

# PROPOSED TRACK AND FIELD

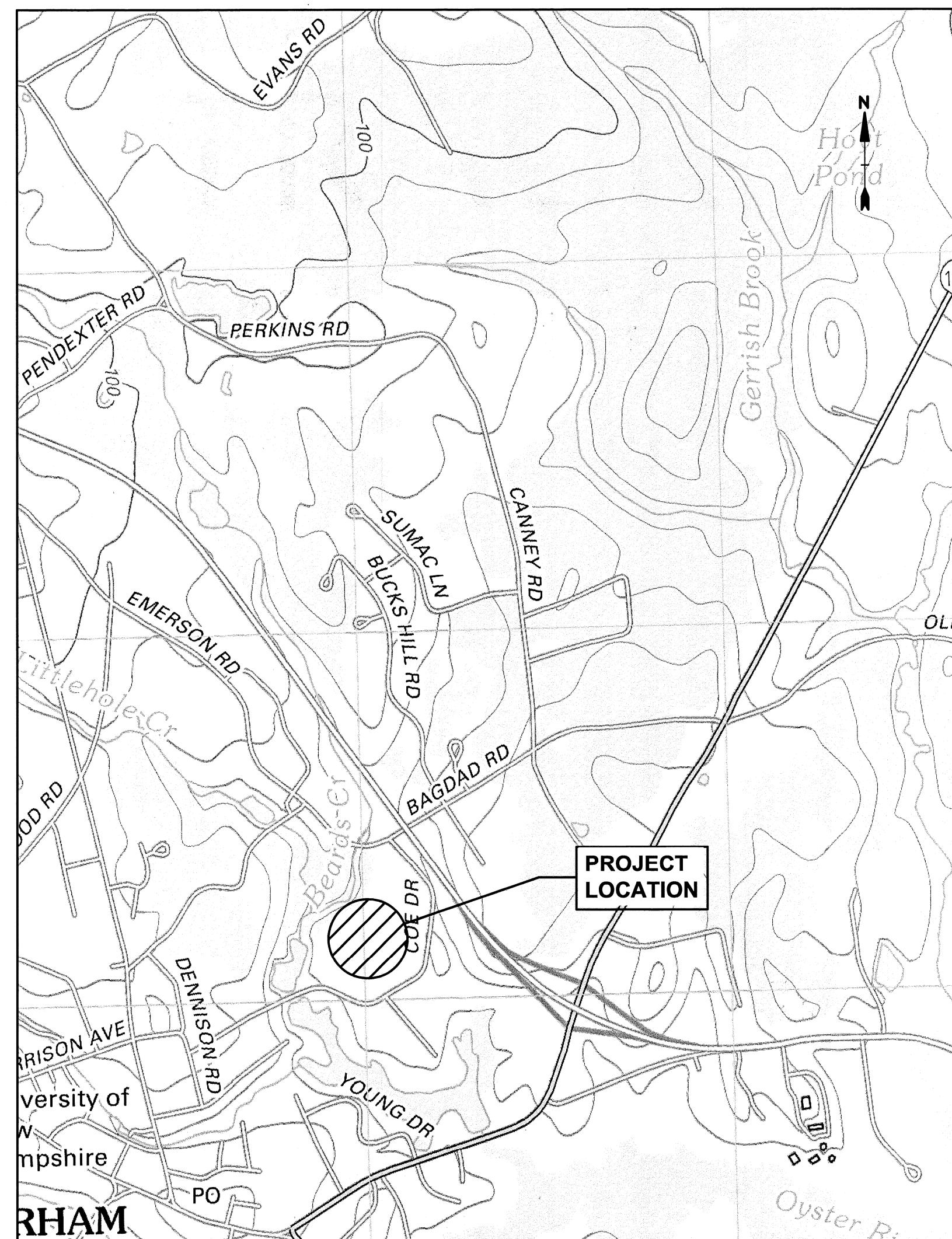
## OYSTER RIVER HIGH SCHOOL

### 36 COE DRIVE

### DURHAM, NEW HAMPSHIRE

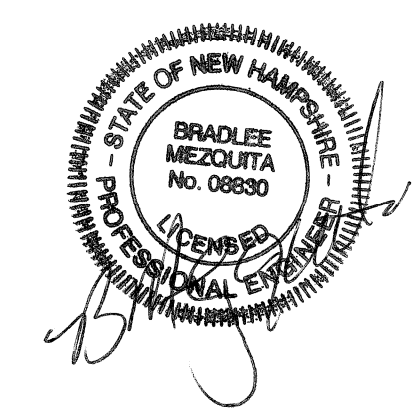
### AUGUST 20, 2014

SHEET	TITLE	LAST REVISED
	COVER SHEET	08/20/2014
1 OF 2	TOPOGRAPHIC PLAN	06/18/2014
2 OF 2	TOPOGRAPHIC PLAN	06/18/2014
1	EXISTING CONDITIONS AND DEMOLITION PLAN	08/20/2014
2	SITE PLAN	08/20/2014
3	FIELD LAYOUT PLAN	08/20/2014
4	GRADING, DRAINAGE, AND EROSION CONTROL PLAN	08/20/2014
5	UTILITIES PLAN	08/20/2014
6	EROSION CONTROL NOTES AND DETAILS	08/20/2014
7	DETAILS SHEET	08/20/2014
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9	DETAILS SHEET	08/20/2014

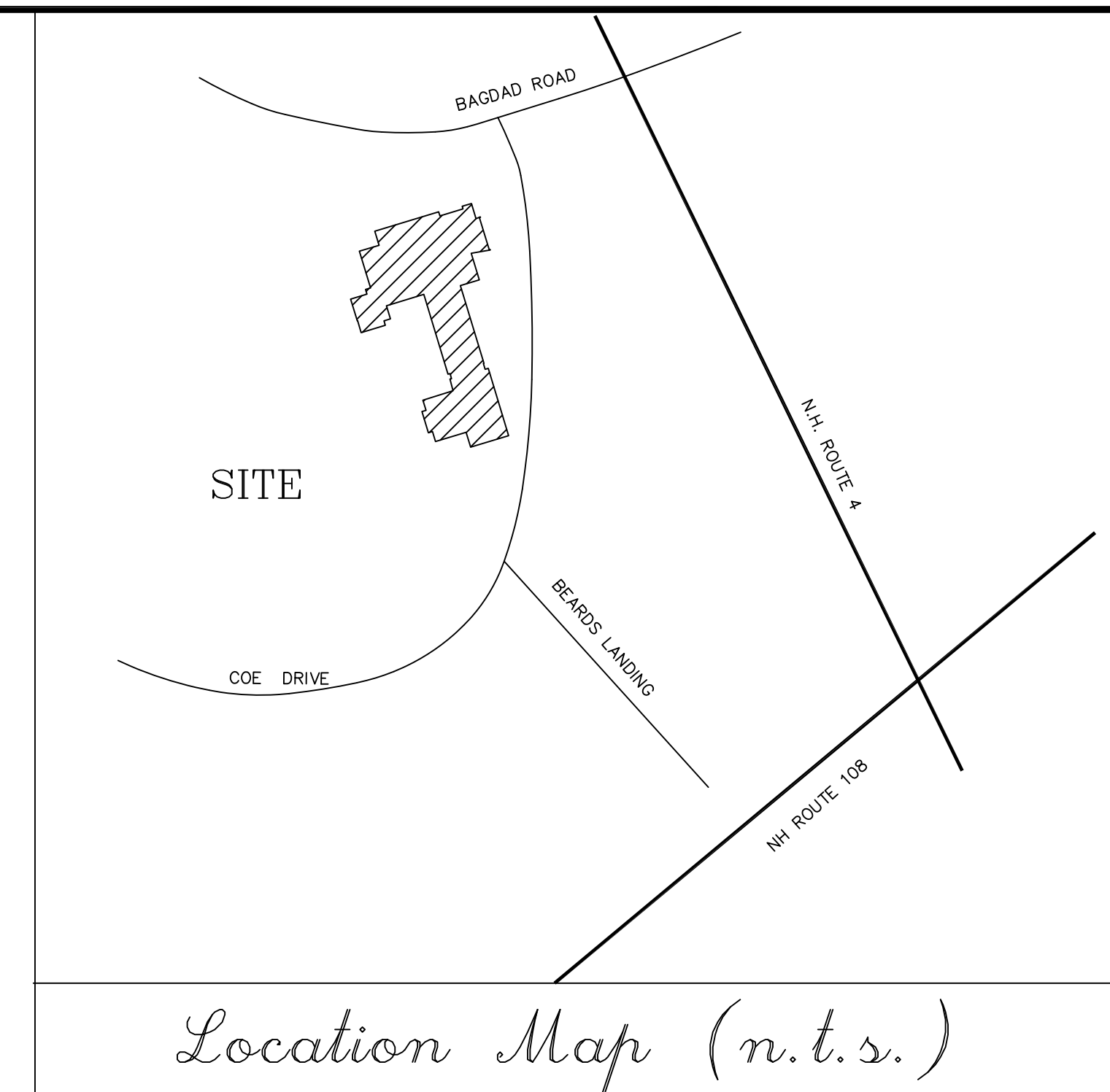
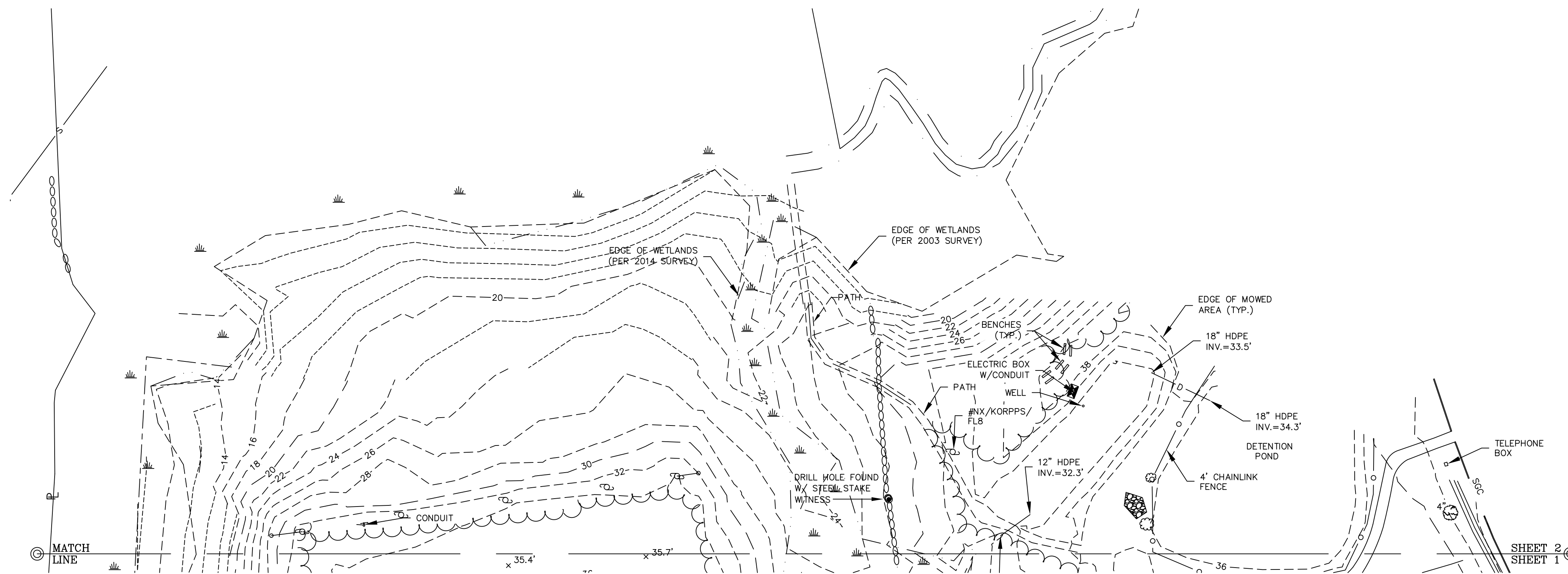
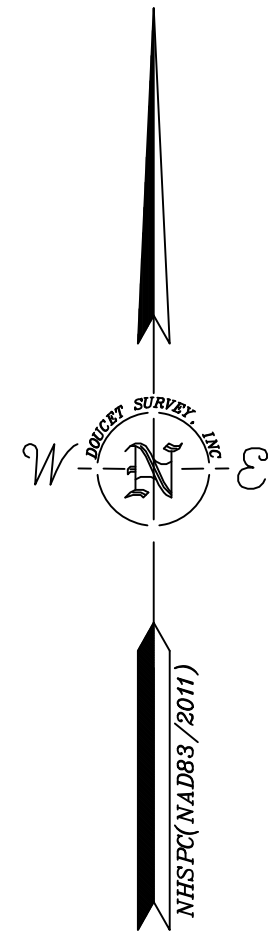


**OYSTER RIVER HIGH SCHOOL**  
**55 COE DRIVE**  
**DURHAM, NH 03824**

**Tighe & Bond**  
*Consulting Engineers*  
 177 Corporate Drive  
 Portsmouth, NH 03801



**COMPLETE SET 12 SHEETS**



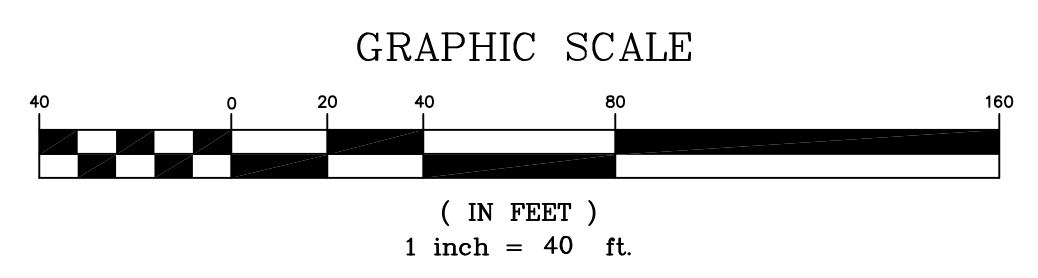
Location Map (n.t.s.)

INVERT INFORMATION			
1998-2003 SURVEY STRUCTURES (SEE NOTE #6)		2014 SURVEY STRUCTURES	
SMH 2082 RIM=45.4' FULL LIQUID LEVEL=40.7'	CB 1558 RIM=42.2' INV. (1) 6" ASBESTOS=38.7' INV. (2) 12" CMP=36.5' INV. (3) 12" CMP=36.5'	CB 2108 RIM=38.6' INV. (1) 12" CMP=34.6' INV. (2) 12" CMP=34.4'	CB 2786 RIM=34.8' INV. (1) 12" CMP=30.9'
SMH 2083 RIM=43.6' INV. (1) 4" PVC=39.3' INV. (2) 6" CLAY=37.7' INV. (3) 6" CLAY=37.7' INV. (4) 6" CLAY=37.7'	CB 1564 RIM=44.0' INV. 8" PIPE=40.4'	CB 2109 RIM=38.3' INV. (1) 12" CMP=33.9' INV. (2) 12" CMP=33.9'	CB 2798 RIM=26.4' INV. (1) 12" CMP=22.9' INV. (2) 12" CMP=22.9' INV. (3) 12" CMP=22.8'
SMH 2107 RIM=38.2' INV. (1) 4" RCP=33.7' INV. (2) 6" DIP=33.7'	CB 1589 RIM=41.9' INV. 12" CMP=37.7'	CB 2156 RIM=41.6' INV. (1) 4" STEEL=38.4' INV. (2) 12" CMP=37.6'	CB 2799 RIM=26.5' INV. (1) 12" CMP=22.3' INV. (2) 12" CMP=22.3'
SMH 2762 RIM=36.6' INV. (1) 6" DIP=31.9' INV. (2) 8" CLAY=31.8'	CB 1590 RIM=41.8' FULL OF WATER, WATER LEVEL=40.3' SUMP=39.3'	CB 2157 RIM=41.4' INV. 12" CMP=37.8'	CB 2807 RIM=18.2' INV. (1) 12" CMP=15.3'
SMH 2756 RIM=38.4' INV. (1) 4" RCP=32.1' INV. (2) 6" PVC=31.8' INV. (3) 6" PVC=31.7' INV. (4) 6" PIPE=31.4' INV. (5) 9" PIPE=30.6'	CB 1612 RIM=41.8' INV. (1) 12" CMP=37.7' INV. (2) 12" CMP=37.7'	CB 2758 RIM=37.4' INV. (1) 12" CMP=33.5'	CB 2808 RIM=19.3' INV. (1) 12" CMP=15.2'
SMH 2806 RIM=19.6' INV. (1) 8" PVC=12.2' INV. (2) 6" PVC=12.1'	CB 1680 RIM=43.0' INV. (1) 12" CMP=39.4' INV. (2) 12" CMP=39.2'	CB 2759 RIM=37.2' INV. (1) 12" CMP=32.6' INV. (2) 12" CMP=32.9'	CB 2809 RIM=19.2' INV. (1) 12" CMP=14.9'
SMH 2954 RIM=16.3' INV. (1) 8" PVC=11.8' INV. (2) 8" PVC=11.8'	CB 1681 (FULL OF SEDIMENT) RIM=42.8' INV. (N) 10" PVC=38.9' INV. (OUT) 12" CMP=40' WATER ELEV.=40.4'	CB 2760 RIM=37.5' INV. (1) 12" CMP=32.4' INV. (2) 12" CMP=32.4'	CB 2956 RIM=43.5' INV. 8" DIP=40.5'
SMH 2955 RIM=24.3' INV. (1) =3.3' INV. (2) =1.9'	CB 1702 RIM=42.3' INV. (1) 4" METAL=39.7' INV. (2) 8" CLAY=39.4' INV. (3) 12" CMP=39.4'	CB 2763 RIM=35.4' INV. (1) 12" CMP=31.1' INV. (2) 12" CMP=29.6' INV. (3) 12" CMP=29.2'	CB 2764 RIM=35.1' INV. (1) 12" CMP=29.1' INV. (2) 12" CMP=29.1'
	CB 1714 RIM=42.8' INV. (1) 12" CMP=38.9' INV. (2) 12" CMP=40.0' WATER ELEV.=39.3'	CB 2785 RIM=34.7' INV. (1) 12" CMP=31.0' INV. (2) 12" CMP=31.0'	

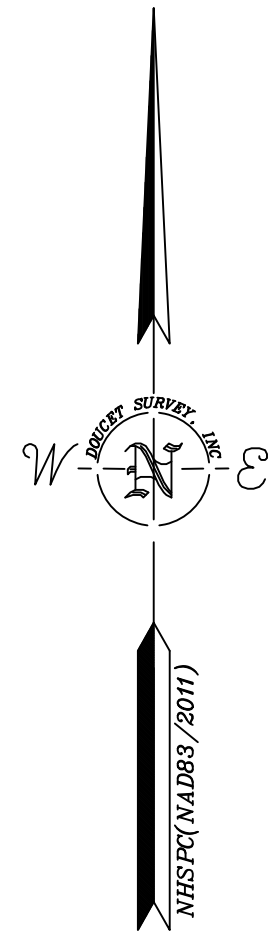
- LEGEND
- UTILITY POLE & GUY WIRE
  - UTILITY POLE W/ LIGHT
  - LIGHT POLE (ONE ARM)
  - SIGN
  - TIMBER POST
  - FENCE POST
  - FIRE HYDRANT
  - WATER SHUTOFF VALVE
  - CATCH BASIN
  - DRAIN MANHOLE
  - JURISDICTIONAL WETLAND SYMBOL
  - BUSH/SHRUB
  - CONIFEROUS TREE
  - DECIDUOUS TREE
  - LANDSCAPED AREA
  - RIP RAP
  - WELL
  - TYP. EDGE OF PAVEMENT
  - SLOPED GRANITE CURB
  - CHAINLINK FENCE
  - OVERHEAD WIRES
  - SEWER LINE
  - DRAIN LINE
  - GAS LINE
  - WATER LINE
  - UNDERGROUND UTILITIES
  - TREE LINE
  - STONE WALL
  - GUARDRAIL
  - CONTOUR LINE
  - EDGE OF JURISDICTIONAL WETLAND (SEE NOTE #3)
  - WETLANDS PER 2003 SURVEY
  - WETLANDS PER 1999 SURVEY
  - 2014 SURVEY LIMITS
  - APPROX. PROPERTY LINES (SEE NOTE #4)

NO.	DATE	DESCRIPTION	BY

NOTE:  
ALL ELECTRIC, GAS, TEL, WATER, SEWER AND DRAIN SERVICES ARE SHOWN IN SCHEMATIC FASHION, THEIR LOCATIONS ARE NOT PRECISE OR NECESSARILY ACCURATE. NO WORK WHATSOEVER SHALL BE UNDERTAKEN ON THIS SITE USING THIS PLAN TO LOCATE THE ABOVE SERVICES. CONSULT WITH THE PROPER AUTHORITIES CONCERNED WITH THE SUBJECT SERVICE LOCATIONS FOR INFORMATION REGARDING SUCH. CALL DIG-SAFE AT 1-888-DIG-SAFE.



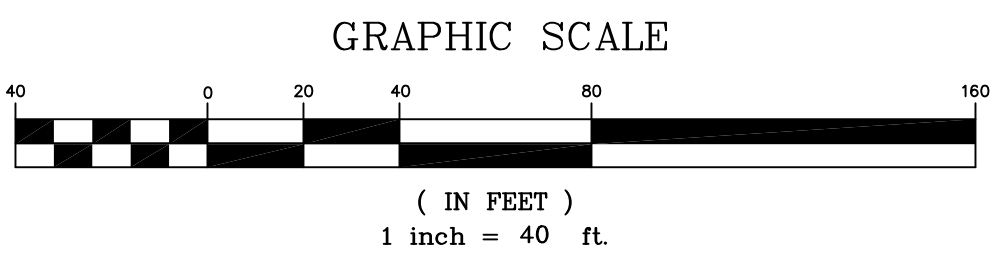
DRAWN BY: M.W.F.	DATE: JUNE 18, 2014
CHECKED BY: J.A.G.	DRAWING NO.: 3540A
JOB NO.: 3540	SHEET 2 OF 2



- NOTES:
- REFERENCE: OYSTER RIVER SCHOOL COE DRIVE DURHAM, NH
  - FIELD SURVEY PERFORMED BY N.J.M. & M.A.B. DURING 06/14 USING A TRIMBLE S6 TOTAL STATION WITH A TRIMBLE TSC3 DATA COLLECTOR AND A SOKKIA B21 AUTO LEVEL. TRAVERSE ADJUSTMENT BASED ON LEAST SQUARE ANALYSIS.
  - JURISDICTIONAL WETLANDS DELINEATED BY GOVE ENVIRONMENTAL SERVICES, INC. DURING MAY 2014 IN ACCORDANCE WITH 1987 CORPS OF ENGINEERS WETLANDS DELINEATIONS MANUAL, TECHNICAL REPORT Y-87-1.
  - HORIZONTAL AND VERTICAL DATUM BASED ON NORWAY PLAINS SITE SKETCH FINISHED FLOOR #1 ELEVATION=46.43'. ALL BOUNDARY DATA PROVIDED BY NORWAY PLAINS ASSOCIATES, INC. DOUCET SURVEY, INC. DID NOT PERFORM ANY BOUNDARY SURVEY OF THE ORSD PARCELS.
  - THE ACCURACY OF MEASURED UTILITY INVERTS AND PIPE SIZES/TYPES IS SUBJECT TO NUMEROUS FIELD CONDITIONS, INCLUDING; THE ABILITY TO MAKE VISUAL OBSERVATIONS, DIRECT ACCESS TO THE VARIOUS ELEMENTS, MANHOLE CONFIGURATION, ETC.
  - EVIDENCE SHOWS THERE HAVE BEEN SIGNIFICANT CHANGES TO COE DRIVE SINCE DOUCET SURVEY COLLECTED THE FIELD DATA SHOWN HEREON FROM 1998-2003. ALL DATA OUTSIDE THE 2014 SURVEY LIMITS LINE SHOULD BE VERIFIED PRIOR TO DESIGN OR CONSTRUCTION.

