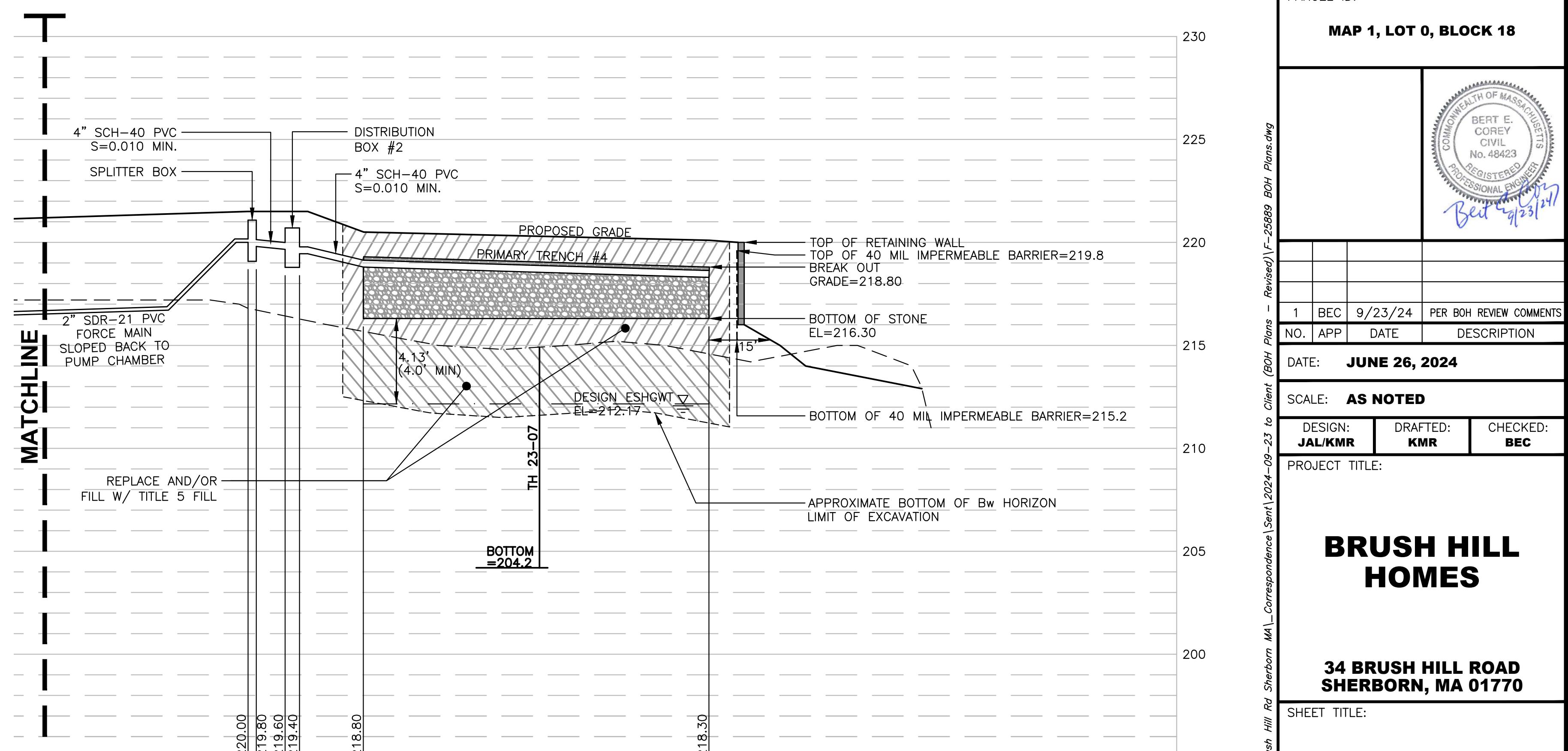


APPLICANT:
FENIX PARTNERS BRUSH HILL, LLC
177 LAKE STREET
SHERBORN, MA 01770

OWNER:
FENIX PARTNERS BRUSH HILL, LLC
ref.
MIDDLESEX REGISTRY OF DEEDS
BOOK: 81892 PAGE: 265

PARCEL ID:

