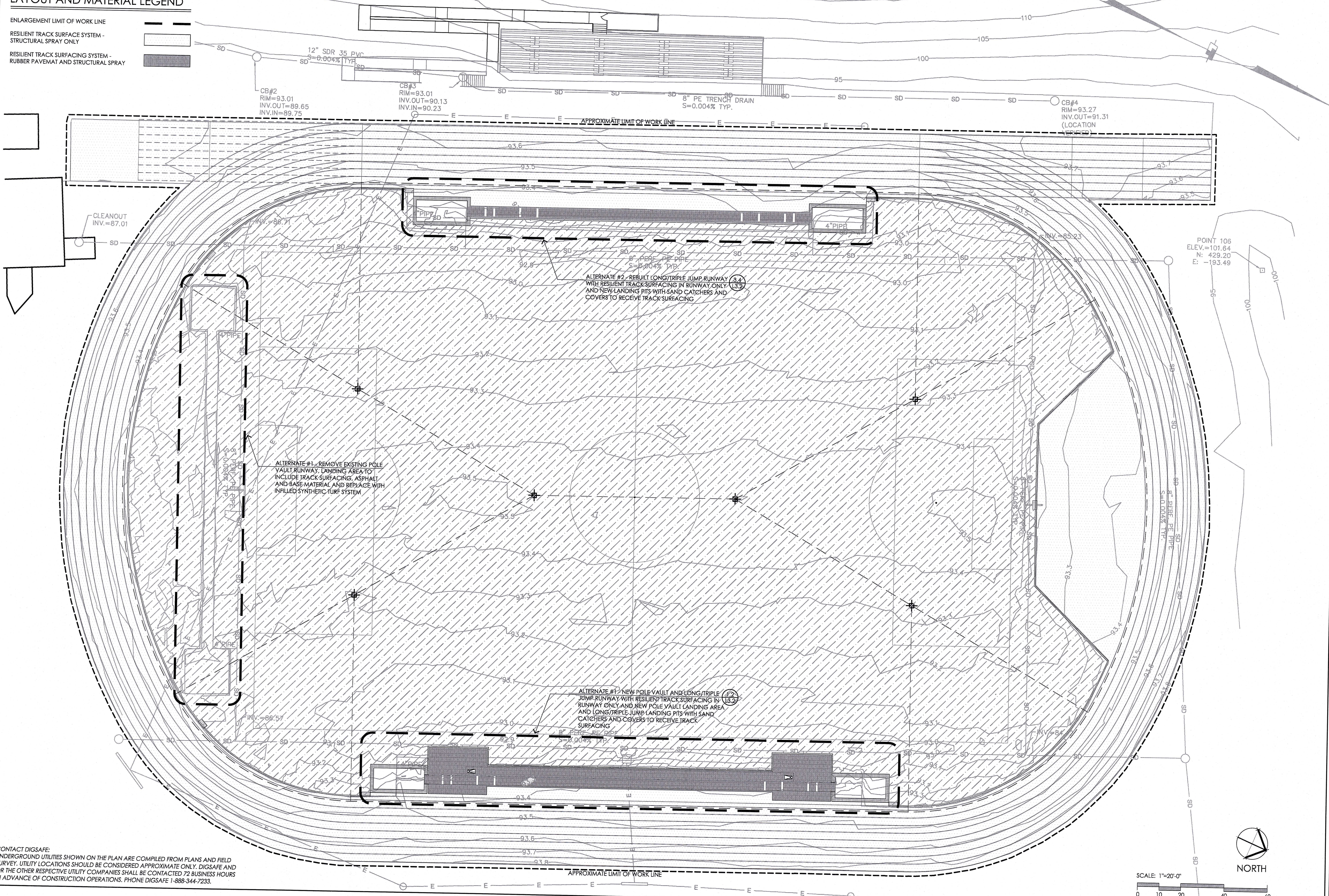
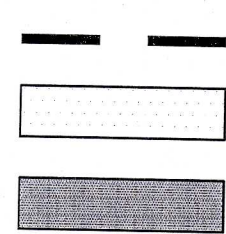


LAYOUT AND MATERIAL NOTES

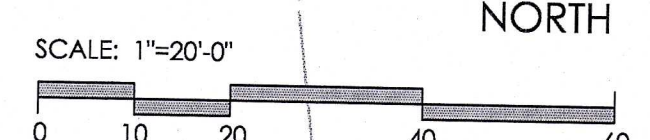
- EXISTING CONDITIONS INFORMATION IS REPRODUCED FROM THE SURVEY PREPARED BY LANDTECH CONSULTING AT 515 GROTON ROAD, WESTFORD, MA AND IS DATED JANUARY 7, 2011.
- THE LOCATIONS OF UNDERGROUND UTILITIES SHOWN ARE BASED ON THE SURVEY REFERENCED ABOVE AND FIELD GRADING AND UTILITY PLAN DATED MARCH 27, 2000 BY PINKHAM & GREER. THE CONTRACTOR SHALL NOTIFY DIGSAFE AND THE PROPER LOCAL AUTHORITIES OR RESPECTIVE UTILITY COMPANIES TO CONFIRM THE LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. ANY DAMAGE DUE TO FAILURE OF THE CONTRACTOR TO CONTACT THE PROPER AUTHORITIES SHALL BE BORNE BY THE CONTRACTOR.
- CONTRACTOR(S) SHALL THOROUGHLY FAMILIARIZE THEMSELVES WITH ALL CONSTRUCTION DOCUMENTS, SPECIFICATIONS, AND SITE CONDITIONS PRIOR TO BIDDING AND PRIOR TO CONSTRUCTION.
- ANY DISCREPANCIES BETWEEN DRAWINGS, SPECIFICATIONS, AND SITE CONDITIONS SHALL BE REPORTED IMMEDIATELY TO THE LANDSCAPE ARCHITECT FOR CLARIFICATION AND RESOLUTION PRIOR TO BIDDING OR CONSTRUCTION.

LAYOUT AND MATERIAL LEGEND

- ENLARGEMENT LIMIT OF WORK LINE
- RESILIENT TRACK SURFACING SYSTEM - STRUCTURAL SPRAY ONLY
- RESILIENT TRACK SURFACING SYSTEM - RUBBER PAVEMAT AND STRUCTURAL SPRAY



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



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Yarmouth, Maine

SYNTHETIC TURF CARPET REPLACEMENT

REV.	
SEAL	
Bid Documents - February 15, 2013	
ALTERNATES 1 & 2	

SCALE: 1"=20'-0"

JOB NO: 12002.00

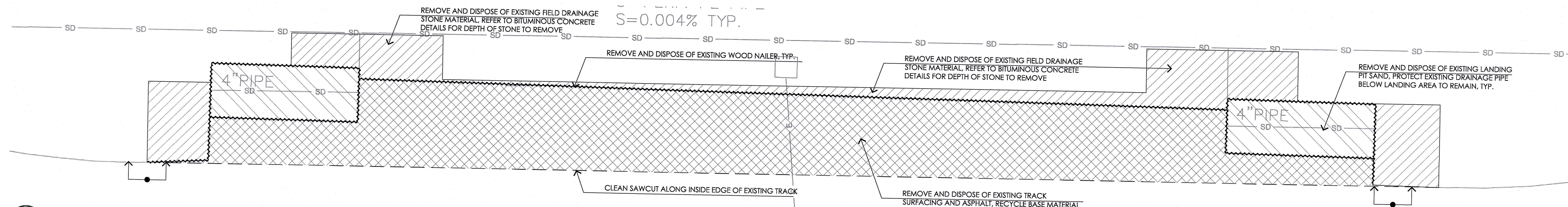
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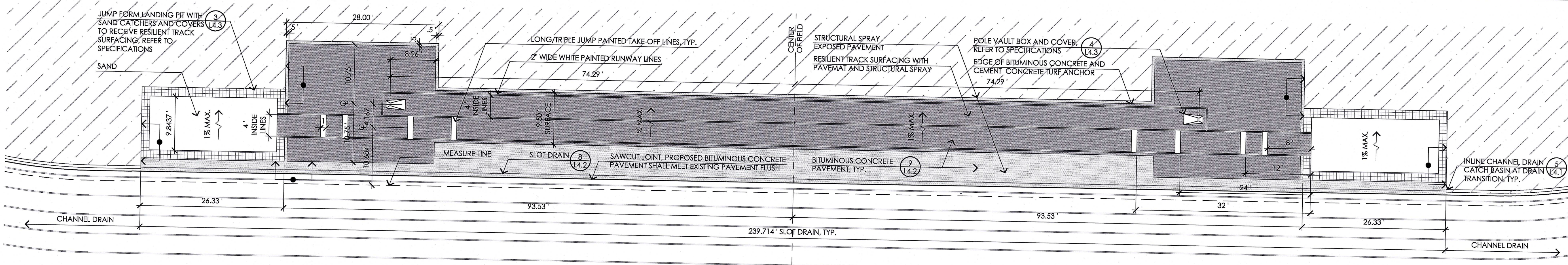
CHECKED: M.J.N. EPM

SHEET NO:

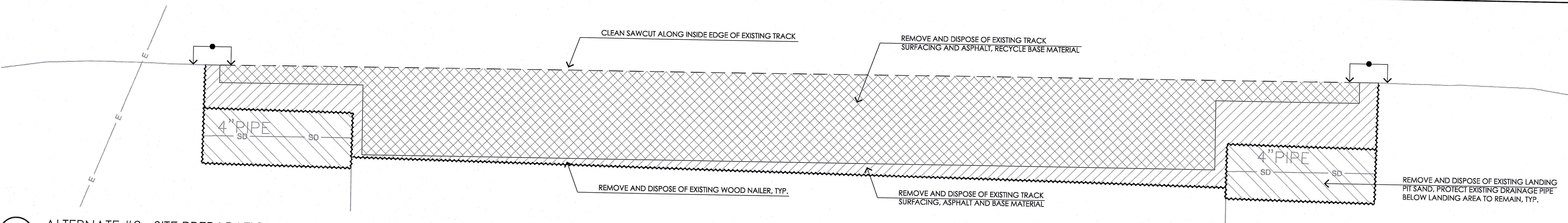
L3.1



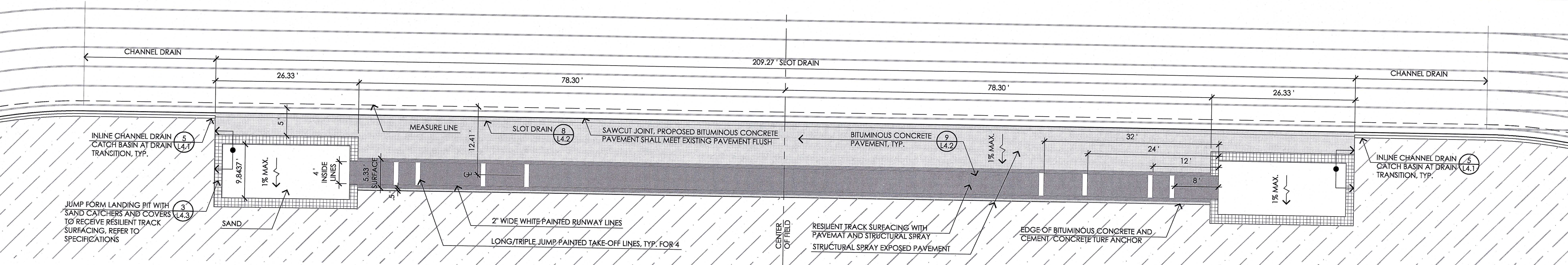
1 ALTERNATE #1 - SITE PREPARATION AND DEMOLITION PLAN
SCALE: 1"=10'-0"



2 ALTERNATE #1 - LAYOUT, MATERIALS AND GRADING PLAN
SCALE: 1"=10'-0"



3 ALTERNATE #2 - SITE PREPARATION AND DEMOLITION PLAN
SCALE: 1"=10'-0"



4 ALTERNATE #2 - LAYOUT, MATERIALS AND GRADING PLAN
SCALE: 1"=10'-0"

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

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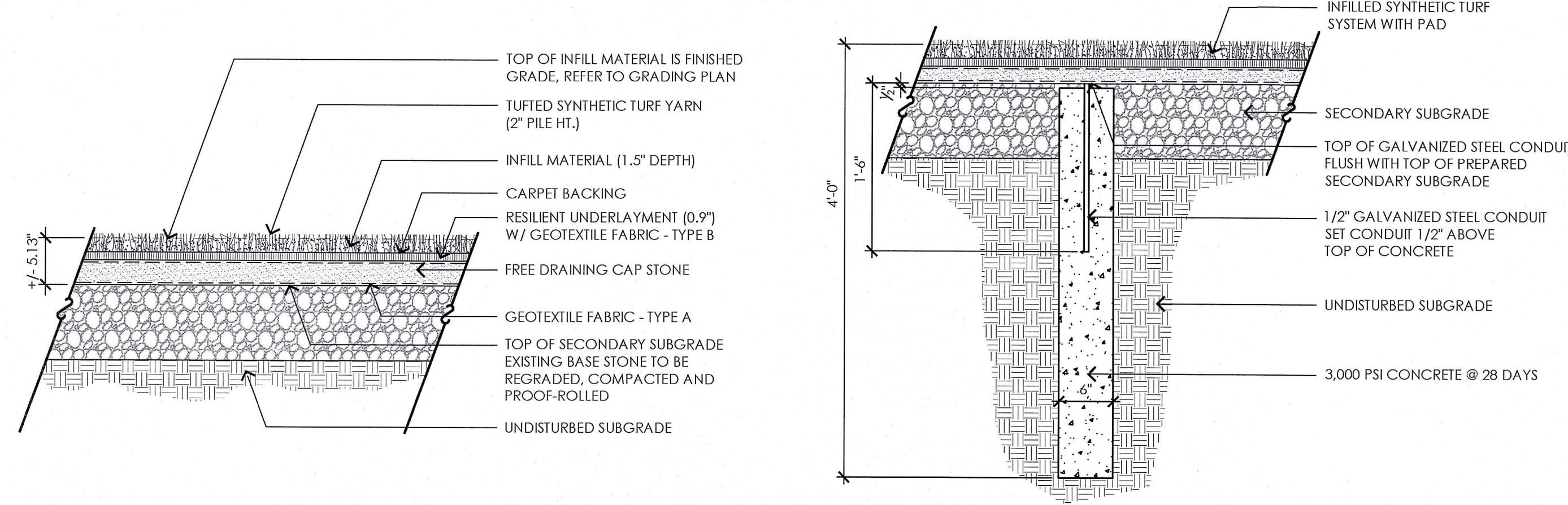
YARMOUTH HIGH SCHOOL
Yarmouth, Maine
SYNTHETIC TURF CARPET REPLACEMENT

REV.	

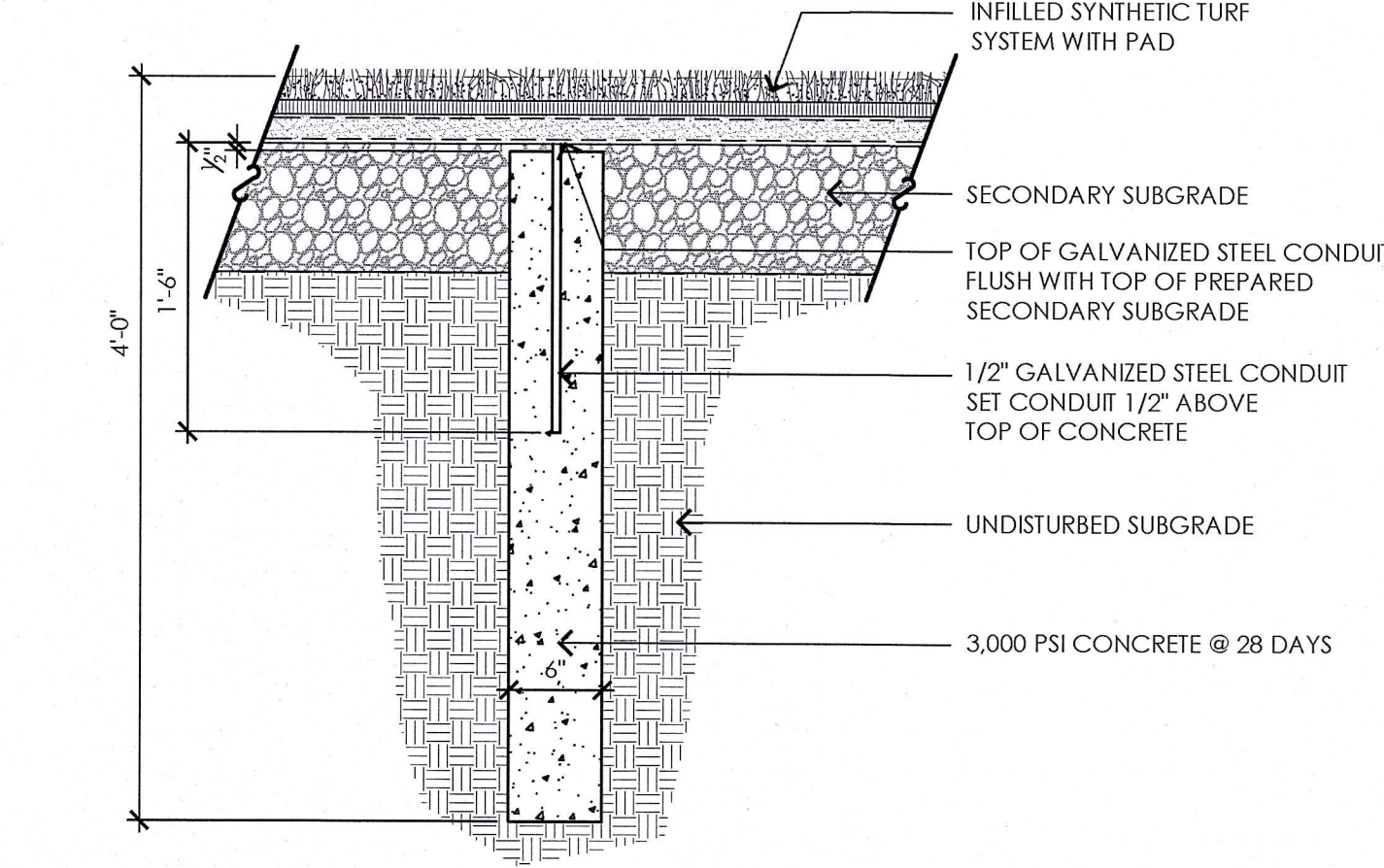
SEAL:
Bid Documents-
February 15, 2013
**ALTERNATES 1 & 2
- ENLARGEMENTS**

