1865 THE UNIVERSITY OF MAINE

University of Maine Field Hockey Complex 2022

168 College Ave, Orono, ME 04469

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PROJECT LOCATION MAP

	Signature	Date
Owner:		
Architect:		
Contractor:		

REV.	DESCRIPTION	DATE
0	ISSUED FOR BID	18 FEB 2022

STATE OF MAINE MEGAN BUCZYNSKI No. 13778 LICENSED PROFESSIONAL ENGINEER

LICENSED ARCHITECT KRISTIAN C. KOWAL NO.3366 STATE OF MAINE 02.18.2022

2/18/22 STATE OF MAINE MICHAEL A. GUETHLE 14284 LICENSED PROFESSIONAL ENGINEER

LICENSED LANDSCAPE ARCHITECT PATRICK MAGUIRE 3907 STATE OF MAINE 18FEB22

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G000	10088.033

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landscape architecture | civil engineering

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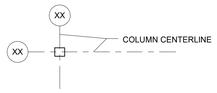
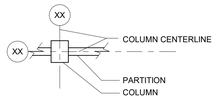
DIMENSIONS ARE AS IDENTIFIED ON THE DOCUMENTS AND AS ESTABLISHED BY CRITERIA. THIS INVOLVES ESTABLISHING TYPICAL RULES GOVERNING PARTITION LOCATIONS AND THEN DIMENSIONING ONLY THE EXCEPTION TO THESE RULES. TYPICAL DIMENSIONING CRITERIA ARE OUTLINED BELOW:

1. GRAPHIC INSTRUCTIONS
ALL DRAWINGS ARE INTENDED TO BE COMPLIMENTARY. NOTIFY THE ARCHITECT OF ANY DIMENSIONING DISCREPANCY PRIOR TO PROCEEDING.

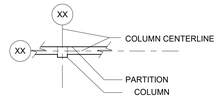
A. COLUMN IDENTIFICATION: DETAILS WILL GOVERN ALL DIMENSIONS AND FEW DIMENSIONS WILL BE SHOWN ON THE SMALL SCALE PLANS. COLUMN GRIDS ARE REPRESENTED THUS:



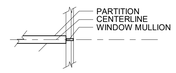
B. PARTITIONS CENTERED ON COLUMN OR GRID LINES WILL NOT BE DIMENSIONED ON THE PLANS, BUT DRAWN ACCORDINGLY:



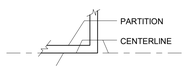
C. PARTITIONS WITH THE FINISHED FACE FLUSH WITH THE FINISHED FACE OF THE COLUMN WILL NOT BE DIMENSIONED ON THE PLANS, BUT WILL BE DRAWN ACCORDING:



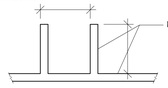
D. PARTITIONS CENTERED ON WINDOW MULLIONS WILL NOT BE DIMENSIONED ON PLANS, BUT WILL BE DRAWN ACCORDINGLY:



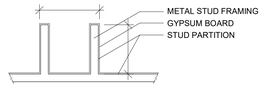
E. PARTITIONS WITH FINISHED FACE LAYING ON THE COLUMN OR GRIDLINES WILL NOT BE DIMENSIONED ON THE PLANS, BUT WILL BE DRAWN ACCORDINGLY:



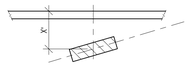
F. MASONRY WALLS ARE DIMENSIONED (USING NOMINAL DIMENSIONS) FROM THE FACE OF ONE UNIT TO THE FACE OF ANOTHER UNIT AND WILL BE DRAWN ACCORDINGLY:



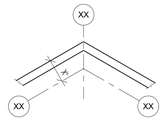
G. METAL STUD WALLS ARE DIMENSIONED TO THE OUTSIDE FACE OF FINISH AND WILL BE DRAWN AS FOLLOWS:



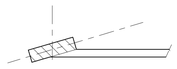
J. IF A WALL IS DIMENSIONED FROM TWO INTERSECTING, NON-PERPENDICULAR GRIDS IT WILL BE DIMENSIONED FROM THE INTERSECTION OF THE GRID LINES



I. WHEN A WALL BREAKS ON A COLUMN LINE, IT'S DIMENSION FROM THE PARALLEL GRID LINE WILL REMAIN THE SAME.

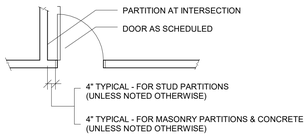


K. IF A WALL APPEARS THAT IT INTERSECTS WITH THE CORNER OF A COLUMN AND IS NOT DIMENSIONED IT SHOULD BE ASSUMED THAT IT SHOULD INTERSECT WITH THE COLUMN CORNER AND WILL BE DRAWN AS FOLLOWS:

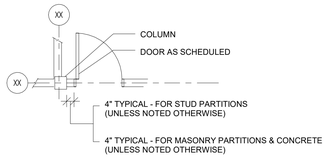


H. FOR OPENINGS IN PARTITIONS OR WALLS:

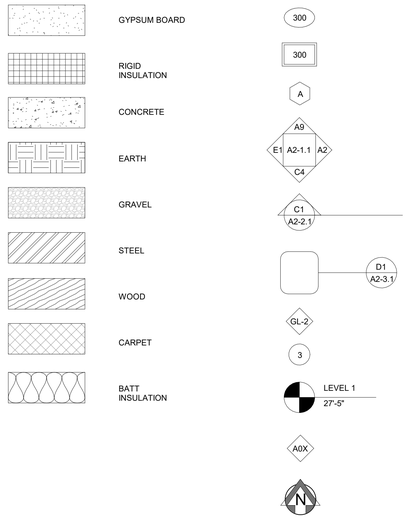
1. WHEN NEITHER JAMB OCCURS AT A PARTITION INTERSECTION, AT A COLUMN OR AT A GRIDLINE; ONE JAMB WILL BE LOCATED DIMENSIONALLY BY THE DETAIL.
2. WHEN ONE JAMB IS LOCATED BY A PARTITION INTERSECTION, THE FOLLOWING DIAGRAM APPLIES:



3. WHEN ONE JAMB IS LOCATED BY A COLUMN, THE FOLLOWING DIAGRAM APPLIES:



E1 DIMENSION NOTES



L8 SYMBOLS

IF PROVIDED, THE BUILDING INFORMATION MODEL (BIM) AND ASSOCIATED MODELS IS AN INSTRUMENT OF SERVICE AND IS CONSIDERED TO BE A COMPONENT OF DESIGN AND CONSTRUCTION DOCUMENTS WITHOUT EXCEPTION. THE BIM MODEL PLUS ASSOCIATED CONSTRUCTION DOCUMENTS, SPECIFICATIONS AND OTHER INSTRUMENTS OF SERVICE PREPARED BY THE ARCHITECT AND ITS CONSULTANTS SHALL SERVE AS THE **BASIS OF DESIGN** ONLY. THE BIM PLUS ASSOCIATED CONSTRUCTION DOCUMENTS, SPECIFICATIONS AND OTHER INSTRUMENTS OF SERVICE PREPARED BY THE ARCHITECT AND ITS CONSULTANTS DO NOT SPECIFY NOR IS INTENDED TO SPECIFY ANY **MEANS AND METHODS** ASSOCIATED WITH FABRICATION, ERECTION AND CONSTRUCTION. MEANS AND METHODS AND ANY SUBSEQUENT MODELING TO DOCUMENT SHOP DRAWINGS, FABRICATION, INSTALLATION AND DELEGATED DESIGN SHALL BE SOLELY THE RESPONSIBILITY OF THE GENERAL CONTRACTOR, SUB-CONTRACTORS, FABRICATORS AND OTHER ENTITIES PROVIDING DESIGN ASSIST AND/OR CONSTRUCTION. BIM AND ASSOCIATED MODELS ARE FOR REFERENCE. PRINTED DOCUMENTS TAKE PRECEDENCE. IF DISCREPANCIES BETWEEN PRINTED DOCUMENTS & BIM & ASSOCIATED MODEL ARE DISCOVERED, THE ARCHITECT SHOULD BE NOTIFIED PROMPTLY.

H8 BIM NOTE

DELEGATED DESIGN: DETAILED DESIGN AND ENGINEERING FOR THE FOLLOWING WORK SHALL BE DELEGATED TO THE SUB-CONTRACTORS, FABRICATORS, ERECTORS AND/OR INSTALLERS UNDER THE DIRECTION OF THE CONSTRUCTION MANAGER/ CONTRACTOR:

1. CONCRETE FORMWORK
2. METAL STAIRS/ HAND RAILS/ BALUSTRADE
3. COACHES VIDEO SYSTEM (S)
4. ALUMINUM BLEACHER AND GRANDSTAND SYSTEMS, SUPPORTS AND FOUNDATIONS
5. GUARDRAIL SYSTEMS
6. FABRICATED PRESS BOX STRUCTURES
7. FABRICATED STADIUM SEATING
8. FABRICATED TEAM SEATING SHELTER

DETAILED DESIGN AND ENGINEERING ASSOCIATED WITH DELEGATED DESIGN SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE CODES AND SHALL ACCOMMODATE ALL DESIGN CRITERIA ESTABLISHED BY THESE DOCUMENTS INCLUDING ALL APPLICABLE DESIGN LOADS AND ENGINEERING REQUIREMENTS INCLUDING MEANS AND METHODS. ALL WORK SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF A DESIGN PROFESSIONAL LICENSED TO PRACTICE WHERE THE PROJECT IS LOCATED. NO EXCEPTIONS WILL BE PERMITTED.

E8 DELEGATED DESIGN NOTES

1. ALL WORK SHALL COMPLY WITH FEDERALLY MANDATED ADA REQUIREMENTS OF THE CITY OF ORONO AND STATE OF MAINE, AND ALL APPLICABLE CODES AND STANDARDS IN ACCORDANCE WITH THE 2015 INTERNATIONAL BUILDING CODE, AND ANY OTHER APPLICABLE CODES AND STANDARDS OF REGULATORY AGENCIES HAVING JURISDICTION.

2. COMPLY WITH EPA REGULATIONS AND DISPOSAL REGULATIONS OF AUTHORITIES HAVING JURISDICTION.

3. THE CONTRACTOR IS RESPONSIBLE FOR THE CONSTRUCTION OF ALL PROTECTION AROUND ANY OPENINGS IN ACCORDANCE WITH OSHA (OCCUPATIONAL SAFETY AND HEALTH ACT) STANDARDS.

4. IT IS NOT EXPECTED THAT HAZARDOUS MATERIALS WILL BE ENCOUNTERED IN THE WORK. A HAZARDOUS MATERIAL SURVEY IS NOT ON FILE. IF THE CONTRACTOR DISCOVERS ANY HAZARDOUS MATERIALS, STOP WORK IMMEDIATELY AND NOTIFY THE OWNER.

5. IF THE CONTRACTOR DISCOVERS DAMAGED STRUCTURAL MATERIAL, STOP WORK IMMEDIATELY AND NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD.

6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE AND INVESTIGATE IT THOROUGHLY PRIOR TO BIDDING ON THE PROJECT.

7. THE WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE SPECIFICATIONS AND THE CONTRACT DRAWINGS. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES WITHIN OR BETWEEN THE SPECIFICATIONS AND THE CONTRACT DRAWINGS TO THE ARCHITECT IN WRITING FOR CLARIFICATION PRIOR TO IMPLEMENTING WORK. NO ALLEGED ORAL ADMISSION, CONDEMNATION, OR INADVERTENT NEGLECT ON THE PART OF THE ARCHITECT WILL BE ACCEPTED AS AN EXCUSE FOR INFERIOR WORK.

8. CONTRACTOR SHALL USE EXTREME CARE AND TAKE PRECAUTION DURING CONSTRUCTION SO AS NOT TO DAMAGE EXISTING ADJACENT FACILITIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRS TO ANY ELEMENTS, INCLUDING STRUCTURE, WHICH ARE TO REMAIN AND THAT HAVE BEEN DAMAGED DURING THE DEMOLITION PROCESS TO THE COMPLETE SATISFACTION OF THE OWNER. THE REPAIRS SHALL BE AT NO EXPENSE TO THE OWNER. ALL STRUCTURAL RELATED REPAIR WORK SHALL BE DESIGNED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED AND SUBMITTED TO THE ARCHITECT AND SEoR FOR REVIEW AND APPROVAL PRIOR TO COMMENCING REPAIR WORK.

9. SHOULD ANY DOUBT OR QUESTION ARISE WITH RESPECT TO THE TRUE MEANING OF THE DRAWINGS OR SPECIFICATIONS, REFERENCE SHALL BE MADE TO THE ARCHITECT WHOSE DECISIONS THEREON SHALL BE FINAL AND CONCLUSIVE.

10. THE CONTRACTOR IS RESPONSIBLE FOR TEMPORARY DIRECTIONAL SIGNAGE AS WELL AS CONSTRUCTION SIGNAGE NOTIFYING THE PUBLIC OF CONSTRUCTION LIMITS.

11. CONTRACTOR SHALL NOT ENGAGE IN ANY ACTIVITY WHICH MAY ENDANGER THE PUBLIC.

12. CONTRACTOR IS REQUIRED, PRIOR TO THE START OF CONSTRUCTION, TO SURVEY THE AREAS WHICH WOULD BE AFFECTED BY THE CONSTRUCTION FOR DOCUMENTATION OF EXISTING DAMAGES.

13. ALL DIMENSIONS OF EXISTING CONSTRUCTION ARE TO PROVIDE THE CONTRACTOR WITH APPROXIMATE SIZES AND ARE NOT INTENDED TO BE USED FOR CONSTRUCTION PURPOSES. ALL DIMENSIONS SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION.

14. REFER TO SURVEY AND CIVIL ENGINEERING DRAWINGS FOR EXISTING CONSTRUCTION RELATED TO SITE UTILITIES. CONTACT ALL UTILITY COMPANIES BEFORE COMMENCING DEMOLITION ACTIVITIES. COORDINATE WITH UTILITY COMPANIES TO DISCONNECT, REMOVE, AND RELOCATE UTILITIES FROM THE SITE AS NECESSARY. EXISTING UTILITY IMPROVEMENTS SHOWN ARE LOCATED FROM A SITE SURVEY AND AVAILABLE UTILITY RECORDS. NOT ALL SURFACE OR SUBSURFACE IMPROVEMENTS MAY BE SHOWN. CONTRACTOR SHALL VERIFY ACTUAL LOCATION OF UTILITIES WITH RESPECTIVE OWNERS AS REQUIRED TO PREVENT DAMAGE BY HIS OPERATIONS. CONTRACTOR SHALL LOCATE APPLICABLE REFERENCE OR LAY-OUT POINTS AND TAKE PRECAUTIONS TO PREVENT THEIR DESTRUCTION.

15. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER'S REPRESENTATIVE FOR THEIR NEED TO ACCESS THE SITE OR ADJACENT ON-SITE FACILITIES THROUGHOUT THE DURATION OF CONSTRUCTION. CONTRACTOR SHALL ALSO TAKE MEASURES TO MAINTAIN ACCEPTABLE VEHICULAR/TRUCK ACCESS FOR THE DURATION OF CONSTRUCTION AS REQUESTED BY THE OWNER. NO CONTRACTOR PERSONAL VEHICULAR PARKING ON-SITE WILL BE ALLOWED.

16. ERECT AND MAINTAIN DUSTPROOF PARTITIONS. COVER AND PROTECT FIXTURES, FURNISHINGS AND EQUIPMENT THAT ARE TO REMAIN.

17. CONSTRUCTION MANAGER TO BE RESPONSIBLE FOR THE ERECTION AND REMOVAL OF ANY TEMPORARY FACILITIES.

18. THE CONTRACT DRAWINGS SHALL NOT BE SCALED FOR DETERMINATION OF QUANTITIES, LENGTHS, FIT OR MATERIALS, ETC.

19. THE CONTRACTOR IS ALLOWED TO STORE MATERIALS ON THE SITE AS APPROVED BY THE OWNER'S REPRESENTATIVE. THE OWNER WILL NOT BE LIABLE FOR THE SECURITY OF ANY SUCH MATERIAL STORED ON SITE.

20. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY LIGHTS THROUGHOUT CONSTRUCTION PERIOD FOR AREAS WHICH PUBLIC SAFETY WOULD BE OF CONCERN, OR AS DIRECTED BY THE OWNER.

21. THE CONTRACTOR IS REQUIRED TO PROVIDE EQUIPMENT AND TOOLS REQUIRED OR NECESSARY FOR THE OWNER'S REPRESENTATIVE, ARCHITECT, OR ENGINEER TO REVIEW THE CONSTRUCTION IN PROGRESS DURING AND UPON COMPLETION. THE OWNER OR OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO INSPECT ANY MATERIAL, FABRICATION, OR WORKMANSHIP, AT ANY TIME, IN THE FIELD OR SHOP FOR CONFORMANCE TO THE SPECIFICATIONS AND DRAWINGS.

22. DETALS, SECTIONS, AND NOTES DESIGNATED AS "TYPICAL" ARE INTENDED TO SHOW INTENT. THEY SHALL ALSO APPLY TO SIMILAR SITUATIONS ELSEWHERE, UNLESS OTHERWISE NOTED OR AGREED TO BY THE ARCHITECT.

23. TRAFFIC: MINIMIZE INTERFERENCE WITH ADJOINING ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES DURING SITE CLEARING OPERATIONS.

24. PROVIDE WEATHER TIGHT ENCLOSURE AND SECURE CLOSURES FOR ANY BUILDING OPENINGS LEFT OPEN OVERNIGHT (i.e. WINDOW & DOOR OPENINGS, ETC.). THE CONTRACTOR IS RESPONSIBLE FOR ANY BREACHES OF SECURITY, WEATHER AND WATER INFILTRATION OR DAMAGE CAUSED AS A RESULT OF INSUFFICIENT PROTECTION.

25. ALL TREES NOT INDICATED FOR REMOVAL SHALL BE LEFT IN PLACE AND PROTECTED BY THE CONTRACTOR. ANY TREES DAMAGED DUE TO THIS PROJECT SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. ANY TREE WITHIN THE CONSTRUCTION LIMITS NOT TO BE REMOVED SHALL BE PROTECTED AND HAVE A FENCE PLACED AROUND THE PERIMETER AT THE DRIP-LINE WHICH SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT. REF: TREE PROTECTION DETAILS ON SHEET C-D001.

26. THE CONTRACTOR IS REQUIRED TO ENGAGE IN AN ON-SITE PRE-PLANNING MEETING WITH THE OWNER'S REPRESENTATIVE PRIOR TO THE BEGINNING OF WORK SHOWN HEREIN.

27. PROVIDE STRUCTURAL STEEL LINTELS OVER OPENINGS AS DETAILED OR SPECIFIED IN THE STRUCTURAL DRAWINGS. ALL STRUCTURAL STEEL LINTELS FOR MASONRY WALLS WITH MASONRY VENEER TO HAVE INTEGRAL STRUCTURAL PLATE FOR VENEER SUPPORT. PROVIDE LOOSE LINTELS AS DETAILED ON THE ARCHITECTURAL DRAWINGS.

28. ALL STEEL LINTELS AND LOOSE LINTELS FOR EXTERIOR DOORS, WINDOWS, AND EXTERIOR OPENINGS ARE TO BE HOT- DIPPED GALVANIZED.

29. PROVIDE MASONRY LINTELS AT MASONRY WALLS FOR MECHANICAL OPENINGS. LINTELS FOR MECHANICAL OPENINGS IN MASONRY WALLS TO BE COORDINATED BY THE MECHANICAL CONTRACTOR AND PROVIDED BY THE MASONRY CONTRACTOR. LINTELS FOR MECHANICAL OPENINGS IN METAL STUD WALLS TO BE COORDINATED BY THE MECHANICAL CONTRACTOR AND PROVIDED BY THE STUD WALL CONTRACTOR.

30. CONTRACTOR SHALL LOCATE APPLICABLE REFERENCE OR LAY-OUT POINTS AND TAKE PRECAUTIONS TO PREVENT THEIR DESTRUCTION.

31. ISOLATION JOINT MATERIAL IS TO BE INSTALLED AT ALL CONCRETE SLAB AND MASONRY WALL INTERSECTIONS (VERTICAL).

32. PROVIDE BLOCKING AT ALL WALL MOUNTED EQUIPMENT, INCLUDING BUT NOT LIMITED TO, TOILET ROOM ACCESSORIES, SHELVING RACKS AND WALL-MOUNTED FIXTURES. STRAP BLOCKING IS ACCEPTABLE IN LIEU OF WOOD.

G14 GENERAL NOTES

1. UNLESS OTHERWISE NOTED, CONTRACTOR SHALL PATCH AND REPAIR OR RESTORE AND REFINISH (AS APPLIES) ALL ADJACENT SURFACES AFFECTED BY DEMOLITION ACTIVITIES.

2. CONTRACTOR SHALL COMPLETELY REMOVE ALL DEMOLISHED MATERIALS FROM SITE. ALL DEMOLISHED MATERIALS WILL BECOME PROPERTY OF THE CONTRACTOR UNLESS THEY ARE TO BE REUSED, OR AS OTHERWISE NOTED OR INSTRUCTED, AND TO BE DISPOSED OF LEGALLY. REMOVE DEBRIS, RUBBISH, AND OTHER MATERIALS DAILY FROM CONSTRUCTION SITE. COORDINATE DUMPSTER LOCATION AND ACCESS WITH OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL INCLUDE IN THEIR BID THE COST OF REMOVING DEMOLISHED MATERIALS FROM THE SITE IN ACCORDANCE WITH ALL APPLICABLE LAWS, CODES, AND REGULATIONS.

3. THE EXISTING CONDITIONS AND FRAMING INDICATED IN THE DRAWINGS IF FOR REFERENCE ONLY AND ARE BASED ON SURVEYS AND INFORMATION PROVIDED BY OTHERS. NO CLAIM IS MADE AS TO THEIR ABSOLUTE COMPLETENESS AND/OR ACCURACY. PRIOR TO THE START OF CONSTRUCTION AND FABRICATION, THE CONTRACTOR SHALL SURVEY AND FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS. VERIFY THE EXACT EXTENT OF DEMOLITION AT THE SITE. DETERMINE THE NATURE AND EXTENT OF DEMOLITION THAT WILL BE NECESSARY BY COMPARING THE CONTRACT DOCUMENTS WITH THE EXISTING CONSTRUCTION. ANY DISCREPANCIES FOUND ON SITE IN RELATION TO THE INFORMATION PROVIDED HEREIN AND EXISTING CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN PROFESSIONALS IMMEDIATELY PRIOR TO CONSTRUCTION.

4. PRIOR TO COMMENCING DEMOLITION WORK, THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UTILITIES AND MAKE PROVISIONS THAT NO INTERRUPTION OF SERVICES OCCUR. COORDINATE ANY SERVICE INTERRUPTIONS WITH OWNER'S REPRESENTATIVE.

5. VERIFY THAT THE SCOPE OF DEMOLITION INDICATED ON THE CONTRACT DOCUMENTS SHALL NOT DAMAGE, CUT OR DISRUPT SERVICE OF ANY MECHANICAL SYSTEM, ELECTRICAL SYSTEM OR UTILITY EMBEDDED IN THE EXISTING STRUCTURE.

6. ALL MATERIALS NOT REQUIRED TO BE REMOVED FOR THE EXECUTION OF THE PROJECT SHALL BE LEFT IN PLACE AND PROTECTED FROM DAMAGE DURING DEMOLITION. ANY ITEMS DAMAGED DURING DEMOLITION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.

7. CUT AND REMOVE PORTIONS OF EXISTING CONSTRUCTION AS REQUIRED TO ALLOW FOR PROPER INSTALLATION OF NEW CONSTRUCTION.

8. ALL DASHED LINES ON DEMOLITION PLANS INDICATE ITEMS TO BE REMOVED.

9. WHERE EXISTING INTERIOR PARTITIONS ARE TO BE REMOVED, REMOVE TO UNDERSIDE OF STRUCTURE AS INDICATED ON PLAN.

10. THE CONTRACTOR IS FULLY RESPONSIBLE FOR THE MEANS AND METHODS OF DEMOLITION AND THE INTEGRITY AND STABILITY OF THE EXISTING STRUCTURE DURING DEMOLITION UNTIL THE WORK IS COMPLETED. THE CONTRACTOR SHALL PROVIDE SHORING IN REQUIRED LOCATIONS WHERE EXISTING CONSTRUCTION TO REMAIN WILL BE AFFECTED BY DEMOLITION. PROVIDE AND MAINTAIN SHORING, BRACING, OR STRUCTURAL SUPPORT TO PRESERVE BUILDING STABILITY AND PREVENT MOVEMENT, SETTLEMENT AND COLLAPSE. THE CONTRACTOR SHALL PROVIDE ALL SUPPLEMENTAL MATERIAL REQUIRED TO PROPERLY INSTALL, SUPPORT, AND BRACE ALL ITEMS AND COMPONENTS WITHIN THE WORK.

11. THE CONTRACTOR SHALL USE QUALIFIED, EXPERIENCED PERSONNEL FOR DEMOLITION AND REMOVAL OPERATIONS. PERFORM DEMOLITION AND REMOVAL OPERATIONS IN A CAREFUL AND ORDERLY MANNER TO PREVENT HAZARDS TO PERSONS, DAMAGE TO PROPERTY, AND THE SPREADING OF DUST AND DEBRIS.

12. DO NOT PERMIT PORTIONS OF THE STRUCTURE TO FALL NOR DEBRIS TO DROP EXCEPT BY METHODS WHICH WILL INSURE INTEGRITY OF THE STRUCTURE.

13. WHERE NEW OPENINGS IN EXISTING CONCRETE SLABS, WALLS OR RISERS ARE TO BE CREATED, THE DEMOLITION CONTRACTOR SHALL CORE HOLES AT THE OUTSIDE CORNERS OF THE NEW OPENING PRIOR TO DEMOLITION. SAW-CUT AND DEMOLISH ITEMS ONLY AFTER THE INSTALLATION OF ALL REQUIRED NEW STRUCTURAL FRAMING AND/OR REINFORCEMENT IN PLAN OR SECTION, UNLESS OTHERWISE NOTED. SAW CUTTING SHALL BE STRAIGHT AND SHALL NOT EXTEND INTO EXISTING ELEMENTS TO REMAIN NOR BEYOND THE HOLES CORED AT THE CORNERS OF THE NEW OPENING.

14. NEATLY CUT OPENINGS AND HOLES PLUMB, SQUARE, AND TRUE TO DIMENSIONS REQUIRED. USE CUTTING METHODS LEAST LIKELY TO DAMAGE CONSTRUCTION TO REMAIN OR ADJOINING CONSTRUCTION. DO NOT REMOVE MORE OF THE EXISTING STRUCTURE AND ELEMENTS THAN INDICATED ON THE CONTRACT DOCUMENTS. DO NOT DAMAGE, MAR, CUT OR DEFACE THE REMAINING STRUCTURE OR MATERIALS TO BE REUSED.

15. SALVAGEABLE IMPROVEMENTS: CAREFULLY REMOVE ITEMS INDICATED TO BE SALVAGED, PROTECT AND STORE ON OWNER'S PREMISE WHERE INDICATED.

A14 GENERAL DEMOLITION NOTES

REV.	DESCRIPTION	DATE
0	ISSUED FOR BID	18 FEB 2022

LICENSED ARCHITECT
KRISTIAN C. ROWAL
NO.3366
STATE OF MAINE
02.18.2022

WBRC ARCHITECTS ENGINEERS
WWW.WBRCAE.COM
BANGOR, MAINE 207-947-4511
PORTLAND, MAINE 207-828-4511
SARASOTA, FLORIDA 941-556-0757

CRAWFORD

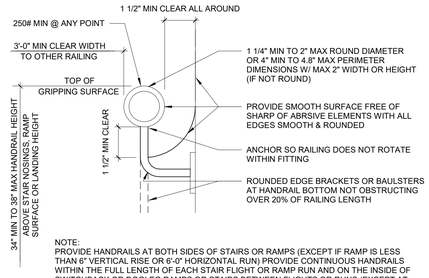
University of Maine
Field Hockey Complex 2022

PROJECT: 168 College Ave, Orono, ME 04469

GENERAL INFORMATION

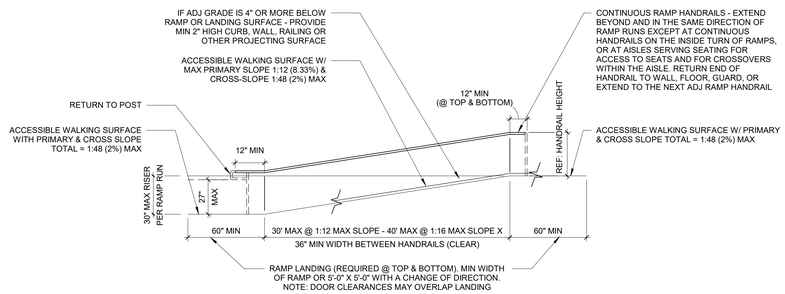
SHEET TITLE:	
WBRC CAD FILE:	
PROJECT No.	10088.033
SCALE:	12" = 1'-0"
PROJECT MANAGER:	Approver
DRAWN BY:	Author
CHECKED BY:	Checker
GRAPHIC SCALE:	0" 1"
SHEET No.	G001

2/18/2022 2:17:07 PM SHEET SIZE: 30x42
BIM 360://UM Athletics - Field Sports/10088015 – UM ATH – FIELD HOCKEY – ARCHR21.rvt

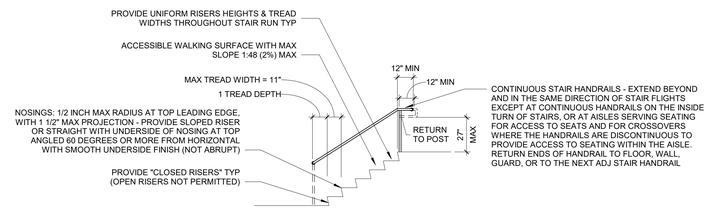


NOTE:
PROVIDE HANDRAILS AT BOTH SIDES OF STAIRS OR RAMPS (EXCEPT IF RAMP IS LESS THAN 6" VERTICAL RISE OR 6'-0" HORIZONTAL RUN) PROVIDE CONTINUOUS HANDRAILS WITHIN THE FULL LENGTH OF EACH STAIR FLIGHT OR RAMP RUN AND ON THE INSIDE OF SWITCHBACK OR DOGLEG RAMPS OR STAIRS BETWEEN FLIGHTS OR RUNS (EXCEPT AT HANDRAILS IN AISLES SERVING SEATING)

RAMP & STAIR HANDRAILS (INTERIOR OR EXTERIOR)



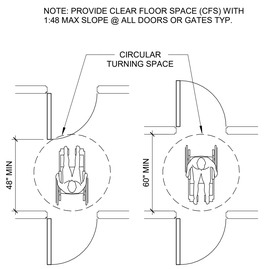
ACCESSIBLE RAMPS (INTERIOR OR EXTERIOR)



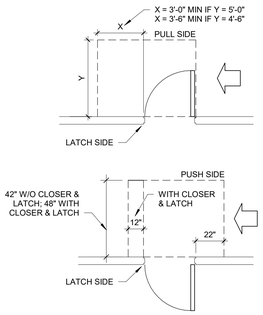
NOTE: CONSTRUCT EXTRIOR STAIRS & APPROACHES & LANDINGS SO THAT WATER CANNOT ACCUMULATE ON WALKING SURFACES

ACCESSIBLE STAIRS (INTERIOR OR EXTERIOR)

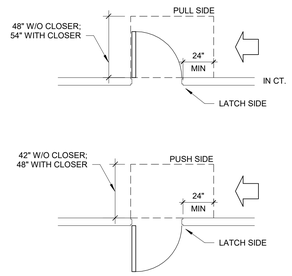
M1 ACCESSIBLE HANDRAIL DETAILS
1/4" = 1'-0"



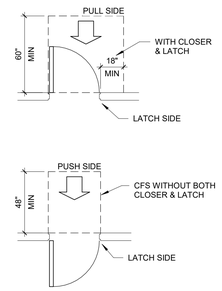
DOORS/GATES IN SERIES



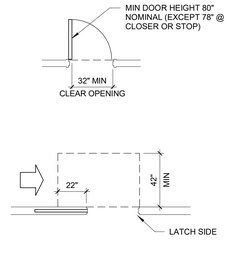
HINGE SIDE APPROACH - SWINGING DOOR OR GATE



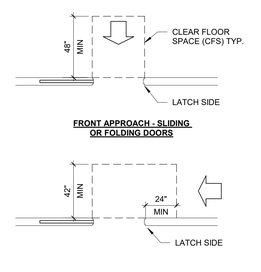
LATCH SIDE APPROACH - SWINGING DOOR OR GATE



FRONT APPROACH - SWINGING DOOR OR GATE

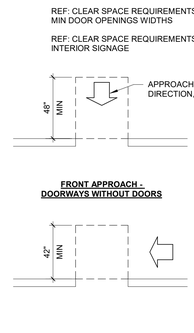


NON-LATCH SIDE APPROACH - SLIDING OR FOLDING DOORS



FRONT APPROACH - SLIDING OR FOLDING DOORS

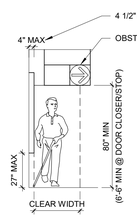
LATCH SIDE APPROACH - SLIDING OR FOLDING DOORS



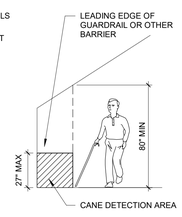
FRONT APPROACH - DOORWAYS WITHOUT DOORS

SIDE APPROACH - DOORWAYS WITHOUT DOORS

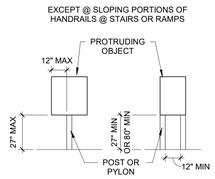
H1 ACCESSIBLE DOOR CLEARANCES
1/4" = 1'-0"



LIMIT OF PROTRUDING OBJECT

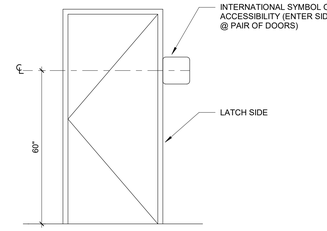


CANE DETECTION @ OVERHEAD HAZARDS



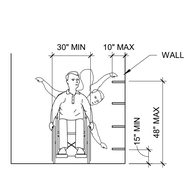
POST MOUNTED PROTRUDING OBJECTS

E1 PROTRUDING OBJECT CLEARANCES
1/4" = 1'-0"

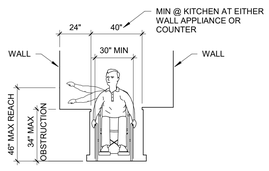


EXTERIOR DOOR @ ACCESSIBLE ENTRANCE

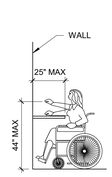
E6 ACCESSIBLE ENTRANCE
1/2" = 1'-0"



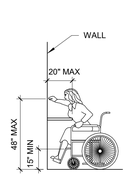
SIDE REACH



SIDE REACH OVER OBSTRUCTION

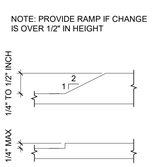


FORWARD REACH OVER OBSTRUCTION

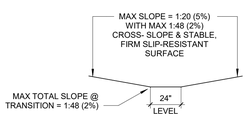


FORWARD REACH

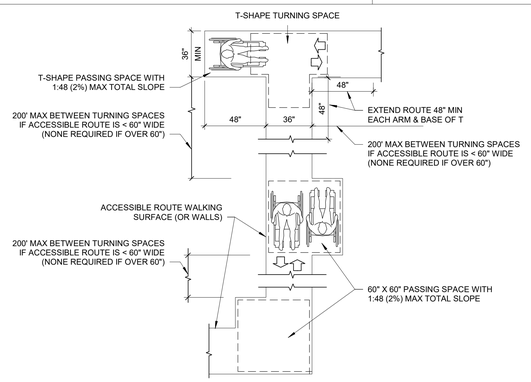
E11 ACCESSIBLE REACH CLEARANCES
1/4" = 1'-0"



ALLOWABLE CHANGE IN LEVEL

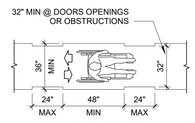


MAX SLOPE OF WALKING SURFACE @ ACCESSIBLE ROUTE

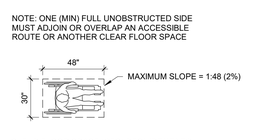


PASSING @ ACCESSIBLE ROUTE

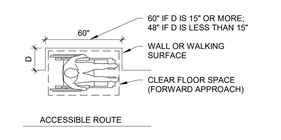
A1 ACCESSIBLE ROUTES
1/4" = 1'-0"



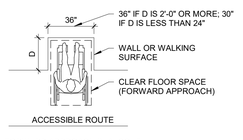
MINIMUM CLEAR WIDTH FOR SINGLE WHEELCHAIR



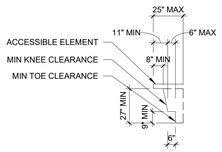
CLEAR FLOOR SPACE (CFS) REQUIREMENTS



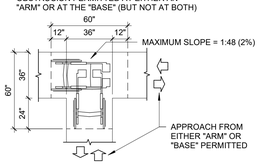
SIDE APPROACH IN ALCOVE



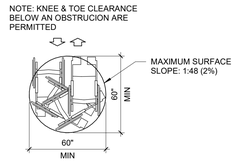
FORWARD APPROACH IN ALCOVE



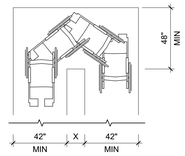
KNEE AND TOE CLEARANCES



T-SHAPED TURNING SPACE



CIRCULAR TURNING SPACE



TURN AROUND AN OBSTRUCTION

A9 ACCESSIBLE CLEARANCES
1/4" = 1'-0"

REV.	DESCRIPTION	DATE
0	ISSUED FOR BID	18 FEB 2022

LICENSED ARCHITECT
KRISTIAN C. ROWAL
NO.3366
STATE OF MAINE
02.18.2022

WBRC ARCHITECTS ENGINEERS
WWW.WBRCAE.COM
BANGOR, MAINE 207-947-4511
PORTLAND, MAINE 207-828-4511
SARASOTA, FLORIDA 941-556-0757
CRAWFORD

PROJECT: University of Maine Field Hockey Complex 2022
168 College Ave, Orono, ME 04469

SHEET TITLE: GENERAL ACCESSIBILITY & MOUNTING HEIGHTS

WBRC CAD FILE:	
PROJECT No.	10088.033
SCALE:	As indicated
PROJECT MANAGER:	Approver
DRAWN BY:	Author
CHECKED BY:	Checker
GRAPHIC SCALE:	0" 1"
SHEET No.	G002

SHEET SIZE: 30x42
2/18/2022 2:17:08 PM
BIM 360://UM Athletics - Field Sports/10088015 – UM ATH – FIELD HOCKEY – ARCH R21.rvt

DEFINITIONS AND GENERAL REQUIREMENTS

1.00 Applicable Codes:

- 2015 International Building Code (IBC)
- 2015 International Existing Building Code (IEBC)
- ICC/ANSI A117.1 2009 Accessible and Usable Buildings and Facilities Standard
- 2010 ADA Guidelines
- 2015 International Energy Conservation Code (IECC), without Amendments
- 2015 International Mechanical Code (IMC), with Amendments
- 2020 National Electric Code (NEC) | NFPA-70
- 2021 Uniform Plumbing Code (UPC)
- Fire Code: 2018 NFPA 1, with Amendments
- Standard for Installation of Sprinkler Systems of Maine: 2016 NFPA 13, without Amendments
- National Fire Alarm and Signaling Code of Maine: 2019 NFPA 72, without Amendments
- Life Safety Code: 2018 NFPA 101, with Amendments
- AHSRAE 62.1 – 2016 (Ventilation for Acceptable Indoor Air Quality)
- ASHRAE 90.1 – 2016 (Energy Standard for Buildings except Low-Rise Residential Buildings), editions without addenda.

2.00 Code Approach:

The non-separated mixed-use occupancy approach is used per IBC Sec. 508.3. Group S occupancies are classified as Accessory and not required to be fire resistive rated separated from the main occupancies.

Use Group Primary: **A-5 Assembly** (IBC Sec. 303.6)

3.00 Use Groups (Chapter 3):

- **A-5**, Stadium, Grandstand (Section 303.6).
- **A-3**, Fitness Areas, without spectator seating (Section 303.4).
- **S-1**, Storage (Section 311.2).

4.00 Permitted Construction, Building Area and Building Height (Sections 503, 504 and 505)

A. Mixed Use and Occupancy:
The height and area restrictions of the building are based upon the most restrictive use. Fire resistive rated occupancy separations are therefore not required. Each portion of the building shall be individually classified as to use. All other code requirements shall apply to each portion of the building based on the use of that space except that the most restrictive applicable provisions of Chapter 9 shall apply to these non-separated uses. Fire separations are then not required between uses (Section 508.3.3), except as required by other specific provisions. Accessory occupancies are allowed to be included with the main occupancy.

B. The permitted construction type shall be: **Type IIB** (noncombustible) and the protective requirements shall be as follows (Table 601 and 602):
- The Stadiums area separated Buildings.

Structural Frame	0 hr.
Bearing Walls	Exterior—0 hr.
	Interior—0 hr. (Not less than the fire-resistance rating required by other sections of this code.)
Nonbearing Walls and Partitions Exterior	0 hr with less than 30 feet of separation to the adjacent property line pending on type of construction; 0 hr with more than 30 feet of separation to the adjacent property line.
Nonbearing Walls and Partitions Interior	0 hr. (Not less than the fire-resistance rating required by other sections of this code.)
Floor construction including support beams and joists	0 hr.
Roof construction	0 hr.

C. Building Heights (Table 504.3 and 504.4):

- The general height limitation for Type II-B construction and A Occupancies is 55'-0" for Buildings not equipped throughout with an automatic sprinkler system.
  - Soccer Press Box: 22'-0" Height.
  - Field Hockey Press Box: 28'-3" Height.
  - Softball Hitting Pavilion: 24'-0" Height.
  - Softball Press Box: 35'-0" Height.
- The number of stories above grade plane is Unlimited for an A-5 Occupancy and 2-stories for an A-3 Occupancy not equipped throughout with an automatic sprinkler system.
  - Soccer Press Box (A-5): 2 Stories
  - Field Hockey Press Box (A-5): 3 Stories
  - Softball Press Box (A-5): 2 Stories
  - Softball Dugouts (A-5): 1 Story
  - Softball Hitting Pavilion (A-3): 1 Story

D. Allowable Building Areas (Table 506.2):

- The allowable area for Type II-B construction is Unlimited for an A-5 Occupancy and 9,500 square feet for an A-3 Occupancy not equipped throughout with an automatic sprinkler system.
  - Softball Hitting Pavilion (A-3): 4,180 sf.

E. Spaces under Grandstands and Bleachers (Section 1029.1.1.1):
- Where spaces under grandstands or bleachers are used for purposes other than ticket booths less than 100 sf and toilet rooms, such spaces shall be separated by fire barriers complying with Section 707 and horizontal assemblies comply with Section 711 with not less than 1-hour fire-resistance-rated construction.

5.00 Separation distances between adjacent buildings on the same site

A. Hour Separation: None.

B: Fire Resistance Ratings for Exterior Walls Per Table 602, we would only require a 0 hour rating.

Table 602 FIRE-RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE

FIRE SEPARATION DISTANCE = x (feet)	TYPE OF CONSTRUCTION	OCCUPANCY GROUP A
X < 5	All	1
5 ≤ X < 10	IA	1
	Others	1
10 ≤ X < 30	IA, IB	1
	IIB, VB	0
	Others	1
X ≥ 30	All	0

C. The maximum area of unprotected openings permitted in an exterior wall in any story of a building shall not exceed the percentages specified in Table 705.8 based on the fire separation distance of each individual story:
1. The Mahaney Dome is approximately 104'-0" from the SW Corner of the newly proposed Softball Hitting Pavilion. There is No Limit to the Allowable Area of Exterior Wall Openings for Fire Separation Distances exceeding 30'-0".
2. The North Engineering Annex Building is approximately 134'-0" from the SE Corner of the newly proposed Softball Press Box and Grandstands. There is No Limit to the Allowable Area of Exterior Wall Openings for Fire Separation Distances exceeding 30'-0".

D. Vertical Separation of Openings (Section 705.8.5). Not required per 705.8.5, Ex. 1. Does not apply to buildings that are three stories or less above grade plane.

Table 705.8 MAXIMUM AREA OF EXTERIOR WALL OPENINGS BASED ON FIRE SEPARATION DISTANCE AND DEGREE OF OPENING PROTECTION

FIRE SEPARATION DISTANCE (feet)	DEGREE OF OPENING PROTECTION	ALLOWABLE AREA
30 or greater	Unprotected, Non-sprinklered (UP, NS)	No Limit
	Unprotected, Sprinklered (UP, S)	No Limit
	Protected (P)	No Limit

MEANS OF EGRESS

1.00 Occupant Load (Section 1004):

In determining means of egress requirements, the number of occupants for whom means of egress facilities must be provided is established by dividing the floor area assigned to each use by the following occupant load factors (Table 1004.1.2):

Assembly with fixed seats	For areas having fixed seats and aisles, the occupant load shall be determined by the number of fixed seats installed therein.
Assembly without fixed seats Concentrated (chairs only—not fixed) Standing space Unconcentrated (tables and chairs)	 7 net 5 net 15 net
Concert, commencement, and other special events	Occupant load will be determined based upon the configuration of the space and the programmed number of people.
Waiting areas	15 gross
Business areas	100 gross
Exercise rooms	50 gross
Kitchens, commercial	200 gross
Mercantile	60 gross
Storage, stock, shipping areas	300 gross
Accessory storage areas, mechanical equipment room	300 gross

2.00 Design Occupant Load Calculations: Refer to Life Safety Plans.

3.00 Exit Capacity

A. The total width of means of egress in inches must not be less than the occupant load served by the means of egress multiplied by the following factors (Section 1005.3.1 and 1005.3.2, Ex. 1)

Stairways	Other Egress Components
0.3 inches/person (40 persons per foot)	0.20 inches/person (60 persons per foot)

B. Where occupants egress from one or more rooms, areas or spaces through others, the design occupant load shall be the combined occupant load of interconnected accessory or intervening spaces. Design of egress path capacity shall be based on the cumulative portion of occupant loads of all rooms, areas or spaces to that point along the path of egress travel (Section 1004.1.1.1).

C. The capacity of the means of egress required from any story of a building shall not be reduced along the path of egress travel until arrival at the public way.

4.00 Exit Capacity Calculations: Refer to Life Safety Plans.

5.00 Number of Exits Required (Section 1006, and 1017)

A. Two exits, or exit access stairways or ramps providing access to exits, from any story or occupied roof shall be provided where one of the following conditions exists:
- The occupant load exceeds one of the values in Table 1006.3.1.
- The exit access travel distance exceeds that specified in Table 1006.3.3(2) as determined in accordance with the provisions of Section 1017.1.

Table 1006.3.1 MINIMUM NUMBER OF EXITS OR ACCESS TO EXITS PER STORY

Occupant Load Per Story	Minimum Number of Exits or Access to Exits from Story
1-500	2
501-1,000	3
More than 1,000	4

Table 1006.3.3(2) STORIES WITH ONE EXIT OR ACCESS TO ONE EXIT FOR OTHER OCCUPANCIES

Story	Occupancy	Maximum Occupants Per Story	Maximum Exit Access Travel Distance
First story or basement	A, S*	49 occupants	75 feet
	S	29 occupants	75 feet
Second story	B, F, M, S	29 occupants	75 feet
Third story and above	Not permitted	Not applicable	Not applicable

B. Three or more exits or exit access doorways, shall be provided from any space with an occupant load of 501 to 1,000. Four exits or exit access doorways shall be provided from any space with an occupant load greater than 1,000. (Section 1008.2.1.1).

6.00 Accessible Means of Egress (Section 1009)

A. Accessible spaces shall be provided with not less than one accessible means of egress. Where more than one means of egress are required by Section 1006.2 or 1006.3 from any accessible space, each accessible portion of the space shall be served by not less than two accessible means of egress.

B. Each required accessible means of egress shall be continuous to a public way and shall consist of one or more of the following components:
- *Accessible routes complying with Section 1104.*
- Interior exit stairways complying with Sections 1009.3 and 1023.
- Interior exit access stairways complying with Sections 1009.3 and 1019.3 or 1019.4.
- Exterior exit stairways complying with Sections 1009.3 and 1027 and serving levels other than the level of exit discharge.
- Elevators complying with Section 1009.4.
- Platform lifts complying with Section 1009.5.
- Horizontal exits complying with Section 1026.
- Ramps complying with Section 1012.
- Areas of refuge complying with Section 1009.6.
- Exterior areas for assisted rescue complying with Section 1009.7 serving exits at the level of exit discharge.

7.00 Egress Arrangement

A. Where the means of egress from stories above and below converge at an intermediate level, the capacity of the means of egress from the point of convergence shall be not less than the largest minimum width or the sum of the required capacities for the stairways serving the two adjacent stories, whichever is larger. (Section 1005.6)

B. Egress from a room or space shall not pass through adjoining or intervening rooms or areas, except where such adjoining rooms or areas and the area served are accessory to one or the other and provide a discernible path of egress travel to an exit. An exit access shall not pass through a room that can be locked to prevent egress. Egress shall not pass through kitchens, storage rooms, closets or spaces used for similar purposes. (Section 1016.2)

C. Common Path of Egress Travel (IBC Table 1014.3): 75 feet.

D. Exit Access Travel Distance (IBC Table 1017.2):

Table 1017.2 EXIT ACCESS TRAVEL DISTANCE

Occupancy	Without Sprinkler System (feet)	With Sprinkler System (feet)
A, S-1	200	250

E. Travel Distance (Section 1029.7): Open-air seating: The travel distance from each seat to the building exterior shall not exceed 400 feet. The travel distance shall not be limited in facilities of Type II construction.

F. Dead End Corridors (IBC Sec. 1020.4): 20 feet.

G. Exit Separation (IBC Sec. 1007.1.1): Where two exits, exit access doorways, exit access stairways or ramps, or any combination thereof, are required from any portion of the exit access, they shall be placed a distance apart equal to not less than one-half of the length of the maximum overall diagonal dimension of the building or area to be served measured in a straight line between them.

H. Exit Discharge (Section 1028):
Exits shall discharge directly to the exterior of the building. The exit discharge shall be at grade or shall provide a direct path of egress travel to grade. The exit discharge shall not reenter a building.

I. Assembly Main Exit (Section 1029.2):
All assembly occupancies with a well-defined main exit and with an occupant load greater than 300 must have a main exit. Where the building is classified as a Group A occupancy, the main exit must front on at least one street or an unoccupied space of not less than 10 feet in width that adjoins a street or public way. The main exit must provide an egress capacity for at least one-half of the occupant load, but not less than the total width of all means of egress leading to the exit. In addition to having access to a main exit, each level of occupancy in Use Group A must be provided with additional exits which provide a means of egress capacity for at least one-half of the total occupant load served by that level. The Stadiums do not have a main exit.
   a. In a building used for assembly purposes where there is no well-defined main exit or where multiple main exits are provided, exits for each level shall be permitted to be distributed around the perimeter of the building, provided that the total width of egress is not less than 100 percent of the required width. (Section 1029.2)

8.00 Protruding Objects (Section 1003.3)

A. Protruding objects are permitted to extend below the minimum ceiling height required by Section 1003.2 provided a minimum headroom of 80 inches shall be provided for any walking surface, including walks, corridors, aisles and passageways. Not more than 50 percent of the ceiling area of a means of egress shall be reduced in height by protruding objects.

EXCEPTION:
Door closer and stops may reduce headroom to no less than 78 inches.

B. A barrier shall be provided where the vertical clearance is less than 80 inches high. The leading edge of such a barrier shall be located 27 inches maximum above the floor.

C. A free-standing object mounted on a post or pylon must not overhang that post or pylon more than 12 inches where the lowest point of the leading edge is more than 27 inches and less than 80 inches above the walking surface. (Section 1003.3.2)

D. Objects with leading edges more than 27 inches and not more than 80 inches above the floor shall not project horizontally more than 4 inches into the circulation path. Handrails are permitted to protrude 4-1/2 inches from the wall. (Section 1003.3.3)

E. Protruding objects must not reduce the minimum clear width of accessible routes. (Section 1003.3.4)

9.00 Exit Access Aisles (Section 1018 and 1029)

A. Bleachers, grandstands and folding and telescopic seating, that are not building elements, shall comply with ICC 300. (1029.1.1)

B. Capacity of Aisle for Assembly (Section 1029.6):
The required capacity of aisles shall be not less than that determined in accordance with Section 1029.6.1 where smoke-protected assembly seating is not provided with Section 1029.6.2 or 1029.6.3 where smoke-protected assembly seating is provided.

Outdoor smoke-protected assembly seating (Section 1029.6.3): The clear width inches of aisles and other means of egress shall be not less than the total occupant load served by the egress element multiplied by 0.08 where egress is stepped aisle and multiplied by 0.06 where egress is by level aisles and ramped aisles.

C. Assembly Aisles are Required (Section 1029.9)
Every occupied portion of any building, room or space used for assembly purposes that contains seats, tables, displays, similar fixtures or equipment shall be provided with aisles leading to exits or exit access doorways in accordance with this section. Minimum clear width for aisles shall be forty-eight inches for stepped aisles having seats on each side, thirty-six inches where the stepped aisles serve less than 50 seats, thirty-six inches where stepped aisles have seating on only one side, twenty-three inches between a stepped aisle handrail and seating where a stepped aisle does not serve more than five rows on one side (Section 1029.9.1).

D. Converging Aisles (Section 1029.9.3):
Where aisles converge to form a single path of egress travel, the required capacity of that path shall be not less than the combined required capacity of the converging aisles.

E. Aisle Accessways (Section 1029.12):
- Clear width of aisle accessways serving seating in rows (Section 1029.12.2):
  Where seating rows have 14 or fewer seats, the minimum clear aisle accessway width shall be not less than 12 inches measured as the clear horizontal distance from the back of the row ahead and the nearest projection of the row behind. Where chairs have automatic or self-rising seats, the measurement shall be made with seats in the raised position. Where any chair in the row does not have an automatic or self-rising seat, the measurements shall be made with the seat in the down position.
- Dual Access (Section 1029.12.2.1):
  For rows of seating served by aisles or doorways at both ends, there shall be not more than 100 seats per row. The minimum clear width of 12 inches between rows shall be increased by 0.3 inch for every additional seat beyond 14 seats where seats have backrests or beyond 21 where seats are without backrests. The minimum clear width is not required to exceed 22 inches.
- Single Access (Section 1029.12.2.2):
  For rows of seating served by an aisle or doorway at only one end of the row, the minimum clear width of 12 inches between rows shall be increased by 0.6 inch for every additional seat beyond seven seats where seats have backrests or beyond 10 where seats are without back rests. The minimum clear width is not required to exceed 22 inches.

F. Assembly Aisle Walking Surfaces (1029.13):
- Aisles that are sloped more than one unit vertical in 20 units horizontal shall be considered a ramped aisle. Ramped aisles that serve as part of an accessible route in accordance with Sections 1009 and 1108.2 shall have a maximum slope of one unit vertical in 12 units horizontal. The slope of other ramped aisles shall not exceed one unit vertical in 8 units horizontal. (Section 1029.13.1)
- Ramped aisles shall have edge protection in accordance with Sections 1012.10 and 1012.10.1. (Section 1029.13.1.3)
- Stepped Aisles (Section 1029.13.2):
  Aisles with a slope exceeding one unit vertical in eight units horizontal shall consist of a series of risers and treads that extends across the full width of aisles and complies with Sections 1029.13.2.1 through 1029.13.2.4.
- Treads (Section 1029.13.2.1):
  Tread depths shall be not less than 11 inches and shall have dimensional uniformity.
- Risers (Section 1029.13.2.2):
  Where the gradient of stepped aisles is to be the same as the gradient of adjoining seating areas, the riser height shall be not less than 4 inches nor more than 8 inches and shall be uniform within each flight. Riser heights not exceeding 9 inches shall be permitted where they are necessitated by the slope of the adjacent seating areas to maintain sightlines.

G. Handrails (Section 1029.15):
- Where there is seating on both sides of the aisle, the mid-aisle handrails shall be discontinuous with gaps or breaks at intervals not exceeding five rows to facilitate access to seating and to permit crossing from one side of the aisle to the other. These gaps or breaks shall have a clear width of not less than 22 inches and not greater than 36 inches, measured horizontally, and the mid-aisle handrail shall have rounded terminations or bends. (Section 1029.15.1).
- Mid-aisle handrails shall not extend beyond the lowest riser and shall terminate within 18 inches, measured horizontally, from the lowest riser. Handrail extensions are not required. (Section 1029.15.3).
- Where mid-aisle handrails are provided in stepped aisles, there shall be an additional rail located approximately 12 inches below the handrail. (Section 1029.15.4)

H. Assembly Guards (Section 1029.16):
- Perimeter Guards (Section 1029.16.1):
  Perimeter guards shall be provided where the footboards or walking surface of seating facilities are more than 30 inches above the floor or grade below. Where the seatboards are adjacent to the perimeter, guard height shall be 422 inches high minimum, measured from the seatboard. Where the seats are self-rising, guard height shall be 42 inches high minimum, measured from the floor surface. Where there is an aisle between the seating and the perimeter, the guard height shall be measured in accordance with Section 1015.2.
- Cross Aisles (Section 1029.16.2):
  Cross aisles located more than 30 inches above the floor or grade below shall have guards in accordance with Section 1015. Where an elevation change of 30 inches or less occurs between a cross aisle and the adjacent floor or grade below, guards not less than 26 inches above the aisle floor shall be provided. Where the backs of seats on the front of the cross aisle project 24 inches or more above the adjacent floor of the aisle, a guard need not be provided.
- Sightline-constrained Guard Heights (Section 1029.16.3):
  Unless subject to the requirements of Section 1029.16.4, a fascia or railing system in accordance with the guard requirements of Section 1015 and having a minimum height of 26 inches shall be provided where the floor or foot-board elevation is more than 30 inches above the floor or grade below and the fascia or railing would otherwise interfere with the sightlines of immediately adjacent seating.
- Guards at the end of Aisles (Section 1029.16.4):
  A fascia or railing system complying with the guard requirements of Section 1015 shall be provided for the full width of the aisle where the foot of the aisle is more than 30 inches above the floor or grade below. The fascia or railing shall be a minimum of 36 inches high and shall provide a minimum 42 inches measured diagonally between the top of the rail and the nosing of the nearest tread.

10.00 Exit Access Corridors

A. A Minimum Corridor Width (Section 1020.2):
The required capacity of corridors shall be determined as specified in Section 1005.1, but the minimum width shall be not less than that specified in Table 1020.2:

Occupancy	Maximum Width (inches)
Any facilities not listed below	44
Access to and utilization of mechanical, plumbing or electrical systems or equipment	24
With an occupant load of less than 50	36
In corridors and areas serving stretcher traffic in occupancies where patients receive outpatient medical care that causes the patient to be incapable of self-preservation	72

B. Obstruction (Section 1020.3):
The minimum width or required capacity of corridors shall be unobstructed. Encroachments complying with Section 1005.7 are the exception.

Doors when fully opened, shall not reduce the required width by more than 7 inches. Doors in any position shall not reduce the required width by more than one-half. (Section 1005.7.1).

Handrail projections shall be in accordance with the provisions of Section 1014.8. Other nonstructural projections such as trim and similar decorative features shall be permitted to project into the required width not more than 1-1/2 inches on each side.

CONSTRUCTION REQUIREMENTS

1.00 Noncombustible Requirements (Section 603.1):
Type II construction requires most building elements to be noncombustible. The use of combustible materials is only permitted in the following applications:

A. Fire-retardant-treated wood is permitted in:
1. Nonbearing partitions where the required fire-resistance rating is 2 hours or less.
2. Roof construction, including girders, trusses, framing and decking.

B. Thermal and acoustical insulation, other than foam plastics, having a flamespread index of not more than 25.

C. Foam plastics and insulation complying with Chapter 26.

D. Roof coverings that have an A, B or C classification.

E. Interior floor finish and floor covering materials installed in accordance with Section 804.

F. Millwork such as doors, door frames ,window sashes and frames.

G. Interior wall and ceiling finishes installed in accordance with Sections 801 and 803.

H. Where not installed over 15 feet above grade, show windows, nailing or furring strips, wooden bulkheads below show windows, their frames, aprons and show cases.

I. Finish flooring installed in accordance with Section 805.

J. Blocking such as for handrails, millwork, cabinets, and window and door frames.

K. Light-transmitting plastics as permitted by Chapter 26.

L. Mastics and caulking materials applied to provide flexible seals between components of exterior wall construction.

M. Nailing or furring strips as permitted by Section 803.13.

N. Heavy timber as permitted by Note c to Table 601 and Sections 602.4.7 and 1406.3.

O. Materials allowed in the concealed spaces of buildings of Type II construction in accordance with Section 718.5.

P. Materials exposed within plenums complying with Section 602 of the International Mechanical Code.

2.00 Area Separation (Section 508 and 509):

A. We are using the non separated approach specified in Section 508.3. Storage occupancies are accessory to the main building occupancies in accordance with 508.2. Buildings or portions of buildings that comply with the provisions of Section 508 shall be considered as separated occupancies. Required separation of Group A from Group S-1 shall be 2 hour for buildings not equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.

B. Incidental uses are ancillary functions associated with a given occupancy that generally pose a greater level of risk to that occupancy and are limited to those uses listed in Table 509:

ROOM OR AREA	SEPARATION AND/OR PROTECTION
Furnace room where any piece of equipment is over 400,000 Btu per hour input	1 hour or provide automatic sprinkler system
Rooms with boilers where the largest piece of equipment is over 15 psi and 10 horsepower	1 hour or provide automatic sprinkler system
Refrigerant machinery room	1 hour or provide automatic sprinkler system
Laundry rooms over 100 square feet	1 hour or provide automatic sprinkler system
Electrical Installations and transformers	See Sections 110.26 through 110.34 and Sections 450.8 through 450.48 of NFPA 70 for protection and separation requirements

3.00 Interior Wall and Ceiling Finish (Section 803):

A. Interior wall and ceiling finish are the exposed interior surfaces of buildings including, but not limited to: fixed or movable walls and partitions; columns; ceilings; and interior wainscoting, paneling, or other finish applied structurally or for decoration, acoustical correction, surface insulation, structural fire resistance or similar purposes, but not including trim. Trim is defined as picture molds, chair rails, baseboards, handrails, door and window frames, and similar decorative or protective materials used in fixed applications.