MAP 1, LOT 0, BLOCK 18



SECTION VIEW

NOTES:

1. OUTLET PIPES TO BE 4" SCH-40 PVC TIGHT JOINT
2. ALL OUTLET INVERT ELEVATIONS TO BE EQUAL. OUTLET PIPES SHALL BE LEVEL FOR AT LEAST TWO FEET. UNUSED OUTLETS TO BE PLUGGED WITH MORTAR.
3. SEE PLAN FOR PIPING LAYOUT.
4. DIMENSIONS SHOWN ARE BASED ON SHEA CONCRETE PRODUCTS, INC. ITEM NO. 9DBH.
5. LOADING: H-20

PLAN VIEW

SPLITTER BOX

1000

24" CAST IRON DRAIN MANHOLE FRAME & COVER
TO FINISH GRADE. USE LEBARON R824 OR
APPROVED EQUAL.

PAVEMENT OR FINISHED GRADE

24"

4' DIAMETER

12" O.C.
TYPICAL

PITCH TABLE TO
INV. 1/4" / F.T.

5" MIN.

ETE

BRICK HEADERS
LAID FLAT

PIPE

STRETCHERS
EDGE

INVERTED ARCH
6" MIN.

BRICK CHIPS AND MORTAR
OR CLASS "A" CONCRETE
TO FORM BED

6" BASE OF 3" MINUS
COMPACTED CRUSHED STONE

PRECAST 8" SLAB TOP

BRICK TABLE AND CHANNEL
OR CLASS "A" CONCRETE
FORMED IN PLACE TO
PROVIDE FLOW CHANNEL

VARIES

FLOW INVERT

CONNECTION TO PIPE SHALL BE BY MEANS OF A FLEXIBLE RUBBER
MORTAR. PROJECT PIPE 1"-3" INTO MANHOLE.

SEWER MANHOLE DETAIL
(NO SCALE)

Architectural plan view of a sewage pump room. The room is 14'-0" wide and 13'-0" deep. A 6" SCH-40 PVC inlet is located on the left wall. The floor is sloped at 2% towards a central circular manhole. Two submersible sewage pumps with guide rail systems and lifting chains are positioned on the floor. A 2" SDR-21 PVC force main connects the pumps to a manhole frame and cover. A bracket for switches is located on the right wall. A ball valve is shown on the right side. A watertight and airtight aluminum access cover is to be brought to finish grade. PVC electrical conduit is to be run to a control panel inside the building. The manhole frame and cover are to be brought to finish grade with heavy-duty H-20 loading. The plan view also shows a height of 8'-0" from the floor to the top of the manhole frame.

14'-0"

13'-0"

6" SCH-40 PVC INLET

8'-0"

7'-0"

2% SLOPE

2% SLOPE

2% SLOPE

2% SLOPE

2% SLOPE

(2) SUBMERSIBLE SEWAGE PUMPS
W/ GUIDE RAIL SYSTEM AND LIFTING CHAIN

FLOOR AT 2% SLOPE

24" DIA. CAST IRON
MANHOLE FRAME & COVER
BROUGHT TO FINISH GRADE
(HEAVY DUTY H-20 LOADING)
(SEE FRAME & COVER
INSTALLATION DETAIL)

BRACKET FOR
SWITCHES

4'

BALL VALVE (TYP.)

2" SDR-21 PVC
FORCE MAIN

PVC ELECTRICAL CONDUIT TO
CONTROL PANEL INSIDE BUILDING
(SEE ELECTRICAL PLANS)

ONE WATERTIGHT & AIRTIGHT ALUMINUM
30"x48" LOCKABLE ACCESS COVER
BROUGHT TO FINISH GRADE
(HEAVY DUTY H-20 LOADING)

PLAN VIEW

PLAN VIEW

SECTION VIEW **NOTES:** 1. SIDES AND BOTTOM OF LEACHING INTERFACES TO BE SCARIFIED PRIOR TO PLACEMENT OF STONE **PROFILE VIEW** **RESER**

SOIL ABSORPTION SYSTEM

ABSORPTION

(310 CMR 13.240-13.255)

