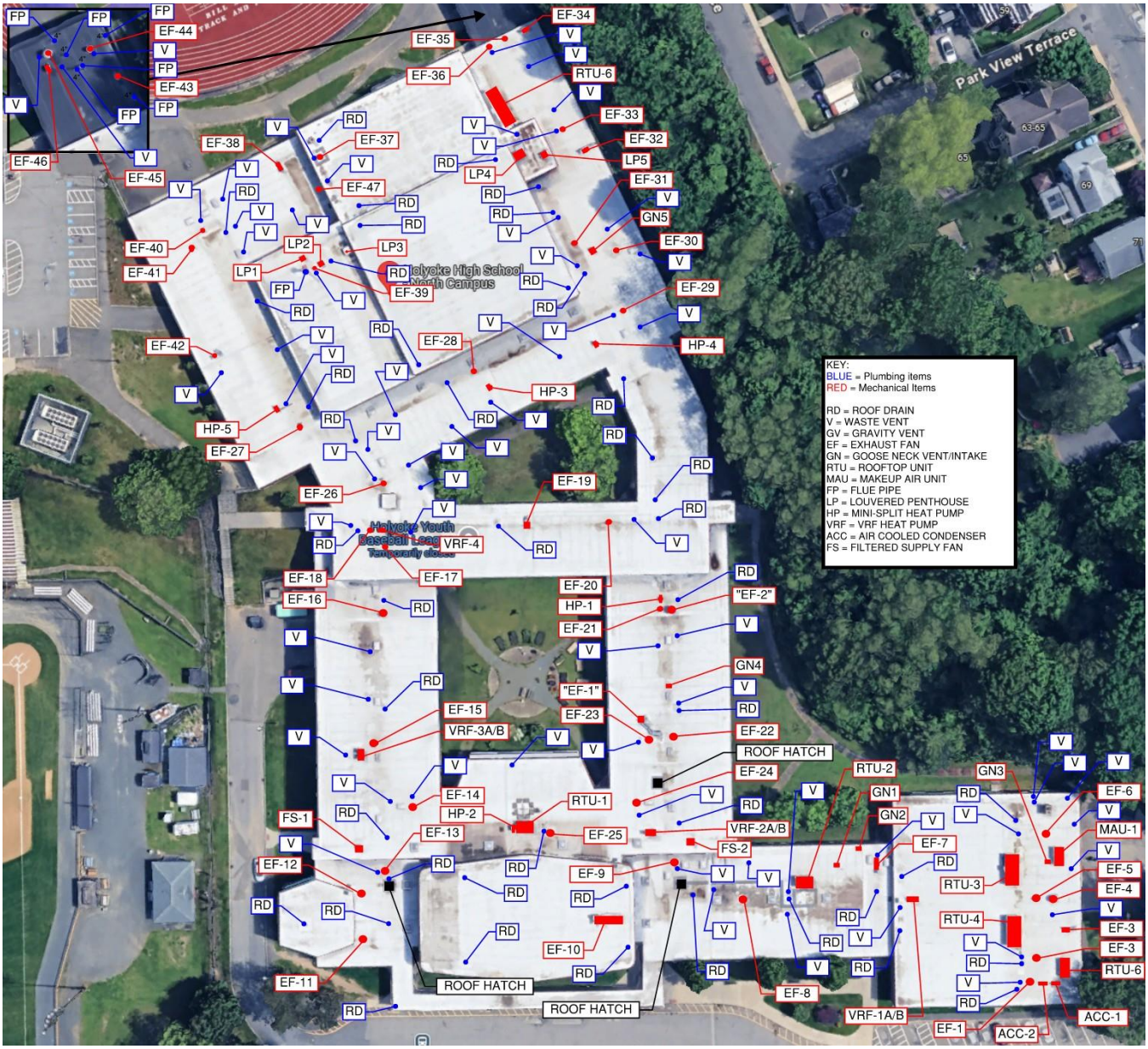
Recommendations

It is recommended that the following items be addressed during this roof project:

1. Reconditioning of existing equipment that will be reinstalled, which should include (but not limited to): Belt replacement, bearing replacement (depending on age), lubrication, cleaning of internal components and housings, securing any loose panels.
2. Re-Balancing of exhaust, RTU, MAU systems.
3. Any equipment the school has found to be problematic or has a history of extensive service should be replaced in-like-kind.
4. Any equipment that is older than 20 years old should be replaced to save on additional expense in the future.
5. Re-insulate all refrigerant lines-sets serving Heat pump outdoor units, refrigeration condensers and VRF equipment with cladding added to protect from weathering.
6. Equipment with loose panels should have them secured.
7. All equipment shall receive curbs that extend equipment 18” beyond the finished roof surface. Ductwork and Piping is to be extended as required.

Rooftop Equipment Map

On the following page is a rooftop map of equipment found on the roof during our site investigation for reference.


KEY:
BLUE = Plumbing items
RED = Mechanical Items
RD = ROOF DRAIN
V = WASTE VENT
GV = GRAVITY VENT
EF = EXHAUST FAN
GN = GOOSE NECK VENT/INTAKE
RTU = ROOFTOP UNIT
MAU = MAKEUP AIR UNIT
FP = FLUE PIPE
LP = LOUVERED PENTHOUSE
HP = MINI-SPLIT HEAT PUMP
VRF = VRF HEAT PUMP
ACC = AIR COOLED CONDENSER
FS = FILTERED SUPPLY FAN
Park View Terrace
Holyoke High School North Campus
Holyoke Youth Baseball League
Temporarily closed
ROOF HATCH
ROOF HATCH
ROOF HATCH

1.5 Proposed Recommendations

The existing roof system has been installed for approximately twenty-seven years (warranty expiration - 2016) outlasting its typical service life. And, based on the information obtained during the site visits, as well as the analysis and testing performed, we recommend the existing roof system be removed down to the structural deck and replaced with a modern reinforced PVC roof system like the roof system that was previously installed. This will provide the Owner with a fully warranted roof system meeting the current life safety requirements.
The new roof system should consist of the following components:

- Fully adhered 80-mil reinforced PVC membrane – recommended for future PV array installation and heavier foot traffic.
- ½-inch thick high density polyisocyanurate cover board adhered.
- Double layer 3-inch thick polyisocyanurate rigid insulation, bottom layer mechanically attached, top layer adhered. Provide code compliant polyisocyanurate insulation which meets the requirements for minimum U or R values.

- Tapered insulation crickets where required providing positive pitch to roof drain locations.
- Tapered insulation sumps at all roof drains with a depth of 2". The use of tapered insulation with ½":12" slope is typical (9'-4" x 9'-4" sump plan dimensions). Sumps with larger areas and more gradual slopes are also recommended at various locations of existing flat structure, existing ponding, or where there are long distances between drain locations. ¼":12" (17'-4" x 17'-4") or 1/8":12" (33'-4" x 33'-4").
- Polyethylene vapor barrier over the existing structural roof decking.
- At the swimming pool perimeter where deck ribs terminate or are perpendicular to perimeter wall, provide an air seal with 24-inch-long expandable spray foam insulation within deck ribs. Shave excess foam smoothly with deck flange or top of deck.
- Provide new expansion joint assemblies in the new roof system at existing expansion joint locations.
- Provide a new expansion joint assembly in the new roof system of the Pool Roof where the structure has an existing expansion joint, but the existing roof assembly does not.
- Some areas of the brick veneer between the upper and lower roof levels should be covered with a mechanically fastened ¾-inch thick plywood sheathing to allow the roof membrane to be continuous from one roof level to another, thereby reducing the possibility of future failure where new roof-to-wall flashings would have to be provided in the existing veneer.
- The south wall of the Auditorium has bowed outward and is out of plumb from what appears to be caused by a past water leak. The wall section of wall should be rebuilt to bring it back in alignment with the adjacent walls.
- Replace all existing roof drain bowls with new drain bowls and strainers. New drain outlets that match the diameter of existing roof leaders.
- Add additional wood blocking to existing unit skylight blocking to height of surrounding new roofing. Remount existing unit skylights including existing fall protection screening.

- Provide new 24-inch-high mechanical curbs mechanically attached to roof deck.
- Extend pipe vent penetrations where minimal flashing height does not exist.
- Remove/replace existing ceiling tiles to access work related to the roof drain replacement. Replace any damaged ceiling tiles because of the remove/replace work.
- Replace fixed roof ladders at roof level transitions with compliant ladders. Install new ships ladders at noted locations.
- Provide required OSHA compliant self-supporting guardrails at courtyard roof edges and at any mechanical equipment within 10-feet of roof perimeter.
- Replace existing roof hatch/hatches with energy-efficient thermally broken roof hatch/hatches, safety railings, and telescoping safety post.
- Install walkway pads to/from and around mechanical equipment, ladders, and hatches to minimize roof membrane wear and damage as well as providing a non-slip walk/work surface where needed.
- Provide roof penetration housings with 24-inch curbs at all mechanical roof penetrations less than 2-inch diameter. Mechanically attached curbs to roof deck.
- Provide new flashings at miscellaneous roof penetrations.
- Mechanically attach new blocking to existing perimeter blocking, deck, and/or structure. Replace deteriorated blocking. Provide additional blocking to maximum height of insulation at perimeter.
- Provide new ANSI/SPRI/FM 4435/ES-1 compliant snap-on roof edge trim to roof perimeter.
- Raise the head wall flashing where appropriate. Install cut in flashing to protect existing thru-wall flashing and weep holes that fall below the 8” code required height above finish roof.
- Modify the existing metal panel walls at mechanical penthouses to raise the head flashing and accept the new roof system.
- Provide new duct insulation and PVC weatherproof wrap at exposed ductwork locations.
- Provide new gutters, downspouts, scuppers, and collector boxes at existing locations.
- Provide an emergency overflow or enlarge the one scupper at the rear south garage / concessions addition roof.
- Provide additional roof drains at locations noted on the drawings to meet code and prevent ponding.
- The drop off canopy roof outer edge should be raised with tapered insulation to create a positive slope towards the gutters to eliminate ponding.
- HVAC - Provide new insulation at existing refrigeration lines and/or exposed ductwork. Replace any broken, problematic equipment or any equipment that is 20 years or older. Recondition and service equipment less than

20years old prior to reinstalling. Rebalance equipment after reinstallation. All equipment should be reinstalled a minimum of 18" above the finished roof. Extend ductwork and piping as required. Refer to mechanical report.

- Remove and infill the abandoned mechanical curb at the south roof, refer to plan.
- Remove the abandoned masonry incinerator chimney, infill structure prior to reroof.
- Remove the masonry kitchen chimney which is currently venting water heaters and install a new stainless steel chimney. This will mitigate the current and future required maintenance of masonry chimney walls.
- Solar Ready Electrical – The future solar system shall be integrated into the existing electrical system. The potential future solar project shall provide all required additional equipment as part of the solar project, including an emergency disconnect on the exterior wall adjacent to the existing electrical meter. All solar system equipment shall be mounted on the exterior walls, ballasted on the roof, or use the limited space within the existing main electrical room. All future conduits shall be exterior-type and mounted to the exterior walls or ballasted on the roof system. Ballasted components shall be placed on a protective membrane over the roof membrane. The future conduit routes shall run across the roof, down walls between roof levels (between windows as necessary) and terminate at the main electrical room as shown on the drawings. The future solar project shall provide wall penetrations to extend the conduit into the electrical room. The connection between the future solar system and existing electrical system will occur within the existing main electrical room. There is currently available wall space for some additional electrical devices. No roof penetrations or interior conduits are recommended to prepare for the potential future solar project. No modifications to the existing electrical system are recommended to prepare for the for the potential future solar project. No cost is included in the estimate for electrical solar readiness.

- Solar Ready Structure – The existing building's roofs have been evaluated for solar readiness and can accept solar arrays in limited areas with no modification to the existing structure. No structural modification work is recommended. The suitable areas identified provide ample space for solar arrays. Refer to the structural report and architectural drawing SR1.00. No cost is included in the estimate for structural solar readiness.

- Solar Ready Architectural – The proposed roof membrane is 80 mil thickness. This is recommended for the base project scope of work and makes the building's roofs solar ready. No additional cost is included in the estimate for architectural solar readiness. The proposed solar arrays are shown and described on drawing SR1.00.

Designer Certification

Mount Vernon Group Architects, Inc. hereby certifies that to the best of our knowledge, the recommendations for the proposed solution to install a new PVC roof system at Holyoke High **School** shall meet the requirements of 2021 IECC International Energy Conservation Code with MA amendments, MA 10th edition Building Code and/or the 780 CMR Massachusetts Stretch Energy Code.

Frank Tedesco AIA, LEED AP
President

Mount Vernon Group Architects
200 Harvard Mill Square
Suite 410
Wakefield, MA 01880

Code Analysis Narrative

The proposed roof replacement work to take place at the existing Holyoke High School shall be considered an Alteration-Level 1 scope of work per 2021 IEBC International Existing Building Code and related 780 CMR Mass. Building Code Amendments (10th Edition). The City of Holyoke has adopted the Stretch energy Code.

The proposed reroof project is to remove the existing roof assembly system down to the structural deck. All the roof top elements will need to be raised to accommodate the thicker code required roof insulation. The roof hatches will be replaced with insulated and thermally broken roof hatches including curb mounted guardrails, with gates. The roof access ladders will either be replaced or raised based on whether they currently meet the building code requirements for ladders. Abandoned mechanical curbs, equipment and masonry chimneys will be removed and a structural roof infill will be installed. Ballasted guardrails will be installed at all courtyard roof edges and at locations where mechanical equipment or roof hatches are within 10' of a roof edge. A structural deficient section of masonry wall will be removed and reframed to straighten. Any short height masonry wall sections between lower and higher roofs are to be covered with ¾" plywood and roofing membrane where not visible from the street. Two roof drains are to be installed as well as upsizing the existing roof drains to match the leader diameters. Any mechanical equipment that was removed to accommodate the reroofing will be serviced or replaced based on a 20-year life cycle. Mechanical curbs and duct and/or pipe insulation are to be replaced.

2021 IEBC

503.1 General
Alterations to any building or structure shall comply with the requirements of the International Building Code for new construction. Alterations shall be such that the existing building or structure is not less complying with the provisions of the International Building Code than the existing building or structure was prior to the alteration.
Exceptions:

1. An existing stairway shall not be required to comply with the requirements of Section 1011 of the International Building Code where the existing space and construction does not allow a reduction in pitch or slope.
2. Handrails otherwise required to comply with Section 1011.11 of the International Building Code shall not be required to comply with the requirements of Section 1014.6 of the International Building Code regarding full extension of the handrails where such extensions would be hazardous because of plan configuration.
3. Where provided in below-grade transportation stations, existing and new escalators shall be permitted to have a clear width of less than 32 inches (815 mm).

Provisions of Chapter 7, Section 705 REROOFING & Section 706 STRUCTURAL of the IEBC, and materials and methods used for replacing an existing roof covering complying with the requirements of Chapter 15 of the 2021 International Building Code shall be followed for any roof recovering or replacement. See below for excerpts of the IEBC;

705.1 General

Materials and methods of application used for recovering or replacing an existing roof covering shall comply with the requirements of Chapter 15 of the International Building Code.

Exceptions:

1. Roof replacement or roof recover of existing low-slope roof coverings shall not be required to meet the minimum design slope requirement of 1/4 unit vertical in 12 units horizontal (2-percent slope) in Section 1507 of the International Building Code for roofs that provide positive roof drainage.
2. Recovering or replacing an existing roof covering shall not be required to meet the requirement for secondary (emergency overflow) drains or scuppers in Section 1502 of the International Building Code for roofs that provide for positive roof drainage. For the purposes of this exception, existing secondary drainage or scupper systems required in accordance with this code shall not be removed unless they are replaced by secondary drains or scuppers designed and installed in accordance with Section 1502 of the International Building Code.

705.2 Roof Replacement

Roof replacement shall include the removal of all existing layers of roof coverings down to the roof deck.

Exception: Where the existing roof assembly includes an ice barrier membrane that is adhered to the roof deck, the existing ice barrier membrane shall be permitted to remain in place and covered with an additional layer of ice barrier membrane in accordance with Section 1507 of the International Building Code.

705.5 Flashings

Flashings shall be reconstructed in accordance with approved manufacturer's installation instructions. Metal flashing to which bituminous materials are to be adhered shall be primed prior to installation.

706.1 General

Where alteration work includes replacement of equipment that is supported by the building or where a reroofing permit is required, the provisions of this section shall apply.

706.2 Addition or Replacement of Roofing or Replacement of Equipment

Any existing gravity load-carrying structural element for which an alteration causes an increase in design gravity load shall be replaced or altered as needed to carry the gravity loads required by the International Building Code for new structures. The increase in gravity loads shall account for the cumulative effects of additions since original construction.
Exceptions:

1. Buildings of Group R occupancy with not more than five dwelling or sleeping units used solely for residential purposes where the altered building complies with the conventional light-frame construction methods of the International Building Code or the provisions of the International Residential Code.
2. Buildings in which the increased dead load is due entirely to the addition of a second layer of roof covering weighing 3 pounds per square foot (0.1437 kN/m2) or less over an existing single layer of roof covering. Insulation shall not be added such that it increases the thermal factor Ct in accordance with ASCE 7-16 Table 7.3-2 without checking capacity of existing structure.
3. Structural elements whose demand capacity ratio is not increased by more than 5%.

706.3 Additional Requirements for Reroof Permits

The requirements of this section shall apply to alteration work requiring reroof permits.

706.3.1 Bracing for Unreinforced Masonry Bearing Wall Parapets

Where a permit is issued for reroofing for more than 25 percent of the roof area of a building assigned to Seismic Design Category D, E or F that has parapets constructed of unreinforced masonry, the work shall include installation of parapet bracing unless an evaluation demonstrates compliance of such items. Reduced seismic forces shall be permitted.

706.3.2 Roof Diaphragms Resisting Wind Uplift Loads in High-Wind Regions

For Risk Category III and IV Buildings where roofing materials are removed from more than 50 percent of the roof diaphragm or section of a building within a 5-year period located where the ultimate design wind speed, Vult, determined in accordance with Table 1604.11 of 780 CMR, is greater than 130 mph (58 m/s), connections of the roof diaphragm to roof framing members, including the building perimeter shall be evaluated for the wind uplift loads specified in the International Building Code. If the connections in their current condition are not capable of resisting 75 percent of those wind uplift loads, they shall be replaced or strengthened in accordance with the loads specified in the International Building Code.
Exception: Buildings that have been demonstrated to comply with the wind load provisions in 780 CMR 5th Edition or later editions.

Section 708 ENERGY CONSERVATION allows the alterations to conform without requiring the entire building or structure to conform to the energy requirements. See excerpt below for IEBC.

708.1 Minimum Requirements
Level 1 alterations to existing buildings or structures do not require the entire building or structure to comply with the energy requirements of the International Energy Conservation Code or International Residential Code. The alterations shall conform to the energy requirements of the International Energy Conservation Code or International Residential Code as they relate to new construction only.

MA 2025 Commercial Stretch Code IECC2021 w/Ma amendments

C303.2.2 Multiple Layers of Continuous Insulation Board

Where two or more layers of continuous insulation board are used in a construction assembly, the continuous insulation boards shall be installed in accordance with Section C303.2. Where the continuous insulation board manufacturer's instructions do not address installation of two or more layers, the edge joints between each layer of continuous insulation boards shall be staggered.

C503.2.1 Roof Replacement

Roof replacements shall comply with Section C402.1.3, C402.1.4, C402.1.5 or C407 where the existing roof assembly is part of the building thermal envelope and contains insulation entirely above the roof deck. In no case shall the R-value of the roof insulation be reduced or the U-factor of the roof assembly be increased as part of the roof replacement.

2021 IBC

1015.6 Mechanical Equipment, Systems and Devices

Guards shall be provided where various components that require service are located within 10 feet (3048 mm) of a roof edge or open side of a walking surface and such edge or open side is located more than 30 inches (762 mm) above the floor, roof or grade below. The guard shall extend not less than 30 inches (762 mm) beyond each end of such components. The guard shall be constructed so as to prevent the passage of a sphere 21 inches (533 mm) in diameter.
Exception: Guards are not required where personal fall arrest anchorage connector devices that comply with ANSI/ASSE Z 359.1 are installed.

1015.7 Roof Access
Guards shall be provided where the roof hatch opening is located within 10 feet (3048 mm) of a roof edge or open side of a walking surface and such edge or open side is located more than 30 inches (762 mm) above the floor, roof or grade below. The guard shall extend not less than 30 inches (762 mm) beyond each end of the hatch parallel to the roof edge. The guard shall be constructed so as to prevent the passage of a sphere 21 inches (533 mm) in diameter.
Exception: Guards are not required where personal fall arrest anchorage connector devices that comply with ANSI/ASSE Z359.1 are installed.

521 CMR 5.00 Architectural Access Board

3.3 Existing Buildings

All additions to, reconstruction, remodeling, and alterations or repairs of existing public buildings or facilities, which require a building permit or which are so defined by a state or local inspector, shall be governed by all applicable subsections in 521 CMR 3.00: JURISDICTION.

For specific applicability of 521 CMR to existing multiple dwellings undergoing renovations, see 521 CMR 9.2.1.

3.3.1

If the work being performed amounts to less than 30% of the full and fair cash value of the building and

1. if the work costs less than $100,000, then only the work being performed is required to comply with 521 CMR

   or

2. if the work costs $100,000 or more, then the work being performed is required to comply with 521 CMR. In addition, an accessible public entrance and an accessible toilet room, telephone, drinking fountain (if toilets, telephones and drinking fountains are provided) shall also be provided in compliance with 521 CMR.

Exception: General maintenance and on-going upkeep of existing, underground transit facilities will not trigger the requirement for an accessible entrance and toilet unless the cost of the work exceeds $500,000 or unless work is being performed on the entrance or toilet.
Exception: Whether performed alone or in combination with each other, the following types of alterations are not subject to 521 CMR 3.3.1, unless the cost of the work exceeds $500,000 or unless work is being performed on the entrance or toilet. (When performing exempted work, a memo stating the exempted work and its costs must be filed with the permit application, or a separate building permit must be obtained.)

1. Curb Cuts: The construction of curb cuts shall comply with 521 CMR 21.00: CURB CUTS.
2. Alteration work which is limited solely to electrical mechanical, or plumbing systems; to abatement of hazardous materials; or retrofit of automatic sprinklers and does not involve the alteration of any elements or spaces required to be accessible under 521 CMR. Where electrical outlets and controls are altered, they must comply with 521 CMR.
3. Roof repair or replacement, window repair or replacement, repointing and masonry repair work.
4. Work relating to septic system repairs, (including Title V, 310 CMR 15.00, improvements) site utilities and landscaping.

527 CMR 1.00 Massachusetts Comprehensive Fire Safety Code, Adopts with Amendments NFPA 1, 2021

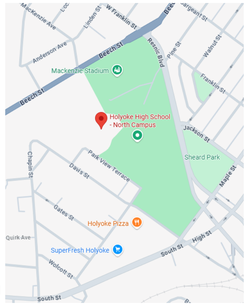
10.11.4.1

Any inner court not protected by a roof shall have a parapet or guard at least 42 inches high.

HOLYOKE HIGH SCHOOL - ROOF REPLACEMENT

500 BEECH ST, HOLYOKE, MA 01040

JUNE 10, 2025 - PROGRESS SET



LOCUS PLAN

OWNER

CITY OF HOLYOKE

HOLYOKE PUBLIC SCHOOLS
57 SUFFOLK STREET, HOLYOKE, MA 01040

ARCHITECT

MVG

MOUNT VERNON GROUP ARCHITECTS
200 HARVARD MILLS SQUARE
WAKEFIELD, MA 01880
(781) 213-5030

CONSULTANTS

MECHANICAL, PLUMBING, FIRE PROTECTION ENGINEERS
C.A. CROWLEY ENGINEERING
645 County St Ste 6
Taunton, MA 02780
(508) 884-5094

HAZARDOUS MATERIALS
UNIVERSAL ENVIRONMENTAL
12 Brewster Road
Framingham, MA 01702
(508) 628-5486

STRUCTURAL ENGINEER
SOUZA TRUE & PARTNERS, INC.
265 Waltham Street, Third Floor
Waltham, MA 02451
(617) 926-6100

CODE CONSULTANT
R.W. SULLIVAN ENGINEERING
529 Main St # 203
Boston, MA 02129
(617) 523-8227

ROOF CONSULTANT
EWING ASSOCIATES
515 Converse St
Longmeadow, MA 01106
(413) 567-9544

COST ESTIMATOR
FENNESSY CONSULTING
27 Glen Street, Suite 8
Stoughton, MA 02072
(781)-344-4464

SYMBOLS

MATERIAL SYMBOL KEY

UNDISTURBED OR COMPACTED SOIL
CONCRETE
MASONRY (CMU OR BRICK)
EXPOSED WOOD TRIM
WOOD FRAMING
WOOD SHIM
PLYWOOD
PLYWOOD
GWB
BATT INSULATION
RIGID INSULATION
1/2" SEALANT JOINT WITH BACKER ROD

ROOM NAME 101 A1 — ROOM NAME, AND FINISH NUMBER
0 SIM A01.01 — WALL TYPE INDICATOR, SEE WALL TYPES SHEET
01 A01.01 / 01 A01.01 — BUILDING SECTION
01 A01.01 — WALL SECTION
01 A01.01 — DETAIL CUT
0 / 0 A01.01 0 / 0 OR 01 A01.01 — INTERIOR /EXTERIOR ELEVATION/ ELEVATION
1 A01.01 — DETAIL
CPT / E-VCT — FLOOR MATERIAL BREAK

T O SLAB 100'-6" OR 15'-8" — REFERENCE ELEVATION
OR — WORK POINT
FEC OR FE-K — SEMI - RECESSED FIRE EXTINGUISHER CABINET w/ FIRE EXTINGUISHER
FE — SURFACE MOUNTED FIRE EXTINGUISHER
CG — CORNER GUARD
EJ — EXPANSION JOINT
CJ — CONTROL JOINT
ICE/WATER SHIELD, MOISTURE BARRIER, AIR BARRIER, DAMP PROOFING, WATER PROOFING

101 — DOOR TAG
W01 — CURTAIN WALL, STOREFRONT OR FIBERGLASS WINDOW TYPE
L01 — LOUVER TYPE
101 — BORROWED LIGH TYPE
DX — KEYED NOTE
XX.X — CENTER LINE OF COLUMN GRIDDS NEW COLUMN NAME
01 A0.01 — EXISTING CONDITIONS PHOTOS

*NOTE: SEE INDIVIDUAL DRAWINGS FOR LEGENDS & DEFINITION OF POCHE USED TO REPRESENT LARGE AREAS OF REPETITIVE MATERIALS.

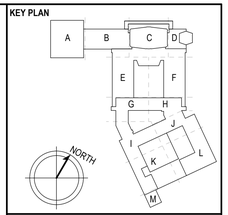
ABBREVIATIONS

@	AT
AB	ANCHOR BOLT
ACOUST	ACOUSTICAL
ACP	ACCESS PANEL
ACT	ACOUSTICAL CEILING TILE
AD	AREA DRAIN
ADO	AUTO DOOR OPENER
ADJ	ADJUSTABLE
AED	AUTOMATIC EMERGENCY DEFIBRILLATOR/CABINET
AFF	ABOVE FINISH FLOOR
ALUM	ALUMINUM
ANOD	ANODIZED
ASPH	ASPHALT
ASSY	ASSEMBLY
ATTACH	ATTACHMENT
ALT	ALTERNATE
BD OR BRD	BOARD
BF	BARRIER FREE
BITUM	BITUMINOUS
BLDG	BUILDING
BLKG	BLOCKING
BM	BEAM
BO	BOTTOM OF
BOD	BOTTOM OF DECK
BOTT	BOTTOM
BTWN	BETWEEN
CB	CATCH BASIN
CEM	CEMENT
CFMF	COLD FORM METAL FRAMING
CG	CORNER GUARD (SS)
CJ	CONTROL JOINT
CLG	CEILING
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
CONC	CONCRETE
CORR	CORRIDOR
CL	CENTER LINE
CLR	CLEAR
CONN	CONNECT
CONT	CONTINUOUS
CP	CEMENT PLASTER
CPT	CARPET
CSK	COUNTERSINK
CT	CERAMIC TILE
CW	CURTAINWALL
D	CLOTHES DRYER
DBL	DOUBLE
DEMO	DEMOLISH
DF	DRINKING FOUNTAIN
DIA, Ø	DIAMETER
DN	DOWN
DO	DITTO OR REPEAT ADJACENT ELEMENT
DR	DOOR
DS	DOWNSPOUT
DWGS	DRAWINGS
EA	EACH
EIFS	EXTERIOR INSULATION FINISH SYSTEM
EJ	EXPANSION JOINT
ELECT	ELECTRICAL
ELEV OR EL	ELEVATION
EMER	EMERGENCY
EMBED	EMBEDMENT
EN	ENAMEL
ENL	ENLARGED
EPS	EXPANDED POLYSTYRENE
EQ	EQUAL
EQUIP	EQUIPMENT
ETR	EXISTING TO REMAIN
EXP	EXPANSION
EXIST OR (E)	EXISTING
EXT	EXTERIOR
EXTR	EXTRUDED
FB	ELECTRICAL FLOOR BOX
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER - SEE SYMBOLS
FE-K	FIRE EXTINGUISHER - KITCHEN TYPE - SEE SYMBOLS
FEC	FIRE EXTINGUISHER CABINET - SEE SYMBOLS
FF	FACTORY FINISH
FH	FIRE HYDRANT
FIN	FINISH(ED)
FLASH'(G)	FLASHING
FLR	FLOOR
FM	FACTORY MUTUAL
FCIC	FURNISHED BY CONTRACTOR INSTALLED BY CONTRACTOR
FOIC	FURNISHED BY OWNER INSTALLED BY CONTRACTOR
FOIO	FURNISHED BY OWNER INSTALLED BY OWNER
FOM	FACE OF MASONRY
FO	FACE OF
FOB	FACE OF BRICK
FO CMU	FACE OF CMU
FP	FIREPLACE
FRMG	FRAMING
FRP	FIBERGLAS REINFORCED PANEL(S)
FT	FOOT OR FEET
FTR	FIN TUBE RADIATION
GA	GAUGE
GALV	GALVANIZED
GL	GLASS
GLB	GLUE LAMINATED BEAM
GWB	GYPSUM WALL BOARD
GYP	GYPSUM
HBD	HARDBOARD
HC	HANDICAP
HD	HOOD
HDW	HARDWARE
HGT	HEIGHT
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HR	HOUR
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
INT	INTERIOR
IFP	INTERACTIVE FLAT PANEL
INSUL	INSULATION
INSTALL OR INS	INSTALLATION
JAN	JANITOR
JT	JOINT
L	ANGLE
LAM	LAMINATE
LB OR #	POUND
LLH	LONG LEG HORIZONTAL
LOC	LOCATION
LLV	LONG LEG VERTICAL
MATL	MATERIAL
MAX	MAXIMUM
MB	MACHINE BOLT
MECH	MECHANICAL
ME/P OR MEP	MECHANICAL, ELECTRICAL, AND PLUMBING
MFR	MANUFACTURER
MH	MANHOLE
MIB	MOISTURE INFILTRATION BARRIER
MICRO	MICROWAVE
MIN	MINIMUM
MLDG	MOLDING
MTL	METAL
NATL	NATURAL
NC	NONCOMBUSTIBLE
NIC	NOT IN CONTRACT
NO	NUMBER
NP	NO PAINT
NR	NOT RATED
NOM	NOMINAL
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
ODC	OVERFLOW DRAIN CAP
OHVD	OVERHEAD
OPER	OPERABLE
OPP	OPPOSITE HAND
OPNG	OPENING
OTS	OPEN TO STRUCTURE-PAINT TYP
OTA	OPEN TO ABOVE
OVHG	OVERHANG
PENE	PENETRATION
PERF	PERFORATED
PFMU	POLISHED FINISH MASONRY UNIT
PI	POST INDICATOR
PJSC	PROJECTION SCREEN
PL	PLATE
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PNL	PANEL
PNT	PAINT
POLY	EXTRUDED POLYSTYRENE
PR	PAIR
PROT	PROTECTION
PSI	POUND PER SQUARE INCH
PT	PRESSURE TREATED
PTN	PARTITION
PVC	POLYVINYL CHLORIDE
PW OR PLYWD	PLYWOOD
QT	QUARRY TILE
RCP	REFLECTED CEILING PLAN
RAD	RADIUS
RD	ROOF DRAIN
RE	REFER TO
REF	REFRIGERATOR
RES	RESILIENT FLOORING
REQD	REQUIRED
RM	ROOM
RUB	RUBBER FLOORING
RWL	RAIN WATER LEADER
SAC	SUSPENDED ACOUSTICAL CEILING
SAM	SELF ADHERED MEMBRANE
SCHED	SCHEDULE
SC	SOLID CORE
SD	SMOKE DETECTOR
SEC	SECURITY
SF	STOREFRONT
SG	STEEL CORNER GUARD
SHEATH	SHEATHING
SHT	SHEET
SHM	SECURITY HOLLOW METAL
SIM	SIMILAR
SPEC	SPECIFICATION
SPK	SPEAKER
SQ	SQUARE
S/S OR SS	STAINLESS STEEL
STC	SOUND TRANSMISSION COEFFICIENT
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURAL
SUSP	SUSPENDED
SV	SLEEVE
T & G	TONGUE & GROOVE
TERM	TERMINATION
THRESH	THRESHOLD
TO	TOP OF
TOS	TOP OF SLAB
TRTD	TREATED
TYP	TYPICAL
TS	TUBE STEEL
UL	UNDERWRITERS LABORATORY
UNO	UNLESS NOTED OTHERWISE
U/S	UNDER SIDE
VCT	VINYL COMPOSITION TILE
VIF	VERIFY IN FIELD
V PLAS	VENEER PLASTER
VERT	VERTICAL
VWC	VINYL WALL COVERING
W	WASHING MACHINE
W/	WITH
WB	WHITE BOARD
WC	WATER CLOSET
WF	WIDE FLANGE
WDO	WINDOW
WD	WOOD
WHS	WELDED HEAD STUD
WOM	WALK OFF MAT
WP	WALL PAD
WR	WATER RESISTANT
WWF	WELDED WIRE FABRIC

DRAWING LIST

SHEET NUMBER	SHEET NAME
A0.00	COVER SHEET - OVERALL
A2.00	OVERALL ROOF PLAN
A2.01	PROPOSED ROOF PLAN - PART A
A2.02	PROPOSED ROOF PLAN - PART B
A2.03	PROPOSED ROOF PLAN - PART C
A2.04	PROPOSED ROOF PLAN - PART D
A2.05	PROPOSED ROOF PLAN - PART E
A2.06	PROPOSED ROOF PLAN - PART F
A2.07	PROPOSED ROOF PLAN - PART G
A2.08	PROPOSED ROOF PLAN - PART H
A2.09	PROPOSED ROOF PLAN - PART I
A2.10	PROPOSED ROOF PLANS - PARTS J & M
A2.11	PROPOSED ROOF PLAN - PART K
A2.12	PROPOSED ROOF PLAN - PART L
EX.01	EXISTING ROOF - PART A
EX.02	EXISTING ROOF - PART B
EX.03	EXISTING ROOF - PART C
EX.04	EXISTING ROOF - PART D
EX.05	EXISTING ROOF - PART E
EX.06	EXISTING ROOF - PART F
EX.07	EXISTING ROOF - PART G
EX.08	EXISTING ROOF - PART H
EX.09	EXISTING ROOF - PART I
EX.10	EXISTING ROOF - PARTS J & M
EX.11	EXISTING ROOF - PART K
EX.12	EXISTING ROOF - PART L

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
SCHEMATIC DESIGN

PROJECT NUMBER
02025.18

OWNER / PROJECT NAME / LOCATION
CITY OF HOLYOKE
HOLYOKE HIGH SCHOOL
500 BEECH ST.
HOLYOKE, MA 01040

DRAWING TITLE
COVER SHEET - OVERALL

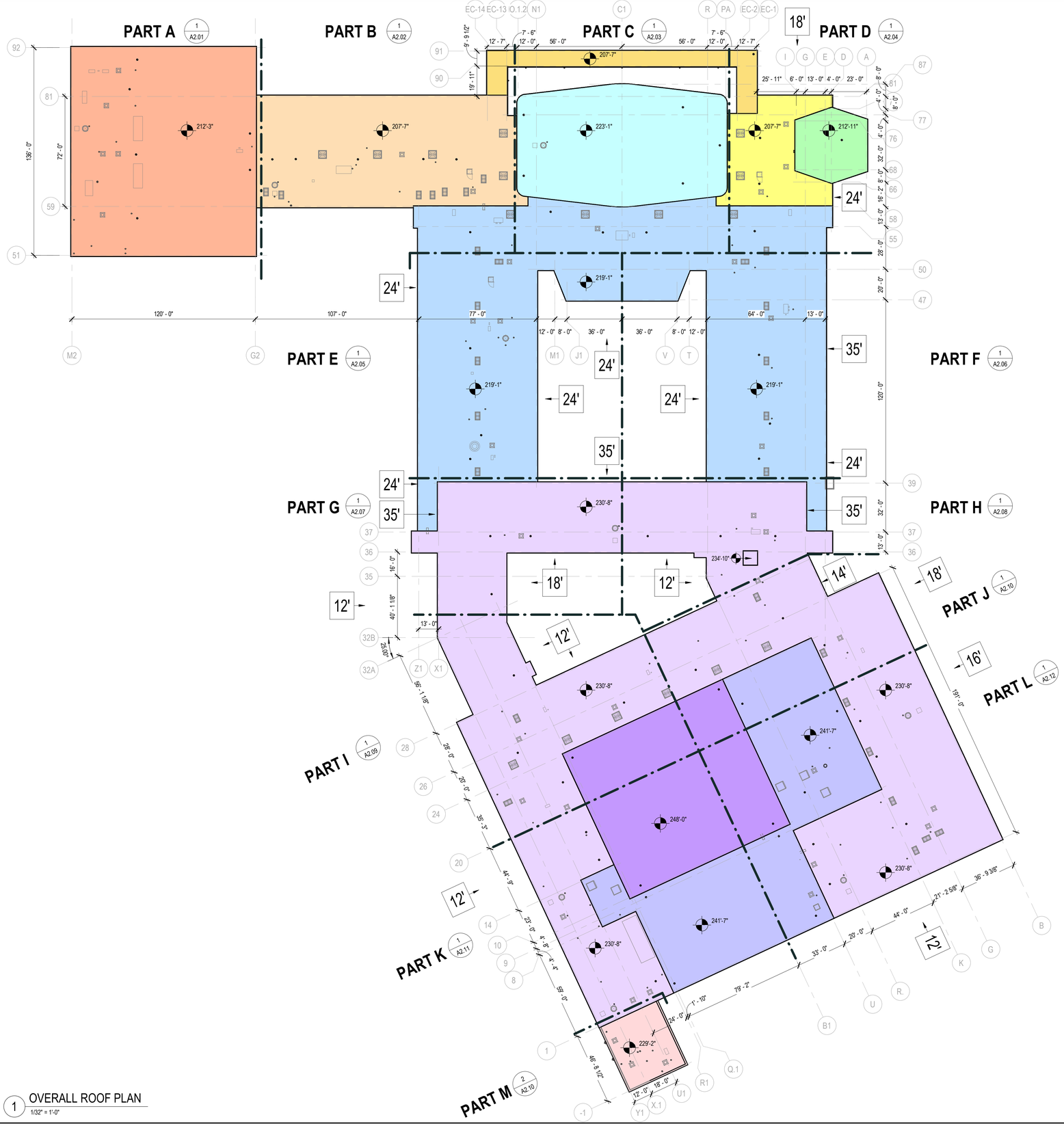
MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main Street, Suite 1110
Springfield MA 01103
413.592.9700 T
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	-
CHECKED	-
DATE	06.02.2025

DRAWING NUMBER
A0.00



1 OVERALL ROOF PLAN
1/32" = 1'-0"

GENERAL NOTES

1. VERIFY ALL EXISTING CONDITIONS IN FIELD, TYPICAL.
2. ELEVATIONS PROVIDED ARE TO THE TOP OF EXISTING STEEL ROOF JOISTS, UNLESS NOTED OTHERWISE.
3. THE EXISTING ROOF DECK IS 1-1/2" CORRUGATED METAL, TYPICAL AT ALL LOCATIONS UNLESS NOTED OTHERWISE.
4. ALL HEIGHTS ABOVE GRADE PROVIDED ARE APPROXIMATE. VERIFY IN FIELD.