B. Interior finishes with a smoke developed rating greater than 450 are not permitted.

C. The flame spread classifications for walls and ceilings correspond to that determined by ASTM E-84 as follows:

Class A	Flame spread 0-25
Class B	Flame spread 26-75
Class C	Flame spread 76-200

D. **INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY (Table 803.11):**

GROUP	NONSPRINKLERED		
	Interior Exit Stairways and Exit Passageways	Corridors and enclosures for exit access stairways	Rooms and enclosed spaces
A-3, A-5	A	A	C
S	B	B	C

4.00 Interior Floor Finish (Section 804):

A. Finished floors or floor covering materials of a traditional type such as wood, vinyl, linoleum, terrazzo and other resilient floor covering materials which are not comprised of fibers are exempt from the requirements of this section.

B. The flame spread classifications for floor coverings correspond to that determined by NFPA 253 as follows:

Class I	0.45 watts/cm2 or greater
Class II	0.22 watts/cm 2 or greater
DOC FF-1	0.04 watts/cm2 (Pill Test)

5.00 Decorative Materials and Trim (Section 806):

A. In occupancies of Group A, curtains, draperies, hangings and other decorative materials suspended from walls or ceilings must be flame resistant in accordance with Section 806.4 and shall not exceed 10 percent of the specific wall or ceiling area to which such materials are attached.

B. Fixed or movable walls and partitions, paneling, applied structurally or for decoration, acoustical correction, surface insulation or other purposes shall be considered interior finish shall comply with Section 803 and shall not be considered decorative materials or furnishings.

C. Material, other than foam plastic used as interior trim, shall have a minimum Class C flame spread and smoke-developed index when tested in accordance with ASTM E84 or UL 723, as described in Section 803.1.1. Combustible trim, excluding handrails and guardrails, shall not exceed 10 percent of the specific wall or ceiling area to which it is attached. (Section 806.7)

D. Interior floor-wall base that is 6 inches or less in height shall be tested in accordance with sEction 804.2 and shall be not less than Class II. Where a Class I floor finish is required, the floor-wall base shall be Class I. (Section 806.8)

6.00 Insulation (Section 807):

A. Thermal and acoustical insulation shall comply with Section 720. (Section 807.1)

7.00 Safety Glazing (Section 2406 and 2407):

B. Individual glazed areas in hazardous locations must pass the test requirements of the Consumer Product Safety Commission Standard for Safety Glazing (CPSC 16 CFR, Part 1201).

C. The locations specified in Sections 2406.4.1 through 2406.4.7 shall be considered specific hazardous locations requiring safety glazing materials:
- Glazing in Doors (Section 2406.4.1).
- Glazing adjacent to Doors (Section 2406.4.2): Glazing in an individual fixed or operable panel adjacent to a door where the nearest vertical edge of the glazing is within a 24 inch arc of either vertical edge of the door in a closed position and where the bottom exposed edge of the glazing is less than 60 inches above the walking surface.
- Glazing in Windows (Section 2406.4.3): Glazing in an individual fixed or operable panel that meets all of the following conditions shall be considered a hazardous location:
  - The exposed area of an individual pane is greater than 9 square feet,
  - The bottom edge of the glazing is less than 18 inches above the floor.
  - The top edge of the glazing is greater than 36 inches above the floor.
  - One or more walking surface(s) are within 36 inches, measured horizontally and in a straight line, of the plane of the glazing.
- Glazing in Guards and Railings (Section 2406.4.4).
- Glazing adjacent to Stairways and Ramps (Section 2406.4.6): Glazing where the bottom exposed edge of the glazing is less than 60 inches above the plane of the adjacent walking surface of stairways, landings between flights of stairs.
- Fire Department Access Panels (Section 2406.5).

8.00 Assembly Area Seating

A. Wheelchair Spaces (IBC Sec. 1108.2.2, Table 1108.2.2.1):

CAPACITY OF SEATING IN ASSEMBLY AREAS	MINIMUM REQUIRED NUMBER OF WHEELCHAIR SPACES
4 to 25	1
26 to 50	2
51 to 100	4
101 to 300	5
301 to 500	6
501 to 5,000	6, plus 1 for each 150, or fraction thereof, between 501 through 5,000
5,001 and over	36 plus 1 for each 200, or fraction thereof, over 5,000

B. Companion Seats (IBC Sec. 1108.2.3): At least one companion seat shall be provided for each wheelchair space required.

C. Dispersion of Wheelchair Spaces (IBC Sec. 1108.2.4): In multilevel assembly seating areas, wheelchair spaces shall be provided on the main floor level and on one of each two additional floor or mezzanine levels. Wheelchair spaces shall be provided in each luxury box, club box, and suite within assembly facilities.

D. Designated Aisle Seats (IBC Sec. 1108.2.5): At least 5 percent, but not less than one, of the total number of aisle seats provided shall be designated aisle seats and shall be the aisle seats located closest to accessible routes. Armrests shall be removable or able to be raised at these locations.

ACTIVE FIRE PROTECTION

Automatic Sprinkler System: **Not Required** (IBC Sec. 903.2)
- Group A-3 (Section 903.2.1.3): The fire area does not exceed 12,000 square feet; The fire area does not have an occupant load of 300 or more; and The fire area is not located on a floor other than a level of exit discharge serving such occupancies.
- Group A-5 (Section 903.2.1.5): The areas do not include concession stands, retail areas, or a press box or other accessory use areas in excess of 1,000 square feet.

Standpipes (Class I) **Not Required** (IBC Sec. 905.1, Sec. 905.3)
- Group A (Section 905.3.2): The Group A buildings do not have occupant loads exceeding 1,000 persons. Group A-5 occupancies are open-air-seating spaces.

Fire Alarm System Required (IBC Sec. 907.2)
- A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group A occupancies where the occupant load due to the assembly occupancy is 300 or more. Group A occupancies not separated from one another in accordance with Section 707.3.10 shall be considered as a single occupancy for the purpose of applying this section. (Section 908.2.1).
- Emergency Voice/Alarm Communication Captions: Stadiums, and grandstands required to caption audible public announcements shall be in accordance with Section 907.5.2.2.4. (Section 907.2.1.21.

Emergency Voice/Alarm Communication Systems Required (IBC Sec. 907.5.2.2)
Portable Fire Extinguishers Required (IBC Sec. 906.1, Table 906.1)

A. Where Required (IBC Sec. 906.1):

IFC SECTION (As Applicable)	SUBJECT
	Group A, S Occupancies
	In areas where flammable or combustible liquids are stored, used or dispensed.
	Special hazard areas (i.e. generator rooms), where required by the fire code official.
	Elevator machine rooms
3206.10	High-piled storage
5703.2.1	Flammable and combustible liquids, general
5704.3.3.1	Indoor storage of flammable and combustible liquids
5704.3.7.5.2	Liquid storage rooms for flammable and combustible liquids

B. Size and Distribution (IBC Sec. 906.3):

FIRE EXTINGUISHERS FOR CLASS A FIRE HAZARDS, TABLE 906.3(1):

	LIGHT (Low) HAZARD OCCUPANCY	ORDINARY (Moderate) HAZARD OCCUPANCY	EXTRA (High) HAZARD OCCUPANCY
Minimum-rated single extinguisher	2-A	2-A	4-A
Maximum floor area per unit of A	3,000 square feet	1,500 square feet	1,000 square feet
Maximum floor area per extinguisher	11,250 square feet	11,250 square feet	11,250 square feet
Maximum distance of travel to extinguisher	75-feet	75-feet	75-feet

FIRE EXTINGUISHERS FOR FLAMMABLE OR COMBUSTIBLE LIQUIDS WITH DEPTHS LESS THAN OR EQUAL TO 0.25 INCH, TABLE 906.3(2):

TYPE OF HAZARD	BASIC MINIMUM EXTINGUISHER RATING	MAXIMUM DISTANCE OF TRAVEL TO EXTINGUISHERS (feet)
Light (Low)	5-B	30
	10-B	50
Ordinary (Moderate)	10-B	30
	20-B	50
Extra (High)	40-B	30
	80-B	50

Emergency Power:
Exit Signs (IBC Sec. 1013.6.3) Required
Emergency Lighting (IBC Sec. 1008.3) Required
- Aisles Corridors
- Exit access stairways and ramps
- Vestibules and areas on level of discharge used for exit discharge
- Exterior landings
- Electrical equipment rooms
- Fire command centers
- Fire pump rooms
- Generator rooms
- Public restrooms with an area greater than 300 square feet

PLUMBING SYSTEMS

1.00 Total Number of Required Fixtures (per Uniform Plumbing Code Table 422.1)

Use Group	Description	Water Closets		Lavatories		Drinking Fountains	Other
		Male	Female	Male	Female		
A-3	Assembly occupancy without fixed or permanent seating	1: 1-100 2: 101-200 3: 201-400	1: 1-25 2: 26-50 3: 51-100 4: 101-200 5: 201-300	1: 1-200 2: 201-400 3: 401-650	1: 1-100 2: 101-200 3: 201-300 4: 301-500	1: 1-250 2: 251-500 3: 501-750	1 service sink
A-5	Assembly occupancy for outdoor activities or sporting events – grandstands and stadiums	1: 1-100 2: 101-200 3: 201-400	1: 1-25 2: 26-50 3: 51-100 4: 101-200 5: 201-300	1: 1-200 2: 201-400 3: 401-750	1: 1-100 2: 101-200 3: 201-300 4: 301-500	1: 1-250 2: 251-500 3: 501-750	1 service sink

0 ISSUED FOR BID 18 FEB 2022
REV. DESCRIPTION DATE

LICENSED ARCHITECT
KRISTIAN C. ROWAL
NO.3366
STATE OF MAINE
02.18.2022

WBRC ARCHITECTS ENGINEERS
WWW.WBRCAE.COM
BANGOR, MAINE 207-947-4511
PORTLAND, MAINE 207-828-4511
SARASOTA, FLORIDA 941-556-0757

CRAWFORD

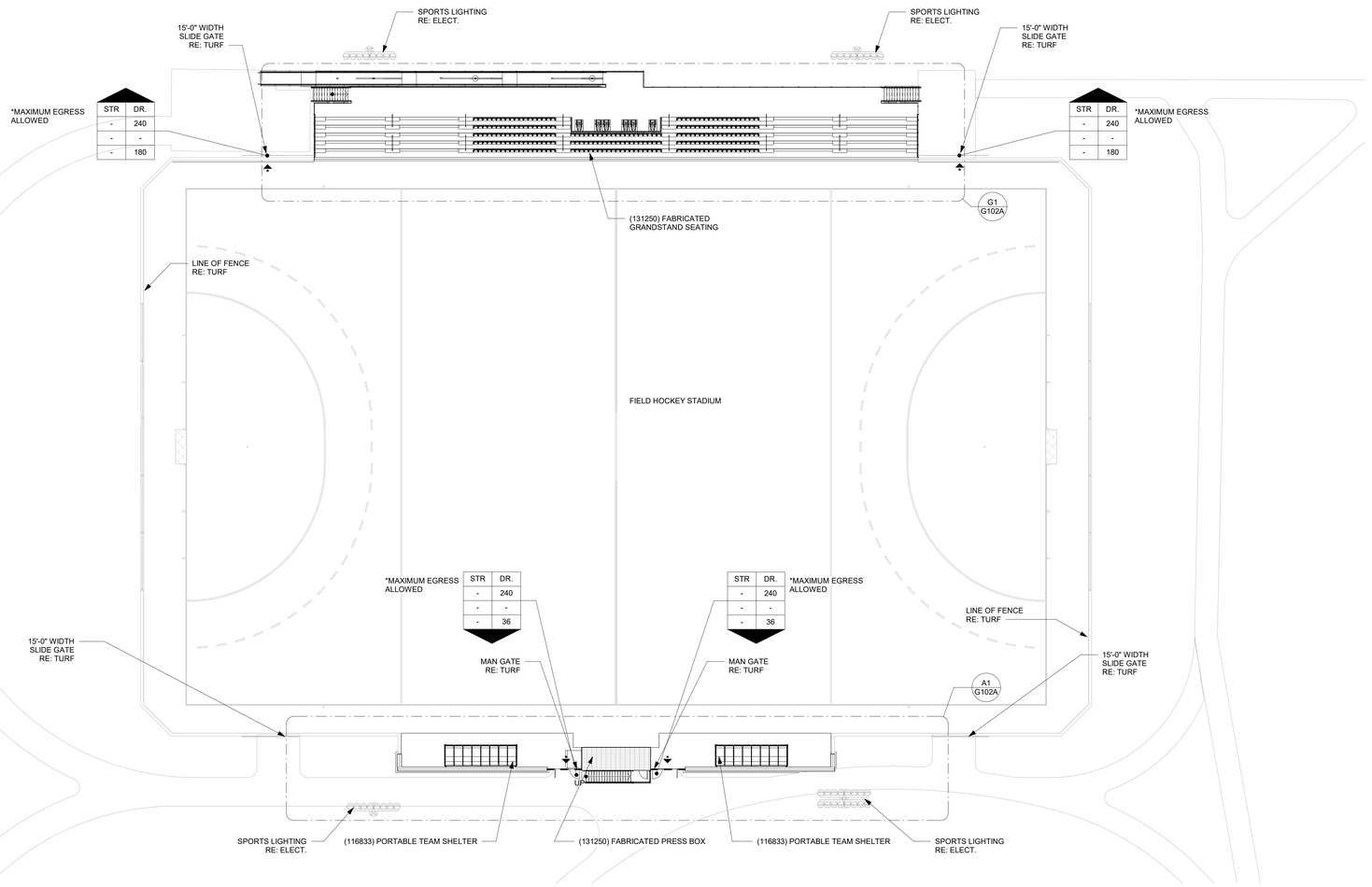
University of Maine
Field Hockey Complex 2022

PROJECT: 168 College Ave, Orono, ME 04469

CODE INFORMATION

SHEET TITLE:
WBRC CAD FILE:
PROJECT No. 10088.033
SCALE:
PROJECT MANAGER: Approver
DRAWN BY: Author
CHECKED BY: Checker
GRAPHIC SCALE: 0" 1"
SHEET No. G005

2/18/2022 2:17:09 PM SHEET SIZE: 30x42
BIM 360://UM Athletics - Field Sports/10088015 – UM ATH – FIELD HOCKEY – ARCH#21.rvt



A1 OVERALL LIFE SAFETY PLAN - FIELD HOCKEY
1" = 20'-0"

LIFE SAFETY LEGEND

- INDICATES 1-HOUR FIRE RESISTITVE CONSTRUCTION
- TRAVEL DISTANCE

STR.	DR.	
		STR. = STAIR WIDTH | DR. = DOOR WIDTH
'X'	'X'	OCCUPANCY
'X'	'X'	REQUIRED EXIT WIDTH (INCHES)
'X'	'X'	PROVIDED EXIT WIDTH (INCHES)

- INDICATES POINT OF EGRESS ACCESS
- INDICATES POINT OF EGRESS DISCHARGE
- * INDICATES LOCATION OF FIRE EXTINGUISHER ON WALL BRACKET
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- *S-R INDICATES LOCATION OF SEMI-RECESSED FIRE EXTINGUISHER CABINET AND FIRE EXTINGUISHER
- *S-R INDICATES LOCATION OF EXISTING SEMI-RECESSED FIRE EXTINGUISHER CABINET AND FIRE EXTINGUISHER
- AED.X AUTOMATIC EXTERNAL DEFIBRILLATOR AND CABINET - GC TO COORDINATE FINAL LOCATION WITH OWNER PRIOR TO INSTALLATION

REV.	DESCRIPTION	DATE
0	ISSUED FOR BID	18 FEB 2022

LICENSED ARCHITECT
KRISTIAN C. LOWAL
NO.3366
STATE OF MAINE
02.18.2022

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CRAWFORD

University of Maine
Field Hockey Complex 2022
PROJECT: 168 College Ave, Orono, ME 04469

LIFE SAFETY PLAN - FIELD HOCKEY

SHEET TITLE:	
WBRC CAD FILE:	
PROJECT No.	10088.033
SCALE:	As indicated
PROJECT MANAGER:	Approver
DRAWN BY:	Author
CHECKED BY:	Checker
GRAPHIC SCALE:	0" 1"
SHEET No.	G102

SHEET SIZE: 30x42
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PLUMBING FIXTURE REQUIREMENTS

568 TOTAL OCCUPANTS
284 M | 284 W

OCCUPANCY CLASSIFICATION	OCCUPANT LOAD		WATER CLOSETS	LAVATORIES	DRINKING FOUNTAINS	SERVICE SINK
A-5	MALE	284	3	2	3	1
	FEMALE	284	6	4		
TOTALS			9	6	3	1

**UNIFORM PLUMBING CODE, 2021 EDITION; TABLE 422.1 MINIMUM PLUMBING FACILITIES

PROJECT TO ACCOMMODATE SITE AREA FOR NINE (9) PORTA-JOHNS, SIX (6) PORTABLE HANDWASH STATIONS, AND THREE (3) DRINKING FOUNTAINS IN CONJUNCTION WITH WITH ADJACENT SOFTBALL FIELD PROJECT

1006.3.1 MINIMUM NUMBER OF EXITS OR ACCESS TO EXITS

THE REQUIRED NUMBER OF EXITS, OR EXIT ACCESS STAIRWAYS OR RAMPS PROVIDING ACCESS TO EXITS SHALL BE MAINTAINED UNTIL ARRIVAL AT THE EXIT DISCHARGE OR A PUBLIC WAY. PROVIDE MINIMUM THREE (3) EXITS FOR OCCUPANT LOAD BETWEEN 501-1000.

1029.6.3 OPEN-AIR ASSEMBLY SEATING

IN OPEN-AIR ASSEMBLY SEATING, THE REQUIRED CAPACITY IN INCHES OF AISLES SHALL BE NOT LESS THAN THE TOTAL OCCUPANT LOAD SERVICED BY THE EGRESS ELEMENT MULTIPLIED BY 0.08 WHERE EGRESS IS BY STEPPED AISLE AND MULTIPLIED BY 0.06 WHERE EGRESS IS BY LEVEL AISLES AND RAMPED AISLES.

1029.7 TRAVEL DISTANCE

THE EXIT ACCESS TRAVEL DISTANCE SHALL COMPLY WITH SECTION 1017. WHERE AISLES ARE PROVIDED FOR SEATING, THE DISTANCE SHALL BE MEASURED ALONG THE AISLE AND AISLE ACCESSWAYS WITHOUT TRAVEL OVER OR ON THE SEATS. IN FACILITIES WITH OPEN-AIR ASSEMBLY SEATING OF TYPE III, IV, OR V CONSTRUCTION, THE TOTAL EXIT ACCESS TRAVEL DISTANCE TO ONE OF THE FOLLOWING SHALL NOT EXCEED 400 FEET:
1.THE CLOSEST RISER OF AN EXIT ACCESS STAIRWAY.
2. THE CLOSEST SLOPE OF AN EXIT ACCESS RAMP.
3. AN EXIT

1029.8 COMMON PATH OF EGRESS TRAVEL

THE COMMON PATH OF EGRESS TRAVEL SHALL NOT EXCEED 50 FEET FROM ANY SEAT TO A POINT WHERE AN OCCUPANT HAS A CHOICE OF TWO PATHS OF EGRESS TRAVEL TO TWO EXITS, FOR OPEN-AIR ASSEMBLY SEATING

1029.9.1 MINIMUM AISLE WIDTH

THE MINIMUM CLEAR WIDTH FOR AISLES SHALL COMPLY WITH THE FOLLOWING:
1. FORTY-EIGHT INCHES FOR STEPPED AISLES HAVING SEATING ON EACH SIDE.
2. THIRTY-SIX INCHES FOR STEPPED AISLES HAVING SEATING ON ONLY ONE SIDE.

1029.9.3 CONVERGING AISLES

WHERE AISLES CONVERGE TO FORM A SINGLE PATH OF EGRESS TRAVEL, THE REQUIRED CAPACITY OF THAT PATH SHALL BE NOT LESS THAN THE COMBINED REQUIRED CAPACITY OF THE CONVERGING AISLES.

1029.12.2 CLEAR WIDTH OF AISLE ACCESSWAYS SERVING SEATING IN ROWS

WHERE SEATING ROWS HAVE 14 OR FEWER SEATS THE MINIMUM CLEAR AISLE ACCESSWAY WIDTH SHALL BE NOT LESS THAN 12 INCHES MEASURED AS THE CLEAR HORIZONTAL DISTANCE FROM THE BACK OF THE ROW AHEAD AND THE NEAREST PROJECTION OF THE ROW BEHIND. WHERE CHAIRS HAVE AUTOMATIC OR SELF-RISING SEATS, THE MEASUREMENT SHALL BE MADE WITH SEATS IN THE RAISED POSITION. WHERE ANY CHAIR IN THE ROW DOES NOT HAVE AN AUTOMATIC OR SELF-RISING SEAT, THE MEASUREMENT SHALL BE MADE WITH THE SEAT IN THE DOWN POSITION.

1029.12.2.1 DUAL ACCESS

FOR ROWS OF SEATING SERVED BY AISLES OR DOORWAYS AT BOTH ENDS, THERE SHALL BE NOT MORE THAN 100 SEATS PER ROW. THE MINIMUM CLEAR WIDTH OF 12 INCHES BETWEEN ROWS SHALL BE INCREASED BY 0.3 INCH FOR EVERY ADDITIONAL SEAT BEYOND 14 SEATS WHERE SEATS HAVE BACKRESTS OR BEYOND 21 WHERE SEATS ARE WITHOUT BACKRESTS. THE MINIMUM CLEAR WIDTH IS NOT REQUIRED TO EXCEED 22 INCHES.

1029.13.2.1 TREADS

TREAD DEPTHS SHALL BE NOT LESS THAN 11 INCHES AND SHALL HAVE DIMENSIONAL UNIFORMITY.

1029.13.2.2 RISERS

WHERE THE GRADIENT OF STEPPED AISLES IS TO BE THE SAME AS THE GRADIENT OF ADJOINING SEATING AREAS, THE RISER HEIGHT SHALL BE NOT LESS THAN 4 INCHES NOR MORE THAN 8 INCHES AND SHALL BE UNIFORM WITHIN EACH FLIGHT.

1029.13.2.3 TREAD CONTRASTING MARKING STRIP

A CONTRASTING MARKING STRIPE SHALL BE PROVIDED ON EACH TREAD AT THE NOSING OR LEADING EDGE SUCH THAT THE LOCATION OF EACH TREAD IS READILY APPARENT WHEN VIEWED IN DESCENT. SUCH STRIPE SHALL BE NOT LESS THAN 1 INCH, AND NOT MORE THAN 2 INCHES WIDE.

1029.15 HANDRAILS

RAMPED AISLES HAVING A SLOPE EXCEEDING ONE UNIT VERTICAL IN 15 UNITS HORIZONTAL (6.7-PERCENT SLOPE) AND STEPPED AISLES SHALL BE PROVIDED WITH HANDRAILS IN COMPLIANCE WITH SECTION N1014 LOCATED EITHER AT ONE OR BOTH SIDES OF THE AISLE OR WITHIN THE AISLE WIDTH.
EX. 3: HANDRAIL EXTENSIONS ARE NOT REQUIRED AT THE TOP AND BOTTOM OF STEPPED AISLES AND RAMPED AISLES TO PERMIT CROSSOVER WITHIN THE AISLES.

1029.15.1 DISCONTINUOUS HANDRAILS

WHERE THERE IS SEATING ON BOTH SIDES OF THE AISLE, THE MID-AISLE HANDRAILS SHALL BE DISCONTINUOUS WITH GAPS OR BREAKS AT INTERVALS NOT EXCEEDING FIVE ROWS TO FACILITATE ACCESS TO SEATING AND TO PERMIT CROSSING FROM ONE SIDE OF THE AISLE TO THE OTHER. THESE GAPS OR BREAKS SHALL BE A CLEAR WIDTH OF NOT LESS THAN 22 INCHES AND NOT GREATER THAN 36 INCHES, MEASURED HORIZONTALLY, AND THE MID-AISLE HANDRAIL SHALL BE ROUNDED TERMINATIONS OR BENDS.

1029.15.3 MID-AISLE TERMINATION

MID-AISLE HANDRAILS SHALL NOT EXTEND BEYOND THE LOWEST RISER AND SHALL TERMINATE WITHIN 18 INCHES, MEASURED HORIZONTALLY, FROM THE LOWEST RISER. HANDRAIL EXTENSIONS RAE NOT REQUIRED.
EX.: MID-AISLE HANDRAILS SHALL BE PERMITTED TO EXTEND BEYOND THE LOWEST RISER WHERE THE HANDRAIL EXTENSIONS DO NOT OBSTRUCT THE WIDTH OF THE CROSS AISLE.

1029.15.4 RAILS

WHERE MID-AISLE HANDRAILS ARE PROVIDED IN STEPPED AISLES, THERE SHALL BE AN ADDITIONAL RAIL LOCATED APPROXIMATELY 12 INCHES BELOW THE HANDRAIL. THE RAIL SHALL BE ADEQUATE IN STRENGTH AND ATTACHMENT IN ACCORDANCE WITH SECTION 1607.8.1.2.

1029.16.1 PERIMETER GUARDS

PERIMETER GUARDS SHALL BE PROVIDED WHERE THE FOOTBOARDS OR WALKING SURFACE OF SEATING FACILITIES ARE MORE THAN 30 INCHES ABOVE THE FLOOR OR GRADE BELOW. WHERE THE SEAT BOARDS ARE ADJACENT TO THE PERIMETER, GUARD HEIGHT SHALL BE 42 INCHES HIGH MINIMUM, MEASURED FROM THE SEATBOARD. WHERE THE SEATS ARE SELF-RISING, GUARD HEIGHT SHALL BE 42 INCHES HIGH MINIMUM, MEASURED FROM THE FLOOR SURFACE. WHERE THERE IS AN AISLE BETWEEN THE SEATING AND THE PERIMETER, THE GUARD HEIGHT SHALL BE MEASURED IN ACCORDANCE WITH SECTION 1015.2.
EX. 1: GUARDS THAT IMPACT SIGHTLINES SHALL BE PERMITTED TO COMPLY WITH SECTION 1029.16.3.
EX. 2: BLEACHERS, GRANDSTANDS AND FOLDING AND TELESCOPIC SEATING SHALL NOT BE REQUIRED TO HAVE PERIMETER GUARDS WHERE THE SEATING IS LOCATED ADJACENT TO A WALL AND THE SPACE BETWEEN THE WALL AND THE SEATING IS LESS THAN 4 INCHES.

1029.16.3 SIGHTLINE-CONSTRAINED GUARD HEIGHTS

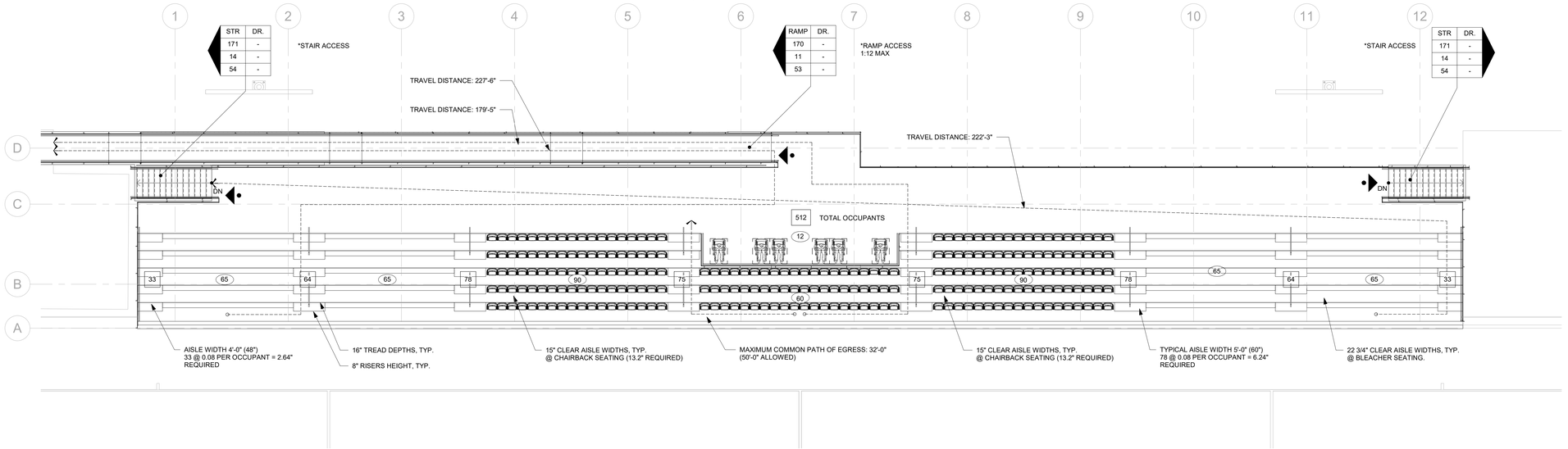
UNLESS SUBJECT TO THE REQUIREMENTS OF SECTION 1029.16.4, A FASCIA OR RAILING SYSTEM IN ACCORDANCE WITH THE GUARD REQUIREMENTS OF SECTION 1015 AND HAVING A MINIMUM HEIGHT OF 26 INCHES SHALL BE PROVIDED WHERE THE FLOOR OR FOOTBOARD ELEVATION IS MORE THAN 30 INCHES ABOVE THE FLOOR OR GRADE BELOW AND THE FASCIA OR RAILING WOULD OTHERWISE INTERFERE WITH THE SIGHTLINES OF IMMEDIATELY ADJACENT SEATING.

1029.16.4 GUARDS AT THE END OF AISLES

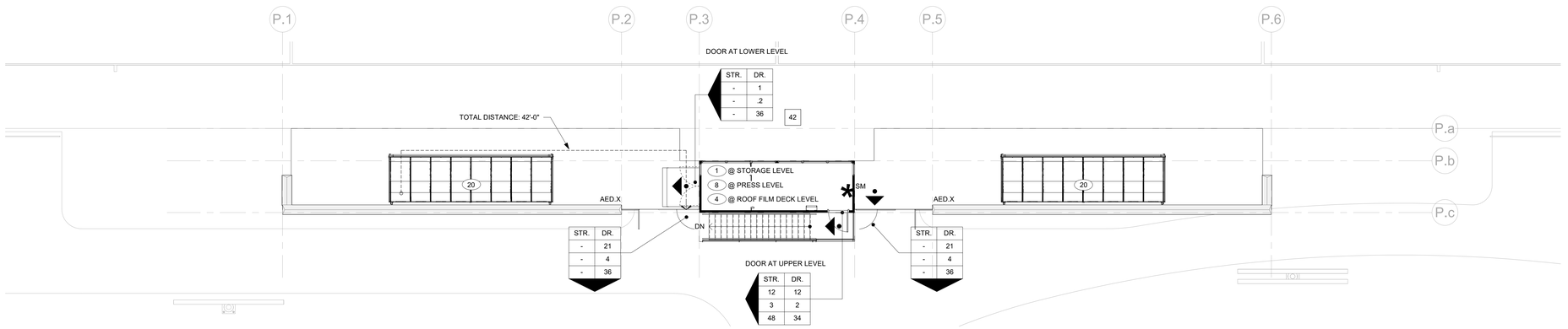
A FASCIA OR RAILING SYSTEM COMPLYING WITH THE GUARD REQUIREMENTS OF SECTION 1015 SHALL BE PROVIDED FOR THE FULL WIDTH OF THE AISLE WHERE THE FOOT OF THE AISLE IS MORE THAN 30 INCHES ABOVE THE FLOOR OR GRADE BELOW. THE FASCIA OR RAILING SHALL BE A MINIMUM OF 36 INCHES HIGH AND SHALL PROVIDE A MINIMUM 42 INCHES MEASURED DIAGONALLY BETWEEN THE TOP OF THE RAIL AND THE NOSING OF THE NEAREST TREAD.

1104.3.2 PRESS BOXES

AN ACCESSIBLE ROUTE SHALL NOT BE REQUIRED TO FREE-STANDING PRESS BOXES THAT ARE MORE THAN 12 FEET ABOVE GRADE PROVIDED THAT THE AGGREGATE AREA OF ALL PRESS BOXES FOR EACH PLAYING FIELD IS NOT MORE THAN 500 SQUARE FEET.



G1 LIFE SAFETY PLAN - FIELD HOCKEY - SPECTATOR SEATING STANDS
1/8" = 1'-0"



A1 LIFE SAFETY PLAN - FIELD HOCKEY - TEAM & GAME MANAGEMENT
1/8" = 1'-0"

LIFE SAFETY LEGEND

- INDICATES 1-HOUR FIRE RESISTITVE CONSTRUCTION
- TRAVEL DISTANCE

STR.	DR.	
		STR. = STAIR WIDTH | DR. = DOOR WIDTH
'X'	'X'	OCCUPANCY
'X'	'X'	REQUIRED EXIT WIDTH (INCHES)
'X'	'X'	PROVIDED EXIT WIDTH (INCHES)

- INDICATES POINT OF EGRESS ACCESS
- INDICATES POINT OF EGRESS DISCHARGE
- INDICATES LOCATION OF FIRE EXTINGUISHER ON WALL BRACKET
- SM — INDICATES LOCATION OF SURFACE MOUNTED FIRE EXTINGUISHER CABINET AND FIRE EXTINGUISHER
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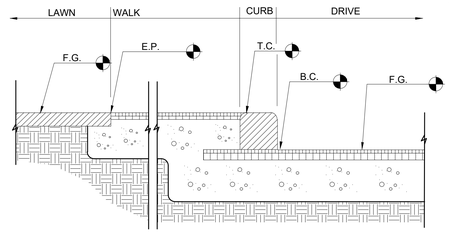
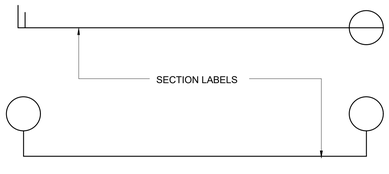


SPOT ELEVATION REFERENCE INDEX

SYMBOLS

- BITUMINOUS PAVEMENT SECTION
- TOPSOIL, LOAM AND SEED, SOD
- GRANULAR FILL MATERIAL
- COARSE AGGREGATE
- UNDISTURBED NATIVE SOIL
- CONCRETE SECTION
- GENERAL FILL MATERIAL
- SAND OR STONE DUST
- RIGID INSULATION
- MULCH BED



ELEVATION LABEL

UTILITY NOTES

E1 ALL UNDERGROUND SECONDARY SHALL BE RUN IN SCH. 40 CONDUIT UNLESS SPECIFIED OTHERWISE.

E2 ALL UNDERGROUND ELECTRICAL FOR SITE LIGHTING SHALL BE RUN IN SCH. 40 P.V.C. CONDUIT.

E3 ALL CABLE TELEVISION / TELEPHONE LINES SHALL BE RUN IN SCH. 40 P.V.C. CONDUIT.

E4 PROVIDE PULL WIRE IN ALL UNDERGROUND CONDUITS.

E5 MAINTAIN 2' - 6" COVER OVER CABLE TELEVISION/TELEPHONE.

S1 WHERE NEW WATER AND SEWER RUN SIDE BY SIDE, MAINTAIN A TEN FOOT (10') HORIZONTAL SEPARATION. WHERE THEY CROSS, MAINTAIN AN EIGHTEEN INCH (18") VERTICAL SEPARATION, WITH WATERLINE ABOVE SEWER. IF WITHIN 18" MIN. VERTICAL SEPARATION, ENCASE WATERLINE 10' EITHER SIDE OF SEWER IN CONC. 3,000 PSI MIN.

S2 SEWER SERVICE, WHEN ENTERING THE BUILDING, SHALL BE 6' - 0" BELOW FINISH FLOOR, UNLESS NOTED OTHERWISE.

W1 MAINTAIN A 5' - 6" MINIMUM COVER OVER WATER LINE.

U1 THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

U2 THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR TRENCHING AND BACKFILLING OF ALL CONDUIT. CONDUIT AND WIRING SHALL BE SUPPLIED AND INSTALLED BY ELECTRICAL CONTRACTOR.

U3 PRIOR TO ANY EARTHWORK ACTIVITIES, THE CONTRACTOR SHALL CONTACT CONTROLLING UTILITY CO., OR CALL "DIGSAFE" AT 1-888-DIG-SAFE. ANY UTILITIES ENCOUNTERED THAT ARE TO REMAIN IN PLACE OR BE ABANDONED SHALL BE DISCONNECTED AND TERMINATED IN ACCORDANCE WITH THE CONTROLLING UTILITY CO. AND NATIONALLY OR LOCALLY APPLICABLE CODES AND ORDINANCES.

U4 NO UTILITY TRENCH SHALL BE BACKFILLED UNTIL WORK HAS BEEN INSPECTED AND APPROVED BY PROJECT ENGINEER AND CONTROLLING UTILITY CO. OR DISTRICT

U5 ALL SANITARY SEWER LINE TO BE SDR 35 PVC MEETING ALL PERFORMANCE CHARACTERISTICS OF ASTM D3034. ALL PIPES AND FITTINGS SHALL HAVE PUSH-ON JOINTS WITH RUBBER GASKETS CONFORMING TO ASTM D1869 AND F477.

U6 ALL NEW WATER SERVICE LINE SHALL BE TYPE K COPPER MEETING ALL PERFORMANCE CHARACTERISTICS OF ASTM B-88-62 FOR TYPE K COPPER. ALL FITTINGS SHALL BE COMPRESSION TYPE.

U7 ALL NEW WATER SPRINKLER SERVICE SHALL BE CLASS 52 DUCTILE IRON MEETING ALL PERFORMANCE CHARACTERISTICS OF THE LATEST VERSION OF ASTM AND AWWA.

U8 THE FOLLOWING UTILITY COMPANIES ARE LOCATED WITHIN THE PROJECT SITE:
- ORONO-VEAZIE WATER DISTRICT
- TOWN OF ORONO WATER POLLUTION CONTROL
- EMERA MAINE
- BANGOR GAS COMPANY
- FAIR POINT COMMUNICATIONS
- TIME WARNER

SURVEY NOTES

S1 REFER TO TOPOGRAPHIC SURVEY AS PROVIDED BY PLISGAH AND DAY FOR THE UNIVERSITY OF MAINE, DATE JANUARY 20, 2022.

REMOVALS NOTES

R1 THE CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL UTILITIES AND SHALL NOTIFY THE ARCHITECT OF UTILITIES DEVIATING FROM THOSE SHOWN ON THIS PLAN

R2 THE CONTRACTOR SHALL MEET THE REQUIREMENTS OF THE UTILITY COMPANIES WHEN INSTALLING WORK ON OR NEAR THEIR POLES.

R3 REMOVE ALL EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH PROPOSED MARKINGS.

R4 ALL DEMOLITION DEBRIS AND REMOVALS SHALL BE DISPOSED OF OFFSITE AND IN CONFORMANCE WITH LOCAL AND STATE ORDINANCES

R5 TREE CANOPY AS SHOWN ON PLANS ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED BY THE SITE CONTRACTOR

LAYOUT NOTES

L1 THE CONTRACTOR SHALL NOTIFY THE OWNER/ARCHITECT OF CONDITIONS VARYING FROM THOSE SHOWN ON THE DRAWING SHEET PRIOR TO CONTINUING WORK.

L2 THE CONTRACTOR SHALL EMPLOY A REGISTERED LAND SURVEYOR IN THE LAYOUT OF BUILDING, DRIVES AND SITE ELEMENTS.

L3 THE CONTRACTOR SHALL VERIFY AND CLEARLY MARK LOCATION OF ALL PROPERTY LINES PRIOR TO COMMENCING WORK.

GRADING NOTES

G1 TOPOGRAPHIC INFORMATION BASED ON A SURVEY BY BY PLISGAH AND DAY LAND SURVEYORS, JANUARY 6, 2022.

G2 BOUNDARY INFORMATION REPRESENTED BY TOWN OF ORONO TAX MAPS.

G3 ALL ELEVATIONS SHOWN HEREIN ARE BASED ON A SURVEY BY PLISGAH AND DAY LAND SURVEYORS, JANUARY 6, 2022.

G4 ALL TOPSOIL AND ORGANICS SHALL BE REMOVED FROM PAVEMENT AND BUILDING AREAS PRIOR TO CONSTRUCTION. THIS MATERIAL SHALL NOT BE USED AS GENERAL SITE FILL.

G5 FINISH GRADES ONE FOOT FROM BUILDING SHALL BE 8" BELOW FINISH FLOOR UNLESS OTHERWISE NOTED.

G6 FINISH GRADES OF SIDEWALKS AT BUILDING ENTRANCES SHALL BE FLUSH WITH FINISH FLOOR UNLESS OTHERWISE NOTED

G7 TEST PIT LOCATIONS ARE APPROXIMATE-REFER TO XXX INC. GEOTECHNICAL REPORT BOUND INTO SPECIFICATIONS. BORING LOGS ARE INCLUDED IN DRAWING SET.

G8 ALL DISTURBED AREAS NOT RECEIVING PAVEMENT, BUILDING, STONE DUST, COURSE AGGREGATE, ETC. SHALL RECEIVE 6" OF LOAM AND SEED UNLESS OTHERWISE NOTED.

SITE ABBREVIATIONS

Ø	DIAMETER
ACP	ASBESTOS CEMENT PIPE
ADD. ALT.	ADDITIVE ALTERNATE BID ITEM
AE	AERIAL ELECTRIC
ARCH.	ARCHITECTURAL
B.C.	BOTTOM OF CURB
BIT.	BITUMINOUS
BLDG.	BUILDING
BOT.	BOTTOM
BW	BOTTOM OF WALL
Ç	CENTERLINE
CB	CATCH BASIN
C.I.	CAST IRON, CONTRACTOR INST'D.
C.I.P.	CAST IN PLACE
CMP	CORRUGATED METAL PIPE,
	CENTRAL MAINE POWER
C	CENTER
C.O.	CLEANOUT
CONC.	CONCRETE
CPP	CORRUGATED PLASTIC PIPE
CTV	CABLE TELEVISION
CFS	CUBIC FEET PER SECOND
D.I.	DITCH INVERT, DUCTILE IRON
DTL.	DETAIL
DIA. Ø	DIAMETER
DIM.	DIMENSION
DMH	DRAIN MANHOLE,DROP MANHOLE
DN	DOWN
DWG	DRAWING
E	EAST
E.P.	EDGE OF PAVEMENT
E.L. ELEV.	ELEVATION
EQ.	EQUAL
EXIST.	EXISTING
EXP.	EXPANSION
FD	FOOTING DRAIN
F.G.	FINISH GRADE
F.H.	FIRE HYDRANT
FIN.	FINISH
F.F.	FINISH FLOOR
FPM	FEET PER MINUTE
FT.	FEET
FTG.	FOOTING
GA.	GAUGE
GALV.	GALVANIZED
GPM	GALLONS PER MINUTE
GRAN	GRANULAR
G.V.	GATE VALVE
G	GAS
H.C.	HANDICAP
HDPE	HIGH DENSITY POLYETHYLENE
HORIZ, HOR.	HORIZONTAL
HPS	HIGH PRESSURE SODIUM
HMA	HOT MIX ASPHALT
I.D.	IDENTIFICATION, INSIDE DIAMETER
I.E.	INVERT ELEVATION
INV.	INVERT
INSUL.	INSULATION
LBS.	POUNDS
LED	LIGHT EMITTING DIODE
LF	LINEAR FEET
LPS	LOW PRESSURE SODIUM
L	LENGTH
MAS	MASONRY
MATL.	MATERIAL
MAX.	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MISC.	MISCELLANEOUS
N	NORTH, NEW UTILITY
N.I.C.	NOT IN CONTRACT
NFD	NEW FOUNDATION DRAIN
NFM	NEW FORCE MAIN
NGAS	NATURAL GAS
NOM.	NOMINAL
NO.	NUMBER
NRD	NEW ROOF DRAIN
NSS	NEW SANITARY SEWER
NSD	NEW STORM DRAIN
NTS	NOT TO SCALE
NUE	NEW UNDERGROUND ELECTRIC
NUD	NEW UNDERDRAIN
NUP	NEW UNDERGROUND PRIMARY
NUS	NEW UNDERGROUND SECONDARY
NW	NEW WATER LINE
OC	ON CENTER
OS/OI	OWNER SUPPLIED/OWNER INST'D
OE	OVERHEAD ELECTRIC
OHW	OVERHEAD WIRE
PVMT.	PAVEMENT
PERF.	PERFORATED
PB	PULL BOX
PI	POINT OF INTERSECTION
P & I	PROVIDE AND INSTALL
PRELIM	PRELIMINARY
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
P.A.	POINT OF TANGENT
PT	POINT
PVC	POLYVINYL CHLORIDE
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
REQ'D	REQUIRED
S	SEWER
SS	SANITARY SEWER
SCH	SCHEDULE
SD	STORM DRAIN
SIM.	SIMILAR
SMH	SEWER MANHOLE
SPECS	SPECIFICATIONS
SQ.	SQUARE
S.F.	SQUARE FEET
STA.	STATION
STYRO.	STYROFOAM
TBM	TEMPORARY BENCH MARK
TEL	TELEPHONE
T.O.W.	TOP OF WALL
T.C.	TOP OF CURB
TEMP.	TEMPORARY
THK.	THICK
TV	TELEVISION
TYP	TYPICAL
T.S.	TOP OF SLAB
UE	UNDERGROUND ELECTRIC
US	UNDERGROUND SECONDARY
UP	UNDERGROUND PRIMARY
VERT., VER.	VERTICAL
W	WATER
W/	WITH
W/O	WITHOUT
WSO	WATER SHUTOFF (CURB STOP OR GATE VALVE)
W.W.F.	WELDED WIRE FABRIC
W V	WATER SHUT OFF / GATE VALVE

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0	ISSUED FOR BID	18 FEB 2022

2/18/22

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MICHAELA QUETHLE
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UNIVERSITY OF MAINE
FIELD HOCKEY COMPLEX 2022
168 College Ave. Orono, ME 04469

PROJECT:

SITE GENERAL NOTES & ABBREVIATIONS

SHEET TITLE:

WBRC CAD FILE:	10088015-C-SP-C001.DWG
PROJECT No. 10088.033	GRAPHIC SCALE: 0" 1"
SCALE: 1"=20'	
PROJECT MANAGER: KCK	SHEET No. C001
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Feb 18, 2022 - 3:33pm
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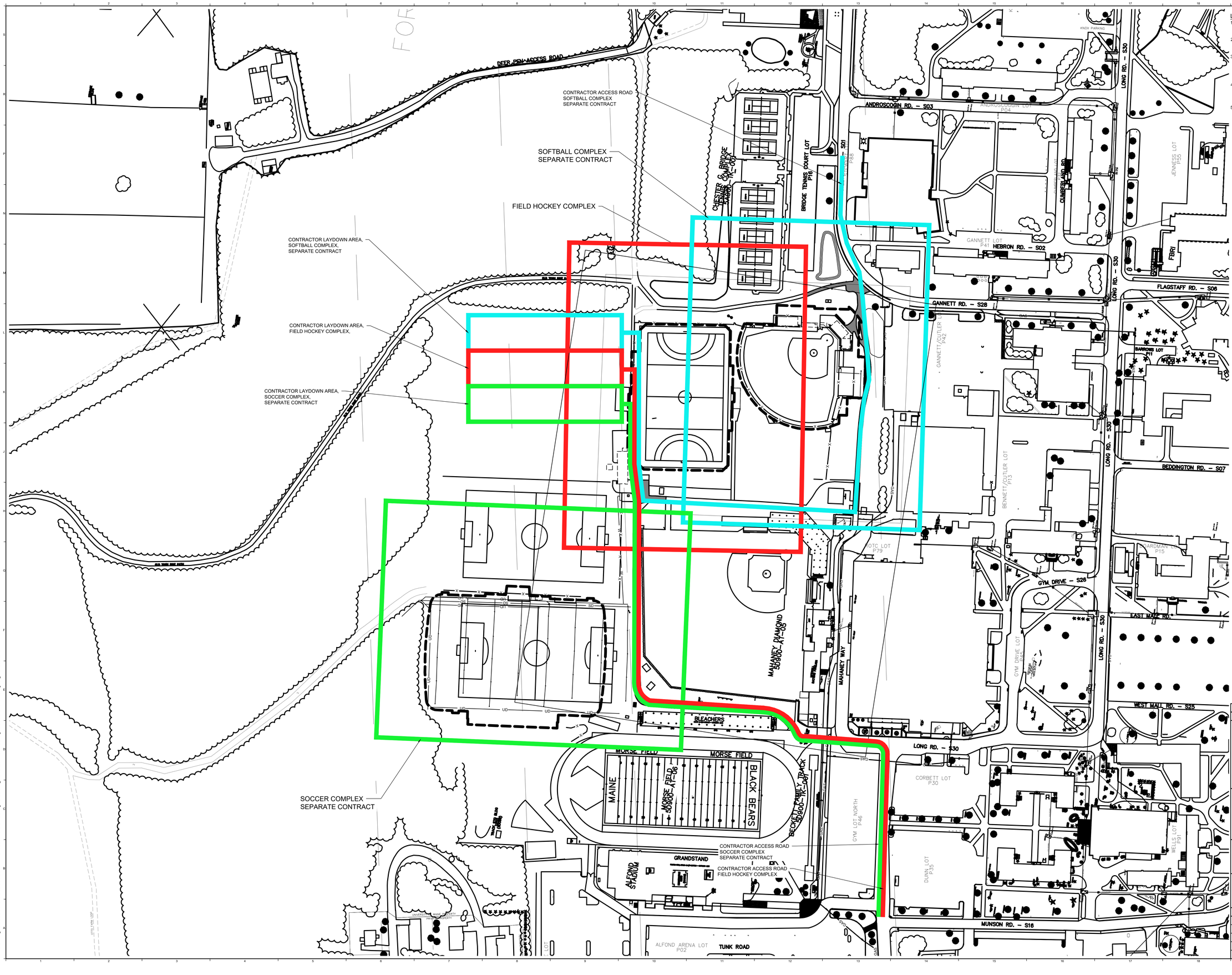

LAYOUT NOTES:

1. SEE NOTES L1 THROUGH L3 ON SHEET C-001 FOR ADDITIONAL LAYOUT INFORMATION.
2. ALL CURB RADII SHALL BE 5' UNLESS OTHERWISE NOTED.
3. COORDINATE ALL SIDEWALK LOCATIONS WITH ARCH. AND STRUCTURAL DRAWINGS TO VERIFY NEW EXTERIOR DOOR LOCATIONS. FIELD ADJUST AS REQUIRED.
4. REFER TO STRUCTURAL SHEETS FOR NEW FOUNDATION LAYOUT. COORDINATE LAYOUT WITH FOUNDATION CONTRACTOR.
5. SEE SHEET CU101 FOR ADDITIONAL INFORMATION RELATED TO THE LAYOUT OF SITE LIGHTS AND UTILITY POLES AND THEIR RESPECTIVE CONDUIT AND WIRING. COORDINATE LAYOUT WITH THE ELECTRICAL CONTRACTOR.

LEGEND

EXISTING		PROPOSED
	UTILITY POLE	
	POLE MOUNT LIGHT	
	WALL MOUNT LIGHT	
	WATER SHUT OFF	
	WATER VALVE	
T	TRANSFORMER PAD	T
D	DUMPSTER LOCATION	D
M	MANHOLE	
S	SEWER MANHOLE	
	CATCH BASIN	
	HYDRANT	
	SIGN	
	DRAINAGE FLOW PATH	
	WETLAND	
	CURBING	
X	CHAIN LINK FENCE	X
	EASEMENT	
	SETBACK	
	PROPERTY LINE	
	ABUTTING PROPERTY LINE	
	TREE LINE	
	CONSTRUCTION LIMIT	
	PAVED AREA	
	GRAVEL AREA	
	CONCRETE AREA	

REV.	DESCRIPTION	DATE
0	ISSUED FOR BID	18 FEB 2022

2/18/22

STATE OF MAINE
MICHAELA GUETHLE
14284
LICENSED
PROFESSIONAL ENGINEER

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SARASOTA, FLORIDA 941-373-1583

UNIVERSITY OF MAINE
FIELD HOCKEY COMPLEX 2022
168 College Ave. Orono, ME 04469

PROJECT:

OVERALL SITE PLAN

SHEET TITLE:

WBRC CAD FILE:	10088015-C-SP-KEY.DWG
PROJECT No:	10088.033
GRAPHIC SCALE:	0" 1"
SCALE:	1"=80'
PROJECT MANAGER:	KCK
DRAWN BY:	BTH
CHECKED BY:	MAG
SHEET No.	SP100

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T:\02 Projects\10088\10000\10088033 UM Athletics - Field Hockey\Dwgs\Sites\03-Fieldhockey\10088015-C-SP-Key.dwg bmartindale

BASEBALL CONCESSIONS

ATHLETIC GROUNDS SHOP

3" PLASTIC

3/4" C

REMOVE AND RESET EXISTING LIGHT POLE AND BASE (THIS POLE ONLY)

LIMIT OF WORK IN THIS CONTRACT

CD194 EXISTING CATCH BASIN TO BE DEMOLISHED

LIMIT OF FENCE DEMOLITION

EXISTING FENCE TO BE REMOVED

WATER PUMP BOX

ER FIELD WAY

DIRECT BURY

3/4" PVC

LIMIT OF WORK IN THIS CONTRACT

DEMOLITION FOR FIELDS AND STRUCTURES PER PLANS BY OTHERS

EXISTING PATH TO BE DEMOLISHED

CAPACITY: 306

LIMIT OF FENCE DEMOLITION

EMPTY 4" PVC COND.

OLD TOWN BIKE PATH

BULL PEN

SCOREBOARD

BLEACHERS BENCH SEATS - CAPACITY: 246

COURT 1

COURT 2

EXISTING PANELS TO BE RELOCATED TO FIELD HOCKEY. REFER TO E SERIES DRAWINGS

EXISTING PANEL LOCATION

SCALE: 1"=20'

LEGEND

EXISTING		PROPOSED
	UTILITY POLE	
	POLE MOUNT LIGHT	
	WALL MOUNT LIGHT	
	WATER SHUT OFF	
	WATER VALVE	
T	TRANSFORMER PAD	T
D	DUMPSTER LOCATION	D
MH	MANHOLE	MH
S	SEWER MANHOLE	S
	CATCH BASIN	
	HYDRANT	
	SIGN	
	DRAINAGE FLOW PATH	
	WETLAND	
	CURBING	
X	CHAIN LINK FENCE	X
	EASEMENT	
	SETBACK	
	PROPERTY LINE	
	ABUTTING PROPERTY LINE	
	TREE LINE	
	LIMIT	
	PAVED AREA	
	GRAVEL AREA	
	CONCRETE AREA	

REV.	DESCRIPTION	DATE
0	ISSUED FOR BID	18 FEB 2022

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SARASOTA, FLORIDA 941-373-1583

PROJECT:
UNIVERSITY OF MAINE
FIELD HOCKEY COMPLEX 2022
168 College Ave. Orono, ME 04469

SHEET TITLE:
EXISTING CONDITIONS AND REMOVALS PLAN

WBRC CAD FILE:	10088015-C-SP-SHEETS.DWG
PROJECT No.	10088.033
SCALE:	1"=20'
PROJECT MANAGER:	KCK
DRAWN BY:	BTH
CHECKED BY:	MAG
GRAPHIC SCALE:	0" 1"
SHEET No.	CD101

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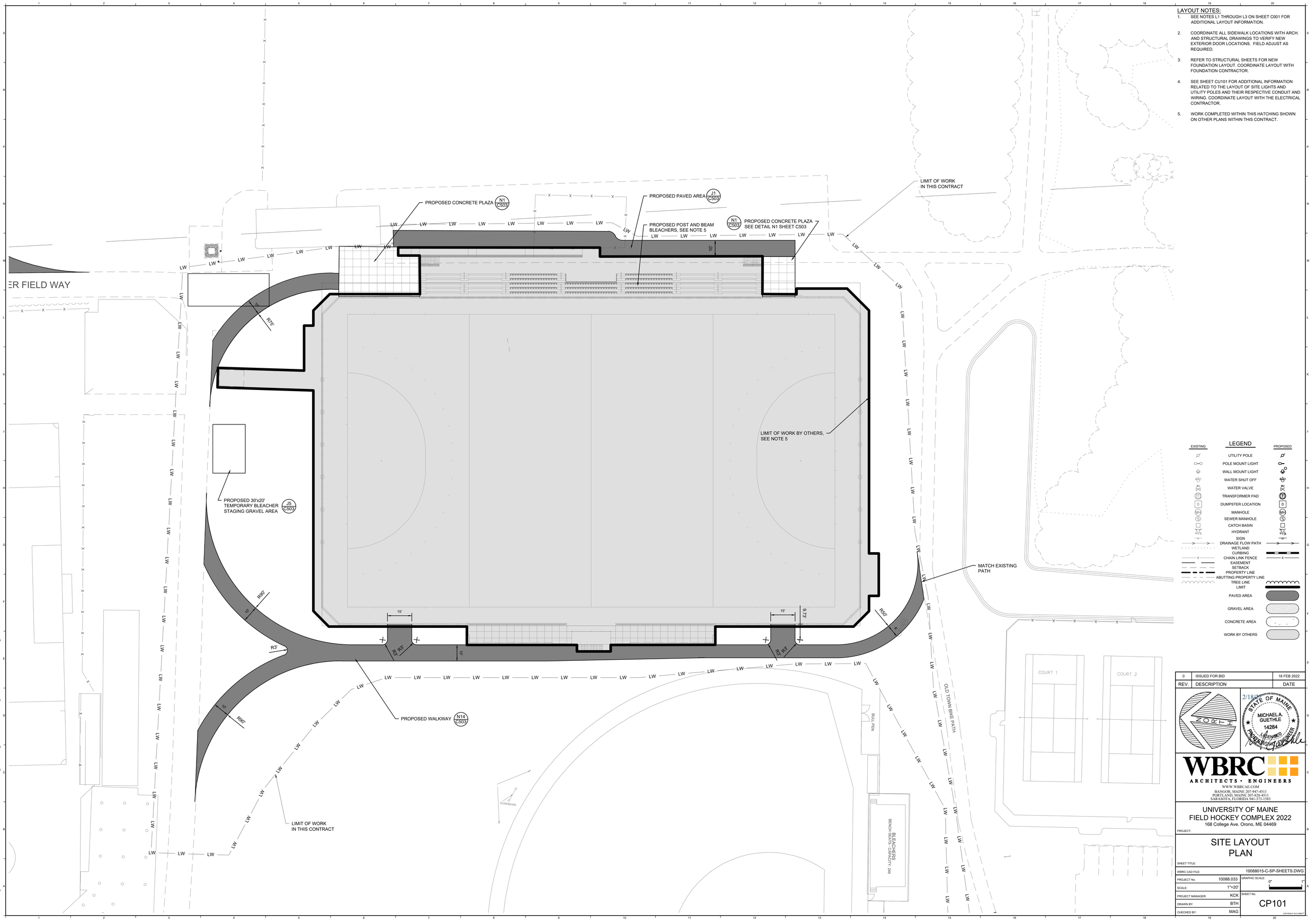

LAYOUT NOTES:

1. SEE NOTES L1 THROUGH L3 ON SHEET C001 FOR ADDITIONAL LAYOUT INFORMATION.
2. COORDINATE ALL SIDEWALK LOCATIONS WITH ARCH. AND STRUCTURAL DRAWINGS TO VERIFY NEW EXTERIOR DOOR LOCATIONS. FIELD ADJUST AS REQUIRED.
3. REFER TO STRUCTURAL SHEETS FOR NEW FOUNDATION LAYOUT. COORDINATE LAYOUT WITH FOUNDATION CONTRACTOR.
4. SEE SHEET CU101 FOR ADDITIONAL INFORMATION RELATED TO THE LAYOUT OF SITE LIGHTS AND UTILITY POLES AND THEIR RESPECTIVE CONDUIT AND WIRING. COORDINATE LAYOUT WITH THE ELECTRICAL CONTRACTOR.
5. WORK COMPLETED WITHIN THIS HATCHING SHOWN ON OTHER PLANS WITHIN THIS CONTRACT.

LEGEND

EXISTING		PROPOSED
	UTILITY POLE	
	POLE MOUNT LIGHT	
	WALL MOUNT LIGHT	
	WATER SHUT OFF	
	WATER VALVE	
TF	TRANSFORMER PAD	TF
D	DUMPSTER LOCATION	D
MH	MANHOLE	MH
S	SEWER MANHOLE	S
	CATCH BASIN	
	HYDRANT	
	SIGN	
	DRAINAGE FLOW PATH	
	WETLAND	
	CURBING	
X	CHAIN LINK FENCE	X
	EASEMENT	
	SETBACK	
	PROPERTY LINE	
	ABUTTING PROPERTY LINE	
	TREE LINE	
	LIMIT	
	PAVED AREA	
	GRAVEL AREA	
	CONCRETE AREA	
	WORK BY OTHERS	

REV.	DESCRIPTION	DATE
0	ISSUED FOR BID	18 FEB 2022

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UNIVERSITY OF MAINE
FIELD HOCKEY COMPLEX 2022
168 College Ave. Orono, ME 04469

PROJECT:

SITE LAYOUT PLAN

SHEET TITLE:

WBRC CAD FILE:	10088015-C-SP-SHEETS.DWG
PROJECT No.	10088.033
SCALE:	1"=20'
PROJECT MANAGER:	KCK
DRAWN BY:	BTH
CHECKED BY:	MAG

GRAPHIC SCALE: 0" 1"

SHEET No.

CP101

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LAYOUT NOTES:

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6. SEE TURF DRAWINGS FOR ADDITIONAL WORK WITHIN DELINEATED SCOPE LINE.

B-22-101
B-22-102
B-22-103
B-22-12
B-22-13
B-22-14
B-22-15
B-22-16
B-22-17
B-22-18
B-22-22

A10/C502 50'x20' STABILIZED CONSTRUCTION ENTRANCE

N10/C502

LIMIT OF WORK IN THIS CONTRACT

PERIMETER EROSION CONTROL (TYP.). SEE EROSION AND SEDIMENTATION CONTROL DETAILS

LIMIT OF WORK BY OTHERS SEE NOTES 3, 4, 5, 6.

