100% CONSTRUCTION DOCUMENTS

FOR THE

SPORTSMAN TURF FIELD PROJECT

20 COUNTY ROAD
BEDFORD, NH

TOWN OF BEDFORD

AUGUST 31, 2020

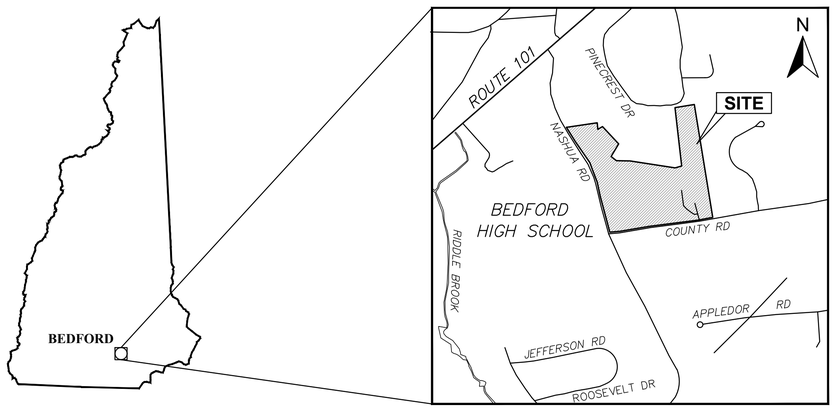
ISSUED FOR BID

GENERAL NOTES:

1. THE SURFACE FEATURES AND TOPOGRAPHY ARE THE RESULT OF AN ON THE GROUND SURVEY CONDUCTED DURING THE MONTH OF DECEMBER 2018 BY FIELDSTONE LAND CONSULTANTS, PLLC.
2. THE CONTRACTOR SHALL VERIFY AND DETERMINE THE LOCATION, SIZE, AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS PRIOR TO THE START OF ANY CONSTRUCTION. THE CONTRACTOR SHALL LOCATE THE UTILITIES SHOWN AND THE POSSIBLE EXISTENCE OF OTHER UNDERGROUND UTILITIES BY PROVIDING OBSERVATION TEST PITS. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION SHALL BE AGREED TO BY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT "DIGSAFE" (DIAL 811) AND TOWN OF BEDFORD AT LEAST 72 HOURS BEFORE DIGGING.
3. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS. IN CASE OF CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWING AND/OR SPECIFICATION, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATIONS.
4. THIS PROJECT IS TO BE CONSTRUCTED TO THE TYPICAL SECTIONS AND DETAILS SHOWN ON THE PLANS, AND SHALL IN ACCORDANCE WITH THE NHDOT 2016 EDITION OF STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND TOWN OF BEDFORD STANDARDS.
5. WHEN PREPARING THE EXISTING SITE FOR THE PROPOSED DEVELOPMENT, ALL MATERIALS REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL GOVERNING AGENCIES.
6. THE CONTRACTOR SHALL PERFORM ALL THE CLEARING AND GRUBBING NECESSARY WITHIN THE CONSTRUCTION AREA, LIMITING THE AMOUNT OF CLEARING AND GRUBBING TO THE GREATEST EXTENT POSSIBLE.
7. CONTRACTOR SHALL PROTECT AND MAINTAIN EXISTING BENCHMARKS AND BOUNDS. ALL BENCHMARKS AND BOUNDS DISTURBED BY THE CONTRACTOR SHALL BE RE-ESTABLISHED BY A NEW HAMPSHIRE REGISTERED LAND SURVEYOR AT NO EXPENSE TO THE OWNER.
8. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ANY EXCAVATION SAFEGUARDS, NECESSARY BARRICADES, POLICE DETAILS, ETC., FOR TRAFFIC CONTROL AND SITE SAFETY. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS.
9. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR THE CONDITIONS OF THE SITE.
10. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE ALL WORK IS DONE IN ACCORDANCE WITH OSHA REQUIREMENTS.
11. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL PRODUCTS (PIPE, CASTINGS, STRUCTURES, ETC.) TO THE INSPECTING ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION AND INSTALLATION.
12. THE CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS, FEES, TEMPORARY UTILITIES AND COORDINATION WITH ALL AGENCIES IN OBTAINING ACCESS TO THE SITE AND PERFORMING ALL WORK REQUIRED FOR THIS PROJECT.
13. CONTRACTOR TO OBTAIN A NPDES CONSTRUCTION GENERAL PERMIT NOI PRIOR TO CONSTRUCTION.
14. ALL PROPOSED SITE FEATURES SHALL BE LAID OUT IN THE FIELD USING SURVEY EQUIPMENT. AN AUTOCAD FILE OF THE EXISTING AND PROPOSED FEATURES WITH CONTROL POINTS WILL BE PROVIDED TO THE CONTRACTOR FOR CONSTRUCTION LAYOUT.
15. THE CONTRACTOR SHALL REMOVE THE IRRIGATION SYSTEM LOCATED WITHIN THE GRASS FIELD. SALVAGE IRRIGATION HEADS FOR THE TOWN OF BEDFORD. CAP EXISTING LINES LOCATED OUTSIDE THE LIMITS OF PROPOSED WORK. COORDINATE WITH THE TOWN TO ENSURE THE SYSTEM IS PROPERLY REMOVED AND DOES NOT AFFECT FUNCTIONALITY OF THE OTHER IRRIGATION SYSTEMS TO REMAIN ONSITE.

DRAINAGE NOTES:

1. THE STORM DRAINAGE SYSTEM SHALL BE CONSTRUCTED TO LINE AND GRADE AS SHOWN ON THE PLANS. ALL PIPE MATERIALS SHALL BE AS SPECIFIED ON THE PLANS. CONSTRUCTION METHODS SHALL CONFORM TO NHDOT STANDARD SPECIFICATIONS, SECTION 603. CATCH BASINS AND DRAIN MANHOLES SHALL CONFORM TO SECTION 604. ALL CATCH BASIN GRATES SHALL BE TYPE B AND CONFORM TO NHDOT STANDARD SPECIFICATIONS UNLESS OTHERWISE NOTED.
2. PROPOSED RIM ELEVATIONS OF DRAINAGE MANHOLES AND CATCH BASINS ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH WITH FINISH GRADES.
3. THE CONTRACTOR SHALL PROVIDE FOR THE HANDLING OF EXISTING FLOWS FROM SERVICE CONNECTIONS AND MAINLINE PIPES. THE EXISTING DRAINS MAY HAVE ACTIVE FLOW AND THE CONTRACTOR SHALL MAINTAIN CONTINUOUS FLOW WITHOUT RESTRICTIONS.
4. THE CONTRACTOR SHALL STABILIZE ANY AND ALL DITCHES AND SWALES PRIOR TO DIRECTING STORMWATER RUN-OFF TO THEM.
5. WHEN CONNECTING NEW PIPES TO EXISTING STRUCTURES SUCH AS MANHOLES AND CATCH BASINS, THE STRUCTURE SHALL BE COMPLETELY CLEANED OUT. THE HOLE MADE IN THE STRUCTURE SHALL BE AS SMALL AS NECESSARY. THE STRUCTURE SHALL BE REPAIRED TO MATCH ITS ORIGINAL TYPE OF CONSTRUCTION. THE JOINT BETWEEN THE STRUCTURE AND THE PIPE SHALL BE MADE WATERTIGHT BY FILLING THE JOINT WITH MORTAR.
6. THE CONTRACTOR SHALL CLEAN THE ENTIRE STORMWATER SYSTEM OF ALL SEDIMENT AND DEBRIS, WITHIN THE LIMIT OF WORK UPON COMPLETION OF CONSTRUCTION.
7. ALL DRAIN PIPES SHALL HAVE A MINIMUM GROUND COVER OF 3'. IF THE REQUIRED COVER CANNOT BE OBTAINED, INSTALL 4" OF RIGID INSULATION ABOVE THE DRAIN LINE.



LOCATION MAP

NOT TO SCALE

LIST OF DRAWINGS

ABBREVIATIONS:

CB	CATCH BASIN
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
CONC	CONCRETE
DWG	DRAWING
EX	EXISTING
HDPE	HIGH DENSITY POLYETHYLENE
HW	HEADWALL
OC	ON CENTER
INV	INVERT
MAX	MAXIMUM
PB	PULL BOX
PERF	PERFORATED
R&D	REMOVE & DISPOSE
TYP	TYPICAL
UD	UNDERDRAIN
W/	WITH

EARTHWORK & GRADING NOTES:

1. PROVIDE UNIFORM SLOPE BETWEEN CONTOURS AND/OR SPOT ELEVATIONS.
2. SPOT GRADES SHOWN ARE PAVEMENT ELEVATIONS AT THE CURBLINE UNLESS OTHERWISE NOTED.
3. EARTH SLOPES SHALL BE NO STEEPER THAN 2:1 (HORIZONTAL: VERTICAL) AND SHALL BE FLATTER WHERE SHOWN.
4. GENERAL FILL BEYOND PAVED AREAS SHALL BE FREE OF BRUSH RUBBISH, STUMPS, AND STONES LARGER THAN 8". FILL SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 8" IN THICKNESS. THE DRY DENSITY AFTER COMPACTION SHALL NOT BE LESS THAN 95% OF THE STANDARD PROCTOR TEST AND DONE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM D698.
5. AFTER THE AREAS TO BE TOPSOILED HAVE BEEN BROUGHT TO GRADE, THE SUBGRADE SHALL BE LOOSENED BY SCARIFYING TO A DEPTH OF AT LEAST 2" TO ENSURE BONDING OF THE TOPSOIL AND SUBSOIL.
6. FILL OR TOPSOIL SHALL NEITHER BE PLACED NOR COMPACTED WHILE IN A FROZEN OR MUDDY CONDITION OR WHILE SUBGRADE IS FROZEN.
7. FINISH PAVEMENT SURFACES AND LAWN AREAS SHALL BE FREE OF LOW SPOTS AND PONDING AREAS.
8. ALL AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS THAT DO NOT HAVE A SURFACE TREATMENT SPECIFICALLY SPECIFIED SHALL BE RESTORED TO A MINIMUM OF 4" OF SEEDED TOPSOIL, FERTILIZER, AND MULCH.
9. THE CONTRACTOR SHALL REMOVE, CONTAIN, TEST AND DISPOSE OF EXCAVATED SOILS IN ACCORDANCE WITH THE NHDOT STANDARD SPECIFICATIONS DIVISION 200 – EARTHWORK.

