

Brittany Howard
Code Enforcement
planner@townofepping.com



Town Hall
157 Main Street
Epping, NH 03042

Tel: (603) 679-1224
Fax: (603) 679-3002

Town of Epping, New Hampshire
Community Planning and Development

April 17, 2019

Rockingham Planning Commission
156 Water Street
Exeter, NH 03833

RE: Regional Impact

To Whom It May Concern,

On April 11, 2019 the Planning Board voted to consider the site plan for an asphalt plan by Sam Patterson Real Estate Development LLC a regional impact; please review the attached draft minutes and plans. The meeting will be May 9, 2019. I can be reached at 679-1224 ext 33 or planner@townofepping.com with any questions.

Respectfully Submitted,

Brittany Howard
Code Enforcement Officer

Cc: Fremont

PUBLIC HEARING: Site Plan - Asphalt Plant

Owner/developer: Sam Patterson Real Estate Dev., LLC

Location: Shirking Road, Tax Map 035 – Lot 026-002

Chairman Foley read notice of a site plan for an asphalt plant on Shirking Road. Abutters present: none.

Clark motioned to accept the plan Reinhold seconded. Motion passed unanimously 5-0.

Joe Coronati from Jones and Beach was representing Sam Patterson the property owner. Coronati went over the history of the lot. The property is in the industrial commercial zone. There are many industrial and commercial uses. New England Paving has relocated to the lot in front of the lot of the proposed asphalt plant. The roadway leading to site is complete up to gravel. New England Paving recycles the pavement from various projects. The proposed plant is portable but would be permanent at this site. Asphalt is made with sand, gravel and/or recycled asphalt. This plant would allow them to recycle the asphalt they have from projects. This is not a large commercial operation. They cannot compete with Pike or Continental; this is going to be small use mostly by the owner. They will have to buy all their own material; they do not have their own pits.

The proposed plant is an AZTEC six pack. It is brought in on 6 or 7 trailers and can be used temporarily. They are proposing a permanent use. The roadway into the site is one way. They back of the property is where the material will be stock piled to create a buffer for abutters. The grading on the site will be changed so that the site will drain toward the road and not toward the abutters. The area between the roadway and the site will be a bioretention pond for treatment not infiltration. It goes from there to a wet pond and then another swale so any water from the site will be treated at 3 separate areas.

Three components go into making asphalt, sand, gravel, and liquid asphalt. Liquid asphalt is hard when it isn't heated. Drinking water pipes, water tanks are lined with liquid asphalt. This site will be mainly used for New England Paving, they do parking lots and driveways. They do not do roads. They currently leave the site empty but by having this plant they could leave the site with asphalt.

Chairman Foley asked how many tons they would make in a day. Sam Patterson stated on a good day it is 400 ton but typically it is 100 ton. The trucks carry 20 ton.

Coronati stated that the stated that the Zoning Ordinance requires the operation be in a building. The proposal is that the area of the plant that mixes the material will be inside but the areas where the materials are placed in and the conveyor belts are not within the building. The site will be paved for dust control and a cleaner site. There will be a generator and a small office. There will be a port-a-potty and the ability to use the building on the other site. The heating system will run on propane.

Chairman Foley asked about the emission from the site. Coronati stated that they have applied for and received their permit from air emission department part of NHDES, at the state level.

Clark asked why it is a temporary permit. Coronati stated the permit is good until 2020. They have to get the plant up and running and the state comes down to monitor the plant. The plants have to meet air emission. There is not grandfathering. All plants have to meet the air emission standards.

Clark asked what they do with their current recycled asphalt. Sam Patterson stated that they bring it back to their site, screen it, crush it and use it as a gravel product. With the asphalt plant we can reheat it and use it more permanently. Coronati stated that recycled asphalt is also used on dirt roads. Clark Patterson spoke about emissions. The more efficient the plant the cleaner the emission, steam is what comes out of the stack. Asphalt does not containment water.

Chairman Foley stated that this site is very close to the border and that the access is out through Fremont. Does the Board think this is a regional impact development? All members agreed that it is. The Board wants the regional planning commission to be involved as well as the surrounding communities.

Chairman Foley opened the meeting to the public.

Scott Barthelemy – Fremont. Barthelemy believes that they are hardworking men. They are good neighbors. He has concerns about the smell. When they received the original approval, they stated it would be a paving prep site not an asphalt plant.

Coronati stated that this plant will not be running all the time. It is a small operation. They make it on the spot. We will get more information on smell.

Clark asked what the life of the plant is. Clark Patterson stated wear and tear parts need to be replaced more regularly but other part may last forever. Clark then asked if they have future plans to turn this into a permanent plant that can make more asphalt Clark Patterson stated that their permit is only for a certain amount of asphalt and they don't plan on requesting more. We are not trying to pave 101, we cannot complete with the bigger companies.

Mary Fosel – Fremont Road – They are good neighbors. There is an issue with traffic and full trucks. Right now, they can't go Railroad Ave. They can't go through Fremont. They are going down St. Laurent Street to Main Street and the roads are too small. There are also concerns about smell coming from the site.

Mark Vallone, 252 Blake Road. What if 20 years from now Pike wants to buy them out and increase the operation on the site. Howard stated that the Board can stipulate that they can only produce a certain amount and if they want to exceed that amount, they would need site plan approval.

Vallone also asked what the plan is to mitigate the air pollution. Coronati stated there is an air emission permit from the state. This is not an unregulated situation where something is happening in your town without oversight. The stack is up 35 feet in the air. Clark Patterson then explains this plant will have a bag house, similar to a diesel engine with an after burner. It is equivalent to 12 wood stoves burning a year. The bag house is a large filter system. The material that is in the filter and gets fed back into the fire.

Vallone asked how the site is monitored. Clark Patterson stated that they do a stack test and drive by test. The state can tell by the color of your emission if you are burning clean. A lot of the smell you get from an asphalt plant is when plants are recycling shingles. Howard stated the Board can restrict the recycling of shingles on the site.

Cary Cloutier, Martin Road Fremont. Last week he informed the Town Administrator about the meeting. The Town Administrator and the Board of Selectmen did not know about the meeting. This is a regional impact and does impact Fremont and the residents. North Road- no thru trucking. Martin Road no through trucking and there is weight limit because of the bridge. A number of residents on Martin Road are unhappy with the amount of trucks every day. Many residents in Epping will be unhappy with all the traffic because residents in Fremont are going to get Shirking Road restricted which means all traffic will go through Epping.

Joe Jean 27 Fremont Road. Is very concerned with the smell. Shirking Road may be industrial commercial but is sandwiched in between residential. I very rarely see New England Paving trucks coming past my property but there are concerns about the smell.

Howard read the letter from the Town of Fremont's Town Administrator into the record. There are concerns about traffic and the conditions of the road, concerns about air and water quality.

Chairman Foley stated that the applicant should reach out the other communities that have a similar plant, so that Board members of abutters may drive by the plant and see about smell. Clark Patterson stated that you should only be able to smell it when the material is dropped into the trucks. Chairman Foley has concerns about Shirking Road and the traffic.

Coronati then showed the Board Fremont Zoning map. All the traffic from the Industrial Zone in Fremont will be going through Epping.

Dennis Howland – Zoning Board of Appeals in Fremont. The ZBA denied an asphalt plant in Fremont because of traffic. We weren't worried about smells, emissions, or contamination. It was denied because of the impact to the residences in the area and the traffic.

Clark motion Reinhold seconded to continue the meeting to May 9th. The motion passed unanimously.

PUBLIC HEARING: Site Plan - Solar

Owner/developer: Route 125 & 101 Investments

Location: Fresh River Road, Tax Map 29 – Lots 283-006

Chairman Foley read notice of a site plan for an asphalt plant on Shirking Road. Abutters present: none.

Clark motion Reinhold seconded to accept the plans; motion passed unanimously.

Paige Libby from Jones and Beach represented Route 125 and 101 Investments. The shed will no longer be in the right-of-way. The site will need a condition use permit for wetland and wetland

SITE PLAN

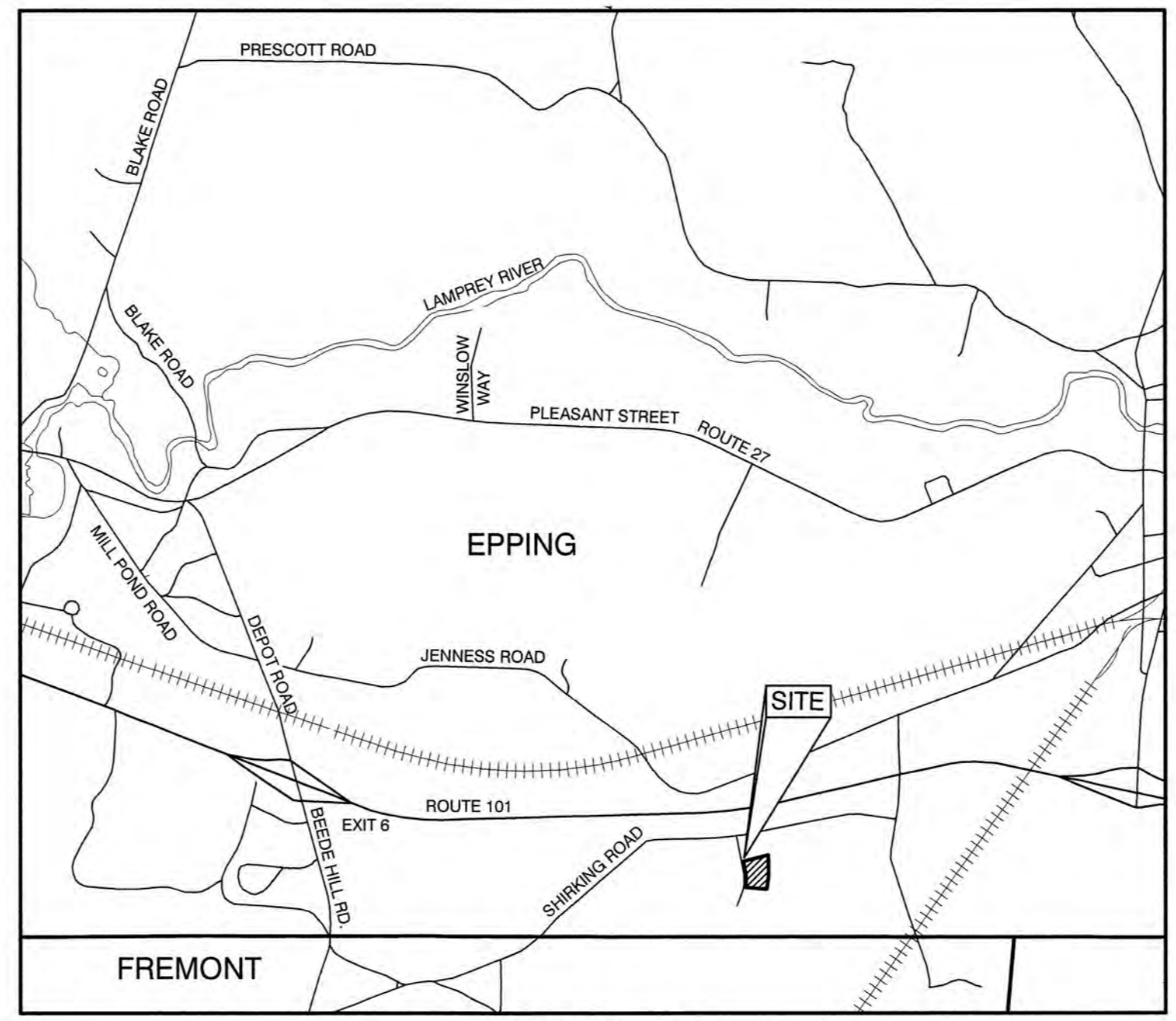
NEW ENGLAND PAVING ASPHALT PLANT

TAX MAP 35, LOT 26-2

SHIRKING ROAD, EPPING, NH

GENERAL LEGEND

EXISTING	PROPOSED	DESCRIPTION
		PROPERTY LINES
		SETBACK LINES
		CENTERLINE
		FRESHWATER WETLANDS LINE
		TIDAL WETLANDS LINE
		STREAM CHANNEL
		TREE LINE
		STONEWALL
		BARBED WIRE
		FENCE
		STOCKADE FENCE
		SOIL BOUNDARY
		AQUIFER PROTECTION LINE
		FLOOD PLAIN LINE
		ZONELINE
		EASEMENT
		MAJOR CONTOUR
		MINOR CONTOUR
		EDGE OF PAVEMENT
		VERTICAL GRANITE CURB
		SLOPE GRANITE CURB
		CAPE COD BERM
		POURED CONCRETE CURB
		SILT FENCE
		DRAINAGE LINE
		SEWER LINE
		SEWER FORCE MAIN
		GAS LINE
		WATER LINE
		WATER SERVICE
		OVERHEAD ELECTRIC
		UNDERGROUND ELECTRIC
		GUARDRAIL
		UNDERDRAIN
		FIRE PROTECTION LINE
		THRUST BLOCK
		IRON PIPE/IRON ROD
		DRILL HOLE
		IRON ROD/DRILL HOLE
		STONE/GRAVITE BOUND
		SPOT GRADE
		PAVEMENT SPOT GRADE
		CURB SPOT GRADE
		BENCHMARK (TBM)
		DOUBLE POST SIGN
		SINGLE POST SIGN
		WELL
		TEST PIT
		FAILED TEST PIT
		MONITORING WELL
		PERC TEST
		PHOTO LOCATION
		TREES AND BUSHES
		UTILITY POLE
		LIGHT POLES
		DRAIN MANHOLE
		SEWER MANHOLE
		HYDRANT
		WATER GATE
		WATER SHUT OFF
		REDUCER
		SINGLE GRATE CATCH BASIN
		DOUBLE GRATE CATCH BASIN
		TRANSFORMER
		CULVERT W/WINGWALLS
		CULVERT W/FLARED END SECTION
		CULVERT W/STRAIGHT HEADWALL
		STONE CHECK DAM
		DRAINAGE FLOW DIRECTION
		4K SEPTIC AREA
		WETLAND IMPACT
		VEGETATED FILTER STRIP
		RIPRAP
		OPEN WATER
		FRESHWATER WETLANDS
		TIDAL WETLANDS
		STABILIZED CONSTRUCTION ENTRANCE
		CONCRETE
		GRAVEL
		SNOW STORAGE
		RETAINING WALL