ROOF AREAS LEGEND

CAFETERIA ROOF: 16,800 SF
PART A
ELEVATION: 212'-3"
TYP. HEIGHT ABOVE GRADE: 17'-0"

ADMINISTRATION ROOF: 12,600 SF
PART B
ELEVATION: 207'-7"
TYP. HEIGHT ABOVE GRADE: 12'-0"

ENTRY CANOPY ROOF: 3,000 SF
PARTS B, C, D
ELEVATION: 207'-7"
TYP. HEIGHT ABOVE GRADE: 12'-0"

NORTHEAST ROOF: 3,900 SF
PART D
ELEVATION: 207'-7"
HEIGHT ABOVE GRADE VARIES: REFER TO PLAN

BAND ROOM ROOF: 2,100 SF
PART D
ELEVATION: 212'-11"
TYP. HEIGHT ABOVE GRADE: 30'-0"

AUDITORIUM ROOF: 10,200 SF
PART C
ELEVATION: 223'-1"
TYP. HEIGHT ABOVE GRADE: 28'-0"

NORTH ROOF: 36,100 SF
PARTS B, C, D, E, F, G, H
ELEVATION: 219'-1"
HEIGHT ABOVE GRADE VARIES: REFER TO PLAN

SOUTH ROOF: 53,300 SF
PARTS G, H, I, J, K, L, M
ELEVATION: 230'-8"
HEIGHT ABOVE GRADE VARIES: REFER TO PLAN

GYM & POOL ROOFS: 15,800 SF
PARTS J, K, L
ELEVATION: 241'-7"
TYP. HEIGHT ABOVE GRADE: 23'-0"

HIGH GYM ROOF: 12,200 SF
PARTS I, J, K, L
ELEVATION: 248'-0"
TYP. HEIGHT ABOVE GRADE: 30'-0"

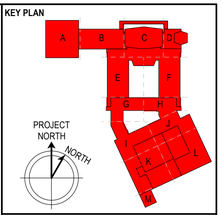
SOUTH ADDITION ROOF: 2,000 SF
PART M
ELEVATION: 229'-2"
TYP. HEIGHT ABOVE GRADE: 12'-0"

TOTAL ROOF AREA: 168,000 SF

##' APPROX. HEIGHT ABOVE GRADE

MATCH LINE FOR PARTIAL PLANS

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
SCHEMATIC DESIGN

PROJECT NUMBER
02025.18

OWNER / PROJECT NAME / LOCATION
CITY OF HOLYOKE
HOLYOKE HIGH SCHOOL
500 BEECH ST.
HOLYOKE, MA 01040

DRAWING TITLE
OVERALL ROOF PLAN

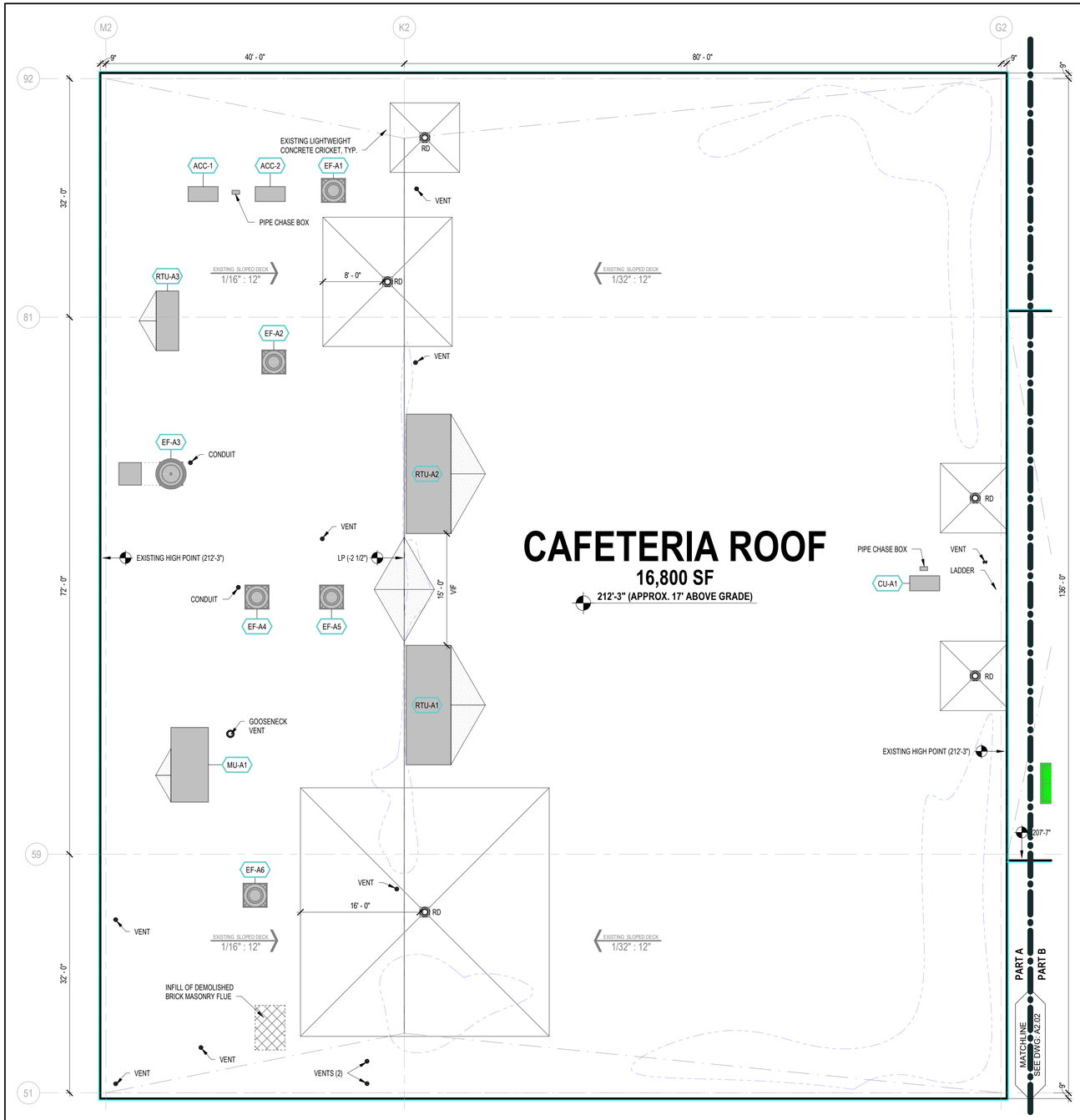
MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main Street, Suite 1110
Springfield MA 01103
413.592.9700 T
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	DL, RS, OJ
CHECKED	JL
DATE	06.02.2025

DRAWING NUMBER
A2.00



CAFETERIA ROOF

16,800 SF

212'-3" (APPROX. 17' ABOVE GRADE)

1 PARTIAL ROOF PLAN - PART A

1/8" = 1'-0"

GENERAL ROOF NOTES

1. REFER TO DRAWING A2.XX AND A2.XX FOR TYPICAL ROOF DETAILS.
2. SEE ROOF DETAILS AND SPECIFICATIONS FOR MORE INFORMATION.
3. VERIFY ALL DIMENSIONS OF EXISTING CONDITIONS IN FIELD, TYPICAL.
4. FALL PROTECTION ANCHORS SHALL BE SPACED NO FURTHER THAN 30'-0" APART O.C. AND SHALL BE ATTACHED TO EXISTING STEEL STRUCTURE. VERIFY LOCATIONS OF EXISTING MEMBERS IN FIELD. REFER TO DETAILS & STRUCTURAL DRAWINGS FOR MORE INFORMATION.
5. FOAM ALL GAPS IN SUBSTRATES, ROOF INSULATION BOARDS, BETWEEN BLOCKING / CURBS / PIPING AND ROOF INSULATION, AND BETWEEN PARAPETS / ROOF EDGE BLOCKING AND ROOF INSULATION. TYPICAL.
6. EXISTING ROOF SUBSTRATES MAY HAVE UNEVEN SURFACES WITH PROTRUSIONS AND/OR DEPRESSIONS UNCOVERED DURING DEMOLITION. REVIEW EXISTING SUBSTRATES UPON EXPOSURE TO VIEW. CUT AND COPE NEW INSULATION AS REQUIRED AT PROTRUSIONS. BUILD-UP NEW INSULATION AS REQUIRED AT DEPRESSIONS. ENSURE POSITIVE DRAINAGE, TYPICAL. REFER TO PLAN FOR LOCATIONS OF EXISTING PONDING.
7. PROVIDE CRICKETS AT EQUIPMENT AND SKYLIGHTS (LOCATED ON SLOPED STRUCTURE OR WITHIN TAPERED INSULATION) ON THE HIGH SIDE OF THE UNIT IF PERPENDICULAR TO TO THE DRAINAGE SLOPE, TYPICAL. DO NOT EXCEED 2' CRICKET HEIGHT. 1/2":12" TAPERED INSULATION IS TYPICAL. USE 1/4":12 OR 1/8":12 INSULATION AS APPLICABLE.

ROOF TYPE

ROOF TYPE ASSEMBLY

SEE ROOF SYSTEM ASSEMBLY PROFILES ON A2.XX

A

TYPE A - FLAT ROOF

- *FULLY ADHERED 80 MIL PVC MEMBRANE & ADHERED FLASHING SYSTEM* - (COLOR: REFLECTIVE GRAY).
- 1/2" OVERLAYMENT BOARD (DENSDECK PRIME OR EQUAL), MECHANICALLY FASTENED.
- 3" RIGID INSULATION TOP LAYER LAYER ADHERED / FASTENED PER MFR., AND
  3" RIGID INSULATION BOTTOM LAYER MECHANICALLY FASTENED.
  INCLUDE INSULATION DRAIN SUMPS (REFER TO PLANS & DETAILS); MIN THICKNESS OF 4" AT ROOF DRAIN, U.N.O.
  INCLUDE INSULATION CRICKETS AS SHOWN ON PLANS.
- SELF-ADHERED MOD. BIT. VAPOR RETARDER / TEMPORARY ROOFING.
- EXISTING 1-1/2" CORRUGATED METAL DECK TO REMAIN. REFER TO PLANS FOR EXISTING SLOPES OF STRUCTURE.

B

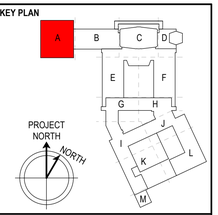
TYPE B - PLACEHOLDER

TBD

ROOF SYMBOL LEGEND

- RD — ROOF DRAIN (RD) / ROOF DRAIN WITH OVERFLOW DRAIN (RD/ORD) & SUMP, SEE DETAILS: AND (REFER TO PLANS FOR SIZE AND SLOPE. IF NOT INDICATED, DETAIL IS TYP.)
- A — ROOF TYPE AREA DESIGNATION (SEE ROOF TYPE ASSEMBLY SUMMARY)
- 30" — TAPERED INSULATION CRICKET. REFER TO PLANS FOR LOCATIONS, SIZES, AND SLOPES. IF NOT INDICATED ON PLANS, TYPICAL = 1/2" PER FT SLOPE, 30°. REF. GENERAL NOTES. POOLING / FREESTANDING WATER SHALL NOT BE ACCEPTED (CRICKET SLOPE DIRECTION AND ANGLE, TYP.)
- EXISTING LIGHTWEIGHT CONCRETE CRICKET
- WELDABLE WALKWAYS, 39" WIDE (FROM ROOF ACCESS TO SERVICEABLE SIDE OF ALL ROOF TOP EQUIPMENT, TYPICAL)
- SB — SPLASH BLOCK OVER WELDED WALKING MAT, REFER TO TYPICAL DETAIL:
- EXISTING VENT PIPING THRU ROOF or EXHAUST FLUES, SEE DETAILS: EXTEND ALL VENT PIPING AS REQUIRED.
- SLOPE 1/4" : 12" — DIRECTION OF SLOPE / TAPERED INSULATION
- EXISTING SLOPE
- 30'-0" — ROOF ELEVATIONS ABOVE FIRST FLOOR (NOTED ELEVATIONS ARE APPROXIMATE)
- FA-R — FALL PROTECTION ROOF ANCHOR, SEE:
- FA-W — FALL PROTECTION WALL ANCHOR, SEE: (NOT APPLICABLE IN PHASE 1)
- FALL PROTECTION SYSTEM CABLE
- ROOF HATCH. SEE DETAIL: AND
- SKYLIGHT
- ROOF LADDER. SEE DETAILS: **A7.01.1**
- ROOF STRUCTURE INFILL LOCATION, SEE DETAIL:
- BALLASTED COURTYARD GUARDRAIL SYSTEM, SEE DETAIL:
- EXPANSION JOINT, SEE DETAIL:
- NEW FASCIA ROOF EDGE METAL
- LOCATION OF PONDING ON PREVIOUS ROOF SYSTEM. REVIEW EXISTING SUBSTRATE. REFER TO GENERAL NOTES.

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02025.18

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

HOLYOKE HIGH SCHOOL

500 BEECH ST.
HOLYOKE, MA 01040

DRAWING TITLE

PROPOSED ROOF PLAN - PART A

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main Street, Suite 1110
Springfield MA 01103
413.592.9700 T
info@mvgarchitects.com E

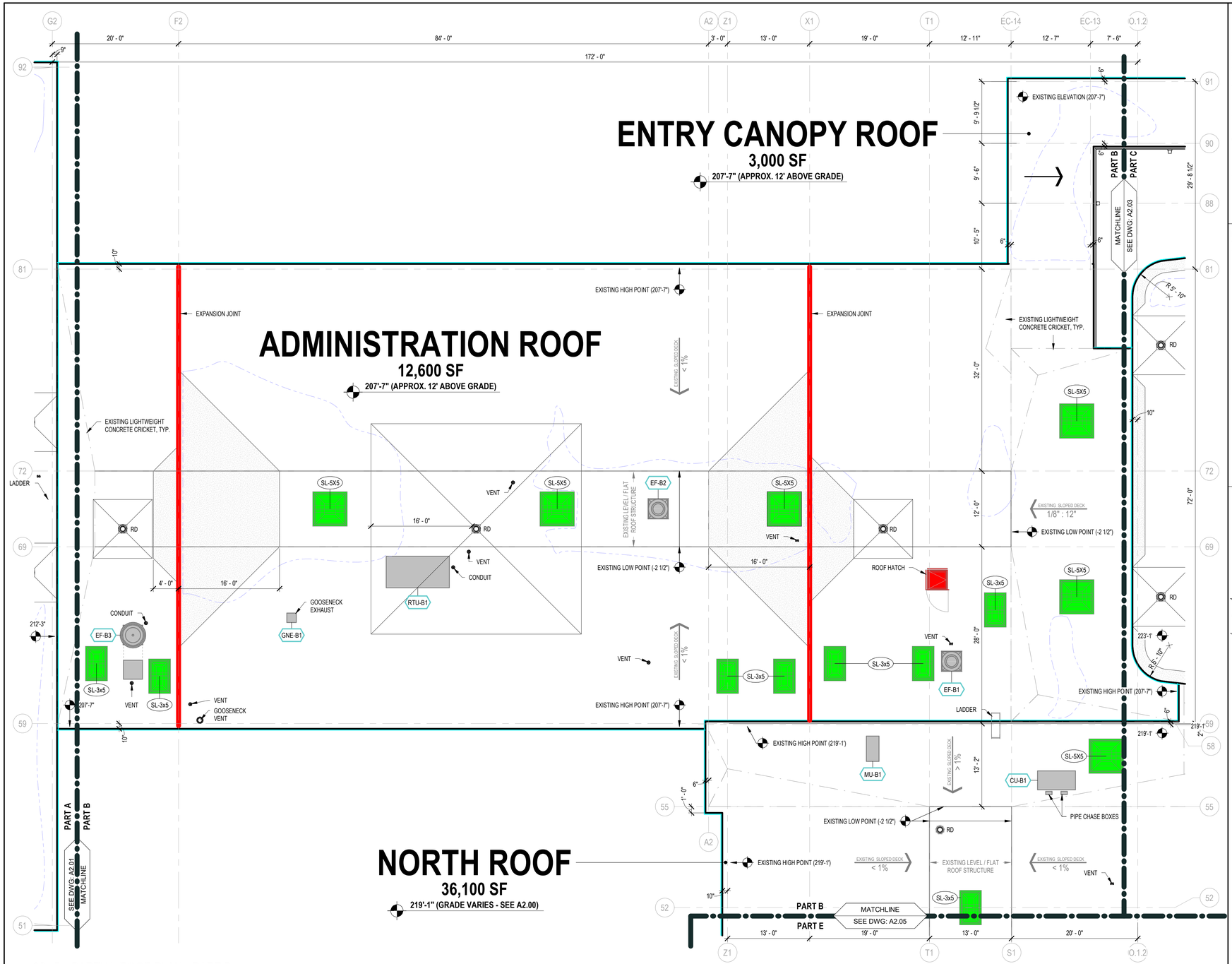
STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	Author
CHECKED	Checker
DATE	06.02.2025

DRAWING NUMBER

A2.01



1 02.1B - PARTIAL ROOF PLAN - PART B
1/8" = 1'-0"

GENERAL ROOF NOTES

1. REFER TO DRAWING A2.XX AND A2.XX FOR TYPICAL ROOF DETAILS.
2. SEE ROOF DETAILS AND SPECIFICATIONS FOR MORE INFORMATION.
3. VERIFY ALL DIMENSIONS OF EXISTING CONDITIONS IN FIELD, TYPICAL.
4. FALL PROTECTION ANCHORS SHALL BE SPACED NO FURTHER THAN 30'-0" APART O.C. AND SHALL BE ATTACHED TO EXISTING STEEL STRUCTURE. VERIFY LOCATIONS OF EXISTING MEMBERS IN FIELD. REFER TO DETAILS & STRUCTURAL DRAWINGS FOR MORE INFORMATION.
5. FOAM ALL GAPS IN SUBSTRATES, ROOF INSULATION BOARDS, BETWEEN BLOCKING / CURBS / PIPING AND ROOF INSULATION, AND BETWEEN PARAPETS / ROOF EDGE BLOCKING AND ROOF INSULATION. TYPICAL.
6. EXISTING ROOF SUBSTRATES MAY HAVE UNEVEN SURFACES WITH PROTRUSIONS AND/OR DEPRESSIONS UNCOVERED DURING DEMOLITION. REVIEW EXISTING SUBSTRATES UPON EXPOSURE TO VIEW. CUT AND COPE NEW INSULATION AS REQUIRED AT PROTRUSIONS. BUILD-UP NEW INSULATION AS REQUIRED AT DEPRESSIONS. ENSURE POSITIVE DRAINAGE, TYPICAL. REFER TO PLAN FOR LOCATIONS OF EXISTING PONDING.
7. PROVIDE CRICKETS AT EQUIPMENT AND SKYLIGHTS (LOCATED ON SLOPED STRUCTURE OR WITHIN TAPERED INSULATION) ON THE HIGH SIDE OF THE UNIT IF PERPENDICULAR TO TO THE DRAINAGE SLOPE, TYPICAL. DO NOT EXCEED 2" CRICKET HEIGHT. 1/2":12" TAPERED INSULATION IS TYPICAL. USE 1/4":12 OR 1/8":12 INSULATION AS APPLICABLE.

ROOF TYPE

A .

ROOF TYPE ASSEMBLY

SEE ROOF SYSTEM ASSEMBLY PROFILES ON A2.XX

TYPE A - FLAT ROOF

- *FULLY ADHERED 80 MIL PVC MEMBRANE & ADHERED FLASHING SYSTEM* - (COLOR: REFLECTIVE GRAY).
- 1/2" OVERLAYMENT BOARD (DENSDECK PRIME OR EQUAL), MECHANICALLY FASTENED.
- 3" RIGID INSULATION TOP LAYER LAYER ADHERED / FASTENED PER MFR., AND
  3" RIGID INSULATION BOTTOM LAYER MECHANICALLY FASTENED.
  INCLUDE INSULATION DRAIN SUMPS (REFER TO PLANS & DETAILS); MIN THICKNESS OF 4" AT ROOF DRAIN, U.N.O.
  INCLUDE INSULATION CRICKETS AS SHOWN ON PLANS.
- SELF-ADHERED MOD. BIT. VAPOR RETARDER / TEMPORARY ROOFING.
- EXISTING 1-1/2" CORRUGATED METAL DECK TO REMAIN. REFER TO PLANS FOR EXISTING SLOPES OF STRUCTURE.

B .

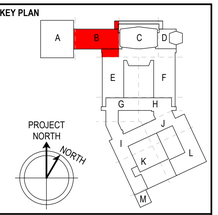
TYPE B - PLACEHOLDER

TBD

ROOF SYMBOL LEGEND

- RD — ROOF DRAIN (RD) / ROOF DRAIN WITH OVERFLOW DRAIN (RD/ORD) & SUMP, SEE DETAILS: AND (REFER TO PLANS FOR SIZE AND SLOPE. IF NOT INDICATED, DETAIL IS TYP.)
- A — ROOF TYPE AREA DESIGNATION (SEE ROOF TYPE ASSEMBLY SUMMARY)
- 30" — TAPERED INSULATION CRICKET. REFER TO PLANS FOR LOCATIONS, SIZES, AND SLOPES. IF NOT INDICATED ON PLANS, TYPICAL = 1/2" PER FT SLOPE, 30" : REF. GENERAL NOTES. POOLING / FREESTANDING WATER SHALL NOT BE ACCEPTED (CRICKET SLOPE DIRECTION AND ANGLE, TYP.)
- EXISTING LIGHTWEIGHT CONCRETE CRICKET
- WELDABLE WALKWAYS, 39" WIDE (FROM ROOF ACCESS TO SERVICEABLE SIDE OF ALL ROOF TOP EQUIPMENT, TYPICAL)
- SB — SPLASH BLOCK OVER WELDED WALKING MAT, REFER TO TYPICAL DETAIL:
- EXISTING VENT PIPING THRU ROOF or EXHAUST FLUES. SEE DETAILS: EXTEND ALL VENT PIPING AS REQUIRED.
- SLOPE 1/4" : 12" — DIRECTION OF SLOPE / TAPERED INSULATION
- EXISTING SLOPE
- 30'-0" — ROOF ELEVATIONS ABOVE FIRST FLOOR (NOTED ELEVATIONS ARE APPROXIMATE)
- FA-R — FALL PROTECTION ROOF ANCHOR, SEE:
- FA-W — FALL PROTECTION WALL ANCHOR, SEE: (NOT APPLICABLE IN PHASE 1)
- FALL PROTECTION SYSTEM CABLE
- ROOF HATCH. SEE DETAIL: AND
- SKYLIGHT
- ROOF LADDER. SEE DETAILS: **A7.01.1**
- ROOF STRUCTURE INFILL LOCATION, SEE DETAIL:
- BALLASTED COURTYARD GUARDRAIL SYSTEM, SEE DETAIL:
- EXPANSION JOINT, SEE DETAIL:
- NEW FASCIA ROOF EDGE METAL
- LOCATION OF PONDING ON PREVIOUS ROOF SYSTEM. REVIEW EXISTING SUBSTRATE. REFER TO GENERAL NOTES.

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02025.18

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

HOLYOKE HIGH SCHOOL

500 BEECH ST.
HOLYOKE, MA 01040

DRAWING TITLE

PROPOSED ROOF PLAN - PART B

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main Street, Suite 1110
Springfield MA 01103
413.592.9700 T
info@mvgarchitects.com E

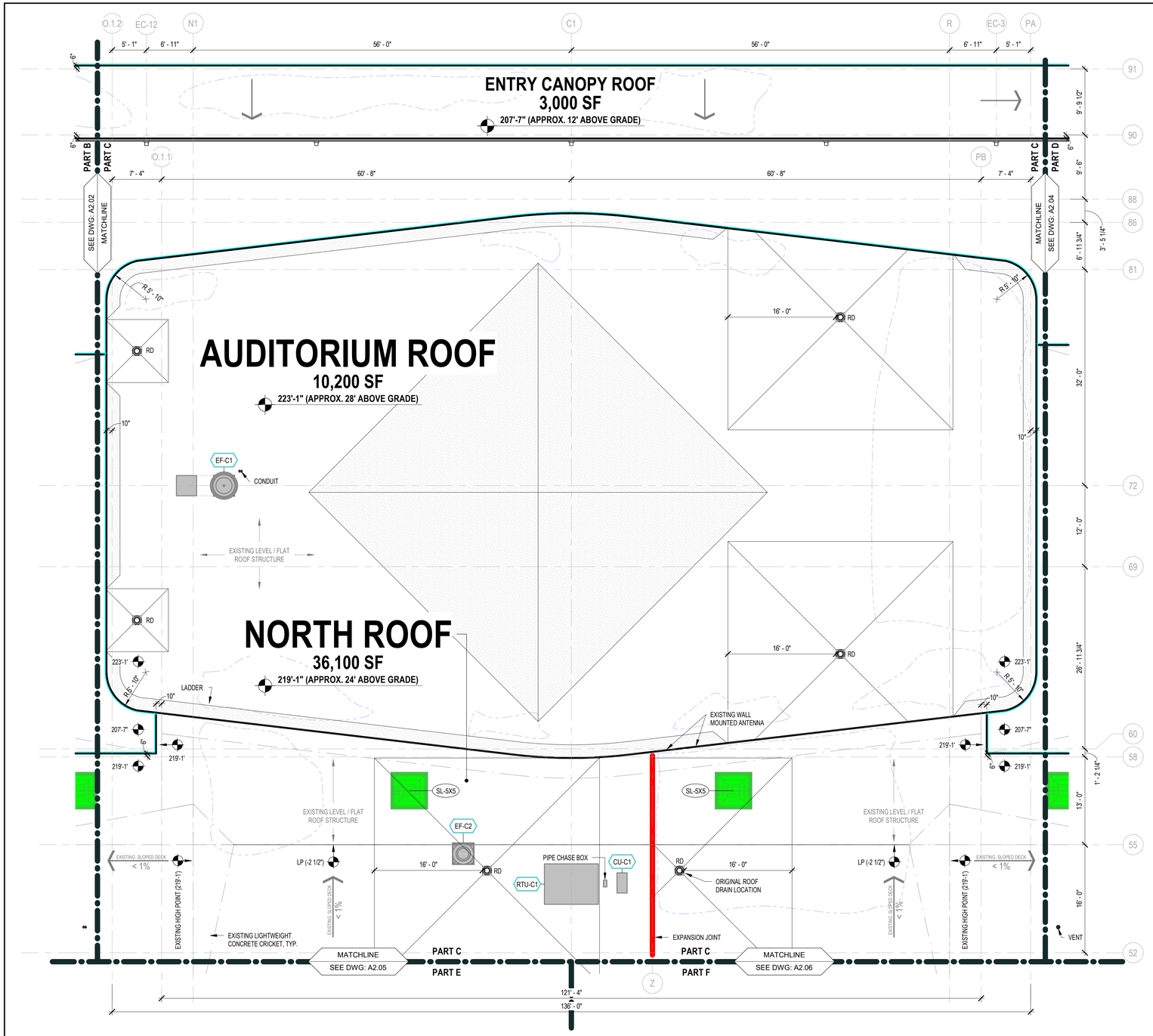
STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	Author
CHECKED	Checker
DATE	06.02.2025

DRAWING NUMBER

A2.02



1 02.1C - PARTIAL ROOF PLAN - PART C
1/8" = 1'-0"

GENERAL ROOF NOTES

1. REFER TO DRAWING A2.XX AND A2.XX FOR TYPICAL ROOF DETAILS.
2. SEE ROOF DETAILS AND SPECIFICATIONS FOR MORE INFORMATION.
3. VERIFY ALL DIMENSIONS OF EXISTING CONDITIONS IN FIELD, TYPICAL.
4. FALL PROTECTION ANCHORS SHALL BE SPACED NO FURTHER THAN 30'-0" APART O.C. AND SHALL BE ATTACHED TO EXISTING STEEL STRUCTURE. VERIFY LOCATIONS OF EXISTING MEMBERS IN FIELD. REFER TO DETAILS & STRUCTURAL DRAWINGS FOR MORE INFORMATION.
5. FOAM ALL GAPS IN SUBSTRATES, ROOF INSULATION BOARDS, BETWEEN BLOCKING / CURBS / PIPING AND ROOF INSULATION, AND BETWEEN PARAPETS / ROOF EDGE BLOCKING AND ROOF INSULATION. TYPICAL.
6. EXISTING ROOF SUBSTRATES MAY HAVE UNEVEN SURFACES WITH PROTRUSIONS AND/OR DEPRESSIONS UNCOVERED DURING DEMOLITION. REVIEW EXISTING SUBSTRATES UPON EXPOSURE TO VIEW. CUT AND COPE NEW INSULATION AS REQUIRED AT PROTRUSIONS. BUILD-UP NEW INSULATION AS REQUIRED AT DEPRESSIONS. ENSURE POSITIVE DRAINAGE, TYPICAL. REFER TO PLAN FOR LOCATIONS OF EXISTING PONDING.
7. PROVIDE CRICKETS AT EQUIPMENT AND SKYLIGHTS (LOCATED ON SLOPED STRUCTURE OR WITHIN TAPERED INSULATION) ON THE HIGH SIDE OF THE UNIT IF PERPENDICULAR TO TO THE DRAINAGE SLOPE, TYPICAL. DO NOT EXCEED 2" CRICKET HEIGHT. 1/2"-12" TAPERED INSULATION IS TYPICAL. USE 1/4"-12 OR 1/8"-12 INSULATION AS APPLICABLE.

ROOF TYPE — **ROOF TYPE ASSEMBLY**
SEE ROOF SYSTEM ASSEMBLY PROFILES ON A2.XX

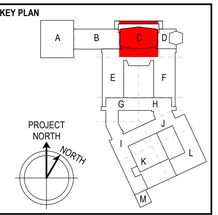
A — **TYPE A - FLAT ROOF**
- *FULLY ADHERED 80 MIL PVC MEMBRANE & ADHERED FLASHING SYSTEM* - (COLOR: REFLECTIVE GRAY).
- 1/2" OVERLAYMENT BOARD (DENSDECK PRIME OR EQUAL), MECHANICALLY FASTENED.
- 3" RIGID INSULATION TOP LAYER LAYER ADHERED / FASTENED PER MFR., AND
  3" RIGID INSULATION BOTTOM LAYER MECHANICALLY FASTENED.
  INCLUDE INSULATION DRAIN SUMPS (REFER TO PLANS & DETAILS); MIN THICKNESS OF 4" AT ROOF DRAIN, U.N.O.
  INCLUDE INSULATION CRICKETS AS SHOWN ON PLANS.
- SELF-ADHERED MOD. BIT. VAPOR RETARDER / TEMPORARY ROOFING.
- EXISTING 1-1/2" CORRUGATED METAL DECK TO REMAIN. REFER TO PLANS FOR EXISTING SLOPES OF STRUCTURE.

B — **TYPE B - PLACEHOLDER**
TBD

ROOF SYMBOL LEGEND

- ROOF DRAIN (RD) / ROOF DRAIN WITH OVERFLOW DRAIN (RD/ORD) & SUMP, SEE DETAILS: AND (REFER TO PLANS FOR SIZE AND SLOPE. IF NOT INDICATED, DETAIL IS TYP.)
- A — ROOF TYPE AREA DESIGNATION (SEE ROOF TYPE ASSEMBLY SUMMARY)
- 30" — TAPERED INSULATION CRICKET. REFER TO PLANS FOR LOCATIONS, SIZES, AND SLOPES. IF NOT INDICATED ON PLANS, TYPICAL = 1/2" PER FT SLOPE, 30° . REF. GENERAL NOTES. POOLING / FREESTANDING WATER SHALL NOT BE ACCEPTED (CRICKET SLOPE DIRECTION AND ANGLE, TYP.)
- EXISTING LIGHTWEIGHT CONCRETE CRICKET
- WELDABLE WALKWAYS, 39" WIDE (FROM ROOF ACCESS TO SERVICEABLE SIDE OF ALL ROOF TOP EQUIPMENT, TYPICAL)
- SB — SPLASH BLOCK OVER WELDED WALKING MAT, REFER TO TYPICAL DETAIL:
- EXISTING VENT PIPING THRU ROOF or EXHAUST FLUES, SEE DETAILS: EXTEND ALL VENT PIPING AS REQUIRED.
- SLOPE 1/4" : 12" — DIRECTION OF SLOPE / TAPERED INSULATION
- EXISTING SLOPE
- 30'-0" — ROOF ELEVATIONS ABOVE FIRST FLOOR (NOTED ELEVATIONS ARE APPROXIMATE)
- FA-R — FALL PROTECTION ROOF ANCHOR, SEE:
- FA-W — FALL PROTECTION WALL ANCHOR, SEE: (NOT APPLICABLE IN PHASE 1)
- FALL PROTECTION SYSTEM CABLE
- ROOF HATCH. SEE DETAIL: AND
- SKYLIGHT
- ROOF LADDER. SEE DETAILS: **A7.01.1**
- ROOF STRUCTURE INFILL LOCATION, SEE DETAIL:
- BALLASTED COURTYARD GUARDRAIL SYSTEM, SEE DETAIL:
- EXPANSION JOINT, SEE DETAIL:
- NEW FASCIA ROOF EDGE METAL
- LOCATION OF PONDING ON PREVIOUS ROOF SYSTEM. REVIEW EXISTING SUBSTRATE. REFER TO GENERAL NOTES.

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
SCHEMATIC DESIGN

PROJECT NUMBER
02025.18

OWNER / PROJECT NAME / LOCATION
CITY OF HOLYOKE
HOLYOKE HIGH SCHOOL
500 BEECH ST.
HOLYOKE, MA 01040

DRAWING TITLE
PROPOSED ROOF PLAN - PART C

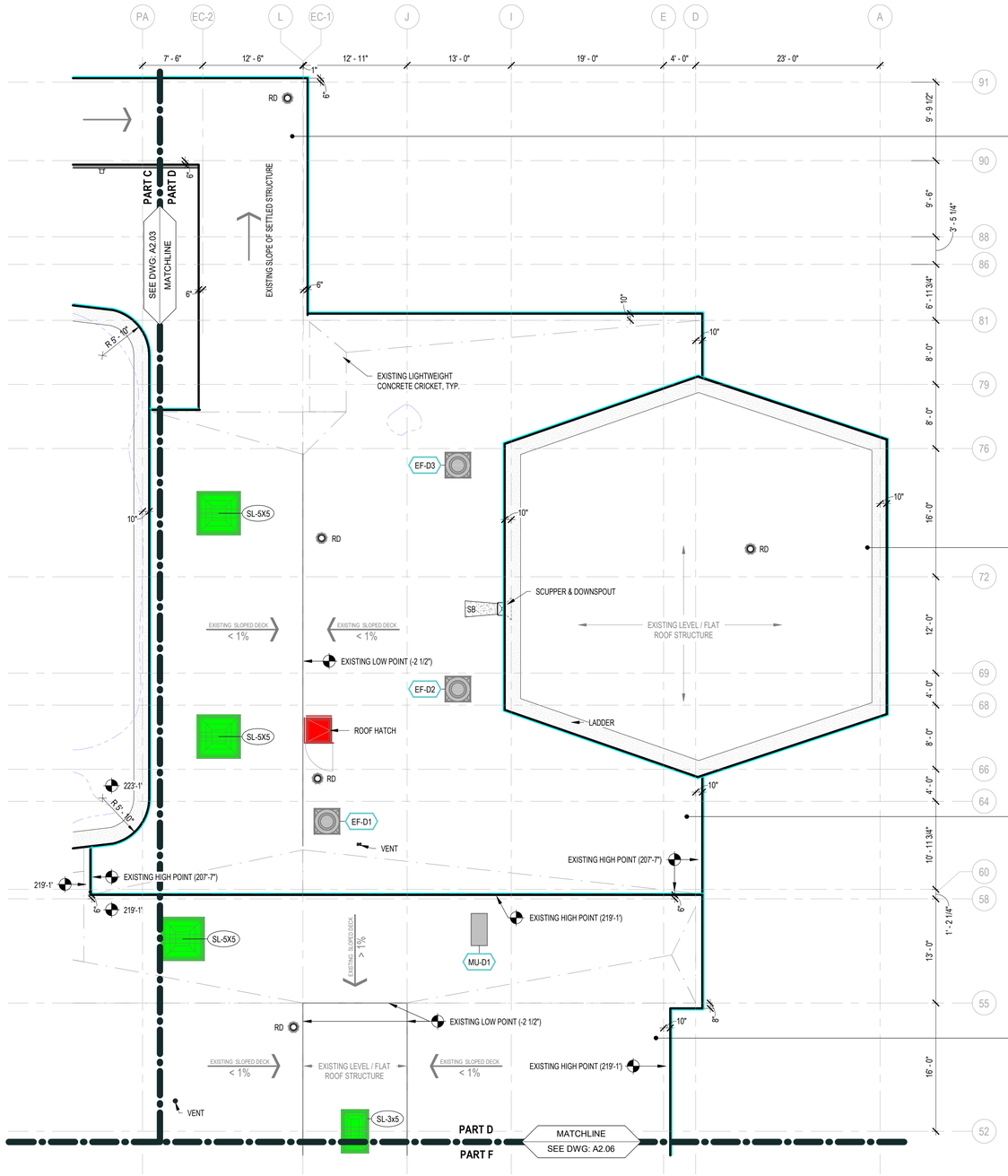
MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main Street, Suite 1110
Springfield MA 01103
413.592.9700 T
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	Author
CHECKED	Checker
DATE	06.02.2025

DRAWING NUMBER
A2.03



1 02.1D - PARTIAL ROOF PLAN - PART D
1/8" = 1'-0"

ENTRY CANOPY ROOF
3,000 SF
207'-7" (APPROX. 12' ABOVE GRADE)

BAND ROOM ROOF
2,100 SF
212'-11" (APPROX. 30' ABOVE GRADE)

NORTHEAST ROOF
3,900 SF
207'-7" (GRADE VARIES - SEE A2.00)

NORTH ROOF
36,100 SF
219'-1" (GRADE VARIES - SEE A2.00)

GENERAL ROOF NOTES

1. REFER TO DRAWING A2.XX AND A2.XX FOR TYPICAL ROOF DETAILS.
2. SEE ROOF DETAILS AND SPECIFICATIONS FOR MORE INFORMATION.
3. VERIFY ALL DIMENSIONS OF EXISTING CONDITIONS IN FIELD, TYPICAL.
4. FALL PROTECTION ANCHORS SHALL BE SPACED NO FURTHER THAN 30'-0" APART O.C. AND SHALL BE ATTACHED TO EXISTING STEEL STRUCTURE. VERIFY LOCATIONS OF EXISTING MEMBERS IN FIELD. REFER TO DETAILS & STRUCTURAL DRAWINGS FOR MORE INFORMATION.
5. FOAM ALL GAPS IN SUBSTRATES, ROOF INSULATION BOARDS, BETWEEN BLOCKING / CURBS / PIPING AND ROOF INSULATION, AND BETWEEN PARAPETS / ROOF EDGE BLOCKING AND ROOF INSULATION. TYPICAL.
6. EXISTING ROOF SUBSTRATES MAY HAVE UNEVEN SURFACES WITH PROTRUSIONS AND/OR DEPRESSIONS UNCOVERED DURING DEMOLITION. REVIEW EXISTING SUBSTRATES UPON EXPOSURE TO VIEW. CUT AND COPE NEW INSULATION AS REQUIRED AT PROTRUSIONS. BUILD-UP NEW INSULATION AS REQUIRED AT DEPRESSIONS. ENSURE POSITIVE DRAINAGE, TYPICAL. REFER TO PLAN FOR LOCATIONS OF EXISTING PONDING.
7. PROVIDE CRICKETS AT EQUIPMENT AND SKYLIGHTS (LOCATED ON SLOPED STRUCTURE OR WITHIN TAPERED INSULATION) ON THE HIGH SIDE OF THE UNIT IF PERPENDICULAR TO TO THE DRAINAGE SLOPE, TYPICAL. DO NOT EXCEED 2" CRICKET HEIGHT. 1/2"-12" TAPERED INSULATION IS TYPICAL. USE 1/4"-12 OR 1/8"-12 INSULATION AS APPLICABLE.