UTILITY NOTES:

1. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES OWNING UTILITIES, EITHER OVERHEAD OR UNDERGROUND, WITHIN THE CONSTRUCTION AREA AND SHALL COORDINATE WITH THE UTILITY COMPANIES FOR RELOCATING AND/OR SUPPORTING THEIR UTILITIES IN ACCORDANCE WITH THE SPECIFICATIONS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORATION OF EXISTING UTILITIES AND STRUCTURES DAMAGED OR REMOVED BY THE CONTRACTOR DURING THEIR OPERATIONS.
3. EXISTING IRRIGATION LINES WITHIN THE LIMIT OF WORK ARE NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL SALVAGE IRRIGATION HEADS FOR THE TOWN AND REMOVE/DISPOSE EXISTING PIPES. COORDINATE WITH TOWN ON REMOVAL OF SYSTEM.
4. ALL ELECTRIC MATERIAL WORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC CODE AS WELL AS STATE AND LOCAL CODES.
5. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL HANDHOLES, FITTINGS, CONNECTORS, COVER PLATES, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THESE DRAWINGS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND OPERATIONAL.
6. CONTRACTOR TO COORDINATE LIGHT POLE BASE LOCATIONS, CONDUIT ROUTING, CONDUIT SIZE, MATERIALS, HAND HOLES AND POWER SUPPLY FOR SITE LIGHTING WITH OWNER.
7. INSTALL NYLON PULL ROPES IN UNDERGROUND CONDUITS TO FACILITATE PULLING CABLES.

CONTACT DIG SAFE
72 HOURS PRIOR
TO CONSTRUCTION
DIGSAFE.COM
DIAL 811

STATE OF NEW HAMPSHIRE
WILLIAM R. DAVIDSON
No. 10664
LICENSED
PROFESSIONAL ENGINEER

8/31/20

REV.	REVISION DESCRIPTION	DATE
3	100% CONSTRUCTION DOCS – ISSUED FOR BID	8/31/20
2	100% CONSTRUCTION DOCS – ISSUED FOR BID	2/21/19
1	95% PLANS – ISSUED FOR REVIEW	1/11/19

CHECKED BY: WRD
DRAWN BY: SMT
DESIGNED BY: SMT

Hoyle, Tanner Associates, Inc.
Pease International Tradeport
100 International Dr., #360, Portsmouth, NH 03801
Tel (603) 431-2520 Fax (603) 431-8067 Web: www.hoyletanner.com

ORIGINAL DATE: JANUARY 11, 2019

SCALE: AS SHOWN

CLIENT
TOWN OF BEDFORD
24 NORTH AMHERST ROAD
BEDFORD, NH 03110

PROJECT
SPORTSMAN TURF FIELD PROJECT
20 COUNTY ROAD
BEDFORD, NH

TITLE SHEET

C1

PROJECT NO. 568602

SHEET 1 OF 8

NOTES:

1. THE PURPOSE OF THIS PLAN IS TO DEPICT THE EXISTING CONDITIONS ON TAX MAP LOT 20-11 IN BEDFORD, NH.
2. THE OWNER OF RECORD FOR TAX MAP LOT 20-11 IS THE TOWN OF BEDFORD - 24 NORTH AMHERST ROAD, BEDFORD, NH 03110.
3. ZONING FOR THE PARCEL IS THE RESIDENTIAL & AGRICULTURAL ZONE (RA) ZONING REQUIREMENTS.
4. THE SURFACE FEATURES AND TOPOGRAPHY SHOWN ARE THE RESULT OF AN ON THE GROUND SURVEY CONDUCTED DURING THE MONTH OF DECEMBER 2018 BY FIELDSTONE LAND CONSULTANTS, PLLC. HORIZONTAL ORIENTATION & VERTICAL DATUM ARE BASED ON THE REFERENCE PLAN.
5. THE SUBJECT PARCEL IS NOT LOCATED IN A FLOOD HAZARD AREA AS DETERMINED FROM THE FLOOD INSURANCE STUDY (FIRM), HILLSBOROUGH COUNTY, CITY OF BEDFORD, NEW HAMPSHIRE, COMMUNITY NO. 330083, PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, MAP NUMBER: 33011C0359D, DATED SEPTEMBER 25, 2009.
6. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN COMPILED IN PART FROM PLANS OF RECORD AND FIELD LOCATION. THE LOCATION OF UNDERGROUND UTILITIES SHOULD BE CONSIDERED APPROXIMATE AND SHOULD BE FIELD VERIFIED PRIOR TO ANY EXCAVATION OR CONSTRUCTION ACTIVITIES.

REFERENCE PLAN:

"SITE DEVELOPMENT PLANS - FOR THE - RILEY FIELD AND SPORTSMAN'S FIELD - REHBILITATION PROJECT - 20 COUNTY ROAD - BEDFORD, NH", SCALE:1"=40', DATED NOVEMBER 22, 2017 BY HOYLE, TANNER, & ASSOCIATES.

CERTIFICATION:

"I HEREBY CERTIFY THAT THE EXISTING IMPROVEMENTS SHOWN ARE THE RESULT OF A FIELD SURVEY PERFORMED BY FIELDSTONE LAND CONSULTANTS, PLLC IN DECEMBER, 2018.

DATE: 2/21/19

STATE OF NEW HAMPSHIRE — No. 946 — MICHAEL D. FLOOF — LICENSED LAND SURVEYOR — SIGNATURE

LEGEND:

- UTILITY POLE & GUY
- CATCH BASIN (SQUARE)
- IRRIGATION CONTROL BOX
- LIGHT POST
- SINGLE SIGN POST
- 20-11 — TAX MAP & LOT NUMBER
- EDGE OF PAVED ROAD
- EDGE OF WETLANDS
- EDGE OF WATER
- CL OF MAN-MADE SWALE
- 250 — 5' CONTOUR INTERVAL
- 251 — 1' CONTOUR INTERVAL
- CHAINLINK FENCE
- CULVERT

20-11
29.57 ACRES
(PER TAX CARD)

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 inch = 20 ft.

ENGINEER

REV.	REVISION DESCRIPTION	DATE
2	100% CONSTRUCTION DOCS - ISSUED FOR BID	2/21/19
1	95% PLANS - ISSUED FOR REVIEW	1/11/19

CHECKED BY: WRD
DRAWN BY: SMT
DESIGNED BY: SMT
ORIGINAL DATE: JANUARY 11, 2019
SCALE: AS SHOWN

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Pease International Tradeport
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Tel (603) 431-2520 Fax (603) 431-8067 Web: www.hoyletanner.com