LOCUS MAP
SCALE 1" = 2000'

SHEET INDEX

CS	COVER SHEET
C1	EXISTING CONDITIONS PLAN
C2	SITE PLAN
C3	GRADING, DRAINAGE & UTILITY PLAN
L1	LIGHTING PLAN
D1	DETAIL SHEET
E1	EROSION AND SEDIMENT CONTROL DETAILS

**CIVIL ENGINEER / SURVEYOR/
WETLAND CONSULTANT**
JONES & BEACH ENGINEERS, INC.
 85 PORTSMOUTH AVENUE
 PO BOX 219
 STRATHAM, NH 03885
 (603) 772-4746
 CONTACT: JOSEPH CORONATI
 EMAIL: JCORONATI@JONESANDBEACH.COM

SOIL CONSULTANT
GOVE ENVIRONMENTAL SERVICES, INC.
 8 CONTINENTAL DRIVE, UNIT H
 PO BOX 219
 EXETER, NH 03833
 (603) 778-0644
 CONTACT: JIM GOVE, CWS, CSS
 EMAIL: JGOVE@GESINC.BIZ

ELECTRIC
EVERSOURCE ENERGY
 74 OLD DOVER ROAD
 ROCHESTER, NH 03867
 (603) 555-5334
 CONTACT: LINDA FARRAR

TELEPHONE
FAIRPOINT COMMUNICATIONS
 100 TRI CITY ROAD
 SOMERWORTH, NH 03878
 (603) 743-1114
 CONTACT: DAVE KESTNER

CABLE TV
COMCAST COMMUNICATION CORPORATION
 334-B CALEF HIGHWAY
 EPPING, NH 03042-2325
 (603) 679-5695

PROJECT PARCEL
 TOWN OF EPPING
 TAX MAP 35, LOT 26-2
 BK 5976, PG 1989

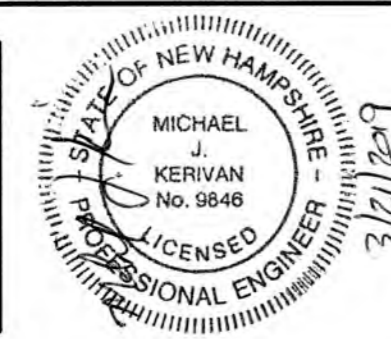
TOTAL LOT AREA
 130,849 SQ. FT.
 3.00 ACRES

APPROVED - EPPING, NH
PLANNING BOARD

 DATE: _____

F:\Land Projects\3\14161-EPPING-SHIRKING-ROAD-RALPH\dwg\14161-PLAN-LOT26-2.dwg 3/20/2019 5:36:30 PM EDT

Design: JAC	Draft: PSL	Date: 3/21/19
Checked: JAC	Scale: AS NOTED	Project No.: 14161.3
Drawing Name: 14161-PLAN-LOT26-2.dwg		
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.		



REV.	DATE	REVISION	BY
0	3/21/19	ISSUED FOR REVIEW	PSL

Designed and Produced in NH

J/B Jones & Beach Engineers, Inc.

85 Portsmouth Ave. PO Box 219 Stratham, NH 03885

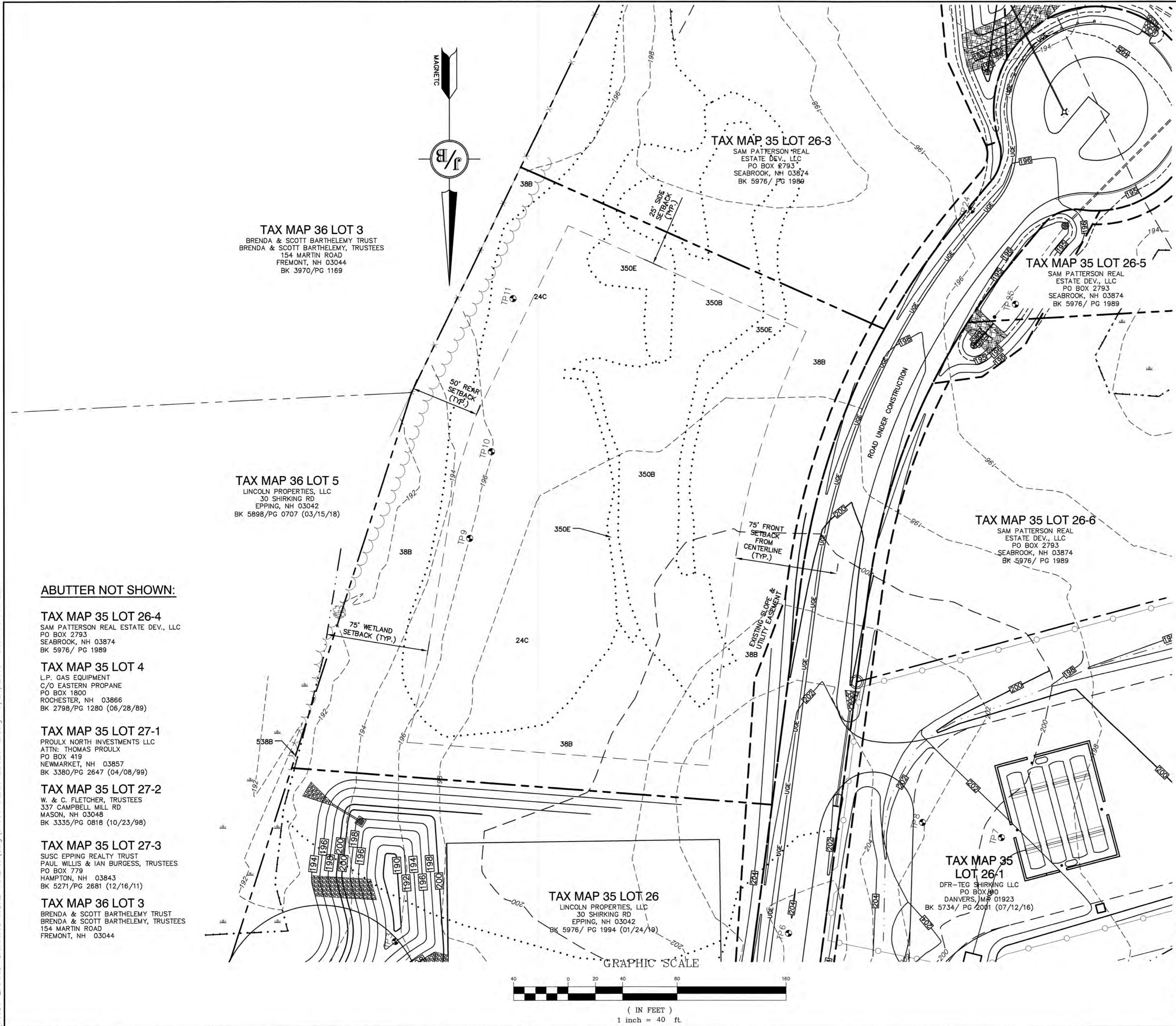
Civil Engineering Services

603-772-4746
FAX: 603-772-0227
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name:	COVER SHEET
Project:	NEW ENGLAND PAVING ASPHALT PLANT 30 SHIRKING ROAD, EPPING, NH
Owner of Record:	SAM PATTERSON REAL ESTATE DEV., LLC PO BOX 2793, SEABROOK, NH 03874

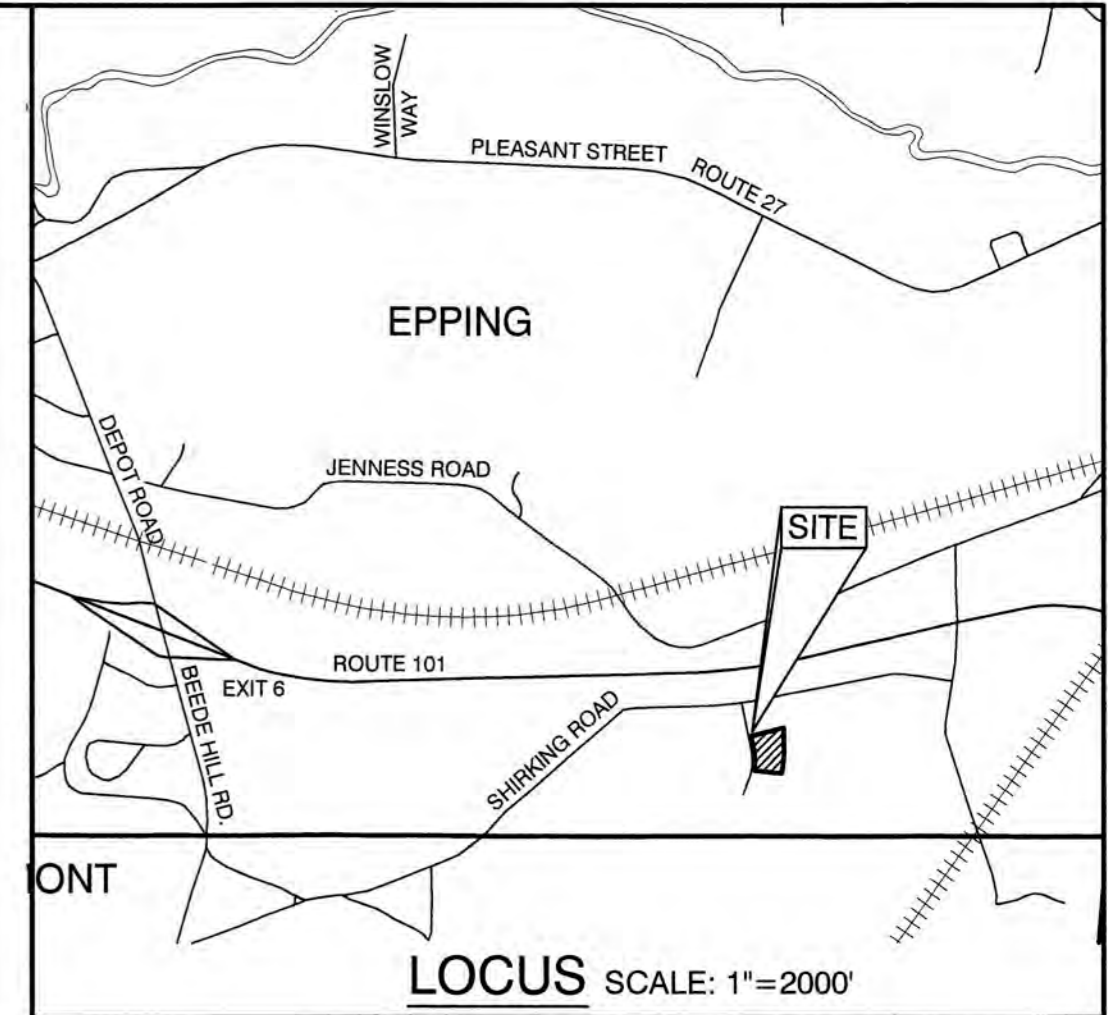
DRAWING No.	CS
SHEET 1 OF 7	JBE PROJECT NO. 14161.3

NEW ENGLAND PAVING ASPHALT PLANT, EPPING, NH
JBE # 14161.3 REVISION: 3/21/19



PLAN OF REFERENCE:

- "SUBDIVISION PLAN, SHIRKING ROAD INDUSTRIAL PARK SUBDIVISION FOR PATTERSON REAL ESTATE, LLC", PREPARED BY JONES & BEACH ENGINEERS, INC., SCALE 1"=100', DATED AUGUST 22, 2016, R.C.R.D. #0-40504.



EXISTING CONDITIONS & DEMOLITION NOTES:

- UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN PLOTTED FROM FIELD OBSERVATION AND THEIR LOCATION MUST BE CONSIDERED APPROXIMATE ONLY. NEITHER JONES & BEACH ENGINEERS, INC., NOR ANY OF THEIR EMPLOYEES TAKE RESPONSIBILITY FOR THE LOCATION OF ANY UNDERGROUND STRUCTURES OR UTILITIES NOT SHOWN THAT MAY EXIST. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL UNDERGROUND STRUCTURES AND/OR UTILITIES LOCATED PRIOR TO EXCAVATION WORK BY CALLING 1-888-DIG-SAFE (1-888-344-7233).
- HORIZONTAL DATUM: MAGNETIC
VERTICAL DATUM: NGVD29
- SUBJECT PROPERTY IS NOT LOCATED WITHIN FEDERALLY DESIGNATED 100 YEAR FLOOD HAZARD ZONE. REFERENCE FEMA COMMUNITY PANEL NO. 33015C 0215 E, DATED MAY 17, 2005.
- THE LIMITS OF JURISDICTIONAL WETLANDS WERE DELINEATED BY CHRISTOPHER ALBERT OF JONES & BEACH ENGINEERS, INC. DURING SPRING, 2015, IN ACCORDANCE WITH THE FOLLOWING GUIDANCE DOCUMENTS:
 - THE CORPS OF ENGINEERS FEDERAL MANUAL FOR IDENTIFYING AND DELINEATING JURISDICTIONAL WETLANDS.
 - THE NORTH CENTRAL & NORTHEAST REGIONAL SUPPLEMENT TO THE FEDERAL MANUAL.
 - THE CURRENT VERSION OF THE FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND, AS PUBLISHED BY THE NEW ENGLAND INTERSTATE WATER POLLUTION CONTROL COMMISSION AND/OR THE CURRENT VERSION OF THE FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, AS PUBLISHED BY THE USDA, NRCS, AS APPROPRIATE.
 - THE CURRENT NATIONAL LIST OF PLANT SPECIES THAT OCCUR IN WETLANDS, AS PUBLISHED BY THE US FISH AND WILDLIFE SERVICE.
- IN AREAS WHERE CONSTRUCTION IS PROPOSED ADJACENT TO ABUTTING PROPERTIES, THE CONTRACTOR SHALL INSTALL ORANGE CONSTRUCTION FENCING ALONG PROPERTY LINES IN ALL AREAS WHERE SILT FENCING IS NOT REQUIRED.
- EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION AND ANY EARTH MOVING OPERATIONS. SILT FENCE SHALL BE INSTALLED AT THE LIMITS OF IMPACT AREAS ACCORDING TO THE DETAILS SHOWN ON SHEET E1.
- WETLAND BOUNDARIES AND CONSTRUCTION LIMITS ARE TO BE CLEARLY MARKED PRIOR TO THE START OF CONSTRUCTION.
- EXCAVATED MATERIALS WILL BE PLACED WITHIN UPLAND AREAS AS FILL MATERIAL OR HAULED OFF-SITE FOR DISPOSAL IN AN APPROPRIATE UPLAND LOCATION.
- THE SITE SPECIFIC SOIL SURVEY WAS PRODUCED OCTOBER 12, 2016, AND WAS PREPARED BY JAMES P. GOVE, CSS # 004, GOVE ENVIRONMENTAL SERVICES, INC. SOILS WERE IDENTIFIED WITH THE NEW HAMPSHIRE STATE-WIDE NUMERICAL SOILS LEGEND, USDA NRCS, DURHAM, NH. ISSUE # 10, JANUARY 2011.