FG=115.70
FG=115.90
FG=116.00
FG=116.08
FG=116.06
FG=115.25
FG: MATCH EXISTING
FG: MATCH EXISTING (115.00)
FG: MATCH EXISTING (117.00)
FG=116.03
FG=115.54
FG=115.54
FG=116.08

ER FIELD WAY

QUO TOWN BIKE PATH

BULL PEN

BLEACHERS
BENCH SEATS - CAPACITY 264

POP/SQUAD

COURT 1
COURT 2

LEGEND

EXISTING		PROPOSED
	UTILITY POLE	
	POLE MOUNT LIGHT	
	WALL MOUNT LIGHT	
WSO	WATER SHUT OFF	
WV	WATER VALVE	
TT	TRANSFORMER PAD	
D	DUMPSTER LOCATION	D
MH	MANHOLE	
S	SEWER MANHOLE	
	CATCH BASIN	
	HYDRANT	
	SIGN	
	DRAINAGE FLOW PATH	
	WETLAND	
	CURBING	
	LIMIT OF WORK	LW
x	CHAIN LINK FENCE	x
	EASEMENT	
	SETBACK	
	PROPERTY LINE	
	ABUTTING PROPERTY LINE	
	TREE LINE	
	LIMIT	
	WORK BY OTHERS	

REV.	DESCRIPTION	DATE
0	ISSUED FOR BID	18 FEB 2022

NORTH

STATE OF MAINE
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2/18/22

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SARASOTA, FLORIDA 941-373-1583

PROJECT:
UNIVERSITY OF MAINE
FIELD HOCKEY COMPLEX 2022
168 College Ave. Orono, ME 04469

SHEET TITLE:
SITE GRADING PLAN

WBRC CAD FILE:	10088015-C-SP-SHEETS.DWG
PROJECT No:	10088.033
SCALE:	1"=20'
PROJECT MANAGER:	KCK
DRAWN BY:	BTH
CHECKED BY:	MAG
GRAPHIC SCALE:	0" 1"
SHEET No.	CG101

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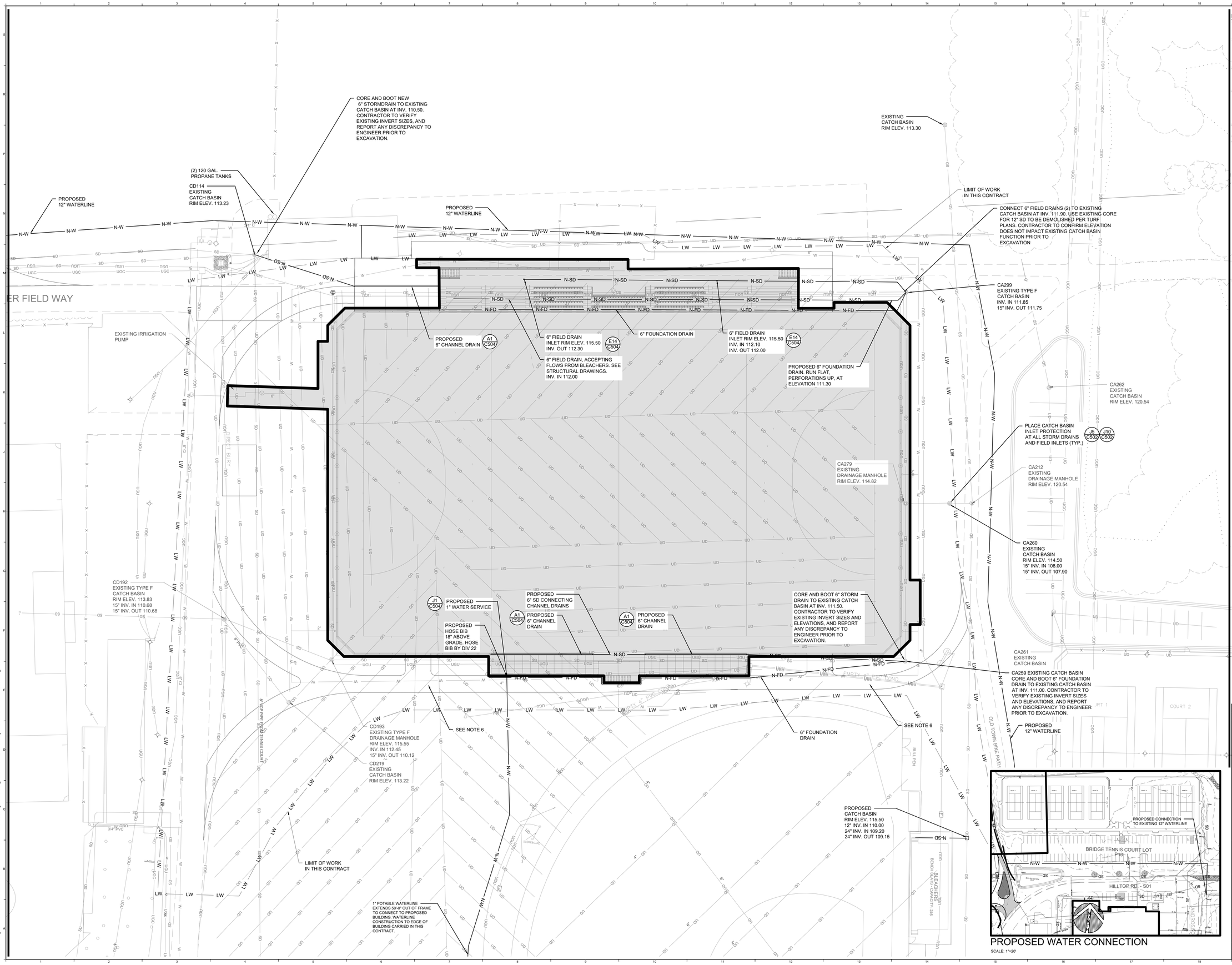

LAYOUT NOTES:

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4. SEE SHEET E101 FOR ADDITIONAL INFORMATION RELATED TO THE LAYOUT OF SITE LIGHTS AND UTILITY POLES AND THEIR RESPECTIVE CONDUIT AND WIRING. COORDINATE LAYOUT WITH THE ELECTRICAL CONTRACTOR.
5. WORK COMPLETED WITHIN THIS HATCHING SHOWN ON OTHER PLANS WITHIN THIS CONTRACT.
6. UNDERDRAINS SHALL NOT BE DISTURBED DURING CONSTRUCTION OF SIDEWALKS, GRADING, FENCING, AND ALL OTHER ASSOCIATED FILL WITHIN THE CORRIDOR.

LEGEND

EXISTING		PROPOSED
	UTILITY POLE	
	POLE MOUNT LIGHT	
	WALL MOUNT LIGHT	
	WATER SHUT OFF	
	WATER VALVE	
TP	TRANSFORMER PAD	TP
D	DUMPSTER LOCATION	D
MH	MANHOLE	MH
S	SEWER MANHOLE	S
	CATCH BASIN	
	HYDRANT	
	SIGN	
	DRAINAGE FLOW PATH	
	WETLAND	
	CURBING	
	LIMIT OF WORK	LW
X	CHAIN LINK FENCE	X
	EASEMENT	
	SETBACK	
	PROPERTY LINE	
	ABUTTING PROPERTY LINE	
	TREE LINE	
	LIMIT	
	WORK BY OTHERS	

REV.	DESCRIPTION	DATE
0	ISSUED FOR BID	18 FEB 2022

2/18/2022

STATE OF MAINE
MICHAELA GUETHLE
14284
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SARASOTA, FLORIDA 941-373-1583

UNIVERSITY OF MAINE
FIELD HOCKEY COMPLEX 2022
168 College Ave. Orono, ME 04469

PROJECT:

SITE UTILITY PLAN

SHEET TITLE:	
WBRC CAD FILE:	10088015-C-SP-SHEETS.DWG
PROJECT No:	10088.033
SCALE:	1"=20'
PROJECT MANAGER:	KCK
DRAWN BY:	BTH
CHECKED BY:	MAG
GRAPHIC SCALE:	0" 1"
SHEET No:	CU101

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EROSION AND SEDIMENTATION CONTROL PLAN

(PURSUANT TO 38 MRSA § 420-C)

ALL EROSION AND SEDIMENTATION CONTROL MEASURES ARE DESIGNED ACCORDING TO THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION'S MAINE EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES MANUAL, 2003. SEDIMENT CONTROL MEASURES MUST BE IN PLACE BEFORE ACTIVITY BEGINS. MEASURES MUST REMAIN IN PLACE AND FUNCTIONAL UNTIL THE SITE IS PERMANENTLY STABILIZED.

1. POLLUTION PREVENTION. MINIMIZE DISTURBED AREAS AND PROTECT NATURAL DOWN-GRADIENT BUFFER AREAS TO THE EXTENT PRACTICABLE. THE DISCHARGE MAY NOT RESULT IN EROSION OF ANY OPEN DRAINAGE CHANNELS, SWALES, UPLAND, OR COASTAL OR FRESHWATER WETLANDS. MINIMIZE DISTURBED AREAS THROUGH PHASING. IF WORK WITHIN AN AREA IS NOT ANTICIPATED TO BEGIN WITHIN TWO WEEKS TIME, LEAVE THE AREA IN ITS NATURALLY EXISTING COVER IF PRACTICABLE.
2. SEDIMENT BARRIERS. PRIOR TO CONSTRUCTION, PROPERLY INSTALL SEDIMENT BARRIERS AT THE EDGE OF ANY DOWN-GRADIENT DISTURBED AREA AND ADJACENT TO ANY DRAINAGE CHANNELS WITHIN THE DISTURBED AREA. MAINTAIN THE SEDIMENT BARRIERS UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED.
3. TEMPORARY STABILIZATION. STABILIZE WITH MULCH OR OTHER NON-ERODABLE COVER ANY EXPOSED SOILS THAT WILL NOT BE WORKED FOR MORE THAN 7 DAYS. STABILIZE AREAS WITHIN 75 FEET OF A WETLAND OR WATERBODY WITHIN 48 HOURS OF THE INITIAL DISTURBANCE OF THE SOIL OR PRIOR TO ANY STORM EVENT, WHICHEVER COMES FIRST.
4. REMOVAL OF TEMPORARY SEDIMENT CONTROL MEASURES. REMOVE ANY TEMPORARY SEDIMENT CONTROL MEASURES, SUCH AS SILT FENCE, WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED. REMOVE ANY ACCUMULATED SEDIMENTS AND STABILIZE. REMOVE SILT FENCE BY CUTTING THE FENCE MATERIALS AT GROUND LEVEL TO AVOID ADDITIONAL SOIL DISTURBANCE.
5. PERMANENT STABILIZATION. PERMANENTLY STABILIZE ALL DISTURBED AREAS THAT WILL NOT BE WORKED FOR MORE THAN ONE YEAR OR THAT HAVE BEEN BROUGHT TO FINAL GRADE BY PLANTING VEGETATION, SEEDING, SOD, OR THROUGH THE USE OF PERMANENT MULCH, OR RIPRAP, OR ROAD SUB-BASE. IF USING VEGETATION FOR STABILIZATION, SELECT THE PROPER VEGETATION FOR THE LIGHT, SOIL AND MOISTURE CONDITIONS; AMEND AREAS OF DISTURBED SUBSOILS WITH TOPSOIL, COMPOST, OR FERTILIZERS; PROTECT SEEDED AREAS WITH MULCH OR, IF NECESSARY, EROSION CONTROL BLANKETS; AND SCHEDULE SODDING, PLANTING, AND SEEDING TO AVOID DIE-OFF FROM SUMMER DROUGHT AND FALL FROSTS. NEWLY SEEDED OR SODDED AREAS MUST BE PROTECTED FROM VEHICLE TRAFFIC, EXCESSIVE PEDESTRIAN TRAFFIC, AND CONCENTRATED RUNOFF UNTIL THE VEGETATION IS WELL-ESTABLISHED. IF NECESSARY, AREAS MUST BE SEEDED AND MULCHED AGAIN IF GERMINATION IS SPARSE, PLANT COVERAGE IS SPOTTY, OR TOPSOIL EROSION IS EVIDENT. ONE OR MORE OF THE FOLLOWING MAY APPLY TO A PARTICULAR SITE.
   (A) SEEDED AREAS. FOR SEEDED AREAS, PERMANENT STABILIZATION MEANS A 90% COVER OF HEALTHY PLANTS WITH NO EVIDENCE OF WASHING OR RILLING OF THE TOPSOIL.
   (B) SODDED AREAS. FOR SODDED AREAS, PERMANENT STABILIZATION MEANS THE COMPLETE BINDING OF THE SOD ROOTS INTO THE UNDERLYING SOIL WITH NO SLUMPING OF THE SOD OR DIE-OFF.
   (C) PERMANENT MULCH. FOR MULCHED AREAS, PERMANENT MULCHING MEANS TOTAL COVERAGE OF THE EXPOSED AREA WITH AN APPROVED MULCH MATERIAL. EROSION CONTROL MIX MAY BE USED AS MULCH FOR PERMANENT STABILIZATION ACCORDING TO THE APPROVED APPLICATION RATES AND LIMITATIONS.
   (D) RIPRAP. FOR AREAS STABILIZED WITH RIPRAP, PERMANENT STABILIZATION MEANS THAT SLOPES STABILIZED WITH RIPRAP HAVE AN APPROPRIATE BACKING OF A WELL-GRADED GRAVEL OR APPROVED GEOTEXTILE TO PREVENT SOIL MOVEMENT FROM BEHIND THE RIPRAP. STONE MUST BE SIZED APPROPRIATELY. IT IS RECOMMENDED THAT ANGULAR STONE BE USED.
   (E) AGRICULTURAL USE. FOR CONSTRUCTION PROJECTS ON LAND USED FOR AGRICULTURAL PURPOSES (E.G., PIPELINES ACROSS CROP LAND), PERMANENT STABILIZATION MAY BE ACCOMPLISHED BY RETURNING THE DISTURBED LAND TO AGRICULTURAL USE.
   (F) PAVED AREAS. FOR PAVED AREAS, PERMANENT STABILIZATION MEANS THE PLACEMENT OF THE COMPACTED GRAVEL SUBBASE IS COMPLETED.
   (G) DITCHES, CHANNELS, AND SWALES. FOR OPEN CHANNELS, PERMANENT STABILIZATION MEANS THE CHANNEL IS STABILIZED WITH A 90% COVER OF HEALTHY VEGETATION, WITH A WELL-GRADED RIPRAP LINING, OR WITH ANOTHER NON-EROSIVE LINING SUCH AS CONCRETE OR ASPHALT PAVEMENT. THERE MUST BE NO EVIDENCE OF SLUMPING OF THE CHANNEL LINING, UNDERCUTTING OF THE CHANNEL BANKS, OR DOWN-CUTTING OF THE CHANNEL.
6. WINTER CONSTRUCTION. "WINTER CONSTRUCTION" IS CONSTRUCTION ACTIVITY PERFORMED DURING THE PERIOD FROM NOVEMBER 1 THROUGH APRIL 15. IF DISTURBED AREAS ARE NOT STABILIZED WITH PERMANENT MEASURES BY NOVEMBER 1 OR NEW SOIL DISTURBANCE OCCURS AFTER NOVEMBER 1, BUT BEFORE APRIL 15, THEN THESE AREAS MUST BE PROTECTED AND RUNOFF FROM THEM MUST BE CONTROLLED BY ADDITIONAL MEASURES AND RESTRICTIONS.

SPECIFICATIONS:

NATURAL RESOURCE PROTECTION ANY AREAS WITHIN 100 FEET FROM ANY NATURAL RESOURCES, IF NOT STABILIZED WITH A MINIMUM OF 75 % MATURE VEGETATION CATCH, SHALL BE MULCHED BY DECEMBER 1 AND ANCHORED WITH PLASTIC NETTING OR PROTECTED WITH AN EROSION CONTROL COVER. DURING WINTER CONSTRUCTION, A DOUBLE ROW OF SEDIMENT BARRIERS (I.E. SILT FENCE BACKED WITH HAY BALES OR EROSION CONTROL MIX) WILL BE PLACED BETWEEN ANY NATURAL RESOURCE AND THE DISTURBED AREA. PROJECTS CROSSING THE NATURAL RESOURCE SHALL BE PROTECTED A MINIMUM DISTANCE OF 100 FEET ON EITHER SIDE FROM THE RESOURCE. EXISTING PROJECTS NOT STABILIZED BY DECEMBER 1 SHALL BE PROTECTED WITH THE SECOND LINE OF SEDIMENT BARRIER TO ENSURE FUNCTIONALITY DURING THE SPRING THAW AND RAINS.

SEDIMENT BARRIERS DURING FROZEN CONDITIONS, SEDIMENT BARRIERS MAY CONSIST OF EROSION CONTROL MIX BERMS OR ANY OTHER RECOGNIZED SEDIMENT BARRIERS AS FROZEN SOIL PREVENTS THE PROPER INSTALLATION OF HAY BALES OR SILT FENCES.

MULCHING ALL AREA SHALL BE CONSIDERED TO BE DENUDED UNTIL SEEDED AND MULCHED. HAY AND STRAW MULCH SHALL BE APPLIED AT A RATE OF 150 LB. PER 1,000 SQUARE FEET OR 3 TONS/ACRE (TWICE THE NORMAL ACCEPTED RATE OF 75-LBS./1,000 S.F. OR 1.5 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED. EROSION CONTROL MIX MUST BE APPLIED WITH A MINIMUM 4-INCH THICKNESS. MULCH SHALL NOT BE SPREAD ON TOP OF SNOW. THE SNOW WILL BE REMOVED DOWN TO A ONE-INCH DEPTH OR LESS PRIOR TO APPLICATION. AFTER EACH DAY OF FINAL GRADING, THE AREA WILL BE PROPERLY STABILIZED WITH ANCHORED HAY OR STRAW OR EROSION CONTROL MATTING. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED OR ADEQUATELY ANCHORED SO THAT GROUND SURFACE IS NOT VISIBLE THOUGH THE MULCH. BETWEEN THE DATES OF NOVEMBER 1 AND APRIL 15, ALL MULCH SHALL BE ANCHORED BY EITHER MULCH NETTING, ASPHALT EMULSION CHEMICAL, TRACKING OR WOOD CELLULOSE FIBER. THE COVER WILL BE CONSIDERED SUFFICIENT WHEN THE GROUND SURFACE IS NOT VISIBLE THOUGH THE MULCH. AFTER NOVEMBER 1ST, MULCH AND ANCHORING OF ALL EXPOSED SOIL SHALL OCCUR AT THE END OF EACH FINAL GRADING WORKDAY.

SOIL STOCKPILING STOCKPILES OF SOIL OR SUBSOIL WILL BE MULCHED FOR OVER WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RATE OR WITH A FOUR-INCH LAYER OF EROSION CONTROL MIX. THIS WILL BE DONE WITHIN 24 HOURS OF STOCKING AND RE-ESTABLISHED PRIOR TO ANY RAINFALL OR SNOWFALL. ANY SOIL STOCKPILE WILL NOT BE PLACED (EVEN COVERED WITH MULCHED) WITHIN 100 FEET FROM ANY NATURAL RESOURCES.

SEEDING BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1ST, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES FINISHED AREAS SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1ST AND IF THE EXPOSED AREA HAS BEEN LOOMED, FINAL GRADED WITH A UNIFORM SURFACE, THEN THE AREA MAY BE DORMANT SEEDED AT A RATE OF 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED. DORMANT SEEDING MAY BE PLACED PRIOR TO THE PLACEMENT OF MULCH OR EROSION CONTROL BLANKETS. IF DORMANT SEEDING IS USED FOR THE SITE, ALL DISTURBED AREAS SHALL RECEIVE 4" OF LOAM AND SEED AT AN APPLICATION RATE OF 5LBS/1000 S.F. ALL AREAS SEEDED DURING THE WINTER WILL BE INSPECTED IN THE SPRING FOR ADEQUATE CATCH. ALL AREAS INSUFFICIENTLY VEGETATED (LESS THAN 75 % CATCH) SHALL BE REVEGETATED BY REPLACING LOAM, SEED AND MULCH. IF DORMANT SEEDING IS NOT USED FOR THE SITE, ALL DISTURBED AREAS SHALL BE REVEGETATED IN THE SPRING.

OVERWINTER STABILIZATION OF DITCHES AND CHANNELS ALL STONE-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY NOVEMBER 15. ALL GRASS-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY SEPTEMBER 1. IF A DITCH OR CHANNEL IS NOT GRASS-LINED BY SEPTEMBER 1, THEN ONE OF THE FOLLOWING ACTIONS MUST BE TAKEN TO STABILIZE THE DITCH FOR LATE FALL AND WINTER. INSTALL A SOD LINING IN THE DITCH: A DITCH MUST BE LINED WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES: PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL, AND ANCHORING SOD AT THE BASE OF THE DITCH WITH JUTE OR PLASTIC MESH TO PREVENT THE SOD FROM SLOUGHING DURING FLOW CONDITIONS. INSTALL A STONE LINING IN THE DITCH: A DITCH MUST BE LINED WITH STONE RIPRAP BY NOVEMBER 15. A REGISTERED PROFESSIONAL MAG MUST BE HIRED TO DETERMINE THE STONE SIZE AND LINING THICKNESS NEEDED TO WITHSTAND THE ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHIN THE DITCH. IF NECESSARY, THE CONTRACTOR WILL REGRADE THE DITCH PRIOR TO PLACING THE STONE LINING SO TO PREVENT THE STONE LINING FROM REDUCING THE DITCH'S CROSS-SECTIONAL AREA.

OVERWINTER STABILIZATION OF DISTURBED SLOPES ALL STONE-COVERED SLOPES MUST BE CONSTRUCTED AND STABILIZED BY NOVEMBER 15. AND ALL SLOPES TO BE VEGETATED MUST BE SEEDED AND MULCHED BY SEPTEMBER 1. THE DEPARTMENT WILL CONSIDER ANY AREA HAVING A GRADE GREATER THAN 15% TO BE A SLOPE. IF A SLOPE TO BE VEGETATED IS NOT STABILIZED BY SEPTEMBER 1, THEN ONE OF THE FOLLOWING ACTIONS MUST BE TAKEN TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER. STABILIZE THE SOIL WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS -- BY OCTOBER 1 THE DISTURBED SLOPE MUST BE SEEDED WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET AND THEN INSTALL EROSION CONTROL MATS OR ANCHORED MULCH OVER THE SEEDING. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR FAILS TO COVER AT LEAST 75% OF THE SLOPE BY NOVEMBER 1, THEN THE CONTRACTOR WILL COVER THE SLOPE WITH A LAYER OF EROSION CONTROL MIX OR WITH STONE RIPRAP AS DESCRIBED IN THE FOLLOWING STANDARDS. STABILIZE THE SOIL WITH SOD -- THE DISTURBED SLOPE MUST BE STABILIZED WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE CONTRACTOR PINNING THE SOD ONTO THE SLOPE WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL. THE CONTRACTOR WILL NOT USE LATE-SEASON SOD INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 33% (3H:1V) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE. STABILIZE THE SOIL WITH EROSION CONTROL MIX - EROSION CONTROL MIX MUST BE PROPERLY INSTALLED BY NOVEMBER 15. THE CONTRACTOR WILL NOT USE EROSION CONTROL MIX TO STABILIZE SLOPES HAVING GRADES GREATER THAN 50% (2H:1V) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE. STABILIZE THE SOIL WITH STONE RIPRAP -- PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER 15. THE DEVELOPMENT'S OWNER WILL HIRE A REGISTERED PROFESSIONAL MAG TO DETERMINE THE STONE SIZE NEEDED FOR STABILITY ON THE SLOPE AND TO DESIGN A FILTER LAYER FOR UNDERNEATH THE RIPRAP.

OVERWINTER STABILIZATION OF DISTURBED SOILS BY SEPTEMBER 15, ALL DISTURBED SOILS ON AREAS HAVING A SLOPE LESS THAN 15% MUST BE SEEDED AND MULCHED. IF THE DISTURBED AREAS ARE NOT STABILIZED BY THIS DATE, THEN ONE OF THE FOLLOWING ACTIONS MUST BE TAKEN TO STABILIZE THE SOIL FOR LATE FALL AND WINTER. STABILIZE THE SOIL WITH TEMPORARY VEGETATION -- BY OCTOBER 1, SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET, LIGHTLY MULCH THE SEEDED SOIL WITH HAY OR STRAW AT 75 POUNDS PER 1000 SQUARE FEET, AND ANCHOR THE MULCH WITH PLASTIC NETTING. MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR FAILS TO COVER AT LEAST 75% OF THE DISTURBED SOIL BEFORE NOVEMBER 1, THEN MULCH THE AREA FOR OVER-WINTER PROTECTION AS DESCRIBED BELOW. STABILIZE THE SOIL WITH SOD -- STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL. STABILIZE THE SOIL WITH MULCH -- BY NOVEMBER 15, MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 POUNDS PER 1000 SQUARE FEET ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. IMMEDIATELY AFTER APPLYING THE MULCH, ANCHOR THE MULCH WITH PLASTIC NETTING TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.

MAINTENANCE:

MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION SEASON. AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF THAWING AND RUNOFF, THE SITE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES AND PERFORM REPAIRS AS NEEDED TO INSURE THEIR CONTINUOUS FUNCTION. FOLLOWING THE TEMPORARY AND/OR FINAL SEEDING AND MULCHING, THE CONTRACTOR SHALL, IN THE SPRING, INSPECT AND REPAIR ANY DAMAGES AND/OR BARE SPOTS. AN ESTABLISHED VEGETATIVE COVER MEANS A MINIMUM OF 85 TO 90 % OF AREAS VEGETATED WITH VIGOROUS GROWTH.

STABILIZATION SCHEDULE BEFORE WINTER:

SEPTEMBER 15 ALL DISTURBED AREAS MUST BE SEEDED AND MULCHED. ALL SLOPES MUST BE STABILIZED, SEEDED AND MULCHED. ALL GRASS-LINED DITCHES AND CHANNELS MUST BE STABILIZED WITH MULCH OR AN EROSION CONTROL BLANKET.

OCTOBER 1 IF THE SLOPE IS STABILIZED WITH AN EROSION CONTROL BLANKET AND SEEDED. ALL DISTURBED AREAS TO BE PROTECTED WITH AN ANNUAL GRASS MUST BE SEEDED AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET AND MULCHED.

NOVEMBER 15 ALL STONE-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED. SLOPES THAT ARE COVERED WITH RIPRAP MUST BE CONSTRUCTED BY THAT DATE.

DECEMBER 1 ALL DISTURBED AREAS WHERE THE GROWTH OF VEGETATION FAILS TO BE AT LEAST THREE INCHES TALL OR AT LEAST 75% OF THE DISTURBED SOIL IS COVERED BY VEGETATION, MUST BE PROTECTED FOR OVER-WINTER.

NOTE:

THE DATES GIVEN ARE FOR PROJECTS IN SOUTH-CENTRAL MAINE. ADJUST THE DATES GIVEN BASED ON THE PROJECT'S LOCATION WITHIN THE STATE - REDUCING TIMES UP TO THREE WEEKS FOR PROJECT'S IN NORTHERN MAINE AND EXTENDING TIMES UP TO TWO WEEKS FOR PROJECT'S ON THE COAST IN EXTREME SOUTHERN MAINE.

7. STORMWATER CHANNELS. DITCHES, SWALES, AND OTHER OPEN STORMWATER CHANNELS MUST BE CONSTRUCTED AND STABILIZED USING MEASURES THAT ACHIEVE LONG-TERM EROSION CONTROL. EACH CHANNEL SHOULD BE CONSTRUCTED IN SECTIONS SO THAT THE SECTION'S GRADING, SHAPING, AND INSTALLATION OF THE PERMANENT LINING CAN BE COMPLETED THE SAME DAY. IF A CHANNEL'S FINAL GRADING OR LINING INSTALLATION MUST BE DELAYED, THEN DIVERSION BERMS MUST BE USED TO DIVERT STORMWATER AWAY FROM THE CHANNEL, PROPERLY-SPACED CHECK DAMS MUST BE INSTALLED IN THE CHANNEL TO SLOW THE WATER VELOCITY, AND A TEMPORARY LINING INSTALLED ALONG THE CHANNEL TO PREVENT SCOURING.
8. ROADS. GRAVEL AND PAVED ROADS MUST BE CONSTRUCTED WITH CROWNS OR OTHER MEASURES, SUCH AS WATER BARS, TO ENSURE THAT STORMWATER IS DELIVERED IMMEDIATELY TO ADJACENT STABLE DITCHES, VEGETATED BUFFER AREAS, CATCH BASIN INLETS, OR STREET GUTTERS.
9. CULVERTS. CULVERT INLETS MUST BE PROTECTED WITH APPROPRIATE MATERIALS AND PROTECTION MUST EXTEND AT LEAST AS HIGH AS THE EXPECTED MAXIMUM ELEVATION OF STORAGE BEHIND THE CULVERT. CULVERT OUTLETS MUST INCORPORATE MEASURES, SUCH AS APRONS OR PLUNGE POOLS, TO PREVENT SCOUR OF THE STREAM CHANNEL.
10. PARKING AREAS. PARKING AREAS MUST BE CONSTRUCTED TO ENSURE RUNOFF IS DELIVERED TO ADJACENT SWALES, CATCH BASINS, CURB GUTTERS, OR BUFFER AREAS WITHOUT ERODING AREAS DOWNSLOPE. THE PARKING AREA'S SUBBASE COMPACTION AND GRADING MUST BE DONE TO ENSURE RUNOFF IS EVENLY DISTRIBUTED TO ADJACENT BUFFERS OR SIDE SLOPES. CATCH BASINS MUST BE LOCATED AND SET TO PROVIDE ENOUGH STORAGE DEPTH AT THE INLET TO ALLOW INFLOW OF PEAK RUNOFF RATES WITHOUT BY-PASS OF RUNOFF TO OTHER AREAS.

INSPECTION AND MAINTENANCE PLAN

1. DURING CONSTRUCTION. THE FOLLOWING STANDARDS MUST BE MET DURING CONSTRUCTION:
   (A) INSPECTION AND CORRECTIVE ACTION. INSPECT DISTURBED AND IMPERVIOUS AREAS, EROSION CONTROL MEASURES, MATERIALS STORAGE AREAS THAT ARE EXPOSED TO PRECIPITATION, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE. INSPECT THESE AREAS AT LEAST ONCE A WEEK AS WELL AS BEFORE AND AFTER A STORM EVENT, AND PRIOR TO COMPLETING PERMANENT STABILIZATION MEASURES. A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL, INCLUDING THE STANDARDS AND CONDITIONS IN THE PERMIT, SHALL CONDUCT THE INSPECTIONS.
   (B) MAINTENANCE. MAINTAIN ALL MEASURES IN EFFECTIVE OPERATING CONDITION UNTIL AREAS ARE PERMANENTLY STABILIZED. IF BEST MANAGEMENT PRACTICES (BMPS) NEED TO BE MAINTAINED OR MODIFIED, ADDITIONAL BMPS ARE NECESSARY, OR OTHER CORRECTIVE ACTION IS NEEDED, IMPLEMENTATION MUST BE COMPLETED WITHIN 7 CALENDAR DAYS AND PRIOR TO ANY STORM EVENT (RAINFALL).
   (C) DOCUMENTATION. KEEP A LOG (REPORT) SUMMARIZING THE INSPECTIONS AND ANY CORRECTIVE ACTION TAKEN. THE LOG MUST INCLUDE THE NAME(S) AND QUALIFICATIONS OF THE PERSON MAKING THE INSPECTIONS, THE DATE(S) OF THE INSPECTIONS, AND MAJOR OBSERVATIONS ABOUT THE OPERATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS, MATERIALS STORAGE AREAS, AND VEHICLES ACCESS POINTS TO THE PARCEL. MAJOR OBSERVATIONS MUST INCLUDE BMPS THAT NEED MAINTENANCE. BMPS THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION, AND LOCATION(S) WHERE ADDITIONAL BMPS ARE NEEDED. FOR EACH BMP REQUIRING MAINTENANCE, BMP NEEDING REPLACEMENT, AND LOCATION NEEDING ADDITIONAL BMPS, NOTE IN THE LOG THE CORRECTIVE ACTION TAKEN AND WHEN IT WAS TAKEN. THE LOG MUST BE MADE ACCESSIBLE TO DEPARTMENT STAFF AND A COPY MUST BE PROVIDED UPON REQUEST. THE PERMITTEE SHALL RETAIN A COPY OF THE LOG FOR A PERIOD OF AT LEAST THREE YEARS FROM THE COMPLETION OF PERMANENT STABILIZATION.

HOUSEKEEPING PLAN

1. SPILL PREVENTION. CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM BEING DISCHARGED FROM MATERIALS ON SITE, INCLUDING STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER, AND APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING AND IMPLEMENTATION.
2. GROUNDWATER PROTECTION. DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS, TOPOGRAPHY AND OTHER RELEVANT FACTORS ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DIKES, BERMS, SUMPS, AND OTHER FORMS OF SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS.
3. FUGITIVE SEDIMENT AND DUST. ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL.

   NOTE: AN EXAMPLE OF THE USE OF BMPS TO CONTROL FUGITIVE SEDIMENT AND DUST IS AS FOLLOWS. OPERATIONS DURING WET MONTHS THAT EXPERIENCE TRACKING OF MUD OFF THE SITE ONTO PUBLIC ROADS SHOULD PROVIDE FOR SWEEPING OF ROAD AREAS AT LEAST ONCE A WEEK AND PRIOR TO SIGNIFICANT STORM EVENTS. WHERE CHRONIC MUD TRACKING OCCURS, A STABILIZED CONSTRUCTION ENTRANCE SHOULD BE PROVIDED. OPERATIONS DURING DRY MONTHS, THAT EXPERIENCE FUGITIVE DUST PROBLEMS, SHOULD WET DOWN THE ACCESS ROADS ONCE A WEEK OR MORE FREQUENTLY AS NEEDED.

   NOTE: DEWATERING A STREAM WITHOUT A PERMIT FROM THE DEPARTMENT VIOLATES STATE WATER QUALITY STANDARDS AND THE NATURAL RESOURCES PROTECTION ACT.
4. DEBRIS AND OTHER MATERIALS. LITTER, CONSTRUCTION DEBRIS, AND CHEMICALS EXPOSED TO STORMWATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.

   NOTE: TO PREVENT THESE MATERIALS FROM BECOMING A SOURCE OF POLLUTANTS, CONSTRUCTION AND POST-CONSTRUCTION ACTIVITIES RELATED TO A PROJECT MAY BE REQUIRED TO COMPLY WITH APPLICABLE PROVISION OF RULES RELATED TO SOLID, UNIVERSAL, AND HAZARDOUS WASTE, INCLUDING, BUT NOT LIMITED TO, THE MAINE SOLID WASTE AND HAZARDOUS WASTE MANAGEMENT RULES; MAINE HAZARDOUS WASTE MANAGEMENT RULES; MAINE OIL CONVEYANCE AND STORAGE RULES; AND MAINE PESTICIDE REQUIREMENTS.
5. TRENCH OR FOUNDATION DE-WATERING. TRENCH DE-WATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFERDAMS, PONDS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES THE COLLECTED WATER IS HEAVILY SILTED AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE COLLECTED WATER MUST BE REMOVED FROM THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, AND MUST BE SPREAD THROUGH NATURAL WOODED BUFFERS OR REMOVED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE, LIKE A COFFERDAM SEDIMENTATION BASIN. AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE. EQUIVALENT MEASURES MAY BE TAKEN IF APPROVED BY THE DEPARTMENT.

SITE DEFINITION

1. POSITIVE DRAINAGE SHALL MEAN PROVIDING A MINIMUM DOWN GRADIENT SLOPE OF ONE PERCENT TO A REFERENCED STRUCTURE OR VEGETATIVE SWALE UNLESS OTHERWISE NOTED.

REV.	DESCRIPTION	DATE
0	ISSUED FOR BID	18 FEB 2022

2/18/2022

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MICHAELA GUETHLE
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UNIVERSITY OF MAINE
FIELD HOCKEY COMPLEX 2022
168 College Ave. Orono, ME 04469

PROJECT:

EROSION AND SEDIMENT CONTROL NOTES

SHEET TITLE:

WBRC CAD FILE:	10088015-C-DT FIELD HOCKEY.DWG
PROJECT No.	10088.033
SCALE:	AS NOTED
PROJECT MANAGER:	KCK
DRAWN BY:	BTH
CHECKED BY:	MAG

GRAPHIC SCALE: 0" 1"

SHEET No.: C501

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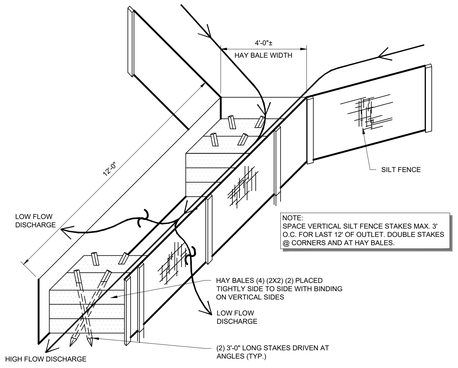
Feb 18, 2022 - 3:36pm
T:\02 Projects\0001-0500\10088.033 IM Athletics - Field Hockey\2DFS\Dwgs\Site\03-Fieldhockey\10088015-C-DT Field Hockey4wg brianhanlon

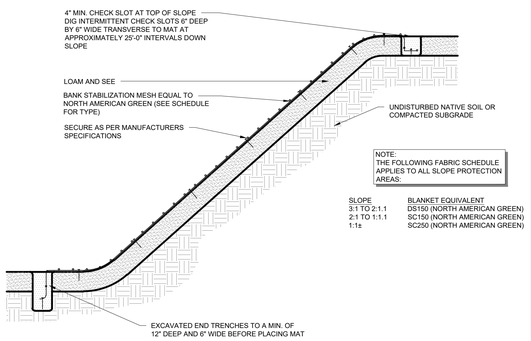
N1 HAY BALE / SILT FENCE OUTLET

NOT TO SCALE



N5 BANK STABILIZATION MESH

NOT TO SCALE



N10 TEMPORARY SILT FENCE

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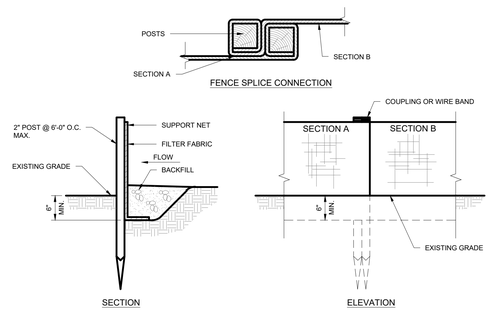
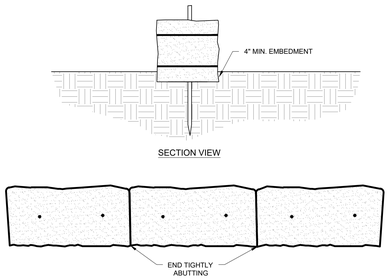


N14

J1 HAY BALE BARRIER

NOT TO SCALE



J5 TEMPORARY INLET PROTECTION

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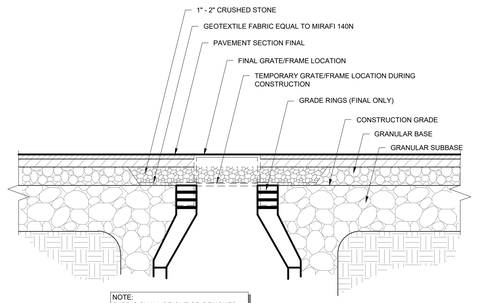
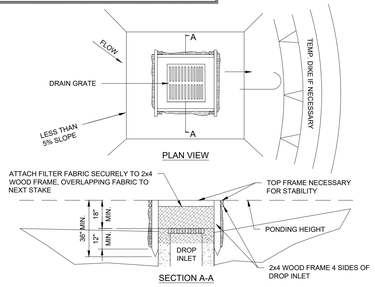


J10 TEMPORARY SILT FENCE INLET PROTECTION

NOT TO SCALE

NOTES:
1. DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DRAINAGE AREAS (LESS THAN 5%)
2. USE 2"X4" (100X50MM) WOOD OR EQUIVALENT METAL STAKES, 3' (1M MIN. LENGTH)
3. INSTALL 2"X4" (100X50MM) WOOD TOP FRAME TO INSURE STABILITY.
4. THE TOP OF THE FRAME (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BY-PASSING THE INLET. A TEMP. DIKE MAY BE NECESSARY ON THE DOWNSLOPE SIDE OF THE STRUCTURE.

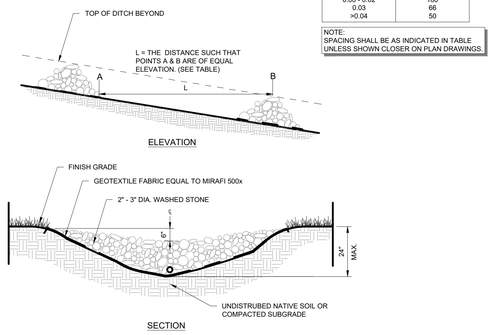


J14 STONE CHECK DAM

NOT TO SCALE

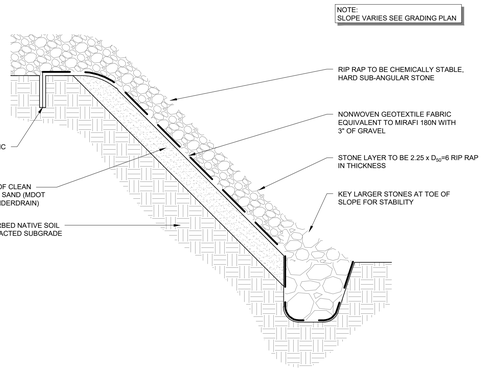
SPACING TABLE	
DITCH SLOPE (FT/FT)	SPACING LENGTH (FT)
0.00 - 0.02	100
0.03	66
>0.04	50

NOTE:
SPACING SHALL BE AS INDICATED IN TABLE UNLESS SHOWN CLOSER ON PLAN DRAWINGS.



A1 FLUSH CURB OUTLET

NOT TO SCALE



A5 SEDIMENT BARRIER

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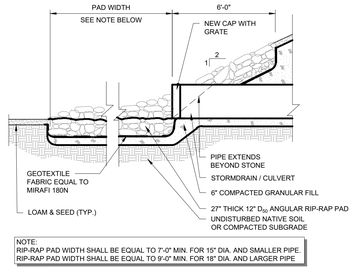

A10 TEMPORARY CONSTRUCTION ENTRANCE

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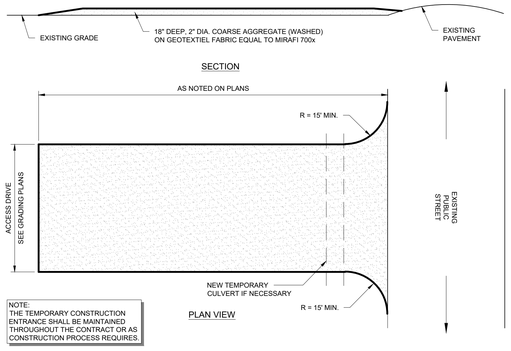
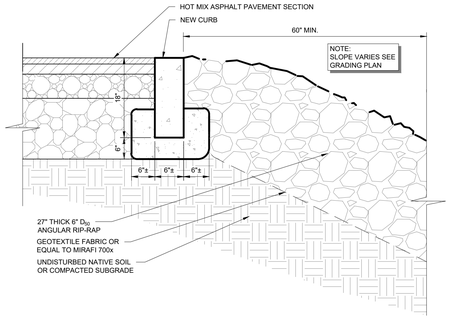


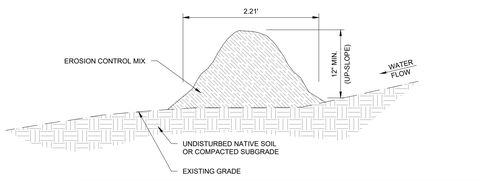
E1 RIP-RAP BANK STABILIZATION

NOT TO SCALE



E5 RIP-RAP INLET / OUTLET

NOT TO SCALE



E10 RIP-RAP CHANNEL

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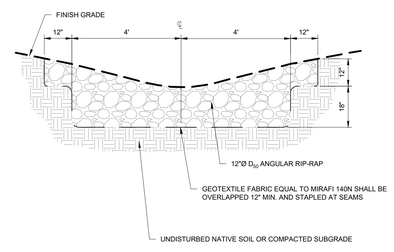

E14 GRASS SWALE

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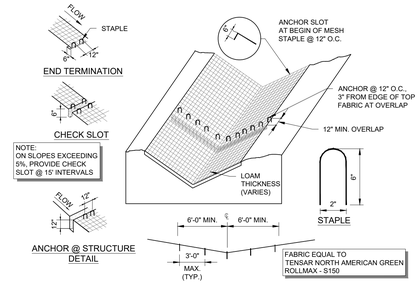

E14

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168 College Ave. Orono, ME 04469

PROJECT:

EROSION AND SEDIMENT CONTROL DETAILS

SHEET TITLE:

WBRC CAD FILE:	10088015-C-DT FIELD HOCKEY.DWG
PROJECT No.	10088.033
SCALE:	AS NOTED
PROJECT MANAGER:	KCK
DRAWN BY:	BTH
CHECKED BY:	MAG

GRAPHIC SCALE: 0" 1"

SHEET No.: C502

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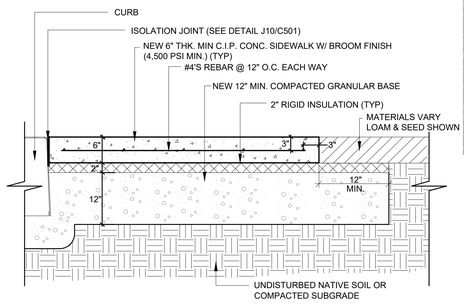
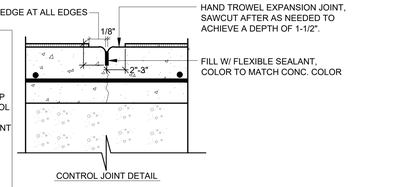
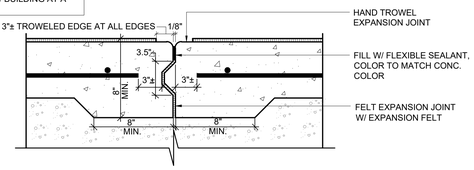
Feb 18, 2022 - 3:36pm
T:\02 Projects\0010-0100\10088\033 IM Athletics - Field Hockey\2DFS\Dwgs\Site\03-Fieldhockey\10088015-C-01 Field Hockey.dwg brianhanlon



NOTE:
1. SEE SITE LAYOUT & MATERIALS PLAN (CP101) FOR LOCATION OF CONCRETE PLAZAS & SIDEWALKS.
2. #5 DIAGONAL BARS SHALL BE PLACED AT ALL OPENINGS.
3. THE SITE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS SHOWING THE LOCATION OF CONTROL & CONSTRUCTION JOINTS TO THE LANDSCAPE ARCHITECT FOR REVIEW PRIOR TO REPLACEMENT OF CONCRETE FOR THE PLAZAS.
4. AREAS INDICATED ON THE SITE LAYOUT & MATERIALS PLAN AS "COLORED" ARE TO HAVE INTEGRAL COLOR AS SPECIFIED.
5. FOR PLAZA'S TRANSITION FILL TO 5' DEEP WHERE PLAZA MEETS THE NEW BUILDING AT A CONSTANT SLOPE.



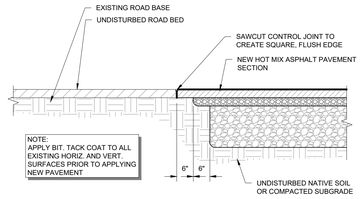
CONTROL JOINT DETAIL



CONSTRUCTION JOINT DETAIL

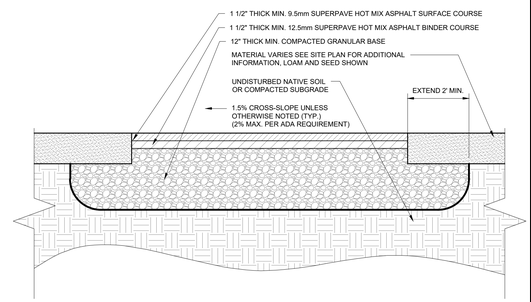
N1 NEW C.I.P. CONCRETE SIDEWALK/PLAZA

NOT TO SCALE



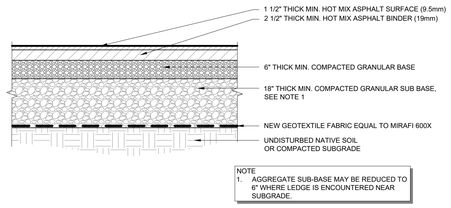
N10 HOT MIX ASPHALT BUTT JOINT

NOT TO SCALE



N14 HOT MIX ASPHALT SIDEWALK

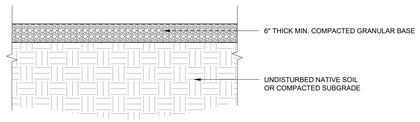
NOT TO SCALE



NOTE
1. AGGREGATE SUB-BASE MAY BE REDUCED TO 6" WHERE LEDGE IS ENCOUNTERED NEAR SUBGRADE.

J1 FULL DEPTH HOT MIX ASPHALT PAVEMENT SECTION

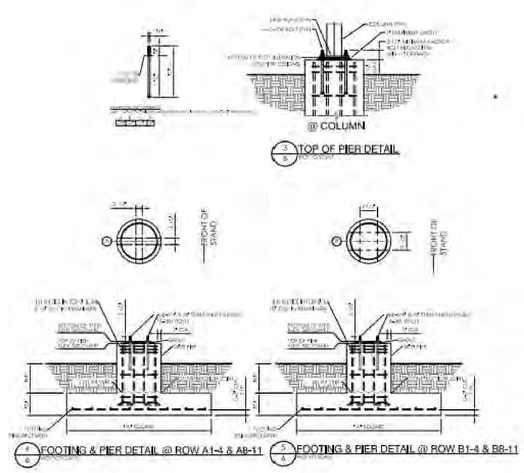
NOT TO SCALE



J5 TEMPORARY BLEACHER AND PORTABLE TOILET STAGING

NOT TO SCALE

J14



FOOTING SCHEDULE
T.O.P. = TOP OF PIER
B.O.S. = BOTTOM OF STEEL

FOOTING # (R = RAMMED)	T.O.P. ELEV.	B.O.S. ELEV.	"A"	"B"	"W"	REINFORCEMENT
A1, AB, B1, B4, B8, R1, R2	110'-0"	107'-6"	30" MIN.	18"	5'-10"	(11) #5 EACH WAY

E1

E5

E10 PIER DETAILS (FOR BIDDING PURPOSES ONLY)

E14

A1

A5

A10

A14

REV.	DESCRIPTION	DATE
0	ISSUED FOR BID	18 FEB 2022

2/18/2022

STATE OF MAINE
MICHAEL A. GUETHLE
14284
LICENSED PROFESSIONAL ENGINEER

WBRC ARCHITECTS • ENGINEERS
WWW.WBRCAE.COM
BANGOR, MAINE 207-947-4511
PORTLAND, MAINE 207-828-4511
SARASOTA, FLORIDA 941-373-1583

UNIVERSITY OF MAINE
FIELD HOCKEY COMPLEX 2022
168 College Ave. Orono, ME 04469

PROJECT:

SITE DETAILS

SHEET TITLE:

WBRC CAD FILE:	10088015-C-DT FIELD HOCKEY.DWG
PROJECT No.	10088.033
SCALE:	AS NOTED
PROJECT MANAGER:	KCK
DRAWN BY:	BTH
CHECKED BY:	MAG

GRAPHIC SCALE: 0" 1"

SHEET No.: C503

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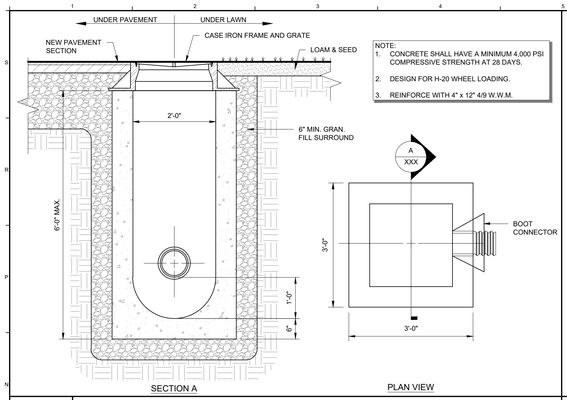
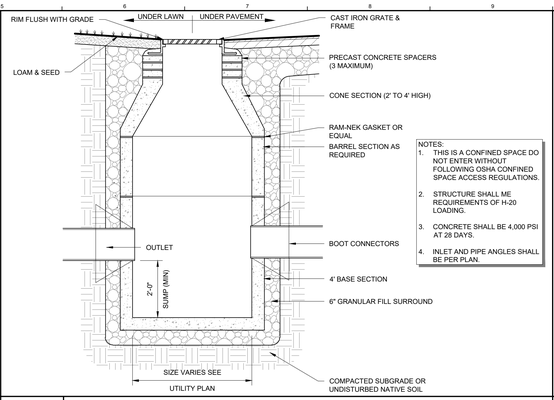
T:\O2 Projects\10001-10500\10088033 IM Athletics - Field Hockey\2DES\Dwgs\Site\03-Field\Hockey\10088015-C-DT Field Hockey.dwg tranhanlon



NOTE:
1. CONCRETE SHALL HAVE A MINIMUM 4,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
2. DESIGN FOR H-20 WHEEL LOADING.
3. REINFORCE WITH 4" x 12" 4/9 W.W.M.

N1 TYPE "F" CATCH BASIN

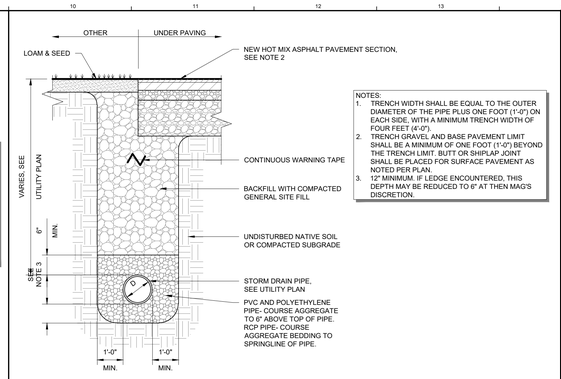
NOT TO SCALE



NOTES:
1. THIS IS A CONFINED SPACE DO NOT ENTER WITHOUT FOLLOWING OSHA CONFINED SPACE ACCESS REGULATIONS.
2. STRUCTURE SHALL ME REQUIREMENTS OF H-20 LOADING.
3. CONCRETE SHALL BE 4,000 PSI AT 28 DAYS.
4. INLET AND PIPE ANGLES SHALL BE PER PLAN.

N5 CATCH BASIN

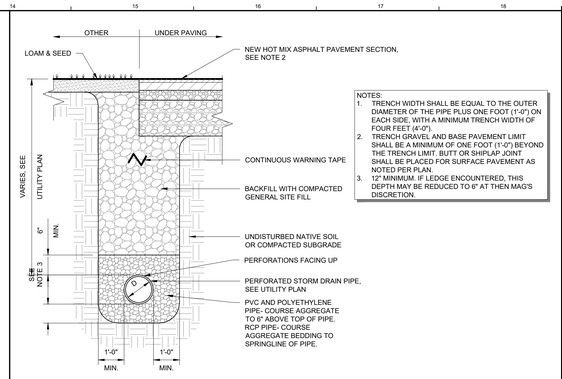
NOT TO SCALE



NOTES:
1. TRENCH WIDTH SHALL BE EQUAL TO THE OUTER DIAMETER OF THE PIPE PLUS ONE FOOT (1'-0") ON EACH SIDE, WITH A MINIMUM TRENCH WIDTH OF FOUR FEET (4'-0").
2. TRENCH GRAVEL AND BASE PAVEMENT LIMIT SHALL BE A MINIMUM OF ONE FOOT (1'-0") BEYOND THE TRENCH LIMIT. BUTT OR SHIPLAP JOINT SHALL BE PLACED FOR SURFACE PAVEMENT AS NOTED PER PLAN.
3. 12" MINIMUM. IF LEDGE ENCOUNTERED, THIS DEPTH MAY BE REDUCED TO 6" AT THEN MAG'S DISCRETION.

N10 STORM DRAIN TRENCH

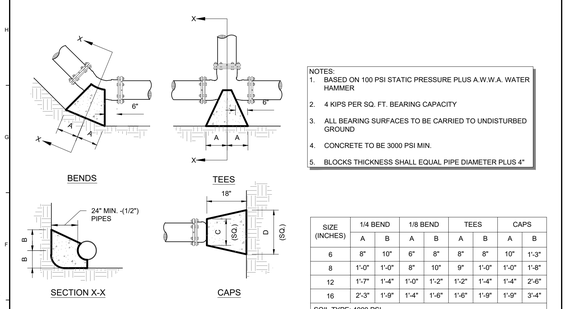
NOT TO SCALE



NOTES:
1. TRENCH WIDTH SHALL BE EQUAL TO THE OUTER DIAMETER OF THE PIPE PLUS ONE FOOT (1'-0") ON EACH SIDE, WITH A MINIMUM TRENCH WIDTH OF FOUR FEET (4'-0").
2. TRENCH GRAVEL AND BASE PAVEMENT LIMIT SHALL BE A MINIMUM OF ONE FOOT (1'-0") BEYOND THE TRENCH LIMIT. BUTT OR SHIPLAP JOINT SHALL BE PLACED FOR SURFACE PAVEMENT AS NOTED PER PLAN.
3. 12" MINIMUM. IF LEDGE ENCOUNTERED, THIS DEPTH MAY BE REDUCED TO 6" AT THEN MAG'S DISCRETION.

N14 FOUNDATION DRAIN

NOT TO SCALE

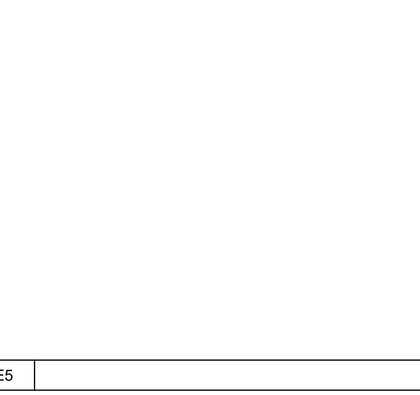


NOTES:
1. TRENCH WIDTH SHALL BE EQUAL TO THE OUTER DIAMETER OF THE PIPE PLUS ONE FOOT (1'-0") ON EACH SIDE, WITH A MINIMUM TRENCH WIDTH OF FOUR FEET (4'-0").
2. TRENCH GRAVEL AND BASE PAVEMENT LIMIT SHALL BE A MINIMUM OF ONE FOOT (1'-0") BEYOND THE TRENCH LIMIT. BUTT OR SHIPLAP JOINT SHALL BE PLACED FOR SURFACE PAVEMENT AS NOTED PER PLAN.
3. 12" MINIMUM. IF LEDGE ENCOUNTERED, THIS DEPTH MAY BE REDUCED TO 6" AT THEN MAG'S DISCRETION.

J1 WATERLINE TRENCH

NOT TO SCALE

NOTE:
2" RIGID INSULATION SHALL BE BLUEBOARD DUPONT™ STYROFOAM™ EXTRUDED POLYSTYRENE OR APPROVED EQUAL.