CLIENT: TOWN OF BEDFORD
24 NORTH AMHERST ROAD
BEDFORD, NH 03110

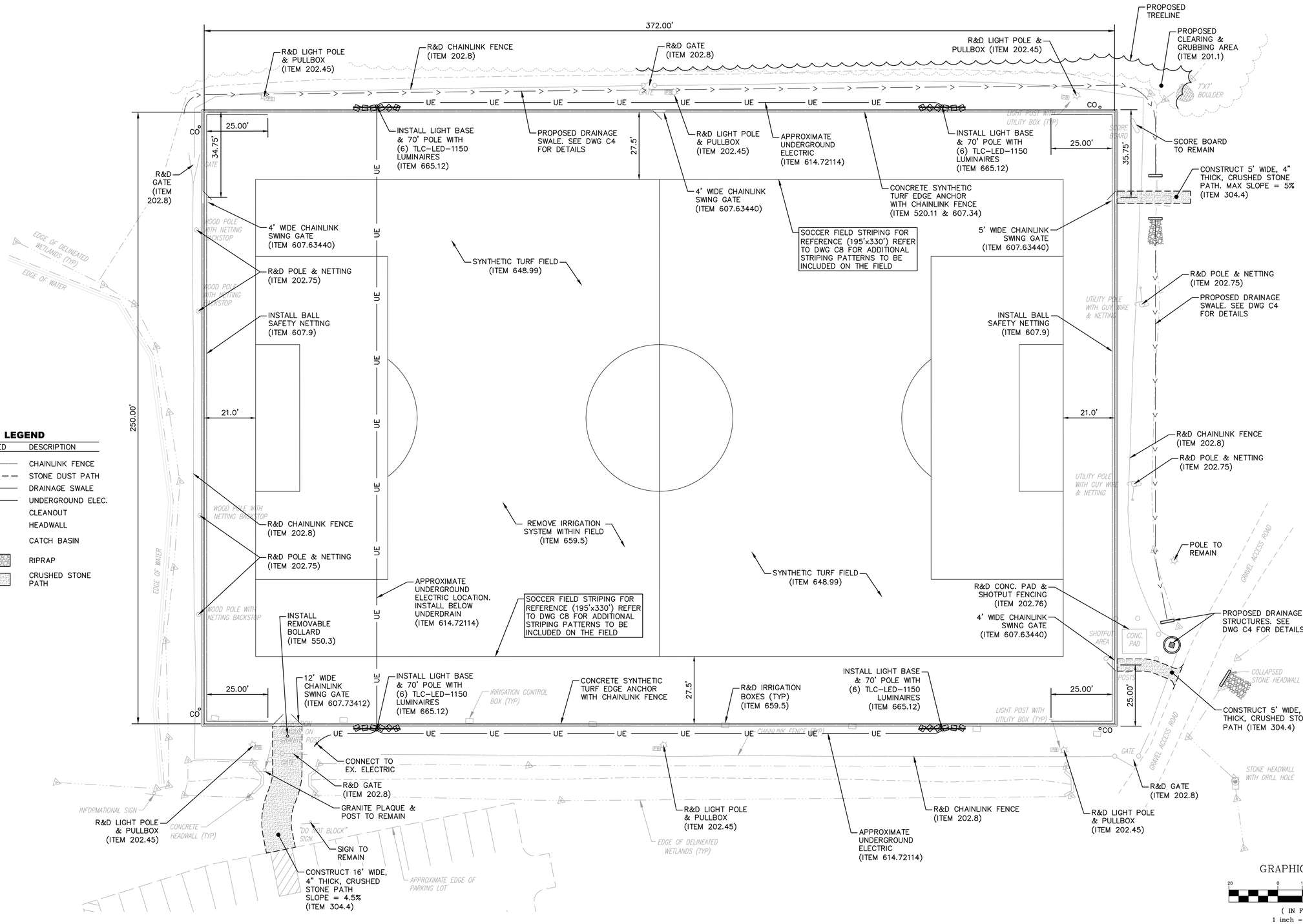
PROJECT: SPORTSMAN TURF FIELD PROJECT
20 COUNTY ROAD
BEDFORD, NH

EXISTING CONDITIONS PLAN
C2

PROJECT NO. 568602
SHEET 2 OF 8

NOTES:

1. REFER TO DWG C1 FOR NOTES AND ABBREVIATIONS
2. REFER TO DWGS C5–C7 FOR CONSTRUCTION DETAILS.
3. INSTALL EROSION CONTROL MEASURES SHOWN ON DWG C4 PRIOR TO THE START OF ANY CONSTRUCTION.



LEGEND

PROPOSED	DESCRIPTION
———	CHAINLINK FENCE
- - - - - - -	STONE DUST PATH
——— > ———	DRAINAGE SWALE
——— UE ———	UNDERGROUND ELEC.
CO°	CLEANOUT
	HEADWALL
	CATCH BASIN
	RIPRAP
	CRUSHED STONE PATH

WILLIAM R. DAVIDSON No. 10664 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE

8/31/20

REV.	DESCRIPTION	DATE
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BEDFORD, NH 03110

PROJECT
SPORTSMAN TURF FIELD PROJECT
20 COUNTY ROAD
BEDFORD, NH

SITE PREPARATION & LAYOUT PLAN

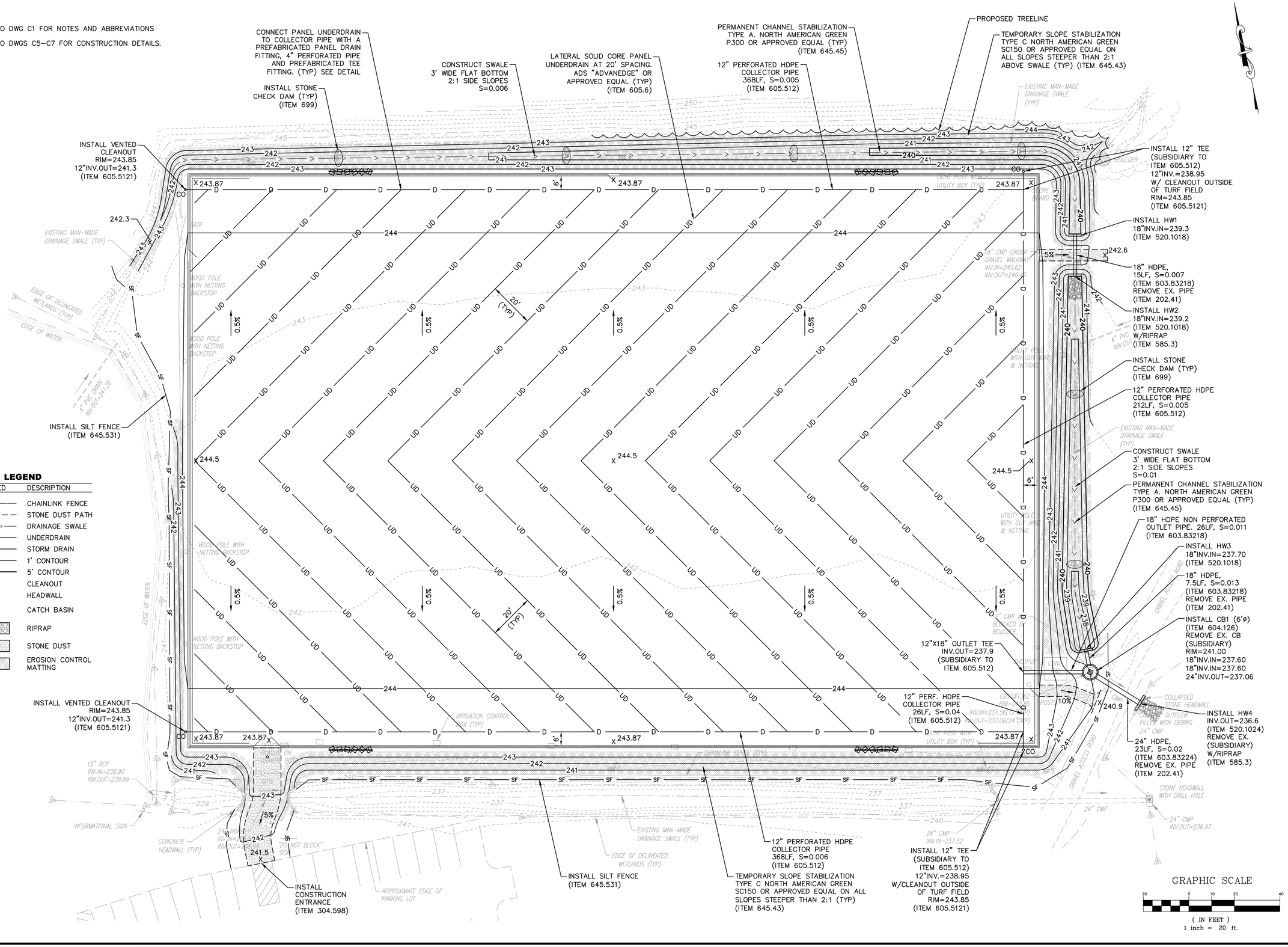
C3

PROJECT NO. 568602

SHEET 3 OF 8

NOTES:

1. REFER TO DWG C1 FOR NOTES AND ABBREVIATIONS
2. REFER TO DWGS C5–C7 FOR CONSTRUCTION DETAILS.



LEGEND

PROPOSED	DESCRIPTION
	CHAINLINK FENCE
	STONE DUST PATH
	DRAINAGE SWALE
UD	UNDERDRAIN
D	STORM DRAIN
239	1' CONTOUR
240	5' CONTOUR
CO	CLEANOUT
	HEADWALL
	CATCH BASIN
	RIPRAP
	STONE DUST
	EROSION CONTROL MATTING

GRAPHIC SCALE

20 0 10 20 40

(IN FEET)

1 inch = 20 ft.

STATE OF NEW HAMPSHIRE
WILLIAM R. DAVIDSON
No. 10664
LICENSED PROFESSIONAL ENGINEER

8/31/20

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PROJECT
SPORTSMAN TURF FIELD PROJECT
20 COUNTY ROAD
BEDFORD, NH

GRADING, DRAINAGE & EROSION CONTROL PLAN

C4

PROJECT NO. 568602

SHEET 4 OF 8

EROSION CONTROL NOTES:

A. GENERAL NOTES

1. DURING CONSTRUCTION, AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NOTED. THE SMALLEST PRACTICAL AREA OF LAND (5 ACRES MAXIMUM) SHOULD BE EXPOSED AT ANY ONE TIME DURING DEVELOPMENT. WHEN LAND IS EXPOSED DURING DEVELOPMENT, THE EXPOSURE SHOULD BE KEPT TO A MAXIMUM OF 72 HOURS BEFORE APPLYING TEMPORARY OR PERMANENT EROSION CONTROL MEASURES. ALL DITCHES AND SWALES ARE REQUIRED TO BE STABILIZED PRIOR TO DIRECT RECEIPT OF ANY FLOW.