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CHECKED: MJN, EPM
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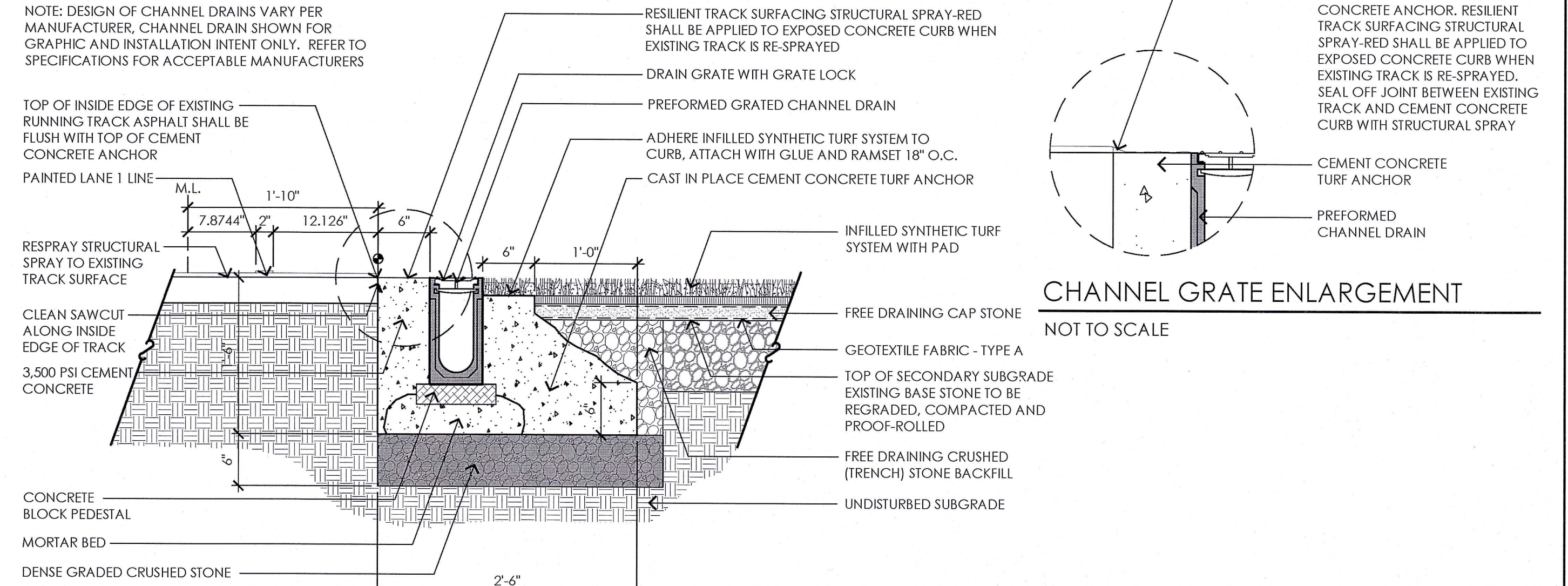
L3.2



1 INFILLED SYNTHETIC TURF SYSTEM WITH PAD
NOT TO SCALE

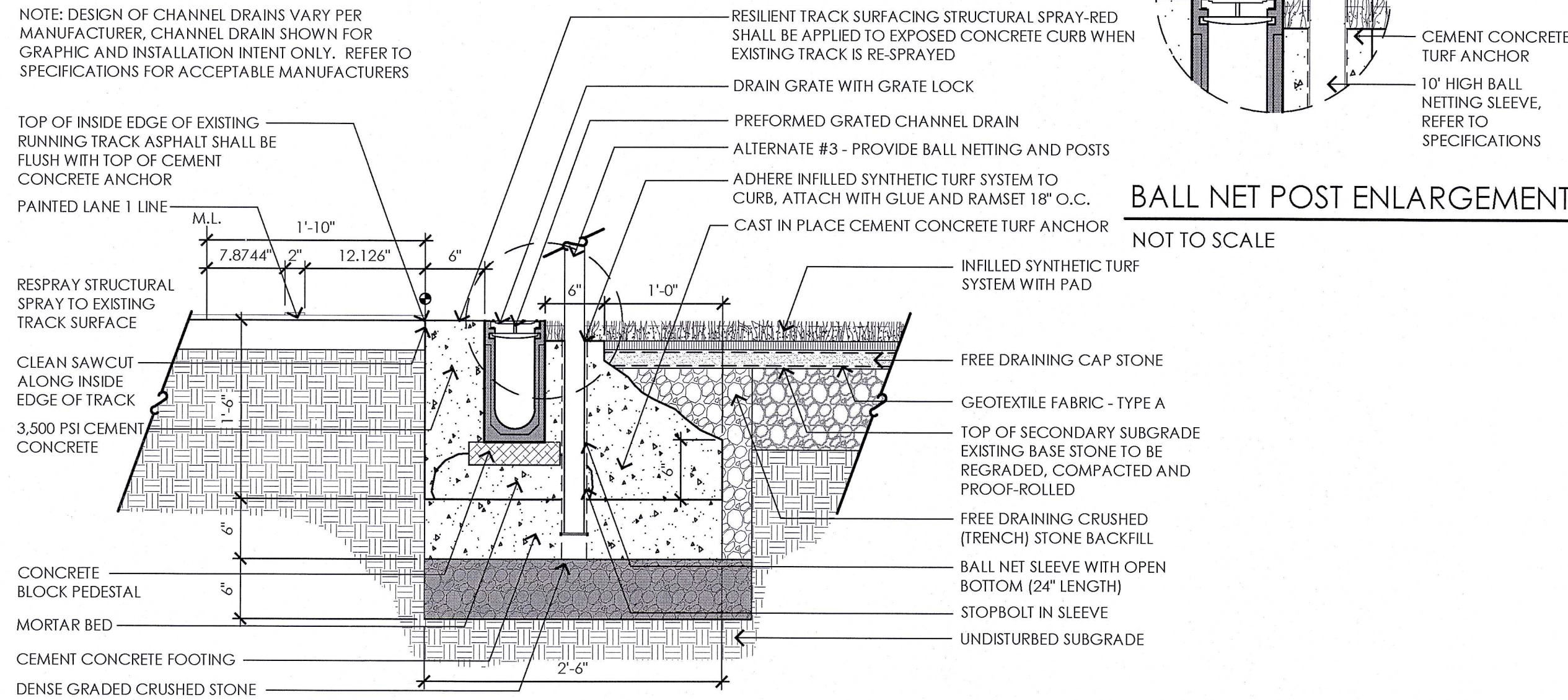


2 RADIUS MONUMENT
NOT TO SCALE

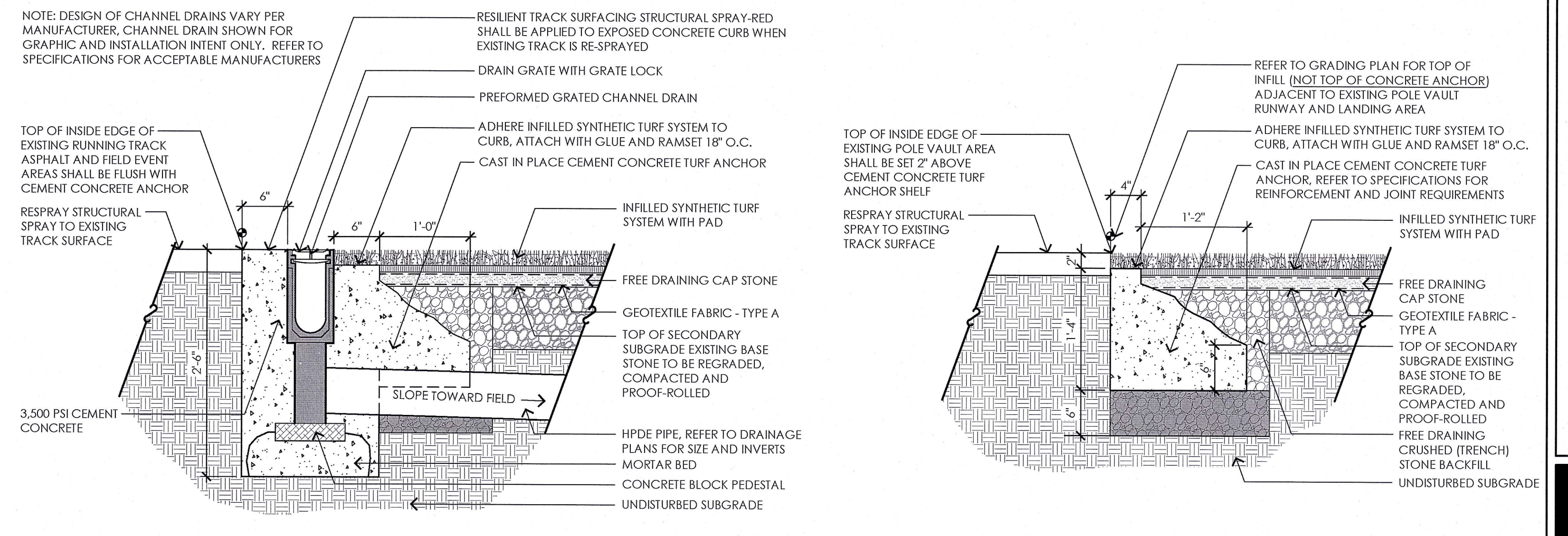


3 PREFORMED CHANNEL DRAIN AND CEMENT CONCRETE TURF ANCHOR AT INFILLED SYNTHETIC TURF
NOT TO SCALE

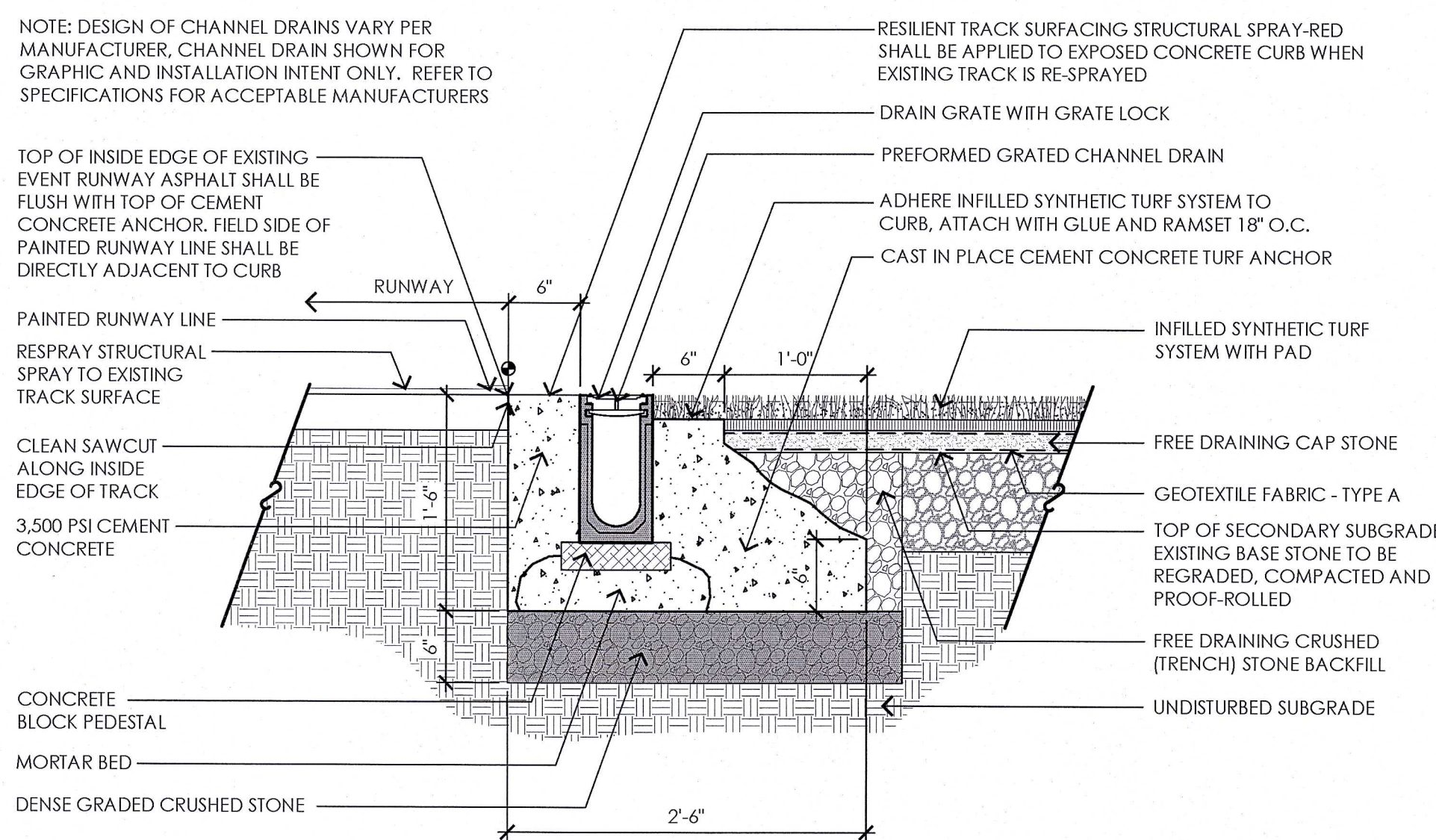
NOTE: AS PART OF BASE BID, PROVIDE CAPS FOR BALL NETTING SYSTEM SLEEVES, TYP.



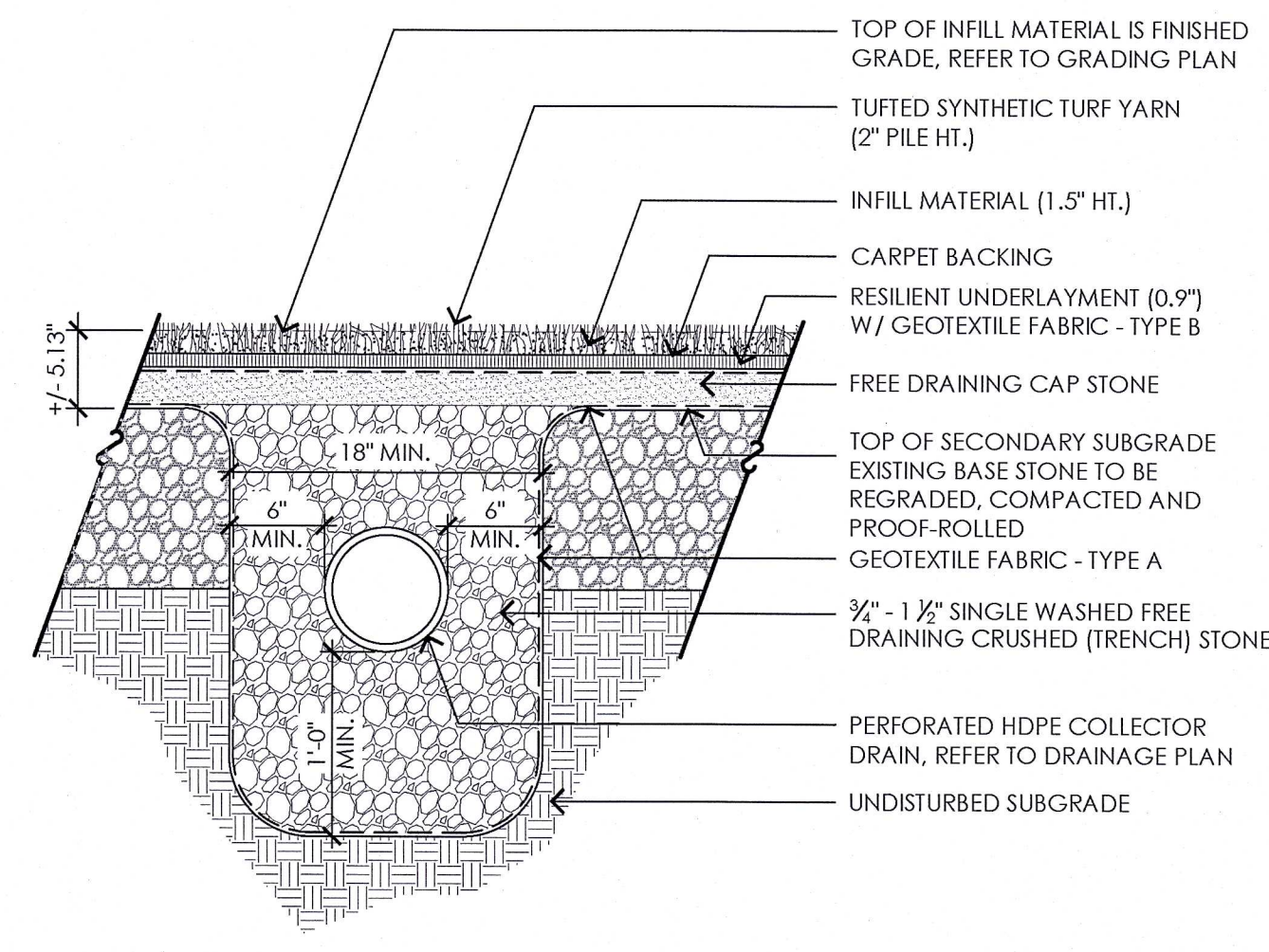
4 10' HIGH BALL NETTING SLEEVES IN CEMENT CONCRETE TURF ANCHOR FOR INFILLED SYNTHETIC TURF
NOT TO SCALE