ABUTTER NOT SHOWN:

- TAX MAP 35 LOT 26-4**
SAM PATTERSON REAL ESTATE DEV., LLC
PO BOX 2793
SEABROOK, NH 03874
BK 5976/ PG 1989
- TAX MAP 35 LOT 4**
L.P. GAS EQUIPMENT
C/O EASTERN PROPANE
PO BOX 1800
ROCHESTER, NH 03866
BK 2798/PG 1280 (06/28/89)
- TAX MAP 35 LOT 27-1**
PROULX NORTH INVESTMENTS LLC
ATTN: THOMAS PROULX
PO BOX 419
NEWMARKET, NH 03857
BK 3380/PG 2647 (04/08/99)
- TAX MAP 35 LOT 27-2**
W. & C. FLETCHER, TRUSTEES
337 CAMPBELL MILL RD
MASON, NH 03048
BK 3335/PG 0818 (10/23/98)
- TAX MAP 35 LOT 27-3**
SUSC EPPING REALTY TRUST
PAUL WILLIS & IAN BURGESS, TRUSTEES
PO BOX 779
HAMPTON, NH 03843
BK 5271/PG 2681 (12/16/11)
- TAX MAP 36 LOT 3**
BRENDA & SCOTT BARTHELEMY TRUST
BRENDA & SCOTT BARTHELEMY, TRUSTEES
154 MARTIN ROAD
FREMONT, NH 03044

SOIL IDENTIFICATION LEGEND

NRCS SOIL MAP UNIT	NRCS SOIL SERIES	HSG
24	AGAWAM	B
38	ELDRIDGE	C
350	UDIPSAMMENTS, WET SUBSTRATUM	C
538	SQUAMSCOTT	C

SLOPES:
 B = 0-8%
 C = 8-15%
 D = 15-25%
 E = GREATER THAN 25%

PROJECT PARCEL TOWN OF EPPING TAX MAP 35, LOT 26-2 BK 5976, PG 1989
TOTAL LOT AREA 130,849 SQ. FT. 3.00 ACRES

Design: JAC Draft: PSL Date: 3/21/19
 Checked: JAC Scale: 1"=40' Project No.: 14161.3
 Drawing Name: 14161-PLAN-LOT26-2.dwg
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REV.	DATE	ISSUED FOR REVIEW	BY
0	3/21/19	ISSUED FOR REVIEW	PSL
		REVISION	

Designed and Produced in NH

J/B Jones & Beach Engineers, Inc.
 Civil Engineering Services
 85 Portsmouth Ave. PO Box 219 Stratham, NH 03885
 603-772-4746
 FAX: 603-772-0227
 E-MAIL: JBE@JONESANDBEACH.COM

Plan Name:	EXISTING CONDITIONS PLAN
Project:	NEW ENGLAND PAVING ASPHALT PLANT 30 SHIRKING ROAD, EPPING, NH
Owner of Record:	SAM PATTERSON REAL ESTATE DEV., LLC PO BOX 2793, SEABROOK, NH 03874

DRAWING No.	C1
SHEET 2 OF 7	JBE PROJECT NO. 14161.3

GENERAL LEGEND

EXISTING	PROPOSED	DESCRIPTION
---	---	PROPERTY LINES
---	---	SETBACK LINES
---	---	FRESHWATER WETLANDS LINE
---	---	TREE LINE
---	---	FENCE
---	---	STOCKADE FENCE
---	---	EDGE OF PAVEMENT
---	---	SILT FENCE
---	---	OVERHEAD ELECTRIC
---	---	UNDERGROUND ELECTRIC
---	---	IRON PIPE/IRON ROD
---	---	DRILL HOLE
---	---	IRON ROD/DRILL HOLE
---	---	SPOT GRADE
---	---	PAVEMENT SPOT GRADE
---	---	CURB SPOT GRADE
---	---	BENCHMARK (TBM)
---	---	SINGLE POST SIGN
---	---	WELL
---	---	TREES AND BUSHES
---	---	UTILITY POLES
---	---	LIGHT POLES
---	---	TRANSFORMER
---	---	FRESHWATER WETLANDS
---	---	GRAVEL
---	---	SNOW STORAGE

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TAX MAP 36 LOT 3
 BRENDA & SCOTT BARTHELEMY TRUST
 BRENDA & SCOTT BARTHELEMY, TRUSTEES
 154 MARTIN ROAD
 FREMONT, NH 03044
 BK 3970/PG 1169

TAX MAP 36 LOT 5
 LINCOLN PROPERTIES, LLC
 30 SHIRKING RD
 EPPING, NH 03042
 BK 5898/PG 0707 (03/15/18)

ABUTTER NOT SHOWN:

TAX MAP 35 LOT 26-4
 SAM PATTERSON REAL ESTATE DEV., LLC
 PO BOX 2793
 SEABROOK, NH 03874
 BK 5976/ PG 1989

TAX MAP 35 LOT 4
 L.P. GAS EQUIPMENT
 C/O EASTERN PROPANE
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TAX MAP 35 LOT 27-1
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 ATTN: THOMAS PROULX
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 NEWMARKET, NH 03857
 BK 3380/PG 2647 (04/08/99)

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 W. & C. FLETCHER, TRUSTEES
 337 CAMPBELL MILL RD
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 BK 5271/PG 2681 (12/16/11)

TAX MAP 36 LOT 3
 BRENDA & SCOTT BARTHELEMY TRUST
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 154 MARTIN ROAD
 FREMONT, NH 03044

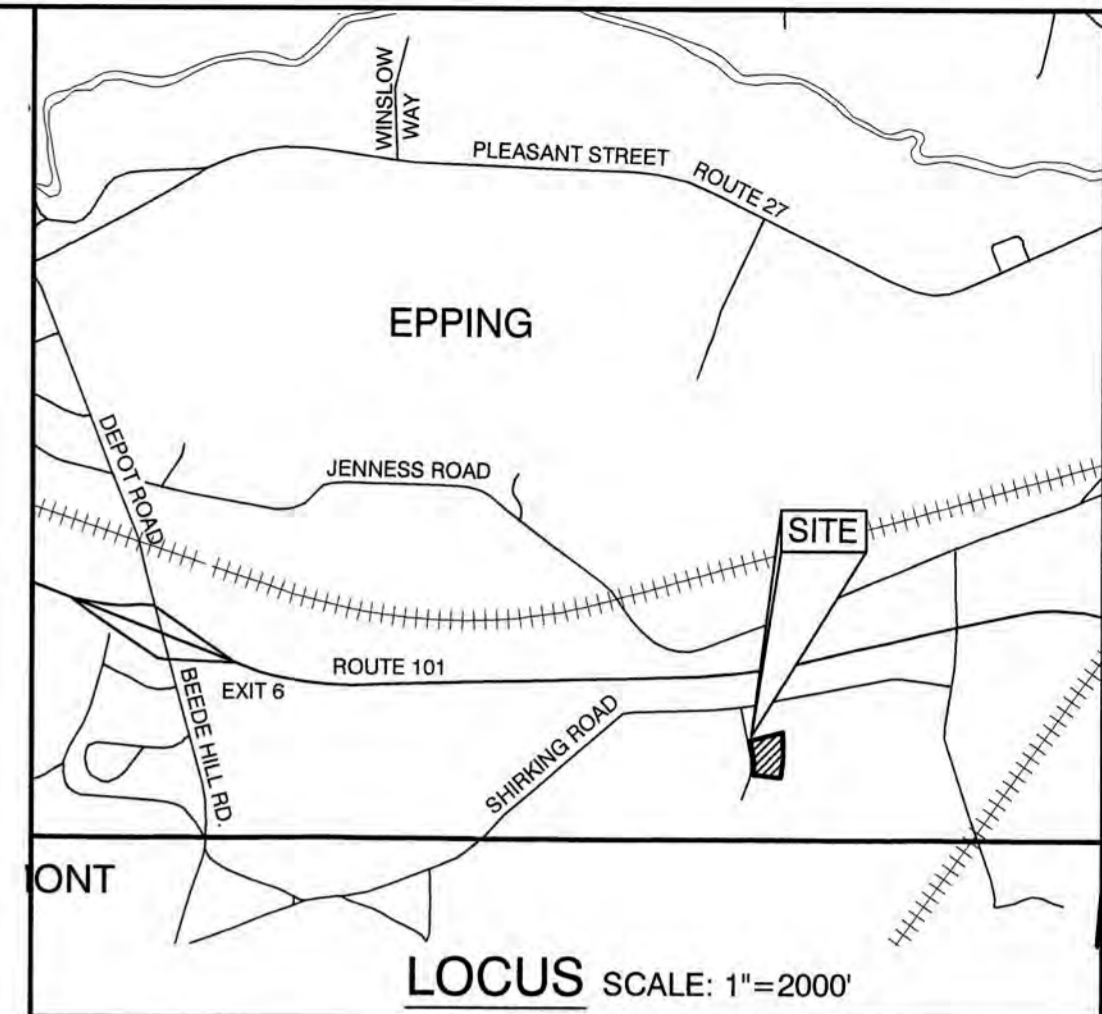
TAX MAP 35 LOT 26
 LINCOLN PROPERTIES, LLC
 30 SHIRKING RD
 EPPING, NH 03042
 BK 5976/ PG 1994 (01/24/19)

TAX MAP 35 LOT 26-3
 SAM PATTERSON REAL ESTATE DEV., LLC
 PO BOX 2793
 SEABROOK, NH 03874
 BK 5976/ PG 1989

TAX MAP 35 LOT 26-5
 SAM PATTERSON REAL ESTATE DEV., LLC
 PO BOX 2793
 SEABROOK, NH 03874
 BK 5976/ PG 1989

TAX MAP 35 LOT 26-6
 SAM PATTERSON REAL ESTATE DEV., LLC
 PO BOX 2793
 SEABROOK, NH 03874
 BK 5976/ PG 1989

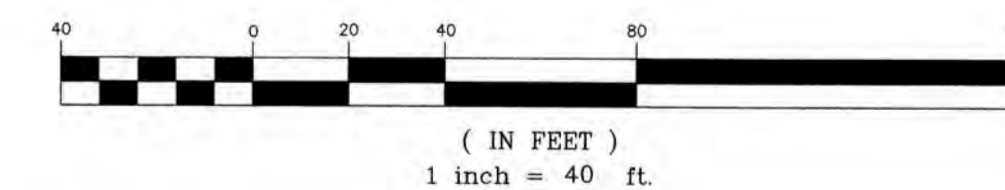
TAX MAP 35 LOT 26-1
 DFR-TEG SHIRKING LLC
 PO BOX 90
 DANVERS, MA 01923
 BK 5734/ PG 2001 (07/12/16)



SITE NOTES:

- THE INTENT OF THIS PLAN IS TO SHOW A PROPOSED ASPHALT PLANT ON LOT 26-2.
- ZONING DISTRICT: INDUSTRIAL/COMMERCIAL ZONE
 DIMENSIONAL REQUIREMENTS:
 LOT AREA MINIMUM = 3 ACRES
 LOT WIDTH MINIMUM = 200'
 BUILDING SETBACKS:
 FRONT SETBACK = 100' FROM CENTERLINE OF ROAD
 SIDE SETBACK = 25'
 REAR SETBACK = 50'
 WETLAND SETBACK = SAME AS SIDE SETBACK FOR UNDERLYING ZONE OR 15', WHICHEVER IS GREATER; 50' FOR WETLANDS GREATER THAN 10,000 S.F.; 75' FOR WETLANDS GREATER THAN 1 ACRE.
 MAX. BUILDING HEIGHT = 50' OR 5 STORIES (EXCLUDING ROOF). ALL BUILDINGS OVER 35' MUST PROVIDE FIRE SUPPRESSION PLAN APPROVED BY TOWN OF EPPING FIRE DEPARTMENT AND PLANNING BOARD.
 MAX. BUILDING COVERAGE = 30% (MAY BE INCREASED TO 45% PROVIDED LOT RUNOFF REMAINS THE SAME)
- SUBJECT PROPERTY IS NOT LOCATED WITHIN FEDERALLY DESIGNATED 100 YEAR FLOOD HAZARD ZONE. REFERENCE FEMA COMMUNITY PANEL NO. 33015C 0215 E, DATED MAY 17, 2005.
- THIS PLAN SET HAS BEEN PREPARED BY JONES & BEACH ENGINEERS, INC., FOR MUNICIPAL AND STATE APPROVALS AND FOR CONSTRUCTION BASED ON DATA OBTAINED FROM ON-SITE FIELD SURVEY AND EXISTING MUNICIPAL RECORDS. THROUGHOUT THE CONSTRUCTION PROCESS, THE CONTRACTOR SHALL INFORM THE ENGINEER IMMEDIATELY OF ANY FIELD DISCREPANCY FROM DATA AS SHOWN ON THE DESIGN PLANS, INCLUDING ANY UNFORESEEN CONDITIONS, SUBSURFACE OR OTHERWISE, FOR EVALUATION AND RECOMMENDATIONS. ANY CONTRADICTION BETWEEN ITEMS ON THIS PLAN/PLAN SET, OR BETWEEN THE PLANS AND ON-SITE CONDITIONS, MUST BE RESOLVED BEFORE RELATED CONSTRUCTION HAS BEEN INITIATED. CONTRACTOR TO ALWAYS CONTACT DIG SAFE PRIOR TO DIGGING ON-SITE OR OFF-SITE TO ENSURE SAFETY AND OBEY THE LAW.
- NHDES ALTERATION OF TERRAIN PERMIT NO. , DATED
- ALL CONSTRUCTION SHALL CONFORM TO TOWN STANDARDS AND REGULATIONS, AND NHDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, WHICHEVER IS MORE STRINGENT.
- LANDOWNERS ARE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL WETLAND REGULATIONS, INCLUDING PERMITTING REQUIRED UNDER THESE REGULATIONS.
- ALL CONSTRUCTION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN (S.W.P.P.). THIS DOCUMENT IS TO BE KEPT ON-SITE AT ALL TIMES AND UPDATED AS REQUIRED.
- PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER, ARCHITECT AND/OR OWNER, IN ORDER TO OBTAIN AND/OR PAY ALL THE NECESSARY LOCAL PERMITS, FEES AND BONDS.
- ALL PROPOSED SIGNAGE SHALL CONFORM WITH THE TOWN ZONING REGULATIONS, UNLESS A VARIANCE IS OTHERWISE REQUESTED.
- ALL CONSTRUCTION ACTIVITIES SHALL CONFORM TO LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) RULES AND REGULATIONS.
- SITE IS TO BE SECURED AT ALL TIMES WHEN NOT IN USE.