NO.	DATE	DESCRIPTION	BY

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TOPOGRAPHIC PLAN  
 OF  
 OYSTER RIVER HIGH SCHOOL  
 COE DRIVE  
 DURHAM, NEW HAMPSHIRE

DRAWN BY:	M.W.F.	DATE:	JUNE 18, 2014
CHECKED BY:	J.A.G.	DRAWING NO.:	3540A
JOB NO.:	3540	SHEET	1 OF 2

**EXISTING CONDITIONS NOTES:**

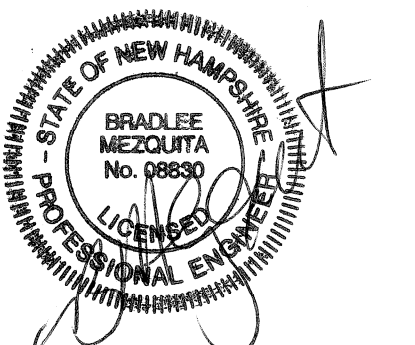
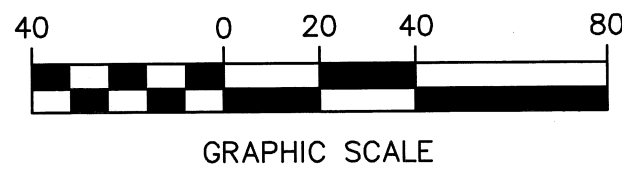
1. TAX MAP: MAP 3 LOT 4
2. LOT AREA: 42.73 ACRES/1,861,319 SQUARE FEET (PER DURHAM, NH ONLINE ASSESSOR DATABASE ACCESSED AUGUST 11, 2014)

**DEMOLITION NOTES:**

1. THE LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE AND THE LOCATIONS ARE NOT GUARANTEED BY THE OWNER OR THE ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UTILITIES, ANTICIPATE CONFLICTS, REPAIR EXISTING UTILITIES, AND RELOCATE EXISTING UTILITIES REQUIRED TO COMPLETE THE WORK.
2. ALL MATERIALS SCHEDULED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. THE CONTRACTOR SHALL DISPOSE OF ALL MATERIALS OFF-SITE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS, ORDINANCES, AND CODES.
3. COORDINATE REMOVAL, RELOCATION, DISPOSAL, OR SALVAGE OF UTILITIES WITH THE OWNER AND APPROPRIATE UTILITY COMPANY.
4. ANY EXISTING WORK OR PROPERTY DAMAGED OR DISRUPTED BY CONSTRUCTION/DEMOLITION ACTIVITIES SHALL BE REPLACED OR REPAIRED TO MATCH ORIGINAL EXISTING CONDITIONS BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
5. THE CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES. CALL DIG SAFE AT LEAST 72 HOURS PRIOR TO THE COMMENCEMENT OF ANY DEMOLITION/CONSTRUCTION ACTIVITIES.
6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE HIMSELF WITH THE CONDITIONS OF ALL OF THE PERMIT APPROVALS.
7. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ADDITIONAL PERMITS, NOTICES, AND FEES NECESSARY TO COMPLETE THE WORK AND ARRANGE FOR AND PAY FOR NECESSARY INSPECTIONS AND APPROVALS FROM THE AUTHORITIES HAVING JURISDICTION.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEMOLITION AND OFF-SITE DISPOSAL OF MATERIALS REQUIRED TO COMPLETE THE WORK, EXCEPT FOR WORK NOTED TO BE COMPLETED BY OTHERS.
9. UTILITIES SHALL BE TERMINATED AT THE MAIN LINE PER UTILITY COMPANY STANDARDS. THE CONTRACTOR SHALL REMOVE ALL ABANDONED UTILITIES LOCATED WITHIN THE LIMITS OF WORK. CONTRACTOR SHALL VERIFY ORIGIN OF ALL DRAINS AND UTILITIES PRIOR TO REMOVAL/TERMINATION TO DETERMINE IF DRAIN OR UTILITY IS ACTIVE AND SERVICES ANY ON OR OFF-SITE STRUCTURE TO REMAIN. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY OF ANY SUCH UTILITY FOUND AND SHALL MAINTAIN THESE UTILITIES UNTIL PERMANENT SOLUTION IS IN PLACE.
10. PAVEMENT REMOVAL LIMITS ARE SHOWN FOR CONTRACTOR'S CONVENIENCE. ADDITIONAL PAVEMENT REMOVAL MAY BE REQUIRED DEPENDING ON THE CONTRACTOR'S OPERATION. CONTRACTOR TO VERIFY FULL LIMITS OF PAVEMENT REMOVAL PRIOR TO BID.
11. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, CONCRETE PADS, UTILITIES, AND PAVEMENT WITHIN THE WORK LIMITS SHOWN UNLESS SPECIFICALLY IDENTIFIED TO REMAIN. ITEMS TO BE REMOVED INCLUDE BUT ARE NOT LIMITED TO: CONCRETE, PAVEMENT, CURBS, LIGHTING, MANHOLES, CATCH BASINS, UNDER GROUND PIPING, POLES, STAIRS, SIGNS, FENCES, RAMPS, WALLS, BOLLARDS, RAILROAD TRACKS, BUILDING SLABS, FOUNDATION, TREES AND LANDSCAPING.
12. REMOVE TREES AND BRUSH AS REQUIRED FOR COMPLETION OF WORK. CONTRACTOR SHALL GRUB AND REMOVE ALL STUMPS WITHIN LIMITS OF WORK AND DISPOSE OF OFF SITE IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS.
13. CONTRACTOR SHALL PROTECT ALL PROPERTY MONUMENTATION THROUGHOUT DEMOLITION AND CONSTRUCTION OPERATIONS. SHOULD ANY MONUMENTATION BE DISTURBED BY THE CONTRACTOR, HE SHALL EMPLOY A LICENSED SURVEYOR TO REPLACE IT.
14. THE CONTRACTOR SHALL PHASE DEMOLITION AND CONSTRUCTION AS REQUIRED TO PROVIDE CONTINUOUS SERVICE TO THE SCHOOL THROUGHOUT THE CONSTRUCTION PERIOD. SCHOOL SERVICES INCLUDE, BUT ARE NOT LIMITED TO ELECTRICAL, COMMUNICATION, FIRE PROTECTION, DOMESTIC WATER AND SEWER SERVICES, TEMPORARY SERVICES, IF REQUIRED, SHALL COMPLY WITH ALL FEDERAL, STATE, LOCAL AND UTILITY COMPANY STANDARDS. CONTRACTOR SHALL PROVIDE DETAILED CONSTRUCTION SCHEDULE TO OWNER PRIOR TO ANY DEMOLITION/CONSTRUCTION ACTIVITIES.
15. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF ANY CLEARING OR DEMOLITION ACTIVITIES.
16. THE CONTRACTOR SHALL PAY ALL COSTS NECESSARY FOR TEMPORARY PARTITIONING, BARRICADING, FENCING, SECURITY, AND SAFETY DEVICES REQUIRED FOR THE MAINTENANCE OF A CLEAN AND SAFE CONSTRUCTION SITE.

**LEGEND**

	PROPERTY LINE
	ABUTTER LOT LINE
	BUILDING SETBACK
	LIMIT OF WORK
	EDGE OF WETLAND
	EXISTING TREE LINE
	EXISTING STONE WALL
	EXISTING GUARDRAIL
	EXISTING FENCE
	EXISTING DRAINAGE
	EXISTING ELECTRIC/TELEPHONE/CABLE
	EXISTING OVERHEAD WIRE
	EXISTING WATER
	EXISTING SEWER
	EXISTING GAS
	EXISTING CONTOUR
	EXISTING 10' CONTOUR
	SILT FENCE
	SAWCUT LIMIT
	EXISTING CONCRETE/BITUMINOUS SIDEWALK
	EXISTING SIGN
	EXISTING TREE
	EXISTING TREE
	EXISTING TREE
	EXISTING LIGHT
	APPROXIMATE LOCATION OF TEST BORINGS DRILLED ON JUNE 6, 2014 BY GREAT WORKS PUMP & TEST BORING, INC. OF ROLLINSFORD, NH.



**Oyster River High School**

**Proposed Track and Field**

36 Coe Drive  
 Durham, NH

Mark	Date	Description
1	08/20/2014	PLANNING BOARD SUBMISSION

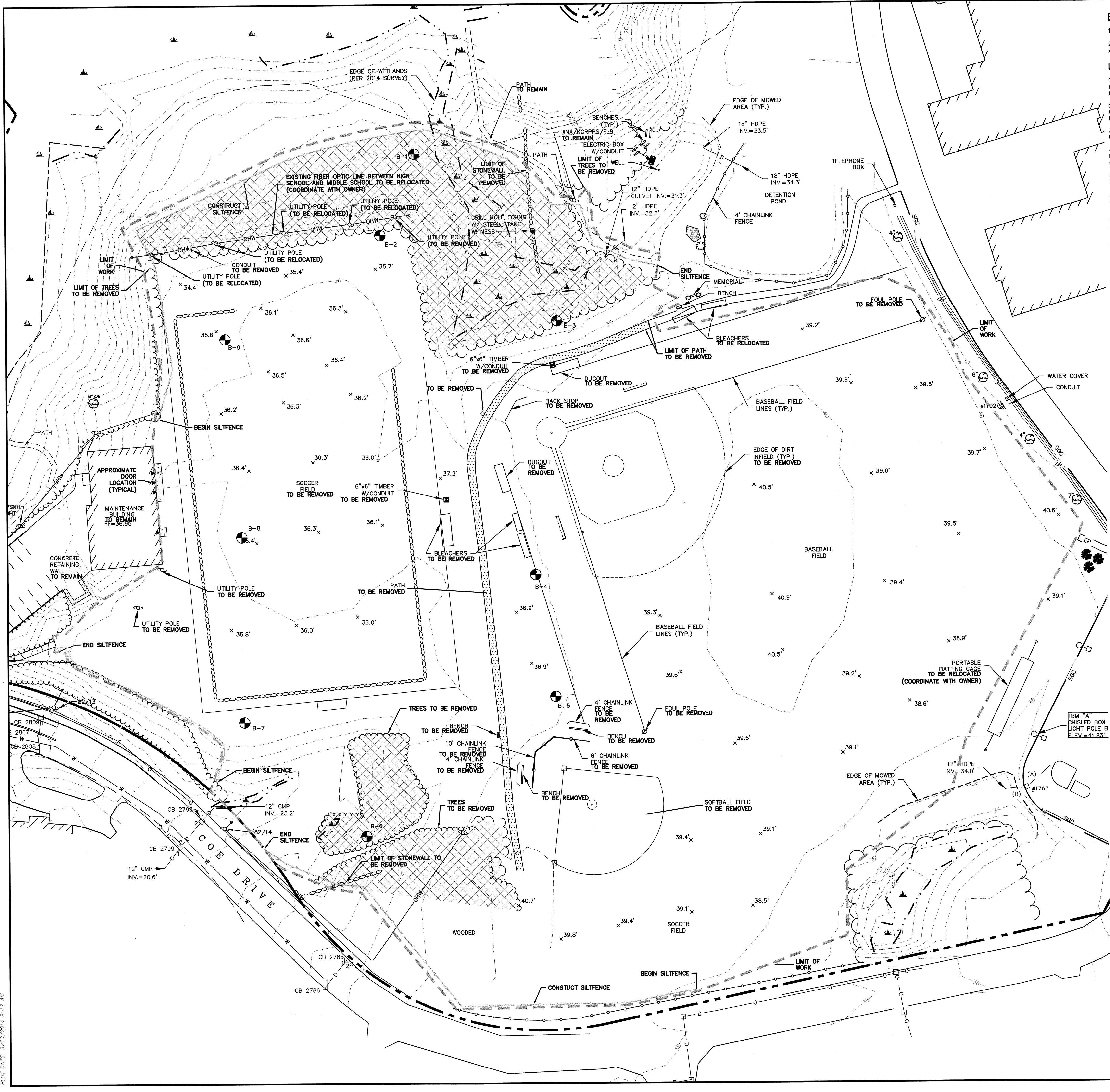
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 CHECKED: BLM  
 APPROVED BY: BLM

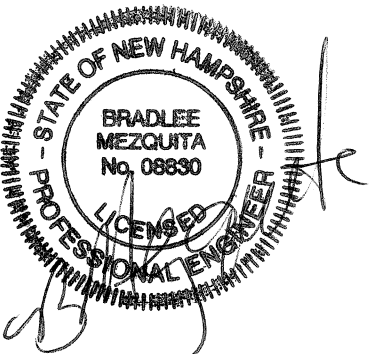
EXISTING CONDITIONS AND DEMOLITION PLAN

SCALE: AS SHOWN

SHEET 1

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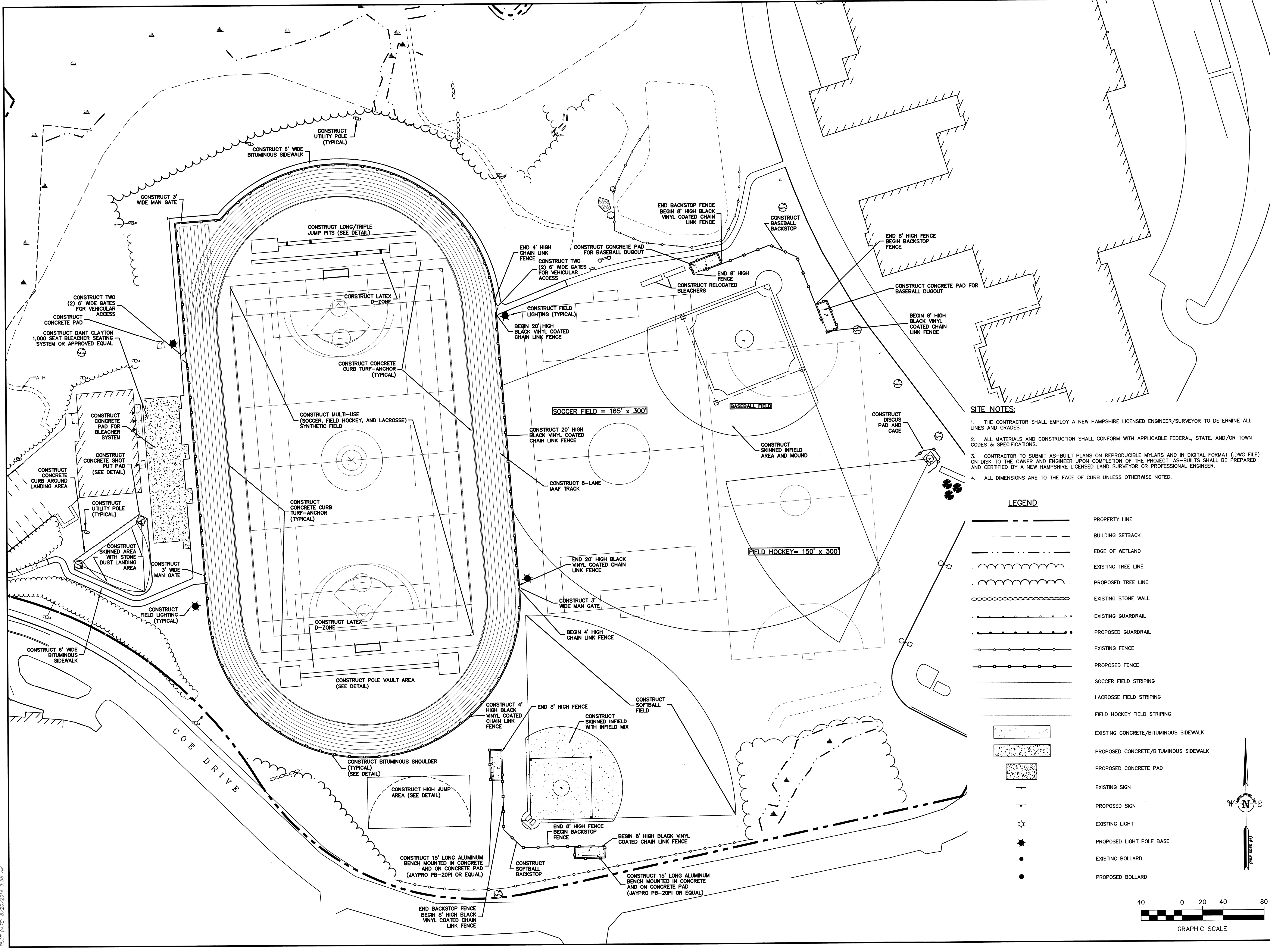
**Oyster River High School**

**Proposed Track and Field**

36 Coe Drive  
 Durham, NH

Mark	Date	Description
1	08/20/2014	PLANNING BOARD SUBMISSION

PROJECT NO:	O-01500
FILE:	2401501_SITE.dwg
DRAWN BY:	SLK1
CHECKED BY:	BLM
APPROVED BY:	BLM
SITE PLAN	
SCALE:	AS SHOWN
SHEET 2	

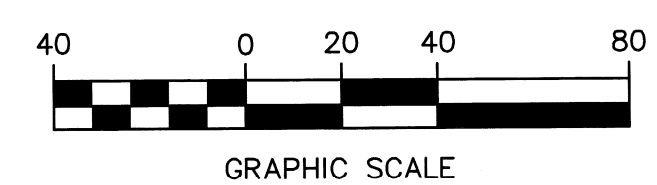


**SITE NOTES:**

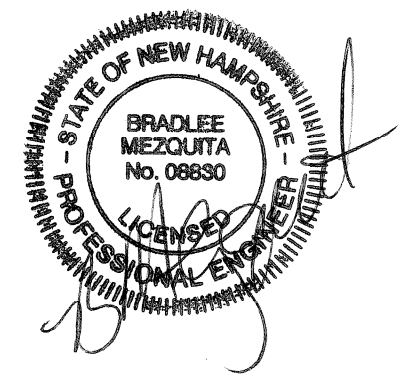
1. THE CONTRACTOR SHALL EMPLOY A NEW HAMPSHIRE LICENSED ENGINEER/SURVEYOR TO DETERMINE ALL LINES AND GRADES.
2. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM WITH APPLICABLE FEDERAL, STATE, AND/OR TOWN CODES & SPECIFICATIONS.
3. CONTRACTOR TO SUBMIT AS-BUILT PLANS ON REPRODUCIBLE MYLARS AND IN DIGITAL FORMAT (.DWG FILE) ON DISK TO THE OWNER AND ENGINEER UPON COMPLETION OF THE PROJECT. AS-BUILTS SHALL BE PREPARED AND CERTIFIED BY A NEW HAMPSHIRE LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER.
4. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.

**LEGEND**

- PROPERTY LINE
- - - BUILDING SETBACK
- · - · - EDGE OF WETLAND
- ~ ~ ~ EXISTING TREE LINE
- ~ ~ ~ PROPOSED TREE LINE
- · — · — EXISTING STONE WALL
- · — · — EXISTING GUARDRAIL
- · — · — PROPOSED GUARDRAIL
- · — · — EXISTING FENCE
- · — · — PROPOSED FENCE
- · — · — SOCCER FIELD STRIPING
- · — · — LACROSSE FIELD STRIPING
- · — · — FIELD HOCKEY FIELD STRIPING
- · — · — EXISTING CONCRETE/BITUMINOUS SIDEWALK
- · — · — PROPOSED CONCRETE/BITUMINOUS SIDEWALK
- · — · — PROPOSED CONCRETE PAD
- · — · — EXISTING SIGN
- · — · — PROPOSED SIGN
- · — · — EXISTING LIGHT
- · — · — PROPOSED LIGHT POLE BASE
- · — · — EXISTING BOLLARD
- · — · — PROPOSED BOLLARD



PLEASANT VALLEY DESIGN GROUP - TRACK & ARTIFICIAL TURF RFP (DWG-CAD) (DESCRIPTION) 2401501\_SITE.DWG  
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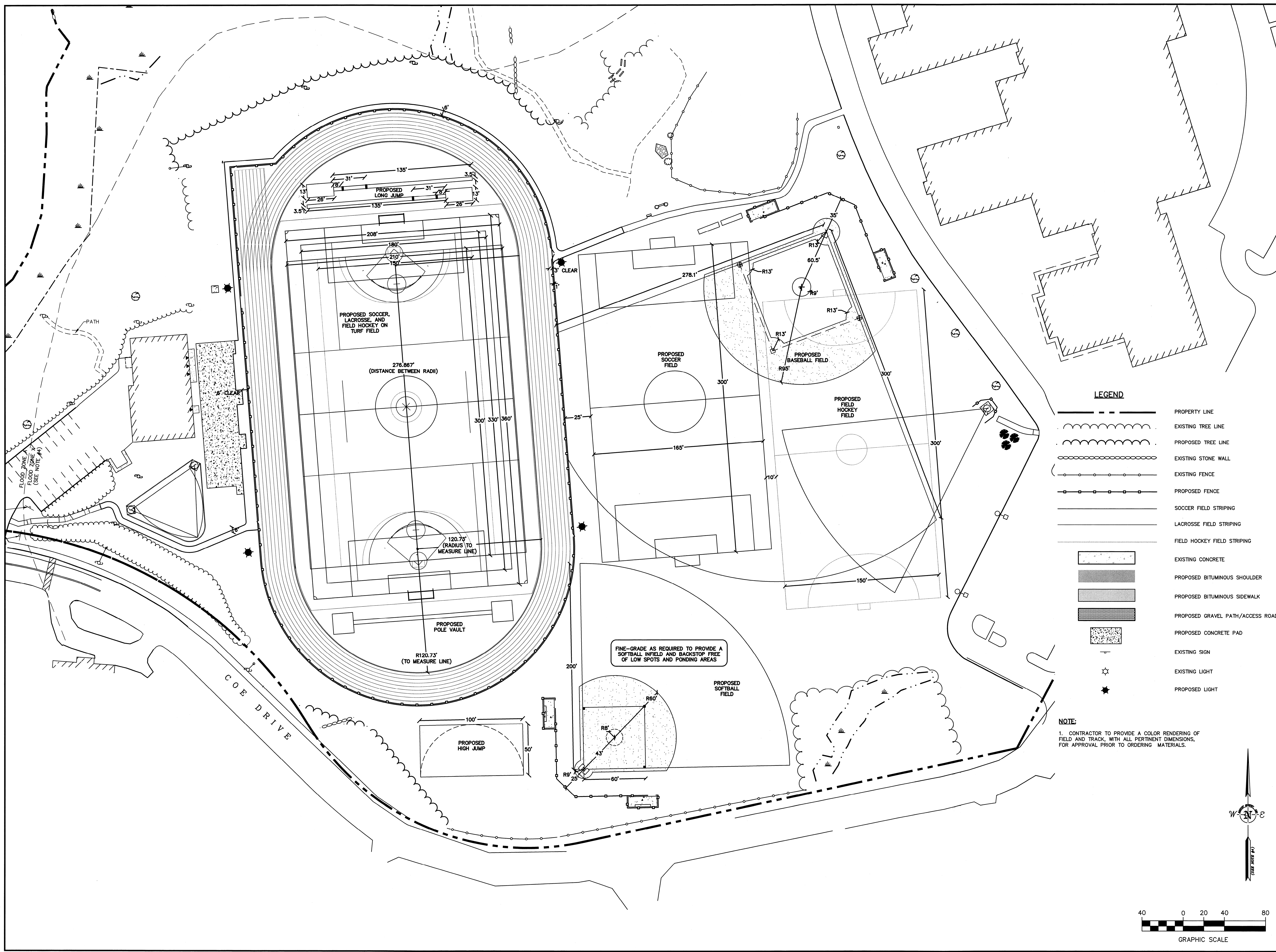


**Oyster River High School**

**Proposed Track and Field**

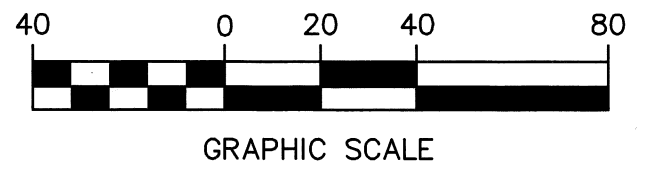
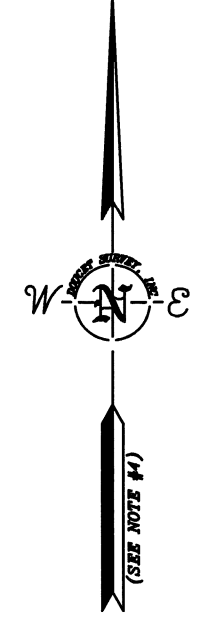
36 Coe Drive  
 Durham, NH

36 Coe Drive  
 Durham, NH



- LEGEND**
- PROPERTY LINE
  - ~ EXISTING TREE LINE
  - ~ PROPOSED TREE LINE
  - - - EXISTING STONE WALL
  - - - EXISTING FENCE
  - - - PROPOSED FENCE
  - SOCCER FIELD STRIPING
  - LACROSSE FIELD STRIPING
  - FIELD HOCKEY FIELD STRIPING
  - EXISTING CONCRETE
  - PROPOSED BITUMINOUS SHOULDER
  - PROPOSED BITUMINOUS SIDEWALK
  - PROPOSED GRAVEL PATH/ACCESS ROAD
  - PROPOSED CONCRETE PAD
  - EXISTING SIGN
  - EXISTING LIGHT
  - PROPOSED LIGHT

**NOTE:**  
 1. CONTRACTOR TO PROVIDE A COLOR RENDERING OF FIELD AND TRACK, WITH ALL PERTINENT DIMENSIONS, FOR APPROVAL PRIOR TO ORDERING MATERIALS.



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 PLOT DATE: 6/20/2014 9:59 AM

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FILE: 2401501_SITE.dwg		
DRAWN BY: SLK1		
CHECKED BY: BLM		
APPROVED BY: BLM		

FIELD LAYOUT PLAN  
 SCALE: AS SHOWN  
**SHEET 3**

**GRADING AND DRAINAGE NOTES:**

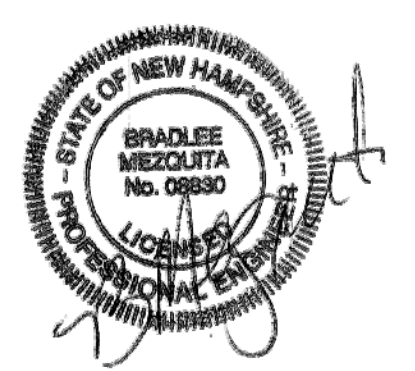
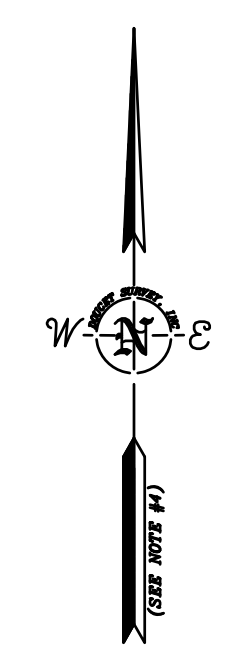
1. COMPACTION REQUIREMENTS:  
BELOW PAVED OR CONCRETE AREAS 95%  
TRENCH BEDDING MATERIAL AND SAND BLANKET BACKFILL 95%  
BELOW LOAM AND SEED AREAS 90%  
\* ALL PERCENTAGES OF COMPACTION SHALL BE OF THE MAXIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED AND CONTROLLED IN ACCORDANCE WITH ASTM D-1557, METHOD C FIELD DENSITY TESTS SHALL BE MADE IN ACCORDANCE WITH ASTM D-1556 OR ASTM-2922.
2. ALL STORM DRAINAGE PIPES SHALL BE HIGH DENSITY POLYETHYLENE (HANCOR HI-Q, ADS N-12 OR APPROVED EQUAL), UNLESS OTHERWISE SPECIFIED.
3. SEE UTILITIES PLAN FOR ALL SITE UTILITY INFORMATION.
4. ADJUST ALL MANHOLES, CATCHBASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE.
5. CONTRACTOR SHALL PROVIDE A FINISH PAVEMENT SURFACE AND LAWN AREAS FREE OF LOW SPOTS AND PONDING AREAS.
6. CONTRACTOR SHALL THOROUGHLY CLEAN ALL CATCHBASINS AND DRAIN LINES WITHIN THE LIMIT OF WORK OF SEDIMENT IMMEDIATELY UPON COMPLETION OF CONSTRUCTION.
7. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM WITH APPLICABLE FEDERAL, STATE, AND LOCAL CODES.
8. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE 6" LOAM, SEED, FERTILIZER, AND MULCH.
9. ALL STORM DRAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION (NHDT) STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, LATEST EDITION.
10. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM WITH APPLICABLE FEDERAL, STATE, AND TOWN OF DURHAM DEPARTMENT OF PUBLIC WORKS AND CONSTRUCTION SPECIFICATIONS, LATEST REVISIONS.
11. CONTRACTOR TO SUBMIT AS-BUILT PLANS ON REPRODUCIBLE MYLARS AND IN DIGITAL FORMAT (.DWG FILE) ON DISK TO THE OWNER AND ENGINEER UPON COMPLETION OF THE PROJECT. AS-BUILTS SHALL BE PREPARED AND CERTIFIED BY A NEW HAMPSHIRE LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER.
12. SEE EXISTING CONDITIONS PLAN FOR BENCH MARK INFORMATION.