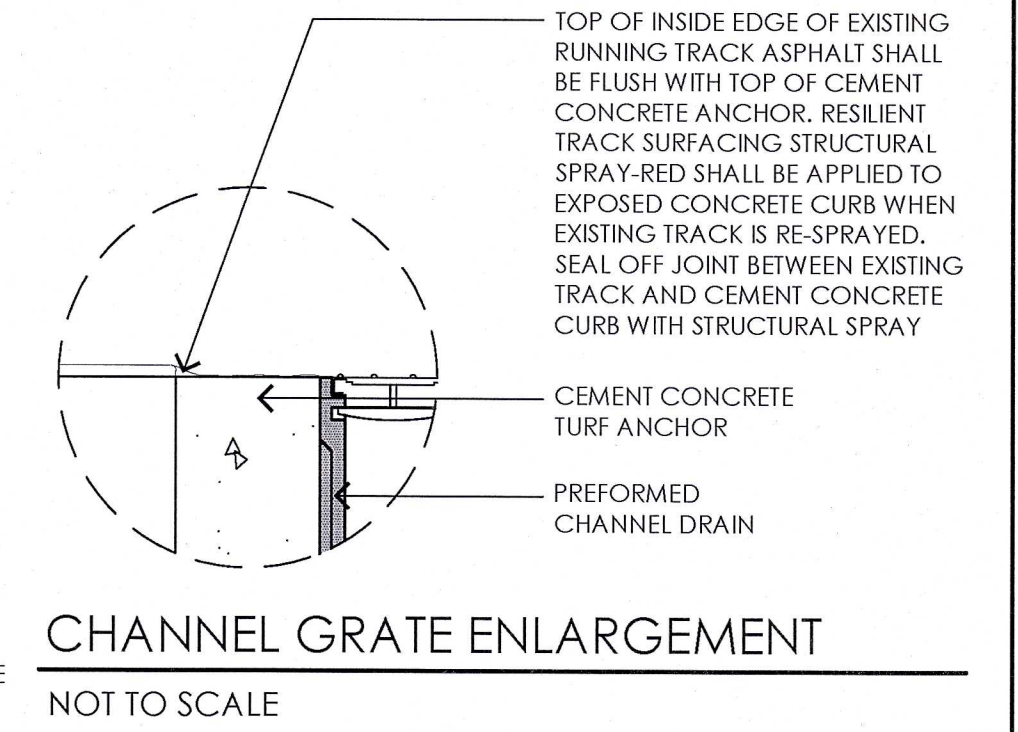
5 PREFORMED INLINE CATCH BASIN IN TURF ANCHOR
NOT TO SCALE



7 PREFORMED CHANNEL DRAIN AND CEMENT CONCRETE TURF ANCHOR AT EVENT RUNWAYS
NOT TO SCALE



8 DRAINAGE PIPE IN INFILLED SYNTHETIC TURF
NOT TO SCALE



CHANNEL GRATE ENLARGEMENT
NOT TO SCALE

REV:	
SEAL:	

Bid Documents -
February 15, 2013
DETAIL SHEET 1

SCALE:	AS NOTED
JOB NO:	12002.00
FILE:	12002-L4.1_DET_1.dwg
DRAWN:	JJC
CHECKED:	M.J.N, EPM
SHEET NO:	

STRUCTURAL DESIGN OF THE FOUNDATIONS BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF MAINE AND SHALL CARRY COSTS ASSOCIATED WITH STRUCTURAL DESIGN OF HIS/HER BID.

30' HIGH BALL NETTING POST, PROVIDE CAP TO RECEIVE INFILLED SYNTHETIC TURF

INFILLED SYNTHETIC TURF SYSTEM WITH PAD

SLOPE TOP OF CONCRETE FOOTING TO DRAIN

5'-0"

E.Q.

E.Q.

FREE DRAINAGE CRUSHED (TRENCH) STONE BACKFILL

BALL NET SLEEVE WITH OPEN BOTTOM

STOPBOLT IN SLEEVE

CONCRETE FOOTING

DENSE GRADED CRUSHED STONE

3'-0"

8"

1 30' BALL NETTING SYSTEM IN INFILLED SYNTHETIC TURF
NOT TO SCALE

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

30" HIGH BALL NETTING POST, PROVIDE CAP TO RECEIVE TRACK SURFACE

HANDWORK POLYURETHANE RUBBER TRACK SURFACING TO MEET FLUSH WITH EXISTING TRACK SURFACING

SLOPE TOP OF CONCRETE FOOTING TO DRAIN, CONCRETE SHALL MEET EXISTING ASPHALT FLUSH

5'-0"

6'-0"

EQ.

EQ.

BALL NET SLEEVE WITH OPEN BOTTOM

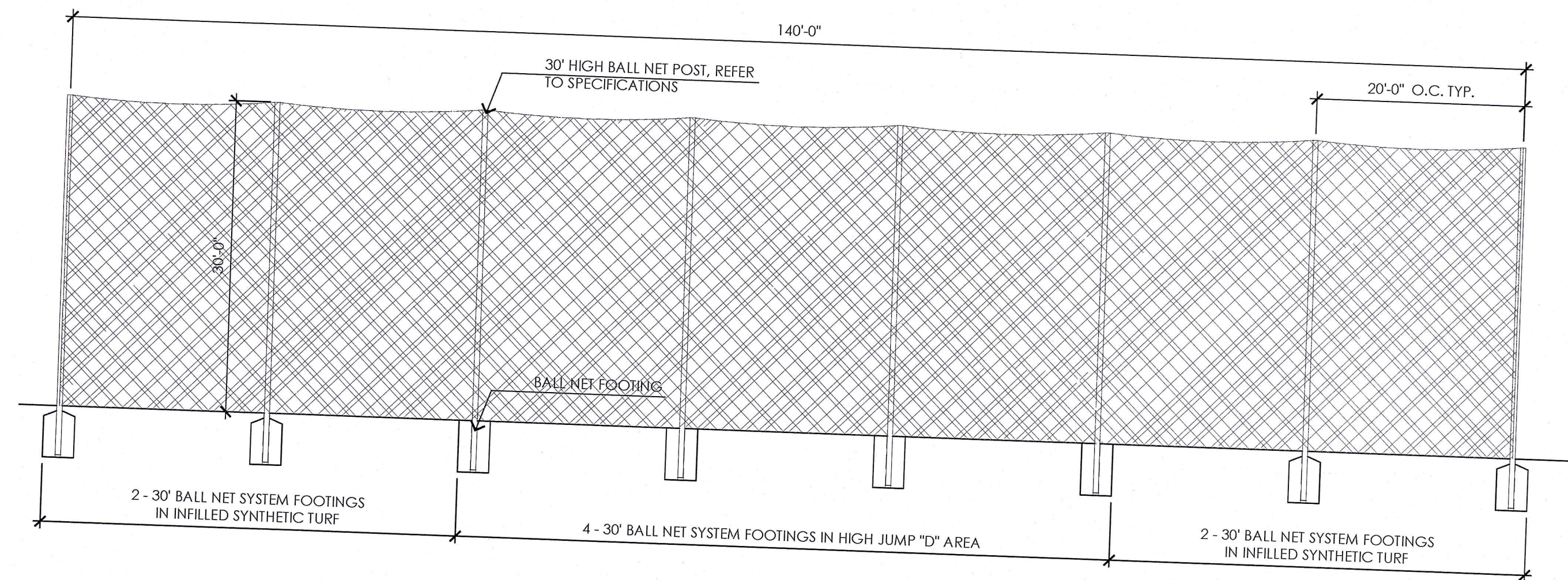
STOPBOLT IN SLEEVE

CONCRETE FOOTING

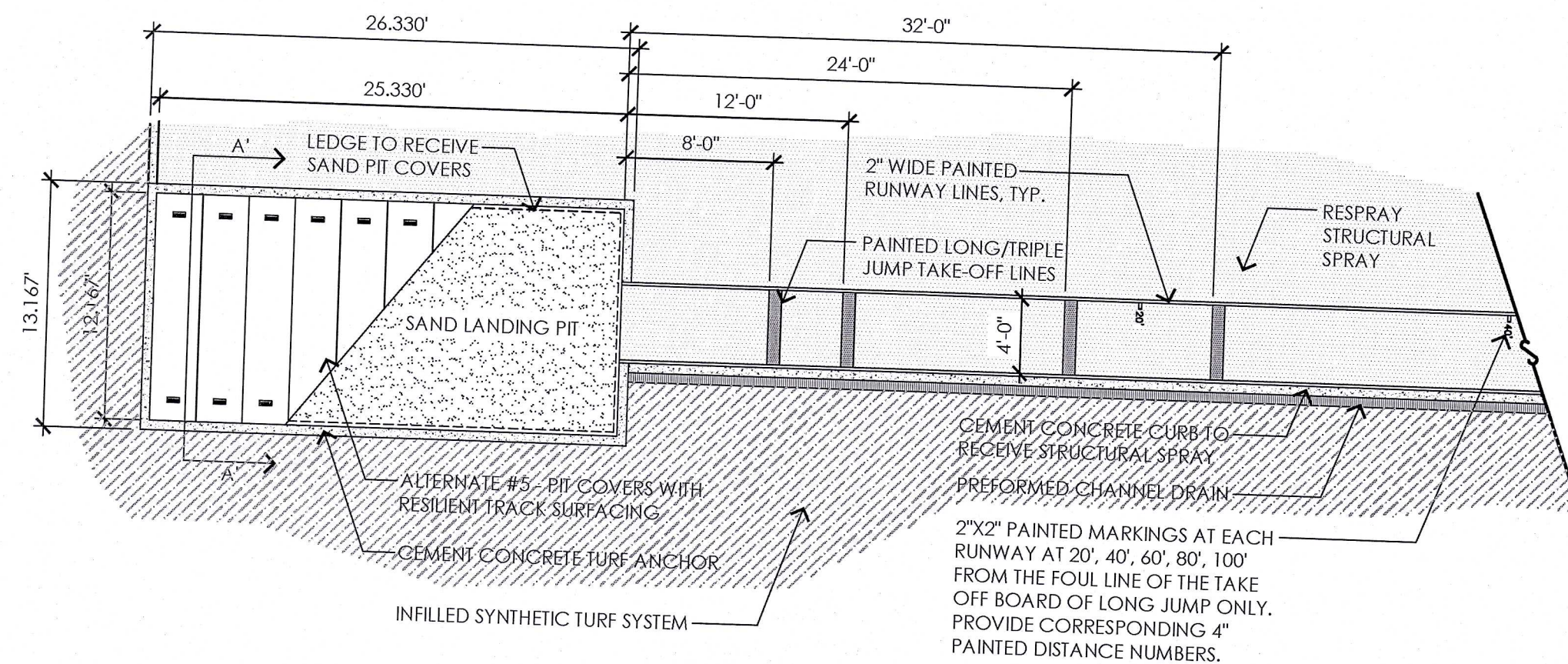
DENSE GRADED CRUSHED STONE

3'-0"

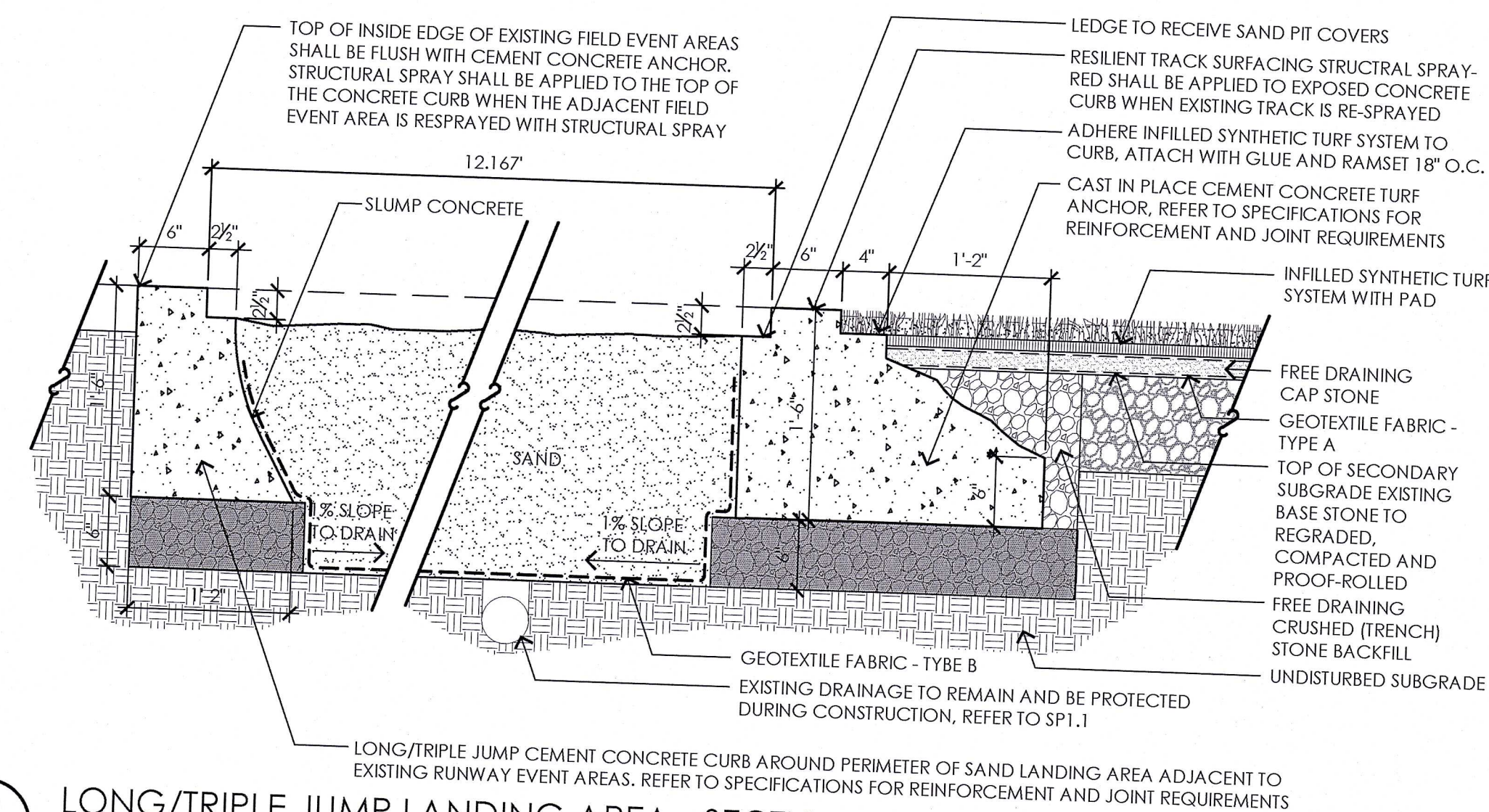
2 30' BALL NETTING SYSTEM IN HIGH JUMP "D" AREA
NOT TO SCALE



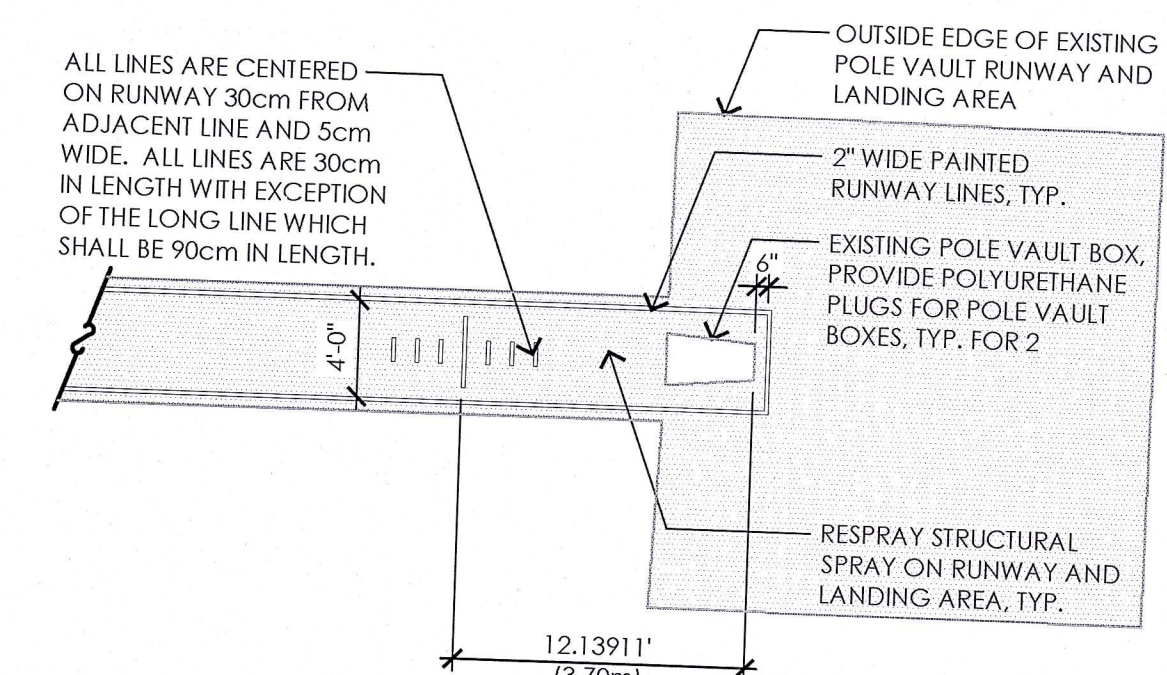
3 30' BALL NETTING SYSTEM - NORTH "D" AREA ELEVATION
NOT TO SCALE



4 LONG/TRIPLE JUMP LANDING AREAS AND RUNWAYS - PLAN VIEW
NOT TO SCALE



5 LONG/TRIPLE JUMP LANDING AREA - SECTION AA
NOT TO SCALE



6 POLE VAULT RUNWAY PAINT LAYOUT
NOT TO SCALE

2" LANE LINE AT ALL OTHER LANES, TYPICAL

MEASURE LINE (TYP)

M.L.