2. INSTALL SILT SOCKS WHERE SHOWN PRIOR TO CONSTRUCTION START. INSTALL INLET PROTECTION AT ALL EXISTING DRAINAGE STRUCTURES ADJACENT TO PROJECT. DO NOT REMOVE SILT BARRIERS UNTIL DISTURBED AREAS ARE FULLY COVERED WITH TURF OR OTHER APPLICABLE SURFACE MATERIAL. ALL PONDS ARE TO BE CONSTRUCTED AND STABILIZED PRIOR TO ANY OTHER DRAINAGE SYSTEM WORK, INCLUDING DITCH AND SWALE EXCAVATION.

3. EROSION AND SEDIMENT CONTROL PRACTICES INCLUDE THE USE OF THE FOLLOWING SILT FENCE BARRIERS, PERMANENT DETENTION/SEDIMENTATION POND BASIN, GRASS AND/OR ROCK LINED SWALES, DIVERSIONS WITH LEVEL SPREADERS. ALL EROSION CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS CONTAINED IN THE "NH STORMWATER MANUAL", VOLUME 3, DECEMBER 2008.

4. SEE PLANS FOR ADDITIONAL EROSION CONTROL MEASURES WHICH MAY BE REQUIRED.

5. CONSTRUCTION AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:

   a. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED
   b. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
   c. A MINIMUM OF 3 INCHES OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED
   d. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

B. VEGETATIVE MEASURES

1. TOPSOIL STOCKPILING: TOPSOIL SHALL BE STRIPPED AND STOCKPILED FOR LATER USE ON CRITICAL AREAS AND ALL OTHER AREAS TO BE SEEDED. THE STOCKPILE WILL NOT BE COMPACTED AND SHALL BE STABILIZED AGAINST EROSION WITH TEMPORARY SEEDING.

2. TEMPORARY SEEDING:

   a. BEDDING – REMOVE STONES AND TRASH THAT WILL INTERFERE WITH SEEDING THE AREA. WHERE FEASIBLE, TILL THE SOIL TO A DEPTH OF ABOUT 3" TO PREPARE SEED BED AND MIX THE FERTILIZER INTO THE SOIL.

   b. FERTILIZER – FERTILIZER SHOULD BE UNIFORMLY SPREAD OVER THE AREA PRIOR TO BEING TILLED INTO THE SOIL. A 10-10-10 MIX OF FERTILIZER SHOULD BE APPLIED AT A RATE OF 300 POUNDS PER ACRE (OR 7 POUNDS PER 1,000 S.F.).

   c. SEED MIXTURE – USE ANY OF THE FOLLOWING IN UPLAND AREAS:

   d. SEEDING RATE:

SPECIES	ACRE	1,000 S.F	PER ACRE RATES	DEPTH
WINTER RYE	112 LBS	2.5 LBS.	8/15-9/5	1 IN.
OATS	80 LBS.	2.0 LBS.	SPRING-5/15	1 IN.
ANNUAL RYE GRASS	40 LBS.	1.0 LBS.	4/15-9/15	0.25IN. W/MULCH

   e. MULCHING – WHERE IT IS IMPRACTICAL TO INCORPORATE FERTILIZER AND SEED INTO MOIST SOIL, THE SEEDED AREA SHALL BE MULCHED TO FACILITATE GERMINATION. MULCH IN THE FORM OF STRAW SHOULD BE APPLIED AT A RATE OF 70 TO 90 LBS. PER 1,000 S.F.

3. PERMANENT SEEDING:

   f. BEDDING – STONES LARGER THAN 4", TRASH, ROOTS, AND OTHER DEBRIS THAT WILL INTERFERE WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA SHOULD BE REMOVED. WHERE FEASIBLE, THE SOIL SHOULD BE TILLED TO A DEPTH OF 4" TO PREPARE A SEEDBED AND MIX FERTILIZER INTO THE SOIL.

   g. FERTILIZER – LIME AND FERTILIZER SHOULD BE APPLIED EVENLY OVER THE AREA PRIOR TO OR AT THE TIME OF SEEDING AND INCORPORATED INTO THE SOIL. KINDS AND AMOUNTS OF LIME AND FERTILIZER SHOULD BE BASED ON AN EVALUATION OF SOIL TESTS. WHEN A SOIL TEST IS NOT AVAILABLE, THE FOLLOWING MINIMUM AMOUNTS SHOULD BE APPLIED:

      AGRICULTURAL LIMESTONE @ 100 LBS. PER 1,000 S.F. 10-20-20 FERTILIZER @ 12 LBS. PER 1,000 S.F.

   h. SEEDING MIXTURE (RECOMMENDED)

SLOPE WORK

SPECIES	PER ACRE	PER 1,000 S.F	USE
CROWNVETCH	15	0.34	
PERENNIAL RYE GRASS	30	0.69	
CREEPING RED FESCUE	35	0.80	ALL SLOPE WORK
RED TOP	5	0.11	
ALSIKE CLOVER	5	0.11	
BIRDSFOOT TREFOIL	5	0.11	
TOTAL	95	2.18	

TREATMENT SWALES

SPECIES	PER ACRE	PER 1,000 S.F.	USE
TALL FESCUE	35	0.80	
SWITCH GRASS	35	0.80	TREATMENT SWALES
JAPANESE MILLET	90	2.00	
TOTAL	160	3.60	

   i. MULCHING – MULCH SHOULD BE USED ON HIGHLY ERODIBLE SOILS, ON CRITICALLY ERODING AREAS, AND ON AREAS WHERE CONSERVATION OF MOISTURE WILL FACILITATE PLANT ESTABLISHMENT.

TYPE	RATE PER 1,000 S.F.	USE AND COMMENTS
STRAW	70 TO 90 LBS.	MUST BE DRY AND FREE FROM MOLD. MAY BE USED WITH PLANTINGS
WOOD CHIPS OR BARK MULCH	460 TO 920 LBS.	USED MOSTLY WITH TREES AND SHRUB PLANTINGS
JUTE AND FIBROUS MATTING	AS PER MANUFACTURER SPECIFICATIONS	USED IN SLOPE AREAS, WATER COURSES AND OTHER AREAS
CRUSHED STONE		SPREAD MORE ¼" TO 1½" DIA THAN ½" THICK. EFFECTIVE IN CONTROLLING WIND AND WATER EROSION.

   j. SODDING – SODDING IS DONE WHERE IT IS DESIRABLE TO RAPIDLY ESTABLISH COVER ON A DISTURBED AREA. SODDING AN AREA MAY BE SUBSTITUTED FOR PERMANENT SEEDING PROCEDURES ANYWHERE ON SITE. BED PREPARATION, FERTILIZING, AND PLACEMENT OF SOD SHALL BE PERFORMED ACCORDING TO THE S.C.S. HANDBOOK.

C. STRUCTURAL MEASURES

1. STRAW BALE BARRIERS/SILT SCREEN FENCES: STRAW BALE BARRIERS AND/OR SILT SCREEN FENCES ARE TO BE INSTALLED IN THE AREAS SHOWN ON THE PLAN. THEY ARE INTENDED PRIMARILY TO INTERCEPT AND FILTER SMALL VOLUMES OF "SHEET FLOWING" RUNOFF, OR AS SEDIMENT TRAPS IN SMALL SWALES. STRAW BALES HAVE A USEFUL LIFE OF 3 MONTHS WHEN WET, AND THEREFORE, MUST BE INSPECTED AND REPAIRED OR REPLACED PERIODICALLY. SILT SCREEN FENCES WILL FUNCTION 6 MONTHS OR LONGER IF KEPT FREE OF SEDIMENT ACCUMULATIONS (SEE DETAILS FOR ADDITIONAL INFORMATION).

2. SWALES: TEMPORARY AND/OR PERMANENT SWALES ARE TO BE INSTALLED AS SHOWN ON THE PLAN. SWALES ARE USED TO CONVERT SHEET FLOW TO CHANNEL FLOW AND CONVEY THE RUNOFF TO A PERMANENT CHANNEL, STORM DRAIN, OR DETENTION/SEDIMENT STRUCTURE. SWALES ARE INTENDED TO INTERCEPT RUNOFF AND DIVERT IT FROM AN EXPOSED NEWLY SEEDED SLOPE TOWARD AN ACCEPTABLE OUTLET OR TO REDUCE THE VELOCITY OF RUNOFF FLOWING DOWN FROM A DRAINAGE AREA.

3. A STABILIZED CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED OF 1.5 INCH STONE ACROSS THE FULL WIDTH OF THE VEHICLE INGRESS EGRESS AREA. THE STONE PAD SHOULD BE AT LEAST 50 FEET LONG, 25 FEET WIDE AND AT LEAST 6 INCHES THICK. ADDITIONAL STONE MAY HAVE TO BE ADDED PERIODICALLY TO MAINTAIN THE PROPER FUNCTIONING OF THE PAD.