SECTION VIEW

24" DIA. CAST IRON MANHOLE FRAME & COVER BROUGHT TO FINISH GRADE (HEAVY DUTY H-20 LOADING) (SEE FRAME & COVER INSTALLATION DETAIL)

FINISH GRADE

ADJUST TO FINISH GRADE SEE FRAME AND COVER SETTING DETAIL

TOP OF TANK=206.37

CAST-IN FLEXIBLE SLEEVE (RUBBERIZED BOOT)

INV IN=204.95

LIQUID LEVEL

8"

BUTYL RESIN GASKET

PRECAST CONCRETE SECTIONS AS NECESSARY

85"

66

6"

ELEV=200.35

FLOOR AT 2% SLOPE

6"

6" MIN. OF 3/4"-1 1/2" WASHED COMPACTED STONE

CRUSHED STONE

36" MAXIMUM COVER 9" MINIMUM COVER

ELECTRICAL CONDUIT

SWITCH BRACKET

3.15' OF STORAGE = 2,142 GALLONS = 26 HOURS (MEASURED FROM ALARM FLOAT TO INV IN)

ELEV.=202.05 LAG ON 0.25'

ELEV.=201.80 ALARM ON 0.25'

ELEV.=201.55 PUMP ON 0.60'

DRAW DEPTH = 0.60' = 408 GALLONS ELEV.=200.95 PUMP OFF 1.0'

(4) PRESSURE SWITCHES

12" O.C. (TYP)

LIFTING CHAIN

GUIDE BARS

QUICK DISCONNECT UNION

CAST-IN FLEXIBLE SLEEVE (RUBBERIZED BOOT)

2" SDR-21 PVC FORCE MAIN

INV OUT=204.50

CHECK VALVE (TYP.)

MH STEPS TO BOTTOM OF TANK STEEL REINFORCED COPOLYMER POLYPROPYLENEPLASTIC STEPS CONFORMING TO LATEST ASTM C478 SPECIFICATIONS

EXTERIOR CONCRETE SURFACES SHALL BE MADE WATERTIGHT BY SEALING ALL EXTERIOR SURFACES WITH EBITUMASTIC COATING.

INSIDE BOTTOM ELEV.=199.95

CONCRETE COLLAR

FOR THE 30"x48" ACCESS COVER: 5' INSIDE DIAMETER PRECAST CONCRETE MANHOLE RISERS AS NECESSARY. USE PRECAST CONCRETE FLAT SLAB TOP. ADJUST FRAME AND COVER TO GRADE USING BRICK AND MORTAR.

(2) SUBMERSIBLE SEWAGE PUMPS WITH GUIDE RAIL SYSTEM

SECTION VIEW

DIMENSIONS SHOWN ARE BASED ON SHEA CONCRETE PRODUCTS 3,000 GALLON COMMERCIAL LINE TANK ITEM NO. 8X14-30 (OR APPROVED EQUAL)
LOADING: H-20

PUMP CHAMBER DETAIL

(NO SCALE)

PROFILE VIEW

NOTES:

1. OUTLET PIPES TO BE 4" SCH-40 PVC TIGHT JOINT
2. ALL OUTLET INVERT ELEVATIONS TO BE EQUAL. OUTLET PIPES SHALL BE LEVEL FOR AT LEAST TWO FEET. UNUSED OUTLETS TO BE PLUGGED WITH MORTAR.
3. SEE PLAN FOR PIPING LAYOUT.
4. DIMENSIONS SHOWN ARE BASED ON SHEA CONCRETE PRODUCTS, INC. ITEM NO. 13DBH.
5. LOADING: H-20