INSIDE EDGE OF EXISTING RUNNING TRACK

INFILLED SYNTHETIC TURF SYSTEM

PREFORMED CHANNEL DRAIN

6" CEMENT-CONCRETE CURB

↑ ↑
RUNNING DIRECTION

1'-10" 3'-6" 3'-6" 3'-6" 3'-6" 3'-6" 3'-6" 3'-6"

7.8744' (20cm) 7.8744' (20cm) 7.8744' (20cm) 7.8744' (20cm) 7.8744' (20cm) 7.8744' (20cm) 7.8744' (20cm) 7.8744' (20cm)

12.126' 3'-6" 3'-6" 3'-6" 3'-6" 3'-6" 3'-6" 3'-6" 3'-6"

LANE 1 LANE 2 LANE 3 LANE 4 LANE 5 LANE 6 LANE 7 LANE 8

7 8-LANE HIGH SCHOOL TRACK RUNNING LANE LAYOUT
NOT TO SCALE

PAINTED LANE 1 LINE

M.L.

1'-10"

7.874"

2"

12.126"

6"

5/8"

1'-6"

6"

2'-0"

6"

RESPIRANT TRACK SURFACING, PROVIDE SMOOTH TRANSITION BETWEEN EXISTING AND PROPOSED TRACK SURFACING

TOP OF INSIDE EDGE OF EXISTING RUNNING TRACK ASPHALT SHALL BE FLUSH WITH TOP OF CEMENT CONCRETE ANCHOR

FIELD SIDE OF TRACK

PREFORMED SLOT CHANNEL

CONCRETE BLOCK PEDESTAL

MORTAR BED

DENSE GRADED CRUSHED STONE

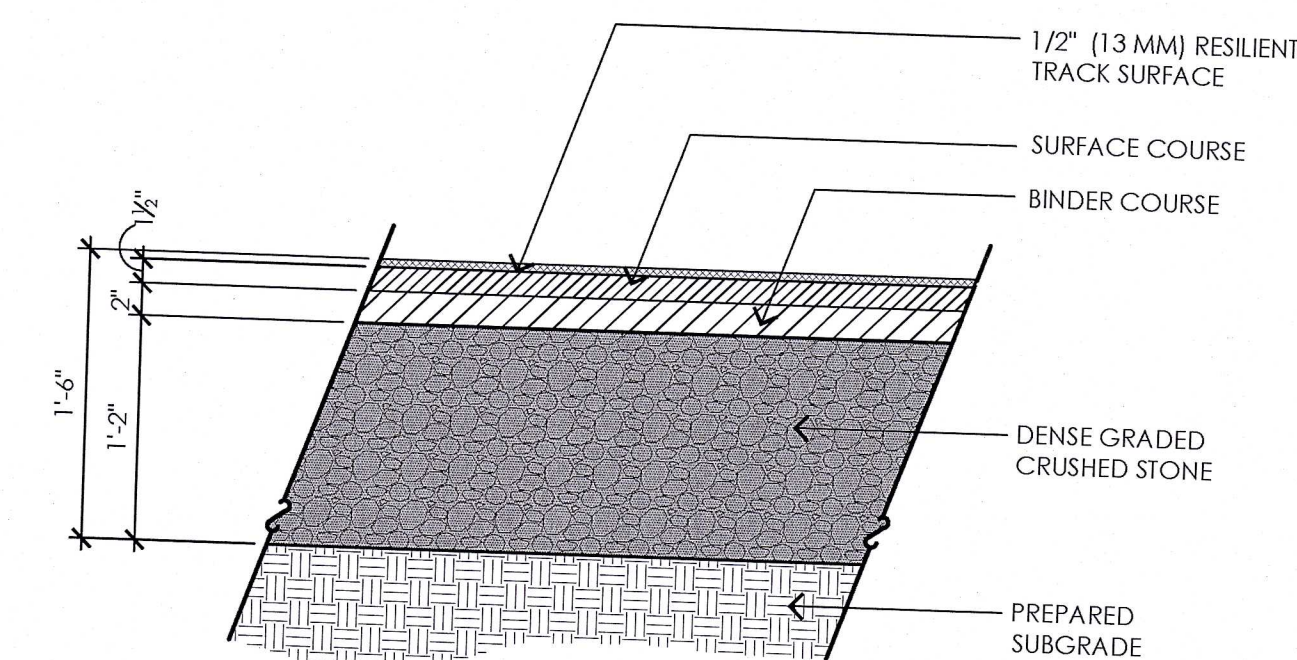
PREPARED SUBGRADE

RESPRAY STRUCTURAL SPRAY TO EXISTING TRACK SURFACE

CLEAN SAWCUT ALONG INSIDE EDGE OF TRACK

3,500 PSI CEMENT CONCRETE

8 ALTERNATE 1 - SLOT DRAIN
NOT TO SCALE



9 ALTERNATE 1 - BITUMINOUS CONCRETE PAVEMENT
WITH RESILIENT TRACK SURFACE
NOT TO SCALE

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SYNTHETIC TURF CARPET REPLACEMENT

REV.:

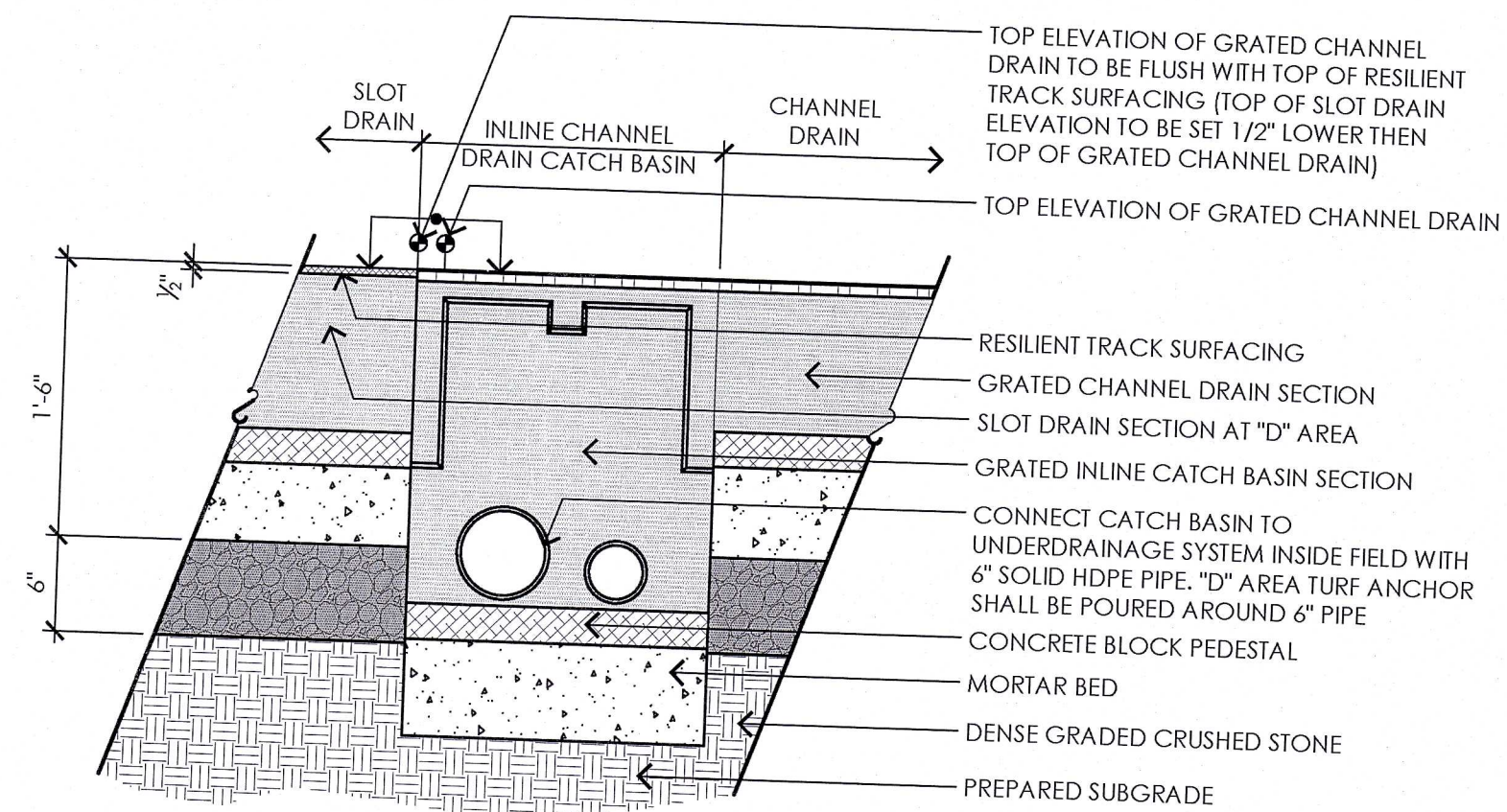
SEAL:

*Bid Documents-
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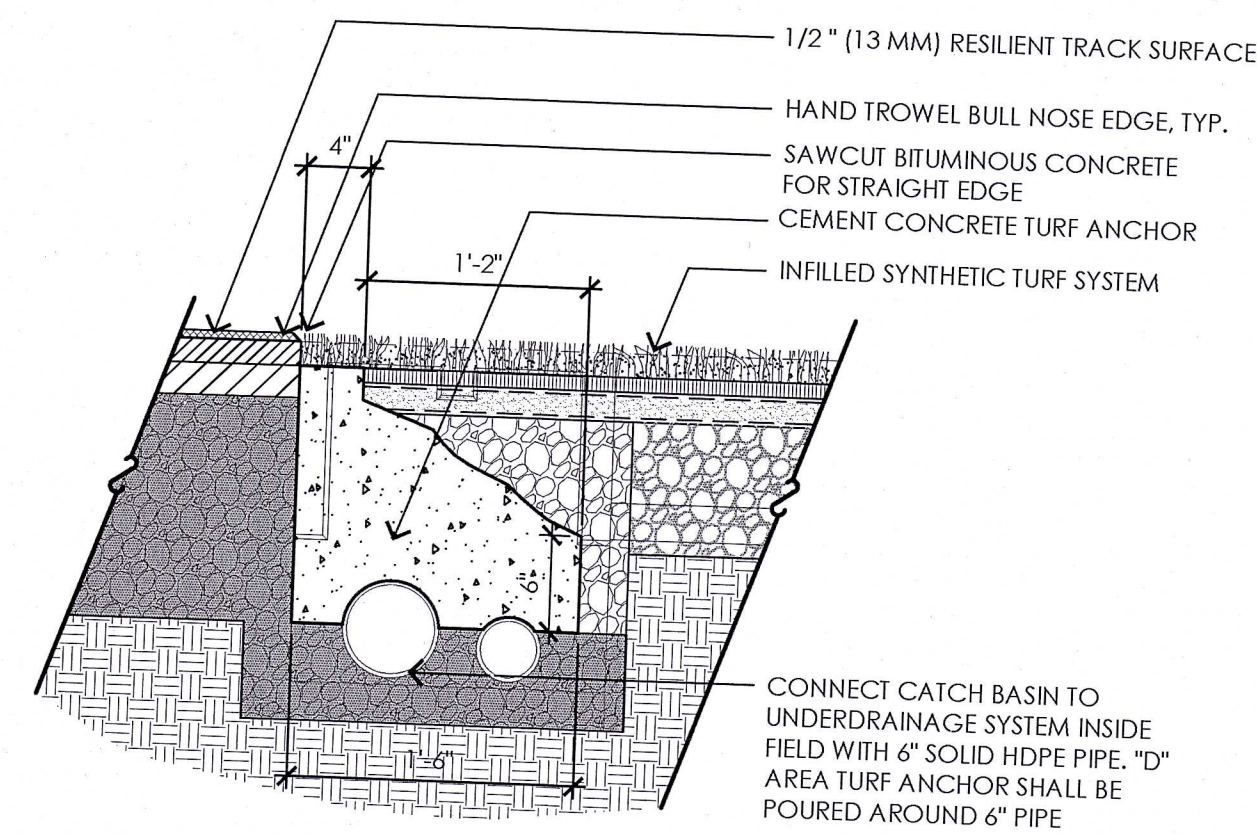
DETAIL SHEET II

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DRAWN:	JJC
CHECKED:	MJN, EPM

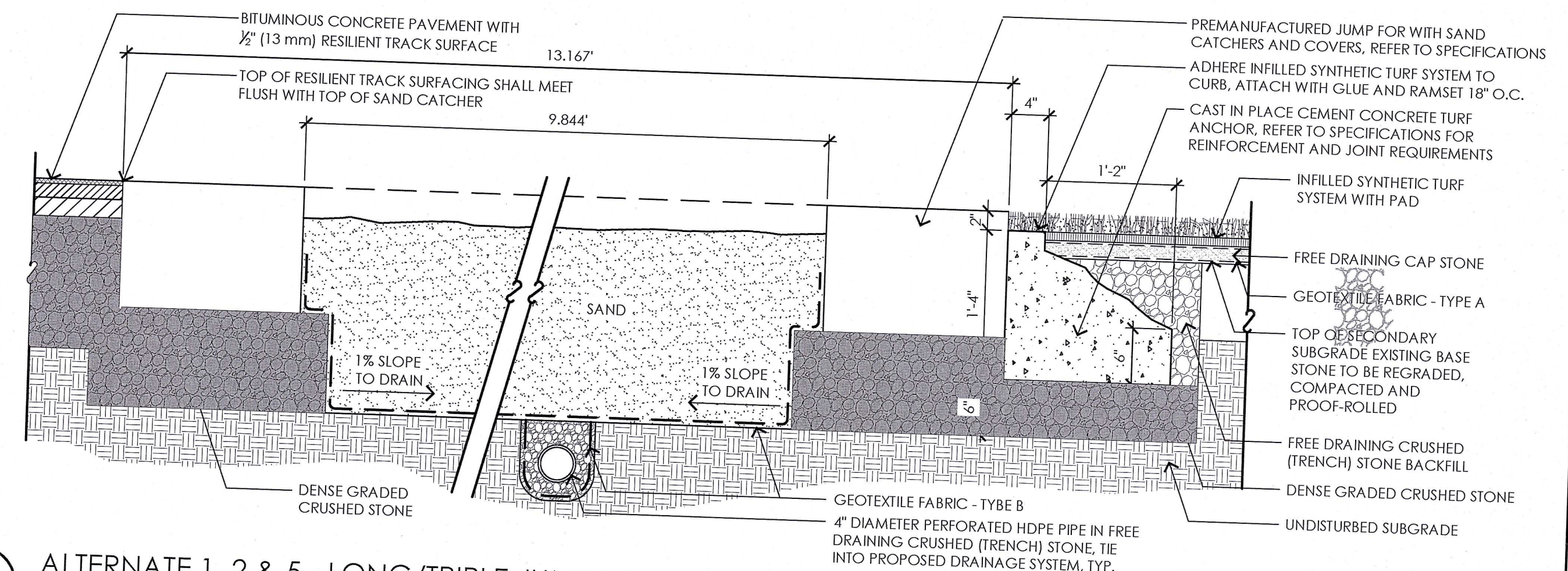
L4.2



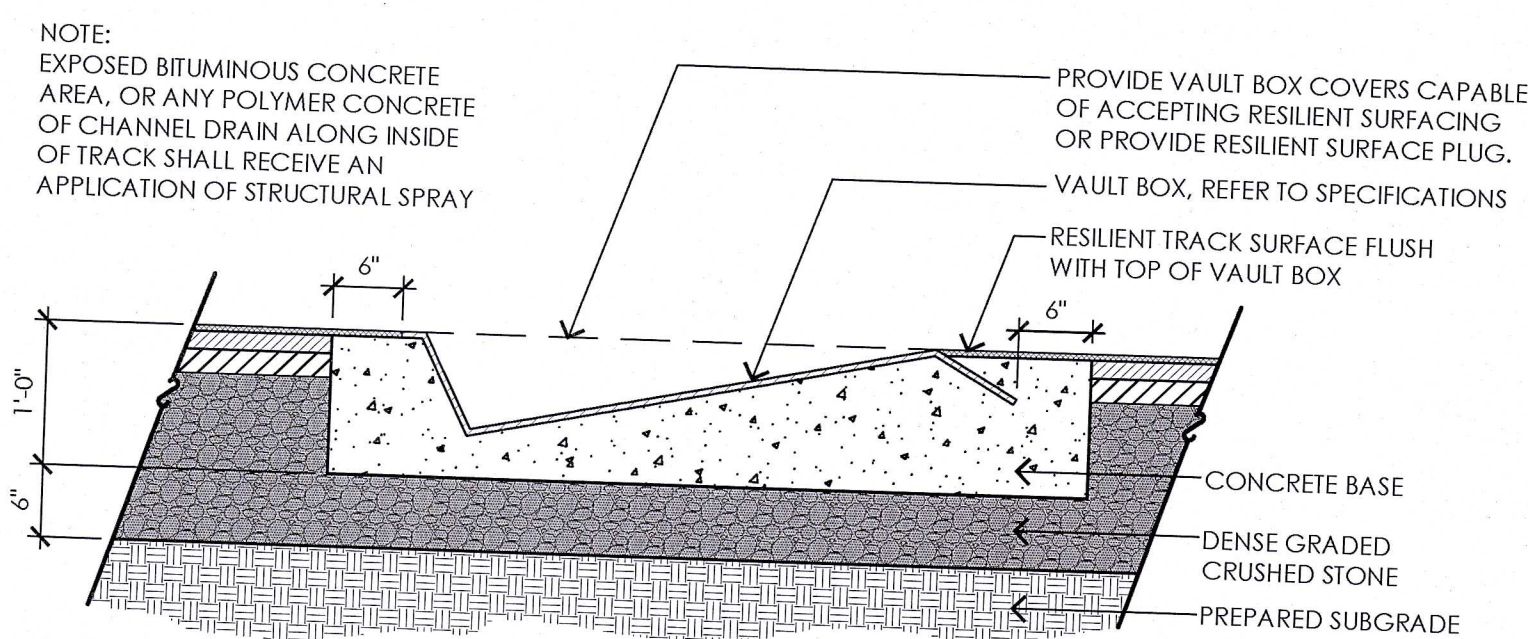
1 ALTERNATE 1 & 2 - SLOT DRAIN / CHANNEL DRAIN TRANSITION AT INLINE CATCH BASIN
NOT TO SCALE