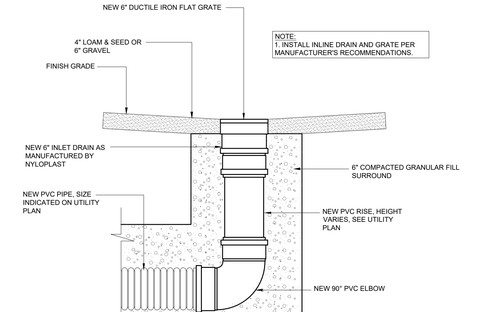


J5 INSULATED PIPE CROSSING

NOT TO SCALE

J10 STORM DRAIN AND CULVERT PIPE SECTION

NOT TO SCALE



J14 GATE VALVE

NOT TO SCALE

NOTES:
1. BASED ON 100 PSI STATIC PRESSURE PLUS A.W.W.A. WATER HAMMER
2. 4 KIPS PER SQ. FT. BEARING CAPACITY
3. ALL BEARING SURFACES TO BE CARRIED TO UNDISTURBED GROUND
4. CONCRETE TO BE 3000 PSI MIN.
5. BLOCKS THICKNESS SHALL EQUAL PIPE DIAMETER PLUS 4"

SIZE (INCHES)	1/4 BEND		1/8 BEND		TEES		CAPS	
	A	B	A	B	A	B	A	B
6	8"	10"	6"	8"	8"	8"	10"	1'-3"
8	1'-0"	1'-0"	8"	10"	9"	1'-0"	1'-0"	1'-8"
12	1'-7"	1'-4"	1'-0"	1'-2"	1'-2"	1'-4"	1'-4"	2'-6"
16	2'-3"	1'-9"	1'-4"	1'-6"	1'-6"	1'-9"	1'-9"	3'-4"

SOIL TYPE: 4000 PSI

E1 THRUST BLOCKS

NOT TO SCALE

E5

NOT TO SCALE

E10

NOT TO SCALE

E14 YARD DRAIN

NOT TO SCALE

A1 NEW CHANNEL DRAIN

NOT TO SCALE

A10

A14

REV.	DESCRIPTION	DATE
0	ISSUED FOR BID	18 FEB 2022

2/18/22

STATE OF MAINE
MICHAEL A. GUETHLE
14284
LICENSED PROFESSIONAL ENGINEER

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SARASOTA, FLORIDA 941-373-1583

UNIVERSITY OF MAINE
FIELD HOCKEY COMPLEX 2022
168 College Ave. Orono, ME 04469

PROJECT:

SITE UTILITY DETAILS

SHEET TITLE:

WBRC CAD FILE:	10088015-C-DT FIELD HOCKEY.DWG
PROJECT No.	10088.033
SCALE:	AS NOTED
PROJECT MANAGER:	KCK
DRAWN BY:	BTH
CHECKED BY:	MAG

GRAPHIC SCALE: 0" 1"

SHEET No.
C504

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I:\02 Projects\0001-0100\10088\033 IM Athletics - Field Hockey\2DFS\Dwgs\Site\03-Fieldhockey\10088015-C-DT Field Hockey.dwg brianhanlon

NOTES:

1. BORING LOGS OBTAINED FROM S.W. COLE INC. EXPLORATIONS AND GEOTECHNICAL SERVICES REPORT.

BORING LOG

BORING NO.: B-22-12
SHEET: 1 of 1
PROJECT NO. 21-1832
DATE START: 1/25/2022
DATE FINISH: 1/25/2022

CLIENT: The University of Maine System
PROJECT: Proposed Athletic Facilities Improvements
LOCATION: University of Maine, Orono, ME

Drilling Information

LOCATION: See Exploration Location Plan
ELEVATION (FT): N/A
TOTAL DEPTH (FT): 11.7
LOGGED BY: Camden Clark
DRILLING CO.: S. W. Cole Explorations, LLC
DRILLER: Kevin Hanscom
DRILLING METHOD: Hollow Stem Auger
RIG TYPE: Track Mounted Diedrich D-50
AUGER ID/OD: 2 1/4 in / 5 5/8 in
SAMPLER: Standard Split-Spoon
HAMMER TYPE: Automatic
HAMMER WEIGHT (lbs): 140
CASING ID/OD: N/A /N/A
CORE BARREL: N/A
HAMMER EFFICIENCY FACTOR: 0.995
HAMMER DROP (inch): 30
WATER LEVEL DEPTHS (ft): Soils wet below 10 feet +/-
GENERAL NOTES:

KEY TO NOTES AND SYMBOLS: Water Level: ▽ At time of Drilling; ▼ At Completion of Drilling; ⧗ After Drilling. D = Split Spoon Sample; U = Thin Walled Tube Sample; R = Rock Core Sample; V = Field Vane Shear. Pen. = Penetration Length; Rec. = Recovery Length; bpf = Blows per Foot; mpf = Minute per Foot. WOR = Weight of Rods; WOH = Weight of Hammer; RQD = Rock Quality Designation; PID = Photoionization Detector. S_v = Field Vane Shear Strength, kips/sq.ft.; q_u = Unconfined Compressive Strength, kips/sq.ft.; Ø = Friction Angle (Estimated); N/A = Not Applicable

SAMPLE INFORMATION

Elev. (ft)	Depth (ft)	Casing Pen. (bpf)	Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD	Field / Lab Test Data	Graphic Log	Sample Description & Classification	H_2O Depth	Remarks
			1D		1-3	24/24	23-14-6-7			Brown gravelly SAND, some silt (Fill, frozen to 2 feet +/-)		
										1.0' Medium dense, brown silty SAND, trace fine organics (Fill)		
			2D		3-5	24/24	6-6-6-6			4.0' Stiff, brown and gray silty CLAY		
	5		3D		5-7	24/24	4-5-6-7	q_u=5-8 ksf				
								q_u=5-8 ksf				
	10		4D		10-11.4	17/10	3-33-50/5"			10.5' Dense, brown SILT and SAND, some gravel (Glacial Till)		
										11.4' Probable Weathered Bedrock		
										Auger Refusal at 11.7 feet Probable Bedrock		

Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

BORING NO.: B-22-12

BORING LOG

BORING NO.: B-22-13
SHEET: 1 of 1
PROJECT NO. 21-1832
DATE START: 1/25/2022
DATE FINISH: 1/25/2022

CLIENT: The University of Maine System
PROJECT: Proposed Athletic Facilities Improvements
LOCATION: University of Maine, Orono, ME

Drilling Information

LOCATION: See Exploration Location Plan
ELEVATION (FT): N/A
TOTAL DEPTH (FT): 11.4
LOGGED BY: Camden Clark
DRILLING CO.: S. W. Cole Explorations, LLC
DRILLER: Kevin Hanscom
DRILLING METHOD: Hollow Stem Auger
RIG TYPE: Track Mounted Diedrich D-50
AUGER ID/OD: 2 1/4 in / 5 5/8 in
SAMPLER: Standard Split-Spoon
HAMMER TYPE: Automatic
HAMMER WEIGHT (lbs): 140
CASING ID/OD: N/A /N/A
CORE BARREL: N/A
HAMMER EFFICIENCY FACTOR: 0.995
HAMMER DROP (inch): 30
WATER LEVEL DEPTHS (ft): Soils wet below 10 feet +/-
GENERAL NOTES:

KEY TO NOTES AND SYMBOLS: Water Level: ▽ At time of Drilling; ▼ At Completion of Drilling; ⧗ After Drilling. D = Split Spoon Sample; U = Thin Walled Tube Sample; R = Rock Core Sample; V = Field Vane Shear. Pen. = Penetration Length; Rec. = Recovery Length; bpf = Blows per Foot; mpf = Minute per Foot. WOR = Weight of Rods; WOH = Weight of Hammer; RQD = Rock Quality Designation; PID = Photoionization Detector. S_v = Field Vane Shear Strength, kips/sq.ft.; q_u = Unconfined Compressive Strength, kips/sq.ft.; Ø = Friction Angle (Estimated); N/A = Not Applicable

SAMPLE INFORMATION

Elev. (ft)	Depth (ft)	Casing Pen. (bpf)	Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD	Field / Lab Test Data	Graphic Log	Sample Description & Classification	H_2O Depth	Remarks
			1D		0-0.5	6/4	50			Brown gravelly SAND, some silt (Fill, frozen to 2 feet +/-)		
			2D		2-4	24/24	4-6-7-8	q_u=7-9 ksf		2.0' Hard to very stiff, brown and gray silty CLAY		
	5		3D		5-7	24/24	4-6-8-7	q_u=7-9 ksf		5.0' Hard to very stiff, brown silty CLAY		
	10		4D		10-10.8	9/4	10-50/3"			10.0' Medium dense, brown silty gravelly SAND (Glacial Till)		
										10.8' Probable Weathered Bedrock		
										Auger Refusal at 11.4 feet Probable Bedrock		

Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

BORING NO.: B-22-13

BORING LOG

BORING NO.: B-22-14
SHEET: 1 of 1
PROJECT NO. 21-1832
DATE START: 1/25/2022
DATE FINISH: 1/25/2022

CLIENT: The University of Maine System
PROJECT: Proposed Athletic Facilities Improvements
LOCATION: University of Maine, Orono, ME

Drilling Information

LOCATION: See Exploration Location Plan
ELEVATION (FT): N/A
TOTAL DEPTH (FT): 22.0
LOGGED BY: Camden Clark
DRILLING CO.: S. W. Cole Explorations, LLC
DRILLER: Kevin Hanscom
DRILLING METHOD: Hollow Stem Auger
RIG TYPE: Track Mounted Diedrich D-50
AUGER ID/OD: 2 1/4 in / 5 5/8 in
SAMPLER: Standard Split-Spoon
HAMMER TYPE: Automatic
HAMMER WEIGHT (lbs): 140
CASING ID/OD: N/A /N/A
CORE BARREL: N/A
HAMMER EFFICIENCY FACTOR: 0.995
HAMMER DROP (inch): 30
WATER LEVEL DEPTHS (ft): No free water observed
GENERAL NOTES:

KEY TO NOTES AND SYMBOLS: Water Level: ▽ At time of Drilling; ▼ At Completion of Drilling; ⧗ After Drilling. D = Split Spoon Sample; U = Thin Walled Tube Sample; R = Rock Core Sample; V = Field Vane Shear. Pen. = Penetration Length; Rec. = Recovery Length; bpf = Blows per Foot; mpf = Minute per Foot. WOR = Weight of Rods; WOH = Weight of Hammer; RQD = Rock Quality Designation; PID = Photoionization Detector. S_v = Field Vane Shear Strength, kips/sq.ft.; q_u = Unconfined Compressive Strength, kips/sq.ft.; Ø = Friction Angle (Estimated); N/A = Not Applicable

SAMPLE INFORMATION

Elev. (ft)	Depth (ft)	Casing Pen. (bpf)	Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD	Field / Lab Test Data	Graphic Log	Sample Description & Classification	H_2O Depth	Remarks
			1D		0-2	24/18	16-17-18-11			0.4' Topsoil (Frozen to 2 feet +/-)		
										Loose, brown silty SAND, trace gravel (Fill)		
			2D		2-4	24/18	3-3-3-4			2.0' Loose, gray clayey sandy SILT (Fill)		
	5		3D		5-7	24/24	2-2-2-4			5.5' Relic Topsoil		
								q_u=3-4 ksf		6.0' Stiff to very stiff, brown and gray silty CLAY		
	10		4D		10-12	24/24	3-4-6-5	q_u=3-5 ksf				
	15		5D		15-17	24/24	2-2-2-3	q_u=2-3 ksf		15.0' Stiff, gray silty CLAY		
	20		6D		20-22	24/10	6-6-7-8			19.3' Medium dense, gray silty SAND, some gravel (Glacial Till)		
										Bottom of Exploration at 22.0 feet		

Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

BORING NO.: B-22-14

BORING LOG

BORING NO.: B-22-15
SHEET: 1 of 1
PROJECT NO. 21-1832
DATE START: 1/25/2022
DATE FINISH: 1/25/2022

CLIENT: The University of Maine System
PROJECT: Proposed Athletic Facilities Improvements
LOCATION: University of Maine, Orono, ME

Drilling Information

LOCATION: See Exploration Location Plan
ELEVATION (FT): N/A
TOTAL DEPTH (FT): 22.0
LOGGED BY: Camden Clark
DRILLING CO.: S. W. Cole Explorations, LLC
DRILLER: Kevin Hanscom
DRILLING METHOD: Hollow Stem Auger
RIG TYPE: Track Mounted Diedrich D-50
AUGER ID/OD: 2 1/4 in / 5 5/8 in
SAMPLER: Standard Split-Spoon
HAMMER TYPE: Automatic
HAMMER WEIGHT (lbs): 140
CASING ID/OD: N/A /N/A
CORE BARREL: N/A
HAMMER EFFICIENCY FACTOR: 0.995
HAMMER DROP (inch): 30
WATER LEVEL DEPTHS (ft): ≥ 11 ft. Free water observed at 11 feet +/-
GENERAL NOTES:

KEY TO NOTES AND SYMBOLS: Water Level: ▽ At time of Drilling; ▼ At Completion of Drilling; ⧗ After Drilling. D = Split Spoon Sample; U = Thin Walled Tube Sample; R = Rock Core Sample; V = Field Vane Shear. Pen. = Penetration Length; Rec. = Recovery Length; bpf = Blows per Foot; mpf = Minute per Foot. WOR = Weight of Rods; WOH = Weight of Hammer; RQD = Rock Quality Designation; PID = Photoionization Detector. S_v = Field Vane Shear Strength, kips/sq.ft.; q_u = Unconfined Compressive Strength, kips/sq.ft.; Ø = Friction Angle (Estimated); N/A = Not Applicable

SAMPLE INFORMATION

Elev. (ft)	Depth (ft)	Casing Pen. (bpf)	Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD	Field / Lab Test Data	Graphic Log	Sample Description & Classification	H_2O Depth	Remarks
			1D		0-2	24/24	14-13-7-7			0.3' Topsoil (Frozen to 1 foot +/-)		
										Medium dense, brown SAND and SILT, some gravel (Fill)		
			2D		2-4	24/12	8-8-9-6			3.5' Medium dense to loose, black silty gravelly SAND (Fill)		
	5		3D		5-7	24/12	1-1-2-6			5.0' Relic Topsoil		
										5.5' Stiff, gray silty CLAY		
	10		4D		10-12	24/24	3-3-4-3	q_u=3-4 ksf				
	15		5D		15-17	24/24	2-3-4-3	q_u=3-4 ksf				
	20		6D		20-22	24/2	21-21-14-13			19.0' Dense, gray silty gravelly SAND (Glacial Till)		
										Bottom of Exploration at 22.0 feet		

Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

BORING NO.: B-22-15

BORING LOG

BORING NO.: B-22-16
SHEET: 1 of 1
PROJECT NO. 21-1832
DATE START: 1/25/2022
DATE FINISH: 1/25/2022

CLIENT: The University of Maine System
PROJECT: Proposed Athletic Facilities Improvements
LOCATION: University of Maine, Orono, ME

Drilling Information

LOCATION: See Exploration Location Plan
ELEVATION (FT): N/A
TOTAL DEPTH (FT): 12.0
LOGGED BY: Camden Clark
DRILLING CO.: S. W. Cole Explorations, LLC
DRILLER: Kevin Hanscom
DRILLING METHOD: Hollow Stem Auger
RIG TYPE: Track Mounted Diedrich D-50
AUGER ID/OD: 2 1/4 in / 5 5/8 in
SAMPLER: Standard Split-Spoon
HAMMER TYPE: Automatic
HAMMER WEIGHT (lbs): 140
CASING ID/OD: N/A /N/A
CORE BARREL: N/A
HAMMER EFFICIENCY FACTOR: 0.995
HAMMER DROP (inch): 30
WATER LEVEL DEPTHS (ft): No free water observed
GENERAL NOTES:

KEY TO NOTES AND SYMBOLS: Water Level: ▽ At time of Drilling; ▼ At Completion of Drilling; ⧗ After Drilling. D = Split Spoon Sample; U = Thin Walled Tube Sample; R = Rock Core Sample; V = Field Vane Shear. Pen. = Penetration Length; Rec. = Recovery Length; bpf = Blows per Foot; mpf = Minute per Foot. WOR = Weight of Rods; WOH = Weight of Hammer; RQD = Rock Quality Designation; PID = Photoionization Detector. S_v = Field Vane Shear Strength, kips/sq.ft.; q_u = Unconfined Compressive Strength, kips/sq.ft.; Ø = Friction Angle (Estimated); N/A = Not Applicable

SAMPLE INFORMATION

Elev. (ft)	Depth (ft)	Casing Pen. (bpf)	Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD	Field / Lab Test Data	Graphic Log	Sample Description & Classification	H_2O Depth	Remarks
			1D		0-2	24/22	18-32-14-4			0.3' Topsoil (Frozen to 1.5 feet +/-)		
										Brown silty gravelly SAND, trace fine organics (Fill)		
			2D		2-4	24/20	3-4-5-5			1.5' Loose, brown silty SAND, trace gravel (Possible Fill)		
	5		3D		5-7	24/24	2-7-11-13	q_u=6+ ksf		5.5' Hard to stiff, brown and gray silty CLAY		
	10		4D		10-12	24/24	2-3-5-6	q_u=3-4 ksf				
										Bottom of Exploration at 12.0 feet		

Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

BORING NO.: B-22-16

BORING LOG

BORING NO.: B-22-17
SHEET: 1 of 1
PROJECT NO. 21-1832
DATE START: 1/25/2022
DATE FINISH: 1/25/2022

CLIENT: The University of Maine System
PROJECT: Proposed Athletic Facilities Improvements
LOCATION: University of Maine, Orono, ME

Drilling Information

LOCATION: See Exploration Location Plan
ELEVATION (FT): N/A
TOTAL DEPTH (FT): 12.0
LOGGED BY: Camden Clark
DRILLING CO.: S. W. Cole Explorations, LLC
DRILLER: Kevin Hanscom
DRILLING METHOD: Hollow Stem Auger
RIG TYPE: Track Mounted Diedrich D-50
AUGER ID/OD: 2 1/4 in / 5 5/8 in
SAMPLER: Standard Split-Spoon
HAMMER TYPE: Automatic
HAMMER WEIGHT (lbs): 140
CASING ID/OD: N/A /N/A
CORE BARREL: N/A
HAMMER EFFICIENCY FACTOR: 0.995
HAMMER DROP (inch): 30
WATER LEVEL DEPTHS (ft): No free water observed
GENERAL NOTES:

KEY TO NOTES AND SYMBOLS: Water Level: ▽ At time of Drilling; ▼ At Completion of Drilling; ⧗ After Drilling. D = Split Spoon Sample; U = Thin Walled Tube Sample; R = Rock Core Sample; V = Field Vane Shear. Pen. = Penetration Length; Rec. = Recovery Length; bpf = Blows per Foot; mpf = Minute per Foot. WOR = Weight of Rods; WOH = Weight of Hammer; RQD = Rock Quality Designation; PID = Photoionization Detector. S_v = Field Vane Shear Strength, kips/sq.ft.; q_u = Unconfined Compressive Strength, kips/sq.ft.; Ø = Friction Angle (Estimated); N/A = Not Applicable

SAMPLE INFORMATION

Elev. (ft)	Depth (ft)	Casing Pen. (bpf)	Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD	Field / Lab Test Data	Graphic Log	Sample Description & Classification	H_2O Depth	Remarks
			1D		0-2	24/18	1-2-4-5			0.3' Topsoil		
										Loose, brown SILT and SAND		
			2D		2-4	24/24	3-5-6-7	q_u=5-7 ksf		2.0' Very stiff, brown and gray silty CLAY		
	5		3D		5-7	24/24	3-5-5-7	q_u=6-8 ksf		5.0' Very stiff, brown silty CLAY		
	10		4D		10-12	24/4	7-12-20-23			11.0' Dense, brown gravelly silty SAND (Glacial Till)		
										Auger Refusal at 12.0 feet Probable Bedrock		

Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

BORING NO.: B-22-17

DRAFT

THIS INFORMATION IS NOT PART OF THE CONTRACT DOCUMENTS AND IS FOR INFORMATIONAL PURPOSES ONLY.

REV.	DESCRIPTION	DATE
0	ISSUED FOR BID	18 FEB 2022

WBRC ARCHITECTS • ENGINEERS
WWW.WBRCAE.COM
BANGOR, MAINE 207-947-4581
PORTLAND, MAINE 207-228-4581
SARASOTA, FLORIDA 941-371-2183

UNIVERSITY OF MAINE, FIELD HOCKEY

PROJECT:

SITE BORING LOGS

SHEET TITLE:

WBRC CAD FILE:	10088015-C601.DWG
PROJECT No.	10088.033
SCALE:	NONE
PROJECT MANAGER:	KCK
DRAWN BY:	KRB
CHECKED BY:	MAG

GRAPHIC SCALE: 0" 1"

SHEET No.: C603

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Feb 18, 2022 - 3:36pm
T:\02 Projects\0001-0500\0088033 IM Athletics - Field Hockey\2DES\Dwgs\Site\0088015-C601.dwg brianhanlon

NOTES:
1. BORING LOGS OBTAINED FROM S.W. COLE INC. EXPLORATIONS AND GEOTECHNICAL SERVICES REPORT.

BORING LOG — B-22-18

CLIENT: The University of Maine System
PROJECT: Proposed Athletic Facilities Improvements
LOCATION: University of Maine, Orono, ME

BORING NO.: B-22-18 | SHEET: 1 of 1 | PROJECT NO. 21-1832 | DATE START: 1/25/2022 | DATE FINISH: 1/25/2022

Drilling Information
LOCATION: See Exploration Location Plan | ELEVATION (FT): N/A | TOTAL DEPTH (FT): 19.0 | LOGGED BY: Camden Clark
DRILLING CO.: S. W. Cole Explorations, LLC | DRILLER: Kevin Hanscom | DRILLING METHOD: Hollow Stem Auger
RIG TYPE: Track Mounted Diedrich D-50 | AUGER ID/OD: 2 1/4 in / 5 5/8 in | SAMPLER: Standard Split-Spoon
HAMMER TYPE: Automatic | HAMMER WEIGHT (lbs): 140 | CASING ID/OD: N/A /N/A | CORE BARREL: N/A
HAMMER EFFICIENCY FACTOR: 0.995 | HAMMER DROP (inch): 30
WATER LEVEL DEPTHS (ft): Soils wet below 15 feet +/-
GENERAL NOTES:

KEY TO NOTES AND SYMBOLS: Water Level: ▽ At time of Drilling; ▼ At Completion of Drilling; ⧗ After Drilling | D = Split Spoon Sample; U = Thin Walled Tube Sample; R = Rock Core Sample; V = Field Vane Shear | Pen. = Penetration Length; Rec. = Recovery Length; bpf = Blows per Foot; mpf = Minute per Foot | WOR = Weight of Rods; WOH = Weight of Hammer; RQD = Rock Quality Designation; PID = Photoionization Detector | S_v = Field Vane Shear Strength, kips/sq.ft.; q_u = Unconfined Compressive Strength, kips/sq.ft.; Ø = Friction Angle (Estimated); N/A = Not Applicable

Elev. (ft)	Depth (ft)	Casing Pen. (spf)	Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD	Field / Lab Test Data	Graphic Log	Sample Description & Classification	H_2S Depth	Remarks
			1D		0-2	24/14	9-29-17-14			0.4 Topsoil (Frozen to 2 feet +/-) Loose, brown silty SAND, trace gravel (Fill)		
	5		2D		2-4	24/8	8-4-5-4					
			3D		5-7	24/24	2-4-6-8	q_u=6.7 ksf		5.0 Very stiff, brown and gray silty CLAY		
	10		4D		10-12	24/24	3-4-5-5	q_u=4.5 ksf		10.0 Very stiff, brown silty CLAY		
	15		5D		15-17	24/10	2-3-15-22			...becoming gray		
										16.0 Dense, gray silty gravelly SAND (Glacial Till)		
										Auger Refusal at 19.0 feet Probable Bedrock		

Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

BORING NO.: B-22-18

BORING LOG — B-22-22

CLIENT: The University of Maine System
PROJECT: Proposed Athletic Facilities Improvements
LOCATION: University of Maine, Orono, ME

BORING NO.: B-22-22 | SHEET: 1 of 1 | PROJECT NO. 21-1832 | DATE START: 1/25/2022 | DATE FINISH: 1/25/2022

Drilling Information
LOCATION: See Exploration Location Plan | ELEVATION (FT): N/A | TOTAL DEPTH (FT): 25.3 | LOGGED BY: Camden Clark
DRILLING CO.: S. W. Cole Explorations, LLC | DRILLER: Kevin Hanscom | DRILLING METHOD: Hollow Stem Auger
RIG TYPE: Track Mounted Diedrich D-50 | AUGER ID/OD: 2 1/4 in / 5 5/8 in | SAMPLER: Standard Split-Spoon
HAMMER TYPE: Automatic | HAMMER WEIGHT (lbs): 140 | CASING ID/OD: N/A /N/A | CORE BARREL: N/A
HAMMER EFFICIENCY FACTOR: 0.995 | HAMMER DROP (inch): 30
WATER LEVEL DEPTHS (ft): ▽ 23.1 ft. Free water observed at 23.1 feet +/-
GENERAL NOTES:

KEY TO NOTES AND SYMBOLS: Water Level: ▽ At time of Drilling; ▼ At Completion of Drilling; ⧗ After Drilling | D = Split Spoon Sample; U = Thin Walled Tube Sample; R = Rock Core Sample; V = Field Vane Shear | Pen. = Penetration Length; Rec. = Recovery Length; bpf = Blows per Foot; mpf = Minute per Foot | WOR = Weight of Rods; WOH = Weight of Hammer; RQD = Rock Quality Designation; PID = Photoionization Detector | S_v = Field Vane Shear Strength, kips/sq.ft.; q_u = Unconfined Compressive Strength, kips/sq.ft.; Ø = Friction Angle (Estimated); N/A = Not Applicable

Elev. (ft)	Depth (ft)	Casing Pen. (spf)	Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD	Field / Lab Test Data	Graphic Log	Sample Description & Classification	H_2S Depth	Remarks
			1D		1-3	24/18	7-6-4-6			0.3 Topsoil (Frozen to 1 foot +/-) Loose, brown SAND and SILT, trace gravel (Fill)		
			2D		3-5	24/18	4-6-6-5					
	5		3D		5-7	24/16	3-5-4-3					
										8.0 Very stiff, brown and gray silty CLAY		
	10		4D		10-12	24/18	3-3-5-6	q_u=6.8 ksf				
	15		5D		15-17	24/24	3-4-5-5	q_u=5.6 ksf		15.0 Very Stiff, brown silty CLAY		
										17.9 Very dense, brown silty gravelly SAND (Glacial Till)		
	20		6D		20-22	24/18	15-33-33-31					
	25		7D		25-25.3	4/3	50/4"			Auger Refusal at 25.3 feet Probable Bedrock		

Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

BORING NO.: B-22-22

BORING LOG — B-22-101

CLIENT: The University of Maine System
PROJECT: Proposed Athletic Facilities Improvements
LOCATION: University of Maine, Orono, ME

BORING NO.: B-22-101 | SHEET: 1 of 1 | PROJECT NO. 21-1832 | DATE START: 1/26/2022 | DATE FINISH: 1/26/2022

Drilling Information
LOCATION: See Exploration Location Plan | ELEVATION (FT): N/A | TOTAL DEPTH (FT): 22.0 | LOGGED BY: Camden Clark
DRILLING CO.: S. W. Cole Explorations, LLC | DRILLER: Kevin Hanscom | DRILLING METHOD: Hollow Stem Auger
RIG TYPE: Track Mounted Diedrich D-50 | AUGER ID/OD: 2 1/4 in / 5 5/8 in | SAMPLER: Standard Split-Spoon
HAMMER TYPE: Automatic | HAMMER WEIGHT (lbs): 140 | CASING ID/OD: N/A /N/A | CORE BARREL: N/A
HAMMER EFFICIENCY FACTOR: 0.995 | HAMMER DROP (inch): 30
WATER LEVEL DEPTHS (ft): ▽ 11.5 ft. Free water observed at 11.5 feet +/-
GENERAL NOTES:

KEY TO NOTES AND SYMBOLS: Water Level: ▽ At time of Drilling; ▼ At Completion of Drilling; ⧗ After Drilling | D = Split Spoon Sample; U = Thin Walled Tube Sample; R = Rock Core Sample; V = Field Vane Shear | Pen. = Penetration Length; Rec. = Recovery Length; bpf = Blows per Foot; mpf = Minute per Foot | WOR = Weight of Rods; WOH = Weight of Hammer; RQD = Rock Quality Designation; PID = Photoionization Detector | S_v = Field Vane Shear Strength, kips/sq.ft.; q_u = Unconfined Compressive Strength, kips/sq.ft.; Ø = Friction Angle (Estimated); N/A = Not Applicable

Elev. (ft)	Depth (ft)	Casing Pen. (spf)	Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD	Field / Lab Test Data	Graphic Log	Sample Description & Classification	H_2S Depth	Remarks
			1D		0-2	24/6	6-2-7-7			0.3 Topsoil Loose, brown silty SAND (Fill)		
			2D		2-4	24/10	4-4-5-4					
	5		3D		5-7	24/24	3-6-8-8	q_u=7.6 ksf		5.0 Very stiff, brown and gray silty CLAY	▽	
	10		4D		10-12	24/24	3-3-4-4	q_u=3.4 ksf				
	15		5D		15-17	24/24	2-2-2-3	q_u=2 ksf		15.0 Stiff, gray silty CLAY		
										19.0 Very dense, gray SAND, some silt and gravel (Glacial Till)		
	20		6D		20-22	24/18	18-30-25-19					
										Bottom of Exploration at 22.0 feet		

Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

BORING NO.: B-22-101

BORING LOG — B-22-102

CLIENT: The University of Maine System
PROJECT: Proposed Athletic Facilities Improvements
LOCATION: University of Maine, Orono, ME

BORING NO.: B-22-102 | SHEET: 1 of 1 | PROJECT NO. 21-1832 | DATE START: 1/26/2022 | DATE FINISH: 1/26/2022

Drilling Information
LOCATION: See Exploration Location Plan | ELEVATION (FT): N/A | TOTAL DEPTH (FT): 7.2 | LOGGED BY: Camden Clark
DRILLING CO.: S. W. Cole Explorations, LLC | DRILLER: Kevin Hanscom | DRILLING METHOD: Hollow Stem Auger
RIG TYPE: Track Mounted Diedrich D-50 | AUGER ID/OD: 2 1/4 in / 5 5/8 in | SAMPLER: Standard Split-Spoon
HAMMER TYPE: Automatic | HAMMER WEIGHT (lbs): 140 | CASING ID/OD: N/A /N/A | CORE BARREL: N/A
HAMMER EFFICIENCY FACTOR: 0.995 | HAMMER DROP (inch): 30
WATER LEVEL DEPTHS (ft): Soils wet below 5 feet +/-
GENERAL NOTES:

KEY TO NOTES AND SYMBOLS: Water Level: ▽ At time of Drilling; ▼ At Completion of Drilling; ⧗ After Drilling | D = Split Spoon Sample; U = Thin Walled Tube Sample; R = Rock Core Sample; V = Field Vane Shear | Pen. = Penetration Length; Rec. = Recovery Length; bpf = Blows per Foot; mpf = Minute per Foot | WOR = Weight of Rods; WOH = Weight of Hammer; RQD = Rock Quality Designation; PID = Photoionization Detector | S_v = Field Vane Shear Strength, kips/sq.ft.; q_u = Unconfined Compressive Strength, kips/sq.ft.; Ø = Friction Angle (Estimated); N/A = Not Applicable

Elev. (ft)	Depth (ft)	Casing Pen. (spf)	Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD	Field / Lab Test Data	Graphic Log	Sample Description & Classification	H_2S Depth	Remarks
			1D		0-2	24/18	17-19-24-15			0.3 Topsoil (Frozen to 2 feet +/-) Medium dense, brown silty SAND, trace gravel		
			2D		2-4	24/20	9-8-6-7	q_u=6.7 ksf		3.0 Very stiff, brown and gray silty CLAY		
	5		3D		5-6.8	21/20	5-7-8-50/3"	q_u=8 ksf		6.5 Probable Weathered Bedrock		
										Auger Refusal at 7.2 feet Probable Bedrock		

Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

BORING NO.: B-22-102

BORING LOG — B-22-103

CLIENT: The University of Maine System
PROJECT: Proposed Athletic Facilities Improvements
LOCATION: University of Maine, Orono, ME

BORING NO.: B-22-103 | SHEET: 1 of 1 | PROJECT NO. 21-1832 | DATE START: 1/26/2022 | DATE FINISH: 1/26/2022

Drilling Information
LOCATION: See Exploration Location Plan | ELEVATION (FT): N/A | TOTAL DEPTH (FT): 15.0 | LOGGED BY: Camden Clark
DRILLING CO.: S. W. Cole Explorations, LLC | DRILLER: Kevin Hanscom | DRILLING METHOD: Hollow Stem Auger
RIG TYPE: Track Mounted Diedrich D-50 | AUGER ID/OD: 2 1/4 in / 5 5/8 in | SAMPLER: Standard Split-Spoon
HAMMER TYPE: Automatic | HAMMER WEIGHT (lbs): 140 | CASING ID/OD: N/A /N/A | CORE BARREL: N/A
HAMMER EFFICIENCY FACTOR: 0.995 | HAMMER DROP (inch): 30
WATER LEVEL DEPTHS (ft): Soils wet below 10 feet +/-
GENERAL NOTES:

KEY TO NOTES AND SYMBOLS: Water Level: ▽ At time of Drilling; ▼ At Completion of Drilling; ⧗ After Drilling | D = Split Spoon Sample; U = Thin Walled Tube Sample; R = Rock Core Sample; V = Field Vane Shear | Pen. = Penetration Length; Rec. = Recovery Length; bpf = Blows per Foot; mpf = Minute per Foot | WOR = Weight of Rods; WOH = Weight of Hammer; RQD = Rock Quality Designation; PID = Photoionization Detector | S_v = Field Vane Shear Strength, kips/sq.ft.; q_u = Unconfined Compressive Strength, kips/sq.ft.; Ø = Friction Angle (Estimated); N/A = Not Applicable

Elev. (ft)	Depth (ft)	Casing Pen. (spf)	Sample No.	Type	Depth (ft)	Pen./ Rec. (in)	Blow Count or RQD	Field / Lab Test Data	Graphic Log	Sample Description & Classification	H_2S Depth	Remarks
			1D		1-3	24/16	6-6-6-6			0.3 Topsoil (Frozen to 1 foot +/-) Medium dense, brown silty SAND, trace gravel		
								q_u=6.8 ksf		2.0 Very stiff, brown silty CLAY		
			2D		3-5	24/24	5-7-9-9	q_u=5.6 ksf				
	5		3D		5-7	24/24	4-5-5-5	q_u=4 ksf				
										7.8 Medium dense, brown SAND and SILT, some gravel (Glacial Till)		
	10		4D		10-12	24/18	7-7-9-9					
	15									Auger Refusal at 15.0 feet Probable Bedrock		

Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

BORING NO.: B-22-103

DRAFT

THIS INFORMATION IS NOT PART OF THE CONTRACT DOCUMENTS AND IS FOR INFORMATIONAL PURPOSES ONLY.

REV.	DESCRIPTION	DATE
0	ISSUED FOR BID	18 FEB 2022

WBRC ARCHITECTS • ENGINEERS
WWW.WBRCAE.COM
BANGOR, MAINE 207-947-4321
PORTLAND, MAINE 207-228-4321
SARASOTA, FLORIDA 941-371-2183

UNIVERSITY OF MAINE, FIELD HOCKEY

PROJECT:

SITE BORING LOGS

SHEET TITLE:

WBRC CAD FILE:	10088015-C601.DWG
PROJECT No.	10088.033
SCALE:	NONE
PROJECT MANAGER:	KCK
DRAWN BY:	KRB
CHECKED BY:	MAG

GRAPHIC SCALE: 0" 1"
SHEET No. C604

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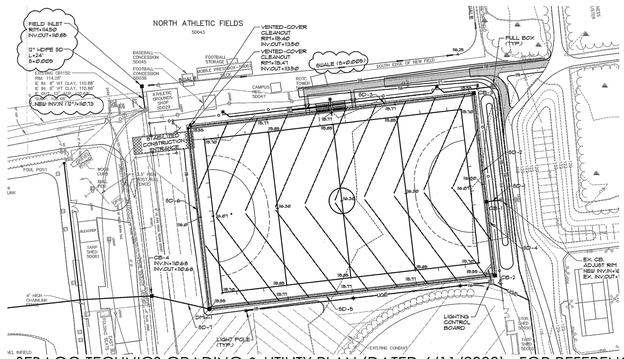
Feb 18, 2022 - 3:37pm
T:\02 Projects\10001-10500\10088.033 IM Athletics - Field Hockey\2DES\Dwgs\Site\10088015-C601.dwg brianhanlon



1 SEBAGO TECHNICS GRADING & UTILITY PLAN (DATED 6/11/2008) - FOR REFERENCE

NOT TO SCALE

REMOVE AND DISPOSE OF EXISTING 12" HDPE COLLECTOR PIPE FOR ENTIRE SIDELINE

REMOVE AND DISPOSE OF EXISTING FIELD HOCKEY PRESS BOX STRUCTURE

RESET EXISTING SPORTS LIGHT POLE AND BASE

REMOVE AND DISPOSE OF EXISTING WATER LINE AROUND PERIMETER OF EXISTING FIELD, TYPICAL

PROPOSED PERIMETER OF NEW FIELD (REFER TO LF101) SHOWN FOR DEMOLITION REFERENCE

REMOVE AND DISPOSE OF EXISTING FLAT PANEL FIELD DRAINS TO LIMIT OF NEW FIELD COLLECTOR PIPES; REFER TO ATHLETIC FIELD DRAINAGE AND UTILITY PLAN (LF301) FOR REFERENCE

REMOVE AND DISPOSE OF EXISTING IRRIGATION HEADS AND ASSOCIATED CONNECTIONS AT FIELD, TYPICAL FOR (7); REFER TO IRRIGATION PLANS FOR FURTHER INFORMATION

REFER TO CIVIL REMOVALS AND SITE UTILITIES PLANS FOR NEW WATER CONNECTION AT EXISTING PUMP TO REMAIN

REFER TO IRRIGATION PLAN(S) FOR IRRIGATION REMOVAL/CONNECTIONS AT EXISTING IRRIGATION PUMP

REMOVE AND DISPOSE OF EXISTING 12" HDPE COLLECTOR PIPE FOR ENTIRE END LINE

REMOVE AND DISPOSE OF EXISTING CONCRETE SLIP FORM TURF ANCHOR AT ENTIRE FIELD EDGE

REMOVE AND DISPOSE OF EXISTING CRUSHED STONE TRENCH, TYPICAL FOR PERIMETER OF FIELD, STRIP AND STOCKPILE EXISTING TOPSOIL TO EXTENT REQUIRED FOR WORK

EXISTING DRAIN AND STRUCTURES TO REMAIN AND BE PROTECTED

REMOVE AND DISPOSE OF EXISTING NYLON CARPET AND EXISTING ELASTIC ELAYER - ASSUME 35MM THICKNESS

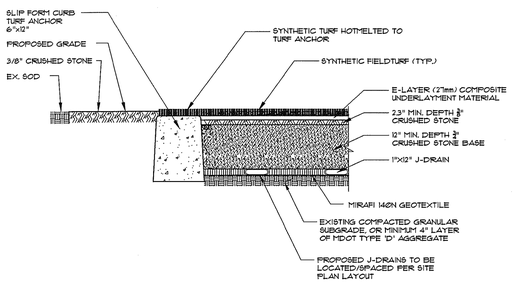
ALL EXISTING UNDERDRAINS AND LATERALS TO REMAIN AND BE PROTECTED EXCEPT FOR AREAS SHOWN ON PLAN OUTSIDE OF PROPOSED FIELD AREAS

EXISTING DRAIN LINE AND STRUCTURES TO REMAIN AND BE PROTECTED

REMOVE AND DISPOSE OF EXISTING SCOREBOARD; REFER TO ELECTRICAL PLANS ELECTRICAL DEMO

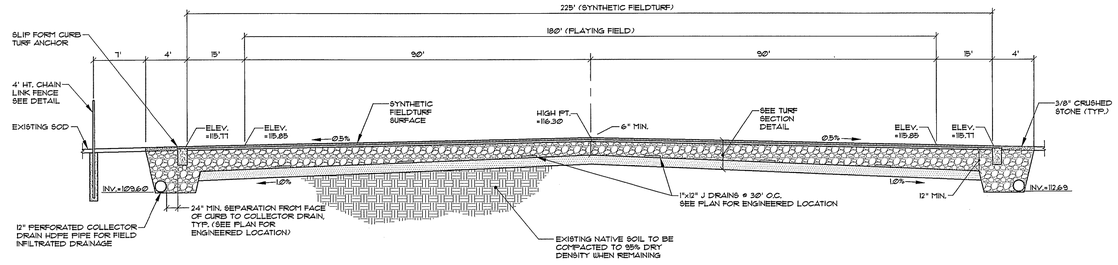
ALL SPORTS LIGHT POLES TO REMAIN AND BE PROTECTED AS PART OF FIELD HOCKEY PROJECT; REFER TO ELECTRICAL PLANS FOR ANY ADJUSTMENTS TO CONDUIT RUNS/WIRING

REMOVE AND DISPOSE OF EXISTING BLEACHERS



2 SEBAGO TECHNICS EXISTING TURF DETAIL (DATED 6/11/2008) - FOR REFERENCE

NOT TO SCALE



3 SEBAGO TECHNICS EXISTING FIELD CROSS SECTION (DATED 6/11/2008) - FOR REFERENCE

NOT TO SCALE

REMOVALS LEGEND

- MATCHLINE
- CONSTRUCTION ACCESS
- SAWCUT LINE
- REMOVE AND DISPOSE OF FENCING/NETTING
- REMOVE AND DISPOSE OF EXISTING UTILITY
- REMOVE AND DISPOSE OF STRUCTURE — X
- REMOVE AND DISPOSE OF EXISTING SYNTHETIC TURF CARPET
- REMOVE AND DISPOSE OF CRUSHED STONE

REMOVALS NOTES

1. EXISTING CONDITIONS INFORMATION IS REPRODUCED FROM THE UNIVERSITY OF MAINE CAMPUS MAP AND LIDAR INFORMATION OBTAINED FROM THE MAINE OFFICE OF GIS.
2. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS IN THE FIELD AND REPORT ANY DISCREPANCIES BETWEEN PLANS, SPECIFICATIONS, AND ACTUAL CONDITIONS TO THE LANDSCAPE ARCHITECT/CIVIL ENGINEER FOR CLARIFICATION AND RESOLUTION PRIOR TO STARTING WORK.
3. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING CONDITIONS TO REMAIN THAT ARE DUE TO CONTRACTOR OPERATIONS.
4. ALL ITEMS TO BE REMOVED THAT ARE NOT STOCKPILED FOR LATER REUSE ON THE PROJECT OR FOR DELIVERY TO THE OWNER SHALL BE LEGALLY DISPOSED OF OFF SITE BY THE CONTRACTOR.
5. THE LOCATIONS OF UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED ON THE SURVEY REFERENCED. THE CONTRACTOR SHALL CONTACT DIGSAFE AND THE PROPER LOCAL AUTHORITIES OR RESPECTIVE UTILITY COMPANIES TO CONFIRM THE LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. ANY DAMAGE DUE TO FAILURE OF THE CONTRACTOR TO CONTACT THE PROPER AUTHORITIES SHALL BE BORNE BY THE CONTRACTOR.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS EFFORTS OF THE DEMOLITION WITH ALL TRADES.
7. THE CONTRACTOR SHALL COORDINATE ALL ADJUSTMENTS OR ABANDONMENT OF UTILITIES WITH THE RESPECTIVE UTILITY COMPANY.
8. THE CONTRACTOR SHALL MAINTAIN OR ADJUST TO NEW FINISH GRADE (AS NECESSARY) ALL UTILITY AND SITE STRUCTURES SUCH AS MANHOLES, CATCH BASINS, ETC. FROM MAINTAINED UTILITY AND SITE SYSTEMS UNLESS OTHERWISE NOTED OR DIRECTED BY THE LANDSCAPE ARCHITECT.
9. THE CONTRACTOR SHALL INSTALL CONSTRUCTION FENCING PER THE PLANS AND SPECIFICATIONS. CONTRACTOR MUST TAKE APPROPRIATE MEASURES TO MAINTAIN A SECURE SITE THROUGHOUT THE PROJECT.
10. CONTRACTOR SHALL INSTALL ALL EROSION CONTROL MEASURES AROUND THE OUTSIDE PERIMETER (LIMIT OF WORK) PRIOR TO COMMENCING DEMOLITION AND EARTHWORK OPERATIONS.
11. CONTRACTOR SHALL CONFIRM BENCHMARKS AND NORTHINGS AND EASTINGS IN FIELD PRIOR TO DEMOLITION.

CONTACT DIGSAFE:
UNDERGROUND UTILITIES SHOWN ON THE PLAN ARE COMPILED FROM PLANS AND FIELD SURVEY. UTILITY LOCATIONS SHOULD BE CONSIDERED APPROXIMATE ONLY. DIGSAFE AND OR THE OTHER RESPECTIVE UTILITY COMPANIES SHALL BE CONTACTED 72 BUSINESS HOURS IN ADVANCE OF CONSTRUCTION OPERATIONS. PHONE DIGSAFE 1-888-344-7233.

0' 10' 20' 40' 60'

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REV.	DESCRIPTION	DATE
0	ISSUED FOR BID	18 FEB 2022

MEGAN BUCZYNSKI No. 13907 REGISTERED LANDSCAPE ARCHITECT STATE OF MAINE
18FEB22
MEGAN BUCZYNSKI No. 13778 REGISTERED PROFESSIONAL ENGINEER STATE OF MAINE
02/18/2022

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SARASOTA, FLORIDA 941-556-0757

University of Maine
Field Hockey Complex
PROJECT: 168 College Ave, Orono, Maine 04469

Removals Plan
SHEET TITLE:

CAD FILE:	21049-L002-SP_PLAN.DWG
PROJECT No:	21049.00
SCALE:	1"=20'-0"
PROJECT MANAGER:	MEB
DRAWN BY:	OCM
CHECKED BY:	EPM
SHEET No:	LF001

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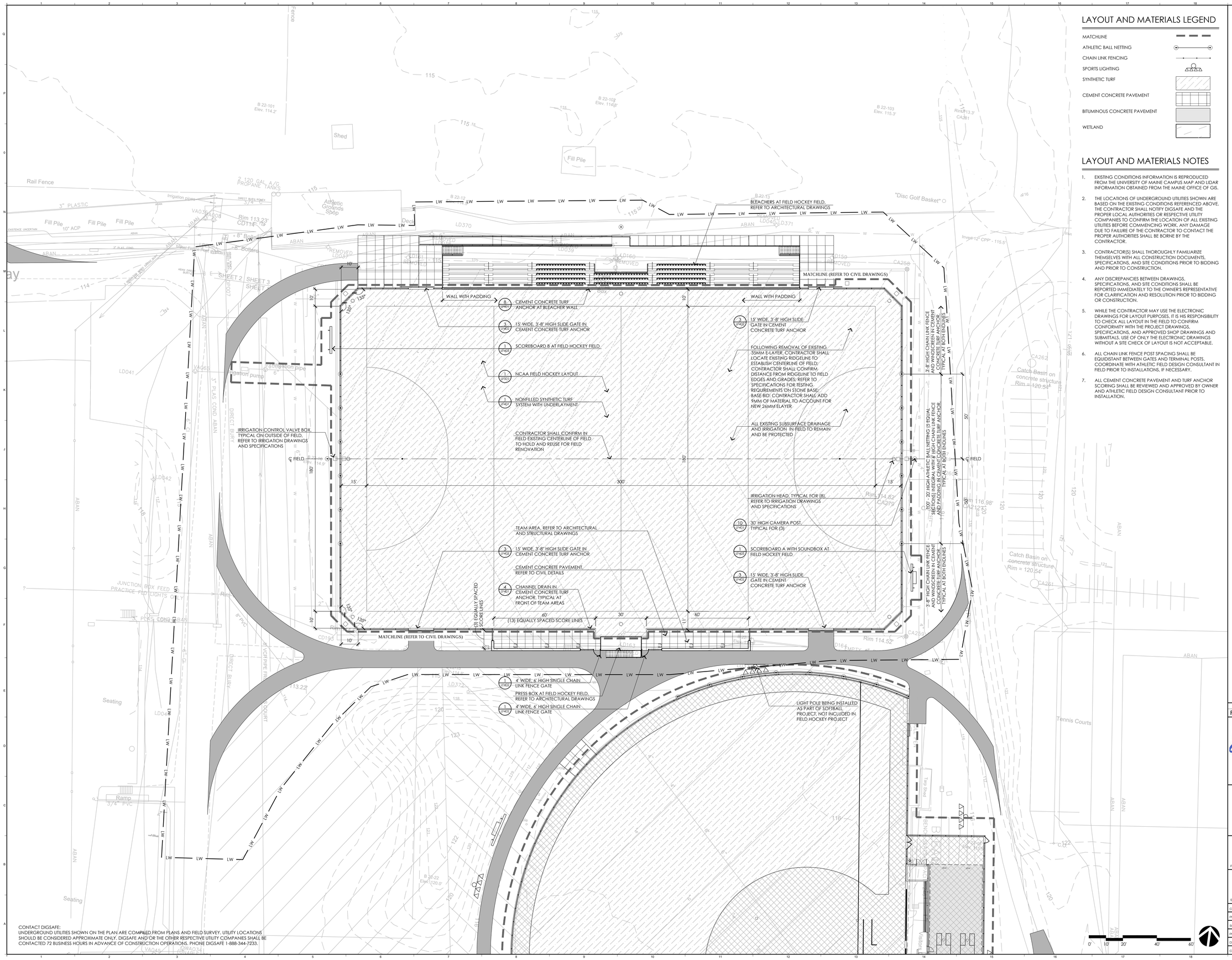

LAYOUT AND MATERIALS LEGEND

- MATCHLINE
- ATHLETIC BALL NETTING
- CHAIN LINK FENCING
- SPORTS LIGHTING
- SYNTHETIC TURF
- CEMENT CONCRETE PAVEMENT
- BITUMINOUS CONCRETE PAVEMENT
- WETLAND

LAYOUT AND MATERIALS NOTES

1. EXISTING CONDITIONS INFORMATION IS REPRODUCED FROM THE UNIVERSITY OF MAINE CAMPUS MAP AND LIDAR INFORMATION OBTAINED FROM THE MAINE OFFICE OF GIS.
2. THE LOCATIONS OF UNDERGROUND UTILITIES SHOWN ARE BASED ON THE EXISTING CONDITIONS REFERENCED ABOVE. THE CONTRACTOR SHALL NOTIFY DIGSAFE AND THE PROPER LOCAL AUTHORITIES OR RESPECTIVE UTILITY COMPANIES TO CONFIRM THE LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. ANY DAMAGE DUE TO FAILURE OF THE CONTRACTOR TO CONTACT THE PROPER AUTHORITIES SHALL BE BORNE BY THE CONTRACTOR.
3. CONTRACTOR(S) SHALL THOROUGHLY FAMILIARIZE THEMSELVES WITH ALL CONSTRUCTION DOCUMENTS, SPECIFICATIONS, AND SITE CONDITIONS PRIOR TO BIDDING AND PRIOR TO CONSTRUCTION.
4. ANY DISCREPANCIES BETWEEN DRAWINGS, SPECIFICATIONS, AND SITE CONDITIONS SHALL BE REPORTED IMMEDIATELY TO THE OWNER'S REPRESENTATIVE FOR CLARIFICATION AND RESOLUTION PRIOR TO BIDDING OR CONSTRUCTION.
5. WHILE THE CONTRACTOR MAY USE THE ELECTRONIC DRAWINGS FOR LAYOUT PURPOSES, IT IS HIS RESPONSIBILITY TO CHECK ALL LAYOUT IN THE FIELD TO CONFIRM CONFORMITY WITH THE PROJECT DRAWINGS, SPECIFICATIONS, AND APPROVED SHOP DRAWINGS AND SUBMITTALS. USE OF ONLY THE ELECTRONIC DRAWINGS WITHOUT A SITE CHECK OF LAYOUT IS NOT ACCEPTABLE.
6. ALL CHAIN LINK FENCE POST SPACING SHALL BE EQUIDISTANT BETWEEN GATES AND TERMINAL POSTS. COORDINATE WITH ATHLETIC FIELD DESIGN CONSULTANT IN FIELD PRIOR TO INSTALLATIONS, IF NECESSARY.
7. ALL CEMENT CONCRETE PAVEMENT AND TURF ANCHOR SCORING SHALL BE REVIEWED AND APPROVED BY OWNER AND ATHLETIC FIELD DESIGN CONSULTANT PRIOR TO INSTALLATION.

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MEGAN BUCZYNSKI No. 13778 REGISTERED PROFESSIONAL ENGINEER STATE OF MAINE
02/18/2022

CHRISTOPHER PAUL MORRILL 3907 REGISTERED LANDSCAPE ARCHITECT STATE OF MAINE
18FEB22

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SARASOTA, FLORIDA 941-556-0757

University of Maine
Field Hockey Complex

PROJECT: 168 College Ave, Orono, Maine 04469

Layout & Materials Plan

SHEET TITLE:	
CAD FILE:	21049-L102-LM_PLAN_2.DWG
PROJECT No:	21049.00
SCALE:	1"=20'-0"
PROJECT MANAGER:	MEB
DRAWN BY:	BPG
CHECKED BY:	EPM
SHEET No:	LF101

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GRADING LEGEND

MATCHLINE	
WETLAND	
EXISTING 1 FOOT CONTOUR	
PROPOSED 1 FOOT CONTOUR	
RIDGELINE	
PROPOSED SLOPE DIRECTION	
EXISTING SPOT GRADE	*FFE: 220.39*
PROPOSED SPOT GRADE	+150.08

GRADING NOTES

1. EXISTING CONDITIONS INFORMATION IS REPRODUCED FROM THE UNIVERSITY OF MAINE CAMPUS MAP AND LIDAR INFORMATION OBTAINED FROM THE MAINE OFFICE OF GIS.
2. THE LOCATIONS OF UNDERGROUND UTILITIES SHOWN ARE BASED ON THE SURVEY REFERENCED ABOVE. THE CONTRACTOR SHALL NOTIFY DIGSAFE AND THE PROPER LOCAL AUTHORITIES OR RESPECTIVE UTILITY COMPANIES TO CONFIRM THE LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. ANY DAMAGE DUE TO FAILURE OF THE CONTRACTOR TO CONTACT THE PROPER AUTHORITIES SHALL BE BORNE BY THE CONTRACTOR.
3. CONTRACTOR SHALL VERIFY EXISTING GRADES AND NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES.
4. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE OWNER'S REPRESENTATIVE FOR RESOLUTION OF THE CONFLICT.
5. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF ALL ELECTRIC, TELEPHONE, AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANY.
6. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION, AT THE CONTRACTOR'S EXPENSE.
7. PROTECT AND MAINTAIN EXISTING ON-SITE DRAINAGE STRUCTURES AND PIPES UNLESS OTHERWISE NOTED, REFER TO UTILITY PLANS.
8. WHERE PROPOSED GRADES MEET EXISTING GRADES, CONTRACTOR SHALL BLEND GRADES TO PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING AND NEW WORK. PONDING AT TRANSITION AREAS WILL NOT BE ALLOWED.
9. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL BUILDING FOUNDATIONS, STRUCTURES AND PLANTING BEDS.
10. CONTRACTOR SHALL VERIFY EXISTING GRADES AND NOTIFY ATHLETIC FIELD DESIGN CONSULTANT OF ANY DISCREPANCIES.

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RIDGELINE ELEVATION 116.58
FLAT RIDGE, ENSURE SLOPE BREAKS ARE ROUNDED
RIDGELINE ELEVATION 116.58

NOTE:
PER THE SEBAGO TECHNICS CONSTRUCTION PLAN [DATED 6/17/2008] THE EXISTING FIELD HAS A TURTLE BACK GRADING SCHEME, GRADED AT 0.5%. THE INTENT OF THE PROPOSED GRADING IS TO EXTEND THE FIELD RIDGELINE TO THE EDGE OF THE TURF AND THEN BUILD ON TOP OF THE EXISTING BASE SURFACE WITH THE PROPOSED TURF SYSTEM PROFILE. IN THE AREAS OF THE EXISTING RIDGE THE FINISH GRADE RAISES APPROXIMATELY 3.3'. IN AREAS OF THE EXTENDED RIDGELINE THE FINISH GRADE RAISES GREATER THAN 3.3' TO ACCOMODATE THE EXTENDED RIDGELINE. CONTRACTOR SHALL CONFIRM EXISTING ELEVATIONS OF THE EDGES OF THE FIELD AND PROVIDE TO OWNER'S REPRESENTATIVE TO DETERMINE IF ANY ADJUSTMENTS TO GRADES ARE REQUIRED. THIS PROJECT DOES NOT INTEND TO "CUT" ANY FIELD GRADES.

CONTACT DIGSAFE:
UNDERGROUND UTILITIES SHOWN ON THE PLAN ARE COMPILED FROM PLANS AND FIELD SURVEY. UTILITY LOCATIONS SHOULD BE CONSIDERED APPROXIMATE ONLY. DIGSAFE AND/OR THE OTHER RESPECTIVE UTILITY COMPANIES SHALL BE CONTACTED 72 BUSINESS HOURS IN ADVANCE OF CONSTRUCTION OPERATIONS. PHONE DIGSAFE 1-888-344-7233.

REV.	DESCRIPTION	DATE
0	ISSUED FOR BID	18 FEB 2022

REGISTERED LANDSCAPE ARCHITECT — STATE OF MAINE — 3907 — 18FEB22
STATE OF MAINE — MEGAN BUCZYNSKI — No. 13778 — REGISTERED PROFESSIONAL ENGINEER — 02/18/2022

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SARASOTA, FLORIDA 941-556-0757

University of Maine
Field Hockey Complex
PROJECT: 168 College Ave, Orono, Maine 04469

Grading Plan

SHEET TITLE:

CAD FILE:	21049-L201-G_PLAN.DWG
PROJECT No:	21049.00
SCALE:	1"=20'-0"
PROJECT MANAGER:	MEB
DRAWN BY:	BPG
CHECKED BY:	EPM

SHEET No: LF201

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DRAINAGE AND UTILITY LEGEND

MATCHLINE	
HDPE PERFORATED DRAIN PIPE	X" D PERF
HDPE SOLID DRAIN LINE	X" D
DRAIN CLEAN OUT	

DRAINAGE AND UTILITY NOTES

1. EXISTING CONDITIONS INFORMATION IS REPRODUCED FROM THE UNIVERSITY OF MAINE CAMPUS MAP AND LIDAR INFORMATION OBTAINED FROM THE MAINE OFFICE OF GIS.
2. PRIOR TO THE START OF ANY EXCAVATION FOR THE PROJECT, BOTH ON AND OFF THE SITE, THE CONTRACTOR SHALL NOTIFY DIGSAFE AND BE PROVIDED WITH A DIGSAFE NUMBER INDICATING THAT ALL EXISTING UTILITIES HAVE BEEN LOCATED AND MARKED.
3. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ALL UNDERGROUND UTILITIES.
4. CONTRACTOR(S) SHALL THOROUGHLY FAMILIARIZE THEMSELVES WITH ALL CONSTRUCTION DOCUMENTS, SPECIFICATIONS, AND SITE CONDITIONS PRIOR TO BIDDING AND PRIOR TO CONSTRUCTION.
5. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE OWNER'S REPRESENTATIVE FOR RESOLUTION OF THE CONFLICT.
6. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF ALL GAS, ELECTRIC, TELEPHONE, AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANIES.
7. CONTRACTOR SHALL MAINTAIN, OR ADJUST TO NEW FINISH GRADE, AS NECESSARY ALL UTILITY AND SITE STRUCTURES SUCH AS: TRAFFIC SIGN POLES, ETC., FROM MAINTAINED UTILITY AND SITE SYSTEMS, UNLESS OTHERWISE NOTED OR DIRECTED BY THE OWNER'S REPRESENTATIVE.
8. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION, AT THE CONTRACTOR'S EXPENSE.
9. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF ALL GAS, ELECTRIC, TELEPHONE AND OTHER PRIVATE UTILITIES BY THE UTILITY COMPANIES PRIOR TO ANY CONSTRUCTION.
10. PROTECT AND MAINTAIN EXISTING ON-SITE DRAINAGE STRUCTURES AND PIPES UNLESS OTHERWISE NOTED.

ATHLETIC GROUNDS SHOP AND ALL UTILITIES SUPPORTING IT SHALL REMAIN AND BE PROTECTED

REFER TO CIVIL DRAWINGS FOR ALL UTILITY INFORMATION AT BLEACHERS AND PLAZA AREAS, TYPICAL

12"D PERFORATED

INV=113.50

INV=111.97

INV=111.91

MAINTAIN EXISTING DRAIN LINE; AT OLD UNDERDRAIN CONNECTIONS CAP EXISTING CONNECTION ON FITTING RATHER THAN REPLACING PIPE SECTIONS

INV=110.47
CORE INTO EXISTING MANHOLE

INV=110.57

CONFIRM THAT EXISTING INVERT IS ~108.15 AS NOTED ON 2008 CONSTRUCTION PLAN

REFER TO IRRIGATION PLANS FOR SYSTEM CONNECTIONS AT EXISTING IRRIGATION PUMP

NOTE: THE EXISTING DRAINAGE INFRASTRUCTURE SHOWN WITHIN THE EXISTING FIELD LIMITS REFLECTS THE 2008 FIELD HOCKEY CONSTRUCTION DRAWING BY SEBAGO TECHNICS; THIS INFRASTRUCTURE IS TO REMAIN AND BE PROTECTED UNLESS OTHERWISE NOTED

NOTE: REFER TO IRRIGATION AND ELECTRICAL PLANS TO COORDINATE UTILITY LOCATIONS AT EDGES OF FIELD; IF A CONFLICT ARISES, CONTACT THE OWNER'S REPRESENTATIVE IMMEDIATELY

IRRIGATION HEADS AND VALVE BOXES, TYPICAL FOR EIGHT (8); REFER TO IRRIGATION PLANS AND DETAILS FOR ALL INFORMATION

INV=112.61

INV=112.55

CONNECT EXISTING UNDERDRAINS TO NEW PERIMETER DRAIN AT ALL LOCATIONS USING APPROPRIATE FITTINGS, TYPICAL

INV=110.95

INV=111.01

REFER TO ELECTRICAL PLANS FOR SCOREBOARD CONNECTIONS, TYPICAL

EXISTING FIELD HOCKEY LIGHT POLES TO REMAIN. REFER TO ELECTRICAL PLANS FOR ANY ADJUSTMENTS TO ELECTRICAL FEEDS, TYPICAL AT ALL POLES

REFER TO CIVIL AND ELECTRICAL DRAWINGS FOR UTILITY INFORMATION IN TEAM AREAS AND AT PRESSBOX, TYPICAL

MAINTAIN EXISTING DRAIN LINE; AND ASSOCIATED STRUCTURES; AT OLD UNDERDRAIN CONNECTIONS CAP EXISTING CONNECTION ON FITTING RATHER THAN REPLACING PIPE SECTIONS

CONTACT DIGSAFE:
UNDERGROUND UTILITIES SHOWN ON THE PLAN ARE COMPILED FROM PLANS AND FIELD SURVEY. UTILITY LOCATIONS SHOULD BE CONSIDERED APPROXIMATE ONLY. DIGSAFE AND/OR THE OTHER RESPECTIVE UTILITY COMPANIES SHALL BE CONTACTED 72 BUSINESS HOURS IN ADVANCE OF CONSTRUCTION OPERATIONS. PHONE DIGSAFE 1-888-344-7233.