ROOF TYPE — **ROOF TYPE ASSEMBLY**
SEE ROOF SYSTEM ASSEMBLY PROFILES ON A2.XX

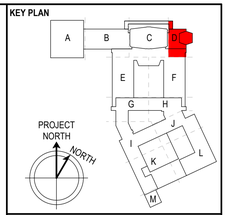
A — **TYPE A - FLAT ROOF**
- *FULLY ADHERED 80 MIL PVC MEMBRANE & ADHERED FLASHING SYSTEM* - (COLOR: REFLECTIVE GRAY).
- 1/2" OVERLAYMENT BOARD (DENSDECK PRIME OR EQUAL), MECHANICALLY FASTENED.
- 3" RIGID INSULATION TOP LAYER LAYER ADHERED / FASTENED PER MFR., AND
  3" RIGID INSULATION BOTTOM LAYER MECHANICALLY FASTENED.
  INCLUDE INSULATION DRAIN SUMPS (REFER TO PLANS & DETAILS); MIN THICKNESS OF 4" AT ROOF DRAIN, U.N.O.
  INCLUDE INSULATION CRICKETS AS SHOWN ON PLANS.
- SELF-ADHERED MOD. BIT. VAPOR RETARDER / TEMPORARY ROOFING.
- EXISTING 1-1/2" CORRUGATED METAL DECK TO REMAIN. REFER TO PLANS FOR EXISTING SLOPES OF STRUCTURE.

B — **TYPE B - PLACEHOLDER**
TBD

ROOF SYMBOL LEGEND

- RD — ROOF DRAIN (RD) / ROOF DRAIN WITH OVERFLOW DRAIN (RD/ORD) & SUMP, SEE DETAILS: - AND - (REFER TO PLANS FOR SIZE AND SLOPE. IF NOT INDICATED, DETAIL IS TYP.)
- A — ROOF TYPE AREA DESIGNATION (SEE ROOF TYPE ASSEMBLY SUMMARY)
- 30" — TAPERED INSULATION CRICKET. REFER TO PLANS FOR LOCATIONS, SIZES, AND SLOPES. IF NOT INDICATED ON PLANS, TYPICAL = 1/2" PER FT SLOPE, 30" . REF. GENERAL NOTES. POOLING / FREESTANDING WATER SHALL NOT BE ACCEPTED (CRICKET SLOPE DIRECTION AND ANGLE, TYP.)
- EXISTING LIGHTWEIGHT CONCRETE CRICKET
- WELDABLE WALKWAYS, 39" WIDE (FROM ROOF ACCESS TO SERVICEABLE SIDE OF ALL ROOF TOP EQUIPMENT, TYPICAL)
- SB — SPLASH BLOCK OVER WELDED WALKING MAT, REFER TO TYPICAL DETAIL: -
- EXISTING VENT PIPING THRU ROOF or EXHAUST FLUES, SEE DETAILS: - - EXTEND ALL VENT PIPING AS REQUIRED.
- SLOPE 1/4" : 12" — DIRECTION OF SLOPE / TAPERED INSULATION
- EXISTING SLOPE
- 30'-0" — ROOF ELEVATIONS ABOVE FIRST FLOOR (NOTED ELEVATIONS ARE APPROXIMATE)
- FA-R — FALL PROTECTION ROOF ANCHOR, SEE: -
- FA-W — FALL PROTECTION WALL ANCHOR, SEE: (NOT APPLICABLE IN PHASE 1)
- FALL PROTECTION SYSTEM CABLE
- ROOF HATCH. SEE DETAIL: AND
- SKYLIGHT
- ROOF LADDER. SEE DETAILS: **A7.01.1**
- ROOF STRUCTURE INFILL LOCATION, SEE DETAIL: -
- BALLASTED COURTYARD GUARDRAIL SYSTEM, SEE DETAIL: -
- EXPANSION JOINT, SEE DETAIL: -
- NEW FASCIA ROOF EDGE METAL
- LOCATION OF PONDING ON PREVIOUS ROOF SYSTEM. REVIEW EXISTING SUBSTRATE. REFER TO GENERAL NOTES.

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
SCHEMATIC DESIGN

PROJECT NUMBER
02025.18

OWNER / PROJECT NAME / LOCATION
CITY OF HOLYOKE
HOLYOKE HIGH SCHOOL
500 BEECH ST.
HOLYOKE, MA 01040

DRAWING TITLE
PROPOSED ROOF PLAN - PART D

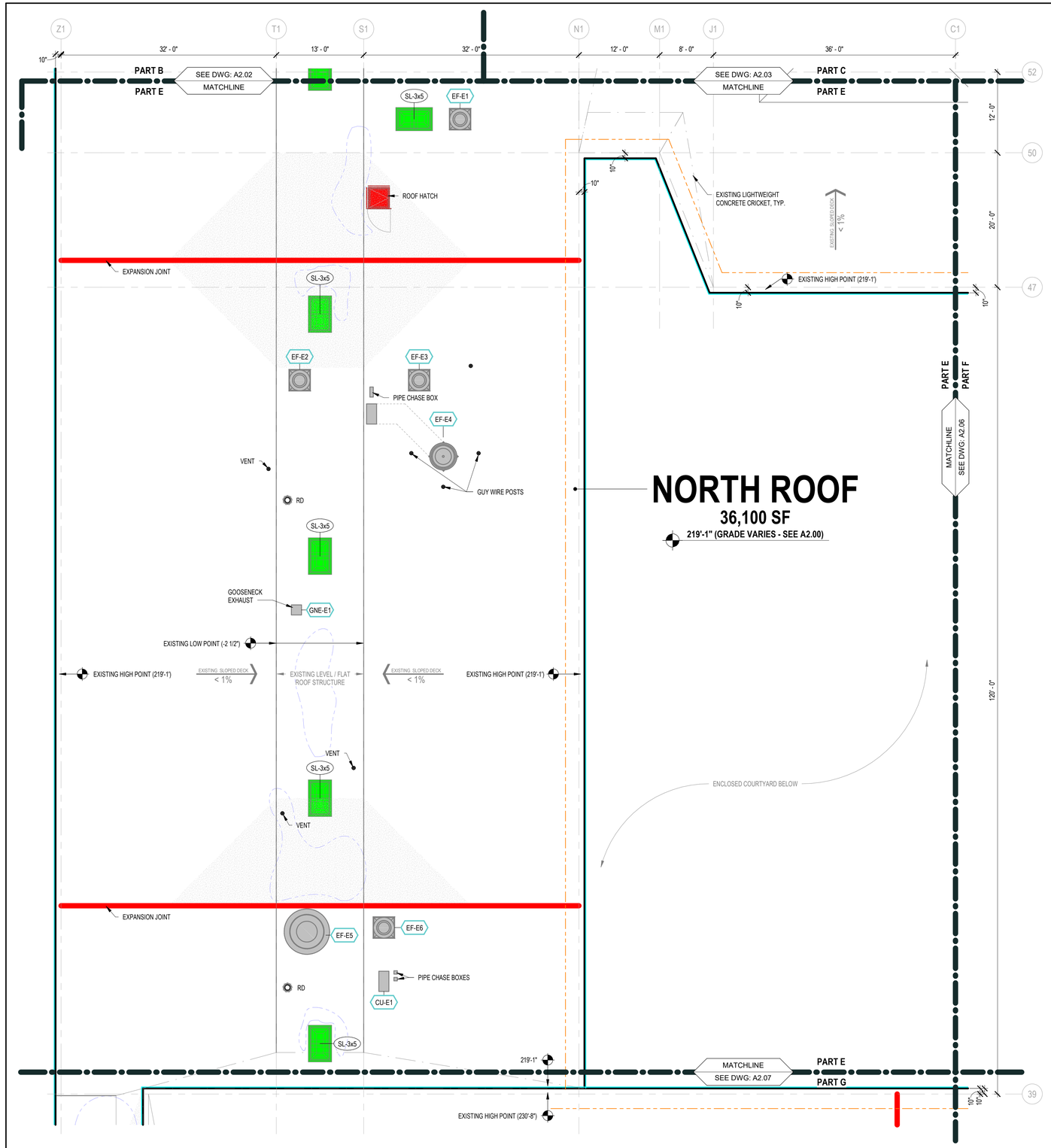
MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main Street, Suite 1110
Springfield MA 01103
413.592.9700 T
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	Author
CHECKED	Checker
DATE	06.02.2025

DRAWING NUMBER
A2.04



1 02.1E - PARTIAL ROOF PLAN - PART E
1/8" = 1'-0"

GENERAL ROOF NOTES

1. REFER TO DRAWING A2.XX AND A2.XX FOR TYPICAL ROOF DETAILS.
2. SEE ROOF DETAILS AND SPECIFICATIONS FOR MORE INFORMATION.
3. VERIFY ALL DIMENSIONS OF EXISTING CONDITIONS IN FIELD, TYPICAL.
4. FALL PROTECTION ANCHORS SHALL BE SPACED NO FURTHER THAN 30'-0" APART O.C. AND SHALL BE ATTACHED TO EXISTING STEEL STRUCTURE. VERIFY LOCATIONS OF EXISTING MEMBERS IN FIELD. REFER TO DETAILS & STRUCTURAL DRAWINGS FOR MORE INFORMATION.
5. FOAM ALL GAPS IN SUBSTRATES, ROOF INSULATION BOARDS, BETWEEN BLOCKING / CURBS / PIPING AND ROOF INSULATION, AND BETWEEN PARAPETS / ROOF EDGE BLOCKING AND ROOF INSULATION. TYPICAL.
6. EXISTING ROOF SUBSTRATES MAY HAVE UNEVEN SURFACES WITH PROTRUSIONS AND/OR DEPRESSIONS UNCOVERED DURING DEMOLITION. REVIEW EXISTING SUBSTRATES UPON EXPOSURE TO VIEW. CUT AND COPE NEW INSULATION AS REQUIRED AT PROTRUSIONS. BUILD-UP NEW INSULATION AS REQUIRED AT DEPRESSIONS. ENSURE POSITIVE DRAINAGE, TYPICAL. REFER TO PLAN FOR LOCATIONS OF EXISTING PONDING.
7. PROVIDE CRICKETS AT EQUIPMENT AND SKYLIGHTS (LOCATED ON SLOPED STRUCTURE OR WITHIN TAPERED INSULATION) ON THE HIGH SIDE OF THE UNIT IF PERPENDICULAR TO TO THE DRAINAGE SLOPE, TYPICAL. DO NOT EXCEED 2' CRICKET HEIGHT. 1/2":12" TAPERED INSULATION IS TYPICAL. USE 1/4":12 OR 1/8":12 INSULATION AS APPLICABLE.

ROOF TYPE — **ROOF TYPE ASSEMBLY**

SEE ROOF SYSTEM ASSEMBLY PROFILES ON A2.XX

A — **TYPE A - FLAT ROOF**

- *FULLY ADHERED 80 MIL PVC MEMBRANE & ADHERED FLASHING SYSTEM* - (COLOR: REFLECTIVE GRAY).
- 1/2" OVERLAYMENT BOARD (DENSDECK PRIME OR EQUAL), MECHANICALLY FASTENED.
- 3" RIGID INSULATION TOP LAYER LAYER ADHERED / FASTENED PER MFR., AND
  3" RIGID INSULATION BOTTOM LAYER MECHANICALLY FASTENED.
  INCLUDE INSULATION DRAIN SUMPS (REFER TO PLANS & DETAILS); MIN THICKNESS OF 4" AT ROOF DRAIN, U.N.O.
  INCLUDE INSULATION CRICKETS AS SHOWN ON PLANS.
- SELF-ADHERED MOD. BIT. VAPOR RETARDER / TEMPORARY ROOFING.
- EXISTING 1-1/2" CORRUGATED METAL DECK TO REMAIN. REFER TO PLANS FOR EXISTING SLOPES OF STRUCTURE.

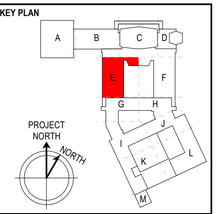
B — **TYPE B - PLACEHOLDER**

TBD

ROOF SYMBOL LEGEND

- RD — ROOF DRAIN (RD) / ROOF DRAIN WITH OVERFLOW DRAIN (RD/ORD) & SUMP, SEE DETAILS: - AND - --- (REFER TO PLANS FOR SIZE AND SLOPE. IF NOT INDICATED, DETAIL IS TYP.)
- A — ROOF TYPE AREA DESIGNATION (SEE ROOF TYPE ASSEMBLY SUMMARY)
- 30° — TAPERED INSULATION CRICKET. REFER TO PLANS FOR LOCATIONS, SIZES, AND SLOPES. IF NOT INDICATED ON PLANS, TYPICAL = 1/2" PER FT SLOPE, 30°. REF. GENERAL NOTES. POOLING / FREESTANDING WATER SHALL NOT BE ACCEPTED (CRICKET SLOPE DIRECTION AND ANGLE, TYP.)
- EXISTING LIGHTWEIGHT CONCRETE CRICKET
- WELDABLE WALKWAYS, 39" WIDE (FROM ROOF ACCESS TO SERVICEABLE SIDE OF ALL ROOF TOP EQUIPMENT, TYPICAL)
- SB — SPLASH BLOCK OVER WELDED WALKING MAT, REFER TO TYPICAL DETAIL: - ---
- EXISTING VENT PIPING THRU ROOF or EXHAUST FLUES, SEE DETAILS: - --- - --- EXTEND ALL VENT PIPING AS REQUIRED.
- SLOPE 1/4" - 12" — DIRECTION OF SLOPE / TAPERED INSULATION
- EXISTING SLOPE
- 30'-0" — ROOF ELEVATIONS ABOVE FIRST FLOOR (NOTED ELEVATIONS ARE APPROXIMATE)
- FA-R — FALL PROTECTION ROOF ANCHOR, SEE: - ---
- FA-W — FALL PROTECTION WALL ANCHOR, SEE: (NOT APPLICABLE IN PHASE 1)
- FALL PROTECTION SYSTEM CABLE
- ROOF HATCH. SEE DETAIL: AND
- SKYLIGHT
- ROOF LADDER. SEE DETAILS: **A7.01.1**
- ROOF STRUCTURE INFILL LOCATION, SEE DETAIL: - ---
- BALLASTED COURTYARD GUARDRAIL SYSTEM, SEE DETAIL: - ---
- EXPANSION JOINT, SEE DETAIL: - ---
- NEW FASCIA ROOF EDGE METAL
- LOCATION OF PONDING ON PREVIOUS ROOF SYSTEM. REVIEW EXISTING SUBSTRATE. REFER TO GENERAL NOTES.

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02025.18

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

HOLYOKE HIGH SCHOOL

500 BEECH ST.
HOLYOKE, MA 01040

DRAWING TITLE

PROPOSED ROOF PLAN - PART E

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main Street, Suite 1110
Springfield MA 01103
413.592.9700 T
info@mvgarchitects.com E

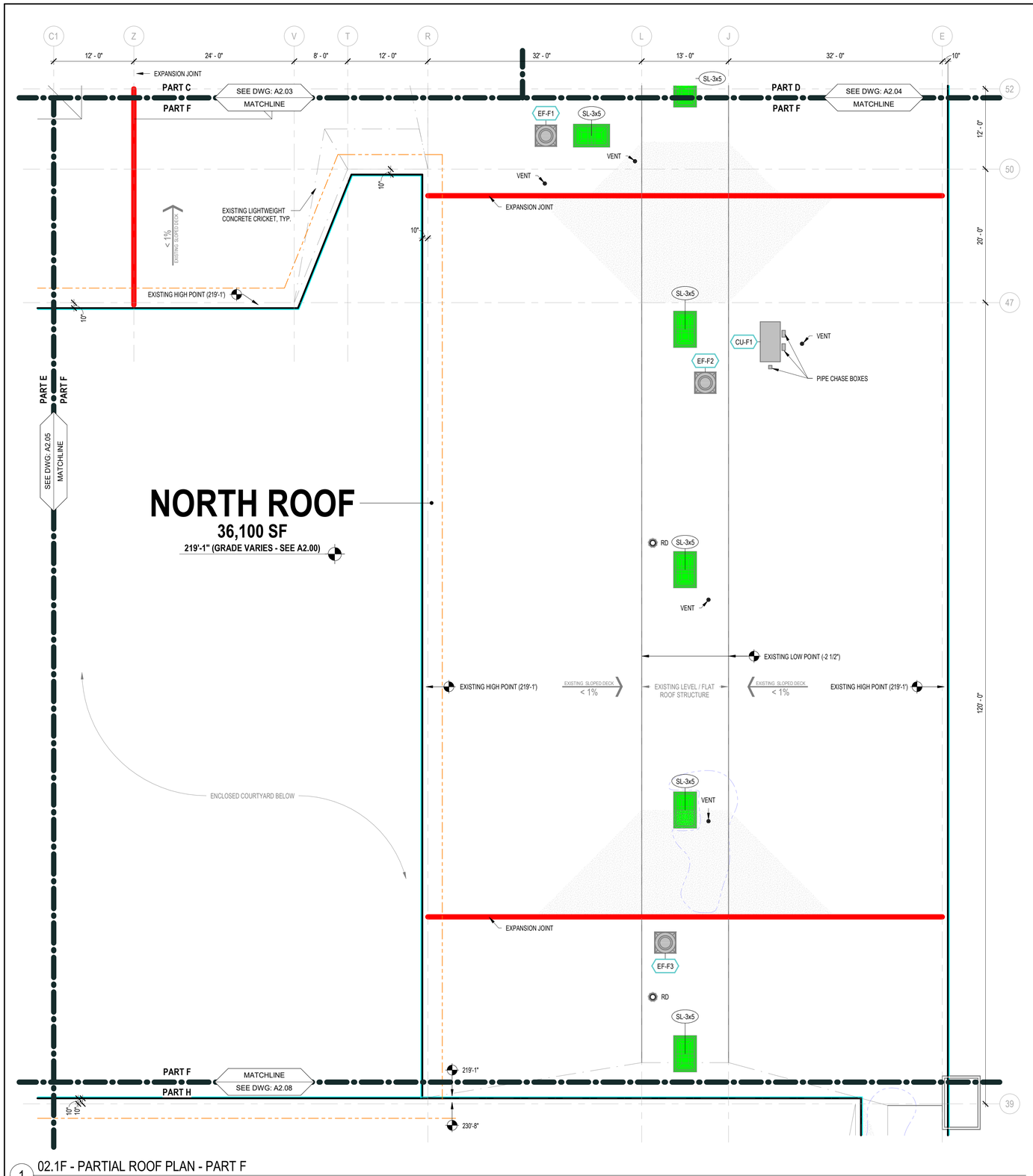
STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	Author
CHECKED	Checker
DATE	06.02.2025

DRAWING NUMBER

A2.05



1 02.1F - PARTIAL ROOF PLAN - PART F
1/8" = 1'-0"

GENERAL ROOF NOTES

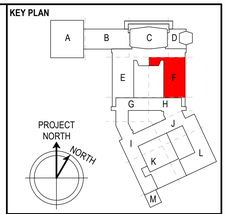
1. REFER TO DRAWING A2.XX AND A2.XX FOR TYPICAL ROOF DETAILS.
2. SEE ROOF DETAILS AND SPECIFICATIONS FOR MORE INFORMATION.
3. VERIFY ALL DIMENSIONS OF EXISTING CONDITIONS IN FIELD, TYPICAL.
4. FALL PROTECTION ANCHORS SHALL BE SPACED NO FURTHER THAN 30'-0" APART O.C. AND SHALL BE ATTACHED TO EXISTING STEEL STRUCTURE. VERIFY LOCATIONS OF EXISTING MEMBERS IN FIELD. REFER TO DETAILS & STRUCTURAL DRAWINGS FOR MORE INFORMATION.
5. FOAM ALL GAPS IN SUBSTRATES, ROOF INSULATION BOARDS, BETWEEN BLOCKING / CURBS / PIPING AND ROOF INSULATION, AND BETWEEN PARAPETS / ROOF EDGE BLOCKING AND ROOF INSULATION. TYPICAL.
6. EXISTING ROOF SUBSTRATES MAY HAVE UNEVEN SURFACES WITH PROTRUSIONS AND/OR DEPRESSIONS UNCOVERED DURING DEMOLITION. REVIEW EXISTING SUBSTRATES UPON EXPOSURE TO VIEW. CUT AND COPE NEW INSULATION AS REQUIRED AT PROTRUSIONS. BUILD-UP NEW INSULATION AS REQUIRED AT DEPRESSIONS. ENSURE POSITIVE DRAINAGE, TYPICAL. REFER TO PLAN FOR LOCATIONS OF EXISTING PONDING.
7. PROVIDE CRICKETS AT EQUIPMENT AND SKYLIGHTS (LOCATED ON SLOPED STRUCTURE OR WITHIN TAPERED INSULATION) ON THE HIGH SIDE OF THE UNIT IF PERPENDICULAR TO TO THE DRAINAGE SLOPE, TYPICAL. DO NOT EXCEED 2" CRICKET HEIGHT. 1/2"-12" TAPERED INSULATION IS TYPICAL. USE 1/4"-12 OR 1/8"-12 INSULATION AS APPLICABLE.

ROOF TYPE	ROOF TYPE ASSEMBLY
	SEE ROOF SYSTEM ASSEMBLY PROFILES ON A2.XX
A	**TYPE A - FLAT ROOF**
	• *FULLY ADHERED 80 MIL PVC MEMBRANE & ADHERED FLASHING SYSTEM* - (COLOR: REFLECTIVE GRAY).
	• 1/2" OVERLAYMENT BOARD (DENSDECK PRIME OR EQUAL), MECHANICALLY FASTENED.
	• 3" RIGID INSULATION TOP LAYER LAYER ADHERED / FASTENED PER MFR., AND 3" RIGID INSULATION BOTTOM LAYER MECHANICALLY FASTENED. INCLUDE INSULATION DRAIN SUMPS (REFER TO PLANS & DETAILS); MIN THICKNESS OF 4" AT ROOF DRAIN, U.N.O. INCLUDE INSULATION CRICKETS AS SHOWN ON PLANS.
	• SELF-ADHERED MOD. BIT. VAPOR RETARDER / TEMPORARY ROOFING.
	• EXISTING 1-1/2" CORRUGATED METAL DECK TO REMAIN. REFER TO PLANS FOR EXISTING SLOPES OF STRUCTURE.
B	**TYPE B - PLACEHOLDER**
	TBD

ROOF SYMBOL LEGEND

- RD — ROOF DRAIN (RD) / ROOF DRAIN WITH OVERFLOW DRAIN (RD/ORD) & SUMP, SEE DETAILS: AND (REFER TO PLANS FOR SIZE AND SLOPE. IF NOT INDICATED, DETAIL IS TYP.)
- A — ROOF TYPE AREA DESIGNATION (SEE ROOF TYPE ASSEMBLY SUMMARY)
- 30" — TAPERED INSULATION CRICKET. REFER TO PLANS FOR LOCATIONS, SIZES, AND SLOPES. IF NOT INDICATED ON PLANS, TYPICAL = 1/2" PER FT SLOPE, 30°. REF. GENERAL NOTES. POOLING / FREESTANDING WATER SHALL NOT BE ACCEPTED (CRICKET SLOPE DIRECTION AND ANGLE, TYP.)
- EXISTING LIGHTWEIGHT CONCRETE CRICKET
- WELDABLE WALKWAYS, 36" WIDE (FROM ROOF ACCESS TO SERVICEABLE SIDE OF ALL ROOF TOP EQUIPMENT, TYPICAL)
- SB — SPLASH BLOCK OVER WELDED WALKING MAT, REFER TO TYPICAL DETAIL:
- EXISTING VENT PIPING THRU ROOF or EXHAUST FLUES, SEE DETAILS: EXTEND ALL VENT PIPING AS REQUIRED.
- SLOPE 1/4" : 12" — DIRECTION OF SLOPE / TAPERED INSULATION
- EXISTING SLOPE
- 30'-0" — ROOF ELEVATIONS ABOVE FIRST FLOOR (NOTED ELEVATIONS ARE APPROXIMATE)
- FA-R — FALL PROTECTION ROOF ANCHOR, SEE:
- FA-W — FALL PROTECTION WALL ANCHOR, SEE: (NOT APPLICABLE IN PHASE 1)
- FALL PROTECTION SYSTEM CABLE
- ROOF HATCH. SEE DETAIL: AND
- SKYLIGHT
- ROOF LADDER. SEE DETAILS: **A7.01.1**
- ROOF STRUCTURE INFILL LOCATION, SEE DETAIL:
- BALLASTED COURTYARD GUARDRAIL SYSTEM, SEE DETAIL:
- EXPANSION JOINT, SEE DETAIL:
- NEW FASCIA ROOF EDGE METAL
- LOCATION OF PONDING ON PREVIOUS ROOF SYSTEM. REVIEW EXISTING SUBSTRATE. REFER TO GENERAL NOTES.

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02025.18

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

HOLYOKE HIGH SCHOOL

500 BEECH ST.
HOLYOKE, MA 01040

DRAWING TITLE

PROPOSED ROOF PLAN - PART F

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main Street, Suite 1110
Springfield MA 01103
413.592.9700 T
info@mvgarchitects.com E

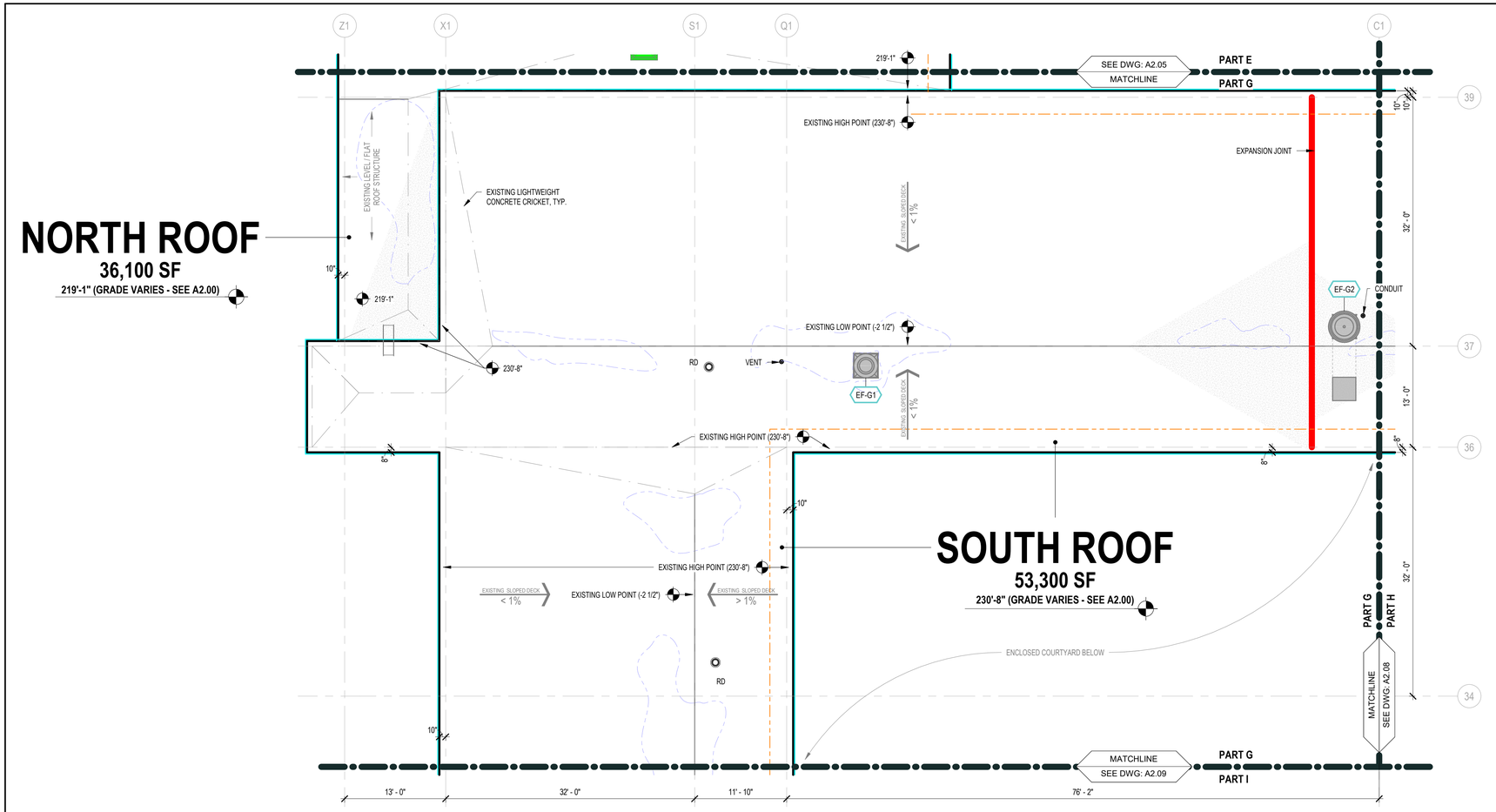
STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	Author
CHECKED	Checker
DATE	06.02.2025

DRAWING NUMBER

A2.06



1 02.1G - PARTIAL ROOF PLAN - PART G
1/8" = 1'-0"

GENERAL ROOF NOTES

1. REFER TO DRAWING A2.XX AND A2.XX FOR TYPICAL ROOF DETAILS.
2. SEE ROOF DETAILS AND SPECIFICATIONS FOR MORE INFORMATION.
3. VERIFY ALL DIMENSIONS OF EXISTING CONDITIONS IN FIELD, TYPICAL.
4. FALL PROTECTION ANCHORS SHALL BE SPACED NO FURTHER THAN 30'-0" APART O.C. AND SHALL BE ATTACHED TO EXISTING STEEL STRUCTURE. VERIFY LOCATIONS OF EXISTING MEMBERS IN FIELD. REFER TO DETAILS & STRUCTURAL DRAWINGS FOR MORE INFORMATION.
5. FOAM ALL GAPS IN SUBSTRATES, ROOF INSULATION BOARDS, BETWEEN BLOCKING / CURBS / PIPING AND ROOF INSULATION, AND BETWEEN PARAPETS / ROOF EDGE BLOCKING AND ROOF INSULATION. TYPICAL.
6. EXISTING ROOF SUBSTRATES MAY HAVE UNEVEN SURFACES WITH PROTRUSIONS AND/OR DEPRESSIONS UNCOVERED DURING DEMOLITION. REVIEW EXISTING SUBSTRATES UPON EXPOSURE TO VIEW. CUT AND COPE NEW INSULATION AS REQUIRED AT PROTRUSIONS. BUILD-UP NEW INSULATION AS REQUIRED AT DEPRESSIONS. ENSURE POSITIVE DRAINAGE, TYPICAL. REFER TO PLAN FOR LOCATIONS OF EXISTING PONDING.
7. PROVIDE CRICKETS AT EQUIPMENT AND SKYLIGHTS (LOCATED ON SLOPED STRUCTURE OR WITHIN TAPERED INSULATION) ON THE HIGH SIDE OF THE UNIT IF PERPENDICULAR TO TO THE DRAINAGE SLOPE, TYPICAL. DO NOT EXCEED 2" CRICKET HEIGHT. 1/2":12" TAPERED INSULATION IS TYPICAL. USE 1/4":12 OR 1/8":12 INSULATION AS APPLICABLE.

ROOF TYPE — **ROOF TYPE ASSEMBLY**

SEE ROOF SYSTEM ASSEMBLY PROFILES ON A2.XX

A — **TYPE A - FLAT ROOF**

- *FULLY ADHERED 80 MIL PVC MEMBRANE & ADHERED FLASHING SYSTEM* - (COLOR: REFLECTIVE GRAY).
- 1/2" OVERLAYMENT BOARD (DENSDECK PRIME OR EQUAL), MECHANICALLY FASTENED.
- 3" RIGID INSULATION TOP LAYER LAYER ADHERED / FASTENED PER MFR., AND
  3" RIGID INSULATION BOTTOM LAYER MECHANICALLY FASTENED.
  INCLUDE INSULATION DRAIN SUMPS (REFER TO PLANS & DETAILS); MIN THICKNESS OF 4" AT ROOF DRAIN, U.N.O.
  INCLUDE INSULATION CRICKETS AS SHOWN ON PLANS.
- SELF-ADHERED MOD. BIT. VAPOR RETARDER / TEMPORARY ROOFING.
- EXISTING 1-1/2" CORRUGATED METAL DECK TO REMAIN. REFER TO PLANS FOR EXISTING SLOPES OF STRUCTURE.

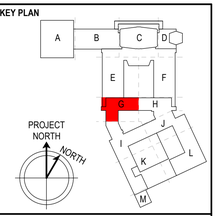
B — **TYPE B - PLACEHOLDER**

TBD

ROOF SYMBOL LEGEND

- RD — ROOF DRAIN (RD) / ROOF DRAIN WITH OVERFLOW DRAIN (RD/ORD) & SUMP, SEE DETAILS: AND (REFER TO PLANS FOR SIZE AND SLOPE. IF NOT INDICATED, DETAIL IS TYP.)
- A — ROOF TYPE AREA DESIGNATION (SEE ROOF TYPE ASSEMBLY SUMMARY)
- 30" — TAPERED INSULATION CRICKET. REFER TO PLANS FOR LOCATIONS, SIZES, AND SLOPES. IF NOT INDICATED ON PLANS, TYPICAL = 1/2" PER FT SLOPE, 30° . REF. GENERAL NOTES. POOLING / FREESTANDING WATER SHALL NOT BE ACCEPTED (CRICKET SLOPE DIRECTION AND ANGLE, TYP.)
- EXISTING LIGHTWEIGHT CONCRETE CRICKET
- WELDABLE WALKWAYS, 36" WIDE (FROM ROOF ACCESS TO SERVICEABLE SIDE OF ALL ROOF TOP EQUIPMENT, TYPICAL)
- SB — SPLASH BLOCK OVER WELDED WALKING MAT, REFER TO TYPICAL DETAIL:
- EXISTING VENT PIPING THRU ROOF or EXHAUST FLUES, SEE DETAILS: EXTEND ALL VENT PIPING AS REQUIRED.
- SLOPE 1/4" : 12" — DIRECTION OF SLOPE / TAPERED INSULATION
- EXISTING SLOPE
- 30'-0" — ROOF ELEVATIONS ABOVE FIRST FLOOR (NOTED ELEVATIONS ARE APPROXIMATE)
- FA-R — FALL PROTECTION ROOF ANCHOR, SEE:
- FA-W — FALL PROTECTION WALL ANCHOR, SEE: (NOT APPLICABLE IN PHASE 1)
- FALL PROTECTION SYSTEM CABLE
- ROOF HATCH. SEE DETAIL: AND
- SKYLIGHT
- ROOF LADDER. SEE DETAILS: **A7.01.1**
- ROOF STRUCTURE INFILL LOCATION, SEE DETAIL:
- BALLASTED COURTYARD GUARDRAIL SYSTEM, SEE DETAIL:
- EXPANSION JOINT, SEE DETAIL:
- NEW FASCIA ROOF EDGE METAL
- LOCATION OF PONDING ON PREVIOUS ROOF SYSTEM. REVIEW EXISTING SUBSTRATE. REFER TO GENERAL NOTES.