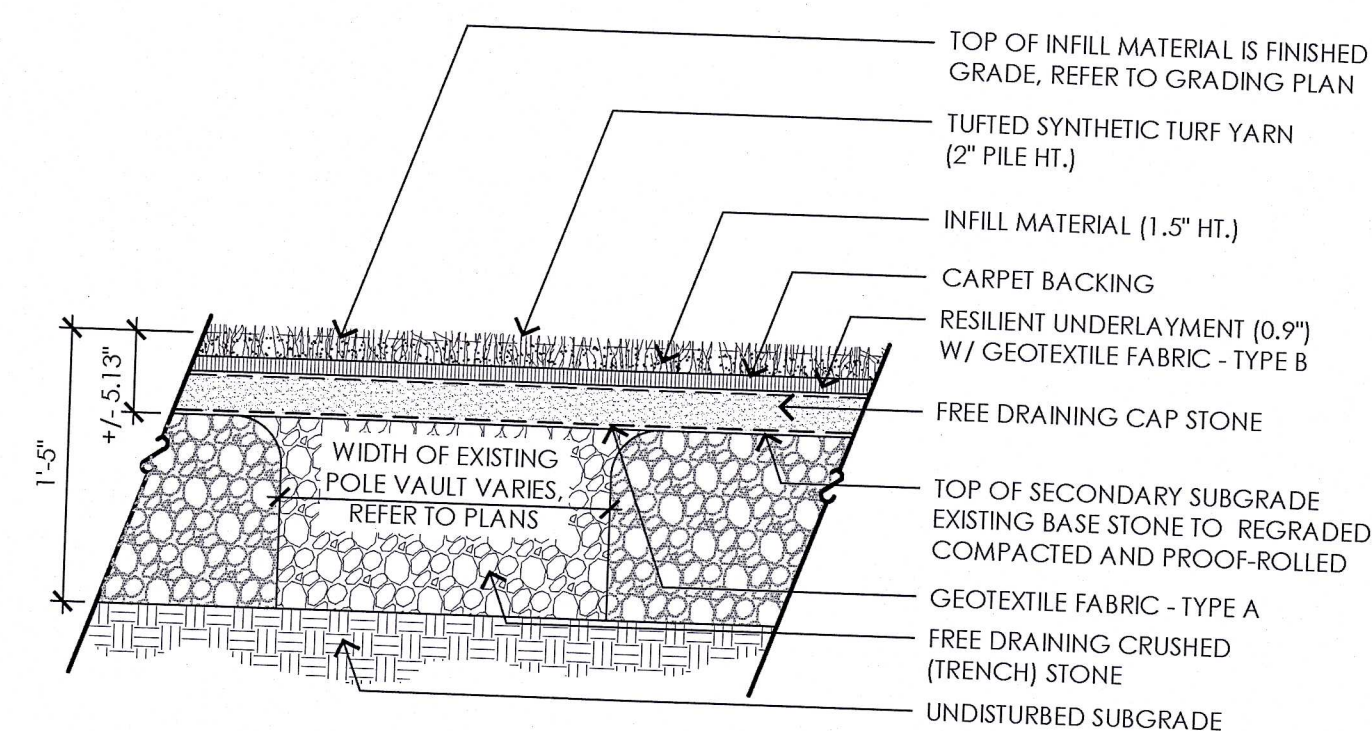
2 ALTERNATE 1 & 2 - CEMENT CONCRETE TURF ANCHOR AT FIELD EVENT AREA/INLINE CATCH BASIN
NOT TO SCALE



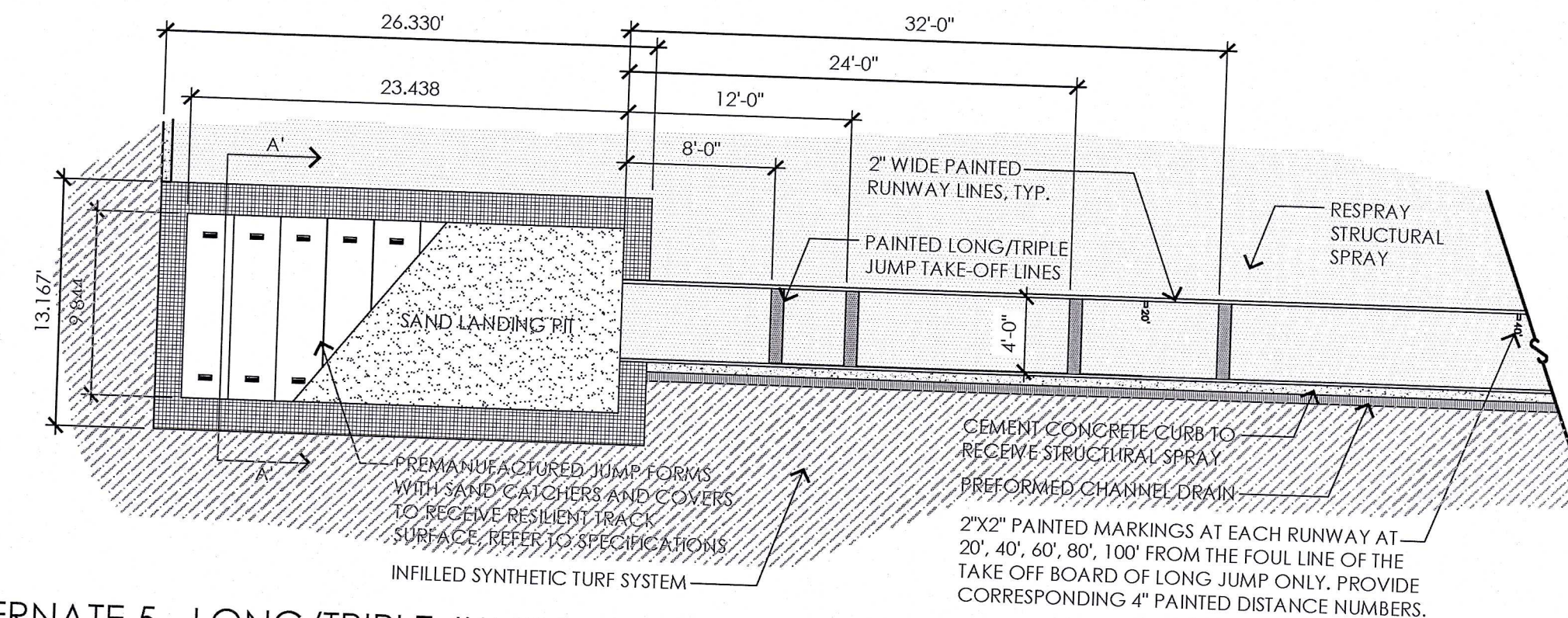
3 ALTERNATE 1, 2 & 5 - LONG/TRIPLE JUMP LANDING AREA WITH SAND CATCHERS - SECTION AA
NOT TO SCALE



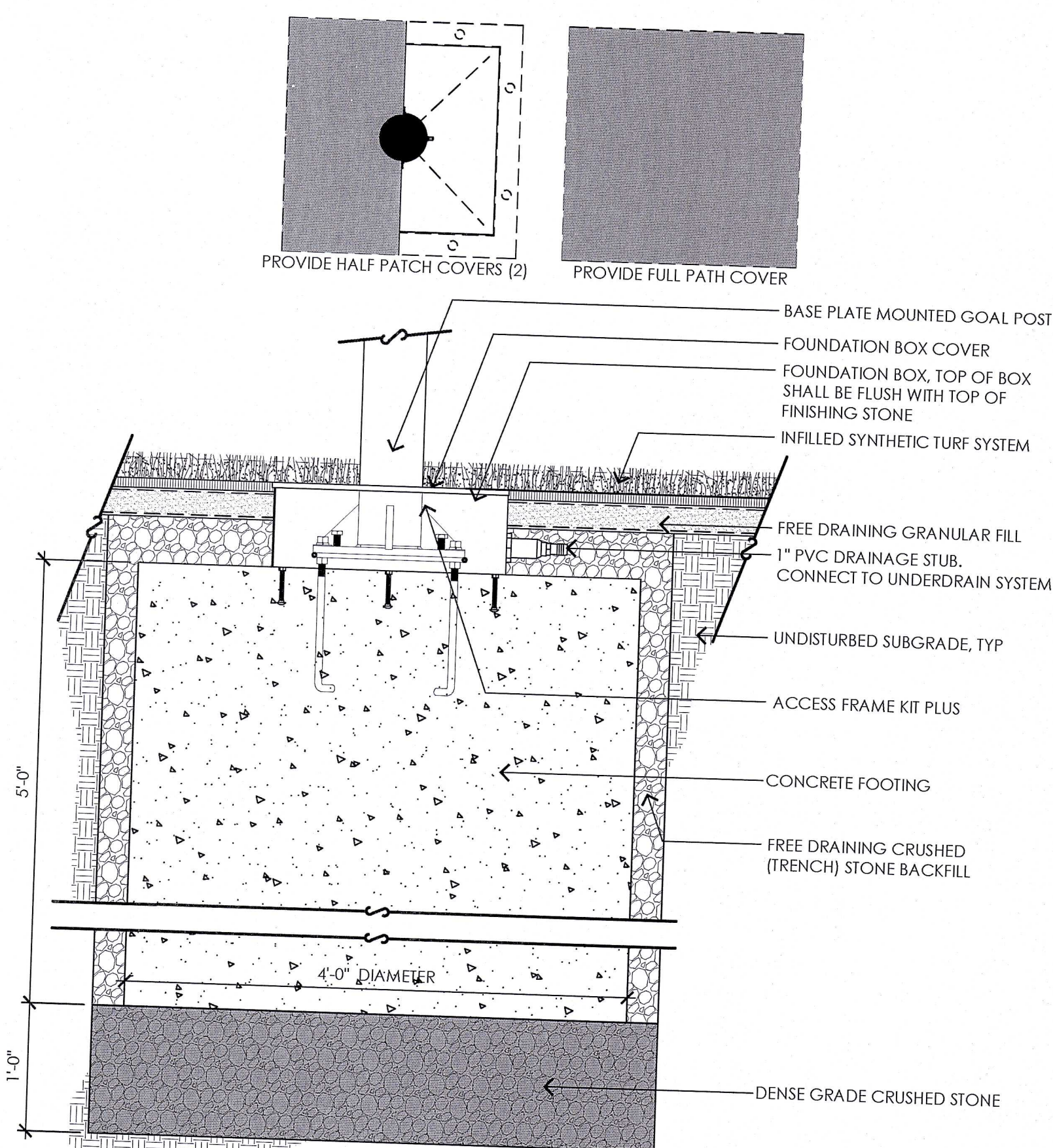
4 ALTERNATE 1 - ALUMINUM POLE VAULT BOX AND COVER
NOT TO SCALE



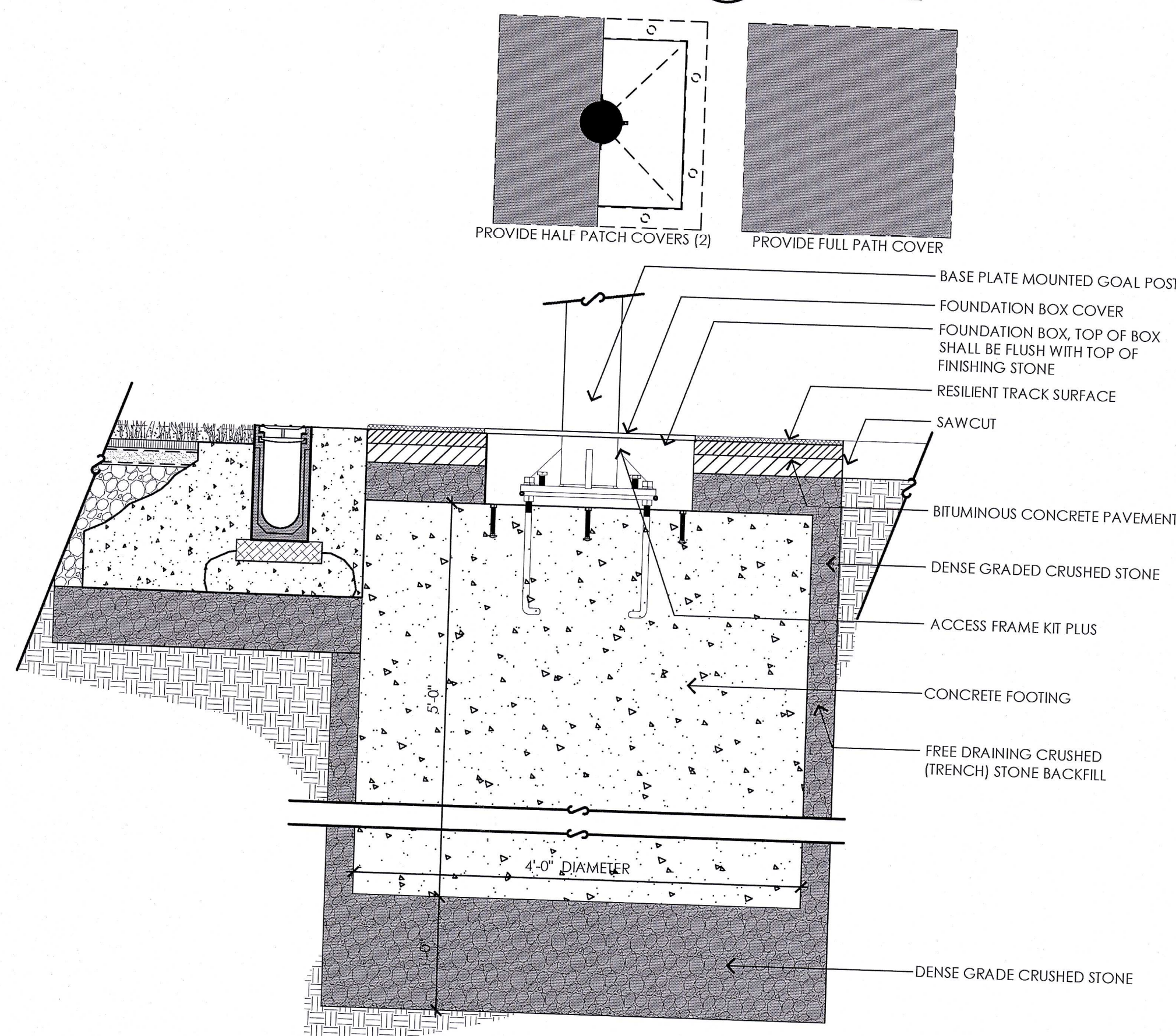
5 ALTERNATE 1 - INFILLED SYNTHETIC TURF SYSTEM AT EXISTING POLE VAULT AREA
NOT TO SCALE



6 ALTERNATE 5 - LONG/TRIPLE JUMP LANDING AREA WITH SAND CATCHERS - PLAN
NOT TO SCALE



7 ALTERNATE 7 - FOOTBALL GOAL POST AND FOOTING IN SYNTHETIC TURF
NOT TO SCALE



8 ALTERNATE 7 - FOOTBALL GOAL POST AND FOOTING IN "D" AREA
NOT TO SCALE

REV:	

SEAL:	

Bid Documents-
February 15, 2013
DETAIL SHEET III

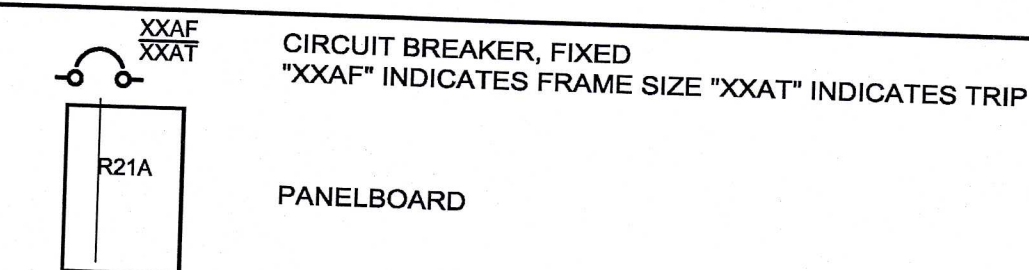
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FILE:	12002-14.3_DET_3.dwg
DRAWN:	JJC
CHECKED:	MJN, EPM
SHEET NO:	