**EROSION CONTROL NOTES:**

1. INSTALL EROSION CONTROL BARRIERS AS SHOWN AS FIRST ORDER OF WORK.
2. SEE GENERAL EROSION CONTROL NOTES ON DETAIL SHEETS.
3. PROVIDE INLET PROTECTION AROUND ALL EXISTING AND PROPOSED CATCHBASIN INLETS WITHIN THE WORK LIMITS. MAINTAIN FOR THE DURATION OF THE PROJECT UNTIL PAVEMENT HAS BEEN INSTALLED.
4. INSTALL STABILIZED CONSTRUCTION ENTRANCES.
5. INSPECT INLET PROTECTION AND SILT FENCES DAILY AND AFTER EACH RAIN STORM OF 0.25 INCHES OR GREATER. REPAIR/MODIFY PROTECTION AS NECESSARY TO MAXIMIZE EFFICIENCY OF FILTER. REPLACE ALL FILTERS WHEN SEDIMENT IS 1/3 THE FILTER HEIGHT.
6. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE 6" LOAM, SEED, FERTILIZER, AND MULCH.
7. CONSTRUCT EXCELSIOR MAT ON ALL SLOPES STEEPER THAN 3:1.
8. PRIOR TO ANY WORK OR SOIL DISTURBANCE COMMENCING ON THE SUBJECT PROPERTY, INCLUDING MOVING OF EARTH, THE APPLICANT SHALL INSTALL ALL EROSION AND SILTATION MITIGATION AND CONTROL MEASURES AS REQUIRED BY STATE AND LOCAL PERMITS AND APPROVALS.
9. CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST AND WIND EROSION THROUGHOUT THE CONSTRUCTION PERIOD. DUST CONTROL MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, SPRINKLING WATER ON UNSTABLE SOILS SUBJECT TO ARID CONDITIONS.
10. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF CONSTRUCTION.
11. ALL CATCHBASIN SUMPS AND PIPING SHALL BE THOROUGHLY CLEANED TO REMOVE ALL SEDIMENT AND DEBRIS AFTER THE PROJECT HAS BEEN PAVED.
12. TEMPORARY SOIL STOCKPILE SHALL BE SURROUNDED BY SILT FENCE AND SHALL BE STABILIZED BY TEMPORARY EROSION CONTROL SEEDING. STOCKPILE AREAS TO BE LOCATED AS FAR AS POSSIBLE FROM DELINEATED EDGE OF WETLAND.
13. SAFETY FENCING SHALL BE PROVIDED AROUND STOCKPILES OVER 10 FT.
14. CONCRETE TRUCKS WILL BE REQUIRED TO WASH OUT (IF NECESSARY) SHOOTS ONLY WITHIN AREAS WHERE CONCRETE HAS BEEN PLACED. NO OTHER WASH OUT WILL BE ALLOWED.

**LEGEND**

	PROPERTY LINE
	BUILDING SETBACK
	LIMIT OF WORK
	EDGE OF WETLAND
	EXISTING TREE LINE
	PROPOSED TREE LINE
	EXISTING STONE WALL
	EXISTING GUARDRAIL
	PROPOSED GUARDRAIL
	EXISTING FENCE
	PROPOSED FENCE
	EXISTING CONTOUR
	EXISTING 10' CONTOUR
	FINISHED GRADE
	EXISTING DRAINAGE
	PROPOSED DRAINAGE
	SILT FENCE
	EXISTING CONCRETE/BITUMINOUS SIDEWALK
	PROPOSED CONCRETE/BITUMINOUS SIDEWALK
	PROPOSED CONCRETE PAD
	EXISTING SIGN
	PROPOSED SIGN
	PROPOSED BOLLARD
	PROPOSED INLET PROTECTION



**Oyster River High School**

**Proposed Track and Field**

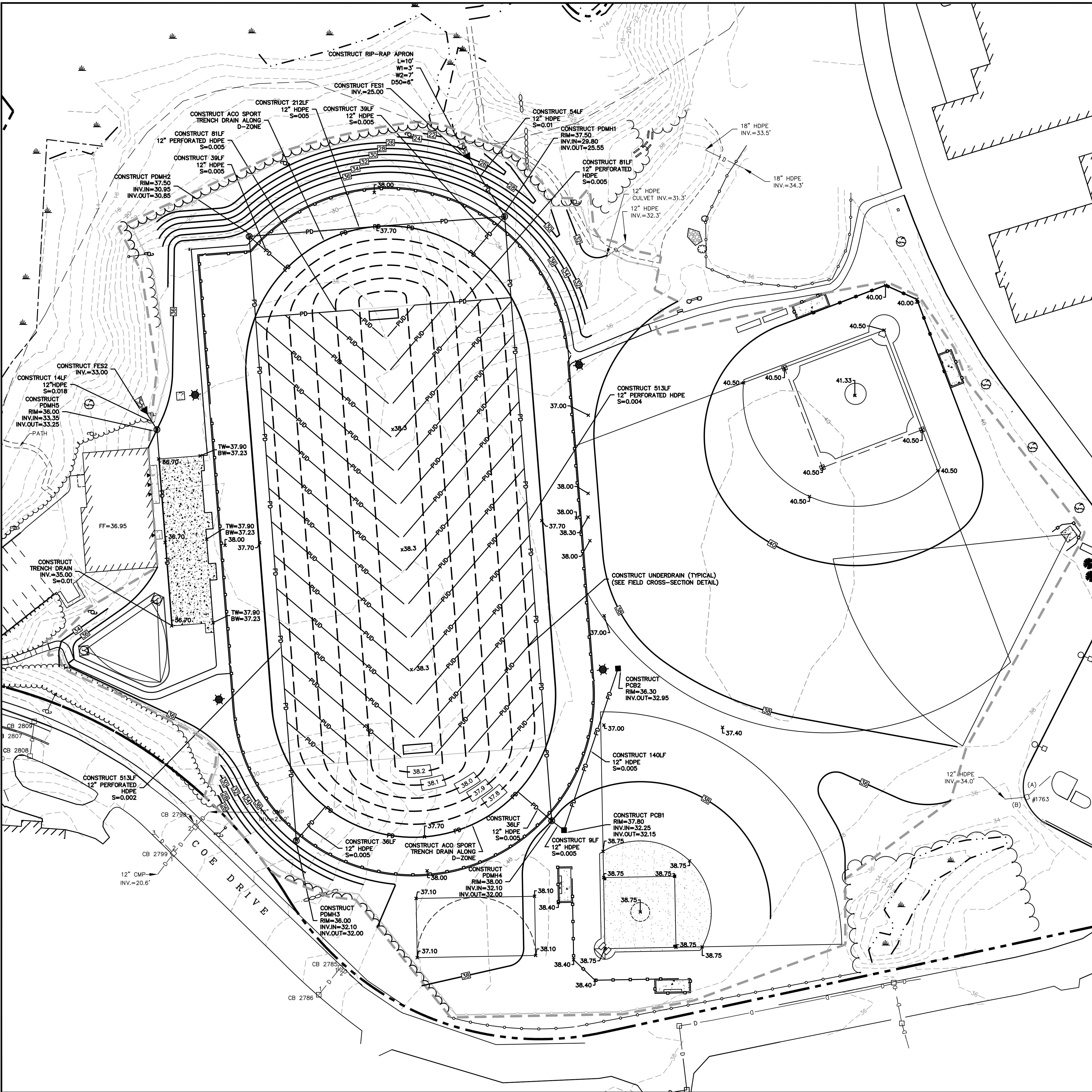
36 Coe Drive  
Durham, NH

1	08/20/2014	PLANNING BOARD SUBMISSION
PROJECT NO:	O-01500	
FILE:	2401501_SITE.dwg	
DRAWN BY:	SLK1	
CHECKED BY:	BLM	
APPROVED BY:	BLM	

**GRADING, DRAINAGE, AND EROSION CONTROL PLAN**

SCALE: AS SHOWN

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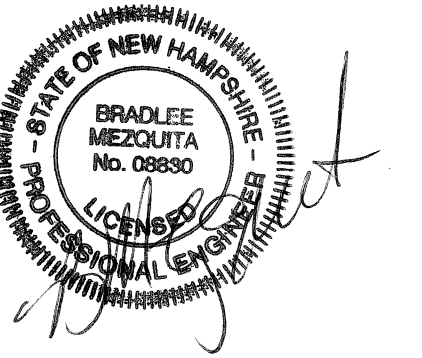
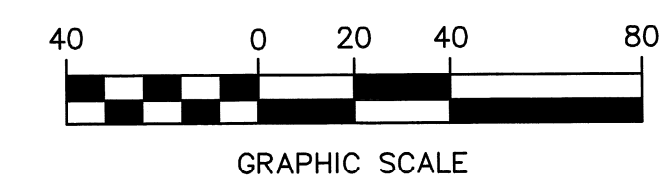


**UTILITY NOTES:**

1. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND THE LOCATIONS ARE NOT GUARANTEED BY THE OWNER OR ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UTILITIES, ANTICIPATE CONFLICTS, REPAIR EXISTING UTILITIES, AND RELOCATE EXISTING UTILITIES REQUIRED TO COMPLETE THE WORK AT NO ADDITIONAL COST TO THE OWNER.
2. COORDINATE ALL UTILITY WORK WITH APPROPRIATE UTILITY COMPANY.  
 NATURAL GAS - UNTIL  
 WATER - TOWN OF DURHAM DEPARTMENT OF PUBLIC WORKS WATER DIVISION  
 SEWER - TOWN OF DURHAM DEPARTMENT OF PUBLIC WORKS WASTEWATER DIVISION  
 ELECTRIC - PUBLIC SERVICE OF NEW HAMPSHIRE (PSNH)
3. SEE EXISTING CONDITIONS PLAN FOR BENCHMARK INFORMATION.
4. SEE GRADING, DRAINAGE, AND EROSION CONTROL PLAN FOR PROPOSED GRADING AND EROSION CONTROL MEASURES.
5. CONTRACTOR SHALL MAINTAIN UTILITY SERVICES TO ABUTTING PROPERTIES AND EXISTING SCHOOL THROUGHOUT CONSTRUCTION.
6. EXISTING UTILITIES TO BE REMOVED SHALL BE CAPPED AT THE MAIN AND MEET THE DEPARTMENT OF PUBLIC WORKS STANDARDS FOR CAPPING OF WATER AND SEWER SERVICES.
7. ALL ELECTRICAL MATERIAL WORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC CODE, LATEST EDITION, AND ALL APPLICABLE STATE AND LOCAL CODES.
8. THE EXACT LOCATION OF NEW UTILITY SERVICES AND CONNECTIONS SHALL BE COORDINATED WITH UTILITY COMPANIES.
9. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE.
10. ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING CABLES.
11. THE CONTRACTOR SHALL OBTAIN, PAY FOR, AND COMPLY WITH ALL REQUIRED PERMITS, ARRANGE FOR ALL INSPECTIONS, AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE OWNER PRIOR TO THE COMPLETION OF THIS PROJECT.
12. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, CONNECTORS, COVER PLATES, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THESE DRAWINGS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND OPERATIONAL.
13. THE CONTRACTOR SHALL CONTACT "DIG-SAFE" 72 HOURS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL HAVE THE "DIG-SAFE" NUMBER ON SITE AT ALL TIMES.
14. CONTRACTOR TO SUBMIT AS-BUILT PLANS ON REPRODUCIBLE MYLARS AND IN DIGITAL FORMAT (DWG FILES) TO THE OWNER AND ENGINEER UPON COMPLETION OF THE PROJECT. AS-BUILTS SHALL BE PREPARED AND CERTIFIED BY A NEW HAMPSHIRE LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER.
15. SAWCUT AND REMOVE PAVEMENT AND CONSTRUCT PAVEMENT TRENCH PATCH FOR ALL PROPOSED UTILITIES LOCATED IN EXISTING PAVEMENT AREAS TO REMAIN.
16. CONTRACTOR SHALL COORDINATE ALL ELECTRIC WORK INCLUDING BUT NOT LIMITED TO: CONDUIT CONSTRUCTION, MANHOLE CONSTRUCTION, UTILITY POLE CONSTRUCTION, OVERHEAD WIRE RELOCATION, AND TRANSFORMER CONSTRUCTION WITH ELECTRIC COMPANY.
17. CONTRACTOR SHALL PHASE UTILITY CONSTRUCTION TO MAINTAIN CONTINUOUS SERVICE TO ABUTTING PROPERTIES AND EXISTING SCHOOL.
18. SITE LIGHTING SPECIFICATIONS, CONDUIT LAYOUT, AND CIRCUITRY FOR PROPOSED SITE LIGHTING AND SIGN ILLUMINATION SHALL BE PROVIDED BY THE PROJECT ELECTRICAL ENGINEER.

**LEGEND**

	PROPERTY LINE
	BUILDING SETBACK
	EDGE OF WETLAND
	EXISTING TREE LINE
	PROPOSED TREE LINE
	EXISTING STONE WALL
	EXISTING GUARDRAIL
	PROPOSED GUARDRAIL
	EXISTING FENCE
	PROPOSED FENCE
	EXISTING DRAINAGE
	PROPOSED DRAINAGE
	EXISTING ELECTRIC/TELEPHONE/CABLE
	EXISTING OVERHEAD WIRE
	PROPOSED UNDERGROUND ELECTRIC/TELEPHONE
	EXISTING WATER
	PROPOSED WATER
	EXISTING SEWER
	PROPOSED SEWER
	EXISTING GAS
	PROPOSED GAS
	EXISTING CONCRETE/BITUMINOUS SIDEWALK
	PROPOSED CONCRETE/BITUMINOUS SIDEWALK
	PROPOSED CONCRETE PAD
	EXISTING LIGHT
	PROPOSED LIGHT POLE BASE
	EXISTING BOLLARD
	PROPOSED BOLLARD



**Oyster River High School**

**Proposed Track and Field**

36 Coe Drive  
 Durham, NH

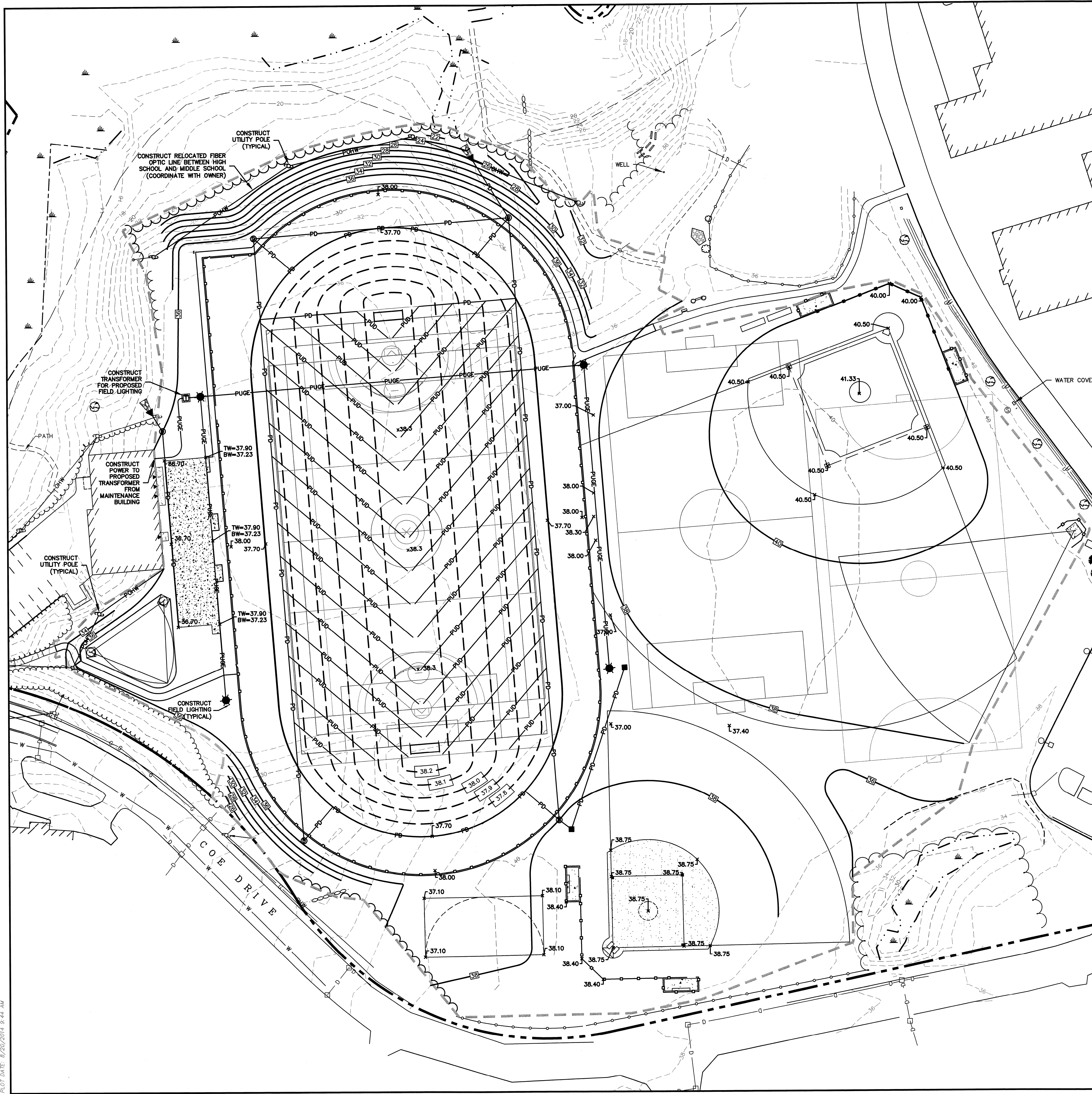
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1	08/20/2014	PLANNING BOARD SUBMISSION

**UTILITIES PLAN**

SCALE: AS SHOWN

SHEET 5

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 PLOT DATE: 8/20/2014 9:44 AM





PROJECT NAME AND LOCATION  
OYSTER RIVER HIGH SCHOOL TRACK AND FIELD FACILITY  
65 COE DRIVE  
DURHAM, NH  
43° 08' 27"N  
70° 55' 03"W

DESCRIPTION  
THE PROJECT CONSISTS OF THE CONSTRUCTION OF A MULTI-USE ATHLETIC FIELD, A TRACK, FIELD EVENT AREAS, AND ALL ASSOCIATED UTILITIES. THE MULTI-USE FIELD WILL BE SYNTHETIC RUBBER AND SAND INFILL. THE TRACK WILL BE LATEX RUBBER, AND THE PRACTICE FIELDS WILL BE NATURAL LOAM AND SEED.

DISTURBED AREA  
THE TOTAL AREA TO BE DISTURBED IS APPROXIMATELY 10 ACRES.

SOIL CHARACTERISTICS  
BASED ON THE USGS SOIL SURVEY FOR STRAFFORD COUNTY, THE SOILS CONSIST OF BUXTON SILT LOAM (HYDROLOGIC SOIL GROUP C) AND SUFFIELD SILT LOAM (HYDROLOGIC SOIL GROUP C).  
BASED ON A SITE-SPECIFIC SOIL SURVEY REPORT COMPLETED BY GOVE ENVIRONMENTAL SERVICES, INC. ON JULY 2, 2014, THE SOILS CONSIST OF AGAWAM (HYDROLOGIC SOIL GROUP B), DEERFIELD (HYDROLOGIC SOIL GROUP B), DEERFIELD VARIANT (HYDROLOGIC SOIL GROUP C), AND SCARBORO (POORLY DRAINED, HYDROLOGIC SOIL GROUP D).

SEQUENCE OF MAJOR ACTIVITIES  
1. CUT AND CLEAR TREES.  
2. CONSTRUCT TEMPORARY AND PERMANENT SEDIMENT, EROSION AND DETENTION CONTROL FACILITIES. EROSION, SEDIMENT AND DETENTION MEASURES SHALL BE INSTALLED PRIOR TO ANY EARTH MOVING OPERATIONS THAT WILL INFLUENCE STORMWATER RUNOFF SUCH AS:  
- NEW CONSTRUCTION  
- DEVELOPMENT OF BORROW PIT AREAS  
- CONTROL OF DUST  
- CONSTRUCTION OF ACCESS AND HAUL ROAD  
- NEARNESS OF CONSTRUCTION SITE TO RECEIVING WATERS  
- CONSTRUCTION DURING LATE WINTER AND EARLY SPRING  
3. ALL PERMANENT DITCHES, SWALES, DETENTION, RETENTION AND SEDIMENTATION BASINS TO BE STABILIZED USING THE VEGETATIVE AND NON-STRUCTURAL BMPs PRIOR TO DIRECTING RUNOFF TO THEM.  
4. CLEAR AND DISPOSE OF DEBRIS.  
5. CONSTRUCT TEMPORARY CULVERTS AND DIVERSION CHANNELS AS REQUIRED.  
6. GRADE AND GRAVEL ROADWAYS AND PARKING AREAS. ALL ROADS AND PARKING AREA SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.  
7. BEGIN PERMANENT AND TEMPORARY SEEDING AND MULCHING. ALL OUT AND FILL SLOPES SHALL BE SEEDING WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.  
8. DITCHES OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINS, DITCHES, SILT FENCES, SEDIMENT TRAPS, ETC., MULCH AND SEED AS REQUIRED.  
9. FINISH PAVING ALL ROADWAYS AND PARKING LOTS.  
10. INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES.  
11. COMPLETE PERMANENT SEEDING AND LANDSCAPING.  
12. REMOVE TRAPPED SEDIMENTS FROM COLLECTOR DEVICES AS APPROPRIATE AND THEN REMOVE TEMPORARY EROSION CONTROL MEASURES.

NOTE: THE CONSTRUCTION SEQUENCE MUST LIMIT THE DURATION AND AREA OF DISTURBANCE.

NAME OF RECEIVING WATERS  
THE STORMWATER RUNOFF FROM THE PROPOSED TRACK AND FIELD WILL BE DETAINED WITHIN THE TURN FIELD SECTION PRIOR TO DISCHARGE TO THE ON-SITE WETLAND LOCATED NORTH OF THE PROJECT SITE. THEN WILL DRAIN TO BEARD'S CREEK AND ULTIMATELY TO OYSTER RIVER.  
THE STORMWATER RUNOFF FROM THE PROPOSED BASEBALL FIELD AND SOFTBALL FIELD WILL DISCHARGE VIA OVERLAND FLOW TOWARD THE MUNICIPAL STORMWATER SYSTEM LOCATED IN COE DRIVE AND ULTIMATELY TO OYSTER RIVER.

EROSION AND SEDIMENT CONTROLS AND STABILIZATION PRACTICES  
A. STABILIZATION SHALL BE INITIATED ON ALL LOAM STOCKPILES AND DISTURBED AREAS WHERE CONSTRUCTION ACTIVITY WILL NOT OCCUR FOR MORE THAN TWENTY ONE (21) CALENDAR DAYS BY THE FOURTEENTH DAY AFTER CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED IN THAT AREA. STABILIZATION MEASURES TO BE USED INCLUDE:  
1. TEMPORARY SEEDING  
2. MULCHING  
B. DURING CONSTRUCTION, RUNOFF WILL BE DIVERTED AROUND THE SITE WITH EARTH DIKES, PIPING OR STABILIZED CHANNELS WHERE POSSIBLE. SHEET RUNOFF FROM THE SITE WILL BE FILTERED THROUGH HAYBALE BARRIERS, SILT FENCES, STORM DRAIN BASIN INLETS SHALL BE PROVIDED WITH FLARED END SECTIONS AND TRASH RACKS. THE SITE SHALL BE STABILIZED FOR THE WINTER BY NOVEMBER 15.  
C. AN AREA SHALL BE CONSIDERED STABLE WHEN ONE OF THE FOLLOWING HAS OCCURRED:  
1. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED.  
2. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED.  
3. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH STONE OR RIPRAP HAS BEEN INSTALLED.  
4. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.  
D. WINTER STABILIZATION PRACTICES:  
1. ALL PROPOSED POST-DEVELOPMENT VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATED GROWTH BY NOVEMBER 15TH, OR WHICH ARE DISTURBED AFTER NOVEMBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 4:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURE WITH ANCHOR NETTING, ELSEWHERE.  
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 WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITION.

OFF SITE VEHICLE TRACKING  
THE CONTRACTOR SHALL CONSTRUCT THE STABILIZED CONSTRUCTION ENTRANCE(S) PRIOR TO ANY EXCAVATION ACTIVITIES.