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02025.18

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

HOLYOKE HIGH SCHOOL

500 BEECH ST.
HOLYOKE, MA 01040

DRAWING TITLE

PROPOSED ROOF PLAN - PART G

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main Street, Suite 1110
Springfield MA 01103
413.592.9700 T
info@mvgarchitects.com E

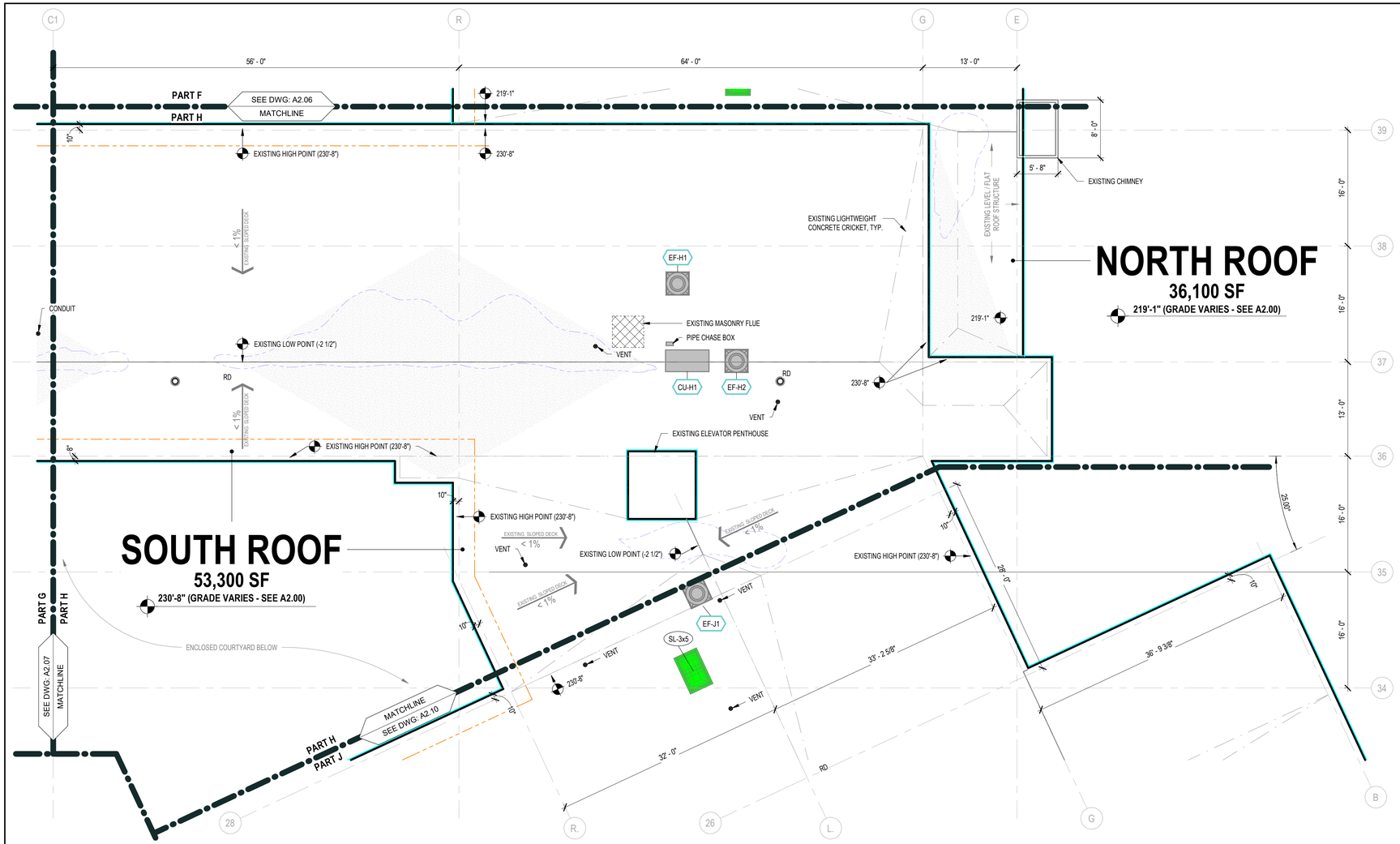
STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	Author
CHECKED	Checker
DATE	06.02.2025

DRAWING NUMBER

A2.07



1 02.1H - PARTIAL ROOF PLAN - PART H
1/8" = 1'-0"

GENERAL ROOF NOTES

1. REFER TO DRAWING A2.XX AND A2.XX FOR TYPICAL ROOF DETAILS.
2. SEE ROOF DETAILS AND SPECIFICATIONS FOR MORE INFORMATION.
3. VERIFY ALL DIMENSIONS OF EXISTING CONDITIONS IN FIELD, TYPICAL.
4. FALL PROTECTION ANCHORS SHALL BE SPACED NO FURTHER THAN 30'-0" APART O.C. AND SHALL BE ATTACHED TO EXISTING STEEL STRUCTURE. VERIFY LOCATIONS OF EXISTING MEMBERS IN FIELD. REFER TO DETAILS & STRUCTURAL DRAWINGS FOR MORE INFORMATION.
5. FOAM ALL GAPS IN SUBSTRATES, ROOF INSULATION BOARDS, BETWEEN BLOCKING / CURBS / PIPING AND ROOF INSULATION, AND BETWEEN PARAPETS / ROOF EDGE BLOCKING AND ROOF INSULATION. TYPICAL.
6. EXISTING ROOF SUBSTRATES MAY HAVE UNEVEN SURFACES WITH PROTRUSIONS AND/OR DEPRESSIONS UNCOVERED DURING DEMOLITION. REVIEW EXISTING SUBSTRATES UPON EXPOSURE TO VIEW. CUT AND COPE NEW INSULATION AS REQUIRED AT PROTRUSIONS. BUILD-UP NEW INSULATION AS REQUIRED AT DEPRESSIONS. ENSURE POSITIVE DRAINAGE, TYPICAL. REFER TO PLAN FOR LOCATIONS OF EXISTING PONDING.
7. PROVIDE CRICKETS AT EQUIPMENT AND SKYLIGHTS (LOCATED ON SLOPED STRUCTURE OR WITHIN TAPERED INSULATION) ON THE HIGH SIDE OF THE UNIT IF PERPENDICULAR TO TO THE DRAINAGE SLOPE, TYPICAL. DO NOT EXCEED 2" CRICKET HEIGHT. 1/2":12" TAPERED INSULATION IS TYPICAL. USE 1/4":12 OR 1/8":12 INSULATION AS APPLICABLE.

ROOF TYPE — **ROOF TYPE ASSEMBLY**

SEE ROOF SYSTEM ASSEMBLY PROFILES ON A2.XX

A — **TYPE A - FLAT ROOF**

- *FULLY ADHERED 80 MIL PVC MEMBRANE & ADHERED FLASHING SYSTEM* - (COLOR: REFLECTIVE GRAY).
- 1/2" OVERLAYMENT BOARD (DENSDECK PRIME OR EQUAL), MECHANICALLY FASTENED.
- 3" RIGID INSULATION TOP LAYER LAYER ADHERED / FASTENED PER MFR., AND 3" RIGID INSULATION BOTTOM LAYER MECHANICALLY FASTENED. INCLUDE INSULATION DRAIN SUMPS (REFER TO PLANS & DETAILS); MIN THICKNESS OF 4" AT ROOF DRAIN, U.N.O. INCLUDE INSULATION CRICKETS AS SHOWN ON PLANS.
- SELF-ADHERED MOD. BIT. VAPOR RETARDER / TEMPORARY ROOFING.
- EXISTING 1-1/2" CORRUGATED METAL DECK TO REMAIN. REFER TO PLANS FOR EXISTING SLOPES OF STRUCTURE.

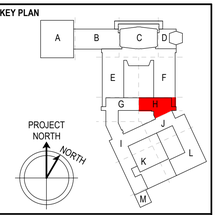
B — **TYPE B - PLACEHOLDER**

TBD

ROOF SYMBOL LEGEND

- RD — ROOF DRAIN (RD) / ROOF DRAIN WITH OVERFLOW DRAIN (RD/ORD) & SUMP, SEE DETAILS: AND (REFER TO PLANS FOR SIZE AND SLOPE. IF NOT INDICATED, DETAIL IS TYP.)
- A — ROOF TYPE AREA DESIGNATION (SEE ROOF TYPE ASSEMBLY SUMMARY)
- TAPERED INSULATION CRICKET. REFER TO PLANS FOR LOCATIONS, SIZES, AND SLOPES. IF NOT INDICATED ON PLANS, TYPICAL = 1/2" PER FT SLOPE, 30°. REF. GENERAL NOTES. POOLING / FREESTANDING WATER SHALL NOT BE ACCEPTED (CRICKET SLOPE DIRECTION AND ANGLE, TYP.)
- EXISTING LIGHTWEIGHT CONCRETE CRICKET
- WELDABLE WALKWAYS, 39" WIDE (FROM ROOF ACCESS TO SERVICEABLE SIDE OF ALL ROOF TOP EQUIPMENT, TYPICAL)
- SB — SPLASH BLOCK OVER WELDED WALKING MAT, REFER TO TYPICAL DETAIL:
- EXISTING VENT PIPING THRU ROOF or EXHAUST FLUES, SEE DETAILS: EXTEND ALL VENT PIPING AS REQUIRED.
- SLOPE 1/4" : 12" — DIRECTION OF SLOPE / TAPERED INSULATION
- EXISTING SLOPE
- 30'-0" — ROOF ELEVATIONS ABOVE FIRST FLOOR (NOTED ELEVATIONS ARE APPROXIMATE)
- FA-R — FALL PROTECTION ROOF ANCHOR, SEE:
- FA-W — FALL PROTECTION WALL ANCHOR, SEE: (NOT APPLICABLE IN PHASE 1)
- FALL PROTECTION SYSTEM CABLE
- ROOF HATCH. SEE DETAIL: AND
- SKYLIGHT
- ROOF LADDER. SEE DETAILS: **A7.01.1**
- ROOF STRUCTURE INFILL LOCATION, SEE DETAIL:
- BALLASTED COURTYARD GUARDRAIL SYSTEM, SEE DETAIL:
- EXPANSION JOINT, SEE DETAIL:
- NEW FASCIA ROOF EDGE METAL
- LOCATION OF PONDING ON PREVIOUS ROOF SYSTEM. REVIEW EXISTING SUBSTRATE. REFER TO GENERAL NOTES.

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02025.18

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

HOLYOKE HIGH SCHOOL

500 BEECH ST.
HOLYOKE, MA 01040

DRAWING TITLE

PROPOSED ROOF PLAN - PART H

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main Street, Suite 1110
Springfield MA 01103
413.592.9700 T
info@mvgarchitects.com E

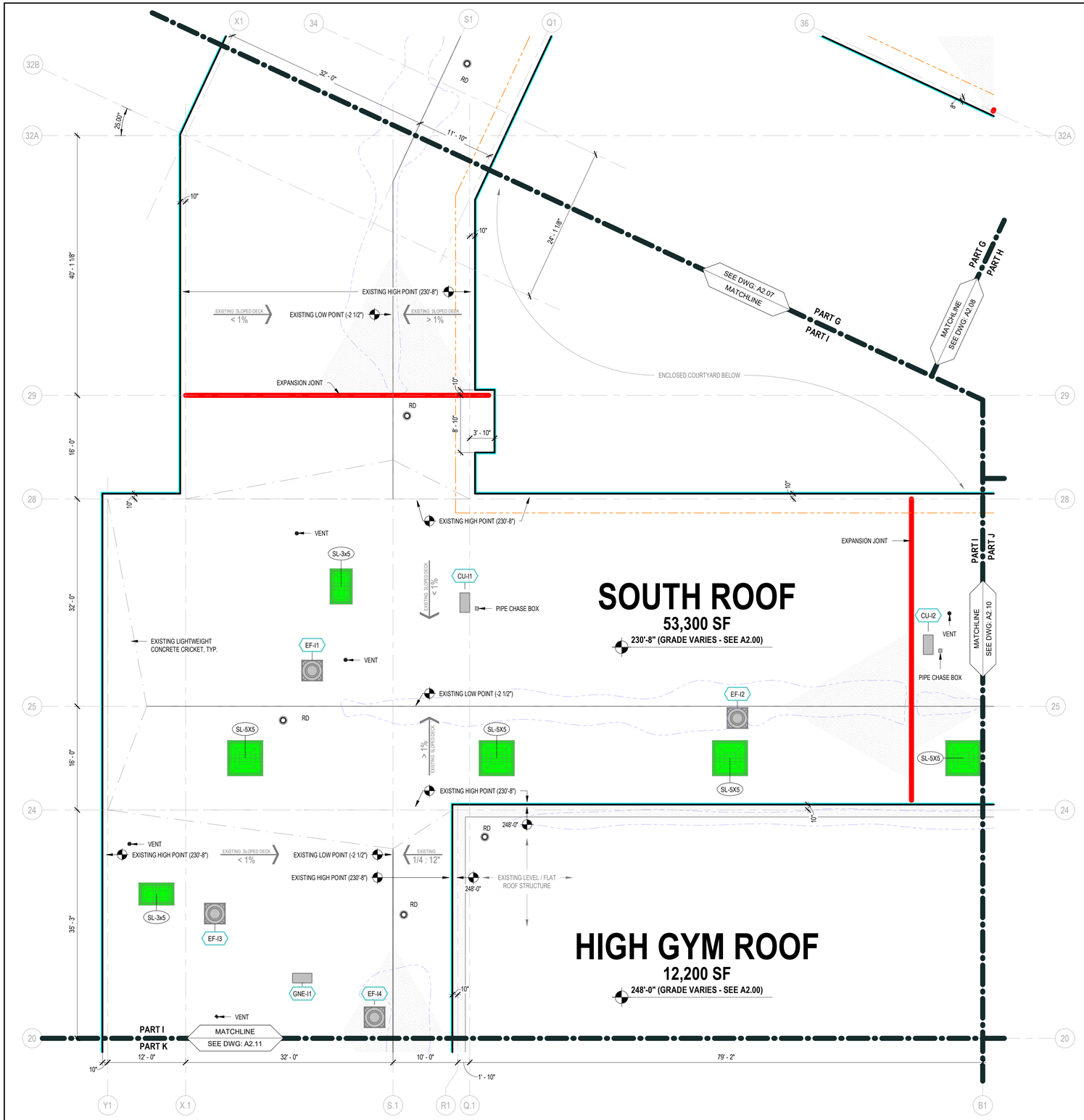
STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	Author
CHECKED	Checker
DATE	06.02.2025

DRAWING NUMBER

A2.08



1 02.1I - PARTIAL ROOF PLAN - PART I
1/8" = 1'-0"

GENERAL ROOF NOTES

1. REFER TO DRAWING A2.XX AND A2.XX FOR TYPICAL ROOF DETAILS.
2. SEE ROOF DETAILS AND SPECIFICATIONS FOR MORE INFORMATION.
3. VERIFY ALL DIMENSIONS OF EXISTING CONDITIONS IN FIELD, TYPICAL.
4. FALL PROTECTION ANCHORS SHALL BE SPACED NO FURTHER THAN 30'-0" APART O.C. AND SHALL BE ATTACHED TO EXISTING STEEL STRUCTURE. VERIFY LOCATIONS OF EXISTING MEMBERS IN FIELD. REFER TO DETAILS & STRUCTURAL DRAWINGS FOR MORE INFORMATION.
5. FOAM ALL GAPS IN SUBSTRATES, ROOF INSULATION BOARDS, BETWEEN BLOCKING / CURBS / PIPING AND ROOF INSULATION, AND BETWEEN PARAPETS / ROOF EDGE BLOCKING AND ROOF INSULATION. TYPICAL.
6. EXISTING ROOF SUBSTRATES MAY HAVE UNEVEN SURFACES WITH PROTRUSIONS AND/OR DEPRESSIONS UNCOVERED DURING DEMOLITION. REVIEW EXISTING SUBSTRATES UPON EXPOSURE TO VIEW. CUT AND COPE NEW INSULATION AS REQUIRED AT PROTRUSIONS. BUILD-UP NEW INSULATION AS REQUIRED AT DEPRESSIONS. ENSURE POSITIVE DRAINAGE, TYPICAL. REFER TO PLAN FOR LOCATIONS OF EXISTING PONDING.
7. PROVIDE CRICKETS AT EQUIPMENT AND SKYLIGHTS (LOCATED ON SLOPED STRUCTURE OR WITHIN TAPERED INSULATION) ON THE HIGH SIDE OF THE UNIT IF PERPENDICULAR TO TO THE DRAINAGE SLOPE, TYPICAL. DO NOT EXCEED 2' CRICKET HEIGHT. 1/2":12" TAPERED INSULATION IS TYPICAL. USE 1/4":12 OR 1/8":12 INSULATION AS APPLICABLE.

ROOF TYPE

ROOF TYPE ASSEMBLY

SEE ROOF SYSTEM ASSEMBLY PROFILES ON A2.XX

A

TYPE A - FLAT ROOF

- *FULLY ADHERED 80 MIL PVC MEMBRANE & ADHERED FLASHING SYSTEM* - (COLOR: REFLECTIVE GRAY).
- 1/2" OVERLAYMENT BOARD (DENSDECK PRIME OR EQUAL), MECHANICALLY FASTENED.
- 3" RIGID INSULATION TOP LAYER LAYER ADHERED / FASTENED PER MFR., AND 3" RIGID INSULATION BOTTOM LAYER MECHANICALLY FASTENED. INCLUDE INSULATION DRAIN SUMPS (REFER TO PLANS & DETAILS); MIN THICKNESS OF 4" AT ROOF DRAIN, U.N.O. INCLUDE INSULATION CRICKETS AS SHOWN ON PLANS.
- SELF-ADHERED MOD. BIT. VAPOR RETARDER / TEMPORARY ROOFING.
- EXISTING 1-1/2" CORRUGATED METAL DECK TO REMAIN. REFER TO PLANS FOR EXISTING SLOPES OF STRUCTURE.

B

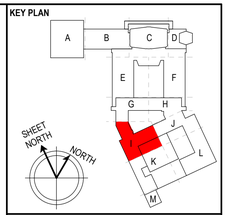
TYPE B - PLACEHOLDER

TBD

ROOF SYMBOL LEGEND

- RD — ROOF DRAIN (RD) / ROOF DRAIN WITH OVERFLOW DRAIN (RD/ORD) & SUMP, SEE DETAILS: AND (REFER TO PLANS FOR SIZE AND SLOPE. IF NOT INDICATED, DETAIL IS TYP.)
- A — ROOF TYPE AREA DESIGNATION (SEE ROOF TYPE ASSEMBLY SUMMARY)
- 30" — TAPERED INSULATION CRICKET. REFER TO PLANS FOR LOCATIONS, SIZES, AND SLOPES. IF NOT INDICATED ON PLANS, TYPICAL = 1/2" PER FT SLOPE, 30" : REF. GENERAL NOTES. POOLING / FREESTANDING WATER SHALL NOT BE ACCEPTED (CRICKET SLOPE DIRECTION AND ANGLE, TYP.)
- EXISTING LIGHTWEIGHT CONCRETE CRICKET
- WELDABLE WALKWAYS, 39" WIDE (FROM ROOF ACCESS TO SERVICEABLE SIDE OF ALL ROOF TOP EQUIPMENT, TYPICAL)
- SB — SPLASH BLOCK OVER WELDED WALKING MAT, REFER TO TYPICAL DETAIL:
- EXISTING VENT PIPING THRU ROOF or EXHAUST FLUES, SEE DETAILS: EXTEND ALL VENT PIPING AS REQUIRED.
- SLOPE 1/4" : 12" — DIRECTION OF SLOPE / TAPERED INSULATION
- EXISTING SLOPE
- 30'-0" — ROOF ELEVATIONS ABOVE FIRST FLOOR (NOTED ELEVATIONS ARE APPROXIMATE)
- FA-R — FALL PROTECTION ROOF ANCHOR, SEE:
- FA-W — FALL PROTECTION WALL ANCHOR, SEE: (NOT APPLICABLE IN PHASE 1)
- FALL PROTECTION SYSTEM CABLE
- ROOF HATCH. SEE DETAIL: AND
- SKYLIGHT
- ROOF LADDER. SEE DETAILS: **A7.01.1**
- ROOF STRUCTURE INFILL LOCATION, SEE DETAIL:
- BALLASTED COURTYARD GUARDRAIL SYSTEM, SEE DETAIL:
- EXPANSION JOINT, SEE DETAIL:
- NEW FASCIA ROOF EDGE METAL
- LOCATION OF PONDING ON PREVIOUS ROOF SYSTEM. REVIEW EXISTING SUBSTRATE. REFER TO GENERAL NOTES.

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02025.18

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

HOLYOKE HIGH SCHOOL

500 BEECH ST.
HOLYOKE, MA 01040

DRAWING TITLE

PROPOSED ROOF PLAN - PART I

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main Street, Suite 1110
Springfield MA 01103
413.592.9700 T
info@mvgarchitects.com E

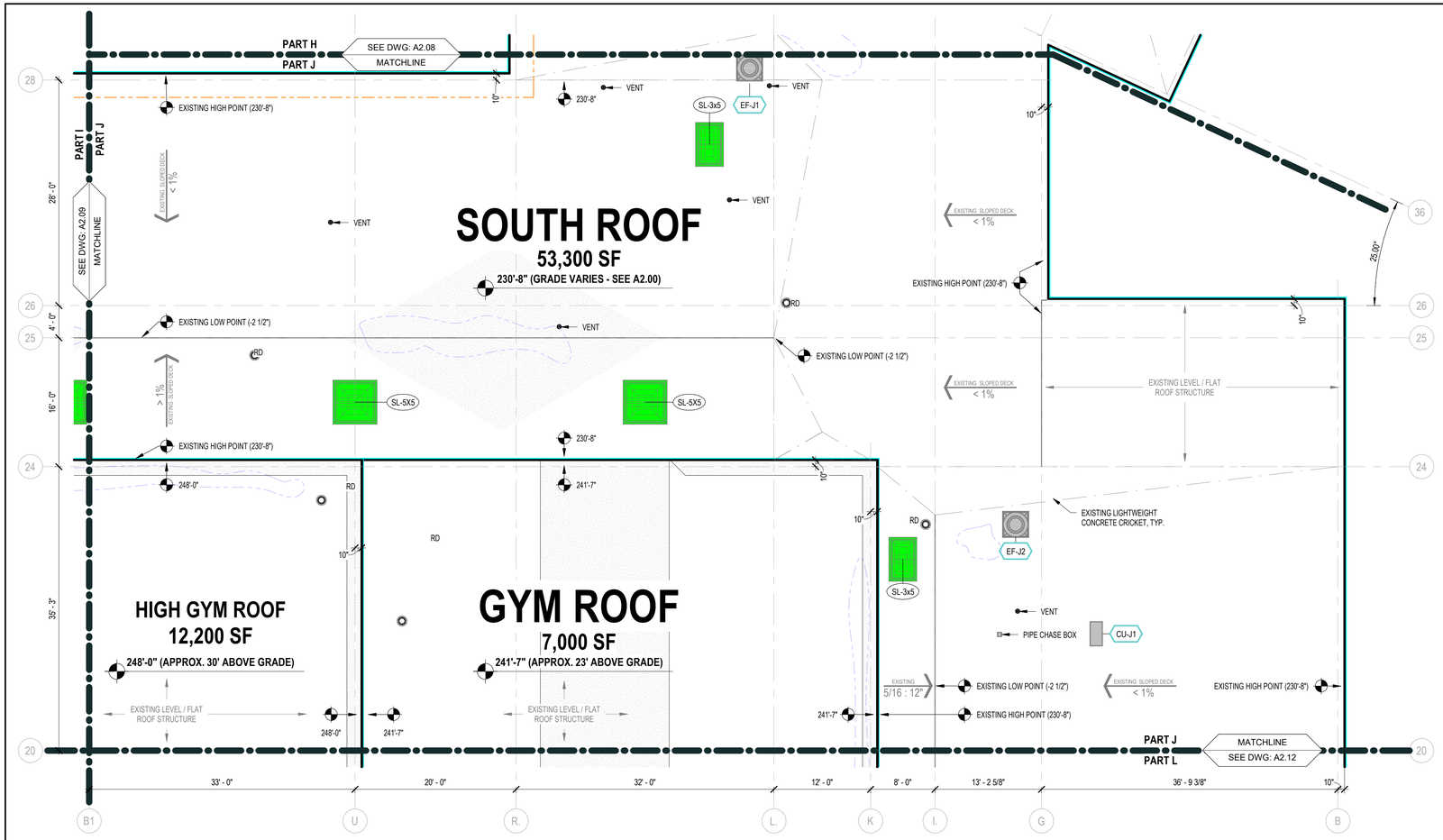
STAMP

DRAWING INFORMATION

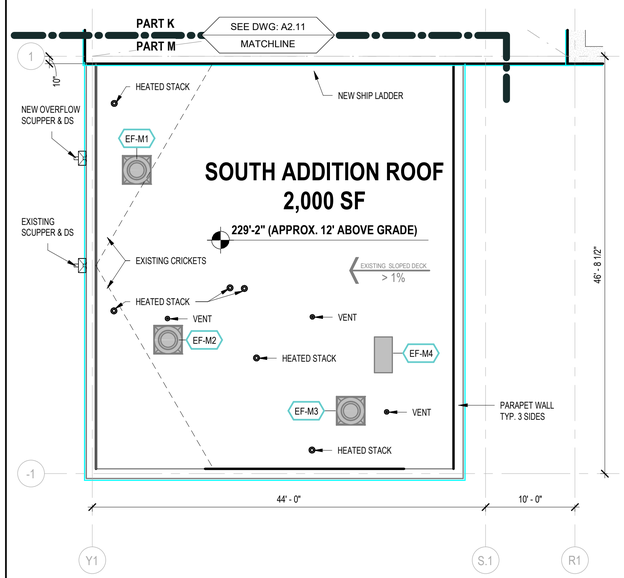
SCALE	As indicated
DRAWN BY	Author
CHECKED	Checker
DATE	06.02.2025

DRAWING NUMBER

A2.09



1 02.1J - PARTIAL ROOF PLAN - PART J
1/8" = 1'-0"



2 02.1M - PARTIAL ROOF PLAN - PART M
1/8" = 1'-0"

GENERAL ROOF NOTES

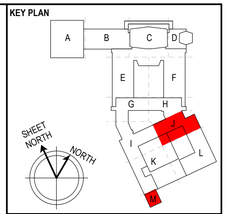
1. REFER TO DRAWING A2.XX AND A2.XX FOR TYPICAL ROOF DETAILS.
2. SEE ROOF DETAILS AND SPECIFICATIONS FOR MORE INFORMATION.
3. VERIFY ALL DIMENSIONS OF EXISTING CONDITIONS IN FIELD, TYPICAL.
4. FALL PROTECTION ANCHORS SHALL BE SPACED NO FURTHER THAN 30'-0" APART O.C. AND SHALL BE ATTACHED TO EXISTING STEEL STRUCTURE. VERIFY LOCATIONS OF EXISTING MEMBERS IN FIELD. REFER TO DETAILS & STRUCTURAL DRAWINGS FOR MORE INFORMATION.
5. FOAM ALL GAPS IN SUBSTRATES, ROOF INSULATION BOARDS, BETWEEN BLOCKING / CURBS / PIPING AND ROOF INSULATION, AND BETWEEN PARAPETS / ROOF EDGE BLOCKING AND ROOF INSULATION. TYPICAL.
6. EXISTING ROOF SUBSTRATES MAY HAVE UNEVEN SURFACES WITH PROTRUSIONS AND/OR DEPRESSIONS UNCOVERED DURING DEMOLITION. REVIEW EXISTING SUBSTRATES UPON EXPOSURE TO VIEW. CUT AND COPE NEW INSULATION AS REQUIRED AT PROTRUSIONS. BUILD-UP NEW INSULATION AS REQUIRED AT DEPRESSIONS. ENSURE POSITIVE DRAINAGE, TYPICAL. REFER TO PLAN FOR LOCATIONS OF EXISTING PONDING.
7. PROVIDE CRICKETS AT EQUIPMENT AND SKYLIGHTS (LOCATED ON SLOPED STRUCTURE OR WITHIN TAPERED INSULATION) ON THE HIGH SIDE OF THE UNIT IF PERPENDICULAR TO TO THE DRAINAGE SLOPE, TYPICAL. DO NOT EXCEED 2' CRICKET HEIGHT. 1/2":12" TAPERED INSULATION IS TYPICAL. USE 1/4":12 OR 1/8":12 INSULATION AS APPLICABLE.

ROOF TYPE	ROOF TYPE ASSEMBLY
	SEE ROOF SYSTEM ASSEMBLY PROFILES ON A2.XX
A	**TYPE A - FLAT ROOF**
	• *FULLY ADHERED 80 MIL PVC MEMBRANE & ADHERED FLASHING SYSTEM* - (COLOR: REFLECTIVE GRAY).
	• 1/2" OVERLAYMENT BOARD (DENSDECK PRIME OR EQUAL), MECHANICALLY FASTENED.
	• 3" RIGID INSULATION TOP LAYER LAYER ADHERED / FASTENED PER MFR., AND 3" RIGID INSULATION BOTTOM LAYER MECHANICALLY FASTENED. INCLUDE INSULATION DRAIN SUMPS (REFER TO PLANS & DETAILS); MIN THICKNESS OF 4" AT ROOF DRAIN, U.N.O. INCLUDE INSULATION CRICKETS AS SHOWN ON PLANS.
	• SELF-ADHERED MOD. BIT. VAPOR RETARDER / TEMPORARY ROOFING.
	• EXISTING 1-1/2" CORRUGATED METAL DECK TO REMAIN. REFER TO PLANS FOR EXISTING SLOPES OF STRUCTURE.
B	**TYPE B - PLACEHOLDER**
	TBD

ROOF SYMBOL LEGEND

- RD — ROOF DRAIN (RD) / ROOF DRAIN WITH OVERFLOW DRAIN (RD/ORD) & SUMP, SEE DETAILS: AND (REFER TO PLANS FOR SIZE AND SLOPE. IF NOT INDICATED, DETAIL IS TYP.)
- A — ROOF TYPE AREA DESIGNATION (SEE ROOF TYPE ASSEMBLY SUMMARY)
- TAPERED INSULATION CRICKET. REFER TO PLANS FOR LOCATIONS, SIZES, AND SLOPES. IF NOT INDICATED ON PLANS, TYPICAL = 1/2" PER FT SLOPE, 30°. REF. GENERAL NOTES. POOLING / FREESTANDING WATER SHALL NOT BE ACCEPTED (CRICKET SLOPE DIRECTION AND ANGLE, TYP.)
- EXISTING LIGHTWEIGHT CONCRETE CRICKET
- WELDABLE WALKWAYS, 39" WIDE (FROM ROOF ACCESS TO SERVICEABLE SIDE OF ALL ROOF TOP EQUIPMENT, TYPICAL)
- SB — SPLASH BLOCK OVER WELDED WALKING MAT, REFER TO TYPICAL DETAIL:
- EXISTING VENT PIPING THRU ROOF or EXHAUST FLUES, SEE DETAILS: EXTEND ALL VENT PIPING AS REQUIRED.
- SLOPE 1/4" - 12" — DIRECTION OF SLOPE / TAPERED INSULATION
- EXISTING SLOPE
- 30'-0" — ROOF ELEVATIONS ABOVE FIRST FLOOR (NOTED ELEVATIONS ARE APPROXIMATE)
- FA-R — FALL PROTECTION ROOF ANCHOR, SEE:
- FA-W — FALL PROTECTION WALL ANCHOR, SEE: (NOT APPLICABLE IN PHASE 1)
- FALL PROTECTION SYSTEM CABLE
- ROOF HATCH. SEE DETAIL: AND
- SKYLIGHT
- ROOF LADDER. SEE DETAILS: **A7.01.1**
- ROOF STRUCTURE INFILL LOCATION, SEE DETAIL:
- BALLASTED COURTYARD GUARDRAIL SYSTEM, SEE DETAIL:
- EXPANSION JOINT, SEE DETAIL:
- NEW FASCIA ROOF EDGE METAL
- LOCATION OF PONDING ON PREVIOUS ROOF SYSTEM. REVIEW EXISTING SUBSTRATE. REFER TO GENERAL NOTES.

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02025.18

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

HOLYOKE HIGH SCHOOL

500 BEECH ST.
HOLYOKE, MA 01040

DRAWING TITLE

PROPOSED ROOF PLANS - PARTS J & M

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main Street, Suite 1110
Springfield MA 01103
413.592.9700 T
info@mvgarchitects.com E

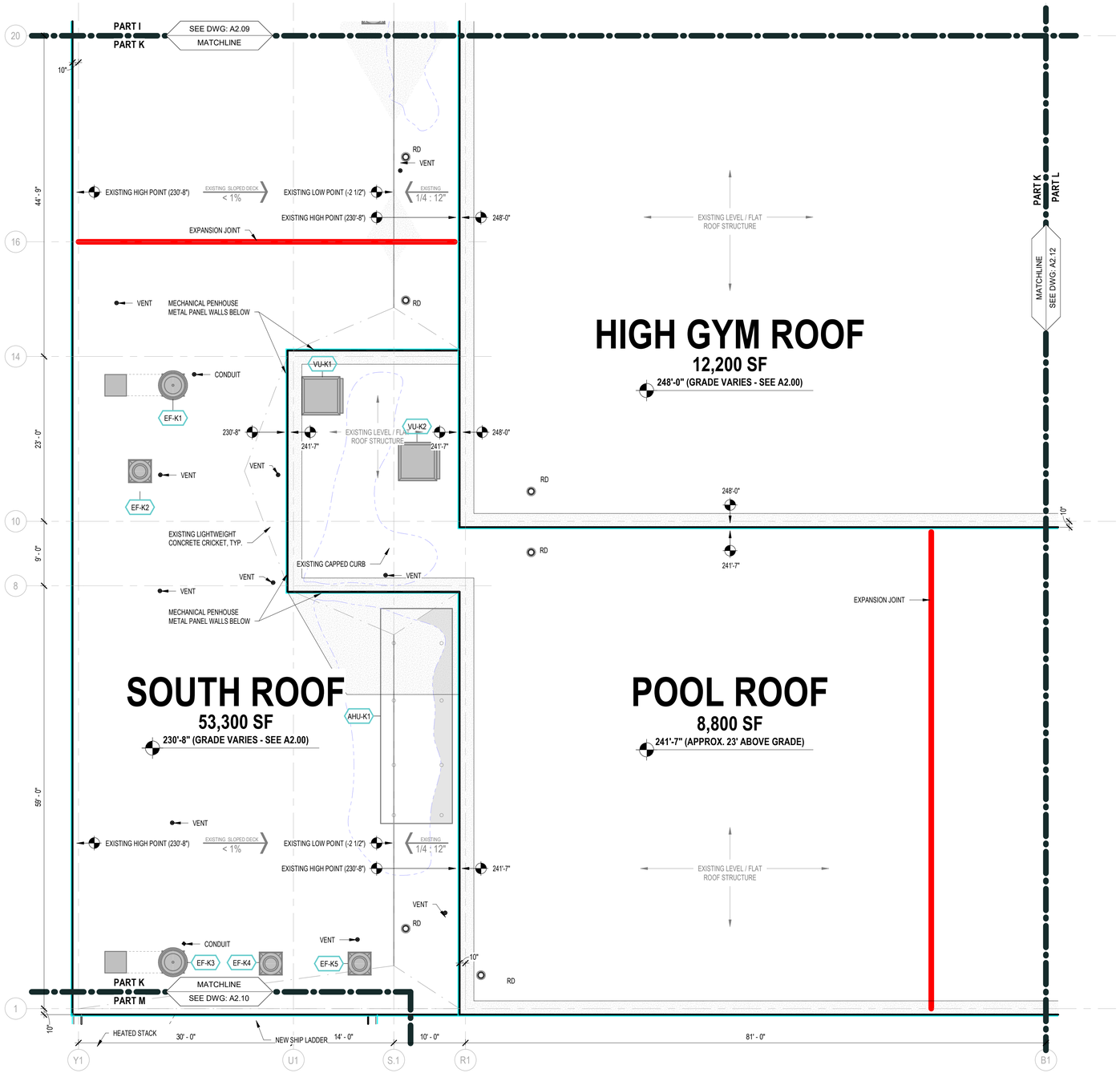
STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	Author
CHECKED	Checker
DATE	06.02.2025

DRAWING NUMBER

A2.10



1 02.1K - PARTIAL ROOF PLAN - PART K
1/8" = 1'-0"

GENERAL ROOF NOTES

1. REFER TO DRAWING A2.XX AND A2.XX FOR TYPICAL ROOF DETAILS.
2. SEE ROOF DETAILS AND SPECIFICATIONS FOR MORE INFORMATION.
3. VERIFY ALL DIMENSIONS OF EXISTING CONDITIONS IN FIELD, TYPICAL.
4. FALL PROTECTION ANCHORS SHALL BE SPACED NO FURTHER THAN 30'-0" APART O.C. AND SHALL BE ATTACHED TO EXISTING STEEL STRUCTURE. VERIFY LOCATIONS OF EXISTING MEMBERS IN FIELD. REFER TO DETAILS & STRUCTURAL DRAWINGS FOR MORE INFORMATION.
5. FOAM ALL GAPS IN SUBSTRATES, ROOF INSULATION BOARDS, BETWEEN BLOCKING / CURBS / PIPING AND ROOF INSULATION, AND BETWEEN PARAPETS / ROOF EDGE BLOCKING AND ROOF INSULATION. TYPICAL.
6. EXISTING ROOF SUBSTRATES MAY HAVE UNEVEN SURFACES WITH PROTRUSIONS AND/OR DEPRESSIONS UNCOVERED DURING DEMOLITION. REVIEW EXISTING SUBSTRATES UPON EXPOSURE TO VIEW. CUT AND COPE NEW INSULATION AS REQUIRED AT PROTRUSIONS. BUILD-UP NEW INSULATION AS REQUIRED AT DEPRESSIONS. ENSURE POSITIVE DRAINAGE, TYPICAL. REFER TO PLAN FOR LOCATIONS OF EXISTING PONDING.
7. PROVIDE CRICKETS AT EQUIPMENT AND SKYLIGHTS (LOCATED ON SLOPED STRUCTURE OR WITHIN TAPERED INSULATION) ON THE HIGH SIDE OF THE UNIT IF PERPENDICULAR TO TO THE DRAINAGE SLOPE, TYPICAL. DO NOT EXCEED 2' CRICKET HEIGHT. 1/2":12" TAPERED INSULATION IS TYPICAL. USE 1/4":12 OR 1/8":12 INSULATION AS APPLICABLE.

ROOF TYPE

ROOF TYPE ASSEMBLY

SEE ROOF SYSTEM ASSEMBLY PROFILES ON A2.XX

A — **TYPE A - FLAT ROOF**

- *FULLY ADHERED 80 MIL PVC MEMBRANE & ADHERED FLASHING SYSTEM* - (COLOR: REFLECTIVE GRAY).
- 1/2" OVERLAYMENT BOARD (DENSDECK PRIME OR EQUAL), MECHANICALLY FASTENED.
- 3" RIGID INSULATION TOP LAYER LAYER ADHERED / FASTENED PER MFR., AND
  3" RIGID INSULATION BOTTOM LAYER MECHANICALLY FASTENED.
  INCLUDE INSULATION DRAIN SUMPS (REFER TO PLANS & DETAILS); MIN THICKNESS OF 4" AT ROOF DRAIN, U.N.O.
  INCLUDE INSULATION CRICKETS AS SHOWN ON PLANS.
- SELF-ADHERED MOD. BIT. VAPOR RETARDER / TEMPORARY ROOFING.
- EXISTING 1-1/2" CORRUGATED METAL DECK TO REMAIN. REFER TO PLANS FOR EXISTING SLOPES OF STRUCTURE.