L4.4

BRANCH CIRCUIT & FEEDER LEGEND

- BRANCH CIRCUIT OR FEEDER TURNING UP TOWARDS OBSERVER
- BRANCH CIRCUIT OR FEEDER TURNING DOWN AWAY FROM OBSERVER

ONE LINE SYMBOLS LEGEND



SITE LEGEND

- EH ELECTRIC HAND HOLE
- UE UNDERGROUND ELECTRIC

POWER DISTRIBUTION

- 208Y/120 VOLT PANELBOARD, SURFACE MOUNTED REFER TO SCHEDULE OF PANELBOARDS
- 208Y/120 VOLT PANELBOARD, RECESSED MOUNTED REFER TO SCHEDULE OF PANELBOARDS
- 480Y/277 VOLT PANELBOARD, SURFACE MOUNTED REFER TO SCHEDULE OF PANELBOARDS
- 480Y/277 VOLT PANELBOARD, RECESSED MOUNTED REFER TO SCHEDULE OF PANELBOARDS
- GROUND BAR
- DRY TYPE TRANSFORMER "T3" - INDICATES KVA RATING OF TRANSFORMER REFER TO DRY TYPE TRANSFORMER SCHEDULE
- DRY TYPE TRANSFORMER K-RATED "KT3" - INDICATES KVA RATING OF TRANSFORMER REFER TO DRY TYPE K-RATED TRANSFORMER SCHEDULE
- CURRENT TRANSFORMER CABINET
- CUSTOMER METER
- UTILITY METER AND SOCKET
- BUSWAY, VERTICAL, REFER TO RISER FOR RATING
- BUSWAY, HORIZONTAL WITH FUSED PLUG-IN DISCONNECT

EXISTING EQUIPMENT LEGEND

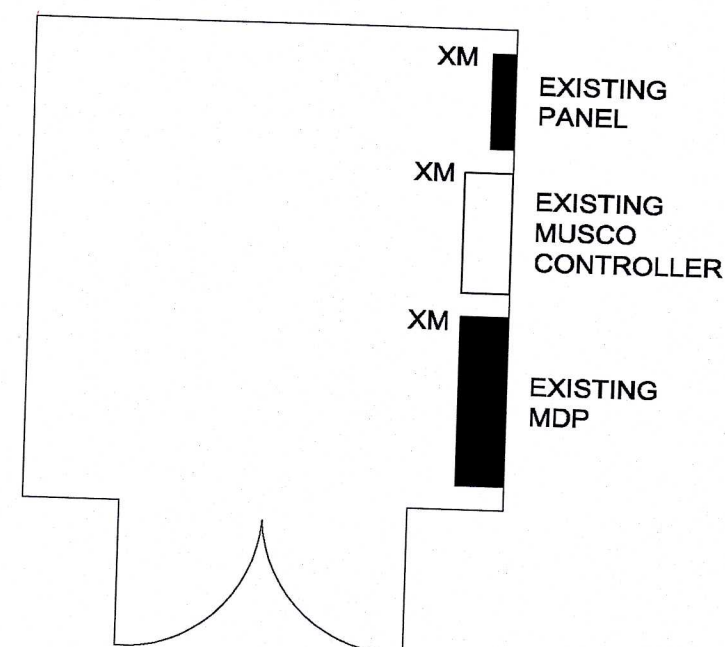
- XM EXISTING EQUIPMENT TO REMAIN
- X EXISTING EQUIPMENT TO BE REMOVED
- XR EXISTING EQUIPMENT TO BE RELOCATED
- XN NEW LOCATION OF EXISTING RELOCATED EQUIPMENT
- NR EXISTING EQUIPMENT TO BE REMOVED AND NEW EQUIPMENT TO BE INSTALLED ON EXISTING BRANCH/FEEDER
- EXISTING EQUIPMENT FOR INFORMATION ONLY - INDICATED BY SYMBOL WITH LIGHT AND OUT OF FUNCTION LINE TYPE
- EXISTING EQUIPMENT TO BE REWORKED - INDICATED BY SYMBOL WITH DASHED AND IN FUNCTION LINE TYPE

ABBREVIATIONS

A/AMP	AMPERE	KWH	KILOWATT HOURS
AC	ALTERNATION CURRENT	LTG	LIGHTING
ADA	AMERICAN WITH DISABILITIES ACT	MCB	MAIN CIRCUIT BREAKER
AF	AMPERE FRAME	MEC	MASSACHUSETTS ELECTRICAL CODE
AFF	ABOVE FINISHED FLOOR	M/G	MOTOR/GENERATOR SET
AFG	ABOVE FINISHED GRADE	MH	MANHOLE
AIC	AMPERE INTERRUPTING CAPACITY	MLO	MAIN LUGS ONLY
AL	ALUMINIUM	MTD	MOUNTED
AT	AMPERE TRIP	MTG	MOUNTING
ATS	AUTOMATIC TRANSFER SWITCH	NC	NORMALLY CLOSED CONTACT
AWG	AMERICAN WIRE GAUGE	NEC	NATIONAL ELECTRICAL CODE
B	BURIED	NO	NORMALLY OPEN CONTACT
C	CONDUIT	NTS	NOT TO SCALE
CA	CABLE	#	NUMBER
CATV	CABLE TELEVISION	OPD	OVER CURRENT PROTECTION DEVICE
CCTV	CLOSED CIRCUIT TELEVISION SYSTEM	POS	PROVIDED UNDER OTHER SECTIONS
CB	CIRCUIT BREAKER	PVC	POLYVINYL CHLORIDE
CKT	CIRCUITS	PWR	POWER
CPU	CENTRAL PROCESSING UNIT	RGS	RIGID GALVANIZED STEEL
CL	CENTERLINE	RMS	ROOT MEAN SQUARE VALUE
dB	DECIBEL	RPM	REVOLUTIONS PER MINUTE
DC	DIRECT CURRENT	SN	SOLID NEUTRAL
DWG	DRAWING	SWBD	SWITCHBOARD
EC	ELECTRICAL CONTRACTOR	TB	TERMINAL BLOCK
EMT	ELECTRIC METALLIC TUBING	TEL	TELEPHONE
FDR	FEEDER	TERMN	TERMINAL
FLMT	FLEXIBLE LIQUID TIGHT METALLIC TUBING	TSP	TWISTED SHIELDED-PAIR
FREQ	FREQUENCY	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSER
GEC	GROUNDING ELECTRODE CONDUCTOR	TYP	TYPICAL
GFI	GROUND FAULT INTERRUPTING	UG	UNDERGROUND
GND	GROUND	UNO	UNLESS NOTED OTHERWISE
HH	HANDHOLE	UPS	UNINTERRUPTIBLE POWER SUPPLY
HP	HORSEPOWER	UTP	UNSHIELDED TWISTED-PAIR
HVAC	HEATING, VENTILATING AND AIR CONDITIONING	V	VOLTS
HZ	HERTZ	VA	VOLT-AMPERE
IG	ISOLATED GROUND	VSD	VARIABLE SPEED DRIVE
JB	JUNCTION BOX	W	WATTS
KVA	KILOVOLT-AMPERE	WP	WEATHERPROOF
KW	KILOWATT		

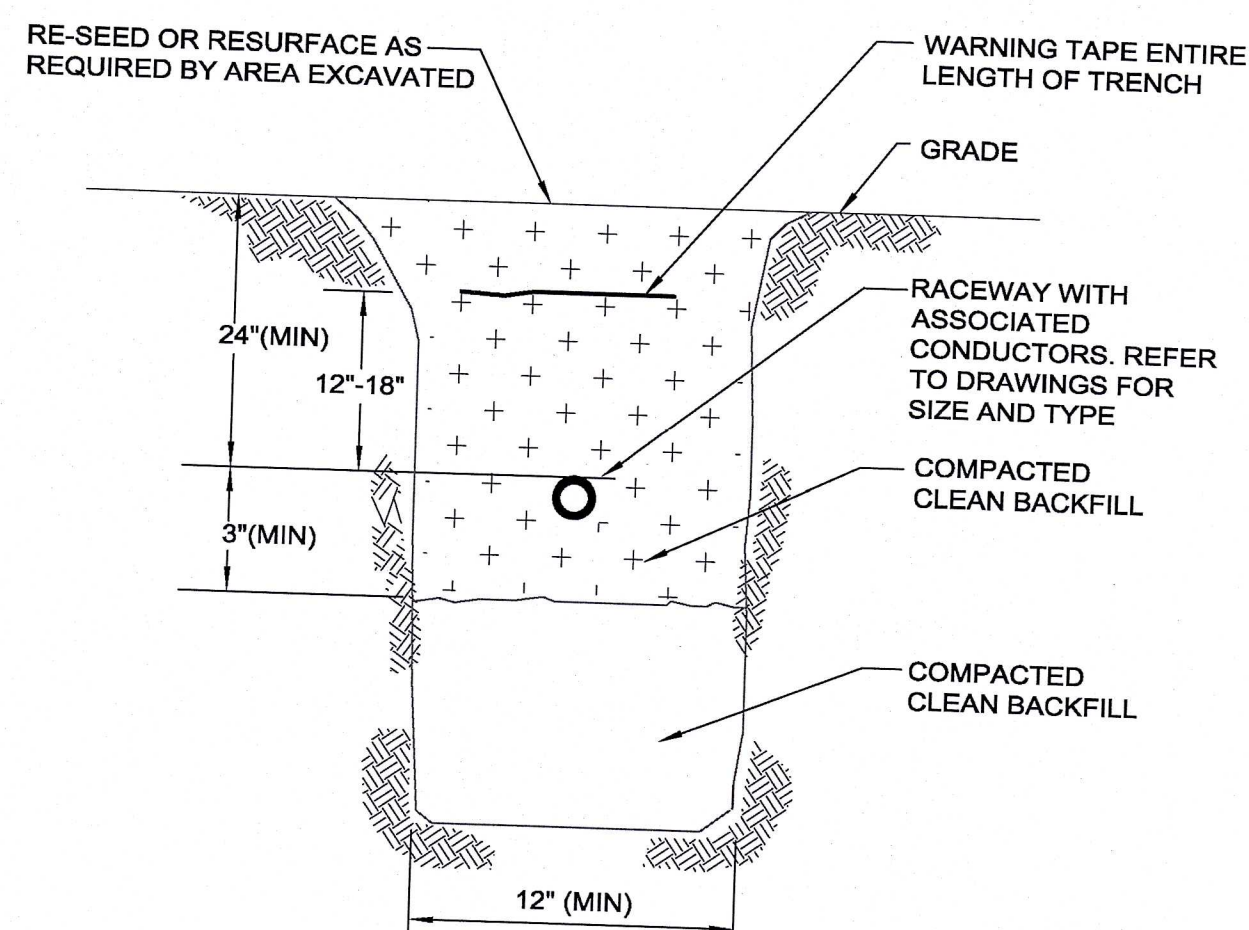
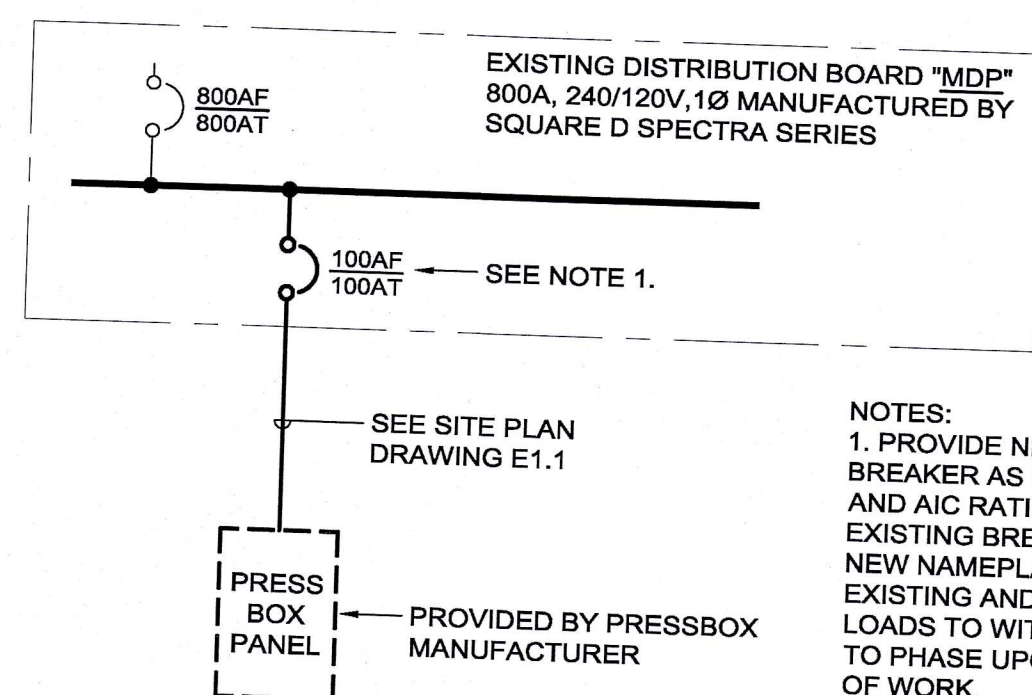
ELECTRIC SHED ENLARGED PART PLAN

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



PARTIAL ONE-LINE DIAGRAM

SCALE: NTS

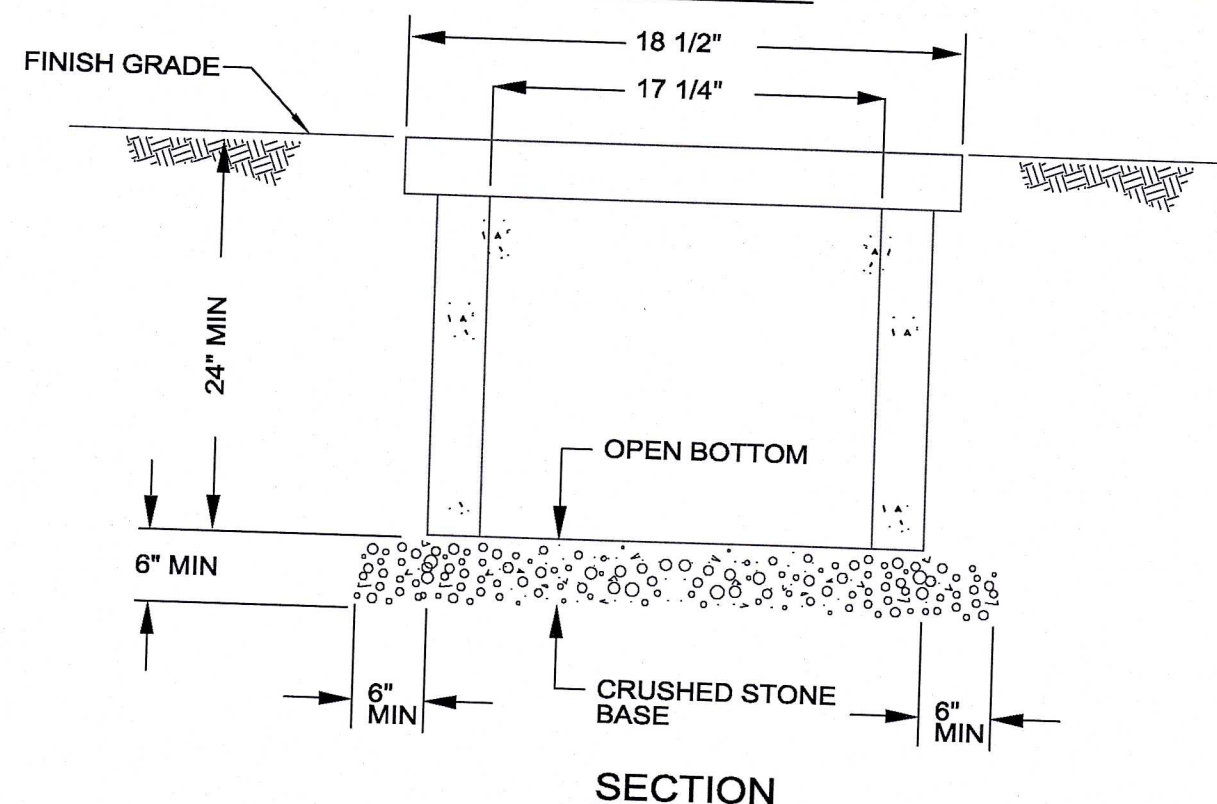
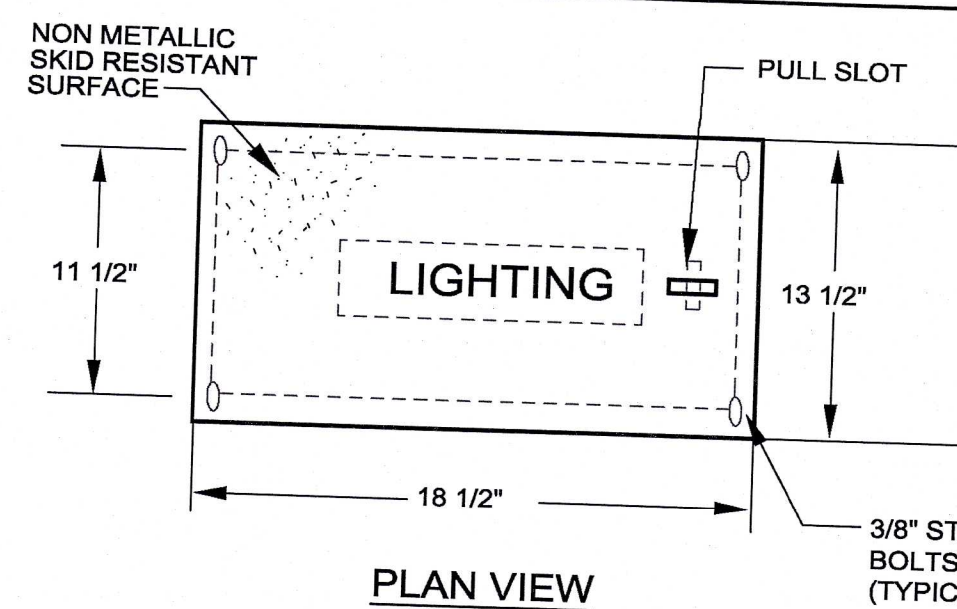


- NOTES:
1. THIS DETAIL IS INTENDED TO ILLUSTRATE REQUIREMENTS WHICH EXCEED THOSE REQUIRED BY NEC TABLE 300-5.
 2. WARNING TAPE SHALL BE DETECTABLE TYPE FOIL BACKED 4MIL POLYETHYLENE WITH FADE RESISTANT "BURIED ELECTRIC LINE BELOW" A MINIMUM OF 18 INCHES ABOVE THE BURIED SERVICE. TAPE SHALL BE EQUAL TO T&B NAF-0708.
 3. ALL ROADWAY CROSSING SHALL BE ENCASED WITH A MINIMUM OF 2 INCHES OF CONCRETE (TOP BOTTOM AND SIDES) EXTENDING A MINIMUM OF 2 FEET BEYOND EACH SIDE OF CROSSING.
 4. ALL CONDUIT RISERS SHALL UTILIZE LONG RADIUS GALVANIZED RIGID STEEL SWEEPS.