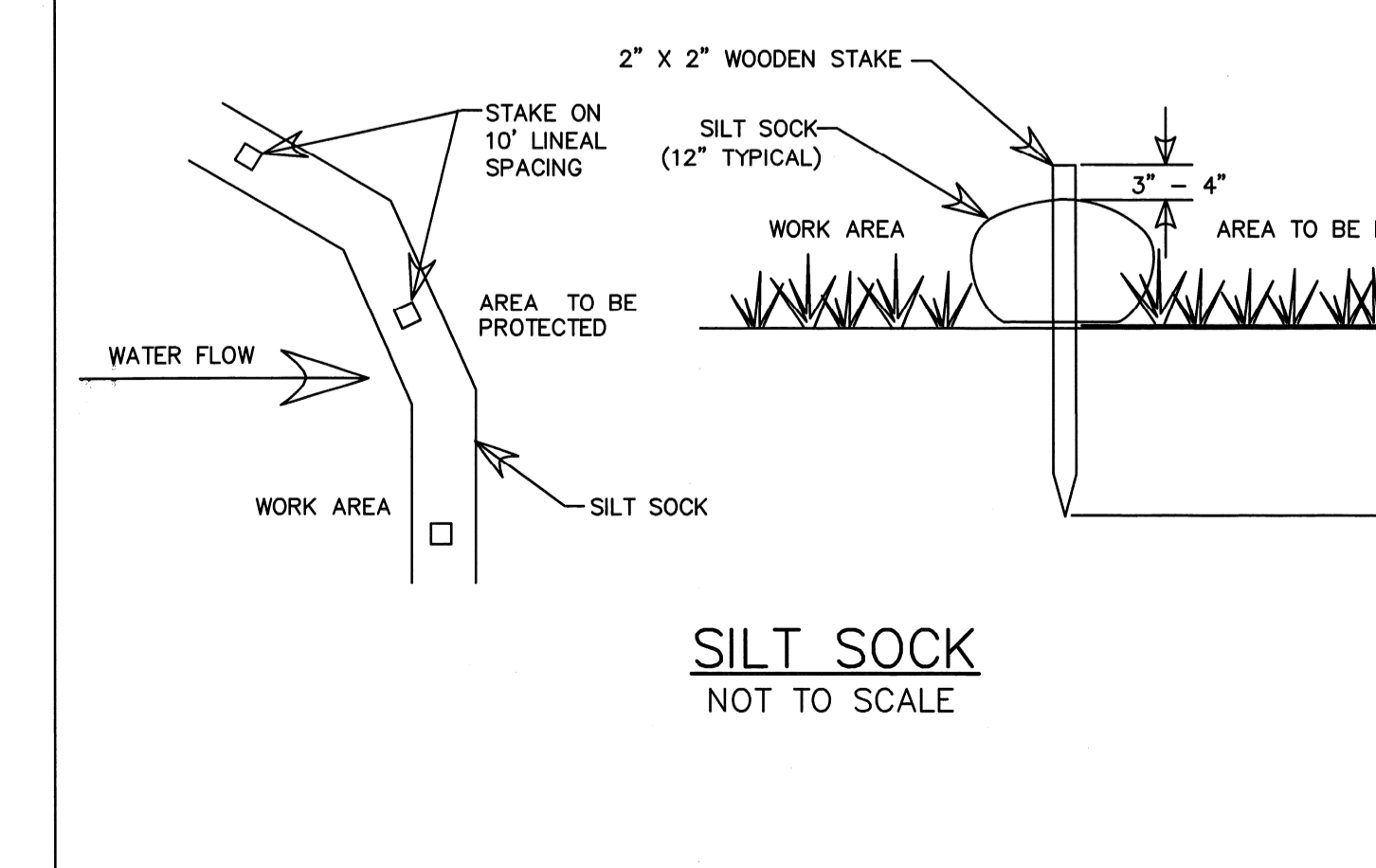
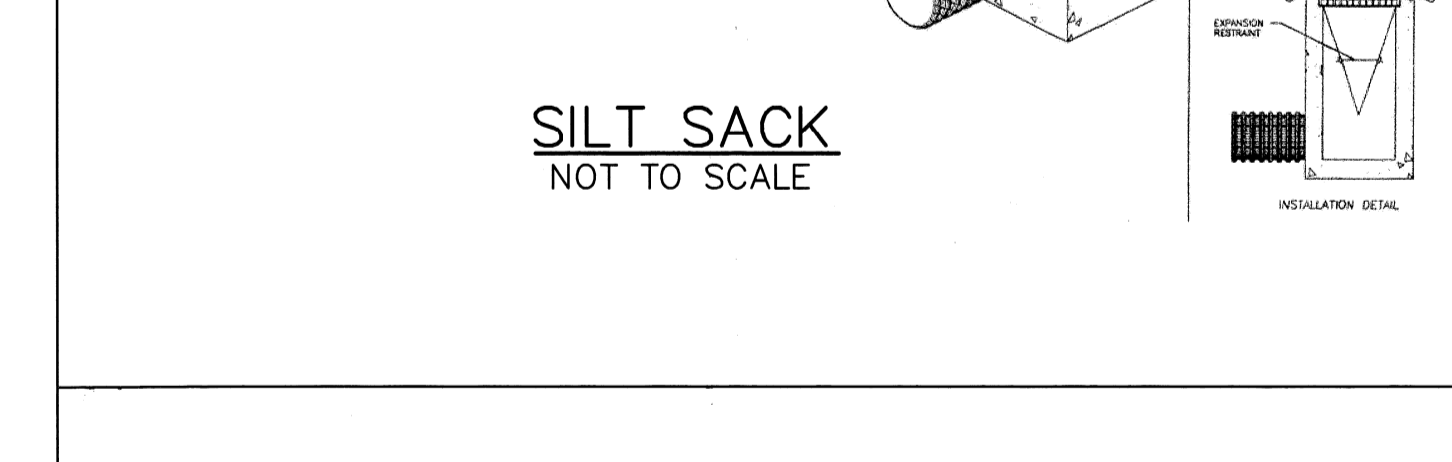
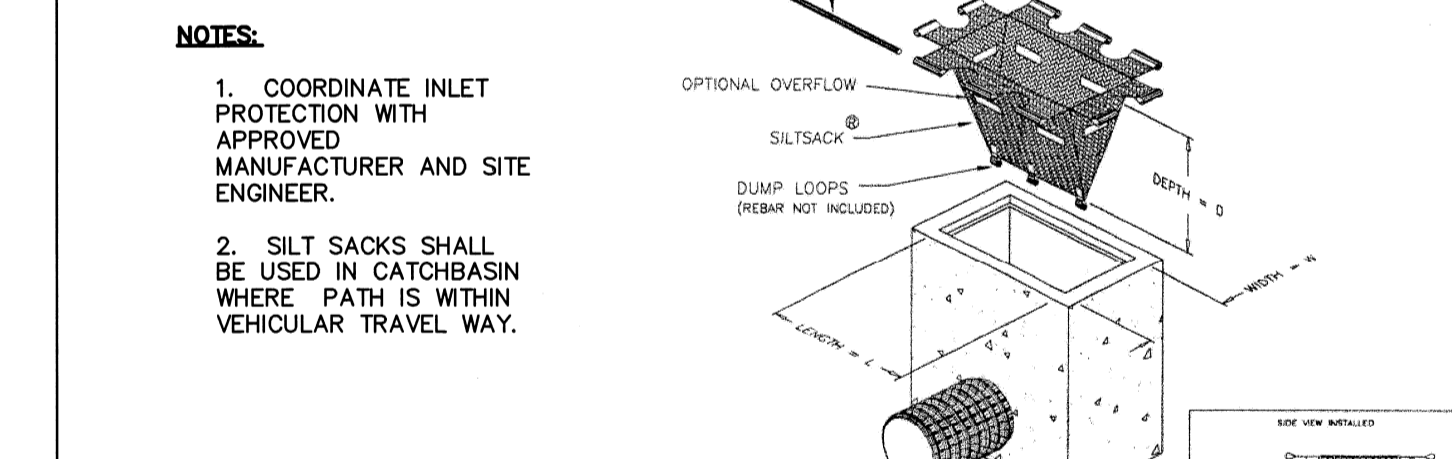
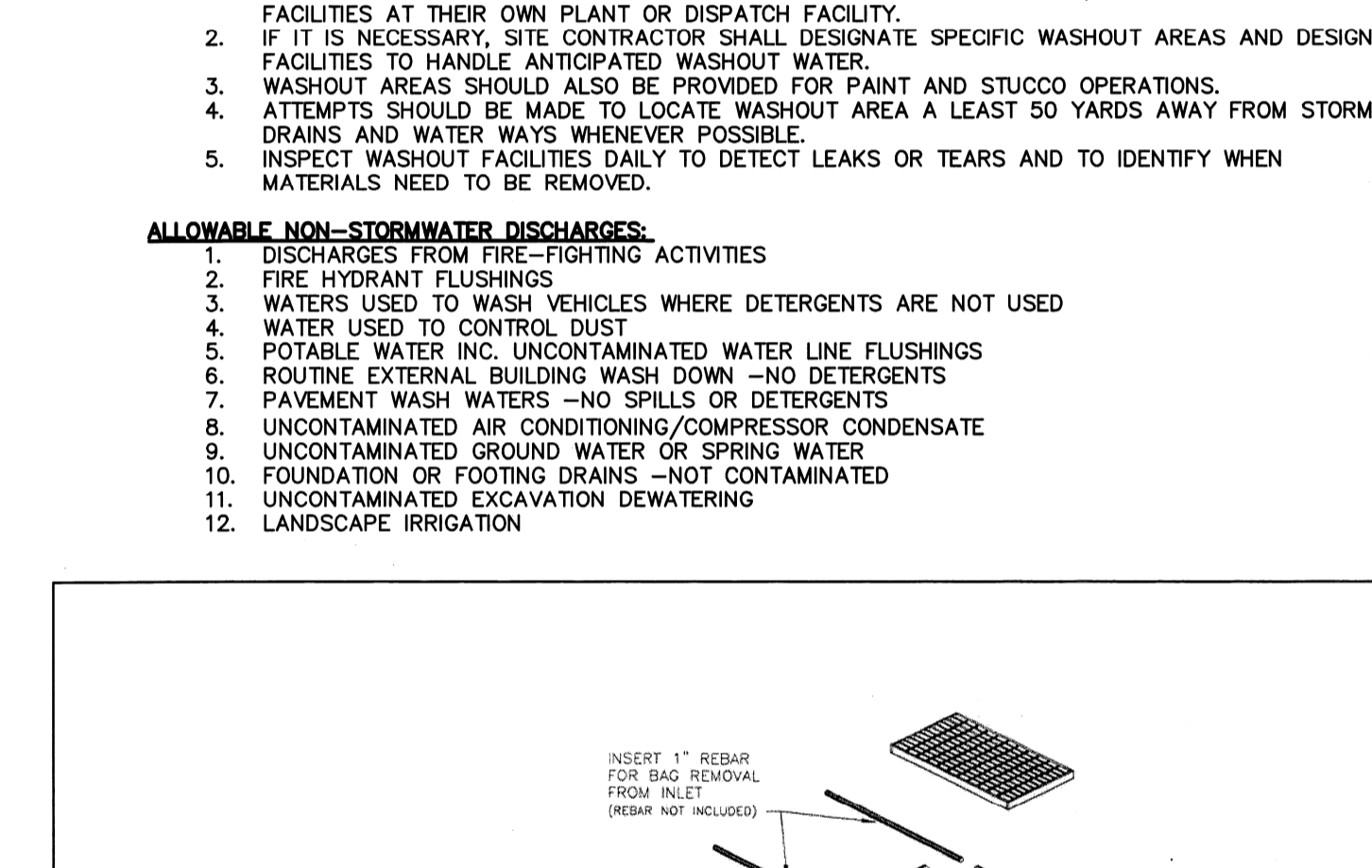
INSTALLATION, MAINTENANCE AND INSPECTION PROCEDURES OF EROSION AND SEDIMENT CONTROLS  
A. GENERAL  
1. THESE ARE THE GENERAL INSPECTION AND MAINTENANCE PRACTICES THAT WILL BE USED TO IMPLEMENT THE PLAN.  
2. ALL SWALES SHALL BE STABILIZED PRIOR TO DIRECTING FLOW TO THEM.  
3. THE SMALLEST PRACTICAL PORTION OF THE SITE WILL BE DENUDATED AT ONE TIME. UNDER NO CIRCUMSTANCES SHALL MORE THAN 5.0 ACRES OF THE PROJECT SITE BE UNSTABILIZED AT ONE TIME.  
4. ALL CONTROL MEASURES WILL BE INSPECTED AT LEAST ONCE EACH WEEK AND FOLLOWING ANY STORM EVENT OF 1/2 INCH OR GREATER RAINFALL.  
5. ALL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.  
6. BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE OR HAYBALE BARRIERS WHEN IT HAS REACHED ONE THIRD THE HEIGHT OF THE FENCE OR BALE.  
7. ALL DIVERSION DIKES WILL BE INSPECTED AND ANY BREACHES PROMPTLY REPAIRED.  
8. TEMPORARY SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND UNHEALTHY GROWTH.  
9. A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION.  
10. A REPRESENTATIVE OF THE SITE CONTRACTOR, WILL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES, AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORT.  
11. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE, OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES, AND CONDUITS, ETC., SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL CODES OR SPECIFICATIONS.  
B. FILTEREXX SILT SOXX  
1. APPLICATION  
A. FILTEREXX SILT SOXX ARE TO BE INSTALLED DOWN SLOPE OF ANY DISTURBED AREA REQUIRING EROSION AND SEDIMENT CONTROL AND FILTRATION OF SUSPENDED SOLIDS. THE SILT SOXX ARE EFFECTIVE WHEN INSTALLED PERPENDICULAR TO SHEET OR LOW CONCENTRATED FLOW.  
2. INSTALLATION DETAILS  
A. SILT SOXX USED FOR PERIMETER CONTROL OF SEDIMENT AND SOLUBLE POLLUTANTS IN STORM RUNOFF SHALL MEET FILTEREXX SOXX MATERIAL SPECIFICATIONS AND USE CERTIFIED FILTEREXX FILTER MEDIA.  
B. CONTRACTOR IS REQUIRED TO BE FILTEREXX CERTIFIED AS DETERMINED BY FILTEREXX INTERNATIONAL, LLC. IDENTIFICATION SHALL BE ORDERED CURRENT IF APPROPRIATE IDENTIFICATION IS SHOWN DURING TIME OF BID OR AT TIME OF APPLICATION. LOOK FOR THE FILTEREXX CERTIFIED SEAL.  
C. SILT SOXX WILL BE PLACED AT LOCATIONS INDICATED ON PLANS AS DIRECTED BY THE ENGINEER.  
D. SILT SOXX SHOULD BE INSTALLED PARALLEL TO THE BASE OF THE SLOPE OR OTHER DISTURBED AREA, IN EXTREME CONDITIONS (I.E. 2:1 SLOPES), A SECOND SILT SOXX SHALL BE CONSTRUCTED AT THE TOP OF THE SLOPE.  
E. STAKES SHALL BE INSTALLED THROUGH THE MIDDLE OF THE SILT SOXX ON 10 FT CENTERS, USING 2 INCH BY 2 INCH BY 3 FEET WOODEN STAKES. IN THE EVENT STAKING IS NOT POSSIBLE, I.E., WHEN SILT SOXX ARE USED ON PAVEMENT, HEAVY CONCRETE BLOCKS SHALL BE USED BEHIND THE SILT SOXX TO HELP STABILIZE DURING RAINFALL/RUNOFF EVENTS.  
F. STAKING DEPTH FOR SAND AND SILT LOAM SOILS SHALL BE 12 INCHES, AND 8 INCHES FOR CLAY SOILS.  
G. LOOSE COMPOST MAY BE BACKFILLED ALONG THE UPSLOPE SIDE OF THE SILT SOXX, FILLING THE SEAM BETWEEN THE SOIL SURFACE AND THE DEVICE, IMPROVING FILTRATION AND SEDIMENT RETENTION.  
H. IF THE SILT SOXX IS TO BE LEFT AS A PERMANENT FILTER OR PART OF THE NATURAL LANDSCAPE, IT MAY BE SEEDED AT TIME OF INSTALLATION FOR ESTABLISHMENT OF PERMANENT VEGETATION.  
I. FILTEREXX SILT SOXX ARE NOT TO BE USED IN PERENNIAL, EPHEMERAL, OR INTERMITTENT STREAMS.  
J. SEE DETAIL FOR CORRECT FILTEREXX SILT SOXX INSTALLATION.

B. FILTERS  
1. SILT FENCE  
A. SYNTHETIC FILTER FABRIC SHALL BE A PREVIOUS SHEET OF PROPYLENE, NYLON, POLYESTER OR ETHYLENE YARN AND SHALL BE CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE FOLLOWING REQUIREMENTS:  
PHYSICAL PROPERTY TEST REQUIREMENTS  
FILTERING EFFICIENCY VTM-51 75% MINIMUM  
TENSILE STRENGTH AT BREAK VTM-52 EXTRA STRENGTH  
20% MAXIMUM ELONGATION\* VTM-52 50 LB/LINEAR INCH (MIN.) STANDARD STRENGTH  
30 LB/LINEAR INCH (MIN.)  
FLOW RATE VTM-51 0.3 GAL/SF/MIN (MIN.)  
\* REQUIREMENTS REDUCED BY 50 PERCENT AFTER SIX (6) MONTHS OF INSTALLATION.  
A. SYNTHETIC FILTER FABRIC SHALL CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF SIX (6) MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0 DEGREES F TO 120 DEGREES F.  
B. THE HEIGHT OF THE SILT FENCE SHALL NOT EXCEED THIRTY-SIX (36) INCHES.  
C. THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT SUPPORT POST, WITH A MINIMUM SIX (6) INCH OVERLAP, AND SECURELY SEALED.  
D. POSTS SHALL BE SPACED A MAXIMUM OF TEN (10) FEET APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND (MINIMUM OF 16 INCHES). WHEN EXTRA STRENGTH FABRIC IS USED WITHOUT THE WIRE SUPPORT FENCE, POST SPACING SHALL NOT EXCEED TEN FEET.  
E. POSTS FOR SILT FENCES SHALL BE EITHER 4-INCH DIAMETER WOOD OR 1.33 POUNDS PER LINEAR FOOT STEEL WITH A MINIMUM LENGTH OF 5 FEET. STEEL POSTS SHALL HAVE A MAXIMUM MESH SPACING OF 8 INCHES.  
F. WIRE FENCE REINFORCEMENT FOR SILT FENCES USING STANDARD STRENGTH FILTER CLOTH SHALL BE A MINIMUM OF 42 INCHES IN HEIGHT, A MINIMUM OF 14 GAUGE AND SHALL HAVE PROJECTIONS FOR FASTENING WIRE TO THEM.  
G. A TRENCH SHALL BE EXCAVATED APPROXIMATELY FOUR (4) INCHES WIDE AND FOUR (4) INCHES DEEP ALONG THE LINE OF POSTS AND UPSLOPE FROM THE BARRIER.  
H. WHEN STANDARD STRENGTH FILTER FABRIC IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES. THE WIRE MESH SHALL BE AT LEAST 12 INCHES LONG. THE WIRE OR HOOD RINGS, THE WIRE SHALL EXTEND NO MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACES.  
I. THE "STANDARD STRENGTH" FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE FENCE, AND EIGHT (8) INCHES OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE. FILTER FABRIC SHALL NOT BE STAPLED TO EXISTING TREES.  
J. WHEN EXTRA STRENGTH FILTER FABRIC AND CLOSER POST SPACING ARE USED, THE WIRE MESH SUPPORT FENCE MAY BE ELIMINATED. IN SUCH A CASE, THE FILTER FABRIC IS STAPLED OR WIRED DIRECTLY TO THE POSTS WITH ALL OTHER PROVISIONS OF ITEM (I) APPLYING.  
K. THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE FILTER FABRIC.  
L. SILT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREAS HAS BEEN PERMANENTLY STABILIZED.  
2. SEQUENCE OF INSTALLATION  
SEDIMENT BARRIERS SHALL BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM.  
3. MAINTENANCE  
A. SILT SOXX BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. THEY SHALL BE REPAIRED IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THEM. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OF THE EDGES, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THEM. SEDIMENT BARRIERS SHALL BE REPLACED WITH A TEMPORARY CHECK DAM.  
B. SHOULD THE FABRIC ON A SILT SOXX BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF EXPECTED USABLE LIFE AND THE BARRIER STILL IS NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.  
C. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-THIRD (1/3) THE HEIGHT OF THE BARRIER.  
D. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT SOXX BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED AND SEED.

C. MULCHING  
1. TIMING  
IN ORDER FOR MULCH TO BE EFFECTIVE, IT MUST BE IN PLACE PRIOR TO MAJOR STORM EVENTS. THERE ARE TWO (2) TYPES OF STANDARDS WHICH SHALL BE USED TO ASSURE THIS:  
A. APPLY MULCH PRIOR TO ANY STORM EVENT. IT WILL BE NECESSARY TO CLOSELY MONITOR WEATHER PREDICTIONS, USUALLY BY CONTACTING THE NATIONAL WEATHER SERVICE IN CONCORD, TO HAVE ADEQUATE WARNING OF SIGNIFICANT STORMS. REQUIRED MULCHING WITHIN A SPECIFIED TIME PERIOD. THE TIME PERIOD CAN VARY FROM 14 TO 21 DAYS OF INACTIVITY ON A AREA. THE LENGTH OF TIME RANGING WITH SITE CONDITIONS. PROFESSIONAL JUDGMENT SHALL BE USED TO EVALUATE THE INTERACTION OF SITE CONDITIONS (SOIL/EROSIBILITY, SEASON OF YEAR, EXTENT OF DISTURBANCE, PROXIMITY TO SENSITIVE RESOURCES, ETC.) AND THE POTENTIAL IMPACT OF EROSION ON ADJACENT AREAS TO CHOOSE AN APPROPRIATE TIME RESTRICTION.  
2. APPLICATION RATE  
MULCH SHALL BE APPLIED AT A RATE OF BETWEEN 1.5 TO 2 TONS PER ACRE, OR 90 TO 100 POUNDS PER 1000 SQUARE FEET. THE MINIMUM MULCH REQUIREMENT, REGARDLESS OF APPLICATION RATE IS THAT SOIL MUST NOT BE VISIBLE.  
3. GUIDELINES FOR WINTER MULCH APPLICATION  
WHEN MULCH IS APPLIED TO PROVIDE PROTECTION OVER WINTER (PAST THE GROWING SEASON) IT SHALL BE AT A RATE OF 6,000 POUNDS OF HAY OR STRAW PER ACRE. A TACKIFIER MAY BE ADDED TO THE MULCH. NO MULCH IS TO BE APPLIED OVER MORE THAN TWO (2) INCHES OF SNOW. IF SNOW DEPTH IS GREATER THAN TWO (2) INCHES IT SHALL BE REMOVED BEFORE MULCHING.  
4. MAINTENANCE  
ALL MULCHES MUST BE INSPECTED PERIODICALLY, IN PARTICULAR AFTER RAINSTORMS, TO CHECK FOR RILL EROSION. IF LESS THAN 90% OF THE SOIL SURFACE IS COVERED BY MULCH, ADDITIONAL MULCH SHALL BE IMMEDIATELY APPLIED.  
5. EXCELSIOR MATTING  
EXCELSIOR MATTING SHALL BE USED IN PLACE OF MULCH ON ALL SLOPES STEEPER THAN 3:1.  
6. SLOPES  
ALL SLOPES GREATER THAN 15% DURING THE REGULAR CONSTRUCTION SEASON ARE TO HAVE NETTING OVER MULCH OR COMBINATION EROSION CONTROL MAT USED (MULCH AND NET). THIS APPLIES TO ALL SLOPES GREATER THAN 8% AFTER OCTOBER 1. MULCHING IS REQUIRED OVER HYDROSEEDING.  
D. TEMPORARY GRASS COVER  
1. SEEDBED PREPARATION  
APPLY FERTILIZER AT THE RATE OF 600 POUNDS PER ACRE OF 10-10-10. APPLY LIMESTONE (EQUIVALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF THREE (3) TONS PER ACRE.  
2. SEEDING  
A. UTILIZE ANNUAL RYE GRASS AT A RATE OF 40 LBS/ACRE.  
B. WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF TWO (2) INCHES BEFORE APPLYING FERTILIZER, LIME AND SEED.  
C. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, OR HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER). HYDROSEEDINGS, WHICH INCLUDE MULCH/MAY BE LEFT ON SOIL SURFACE. SEEDING RATES MUST BE INCREASED 10% WHEN HYDROSEEDING.  
3. MAINTENANCE  
TEMPORARY SEEDINGS SHALL BE PERIODICALLY INSPECTED. AT A MINIMUM, 95% OF THE SOIL SURFACE SHOULD BE COVERED BY VEGETATION. IF ANY EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHALL BE MADE AND OTHER TEMPORARY MEASURES USED IN THE INTERIM (MULCH, FILTER BARRIERS, CHECK DAMS, ETC.).  
E. PERMANENT MULCHING  
1. TIMING  
A. APPLYING PLANT RESIDUES OR OTHER SUITABLE MATERIALS THAT RESIST DECOMPOSITION SUCH AS WOOD CHIPS OR CRUSHED STONE TO THE SOIL SURFACE WHERE VEGETATION STABILIZATION IS EITHER IMPRACTICAL OR DIFFICULT TO ESTABLISH.  
B. WINTER STABILIZATION SHALL MEET OR EXCEED THE FOLLOWING REQUIREMENTS.  
2. CONSIDERATIONS  
A. PERMANENT MULCHING SHALL BE USED TO STABILIZE CHRONIC EROSION AREAS WHICH RECEIVE HEAVY FOOT OR VEHICLE TRAFFIC. NOT INTENDED FOR AREAS OF CONCENTRATED FLOWS.  
B. IF WOOD CHIPS ARE USED IN LANDSCAPED AREAS (TREES & SHRUBS), A SUPPLEMENTAL APPLICATION OF CHEMICAL FERTILIZER SHOULD BE APPLIED AT A RATE OF TWO POUNDS OF 5-10-5 PER 1000 SQUARE FEET OF MULCH.  
C. IF CRUSHED STONE IS USED, A PLASTIC FILTER CLOTH SHALL BE PLACED BETWEEN THE GROUND AND THE STONE.  
3. SPECIFICATIONS  
A. WOOD CHIPS OR AGGREGATE SHALL BE USED ON SLOPES NO STEEPER THAN 3 HORIZONTALLY ON 1 VERTICALLY.  
B. PERMANENT MULCH SHALL BE 3 INCHES OR MORE IN DEPTH.  
C. WOOD CHIPS SHALL BE APPLIED AT A RATE OF 500-600 POUNDS PER 1,000 SQUARE FEET OR 10-20 TONS PER ACRE. WOOD CHIPS SHALL BE GREEN OR AIR-DRIED AND FREE OF OBJECTIONABLE COARSE MATERIALS.  
D. AGGREGATE COVER (GRAVEL, CRUSHED STONE OR SLAG) SHALL BE WASHED, 1/4 INCH TO 2 1/2 INCHES AND APPLIED AT A RATE OF 9 CUBIC YARDS PER 1,000 SQUARE FEET.  
4. MAINTENANCE  
A. WOOD CHIPS SHALL BE MONITORED FOR DECOMPOSITION AND NEW APPLICATIONS MADE.  
B. CRUSHED STONE SHALL BE MONITORED FOR WASH OUT AND SLIPPING DOWN SLOPE. IF EITHER OCCUR, NEW MATERIAL SHALL BE PROVIDED ON THE BARREN AREAS.