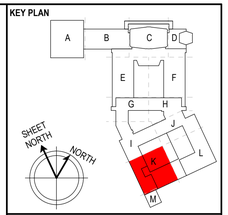
B — **TYPE B - PLACEHOLDER**

TBD

ROOF SYMBOL LEGEND

- RD — ROOF DRAIN (RD) / ROOF DRAIN WITH OVERFLOW DRAIN (RD/ORD) & SUMP, SEE DETAILS: AND (REFER TO PLANS FOR SIZE AND SLOPE. IF NOT INDICATED, DETAIL IS TYP.)
- A — ROOF TYPE AREA DESIGNATION (SEE ROOF TYPE ASSEMBLY SUMMARY)
- 30" — TAPERED INSULATION CRICKET. REFER TO PLANS FOR LOCATIONS, SIZES, AND SLOPES. IF NOT INDICATED ON PLANS, TYPICAL = 1/2" PER FT SLOPE, 30". REF. GENERAL NOTES. POOLING / FREESTANDING WATER SHALL NOT BE ACCEPTED (CRICKET SLOPE DIRECTION AND ANGLE, TYP.)
- EXISTING LIGHTWEIGHT CONCRETE CRICKET
- WELDABLE WALKWAYS, 39" WIDE (FROM ROOF ACCESS TO SERVICEABLE SIDE OF ALL ROOF TOP EQUIPMENT, TYPICAL)
- SB — SPLASH BLOCK OVER WELDED WALKING MAT, REFER TO TYPICAL DETAIL:
- EXISTING VENT PIPING THRU ROOF or EXHAUST FLUES, SEE DETAILS: EXTEND ALL VENT PIPING AS REQUIRED.
- SLOPE 1/4" - 12" — DIRECTION OF SLOPE / TAPERED INSULATION
- EXISTING SLOPE
- 30'-0" — ROOF ELEVATIONS ABOVE FIRST FLOOR (NOTED ELEVATIONS ARE APPROXIMATE)
- FA-R — FALL PROTECTION ROOF ANCHOR, SEE:
- FA-W — FALL PROTECTION WALL ANCHOR, SEE: (NOT APPLICABLE IN PHASE 1)
- FALL PROTECTION SYSTEM CABLE
- ROOF HATCH. SEE DETAIL: AND
- SKYLIGHT
- ROOF LADDER. SEE DETAILS: **A7.01.1**
- ROOF STRUCTURE INFILL LOCATION, SEE DETAIL:
- BALLASTED COURTYARD GUARDRAIL SYSTEM, SEE DETAIL:
- EXPANSION JOINT, SEE DETAIL:
- NEW FASCIA ROOF EDGE METAL
- LOCATION OF PONDING ON PREVIOUS ROOF SYSTEM. REVIEW EXISTING SUBSTRATE. REFER TO GENERAL NOTES.

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02025.18

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

HOLYOKE HIGH SCHOOL

500 BEECH ST.
HOLYOKE, MA 01040

DRAWING TITLE

PROPOSED ROOF PLAN - PART K

MOUNT VERNON GROUP ARCHITECTS
1350 Main Street, Suite 1110
Springfield MA 01103
413.592.9700 T
info@mvgarchitects.com E

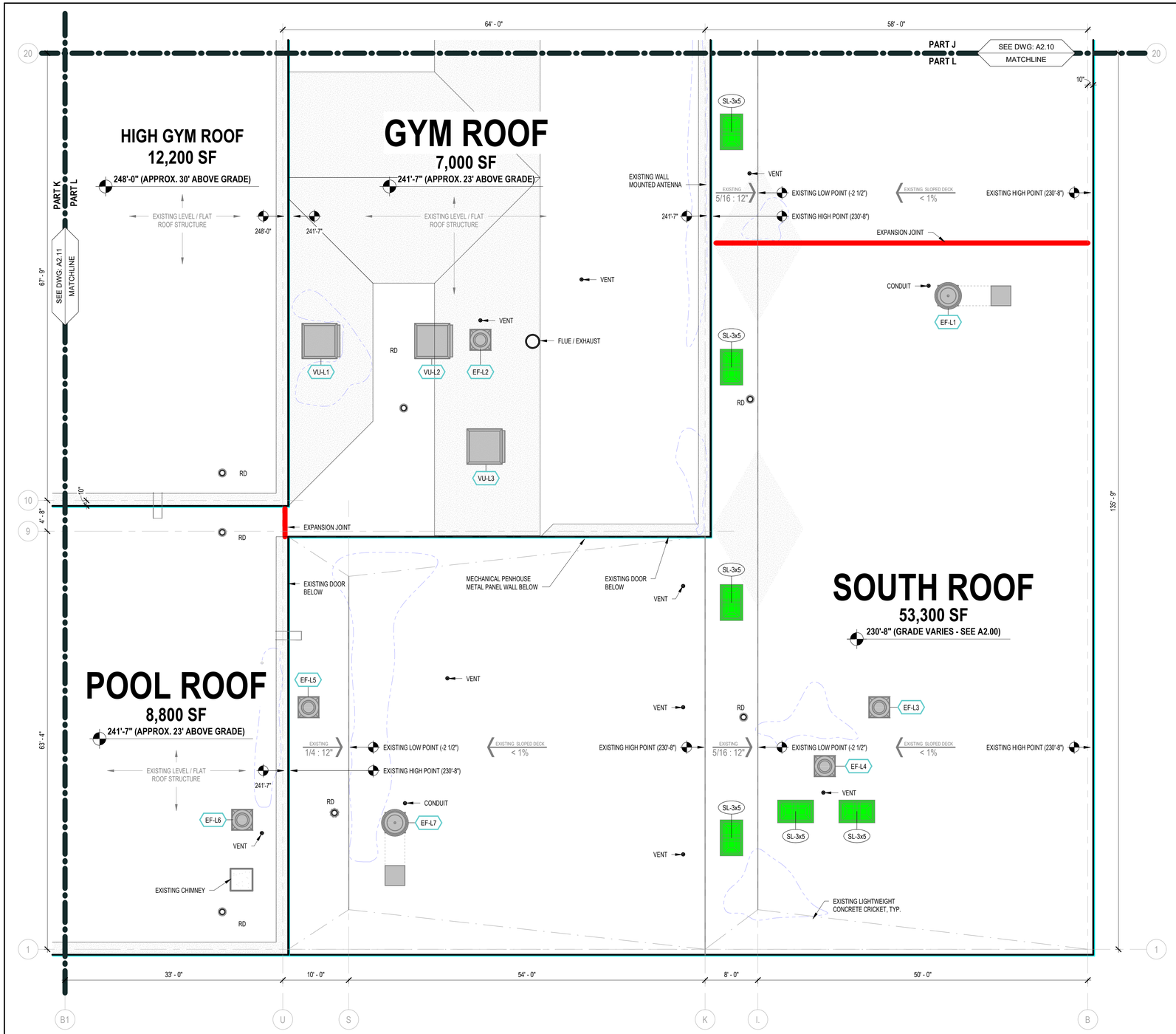
STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	Author
CHECKED	Checker
DATE	06.02.2025

DRAWING NUMBER

A2.11



1 02.1L - PARTIAL ROOF PLAN - PART L
1/8" = 1'-0"

GENERAL ROOF NOTES

1. REFER TO DRAWING A2.XX AND A2.XX FOR TYPICAL ROOF DETAILS.
2. SEE ROOF DETAILS AND SPECIFICATIONS FOR MORE INFORMATION.
3. VERIFY ALL DIMENSIONS OF EXISTING CONDITIONS IN FIELD, TYPICAL.
4. FALL PROTECTION ANCHORS SHALL BE SPACED NO FURTHER THAN 30'-0" APART O.C. AND SHALL BE ATTACHED TO EXISTING STEEL STRUCTURE. VERIFY LOCATIONS OF EXISTING MEMBERS IN FIELD. REFER TO DETAILS & STRUCTURAL DRAWINGS FOR MORE INFORMATION.
5. FOAM ALL GAPS IN SUBSTRATES, ROOF INSULATION BOARDS, BETWEEN BLOCKING / CURBS / PIPING AND ROOF INSULATION, AND BETWEEN PARAPETS / ROOF EDGE BLOCKING AND ROOF INSULATION. TYPICAL.
6. EXISTING ROOF SUBSTRATES MAY HAVE UNEVEN SURFACES WITH PROTRUSIONS AND/OR DEPRESSIONS UNCOVERED DURING DEMOLITION. REVIEW EXISTING SUBSTRATES UPON EXPOSURE TO VIEW. CUT AND COPE NEW INSULATION AS REQUIRED AT PROTRUSIONS. BUILD-UP NEW INSULATION AS REQUIRED AT DEPRESSIONS. ENSURE POSITIVE DRAINAGE, TYPICAL. REFER TO PLAN FOR LOCATIONS OF EXISTING PONDING.
7. PROVIDE CRICKETS AT EQUIPMENT AND SKYLIGHTS (LOCATED ON SLOPED STRUCTURE OR WITHIN TAPERED INSULATION) ON THE HIGH SIDE OF THE UNIT IF PERPENDICULAR TO TO THE DRAINAGE SLOPE, TYPICAL. DO NOT EXCEED 2" CRICKET HEIGHT. 1/2":12" TAPERED INSULATION IS TYPICAL. USE 1/4":12 OR 1/8":12 INSULATION AS APPLICABLE.

ROOF TYPE — **ROOF TYPE ASSEMBLY**
SEE ROOF SYSTEM ASSEMBLY PROFILES ON A2.XX

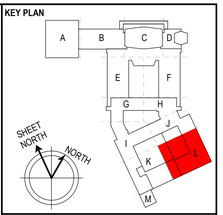
A — **TYPE A - FLAT ROOF**
- *FULLY ADHERED 80 MIL PVC MEMBRANE & ADHERED FLASHING SYSTEM* - (COLOR: REFLECTIVE GRAY).
- 1/2" OVERLAYMENT BOARD (DENSDECK PRIME OR EQUAL), MECHANICALLY FASTENED.
- 3" RIGID INSULATION TOP LAYER LAYER ADHERED / FASTENED PER MFR., AND 3" RIGID INSULATION BOTTOM LAYER MECHANICALLY FASTENED. INCLUDE INSULATION DRAIN SUMPS (REFER TO PLANS & DETAILS); MIN THICKNESS OF 4" AT ROOF DRAIN, U.N.O. INCLUDE INSULATION CRICKETS AS SHOWN ON PLANS.
- SELF-ADHERED MOD. BIT. VAPOR RETARDER / TEMPORARY ROOFING.
- EXISTING 1-1/2" CORRUGATED METAL DECK TO REMAIN. REFER TO PLANS FOR EXISTING SLOPES OF STRUCTURE.

B — **TYPE B - PLACEHOLDER**
TBD

ROOF SYMBOL LEGEND

- RD — ROOF DRAIN (RD) / ROOF DRAIN WITH OVERFLOW DRAIN (RD/ORD) & SUMP, SEE DETAILS: AND (REFER TO PLANS FOR SIZE AND SLOPE. IF NOT INDICATED, DETAIL IS TYP.)
- A — ROOF TYPE AREA DESIGNATION (SEE ROOF TYPE ASSEMBLY SUMMARY)
- 30" — TAPERED INSULATION CRICKET. REFER TO PLANS FOR LOCATIONS, SIZES, AND SLOPES. IF NOT INDICATED ON PLANS, TYPICAL = 1/2" PER FT SLOPE, 30°. REF. GENERAL NOTES. POOLING / FREESTANDING WATER SHALL NOT BE ACCEPTED (CRICKET SLOPE DIRECTION AND ANGLE, TYP.)
- EXISTING LIGHTWEIGHT CONCRETE CRICKET
- WELDABLE WALKWAYS, 39" WIDE (FROM ROOF ACCESS TO SERVICEABLE SIDE OF ALL ROOF TOP EQUIPMENT, TYPICAL)
- SB — SPLASH BLOCK OVER WELDED WALKING MAT, REFER TO TYPICAL DETAIL:
- EXISTING VENT PIPING THRU ROOF or EXHAUST FLUES, SEE DETAILS: EXTEND ALL VENT PIPING AS REQUIRED.
- SLOPE 1/4" : 12" — DIRECTION OF SLOPE / TAPERED INSULATION
- EXISTING SLOPE
- 30'-0" — ROOF ELEVATIONS ABOVE FIRST FLOOR (NOTED ELEVATIONS ARE APPROXIMATE)
- FA-R — FALL PROTECTION ROOF ANCHOR, SEE:
- FA-W — FALL PROTECTION WALL ANCHOR, SEE: (NOT APPLICABLE IN PHASE 1)
- FALL PROTECTION SYSTEM CABLE
- ROOF HATCH. SEE DETAIL: AND
- SKYLIGHT
- ROOF LADDER. SEE DETAILS: **A7.01.1**
- ROOF STRUCTURE INFILL LOCATION, SEE DETAIL:
- BALLASTED COURTYARD GUARDRAIL SYSTEM, SEE DETAIL:
- EXPANSION JOINT, SEE DETAIL:
- NEW FASCIA ROOF EDGE METAL
- LOCATION OF PONDING ON PREVIOUS ROOF SYSTEM. REVIEW EXISTING SUBSTRATE. REFER TO GENERAL NOTES.

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
SCHEMATIC DESIGN

PROJECT NUMBER
02025.18

OWNER / PROJECT NAME / LOCATION
CITY OF HOLYOKE
HOLYOKE HIGH SCHOOL
500 BEECH ST.
HOLYOKE, MA 01040

DRAWING TITLE
PROPOSED ROOF PLAN - PART L

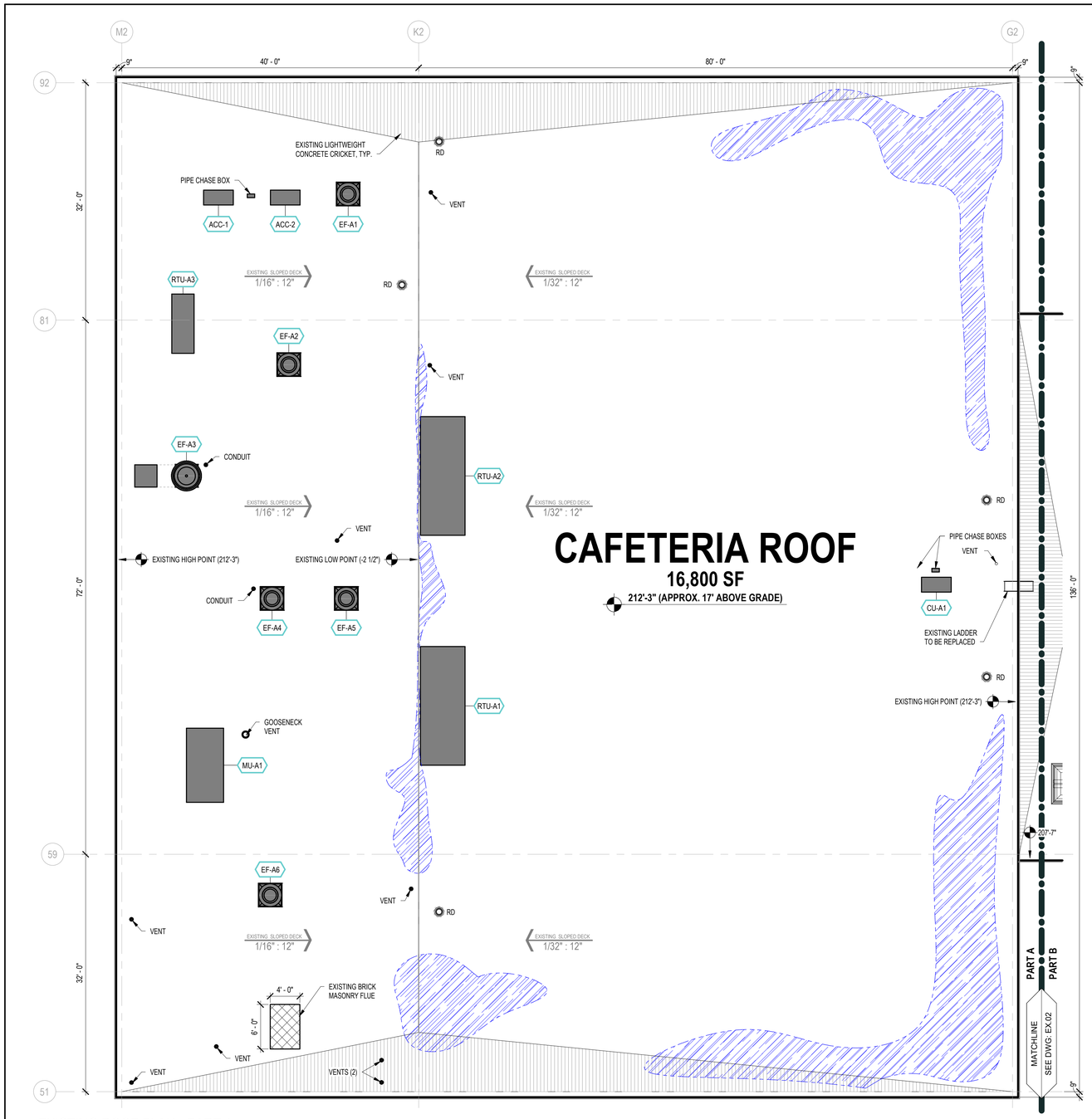
MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main Street, Suite 1110
Springfield MA 01103
413.592.9700 T
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

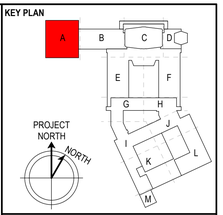
SCALE	As indicated
DRAWN BY	Author
CHECKED	Checker
DATE	06.02.2025

DRAWING NUMBER
A2.12



1 EXISTING ROOF PLAN - PART A
1/8" = 1'-0"

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02025.18

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

HOLYOKE HIGH SCHOOL

500 BEECH ST.
HOLYOKE, MA 01040

DRAWING TITLE

EXISTING ROOF - PART A

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main Street, Suite 1110
Springfield MA 01103
413.592.9700 T
info@mvgarchitects.com E

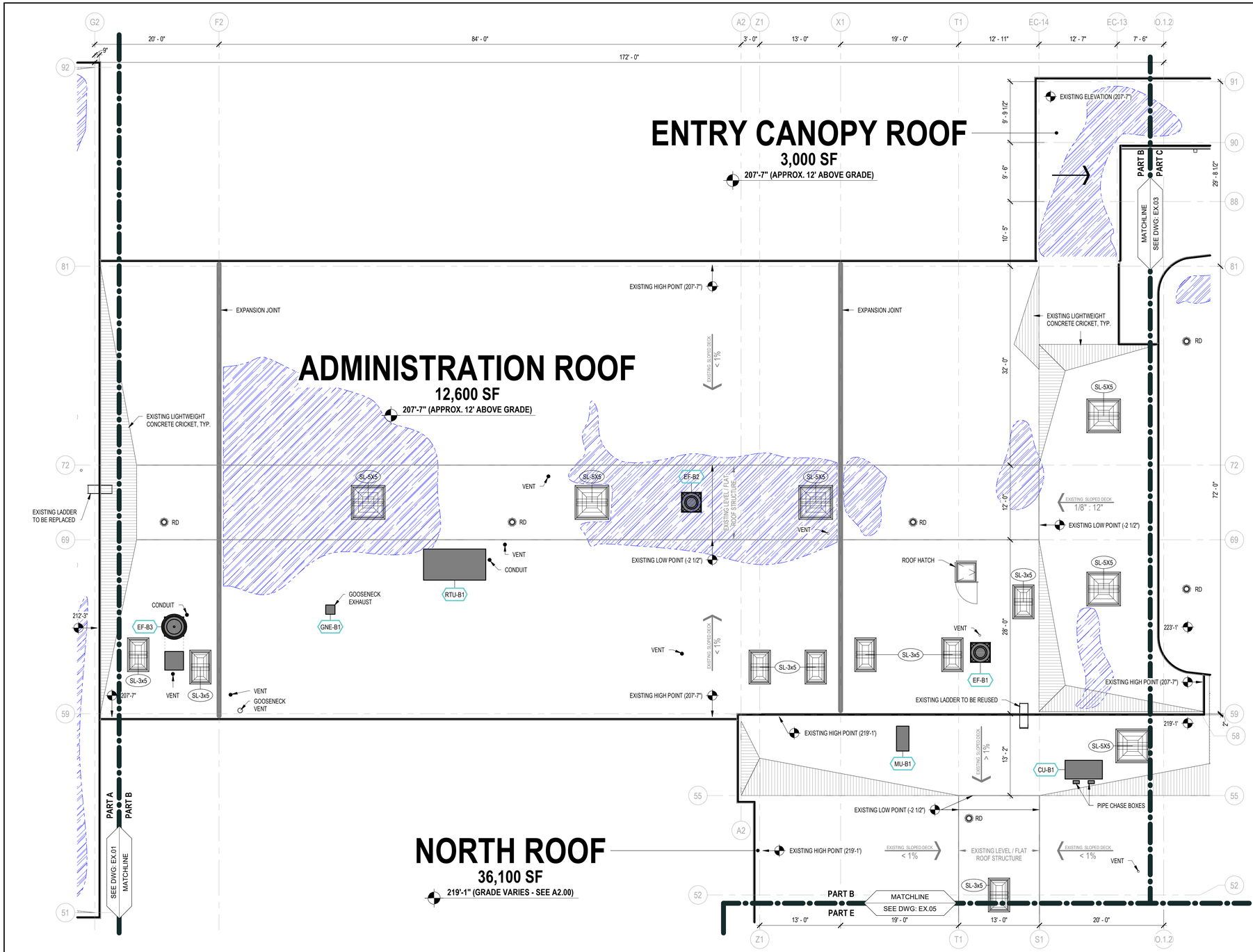
STAMP

DRAWING INFORMATION

SCALE	1/8" = 1'-0"
DRAWN BY	Author
CHECKED	Checker
DATE	06.02.2025

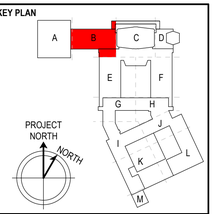
DRAWING NUMBER

EX.01



1 EXISTING ROOF PLAN - PART B
1/8" = 1'-0"

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02025.18

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

HOLYOKE HIGH SCHOOL

500 BEECH ST.
HOLYOKE, MA 01040

DRAWING TITLE

EXISTING ROOF - PART B

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main Street, Suite 1110
Springfield MA 01103
413.592.9700 T
info@mvgarchitects.com E

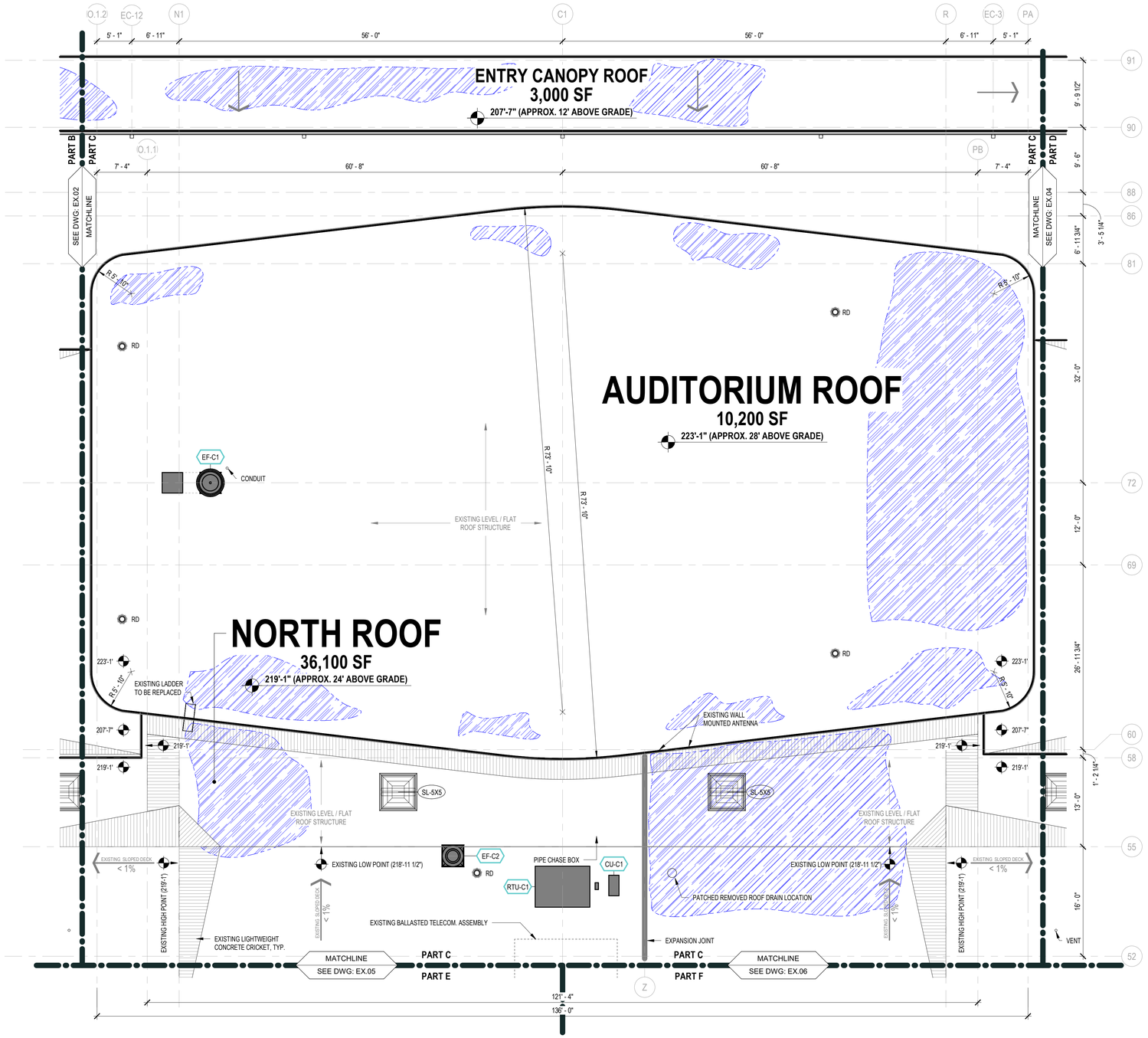
STAMP

DRAWING INFORMATION

SCALE	1/8" = 1'-0"
DRAWN BY	Author
CHECKED	Checker
DATE	06.02.2025

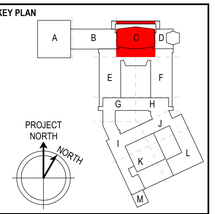
DRAWING NUMBER

EX.02



1 EXISTING ROOF PLAN - PART C
1/8" = 1'-0"

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02025.18

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

HOLYOKE HIGH SCHOOL

500 BEECH ST.
HOLYOKE, MA 01040

DRAWING TITLE

EXISTING ROOF - PART C

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main Street, Suite 1110
Springfield MA 01103
413.592.9700 T
info@mvgarchitects.com E

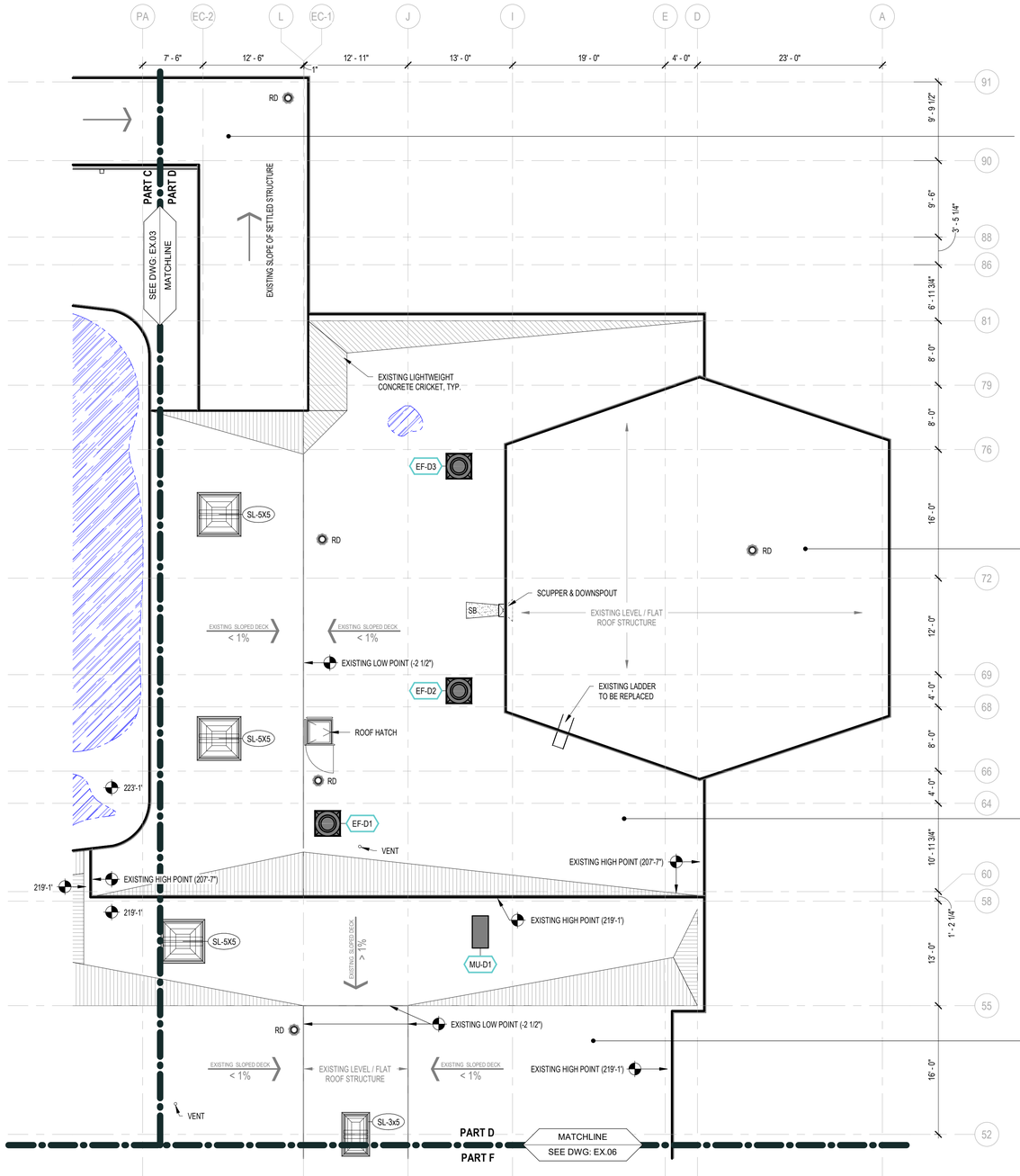
STAMP

DRAWING INFORMATION

SCALE	1/8" = 1'-0"
DRAWN BY	Author
CHECKED	Checker
DATE	06.02.2025

DRAWING NUMBER

EX.03



1 EXISTING ROOF PLAN - PART D
1/8" = 1'-0"

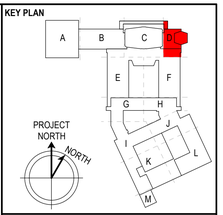
ENTRY CANOPY ROOF
3,000 SF
207'-7" (APPROX. 12' ABOVE GRADE)

BAND ROOM ROOF
2,100 SF
212'-11" (APPROX. 30' ABOVE GRADE)

NORTHEAST ROOF
3,900 SF
207'-7" (GRADE VARIES - SEE A2.00)

NORTH ROOF
36,100 SF
219'-1" (GRADE VARIES - SEE A2.00)

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
SCHEMATIC DESIGN

PROJECT NUMBER
02025.18

OWNER / PROJECT NAME / LOCATION
CITY OF HOLYOKE
HOLYOKE HIGH SCHOOL
500 BEECH ST.
HOLYOKE, MA 01040

DRAWING TITLE
EXISTING ROOF - PART D

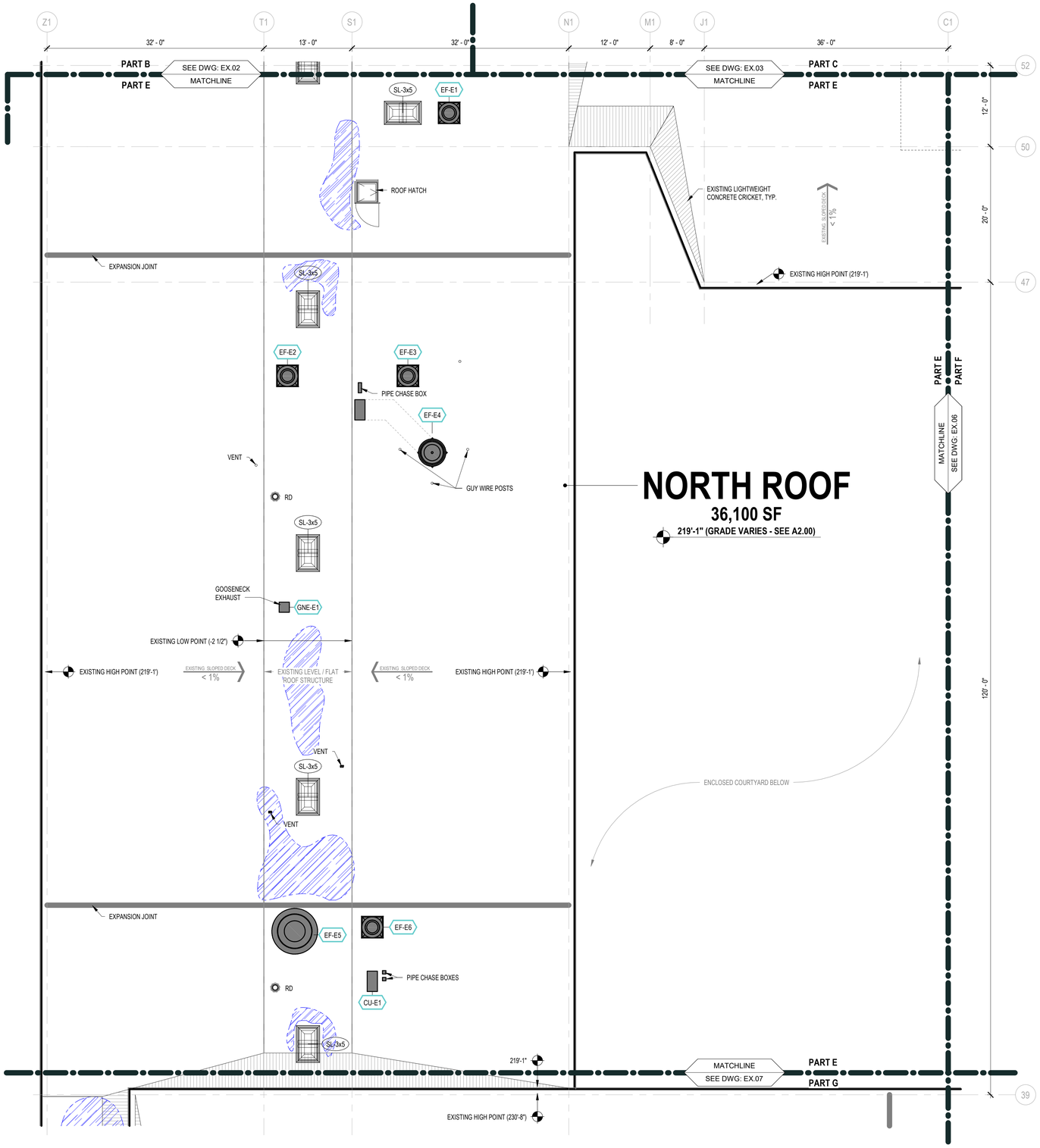
MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main Street, Suite 1110
Springfield MA 01103
413.592.9700 T
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

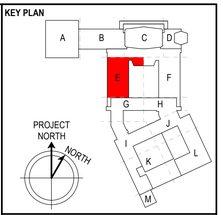
SCALE	1/8" = 1'-0"
DRAWN BY	Author
CHECKED	Checker
DATE	06.02.2025

DRAWING NUMBER
EX.04



1 EXISTING ROOF PLAN - PART E
1/8" = 1'-0"

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02025.18

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

HOLYOKE HIGH SCHOOL

500 BEECH ST.
HOLYOKE, MA 01040

DRAWING TITLE

EXISTING ROOF - PART E

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main Street, Suite 1110
Springfield MA 01103