0' 10' 20' 40' 60'

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REV.	DESCRIPTION	DATE
0	ISSUED FOR BID	18 FEB 2022

REGISTERED LANDSCAPE ARCHITECT — Thomas G. Hall — 3907 — STATE OF MAINE — 18FEB22

STATE OF MAINE — MEGAN BUCZYNSKI — No. 13778 — REGISTERED PROFESSIONAL ENGINEER — 02/18/2022

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University of Maine
Field Hockey Complex
PROJECT: 168 College Ave, Orono, Maine 04469

Athletic Drainage & Utilities Plan

SHEET TITLE:	
CAD FILE:	21049-L302-UT_PLAN_2.DWG
PROJECT No:	21049.00
SCALE:	1"=20'-0"
PROJECT MANAGER:	MEB
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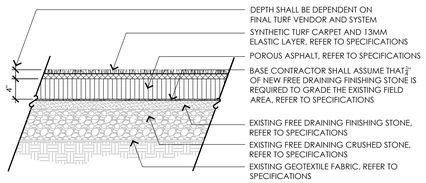
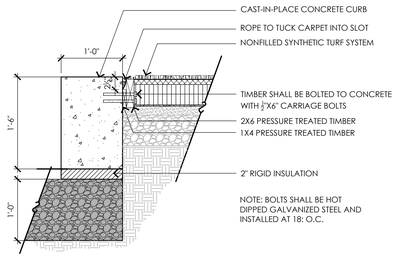


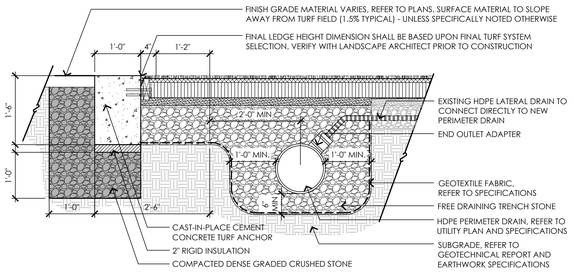
1 NONFILLED SYNTHETIC TURF SYSTEM

NOT TO SCALE



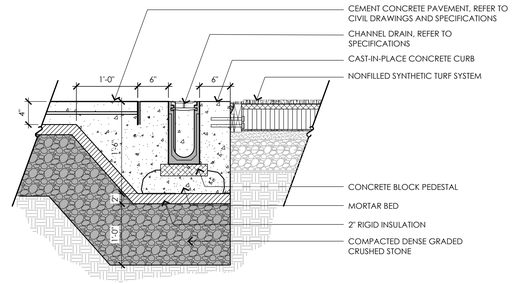
2 FIELD CONNECTION AT CONCRETE ANCHOR

NOT TO SCALE



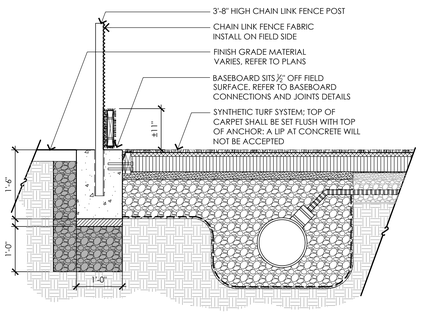
3 PERIMETER DRAINAGE

NOT TO SCALE



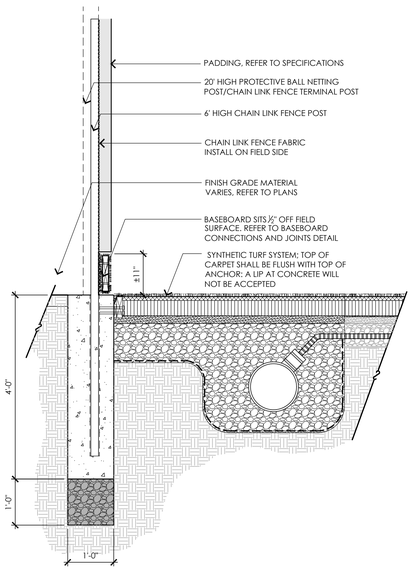
4 CHANNEL DRAIN IN CEMENT CONCRETE TURF ANCHOR

NOT TO SCALE



5 3'-8" HIGH CHAIN LINK FENCE IN CONCRETE TURF ANCHOR

NOT TO SCALE

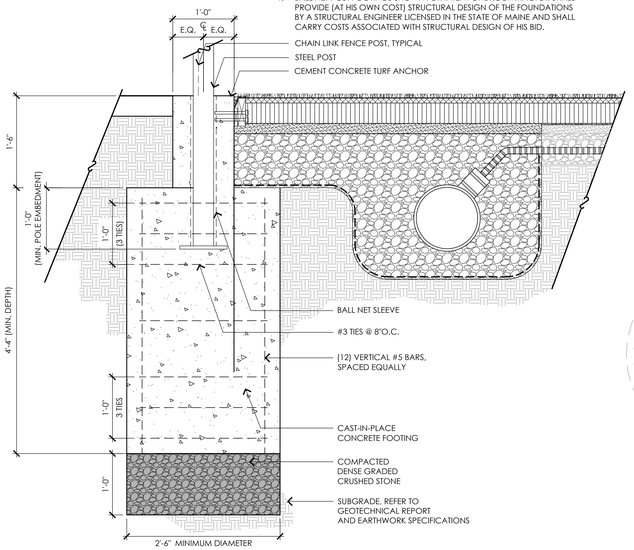


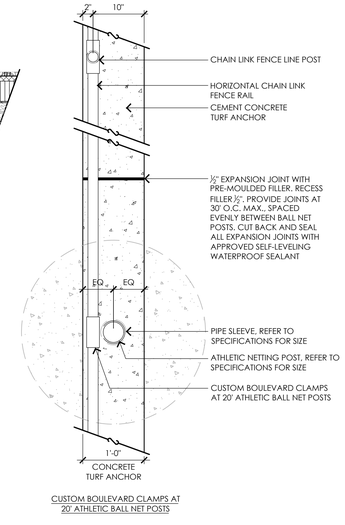
6 6' HIGH CHAIN LINK FENCE IN CONCRETE TURF ANCHOR

NOT TO SCALE

NOTES:

1. BALL NET POST FOOTINGS SHOWN FOR INTENT ONLY.CONTRACTOR SHALL PROVIDE (AT HIS OWN COST) STRUCTURAL DESIGN OF THE FOUNDATIONS BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF MAINE AND SHALL CARRY COSTS ASSOCIATED WITH STRUCTURAL DESIGN OF HIS BID.

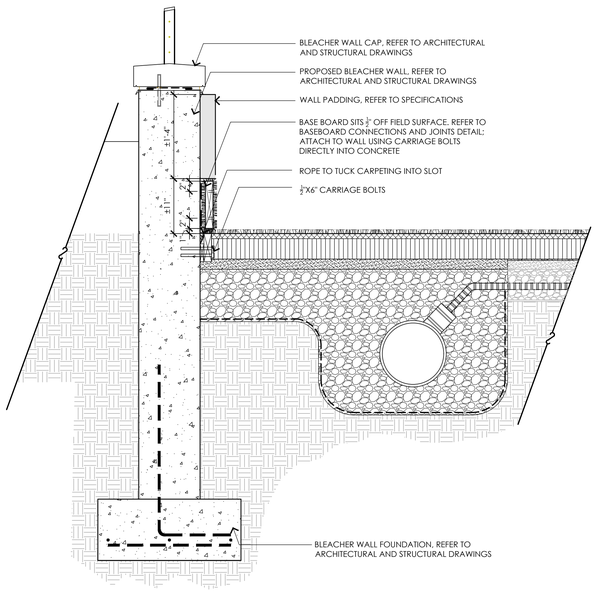




CUSTOM BOULEVARD CLAMPS AT 20' ATHLETIC BALL NET POSTS

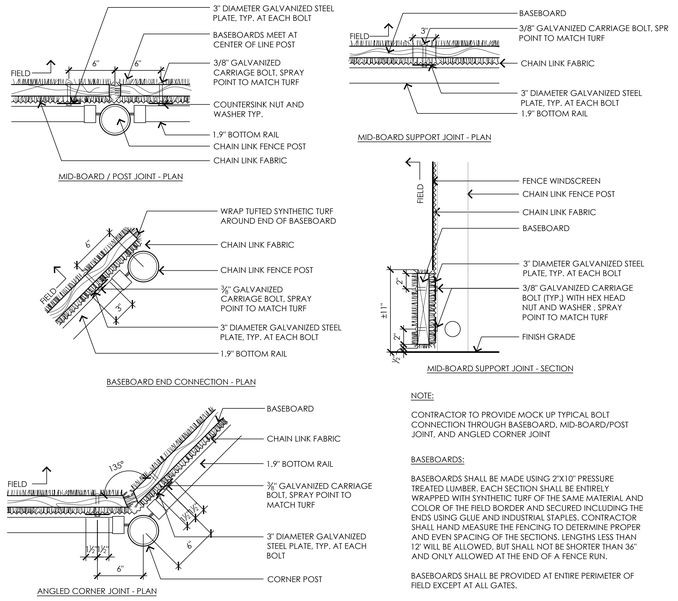
7 20' ATHLETIC BALL NETTING WITH INTEGRATED CHAIN LINK FENCE IN CONCRETE TURF ANCHOR

NOT TO SCALE



8 CEMENT TURF ANCHOR AT BLEACHER WALL

NOT TO SCALE



NOTE:

CONTRACTOR TO PROVIDE MOCK UP TYPICAL BOLT CONNECTION THROUGH BASEBOARD, MID-BOARD/POST JOINT, AND ANGLED CORNER JOINT

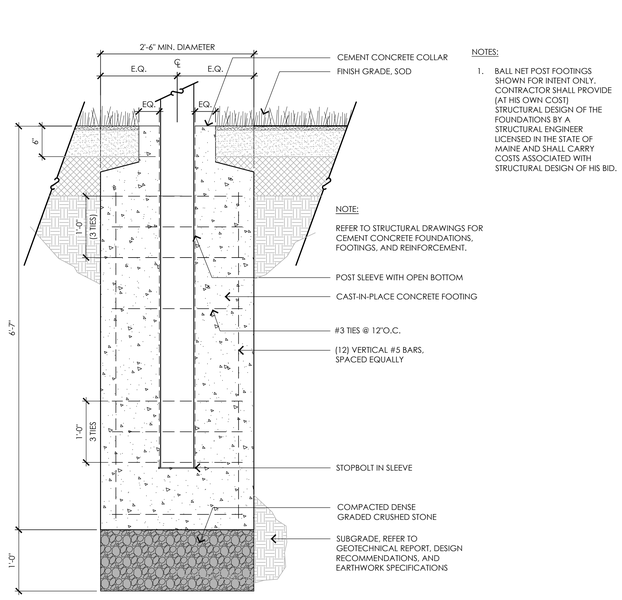
BASEBOARDS:

BASEBOARDS SHALL BE MADE USING 2"X10" PRESSURE TREATED LUMBER, EACH SECTION SHALL BE ENTIRELY WRAPPED WITH SYNTHETIC TURF OF THE SAME MATERIAL AND COLOR OF THE FIELD BORDER AND SECURED INCLUDING THE ENDS USING GLUE AND INDUSTRIAL STAPLES. CONTRACTOR SHALL HAND MEASURE THE FENCING TO DETERMINE PROPER AND EVEN SPACING OF THE SECTIONS. LENGTHS LESS THAN 12' WILL BE ALLOWED, BUT SHALL NOT BE SHORTER THAN 36" AND ONLY ALLOWED AT THE END OF A FENCE RUN.

BASEBOARDS SHALL BE PROVIDED AT ENTIRE PERIMETER OF FIELD EXCEPT AT ALL GATES.

9 BASEBOARD CONNECTIONS AND JOINTS

NOT TO SCALE



NOTES:

1. BALL NET POST FOOTINGS SHOWN FOR INTENT ONLY. CONTRACTOR SHALL PROVIDE (AT HIS OWN COST) STRUCTURAL DESIGN OF THE FOUNDATIONS BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF MAINE AND SHALL CARRY COSTS ASSOCIATED WITH STRUCTURAL DESIGN OF HIS BID.

NOTE:

REFER TO STRUCTURAL DRAWINGS FOR CEMENT CONCRETE FOUNDATIONS, FOOTINGS, AND REINFORCEMENT.

10 30' HIGH CAMERA POST OUTSIDE OF FIELD

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REGISTERED LANDSCAPE ARCHITECT 3907 STATE OF MAINE 18FEB22

STATE OF MAINE MEGAN BUCZYNSKI No. 13778 REGISTERED PROFESSIONAL ENGINEER 02/18/2022

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University of Maine
Field Hockey Complex

PROJECT: 168 College Ave, Orono, Maine 04469

Detail Sheet I

SHEET TITLE:	
CAD FILE:	21049-L401-DET_1.DWG
PROJECT No:	21049.00
SCALE:	AS NOTED
PROJECT MANAGER:	MEB
DRAWN BY:	BPG
CHECKED BY:	EPM
SHEET No:	LF401

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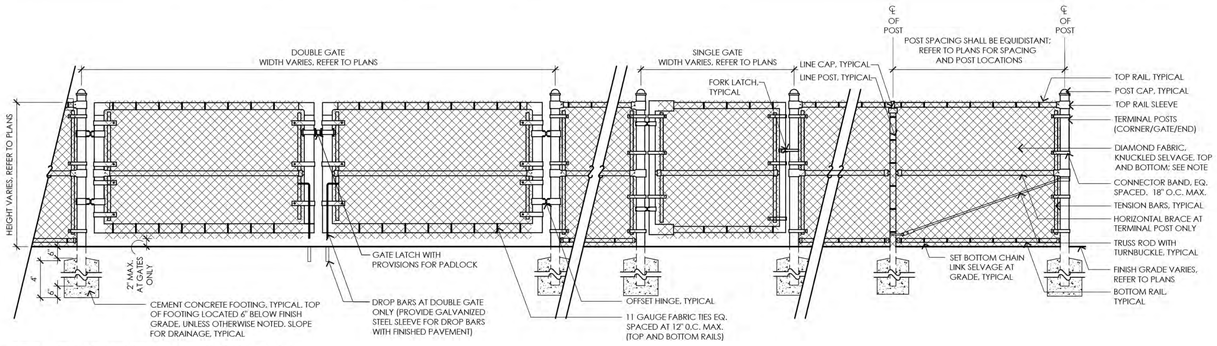


NOTES:

1. FENCE FABRIC TOP SHALL BE EVEN WITH TOP OF TOP RAIL.
2. TOP OF CONCRETE FENCE POST FOOTING TO HAVE SLOPE TO PROMOTE POSITIVE DRAINAGE.
3. GATES SHALL SWING 180º DEGREES SO THAT WHEN FULLY OPEN GATE PANELS SHALL BE PARALLEL TO CHAIN LINK FENCE.
4. REFER TO SPECIFICATIONS FOR MATERIAL GAUGE.
5. AT FENCING AT PARKING LOT WHERE FIELD SIDE HAS PADDING, FENCE SHALL BE DOUBLE HUNG WITH FABRIC ON PARKING LOT SIDE TO RECEIVE WINDSCREEN.

CONCRETE FOOTING DEPTH X WIDTH

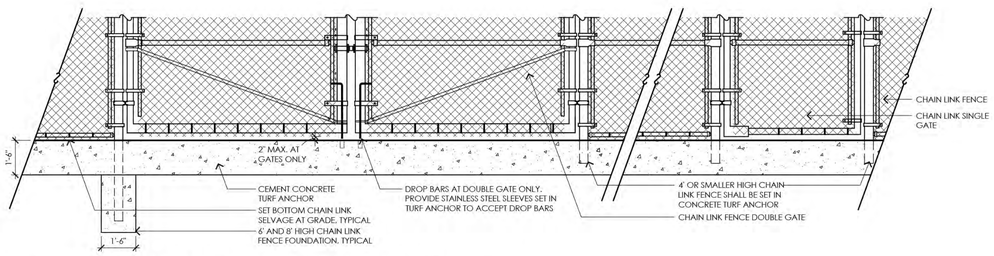
	H
TERMINAL	48"X18"
LINE	48"X15"

* NOT IN TURF ANCHOR

	H				
	3'-6"	4'-0"	6'-0"	8'-0"	10'-0"
TERMINAL POSTS	2.375	2.375	2.375	2.875	2.875
LINE POSTS	1.90	1.90	1.90	2.375	2.875
TOP RAIL	1.660	1.660	1.660	1.660	1.660
BOTTOM RAIL	1.660	1.660	1.660	1.660	1.660
CENTER RAIL	N/A	N/A	N/A	N/A	N/A
HORIZONTAL BRACE	N/A	N/A	1.660	1.660	1.660
TRUSS ROD	N/A	N/A	3/8"	5/8"	5/8"

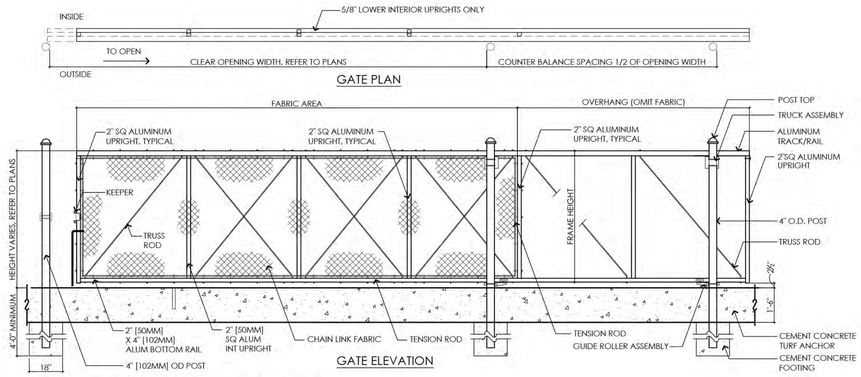
1 CHAIN LINK FENCE AND GATES

NOT TO SCALE



2 CHAIN LINK FENCE AND GATES IN CONCRETE TURF ANCHOR

NOT TO SCALE

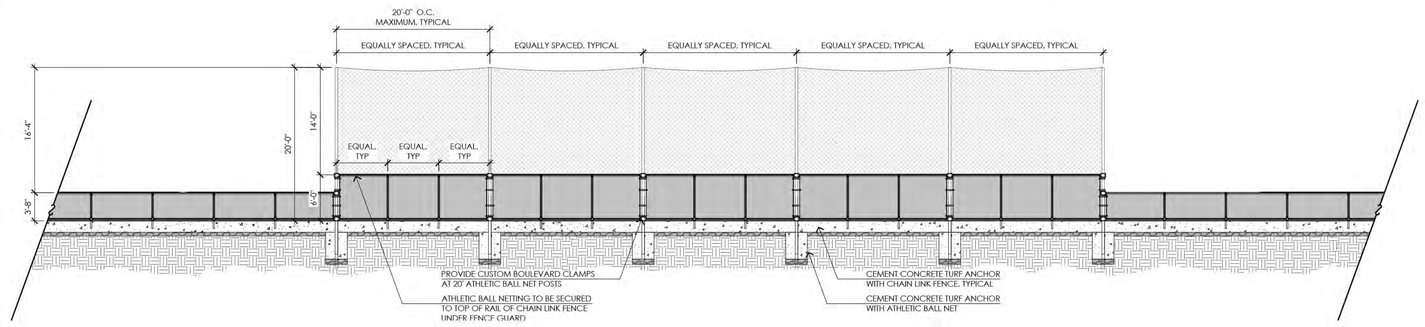


NOTES:

1. FENCE FABRIC TOP SHALL BE EVEN WITH TOP OF TOP RAIL.
2. CONTRACTOR SHALL PROVIDE STAMPED DRAWINGS OF EACH TYPE OF SLIDE GATE FOR REVIEW AND APPROVAL.
3. REFER TO CEMENT CONCRETE TURF ANCHOR DETAILS FOR CHAIN LINK FENCE POSTS SET IN CEMENT CONCRETE TURF ANCHOR.
4. REFER TO SPECIFICATIONS FOR POST, RAIL, AND FABRIC INFORMATION.
5. PROVIDE PROVISIONS FOR PAD LOCK ON ALL GATES.
6. PROVIDE PROVISIONS FOR DROP BAR AND STAINLESS STEEL DROP BAR RECEIVING SLEEVE TO ALLOW FOR GATE TO BE PARTIALLY OPEN AT 6'-0" WIDE. CONTRACTOR TO REVIEW SLEEVE LOCATION IN THE FIELD WITH THE LANDSCAPE ARCHITECT PRIOR TO INSTALL.

3 CHAIN LINK FENCE CANTILEVER SLIDE GATE SYSTEM

NOT TO SCALE



4 20' HIGH ATHLETIC BALL NETTING WITH INTEGRATED 6' CHAIN LINK FENCE AND 3'-8" CHAIN LINK FENCE IN CONCRETE TURF ANCHOR - ELEVATION

NOT TO SCALE

5 WINDSCREEN AND PADDING AT FIELD HOCKEY ENDLINES - ELEVATION

NOT TO SCALE

6 BASEBOARD AND PADDING AT SPECTATOR SEATING - ELEVATION

NOT TO SCALE

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SHEET TITLE: Detail Sheet II

CAD FILE:	21049-L402-DET_2.DWG
PROJECT No.	21049.00
SCALE:	AS NOTED
PROJECT MANAGER:	MEB
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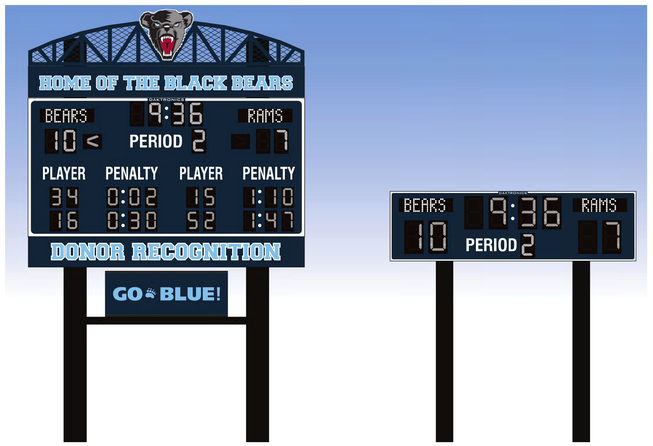

SCOREBOARD A
PRIMARY SCOREBOARD & AUDIO

SCOREBOARD B
SECONDARY SCOREBOARD

1 SCOREBOARD CONCEPTUAL RENDERING

NOT TO SCALE

NOTE:

1. THE OWNER IS PROCURING THE SCOREBOARDS AND ASSOCIATED STEEL BEAMS THROUGH A SEPARATE CONTRACT. THE GENERAL CONTRACTOR SHALL COORDINATE WITH THE SCOREBOARD VENDOR (SCOREBOARD ENTERPRISES) AND PROVIDE AND INSTALL THE CONCRETE AND REBAR FOR THE FOOTINGS, WHILE THE VENDOR ASSISTS WITH HOLDING THE STEEL IN PLACE TO ENSURE ALL INSTALLED MATERIALS ARE PLUMB AND TRUE. FOR THE PURPOSES OF THE BID, THE GENERAL CONTRACTOR SHALL ASSUME THE FOOTING SIZES AS SHOWN AND PROVIDE AND INSTALL THE CONCRETE AND REBAR CAGES APPROPRIATELY AS WELL AS COORDINATE THE NECESSARY CONDUIT AND UTILITIES AS SHOWN ON THE PLANS.
2. COLORS SHALL BE SELECTED FROM MANUFACTURER'S LIST OF STANDARD COLORS. COLORS ARE SHOWN FOR INTENT.
3. REFER TO SPECIFICATIONS FOR SCOREBOARD AND SOUND BOX PRODUCT INFORMATION AND REQUIREMENTS.

INTENTIONALLY BLANK

STRUCTURAL DESIGNS FOR CONCRETE SCOREBOARD FOOTINGS (OWNED BY CONTRACTOR) WILL BE PROVIDED TO BIDDERS AS AN ADDENDUM

2 CONCRETE SCOREBOARD FOOTING

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Detail Sheet III

SHEET TITLE:

CAD FILE:	21049-L403-DET_3.DWG
PROJECT No:	21049.00
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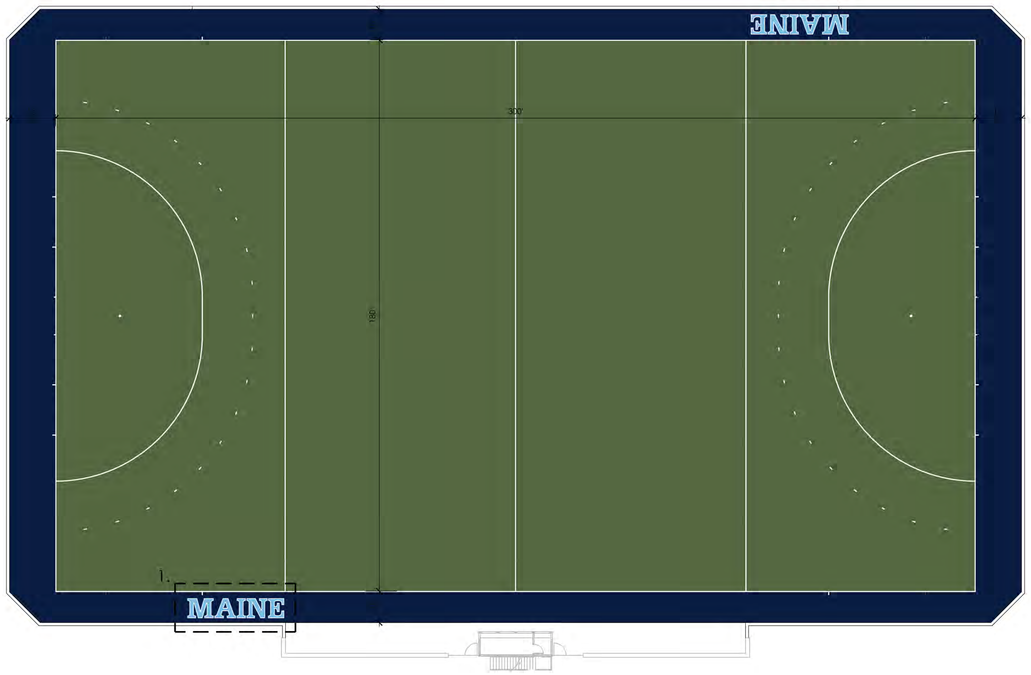


NOTE:

DRAWINGS AND DETAILS PROVIDED TO BIDDERS FOR REFERENCE ONLY. FIELD HOCKEY KNITTED NYLON CARPET AND 13MM ELASTIC LAYER HAVE BEEN PURCHASED AND WILL BE INSTALLED UNDER A SEPARATE CONTRACT DIRECTLY WITH THE OWNER. REFER TO SPECIFICATION SECTION 32 18 23.29 - NONFILLED SYNTHETIC TURF SYSTEM.

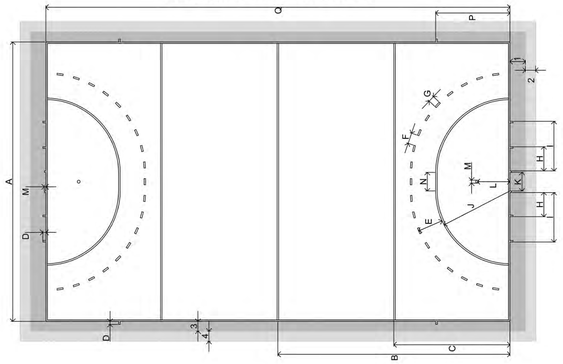
ELECTRONIC FILES FOR ALL LOGOS WILL BE PROVIDED TO THE TURF VENDOR TO PREPARE SHOP DRAWINGS AND SUBMITTALS FOR REVIEW. REFER TO DETAILS FOR DIMENSIONAL LAYOUT OF FIELDS.

FIELD LINE NOTES:

1. FIELD HOCKEY (3" WIDE WHITE LINES) 180'X300'
2. REFER TO FLL-02 FOR FIELD LINE DIMENSIONS
3. FIELD BODY SHALL BE A BLEND OF TWO (2) STANDARD GREENS; FIELD BORDER SHALL BE STANDARD BLUE
4. LOGO COLORS SHALL BE STANDARD WHITE AND CUSTOM LIGHT BLUE (PANTONE 292)

1. SIDELINE LOGO, TYPICAL FOR (2)

DIAGRAM TAKEN FROM FIH



NOTES:

1. ALL FIELD HOCKEY FIELD LINES ARE 3" WIDE AND WHITE.
2. END LINES AND SIDELINES ARE CONSIDERED IN BOUNDS.
3. TAKE MEASUREMENTS FROM CENTER OF HALFWAY LINE TO OUTSIDE OF SIDE AND END LINES.

Field Dimensions

Code	Metres	Code	Metres
A	55.00	M	0.15
B	45.70	N	3.66
C	22.90	P	14.63
D	0.30	Q	91.40
E	5.00	1	minimum 2.00
F	3.00	2	1.00
G	0.30	(1 + 2)	minimum 3.00
H*	4.975*	3	minimum 1.00
I*	9.975*	4	1.00
J	14.63	(3 + 4)	minimum 2.00
K	3.66		
L	6.475		

** Dimensions H and I are measured from the goal-post line and not from the goal-post itself; the dimensions from the goal-post are 5.00 metres and 10.00 metres respectively.*

1 NCAA/FIH FIELD HOCKEY LAYOUT

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Field Line Layout

SHEET TITLE:

CAD FILE:	21049-L502-FLL_FH.DWG
PROJECT No:	21049.00
SCALE:	AS NOTED
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SHEET No.
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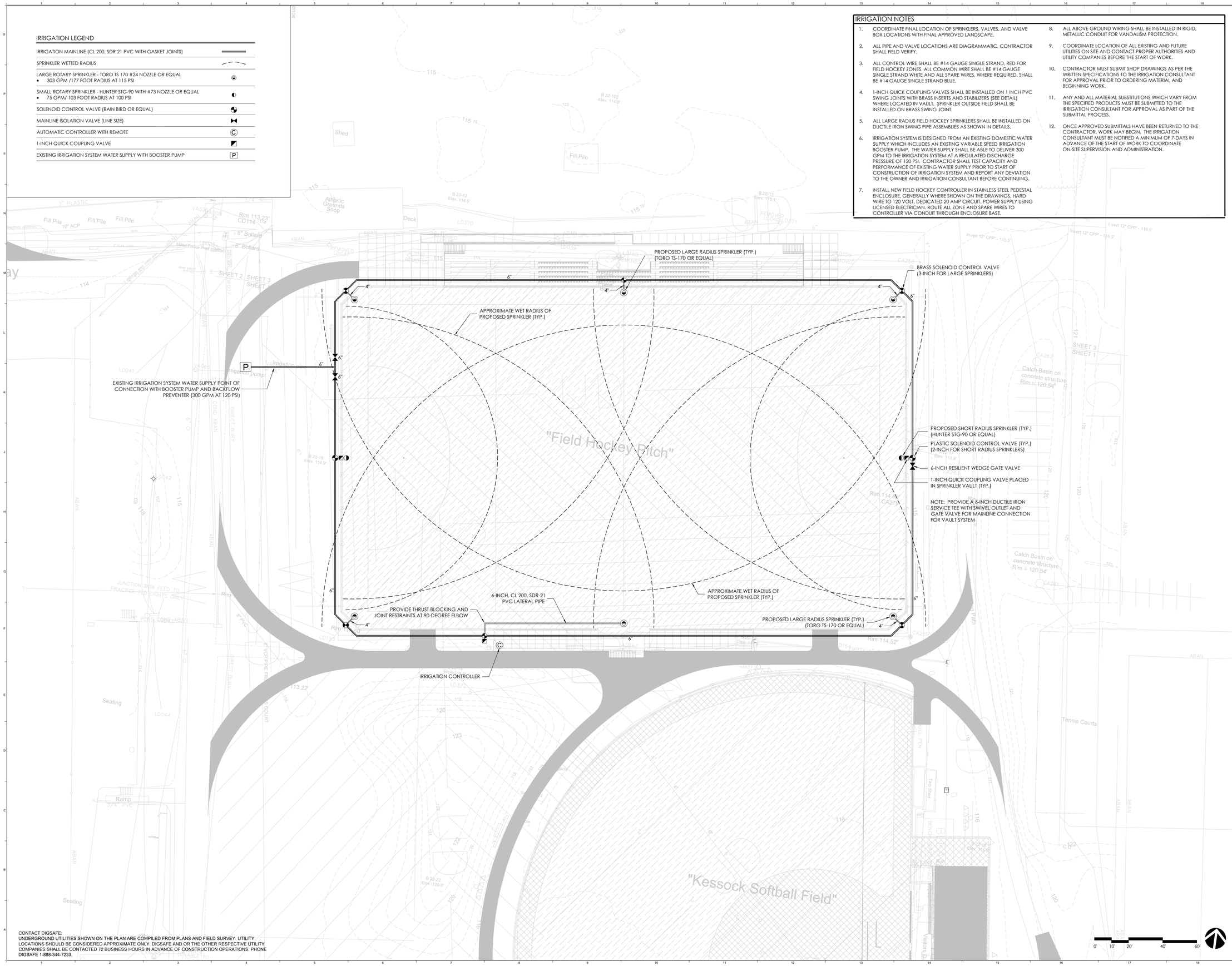
IRRIGATION LEGEND

IRRIGATION MAINLINE (CL 200, SDR 21 PVC WITH GASKET JOINTS)	
SPRINKLER WETTED RADIUS	
LARGE ROTARY SPRINKLER - TORO TS 170 #24 NOZZLE OR EQUAL • 303 GPM /177 FOOT RADIUS AT 115 PSI	
SMALL ROTARY SPRINKLER - HUNTER STG-90 WITH #73 NOZZLE OR EQUAL • 75 GPM/ 103 FOOT RADIUS AT 100 PSI	
SOLENOID CONTROL VALVE (RAIN BIRD OR EQUAL)	
MAINLINE ISOLATION VALVE (LINE SIZE)	
AUTOMATIC CONTROLLER WITH REMOTE	C
1-INCH QUICK COUPLING VALVE	
EXISTING IRRIGATION SYSTEM WATER SUPPLY WITH BOOSTER PUMP	P

IRRIGATION NOTES

1. COORDINATE FINAL LOCATION OF SPRINKLERS, VALVES, AND VALVE BOX LOCATIONS WITH FINAL APPROVED LANDSCAPE.
2. ALL PIPE AND VALVE LOCATIONS ARE DIAGRAMMATIC, CONTRACTOR SHALL FIELD VERIFY.
3. ALL CONTROL WIRE SHALL BE #14 GAUGE SINGLE STRAND, RED FOR FIELD HOCKEY ZONES. ALL COMMON WIRE SHALL BE #14 GAUGE SINGLE STRAND WHITE AND ALL SPARE WIRES, WHERE REQUIRED, SHALL BE #14 GAUGE SINGLE STRAND BLUE.
4. 1-INCH QUICK COUPLING VALVES SHALL BE INSTALLED ON 1 INCH PVC SWING JOINTS WITH BRASS INSERTS AND STABILIZERS (SEE DETAIL) WHERE LOCATED IN VAULT. SPRINKLER OUTSIDE FIELD SHALL BE INSTALLED ON BRASS SWING JOINT.
5. ALL LARGE RADIUS FIELD HOCKEY SPRINKLERS SHALL BE INSTALLED ON DUCTILE IRON SWING PIPE ASSEMBLIES AS SHOWN IN DETAILS.
6. IRRIGATION SYSTEM IS DESIGNED FROM AN EXISTING DOMESTIC WATER SUPPLY WHICH INCLUDES AN EXISTING VARIABLE SPEED IRRIGATION BOOSTER PUMP. THE WATER SUPPLY SHALL BE ABLE TO DELIVER 300 GPM TO THE IRRIGATION SYSTEM AT A REGULATED DISCHARGE PRESSURE OF 120 PSI. CONTRACTOR SHALL TEST CAPACITY AND PERFORMANCE OF EXISTING WATER SUPPLY PRIOR TO START OF CONSTRUCTION OF IRRIGATION SYSTEM AND REPORT ANY DEVIATION TO THE OWNER AND IRRIGATION CONSULTANT BEFORE CONTINUING.
7. INSTALL NEW FIELD HOCKEY CONTROLLER IN STAINLESS STEEL PEDESTAL ENCLOSURE, GENERALLY WHERE SHOWN ON THE DRAWINGS. HARD WIRE TO 120 VOLT, DEDICATED 20 AMP CIRCUIT, POWER SUPPLY USING LICENSED ELECTRICIAN. ROUTE ALL ZONE AND SPARE WIRES TO CONTROLLER VIA CONDUIT THROUGH ENCLOSURE BASE.
8. ALL ABOVE GROUND WIRING SHALL BE INSTALLED IN RIGID, METALLIC CONDUIT FOR VANDALISM PROTECTION.
9. COORDINATE LOCATION OF ALL EXISTING AND FUTURE UTILITIES ON SITE AND CONTACT PROPER AUTHORITIES AND UTILITY COMPANIES BEFORE THE START OF WORK.
10. CONTRACTOR MUST SUBMIT SHOP DRAWINGS AS PER THE WRITTEN SPECIFICATIONS TO THE IRRIGATION CONSULTANT FOR APPROVAL PRIOR TO ORDERING MATERIAL AND BEGINNING WORK.
11. ANY AND ALL MATERIAL SUBSTITUTIONS WHICH VARY FROM THE SPECIFIED PRODUCTS MUST BE SUBMITTED TO THE IRRIGATION CONSULTANT FOR APPROVAL AS PART OF THE SUBMITTAL PROCESS.
12. ONCE APPROVED SUBMITTALS HAVE BEEN RETURNED TO THE CONTRACTOR, WORK MAY BEGIN. THE IRRIGATION CONSULTANT MUST BE NOTIFIED A MINIMUM OF 7-DAYS IN ADVANCE OF THE START OF WORK TO COORDINATE ON-SITE SUPERVISION AND ADMINISTRATION.



CONTACT DIGSAFE:
UNDERGROUND UTILITIES SHOWN ON THE PLAN ARE COMPILED FROM PLANS AND FIELD SURVEY. UTILITY LOCATIONS SHOULD BE CONSIDERED APPROXIMATE ONLY. DIGSAFE AND OR THE OTHER RESPECTIVE UTILITY COMPANIES SHALL BE CONTACTED 72 BUSINESS HOURS IN ADVANCE OF CONSTRUCTION OPERATIONS. PHONE DIGSAFE 1-888-344-7233.

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PROJECT: University of Maine
Field Hockey Complex
168 College Ave, Orono, Maine 04469

SHEET TITLE: Irrigation Plan
Field Hockey

CAD FILE:	
PROJECT No.	21049.00
SCALE:	1" = 20'-0"
PROJECT MANAGER:	JRB
DRAWN BY:	JRB
CHECKED BY:	JRB

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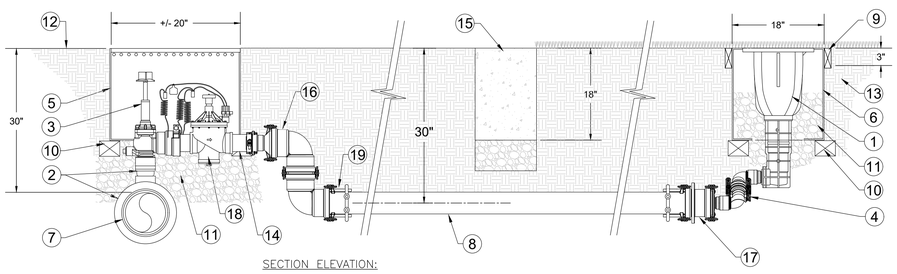
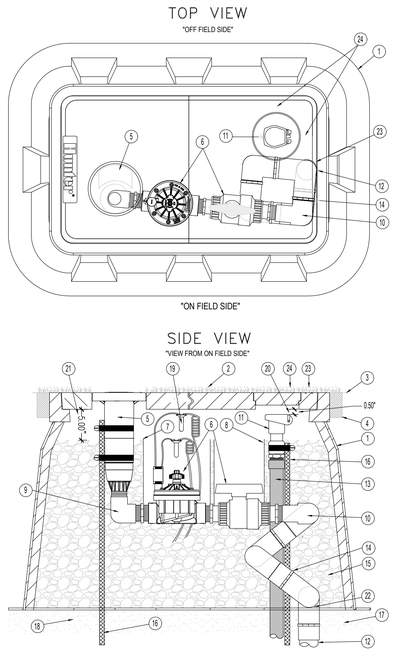


LEGEND:

1. LARGE ROTARY SPRINKLER (TORO TS170 OR EQUAL)
2. DUCTILE IRON SERVICE TEE WITH 3-INCH FEMALE SWIVEL THREADED OUTLET
3. 3-INCH LATERAL ISOLATION WITH MALE SWIVEL THREADED INLET
4. DUCTILE IRON SWING JOINT ASSEMBLY, TORO MODEL NUMBER TS170-IV3K-3L-SJ - 3-INCH X 2-INCH NPT SIZE OR EQUAL.
5. 13"X 20" SPECIFICATION GRADE IRRIGATION VALVE BOX (HIGHLINE PRODUCTS OR EQUAL)
6. TORO ENCLOSURE MODEL NO. TSSBK-18-170 STAINLESS STEEL WITH RECESSED LID AND 1/2" THICK HDPE INSERT SECURED FROM UNDERSIDE.
7. 6-INCH SDR 21 PVC, 200 PSI RATED IRRIGATION MAINLINE PIPING WITH GASKET JOINT DUCTILE IRON SERVICE TEE FOR VALVE AND SPRINKLER CONNECTION
8. LATERAL LINE PIPING, 4-INCH OR 6-INCH SDR 21 PVC, LENGTH AS REQUIRED WITH FLANGED OR RESTRAINED DUCTILE IRON GASKET CONNECTIONS.
9. HDPE SIDE SUPPORTS - ADJUST FOR VARYING PILE HEIGHTS - SECURE TO ALL FOUR SIDES OF VALVE BOX (INCLUDED WITH EACH VALVE BOX SERIES).
10. COMMON RED OR CONCRETE BRICK SUPPORT UNDER EACH BOX CORNER.
11. 3/4" WASHED GRAVEL BACKFILL - SET WITHIN 6-8 INCHES BELOW VALVE BOX.
12. FINISH GRADE.
13. COMPACTED SUB-BASE MATERIAL (SEE CIVIL AND LANDSCAPE DRAWINGS).
14. 3-INCH DUCTILE IRON TOE NIPPLE (OAL=6") FOR INLET AND OUTLET OF CONTROL VALVE
15. TURF ANCHOR (SEE CIVIL AND LANDSCAPE DRAWINGS)
16. 3" X 6" OR 3" X 4" BELL (SEE LATERAL PIPE SIZE)
17. 4" OR 6" DI COUPLING WITH RESTRAINED FLANGE BY SPIGOT ADAPTER WITH CAST IRON REDUCING COMPANION FLANGE FOR 3" DUCTILE IRON SWING JOINT CONNECTION
18. 3-INCH BRASS SOLENOID CONTROL VALVE, RATED FOR 200 PSI (RAIN BIRD OR EQUAL)
19. 4" OR 6" DUCTILE IRON ELBOW WITH JOINT RESTRAINTS FOR ALL PIPE CONNECTIONS

1 LARGE ROTARY SPRINKLER INSTALLATION DETAIL - SECTION VIEW
NO SCALE

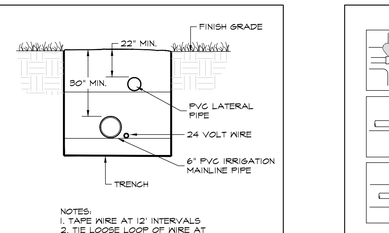


LEGEND:

1. COMPOSITE BOX & 2-PIECE POLYMER-CONCRETE LID ASSEMBLY WITH CAST-IN OPENING TO SUPPORT ROTOR LATERAL THRUST PLUS CAST IN OPENING WITH CIRCULAR COVER FOR QUICK COUPLER ACCESS
2. SYNTHETIC TURF MATERIAL ATTACHED TO COVERS
3. FINISHED GRADE SET TO FIELD PERIMETER TACK/GLUE BOARD OR AS PER SPECIFICATION
4. 2" X 4" TACK/GLUE BOARD AS PER SPECIFICATION ALL SIDES
5. SHORT RADIUS SPRINKLER, HUNTER STG-900 WITH RUBBER COVER KIT OR APPROVED EQUAL
6. CONTROL KIT - INCLUDES 1.5-INCH CONTROL VALVE AND BALL VALVE (235 PSI RATED) PLUS ACME PIVOT CONNECTION FITTINGS (HUNTER OR APPROVED EQUAL)
7. CONTROL VALVE SLEEVE, 8" DIAMETER X 11" TALL WITH 2 NOTCHED SECTIONS FOR PIPING
8. BALL VALVE SLEEVE, 6" DIAMETER X 11" TALL WITH 2 NOTCHED SECTIONS FOR PIPING
9. ROTOR ADAPTER FITTING WITH 2 ACME PIVOT POINTS
10. PREFABRICATED 2" SCH 80 PVC SWING JOINT WITH 6 ACME PIVOT POINTS TO PROVIDE MULTI-AXIS ARTICULATION AND ALIGNMENT OF ROTOR TO THE OPENING IN ENCLOSURE COVER
11. 1-INCH QUICK COUPLING VALVE
12. SUPPLY PIPING AND FITTINGS - 2" MINIMUM FROM MAINLINE THROUGH TO ST2008VA SWING JOINT
13. SCH 80 PVC RISER SUPPLY PIPING AND FITTINGS - 1" MINIMUM
14. ACME THREADED PIVOTING POINTS (9 TOTAL)
15. 3/4" MINUS WASHED GRAVEL
16. 5/8" X 30" REBAR STAKE AND STAINLESS STEEL STRAPING
17. COMPACTED FIELD BASE MATERIAL AS PER SPECIFICATION
18. PROVIDE DRAINAGE VIA ACCESS TO FIELD DRAINAGE SYSTEM
19. WATERPROOF CONNECTIONS PER SPECIFICATION
20. TOP OF QUICK COUPLER SET 1/2" BELOW UNDERSIDE OF ENCLOSURE COVER
21. GRAVEL LEVEL 5" BELOW UNDERSIDE OF ENCLOSURE COVER (TO BOTTOM OF ROTOR'S COMPARTMENT)
22. ELEVATION OF SWING JOINT'S INLET - SET SECOND PIVOT POINT ON SWING JOINT WITH BOTTOM OF ENCLOSURE PER SIDE VIEW DETAIL DRAWING (26" BELOW ENCLOSURE TOP)
23. LOCATION OF SWING JOINT'S INLET - SET INLET AT CENTERLINE EDGE OF ENCLOSURE COVER PER TOP VIEW DETAIL DRAWING. INLET CAN BE SET DIRECTLY BELOW ENCLOSURE RIM AT CENTERLINE. INLET MUST NOT BE SET CLOSER TO ROTOR THAN SHOWN.
24. LOCATION OF QUICK COUPLER INLET PIPING - MEASURE INLET PIPING LOCATION AT TOP RIGHT HAND CORNER OF ENCLOSURE - 5" FROM TOP EDGE AND 5" FROM SIDE EDGE.

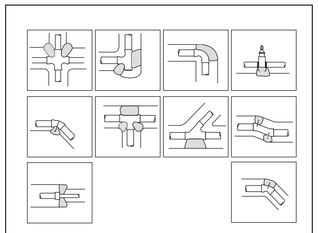
*ENCLOSURE DIMENSIONS
2 - PIECE COVER - 17" X 30"
EXPOSED RIM - 20" X 33"
OVERALL HEIGHT - 26"
BASE PAD - 27" X 41"

2 SHORT RADIUS SPRINKLER INSTALLATION DETAIL - SECTION AND PLAN VIEWS
NO SCALE



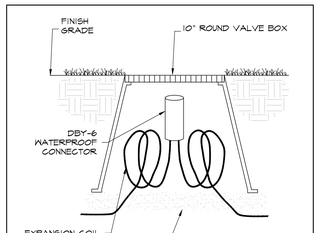
NOTES:
1. TAPE WIRE AT 12' INTERVALS
2. TIE LOOSE LOOP OF WIRE AT CHANGES OF DIRECTION

3 IRRIGATION TRENCH AND WIRE DETAIL
NO SCALE

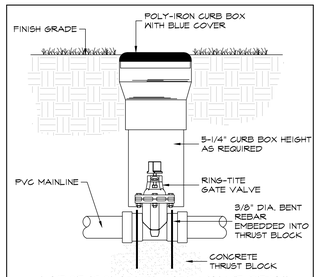


CONTRACTOR RESPONSIBLE FOR PROPER SIZING AND PLACEMENT OF CONCRETE THRUST BLOCKS AS PER ASAE STANDARD 376.2
THRUST BLOCKS REQUIRED ON BELL & GASKET PIPE AND FITTINGS ONLY.

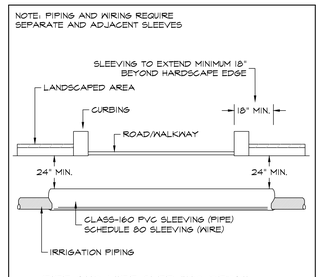
4 THRUST BLOCKING DETAIL
NO SCALE



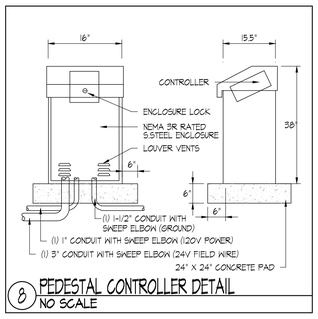
5 WIRE SPLICE DETAIL
NO SCALE



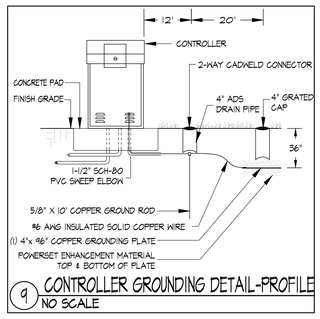
6 LARGE ISOLATION GATE VALVE DETAIL
NO SCALE



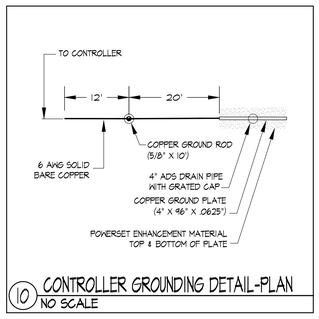
7 PIPE AND WIRE SLEEVING DETAIL
NO SCALE



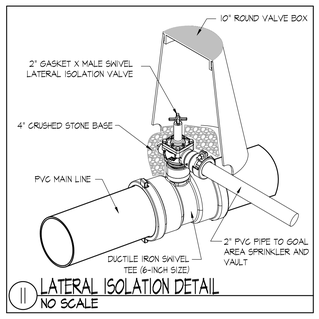
8 PEDESTAL CONTROLLER DETAIL
NO SCALE



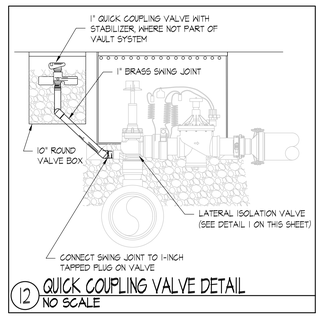
9 CONTROLLER GROUNDING DETAIL-PROFILE
NO SCALE



10 CONTROLLER GROUNDING DETAIL-PLAN
NO SCALE



11 LATERAL ISOLATION DETAIL
NO SCALE



12 QUICK COUPLING VALVE DETAIL
NO SCALE

CONTACT DIGSAFE:
UNDERGROUND UTILITIES SHOWN ON THE PLAN ARE COMPILED FROM PLANS AND FIELD SURVEY. UTILITY LOCATIONS SHOULD BE CONSIDERED APPROXIMATE ONLY. DIGSAFE AND OR THE OTHER RESPECTIVE UTILITY COMPANIES SHALL BE CONTACTED 72 BUSINESS HOURS IN ADVANCE OF CONSTRUCTION OPERATIONS. PHONE DIGSAFE 1-888-344-7233.

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PORTLAND, MAINE 207-828-4511
SARASOTA, FLORIDA 941-556-0757

University of Maine
Field Hockey Complex
PROJECT: 168 College Ave, Orono, Maine 04469

Irrigation Details
Field Hockey

SHEET TITLE:
CAD FILE:
PROJECT No. 21049.00
SCALE: NONE
PROJECT MANAGER: JRB
DRAWN BY: JRB
CHECKED BY: JRB
SHEET No. IF101

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STRUCTURAL GENERAL NOTES:

1. ALL DOCUMENTS ARE INSTRUMENTS OF SERVICE AND ARE COPYRIGHT PROPERTY OF WBRC ARCHITECTS ENGINEERS. THEY MAY NOT BE REPRODUCED, ALTERED OR REUSED WITHOUT THE EXPRESS WRITTEN CONSENT OF WBRC ARCHITECTS ENGINEERS.

2. CONTRACT DRAWINGS REPRESENT THE DESIGN INTENT OF THE PROJECT. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE MEANS AND METHODS OF CONSTRUCTION TO TRANSFORM THE DESIGN INTENT INTO THE PHYSICAL STRUCTURE.

3. SECTIONS AND DETAILS SHOWN ON ANY STRUCTURAL DRAWING ARE TO BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS, UNLESS NOTED OTHERWISE (U.N.O.).

4. STRUCTURAL DRAWINGS ARE NOT INDEPENDENT DOCUMENTS AND ARE INTENDED TO BE USED IN CONJUNCTION WITH SPECIFICATIONS AND ARCHITECTURAL DRAWINGS. DO NOT SCALE DRAWINGS. REFER TO AND COORDINATE WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, CIVIL AND APPROVED SHOP DRAWINGS FOR LOCATION AND DIMENSIONS OF CHASES, INSERTS, OPENINGS, SLEEVES, DEPRESSIONS, ATTACHMENT OF FINISHES AND ALL OTHER DETAILS NOT SHOWN ON THE STRUCTURAL DRAWINGS. CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES AND INCONSISTENCIES BETWEEN CONTRACT DRAWINGS FOR RESOLUTION PRIOR TO PROCEEDING WITH THE WORK.

5. THE CONTRACTOR SHALL MAKE NO DEVIATION FROM THE CONTRACT DRAWINGS WITHOUT THE WRITTEN APPROVAL FROM THE ARCHITECT/ENGINEER.

6. ALL REQUESTS FOR INFORMATION SHALL BE COORDINATED THROUGH THE ARCHITECT.

7. REFER TO THE PROJECT MANUAL FOR GENERAL CONTRACT REQUIREMENTS AND DETAILED REQUIREMENTS FOR MATERIALS, WORKMANSHIP AND SHOP DRAWING SUBMITTALS. THESE NOTES SUPPLEMENT THE SPECIFICATIONS, WHICH SHALL BE REFERRED TO FOR ADDITIONAL REQUIREMENTS.

8. THE CONTRACTOR SHALL VERIFY AT THE PROJECT SITE ALL DIMENSIONS AND ELEVATIONS, NEW AND EXISTING, BY MEASUREMENTS AND SURVEYS PRIOR TO SUBMITTAL OF THE SHOP DRAWINGS. THE CONTRACTOR SHALL TAKE ALL MEASUREMENTS NECESSARY TO VERIFY CONFORMANCE WITH ALL THE CONTRACT DRAWINGS. NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY INCONSISTENCIES, DISCREPENCIES OR UNFORSEEN FIELD CONDITION UNCOVERED DURING CONSTRUCTION THAT MAY BE STRUCTURALLY INADEQUATE OR WILL IMPAIR ARCHITECTURAL LAYOUTS AND ATTACHMENT OF FINISHES.

9. THE STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE ONLY AFTER THE BUILDING IS COMPLETE. NO PROVISIONS HAVE BEEN MADE FOR CONDITIONS OCCURRING DURING CONSTRUCTION. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND SAFETY PROGRAMS DURING THE CONSTRUCTION OPERATIONS OF THE PROJECT. THIS INCLUDES THE DESIGN, INSTALLATION AND REMOVAL OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIEDOWNS TO COMPLETE THE PROJECT. SUCH MATERIAL SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT. ANY FAILURE TO MAKE PROPER AND ADEQUATE PROVISIONS FOR STRESSES AND STABILITY OCCURRING FROM ANY CAUSE DURING CONSTRUCTION SHALL BE THE SOLE RISK AND RESPONSIBILITY OF THE CONTRACTOR.

10. ACAD OR BIM FILES WILL NOT BE MADE AVAILABLE TO THE BIDDER FOR ANY PURPOSE.

11. ALL WORK IS TO BE COMPLETED IN ACCORDANCE WITH THE REFERENCED BUILDING CODE, WRITTEN SPECIFICATIONS, AND THESE DRAWINGS. ALL WORK SHALL BE PERFORMED BY PERSONS QUALIFIED IN THEIR TRADE AND LICENSED TO PRACTICE IN THE STATE WHERE THIS PROJECT IS LOCATED.

12. CONTRACTOR TO ADHERE TO ALL APPLICABLE FEDERAL, STATE AND MUNICIPAL LAWS, REGULATIONS AND ORDINANCES, INCLUDING THE FEDERAL DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA).

SUBMITTAL NOTES:

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL CONTRACT DOCUMENTS, INCLUDING ANY ADDENDA ITEMS, TO DISTRIBUTE TO ALL SUBCONTRACTORS PRIOR TO THE SUBMITTAL OF SHOP DRAWINGS.

2. THE CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS FOR ALL PARTS OF THE WORK. THE SHOP DRAWINGS SHALL BE PREPARED IN ACCORDANCE WITH THE RESPECTIVE TRADE'S CODES OF STANDARD PRACTICE IN EFFECT FOR THIS PROJECT. THE CONTRACTOR SHALL REVIEW AND APPROVE ALL SHOP DRAWING SUBMITTALS PRIOR TO FORWARDING TO THE ARCHITECT/ENGINEER (A/E). ALL COPIES OF SHOP DRAWINGS SHALL BEAR A STAMP FROM THE CONTRACTOR VERIFYING THEY HAVE REVIEWED AND APPROVED THE SHOP DRAWINGS FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS. SHOP DRAWINGS NOT BEARING THE CONTRACTOR'S APPROVAL STAMP WILL NOT BE REVIEWED AND SHALL BE RETURNED "NOT REVIEWED". NO PERFORMANCE OF THE WORK INCLUDING, BUT NOT LIMITED TO, DEMOLITION OF EXISTING STRUCTURE, OR FABRICATION OR ERECTION OF NEW STRUCTURAL ELEMENTS, SHALL COMMENCE WITHOUT REVIEW OF THE SHOP DRAWINGS BY THE A/E.

3. SUBMITTALS SHALL INCLUDE THE DATE AND ISSUE DESCRIPTION OF THE ARCHITECTURAL AND STRUCTURAL REFERENCE DRAWINGS USED TO PREPARE THEM. SUBMITTALS NOT PREPARED ACCORDING TO THE LATEST ISSUE OF THE CONTRACT DOCUMENTS, OR NOT INDICATING THE REFERENCE DRAWINGS DATE AND ISSUE DESCRIPTION, WILL BE RETURNED "NOT REVIEWED". CONTRACT DRAWINGS SHALL NOT BE REPRODUCED, IN WHOLE OR IN PART, BY THE CONTRACTORS OR THEIR AGENTS FOR THE PREPARATION AND DEVELOPMENT OF SHOP DRAWINGS.

4. CONTRACTOR SHALL ISSUE A SUBMITTAL SCHEDULE AT LEAST 30 DAYS PRIOR TO RECEIPT OF THE FIRST SUBMITTAL. SUBMITTAL SCHEDULE SHALL IDENTIFY THE DATE THAT EACH SUBMITTAL WILL BE ISSUED TO THE A/E FOR THEIR REVIEW. FAILURE TO SUBMIT THIS SCHEDULE OR TO ISSUE SUBMITTAL ON THE DATES SPECIFIED, MAY IMPACT THE DURATION OF A/E REVIEW.

5. THE CONTRACTOR SHALL SUBMIT ONE ELECTRONIC (PDF) COPY OF ALL SUBMITTALS TO THE ARCHITECT FOR A/E REVIEW. COPIES SHALL BE CLEAR AND LEGIBLE. THE ELECTRONIC COPY WILL BE MARKED UP AND RETURNED FOR DISTRIBUTION. REFER TO THE PROJECT DRAWINGS AND SPECIFICATIONS FOR SUBMITTALS REQUIRED.

6. THE CONTRACTOR SHALL NOT BE RELIEVED OF ANY RESPONSIBILITY FOR ANY DEVIATION FROM THE REQUIREMENTS OF THE CONTRACT DOCUMENTS AS A RESULT OF THE REVIEW OF THE SUBMITTALS UNLESS THE CONTRACTOR HAS SPECIFICALLY NOTIFIED THE A/E IN WRITING OF THE DEVIATION AND THE A/E HAS PROVIDED WRITTEN ACCEPTANCE OF THE DEVIATION. THE CONTRACTOR IS REQUIRED TO CLEARLY IDENTIFY ANY DEVIATIONS FROM THE CONTRACT DOCUMENTS AND INCLUDE REASON FOR DEVIATION WITHIN THE SUBMITTAL.

7. MATERIALS REQUIRED BY THE CONTRACT DOCUMENTS AND OMITTED FROM THE SHOP DRAWINGS SHALL NOT RELIEVE THE CONTRACTOR FROM FURNISHING THESE MATERIALS REGARDLESS OF WHETHER THE SUBMITTALS HAVE BEEN REVIEWED.

8. THE CONTRACTOR SHALL NOT BE RELIEVED FROM RESPONSIBILITY FOR ERRORS OR OMISSIONS IN ANY SUBMITTAL BY A/E REVIEW THEREOF.

9. RE-SUBMITTED SHOP DRAWINGS WILL NOT BE REVIEWED UNLESS ANY AND ALL REVISIONS ARE CLOUDED. ONLY CLOUDED ITEMS WILL BE REVIEWED.

10. THE FOLLOWING SHALL BE DESIGNED BY A SPECIALTY ENGINEER NOT UNDER THE SUPERVISION OF THE SER, AND SUBMITTED FOR REVIEW. SUBMITTAL DRAWINGS AND CALCULATIONS SHALL BE STAMPED BY A ENGINEER LICENSED IN THE STATE THE PROJECT IS LOCATED. REFER TO PROJECT SPECIFICATIONS FOR ADDITIONAL INFORMATION:

    A. COLD-FORMED STEEL FRAMING
    B. CURTAIN WALL GLAZING SYSTEMS
    C. PRE-FABRICATED WOOD OR STEEL TRUSSES
    D. METAL, CONCRETE, OR WOOD STAIRS AND RAILINGS, U.N.O.
    E. STRUCTURAL STEEL CONNECTIONS NOT FULLY DETAILED ON DRAWINGS
    F. TEMPORARY SHORING AND JACKING SYSTEMS
    G. CONSTRUCTION METHODS AND SEQUENCING, WHERE APPLICABLE
    H. OTHER SYSTEMS AS NOTED IN THE PROJECT SPECIFICATIONS.