RDK

BURIED CONDUIT DETAIL

E513

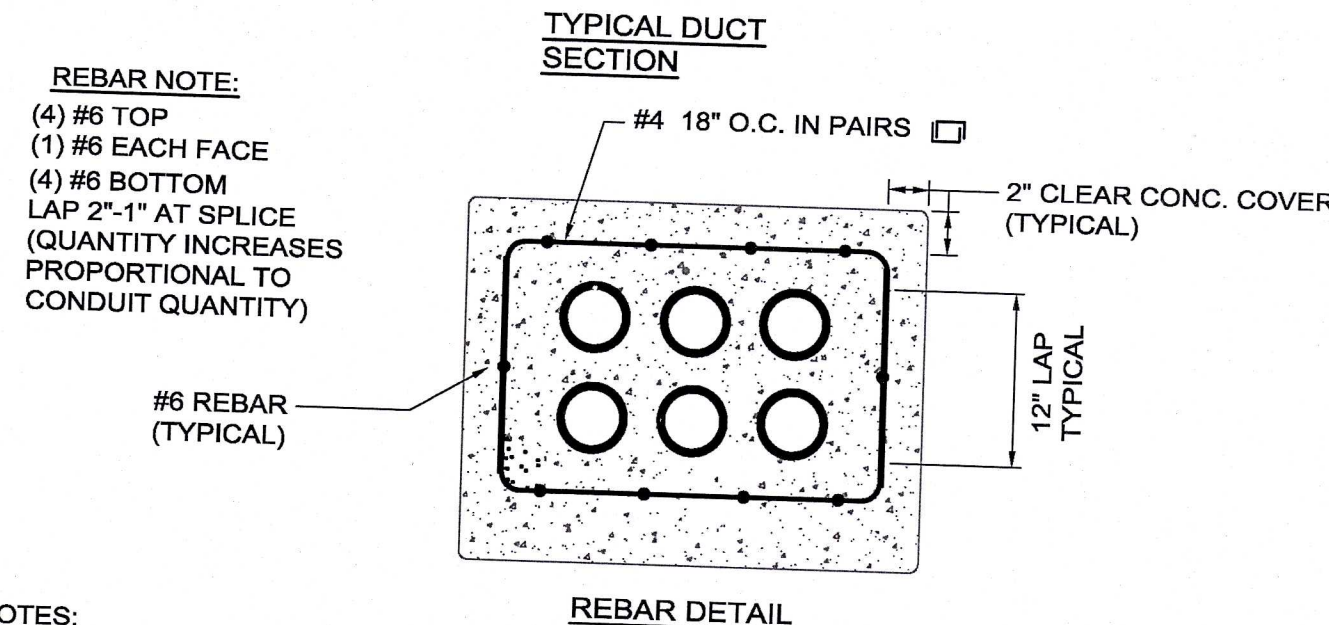
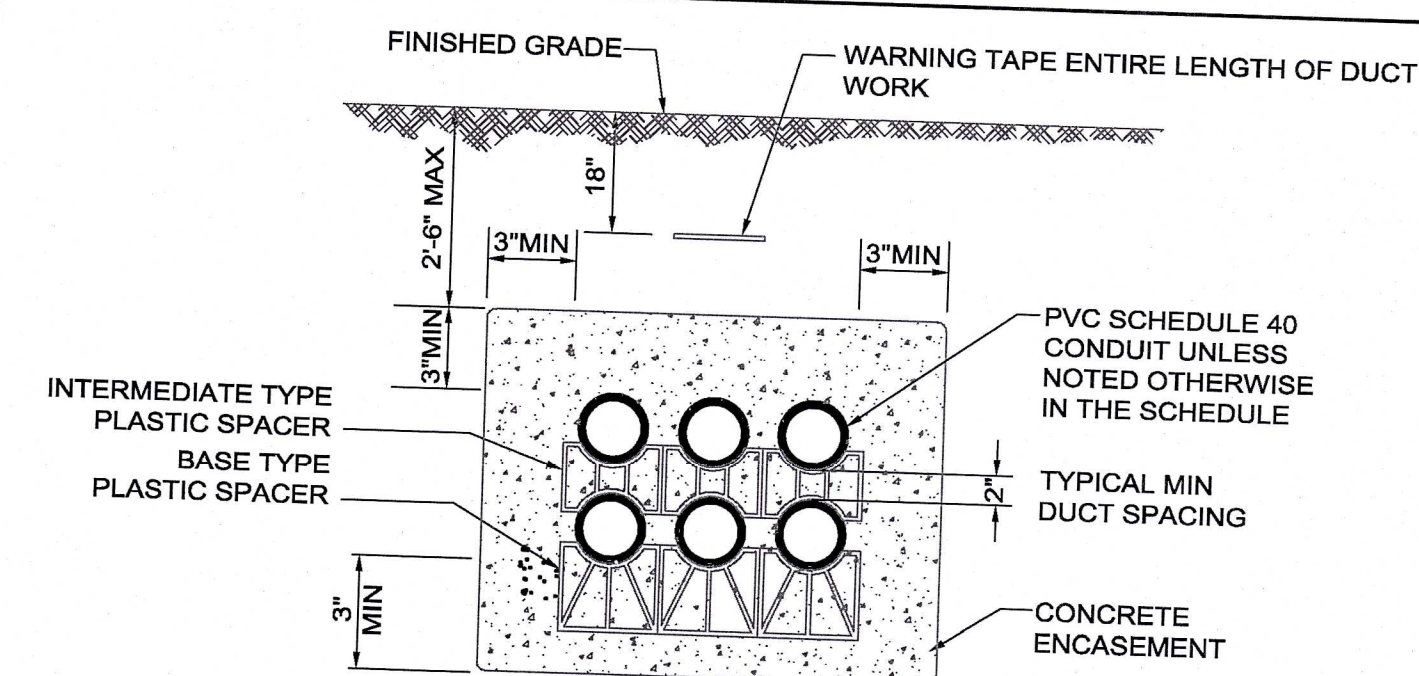


- NOTES:
1. THIS IS A TYPICAL DETAIL. REFER TO DRAWING FOR ACTUAL DIMENSIONS OF HANDHOLE WHICH MAY DEVIATE FROM THESE DIMENSIONS. REFER TO THE SITE PLAN FOR QUANTITY OF CONDUITS AND THE "SERVICE" REQUIRED ON THE COVER.
 2. THIS HANDHOLE IS INTENDED FOR NON-DELIBERATE VEHICULAR TRAFFIC ONLY, ANSI TIER 22 (22,500 POUND DESIGN LOAD)
 3. HANDHOLE SHALL BE PREFABRICATED POLYMER CONCRETE AGGREGATE EQUAL TO QUARTZITE OR EQUAL PRE CAST CONCRETE CONSTRUCTION.

RDK

TYPICAL PREFABRICATED HANDHOLE DETAIL

E505



- NOTES:
1. THIS DETAIL IS INTENDED TO ILLUSTRATE CONSTRUCTION OF TYPICAL DUCT BANK. REFER TO REFERENCED SECTION FOR QUANTITY AND SIZE OF CONDUIT REQUIRED. DUCT CONSTRUCTION SHALL BE MODIFIED TO ACCOMMODATE REQUIREMENTS ILLUSTRATED IN THE ACTUAL SECTION, UTILIZING THE CRITERIA ESTABLISHED IN THIS DETAIL AND AS WRITTEN IN THE SPECIFICATIONS.
 2. REBAR SHALL BE USED FOR ALL DUCT BANKS INSTALLED UNDER TRAVELED WAYS, ROADWAYS, AND TRANSITIONS INTO MANHOLES/HANDHOLES AND FOUNDATIONS. REFER TO SPECIFICATIONS FOR ADDITIONAL DETAILS.
 3. WARNING TAPE SHALL BE DETECTABLE TYPE FOIL BACKED 4 MIL POLYETHYLENE WITH FADE RESISTANT "BURIED ELECTRIC LINE BELOW" A MINIMUM OF 12 INCHES ABOVE THE BURIED SERVICE. TAPE SHALL BE EQUAL TO T & B NAF-0705

RDK

TYPICAL ELECTRICAL DUCT DETAIL

E502

YARMOUTH HIGH SCHOOL

Yarmouth, Maine

SYNTHETIC TURF CARPET REPLACEMENT

REV:

SCALE:

Bid Documents:
February 15, 2013
ELECTRICAL
LEGEND, DETAILS
& ONE-LINE

SCALE: AS NOTED
JOB NO: 12002.00
FILE: 12005-L3.1-PP.dwg
DRAWN: MM
CHECKED: MM

SHEET NO:

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

ELECTRICAL SPECIFICATIONS

PART 1 - GENERAL

- GENERAL PROVISIONS: DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF WORK IN CONTRACT. REFER TO ALL DRAWINGS ASSOCIATED WITH THIS PROJECT (EACH TRADE) FOR EXACT LOCATION OF ALL EQUIPMENT AND REQUIRED MOUNTING HEIGHTS.
2. SCOPE: PERFORM WORK AND PROVIDE NEW MATERIAL AND EQUIPMENT AS SHOWN ON DRAWINGS AND AS SPECIFIED IN THIS SECTION OF THE SPECIFICATIONS. PROVIDE ALL COMPONENTS AND MATERIALS, WHETHER SPECIFICALLY SHOWN OR NOT, THAT ARE NECESSARY TO MAKE THE SYSTEMS COMPLY WITH THE FOLLOWING OPERATIONAL. WORK SHALL INCLUDE, BUT NOT BE LIMITED TO: 1) THE DESIGN INTENT AS ILLUSTRATED ON THESE DRAWINGS, 2) ALL TESTING AND CERTIFICATIONS NECESSARY TO COMPLY WITH ALL COMMUNICATIONS AND ANY REQUIRED REMEDIAL ACTIONS AND RETESTING DUE TO FAILURE,
3. SITE VISIT: VISIT AND CAREFULLY EXAMINE SITE TO IDENTIFY EXISTING CONDITIONS THAT MAY AFFECT WORK OF THIS SECTION BEFORE SUBMITTING BID. NO EXTRA PAYMENT WILL BE ALLOWED FOR ADDITIONAL WORK CAUSED BY UNFAMILIARITY WITH SITE CONDITIONS THAT ARE VISIBLE OR READILY DISCERNED.
4. RELATED WORK: THE FOLLOWING WORK IS NOT INCLUDED IN THIS SECTION AND WILL BE PROVIDED UNDER OTHER SECTIONS: 1) TEMPORARY LIGHTING AND POWER TO BE USED DURING CONSTRUCTION AND TESTING UNLESS SPECIFICALLY NOTED IN OTHER SPECIFICATIONS, 2) TELECOMMUNICATIONS WIRING AND DEVICES UNLESS SPECIFICALLY NOTED ON THE DRAWINGS 3) AUTOMATIC TEMPERATURE CONTROL AND DIRECT DIGITAL COMMUNICATIONS WIRING UNLESS SPECIFICALLY NOTED ON THE DRAWINGS AND 4) PAINTING.
5. CODES, STANDARDS, AUTHORITIES AND PERMITS: ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITIONS OF THE STATE BUILDING CODE, THE STATE ELECTRICAL CODE, NFPA, ANSI/NECA INSTALLATION STANDARDS AND OTHER APPLICABLE CODES, REGULATIONS AND LAWS OF LOCAL, STATE AND FEDERAL GOVERNMENT, OTHER AUTHORITIES AND STANDARDS, AND APPLICABLE BASE BUILDING STANDARDS AND SPECIFICATIONS. CODES, LAWS, ORDINANCES AND STANDARDS PROVIDE A BASIS FOR THE MINIMUM INSTALLATION CRITERIA FOR THIS PROJECT, WHICH MAY EXCEED MINIMUM CODE, LAW AND STANDARDS CRITERIA. GIVE NOTICES, FILE PLANS, OBTAIN PERMITS AND LICENSES, PAY BACKCHARGES AND OBTAIN NECESSARY APPROVALS FROM UTILITY COMPANIES AND AUTHORITIES HAVING JURISDICTION AS REQUIRED FOR THE EXECUTION OF ALL WORK ASSOCIATED WITH THIS PROJECT.
- INTERPRETATION OF DOCUMENTS: ADVISE THE ENGINEER IN WRITING (RFI) PRIOR TO PROCEEDING WITH PROCUREMENT OF INSTALLATION THAT THE DESIGN INTENT IS UNCLEAR OR THAT CONSTRUCTION DOCUMENTS DO NOT COINCIDE WITH MANUFACTURER'S RECOMMENDATIONS. ALL COSTS FOR REWORK NECESSARY TO RESOLVE DISCREPANCIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- REQUEST FOR INFORMATION: RFI ISSUED TO RESOLVE A CONFLICT OR DISCREPANCY SHALL BE PROVIDED WITH THE PREFERRED SOLUTION VIA WRITTEN DESCRIPTION OR SKETCH.
- RECORD DRAWINGS: CAD RECORD DRAWING FILES SHALL BE SUBMITTED AT THE COMPLETION OF THIS PROJECT SHOWING THE "AS-BUILT" CONDITION INCLUDING WORK INSTALLED AND ALL MODIFICATIONS OR ADDITIONS TO ORIGINAL DESIGN. OBTAIN THE AUTOCAD FILES FOR PREPARATION OF AS-BUILT DRAWINGS FROM THE ARCHITECT. THE ARCHITECT AND ENGINEER ARE NOT GRANTING ANY OWNERSHIP OR PROPERTY INTEREST IN THE CAD DRAWINGS BY THE DELIVERY OF THE CAD FILES. THE RIGHTS TO USE THE CAD FILES AND DRAWINGS ARE LIMITED TO THE CONTRACTOR FOR THE SOLE PURPOSE OF ASSISTING IN THE PERFORMANCE OF CONSTRUCTION OBLIGATIONS WITH RESPECT TO THIS PROJECT. ANY REUSE AND/OR OTHER USE WILL BE AT THE CONTRACTOR'S SOLE RISK AND WITHOUT LIABILITY TO THE ARCHITECT AND ENGINEER.
- WARRANTIES: WARRANTY INSTALLATION IN WRITING FOR ONE YEAR FROM DATE OF OWNER'S ACCEPTANCE OF CERTIFICATE OF SUBSTANTIAL COMPLETION. REPAIR, REPLACE OR PROVIDE TEMPORARY ACCOMMODATIONS FOR DEFECTIVE MATERIALS, EQUIPMENT, WORKMANSHIP AND INSTALLATION THAT DEVELOP WITHIN 24 HOURS OF NOTIFICATION. WARRANTY SHALL INCLUDE A CONTACT PERSON (NAME AND 24 HOUR TELEPHONE NUMBER) FOR SERVICE REQUESTS. CORRECT DAMAGE CAUSED WHILE MAKING NECESSARY REPAIRS AND REPLACEMENTS DURING WARRANTY PERIOD AT NO ADDITIONAL COST.
- COORDINATION: CONFER WITH ALL OTHER TRADES RELATIVE TO LOCATION OF ALL APPARATUS AND EQUIPMENT TO BE INSTALLED AND SELECT LOCATIONS SO AS NOT TO CONFLICT WITH OR HINDER PROGRESS OF ANY OTHER TRADE SECTIONS. WORK INSTALLED THAT CREATES INTERFERENCE OR RESTRICTS ACCESS REQUIRED BY CODE OR TO CONDUCT MAINTENANCE AND/OR ADJUSTMENTS SHALL BE MODIFIED AT NO ADDITIONAL COST TO THE OWNER.
- SUPPORTS: INCLUDE ALL STRUCTURAL STEEL SUPPORTS, HANGER BRACKETS, ETC., REQUIRED FOR THE EXECUTION OF THE WORK OF THIS SECTION. HANGERS SHALL BE PREFINISHED CHANNEL AND THREADED ROD USED WITH APPROVED CLAMPS, HARDWARE, ETC. CHANNEL INSTALLED IN EXTERIOR LOCATIONS SHALL BE GALVANIZED STEEL WITH STAINLESS STEEL HARDWARE.
- CUTTING AND PATCHING: INCLUDE ALL CUTTING AND PATCHING NECESSARY FOR THE EXECUTION OF THE WORK OF THIS SECTION.
- HOISTING, SCAFFOLDING AND PLANKING: INCLUDE THE FURNISHING, SET-UP AND MAINTENANCE OF ALL HOISTING MACHINERY, CRANES, SCAFFOLDS, STAGING AND PLANKING AS REQUIRED FOR THE EXECUTION OF WORK FOR THIS SECTION.
- SAFETY PRECAUTIONS: LIFE SAFETY AND ACCIDENT PREVENTION SHALL BE A PRIMARY CONSIDERATION. COMPLY WITH ALL OF THE SAFETY REQUIREMENTS OF THE OWNER AND OSHA THROUGHOUT THE ENTIRE CONSTRUCTION PERIOD OF THE PROJECT. FURNISH, PLACE AND MAINTAIN PROPER GUARDS AND ANY OTHER NECESSARY CONSTRUCTION REQUIRED TO SECURE SAFETY OF LIFE AND PROPERTY.
- ACCESSIBILITY: ALL WORK PROVIDED UNDER THIS SECTION OF THE SPECIFICATION SHALL BE INSTALLED SO THAT PARTS REQUIRING PERIODIC INSPECTION, MAINTENANCE AND REPAIR ARE READILY ACCESSIBLE. WORK OF THIS TRADE SHALL NOT INFRINGE UPON CLEARANCES REQUIRED BY EQUIPMENT OF OTHER TRADES.
- PROTECTION OF WORK AND PROPERTY: THIS CONTRACTOR SHALL BE RESPONSIBLE FOR THE CARE AND PROTECTION OF ALL WORK INCLUDED UNDER THIS SECTION UNTIL THE COMPLETION AND FINAL ACCEPTANCE OF THIS PROJECT. PROTECT ALL EQUIPMENT AND MATERIALS FROM DAMAGE FROM ALL MATERIALS AND EQUIPMENT DAMAGED OR STOLEN SHALL BE REPAIRED OR REPLACED WITH EQUAL MATERIAL OR EQUIPMENT AT NO ADDITIONAL COST TO THE OWNER. PROTECT ALL EQUIPMENT, OUTLETS AND WIRINGS, AND ROOF PENETRATIONS WITH TEMPORARY PLUGS, CAPS AND COVERS. PROTECT MATERIALS OF OTHER TRADES FROM DAMAGE THAT MIGHT BE CAUSED BY USED BY WORK OR WORKMEN UNDER THIS SECTION AND MAKE GOOD DAMAGE THUS CAUSED. DAMAGED MATERIALS ARE TO BE REMOVED FROM THE SITE; NO SITE STING SYSTEMS AND EQUIPMENT CAUSE DAMAGE BY THE CONTRACTOR DURING INSTALLATION SHALL BE REPAIRED AND/OR REPLACED AT THIS CONTRACTOR'S EXPENSE TO THE COMPLETE SATISFACTION OF THE BUILDING OWNER.