GRAPHIC SCALE



APPROVED - EPPING, NH
 PLANNING BOARD

PROJECT PARCEL
 TOWN OF EPPING
 TAX MAP 35, LOT 26-2
 BK 5976, PG 1989

TOTAL LOT AREA
 130,849 SQ. FT.
 3.00 ACRES

DATE:

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Design: JAC	Draft: PSL	Date: 3/21/19
Checked: JAC	Scale: 1"=40'	Project No.: 14161.3
Drawing Name: 14161-PLAN-LOT26-2.dwg		
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.		



REV.	DATE	REVISION	BY
0	3/21/19	ISSUED FOR REVIEW	PSL

Designed and Produced in NH

J/B Jones & Beach Engineers, Inc.

Civil Engineering Services

85 Portsmouth Ave. PO Box 219 Stratham, NH 03885

603-772-4746 FAX: 603-772-0227 E-MAIL: JBE@JONESANDBEACH.COM

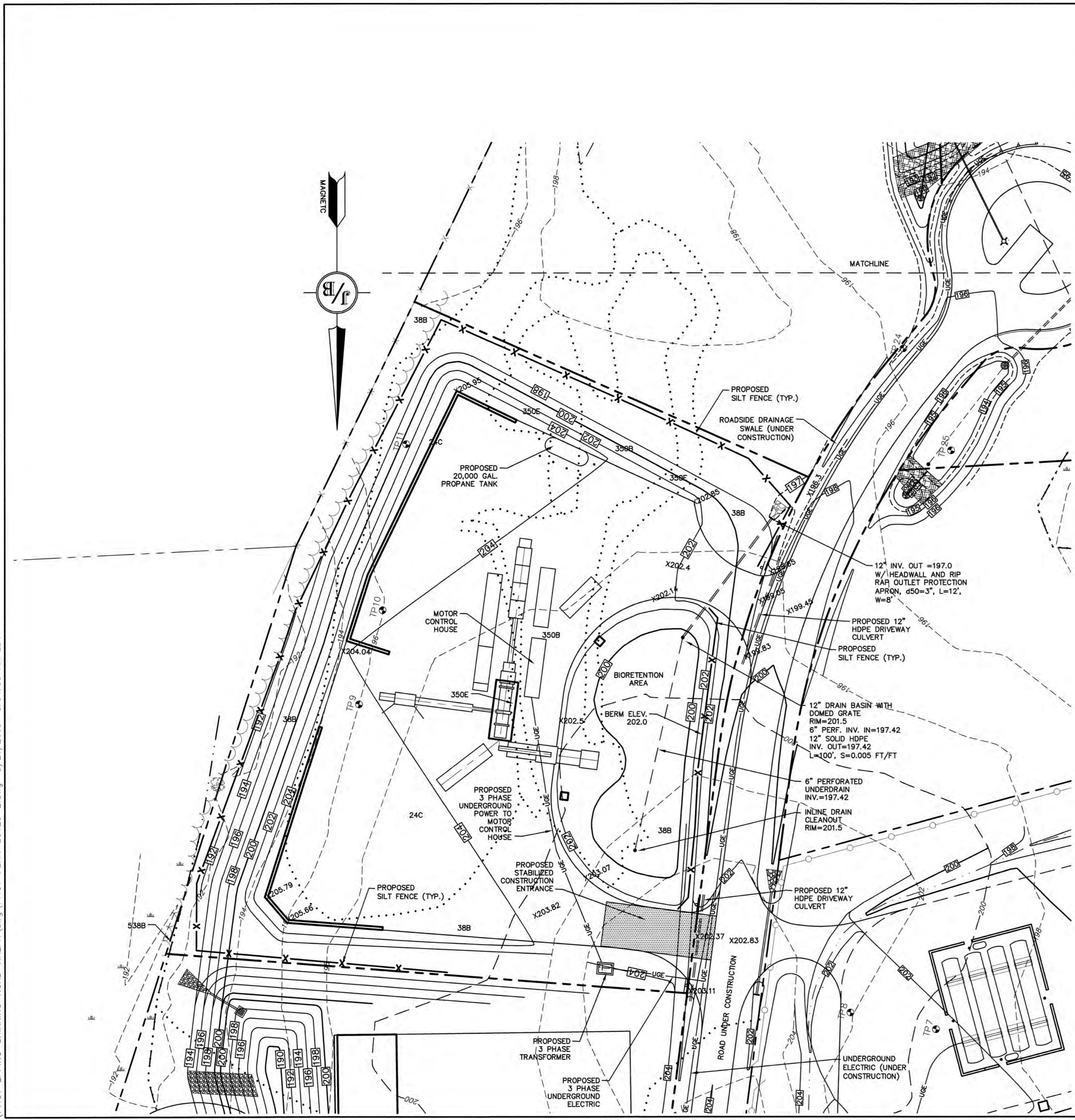
Plan Name:	SITE PLAN MAP 35, LOT 26-2
Project:	NEW ENGLAND PAVING ASPHALT PLANT 30 SHIRKING ROAD, EPPING, NH
Owner of Record:	SAM PATTERSON REAL ESTATE DEV., LLC PO BOX 2793, SEABROOK, NH 03874

DRAWING No.

C2

SHEET 3 OF 7
 JBE PROJECT NO. 14161.3

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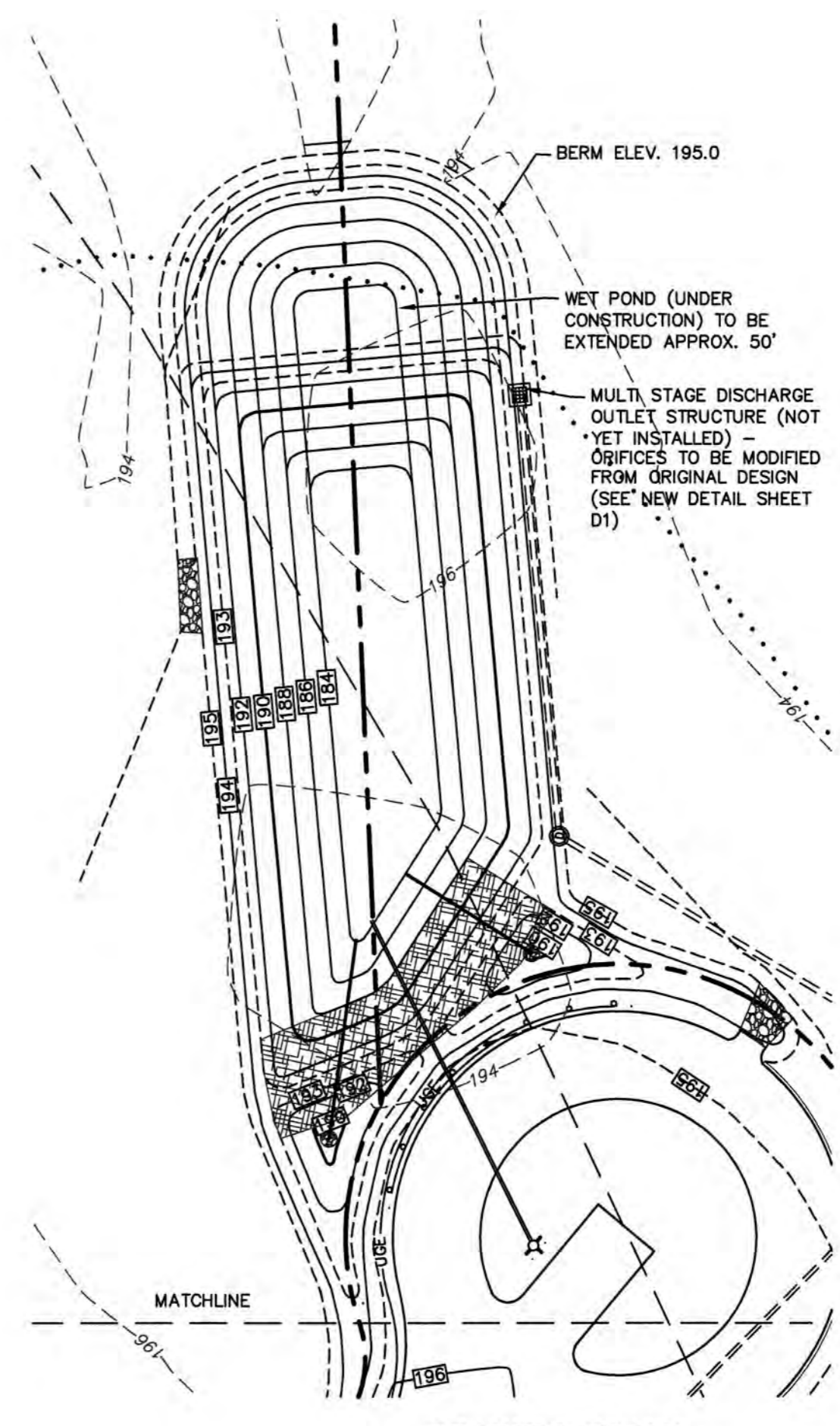


UTILITY NOTES:

- PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER, ARCHITECT AND/OR OWNER, IN ORDER TO OBTAIN AND/OR PAY ALL THE NECESSARY LOCAL PERMITS, CONNECTION FEES AND BONDS.
- A PRECONSTRUCTION MEETING SHALL BE HELD WITH THE OWNER, ENGINEER, ARCHITECT, CONTRACTOR, LOCAL OFFICIALS, AND ALL PROJECT-RELATED UTILITY COMPANIES (PUBLIC AND PRIVATE) PRIOR TO START OF CONSTRUCTION.
- ALL CONSTRUCTION SHALL CONFORM TO THE TOWN STANDARDS AND REGULATIONS, AND NHDES STANDARDS AND SPECIFICATIONS, WHICHEVER ARE MORE STRINGENT, UNLESS OTHERWISE SPECIFIED.
- ALL CONSTRUCTION ACTIVITIES SHALL CONFORM TO LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) RULES AND REGULATIONS.
- CONTRACTOR TO FURNISH SHOP DRAWINGS FOR UTILITY RELATED ITEMS TO ENSURE CONFORMANCE WITH THE PLANS AND SPECIFICATIONS. SHOP DRAWINGS SHOULD BE SENT IN TRIPLICATE TO THE DESIGN ENGINEER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
- EXISTING UTILITIES SHALL BE DIGSAFED BEFORE CONSTRUCTION.
- LIGHTING CONDUIT SHALL BE SCHEDULE 40 PVC, AND SHALL BE INSTALLED IN CONFORMANCE WITH THE NATIONAL ELECTRIC CODE. CONTRACTOR SHALL PROVIDE EXCAVATION AND BACKFILL.
- ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS.

GRADING AND DRAINAGE NOTES:

- UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN PLOTTED FROM FIELD OBSERVATION AND THEIR LOCATION MUST BE CONSIDERED APPROXIMATE ONLY. NEITHER JONES & BEACH ENGINEERS, INC., NOR ANY OF THEIR EMPLOYEES TAKE RESPONSIBILITY FOR THE LOCATION OF ANY UNDERGROUND STRUCTURES AND/OR UTILITIES NOT SHOWN THAT MAY EXIST. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL UNDERGROUND STRUCTURES AND/OR UTILITIES LOCATED PRIOR TO EXCAVATION WORK BY CALLING 888-DIG-SAFE (888-344-7233).
- VERTICAL DATUM: NGVD29. HORIZONTAL DATUM: MAGNETIC.
- ALL BENCHMARKS AND TOPOGRAPHY SHOULD BE FIELD VERIFIED BY THE CONTRACTOR.
- SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED. SEE CONSTRUCTION SEQUENCE ON SHEET E1.
- ALL STORMWATER MANAGEMENT AREAS ARE TO BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
- ALL DRAINAGE STRUCTURES SHALL BE PRECAST, UNLESS OTHERWISE SPECIFIED.
- ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET HEAVY DUTY TRAFFIC H20 LOADING AND SHALL BE INSTALLED ACCORDINGLY.
- IN AREAS WHERE CONSTRUCTION IS PROPOSED ADJACENT TO ADJUTING PROPERTIES, THE CONTRACTOR SHALL INSTALL ORANGE CONSTRUCTION FENCING ALONG PROPERTY LINES IN ALL AREAS WHERE SILT FENCING IS NOT REQUIRED.
- ALL DRAINAGE PIPE SHALL BE NON-PERFORATED ADS N-12 OR APPROVED EQUAL.
- LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY ALL GOVERNING AUTHORITIES. THE GENERAL CONTRACTOR SHALL STRICTLY ADHERE TO THE EPA SWPPP DURING CONSTRUCTION OPERATIONS.
- NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
- ALL EXPOSED AREAS SHALL BE SEEDED AS SPECIFIED WITHIN 3 DAYS OF FINAL GRADING.
- SHOULD CONSTRUCTION STOP FOR LONGER THAN 3 DAYS, THE SITE SHALL BE SEEDED AS SPECIFIED.
- MAINTAIN EROSION CONTROL MEASURES AFTER EACH RAIN EVENT OF 0.25" OR GREATER IN A 24 HOUR PERIOD AND AT LEAST ONCE A WEEK.
- THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE, AS THE GENERAL CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SEDIMENT FROM LEAVING THE SITE.
- CONSTRUCTION VEHICLES SHALL UTILIZE THE STABILIZED CONSTRUCTION ENTRANCE TO THE EXTENT POSSIBLE THROUGHOUT CONSTRUCTION.
- IF INSTALLATION OF STORM DRAINAGE SYSTEM SHOULD BE INTERRUPTED BY WEATHER OR NIGHTFALL, THE PIPE ENDS SHALL BE COVERED WITH FILTER FABRIC.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.
- SEDIMENT SHALL BE REMOVED FROM ALL SEDIMENT BASINS BEFORE THEY ARE 25% FULL.
- ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH PROJECT SPECIFICATIONS.
- ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED, IF DEEMED NECESSARY BY ON-SITE INSPECTION BY ENGINEER AND/OR REGULATORY OFFICIALS.
- SEE ALSO EROSION AND SEDIMENT CONTROL SPECIFICATIONS ON SHEET E1.