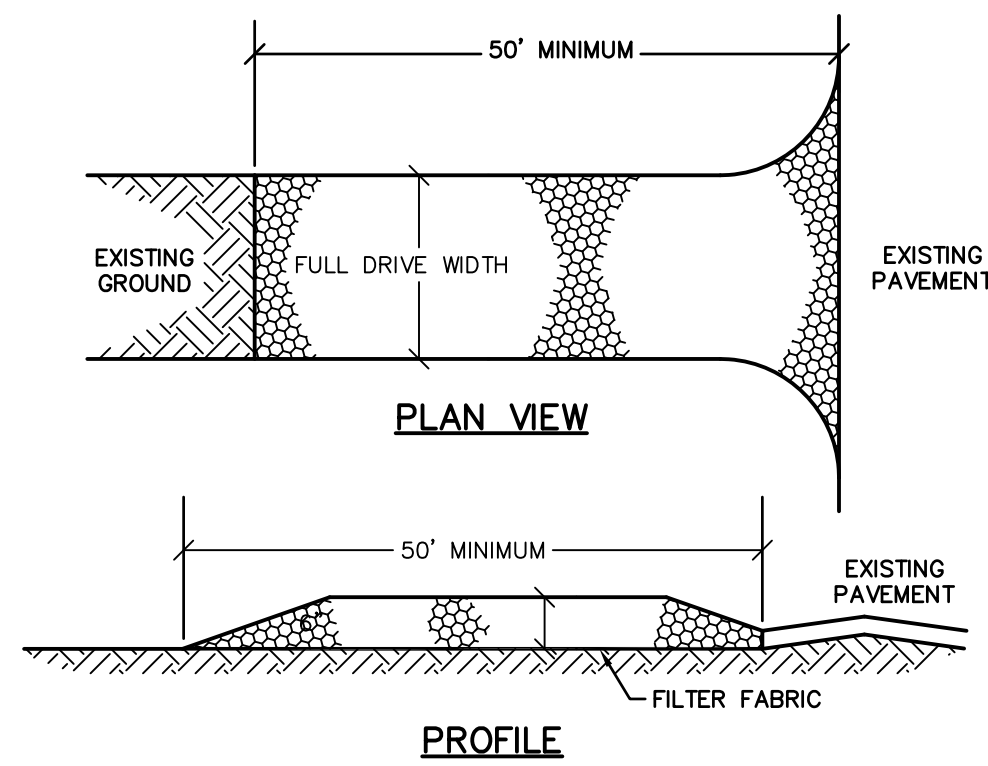
F. VEGETATIVE PRACTICE  
1. FOR PERMANENT MEASURES AND PLANTINGS.  
A. LIMESTONE SHALL BE THOROUGHLY INCORPORATED INTO THE LOAM LAYER AT A RATE OF 1 TON PER ACRE IN ORDER TO PROVIDE A PH VALUE OF 5.5 TO 6.5.  
B. FERTILIZER SHALL BE SPREAD ON THE TOP LAYER OF LOAM AND WORKED INTO THE SURFACE. FERTILIZER APPLICATION RATE SHALL BE 800 POUNDS PER ACRE OF 10-20-20.  
C. SOIL CONDITIONERS AND FERTILIZER SHALL BE APPLIED AT THE RECOMMENDED RATES AND SHALL BE THOROUGHLY WORKED INTO THE LOAM. LOAM SHALL BE RAKED UNTIL THE SURFACE IS EVEN AND FINISHED. SMOOTH AND EVEN SEEDING SHALL BE DONE TO EVEN SURFACE CONFORMING TO THE REQUIRED LINES AND GRADES WITH APPROVED ROLLERS WEIGHING BETWEEN 4-1/2 POUNDS AND 5-1/2 POUNDS PER INCH OF WIDTH.  
D. SEED SHALL BE SOWN AT THE RATE SHOWN BELOW. SOWING SHALL BE DONE ON A CALM, DRY DAY, PREFERABLY, BY MACHINE, BUT IF BY HAND, ONLY BY EXPERIENCED WORKMEN. IMMEDIATELY BEFORE SEEDING, THE SOIL SHALL BE LIGHTLY RAKED. ONE HALF THE SEED SHALL BE SOWN IN ONE DIRECTION AND THE OTHER HALF AT RIGHT ANGLES TO THE ORIGINAL DIRECTION. IT SHALL BE LIGHTLY RAKED INTO THE SOIL TO A DEPTH NOT OVER 1/4 INCH AND ROLLED WITH A HAND ROLLER WEIGHING NOT OVER 100 POUNDS PER LINEAR FOOT OF WIDTH.  
E. HAY MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING AS INDICATED ABOVE.  
F. THE SURFACE SHALL BE WATERED AND KEPT MOIST WITH A FINE SPRAY AS REQUIRED, WITHOUT WASHING AWAY THE SOIL. UNTIL THE GRASS IS WELL ESTABLISHED, ANY AREAS WHICH ARE NOT SATISFACTORILY COVERED WITH GRASS SHALL BE RESEDED, AND ALL NOXIOUS WEEDS REMOVED.  
G. THE CONTRACTOR SHALL PROTECT AND MAINTAIN THE SEEDED AREAS UNTIL ACCEPTED.  
H. A GRASS SEED MIXTURE CONTAINING THE FOLLOWING SEED REQUIREMENTS SHALL BE APPLIED AT 300 LBS/ACRE:  
SEED % WEIGHT  
"BARON" KENTUCKY BLUEGRASS 65 %  
"PALMER" PERENNIAL RYEGRASS 35 %  
IN NO CASE SHALL THE WEED CONTENT EXCEED 1 PERCENT BY WEIGHT. ALL SEED SHALL COMPLY WITH STATE AND FEDERAL LAWS. SEEDING SHALL BE DONE NO LATER THAN SEPTEMBER 15. IN NO CASE SHALL SEEDING TAKE PLACE OVER SNOW.  
G. DORMANT SEEDING (SEPTEMBER 15 TO FIRST SNOWFALL)  
DORMANT SEEDING SHALL BE USED FOR PERMANENT SEEDING. SEEDING SHALL BE DONE AT TWICE THE INDICATED RATE. APPLY MULCH AS INDICATED FOR PERMANENT MEASURES.  
H. STORM DRAIN INLET PROTECTION  
1. SILT SACK  
A. SACK SHALL BE INSTALLED WITHIN CATCHBASIN MAKING SURE EMPTY STRAPS ARE LAID FLAT OUTSIDE THE BASIN.  
B. SACK SHALL FIT TIGHTLY WITHIN THE BASIN TO PREVENT SEDIMENT FROM GOING THROUGH ANY GAPS.  
C. ALL STRUCTURES SHOULD BE INSPECTED AFTER EVERY RAINSTORM AND REPAIRS MADE AS NECESSARY.  
D. SEDIMENT SHOULD BE REMOVED FROM THE DEVICES AFTER THE SEDIMENT HAS REACHED A MAXIMUM OF ONE-THIRD THE DEPTH OF THE TRAP.  
E. SILT SACK SHALL BE REMOVED UPON THE COMPLETION OF THE PROJECT.  
2. BLACK AND GRAVEL INLET PROTECTION  
A. PLACE CONCRETE BLOCKS LENGTHWISE ON THEIR SIDE IN A SINGLE ROW AROUND THE PERIMETER OF THE INLET. WITH THE ADJACENT BLOCKS ADJUTING. THE HEIGHT OF THE BARRIER CAN BE VARRIED, DEPENDING ON DESIGN NEEDS, BU STACKING COMBINATIONS OF 4-INCH, 8-INCH AND 12-INCH WIDE BLOCKS. THE BARRIER OF BLOCKS SHALL BE AT LEAST 12 INCHES HIGH AND NO GREATER THAN 24 INCHES HIGH.  
B. WIRE MESH SHALL BE PLACED OVER THE OUTSIDE VERTICAL FACE (WEBBING) OF THE CONCRETE BLOCKS TO PREVENT STONE FROM BEING WASHED THROUGH THE HOLES IN THE BLOCKS. HARDWARE CLOTH OR COMPARE WIRE MESH WITH 1/2-INCH OPENINGS SHALL BE USED.  
C. STONE SHALL BE PILED AGAINST THE WIRE TO BE THE TOP OF THE BLOCK BARRIER, AS SHOWN IN FIGURE 16.7. STONE GRADATION SHALL BE WELL GRADED WITH THE MAXIMUM STONE SIZE OF 6 INCHES AND MINIMUM STONE SIZE OF 1 INCH.  
D. IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONE MUST BE PULLED AWAY FROM THE BLOCKS, CLEANED AND REPLACE.  
I. STABILIZED CONSTRUCTION ENTRANCE  
1. SPECIFICATIONS  
A. AGGREGATE SIZE: USE TWO (2) INCHES STONE.  
B. AGGREGATE THICKNESS: NOT LESS THAN SIX (6) INCHES.  
C. WIDTH: TEN (10) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH OF POINTS WHERE INGRESS OR EGRESS OCCURS.  
D. LENGTH: AS REQUIRED, BUT NOT LESS THAN FIFTY (50) FEET.  
E. GEOTEXTILE: TO BE PLACED OVER THE ENTIRE AREA TO BE COVERED WITH AGGREGATE. PIPING OF ENTRANCE WATER UNDER STRUCTURE AS REQUIRED.  
F. CRITERIA FOR GEOTEXTILE: THE FABRICS SHALL BE TREVIA SPUNBOND 1135, MIRAFI 600X OR EQUAL.  
2. MAINTENANCE  
THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH AGGREGATE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAP. SEDIMENT SHALL BE PREVENTED FROM ENTERING STORM DRAINS, DITCHES OR WATERWAYS.  
TIMING OF CONTROLS/MEASURES  
THE MAXIMUM AREA TO BE DISTURBED AT ONE TIME SHALL BE KEPT UNDER FIVE (5) ACRES. A PHASING PLAN DESCRIBING THE AREAS TO BE DISTURBED SHALL BE SUBMITTED TO THE DESIGN ENGINEER AND NHDES. AN INDEPENDENT MONITORING COMPANY SHALL BE HIRED BY THE CONTRACTOR TO MONITOR ALL EROSION CONTROL DEVICES.  
AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES THE EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO COMMENCING ANY CLEARING OR GRADING OF THE SITE. STRUCTURAL CONTROLS SHALL BE INSTALLED CONCURRENTLY WITH THE APPLICABLE ACTIVITY. AREAS WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR MORE THAN TWENTY ONE (21) DAYS WILL BE STABILIZED WITH A TEMPORARY SEED AND MULCH WITHIN FOURTEEN (14) DAYS OF THE LAST DISTURBANCE. WHEN CONSTRUCTION ACTIVITY PERMANENTLY OR TEMPORARILY CEASES WITHIN 100 FEET OF ANY WETLAND OR STREAM THE AREA SHALL BE STABILIZED WITHIN 7 DAYS OR PRIOR TO A RAIN EVENT. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, SILT FENCES AND HAYBALE BARRIERS AND ANY EARTH/DIKES WILL BE REMOVED ONCE PERMANENT MEASURES ARE ESTABLISHED.  
WASTE DISPOSAL  
A. ALL WASTE MATERIALS WILL BE COLLECTED AND STORED IN SECURELY LIDDED RECEPTACLES. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN A DUMPSTER. NO CONSTRUCTION WASTE MATERIALS WILL BE BURIED ON SITE. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL BY THE SUPERINTENDENT.  
B. HAZARDOUS WASTE  
ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES BY THE SUPERINTENDENT.  
C. SANITARY WASTE  
ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONCE PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.  
SPILL PREVENTION  
A. MATERIAL MANAGEMENT PRACTICES  
THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES DURING CONSTRUCTION TO STORMWATER RUNOFF:  
1. GOOD HOUSEKEEPING:  
THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED ON SITE DURING THE CONSTRUCTION PROJECT:  
A. AN EFFORT WILL BE MADE TO STORE ONLY SUFFICIENT AMOUNTS OF PRODUCTS TO DO THE JOB.  
B. ALL MATERIALS STORED ON SITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR PROPER (ORIGINAL IF POSSIBLE) CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.  
C. MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.  
D. THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS.  
E. SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.  
F. WHENEVER POSSIBLE ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.  
2. HAZARDOUS PRODUCTS:  
THE FOLLOWING PRACTICES WILL BE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS:  
A. PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.  
B. ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED FOR IMPORTANT PRODUCT INFORMATION.  
C. SURPLUS PRODUCT MUST BE DISPOSED OF WILL BE DISCARDED ACCORDING TO THE MANUFACTURER'S RECOMMENDED METHODS OF DISPOSAL.

G. PRODUCT SPECIFICATION PRACTICES  
THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ON SITE:  
1. PETROLEUM PRODUCTS:  
ALL ON SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT BASED SUBSTANCES USED ON SITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.  
2. FERTILIZERS:  
FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS DIRECTED BY THE SPECIFICATIONS. ONCE APPLIED FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER. STORAGE WILL BE IN A COVERED SHED OR ENCLOSED TRAILERS. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEPARATE PLASTIC BIN TO AVOID SPILLS.  
3. PAINTS:  
ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE DISPOSED OF PROPERLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.  
C. SPILL CONTROL PRACTICES  
IN ADDITION TO GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTION THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:  
1. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.  
2. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ON SITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUSTPANS, WOPPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAMUDIST AND PLASTIC OR METAL TRAYS SPECIALLY FOR THIS PURPOSE.  
3. ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.  
4. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PROTECT FROM CONTACT WITH A HAZARDOUS SUBSTANCE.  
5. SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE.  
6. THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM RECURRING AND TO CLEANUP THE SPILL. IT REQUIRES A DESCRIPTION OF THE SPILL, ITS CAUSE, AND THE CLEANUP MEASURES WILL BE INCLUDED.  
7. THE SITE SUPERINTENDENT RESPONSIBLE FOR DAY-TO-DAY SITE OPERATIONS WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR.  
D. VEHICLE FUELING AND MAINTENANCE PRACTICE:  
1. EFFORTS SHOULD BE MADE TO PERFORM EQUIPMENT/VEHICLE FUELING AND MAINTENANCE AT AN OFF-SITE FACILITY.  
2. CONTRACTOR SHALL PROVIDE AN ON-SITE FUELING AND MAINTENANCE AREA THAT IS CLEAN AND DRY.  
3. IF POSSIBLE KEEP AREA COVERED.  
4. KEEP A SPILL KIT AT THE FUELING AND MAINTENANCE AREA.  
5. VEHICLES SHALL BE INSPECTED REGULARLY FOR LEAKS AND DAMAGE.  
6. USE DRIP PANS, DRIP CLOTHS, OR ABSORBENT PADS WHEN REPLACING SPENT FLUID.  
DUST CONTROL:  
THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST THROUGHOUT THE CONSTRUCTION PERIOD. DUST CONTROL METHODS SHALL INCLUDE, BUT BE NOT LIMITED TO SPRINKLING WATER ON EXPOSED AREAS, COVERING LOADED DUMP TRUCKS LEAVING THE SITE, AND TEMPORARY MULCHING. DUST CONTROL MEASURES SHALL BE UTILIZED SO AS TO PREVENT THE MIGRATION OF DUST FROM THE SITE TO ADJUTING AREAS.  
CONCRETE WASHOUT AREA:  
1. THE CONCRETE CONTRACTOR SHOULD BE ENCOURAGED WHERE POSSIBLE, TO USE WASHOUT FACILITIES AT THEIR OWN PLANT OR DISPATCH FACILITY.  
2. IF IT IS NECESSARY, SITE CONTRACTOR SHALL DESIGNATE SPECIFIC WASHOUT AREAS AND DESIGN FACILITIES TO HANDLE ANTICIPATED WASHOUT WATER.  
3. WASHOUT AREAS SHOULD ALSO BE PROVIDED FOR PAINT AND STUCCO OPERATIONS.  
4. ATTEMPTS SHOULD BE MADE TO LOCATE WASHOUT AREA A LEAST 50 YARDS AWAY FROM STORM DRAINS AND WATERWAYS WHENEVER POSSIBLE.  
5. INSPECT WASHOUT FACILITIES DAILY TO DETECT LEAKS OR TEARS AND TO IDENTIFY WHEN MATERIALS NEED TO BE REMOVED.  
ALLOWABLE NON-STORMWATER DISCHARGES:  
1. DISCHARGES FROM FIRE-FIGHTING ACTIVITIES  
2. FIRE HYDRANT FLUSHINGS  
3. WATERS USED TO WASH VEHICLES WHERE DETERGENTS ARE NOT USED  
4. WATER USED TO CONTROL DUST  
5. POTABLE WATER INC. UNCONTAMINATED WATER LINE FLUSHINGS  
6. ROUTINE EXTERNAL BUILDING WASH DOWN -NO DETERGENTS  
7. PAVEMENT WASH WATERS -NO SPILLS OR DETERGENTS  
8. UNCONTAMINATED AIR CONDITIONING/COMPRESSOR CONDENSATE  
9. UNCONTAMINATED GROUND WATER OR SPRING WATER  
10. FOUNDATION OR FOOTING DRAINS -NOT CONTAMINATED  
11. UNCONTAMINATED EXCAVATION Dewatering  
12. LANDSCAPE IRRIGATION



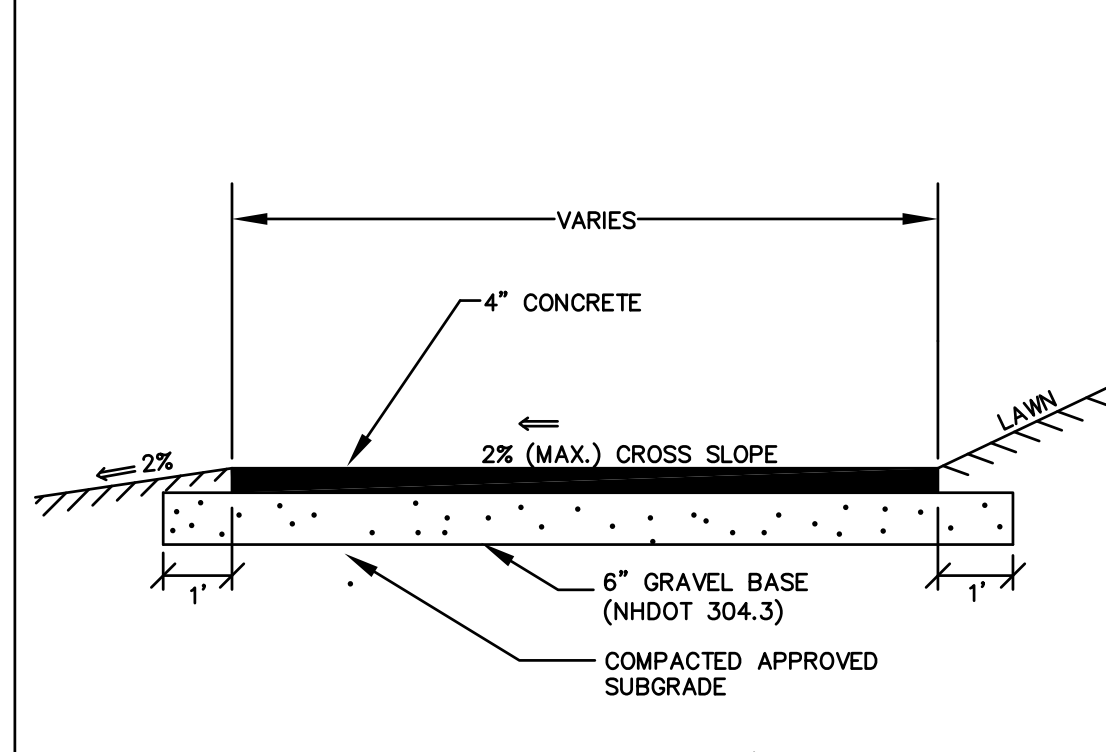
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1 08/20/2014 PLANNING BOARD SUBMISSION	
Mark	Date Description
PROJECT NO:	O-01500
FILE:	2401501_DETAILS.dwg
DRAWN BY:	SLK1
CHECKED BY:	BLM
APPROVED BY:	BLM
EROSION CONTROL NOTES AND DETAILS SHEET	
SCALE:	AS SHOWN
SHEET 6	

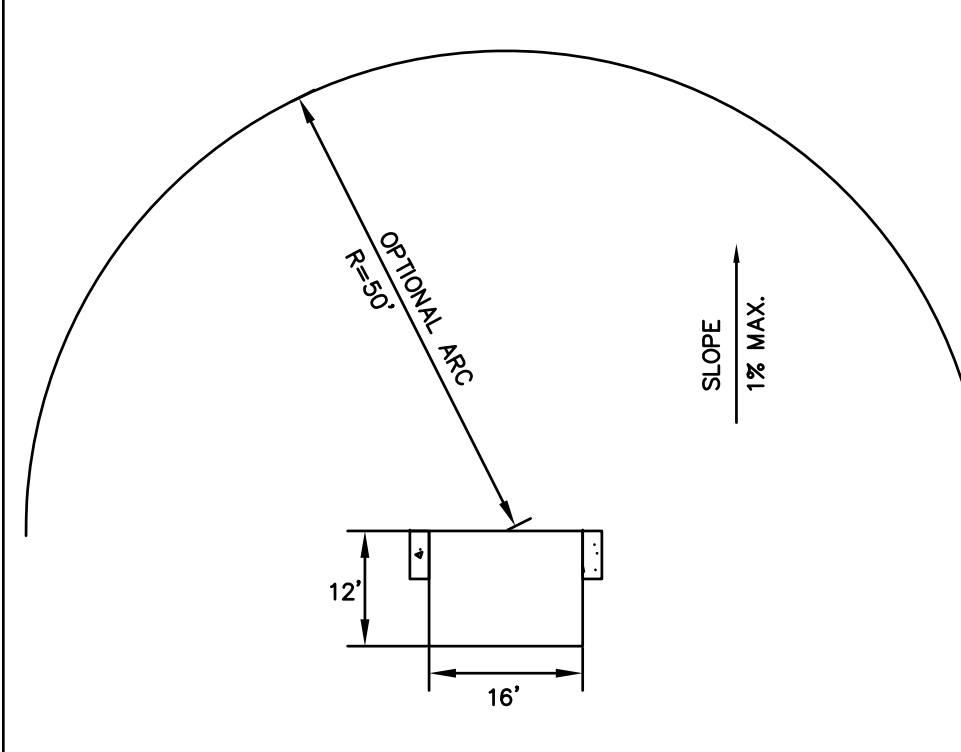


**NOTE:**  
 1. SEE EROSION CONTROL NOTES FOR MATERIAL, INSTALLATION, AND MAINTENANCE REQUIREMENTS.

**STABILIZED CONSTRUCTION ENTRANCE**  
 NOT TO SCALE

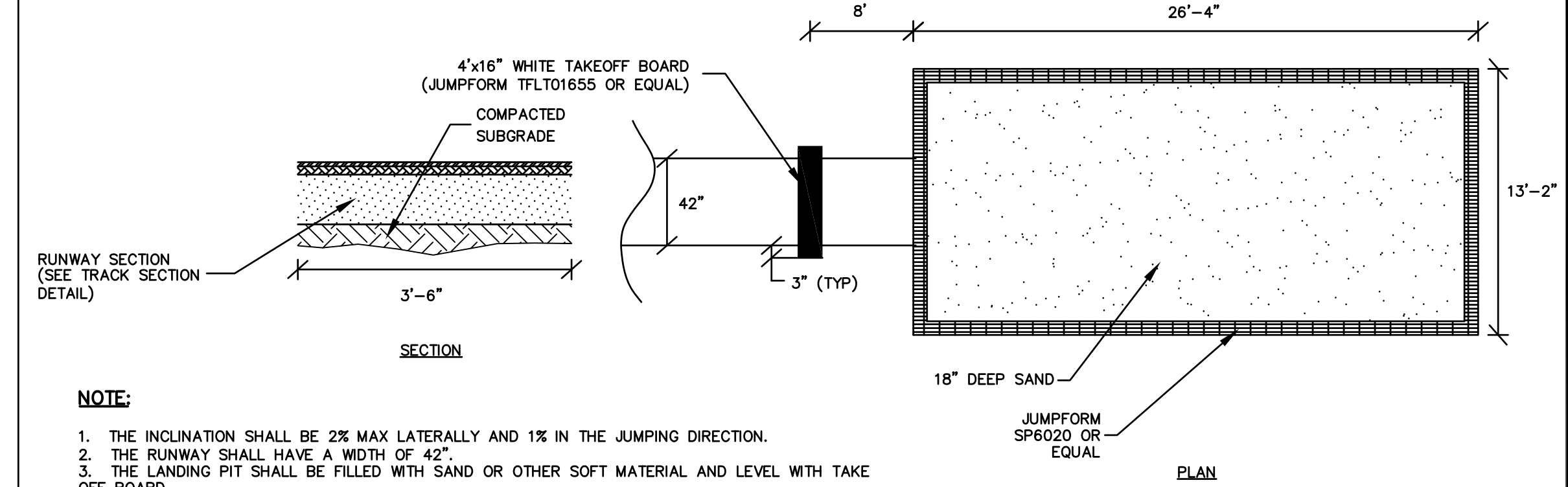


**CONCRETE SHOT PUT/DISCUS PAD**  
 NOT TO SCALE



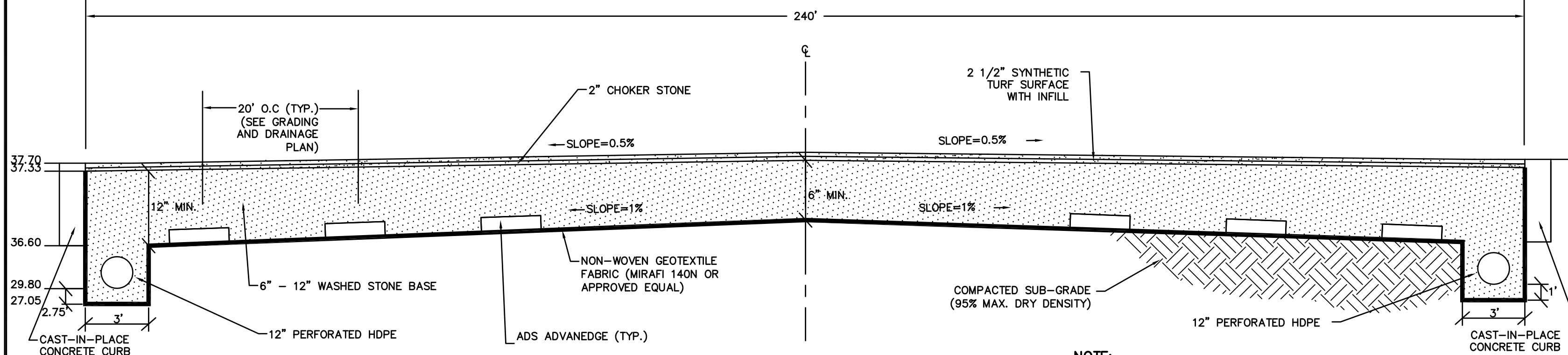
**NOTE:**  
 1. THE INCLINATION OF THE HIGH JUMP APPROACH SHALL BE 1% OR LESS (SEE GRADING PLAN).  
 2. SEE TRACK SECTION FOR HIGH JUMP AREA CROSS-SECTION.