4. CATCH BASIN SEDIMENT FILTER: STONE CATCH BASIN SEDIMENT FILTERS ARE TO BE INSTALLED IN THE AREAS SHOWN ON THE PLAN. THEY ARE INTENDED PRIMARILY FILTER SMALL VOLUMES OF "SHEET FLOWING" RUNOFF. CATCH BASIN SEDIMENT FILTERS SHALL BE CONSTRUCTED OF FILTER FABRIC BEING INSTALLED OVER INLET GRATE, AND 3/4" WASHED CRUSHED STONE, 12 INCHES THICK. CATCH BASIN SEDIMENT FILTERS WILL LAST LONGER IF KEPT FREE OF SEDIMENT ACCUMULATIONS (SEE DETAILS FOR ADDITIONAL INFORMATION).

D. MAINTENANCE

1. DURING THE PERIOD OF CONSTRUCTION AND/OR UNTIL LONG TERM VEGETATION IS ESTABLISHED:

   a. SEEDED AREAS WILL BE FERTILIZED AND WILL BE SEEDED AS NECESSARY TO INSURE VEGETATIVE ESTABLISHMENT.

   b. ADDITIONAL STONE MAY HAVE TO BE ADDED TO THE CONSTRUCTION ENTRANCE, ROCK LINED SWALES, ETC., PERIODICALLY TO MAINTAIN THE PROPER FUNCTIONING OF THE EROSION CONTROL STRUCTURE.

   c. ALL DIVERSION CHANNELS AND SWALES WILL BE CHECKED WEEKLY AND REPAIRED WHEN NECESSARY UNTIL ADEQUATE VEGETATION IS ESTABLISHED.

   d. ALL SILT SCREEN FENCES WILL BE CHECKED WEEKLY. NECESSARY REPAIRS WILL BE MADE TO CORRECT UNDERMINING OR DETERIORATION OF THE BARRIER.

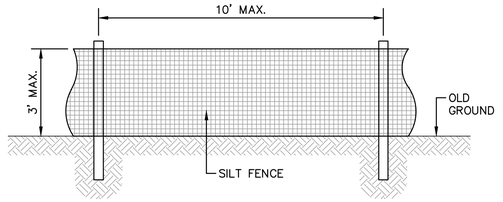
   e. EROSION CONTROL MEASURES TO BE INSPECTED WEEKLY AND AFTER EVERY 0.5" OF RAINFALL.

E. WINTER CONSTRUCTION

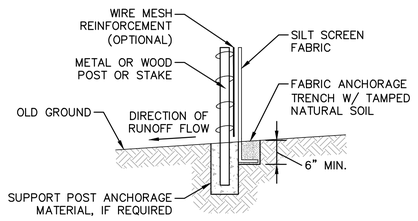
1. ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.

2. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.

3. AFTER NOVEMBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3.



ELEVATION



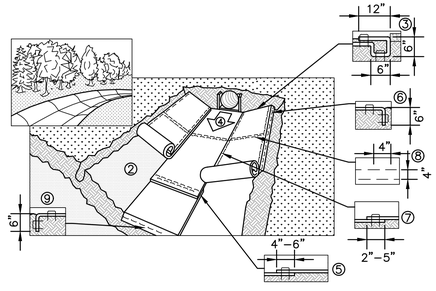
END VIEW

SILT FENCE NOTES:

1. SPACING OF FENCE POSTS NOT TO EXCEED 10-0".
2. SILT FENCE SHALL BE INSTALLED BEFORE ANY EARTH REMOVAL OR EXCAVATION TAKES PLACE.
3. FILTER FABRIC TO BE FASTENED SECURELY TO POSTS WITH WIRE TIES OR STAPLES AT TOP, MIDPOINT AND BOTTOM.
4. OVERLAP BY 6". FOLD AND STAPLE ADJOINING SECTIONS OF FILTER FABRIC.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED, AND THE MATERIAL REMOVED WHEN "BULGES" DEVELOP. DO NOT DEPOSIT THE MATERIAL NEAR WETLANDS OR WATERCOURSES.
6. FILTER FABRIC SHALL BE ENTRENCHED 6" MINIMUM BELOW EXISTING OR FINISHED GRADE.

1 C5 SILT FENCE EROSION CONTROL DETAIL (ITEM 645.31)

SCALE: NONE



NOTES:

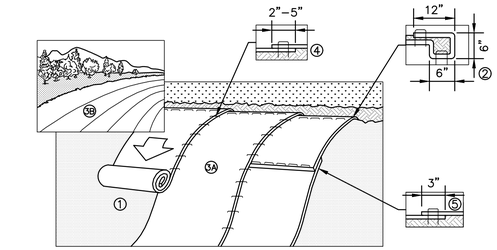
CRITICAL POINTS
A. OVERLAPS AND SEAMS
B. PROJECTED WATER LINE
C. CHANNEL BOTTOM/SIDE SLOPE VERTICES

** HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

** IN LOOSE SOIL CONDITIONS, THE USED OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15cm) MAY BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS

3 C5 PERMANENT CHANNEL STABILIZATION TYPE A DETAIL (ITEM 645.45)

SCALE: NONE



SLOPE PROTECTION INSTALLATION NOTES:

1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12"APART ACROSS ENTIRE BLANKET WIDTH.
6. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.
7. INSTALL PRODUCT IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

2 C5 TEMPORARY SLOPE STABILIZATION TYPE C DETAIL (ITEM 645.43)

SCALE: NONE

CHANNEL INSTALLATION NOTES:

1. INSTALL PRODUCT IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS
2. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED, DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH THE PAPER SIDE DOWN.
3. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
4. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
5. PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4"-6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4"(10") ON CENTER TO SECURE BLANKETS.
6. FULL-LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6"DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
7. ADJACENT BLANKETS MUST BE OVERLAPPED APPROXIMATELY 2"-5" (DEPENDING ON BLANKET TYPE) AND STAPLED TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE BLANKET BEING OVERLAPPED.
8. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30' TO 40' INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER OVER ENTIRE WIDTH OF CHANNEL.
9. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

STATE OF NEW HAMPSHIRE
WILLIAM R. DAVIDSON No. 10664
LICENSED PROFESSIONAL ENGINEER
8/31/20

REV.	DESCRIPTION	DATE
1	95% PLANS – ISSUED FOR REVIEW	1/11/19
2	100% CONSTRUCTION DOCS – ISSUED FOR BID	2/21/19
3	100% CONSTRUCTION DOCS – ISSUED FOR BID	8/31/20

CHECKED BY: WRD
DRAWN BY: SMT
DESIGNED BY: SMT
ORIGINAL DATE: JANUARY 11, 2019
SCALE: AS SHOWN

Hoyle, Tanner Associates, Inc.
Pease International Tradeport
100 International Dr., #360, Portsmouth, NH 03801
Tel (603) 431-2520 Fax (603) 431-8067 Web: www.hoyletanner.com

CLIENT: TOWN OF BEDFORD
24 NORTH AMHERST ROAD
BEDFORD, NH 03110

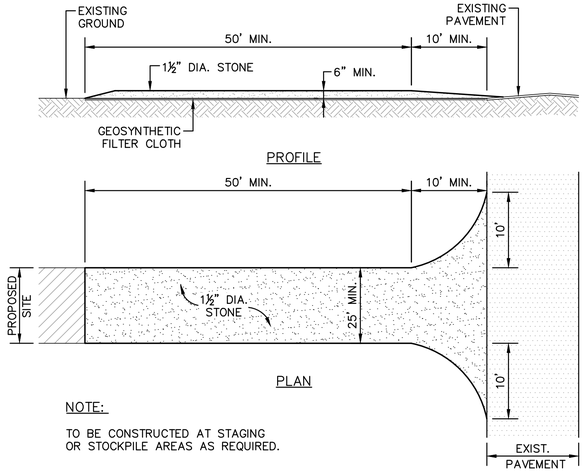
PROJECT: SPORTSMAN TURF FIELD PROJECT
20 COUNTY ROAD
BEDFORD, NH

CONSTRUCTION DETAILS 1

C5

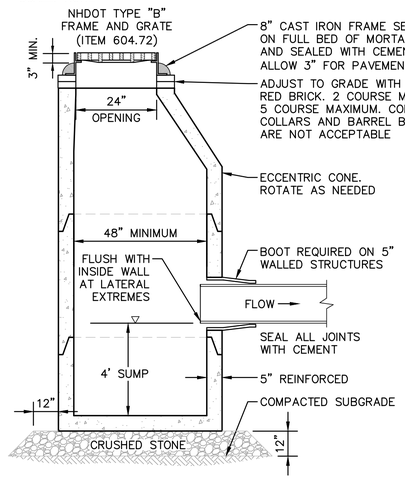
PROJECT NO. 568602

SHEET 5 OF 8



1 C6 STABILIZED CONSTRUCTION ENTRY DETAIL (ITEM 304.598)

SCALE: NONE

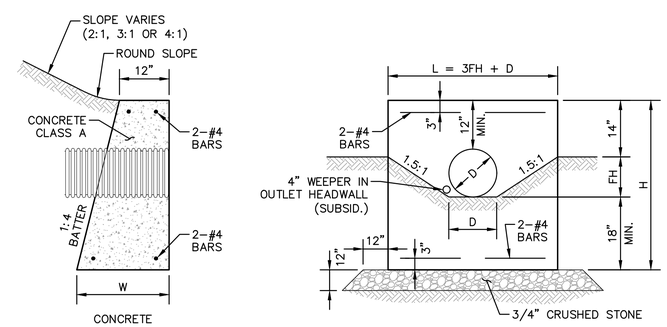


CATCH BASIN NOTES:

1. STRUCTURE SHALL BE DESIGNED FOR H–20 LOADING.
2. CONCRETE: 4,000 PSI AFTER 28 DAYS.
3. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ.IN. PER LINEAR FOOT IN ALL SECTIONS AND SHALL BE IN THE CENTER OF THE WALL. STRUCTURE SHALL BE DESIGNED TO SUPPORT H–20 LOADINGS.
4. THE TONGUE OR THE GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ.IN. PER LINEAR FOOT.
5. SEAL ALL PRECAST JOINTS WITH BITUMASTIC SEAL.
6. RISERS OF 2", 3" AND 4" CAN BE USED TO REACH DESIRED DEPTH. 12" MAXIMUM RISER HEIGHT.