PROJECT PARCEL
TOWN OF EPPING
TAX MAP 35, LOT 26-2
BK 5976, PG 1989

TOTAL LOT AREA
130,849 SQ. FT.
3.00 ACRES

Design: JAC Draft: PSL Date: 3/21/19
Checked: JAC Scale: 1"=40' Project No.: 14161.3
Drawing Name: 14161-PLAN-LOT26-2.dwg

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REV.	DATE	ISSUED FOR REVIEW	BY
0	3/21/19	ISSUED FOR REVIEW	PSL

Designed and Produced in NH

J/B Jones & Beach Engineers, Inc.
Civil Engineering Services

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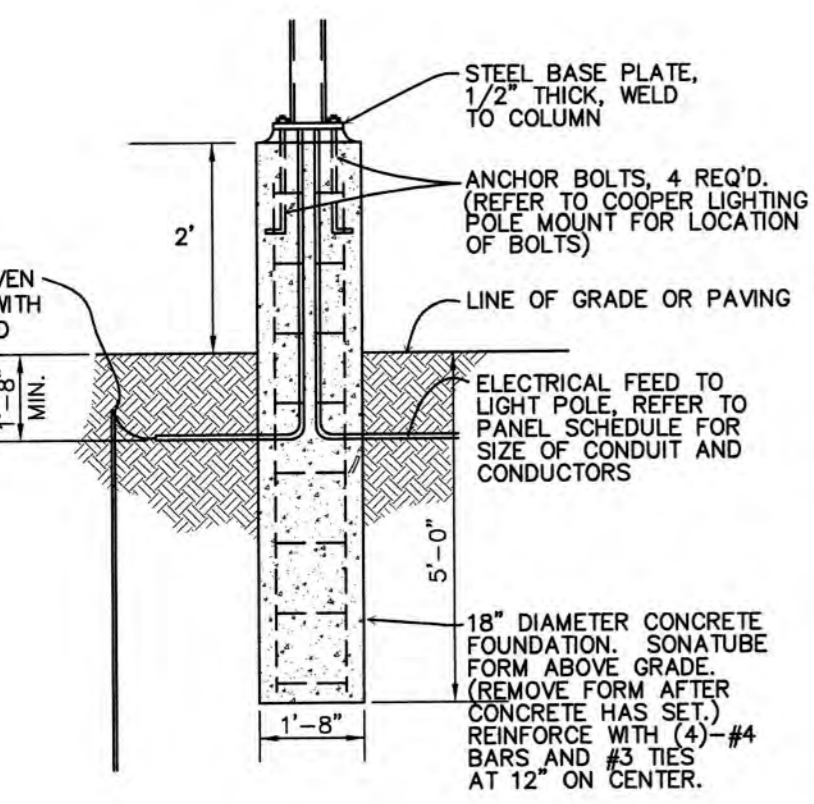
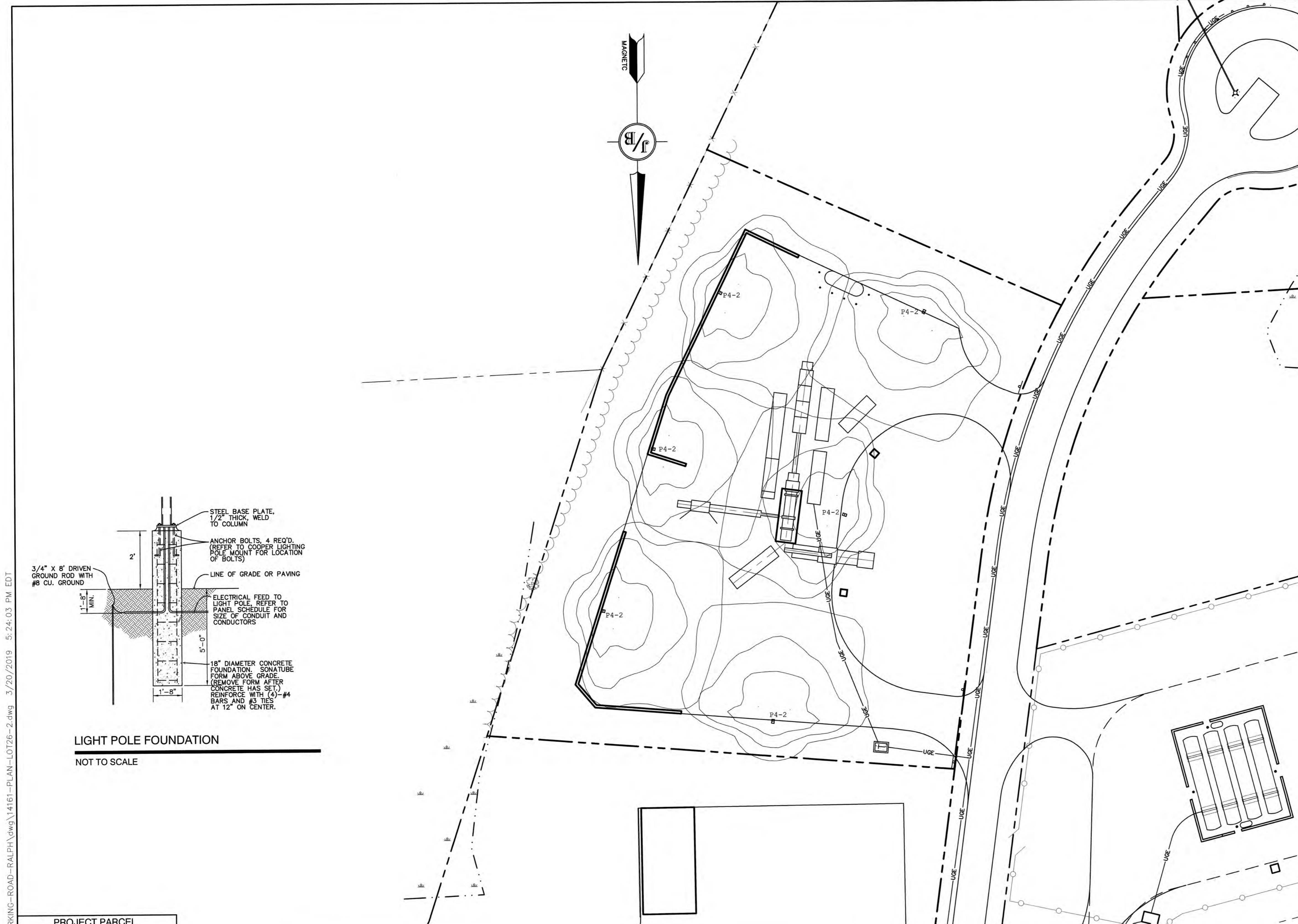
Plan Name:	GRADING, DRAINAGE & UTILITY PLAN
Project:	NEW ENGLAND PAVING ASPHALT PLANT 30 SHIRKING ROAD, EPPING, NH
Owner of Record:	SAM PATTERSON REAL ESTATE DEV., LLC PO BOX 2793, SEABROOK, NH 03874

DRAWING No.

C3

SHEET 4 OF 7
JBE PROJECT NO. 14161.3

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LIGHT POLE FOUNDATION
NOT TO SCALE

McGraw-Edison energy solutions

DESCRIPTION
The Galleon™ LED luminaire delivers exceptional performance in a highly scalable, low-profile design. Patented, high-efficiency AccuLED Optics™ system provides uniform and energy conscious illumination to walkways, parking lots, roadways, building areas and security lighting applications. IP66 rated.

Catalog #	Type
Project	Date
Comments	
Prepared by	

SPECIFICATION FEATURES

Construction
Extruded aluminum driver enclosure thermally isolated from Light Squares for optimal thermal performance. Heavy-wall, die-cast aluminum end caps enclose housing and die-cast aluminum heat sinks. A unique, patent pending interlocking housing and heat sink provides scalability with superior structural rigidity. 3G vibration tested. Optional tool-less hardware available for ease of entry into electrical chamber. Housing is IP66 rated.

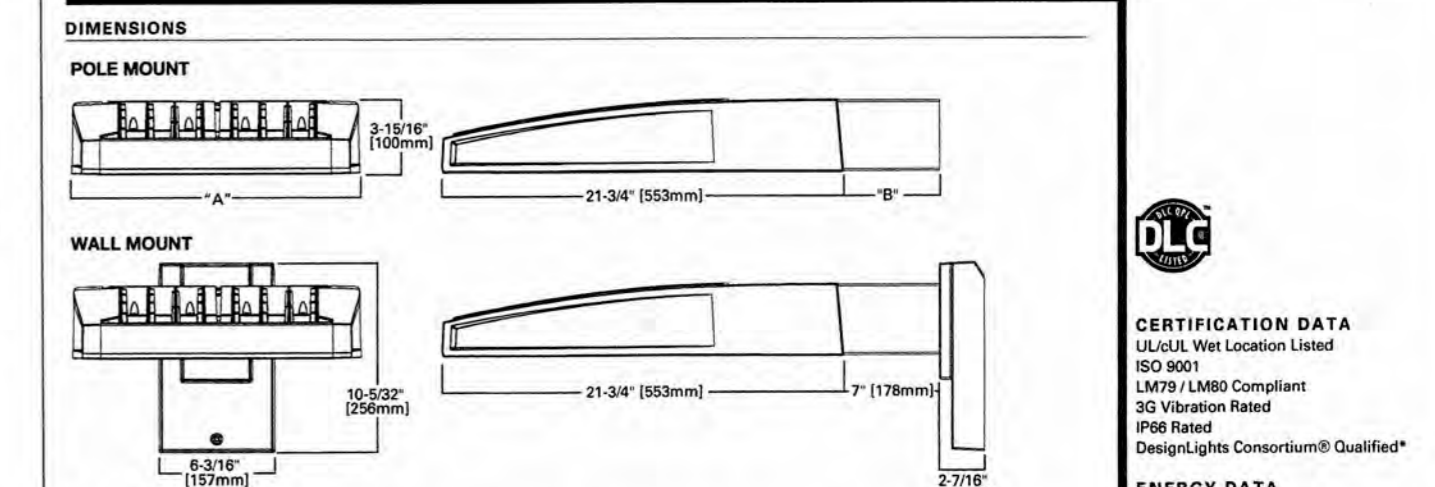
Electrical
LED drivers are mounted to removable tray assembly for ease of maintenance. 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. Standard with 0-10V dimming. Shipped standard with Cooper Lighting proprietary circuit module designed to withstand 10kV of transient line surge. The Galleon LED luminaire is suitable for operation in -40°C to 40°C ambient environments. For applications with ambient temperatures exceeding 40°C, specify the HA (High Ambient) option. Light Squares are IP66 rated. Greater than 90% lumen maintenance expected at 60,000 hours. Available in standard 1A drive current and optional 530mA and 700mA drive currents.

Optics
Choice of 16 patented, high-efficiency AccuLED Optics. The optics are precisely designed to shape the distribution maximizing efficiency and application spacing. AccuLED Optics create consistent distributions with the scalability to meet customized application requirements. Offered standard in 4000K (+/- 27%) CCT and minimum 70 CRI. Optional 6000K CCT and 3000K CCT. For the ultimate level of spill light control, an optional house side shield accessory can be field or factory installed. The house side shield is designed to seamlessly integrate with the SL2, SL3, SL4 or AFL optics.

Mounting
Extruded aluminum arm includes internal bolt guides allowing for easy positioning of fixture during assembly. Designed for pole or wall mounting. When mounting two or more luminaires at 90° or 120° apart, the EA extended arm may be required. Refer to the arm mounting requirement table on page 5. Round pole top adapter included. For wall mounting, specify wall mount bracket option. 3G vibration rated.

Finish
Housing finished in super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Heat sink is powder coated black. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available. Consult the McGraw-Edison Architectural Colors brochure for the complete selection.

Warranty
Five-year warranty.



CERTIFICATION DATA
UL/cUL, Wet Location Listed
ISO 9001
LM79 / LM80 Compliant
3G Vibration Rated
IP66 Rated
DesignLights Consortium® Qualified*

ENERGY DATA
Electronic LED Driver
+0.3 Power Factor
-20% Total Harmonic Distortion
120V-277V 50/60Hz
347V & 480V 60Hz
40°C Min. Temperature
40°C Max. Temperature
50°C Max. Temperature (HA Option)

DIMENSION DATA

Number of Light Squares	"A" Width (In.)	"B" Standard Arm Length (In.)	"B" Optional Arm Length (In.)	Weight with Arm (Lbs.)	EPA with Arm (sq. Ft.)
1-4	15-1/2" (394mm)	7" (178mm)	10" (254mm)	33 (15.0 kg)	0.96
5-6	21-5/8" (549mm)	7" (178mm)	10" (254mm)	44 (20.0 kg)	1.00
7-8	27-5/8" (702mm)	7" (178mm)	10" (254mm)	54 (24.5 kg)	1.07
9-10	33-3/4" (857mm)	7" (178mm)	10" (254mm)	63 (28.6 kg)	1.12

NOTES: 1 Extended arm option may be required when mounting two or more fixtures per pole at 90° or 120°. Refer to arm mounting requirement table. 2 EPA calculated with optional arm length.