413.592.9700 T
info@mvgarchitects.com E

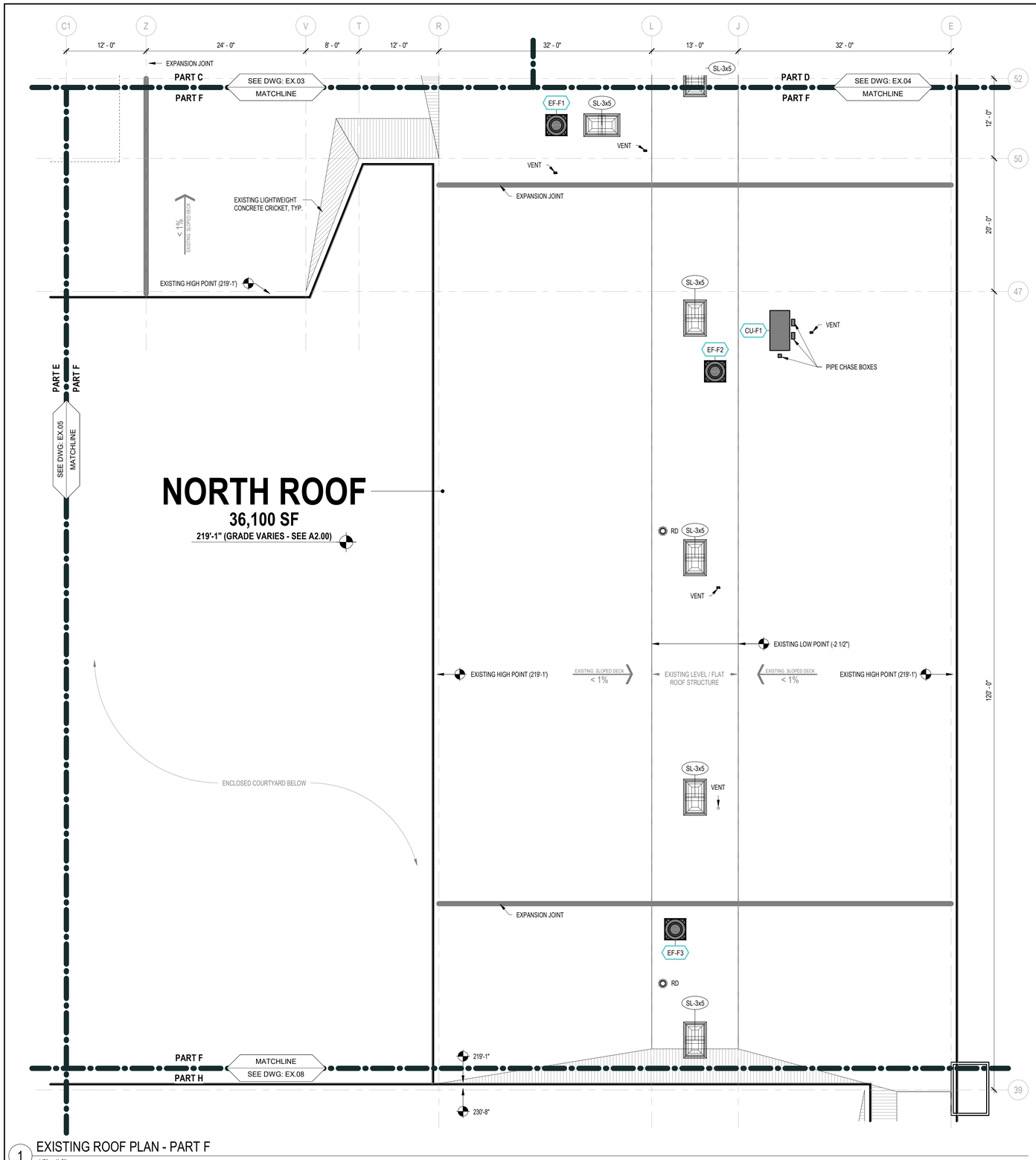
STAMP

DRAWING INFORMATION

SCALE	1/8" = 1'-0"
DRAWN BY	Author
CHECKED	Checker
DATE	06.02.2025

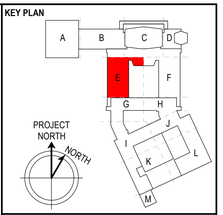
DRAWING NUMBER

EX.05



1 EXISTING ROOF PLAN - PART F
1/8" = 1'-0"

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02025.18

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

HOLYOKE HIGH SCHOOL

500 BEECH ST.
HOLYOKE, MA 01040

DRAWING TITLE

EXISTING ROOF - PART F

MOUNT VERNON GROUP ARCHITECTS
1350 Main Street, Suite 1110
Springfield MA 01103
413.592.9700 T
info@mvgarchitects.com E

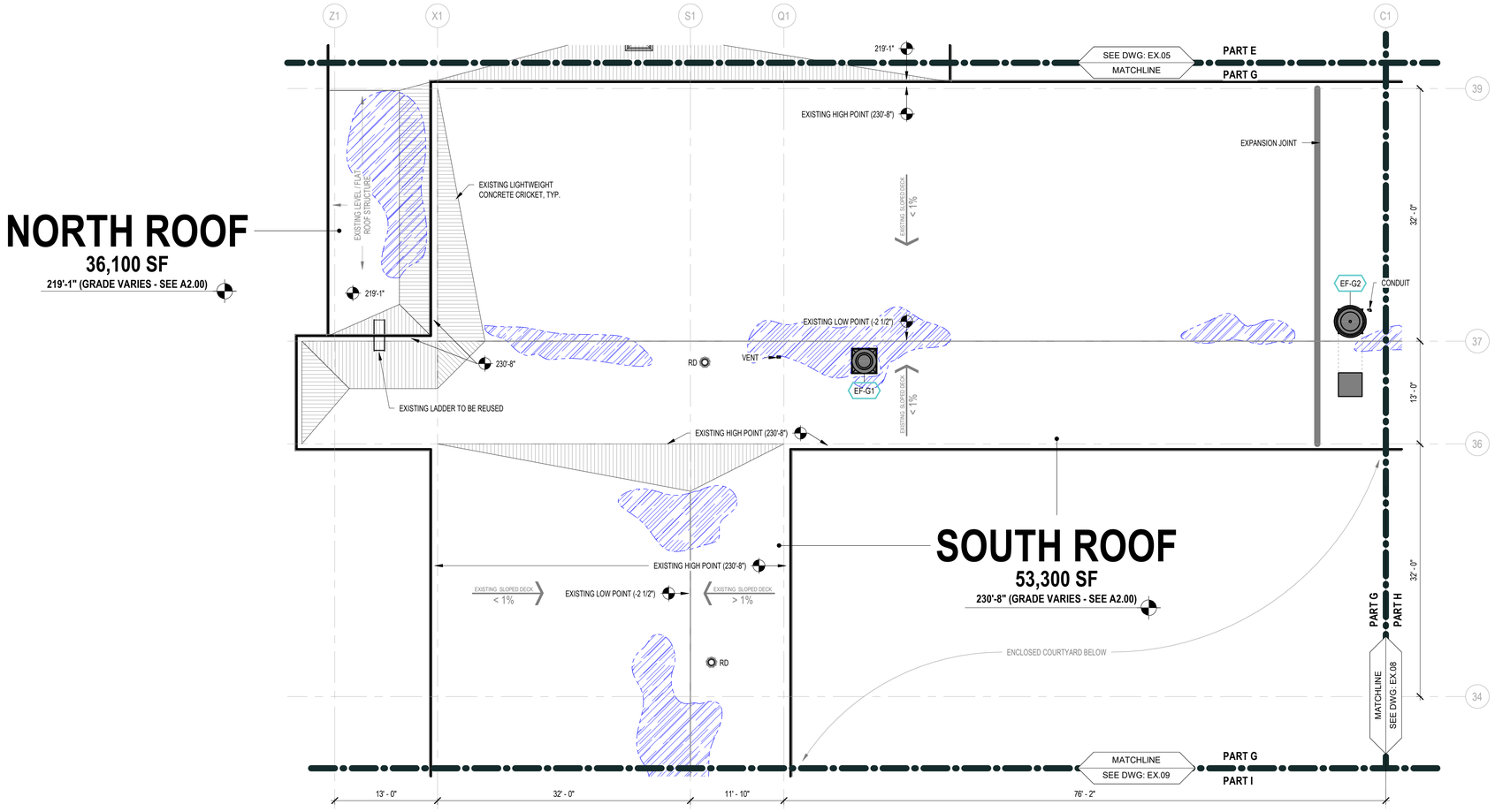
STAMP

DRAWING INFORMATION

SCALE	1/8" = 1'-0"
DRAWN BY	Author
CHECKED	Checker
DATE	06.02.2025

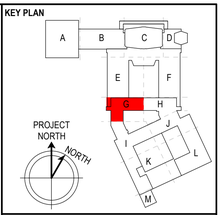
DRAWING NUMBER

EX.06



1 EXISTING ROOF PLAN - PART G
1/8" = 1'-0"

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02025.18

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

HOLYOKE HIGH SCHOOL

500 BEECH ST.
HOLYOKE, MA 01040

DRAWING TITLE

EXISTING ROOF - PART G

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main Street, Suite 1110
Springfield MA 01103
413.592.9700 T
info@mvgarchitects.com E

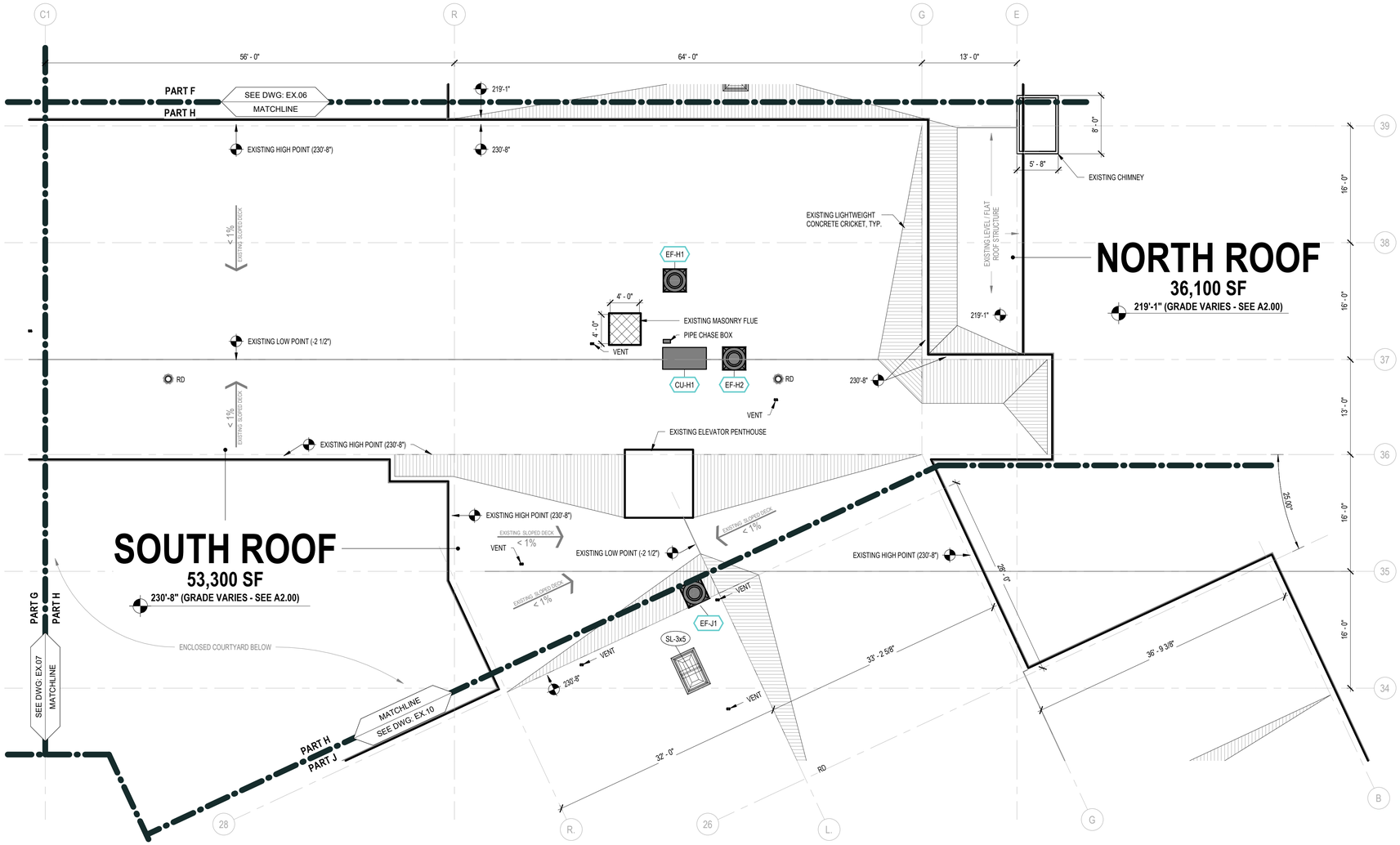
STAMP

DRAWING INFORMATION

SCALE	1/8" = 1'-0"
DRAWN BY	Author
CHECKED	Checker
DATE	06.02.2025

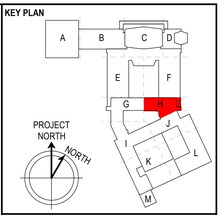
DRAWING NUMBER

EX.07



1 EXISTING ROOF PLAN - PART H
1/8" = 1'-0"

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02025.18

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

HOLYOKE HIGH SCHOOL

500 BEECH ST.
HOLYOKE, MA 01040

DRAWING TITLE

EXISTING ROOF - PART H

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main Street, Suite 1110
Springfield MA 01103

413.592.9700 T
info@mvgarchitects.com E

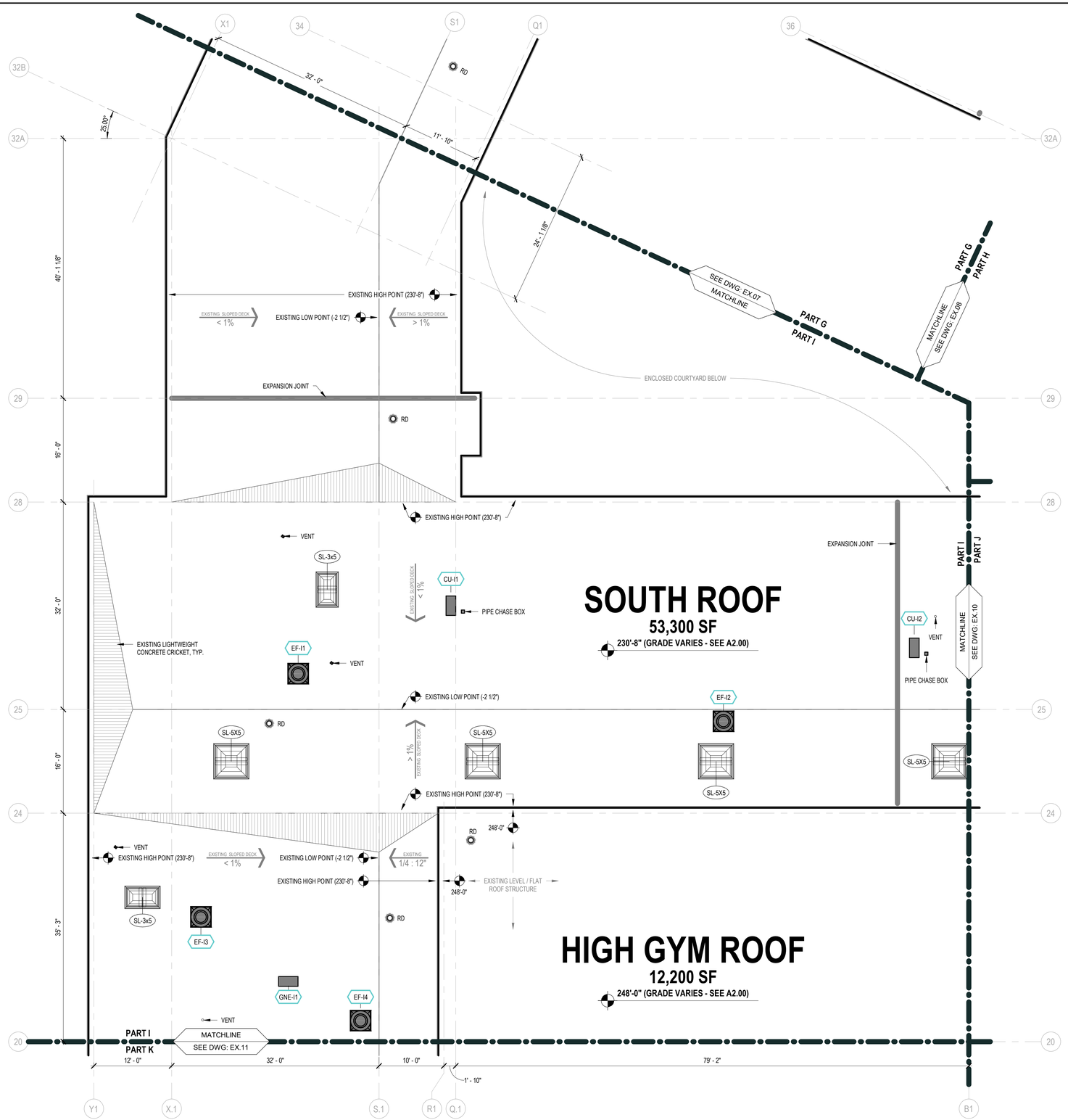
STAMP

DRAWING INFORMATION

SCALE	1/8" = 1'-0"
DRAWN BY	Author
CHECKED	Checker
DATE	06.02.2025

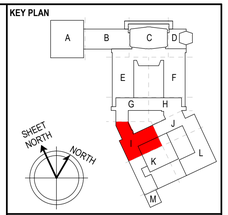
DRAWING NUMBER

EX.08



1 EXISTING ROOF PLAN - PART I
1/8" = 1'-0"

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02025.18

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

HOLYOKE HIGH SCHOOL

500 BEECH ST.
HOLYOKE, MA 01040

DRAWING TITLE

EXISTING ROOF - PART I

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main Street, Suite 1110
Springfield MA 01103
413.592.9700 T
info@mvgarchitects.com E

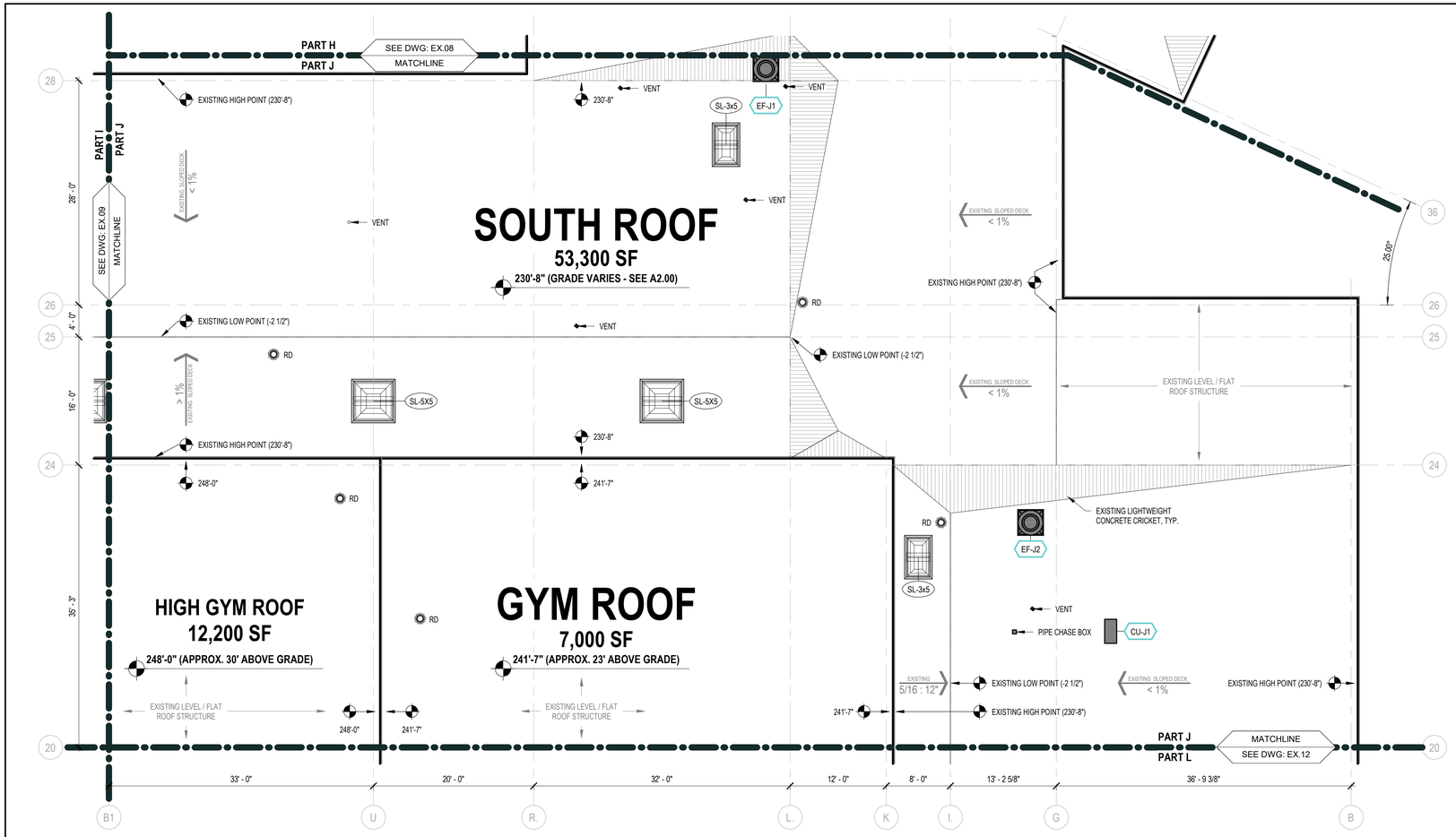
STAMP

DRAWING INFORMATION

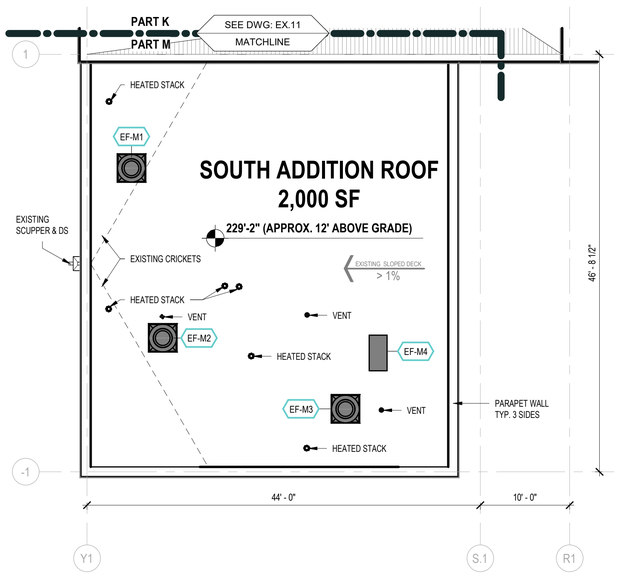
SCALE	1/8" = 1'-0"
DRAWN BY	Author
CHECKED	Checker
DATE	06.02.2025

DRAWING NUMBER

EX.09

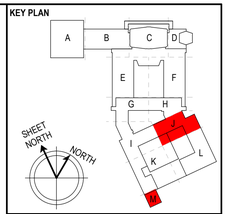


1 EXISTING ROOF PLAN - PART J
1/8" = 1'-0"



2 EXISTING ROOF PLAN - PART M
1/8" = 1'-0"

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02025.18

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

HOLYOKE HIGH SCHOOL

500 BEECH ST.
HOLYOKE, MA 01040

DRAWING TITLE

EXISTING ROOF - PARTS J & M

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main Street, Suite 1110
Springfield MA 01103

413.592.9700 T
info@mvgarchitects.com E

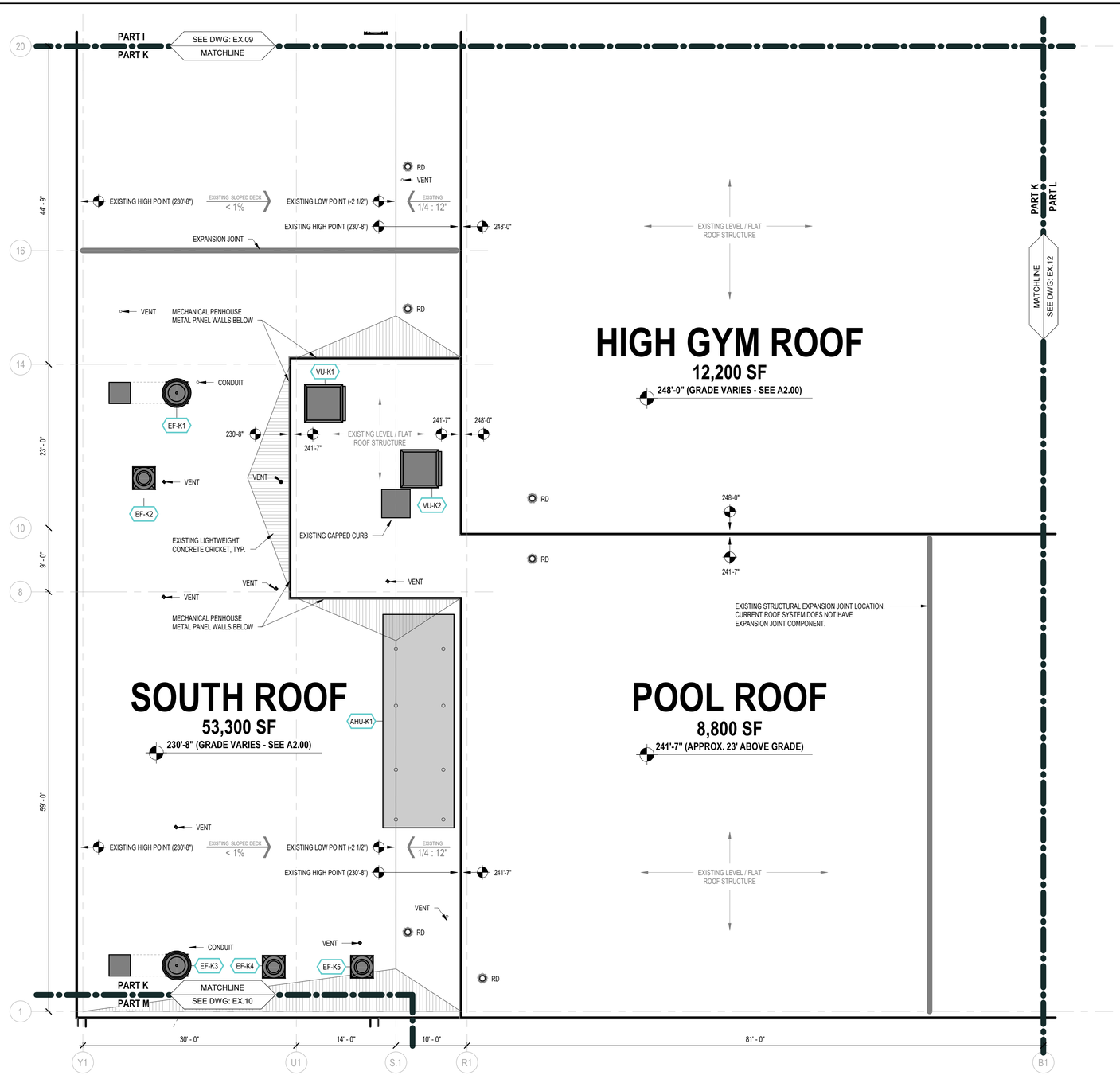
STAMP

DRAWING INFORMATION

SCALE	1/8" = 1'-0"
DRAWN BY	Author
CHECKED	Checker
DATE	06.02.2025

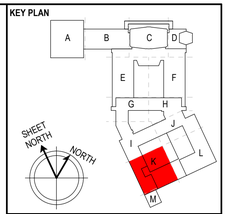
DRAWING NUMBER

EX.10



1 EXISTING ROOF PLAN - PART K
1/8" = 1'-0"

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02025.18

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

HOLYOKE HIGH SCHOOL

500 BEECH ST.
HOLYOKE, MA 01040

DRAWING TITLE

EXISTING ROOF - PART K

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main Street, Suite 1110
Springfield MA 01103

413.592.9700 T
info@mvgarchitects.com E

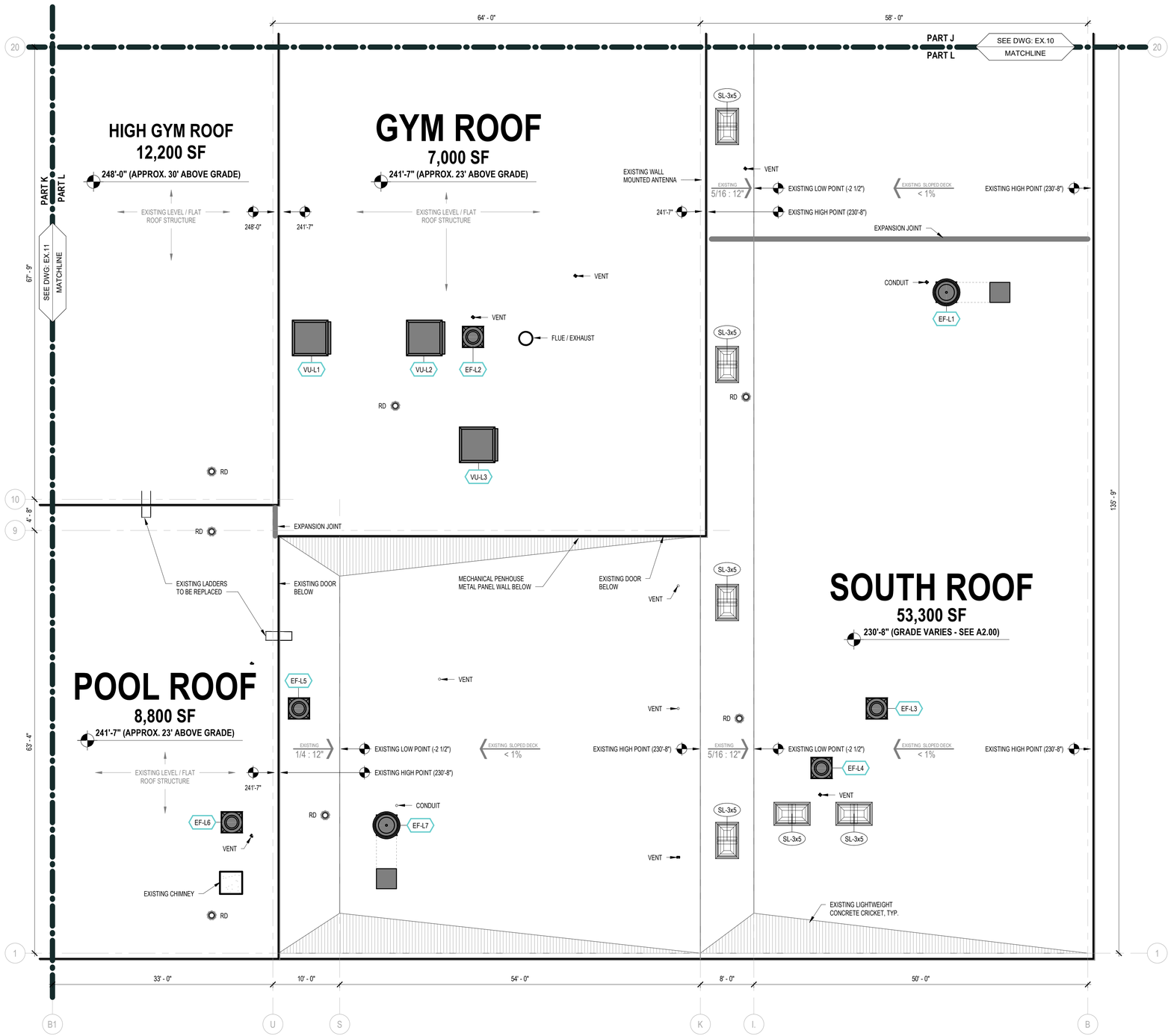
STAMP

DRAWING INFORMATION

SCALE	1/8" = 1'-0"
DRAWN BY	Author
CHECKED	Checker
DATE	06.02.2025

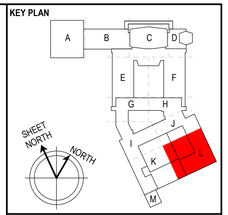
DRAWING NUMBER

EX.11



1 EXISTING ROOF PLAN - PART L
1/8" = 1'-0"

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE

SCHEMATIC DESIGN

PROJECT NUMBER

02025.18

OWNER / PROJECT NAME / LOCATION

CITY OF HOLYOKE

HOLYOKE HIGH SCHOOL

500 BEECH ST.
HOLYOKE, MA 01040

DRAWING TITLE

EXISTING ROOF - PART L

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main Street, Suite 1110
Springfield MA 01103

413.592.9700 T
info@mvgarchitects.com E

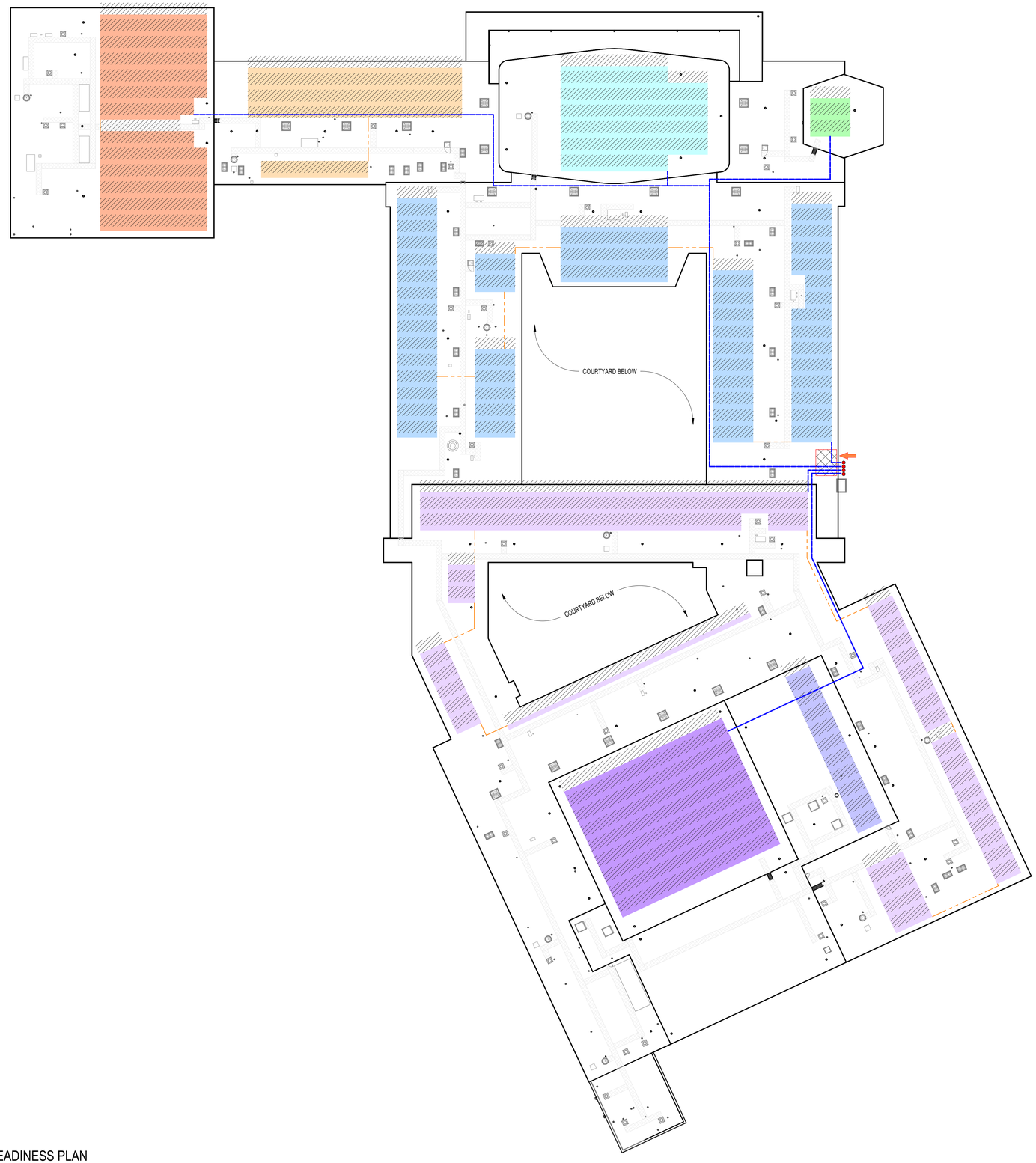
STAMP

DRAWING INFORMATION

SCALE	1/8" = 1'-0"
DRAWN BY	Author
CHECKED	Checker
DATE	06.02.2025

DRAWING NUMBER

EX.12



1 SOLAR READINESS PLAN
1/32" = 1'-0"

GENERAL NOTES

1. SCHEMATIC SOLAR DESIGN IS BASED ON THE FOLLOWING PV MODULE PRODUCT:
   a. **MANUFACTURER:** HELIENE
      MODEL: 156HC M10 NTYP SL BIFACIAL MODULE
      A. 156 Half-Cut Monocrystalline 635W
      B. WIDTH = 45" x LENGTH = 98" x DEPTH = 1 3/8"
      C. MAX POWER (NMOT) = 482W
2. TYPICAL ARRAY:
   A. TYPE = FIXED, BALLASTED-ROOF, OPEN-RACK
   B. SYSTEM LOSSES = 14.08%
   C. DC TO AC SIZE RATIO = 1.2
   D. INVERTER EFFICIENCY = 96%
   E. TILTED PANEL WIDTH = 3'-0"
   F. SHADOW LENGTH BETWEEN ROWS = 7'-0"
3. CALCULATIONS ARE BASED ON DATA FROM THE NATIONAL RENEWABLE ENERGY LABORATORY:
   A. *PVWATTS.NREL.GOV*
4. ALL VALUES ARE APPROXIMATE. VERIFY ALL DIMENSIONS IN FIELD AND COORDINATE WITH SELECTED VENDOR / MANUFACTURER.
5. NO STRUCTURAL MODIFICATION SCOPE IS REQUIRED AT SOLAR READY LOCATIONS. REFER TO SCHEMATIC STRUCTURAL REPORT.
6. NO ROOF PENETRATIONS. THE SOLAR PROJECT SHALL PROVIDE EXTERIOR CONDUIT BALLASTED ON EXISTING ROOF, MOUNTED TO EXISTING EXTERIOR WALL, OR MOUNTED TO EXISTING EXTERIOR SOFFITS.
7. NO MODIFICATIONS TO EXISTING ELECTRICAL SYSTEM ARE ANTICIPATED TO BE REQUIRED TO MAKE THE BUILDING SOLAR-READY TO ACCEPT THE PROPOSED ZONES. THE FUTURE SOLAR PROJECT SHALL PROVIDE ALL REQUIRED ADDITIONAL EQUIPMENT AS PART OF THE SOLAR SCOPE OF WORK. THE FUTURE SOLAR PROJECT SHALL INTEGRATE THE NEW SOLAR SYSTEM WITH THE EXISTING ELECTRICAL SYSTEM AS REQUIRED.
8. MAX. ARRAY LOAD = 10 PSF, TYPICAL.