DISTRIBUTION BOX #1 & #2

$$1'' \equiv 1'$$

SHERBORN, MA 01770

Hill

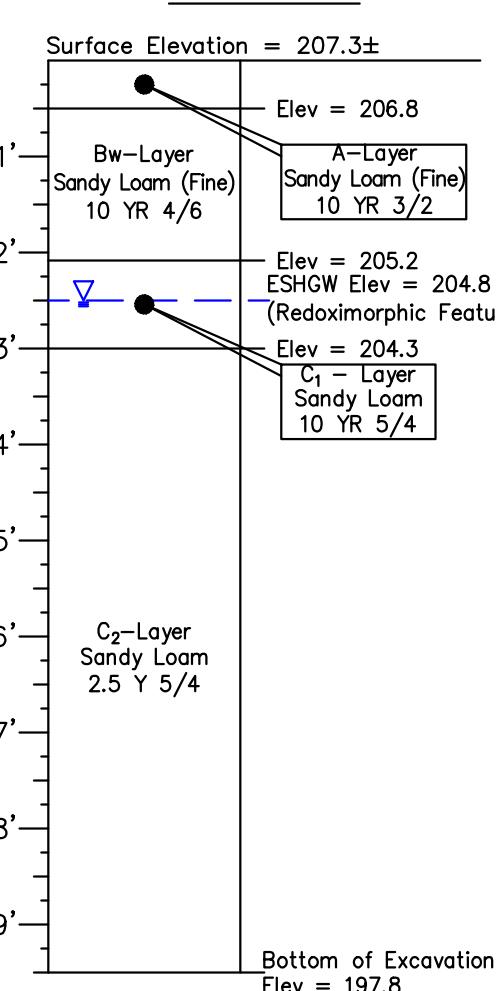