Cooper Lighting
by **F.T.M.**

*www.designlights.org

- LIGHTING AND ELECTRICAL NOTES:**
- SITE ELECTRICAL CONTRACTOR SHALL COORDINATE LOCATION OF EASEMENTS, UNDERGROUND UTILITIES AND DRAINAGE BEFORE DRILLING POLE BASES.
 - CONTRACTOR SHALL INSTALL PROPOSED LIGHT POLES ACCORDING TO TOWN REGULATIONS.
 - ALL OUTDOOR LIGHTING SYSTEMS SHALL BE EQUIPPED WITH TIMERS TO REDUCE ILLUMINATION LEVELS TO NON-OPERATIONAL VALUES PER TOWN REGULATIONS.
 - LIGHTING CONDUIT SHALL BE SCHEDULE 40 PVC, AND SHALL BE INSTALLED IN CONFORMANCE WITH THE NATIONAL ELECTRICAL CODE. CONTRACTOR SHALL PROVIDE EXCAVATION AND BACKFILL.
 - ILLUMINATION READINGS SHOWN ARE BASED ON A TOTAL LLF OF 0.75 AT GRADE. ILLUMINATION READINGS SHOWN ARE IN UNITS OF FOOT-CANDELES.
 - LIGHTING CALCULATIONS SHOWN ARE NOT A SUBSTITUTE FOR INDEPENDENT ENGINEERING ANALYSIS OF LIGHTING SYSTEM AND SAFETY.
 - ALL LIGHTING FIXTURES SHALL BE FULL CUT-OFF DARK-SKY COMPLIANT, UNLESS OTHERWISE NOTED.
 - NL INDICATES THAT THIS LUMINAIRE SHALL BE ON A NIGHT LIGHT CIRCUIT. FL INDICATES THAT THIS LUMINAIRE SHALL BE A FLOOD LIGHT FIXTURE. MOUNTING BRACKET FOR THIS FL FIXTURE SHALL BE MOUNTED 25' ABOVE BOTTOM OF POLE BASE FOR ALL LIGHT POLES CLOSEST TO STOREFRONT. THESE DESIGNATIONS INDICATE WHAT PHASE LIGHTS ARE WIRED TO (TYP).

PROJECT PARCEL
TOWN OF EPPING
TAX MAP 35, LOT 26-2
BK 5976, PG 1989

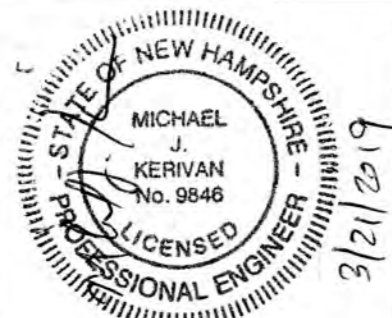
TOTAL LOT AREA
130,849 SQ. FT.
3.00 ACRES

Luminaire Schedule

Symbol	Qty	Label	Arrangement	Description
[Symbol]	6	P4-2	SINGLE	GLEON-AE-02-LED-E1-T4FT/ 30' AFG

Design: JAC Draft: PSL Date: 3/21/19
Checked: JAC Scale: 1"=40' Project No.: 14161.3
Drawing Name: 14161-PLAN-LOT26-2.dwg

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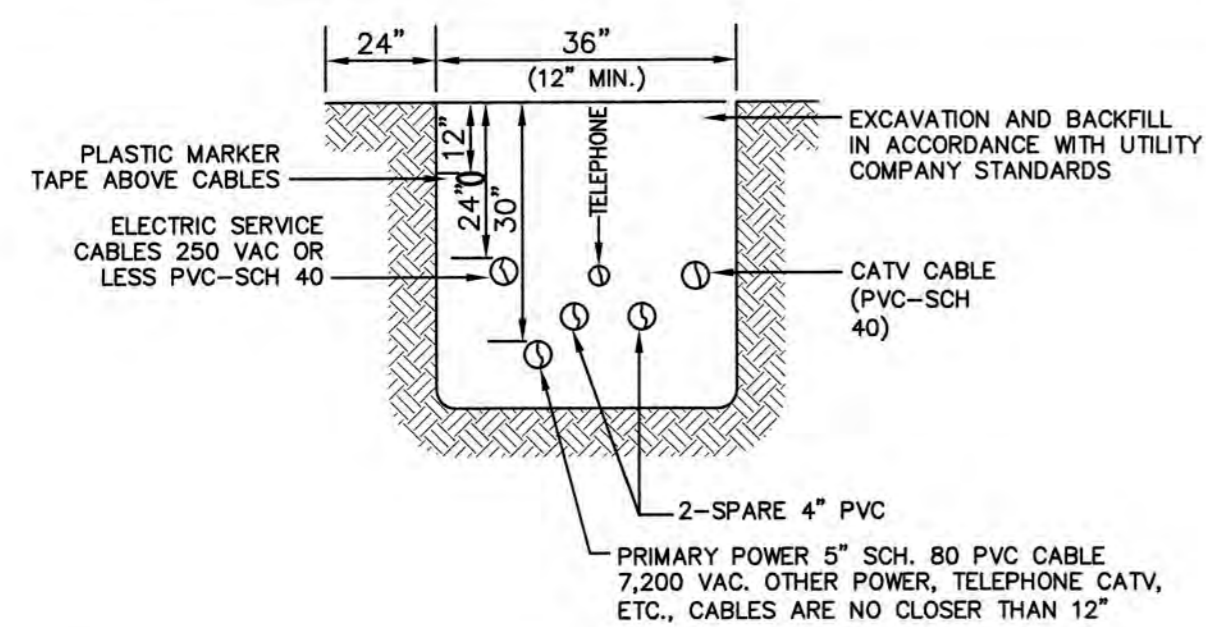
Plan Name: **LIGHTING PLAN**

Project: **NEW ENGLAND PAVING ASPHALT PLANT
30 SHIRKING ROAD, EPPING, NH**

Owner of Record: **SAM PATTERSON REAL ESTATE DEV., LLC
PO BOX 2793, SEABROOK, NH 03874**

DRAWING No. **L1**

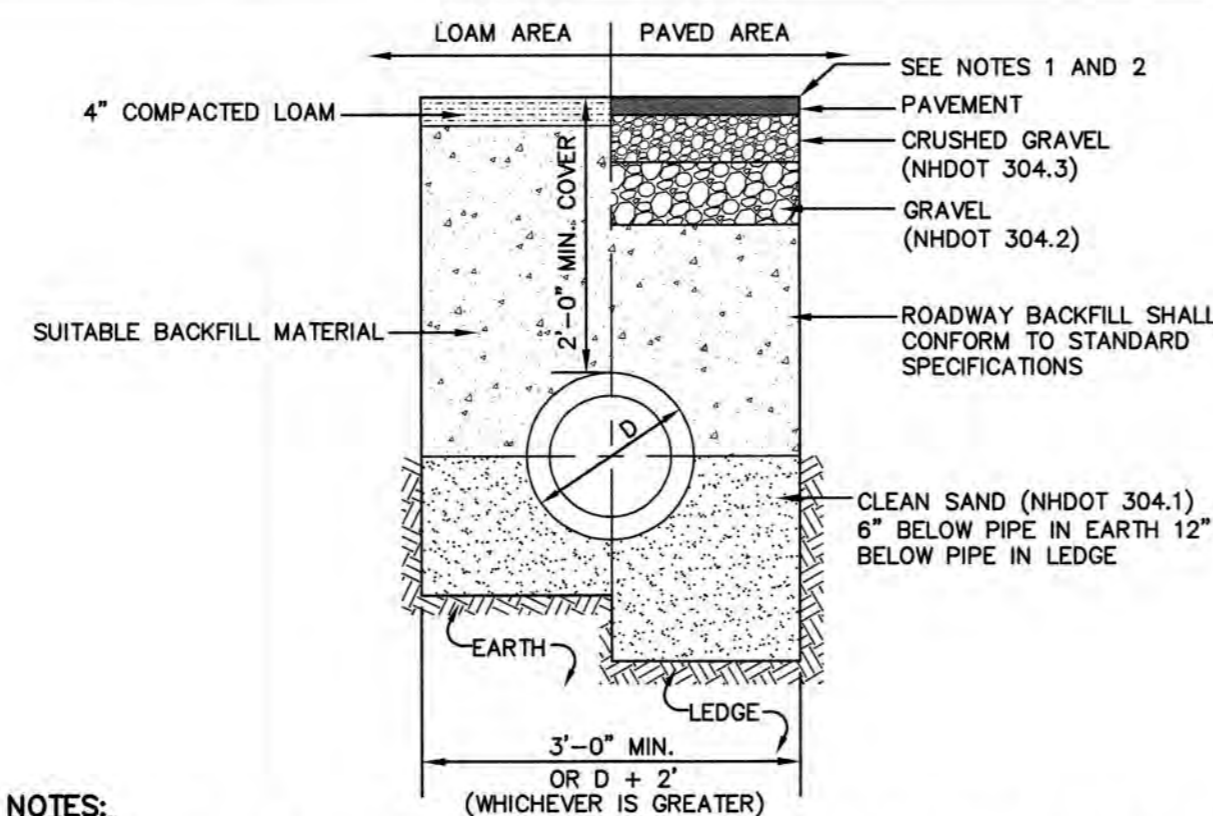
SHEET 5 OF 7
JBE PROJECT NO. 14161.3



NOTE: ALL UTILITIES SHALL BE REVIEWED AND APPROVED BY APPROPRIATE UTILITY COMPANY.

UTILITY TRENCH

NOT TO SCALE



NOTES:

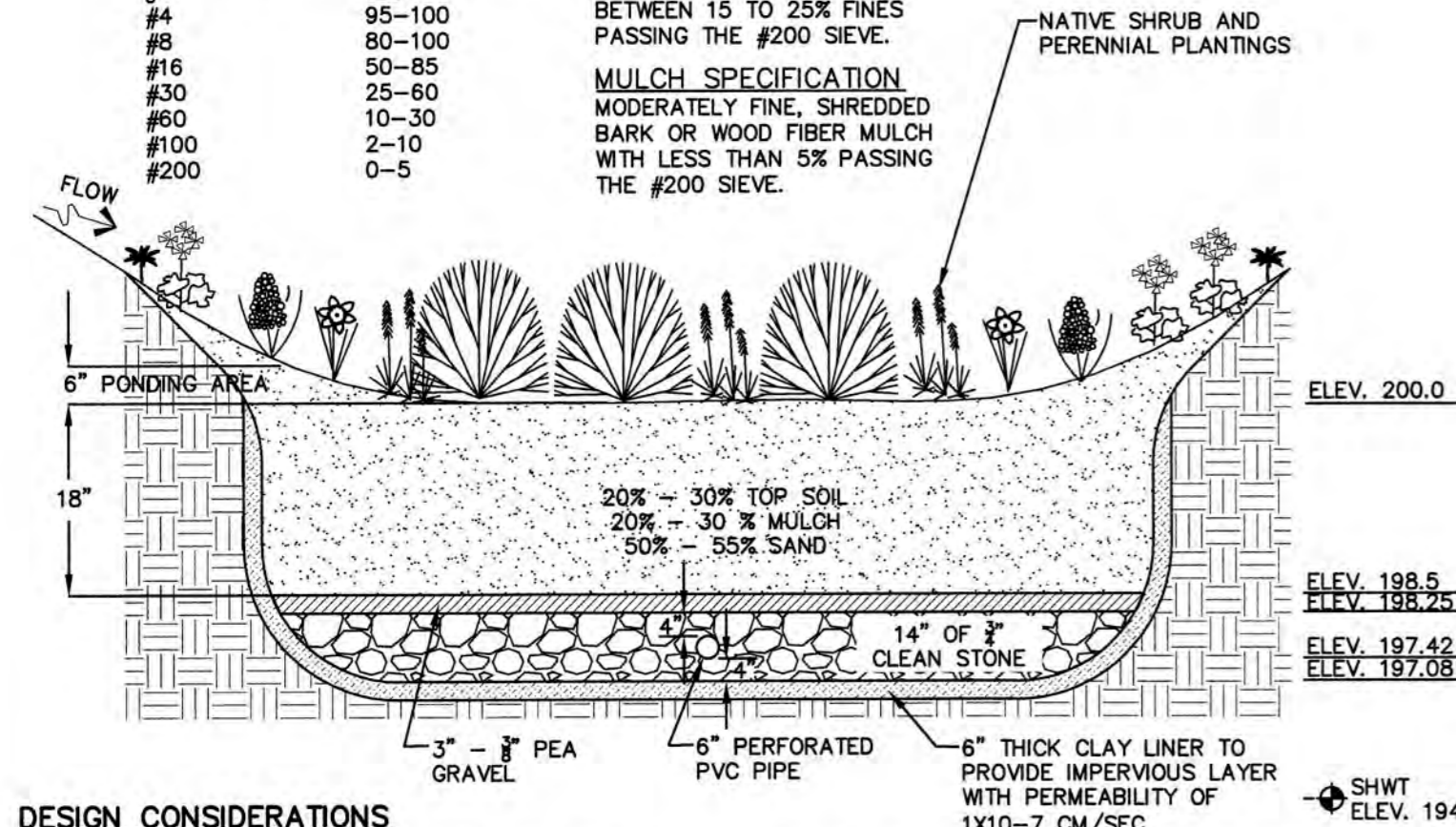
- PAVEMENT REPAIR IN EXISTING ROADWAYS SHALL CONFORM TO STREET OPENING REGULATIONS.
- NEW ROADWAY CONSTRUCTION SHALL CONFORM WITH PROJECT AND TOWN SPECIFICATIONS.
- ALL MATERIALS ARE TO BE COMPACTED TO 95% OF ASTM D-1557.

DRAINAGE TRENCH

NOT TO SCALE

SAND SPECIFICATION		TOPSOIL SPECIFICATION	
SIEN SIZE	% BY WEIGHT	LOAMY SAND TOPSOIL WITH MINIMAL CLAY CONTENT AND BETWEEN 15 TO 25% FINES PASSING THE #200 SIEVE.	
#4	100		
#8	95-100		
#16	80-100		
#30	50-85		
#60	25-60		
#100	10-30		
#200	2-10		
	0-5		

MULCH SPECIFICATION: MODERATELY FINE, SHREDDED BARK OR WOOD FIBER MULCH WITH LESS THAN 5% PASSING THE #200 SIEVE.