REINFORCING STEEL NOTES:

1. ALL REINFORCING BAR DETAILING AND PLACING SHALL CONFORM TO THE ACI 315, "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" AND ACI 315R "MANUAL OF ENGINEERING AND PLACING DRAWINGS FOR REINFORCED CONCRETE STRUCTURES." DO NOT BEND BARS IN THE FIELD; COMPLETE ALL BAR BENDING IN THE FABRICATORS SHOP.

2. REFER TO SPECIFICATION SECTION 032000, CONCRETE REINFORCEMENT, FOR SHOP DRAWING PREPARATION REQUIREMENTS.

3. REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 60. WHERE WELDING OF DEFORMED BARS TO STRUCTURAL STEEL IS SHOWN, PROVIDE ASTM A706 GRADE 60 AND COMPLETE WELDING IN ACCORDANCE WITH AWS D1.4.

4. REINFORCING STEEL SHALL BE SUPPORTED AND SECURED AGAINST DISPLACEMENT IN ACCORDANCE WITH THE CONCRETE REINFORCING STEEL INSTITUTE'S "MANUAL OF STANDARD PRACTICE". "WET-SETTING" OR "WET-STICKING" REINFORCING INTO GREEN CONCRETE IS NOT ACCEPTABLE. SLAB BOLSTERS, HIGH CHAIRS AND STANDEES SHALL BE SPACED AT A MAXIMUM OF 48" o.c., UNLESS NOTED OTHERWISE ON PLANS.

5. REINFORCING STEEL BENDS, HOOKS AND LAP SPLICES SHALL CONFORM TO THE ACI "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318) UNLESS OTHERWISE INDICATED.

6. NOTIFY THE ARCHITECT/ENGINEER OR STRUCTURAL INSPECTOR AT LEAST 48 HOURS IN ADVANCE OF PLACING CONCRETE FOR REVIEW OF THE REINFORCING STEEL PLACEMENT. DO NOT CAST CONCRETE UNTIL THE REVIEW HAS BEEN MADE OR WAIVED.

7. PROVIDE FOOTING DOWELS FOR VERTICAL WALL REINFORCEMENT. DOWELS SHALL BE THE SAME SIZE AND SPACING AS THE VERTICAL WALL REINFORCEMENT, UNLESS NOTED OTHERWISE, WITH LAP SPLICES AS INDICATED ON THE APPLICABLE SECTIONS. INSTALL DOWELS IN THE FOOTING FORMS BEFORE CONCRETE IS PLACED, SUPPORTING AND TYING THEM SECURLY IN POSITION.

8. DO NOT CUT OR DISPLACE ANY REINFORCING STEEL TO ACCOMMODATE THE INSTALLATION OF ANY EMBEDDED ITEMS WITHOUT THE EXPRESS WRITTEN APPROVAL OF THE ARCHITECT/ENGINEER. COORDINATE THE INSTALLATION OF EMBEDED ITEMS INTO THE CONCRETE WITH THE PLACING OF THE REINFORCING STEEL TO ENSURE THAT ALL BARS ARE IN THEIR PROPER POSITION AND ARE NOT CUT OR DISPLACED BY THE EMBEDED ITEMS.

9. USE SLEEVES TO ACCOMMODATE PIPING WHICH MUST PASS THROUGH STRUCTURAL CONCRETE. SUBMIT LAYOUT OF SLEEVES TO ARCHITECT/ENGINEER FOR APPROVAL PRIOR TO CASTING CONCRETE. ALL SLEEVES SHALL BE STEEL, CAST IRON PIPE OR PVC PIPE.

10. PROVIDE SUPPLEMENTAL REINFORCEMENT AROUND ALL OPENINGS IN CONCRETE SLABS AND WALLS, IF APPLICABLE, AS INDICATED IN THE TYPICAL DETAILS.

11. MINIMUM CLEARANCE OF REINFORCING BARS FROM CONCRETE SURFACES SHALL BE AS FOLLOWS:

A.	UNFORMED FACE IN CONTACT WITH EARTH:	3"
B.	UNFORMED SLABS IN CONTACT WITH EARTH:	1-1/2"
C.	FORMED FACE IN CONTACT WITH EARTH:	2"
D.	FORMED FACE EXPOSED TO WEATHER:	2" FOR #6 AND LARGER BARS
E.	FORMED FACE EXPOSED TO WEATHER:	1-1/2" FOR #5 AND SMALLER BARS
F.	INTERIOR EXPOSED FACES OF WALLS:	1"
G.	HORIZONTAL BARS FROM TOP OF WALL:	2" MAX.
H.	TIES FROM TOP OF PIER OR COLUMN:	2" MAX.

EXCAVATION NOTES:

1. SITE PREPARATION SHOULD BEGIN WITH THE CONSTRUCTION OF AN EROSION CONTROL SYSTEM TO MINIMIZE SILTATION INTO DRAINAGE-WAYS AND AREAS OUTSIDE THE CONSTRUCTION LIMITS.

2. EXTEND AND SLOPE SIDES OF EXCAVATION, OR SHORE, SHEET AND BRACE EXCAVATION, AS REQUIRED, TO ENSURE SAFETY AND STABILITY AT ALL TIMES.

3. PUMP EXCAVATION TO REMOVE SURFACE AND GROUND WATER TO PERMIT FINISHING OF EXCAVATION AND PLACEMENT OF FOUNDATIONS IN THE DRY.

4. STAGING AND SEQUENCING OF SITE PER PERMIT CONDITIONS.

FOUNDATION, BACKFILL AND DRAINAGE NOTES:

1. FOUNDATION WORK SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT BY "GEOTECHNICAL COMPANY NAME", DATED MONTH DAY, YEAR.

2. THE OWNER AND ARCHITECT/ENGINEER ASSUME NO RESPONSIBILITY FOR THE VALIDITY OF THE SUBSURFACE CONDITIONS DESCRIBED ON THE DRAWINGS, SPECIFICATIONS, BORING LOGS, OR TEST PITS. THIS DATA IS INCLUDED ONLY TO ASSIST THE CONTRACTOR DURING BIDDING AND SUBSEQUENT CONSTRUCTION AND REPRESENT CONDITIONS ONLY OF THOSE SPECIFIED LOCATIONS AT THE PARTICULAR TIME THEY WERE MADE.

3. THE CONTRACTOR SHALL INFORM THE ARCHITECT/ENGINEER AND RELOCATE, AS REQUIRED, ANY EXISTING UTILITY LINES THAT MAY INTERFERE WITH NEW FOUNDATIONS. THE CONTRACTOR SHALL REMOVE ANY EXISTING UTILITY LINES THAT ARE BEING ABANDONED IN THE VICINITY OF THE NEW FOUNDATION AND BACKFILL THE AREA WITH COMPACTED STRUCTURAL FILL.

4. PREPARE AREAS OF PROPOSED FILL AND CONSTRUCTION BY REMOVING TOPSOIL, EXISTING FILL, ORGANIC MATERIAL, AND FROZEN, WET, SOFT, LOOSE OR OTHERWISE UNSUITABLE MATERIALS. PROOFROLL THE EXPOSED SUBGRADE WITH SUITABLE EQUIPMENT AS REQUIRED.

5. ALL SUBGRADES AT FOOTING EXCAVATIONS SHALL BE INSPECTED AND APPROVED BY THE DESIGNATED EARTHWORK INSPECTOR BEFORE CONCEALING WITH STRUCTURAL FILL AND BEFORE THE FOOTINGS ARE FORMED AND CAST.

6. ALL FOOTINGS SHALL BEAR ON SUITABLE NATIVE UNDISTURBED SOIL OR COMPACTED STRUCTURAL FILL. REFER TO STRUCURAL DRAWINGS AND GEOTECHNICAL REPORT FOR STRUCTURAL FILL THICKNESS, COMPACTION AND GEOTEXTILE FABRIC REQUIREMENTS UNDERNEATH FOOTINGS AS REQUIRED.

7. REFER TO THE GEOTECHNICAL REPORT FOR ALL EXCAVATION, BACKFILL, COMPACTION, CONSTRUCTION DEWATERING AND PERMANENT DRAINAGE REQUIREMENTS. COORDINATE INSTALLATION OF FOUNDATION DRAINS WITH STRUCTURAL ELEMENTS.

8. BOTTOM OF EXTERIOR FOUNDATIONS SHALL BE LOCATED A MINIMUM OF 5' - 0" BELOW FINISHED EXTERIOR GRADE FOR PROTECTION AGAINST FROST HEAVE, UNLESS OTHERWISE NOTED ON PLANS.

9. NO CONCRETE SLAB OR FOUNDATION SHALL BE PLACED IN WATER OR ON FROZEN GROUND. SOILS EXPOSED AT THE BASE OF EXCAVATIONS SHOULD BE ADEQUATELY PROTECTED AGAINST ANY DETRIMENTAL CHANGE IN CONDITION, SUCH AS DISTURBANCE FROM RAIN OR FROST. IF ANY FROZEN MATERIAL IS FOUND ADJACENT OR BELOW THE CONCRETE SLAB OR FOUNDATION, IT SHALL BE REMOVED AND REPLACED WITH COMPACTED STRUCTURAL FILL OR LEAN CONCRETE. SURFACE RUNOFF SHOULD BE DRAINED WAY FROM THE EXCAVATIONS AND NOT BE ALLOWED TO POND. GROUNDWATER SHOULD BE ANTICIPATED FOR EXCAVATIONS AND APPROPRIATE DEWATERING MEASURES SHALL BE EMPLOYED.

10. ALL FOUNDATION WALLS AND PIERS SHALL BE CENTERED OVER FOOTINGS, UNLESS DETAILED OTHERWISE.

11. EXCAVATING AND BACK FILLING AT NEW AND EXISTING FOUNDATION WALLS SHALL BE DONE SUCH THAT SYMMETRICAL LOADING BE MAINTAINED ON ALL SIDES. EXTEND AND SLOPE SIDES OF EXCAVATION TO ENSURE STABILITY AND SAFETY AT ALL TIMES. WHERE DESIGN CONDITIONS REQUIRE UNEVEN BACK FILL HEIGHTS ON EITHER SIDE OF THE WALL, SHORING SHALL BE PROVIDED AND SHORES SHALL REMAIN UNTIL PERMANENT STRUCTURE IS IN PLACE. PROVIDE SHORING OR SHEETING IN ACCORDANCE WITH OSHA REQUIREMENTS. BRACED EXCAVATIONS SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE THIS PROJECT IS LOCATED.

12. EXCAVATIONS FOR NEW FOUNDATIONS SHALL NOT UNDERMINE EXISTING FOUNDATIONS OR ANY ADJACENT STRUCTURES, UNLESS SPECIFICALLY DETAILED IN THE STRUCTURAL CONTRACT DOCUMENTS.

13. ELEVATED FLOOR SLABS AND SLABS-ON-GRADE, PROVIDING TOP AND BOTTOM SUPPORT FOR CONCRETE WALLS RETAINING EARTH, SHALL BE IN PLACE AND HAVE REACHED 70% OF THEIR REQUIRED 28 DAY COMPRESSIVE STRENGTH BEFORE ANY BACKFILLING OPERATIONS BEGIN. IF THE CONTRACTOR CHOOSES TO BACKFILL WALLS PRIOR TO THE INSTALLATION OF THE SLABS, WALL SUPPORT BRACING SHALL BE PROVIDED AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, MATERIAL AND LABOR OF SUCH INSTALLATION.

14. CONCRETE WALLS RETAINING EARTH MUST HAVE REACHED 100% OF THEIR REQUIRED 28 DAY COMPRESSIVE STRENGTH BEFORE BACKFILLING OPERATIONS BEGIN.

15. SEE CONTRACT DRAWINGS AND SPECIFICAITONS FOR CONTINUOUS VAPOR BARRIER UNDER INTERIOR SLABS-ON-GRADE.

16. SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR PERIMETER FOUNDATION INSULATION AND THERMAL BREAKS.

CAST-IN-PLACE CONCRETE NOTES:

1. CONCRETE WORK SHALL COMPLY WITH THE LATEST EDITION OF ACI 301, "STANDARD SPECIFICATION FOR STRUCTURAL CONCRETE IN BUILDINGS," AND ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE." HOT AND COLD WEATHER CONCRETING SHALL BE IN ACCORDANCE WITH ACI 305R AND 306R, RESPECTIVELY.

2. ALL STRUCTURAL CONCRETE IS CONTROLLED AND SHALL BE USED, PROPORTIONED, MIXED AND PLACED UNDER THE SUPERVISION OF THE STRUCTURAL INSPECTOR AS A PART OF THE SPECIAL INSPECTIONS REQUIREMENTS FOR THE PROJECT.

3. ALL CONCRETE WORK SHALL BE PERFORMED TO ENSURE HOMOGENOUS CONCRETE THROUGHOUT THE PROJECT. CONCRETE SHALL ATTAIN THE REQUIRED STRENGTH, DURABILITY AND WEATHERING RESISTANCE WITHOUT PLANES OF WEAKNESS OR OTHER STRUCTURAL DEFECTS. CONCRETE SHALL BE FREE OF PRONOUNCED HONEYCOMBS, AIR POCKETS, VOIDS, PROJECTIONS OR OTHER DEFACEMENTS ON EXPOSED SURFACES.

4. REFER TO SPECIFICATION SECTION 031000, CONCRETE FORMWORK, FOR FORM MATERIAL INFORMATION AND REMOVAL REQUIREMENTS.

5. REFER TO SPECIFICATION SECTION 033000, CAST-IN-PLACE CONCRETE, FOR CONCRETE MATERIAL INFORMATION, CONCRETE MIX PROPORTIONING REQUIREMENTS, AND CURING PROCEDURES.

6. PROPORTION CONCRETE MIX TO PROVIDE WORKABILITY AND CONSISTENCY TO PERMIT CONCRETE TO BE WORKED READILY INTO THE FORMS AND AROUND REINFORCEMENT BY THE METHODS OF PLACEMENT AND CONSILIDATION TO BE EMPLOYED, WITHOUT SEGREGATION OR EXCESSIVE BLEEDING.

7. NOTIFY THE ARCHITECT/ENGINEER AND STRUCTURAL INSPECTOR AT LEAST 48 HOURS IN ADVANCE OF PLACING CONCRETE FOR INSPECTION OF THE REINFORCING STEEL. DO NOT CAST CONCRETE UNTIL THE INSPECTION HAS BEEN MADE OR WAIVED.

8. ALL STRUCTURAL CONCRETE SHALL BE FORMED WITH APPROVED FORMWORK MATERIALS. EARTH FORMING IS NOT PERMITTED, U.N.O.

9. CONCRETE MIX DURATION TIMES SHALL BE LIMITED TO LESS THAN 90 MINUTES, WITHOUT EXCEPTION.

10. ALL SHORING SHALL REMAIN IN PLACE UNTIL CONCRETE HAS ATTAINED 70% OF ITS 28 DAY STRENGTH.

11. PROVIDE 3/4" CHAMFER AT ALL EXPOSED CORNERS OF CONCRETE UNLESS NOTED OTHERWISE.

12. CONCRETE WALL CONTRACTION JOINTS TO BE SPACED AT A MAXIMUM OF 30 FT ALONG A CONTINUOUS STRAIGHT WALL AND 20 FT FROM CORNERS. WALL CONSTRUCTION JOINTS SHALL BE KEYED AND SPACED AT 60 FT o.c. MAXIMUM. REFER TO TYPICAL WALL JOINT DETAILS FOR ADDITIONAL INFORMATION.

13. CONCRETE PIERS, BEAMS, SLABS AND WALLS (EXCEPT SHAFT/SHEAR WALLS) SHALL BE PLACED WITHOUT HORIZONTAL CONSTRUCTION JOINTS.

14. SLAB-ON-GRADE CONTRACTION JOINTS TO BE SAWCUT AS SOON AS THE CONCRETE HARDENS BETWEEN 4 HRS TO 12 HRS FROM FINAL FINISH. SAWCUTTING OPERATION IS TO BE COMPLETE BEFORE ANY SHRINKAGE CRACKING TAKE EFFECT.

15. SLAB THICKNESSES INDICATED ON THE STRUCTURAL DRAWINGS ARE TO BE CONSIDERED MINIMUMS. PROVIDE SUFFICIENT CONCRETE TO ACCOUNT FOR VERTICAL FLATNESS TOLERANCES, SUBGRADE FLUCTUATIONS AND TO OBTAIN THE SPECIFIED SLAB ELEVATION INDICATED.

16. FINISHING OF FORMED SURFACES: NO FINISH IS REQUIRED FOR BURIED CONCRETE SUCH AS FOOTINGS AND FROST WALLS. ABOVE GROUND CONCRETE NOT EXPOSED TO PUBLIC VIEW SHALL HAVE AN "SF-2.0" SURFACE FINISH. ABOVE GROUND CONCRETE EXPOSED TO VIEW SHALL HAVE AN "SF-3.0" SURFACE FINISH, UNLESS OTHERWISE NOTED.

17. FINISHING OF CONCRETE SLAB-ON-GRADE: TROWEL FINISH AFTER SCREEDING AND FLOATING OPERATIONS HAVE BEEN COMPLETED AND PROVIDE FLOOR FLATNESS TOLERANCES SPECIFIED IN SPECIFICATION SECTION 033000. FOR RAMPS AND STEPS, PROVIDE A BROOM FINISH.

18. CURING OF SLABS: CURE SLABS WITH CURING COMPOUND OR MOISTURE RETENTION COVERS AS INDICATED IN SPECIFICATION SECTION 033000.

19. ALL HORIZONTAL INTERIOR CONCRETE SURFACES THAT DO NOT RECEIVE A FINISHED FLOOR MATERIAL SHALL RECEIVE A PENETRATING LIQUID FLOOR TREATMENT PER SPECIFICATION SECTION 033000.

20. ALL HORIZONTAL EXTERIOR CONCRETE SURFACES EXPOSED TO DE-ICING CHEMICALS, SUCH AS SIDEWALKS AND APRONS, SHALL RECIEVE A BROOM FINISH AND A LIQUID PENETRATING SEALER PER SPECIFICATION SECTION 033000.

STRUCTURAL DESIGN CRITERIA:

CODES AND STANDARDS:

1. 2015 INTERNATIONAL BUILDING CODE AMENDED BY THE MAINE UNIFORM BUILDING AND ENERGY CODE (MUBEC)
2. ASCE 7-10 "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES"

GEOTECHNICAL DESIGN CRITERIA:

1. FOUNDATION DESIGN IS BASED ON RECOMMENDATIONS CONTAINED IN THE GEOTECHNICAL ENGINEERING REPORT PROVIDED BY "S. W. COLE ENGINEERING", PROJECT NO. 21-1832.1 S, DATED FEBRUARY, 16 2022. NOTIFY THE ARCHITECT/ENGINEER IF UNSUITABLE MATERIALS ARE ENCOUNTERED BEFORE PROCEEDING WITH THE AFFECTED AREA OF WORK.
2. FOUNDATION DESIGN BEARING CAPACITY IS BASED ON USING THE FOLLOWING ALLOWABLE NET SOIL BEARING PRESSURES:
    A. COLUMN FOOTINGS: 3000 PSF
    B. CONTINUOUS WALL FOOTINGS: 3000 PSF
3. LATERAL EARTH PRESSURE DESIGN CRITERIA FOR NON-YIELDING WALLS:
    A. ACTIVE COEFFICIENT, Ka: 0.33
    B. PASSIVE COEFFICIENT, Ka: 3.0
    C. AT-REST COEFFICIENT, Ko: 0.5
    D. UNIT WEIGHT OF BACKFILL: 130 PCF
    E. COEFFICIENT OF FRICTION: 0.40 (USING A 1.5 SF)
4. SEISMIC DESIGN SITE CLASSIFICATION: SITE CLASS D

DESIGN LOADS:

1. DEAD LOADS: ESTIMATED SELF-WEIGHT OF STRUCTURE AND ANY COMPONENTS OR FIXTURES CONSIDERED PERMANENT, AS PROVIDED TO THE ARCHITECT/ENGINEER AT THE TIME OF THE ISSUANCE OF THESE DRAWINGS.
2. LIVE LOADS:
    A. PUBLIC SPACES 100 PSF
3. WIND LOADS:
    A. ULTIMATE WIND SPEED (3-SEC GUST), Vult: 115 MPH
    B. NOMINAL WIND SPEED (3-SEC GUST), Vnom: 90 MPH
    C. RISK CATEGORY: II
    D. EXPOSURE CATEGORY: B

    COMPONENTS & CLADDING LOADS IN ACCORDANCE WITH ASCE 7
4. SEISMIC LOADS:
    A. RISK CATEGORY: II
    B. IMPORTANCE FACTOR, Ie: 1.0
    C. MAPPED SPECTRAL RESPONSE ACCELERATIONS:
        a. Ss: 0.288
        b. S1: 0.076
    D. SITE CLASS: D
    E. SPECTRAL RESPONSE COEFFICIENTS:
        a. Sds: 0.302
        b. Sd1: 0.121
    F. SEISMIC DESIGN CATEGORY: B
    G. ANALYSIS PROCEDURE:
        a. EQUIVALENT LATERAL FORCE PROCEDURE

REV.	DESCRIPTION	DATE
0	ISSUED FOR BID	18 FEB 2022

STATE OF MAINE
Miguel Betancourt
MIGUEL BETANCOURT
No. 14038
LICENSED PROFESSIONAL ENGINEER

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SARASOTA, FLORIDA 941-556-0757

UNIVERSITY OF MAINE, FIELD HOCKEY COMPLEX 2022

PROJECT: 168 College Ave, Orono, ME 04469

STRUCTURAL GENERAL NOTES

SHEET TITLE:

WBRC CAD FILE:

PROJECT No. 10088.033
SCALE: 1/8" = 1'-0"
PROJECT MANAGER: KK
DRAWN BY: DJU
CHECKED BY: MB

GRAPHIC SCALE: 0" 1"
SHEET NO. S-001

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STATEMENT OF SPECIAL INSPECTIONS

PROJECT:	<PROJECT NAME>
LOCATION:	<PROJECT ADDRESS>
OWNER:	<OWNER NAME>
ARCHITECT OF RECORD:	WBRC ARCHITECTS ENGINEERS
STRUCTURAL ENGINEER OF RECORD:	WBRC ARCHITECTS ENGINEERS
BUILDING CODE:	2015 INTERNATIONAL BUILDING CODE

THIS STATEMENT OF SPECIAL INSPECTIONS IS SUBMITTED AS A CONDITION FOR PERMIT ISSUANCE IN ACCORDANCE WITH CHAPTER 17 OF THE 2015 INTERNATIONAL BUILDING CODE. IT INCLUDES A SCHEDULE OF SPECIAL INSPECTION SERVICES APPLICABLE TO THIS PROJECT AS WELL AS THE NAME OF THE SPECIAL INSPECTIONS ADMINISTRATOR AND THE IDENTITY OF OTHER APPROVED AGENCIES INTENDED TO BE RETAINED FOR CONDUCTING THESES INSPECTIONS.

THE SPECIAL INSPECTIONS ADMINISTRATOR SHALL KEEP RECORDS OF ALL INSPECTIONS AND SHALL FURNISH INSPECTION REPORTS TO THE OWNER, BUILDING OFFICIAL, STRUCTURAL ENGINEER OF RECORD AND ARCHITECT OF RECORD.

DISCOVERED DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF SUCH DISCREPANCIES ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER, BUILDING OFFICIAL, STRUCTURAL ENGINEER OF RECORD AND ARCHITECT OF RECORD. THE SPECIAL INSPECTIONS PROGRAM DOES NOT RELIEVE THE CONTRACOR OF HIS OR HER RESPONSIBILITIES.

INTERIM REPORTS SHALL BE SUBMITTED ON A <MONTHLY> BASIS TO THE OWNER, BUILDING OFFICIAL, STRUCTURAL ENGINEER OF RECORD AND ARCHITECT OF RECORD.

A FINAL REPORT OF SPECIAL INSPECTIONS DOCUMENTING COMPLETION OF ALL REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHALL BE SUBMITTED PRIOR TO ISSUANCE OF A CERTIFICATE OF USE AND OCCUPANCY.

PREPARED BY:

PRINT NAME	SIGNATURE	DATE
MIGUEL BETANCOURT, PE	Miguel Betancourt	18 FEB 2022

OWNER'S AUTHORIZATION:

PRINT NAME	SIGNATURE	DATE

BUILDING CODE OFFICIAL ACCEPTANCE:

PRINT NAME	SIGNATURE	DATE

STATE OF MAINE — MIGUEL BETANCOURT — No. 14038 — LICENSED PROFESSIONAL ENGINEER

DESIGN PROFESSIONAL SEAL

CONTRACTOR RESPONSIBILITIES

STRUCTURAL TESTS AND SPECIAL INSPECTIONS DO NO RELIEVE THE CONTRACTOR OF ITS RESPONSIBILITIES AND OBLIGATIONS FOR QUALITY CONTROL OF THE WORK, THEIR OBLIGATIONS FOR SUPERVISING THE WORK, FOR ANY DESIGN WORK THAT IS INCLUDED IN THEIR SCOPE OF SERVICES AND FOR FULL COMPLIANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. FURTHERMORE, THE DETECTION OF, OR THE FAILURE TO DETECT DEFICIENCIES IN THE WORK DURING TESTING AND INSPECTION CONDUCTED PURSUANT TO THIS PROGRAM SHALL NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO CORRECT ALL DEFICIENCIES OR DEFECTS, WHETHER DETECTED OR UNDETECTED, IN ALL PARTS OF THE WORK, AND TO OTHERWISE COMPLY WITH ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS.

JOB SITE SAFETY IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR AND NOT PART OF THESE TESTS AND INSPECTIONS.

MATERIALS AND ACTIVITIES TO BE TESTED AND INSPECTED DO NOT INCLUDE THE CONTRACTOR'S EQUIPMENT OR THE MEANS, METHODS AND PROCEDURES USED TO ERECT OR INSTALL THE MATERIALS OR ASSEMBLIES LISTED.

WHERE A STRUCTURAL COMPONENT OR SYSTEM IS SUBJECT TO TESTS AND INSPECTIONS AS DETERMINED BYTHE BUILDING OFFICIAL, AND THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE FOR THE PROJECT HAS NOT BEEN RETAINED TO DESIGN OR, TO PREPARE A PERFORMANCE SPECIFICATION FOR SAID COMPONENT OR SYSTEM, THE CONTRACTOR SHALL RETAIN A LICENSED PROFESSIONAL ENGINEER TO DESIGN SAID COMPONENT OR SYSTEM AND TO PROVIDE ANY REQUIRED TESTS AND INSPECTIONS.

THE CONTRACTOR SHALL PROVIDE FREE AND SAFE ACCESS TO THE WORK FOR ALL INDIVIDUALS WHO ARE PERFORMING THE TESTS OR INSPECTIONS.

THE CONTRACTOR SHALL PROVIDE ALL LADDERS, SCAFFOLDING, STAGING, AND UP-TO-DATE SAFETY EQUIPMENT, ALL IN GOOD AND SAFE WORKING ORDER, AND QUALIFIED PERSONNEL TO HANDLE AND ERECT THEM, AS MAY BE REQUIRED FOR SAFE ACCESS.

THE CONTRACTOR SHALL GIVE REASONABLE NOTICE TO THOSE PERFORMING INSPECTIONS AND TESTS OF WHEN THE VARIOUS PARTS OF THE WORK WILL BE READY FOR TESTING AND INSPECTION.

THE CONTRACTOR SHALL OBTAIN INSTRUCTIONS FROM THE INSPECTION COORDINATOR AS TO WHAT IS REASONABLE NOTICE FOR THE VARIOUS ASPECTS OF THE WORK (TYPICALLY 48 HOURS), WHO IS TO BE NOTIFIED AND HOW.

THE OWNER RESERVES THE RIGHT TO BACK CHARGE THE CONTRACTOR FOR ADDITIONAL EXPENSE INCURRED BY THE OWNER FOR THE SERVICES OF THE INSPECTORS WHEN WORK IS NOT REASONABLY READY FOR INSPECTION IN ACCORDANCE WITH THE NOTICE PROVIDED BY THE CONTRACTOR.

LIKEWISE, IF WORK IS REPEATEDLY FOUND DEFICIENT, COSTS FOR A THIRD INSPECTION AND BEYOND MAY BE REIMBURSED FROM THE CONTRACTOR.

QUALIFICATIONS OF INSPECTORS AND TESTERS

THE CREDENTIALS AND QUALIFICATIONS OF ALL INDIVIDUALS PERFORMING SPECIAL INSPECTION AND TESTING ACTIVITIES ARE SUBJECT TO THE APPROVAL OF THE BUILDING OFFICIAL AND THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. CREDENTIALS SHALL BE PROVIDED FOR REVIEW, APPROVAL AND RECORD.

KEY FOR MINIMUM QUALIFICATIONS OF INSPECTION AGENTS: WHEN THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE DEEMS IT APPROPRIATE THAT THE INDIVIDUAL PERFORMING A STIPULATED TEST OR INSPECTION HAVE A SPECIFIC CERTIFICATION, LICENSE OR EXPERIENCE LEVEL AS INDICATED BELOW, SUCH DESIGNATION SHALL APPEAR WITH THE AGENCY NAME ON THE SCHEDULE.

ENGINEER:	
PE/SE	STRUCTURAL ENGINEER – A LICENSED SE OR PE SPECIALIZING IN THE DESIGN OF BUILDING STRUCTURES
PE/GE	GEOTECHNICAL ENGINEER – A LICENSED PE SPECIALIZING IN SOIL MECHANICS AND FOUNDATIONS
EIT	ENGINEERINTRAINING – A GRADUATE ENGINEER WHO HAS PASSED THE FUNDAMENTALS OF ENGINEERING EXAMINATION
EXPERIENCED TESTING TECHNICIAN:	
ETT	EXPERIENCED TESTING TECHNICIAN - AN EXPERIENCED TESTING TECHNICIAN WITH A MINIMUM 5 YEARS EXPERIENCE WITH THE STIPULATED TEST.
AMERICAN CONCRETE INSTITUTE (ACI) CERTIFICATION:	
ACI-CFTT	CONCRETE FIELD TESTING TECHNICIAN – GRADE 1
ACI-CCI	CONCRETE CONSTRUCTION INSPECTOR
ACI-LTT	LABORATORY TESTING TECHNICIAN – GRADE 1&2
ACI-STT	STRENGTH TESTING TECHNICIAN
AMERICAN WELDING SOCIETY (AWS) CERTIFICATION:	
AWS-CWI	CERTIFIED WELDING INSPECTOR
AWS/AISC-SSI	CERTIFIED STRUCTURAL STEEL INSPECTOR
AMERICAN SOCIETY OF NON-DESTRUCTIVE TESTING (ASNT) CERTIFICATION:	
ASNT	CONCRETE CONSTRUCTION INSPECTOR
INTERNATIONAL CODE COUNCIL (ICC) CERTIFICATION:	
ICC-SMSI	STRUCTURAL MASONRY SPECIAL INSPECTOR
ICC-SWSI	STRUCTURAL STEEL AND WELDING SPECIAL INSPECTOR
ICC-RCSI	REINFORCED CONCRETE SPECIAL INSPECTOR
NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES (NICET):	
NICET-CT	CONCRETE TECHNICIAN – LEVELS I, II, III & IV
NICET-ST	SOILS TECHNICIAN - LEVELS I, II, III & IV
NICET-GET	GEOTECHNICAL ENGINEERING TECHNICIAN - LEVELS I, II, III & IV

SCHEDULE OF TESTING AND INSPECTION AGENCIES

THE FOLLOWING ARE THE TESTING AGENCIES AND SPECIAL INSPECTORS THAT WILL BE RETAINED BY THE OWNER OR OWNER'S AGENT TO CONDUCT TESTS AND INSPECTIONS ON THIS PROJECT.

	RESPONSIBILITIES	FIRM	ADDRESS & TELEPHONE
1.	IBC SPECIAL INSPECTIONS, UNLESS NOTED OTHERWISE	TO BE DETERMINED	TO BE DETERMINED
2.	GEOTECHNICAL TESTING AND INSPECTION	TO BE DETERMINED	TO BE DETERMINED
3.	CONCRETE TESTING AND INSPECTION	TO BE DETERMINED	TO BE DETERMINED
4.			
5.			
6.			

NOTE: UNLESS NOTED OTHEWISE, THE INSPECTORS AND TESTING AGENCIES SHALL BE ENGAGED BY THE OWNER OR OWNER'S REPRESENTATIVE AND NOT BY THE CONTRACTOR WHOSE WORK IS TO BE INSPECTED OR TESTED. ANY CONFLICT OF INTEREST MUST BE DISCLOSED TO THE BUILDING OFFICIAL PRIOR TO COMMENCING WORK.

SPECIAL INSPECTION AND TESTS OF SOILS

Special inspections and tests of existing site soil conditions, fill placement and load-bearing requirements shall be performed in accordance with this section 1705.6. The approved geotechnical report and the construction documents prepared by the registered design professionals shall be used to determine compliance. During fill placement, the special inspector shall verify that proper materials and procedures are used in accordance with the provisions of the approved geotechnical report.

	DESCRIPTION	APPLICABLE TO PROJECT Y/N	EXTENT	AGENT
1.	Verify materials below shallow foundations are adequate to achieve the design bearing capacity.		Periodic	PE/GE
2.	Verify excavations are extended to proper depth and have reached proper material.		Periodic	PE/GE
3.	Perform classification and testing of compacted fill materials.		Periodic	ETT
4.	Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill.		Continuous	ETT
5.	Prior to placement of compacted fill, inspect subgrade and verify that site has been prepared propetly.		Periodic	ETT

SPECIAL INSPECTION AND TESTS OF CONCRETE

Special inspections and tests of concrete construction shall be performed in accordance with this section 1705.3, unless exempted from the following:

Exceptions:
1. Isolated concrete spread footings and continuous concrete wall footings of buildings three stories or less above grade plane that are fully supported on earth or rock.
2. Nonstructural concrete slabs supported directly on the ground, including prestressed slabs on grade, where the effective prestress in the concrete is less than 150 psi.
3. Concrete foundation walls constructed in accordance with Table 1807.1.6.2.
4. Concrete patios, driveways and sidewalks, on grade.

	DESCRIPTION	APPLICABLE TO PROJECT Y/N	EXTENT	AGENT
1.	Inspect reinforcement, including prestressing tendons, and verify placement.		Periodic	PE/SE EIT
2.	Inspect reinforcing bar welding.	N	Welding of reinforcement is not allowed	
3.	Inspect anchors cast in concrete.		Periodic	PE/SE EIT
4.	Inspect anchors post-installed in hardened concrete members: a. Adhesive anchors installed in horizontally or upwardly inclined orientations to resist sustained tension loads. b. Mechanical anchors and adhesive anchors not defined in 4a.		Continuous Periodic	ACI-CFTT ACI-CFTT
5.	Verify use of required design mix.		Periodic	ACI-CFTT
6.	Prior to concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete.		Continuous	ACI-CFTT
7.	Inspect concrete and shotcrete placement for proper application techniques.		Continuous	ACI-CFTT
8.	Verify maintenance of specified curing temperature and techniques.		Periodic	ACI-CFTT
9.	Inspect prestressed concrete for: a. Application of prestressing forces b. Grouting of bonded prestressing tendons.		Continuous Continuous	ETT ETT
10.	Inspect erection of precast concrete members.		Periodic	PE/SE EIT
11.	Verify in-situ concrete strength, prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beams and structural slabs.		Periodic	ACI-CFTT
12.	Inspect formwork for shape, location and dimensions of the concrete member being formed.		Periodic	ACI-CFTT

REV.	DESCRIPTION	DATE
0	ISSUED FOR BID	18 FEB 2022

STATE OF MAINE — MIGUEL BETANCOURT — No. 14038 — LICENSED PROFESSIONAL ENGINEER

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UNIVERSITY OF MAINE, FIELD HOCKEY COMPLEX 2022

PROJECT: 168 College Ave, Orono, ME 04469

STRUCTURAL TESTS AND SPECIAL INSPECTIONS

SHEET TITLE:

WBRC CAD FILE:

PROJECT No:	10088.033	GRAPHIC SCALE:	0" 1"
SCALE:	1/8" = 1'-0"		
PROJECT MANAGER:	KK	SHEET No.	S-002
DRAWN BY:	DJU		
CHECKED BY:	MB		

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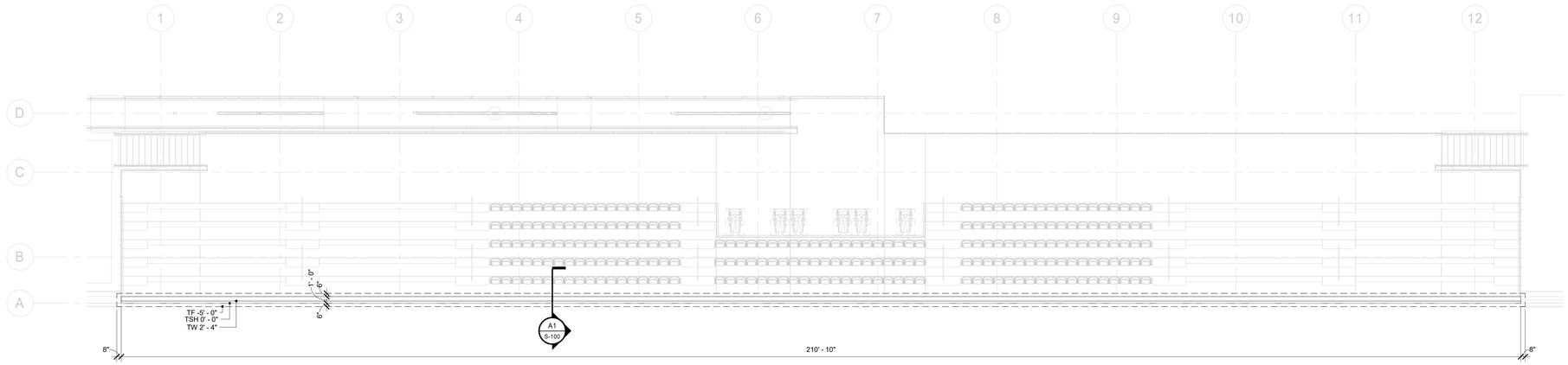
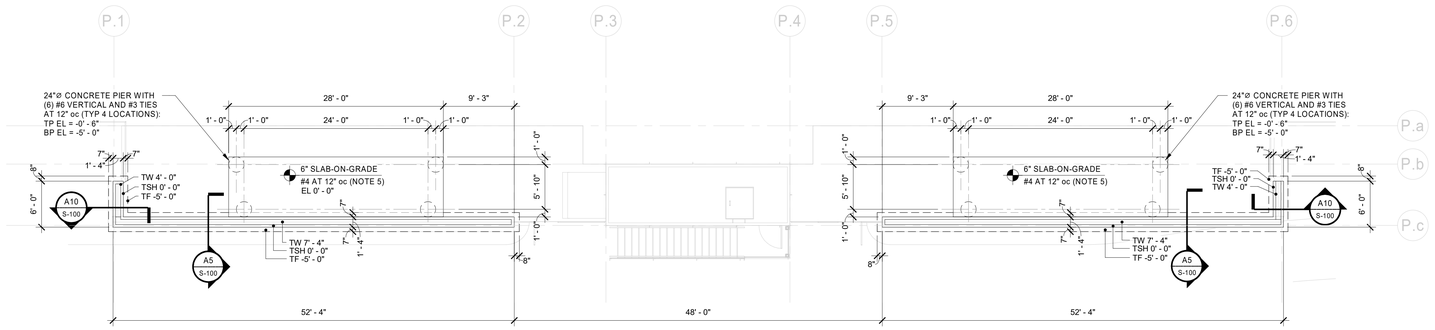


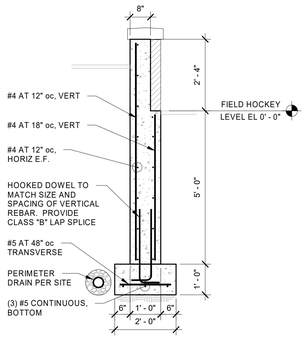
M1 SPECTATOR SEATING FLOOR PLAN - FIELD HOCKEY

1/8" = 1'-0"



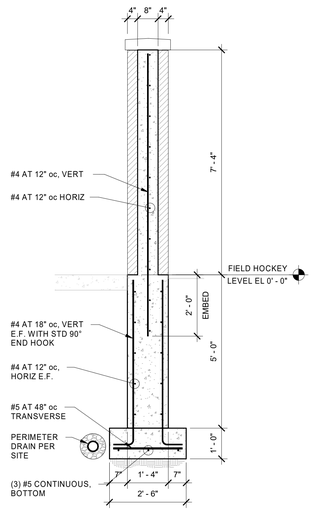
H1 TEAM AREA AND PRESS BOX FLOOR PLAN - FIELD HOCKEY

1/8" = 1'-0"



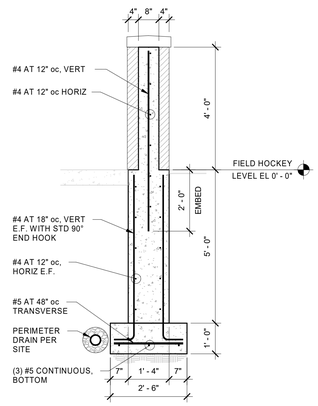
A1 SECTION AT SPECTATOR SEATING

1/2" = 1'-0" S-100



A5 WALL SECTION AT PRESS BOX

1/2" = 1'-0" S-100



A10 WALL SECTION AT PRESS BOX

1/2" = 1'-0" S-100

FOUNDATION PLAN NOTES:

1. REFER TO GENERAL NOTES SHEET FOR DESIGN INFORMATION AND NOTES PERTAINING TO FOUNDATIONS, CONCRETE, AND REINFORCING STEEL.
2. PROJECT REFERENCE ELEVATION AT FIELD HOCKEY FIELD IS 0' - 0" = USGS EL 115.0'
3. WALL FOOTINGS TO BEAR ON FIRM, UNDISTURBED NATURAL SOILS. PROVIDE A MINIMUM 4" DIA. UNDERDRAIN PIPE ALONG BASE OF FOOTING, AS REQUIRED, TO BE COORDINATED WITH SITE DRAWINGS.
4. FOUNDATION WALL PENETRATIONS NOT SHOWN. CONTRACTOR TO COORDINATE SIZE AND LOCATION OF ANY WALL PENETRATIONS FROM UTILITIES THROUGH THE FOUNDATION WALL WITH SITE DRAWINGS, TYPICAL.
5. SLAB-ON-GRADE: CONCRETE SLAB-ON-GRADE REINFORCED AS INDICATED ON PLANS AND SECTIONS AND PLACED OVER COMPACTED FREE-DRAINING GRANULAR FILL MATERIAL. REFER TO GEOTECHNICAL REPORT FOR UNDERSLAB INSULATION AND SUB-BASE INFORMATION. TOP OF CONCRETE SLAB ELEVATION AS NOTED ON PLAN.
6. REFER TO S-300 SERIES DRAWINGS FOR TYPICAL CONCRETE SECTIONS AND DETAILS.
7. SLAB-ON-GRADE CONTROL JOINTS NOT TO EXCEED 12' - 0" OC EA WAY AND CANNOT EXCEED AN ASPECT RATIO OF 1.5 TO 1. REFER TO ARCHITECTURAL AND LANDSCAPE DRAWINGS FOR JOINT LOCATIONS, TYPICAL.
8. WALL CONTROL JOINTS TO BE SPACED AT A MAXIMUM OF 20 FT ALONG A CONTINUOUS STRAIGHT WALL AND A MAXIMUM 20 FT FROM CORNERS. JOINTS SHALL ALSO ALIGN WITH THE BRICK VENEER CONTROL JOINTS, NO EXCEPIONS.

LEGEND:

TF X'-XX"	INDICATES TOP OF CONCRETE WALL FOOTING.
TW X'-XX"	INDICATES TOP OF CONCRETE WALL ELEVATION.
TSH X'-XX"	INDICATES TOP OF CONCRETE SHELF ELEVATION.
FS	INDICATES FOOTING STEP IN CONTINUOUS WALL FOOTING

REV.	DESCRIPTION	DATE
0	ISSUED FOR BID	18 FEB 2022

PROJECT NORTH

STATE OF MAINE
Miguel Betancourt
MIGUEL
BETANCOURT
No. 14038
LICENSED
PROFESSIONAL ENGINEER

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UNIVERSITY OF MAINE, FIELD HOCKEY COMPLEX 2022

PROJECT: 168 College Ave, Orono, ME 04469

FOUNDATION AND SLAB PLAN - FIELD HOCKEY

SHEET TITLE:

WBRC CAD FILE:

PROJECT No.	10088.033
SCALE:	As indicated
PROJECT MANAGER:	KK
DRAWN BY:	DJU
CHECKED BY:	MB

GRAPHIC SCALE: 0" 1"

SHEET No. S-100

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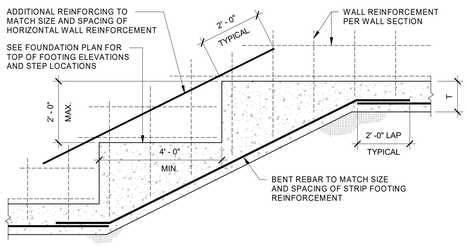
N1 TYPICAL WALL FOOTING STEP DETAIL

NTS

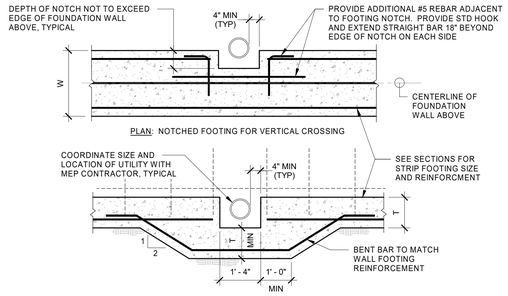


NOTES:

1. STEP FOOTING AS REQUIRED TO MAINTAIN PROPER FROST COVERAGE. REFER TO SITE DRAWINGS FOR GRADE INFORMATION. VERTICAL WALL REINFORCING OR DOWELS TO EXTEND TO BOTTOM REINFORCING OF WALL FOOTING, TYPICAL.

N5 TYPICAL PENETRATION DETAIL AT STRIP FOOTING

NTS



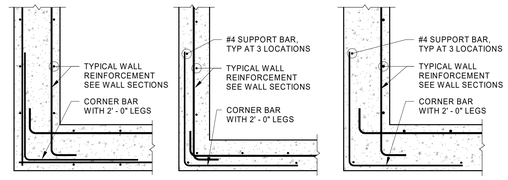
SECTION: STEPPED FOOTING FOR HORIZONTAL CROSSING

NOTES:

1. VERTICAL WALL REINFORCING OR DOWELS TO EXTEND TO BOTTOM REINFORCING OF COLUMN OR AND STRIP FOOTING, TYPICAL.

N10 TYPICAL WALL CORNER REINFORCEMENT

NTS



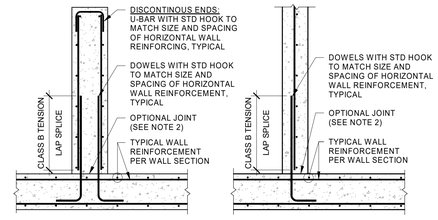
WALL REINFORCEMENT (BOTH FACES) | WALL REINFORCEMENT (CENTERED) | WALL REINFORCEMENT (INSIDE FACE)

NOTES:

1. CORNER BAR TO MATCH SIZE AND SPACING OF HORZONTAL WALL REINFORCEMENT.
2. TERMINATE HORIZONTAL WALL REINFORCEMENT 2" CLEAR FROM END OF WALL.
3. GRADE BEAMS: PROVIDE CORNER BARS FOR LONGITUDINAL REINFORCEMENT IN GRADE BEAMS AT CORNERS WHERE NO CONCRETE PIER IS PRESENT, U.N.O.

N14 TYPICAL WALL INTERSECTION REINFORCEMENT

NTS



WALL REINFORCEMENT (BOTH FACES) | WALL REINFORCEMENT (CENTERED)

NOTES:

1. SEE APPLICABLE SECTIONS FOR WALL REINFORCEMENT SIZE AND SPACING.
2. AT CONTRACTOR'S OPTION, DOWEL BAR REPLACEMENTS (DBR's) MAY BE USED IAT INTERSECTING WALL CONSTRUCTION JOINTS. REFER TO CONCRETE SPECIFICATIONS FOR INFORMATION.

J1 TYPICAL VERTICAL CONTROL JOINT AT WALL

NTS

NOTES:

1. WALL CONTROL JOINTS TO BE SPACED AT A MAXIMUM OF 20 FT ALONG A CONTINUOUS STRAIGHT WALL AND A MAXIMUM 20 FT FROM CORNERS. JOINTS SHALL ALSO ALLIGN WITH THE BRICK VENEER CONTROL JOINTS, NO EXCEPIONS.

J5 TYPICAL VERTICAL CONSTRUCTION JOINT AT WALL

NTS

NOTES:

1. CONSTRUCTION JOINTS, DEFINING THE EXTENT OF INDIVIDUAL PLACEMENTS, SHALL BE DETERMINED BY THE G.C. CONSTRUCTION JOINT SPACING SHALL CONFORM TO THE LOCATIONS SPECIFIED FOR THE CONTRACTION JOINTS.

J10 TYPICAL REINFORCING AT WALL OPENING

NTS

NOTES:

1. FOR WALL OPENINGS NOT SPECIFICALLY DETAILED, USE (3) #5 BARS AT TOP OF OPENING FOR WIDTHS GREATER THAN 6' -0", TYPICAL.
2. NO DIAGONAL BARS REQUIRED FOR CIRCULAR OPENINGS.

J14 TYPICAL SLAB-ON-GRADE RECESS WITH REBAR

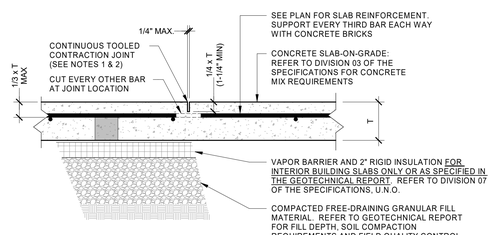
NTS

NOTES:

1. REFER TO STRUCTURAL FLOOR PLAN AND ARCHITECTURAL PLANS FOR SIZE AND LOCATION OF SLAB-ON-GRADE RECESS AREAS.

E1 TYPICAL SLAB-ON-GRADE CONTROL JOINT WITH REBAR

NTS

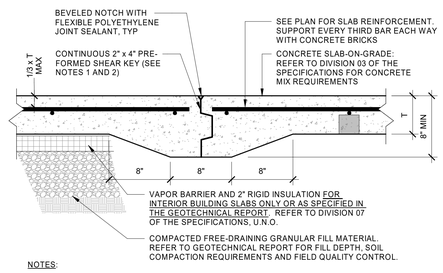


NOTES:

1. TOOL JOINT AS SOON AS THE CONCRETE HARDENS BETWEEN 4 HRS TO 12 HRS FROM FINAL FINISH. THE CONCRETE IS HARD ENOUGH WHEN THE JOINT TOOL DOES NOT DISLODGE ANY AGGREGATE AND WHEN THE EDGES DO NOT RAVEL. TOOLED JOINT OPERATION IS TO BE COMPLETE BEFORE ANY SHRINKAGE CRACKING TAKE EFFECT.

E5 TYPICAL SLAB-ON-GRADE CONSTRUCTION JOINT WITH REBAR

NTS

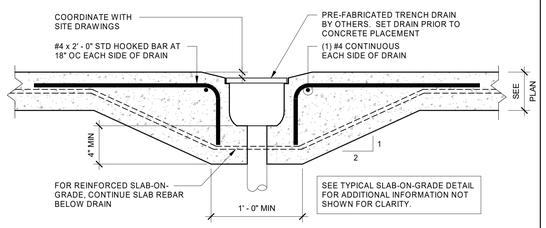


NOTES:

1. CONTRACTOR SHALL COORDINATE CONSTRUCTION JOINT SUCH THAT THEY COINCIDE WITH CONTRACTION JOINT LOCATIONS SHOWN ON PLAN.
2. DISCONTINUE REINFORCING AT JOINT LOCATION AND APPLY LIQUID BONDBREAKER TO FULL DEPTH OF CONSTRUCTION JOINT.

E10 TYPICAL TRENCH DRAIN AT SLAB-ON-GRADE

NTS



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UNIVERSITY OF MAINE, FIELD HOCKEY COMPLEX 2022

PROJECT: 168 College Ave, Orono, ME 04469

TYPICAL CONCRETE SECTIONS AND DETAILS

SHEET TITLE:

WBRC CAD FILE:

PROJECT No. 10088.033

SCALE: As indicated

PROJECT MANAGER: KK

DRAWN BY: DJU

CHECKED BY: MB

GRAPHIC SCALE: 0" 1"

SHEET No. S-300

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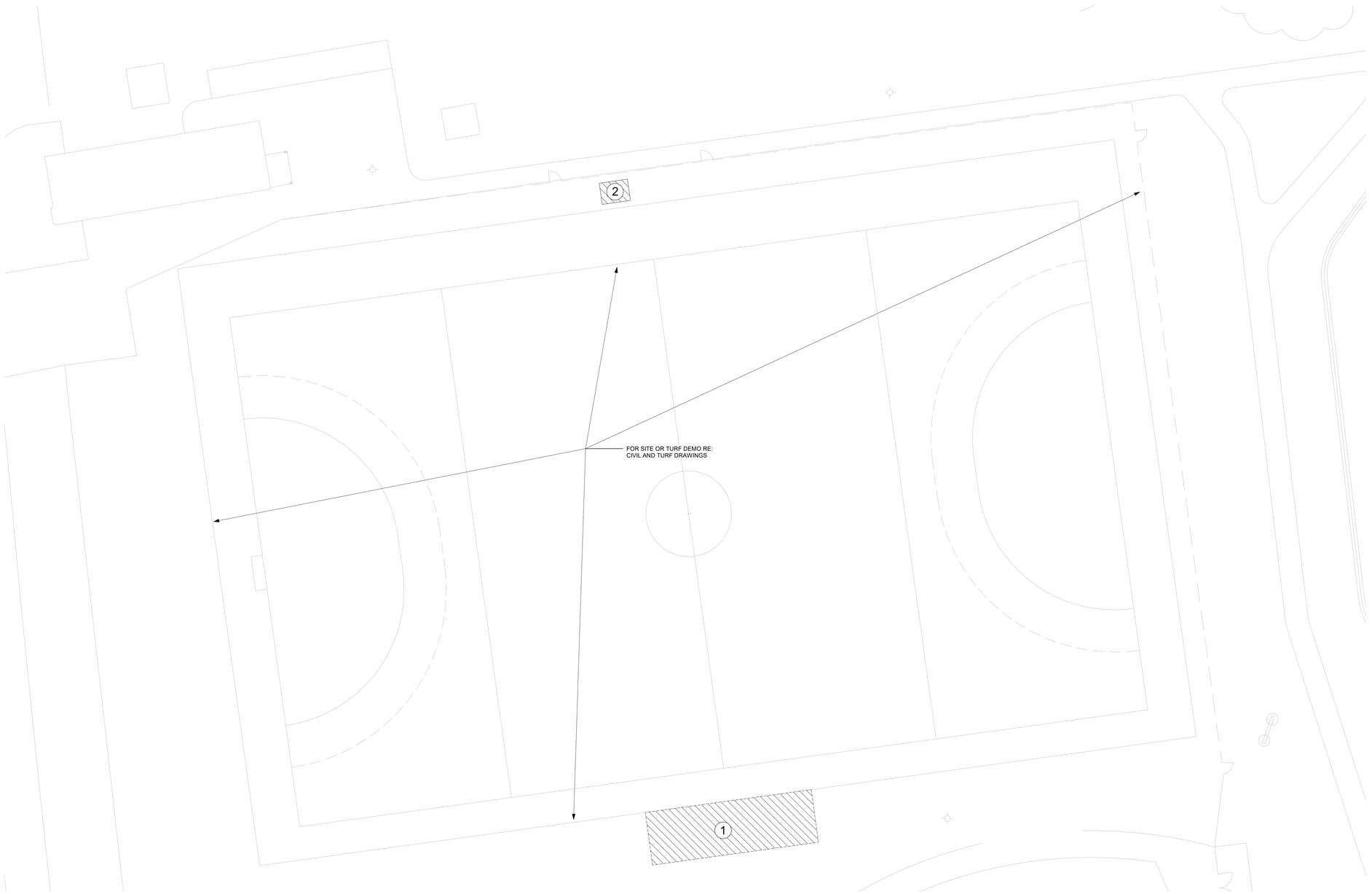
2/18/2022 11:42:57 AM
BIM 360://UM Athletics - Field Sports/10088015 - UM ATH - FIELD HOCKEY - STRUCT R21.rvt



A1 ARCHITECTURAL DEMO PLAN - FIELD HOCKEY
1/16" = 1'-0"

DEMOLITION KEY NOTES:
1. REMOVE EXISTING BLEACHER SEATING, STAIRS, RISERS AND ALL ASSOCIATED HANDRAILS AND ASSOCIATED COMPONENTS, TYP. REMOVE EXISTING FOUNDATIONS TO A DEPTH SO AS NOT TO INTERFERE WITH NEW STRUCTURES
2. DEMOLISH EXISTING PRESS BOX, ASSOCIATED STRUCTURE, UTILITIES, INTERIOR FINISHES, AND EXTERIOR ENVELOPE COMPLETELY. REMOVE EXISTING FOUNDATIONS TO A DEPTH SO AS NOT TO INTERFERE WITH NEW STRUCTURES

REV.	DESCRIPTION	DATE
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Field Hockey Complex 2022

PROJECT: 168 College Ave, Orono, ME 04469

SHEET TITLE: ARCHITECTURAL DEMOLITION PLAN - FIELD HOCKEY

WBRC CAD FILE:	
PROJECT No.	10088.033
SCALE:	1/16" = 1'-0"
PROJECT MANAGER:	Approver
DRAWN BY:	Author
CHECKED BY:	Checker

GRAPHIC SCALE: 0" 1"

SHEET No. AD100

SHEET SIZE: 30x42
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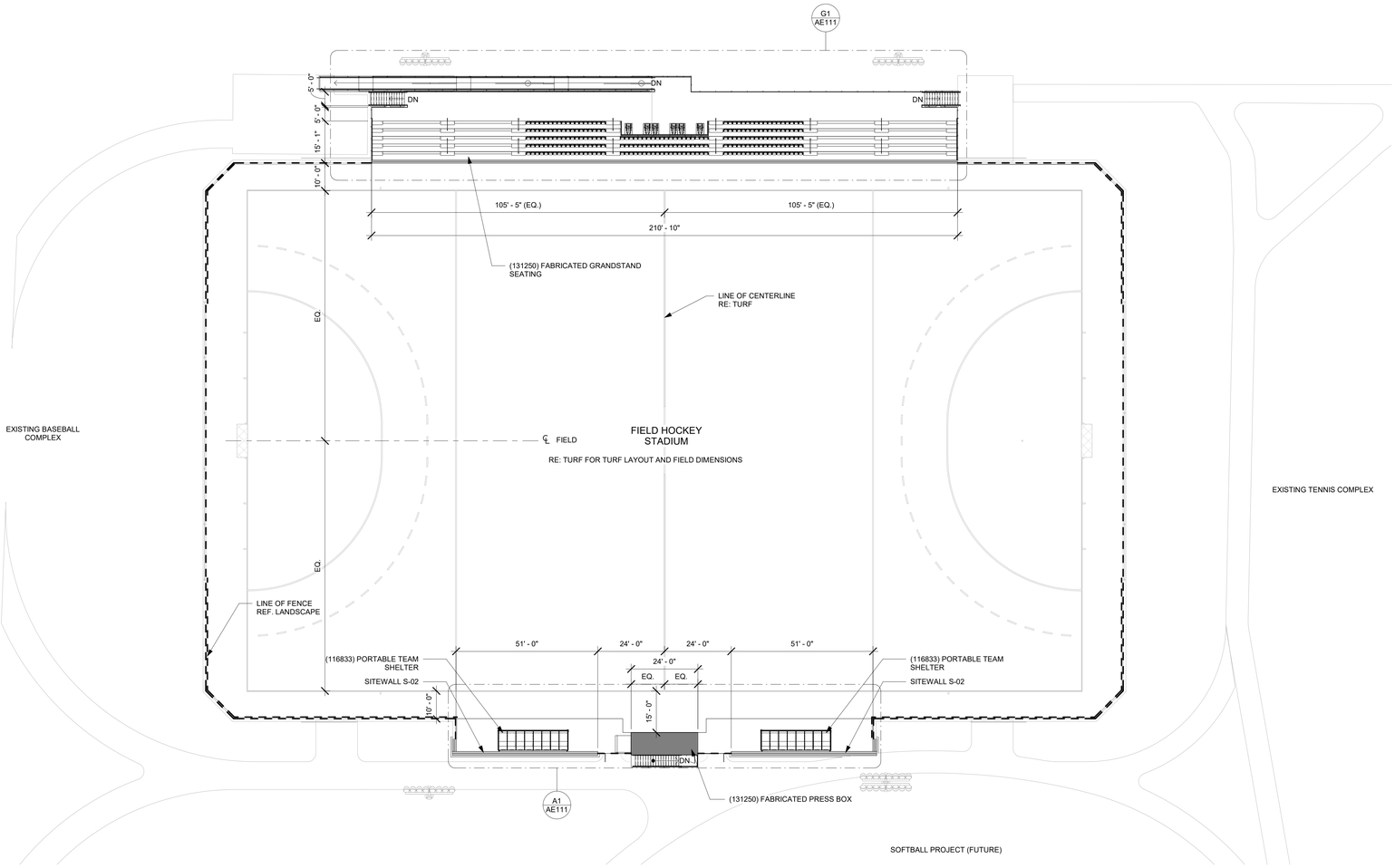

A1 OVERALL REFERENCE PLAN - FIELD HOCKEY
1" = 20'-0"

2/18/2022 2:15:46 PM SHEET SIZE: 30x42
BIM 360://UM Athletics - Field Sports/10088015 – UM ATH – FIELD HOCKEY – ARCHIR21.rvt

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OVERALL REFERENCE PLAN - FIELD HOCKEY

SHEET TITLE:
WBRC CAD FILE:

PROJECT No.	10088.033
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PROJECT MANAGER:	Approver
DRAWN BY:	Author
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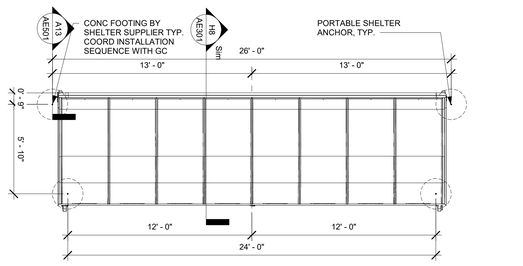
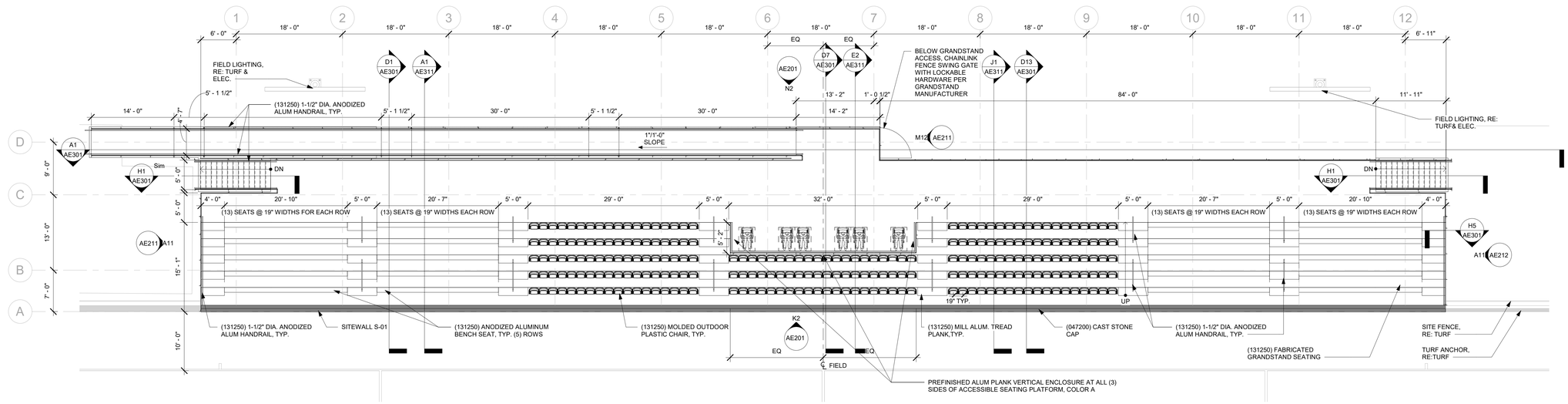
GRAPHIC SCALE: 0" 1"

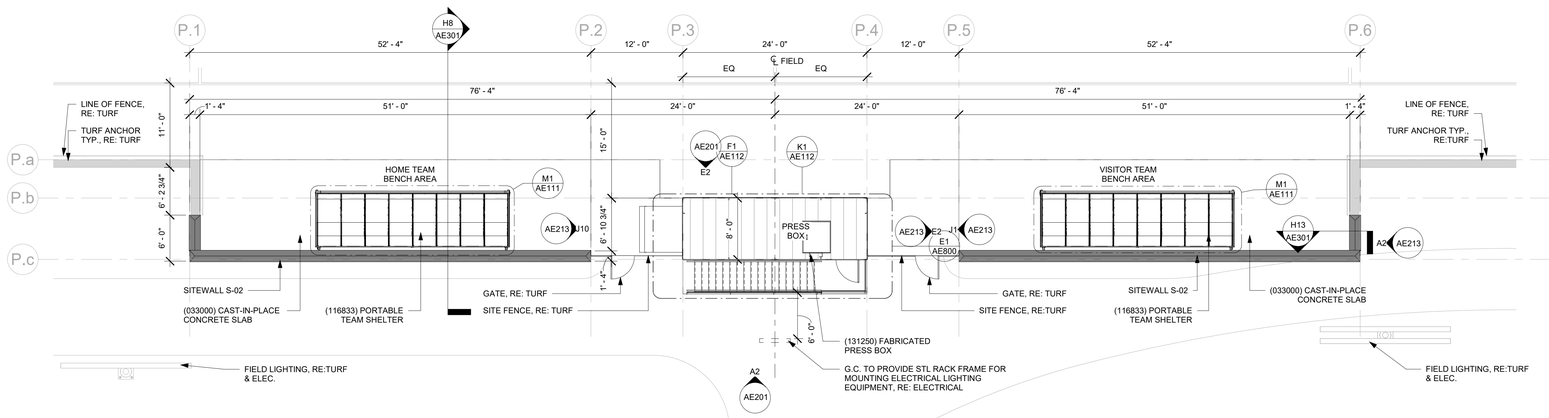
SHEET No. AE101



M1 ENLARGED PLAN - KWIK GOAL SHELTER FOOTINGS
1/4" = 1'-0"



G1 ENLARGED FLOOR PLAN - FIELD HOCKEY SEATING BOWL
1/8" = 1'-0"



A1 ENLARGED FLOOR PLAN - FIELD HOCKEY - TEAM & MANAGEMENT
1/8" = 1'-0"

REV.	DESCRIPTION	DATE
0	ISSUED FOR BID	18 FEB 2022

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ENLARGED FLOOR PLANS - FIELD HOCKEY

SHEET TITLE:	
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PROJECT No.	10088.033
SCALE:	As indicated
PROJECT MANAGER:	Approver
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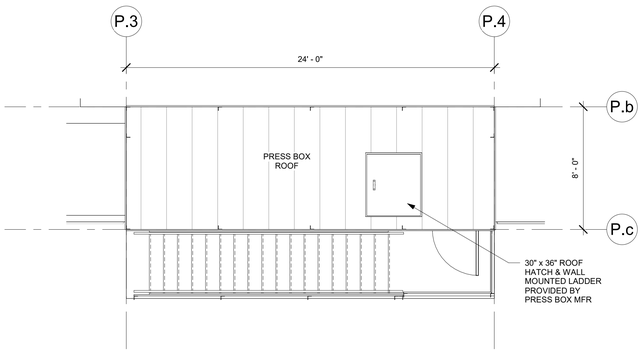
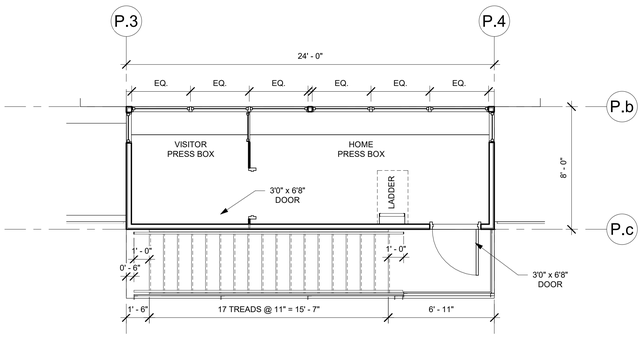


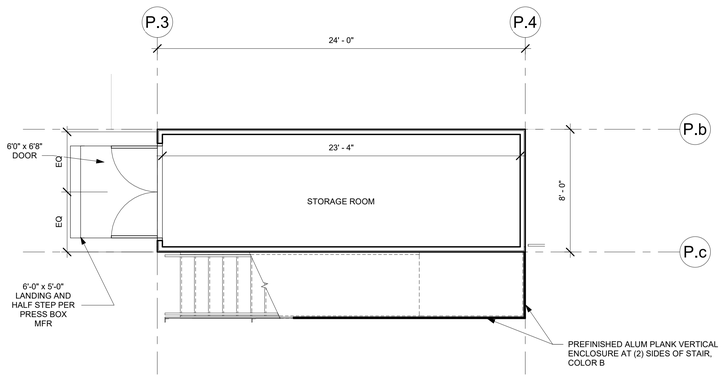
RE: SHEET AE551 FOR ADDITIONAL PRE-FABRICATED BUILDING DETAILS & INFORMATION

K1 ENLARGED PLAN - FIELD HOCKEY - ROOF LEVEL
1/4" = 1'-0"



RE: SHEET AE551 FOR ADDITIONAL PRE-FABRICATED BUILDING DETAILS & INFORMATION

F1 ENLARGED PLAN - FIELD HOCKEY - PRESS LEVEL
1/4" = 1'-0"



RE: SHEET AE551 FOR ADDITIONAL PRE-FABRICATED BUILDING DETAILS & INFORMATION

A1 ENLARGED PLAN - FIELD HOCKEY - STORAGE LEVEL
1/4" = 1'-0"

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ENLARGED FLOOR PLANS - FIELD HOCKEY

SHEET TITLE:
WBRC CAD FILE:
PROJECT No.: 10088.033
SCALE: 1/4" = 1'-0"
PROJECT MANAGER: Approver
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GRAPHIC SCALE: 0" 1"
SHEET No.: AE112

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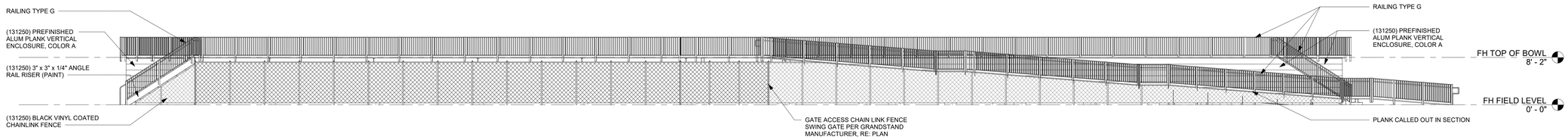
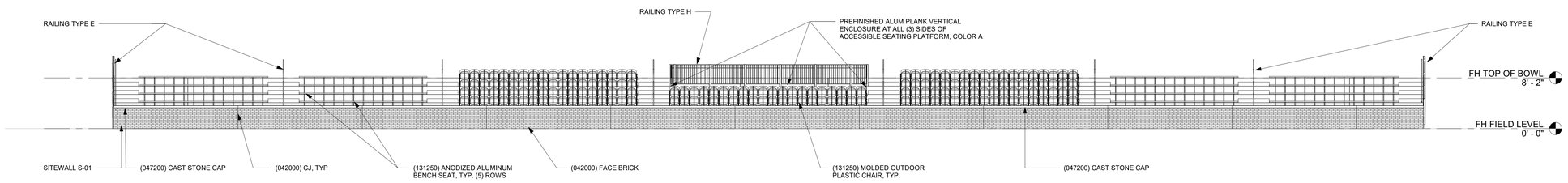
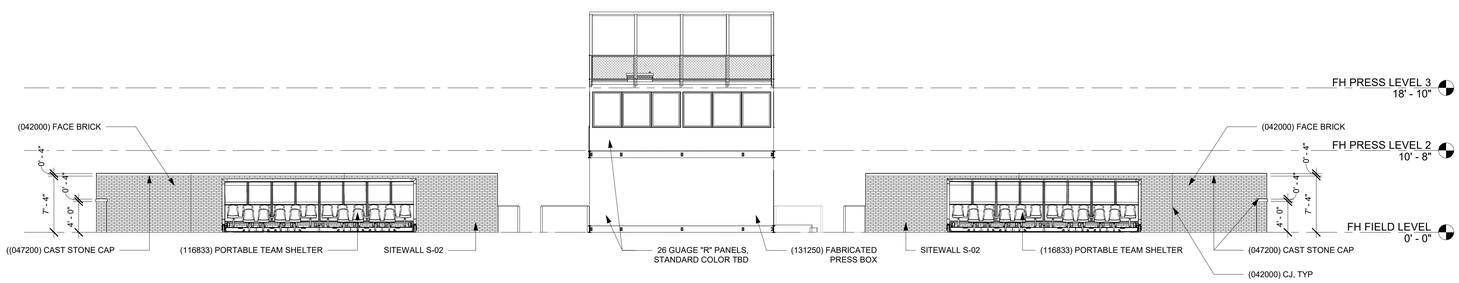


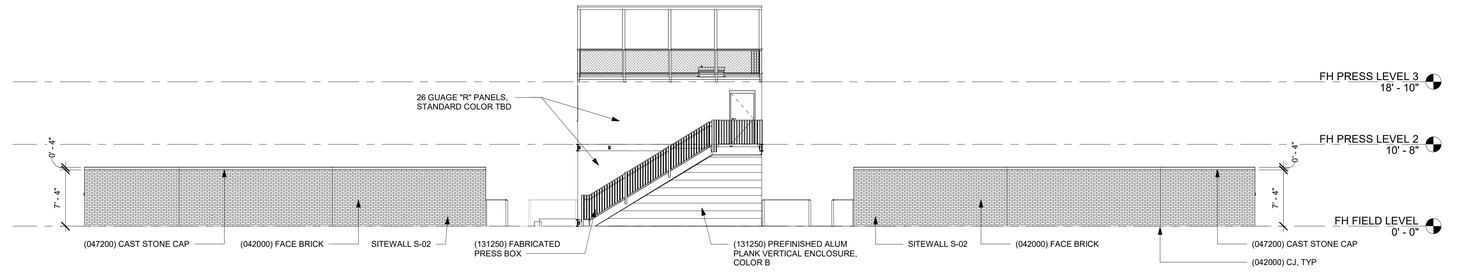
N2 ELEVATION - FIELD HOCKEY - SPECTATOR SEATING - NORTH
1/8" = 1'-0"



K2 ELEVATION - FIELD HOCKEY - SPECTATOR SEATING - SOUTH
1/8" = 1'-0"



E2 ELEVATION - FIELD HOCKEY - PRESS - NORTH
1/8" = 1'-0"



A2 ELEVATION - FIELD HOCKEY - PRESS - SOUTH
1/8" = 1'-0"

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ELEVATIONS - FIELD HOCKEY

SHEET TITLE:
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PROJECT No. 10088.033
SCALE: 1/8" = 1'-0"
PROJECT MANAGER: Approver
DRAWN BY: Author
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GRAPHIC SCALE: 0" 1"
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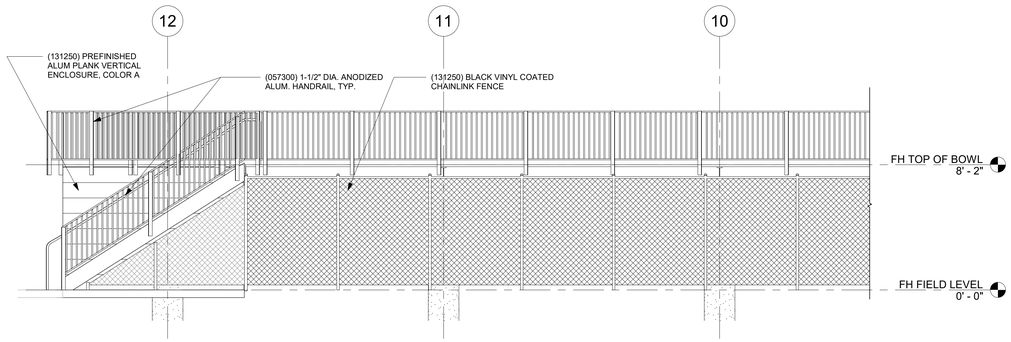
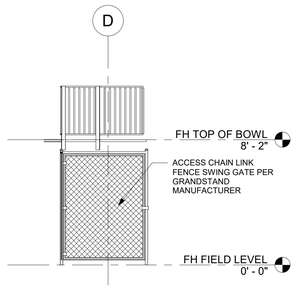


M1 ENLARGED ELEVATION - FIELD HOCKEY - SPECTATOR SEATING - NORTH 3
1/4" = 1'-0"



M12 ENLARGED ELEVATION - FIELD HOCKEY - UNDER SEATING BOWL ACCESS GATE
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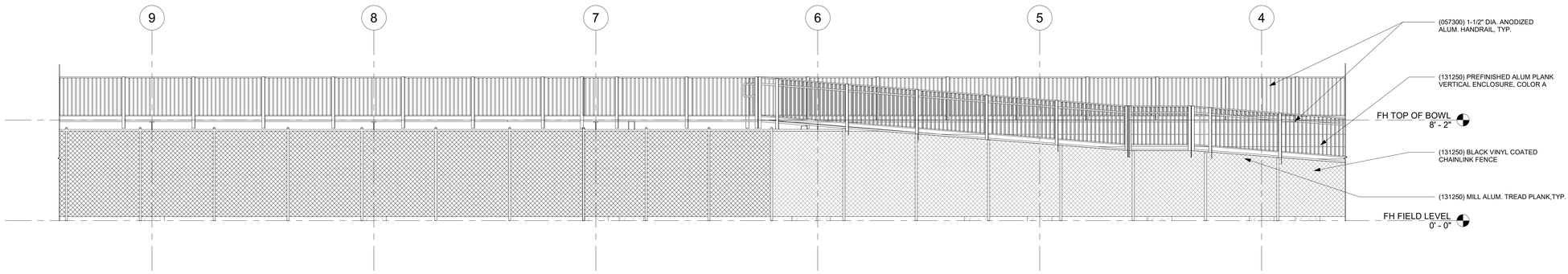
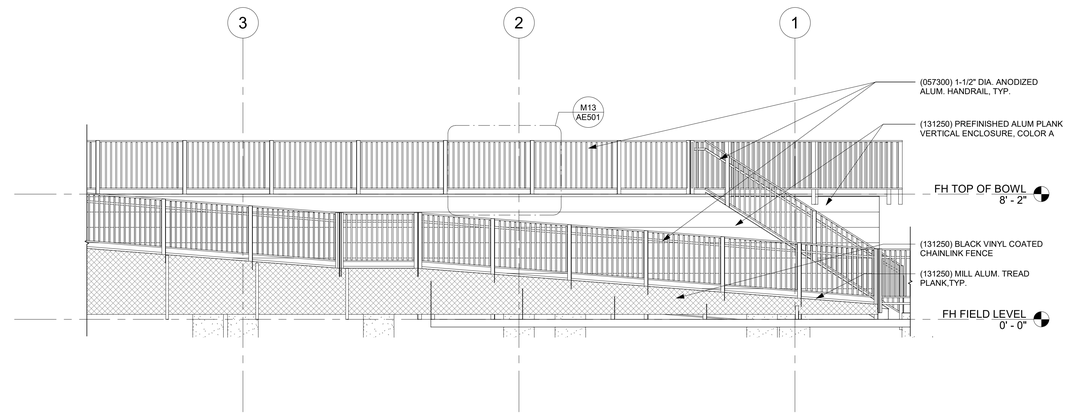


F1 ENLARGED ELEVATION - FIELD HOCKEY - SPECTATOR SEATING - NORTH 2
1/4" = 1'-0"



A1 ENLARGED ELEVATION - FIELD HOCKEY - SPECTATOR SEATING - NORTH 1
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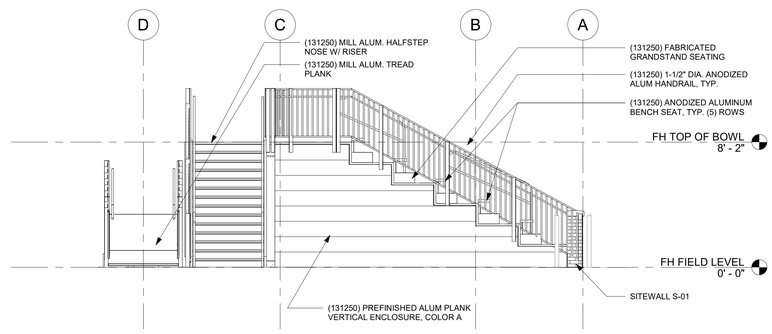

A11 ENLARGED ELEVATION - FIELD HOCKEY - SPECTATOR SEATING - WEST
1/4" = 1'-0"

REV.	DESCRIPTION	DATE
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ENLARGED ELEVATIONS - FIELD HOCKEY

SHEET TITLE:	
WBRC CAD FILE:	
PROJECT No.	10088.033
SCALE:	1/4" = 1'-0"
PROJECT MANAGER:	Approver
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CHECKED BY:	Checker
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SHEET No.	AE211

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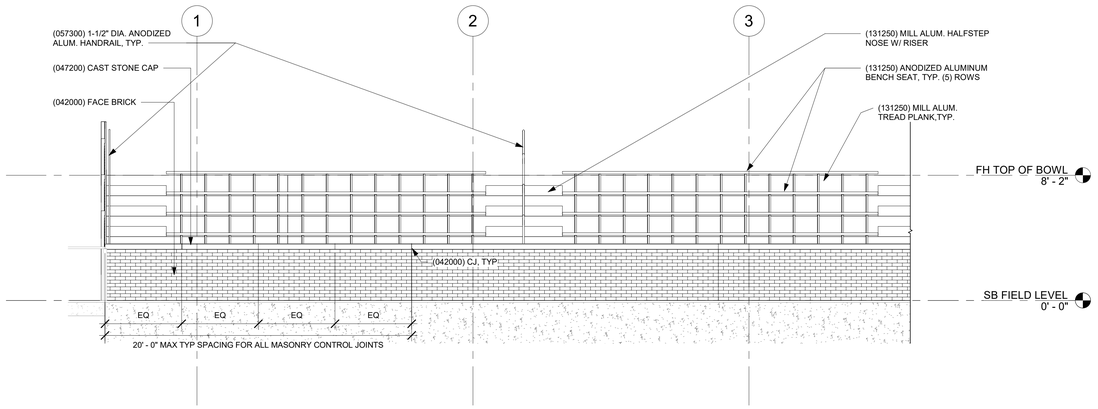

M1 ENLARGED ELEVATION - FIELD HOCKEY - SPECTATOR SEATING - SOUTH 1
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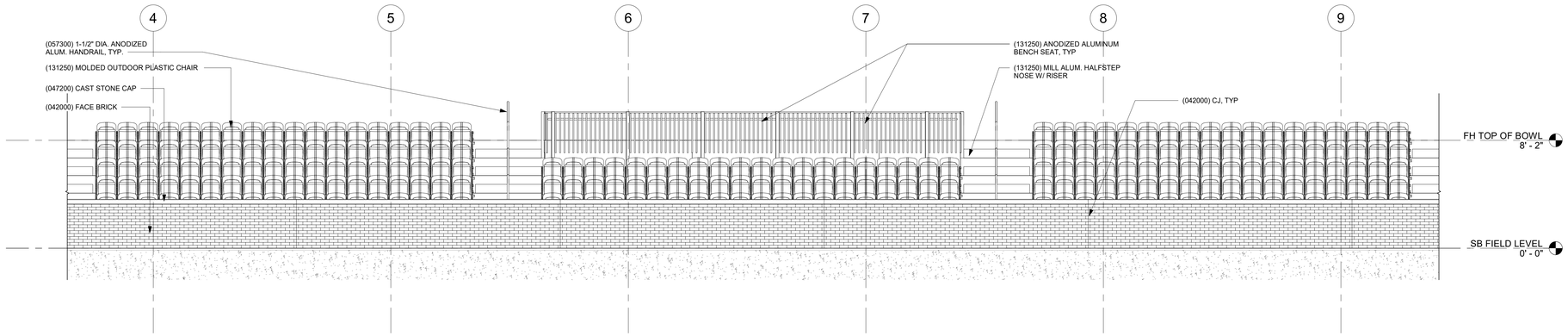

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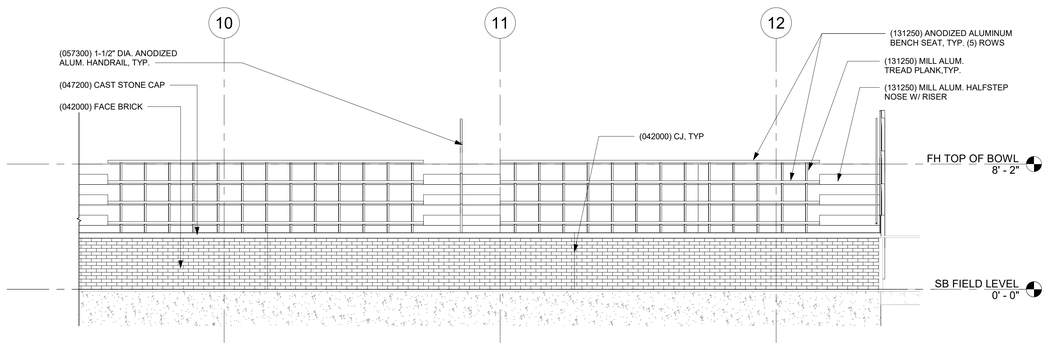
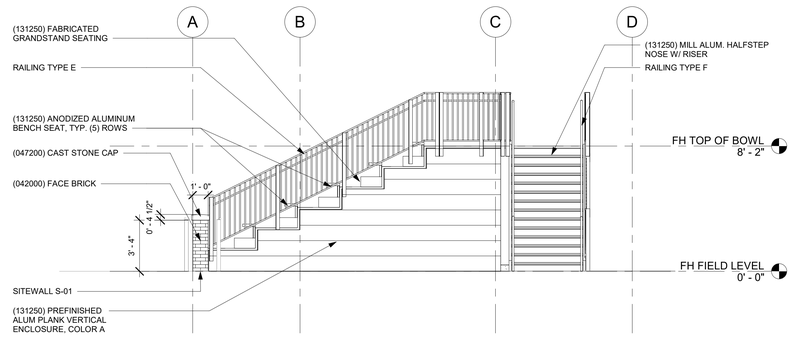
1/4" = 1'-0"



A1 ENLARGED ELEVATION - FIELD HOCKEY - SPECTATOR SEATING - SOUTH 3
1/4" = 1'-0"



A11 ENLARGED ELEVATION - FIELD HOCKEY - SPECTATOR SEATING - EAST
1/4" = 1'-0"

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ENLARGED ELEVATIONS - FIELD HOCKEY

SHEET TITLE:

WBRC CAD FILE:

PROJECT No.	10088.033
SCALE:	1/4" = 1'-0"
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SHEET No. AE212

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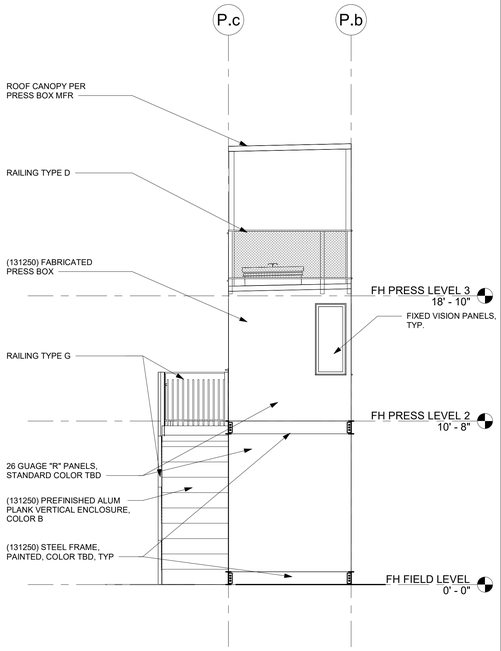
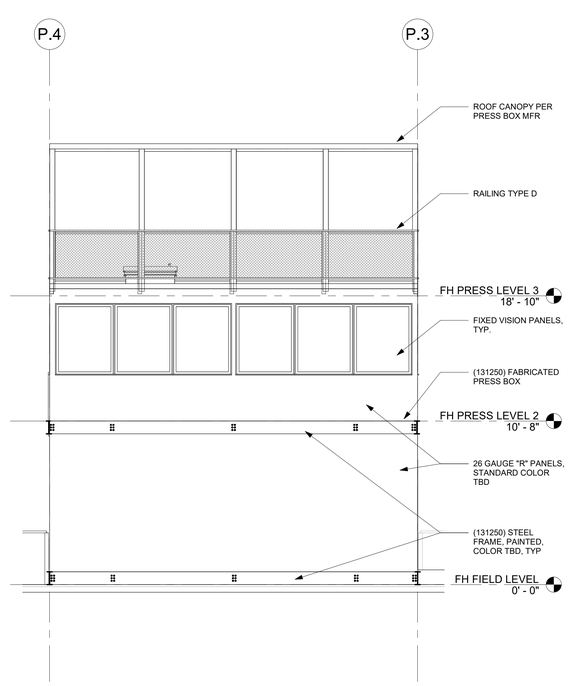
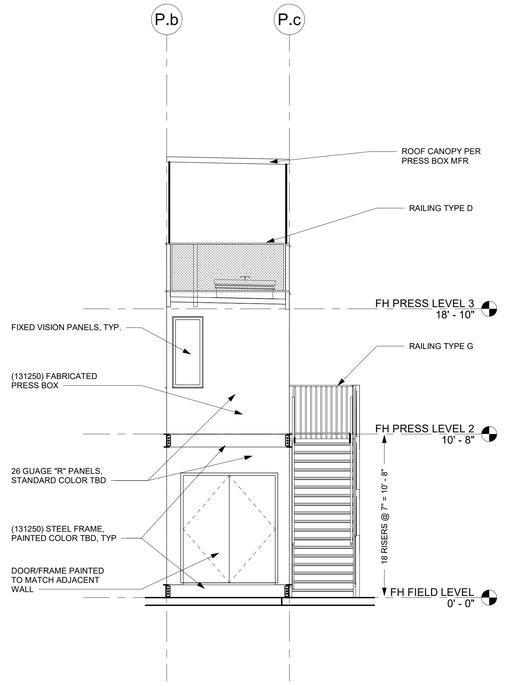


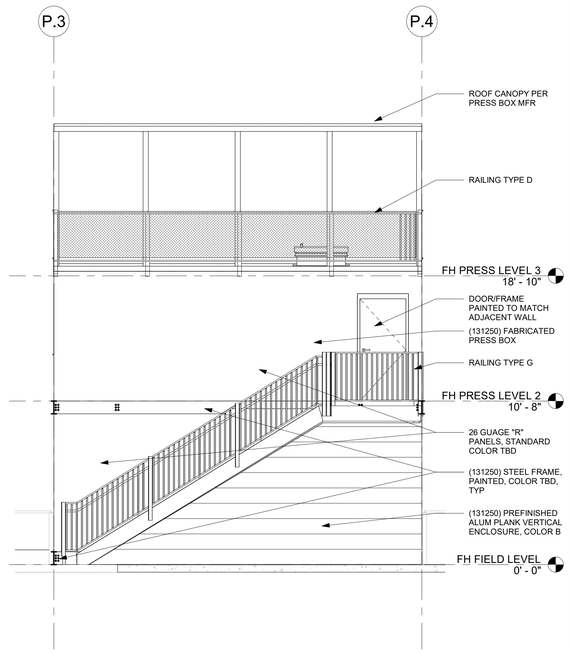
J1 ELEVATION - FIELD HOCKEY - PRESS - EAST
1/4" = 1'-0"



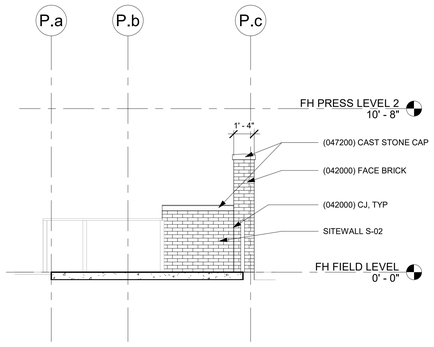
J5 ENLARGED ELEVATION - FIELD HOCKEY - PRESS - NORTH
1/4" = 1'-0"



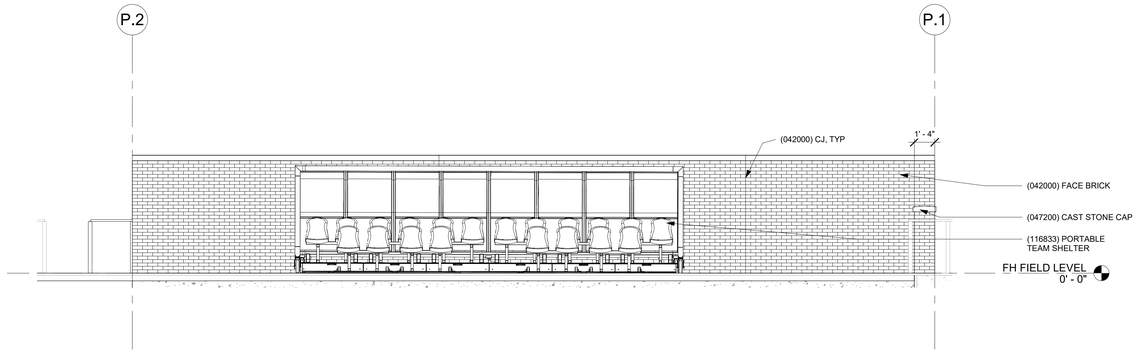
J10 ENLARGED ELEVATION - FIELD HOCKEY - PRESS - WEST
1/4" = 1'-0"



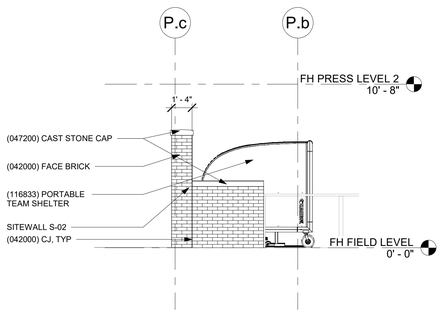
J14 ENLARGED ELEVATION - FIELD HOCKEY - PRESS - SOUTH
1/4" = 1'-0"



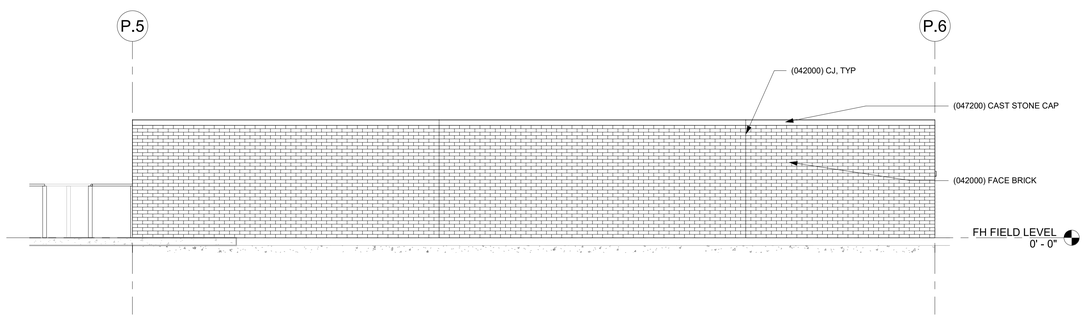
E2 ENLARGED ELEVATION - FIELD HOCKEY - PRESS - EAST - BRICK WALL
1/4" = 1'-0"



E8 ENLARGED ELEVATION - FIELD HOCKEY - WEST TEAM SHELTER - NORTH
1/4" = 1'-0"



A2 ENLARGED ELEVATION - FIELD HOCKEY - PRESS - EAST - BRICK WALL - EXTERIOR
1/4" = 1'-0"



A8 ENLARGED ELEVATION - FIELD HOCKEY - PRESS - SOUTH - BRICK WALL
1/4" = 1'-0"

REV.	DESCRIPTION	DATE
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LICENSED ARCHITECT
KRISTIAN C. ROWAL
NO.3366
STATE OF MAINE
02.18.2022

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CRAWFORD

University of Maine
Field Hockey Complex 2022

PROJECT: 168 College Ave, Orono, ME 04469

ENLARGED ELEVATIONS - FIELD HOCKEY

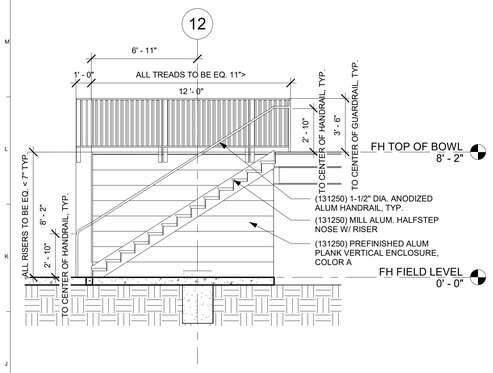
SHEET TITLE:

WBRC CAD FILE:	
PROJECT No.	10088.033
SCALE:	1/4" = 1'-0"
PROJECT MANAGER:	Approver
DRAWN BY:	Author
CHECKED BY:	Checker

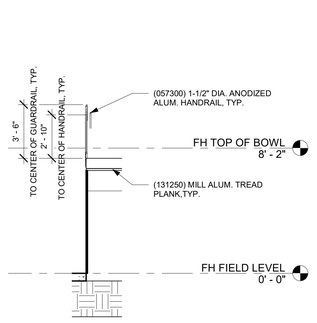
GRAPHIC SCALE: 0" 1"

SHEET No.
AE213

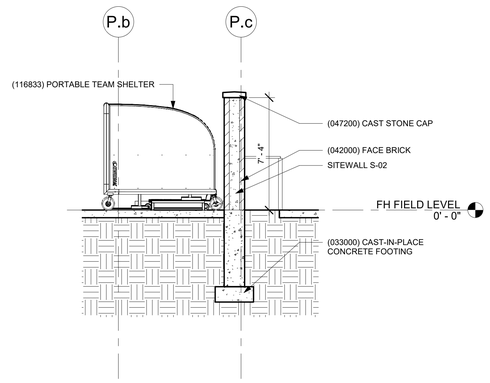
SHEET SIZE - 30x42
2/18/2022 2:16:18 PM
BIM 360://UM Athletics - Field Sports/10088015 - UM ATH – FIELD HOCKEY – ARCHR21.rvt



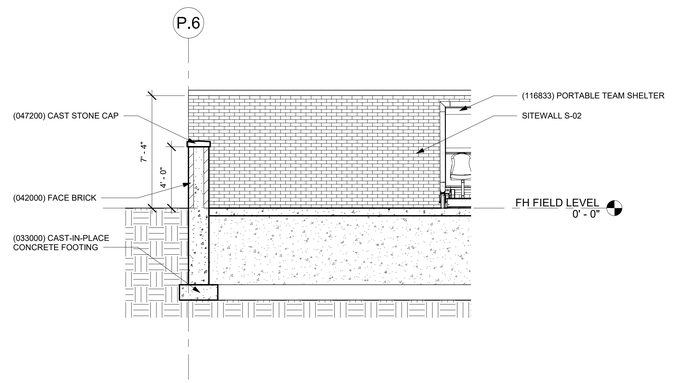
H1 SECTION - SPECTATOR SEATING @ STAIR - FIELD HOCKEY
1/4" = 1'-0"



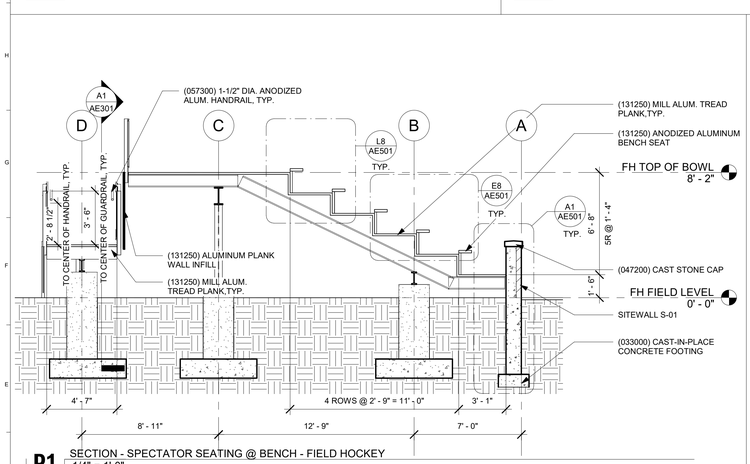
H5 SECTION - SPECTATOR SEATING @ SIDE - FIELD HOCKEY
1/4" = 1'-0"



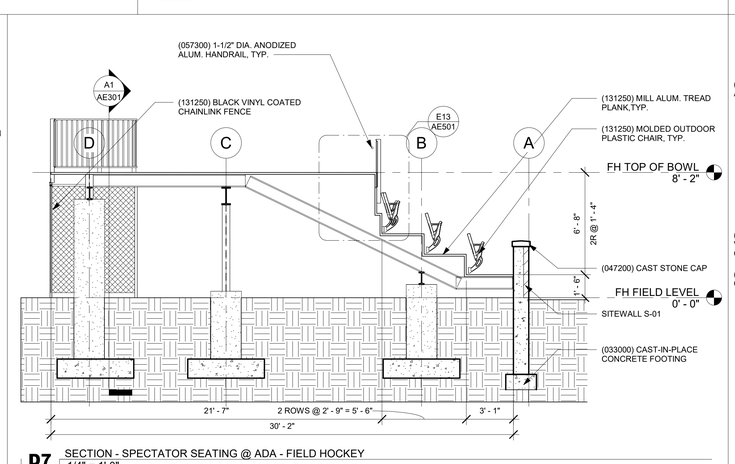
H8 SECTION - COVERRED TEAM AREA - FIELD HOCKEY
1/4" = 1'-0"



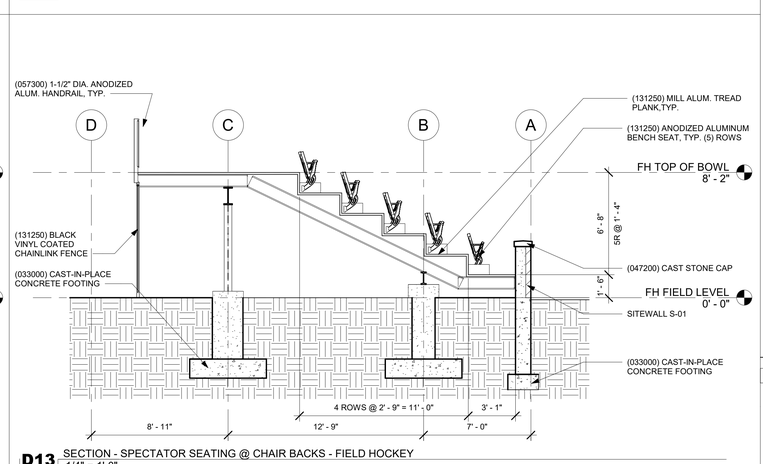
H13 SECTION - COVERED TEAM AREA - SIDE WALL - FIELD HOCKEY
1/4" = 1'-0"



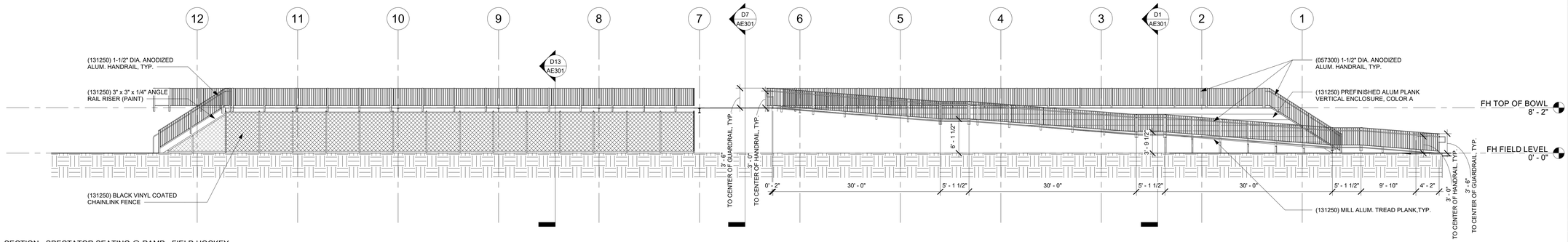
D1 SECTION - SPECTATOR SEATING @ BENCH - FIELD HOCKEY
1/4" = 1'-0"



D7 SECTION - SPECTATOR SEATING @ ADA - FIELD HOCKEY
1/4" = 1'-0"



D13 SECTION - SPECTATOR SEATING @ CHAIR BACKS - FIELD HOCKEY
1/4" = 1'-0"



A1 SECTION - SPECTATOR SEATING @ RAMP - FIELD HOCKEY
1/8" = 1'-0"

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CRAWFORD

University of Maine
Field Hockey Complex 2022

PROJECT: 168 College Ave, Orono, ME 04469

SECTIONS - FIELD HOCKEY

SHEET TITLE:	
WBRC CAD FILE:	
PROJECT No.	10088.033
SCALE:	As indicated
PROJECT MANAGER:	Approver
DRAWN BY:	Author
CHECKED BY:	Checker
GRAPHIC SCALE:	0" 1"
SHEET No.	AE301

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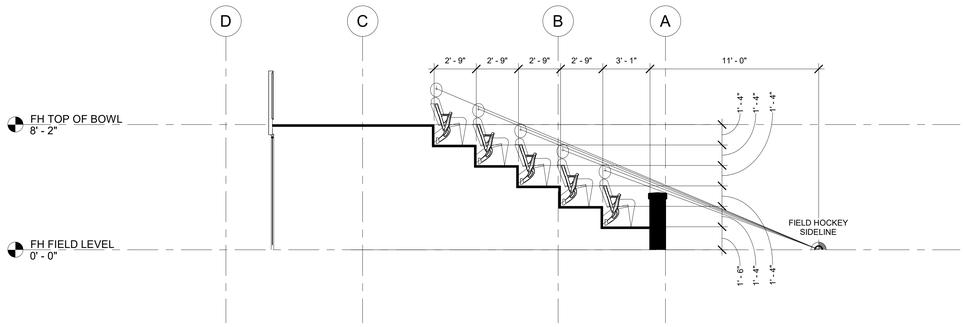
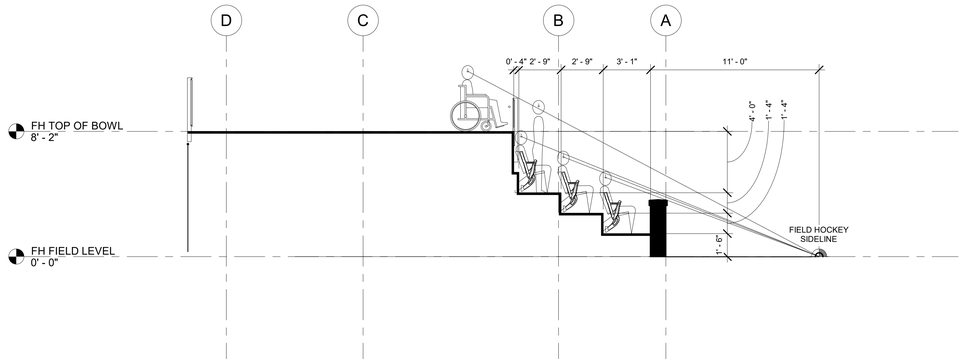
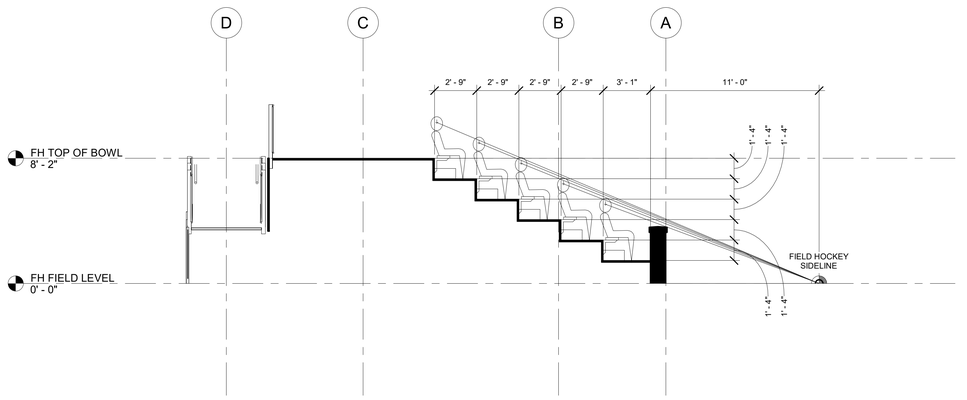
SHEET SIZE: 30x42
2/18/2022 2:16:21 PM
BIM 360://UM Athletics - Field Sports/10088015 – UM ATH – FIELD HOCKEY – ARCHR21.rvt



J1 SIGHTLINE SECTION - SPECTATOR SEATING @ CHAIR BACK - FIELD HOCKEY
1/4" = 1'-0"



E2 SIGHTLINE SECTION - SPECTATOR SEATING @ ADA - FIELD HOCKEY
1/4" = 1'-0"



A1 SIGHTLINE SECTION - SPECTATOR SEATING @ BENCH - FIELD HOCKEY
1/4" = 1'-0"

REV.	DESCRIPTION	DATE
0	ISSUED FOR BID	18 FEB 2022

LICENSED ARCHITECT
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02.18.2022

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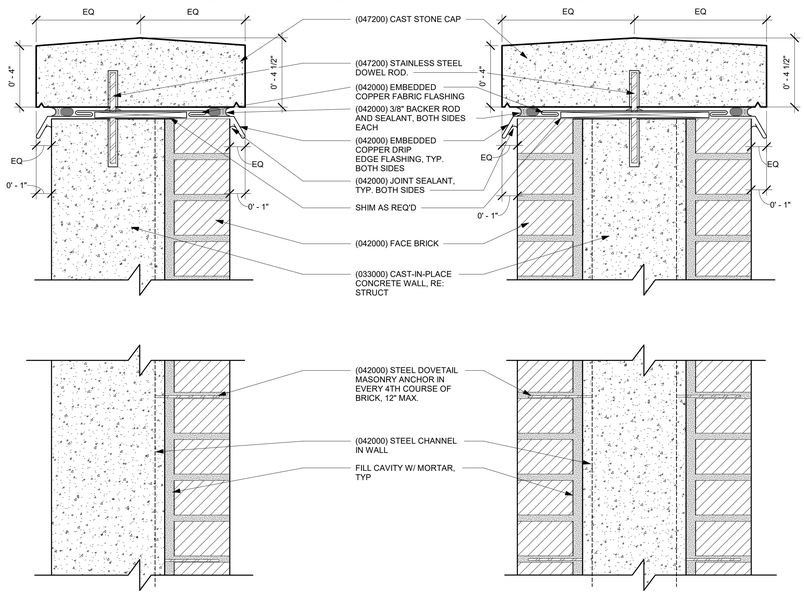
PROJECT: 168 College Ave, Orono, ME 04469

SIGHTLINE SECTIONS - FIELD HOCKEY

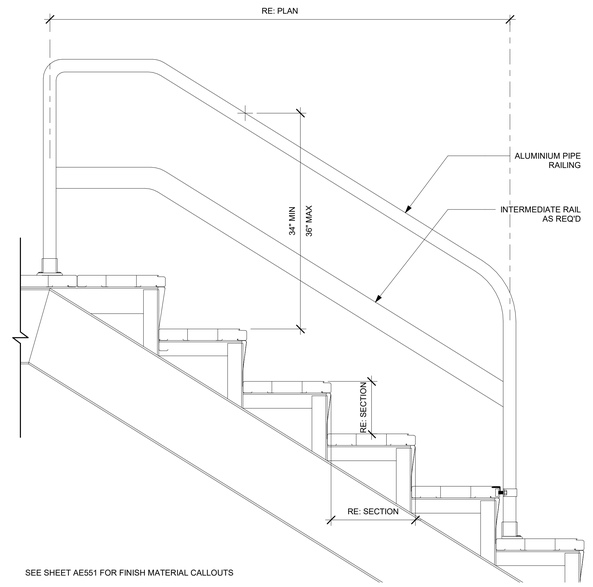
SHEET TITLE:	
WBRC CAD FILE:	
PROJECT No.	10088.033
SCALE:	1/4" = 1'-0"
PROJECT MANAGER:	Approver
DRAWN BY:	Author
CHECKED BY:	Checker
GRAPHIC SCALE:	0" 1"
SHEET No.	AE311

2/18/2022 2:16:23 PM
SHEET SIZE: 30x42
BIM 360://UM Athletics - Field Sports/10088015 – UM ATH – FIELD HOCKEY – ARCHR21.rvt



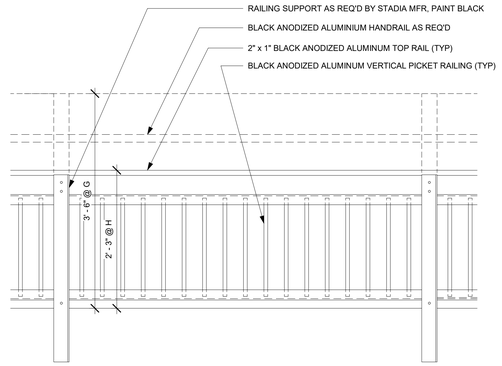
L1 DETAIL - TOP OF SITE WALL S-01
3" = 1'-0"

L5 DETAIL - TOP OF SITE WALL S-02
3" = 1'-0"

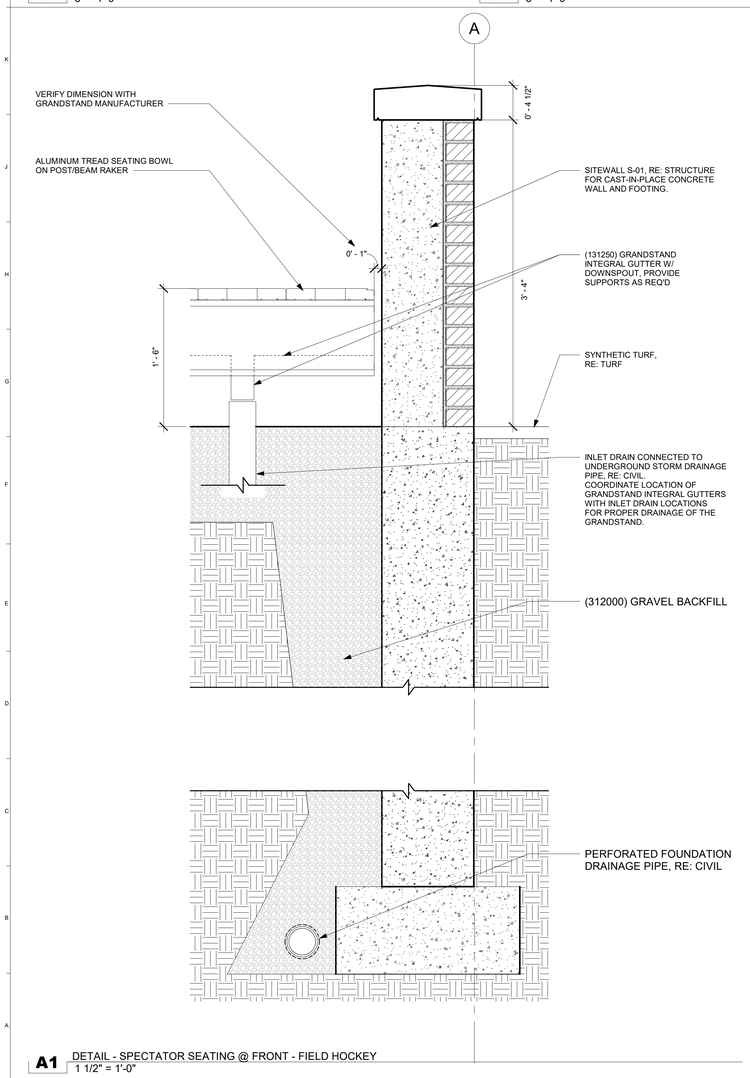


SEE SHEET AE551 FOR FINISH MATERIAL CALLOUTS

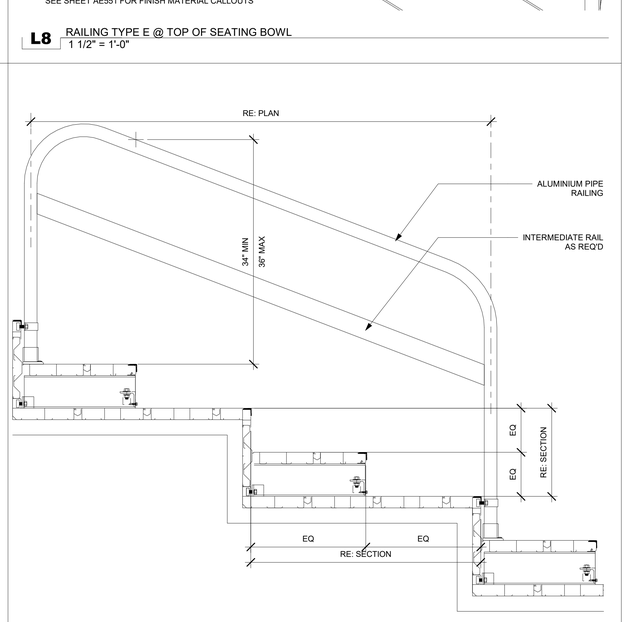
L8 RAILING TYPE E @ TOP OF SEATING BOWL
1 1/2" = 1'-0"



M13 RAILING TYPE G AND H
1" = 1'-0"

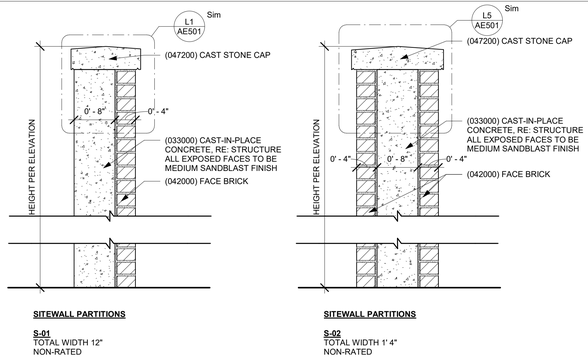


A1 DETAIL - SPECTATOR SEATING @ FRONT - FIELD HOCKEY
1 1/2" = 1'-0"

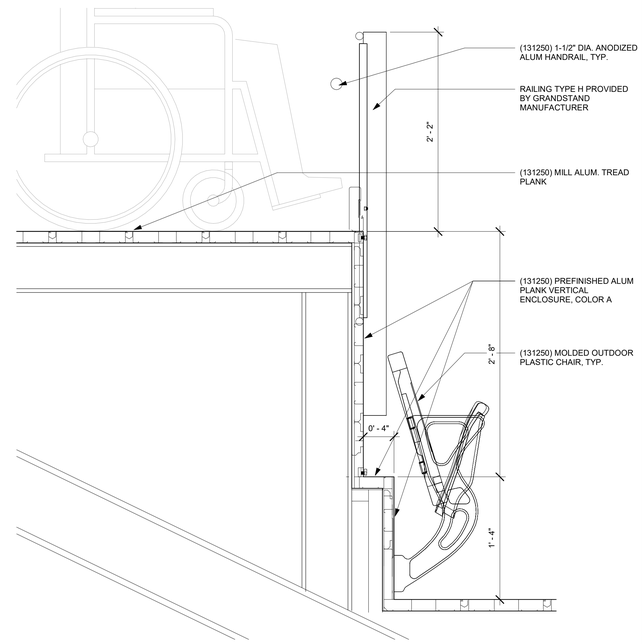


SEE SHEET AE551 FOR FINISH MATERIAL CALLOUTS

E8 RAILING TYPE E @ MIDDLE OF SEATING BOWL
1 1/2" = 1'-0"

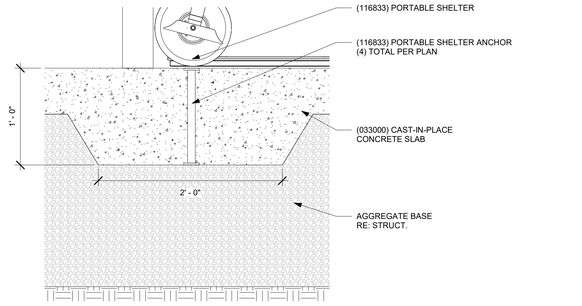


A8 PARTITION TYPES
1" = 1'-0"



SEE SHEET AE551 FOR FINISH MATERIAL CALLOUTS

E13 DETAIL - SPECTATOR SEATING @ ADA - FIELD HOCKEY
1 1/2" = 1'-0"



A13 DETAIL - KWIK GOAL FOOTING - FIELD HOCKEY
1 1/2" = 1'-0"

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PROJECT: 168 College Ave, Orono, ME 04469

SECTION DETAILS - FIELD HOCKEY

SHEET TITLE:	
WBRC CAD FILE:	
PROJECT No.	10088.033
SCALE:	As indicated
PROJECT MANAGER:	Approver
DRAWN BY:	Author
CHECKED BY:	Checker
GRAPHIC SCALE:	0" 1"
SHEET No.	AE501

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SHEET SIZE: 30x42
2/18/2022 2:16:28 PM
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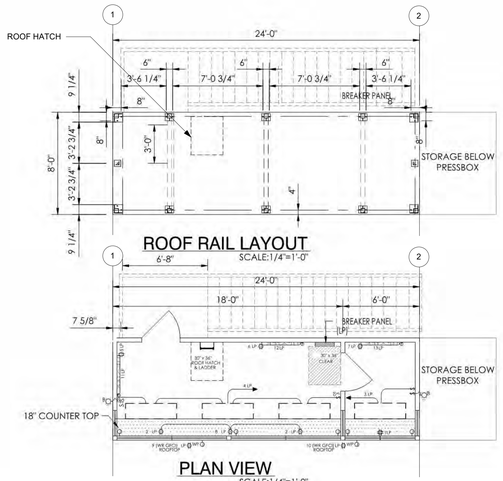


ROOF RAIL LAYOUT

SCALE:1/4"=1'-0"

PLAN VIEW

SCALE:1/4"=1'-0"

U.L. LISTED (PANELBOARDS NO. 67)	LOAD CENTER SCHEDULE	COPPER BUSBAR
	GENERAL ELECTRIC #TLM142DCCU	

PANEL LP 200 AMP RATED - 32 CIRCUIT W/ EQUIPMENT GROUND 208-240/120 VOLTS 1 PH.

MOUNTING: ☑ FLUSH ☐ SURFACE 22kAIC RMS 100 AMP MAIN BREAKER

	BREAKER SIZE	POLE	CIR. #	BUS A	BUS B	CIR. #	BREAKER SIZE	POLE	
DOUBLE RECPT, FRONT WALL	20	1	1	●		2	20	1	(2) RECPT, FRONT WALL
LIGHTS	20	1	3	●		4	20	1	LIGHTS
RECPT, BACK WALL	20	1	5		●	6	20	1	RECPT, BACK WALL
RECPT, BACK WALL	20	1	7		●	8	20	1	RECPT, FRONT WALL
RECPT, ROOFTOP	20	1	9	●		10	20	1	RECPT, ROOFTOP
BASEBOARD HEATER	20	1	11	●		12	20	1	BASEBOARD HEATER
BASEBOARD HEATER	20	1	13			14	20	1	SPACE
SPACE	20	1	15			16			SPACE
SPACE			17	●		18			SPACE
SPACE			19	●		20			SPACE
SPACE			21		●	22			SPACE
SPACE			23		●	24			SPACE
SPACE			25	●		26			SPACE
SPACE			27	●		28			SPACE
SPACE			29		●	30			SPACE
SPACE			31		●	32			SPACE

CONDUIT WILL BE 1/2" EMT, 1/2" STEELFLEX, OR SURFACE RACEWAY UNLESS OTHERWISE NOTED

WIRING ON 20A BREAKERS WILL BE #12 = THWN - THHN

EQUIPMENT GROUND RUN IN ALL CONDUITS OR NON-METALLIC SURFACE RACEWAYS

PANEL FEEDER, NEUTRAL, BONDING, AND GROUNDING TO BE ACCORDING TO APPLICABLE CODES ADOPTED BY THE LOCAL AHJ ON SITE BY ELECTRICAL CONTRACTOR.