4 C6 TYPICAL CATCH BASIN DETAIL (ITEM 604.126)

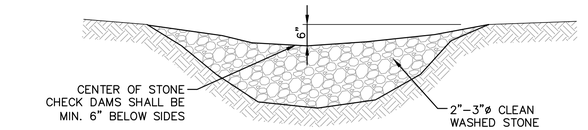
SCALE: NONE



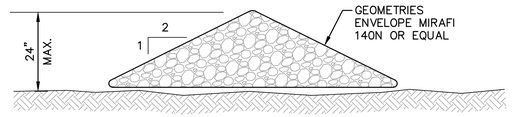
DIAMETER D INCHES	MASONRY PER FOOT OF WALL CU. YD	MASONRY PER STANDARD HEADER CU. YD	STEEL PER STANDARD HEADER LB.	LENGTH OF BARS	EXC. FOR 1' DEPTH CU. YD.	HEADER LENGTH L	HEADER HEIGHT H	FILL HEGHT FH	WIDTH AT BOTTOM OF HEADER W
18	0.222	1.13	14	5–2	1.111	5–6	4–0	1–4	2–0
24	0.260	1.78	20	7–2	1.451	7–6	4–6	1–10	2–1½

8 C6 CONCRETE HEADWALL DETAILS (ITEMS 520.1018 & 520.1024)

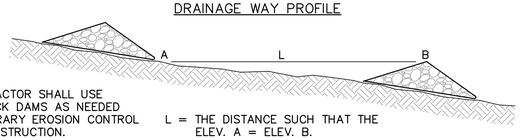
SCALE: NONE



DRAINAGE WAY SECTION



DRAINAGE WAY PROFILE



NOTES:

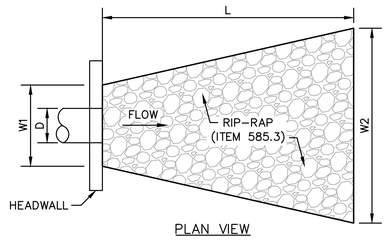
1. THE CONTRACTOR SHALL USE STONE CHECK DAMS AS NEEDED FOR TEMPORARY EROSION CONTROL DURING CONSTRUCTION.
2. REMOVE CHECK DAMS AFTER SITE IS STABILIZED.

L = THE DISTANCE SUCH THAT THE ELEV. A = ELEV. B.

CHECK DAM SPACING

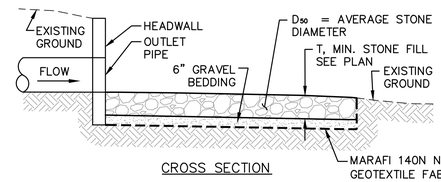
2 C6 STONE CHECK DAM DETAIL (SUBSIDIARY TO ITEM 699)

SCALE: NONE



PLAN VIEW

TABLE OF DIMENSIONS							
	D (IN)	W1 (FT)	L (FT)	W2 (FT)	T (IN)	D50 (IN)	RIPRAP VOLUME (C.Y.)
HW2	18	4.5	10	6.5	12	6	2.0
HW4	24	6	10	8	12	6	2.6



CROSS SECTION

RIP–RAP NOTES

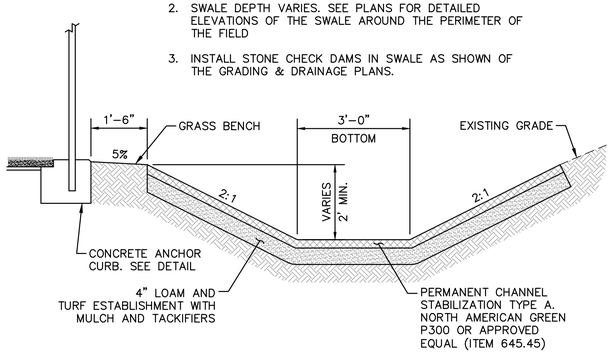
1. ALL RIP–RAP SHALL BE PROTECTED FROM RECEIVING SEDIMENT RUNOFF DURING THE CONSTRUCTION PROCESS. THE CONTRACTOR SHALL ENSURE THAT ALL RIP–RAP IS CLEAN AND FREE OF SEDIMENT AT THE COMPLETION OF THE PROJECT.

5 C6 STONE LINED OUTLET PROTECTION DETAIL

SCALE: NONE

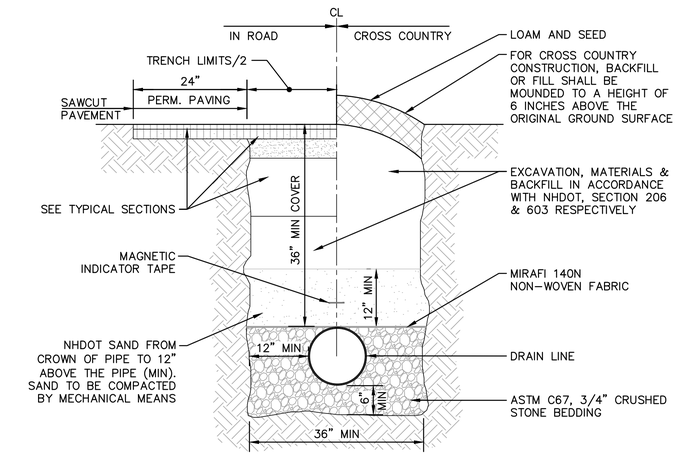
SWALE NOTES

1. STABILIZE ANY AND ALL DITCHES AND SWALES PRIOR TO DIRECTING STORMWATER RUN–OFF TO THEM.
2. SWALE DEPTH VARIES. SEE PLANS FOR DETAILED ELEVATIONS OF THE SWALE AROUND THE PERIMETER OF THE FIELD
3. INSTALL STONE CHECK DAMS IN SWALE AS SHOWN OF THE GRADING & DRAINAGE PLANS.



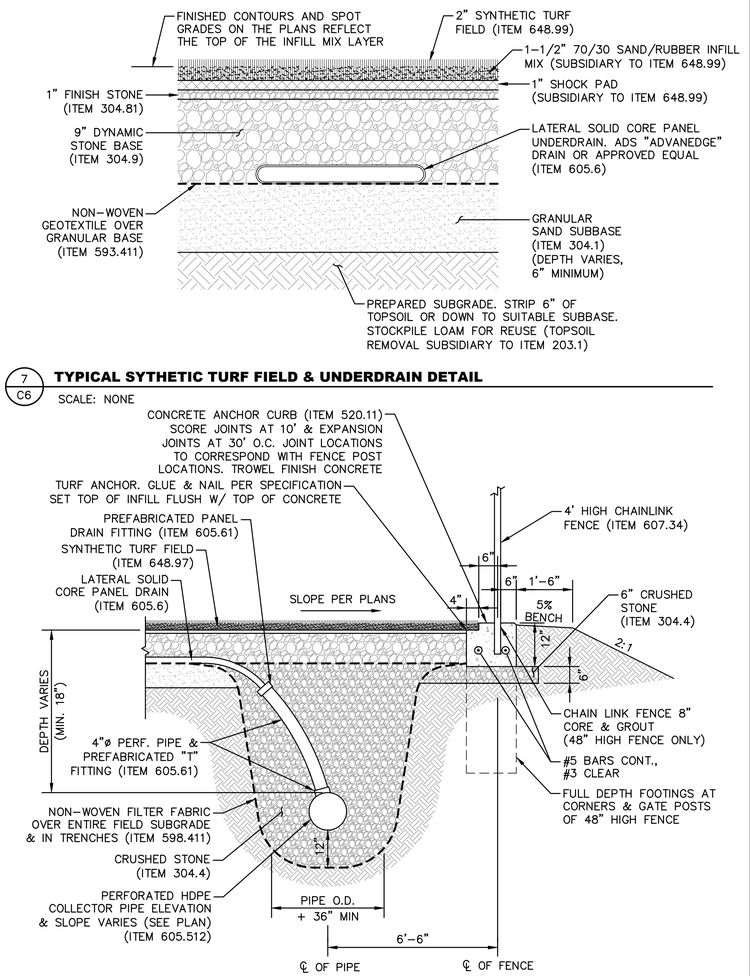
9 C6 PERIMETER SWALE DETAIL

SCALE: NONE



3 C6 DRAIN TRENCH DETAIL (ITEMS 603.83218 & 603.83224)

SCALE: NONE



7 C6 TYPICAL SYTHETIC TURF FIELD & UNDERDRAIN DETAIL

SCALE: NONE

10 C6 SYTHETIC TURF EDGE & COLLECTOR DRAIN DETAIL

SCALE: NONE

WILLIAM R. DAVIDSON No. 10664 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE

8/31/20

REV.	REVISION DESCRIPTION	DATE
3	100% CONSTRUCTION DOCS – ISSUED FOR BID	8/31/20
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Hoyle, Tanner Associates, Inc.
Pease International Tradeport
100 International Dr., #360, Portsmouth, NH 03801
Tel (603) 431-2520 Fax (603) 431-8067 Web: www.hoyletanner.com

ORIGINAL DATE: JANUARY 11, 2019
SCALE: AS SHOWN

CLIENT: TOWN OF BEDFORD, 24 NORTH AMHERST ROAD, BEDFORD, NH 03110

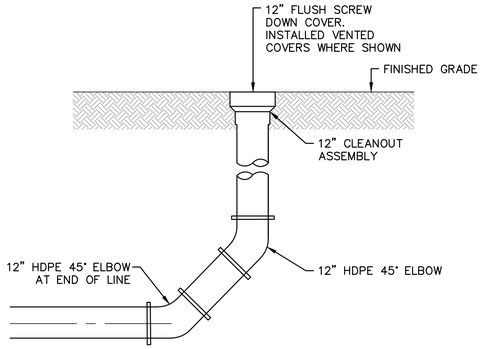
PROJECT: SPORTSMAN TURF FIELD PROJECT, 20 COUNTY ROAD, BEDFORD, NH

CONSTRUCTION DETAILS 2

C6

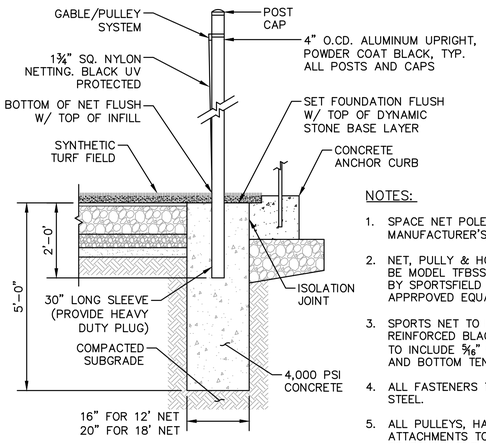
PROJECT NO. 568602

SHEET 6 OF 8



1 C7 DRAIN CLEANOUT DETAIL (ITEM 605.5121)

SCALE: NONE

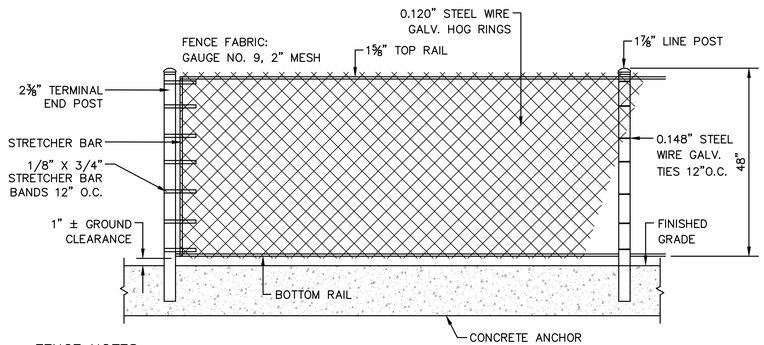


NOTES:

1. SPACE NET POLES PER MANUFACTURER'S RECOMMENDATION.
2. NET, PULLY & HOIST SYSTEM SHALL BE MODEL TFBSS, AS, MANUFACTURED BY SPORTSFIELD SPECIALTIES INC.,OR APPRPOVED EQUAL.
3. SPORTS NET TO BE 1¾" SYNTHETIC REINFORCED BLACK NYLON MESH. NET TO INCLUDE ⅝" PERIMETER CORD AND BOTTOM TENSION CABLE.
4. ALL FASTENERS TO BE STAINLESS STEEL.
5. ALL PULLEYS, HARDWARE, & ATTACHMENTS TO BE ZINC PLATED OR EQUIVALENT.

2 C7 BALL SAFETY NETTING DETAIL (ITEM 607.9)

SCALE: NONE

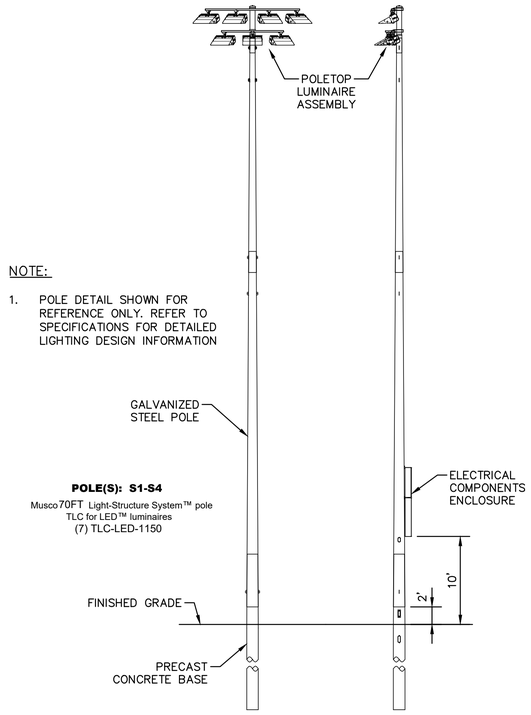


FENCE NOTES:

1. MAXIMUM POST SPACING SHALL BE 10'–0".
2. ALL FENCING SHALL BE VINYL COATED BLACK.
3. REFER TO NHDOT SPECIFICATION AND STANDARD DETAILS FOR ADDITIONAL FENCE INFORMATION AND GATE DETAILS.

3 C7 CHAINLINK FENCE DETAIL (ITEM 607.34)

SCALE: NONE



NOTE:

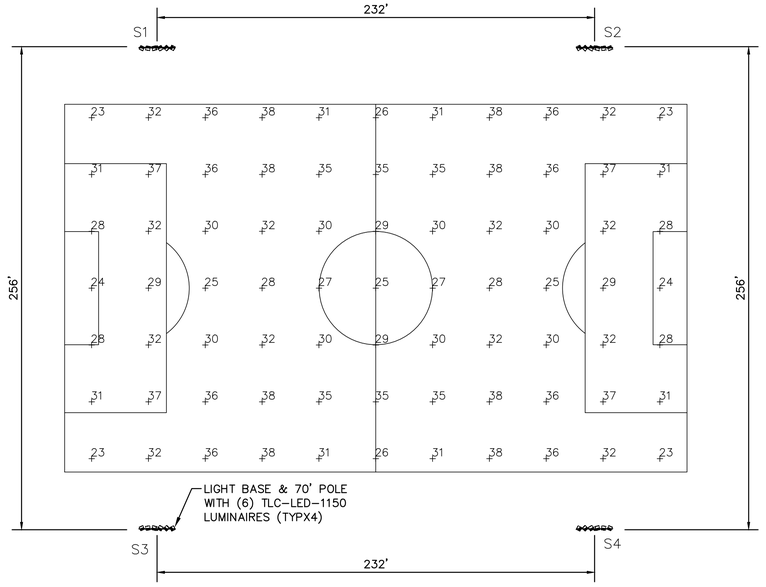
1. POLE DETAIL SHOWN FOR REFERENCE ONLY. REFER TO SPECIFICATIONS FOR DETAILED LIGHTING DESIGN INFORMATION

POLE(S): S1-S4

Musco 70FT Light-Structure System™ pole
TLC for LED™ luminaires
(7) TLC-LED-1150

4 C7 POLE CONFIGURATION DETAIL

SCALE: NONE

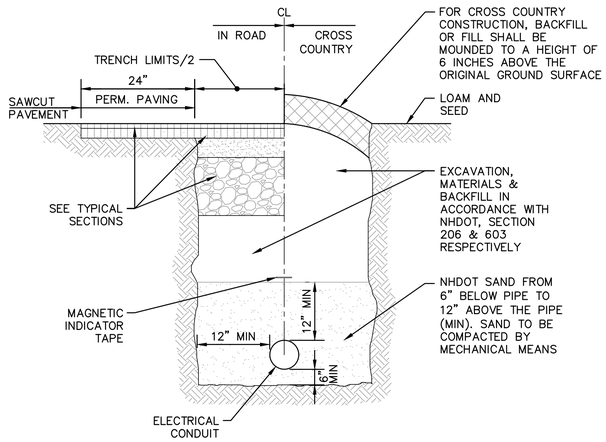


LIGHTING NOTES:

1. PHOTOMETRIC PLAN SHOWN FOR REFERENCE ONLY. REFER TO SPECIFICATIONS FOR DETAILED LIGHTING DESIGN INFORMATION.
2. REFER TO DWG C3 FOR LIGHT POLES LOCATIONS
3. LIGHTING SPOTS SHOWN ARE MEASURED IN FOOT–CANDLES.
4. LIGHTING DESIGN PREPARED USING BY MUSCO SPORTS LIGHTING, LLC.
5. COORDINATE LIGHT POLE BASE LOCATIONS, CONDUIT ROUTING, CONDUIT SIZE AND POWER SUPPLY WITH ELECTRICAL CONTRACTOR.