DESIGN CONSIDERATIONS

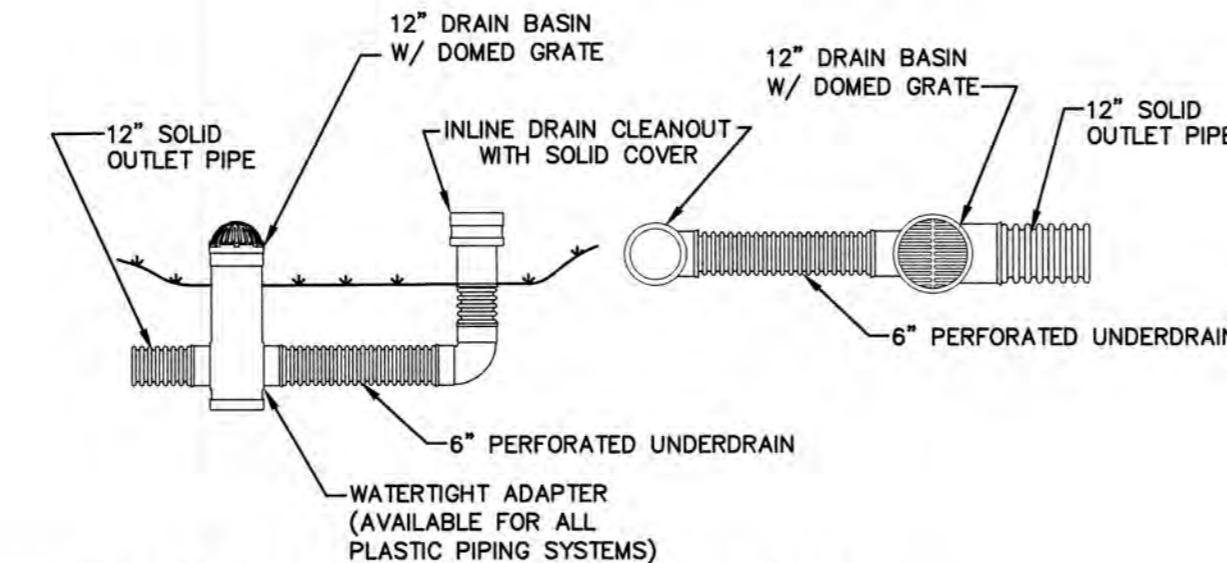
- DO NOT PLACE BIORETENTION SYSTEMS INTO SERVICE UNTIL THE BMP HAS BEEN PLANTED AND ITS CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
- DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUN-OFF, WATER FROM EXCAVATIONS) TO THE BIORETENTION AREA DURING ANY STAGE OF CONSTRUCTION.
- DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT OUTSIDE THE LIMITS OF THE INFILTRATION COMPONENTS OF THE SYSTEM.

MAINTENANCE REQUIREMENTS:

- SYSTEMS SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND FOLLOWING ANY RAINFALL EVENT EXCEEDING 2.5 INCHES IN A 24 HOUR PERIOD, WITH MAINTENANCE OR REHABILITATION CONDUCTED AS WARRANTED BY SUCH INSPECTION.
- PRETREATMENT MEASURES SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND CLEANED OF ACCUMULATED SEDIMENT AS WARRANTED BY INSPECTION, BUT NO LESS THAN ONCE ANNUALLY.
- TRASH AND DEBRIS SHOULD BE REMOVED AT EACH INSPECTION.
- AT LEAST ONCE ANNUALLY, SYSTEM SHOULD BE INSPECTED FOR DRAWDOWN TIME. IF BIORETENTION SYSTEM DOES NOT DRAIN WITHIN 72 HOURS FOLLOWING A RAINFALL EVENT, THEN A QUALIFIED PROFESSIONAL SHOULD ASSESS THE CONDITION OF THE FACILITY TO DETERMINE MEASURES REQUIRED TO RESTORE FILTRATION FUNCTION OR INFILTRATION FUNCTION (AS APPLICABLE), INCLUDING BUT NOT LIMITED TO REMOVAL OF ACCUMULATED SEDIMENTS OR RECONSTRUCTION OF THE FILTER MEDIA.
- VEGETATION SHOULD BE INSPECTED AT LEAST ANNUALLY, AND MAINTAINED IN HEALTHY CONDITION, INCLUDING PRUNING, REMOVAL AND REPLACEMENT OF DEAD OR DISEASED VEGETATION, AND REMOVAL OF INVASIVE SPECIES.
- CLAY LINER MATERIAL SHALL BE CLEAN SILTY-CLAY BORROW FREE OF ROOTS, ORGANIC MATTER, AND OTHER DELETERIOUS SUBSTANCES, AND SHALL CONTAIN NO ROCKS OR LUMPS OVER THREE INCHES (3") IN DIAMETER. THIS MATERIAL SHALL BE INSTALLED IN 6" LIFTS COMPACTED TO 92% OF ASTM D-1557, AND SHALL MEET THE FOLLOWING SPECIFICATIONS: 6" PASSING 100%, #4 SIEVE 95-100%, #40 SIEVE 60-90%, #100 SIEVE 40-60%, #200 SIEVE 25-45% (OF THE FRACTION PASSING THE #4 SIEVE). THE CLAY COMPONENT SHALL HAVE A PLASTICITY INDEX OF AT LEAST 8 AND A HYDRAULIC CONDUCTIVITY OF 10 TO THE -6 CM/SEC.
- COMPACTON AND MATERIALS TESTING SERVICES SHALL BE PERFORMED BY AN INDEPENDENT GEOTECHNICAL ENGINEER RETAINED BY THE OWNER.

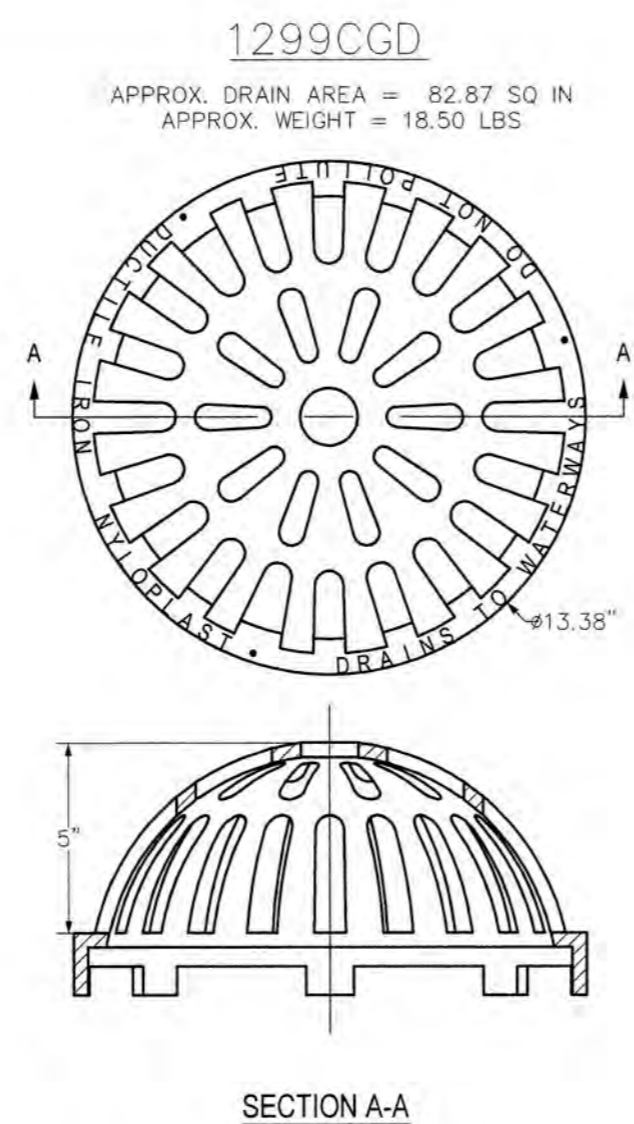
BIORETENTION SYSTEM (with clay bottom and pipe)

NOT TO SCALE



NYOPLAST DRAIN BASIN AND INLINE DRAIN

NOT TO SCALE

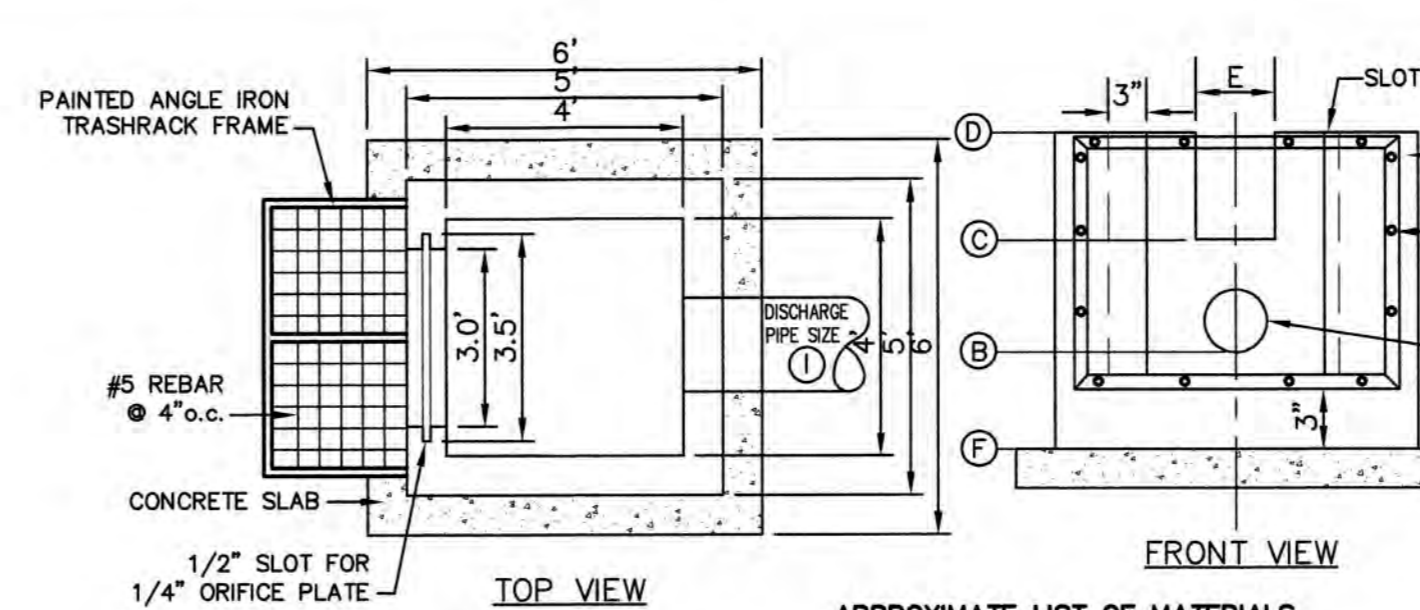


NOTES:

- DIMENSIONS ARE FOR REFERENCE ONLY, ACTUAL DIMENSIONS MAY VARY.
- MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05.
- CASTINGS ARE FURNISHED WITH A BLACK PAINT.
- LOCKING DEVICE AVAILABLE UPON REQUEST.

12" NYOPLAST DOME GRATE

NOT TO SCALE



APPROXIMATE LIST OF MATERIALS

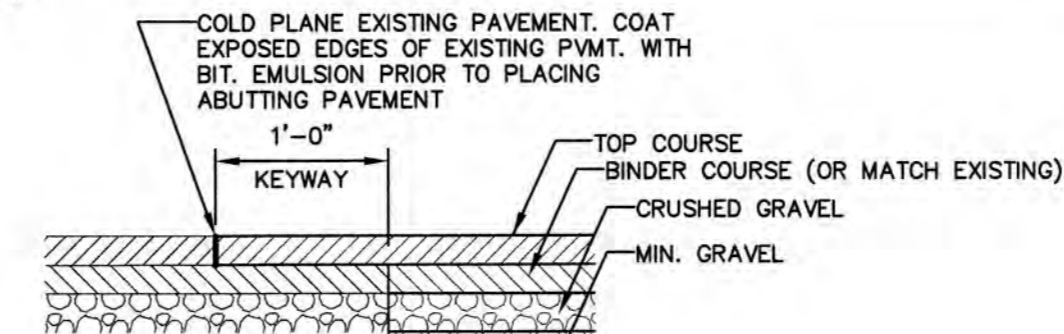
- 3 C.Y. - 5000 PSI CONCRETE
- 15 ANGLE IRONS @ 4' LENGTH
- REQUIRED S.S. BOLTS AND FASTENERS
- 1/4" STEEL PLATE WITH DRILLED ORIFICES
- 1 C.Y. - CRUSHED STONE FOR BASE
- 48 #5 REBARS @ 1', 2' AND 3' LENGTHS
- 32 #4 REBARS @ 4.5' LENGTH

NOTES:

- REINFORCING STEEL SHALL CONSIST OF A SINGLE LAYER OF HORIZONTAL AND VERTICAL PLACED #4 REBAR @ 12" O.C.
- CONCRETE BOX TO BE CONSTRUCTED OR PRECAST OF EQUAL DIMENSIONS AND REINFORCING.
- CONCRETE SLAB TO BE CONSTRUCTED ALONG WITH BASE. FOR PRECAST BOX, A SLOTTED CONCRETE SLAB TO BE USED.
- SECTION JOINTS AND PIPE OPENING SHALL BE SEALED WATERTIGHT WITH MORTAR BY CONTRACTOR.