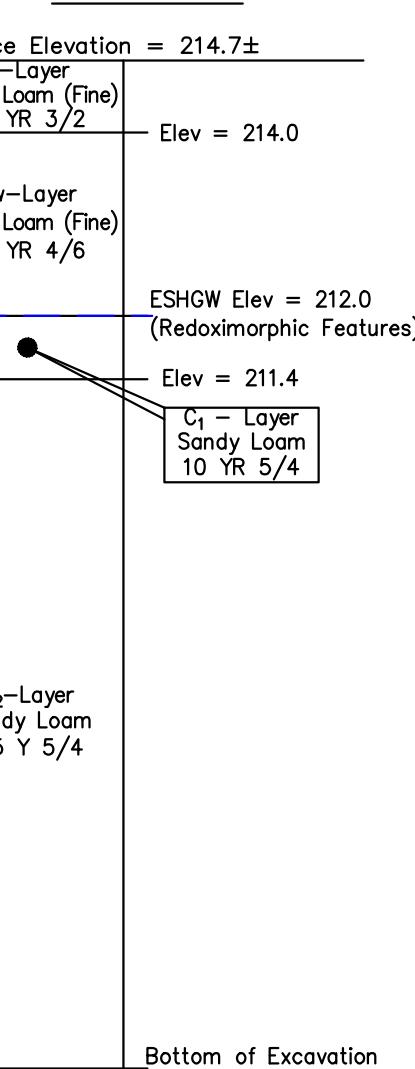
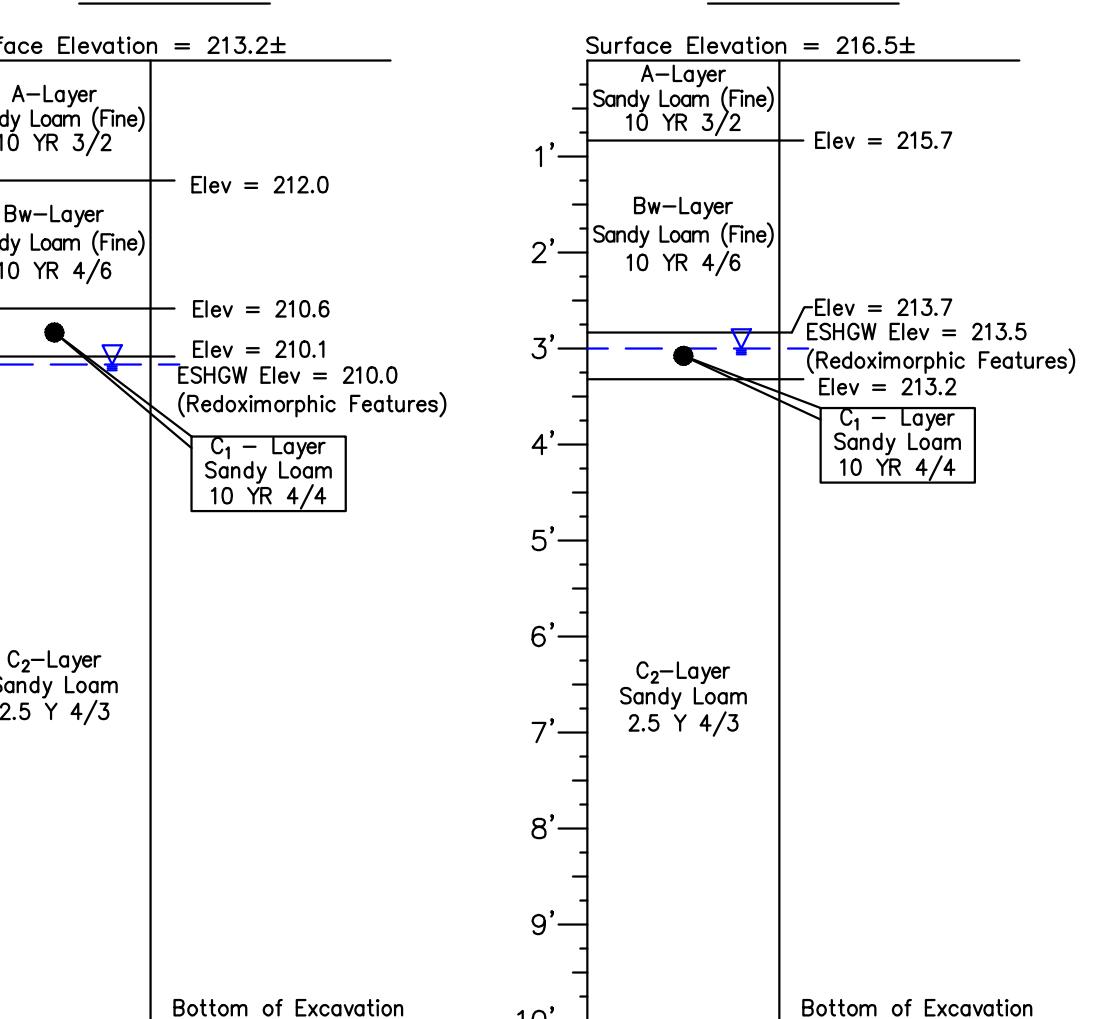