PV ZONES LEGEND

ZONE 1: CAFETERIA ROOF (16,800 SF)
SOLAR READY AREA = 7,644 SF (46%)
QTY OF MODULES = 100
TILT (DEG) = 40°
AZIMUTH (DEG) = 150°
DC SYSTEM SIZE = 48 kW
ANNUAL OUTPUT = 62,509 kWh/yr

ZONE 2: ADMINISTRATION ROOF (12,600 SF)
SOLAR READY AREA = 4,480 SF (36%)
QTY OF MODULES = 56
TILT (DEG) = 40°
AZIMUTH (DEG) = 150°
DC SYSTEM SIZE = 27 kW
ANNUAL OUTPUT = 35,015 kWh/yr

ZONE 3: AUDITORIUM ROOF (10,200 SF)
SOLAR READY AREA = 5,064 SF (50%)
QTY OF MODULES = 71
TILT (DEG) = 40°
AZIMUTH (DEG) = 150°
DC SYSTEM SIZE = 34 kW
ANNUAL OUTPUT = 44,387 kWh/yr

BAND ROOM ROOF (2,100 SF)
SOLAR READY AREA = 552 SF (26%)
QTY OF MODULES = 9
TILT (DEG) = 40°
AZIMUTH (DEG) = 150°
DC SYSTEM SIZE = 4 kW
ANNUAL OUTPUT = 5,637 kWh/yr

NORTH ROOF (36,100 SF)
SOLAR READY AREA = 13,112 SF (36%)
QTY OF MODULES = 182
TILT (DEG) = 40°
AZIMUTH (DEG) = 150°
DC SYSTEM SIZE = 88 kW
ANNUAL OUTPUT = 113,733 kWh/yr

SOUTH ROOF (53,300 SF)
SOLAR READY AREA = 10,720 SF (20%)
QTY OF MODULES = 176
TILT (DEG) = 40°
AZIMUTH (DEG) = 125°
DC SYSTEM SIZE = 85 kW
ANNUAL OUTPUT = 107,207 kWh/yr

GYM ROOF (15,800 SF)
SOLAR READY AREA = 1,648 SF (10%)
QTY OF MODULES = 22
TILT (DEG) = 40°
AZIMUTH (DEG) = 125°
DC SYSTEM SIZE = 11 kW
ANNUAL OUTPUT = 12,990 kWh/yr

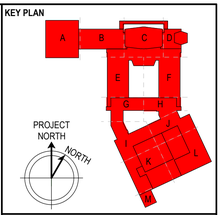
HIGH GYM ROOF (12,200 SF)
SOLAR READY AREA = 8,632 SF (20%)
QTY OF MODULES = 117
TILT (DEG) = 40°
AZIMUTH (DEG) = 125°
DC SYSTEM SIZE = 56 kW
ANNUAL OUTPUT = 68,943 kWh/yr

TOTAL BUILDING ROOF AREA	=	168,000 SF
TOTAL SOLAR READY AREA	**=**	**51,852 SF (31%)**
TOTAL DC SYSTEMS' SIZE	=	353 kW
TOTAL ANNUAL OUTPUT	**=**	**450,421 kWh/yr**

PLAN LEGEND

- FUTURE CONDUIT EXTERIOR WALL PENETRATION (BY SOLAR PROJECT)
- EXISTING ELEC. ROOM BELOW
- SHADOW OF PV MODULE ROW (SPACE BETWEEN ROWS)
- FUTURE FD DISCONNECT ON EXTERIOR WALL (BY SOLAR PROJECT)
- FUTURE EXTERIOR CONDUIT (BY SOLAR PROJECT)
  ROOF-BALLASTED / WALL-MOUNTED / SOFFIT-MOUNTED
- FUTURE BALLASTED CONDUIT FOR ARRAY INTERCONNECTION (BY SOLAR PROJECT)

KEY PLAN



REVISIONS

NUMBER	DESCRIPTION	DATE

PROJECT PHASE
SCHEMATIC DESIGN

PROJECT NUMBER
02025.18

OWNER / PROJECT NAME / LOCATION
CITY OF HOLYOKE
HOLYOKE HIGH SCHOOL
500 BEECH ST.
HOLYOKE, MA 01040

DRAWING TITLE
SOLAR READINESS PLAN

MVG
MOUNT VERNON GROUP ARCHITECTS
1350 Main Street, Suite 1110
Springfield MA 01103
413.592.9700 T
info@mvgarchitects.com E

STAMP

DRAWING INFORMATION

SCALE	As indicated
DRAWN BY	Author
CHECKED	Checker
DATE	07.25.2025

DRAWING NUMBER
SR1.00

Fennessy Consulting Services

DESIGN DEVELOPMENT CONSTRUCTION COST REPORT

Roof Replacement Project

at

Holyoke High School

June 16, 2025

Fennessy Consulting Services
27 Glen Street, Suite 8, Stoughton, MA 02072
www.fennessyconsulting.com

June 16, 2025

John Landry
Mount Vernon Group Architects
1350 Main Street
Suite 1110
Springfield, MA 01103

HOLYOKE HIGH SCHOOL - Roof Replacement Project,
Holyoke, MA

Dear John:

Please find enclosed our Construction Cost Model for the above referenced project based on schematic design information prepared by your office and design team,dated June 3, 2025.

The financial summary of this cost model is outlined below, however we recommend you review the Executive Summary to fully understand the basis of this report and the included and excluded financial impacts contained therein.

	Const. Start	Gross Floor Area	$/sf	Estimated Cost
Holyoke High School *Site Work*	*Jun-26*			*$10,346,973*
ESTIMATED CONTRACT AWARD				***$10,346,973***

Alternates

Alt 1: High School-new roof drains and interior piping	*$623,144*

Bidding conditions are expected to reflect competitive bidding to pre-qualified general contractors, open bidding to prequalified sub-contractors, open specifications for materials and manufactures.

This estimate includes all direct construction costs, general contractor's overhead and profit and design contingency. Cost escalation impacts have been included in this report.

Excluded from the estimate are: construction contingency, loose furnishings and equipment, architect's and engineer's fees, moving, administrative and financing costs. Please refer to Exclusions section of the attached report for further information.

Contractors are not required to be signatory to any labor union, however they will be required to pay prevailing wage rates as set forth by the Commonwealth of Massachusetts for construction in Holyoke. This cost report represents a reasonable opinion of cost. It is not a prediction of the successful bid from a contractor as bids will vary due to fluctuating market conditions, errors and omissions, proprietary specifications, lack or surplus of bidders, perception of risk, etc. Consequently the estimate is expected to fall within the range of bids from a number of competitive contractors or subcontractors, however we do not warrant that bids or negotiated prices will not vary from the final construction cost estimate.

If you have any questions or require further analysis please do not hesitate to contact us.

Sincerely,

Seamus Fennessy

Seamus Fennessy MRICS
Principal/Owner

Enclosures

HOLYOKE HIGH SCHOOL
Roof Replacement Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Contents

	Page No.
Executive Summary	*1*
Basis of Construction Cost Report	*4*
Exclusions	*6*
Areas Calculation	*7*
Overall Summary	*8*
Holyoke High School	*9*
Alternates	*15*
CSI Summary	*16*
Filed Sub-bid Summary	*18*

HOLYOKE HIGH SCHOOL
Roof Replacement Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Executive Summary

The Project
This project in Holyoke, Massachusetts comprises of the replacement of the existing roof at the High School. The replaced roof area totals 170,900 sf.

Financial Status
Our construction cost model for the entire project is in the order of ***$10.35MM.*** *Within this totals we are including a $470.1K design contingency, and $473.9K of future price escalation reflecting the construction schedule outlined herein.*

Risk
A formal risk analysis has not been performed for this project. Some risk factors to be considered at this time include:
- Design Contingency
- Escalation/Market risk
- Construction/Payment default
- Approvals process/Funding
- Unforeseen conditions
- Tariffs

Design Contingency
This construction cost model is based on design development documentation. Due to this incomplete nature of the design we have utilized historic data and personal experience to complete this cost model. To help alleviate possible cost increases as a result of design completion we recommend a ***design contingency of 5%.*** *We have included this contingency in our cost model. As design progresses this contingency will reduce.*

Escalation/Market Risk
The construction industry faced a tougher year in 2024 that the previous year, which was evident in a stabilization and in some regions a static price escalation. The industry is forecast to show signs of growth in 2025 as economic conditions improve. The OECD are expecting short-term interest rates to continue to drop. While they are still higher than before the Covid-19 pandemic, it looks like inflation is starting to come under control, and are projected to fall to 2.1% by the end of 2025.

The impact will vary across the different segments of the construction marketplace. Commercial projects are likely to continue to reduce. Despite surges due to the Infrastructures Bill, highway work is expected to drop but other transportation projects will experience some growth. Work in education and healthcare are expected to remain at similar levels. Public safety and manufacturing is expected to increase.

Residential projects are expected to remain flat but this sector is heavily influenced by local demands. For example, Arizona, New York, New Jersey, South Carolina and Texas all saw significant growth, while Florida, Colorado, Oregon all saw contraction.

Continued shipping and other logistical issues (primarily driven by piracy at the Suez Canal) will continue to put upwards pressures on material prices Suez Canal traffic which used to accommodate 12% of global trade has plummeted by 66%. The longer, more costly routes around the Cape of Good Hope continues to impact prices and delivery times. After two years of record drought conditions which decimated vessel transits, the Panama Canal is experiencing a trade rebound.

Another consideration is how material suppliers are reacting to the current marketplace. A national construction materials distributor has recently announced a 5 - 10% increase in material prices.

Some projects will not experience the same inflationary pressures as others The projects that fall into this category encompass "clean" renovation less complex new construction projects. These types of projects limit risk/exposure and maximize profit generation potential. Complex new and renovation projects are likely to draw limited competition and as such likely to experience higher price levels. This project is likely to fall into the former category.

For these reasons we are continuing to recommend an annual escalation factor of 5% for the next twelve months dropping to 4% thereafter. We have ***included an escalation factor of 4.3%*** *in this cost report. As we move closer to bid date we will continue to review and adjust the escalation factor as appropriate. It is possible that a higher escalation factor will be required for later years.*

<u>Construction/Payment Default</u>
There is a real risk of contractors, subcontractors and material suppliers ceasing to exist due to their inability to honor low bids as material and labor prices increase. We highly recommend that each project has adequate protection in the form of sub guard (preferred) or bonding for both performance and payment.

<u>Approvals Process/Funding.</u>
For the purpose of this report we have included both of these categories together. The risk here is that the funding and approvals process will take significantly longer than expected and hence subject this project to increases in price escalation. We have not included any such pressures in this cost model.

<u>Unforeseen Conditions</u>
The scope of work outlined in these design documents involves partial renovation within an existing space and on "old" roof structure. Despite best efforts and limited destructive exploration during the design phase it will not be possible to accurately determine the true nature and dimensions of existing conditions. For this reason we recommend that the owner carry a 7% change order contingency (not included in this cost model) in the overall project budget.

Tariffs
It is too early to comprehend or understand the full effect of proposed government tariffs if they even happen at all. More than likely, they will have a significant impact on construction pricing. Not only could it impact materials overseas, but it will impact products manufactured here but utilize components from overseas. In addition, the machinery that drives a manufacturing economy here is also dependent on overseas components for operation, and all distribution networks within the USA are also dependent on materials, components and finished products made overseas. While the

Peer/Comparable Projects
We at Fennessy Consulting Services do not like to compare individual projects against some perceived cost/sf. Our reasoning for this is based on the fact that no two projects are the same and as such a typical cost/sf is not all that applicable or reliable. We treat each project as a unique entity.

As a quality control measure we make comparisons of the various building component costs in this estimate against others. We make this comparison to verify that nothing is out of the ordinary. If we come across an abnormal component cost we double check this cost to ensure its accuracy.

HOLYOKE HIGH SCHOOL
Roof Replacement Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Basis of Cost Estimate

Cost Estimate Prepared From	*Dated*	*Received*
Design development design documentation:		
Architecture by Mount Vernon Group	*06/10/25*	*06/03/25*
Structure by Souza True & Partners	*06/18/25*	*06/06/25*
Discussions with the Project Architect and Engineers		

Conditions of Construction
The pricing is based on the following general conditions of construction

A start date of June 2026
A construction period of 4-6 months
The general contract will be competitively bid to qualified general contractors and subcontractors.
There will not be small business set aside requirements.
Contractors are not required to be signatory to labor unions, however they will be required to pay prevailing wage rates as set forth by the Commonwealth of Massachusetts for construction in Holyoke.
There are no phasing requirements.
Contractors will have full access to the site during normal business hours.

The Cost Plan is based on the following conditions:
The costs in this report covers construction costs only calculated at current bidding price level (reflecting the current projected construction schedule) with a separate allowance for cost escalation.

Cost escalation is included to the mid point of the construction schedule. Unit rates in the body of the report include appropriate escalation allowances to deliver specific trades within the prescribed schedule if the project were to commence today.

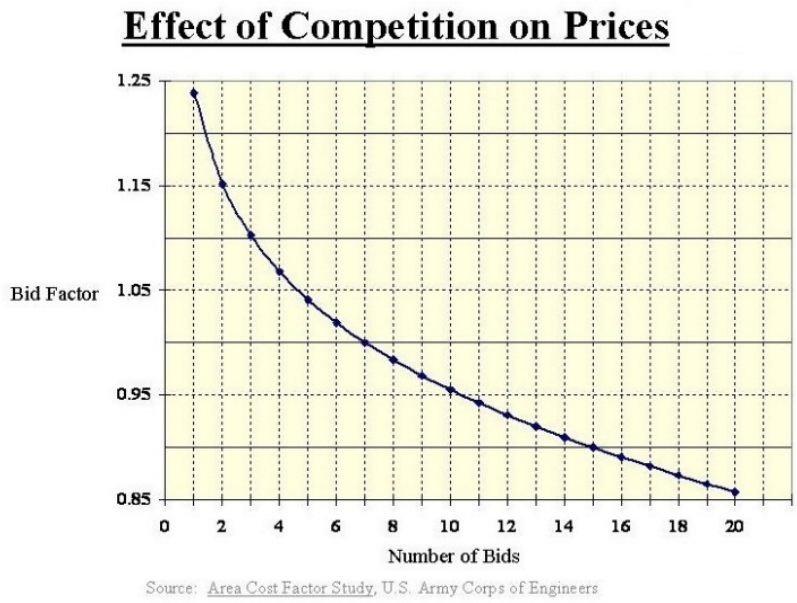
Cost associated with additional escalation required for future start date are included as a below the line markup. This report has included this additional escalation to the scheduled start date of construction noted in this report.

Bidding Process - Market Conditions
This document is based on the measurement and pricing of quantities wherever information is provided and/or reasonable assumptions for other work not covered in the drawings or specifications, as stated within this document. Unit rates have been obtained from historical records and/or discussion with contractors. The unit rates reflect current bid costs in the area.

All unit rates relevant to subcontractor work include the subcontractors overhead and profit unless otherwise stated. The mark-ups cover the costs of field overhead, home office overhead and profit and range from 15% to 25% of the cost for a particular item of work.

Basis of Cost Estimate

Pricing reflects probable construction costs obtainable in the project locality on the date of this statement of probable costs. This estimate is a determination of fair market value for the construction of this project. It is not a prediction of low bid. Pricing assumes competitive bidding for every portion of the construction work for all subcontractors and general contractors, with a minimum of 5 bidders for all items of work. Experience and research indicates that a fewer number of bidders may result in higher bids, conversely an increased number of bidders may result in more competitive bids.



Exclusions

The following cost items have been excluded from this report. Many of these will in fact be required and should be budgeted within the "Soft Cost" component of the project budget

- *Owner supplied and installed furniture, fixtures and equipment*
- *Loose furniture and equipment except as specifically identified*
- *Security head-end equipment and devices*
- *Tele/data head end equipment and devices*
- *Audio visual equipment*
- *Compression of schedule, premium or shift work, and restrictions on the contractor's working hours*
- *Design, testing, inspection or construction management fees*
- *Architectural and design fees*
- *Scope change and post contract contingencies*
- *Assessments, taxes, finance, legal and development charges*
- *Environmental impact mitigation*
- *Builder's risk, project wrap-up and other owner provided insurance program*
- *Land and easement acquisition*
- *Cost escalation beyond a start date of June 2026*
- *Sales tax*

HOLYOKE HIGH SCHOOL
Roof Replacement Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Areas Calculation

	Existing	*Total*
HOLYOKE HIGH SCHOOL		
Roof	*170,896*	
TOTAL ROOF AREA	*170,896*	***170,896***

HOLYOKE HIGH SCHOOL
Roof Replacement Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Overall Summary

		Holyoke High School	Site Work	Total
A10 FOUNDATIONS		$0	$0	$0
A20 BASEMENT CONSTRUCTION		$0	$0	$0
B10 SUPERSTRUCTURE		$0	$0	$0
B20 EXTERIOR CLOSURE		$228,640	$0	$228,640
B30 ROOFING		$6,292,602	$0	$6,292,602
C10 INTERIOR CONSTRUCTION		$0	$0	$0
C20 STAIRCASES		$15,750	$0	$15,750
C30 FINISHES		$0	$0	$0
D10 CONVEYING SYSTEMS		$0	$0	$0
D20 PLUMBING		$75,100	$0	$75,100
D30 HVAC		$123,100	$0	$123,100
D40 FIRE PROTECTION		$0	$0	$0
D50 ELECTRICAL		$25,860	$0	$25,860
E10 EQUIPMENT		$0	$0	$0
E20 FURNISHINGS		$0	$0	$0
F10 SPECIAL CONSTRUCTION		$50,000	$0	$50,000
F20 SELECTIVE BUILDING DEMOLITION		$700,803	$0	$700,803
Total Building Construction		**$7,511,855**	**$0**	**$7,511,855**
G10 SITE PREPARATION		$0	$0	$0
G20 SITE IMPROVEMENTS		$0	$0	$0
G30 SITE MECHANICAL UTILITIES		$0	$0	$0
G40 SITE ELECTRICAL		$0	$0	$0
G90 OTHER SITE CONSTRUCTION		$0	$0	$0
Total Site Construction		**$0**	**$0**	**$0**
TOTAL BUILDING & SITE		**$7,511,855**	**$0**	**$7,511,855**
MARKUPS		**$1,891,065**	**$0**	**$1,891,065**
General conditions & project requirements	18.0%	$1,352,134	$0	$1,352,134
Bond and insurance	2.0%	$177,280	$0	$177,280
Building permit	0.0%	$0	$0	$0
Prime contractor's head office overhead and profit (Fee)	4.0%	$361,651	$0	$361,651
PLANNED CONSTRUCTION COST	**Jun-25**	**$9,402,920**	**$0**	**$9,402,920**
CONTINGENCIES/ESCALATION		**$944,053**	**$0**	**$944,053**
Design & pricing contingency	5.0%	$470,146	$0	$470,146
Gmp contingency	0.0%	$0	$0	$0
Escalation to start date (June 2026)	4.8%	$473,907	$0	$473,907
ESTIMATED CONTRACT AWARD	**Jun-26**	**$10,346,973**	**$0**	**$10,346,973**
	Area	170,896		170,896
	$/sf	$60.55		$60.55

ALTERNATES

Alt 1: High School-new roof drains and interior piping	$623,144

Fennessy Consulting Services

HOLYOKE HIGH SCHOOL
Roof Replacement Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Holyoke High School - Summary

	Total	Roof Area $/sf	170,896 %
A10 Foundations	**$0**	**$0.00**	**0.00%**
A1010 Foundations	$0	$0.00	0.00%
A1020 Special Foundations	$0	$0.00	0.00%
A1030 Slab on Grade	$0	$0.00	0.00%
A20 Basement Construction	**$0**	**$0.00**	**0.00%**
A2010 Basement Earthwork	$0	$0.00	0.00%
A2020 Basement Walls	$0	$0.00	0.00%
B10 Superstructure	**$0**	**$0.00**	**0.00%**
B1010 Floor Construction	$0	$0.00	0.00%
B1020 Roof Construction	$0	$0.00	0.00%
B20 Exterior Closure	**$228,640**	**$1.34**	**2.43%**
B2010 Exterior Walls	$227,220	$1.33	2.42%
B2020 Windows	$0	$0.00	0.00%
B2030 Exterior Doors	$1,420	$0.01	0.02%
B30 Roofing	**$6,292,602**	**$36.82**	**66.92%**
B3010 Roof Covering	$6,271,302	$36.70	66.70%
B3020 Roof Openings	$21,300	$0.12	0.23%
C10 Interior Construction	**$0**	**$0.00**	**0.00%**
C1010 Partitions	$0	$0.00	0.00%
C1020 Interior Doors	$0	$0.00	0.00%
C1030 Specialties	$0	$0.00	0.00%
C20 Staircases	**$15,750**	**$0.09**	**0.17%**
C2010 Stair Construction	$15,750	$0.09	0.17%
C2020 Stair Finishes	$0	$0.00	0.00%
C30 Finishes	**$0**	**$0.00**	**0.00%**
C3010 Wall Finishes	$0	$0.00	0.00%
C3020 Floor Finishes	$0	$0.00	0.00%
C3030 Ceiling Finishes	$0	$0.00	0.00%
D10 Conveying Systems	**$0**	**$0.00**	**0.00%**
D1010 Elevators and Lifts	$0	$0.00	0.00%
D1020 Escalators and Moving Walkways	$0	$0.00	0.00%
D1030 Other Conveying Systems	$0	$0.00	0.00%
D20 Plumbing	**$75,100**	**$0.44**	**0.80%**
D2010 Plumbing Complete	$75,100	$0.44	0.80%
D30 Heating, Ventilation & Air Conditioning	**$123,100**	**$0.72**	**1.31%**
D3010 HVAC, Complete	$123,100	$0.72	1.31%
D40 Fire Protection	**$0**	**$0.00**	**0.00%**
D4010 Fire Protection, Complete	$0	$0.00	0.00%
D50 Electrical	**$25,860**	**$0.15**	**0.28%**
D5010 Electrical, Complete	$25,860	$0.15	0.28%
E10 Equipment	**$0**	**$0.00**	**0.00%**
E1010 Commercial Equipment	$0	$0.00	0.00%
E1020 Institutional Equipment	$0	$0.00	0.00%
E1030 Vehicular Equipment	$0	$0.00	0.00%
E1090 Other Equipment	$0	$0.00	0.00%
E20 Furnishings	**$0**	**$0.00**	**0.00%**
E2010 Fixed Furnishings	$0	$0.00	0.00%
E2020 Loose Furnishings	$0	$0.00	0.00%

HOLYOKE HIGH SCHOOL
Roof Replacement Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Holyoke High School - Summary

		Total	Roof Area $/sf	170,896 %
F10 Special Construction		**$50,000**	**$0.29**	**0.53%**
F1010 Special Structures		$50,000	$0.29	0.53%
F1020 Integrated Construction		$0	$0.00	0.00%
F1030 Special Systems and Facilities		$0	$0.00	0.00%
F20 Selective Building Demolition		**$700,803**	**$4.10**	**7.45%**
F2010 Building Elements Demolition		$655,803	$3.84	6.97%
F2020 Hazardous Components Abatement		$45,000	$0.26	0.48%
TOTAL BUILDING CONSTRUCTION		**$7,511,855**	**$43.96**	**79.89%**
Total Site Construction		**$0**	**$0.00**	**0.00%**
TOTAL BUILDING & SITE		**$7,511,855**	**$43.96**	**79.89%**
Markups		**$1,891,065**	**$11.07**	**20.11%**
General Conditions				
General conditions & project requirements	18.0%	$1,352,134	$7.91	14.38%
Bond and insurance	2.0%	$177,280	$1.04	1.89%
Building permit	0.0%	$0	$0.00	0.00%
Overhead and profit				
Prime contractor's head office overhead and profit (Fee)	4.0%	$361,651	$2.12	3.85%
PLANNED CONSTRUCTION COST	**Jun-25**	**$9,402,920**	**$55.02**	**100.00%**
Contingencies/Escalation		**$944,053**	**$5.52**	
Contingencies				
Design and pricing contingency	5.0%	$470,146	$2.75	
Gmp contingency	0.0%	$0	$0.00	
Escalation				
Escalation to start date (June 2026)	4.8%	$473,907	$2.77	
ESTIMATED CONTRACT AWARD	**Jun-26**	**$10,346,973**	**$60.55**	

HOLYOKE HIGH SCHOOL
Roof Replacement Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Holyoke High School - Estimate Detail

	Quantity	Unit	Rate	Total
B2010 EXTERIOR WALL				
Exterior skin - metal panel				
Paint to metal panel walls at penthouse	1,800	SF	2.50	4,500
Existing masonry				
Masonry repairs/replacement	42	SF	250.00	10,500
Exterior brick course from the CMU portion of masonry wall where brick has bowed/bulged	100	SF	30.00	3,000
Strip paint from mechanical penthouse metal wall panels	1	LS	620.00	620
Rails and the like				
Life safety anchors	40	EA	650.00	26,000
Ballasted guardrail system	913	LF	200.00	182,600
Subtotal				**$227,220**
B2030 EXTERIOR DOORS				
Metal doors				
Remove, reinstall mechanical penthouse doors				
New sill flashing				
Miscellaneous				
Paint to doors	1	EA	250.00	250
Paint to frame	1	EA	250.00	250
Backer rod and double sealant	1	EA	120.00	120
Subtotal				**$1,420**
B3010 ROOF COVERING				
Membrane roofing				
PVC	170,896	SF	16.00	2,734,336
Abutment of flat roof with adjacent walls	1,751	LF	15.00	26,265
Allowance for working membrane roofing around pipe and duct penetrations	1	LS	273,433.60	273,434
Air barrier	170,896	SF	4.50	769,032
Insulation	170,896	SF	7.00	1,196,272
Roof sheathing	170,896	SF	4.50	769,032
Rough blocking	5,252	LF	8.00	42,016
Canopy roofing system				
PVC membrane	2,513	SF	16.00	40,208
Plywood sheathing	2,513	SF	4.50	11,309
Rough blocking	2,513	SF	0.45	1,131
Miscellaneous roofing				
Weldable walkways	5,000	SF	12.00	60,000
Flashings				
Headwall flashings where removed	70	LF	20.00	1,400
Masonry work associated with headwall flashings	70	LF	150.00	10,500
Flashings	5,406	LF	20.00	108,120

HOLYOKE HIGH SCHOOL
Roof Replacement Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Holyoke High School - Estimate Detail

	Quantity	Unit	Rate	Total
Gutters and downspouts				
Fascia mounted gutters at sloped roofing	190	LF	30.00	5,700
Scupper collector box and downspout	19	EA	150.00	2,850
Down spouts	380	LF	20.00	7,600
Splash block over weldable walkway pad	1	EA	150.00	150
Edge treatment				
Trim at eaves/fascia to roof	5,406	LF	30.00	162,180
Rough blocking at roof edges	541	LF	7.00	3,787
Expansion joint cover	836	LF	55.00	45,980
Subtotal				**$6,271,302**
B3020 ROOF OPENINGS				
Skylight system				
Skylight and safety cover over new membrane on existing curb, reinstalled	46	SF	300.00	13,800
Roof hatch/ vents				
Reinstall/reseal roof hatch, new 2X lumber curb build-up at roof hatch locations	3	LOC	2,500.00	7,500
Subtotal				**$21,300**
C2010 STAIR CONSTRUCTION				
Miscellaneous steps and ladders				
Roof ladder	2	EA	2,250.00	4,500
12'	1			
8'	1			
Ship ladder	2	EA	2,250.00	4,500
7"	1			
6'	1			
5'	1			
Interior roof access ladder at hatch location	3	EA	2,250.00	6,750
Subtotal				**$15,750**
D2010 PLUMBING				
Plumbing				
Roof drain	50	EA	1,200.00	60,000
Remove existing roof drains	49	EA	150.00	7,350
Extend vent piping, 18"	67	EA	100.00	6,700
Flash and seal at heated stack	6	EA	150.00	900
Flash and seal at flue/exhaust	1	EA	150.00	150
Subtotal				**$75,100**
D3010 HVAC				
Hvac				
Remove, store and reinstall mechanical equipment	61	EA	1,500.00	91,500
Remove non-functional exhaust fan and lumber sleepers	1	EA	750.00	750
Remove non-functional flue down to bottom of deck elevation	1	EA	250.00	250

	Quantity	Unit	Rate	Total
Pipe chase box at mechanical unit	16	EA	350.00	5,600
Testing	1	LS	5,000.00	5,000
Crane associated with equipment removal and re-installation	1	LS	20,000.00	20,000
Subtotal				**$123,100**
D5010 ELECTRICAL				
Electrical installation				
Disconnect and reconnect mechanical equipment	77	EA	310.00	23,870
Remove large area of unused equipment and ballasts	1	LOC	500.00	500
Flash and seal at conduit penetration	1	LS	1,240.00	1,240
Flash and seal at guy wire penetration	1	LS	250.00	250
Subtotal				**$25,860**
F1010 SPECIAL STRUCTURES				
Staging				
Allowance for staging, including access staircase	1	LS	50,000.00	50,000
Subtotal				**$50,000**
F2010 BUILDING ELEMENTS DEMOLITION				
Roof demolition				
Protect all roof openings and edges	170,896	SF	0.50	85,448
Membrane roofing down to roof deck substrate	170,896	SF	3.00	512,688
Metal fascia roof edge metal	5,406	LF	2.00	10,812
Deteriorated blocking at metal fascia	541	LF	5.00	2,705
Expansion joint assembly, blocking to remain	836	LF	5.00	4,180
Damaged headwall counter flashing	70	LF	6.00	420
Substrate behind membrane at headwall flashing locations	2,800	SF	10.00	28,000
Headwall flashings where headwall will be covered by new plywood and membrane	125	LF	6.00	750
Saw cut/grind connections of metal panels at base of mechanical penthouse	1	LS	600.00	600
Metal flashing beneath metal panel walls at mechanical penthouse	150	LF	4.00	600
Uninstall and store to be reinstalled				
Roof hatch	3	EA	250.00	750
Skylight and safety cover	46	EA	100.00	4,600
Capped curb, wood blocking and flashing	1	EA	250.00	250
Pipe chase boxes/pitch pockets	16	EA	50.00	800
Interior roof access ladder at hatch location	3	EA	250.00	750
Roof ladder	5	EA	350.00	1,750
Gutter	150	LF	2.00	300
Downspouts	5	EA	50.00	250
Weathervane	1	EA	150.00	150
Subtotal				**$655,803**

HOLYOKE HIGH SCHOOL
Roof Replacement Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Holyoke High School - Estimate Detail

	Quantity	Unit	Rate	Total
F2020 HAZARDOUS COMPONENTS ABATEMENT				
Hazardous materials abatement				
Black tar/mastic (ACM) at all masonry, flashings, termination bars, roof edge systems, equipment and piping penetrations	1	LS	9,000.00	9,000
Gray caulk/sealants (ACM) on all masonry, copper/sheet-metal, equipment, flashings accessories, etc.	1	LS	36,000.00	36,000
Subtotal				**$45,000**
MARKUPS				
General conditions and project requirements				
General conditions and requirements	18.0%		7,511,855	1,352,134
Bond and Insurance	2.0%		8,863,989	177,280
Building permit	0.0%		9,041,269	
Overhead and Profit				
Prime contractor's head office overhead and profit (Fee)	4.0%		9,041,269	361,651
Subtotal				**$1,891,065**
CONTINGENCIES/ESCALATION				
Contingencies				
Design contingency	5.0%		9,402,920	470,146
Prime contractor's contingency	0.0%		9,873,066	
Escalation				
Escalation to Start Date (June 2026)	4.8%		9,873,066	473,907
Subtotal				**$944,053**

HOLYOKE HIGH SCHOOL
Roof Replacement Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Alternates

	Quantity	Unit	Rate	Total
ALT 1: HIGH SCHOOL-NEW ROOF DRAINS AND INTERIOR PIPING				
Trade Costs				
Roof drains	52	EA	1,200.00	62,400
Storm water piping	3,120	LF	125.00	390,000
Subtotal				**$452,400**
Markups				
General conditions and project requirements				
General conditions and requirements	18.0%		452,400	81,432
Bond and Insurance	2.0%		533,832	10,677
Building permit	0.0%		544,509	
Overhead and Profit				
Prime contractor's head office overhead and profit (Fee)	4.0%		544,509	21,780
Subtotal				**$113,889**
Contingencies/Escalation				
Contingencies				
Design contingency	5.0%		566,289	28,314
GMP contingency	0.0%		594,603	
Escalation				
Escalation to Start Date (June 2026)	4.8%		594,603	28,541
Subtotal				**$56,855**
TOTAL - ALTERNATE 1				**$623,144**

HOLYOKE HIGH SCHOOL
Roof Replacement Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

CSI Summary

		Holyoke High School	Site work	Total Estimate
	Gross Area:	0 SF		0 SF
DIVISION 1 - GENERAL REQUIRMENTS				
01-00-00	*General Conditions*	*See Below*	*See Below*	*See Below*
DIVISION 2 - EXISTING CONDITIONS		***819,793***	***0***	***819,793***
02-40-00	*Selective Demolition*	*774,793*	*0*	*774,793*
02-60-00	*Hazardous Materials Abatement/Removal*	*45,000*	*0*	*45,000*
DIVISION 3 - CONCRETE		***0***	***0***	***0***
DIVISION 4 - MASONRY		***21,000***	***0***	***21,000***
04-21-00	*Brick Masonry*	*10,500*	*0*	*10,500*
04-22-00	*Concrete Masonry Units*	*0*	*0*	*0*
04-80-00	*Masonry Restoration & Cleaning*	*10,500*	*0*	*10,500*
DIVISION 5 - METAL		***270,330***	***0***	***270,330***
05-50-00	*Metal Fabrications*	*26,000*	*0*	*26,000*
05-60-00	*Metal Rails and Handrails*	*182,600*	*0*	*182,600*
05-80-00	*Expansion Joints*	*61,730*	*0*	*61,730*
DIVISION 6 - WOOD & PLASTICS		***58,243***	***0***	***58,243***
06-10-00	*Rough Carpentry*	*58,243*	*0*	*58,243*
DIVISION 7 - THERMAL & MOISTURE PROTECTION		***5,395,167***	***0***	***5,395,167***
07-10-00	*Damp proofing and Waterproofing*	*769,032*	*0*	*769,032*
07-50-00	*Membrane Roofing*	*4,330,665*	*0*	*4,330,665*
07-60-00	*Flashing and Sheet Metal*	*271,700*	*0*	*271,700*
07-70-00	*Roofing and Wall Specialties and Accessories*	*23,650*	*0*	*23,650*
07-90-00	*Joint Sealants*	*120*	*0*	*120*
DIVISION 8 - DOORS & WINDOWS		***14,600***	***0***	***14,600***
08-40-00	*Entrances, Storefronts*	*800*	*0*	*800*
08-60-00	*Roof Windows and Skylights*	*13,800*	*0*	*13,800*
DIVISION 9 - FINISHES		***774,032***	***0***	***774,032***
09-20-00	*Gypsum Wallboard Assemblies*	*769,032*	*0*	*769,032*
09-90-00	*Painting and Coating*	*5,000*	*0*	*5,000*
DIVISION 10 - SPECIALTIES		***0***	***0***	***0***
DIVISION 11 - EQUIPMENT		***0***	***0***	***0***
DIVISION 12 - FURNISHINGS		***0***	***0***	***0***
DIVISION 13 - SPECIAL CONSTRUCTION		***50,000***	***0***	***50,000***
13-90-00	*Unassigned*	*50,000*	*0*	*50,000*

HOLYOKE HIGH SCHOOL
Roof Replacement Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

CSI Summary

		Holyoke High School	Site work	Total Estimate
	Gross Area:	0 SF		0 SF
DIVISION 14 - CONVEYING SYSTEMS		***0***	***0***	***0***
DIVISION 21 - FIRE SUPPRESSION		***0***	***0***	***0***
DIVISION 22 - PLUMBING		***75,100***	***0***	***75,100***
22-00-00	*Plumbing*	*75,100*	*0*	*75,100*
DIVISION 23 - HVAC		***31,600***	***0***	***31,600***
23-00-00	*HVAC*	*31,600*	*0*	*31,600*
DIVISION 26 - ELECTRICAL		***1,990***	***0***	***1,990***
26-00-00	*Electrical*	*1,990*	*0*	*1,990*
DIVISION 31 -EARTHWORK		***0***	***0***	***0***
DIVISION 32 -EXTERIOR IMPROVEMENTS		***0***	***0***	***0***
DIVISION 33 -UTILITIES		***0***	***0***	***0***
TOTAL DIRECT WORK		***$7,511,855***	***$0***	***$7,511,855***
MARKUPS		***1,891,065***	***0***	***1,891,065***
01-10-00	*General Conditions and Project Requirements*	*1,352,134*	*0*	*1,352,134*
01-20-00	*Insurance, Bond*	*177,280*	*0*	*177,280*
01-30-00	*Permits*	*0*	*0*	*0*
01-40-00	*Prime Contractor's Head Office Overhead & Profit (Fee)*	*361,651*	*0*	*361,651*
PLANNED CONSTRUCTION COST (June 2025)		***$9,402,920***	***$0***	***$9,402,920***
CONTINGENCIES/ESCALATION		***944,053***	***0***	***944,053***
50-10-00	*Design Contingency*	*470,146*	*0*	*470,146*
50-20-00	*Construction Contingency*	*0*	*0*	*0*
50-30-00	*Escalation*	*473,907*	*0*	*473,907*
ESTIMATED CONTRACT AWARD (June 2026)		***$10,346,973***	***$0***	***$10,346,973***

HOLYOKE HIGH SCHOOL
Roof Replacement Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Filed Sub-Bid Summary

		Holyoke High School	Sitework	Total Estimate
	Gross Area:	0 SF		0 SF
04-10-00	**Masonry**	**21,000**	**0**	**21,000**
04-21-00	Brick Masonry	10,500		10,500
04-80-00	Masonry Restoration & Cleaning	10,500		10,500
05-50-00	**Miscellaneous Metals**	**208,600**		**208,600**
05-50-00	Metal Fabrications	26,000		26,000
05-60-00	Metal Rails and Handrails	182,600		182,600
07-10-00	**Waterproofing, Dampproofing & Caulking**	**769,152**		**769,152**
07-10-00	Dampproofing and Waterproofing	769,032		769,032
07-90-00	Joint Sealants	120		120
07-50-00	**Roofing**	**4,602,365**		**4,602,365**
07-50-00	Membrane Roofing	4,330,665		4,330,665
07-60-00	Flashing and Sheet Metal	271,700		271,700
08-10-00	**Windows**	**800**		**800**
08-40-00	Entrances, Storefronts	800		800
08-80-00	**Glass and Glazing**	**0**		**0**
09-10-00	**Plaster**	**0**		**0**
09-30-00	**Tile**	**0**		**0**
09-66-00	**Terrazzo**	**0**		**0**
09-51-00	**Acoustic Ceilings**	**0**		**0**
09-65-00	**Resilient Flooring**	**0**		**0**
09-68-00	**Carpet**	**0**		**0**
09-90-00	**Painting**	**5,000**		**5,000**
09-90-00	Painting and Coating	5,000		5,000
14-20-00	**Conveying**	**0**		**0**
21-00-00	**Fire Protection**	**0**		**0**
22-00-00	**Plumbing**	**75,100**		**75,100**
22-00-00	Plumbing	75,100		75,100

HOLYOKE HIGH SCHOOL
Roof Replacement Project
Holyoke, MA
DESIGN DEVELOPMENT CONSTRUCTION COST REPORT
June 16, 2025

Filed Sub-Bid Summary

		Holyoke High School	Sitework	Total Estimate
	Gross Area:	0 SF		0 SF
23-00-00	***Hvac***	***31,600***		***31,600***
23-00-00	HVAC	31,600		31,600
26-00-00	***Electrical***	***1,990***		***1,990***
26-00-00	Electrical	1,990		1,990
TOTAL FILED SUB-BID WORK		***$5,715,607***		***$5,715,607***

Schematic Design Submission Checklist
MSBA Accelerated Repair Program

District: _____

School: _____

Scope: _____

Schematic Design Deliverables:

OPM	District	
☐	☐	Project Narrative: - Existing conditions analysis (hazardous materials, structural, etc.) - Explanation of proposed solution - Designer statement that the proposed solution meets the Massachusetts Stretch Energy Code and/or the International Energy Conservation Code
☐	☐	Code Analysis
☐	☐	Schematic Design Drawings
☐	☐	Cost Estimate (CSI Format) - Include all Proposed Alternates
☐	☐	Form 3011 – Total Project Budget
☐	☐	Project Cash Flow (cumulative line chart illustrating Total Project Budget)
☐	☐	Project Schedule (Gantt Chart)
☐	☐	Accelerated Repair Program Reimbursement Rate Certification signed by the District
☐	☐	Proposed project scope and budget vote language in compliance with MSBA standard vote language

Program Guidelines and Project Funding Agreement:

OPM	District	
☐	☐	MSBA Board of Directors authorization to execute a Project Funding Agreement is tied to the specific project scope and budget presented in the Schematic Design.
☐	☐	The portion of the Construction Contingency potentially eligible for reimbursement is set at 5% of the total estimated eligible construction costs as included in the PFA's Total Project Budget and is intended for hard costs only. The MSBA will complete one Change Order review per district in which the MSBA will review Change Orders for eligibility not validity. All ineligible costs will not be reimbursed.
☐	☐	The portion of the Owner's Contingency potentially eligible for reimbursement is set at 0.5% of the total estimated eligible construction costs as included in the PFA's Total Project Budget and is intended for soft costs only. All ineligible costs will not be reimbursed.
☐	☐	Prior to securing project funding, the district will draft proposed project scope and budget vote language in compliance with MSBA standard vote language and will provide the vote language to the MSBA for review and approval prior to taking the vote.
☐	☐	After bids have been received and actual construction costs are established, the district's potential Project Funding Agreement must be revised to reflect the actual construction costs in accordance with paragraph 2.3 of the Project Funding Agreement. If there are bid savings, the MSBA shares in the cost savings by reducing the maximum facilities grant to reflect reimbursable costs. If there is a bid overage, construction contingency is transferred to the construction budget to reflect the additional costs and is deemed ineligible. The transfer of construction contingency due to the bid overage results in a reduction to the maximum facilities grant.
☐	☐	MSBA's standardized Schedule of Values will be used by the district to ensure that all budget entries in the MSBA's ProPay system mirror the Total Project Budget Form 3011 following the PFA Bid Amendment. The MSBA will only reimburse eligible costs if they are entered to the correct cost codes in the Total Project Budget.
☐	☐	Budget Revision Requests will be submitted by the district in a timely manner to reflect changes to the Total Project Budget. After a Budget Revision Request is executed, the district will enter the Budget Revision Request into the ProPay system for approval by the MSBA.