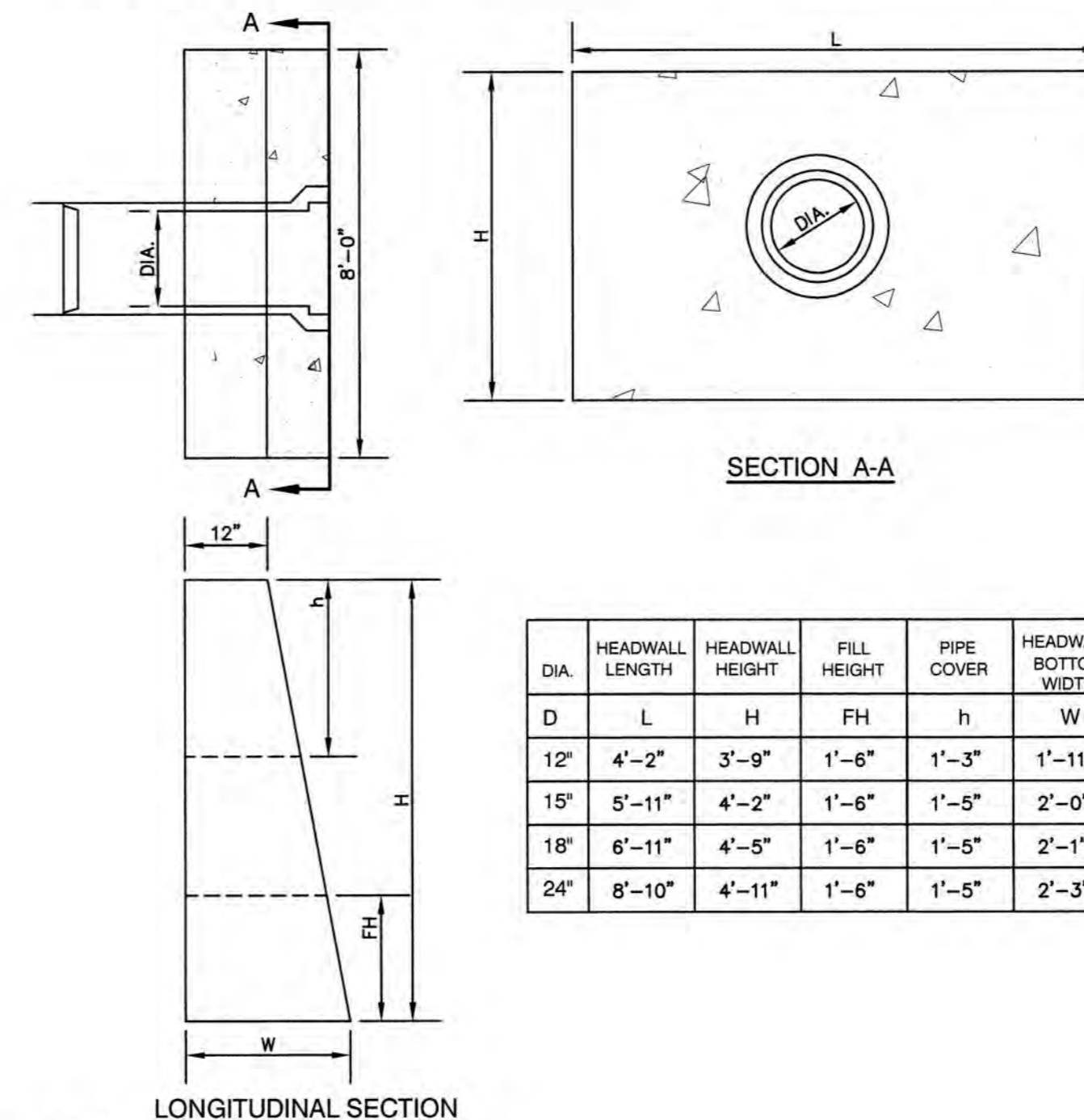
MULTI-STAGE DISCHARGE OUTLET STRUCTURE (MSDOS)

NOT TO SCALE



KEYWAY DETAIL FOR CONNECTION TO EXISTING PAVEMENT

NOT TO SCALE

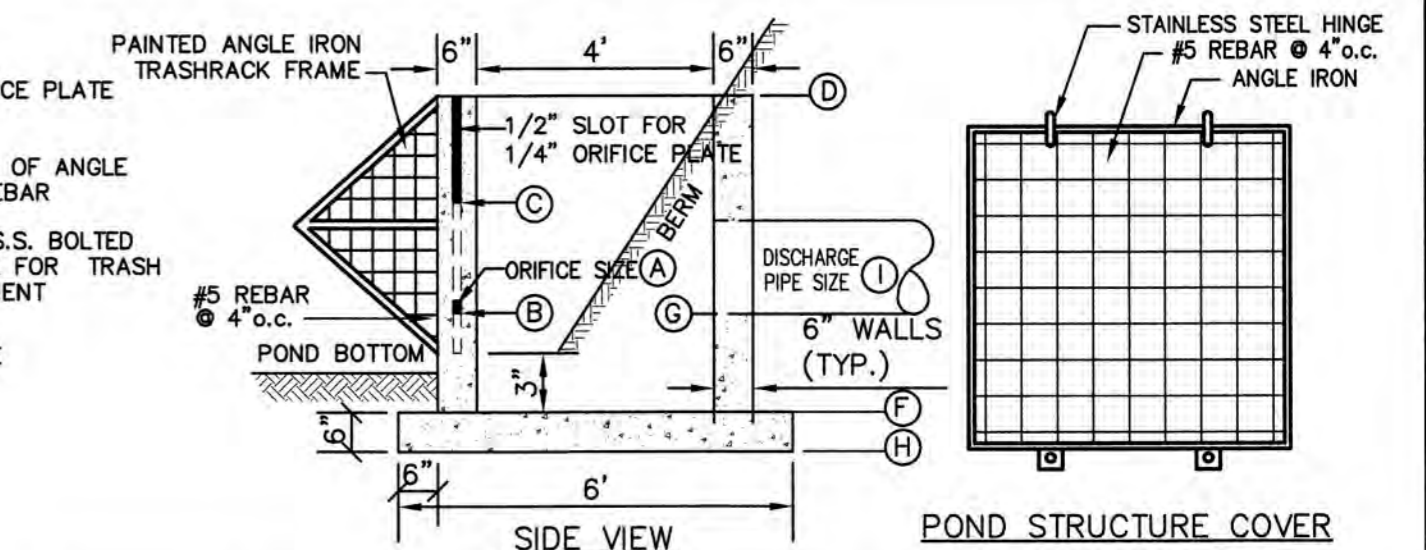


NOTES:

- ALL DIMENSIONS GIVEN IN FEET & INCHES.
- PROVIDE BELL END AT INLET HEADWALL, AND SPIGOT END AT OUTLET END HEADWALL.
- CONCRETE: 5,000 PSI MINIMUM AFTER 28 DAYS. CEMENT TO BE TYPE III PER ASTM C-150. REINFORCING TO MEET OR EXCEED ASTM A-615 GRADE 60 DEFORMED BARS.
- 1" THREADED INSERTS PROVIDED FOR FINAL ATTACHMENT IN FIELD BY OTHERS.

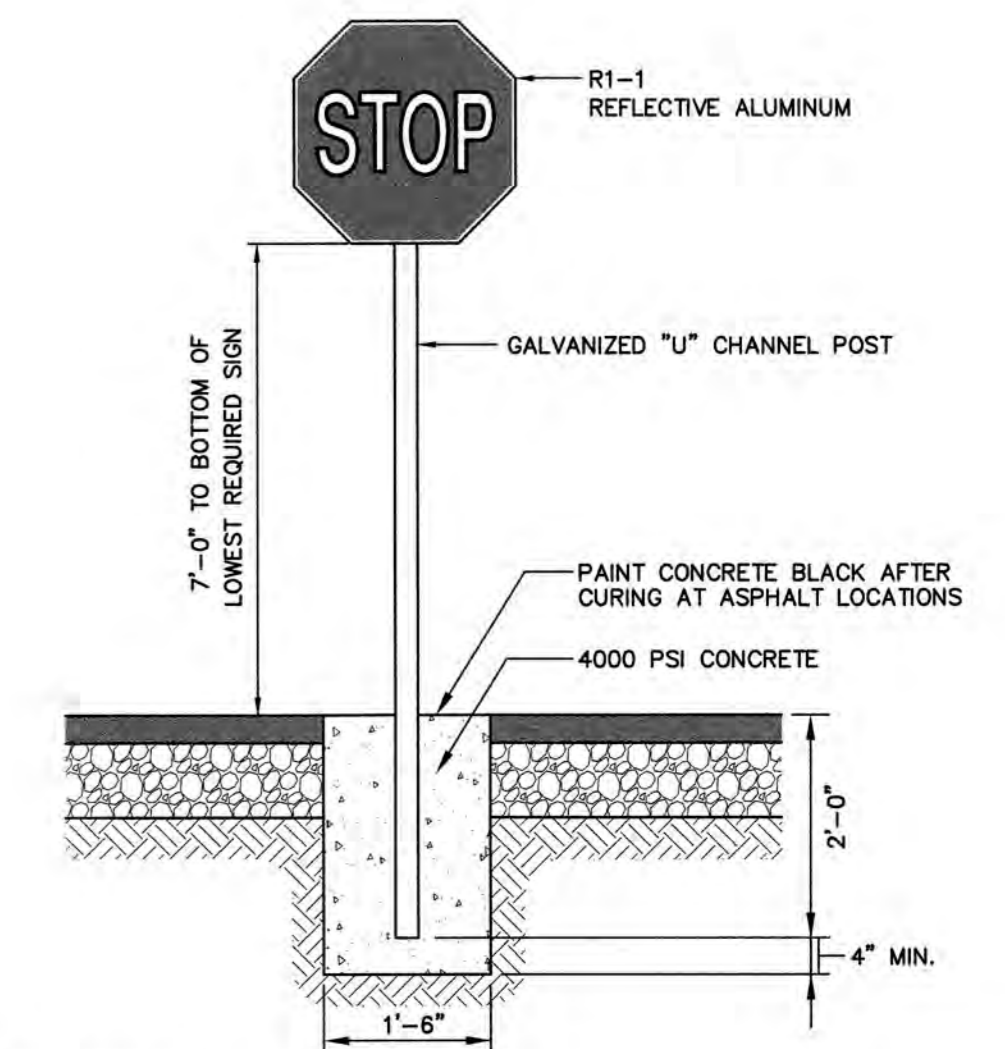
PRECAST CONCRETE HEADWALL

NOT TO SCALE



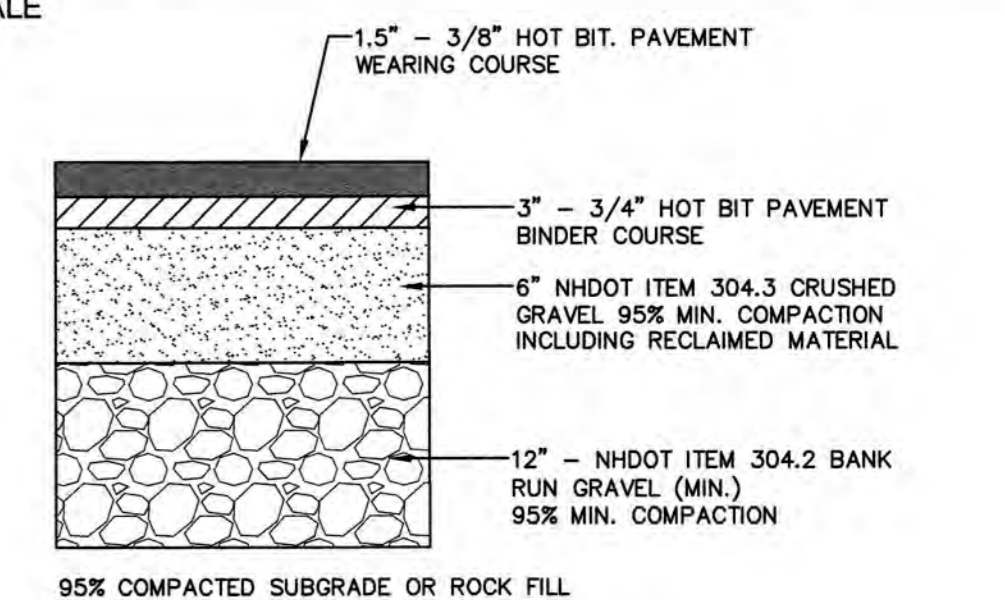
	A	B	C	D	E	F	G	H	I
MSDOS	4.0'	192.00	193.04	194.00	12"	191.50	192.00	191.00	24"

- ALL EXPOSED REBAR TO BE PAINTED WITH RUST-RESISTANT PAINT, COLOR AT CONTRACTOR'S DISCRETION.
- TO BE SUPPLIED BY CAPITAL CONCRETE PRODUCTS OF HENNIKER, N.H., (1-603-428-3218) OR EQUAL.
- STRUCTURE TO HAVE TEMPORARY PLYWOOD INSTALLED IN THE ORIFICE PLATE SLOT UNTIL THE SITE IS STABILIZED.
- STRUCTURE IS TO BE DESIGNED FOR H2O LOADING.
- SOIL UNDERLYING THE STRUCTURE IS TO BE COMPACTED TO 95% MODIFIED PROCTOR.



STOP SIGN (R1-1)

NOT TO SCALE

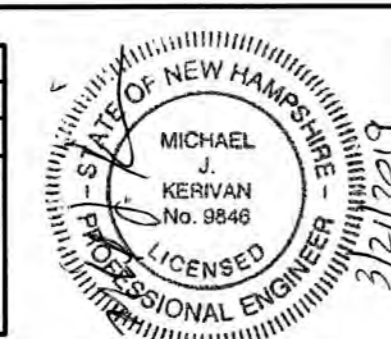


TYPICAL BITUMINOUS PAVEMENT

NOT TO SCALE

F:\Land Projects\3\14161-EPPING-SHIRKING-ROAD-RALPH-DWG\14161-PLAN-LOT26-2.dwg 3/20/2019 3:33:58 PM EDT

Design: JAC	Draft: PSL	Date: 3/21/19
Checked: JAC	Scale: AS NOTED	Project No.: 14161.3
Drawing Name: 14161-PLAN-LOT26-2.dwg		
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REV.	DATE	ISSUED FOR REVIEW	BY
0	3/21/19	ISSUED FOR REVIEW	PSL
		REVISION	

Designed and Produced in NH

J/B Jones & Beach Engineers, Inc.

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Civil Engineering Services

603-772-4746 FAX: 603-772-0227 E-MAIL: JBE@JONESANDBEACH.COM

Plan Name:	DETAIL SHEET
Project:	NEW ENGLAND PAVING ASPHALT PLANT 30 SHIRKING ROAD, EPPING, NH
Owner of Record:	SAM PATTERSON REAL ESTATE DEV., LLC PO BOX 2793, SEABROOK, NH 03874

DRAWING No.	D1
SHEET 6 OF 7	JBE PROJECT NO. 14161.3