PANEL BONDED TO METAL BUILDING FRAME BY PRESS BOX MANUF.

20A, 125V, DUPLEX RECPT. (GFCI WHERE NOTED)

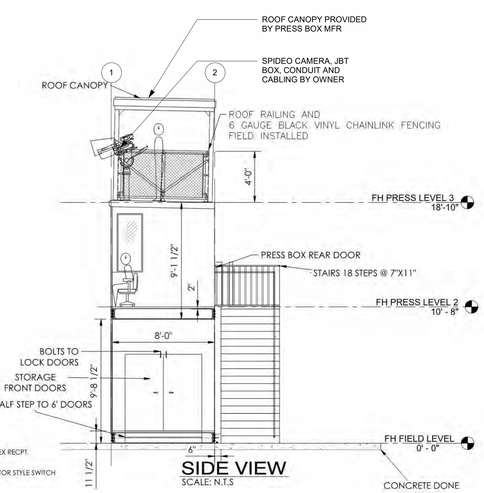
DOUBLE (QUAD) 20A, 125V, DUPLEX RECPT.

S 15A, 125V, SINGLE POLE DECORATOR STYLE SWITCH os- WITH OCCUPANCY SENSOR

J 4X4X2 1/8" JUNCTION BOX W/ 3/4" C STUBOUT UNDER FLOOR FOR USE BY OTHERS

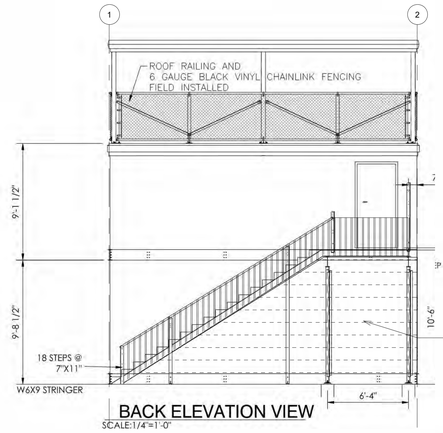
BOT BATTERY BACK UP EMERGENCY/EXIT LIGHT CONNECT TO LIGHT CIRCUIT AHEAD OF SWITCH. NEC 700.12 (F)

4'X2' EDGELIT LED PANEL LIGHT RAB LIGHTING E2PANFA/ZXAD/10 0.26A @ 120V INPUT WATTS: 29.6W



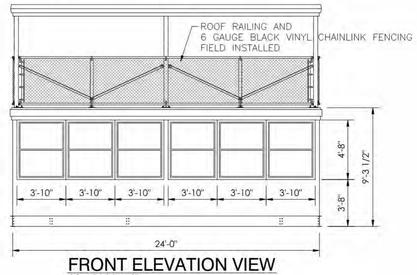
SIDE VIEW

SCALE: N.T.S



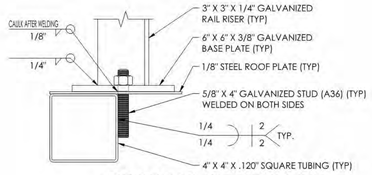
BACK ELEVATION VIEW

SCALE:1/4"=1'-0"



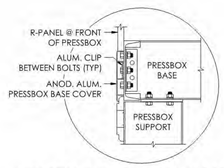
FRONT ELEVATION VIEW

SCALE:1/4"=1'-0"



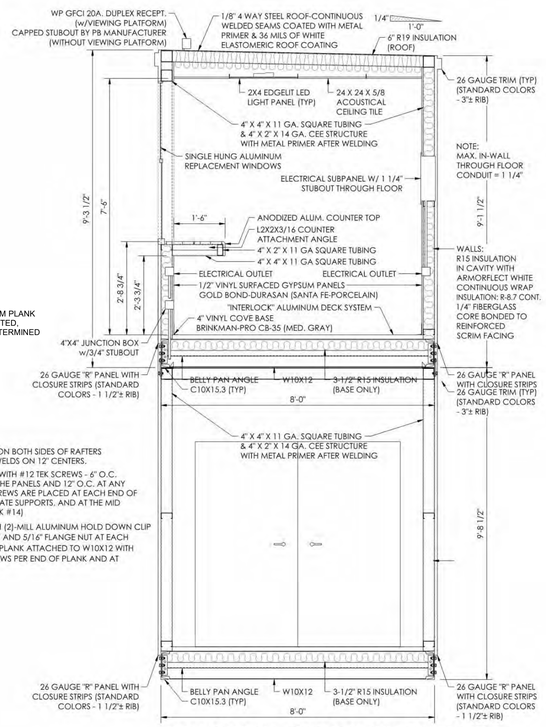
ROOF RAIL ATTACHMENT

NOT TO SCALE OPTIONAL ROOF RAILING



PRESSBOX BASE TRIM DETAIL

NOT TO SCALE



SECTION VIEW - STORAGE AND PRESSBOX

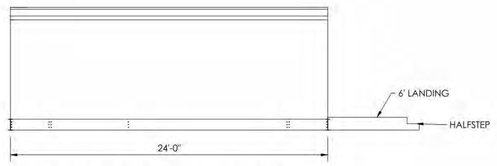
SCALE: NTS

NOTES:

ROOF PLATE STEEL IS WELDED ON BOTH SIDES OF RAFTERS WITH 1-1/2" LONG 1/8" FILLET WELDS ON 12" CENTERS.

WALL PANELS ARE ATTACHED WITH #12 TEK SCREWS - 6" O.C. AT THE TOP AND BOTTOM OF THE PANELS AND 12" O.C. AT ANY INTERMEDIATE BRACE. LAP SCREWS ARE PLACED AT EACH END OF THE PANELS, AT THE INTERMEDIATE SUPPORTS, AND AT THE MID POINT BETWEEN SUPPORTS. (TEK #14)

FLOOR PLANK ATTACHED WITH (2)-MILL ALUMINUM HOLD DOWN CLIP w/ 5/16"X1" CARRIAGE SCREW AND 5/16" FLANGE NUT AT EACH W10X12. FRONT (END) FLOOR PLANK ATTACHED TO W10X12 WITH (2)-COUNTERSUNK 2" TEK SCREWS PER END OF PLANK AND AT INTERMEDIATE SUPPORTS.



STORAGE FRONT ELEVATION VIEW

SCALE:1/4"=1'-0"

STORAGE HALF STEP AND LANDING DETAIL

SCALE:1/4"=1'-0"

F1 FIELD HOCKEY PRESS BOX
N.T.S.

REV.	DESCRIPTION	DATE
0	ISSUED FOR BID	18 FEB 2022

LICENSED ARCHITECT
KRISTIAN C. ROWAL
NO.3366
STATE OF MAINE
02.18.2022

WBRC ARCHITECTS ENGINEERS
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BANGOR, MAINE 207-947-4511
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SARASOTA, FLORIDA 941-556-0757

CRAWFORD

University of Maine
Field Hockey Complex 2022

PROJECT: 168 College Ave, Orono, ME 04469

GRANDSTAND, SEATING, & PRESS BOX DETAILS

SHEET TITLE:

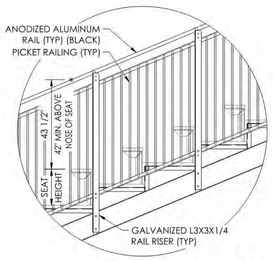
WBRC CAD FILE:

PROJECT No.	10088.033	GRAPHIC SCALE:	0" 1"
SCALE:	6" = 1'-0"		
PROJECT MANAGER:	Approver	SHEET No.	AE551
DRAWN BY:	Author		
CHECKED BY:	Checker		

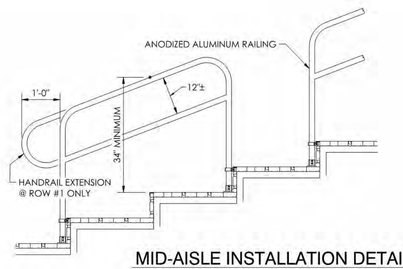
SHEET SIZE: 30x42
2/18/2022 2:16:27 PM
BIM 360://UM Athletics - Field Sports/10088015 - UM ATH – FIELD HOCKEY – ARCHR21.rvt

DESIGN LOADING
TREAD & SEAT AREA 100psf UNIFORM LIVE LOAD.
SEAT (VERTICAL) 120 lbs/lf.
SEAT (HORIZONTAL SWAY) 24lbs/lf PARALLEL AND 10lbs/lf PERPENDICULAR TO SEAT.
TREAD - STAIR AND AISLE TREADS - MINIMUM CONCENTRATED LOAD OF 300LBS ON AN AREA OF 4 SQUARE INCHES
HANDRAIL & GUARDRAIL 50 lbs/lf IN ANY DIRECTION AT THE TOP.
HANDRAIL & GUARDRAIL 200 lbs CONCENTRATED IN ANY DIRECTION.
GUARDS, INFILL COMPONENTS - 50LBS PER SQ.FT. IN HORIZONTAL DIRECTION
SNOW LOADS AS PER STATE ADOPTED CODE
WIND LOADS AS PER STATE ADOPTED CODE
SEISMIC LOADS AS PER STATE ADOPTED CODE.

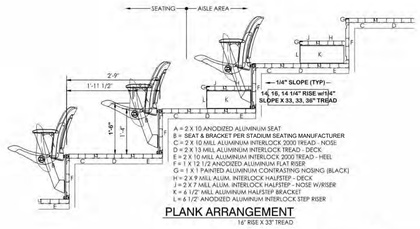
NOTES
1. ALL STRUCTURAL AND MISCELLANEOUS STEEL SHALL CONFORM TO THE FOLLOWING A.I.S.C. STANDARDS
   PLATE UP TO 1/2" THICK = A36 Gr. 36 Fy = 36 ksi Min.
   PLATE 5/8 and greater = 572 Gr 50, Fy = 50 ksi Min.
   ANGLE = A36/A36M GRADE 50
   WIDE FLANGE = A992 Fy=50 ksi
   CHANNEL = A36/A36M GRADE 50
   ROD = A36/A529 GRADE 50
   TUBE = A500 GRADE "B" 46 ksi
2. WELDS ARE ALL AROUND WITH TYPE ER70S-6 WIRE MIG.
3. ALL STEEL TO BE HOT DIPPED GALVANIZED TO A.S.T.M. A-123-89 ae1.
4. STRUCTURAL BOLTS ARE HOT DIPPED GALV. AND ARE EQUAL TO OR GREATER THAN A-307.
5. NO CONNECTIONS UTILIZING HIGH STRENGTH BOLTS ARE CLASSED AS SLIP CRITICAL.
6. ANODIZED ALUMINUM RAIL IS 1 1/4" NOMINAL PIPE SIZE. (1 5/8" O.D.)
7. SOUTHERN BLEACHER COMPANY AS A MANUFACTURER AND INSTALLER OF GRANDSTAND SEATING IS NOT AUTHORIZED TO CERTIFY PLANS AS ADA COMPLIANT. HOWEVER, TO THE BEST OF OUR KNOWLEDGE THESE PLANS MEET OR EXCEED ADA REQUIREMENTS FOR QUANTITY OF ADA SEATING, ACCESS/EGRESS TO ADA SEATING, & DISPERSAL OF ADA SEATING.
8. ALL FIELD CONNECTIONS ARE NON-SLIP CRITICAL U.N.O. ALL CONNECTIONS ARE DESIGNED TO UTILIZE A307 BOLTS, IT IS ACCEPTABLE TO USE A325N BOLTS IN LIEU OF THE A307 BOLTS. THE INSTALLATION OF THESE BOLTS ARE TO BE TIGHTENED A SNUG TIGHT CONDITION AS SPECIFIED BY AISC.



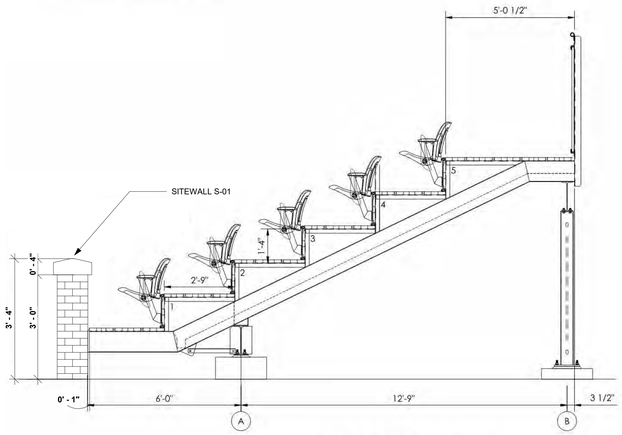
TYPICAL SIDE RAILING



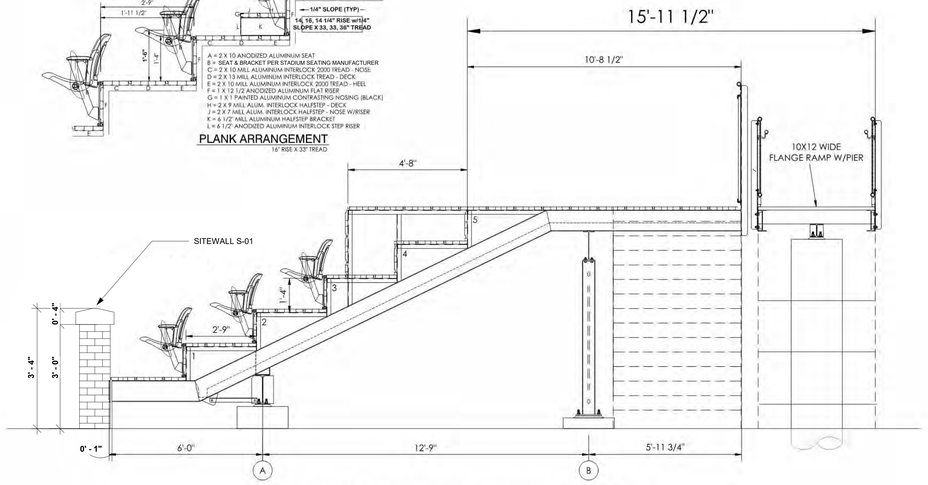
MID-AISLE INSTALLATION DETAIL
NOT TO SCALE



PLANK ARRANGEMENT
16" RISE X 33" TREAD



FIELD HOCKEY SIDE VIEW



FIELD HOCKEY SIDE VIEW W/ PLATFORM

A1 FIELD HOCKEY SECTIONS AND DETAILS
N.T.S.

REV.	DESCRIPTION	DATE
0	ISSUED FOR BID	18 FEB 2022

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University of Maine
Field Hockey Complex 2022
PROJECT: 168 College Ave, Orono, ME 04469

GRANDSTAND, SEATING, & PRESS BOX DETAILS

SHEET TITLE:
WBRC CAD FILE:
PROJECT No.: 10088.033
SCALE: 6" = 1'-0"
PROJECT MANAGER: Approver
DRAWN BY: Author
CHECKED BY: Checker
GRAPHIC SCALE: 0" 1"
SHEET No. AE552

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SHEET SIZE: 30x42
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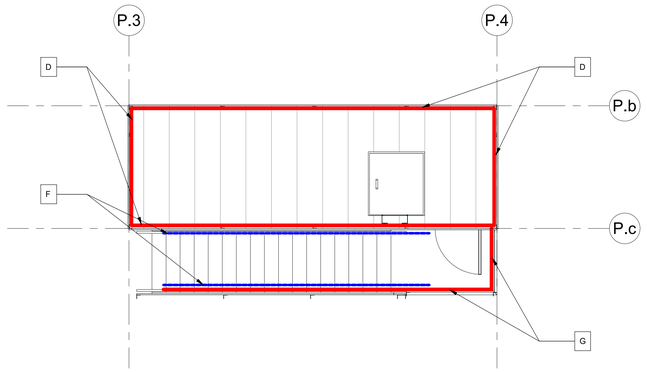
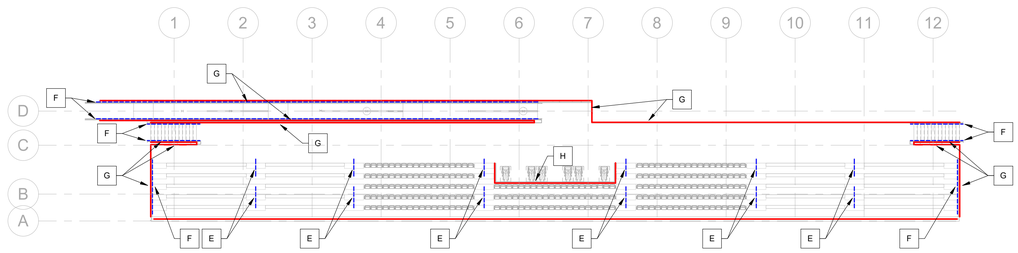


E1 RAILING PLAN - FIELD HOCKEY - PRESS BOX
1/4" = 1'-0"



A1 RAILING PLAN - FIELD HOCKEY - SPECTATOR SEATING STANDS
1/16" = 1'-0"

1029.15 HANDRAILS
RAMPED AISLES HAVING A SLOPE EXCEEDING ONE UNIT VERTICAL IN 15 UNITS HORIZONTAL (6.7-PERCENT SLOPE) AND STEPPED AISLES SHALL BE PROVIDED WITH HANDRAILS IN COMPLIANCE WITH SECTION N1014 LOCATED EITHER AT ONE OR BOTH SIDES OF THE AISLE OR WITHIN THE AISLE WIDTH.
EX. 3: HANDRAIL EXTENSIONS ARE NOT REQUIRED AT THE TOP AND BOTTOM OF STEPPED AISLES AND RAMPED AISLES TO PERMIT CROSSOVER WITHIN THE AISLES.

1029.15.1 DISCONTINUOUS HANDRAILS
WHERE THERE IS SEATING ON BOTH SIDES OF THE AISLE, THE MID-AISLE HANDRAILS SHALL BE DISCONTINUOUS WITH GAPS OR BREAKS AT INTERVALS NOT EXCEEDING FIVE ROWS TO FACILITATE ACCESS TO SEATING AND TO PERMIT CROSSING FROM ONE SIDE OF THE AISLE TO THE OTHER. THESE GAPS OR BREAKS SHALL BE A CLEAR WIDTH OF NOT LESS THAN 22 INCHES AND NOT GREATER THAN 36 INCHES, MEASURED HORIZONTALLY, AND THE MID-AISLE HANDRAIL SHALL BE ROUNDED TERMINATIONS OR BENDS.

1029.15.3 MID-AISLE TERMINATION
MID-AISLE HANDRAILS SHALL NOT EXTEND BEYOND THE LOWEST RISER AND SHALL TERMINATE WITHIN 18 INCHES, MEASURED HORIZONTALLY, FROM THE LOWEST RISER. HANDRAIL EXTENSIONS RAE NOT REQUIRED.
EX.: MID-AISLE HANDRAILS SHALL BE PERMITTED TO EXTEND BEYOND THE LOWEST RISER WHERE THE HANDRAIL EXTENSIONS DO NOT OBSTRUCT THE WIDTH OF THE CROSS AISLE.

1029.15.4 RAILS
WHERE MID-AISLE HANDRAILS ARE PROVIDED IN STEPPED AISLES, THERE SHALL BE AN ADDITIONAL RAIL LOCATED APPROXIMATELY 12 INCHES BELOW THE HANDRAIL. THE RAIL SHALL BE ADEQUATE IN STRENGTH AND ATTACHMENT IN ACCORDANCE WITH SECTION 1607.8.1.2.

1029.16.1 PERIMETER GUARDS
PERIMETER GUARDS SHALL BE PROVIDED WHERE THE FOOTBOARDS OR WALKING SURFACE OF SEATING FACILITIES ARE MORE THAN 30 INCHES ABOVE THE FLOOR OR GRADE BELOW. WHERE THE SEATBOARDS ARE ADJACENT TO THE PERIMETER, GUARD HEIGHT SHALL BE 42 INCHES HIGH MINIMUM, MEASURED FROM THE SEATBOARD. WHERE THE SEATS ARE SELF-RISING, GUARD HEIGHT SHALL BE 42 INCHES HIGH MINIMUM, MEASURED FROM THE FLOOR SURFACE. WHERE THERE IS AN AISLE BETWEEN THE SEATING AND THE PERIMETER, THE GUARD HEIGHT SHALL BE MEASURED IN ACCORDANCE WITH SECTION 1015.2.
EX. 1: GUARDS THAT IMPACT SIGHTLINES SHALL BE PERMITTED TO COMPLY WITH SECTION 1029.16.3.
EX. 2: BLEACHERS, GRANDSTANDS AND FOLDING AND TELESCOPIC SEATING SHALL NOT BE REQUIRED TO HAVE PERIMETER GUARDS WHERE THE SEATING IS LOCATED ADJACENT TO A WALL AND THE SPACE BETWEEN THE WALL AND THE SEATING IS LESS THAN 4 INCHES.

1029.16.3 SIGHTLINES-CONSTRAINED GUARD HEIGHTS
UNLESS SUBJECT TO THE REQUIREMENTS OF SECTION 1029.16.4, A FASCIA OR RAILING SYSTEM IN ACCORDANCE WITH THE GUARD REQUIREMENTS OF SECTION 1015 AND HAVING A MINIMUM HEIGHT OF 26 INCHES SHALL BE PROVIDED WHERE THE FLOOR OR FOOTBOARD ELEVATION IS MORE THAN 30 INCHES ABOVE THE FLOOR OR GRADE BELOW AND THE FASCIA OR RAILING WOULD OTHERWISE INTERFERE WITH THE SIGHTLINES OF IMMEDIATELY ADJACENT SEATING.

1029.16.4 GUARDS AT THE END OF AISLES
A FASCIA OR RAILING SYSTEM COMPLYING WITH THE GUARD REQUIREMENTS OF SECTION 1015 SHALL BE PROVIDED FOR THE FULL WIDTH OF THE AISLE WHERE THE FOOT OF THE AISLE IS MORE THAN 30 INCHES ABOVE THE FLOOR OR GRADE BELOW. THE FASCIA OR RAILING SHALL BE A MINIMUM OF 36 INCHES HIGH AND SHALL PROVIDE A MINIMUM 42 INCHES MEASURED DIAGONALLY BETWEEN THE TOP OF THE RAIL AND THE NOSING OF THE NEAREST TREAD.

RAILING TYPES

A — NOT USED

A.2 — NOT USED

B — NOT USED

C — NOT USED

D — (131250) - 3" x 3" x 1/4" PAINTED GALV. STEEL ANGLE GUARDRAIL RAIL RISERS WITH 2" DIA. BLACK ANODIZED ALUMINUM TOP AND BOTTOM RAIL WITH BLACK VINYL CHAINLINK FENCING INFILL PANELS
MINIMUM HEIGHT: 3'-6" TO TOP OF GUARDRAIL FROM ADJACENT WALKING SURFACE AND/OR BENCH SEAT
RAILING PROVIDED BY FABRICATED GRANDSTAND SEATING MANUFACTURER

E — (131250) - 1.5 INCH O.D. CLEAR ANODIZED ALUMINUM MID-AISLE HANDRAIL WITH TOP AND BOTTOM POST RETURNS. BRACKETS ANCHOR TO ALUMINUM BLEACHER SYSTEM. PROVIDE ROUNDED TERMINATIONS OR BENDS AT BOTH ENDS OF RUNS. RAILINGS SHALL TERMINATE BEYOND NOSING(s) OF NEAREST AISLE STEPS AS SHOWN. PROVIDE ADDITIONAL HORIZONTAL RAIL LOCATED APPROXIMATELY 12 INCHES BELOW THE TOP HANDRAIL
MINIMUM HEIGHT: 2'-10" TO CENTERLINE OF TOP RAIL FROM LEADING EDGE OF AISLE STEP NOSINGS
RAILING PROVIDED BY FABRICATED GRANDSTAND SEATING MANUFACTURER

F — (131250) - 1.5 INCH O.D. CLEAR ANODIZED ALUMINUM HANDRAIL WITH POST BRACKETS SUPPORT AND BOTTOM POST RETURNS. BRACKETS ANCHOR TO ALUMINUM BLEACHER/STAIR/RAMP SYSTEM AND/OR SUPPORTING CONCRETE SURFACES. BRACKETS TO BE SPACED EQ. WITH GUARDRAIL POSTS. RAILINGS SHALL TERMINATE AT 12 INCHES BEYOND TOP AND BOTTOM STAIR NOSINGS AND/OR RAMP RUNS. PROVIDE MIN. 1-1/2 INCH CLEARANCE BETWEEN HANDRAIL AND ADJACENT SURFACES AND/OR OBSTRUTIONS.
MINIMUM HEIGHT: 2'-10" TO CENTERLINE OF TOP RAIL FROM LEADING EDGE OF AISLE STEP NOSINGS
RAILING PROVIDED BY FABRICATED GRANDSTAND SEATING MANUFACTURER

G — (131250) - 3" x 3" x 1/4" PAINTED GALV. STEEL ANGLE GUARDRAIL RAIL RISERS WITH 2" DIA. BLACK ANODIZED ALUMINUM TOP AND BOTTOM RAIL WITH BLACK ANODIZED ALUMINUM PICKET INFILL PANELS
MINIMUM HEIGHT: 3'-6" TO TOP OF GUARDRAIL FROM ADJACENT WALKING SURFACE AND/OR BENCH SEAT
RAILING PROVIDED BY FABRICATED GRANDSTAND SEATING MANUFACTURER

H — (131250) - 3" x 3" x 1/4" PAINTED GALV. STEEL ANGLE GUARDRAIL RAIL RISERS WITH 2" DIA. BLACK ANODIZED ALUMINUM TOP AND BOTTOM RAIL WITH BLACK ANODIZED ALUMINUM PICKET INFILL PANELS
MINIMUM HEIGHT: 2'-3" TO TOP OF GUARDRAIL FROM ADJACENT WALKING SURFACE
"SIGHTLINES-CONSTRAINED GUARD HEIGHT"
RAILING PROVIDED BY FABRICATED GRANDSTAND SEATING MANUFACTURER

REV.	DESCRIPTION	DATE
0	ISSUED FOR BID	18 FEB 2022

LICENSED ARCHITECT
KRISTIAN C. KOWAL
NO.3366
STATE OF MAINE
02.18.2022

WBRC ARCHITECTS ENGINEERS
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SARASOTA, FLORIDA 941-556-0757
CRAWFORD

University of Maine
Field Hockey Complex 2022

PROJECT: 168 College Ave, Orono, ME 04469

RAILING FLOOR PLANS

SHEET TITLE:	
WBRC CAD FILE:	
PROJECT No.	10088.033
SCALE:	As indicated
PROJECT MANAGER:	Approver
DRAWN BY:	Author
CHECKED BY:	Checker
GRAPHIC SCALE:	0" 1"
SHEET No.	AE800

SHEET SIZE - 30x42
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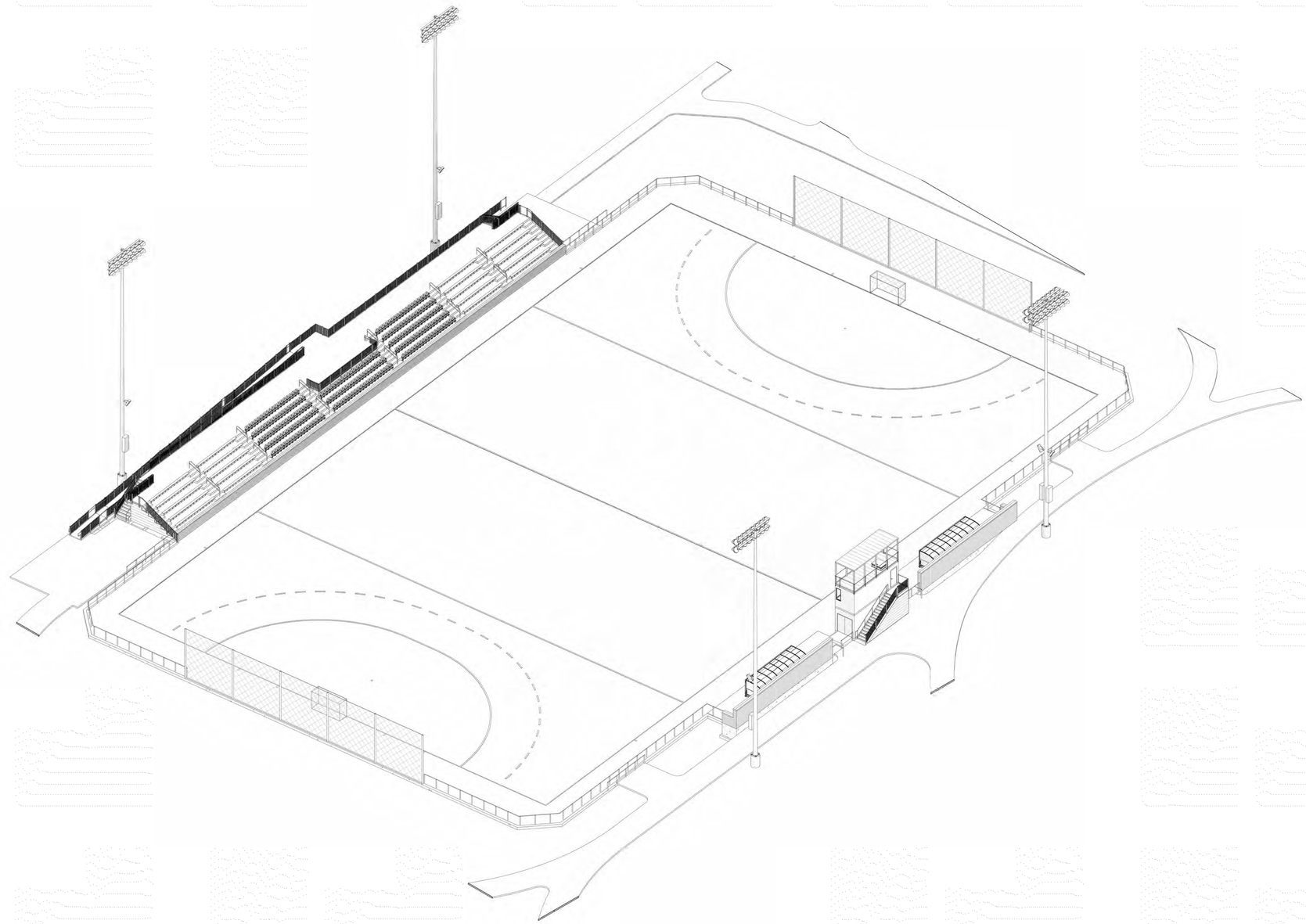

NOTE: ISOMETRIC VIE W SHOWN DIAGRAMATICALLY, SEE CONTRACT DOCUMENTS FOR DETAILS

A1 FIELD HOCKEY - OVERALL PERSPECTIVE - SOUTHWEST

REV.	DESCRIPTION	DATE
0	ISSUED FOR BID	18 FEB 2022

LICENSED ARCHITECT
KRISTIAN C. ROWAL
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STATE OF MAINE
02.18.2022

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CRAWFORD

University of Maine
Field Hockey Complex 2022

PROJECT: 168 College Ave, Orono, ME 04469

OVERALL PERSPECTIVE - FIELD HOCKEY

SHEET TITLE:

WBRC CAD FILE:

PROJECT No: 10088.033

SCALE:

GRAPHIC SCALE: 0" 1"

PROJECT MANAGER: Approver

DRAWN BY: Author

CHECKED BY: Checker

SHEET No: AE901

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SHEET SIZE: 30x42
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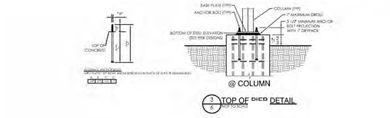
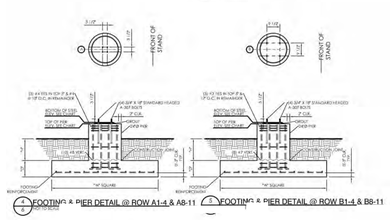


3 TOP OF PIER DETAIL
A-501 / A-502



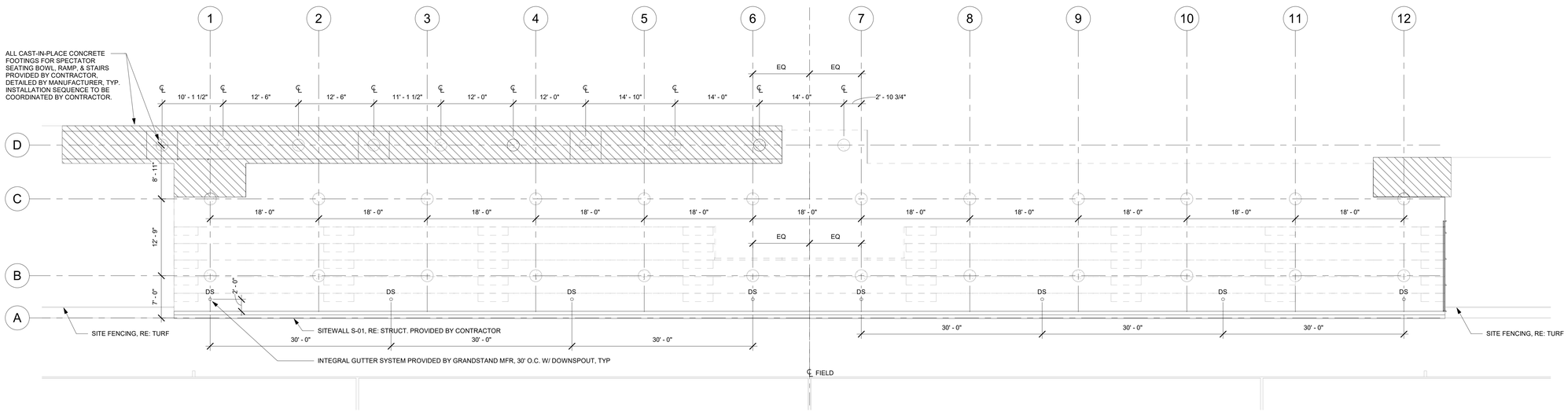
1 FOOTING & PIER DETAIL @ ROW A1-4 & A8-11
A-501 / A-502

2 FOOTING & PIER DETAIL @ ROW B1-4 & B8-11
A-501 / A-502

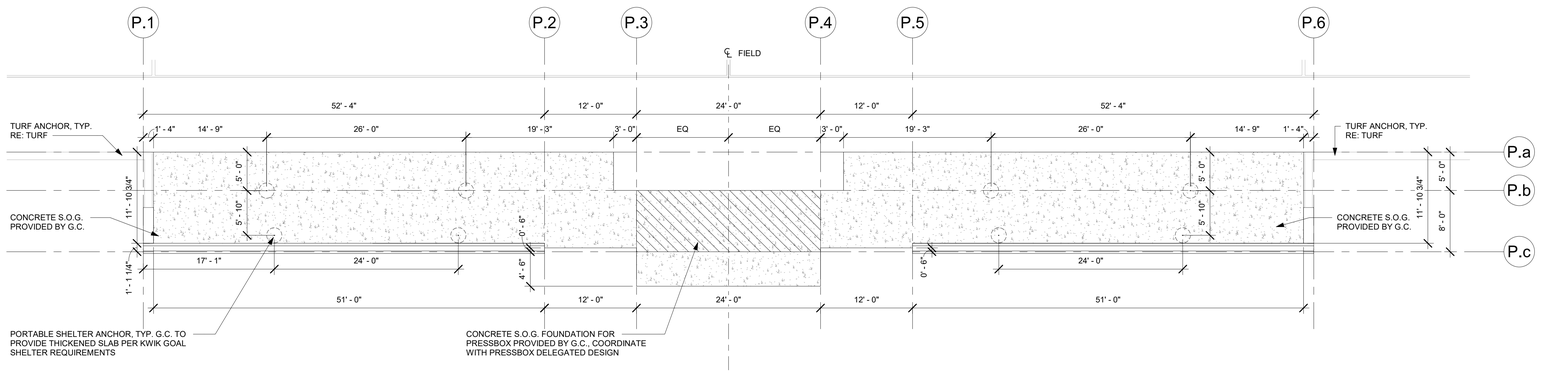
NOTE: CONTRACTOR TO PROVIDE C.I.P. CONCRETE FOOTINGS AND PIERS. FINAL CONRETE DETAILING BY GRANDSTAND MANUFACTURER DELEGATED DESIGN

FOOTING SCHEDULE
T.O.P. = TOP OF PIER
B.O.S. = BOTTOM OF STEEL

FOOTING # (F = RAMP PIER)	T.O.P. ELEV.	B.O.S. ELEV.	"A"	"D"	"W"	PAD REINFORCEMENT
F1, F2, F3, F4, F6, F8, F9, F10, F11	100'-5"	100'-6"	60" MIN.	13"	7'-4" SQ.	(10)# 6 EA EACH WAY



G1 ENLARGED FLOOR PLAN - FIELD HOCKEY SEATING BOWL STRUCTURE
1/8" = 1'-0"



A1 ENLARGED FLOOR PLAN - FIELD HOCKEY SLAB PLAN
1/8" = 1'-0"

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BLEACHER STRUCTURE
LAYOUT - FIELD HOCKEY

SHEET TITLE:
WBRC CAD FILE:
PROJECT No. 10088.033
SCALE: 1/8" = 1'-0"
PROJECT MANAGER: Approver
DRAWN BY: Author
CHECKED BY: Checker
GRAPHIC SCALE: 0" 1"
SHEET No. AE911

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SHEET SIZE: 30x42
2/18/2022 2:17:05 PM
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LEGEND:

ALL DEVICES, FIXTURES, ETC. SHALL BE NEW UNLESS DESIGNATED WITH THE FOLLOWING TAGS:

E	EXISTING TO REMAIN
ER	EXISTING RELOCATED
NR	NEW TO REPLACE EXISTING IN EXISTING LOCATION
R	EXISTING TO BE REMOVED
RR	REMOVE AND RELOCATE EXISTING

- CEILING MOUNTED EXIT SIGN - ARROW INDICATES DIRECTIVE ARROW ON SIGN
- WALL MOUNTED EXIT SIGN - ARROW INDICATES DIRECTIVE ARROW ON SIGN EMERGENCY LIGHTING
- BATTERY PACK WITH EMERGENCY LAMPS AS SHOWN
- REMOTE EMERGENCY LAMP LIGHT FIXTURES
- WALL TOGGLE SWITCH - MOUNT AT 48" A.F.F TO CENTER - LETTER INDICATES SWITCH GROUP
- 20 AMP DUPLEX CONVENIENCE RECEPTACLE
- 20 AMP QUADRAPLEX (DOUBLE DUPLEX)
- SPECIAL PURPOSE OUTLET OR EQUIPMENT CONNECTION - COORDINATE LOCATION AND TYPE OF CONNECTION WITH EQUIPMENT BEING SERVED.
- JUNCTION BOX WITH COVER
- MOTOR - SIZE AS INDICATED - COORDINATE W/ ACTUAL EQUIPMENT BEING SERVED
- MANUAL STARTER - COORDINATE WITH EQUIPMENT BEING SERVED SINGLE THROW
- FUSED DISCONNECT SWITCH - NEMA ENCLOSURE AS REQUIRED REMOTE CONTROL
- MAGNETIC STARTER - COORDINATE W/ EQUIPMENT BEING SERVED
- FUSED DISCONNECT SWITCH / MAGNETIC STARTER - NOTES SAME AS ABOVE
- GROUND
- CIRCUIT BREAKER
- BRANCH CIRCUIT RUN IN CEILING OR IN WALLS
- LOW VOLTAGE OR CONTROL WIRING - #12 MINIMUM OR AS NOTED
- MULTI-CONDUCTOR BRANCH CIRCUIT - NUMBER OF HASHMARKS IS NUMBER OF WIRES (NOT INCLUDING GROUND WIRE) WITHOUT HASHMARKS IS TWO WIRE
- HOMERUN TO CIRCUIT AND PANEL INDICATED - NUMBER OF ARROWS IS NUMBER OF PHASE WIRES - NUMBER OF WIRES AS INDICATED ABOVE

PANELBOARD NAME - # — INDICATES CIRCUIT HOMERUN

PANELBOARD NAME - #,RELAY # — INDICATES CIRCUIT HOMERUN VIA INDICATED RELAY

- CONTINUATION OF CIRCUIT
- DIRECTIVE ARROW
- PANELBOARD - SEE PANELBOARD SCHEDULE(S)

ABBREVIATIONS:

A	AMPERES
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
ATS	AUTOMATIC TRANSFER SWITCH
BATT	BATTERY
BKR	BREAKER
BLDG	BUILDING
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CLG	CEILING
CT	CURRENT TRANSFORMER
DN	DOWN
DWG	DRAWING
EMERG	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
EQUIP	EQUIPMENT
FA	FIRE ALARM
FAA	FIRE ALARM ANNUNCIATOR
FACP	FIRE ALARM CONTROL PANEL
FA-PE	FIRE ALARM SYSTEM POWER EXTENDER
FIN	FINISH, FINISHED
FLR	FLOOR
GND	GROUND
HP	HORSEPOWER, HEAT PUMP
JB	JUNCTION BOX
KVA	KILO VOLT AMPS
KW	KILOWATT(S)
LTG	LIGHTING
MAX	MAXIMUM
MIN	MINIMUM
N	NEW
OC	ON CENTER
OS/OI	OWNER SUPPLIED, OWNER INSTALLED ITEM
PVC	POLYVINYL CHLORIDE
RECEP	RECEPTACLE
TEL	TELEPHONE
TYP	TYPICAL
UG	UNDERGROUND
V	VOLTS
W	WATTS
WG	WIRE GUARD
WM	WIREMOLD
WP	WEATHERPROOF

GENERAL NOTES:

1. ALL WORK SHALL BE INSTALLED IN A NEAT AND WORKMAN LIKE MANNER, RECTILINEAR TO BUILDING STRUCTURE, AND IN ACCORDANCE WITH ALL APPLICABLE CODES, INCLUDING, BUT NOT LIMITED TO NFPA 70, 72, 90A, 101 AND DIRECTION OF AUTHORITY HAVING JURISDICTION.
2. CONTRACTOR SHALL REVIEW ALL TRADES CONTRACT DOCUMENTS, AND FIELD VERIFY TO DETERMINE SPECIFIC MOUNTING LOCATIONS FOR ELECTRICAL EQUIPMENT AND CONDUITS.
3. COORDINATE ARRANGEMENT, MOUNTING, AND SUPPORT OF ELECTRICAL CONDUIT AND EQUIPMENT TO PROVIDE FOR EASE OF DISCONNECTING THE EQUIPMENT WITH MINIMUM INTERFERENCE TO OTHER INSTALLATIONS; TO ALLOW RIGHT OF WAY FOR PIPING INSTALLED AT A REQUIRED SLOPE; AND SO CONNECTING RACEWAYS SHALL BE CLEAR OF OBSTRUCTIONS AND OF THE WORKING AND ACCESS SPACE OF OTHER EQUIPMENT.
4. RUN SEPARATE NEUTRAL WIRE FOR EACH DEDICATED BRANCH CIRCUIT SHOWN ON THE PLANS.

GENERAL DEMO NOTES:

1. ELECTRICAL CONTRACTOR SHALL REVIEW ALL TRADE'S DRAWINGS. AREAS NOTED TO BE DEMOLISHED ARE SHOWN ON ARCHITECTURAL PLANS. THIS SHALL INCLUDE ALL ELECTRICAL DEVICES, FIXTURES AND/OR SWITCHGEAR. ALL EXISTING EQUIPMENT SHALL REMAIN ON EXISTING SURFACES UNLESS SPECIFICALLY NOTED OTHERWISE.
2. WIRING FOR EXISTING BRANCH CIRCUIT DEVICES TO BE DEMOLISHED SHALL BE REMOVED BACK TO THE PANELBOARD, THE ASSOCIATED CIRCUIT BREAKER SHALL BE TURNED OFF AND MARKED AS SPARE IN THE PANELBOARD DIRECTORY. DO NOT ABANDON BRANCH CIRCUIT WIRING ABOVE CEILINGS OR IN WIREWAYS.
3. ALL RACEWAYS & CABLES, NO LONGER IN USE, SHALL BE REMOVED
4. MAINTAIN, OR RESTORE IF INTERRUPTED BY REMOVALS OR IN PATH OF NEW CONSTRUCTION, ALL CONDUITS, BRANCH CIRCUITS, AND FEEDERS PASSING THROUGH AND SERVING UNDISTURBED AREAS (SHOWN OR NOT SHOWN).
5. ALL EXISTING CONDUITS STUBBED THROUGH FLOOR SERVING ITEMS TO BE REMOVED (SHOWN OR NOT SHOWN) AND NOT REQUIRED TO BE REUSED SHALL BE CUT OFF FLUSH WITH THE SLAB DECK AND SEALED.
6. IN ANY AREA REQUIRING THE PERFORMANCE OF ANY TRADES WORK, THE ELECTRICAL CONTRACTOR SHALL CAREFULLY REMOVE AND STORE ANY ELECTRICAL ITEMS IN THE PATH OF WORK, REINSTALLING AND RECONNECTING SAME AS REQUIRED IN ACCORDANCE WITH THE PLANS AND/OR AS DIRECTED AFTER COMPLETION OF OTHER TRADES WORK IN THAT AREA.
7. ENSURE REMOVAL OF ELECTRICAL DEVICES IN CONSTRUCTION AREA DOES NOT AFFECT ADJACENT AREAS.
8. ALL ELECTRICAL FIXTURES, DEVICES AND EQUIPMENT SHALL BE TURNED OVER TO THE OWNER. IF OWNER DOES NOT WISH TO KEEP ITEMS, THEY BECOME THE PROPERTY OF THE ELECTRICAL CONTRACTOR AND MUST BE REMOVED FROM THE SITE.

STATE OF MAINE — ANDREW K. CLARK — LICENSED PROFESSIONAL ENGINEER — NO. 16225

D2.18.23

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UNIVERSITY OF MAINE
FIELD HOCKEY
168 College Ave. Orono, ME 04469

PROJECT:

ELECTRICAL SYMBOLS LIST & SCHEDULES

SHEET TITLE:

WBRC CAD FILE:	ELEC - ATHLETIC FIELD - FIELDHOCKEY - NEW.DWG
PROJECT No.	10088.033
SCALE:	AS NOTED
PROJECT MANAGER:	KCK
DRAWN BY:	DVS
CHECKED BY:	ACS

GRAPHIC SCALE: 0" 1"

SHEET No.: E001

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Feb 11, 2022 - 4:21pm
T:\02 Projects\10088\10088.033 IM Athletics - Field Sports\02ES\Docs\E\ELEC - ATHLETIC FIELD - FIELDHOCKEY - NEW.dwg drew.vansteenbergh

GENERAL NOTES:

1. FIELD HOCKEY LIGHTS TO REMAIN. RELOCATE PANELS AS SHOWN ON DETAIL E5/E501 AND ADD FEEDS AS REQUIRED. EXTEND ALL PANELS AND EQUIPMENT AS NECESSARY TO PROVIDE PERMANENT POWER. COORDINATE WITH OWNER PRIOR TO REMOVALS AND RELOCATIONS.
2. COORDINATE ALL ELECTRICAL REQUIREMENTS WITH MANUFACTURERS AS REQUIRED.
3. DO NOT RUN ANY ELECTRICAL FEEDS OR PATHWAYS THROUGH THE FOOTPRINT OF THE FIELD.

TECHNICAL NOTES:

1. PROVIDE GFCI WP RECEPTACLE ON POLE. PROVIDE 2#2 AND 1#8GND IN 1-1/2"C TO PANEL AS INDICATED.
2. PROVIDE GFCI WP QUAD RECEPTACLE ON WALL AS SHOWN. PROVIDE 2#2 AND 1#8GND IN 1-1/2"C TO PANEL AS INDICATED.
3. PROVIDE 2#2 AND 1#8GND IN 1-1/2"C FOR 20A CIRCUIT SERVING SCOREBOARD A. PROVIDE 2#1/0 AND 1#6GND IN 2"C FOR 30A CIRCUIT SERVING SCOREBOARD A SOUND SYSTEM. PROVIDE (1) SPARE 1" CONDUIT WITH PULLSTRING FROM SCOREBOARD A TO PRESS BOX FOR COMMUNICATIONS.
4. PROVIDE 2#2 AND 1#8GND IN 1-1/2"C FOR 20A CIRCUIT SERVING SCOREBOARD B. PROVIDE (1) SPARE 1" CONDUIT WITH PULLSTRING FROM SCOREBOARD B TO PRESS BOX FOR COMMUNICATIONS.
5. IRRIGATION CONTROLLER. PROVIDE 2#2 AND 1#8GND IN 1-1/2"C TO PANEL AS INDICATED. JUNCTION BOX SHALL BE RECESSED.
6. PROVIDE 1"CONDUIT TO PRESSBOX FOR UNIVERSITY A/V CONNECTION.

EXISTING LIGHT TO REMAIN. MAINTAIN ELECTRICAL FEED.

WP/GFCI (1) LVFH-1

SCOREBOARD B (4) LVFH-2 HH

SCOREBOARD A (3) LVFH-7; LVFH-9 HH

LVFH-5 (5)

WP/GFCI LVFH-10 (2)

PRESSBOX

WP/GFCI LVFH-12 (2)

PROVIDE STEEL RACK UNISTRUT FRAME AT GRADE. COORDINATE WITH STAIR. SEE ELECTRICAL ONE LINE ON E501.

LVFH T-FIH LIGHTING PANEL (ER)

EXISTING LIGHTING CONTROL BOARD

EXISTING LIGHT TO REMAIN. MAINTAIN ELECTRICAL FEED.

JUNCTION BOX FEED TO PRACTICE FILD LIGHTS ONLY

OLD TOWN BIKE PATH

BLEACHERS BENCH SEATS - CAPACITY: 246

VISITOR DUGOUT

HOME DUGOUT

PRESS BOX

CANTILEVERED BLEACHERS - CAPACITY: 282

N-UGC N5 E501

N-UGE N1 E501

EXISTING PANELS SERVING FIELD HOCKEY TO BE RELOCATED. REFER TO DETAIL J1 ON E501

PROVIDE NEW SECONDARY FEED FROM EXISTING DISCONNECT

EXISTING TRANSFORMER

BIO-RETENTION CELL

COURT 1 COURT 2 COURT 3

LEGEND

EXISTING		PROPOSED
	UTILITY POLE	
	POLE MOUNT LIGHT	
	WALL MOUNT LIGHT	
	ATHLETIC FIELD LIGHTING	
UGE	UNDERGROUND ELECTRIC	N-UGE
UGC	COMMUNICATIONS	N-UGC
	HANDHOLE	HH

PROJECT NORTH

ANDREW C. STRAUB 7425 LICENSED PROFESSIONAL ENGINEER

D2., 1f, 2.1

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FIELD HOCKEY
168 College Ave. Orono, ME 04469

PROJECT:

SITE ELECTRICAL & COMMUNICATIONS PLAN

SHEET TITLE:	
WBRC CAD FILE:	ELEC - ATHLETIC FIELD - FIELDHOCKEY - NEW.DWG
PROJECT No.	10088.033
SCALE:	1"=20'
PROJECT MANAGER:	KCK
DRAWN BY:	DVS
CHECKED BY:	ACS
GRAPHIC SCALE	0" 1"
SHEET No.	E101

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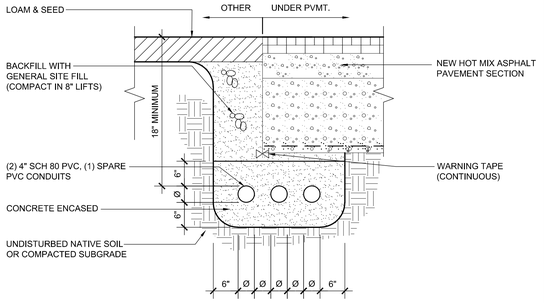
T:\22 Projects\10001-10500\10088\05 UM Athletics - Field Sports\2DES\Docs\ELEC - ATHLETIC FIELD - FIELDHOCKEY - NEW.dwg drew.vanstedenberghe

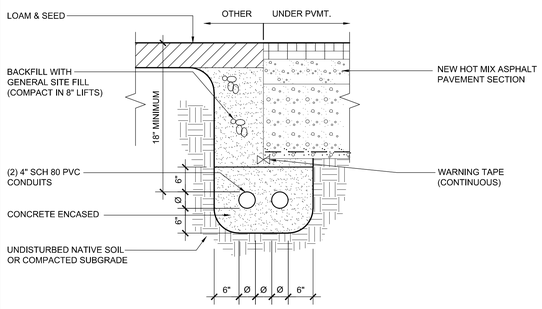
NOTE:
PROVIDE PULL WIRE IN ALL CONDUITS



N1 NEW ELECTRIC TRENCH

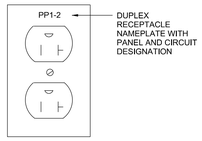
NO SCALE

NOTE:
PROVIDE PULL WIRE IN ALL CONDUITS



N5 NEW COMMUNICATIONS TRENCH

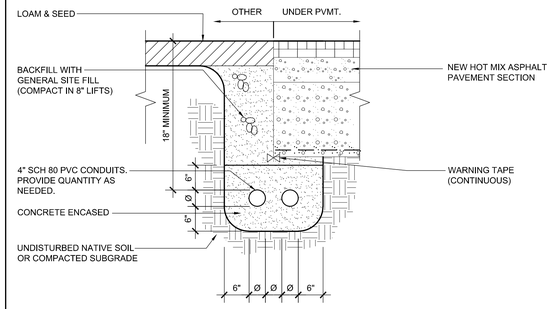
NO SCALE



N14 TYP. ELECTRICAL LABELING

NO SCALE

NOTE:
PROVIDE PULL WIRE IN ALL CONDUITS

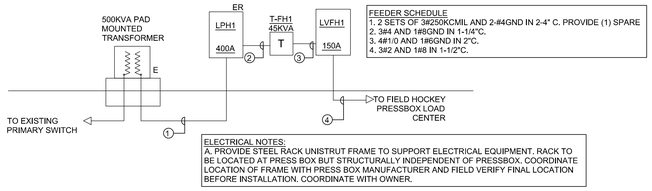


N14 TYPICAL ELECTRICAL TRENCH

NO SCALE

EXISTING ELECTRICAL EQUIPMENT SERVING FIELD HOCKEY. EQUIPMENT TO BE RELOCATED TO FIELD HOCKEY STEEL RACK FRAME LOCATED NEAR BACK OF PRESS BOX. COORDINATE ALL REMOVALS AND RELOCATIONS WITH OWNER.

J1 EXISTING SOFTBALL DUGOUT PANELBOARDS

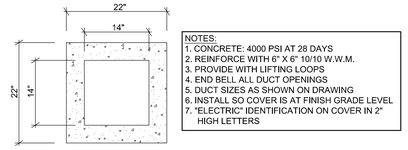


FEEDER SCHEDULE
1. 2 SETS OF 3#250KCMIL AND 2-#4GND IN 2-4" C. PROVIDE (1) SPARE
2. 3#4 AND 1#8GND IN 1-1/4"C.
3. 4#1/0 AND 1#6GND IN 2"C.
4. 3#2 AND 1#8 IN 1-1/2"C.

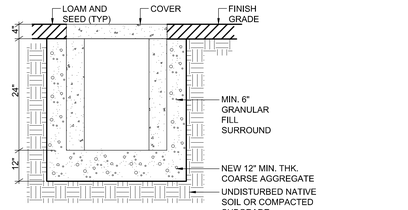
ELECTRICAL NOTES:
A. PROVIDE STEEL RACK UNISTRUT FRAME TO SUPPORT ELECTRICAL EQUIPMENT. RACK TO BE LOCATED AT PRESS BOX BUT STRUCTURALLY INDEPENDENT OF PRESSBOX. COORDINATE LOCATION OF FRAME WITH PRESS BOX MANUFACTURER AND FIELD VERIFY FINAL LOCATION BEFORE INSTALLATION. COORDINATE WITH OWNER.

J5 FIELD HOCKEY WIRING DIAGRAM

NO SCALE



NOTES:
1. CONCRETE: 4000 PSI AT 28 DAYS
2. REINFORCE WITH 6" X 6" 10/10 W.W.M.
3. PROVIDE WITH LIFTING LOOPS
4. END BELL ALL DUCT OPENINGS
5. DUCT SIZES AS SHOWN ON DRAWING
6. INSTALL SO COVER IS AT FINISH GRADE LEVEL
7. "ELECTRIC" IDENTIFICATION ON COVER IN 2" HIGH LETTERS



J14 NEW CONCRETE HAND HOLE

NO SCALE

NEW PANEL	LVFH									LOCATION: STEEL FRAME RACK PRESSBOX
VOLTAGE: 120/208V	PHASES: 3	WIRE: 4								
150A MCB	FED FROM: T-FH1 VIA LIGHTING PANEL									MOUNTING: SURFACE
SERVICE	KW	BRKR	NOTE	NO	PHASE	NO	NOTE	BRKR	KW	SERVICE
FH - POLE MOUNTED RECEPT GFCI WP	0.5	1P20		1	A	2	1	1P20	0.5	FH - SECONDARY SCOREBOARD
FH - POLE MOUNTED RECEPT GFCI WP	0.5	1P20		3	B	4	1	1P20	0.5	FH - BENCH RECEPT GFCI WP
FH - IRRIGATION CONTROLLER	0.5	1P20		5	C	6	1	1P20	0.5	FH - BENCH RECEPT GFCI WP
FH - PRIMARY SCOREBOARD	0.8	1P20		7	A	8		1P20		SPARE
FH - PRIMARY SOUND SYSTEM	1.8	1P30		9	B	10		1P20		SPARE
SPARE		1P20		11	C	12		1P20		SPARE
SPARE		1P20		13	A	14		1P20		SPARE
SPARE		1P20		15	B	16		1P20		SPARE
SPARE		1P20		17	C	18		1P20		SPARE
SPARE		1P20		19	A	20		1P20		SPARE
SPARE		1P20		21	B	22		1P20		SPARE
SPARE		1P20		23	C	24		1P20		SPARE
SPARE		1P20		25	A	26		1P20		SPARE
SPARE		1P20		27	B	28		1P20		SPARE
SPARE		1P20		29	C	30		1P20		SPARE
SPARE		1P20		31	A	32		1P20		SPARE
SPARE		1P20		33	B	34		1P20		SPARE
SPARE		1P20		35	C	36		1P20		SPARE
SPARE		1P20		37	A	38		1P20		SPARE
LC1 - FIELDHOCKEY PRESS BOX PANEL	4.0	2P100	1	39	B	40		1P20		SPARE
	4.0			41	C	42		1P20		SPARE
PANELBOARD NOTES:										
1. PROVIDE NEMA 4X RATED ENCLOSURE										

DRY TYPE TRANSFORMER SCHEDULE (STEP DOWN)

TAG	KVA	480V OVERCURRENT	208V OVERCURRENT	480V FEEDER (DELTA)	120/208V FEEDER (WYE)	GROUNDING (NOTE 5)
T-FH1	45	3P80A	3P150A	3#4 AND 1#8GND IN 1-1/4"C	4#1/0 AND 1#6GND IN 2"C	1#6 IN 3/4"C

TRANSFORMER NOTES:
1. BOND NEUTRAL OF TRANSFORMER SECONDARY TO THE TRANSFORMER CASE WITH BONDING JUMPER
2. GROUND THE CASING OF THE TRANSFORMER TO THE NEAREST AVAILABLE EFFECTIVELY GROUNDED WATER PIPE, STEEL AND OR GROUND ROD AS PER NEC 250.50 AND 250.52
3. ALL CONDUCTOR SIZES ARE FOR COPPER
4. SECONDARY OVERCURRENT PROTECTION SHALL BE LOCATED WITHIN TEN FEET OF THE TRANSFORMER SECONDARY TERMINALS
5. TRANSFORMER BONDING JUMPER AND GROUNDING ELECTRODE CONDUCTOR
6. PROVIDE TRANSFORMER IN WEATHER PROOF ENCLOSURE NEMA 4X.

EXISTING - RELOCATE PANEL	LIGHTING PANEL									LOCATION: STEEL FRAME RACK PRESSBOX
VOLTAGE: 480/277	PHASES: 3	WIRE: 4								
400A MCB	FED FROM:									MOUNTING: FIELD
SERVICE	KW	BRKR	NOTE	NO	PHASE	NO	NOTE	BRKR	KW	SERVICE
SPACE				1	A	2				
				3	B	4	1	3P80		T-FH1
				5	C	6				
POLE LIGHTS SOUTH		3P60		7	A	8				
				9	B	10		3P60		NORTH POLE LIGHTS
				11	C	12				
POLE LIGHTS SOUTH		3P60		13	A	14				
				15	B	16		3P60		POLE LIGHTS NORTH
				17	C	18				
SPARE		2P40		19	A	20		2P40		ACTIVE
				21	B	22				
ST LIGHTS		1P20		23	C	24		1P20		ACTIVE
FIELD PUMP		3P50		25	A	26		2P60		SPARE
				27	B	28				
				29	C	30				SPACE
PANELBOARD NOTES:										
1. PROVIDE NEW BREAKER IN EXISTING PANEL.										

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UNIVERSITY OF MAINE
FIELD HOCKEY
168 College Ave. Orono, ME 04469

PROJECT:

ELECTRICAL DETAILS

SHEET TITLE:

WBRC CAD FILE:	ELEC - ATHLETIC FIELD - FIELDHOCKEY - NEW.DWG
PROJECT No.	10088.033
SCALE:	AS NOTED
PROJECT MANAGER:	KCK
DRAWN BY:	DVS
CHECKED BY:	ACS

GRAPHIC SCALE: 0" 1"

SHEET No.: E501

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