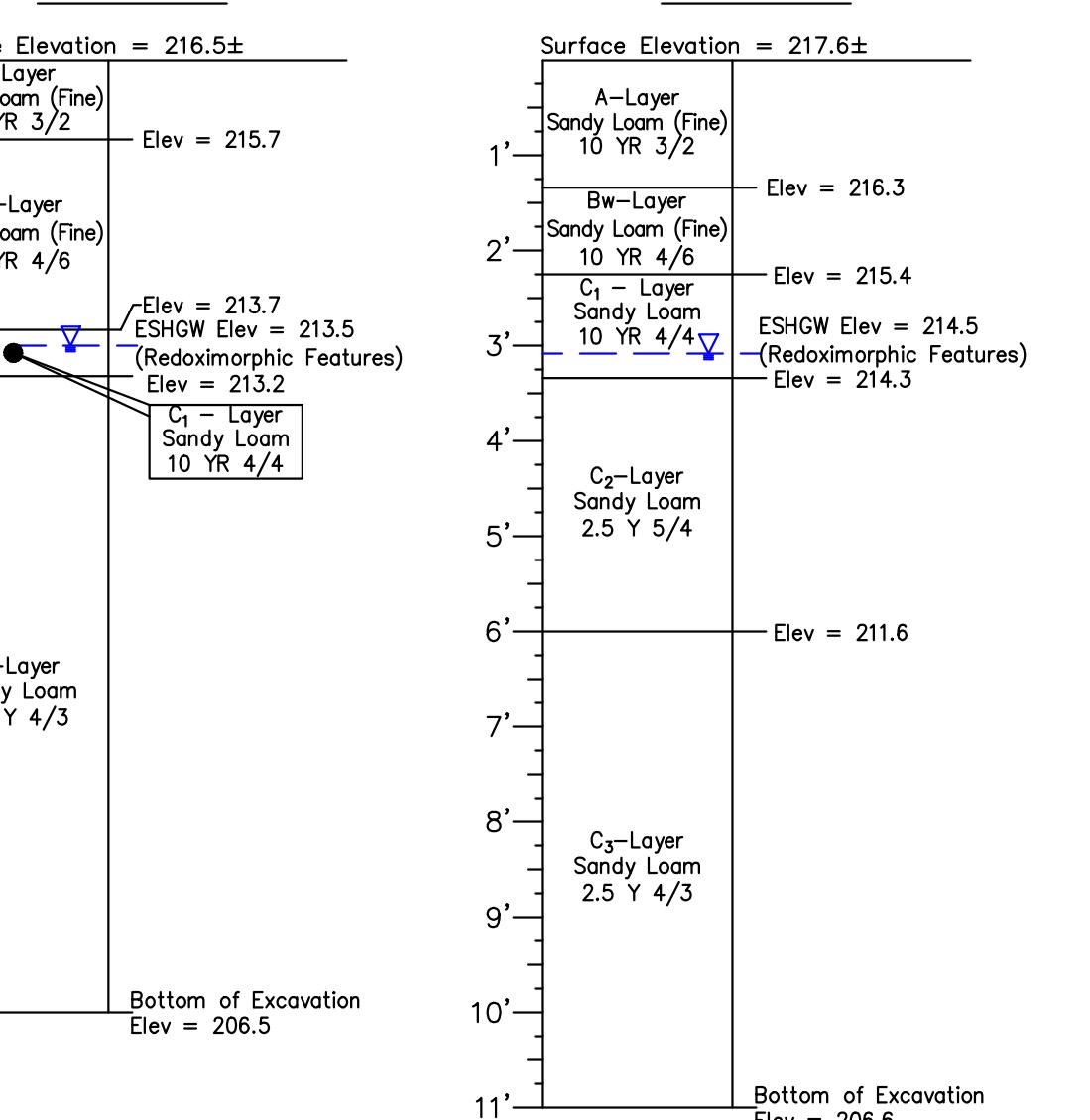
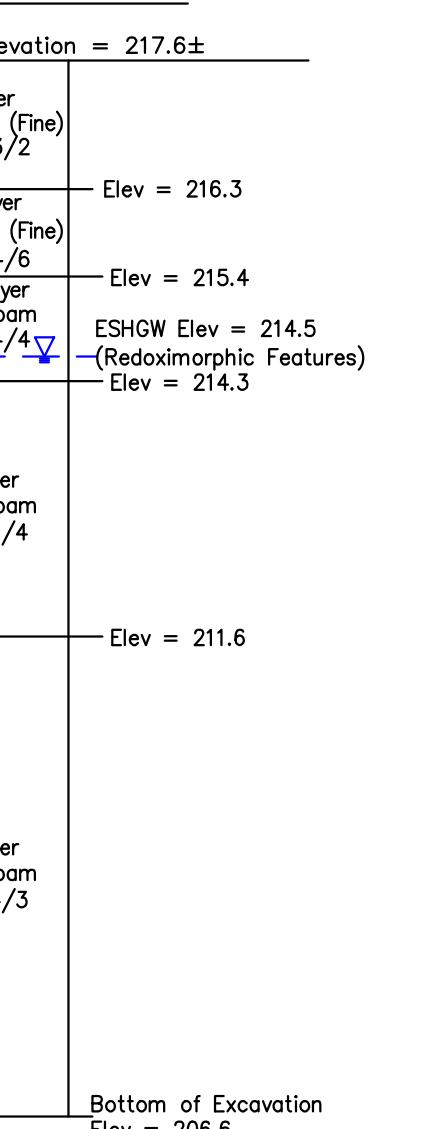
SEWAGE DISPOSAL SYSTEM DETAILS