**HIGH JUMP**  
 NOT TO SCALE



**NOTE:**  
 1. THE INCLINATION SHALL BE 2% MAX LATERALLY AND 1% IN THE JUMPING DIRECTION.  
 2. THE RUNWAY SHALL HAVE A WIDTH OF 42\"/>

**LONG/TRIPLE JUMP LANDING PIT AND RUNWAY**  
 NOT TO SCALE

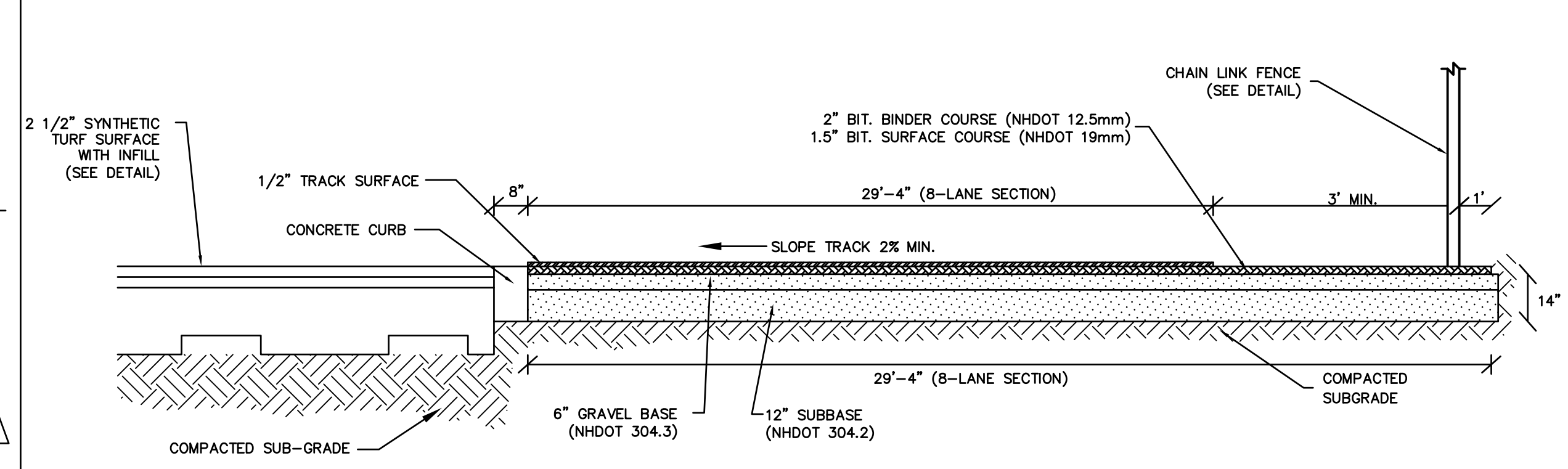


3/4\"/>		
SIEVE	MINIMUM	MAXIMUM
1"	100	—
3/4"	90	100
1/2"	10	50
3/8"	0	20
No. 4	0	5

CHOKER STONE (AASHTO #9)		
SIEVE	MINIMUM	MAXIMUM
1/2"	100	—
3/8"	85	100
No. 4	10	30
No. 8	—	10
No. 16	—	<2

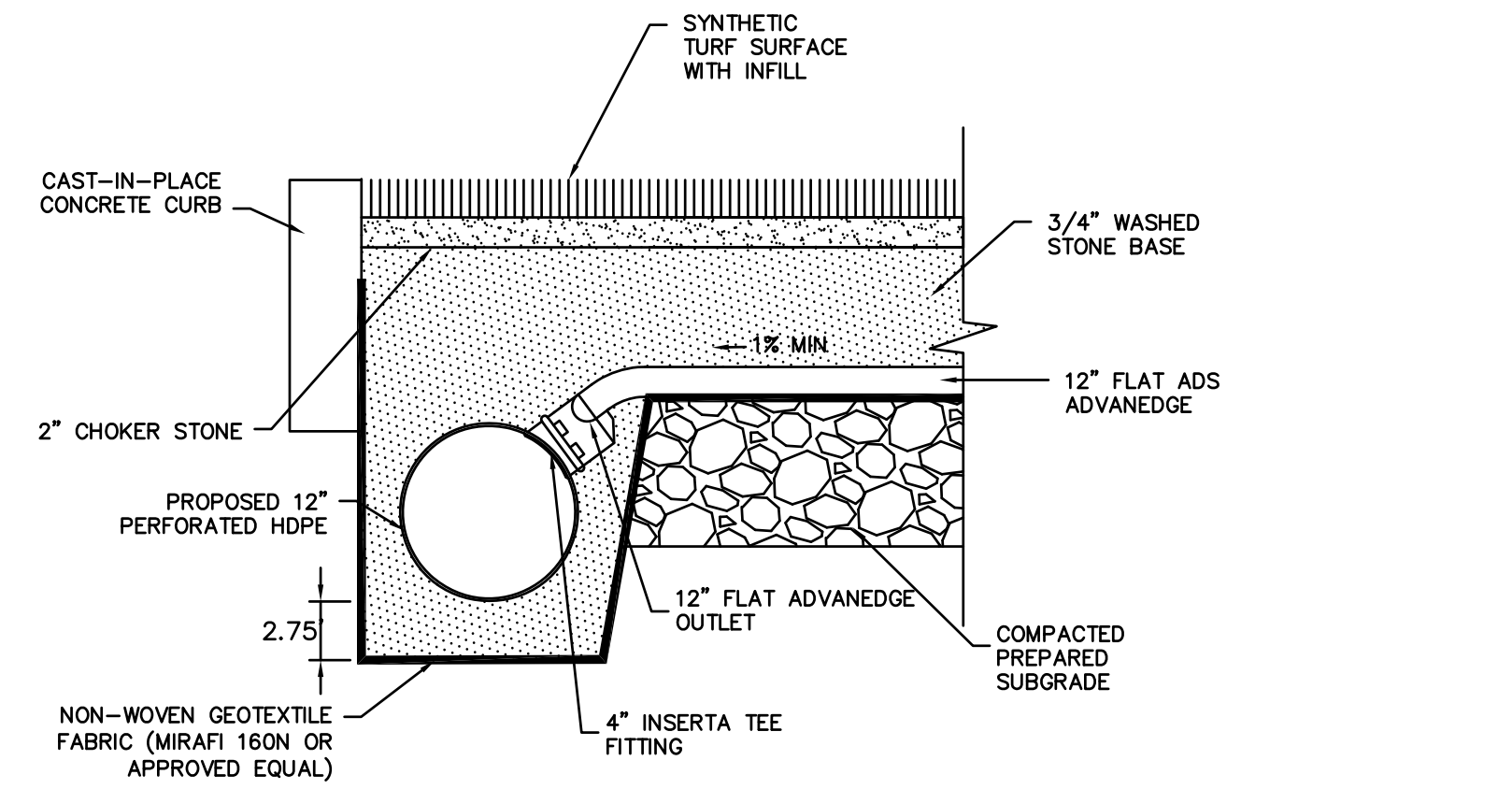
**NOTE:**  
 1. SYNTHETIC TURF SURFACES SHALL BE:  
 \* NE FIELDTURF - VERTEX  
 \* SHAW SPORTS TURF - LEGION  
 \* SPRINTURF - ULTRABLADE DF ELITE  
 OR APPROVED EQUAL.  
 2. ALL TURF PRODUCTS SHALL BE A COMBINATION MONOFILAMENT AND SLIT FILM CARPET AND HAVE AN INSTALLED G-MAX RATING OF 100-140 AND BE SUITABLE FOR SOCCER, FIELD HOCKEY, AND LACROSSE.

**FIELD CROSS SECTION**  
 NOT TO SCALE

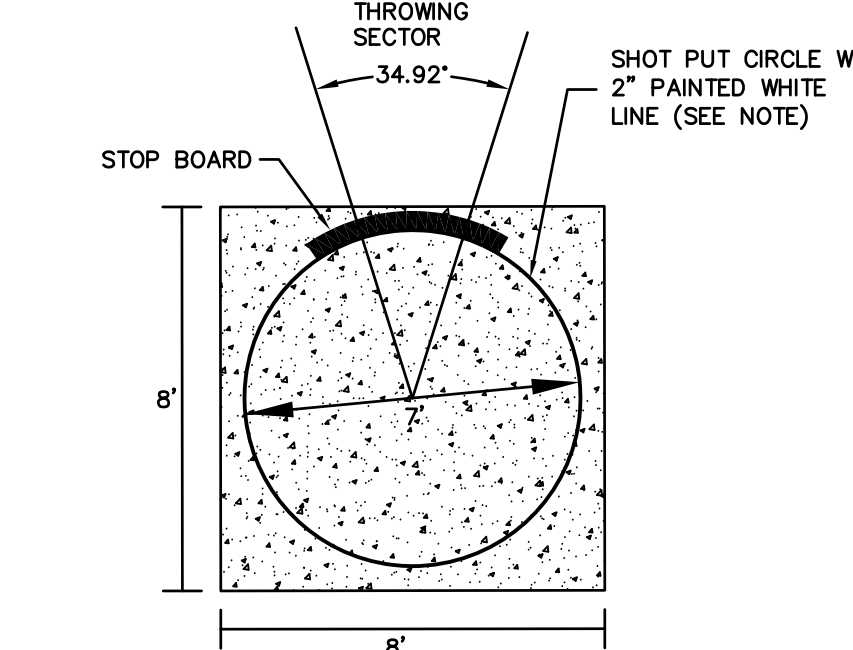


**NOTE:**  
 1. SURFACE SHALL BE PLEXITRAC ACCELERATOR OR BSS-100 POLYURETHANE (RED).  
 2. ATHLETIC TRACK INSTALLER TO PROVIDE SPECIFIC MATERIAL CERTIFICATIONS, WARRANTIES, LANE MARKINGS ETC. PRIOR TO CONSTRUCTION.  
 3. EXISTING SUBGRADE TO BE VERIFIED BY CONTRACTOR IN FIELD AND APPROVED BY GEOTECHNICAL ENGINEER.

**TRACK SECTION**  
 NOT TO SCALE

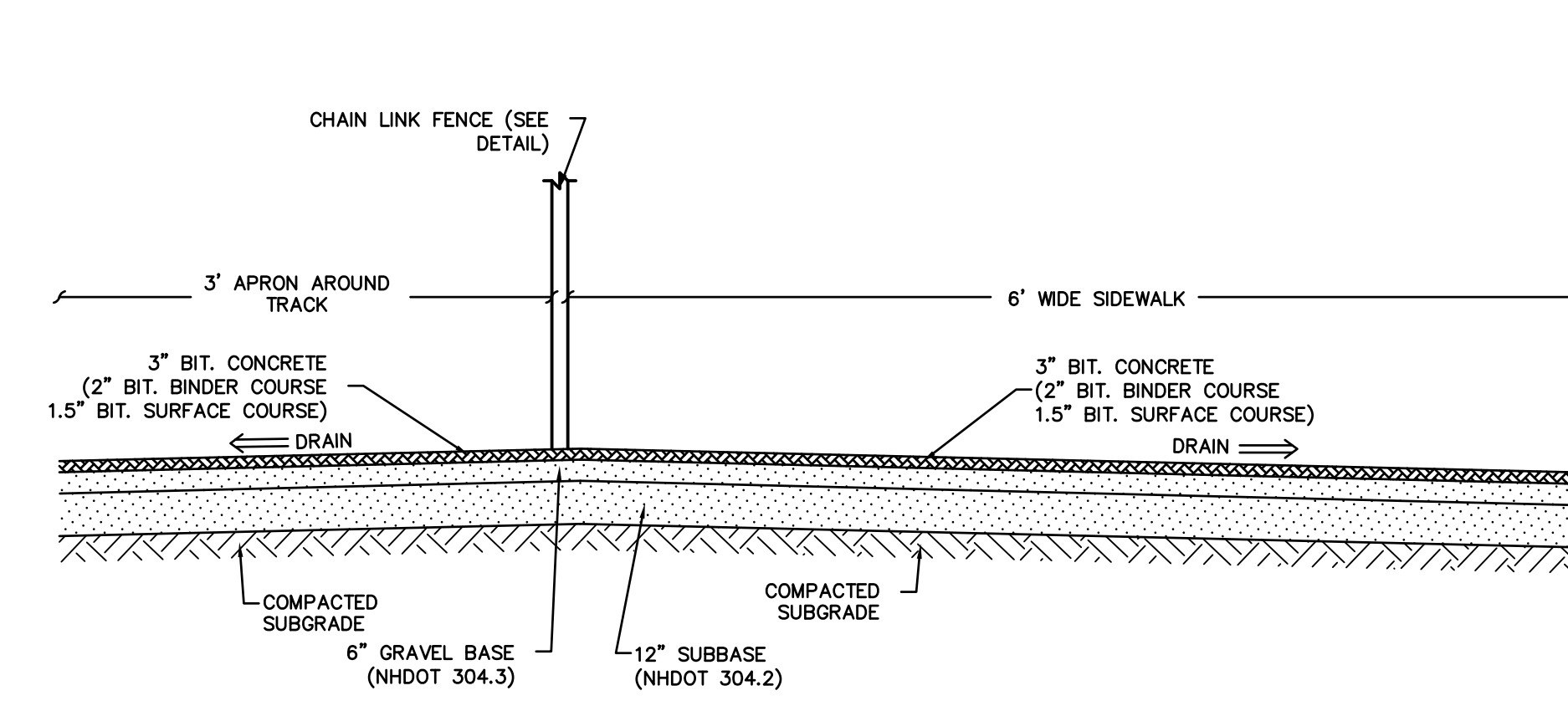


**FIELD TRENCH DETAIL**  
 NOT TO SCALE

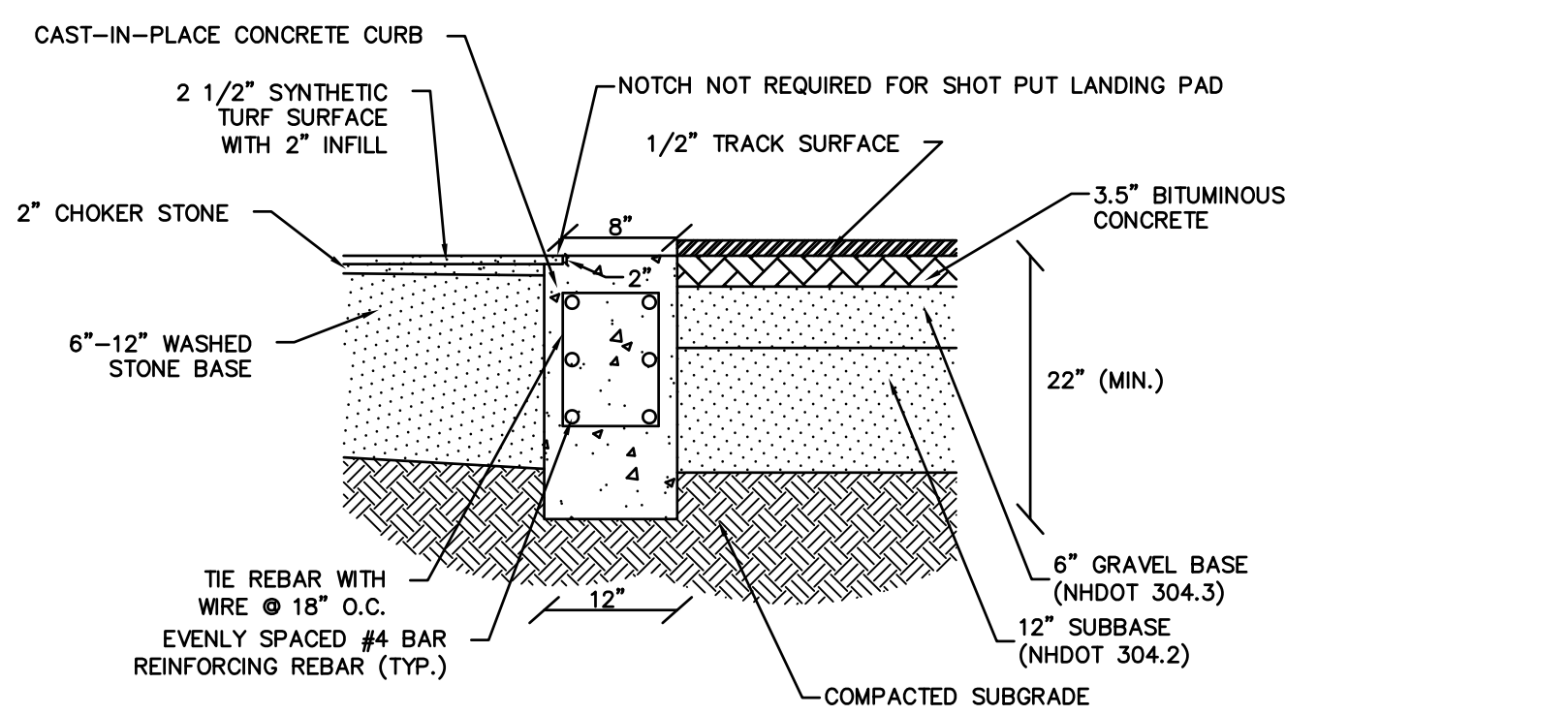


**NOTE:**  
 1. SHOT PUT CIRCLE SHALL BE CONCRETE AND HAVE A DIAMETER OF 7 FEET.  
 2. THE STOP BOARD SHALL BE 4\"/>

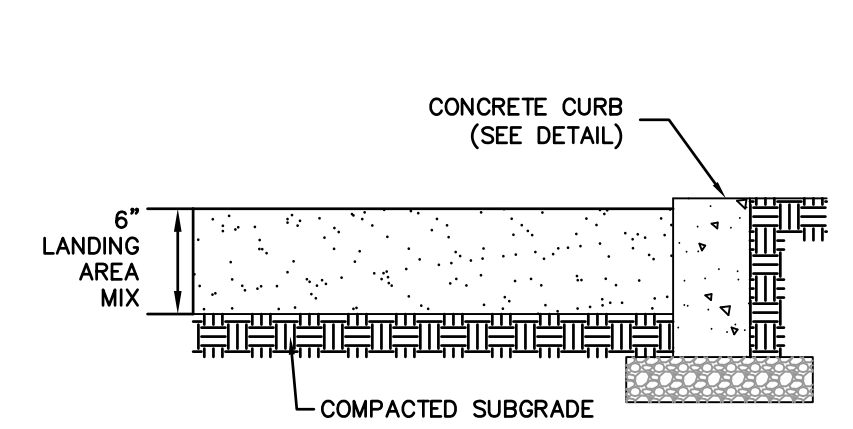
**SHOT PUT**  
 NOT TO SCALE



**BITUMINOUS CONCRETE APRON AND SIDEWALK**  
 NOT TO SCALE



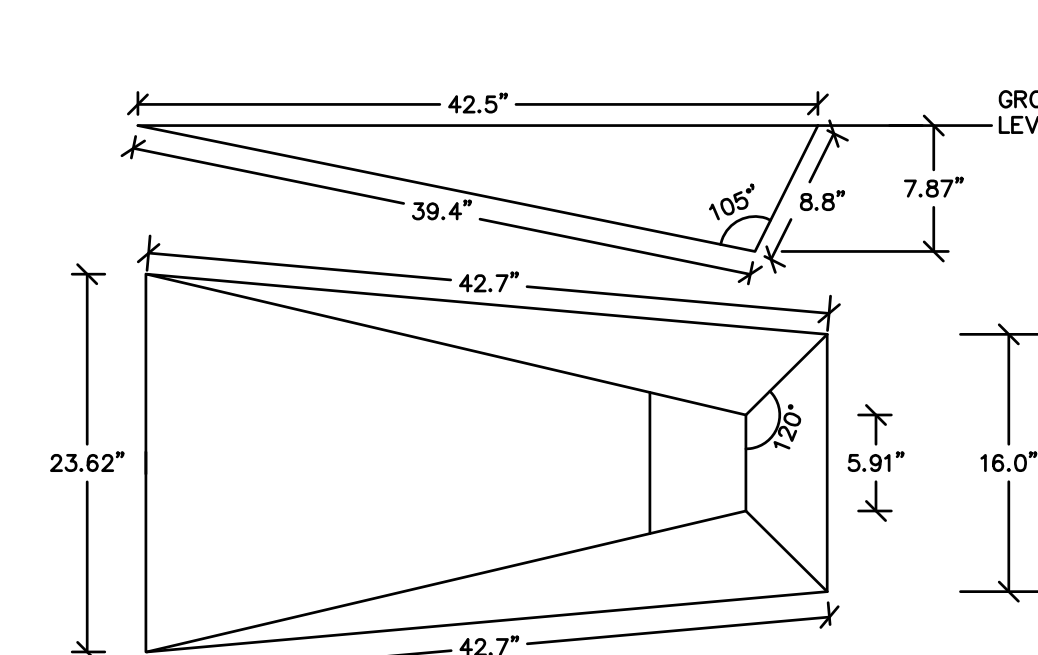
**CONCRETE CURB**  
 NOT TO SCALE



**NOTE:**  
 1. LANDING AREA MIX SHALL NOT CONTAIN ANY STONES GREATER THAN 1/4\"/>

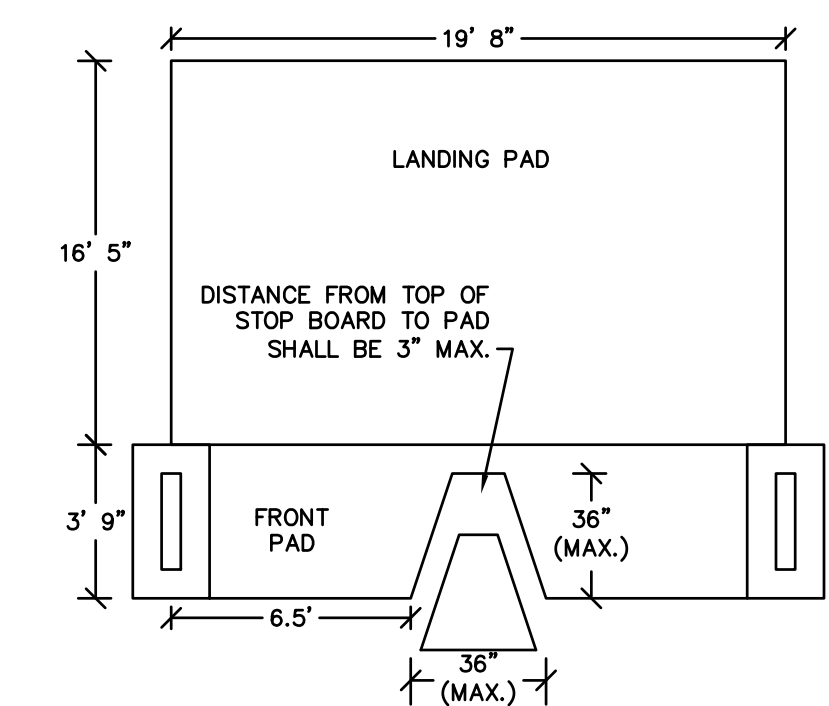
**LANDING AREA MIX:**  
 USE THE SAME INFILL MIX AS USED ON THE SOFTBALL FIELD AND BASEBALL FIELD.

**SHOT PUT LANDING AREA**  
 NOT TO SCALE



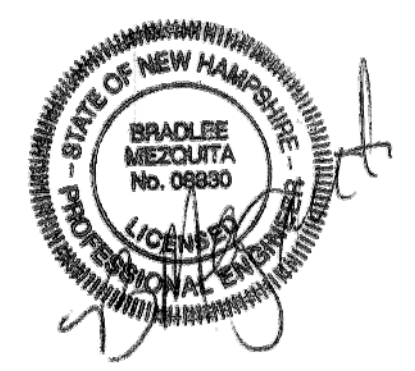
**NOTE:**  
 1. VAULT BOX SHALL BE SPORTSFIELD SPECIALTIES TFPV001CA CAST ALUMINUM POLE VAULT BOX OR APPROVED EQUAL.  
 2. VAULT BOX COVER SHALL SPORTSFIELD SPECIALTIES TFPV003ALTR-CA COVER/PLUG FOR CAST ALUMINUM POLE VAULT BOX OR APPROVED EQUAL.

**POLE VAULT PLANTING PIT**  
 NOT TO SCALE



**NOTE:**  
 1. INCLINATION SHALL BE LIMITED TO 2% LATERALLY AND 1% IN THE RUNNING DIRECTION.  
 2. THE RUNWAY SHALL BE MINIMUM 130 FEET LONG AND 48\"/>

**POLE VAULT LANDING PAD**  
 NOT TO SCALE



**Oyster River High School**

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 Durham, NH

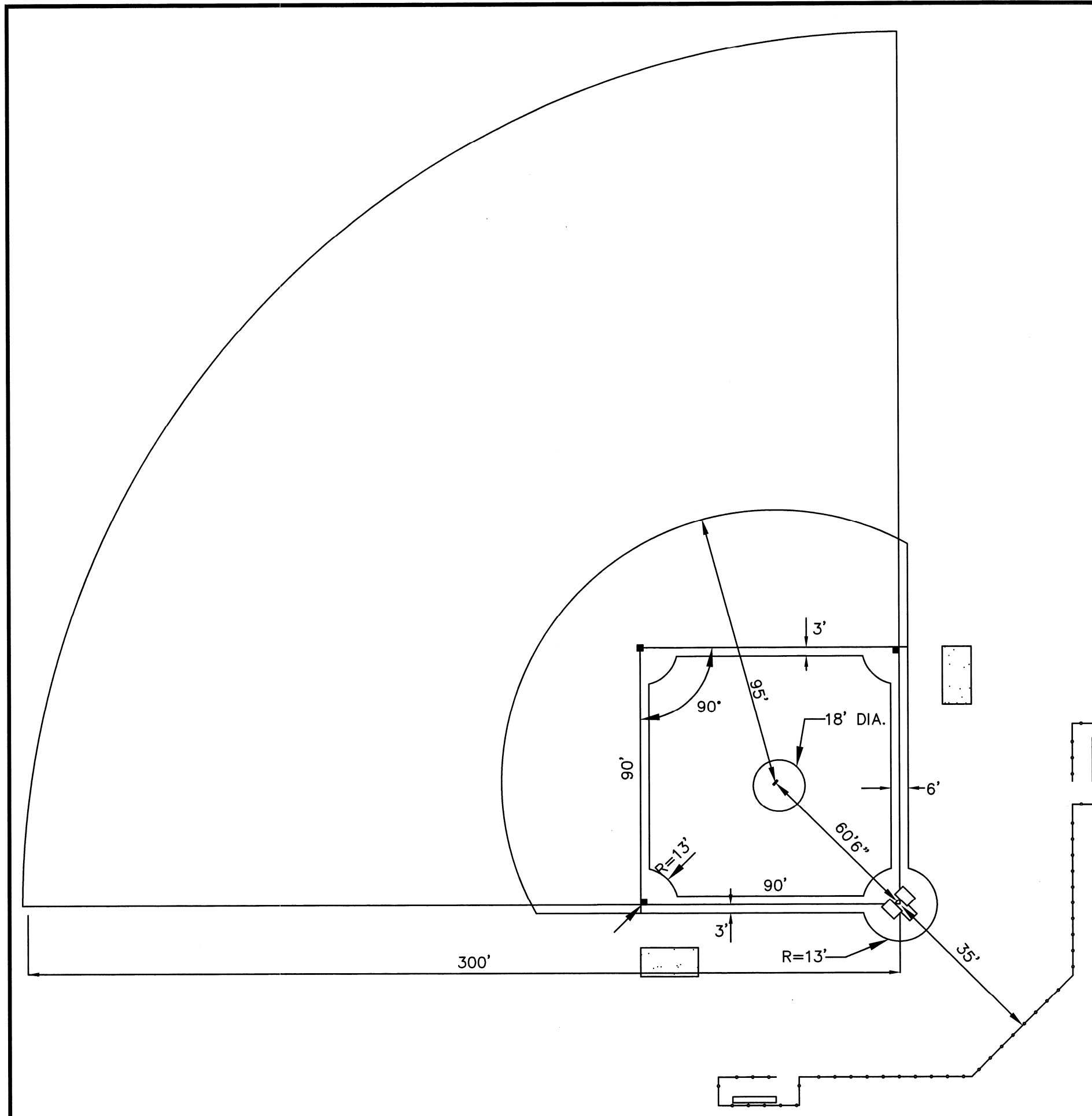
Mark	Date	Description
1	08/20/2014	PLANNING BOARD SUBMISSION