PART 2 - PRODUCTS

1. IDENTIFICATION: NAMEPLATES SHALL INDICATE EQUIPMENT TAG, VOLTAGE CHARACTERISTICS AND SOURCE OF POWER. REFER TO NAMEPLATE DETAIL FOR ADDITIONAL INFORMATION.
2. RACEWAYS AND CONDUIT: RIGID GALVANIZED STEEL CONDUIT (RGS) SHALL BE UTILIZED WITH THREADED FITTINGS ONLY. ELECTRICAL METALLIC TUBING (EMT) SHALL BE UTILIZED WITH SET SCREW TYPE FITTINGS. UL LISTED LIGHT TIGHT FLEXIBLE METAL CONDUIT (LFMC) AND FLEXIBLE METAL CONDUIT (FMC) SHALL BE USED FOR FINAL CONNECTIONS TO EQUIPMENT WHERE FLEXIBILITY OR VIBRATION ISOLATION ARE REQUIRED. LFMC SHALL BE UV RESISTANT WHEN INSTALLED IN AN EXTERIOR LOCATION.
3. WIRE AND CABLE: ALL CONDUCTORS SHALL BE TYPE THHN/THWN OR XHHW, COPPER, RATED 75/90°C, 600 VOLT INSULATION UNLESS OTHERWISE NOTED. MINIMUM SIZE CONDUCTOR SHALL BE #12 AWG COPPER. CONDUCTORS #10 AWG AND LARGER SHALL BE STRAIGHT. #12 AWG AND SMALLER SHALL BE SOLID. EACH BRANCH CIRCUIT AND FEEDER SHALL BE PROVIDED WITH AN INSTALLED GROUNDING CONDUCTOR SIZED IN ACCORDANCE WITH NEC TABLE 250.122. CONDUCTOR COLOR CODING SHALL BE IN ACCORDANCE WITH THE DETAILS ON THE FOLLOWING DRAWINGS. CONDUCTOR COLOR CODING SHALL BE CONSISTENT THROUGHOUT INCLUDING CONDUCTORS INSTALLED IN RACEWAYS AND IN ALL CABLE ASSEMBLIES (MC AND/OR AC). FLEXIBLE METAL CLAD (MC) CABLE SHALL BE UL LISTED WITH INSULATED THIN PHASE AND GROUND CONDUCTORS WITHIN A GALVANIZED STEEL OR ALUMINUM INTERLOCKING ARMOR.

PART 3 EXECUTION

1. GENERAL: ALL INTERRUPTIONS AND SHUTDOWNS OF EXISTING ELECTRICAL SYSTEMS AND SERVICES SHALL BE AS SHORT AS POSSIBLE AND AT A TIME AND DATE APPROVED BY THE OWNER AND ENGINEER. THE CONTRACTOR SHALL INCLUDE ALL PREMIUM TIME ASSOCIATED WITH THE SYSTEM AND SERVICE INTERRUPTIONS AND SHUTDOWNS.
2. IDENTIFICATION: FURNISH AND INSTALL NAMEPLATES ON ALL ELECTRICAL EQUIPMENT INCLUDING PANELS, JUNCTION BOXES, DISCONNECT SWITCHES, TRANSFORMERS AND STARTERS.
3. RACEWAYS AND CONDUIT: REFER TO DRAWINGS FOR ALLOWABLE WIRING METHODS. EMT MAY BE USED WITH SET SCREW FITTINGS IN CONCEALED AND EXPOSED LOCATIONS WHERE NOT EXPOSED TO PHYSICAL DAMAGE OR MOISTURE. USE RIGID GALVANIZED STEEL WITH THREADED FITTINGS WHERE EMT IS PROHIBITED. ALL RACEWAYS, WHICH PASS THROUGH BUILDING EXPANSION JOINTS, SHALL BE EQUIPPED WITH EXPANSION FITTINGS. ALL CONDUITS SHALL BE SUPPORTED IN AN APPROVED MANNER TO THE BUILDING STRUCTURE.
4. WIRE AND CABLE: BRANCH CIRCUIT WIRING IS NOT ILLUSTRATED ON THE DRAWINGS AND IS INDICATED BY CIRCUIT NUMBERS NEXT TO FIXTURES, EQUIPMENT AND DEVICES. PROVIDE COMPLETE WIRING SYSTEM TO MEET ILLUSTRATED INTENT. CONDUIT HOMERUNS SHOWN ON THE DRAWINGS WITH MORE THAN 3 CURRENT CARRYING CONDUCTORS ARE SHOWN DIAGRAMMATICALLY. THE INSTALLATION OF MORE THAN 3 CURRENT CARRYING CONDUCTORS IN A COMMON RACEWAY SHALL REQUIRE THE DERATING OF ALL ASSOCIATED CONDUCTORS. ALL CIRCUITS SHALL CONTAIN A FULL SIZE, INSULATED GROUND CONDUCTOR.
5. EQUIPMENT TESTING AND CLEANING:
 - A. CLEAN THE INTERIOR AND EXTERIOR OF ALL EQUIPMENT AT PROJECT COMPLETION OF ALL CONSTRUCTION DEBRIS AND RESIDUE. DAMAGED SURFACES SHALL BE REPAIRED AND FINISHES TOUCHED UP PAINT TO MATCH THE MANUFACTURER'S FINISH. EXTENSIVELY DAMAGED ENCLOSURES SHALL BE REPLACED.
 - B. TEST THE INSULATION RESISTANCE BETWEEN EACH PHASE AND GROUND OF ALL FEEDERS ILLUSTRATED ON THE ONE LINE DIAGRAM. PROVIDE A TEST REPORT INDICATING THE RESULTS. REPLACE ALL CONDUCTORS THAT FAIL TO COMPLY WITH NETA TESTING STANDARDS.
 - C. VERIFY VOLTAGE AT THE ASSOCIATED PANELBOARD UNDER LOAD AND ADJUST TAP SETTINGS AS REQUIRED TO DELIVER NOMINAL VOLTAGE DURING NORMAL AND LIGHTLY LOADED CONDITIONS.

PART 4 PROJECT CLOSURE

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ITEMS ASSOCIATED WITH PROJECT CLOSEOUT. ALLOW SUFFICIENT TIME IN THE CONSTRUCTION SCHEDULE TO ENSURE THAT THE INSTALLATION IS SUBSTANTIALLY COMPLETE AND ALL REQUIRED TESTING AND ACCURATELY COMPLETED DOCUMENTATION IS DELIVERED TO THE ENGINEER AT LEAST TWO WEEKS PRIOR TO ENGINEER'S SUBSTANTIAL COMPLETION SITE VISIT. FAILURE TO ADEQUATELY PLAN OR SUBMISSION OF INCOMPLETE/INCORRECT DOCUMENTATION WILL RESULT IN BACK CHARGES OF ALL COSTS ASSOCIATED WITH ADDITIONAL WORK PERFORMED BY RDK ENGINEERS.
2. PROVIDE THE CONTRACTOR CERTIFICATE OF COMPLETION IN ACCORDANCE WITH 780CMR 107.6.3 INDICATING THAT THE INSTALLATION IS IN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS AND ALL APPLICABLE LOCAL, STATE AND FEDERAL STATUTES AND CODES. PROVIDE CERTIFICATION FROM BOTH THE GENERAL CONTRACTOR AND ASSOCIATED TRADE CONTRACTOR FOR COMPLIANCE WITH 780CMR CHAPTERS 1, 9 & 13.
3. SUBSTANTIAL COMPLETION SITE VISIT BY THE ENGINEER SHALL BE CONDUCTED AFTER RECEIPT AND REVIEW OF THE CONTRACTOR'S CERTIFICATE OF COMPLETION AND ALL CODE MANDATED TEST REPORTS AND SUBMISSIONS LISTED ABOVE. SUBSTANTIAL COMPLETION SITE VISITS SHALL NOT BE REQUESTED UNTIL THE PROJECT IS SUBSTANTIALLY COMPLETE.
4. PREMATURE REQUESTS THAT REQUIRE ADDITIONAL/FOLLOW UP SITE VISITS BY THE ENGINEER OF DEFICIENT ITEMS (AREAS INCOMPLETE, SYSTEMS NOT OPERATIONAL, ETC.) WILL RESULT IN BACK CHARGES OF THE COSTS ASSOCIATED WITH ANY AND ALL ADDITIONAL VISITS.

CONTACT DIGSAFE:
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ELECTRICAL ENGINEER -
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SURVEY -
LANDTECH CONSULTANTS

YARMOUTH HIGH SCHOOL

Carmouth, Maine

SYNTHETIC TURF CARPET REPLACEMENT

Bid Documents-
February 15, 2013

ELECTRICAL SPECIFICATIONS

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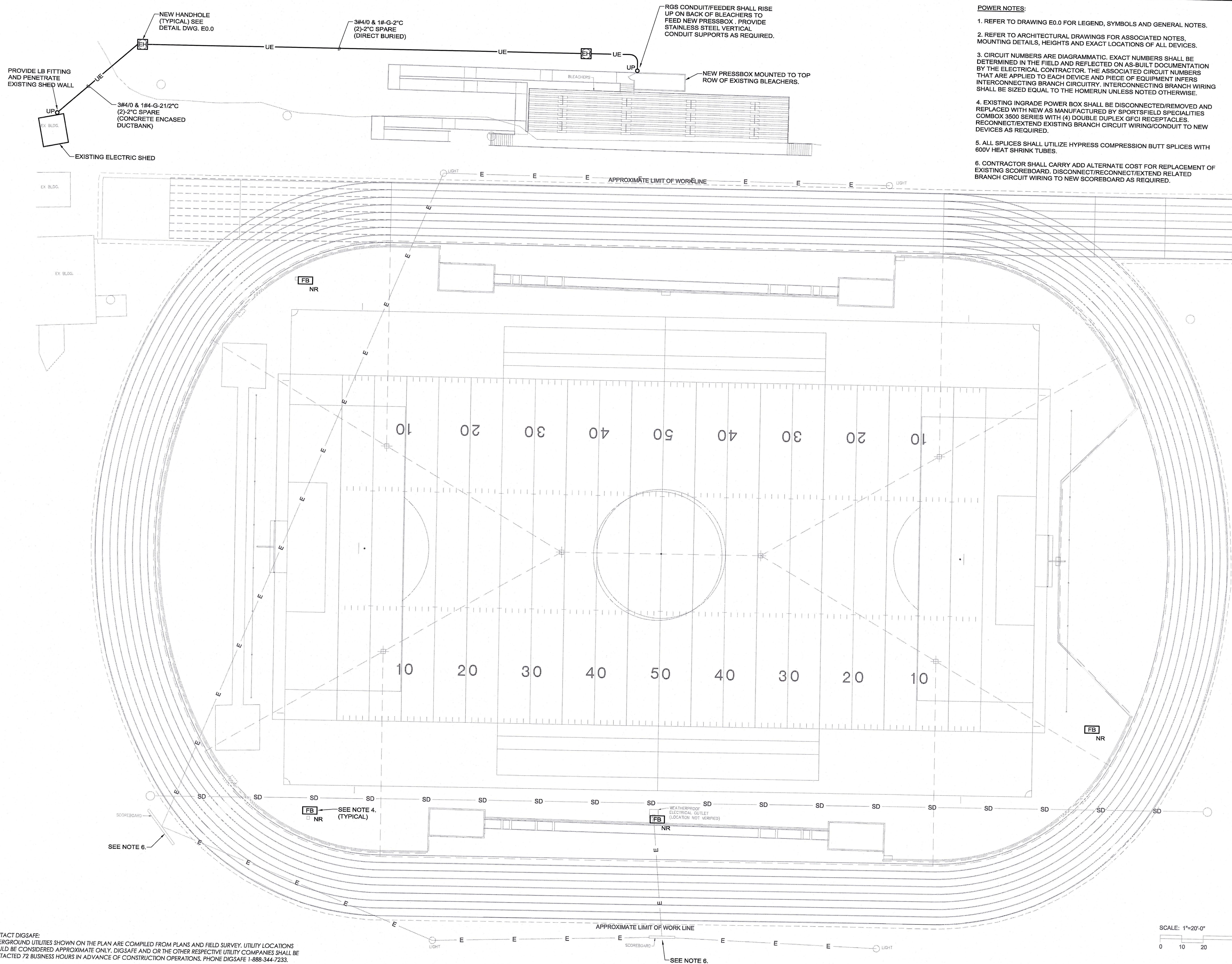
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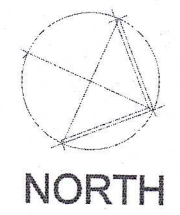
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- POWER NOTES:**
1. REFER TO DRAWING E0.0 FOR LEGEND, SYMBOLS AND GENERAL NOTES.
 2. REFER TO ARCHITECTURAL DRAWINGS FOR ASSOCIATED NOTES, MOUNTING DETAILS, HEIGHTS AND EXACT LOCATIONS OF ALL DEVICES.
 3. CIRCUIT NUMBERS ARE DIAGRAMMATIC. EXACT NUMBERS SHALL BE DETERMINED IN THE FIELD AND REFLECTED ON AS-BUILT DOCUMENTATION BY THE ELECTRICAL CONTRACTOR. THE ASSOCIATED CIRCUIT NUMBERS THAT ARE APPLIED TO EACH DEVICE AND PIECE OF EQUIPMENT INFERS INTERCONNECTING BRANCH CIRCUITRY. INTERCONNECTING BRANCH WIRING SHALL BE SIZED EQUAL TO THE HOMERUN UNLESS NOTED OTHERWISE.
 4. EXISTING INGRADE POWER BOX SHALL BE DISCONNECTED/REMOVED AND REPLACED WITH NEW AS MANUFACTURED BY SPORTSFIELD SPECIALTIES COMBOX 3500 SERIES WITH (4) DOUBLE DUPLEX GFCI RECEPTACLES. RECONNECT/EXTEND EXISTING BRANCH CIRCUIT WIRING/CONDUIT TO NEW DEVICES AS REQUIRED.
 5. ALL SPLICES SHALL UTILIZE HYPRESS COMPRESSION BUTT SPLICES WITH 600V HEAT SHRINK TUBES.
 6. CONTRACTOR SHALL CARRY ADD ALTERNATE COST FOR REPLACEMENT OF EXISTING SCOREBOARD. DISCONNECT/RECONNECT/EXTEND RELATED BRANCH CIRCUIT WIRING TO NEW SCOREBOARD AS REQUIRED.

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SCALE: 1"=20'-0"
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YARMOUTH HIGH SCHOOL
Yarmouth, Maine
SYNTHETIC TURF CARPET REPLACEMENT

REV:	

SEAL:

Bid Documents-
February 15, 2013
**ELECTRICAL
SITE PLAN**

SCALE: 1"=20'-0"
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FILE: 12005-L3.1-PP.dwg
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