1000\1\258

BOH-4

SOIL TEST DATA

DATE: OCTOBER 25 & 26, 2023
 WITNESSED BY: MARK ORAM
 OF THE SHERBORN BOARD OF HEALTH
 SOIL EVALUATOR: FREDERICK J. SCHOBEL III, E.I.T.
 SE 14561

TEST PIT 23-06

TEST PIT 23-07

TEST PIT 23-09

TEST PIT 23-10

TEST PIT 23-11


MODULAR CONCRETE FACING UNITS
 40mil (MINIMUM) HDPE IMPERMEABLE BARRIER BACKED BY A CONCRETE BLOCK WALL (DRY STACKED)

LIMIT OF EXCAVATION FOR ABSORPTION FIELD TO EXTEND TO EDGE OF WALL
 6" THICK MIN. GRANULAR LEVELING PAD

TYPICAL SECTION-RETAINING WALL WITH IMPERMEABLE BARRIER

(NO SCALE)

PRIMARY TRENCH DESIGN DATA

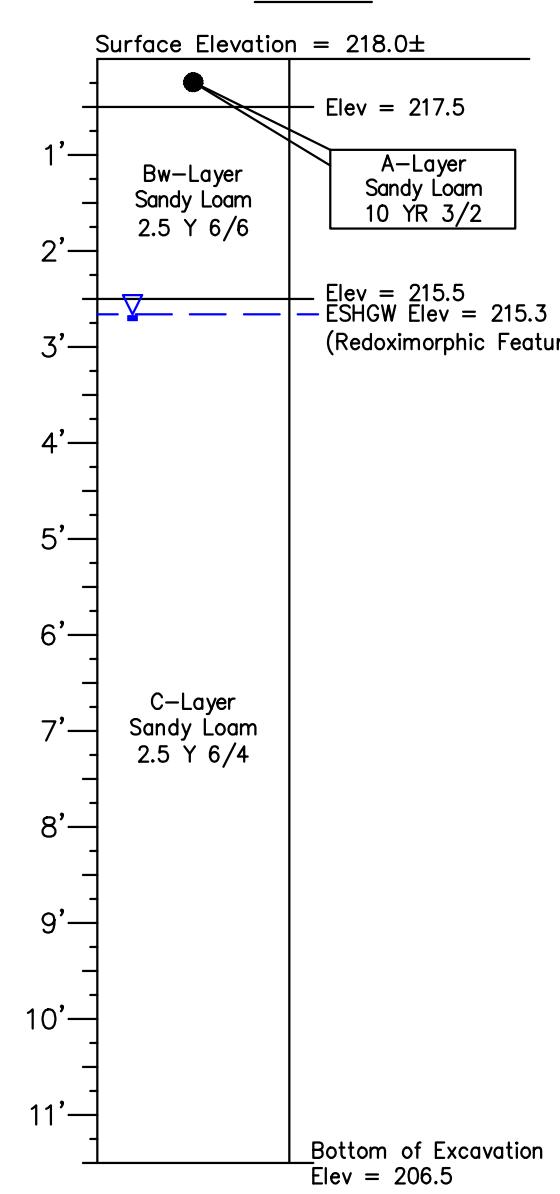
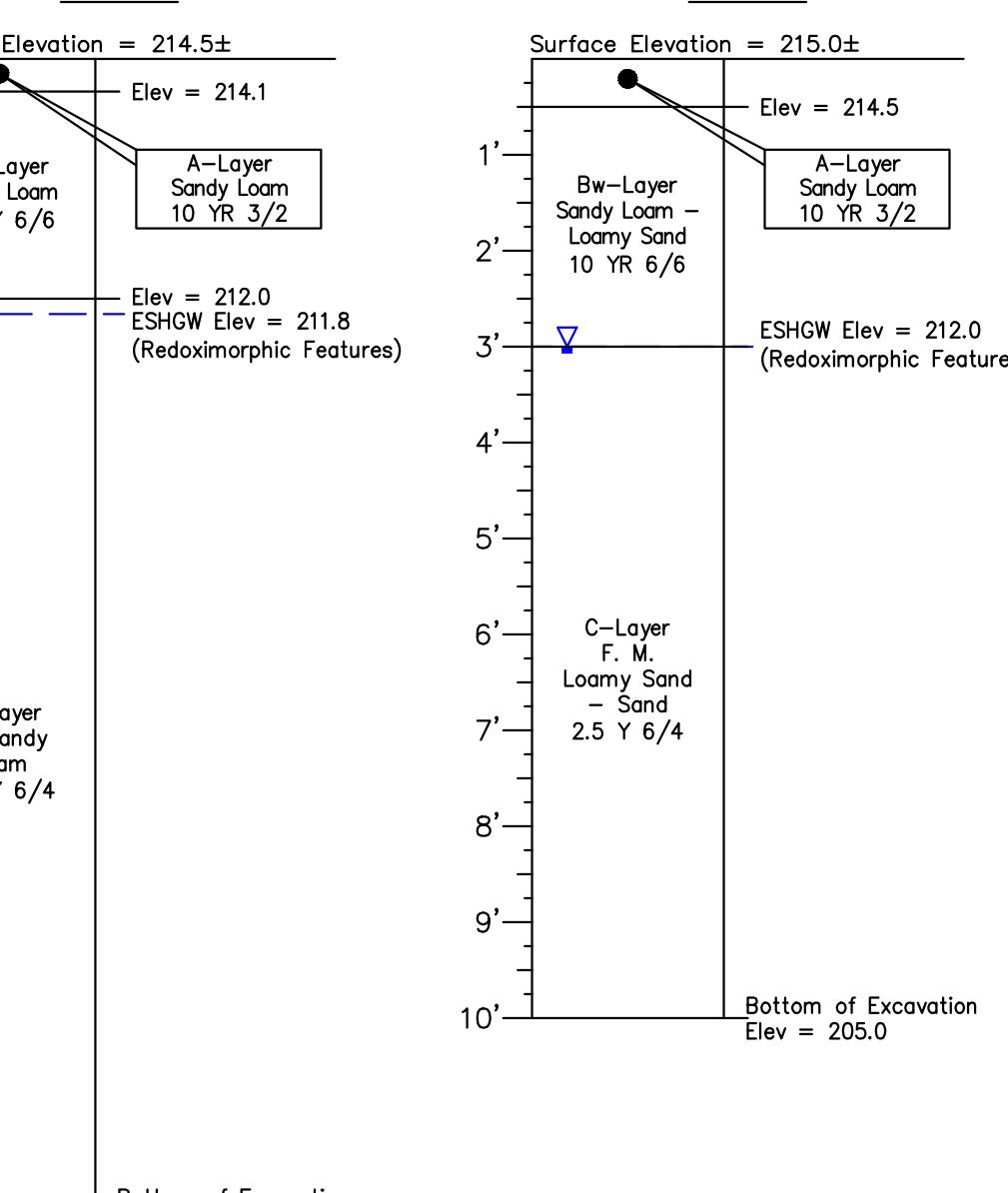
TRENCH NO.	1 & 2	3 & 4	5 & 6	7 & 8	9 & 10	11 & 12	13 & 14
BREAKOUT ELEVATION AT BEGINNING	219.80	219.30	218.80	218.30	217.80	217.30	216.80