PROJECT NO: O-01500  
 FILE: 2401501\_DETAILS.dwg  
 DRAWN BY: SLK1  
 CHECKED: BLM  
 APPROVED BY: BLM

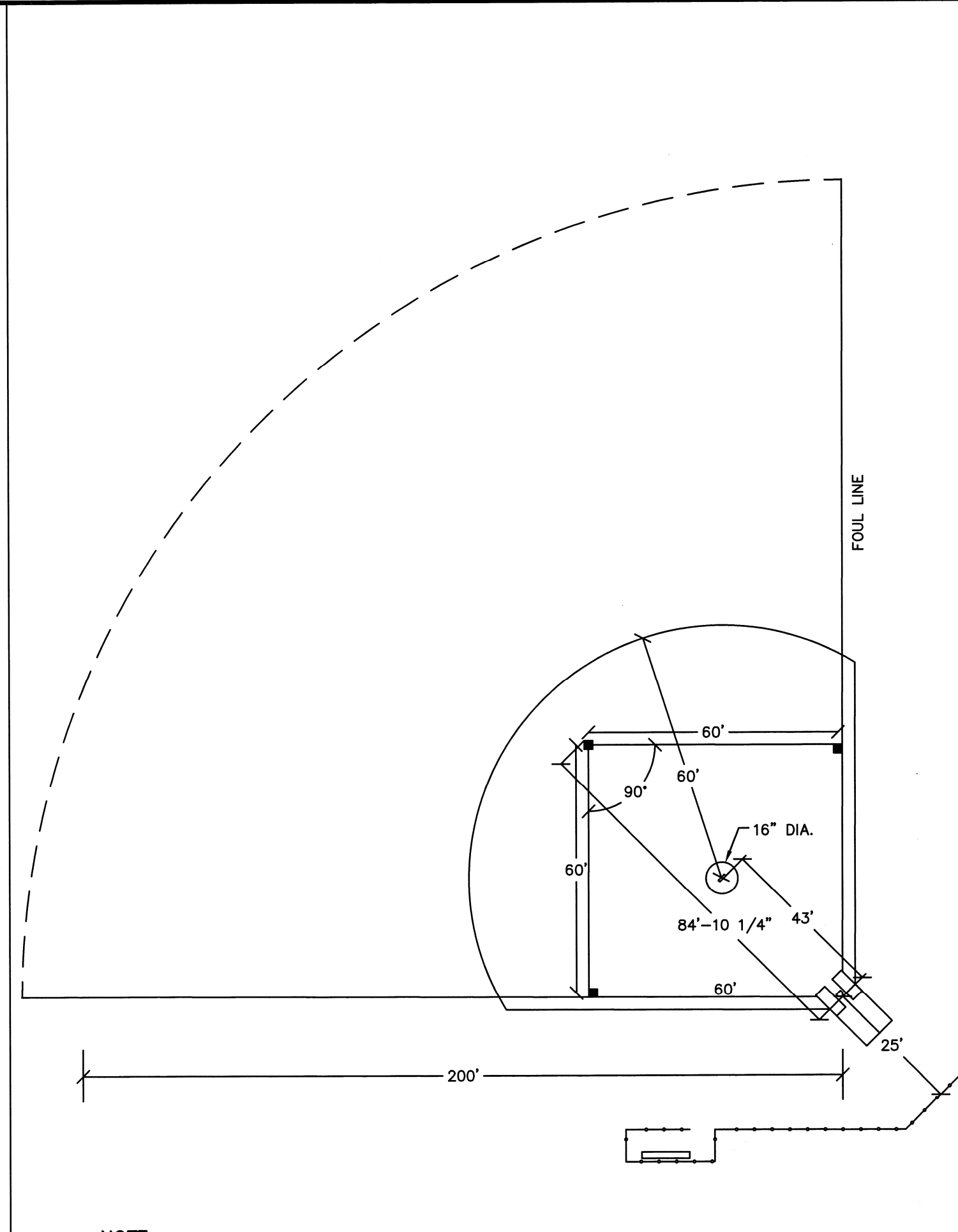
DETAILS SHEET

SCALE: AS SHOWN

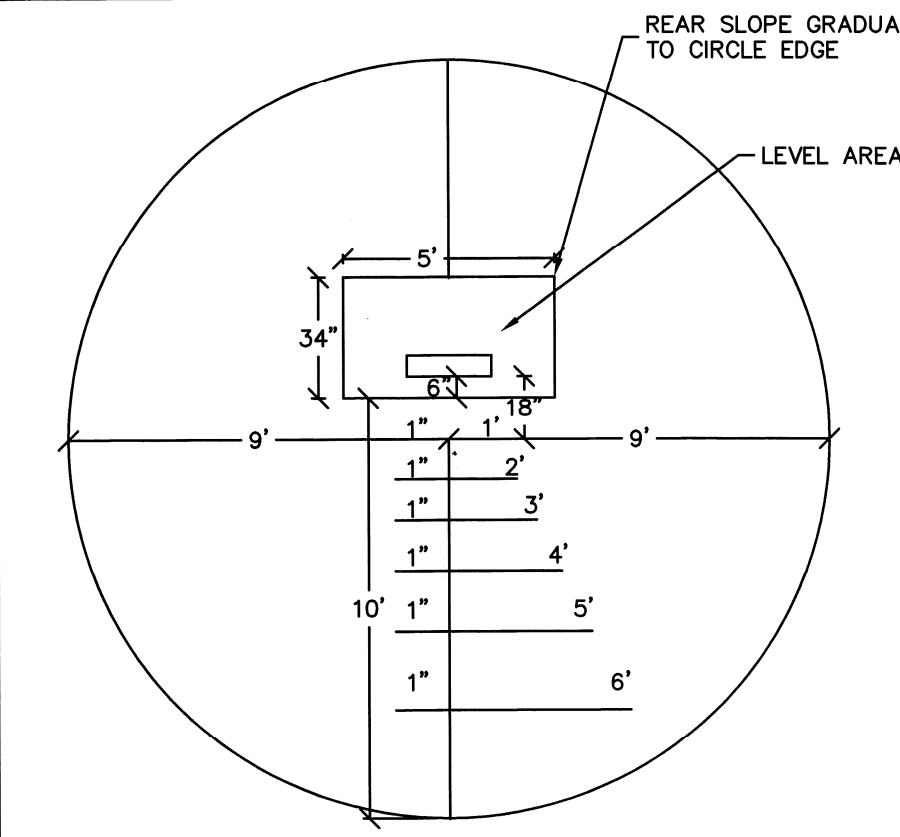
SHEET 7



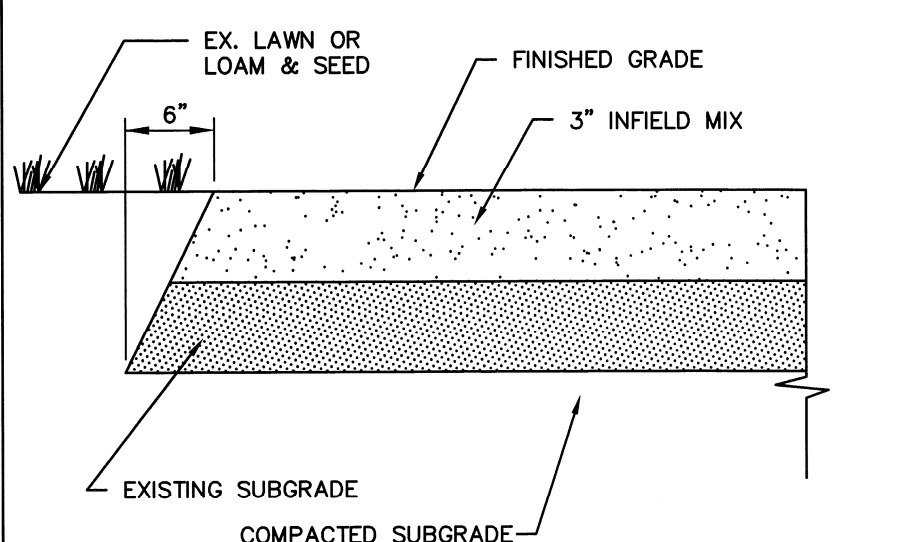
**BASEBALL FIELD**  
NOT TO SCALE



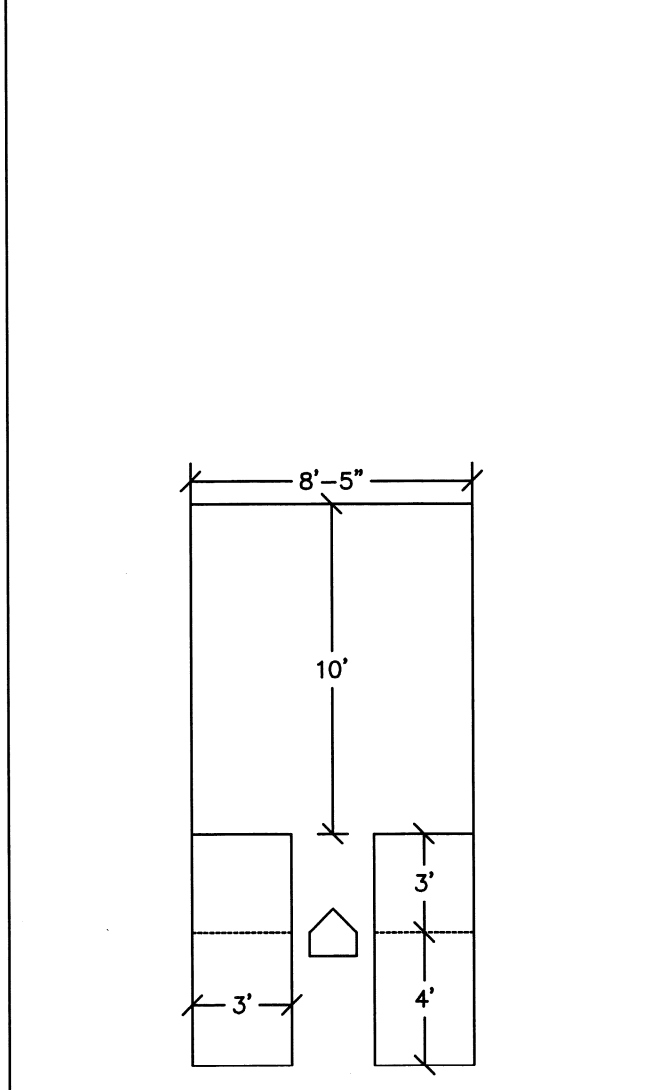
**SOFTBALL FIELD**  
NOT TO SCALE



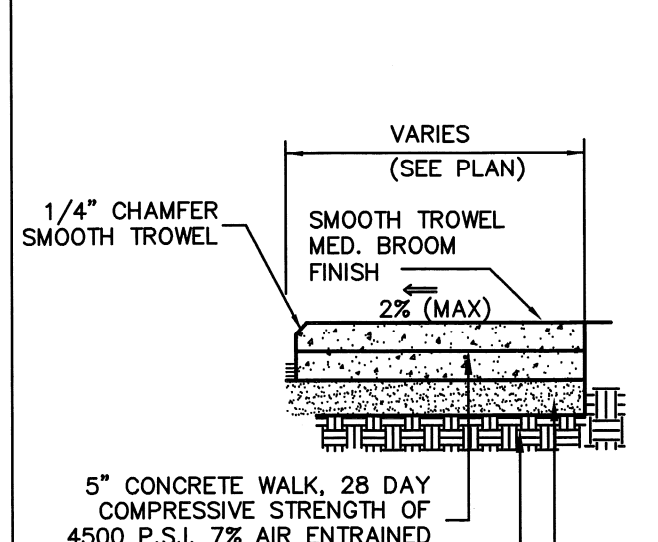
**BASEBALL PITCHER'S MOUND**  
NOT TO SCALE



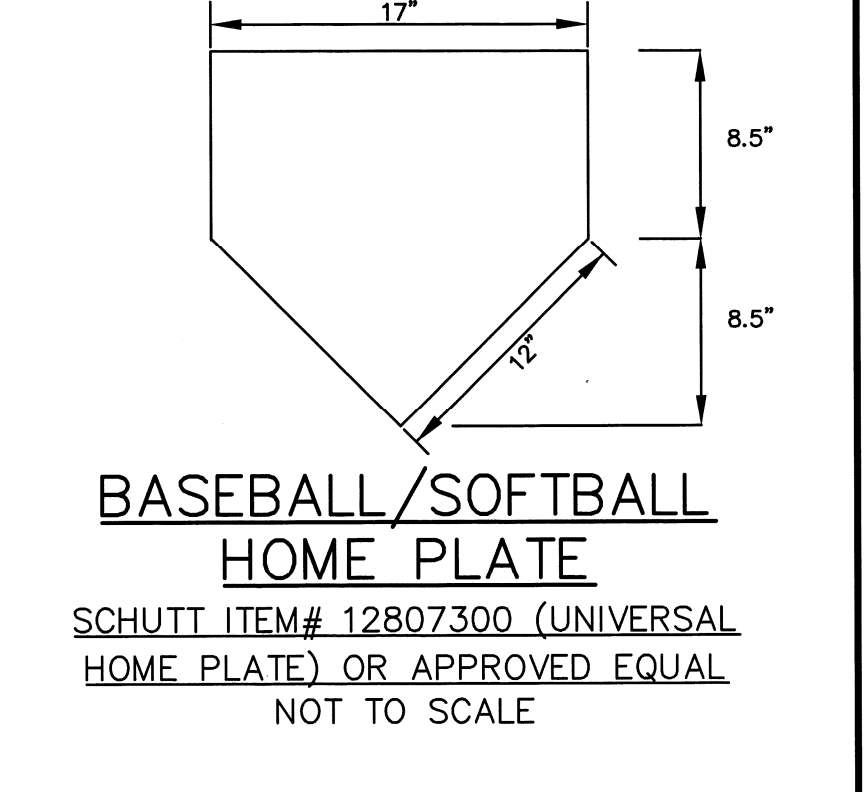
**INFIELD MIX**  
NOT TO SCALE



**BASEBALL/SOFTBALL CATCHER'S BOX AND BATTER'S BOXES**  
NOT TO SCALE



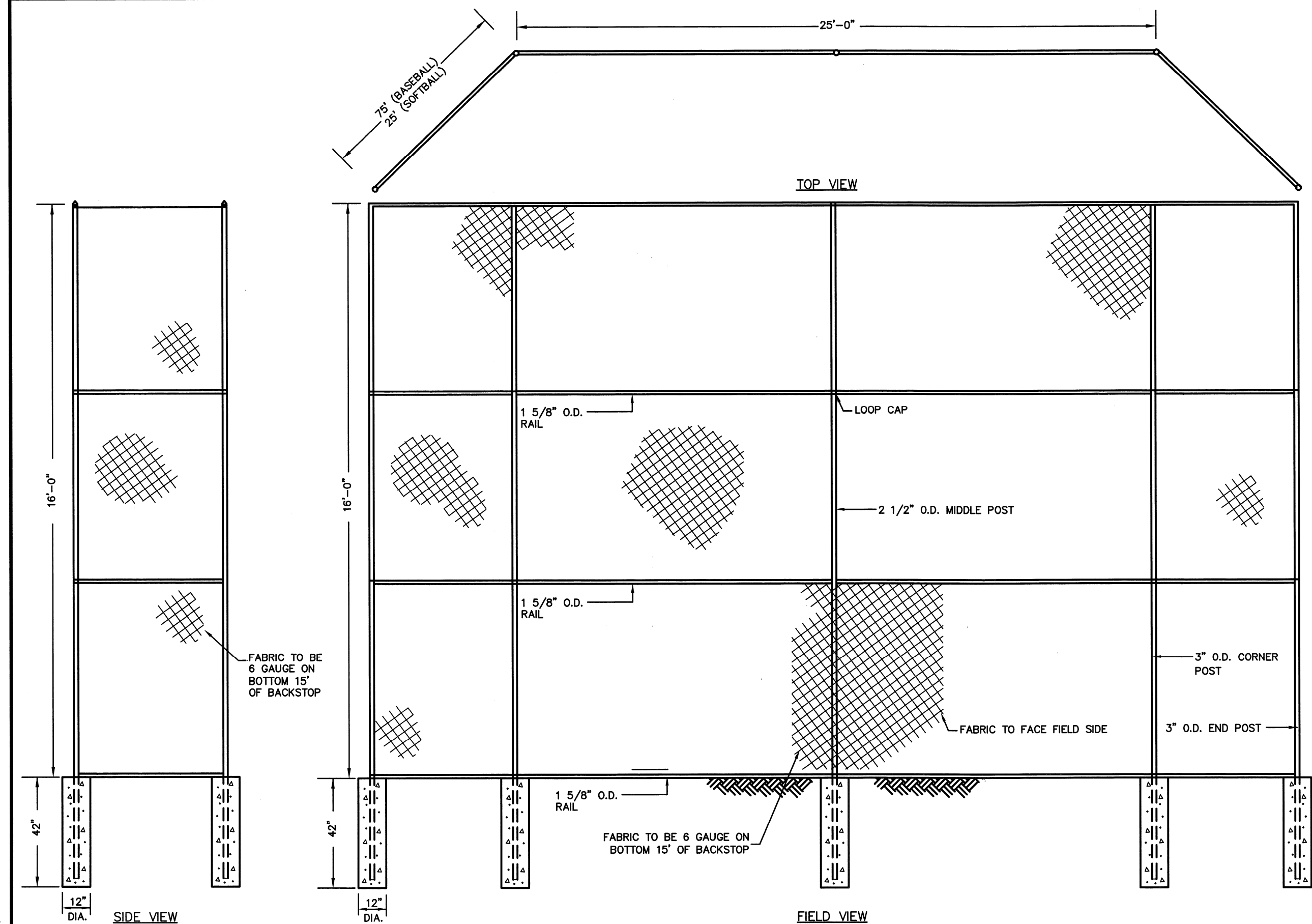
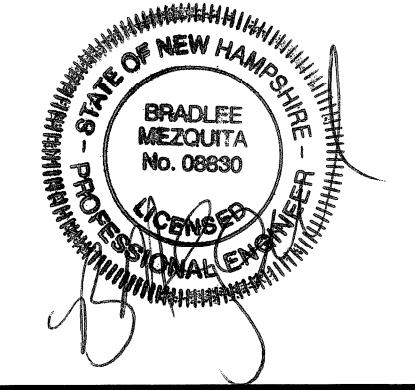
**DUGOUT PAD**  
NOT TO SCALE



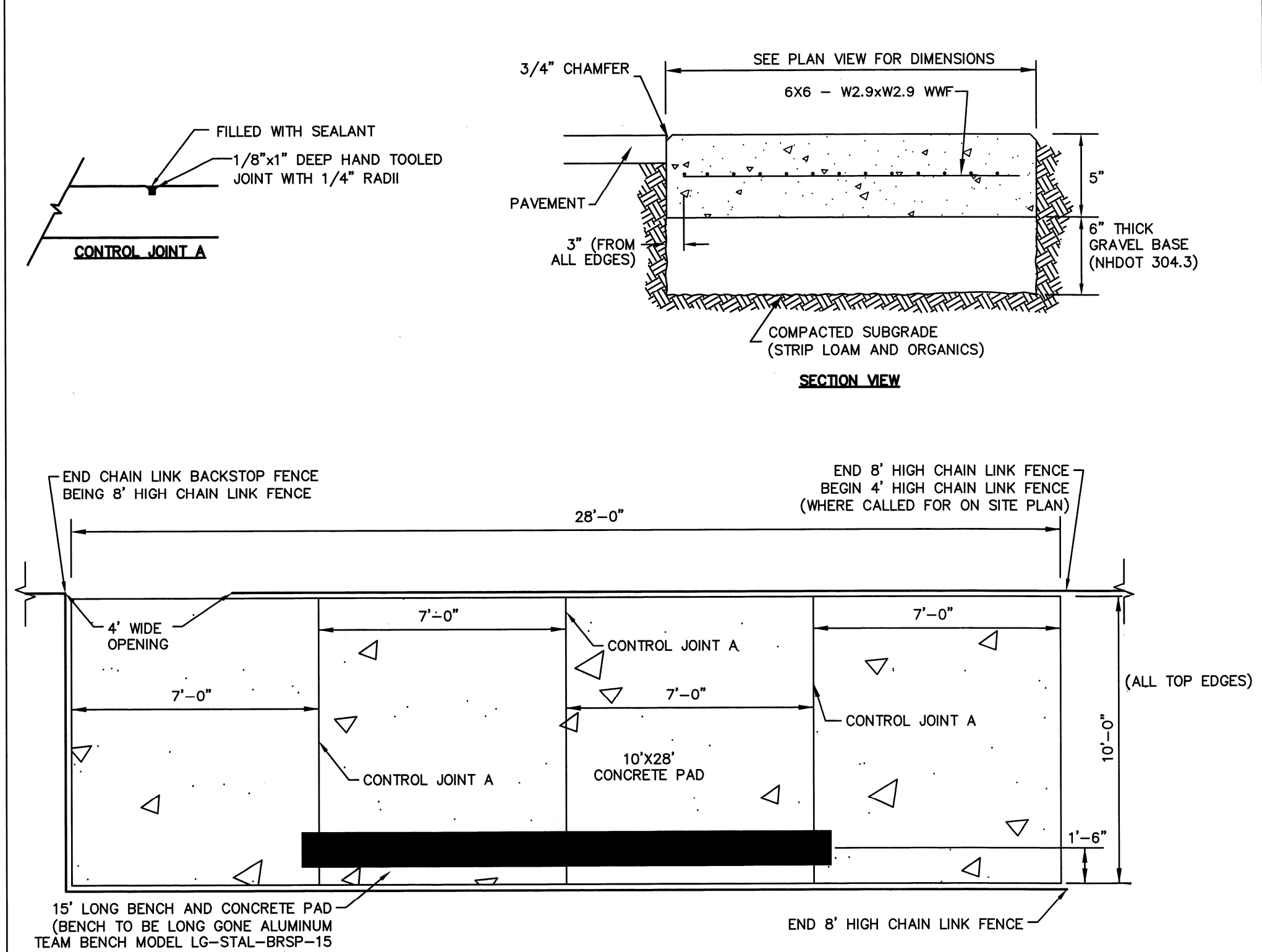
**BASEBALL/SOFTBALL HOME PLATE**  
SCHUTT ITEM# 12807300 (UNIVERSAL HOME PLATE) OR APPROVED EQUAL  
NOT TO SCALE



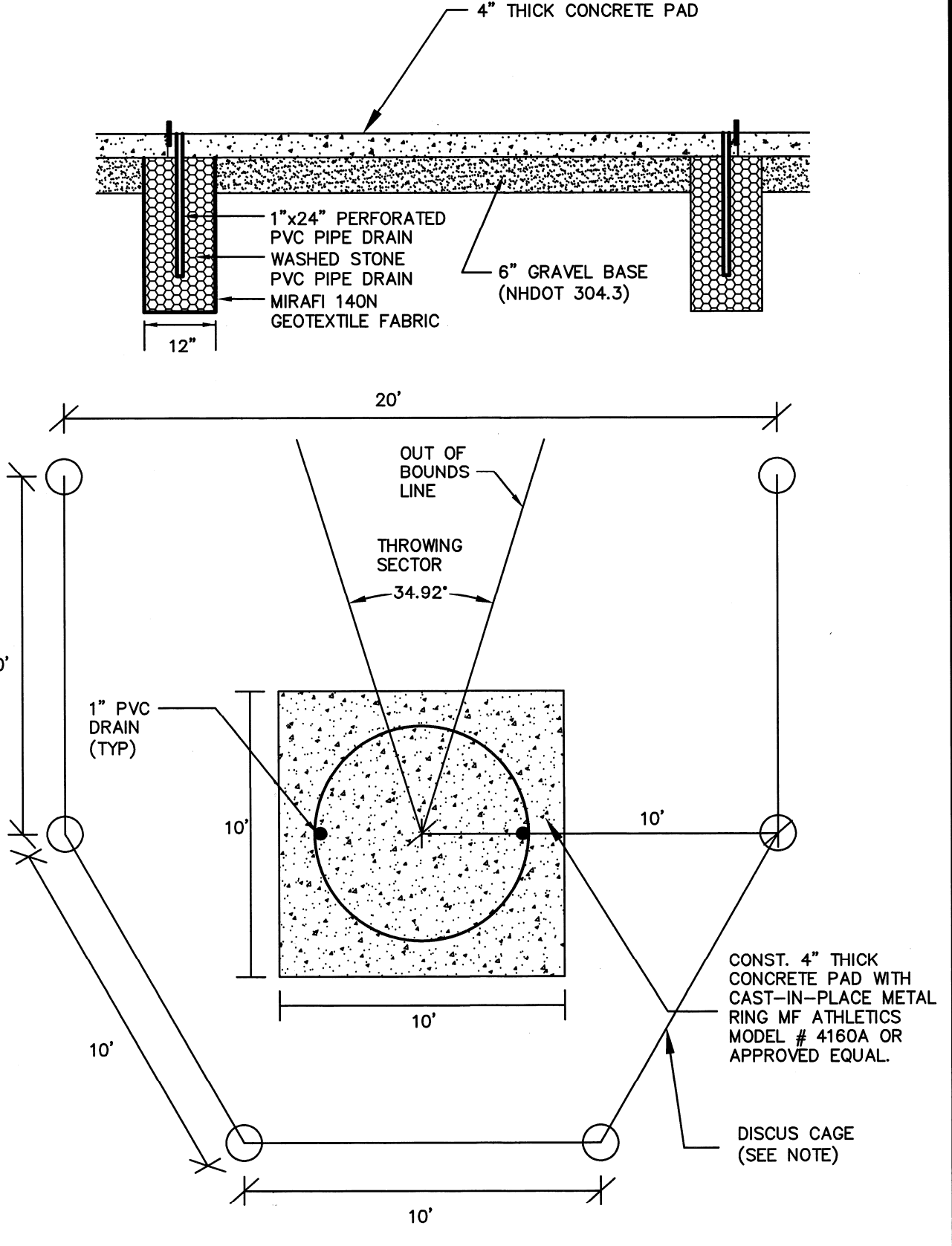
**BASEBALL/SOFTBALL PITCHER'S PLATE**  
SCHUTT ITEM#12909180 (PRO PITCHING RUBBER) OR APPROVED EQUAL  
NOT TO SCALE