5 C7 FIELD PHOTOMETRIC PLAN

SCALE: NONE

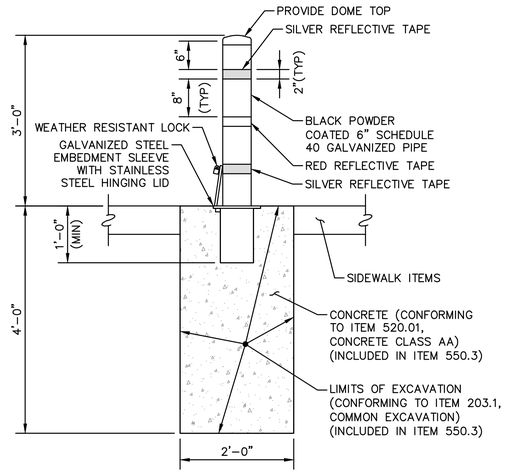


TRENCH NOTES:

1. ELECTRICAL CONDUIT SHALL BE 2" SCHEDULE 40 PVC AND SHALL CONFORM TO THE APPLICABLE SECTIONS OF NEMA TC–2–1990 AND BE UL LISTED.
2. ALL PVC CONDUIT JOINTS SHALL BE CEMENTED.
3. A SUITABLE PULL CABLE, CAPABLE OF 200 POUNDS OF PULL, MUST BE INSTALLED IN THE ELECTRICAL CONDUIT.
4. COORDINATE SIZE OF CONDUIT WITH OWNER.
5. DEPTH OF CONDUIT SHALL BE 36" TO INVERT.

6 C7 ELECTRICAL TRENCH DETAIL (ITEM 614.72114)

SCALE: NONE



7 C7 STEEL BOLLARD (REMOVABLE) DETAIL (ITEM 550.3)

SCALE: NONE

WILLIAM R. DAVIDSON No. 10664 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE

8/31/20

REV.	REVISION DESCRIPTION	DATE
3	100% CONSTRUCTION DOCS – ISSUED FOR BID	8/31/20
2	100% CONSTRUCTION DOCS – ISSUED FOR BID	2/21/19
1	95% PLANS – ISSUED FOR REVIEW	1/11/19

CHECKED BY: WRD
DRAWN BY: SMT
DESIGNED BY: SMT
ORIGINAL DATE: JANUARY 11, 2019
SCALE: AS SHOWN

Hoyle, Tanner Associates, Inc.
Pease International Tradeport
100 International Dr, #360, Portsmouth, NH 03801
Tel (603) 431-2520 Fax (603) 431-8067 Web: www.hoyletanner.com

CLIENT: TOWN OF BEDFORD, 24 NORTH AMHERST ROAD, BEDFORD, NH 03110

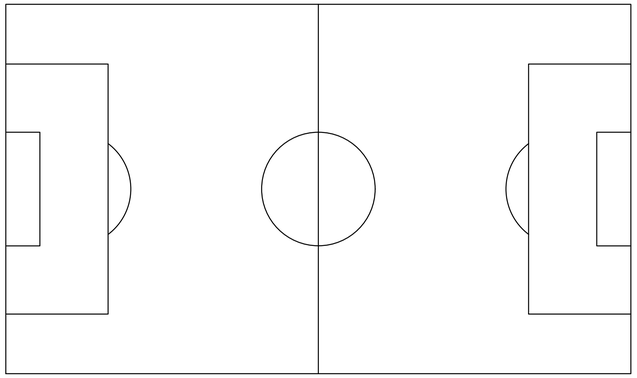
PROJECT: SPORTSMAN TURF FIELD PROJECT, 20 COUNTY ROAD, BEDFORD, NH

CONSTRUCTION DETAILS 3

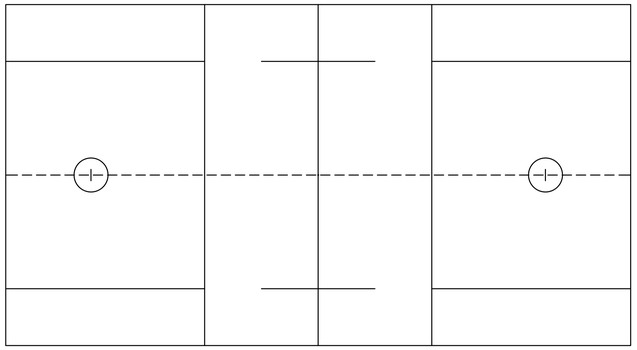
C7

PROJECT NO. 568602

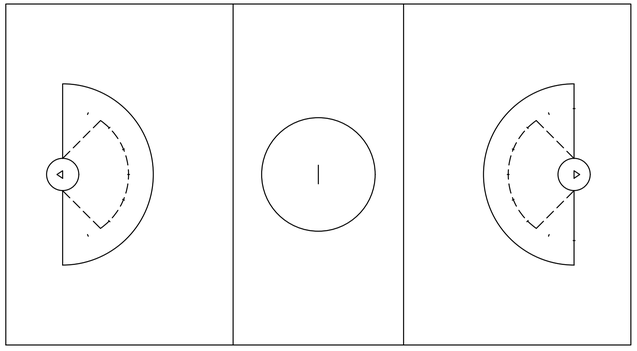
SHEET 7 OF 8



SOCCER FIELD: 195'X330' (INCLUDED IN ITEM 648.99)
ALL LINES TUFTED AND INLAID
COLOR: YELLOW



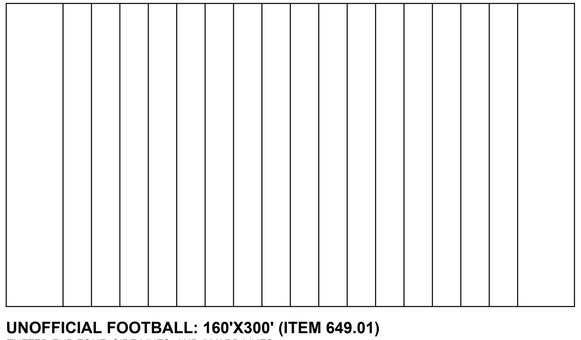
BOY'S LACROSSE: 180'X330' (INCLUDED IN ITEM 648.99)
ALL LINES PAINTED
COLOR: BLUE



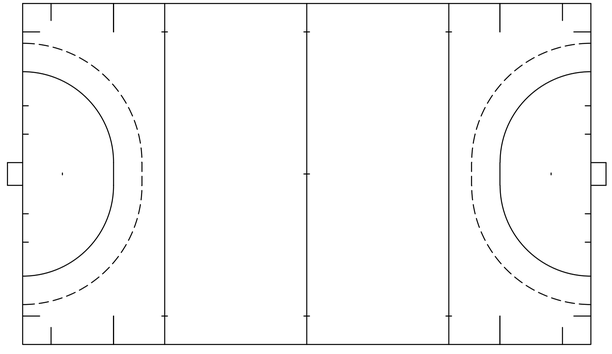
GIRL'S LACROSSE: 180'X330' (INCLUDED IN ITEM 648.99)
ALL LINES PAINTED
COLOR: RED

FIELD STRIPING NOTES:

1. THE PROPOSED TURF FIELD SHALL BE STRIPED WITH THE SOCCER FIELD, BOY'S LACROSSE AND GIRL'S LACROSSE STRIPING AS SHOWN ON THIS DRAWING. UNOFFICIAL FOOTBALL STRIPING (ITEM 649.01) AND FIELD HOCKEY STRIPING (ITEM 649.02) SHALL BE BID AS SEPARATE LINE ITEMS. ALL STRIPING ITEMS SHALL REFERENCE SPECIAL PROVISION ITEM 648.99 FOR CONSTRUCTION SPECIFICATIONS.
2. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS WITH DETAILED DIMENSIONS OF ALL MARKINGS FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.



UNOFFICIAL FOOTBALL: 160'X300' (ITEM 649.01)
TUFTED END ZONE, SIDE LINES, AND 5 YARD LINES
COLOR: WHITE



FIELD HOCKEY: 180'X300' (ITEM 649.02)
ALL LINES TUFTED AND INLAID
COLOR: BLACK

WILLIAM R. DAVIDSON No. 10664 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE
8/31/20

REV.	DATE	REVISION DESCRIPTION
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PROJECT
SPORTSMAN TURF FIELD PROJECT
20 COUNTY ROAD
BEDFORD, NH

FIELD STRIPING DETAILS

C8

PROJECT NO. 568602

SHEET 8 OF 8