☐	☐	MSBA's Audit Department will review requests for reimbursement in the ProPay system of $50,000 or more. All reimbursement requests which are less than $50,000 will be returned to the district without review. All districts are encouraged to attend ProPay training conducted by the Audit Department following the execution of a Project Funding Agreement.
☐	☐	OPM monthly reporting begins when the OPM contract is executed and continues until the project receives Board of Directors approval of the final audit. Failure to submit timely and complete reports may impact district reimbursement review and payment. OPM monthly reporting supports MSBA review of reimbursement requests.

I certify, as evidenced by the boxes set forth under the heading, "Schematic Design Deliverables," which I have checked above, that I have fulfilled all requirements described in Section 8.2 of the MSBA Standard Contract for Project Management Services (Accelerated Repair Program) by submitting the listed deliverables by the established deadline to the MSBA. I further certify, as evidenced by the boxes set forth under the heading, "Program Guidelines and Project Funding Agreement," which I have checked above, that I have explained the Program Guidelines and Project Funding Agreement to the district.

I understand that if a conflict is created between this form and the Project Funding Agreement, the Project Funding Agreement is the controlling document. I also understand that if a conflict is created between this form and the MSBA Standard Contract for Project Management Services (Accelerated Repair Program), the MSBA Standard Contract is the controlling document. I further recognize that the purpose of this form is to further understand the Project Funding Agreement and the MSBA Standard Contract for Project Management Services (Accelerated Repair Program).

_____

Title: Project Director, Owner's Project Manager
Firm:
Date:

I certify, as evidenced by the boxes set forth under the heading, "Program Guidelines and Project Funding Agreement," which I have checked above, that I have read and understand the Program Guidelines and Project Funding Agreement. I certify, as evidenced by the boxes set forth under the heading, "Schematic Design Deliverables," which I have checked above, that I have reviewed the enumerated deliverables within the Schematic Design Submittal with the Owner's Project Manager and Designer. I further

certify, as evidenced by the boxes set forth under the heading, "Schematic Design Deliverables," which I have checked above, that the OPM has explained to me the OPM's responsibilities as described in Section 8.2 of the MSBA Standard Contract for Project Management Services (Accelerated Repair Program) to submit the designer's deliverables listed above.

I understand that if a conflict is created between this form and the Project Funding Agreement, the Project Funding Agreement is the controlling document. I also understand that if a conflict is created between this form and the MSBA Standard Contract for Project Management Services (Accelerated Repair Program), the MSBA Standard Contract is the controlling document. I further recognize that the purpose of this form is to further understand the Project Funding Agreement and the MSBA Standard Contract for Project Management Services (Accelerated Repair Program).

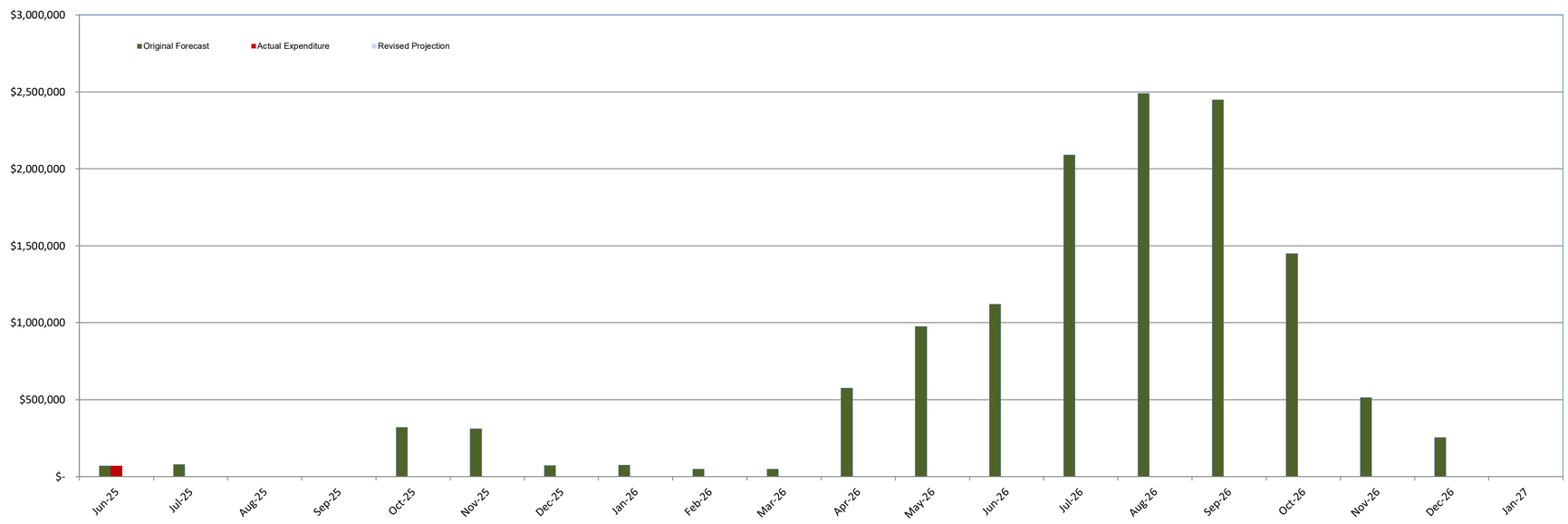
_____

Title: Superintendent of Schools
Date:

Holyoke High School Roof Replacement

Monthly Cash Flow	July 1, 2025		
Date	Original Forecast	Actual Expenditure	Revised Projection
Jun-25	$ 70,000	$ 70,000	
Jul-25	$ 80,000	$ -	
Aug-25	$ -	$ -	
Sep-25	$ -	$ -	
Oct-25	$ 319,620	$ -	
Nov-25	$ 311,102	$ -	
Dec-25	$ 72,919	$ -	
Jan-26	$ 75,000	$ -	
Feb-26	$ 50,000	$ -	
Mar-26	$ 50,000	$ -	
Apr-26	$ 575,000	$ -	
May-26	$ 975,000	$ -	
Jun-26	$ 1,120,000	$ -	
Jul-26	$ 2,090,000	$ -	
Aug-26	$ 2,490,000	$ -	
Sep-26	$ 2,450,000	$ -	
Oct-26	$ 1,450,000	$ -	
Nov-26	$ 513,900	$ -	
Dec-26	$ 253,156	$ -	
Jan-27	$ -	$ -	
Total	$ 12,945,697	$ 70,000	$ -

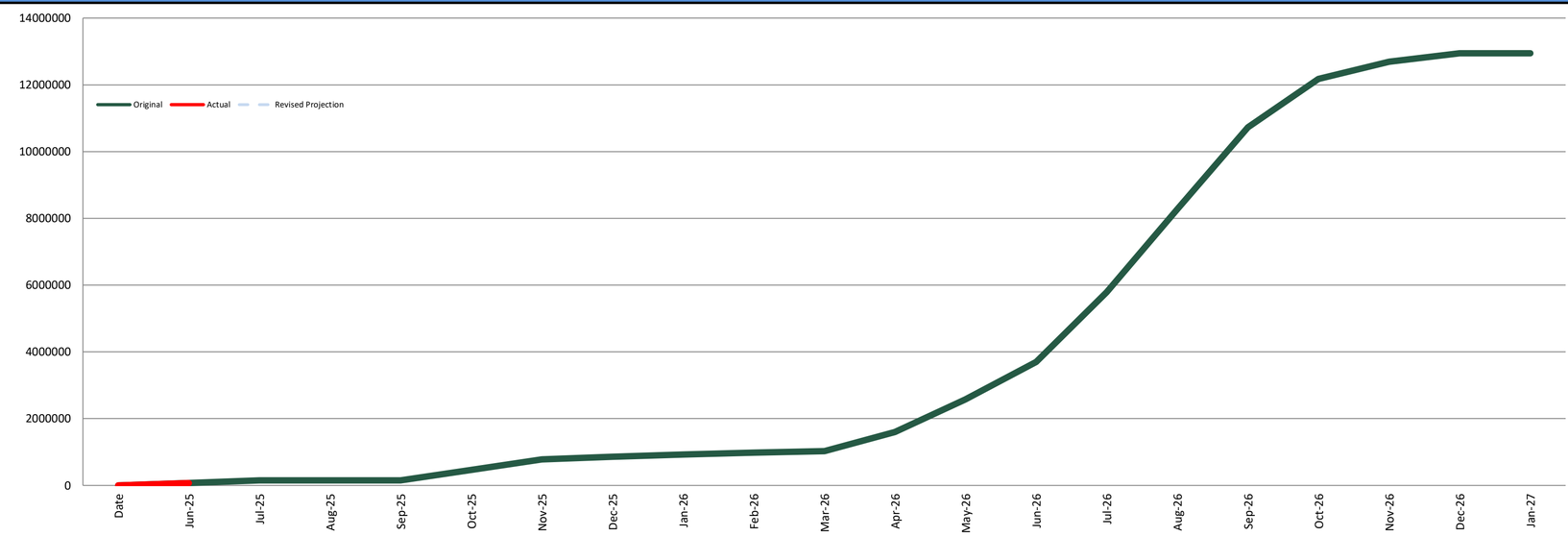
Projected Cash Flow Forecast



Holyoke High School Roof Replacement

Cumulative Cash Flow	July 1, 2025		
Date	Original Forecast	Actual Expenditure	Revised Projection
Jun-25	$ 70,000	$ 70,000	
Jul-25	$ 150,000		
Aug-25	$ 150,000		
Sep-25	$ 150,000		
Oct-25	$ 469,620		
Nov-25	$ 780,722		
Dec-25	$ 853,641		
Jan-26	$ 928,641		
Feb-26	$ 978,641		
Mar-26	$ 1,028,641		
Apr-26	$ 1,603,641		
May-26	$ 2,578,641		
Jun-26	$ 3,698,641		
Jul-26	$ 5,788,641		
Aug-26	$ 8,278,641		
Sep-26	$ 10,728,641		
Oct-26	$ 12,178,641		
Nov-26	$ 12,692,541		
Dec-26	$ 12,945,697		
Jan-27	$ 12,945,697		

Projected Cash Flow Forecast



IN THE YEAR TWO THOUSAND AND TWENTY-FIVE

_____ AMENDMENT TO APPENDIX A OF THE REVISED CODE OF ORDINANCES OF THE CITY OF HOLYOKE, MASSACHUSETTS 1997

AN ORDINANCE

Be it ordained by the City Council of the City of Holyoke as follows:

SECTION 1. Appendix A entitled "Zoning" of the Revised Code of Ordinances of the City of Holyoke, Massachusetts, 1997, as amended, is hereby further amended by:

Amending "SECTION 4. – USE REGULATIONS", "4-4. - Accessory uses and structures." by adding the following after the last sentence of "4.4.11 BESS (Small-Scale) as an accessory structure.":

"4.4.12 Short-Term Rentals

1. **Purpose.**

In accordance with Chapter 337 of the Acts of 2018, this chapter "short-term rentals" has been enacted by the City of Holyoke for the purpose of establishing clear and comprehensive regulations through which certain dwelling units within the City may be utilized as so-called "short-term rental" units. This chapter was created and approved in the best interest of the public, and furthers public safety by allowing for the safe and reasonably regulated operation of such rentals for Holyoke residents, and by protecting the safety of renters and residents alike. This chapter ensures that the primary use of such rentals remains residential, and further seeks to protect against and eliminate safety concerns or detriments to the surrounding residential neighborhood that may be created by said short-term rentals, including but not limited to preventing the saturation of said rentals within City of Holyoke neighborhoods, and the preserving of neighborhood character. This chapter provides a process through which said short-term rental units may be registered with the City of Holyoke under the stipulations set forth herein.

2. **Definitions.**

As used in this chapter, the following terms shall have the meanings indicated:

ACCESSORY DWELLING UNIT ("ADU")

Accessory Dwelling Unit or ADU shall mean any of the following (i) an accessory dwelling unit as defined by MGL c. 40A, Section 1A, (ii) a protected use accessory dwelling unit as defined by 760 CMR 71.00, or (iii) a locally approved and defined accessory dwelling unit as determined by the Holyoke City Council and Holyoke Planning Board.

BOOKING AGENT

Any person or entity that facilitates reservations of or collects payment for a short-term rental on behalf of or for an operator for a fee.

COMMISSIONER

The City of Holyoke's Building Commissioner or his or her designee.

DIRECTOR

The City of Holyoke Board of Health Director or his or her designee.

HOME SHARE UNIT

A residential unit offered as a short-term rental that is the operator's primary residence.

LIMITED SHARE UNIT

A residential unit that is the operator's primary residence, a portion of which is offered as a short-term rental while the operator is present. One bedroom must be reserved for the operator.

OPERATOR

Any natural person who: (i) is the owner of a residential unit, (ii) is an owner of a corporation, limited liability company, partnership, limited partnership, limited liability partnership, or any other entity that owns a residential unit, or (iii) is the beneficiary or trustee of a trust or similar instrument which owns a residential units and that seeks to offer said residential unit as a short-term rental. Only one owner is allowed to register as an operator under this chapter, and it shall be unlawful for any other person, even if that person is an owner and meets the qualifications of a primary resident, to offer a residential unit for short-term residential rental.

OWNER-ADJACENT UNIT

A residential unit offered as a short-term rental that is not the owner's primary residence, but that is located within the same dwelling as the primary residence of, and is owned by, said owner; provided that owner-adjacent units used as short-term rentals shall only be allowed in two-family or three-family dwellings, where all units are owned by the same unique owner-occupant, who serves as the operator; provided further that, for the purpose of owner-occupied three-family residential dwellings, in addition to the unit in which they reside and use as a home share or limited share unit, an operator or an owner of an owner-adjacent unit may only register and use one owner-adjacent unit as a short-term rental.

PRIMARY RESIDENCE

A residential unit in which an operator resides for at least nine months out of a twelve-month period. Primary residence shall be demonstrated by showing that as of the date of the registration of the residential unit with City as a short-term rental, the operator has resided in said residential unit for nine of the past 12 months or that the operator intends to reside in the residential unit for nine of the next 12 months, in accordance with the proof of primary residence requirements set forth below.

PROOF OF PRIMARY RESIDENCE

A copy of a driver's license or state-issued identification, as well as one other document showing residency at the residential unit for the short-term rental (e.g., utility bill, cable bill, or motor vehicle registration).

REGISTRATION NUMBER

An identification number assigned to a single residential unit registered as a short-term rental. Said numbers shall be valid for the calendar year during which they were assigned (January 1 through December 31), and shall be associated with both a single residential unit and a single operator. The residential number must be included on any listing or advertisement offering the unit as a short-term rental. Registration numbers will begin with the last two digits of the year they are given in.

RESIDENTIAL UNIT

A dwelling unit within a dwelling classified under the Building Code ("Code") as residential use, as those terms are defined in the Code, but excluding: a congregate living complex, elderly housing, group residence, homeless shelter, orphanage, temporary dwelling structure, and transitional housing. This term shall not include a hotel, motel or any other nonresidential use.

SHORT-TERM RENTAL(S)

The use of a residential unit for residential occupancy by a person or persons for a period of fewer than 31 consecutive calendar days, in exchange for a fee, compensation, or payment of any kind. Such a rental may or may not be facilitated through the use of a booking agent. Such a rental does not include or impact month-to-month leases or tenancies at will.

3. **Applicability.**

No residential unit shall be offered as a short-term rental except in compliance with each of the provisions of this chapter. The regulations set forth in this chapter shall apply to all short-term rentals in all zones.

4. **Ineligible and exempt residential units.**

A. The following residential units are not eligible to be offered as short-term rentals:

(1) Residential units designated as below-market-rate or income-restricted, which are subject to affordability covenants, or that are otherwise subject to housing or rental assistance under local, state, or federal law;

(2) Residential units subject to any requirement of local, state, or federal law that prohibits the leasing or subleasing of the unit or use of the unit as a short-term rental;

(3) Residential units that do not fit within the above definitions of Home Share Unit, Limited Share Unit, or Owner-Adjacent Unit.

(4) ADUs

1. Short-term rental of an ADU is strictly prohibited.

2. No ADU shall be leased, rented, or offered for rent for a term of fewer than 28 consecutive calendar days.

3. The property owner shall not advertise or list the ADU on any short-term rental platform or service (e.g., Airbnb, VRBO) for rental periods under 28 days.

4. Violations of this provision shall result in fines, revocation of occupancy permits for the ADU, or other enforcement actions as permitted under local and state law.

(5) Residential units that are the subject of:

A. Two or more findings of violations of this section within a six-month period, or;

B. Two or more violations of any municipal ordinance or state law or code relating to excessive noise, improper disposal of trash, disorderly conduct, or other similar conduct within a six-month period; or

C. Any illegal activity;

(6) The Building Commissioner may issue up to seventy-five (75) short term rental licenses during any calendar year for a total of no more than seventy-five (75) short term rental licenses being issued at any given time. The Building Commissioner may adjust the total number of allowable short term rentals to exceed seventy-five (75) in the event that the Building Commissioner issues written findings that such adjustment is warranted based upon the following factors: (i) such adjustment is within the spirit and intent of the Massachusetts General Laws and the City of Holyoke ordinances, (ii) such adjustments will not have the effect of substantially derogating from or nullifying the Massachusetts General Laws and the City of Holyoke ordinances, and (iii) said adjustment is in the best interests of the City of Holyoke and the public good.

B. The following residential units are not subject to certain provisions of this chapter:

(1) Currently licensed lodging houses.

(2) Existing bed-and-breakfasts.

(3) Residential units contracted for hospital stays (i.e., where the use of a dwelling unit or portion thereof is under an existing contract between the owner of the dwelling unit and a health-care facility or government entity or nonprofit organization registered as a charitable organization with the Secretary of the Commonwealth of Massachusetts or classified by the Internal Revenue Service as a public charity or private foundation that provides for the temporary housing in such unit of individuals who are being treated for trauma, injury, or disease, or their family members) shall not be considered a short-term rental.

5. **Requirements for the operation of short-term rentals.**

A. Residential units offered as a short-term rental shall either be Home Share Units, Limited Share Units, or Owner-Adjacent Units, as defined within this chapter. Exceptions to this would be at the discretion of the Building Department and a special permit needs to be granted by the Planning Board. Any property that is currently operating as a Short-Term Rental and can show

proof of rental history and no history of complaints will be considered for a registration number even if it does not fit the previously stated requirements.

B. One party of renters. A residential unit offered as a short-term rental shall be rented to only one party of short-term renters at a time, not rented as separate bedrooms, beds, or spaces to separate parties.

C. Number of short-term renters. A residential unit offered as a short-term rental shall be limited to eight guests total, or two guests per guest bedroom total, whichever is fewer. No more than four bedrooms at a time may be offered as a short-term rental.

D. A residential unit offered as a short-term rental shall comply with all standards and regulations promulgated by the City of Holyoke's Building Department.

E. Short-term rental of a residential unit as a Limited Share Unit. An operator may offer bedrooms within their primary residence as a short-term rental 365 days per year. One bedroom in the unit shall be reserved for, and occupied by, the operator during the entire term of the rental.

F. Short-term rental of a residential unit as an Owner-Adjacent Unit. An operator may offer an Owner-Adjacent Unit as a short-term rental 365 days per year.

G. Short-term rental of a primary residence as a Home Share Unit. Short-term rentals shall not exceed, in the aggregate, 90 consecutive or nonconsecutive calendar days per year, when the operator is not occupying the residential unit during the entire term of the short-term rental.

H. Rental period and use. Renting for an hourly rate, or for rental durations of fewer than 10 consecutive hours shall not be permitted. Commercial meetings and uses are prohibited in short-term rentals.

I. No outstanding violations. The residential unit offered as a short-term rental shall not have any outstanding building, sanitary, zoning, or fire code violations, orders of abatement, or stop-work orders, or other requirements, laws, or regulations that prohibit the operator from offering the residential unit as a short-term rental. If a violation or other order is issued, upon notice of said violation or order short-term rental use shall be terminated until the violation has been cured or otherwise resolved.

J. Should a property receive two or more violations within a six-month period of a nuisance complaint i.e. light, noise parking,, illegal fire pit, or odor or similar. The Short Term Rental of the property will be shut down at the discretion of the enforcing authority immediately after the second incident for 6 months after which the operator can reapply for a license. If a property receives two or more health and safety violations within 6 months ie, trash, fire safety, building code violations, fire code violations or board of health violations or similar the short term rental will be shut down at the discretion of the enforcing authority immediately for 1 year after which the operator can reapply for a license. If there is any illegal activity reported at the property the Short Term Rental will be shut down immediately for 1 year after which the operator can reapply for a license. After a Short Term Rental has been shut down two times it will no longer be eligible for a license. In the event a Short Term Rental is shut down it is the responsibility of the owner/ operator to find and pay for accommodations for any active renter assuming the renter is not the cause of the violation.

Compliance and interaction with other laws. Operators shall comply with all applicable federal, state, and local laws and codes, including but not limited to the Fair Housing Act, MGL c. 151B and local equivalents and regulations related thereto, and all other regulations applicable to residential dwellings. Operators shall certify at the time of registration that the operator is the owner of the residential unit offered as a short-term rental.

K. Retention of records. The operator shall retain and make available to the City, upon written request, records to demonstrate compliance with this section, including but not limited to: records demonstrating the number of months that the operator has resided or will reside in residential unit, if applicable; records showing consent of the owner of the residential unit to the residential unit's use as a short-term rental, if applicable; and records demonstrating number of days per year that the residential unit is offered as a short-term rental. The operator shall retain such records for as long as he or she desires to use the residential unit as a short-term rental.

L. Notifications. The operator shall post and maintain a sign on the inside of the short-term rental on the entry level, visible to and reasonably likely to be readily accessed by individuals utilizing the short-term rental, with the following information:

(1) Instructions for the disposal of waste per the City's recycling and trash programs;

(2) Information regarding the City's parking regulations, including but not limited to visitor parking passes, street sweeping, and snow emergencies;

(3) The local noise ordinances of the City;

(4) Contact information for the operator, or when the operator is not present, the contact information for a locally available contact designated and authorized to respond to all emergencies and problems that may arise during the rental period. Contact information, including for the operator and a local contact, shall be provided to the City along with the application for registration.

(5) In each bedroom, the operator shall post a laminated egress plan showing a red lined path to locations of exits.

M. Parking requirements. Prior to a permit being issued by the City of Holyoke, the operator must submit to the Planning Department a plan detailing parking instructions for guests of any short-term rental. This plan must be approved by the Planning Department.

Additionally, the operator shall, within 30 days of approved registration, provide notice to abutters of a residential unit (any residential dwelling located within 300 feet of said residential unit) that the residential unit has been registered as a short-term rental.

6. **Registration and inspection.**

A. Registration process. All residential units utilized as short-term rentals shall be required to register with the City of Holyoke's Building Department prior to commencing said use. A registration shall be valid for a one-year term, from January 1 through December 31 of each year, or for such alternative twelve-month period as the Commissioner shall determine. An operator shall provide information in its application, including: operator name, address of residential unit, operator's relationship to the unit, local contact information, dwelling floor plan showing size of bedrooms, ceiling heights, location and size of bedroom windows, clear opening per emergency

escape, Building Code requirements, location and size of means of egress doors, bathroom locations, size and fixtures, proposed number of occupants/beds per room, and other information as required by the City. The operator shall also certify that he or she and the residential unit comply with the requirements of this section. An operator who successfully registers his or her residential unit as a short-term rental shall be issued a registration number.

The City shall establish, maintain, and regularly update a database of registered properties through its Building Department. To the extent allowable by law, any personal information included in the City's database created hereunder, which constitutes intimate details of a personal nature, shall be deemed confidential and exempt from public disclosure in accordance with Massachusetts Public Records Law.

The City of Holyoke reserves the right, in furtherance of the stated purposes and goals of this chapter, to limit the number of registrations it will accept within the City limits, within a specific neighborhood, or within a reasonable radius of any currently registered short-term rental, within a given calendar year. The City Council, receiving recommendations from the Commissioner, the Director, and the Director of the Office of Planning and Economic Development r of the City, and in consultation with the Mayor, shall establish and from time to time amend the number of registrations that the City will allow for approval under this chapter, whether delineated by neighborhood, radius or otherwise, and shall include that information within applications for short-term rentals.

Upon submission of an application under this chapter, and on an on-going basis as necessary, registration information shall be compared to information managed and maintained by City and State Departments, in order to efficiently and effectively verify compliance with the provisions of this chapter.

B. As part of the registration process under this chapter, the City of Holyoke Building Department, shall inspect the residential unit being proposed for registration as a short-term rental. Such inspection shall ensure the unit meets minimum standards for human habitation. Additionally, the City of Holyoke Board of Health and Fire Department may perform annual inspections for registered short-term rentals at or around the time of renewal. Through submission of an application for registration under this chapter, owners are providing consent to allow reasonable and timely access to said unit(s) for said inspections. It shall be unlawful to operate a short-term rental without a functioning smoke detector, carbon monoxide detector, and fire extinguisher on the licensed premises, in each bedroom and common area.

C. Fees. Operators shall be responsible for paying an application fee of $250 per application under this chapter (due upon submission of the application), and upon successful registration, operators shall be responsible for paying an annual registration fee of $150 (due on January 2 of each calendar year). These fees may be adjusted annually by the Commissioner.

D. Re-registration upon unit turnover. A registration under this chapter shall be tied to both the residential unit and the operator, and will not automatically transfer upon the sale of the unit. New operators are responsible for ensuring that they re-register with the City Clerk to obtain a new registration number if they wish to continue to utilize the residential unit as a short-term rental.

E. Amending registration upon change in primary residence. If an operator offering a registered residential unit as a short-term rental ceases to be a primary resident of the unit, the operator shall immediately notify the City Clerk, and shall immediately cease using the residential unit as a short-term rental.

F. Room occupancy excise. A residential unit subject to the provisions of this chapter that is also subject to the room occupancy excise under MGL c. 64G or any other excise or surcharge pertaining to short-term rentals or transient occupancy shall comply with the provisions of said statutes.

7. **Penalties; enforcement.**

A. Penalties.

(1) This Ordinance shall be administered and enforced by the Commissioner and the Director.

(2) Violations and penalties. Any person, corporation or entity found in violation of any provisions of this Ordinance shall be punished by a fine in accordance with the following schedule of fines.These fees may be adjusted annually by the Commissioner.

Each day that the violation continues shall constitute a separate offense.

# of Offense	Penalty	Max Penalty
1st	$25	$100
2nd	$100	$500
3rd and subsequent offense	$300	no cap

(3) Offering an ineligible unit as a short-term rental. Any person who offers a unit as a short-term rental, or any booking agent who accepts a fee for booking a unit as a short-term rental, where such unit is not an eligible residential unit, shall be fined $300 per violation, per day. Each day's failure to comply with a notice of violation or any other order shall constitute a separate violation. The Commissioner, the Director, or a designee may also seek an injunction from a court of competent jurisdiction prohibiting the offering of the unit as a short-term rental.

(4) Failure to register. Any person who offers an eligible residential unit as a short-term rental without registering with the City under this chapter, or any person who offers an eligible residential unit as a short-term rental while the unit's registration is suspended under this chapter, shall be fined $300 per violation per day. Each day's failure to comply with a notice of violation or any other order shall constitute a separate violation.

(5) Failure to comply with notice of violation. Any person who fails to comply with any notice of violation or other order issued pursuant to this section by the Director, the Commissioner, or a designee for a violation of any provision of this section shall be fined $300 per violation per day. Each day's failure to comply with a notice of violation or any other order shall constitute a separate violation.

B. Enforcement.

(1) Enforcement by the City. All violations of this chapter may be penalized by a noncriminal disposition as provided for in MGL c. 40, § 21D. All violations of this chapter are subject to penalty in accordance with the ordinances of the City of Holyoke, as amended. The provisions of this chapter may also be enforced according to MGL c. 40U or MGL c. 148A. Nothing herein shall be construed to preclude the City from seeking any additional penalties or taking any additional enforcement action as allowed for by color of law.

(2) Enforcement by booking agent. The City shall enter into agreements with booking agents for assistance in enforcing the provisions of this section, including but not limited to an agreement whereby the booking agent agrees to remove a listing from its platform for exceeding the maximum number of days a residential unit may be offered as a short-term rental, whereby the booking agent agrees to remove a listing from its platform that is deemed ineligible for use as a short-term rental under the provisions of this chapter, and whereby the booking agent agrees to prohibit a host from listing any listing without a valid registration number from the City. Any booking agent that fails to enter into such agreements to actively prevent, remove or de-list any ineligible listings shall be prohibited from conducting business in the City, at the City's sole discretion.

8. **Regulations.**

The Commissioner shall have the authority to promulgate regulations to carry out the provisions of this chapter.

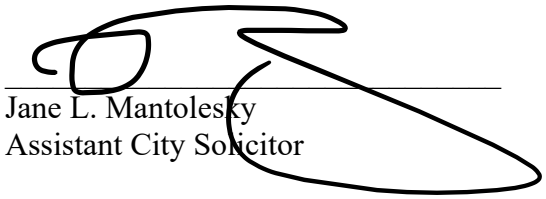
9. **Severability.**

If any provision in this chapter shall be held to be invalid by a court of competent jurisdiction, then such provision shall be considered separately and apart from the remaining provisions, which shall remain in full force and effect."

SECTION 2. All ordinances or parts of ordinances inconsistent herewith are hereby repealed.

SECTION 3. The provisions of this chapter shall take effect nine (9) months from date of passage.

APPROVED AS TO FORM:



Jane L. Mantolesky
Assistant City Solicitor

6-23-2025

To whom it may concern:

The information below is in response to the City of Holyoke abutters notice and notice of property available for sale at Cabot St parcel 010-00-002.

Buyer Information:

Jose A. Santos Suarez

120 Cabot St

Holyoke Ma 01040

413-439-5629

Josesantos302@yahoo.com

Use of property:

Off street parking for personal and tenant use

Improvements include a fence and a small vegetable garden in the rear

Public benefit:

The property has been abandoned for many years. Although I've been able to maintain it at some level there are certain improvements that would prevent panhandlers from cutting through and using it as a bathroom. My plans include repairing an existing fence and gate to prevent this issue. Improving the space will allow more cars to park off street during snow parking bans. My estimate and budget for these improvements is $4,000-$6,000. The fence would be completed by late September.

Amount of offer:

$1,000.00

Please feel free to contact me with any questions at 413-439-5629

Thanks,

Jose Santos

SR COMMERCIAL
REALTY

1. Buyer Information
Buyer Name: Alan Schneider (or nominee)
Address: 102 Pine St, Holyoke, MA 01040
Phone: 617-834-0594
Email: schneiderstimme@gmail.com

2. Use of the Property
The buyer proposes to use the lot at 106 Pine Street to support the operations of the adjacent parcel at 102 Pine Street and to build a single-family home.

Proposed Improvements:

- Removal of overgrowth and debris
- Grading to create a clean, level surface
- Installation of fencing to delineate and secure the lot
- Construction of a single-family residence

Estimated Budget:
Many materials have already been acquired, and much of the work will be performed by the buyer. The total estimated cost is under $50,000.

Proposed Schedule:

- Cleanup and prep: 2025
- Fencing: 2026
- Single Family Construction: 2026

3. Public Benefit
The proposed improvements will:

- Eliminate visible blight and underutilization of the parcel
- Improve the overall appearance and safety of the neighborhood
- Support long-term operations of a nearby small business
- Add new housing stock to the community
- Ensure continued upkeep by a committed neighborhood stakeholder

4. Amount of Offer
Offer Amount: $5,800 (matches assessed value)
A $1,000 deposit accompanies the offer, with the balance due at closing as outlined in the purchase terms.

The deposit amount reflects funds that would be held in escrow to make our agreement binding. It was included to demonstrate that we are ready, willing, and able to move forward in good faith. However, if a deposit is not necessary at this stage, we are happy to revise the agreement so that all funds are due at closing.

SR COMMERCIAL
REALTY

OFFER TO PURCHASE REAL ESTATE

Date: 07/07/2025

1. The undersigned (the "Buyer") **Alan Schneider** or nominee offers to pay the sum of $5,800 to the Owner of Record, ("Seller"), for the purchase of the property located on **106 Pine Street, Holyoke, MA 01040** and recorded in the Hampden County Registry Of Deeds at Book 22440, Page 85 ("PROPERTY") on the following terms and conditions: ("Premises").

2. This property has been offered to the Buyer by **SR Commercial Realty, LLC** by The Buyer's Agent.

3. The Buyer agrees to pay $5,800 cash for the Property, as follows:

a) $1,000 is paid herewith as a deposit to bind this offer.

b) $1,000 is to be paid as a deposit upon the execution of the Purchase and Sale Agreement provided for below.

c) $3,800 is to be paid on the closing date.

4. The Purchase and Sale Agreement shall be subject to the following conditions:

a) A satisfactory inspection or inspections of the Property, which may include but not be limited to inspections for any of the following, if applicable: title, appraisal, structural conditions, mechanical, hazardous waste or materials, zoning, survey and municipal permitting all to be performed within 14 days from the execution of the Purchase and Sale Agreement.

b) The execution and delivery of a Purchase and Sale Agreement pertaining to the Property no later than ten (10) days after signed accepted offer to be drafted by counsel for the Seller. The parties hereto agree to use their best efforts to

negotiate diligently and in good faith so that the Purchase and Sale Agreement may be signed and delivered by said date. In the event that, despite the parties' best efforts, the Purchase and Sale Agreement pertaining to the Property has not been executed by said date, then this offer shall, at the option of either party, terminate. In the event that the parties execute and deliver a Purchase and Sale Agreement then this offer shall be deemed to be merged into said Purchase and Sale Agreement and shall no longer have any independent force and effect.

c) The title to be conveyed by Seller at the Closing shall be by a good and sufficient deed free of liens and encumbrances and subject to the ability of Buyer to obtain a title insurance policy without Schedule B exceptions other than those exceptions, which do not interfere with Buyer's intended use of the Premises.

d) Buyer shall have such above prescribed period during which to satisfy the aforementioned conditions; and, upon satisfying the same, shall close on the Property **106 Pine Street, Holyoke, MA 01040** (30) days thereafter, or sooner if parties are ready.

5. Buyer acknowledges that it has not relied upon any statements or representations by the Seller, its agents or employees, or any broker working for the Seller or the Buyer and is offering to purchase the Premises "as is" (except as otherwise expressly provided herein).

6. Concurrent with the execution of the Purchase and Sale Agreement, Seller shall deliver to the Buyer any and all reports, plans, surveys, leases, rent roll, service contracts, tax forms required by lender, and any other documents within Seller's possession reasonably pertaining to the Premises.

7. This offer is not subject to any other contingency, except as set forth in Sections 4 a) and b) hereof; and we are prepared to enter into the Purchase and Sale Agreement.

8. This offer is good through July 10th, on or before 5pm, at which time a copy hereof shall be signed by the Seller signifying acceptance of this offer and returned to the Buyer or Buyer's Agent forthwith; otherwise, this offer shall be considered as rejected, and any money deposited herewith shall be returned to the Buyer immediately.

9. The Seller and subject Buyer warrant, consent and represent that they have dealt solely with **Zaisha Robert** of SR Commercial Realty, LLC, as Broker for the Buyer. Seller to compensate SR Commercial Realty flat fee of $1,000, per Buyer Representation.

10. This is a legally binding Agreement, subject to the Purchase & Sale Agreement, which shall be incorporated by reference the terms and conditions set forth herein. In the event of any disputes pursuant to any terms not set forth in this legally binding Agreement, the same shall be determined by Arbitration.

11. Seller shall deliver property at closing free of tenants and occupants.

12. Other provisions: _____
_____
_____
_____

Buyers:

Alan Schneider dotloop verified 07/07/25 2:33 PM EDT OEBB-O9CH-KUSJ-ZW2D

_____

_____

ACCEPTANCE OF OFFER

This offer was presented to the Seller by the Buyer on _____. It is hereby accepted upon the foregoing terms and conditions, and the receipt of the deposit of $_____ is hereby acknowledged on _____.

Date: _____ **Signed:** _____