BREAKOUT ELEVATION AT END	219.30	218.80	218.30	217.80	217.30	216.80	216.30
INVERT ELEVATION AT BEGINNING	219.30	218.80	218.30	217.80	217.30	216.80	216.30
INVERT ELEVATION AT END	218.80	218.30	217.80	217.30	216.80	216.30	215.80
BOTTOM OF STONE ELEVATION	216.80	216.30	215.80	215.30	214.80	214.30	213.80
DESIGN GROUNDWATER ELEVATION	212.80	212.17	211.42	210.62	209.89	209.38	208.87

RESERVE TRENCH DESIGN DATA

TRENCH NO.	1 & 2	3 & 4	5 & 6	7 & 8	9 & 10	11 & 12	13 & 14
BOTTOM OF STONE ELEVATION	216.56	216.06	215.56	215.06	214.56	214.06	213.56
DESIGN GROUNDWATER ELEVATION	212.49	211.82	211.02	210.22	209.63	209.12	208.66

SOIL TEST DATA

DATE: AUGUST 19, 2024
 WITNESSED BY: MARK ORAM
 OF THE SHERBORN BOARD OF HEALTH
 SOIL EVALUATOR: DESHENG WANG, PE
 SE 2545

DHTP 2-1

DHTP 2-2

DHTP 2-3