**CHAIN LINK FENCE BACKSTOP**  
NOT TO SCALE



**SOFTBALL DUGOUT**  
NOT TO SCALE



**DISCUS**  
NOT TO SCALE

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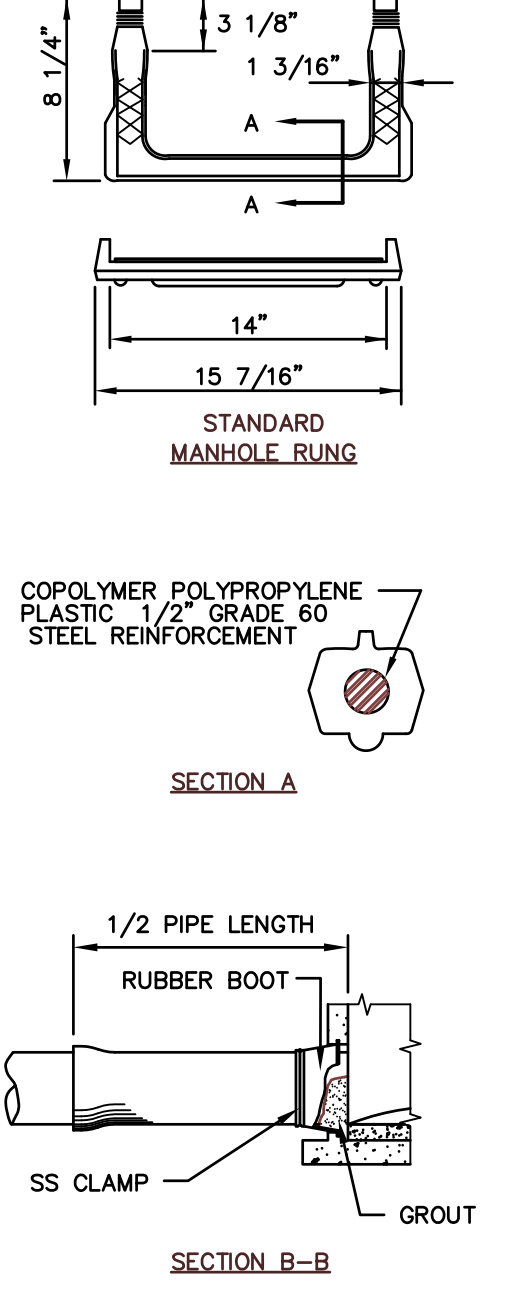
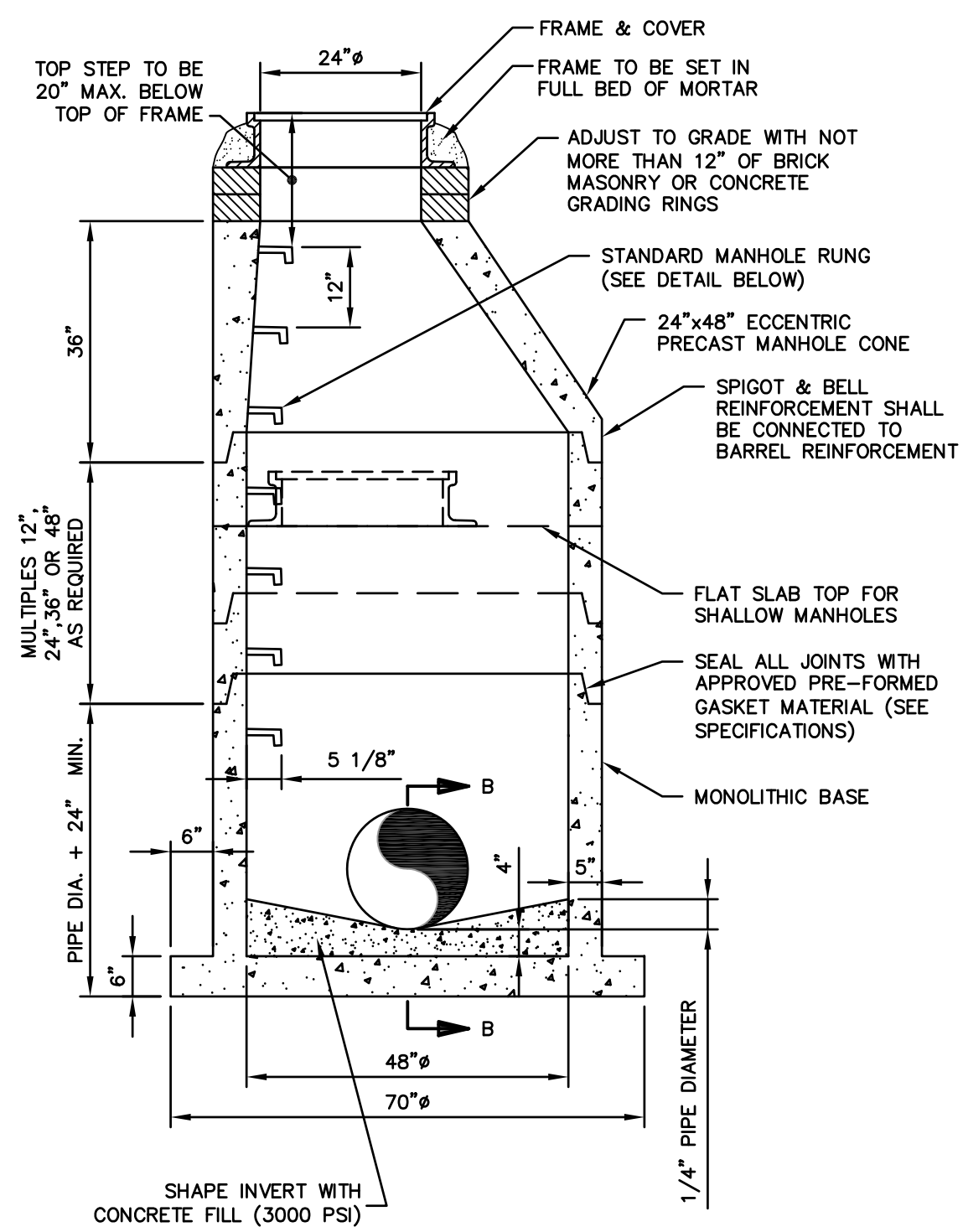
36 Coe Drive  
Durham, NH

Mark	Date	Description
1	08/20/2014	PLANNING BOARD SUBMISSION

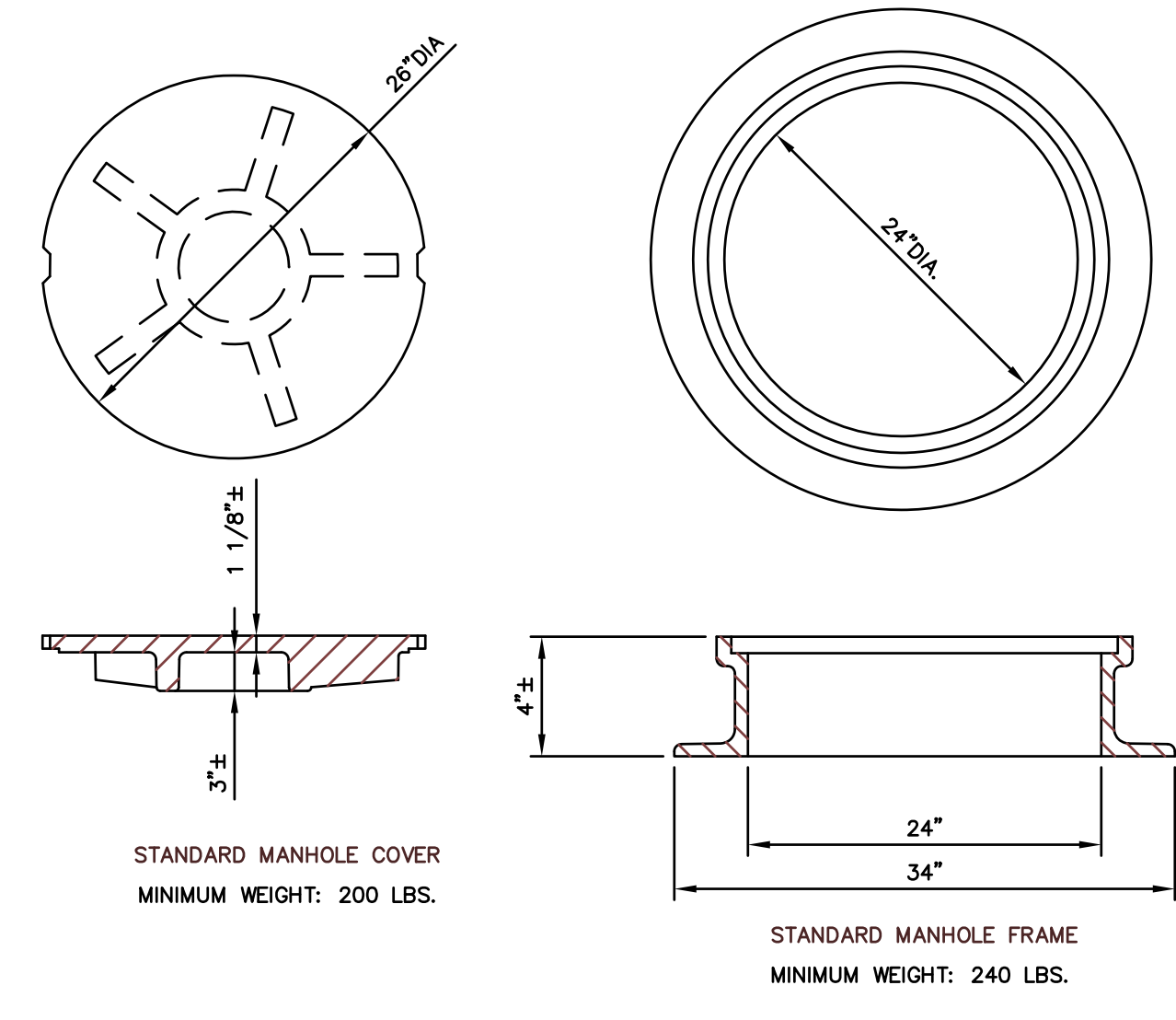
PROJECT NO: O-01500  
 FILE: 2401501\_DETAILS.dwg  
 DRAWN BY: SLK1  
 CHECKED: BLM  
 APPROVED BY: BLM

SCALE: AS SHOWN  
 SHEET 8

FILENAME: J:\010050\_08830\_TRACK & ATHLETIC TURF REPAIR\DWG-CAD\DESIGN\2401501\_DETAILS.DWG  
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 PLOT DATE: 8/18/2014 4:32 PM

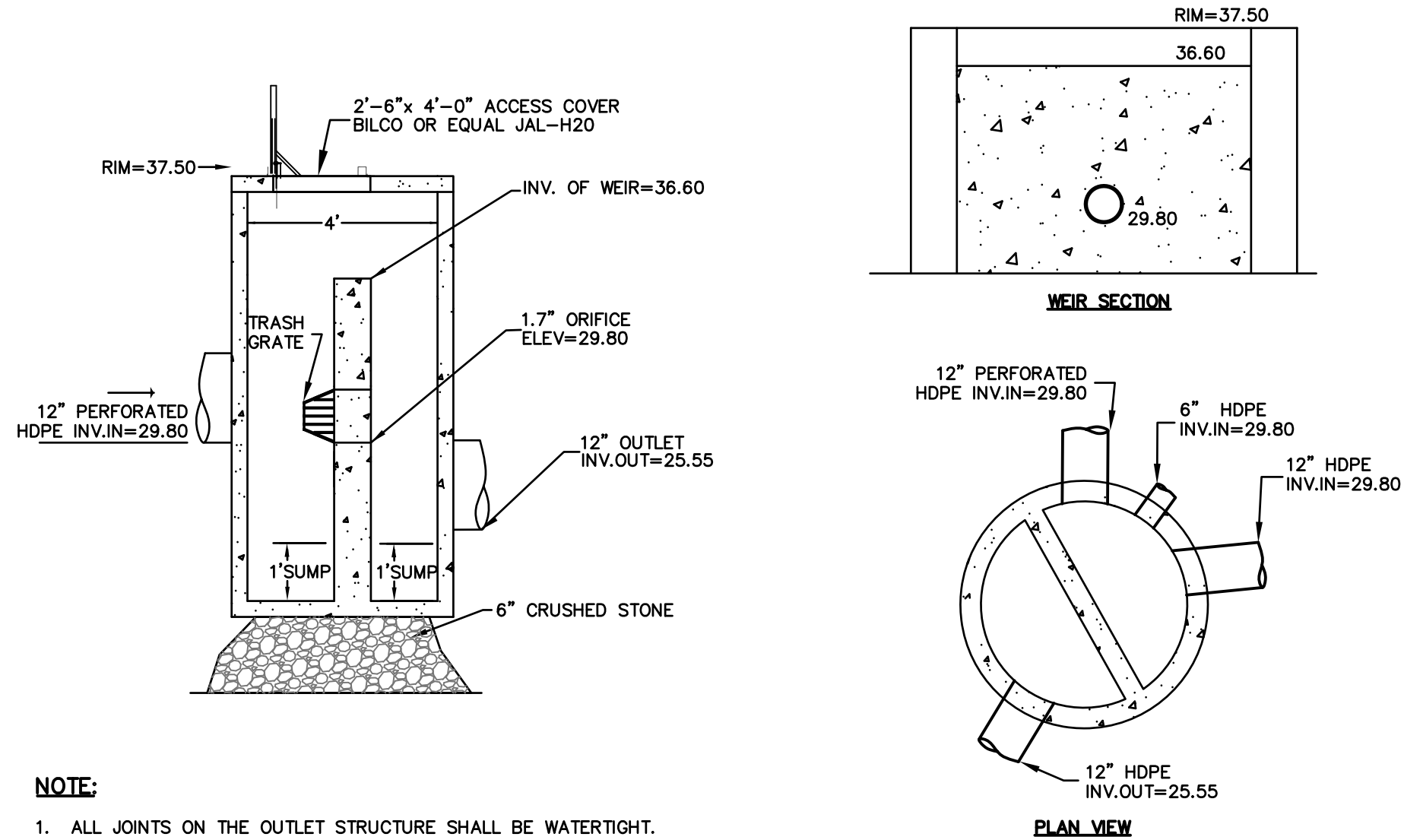


**DRAIN MANHOLE**  
 NOT TO SCALE



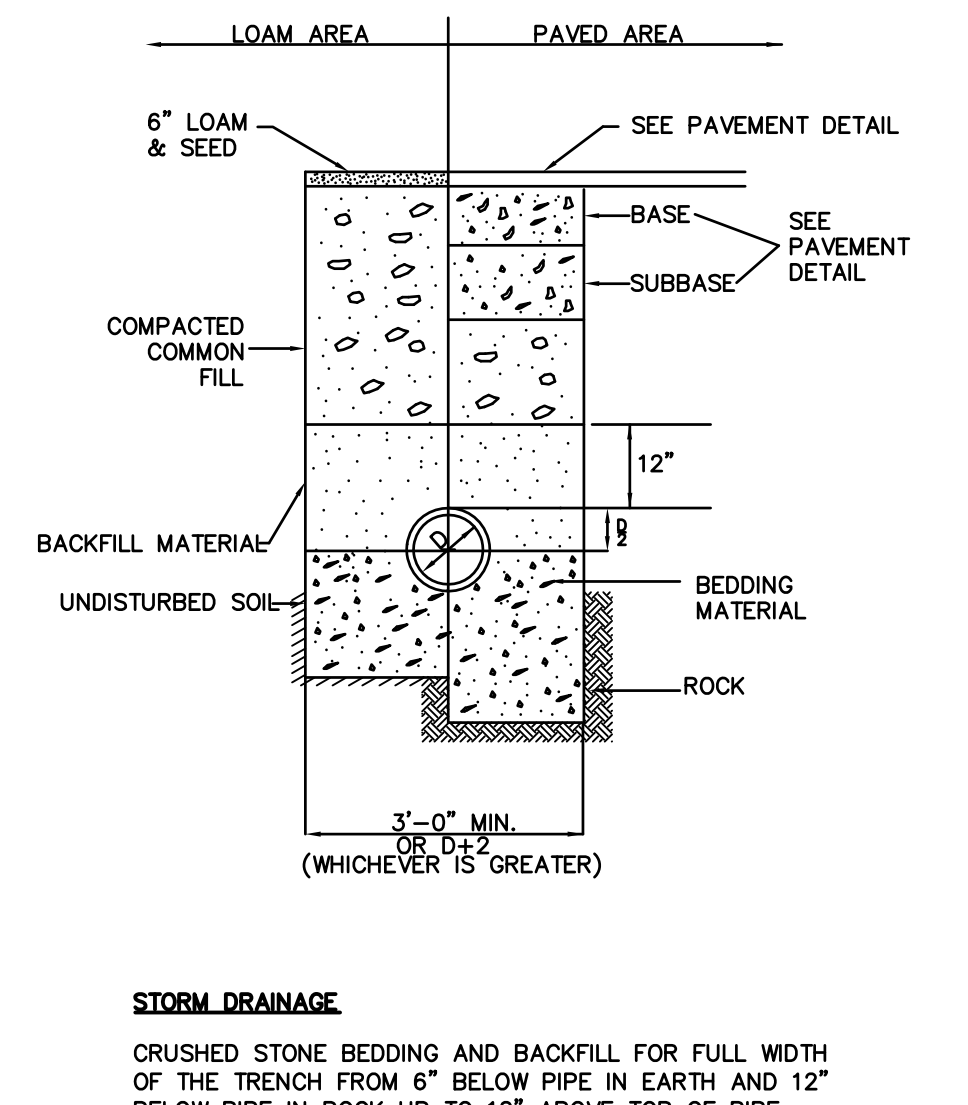
**DRAIN MANHOLE FRAME AND COVER**  
 NOT TO SCALE

**NOTE:**  
 1. FRAME AND COVER SHALL BE PROVIDED BY THE SAME MANUFACTURER.  
 2. LETTERING SHALL BE CAST INTO COVERS AS SPECIFIED.



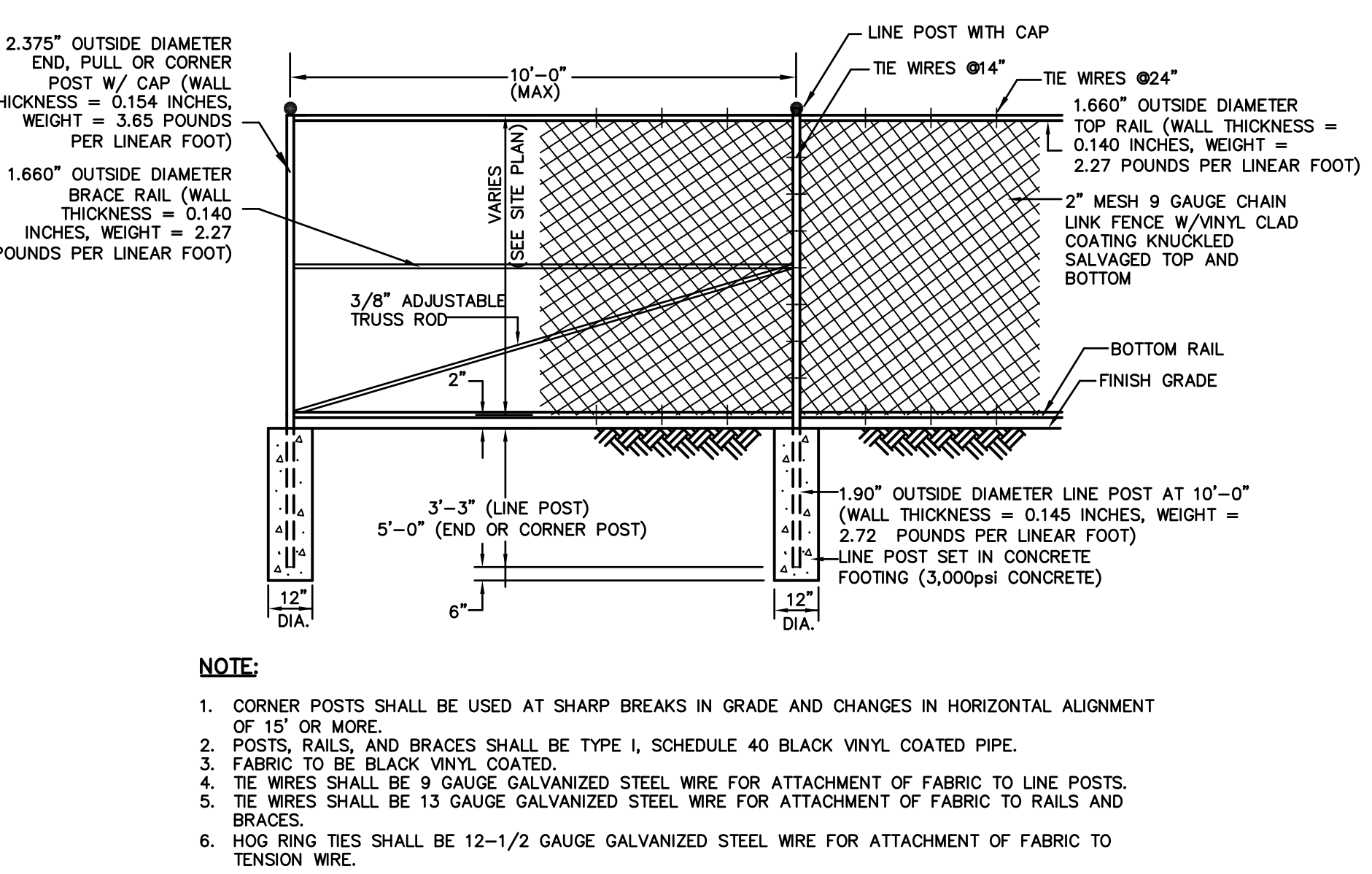
**PDMH1**  
 NOT TO SCALE

**NOTE:**  
 1. ALL JOINTS ON THE OUTLET STRUCTURE SHALL BE WATERTIGHT.



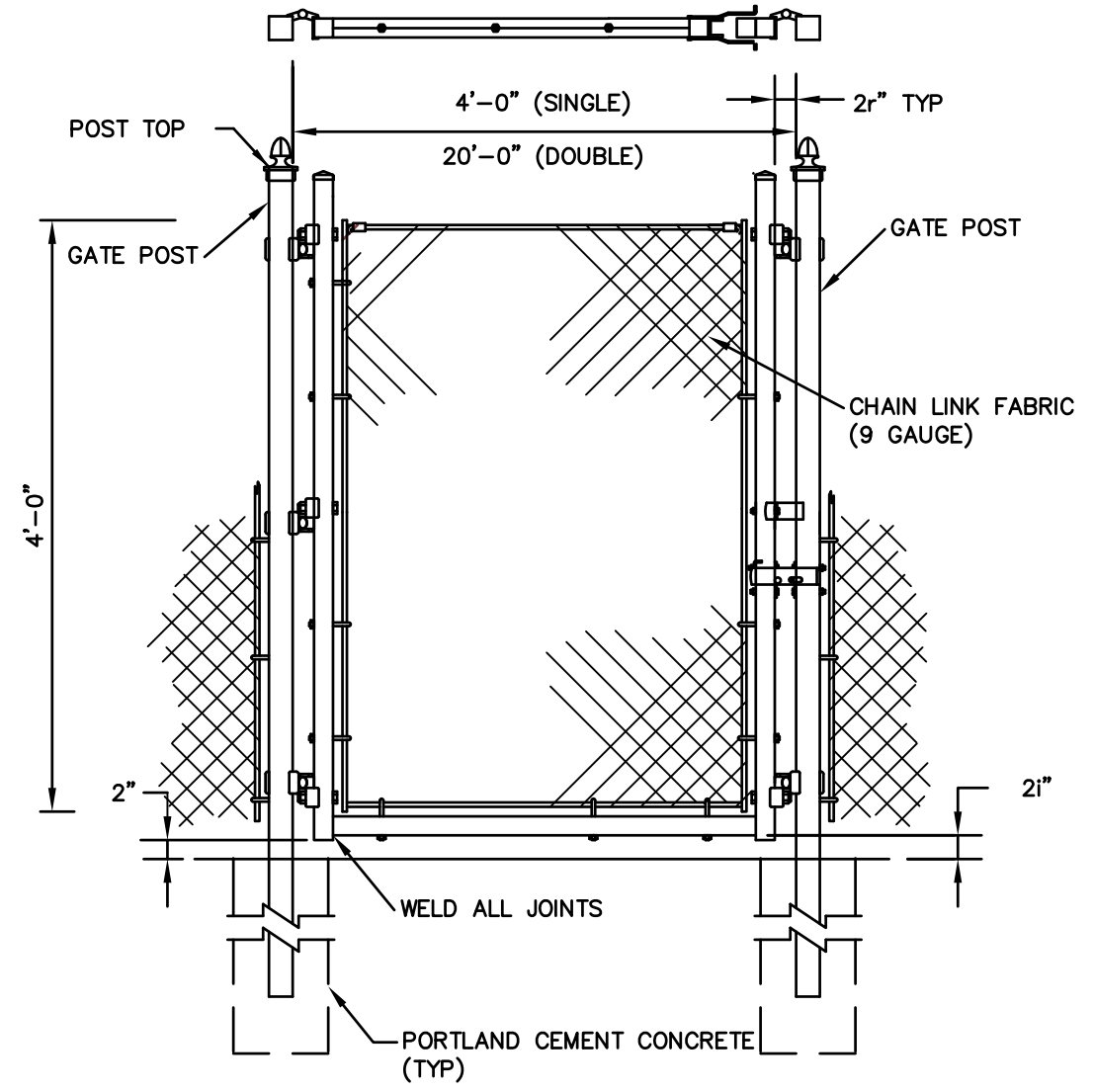
**UTILITY TRENCH**  
 NOT TO SCALE

**STORM DRAINAGE**  
 CRUSHED STONE BEDDING AND BACKFILL FOR FULL WIDTH OF THE TRENCH FROM 6" BELOW PIPE IN EARTH AND 12" BELOW PIPE IN ROCK UP TO 12" ABOVE TOP OF PIPE.



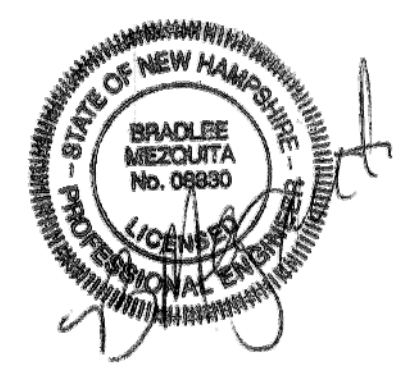
**CHAIN LINK FENCE**  
 NOT TO SCALE

**NOTE:**  
 1. CORNER POSTS SHALL BE USED AT SHARP BREAKS IN GRADE AND CHANGES IN HORIZONTAL ALIGNMENT OF 15' OR MORE.  
 2. POSTS, RAILS, AND BRACES SHALL BE TYPE I, SCHEDULE 40 BLACK VINYL COATED PIPE.  
 3. FABRIC TO BE BLACK VINYL COATED.  
 4. TIE WIRES SHALL BE 9 GAUGE GALVANIZED STEEL WIRE FOR ATTACHMENT OF FABRIC TO LINE POSTS.  
 5. TIE WIRES SHALL BE 13 GAUGE GALVANIZED STEEL WIRE FOR ATTACHMENT OF FABRIC TO RAILS AND BRACES.  
 6. HOG RING TIES SHALL BE 12-1/2 GAUGE GALVANIZED STEEL WIRE FOR ATTACHMENT OF FABRIC TO TENSION WIRE.



**GATE**  
 NOT TO SCALE

**NOTE:**  
 1. FOOTING WIDTH TO BE (4)X POST WIDTH.  
 2. GATES MAY BE MANUALLY OPERATED.



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CHECKED:	BLM	
APPROVED BY:	BLM	

DETAILS SHEET

SCALE: AS SHOWN

FILENAME: J:\010150 ORCSO - TRACK & ARTIFICIAL TURF RFP\DWG-CAD\DESIGN\2401501\_DETAILS.DWG  
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