TOWN OF BENNINGTON
MUNICIPAL WATER SYSTEM
REMEDIAL EXPANSION PHASE II
BENNINGTON, VERMONT

DWSRF RF3-380
CONTRACT 9
(LOWER) CHAPEL ROAD

LEGEND

NOTES:

1. SOME SYMBOLS MAY NOT APPEAR ON ALL PLANS.

2. HORIZONTAL DIMENSIONS ARE IN FEET.

3. VERTICAL DIMENSIONS ARE NAVD88.

4. WATER SERVICE (NEW)

5. WATER SERVICE (EXISTING)

6. METER VAULT

7. UTILITY VAULT

8. ARV: AIR RELEASE VALVE (EXISTING)

9. PRV: PRESSURE REDUCING VALVE (EXISTING)

10. METER VAULT

11. UTILITY VAULT

12. SANITARY SEWER MANHOLE

13. SANITARY SEWER MANHOLE

14. SANITARY SEWER MANHOLE

15. UTILITY MANHOLE

16. UTILITY MANHOLE

17. UTILITY MANHOLE

18. TREE OR BRUSH LINE

19. STREET OR YARD LINE

20. PROPERTY LINE

21. PROJECT ORIENTATION LINE

22. BOUNDARY

23. MAILBOX

24. POST

25.elia (ESRI) 2019

26. Note: Some symbols may not appear on all plans.
NEW JAC"S DRIVE BOOSTER PRESSURE ZONE:
20 GPM PEAK FLOW CAPACITY
1,000 LF PUMP RANGE TO ELEV. 980.00 MSL

NEW BOOSTER PUMP STATION
N: 152508.9698 E: 1458503.4340

06-01-23-90
WALTER SWEET AND TINA PIERCE
45 JACK'S DR
BENNINGTON VT 05201
BK. _, PG. _

06-01-26-01
KENNETH AND BEVERLY BLEAU
40 JACKS DR
BENNINGTON VT 05201
BK. _, PG. _

06-01-26-02
TINA AND JERRY PIERCE
69 JACK'S DR
BENNINGTON VT 05201
BK. 442, PG. 51

06-01-23-02
JOHN AND PATTY SWEET
67 JACK'S DR
BENNINGTON VT 05201
BK. 442, PG. 49

06-01-26
WALTER S SWEET
44 WALTS WAY
BENNINGTON VT 05201
BK. 401, PG. 156

K:\_DRAWING DATABASE\1001-019.7 PFOA REMEDIATION II\SHEETS\CONTRACT 9\1001-019.7 TOB G009 COVER SHEET.DWG

10 October 2019 16:37:12

CONTRACT 9
JACK'S DRIVE PRESSURE ZONE

TOWN OF BENNINGTON
MUNICIPAL WATER SYSTEM
REMEDIAL EXPANSION PHASE II
BENNINGTON, VERMONT
1001-019.7
G009.1
CONTRACT 9
JACK'S DRIVE PRESSURE ZONE

SCALE: 1:50 (CONTRACT 9)

FEET
WL - Chapel Rd PROFILE

- CONNECT TO EXISTING 8" DI WATER MAIN
- 8" GATE VALVE
  STA: 169+20
- 8" CL 52 DI WATER MAIN
- INSTALL 4" (MIN) RIGID INSULATION BENEATH CULVERT CROSSING
- 22.5° HORIZONTAL BEND
  STA: 174+80
- 3/4" CORPORATION STOP (1904 CHAPEL RD)
  STA: 176+32
- INSTALL 4" (MIN) RIGID INSULATION BENEATH CULVERT CROSSING
- 8" GATE VALVE
  STA: 177+37
- 8" GATE VALVE
  STA: 177+43
- 8x6 TEE TO JACKS DRIVE (STA 70+00)
  STA: 177+40
- 3/4" CORPORATION STOP (1847 CHAPEL RD)
  STA: 179+85
- 45° HORIZONTAL BEND
  STA: 169+66
- 45° HORIZONTAL BEND
  STA: 169+80
- 1" CORPORATION STOP (1992 CHAPEL RD)
  STA: 169+85
- 1" CORPORATION STOP (1936 CHAPEL RD)
  STA: 169+83
- 8x6 TEE TO HYDRANT ASSEMBLY
  STA: 174+75
- 5'-6" (MIN. DESIGN DEPTH)
- 19" (18" MIN)
- 29" (18" MIN)
- 6' (6' MIN)
- ELEV: 946.44
- AVG. STREAM DEPTH AT CROSSING
- INSTALL 4" (MIN) RIGID INSULATION BENEATH CULVERT CROSSING
- BORING DEPTH (B-8)
  STA: 170+14
  ELEV: 935.91
- BORING DEPTH (B-7)
  STA: 170+64
  ELEV: 935.51
- BORING DEPTH (P-127 DRILLED)
  STA: 177+59
  ELEV: 930.71
- 3/4" CORPORATION STOP TO SAMPLING STATION
  STA: 169+35
EXISTING 18" CPEP CULVERT CROSSING
APPROX. STA: 194+00
APPROX. INV: 907.63

EXISTING 18" CPEP CULVERT CROSSING
APPROX. STA: 199+44
APPROX. INV: 894.89

EXISTING 18" CPEP CULVERT CROSSING
APPROX. STA: 190+69
APPROX. INV: 910.28

EXISTING GRADE
8" GATE VALVE
STA: 196+23

3/4" CORPORATION STOP (1507 CHAPEL RD)
STA: 196+50

INSTALL 4" (MIN) RIGID INSULATION BENEATH CULVERT CROSSING

ELEV: 891.31
AVG. STREAM DEPTH AT CROSSING
5'-6" (MIN. DESIGN DEPTH)
24" (18" MIN)
36" (18" MIN)
73" (72" MIN)
114" (18" MIN)

BORING DEPTH (P-123 DRILLED)
STA: 198+52
ELEV: 889.64

BORING DEPTH (P-124 DRILLED)
STA: 193+76
ELEV: 901.12
EXISTING GRADE
3/4" CORPORATION STOP (1305 CHAPEL RD)
STA: 208+30

1" CORPORATION STOP (1215 CHAPEL RD)
STA: 212+82

INSTALL 4" (MIN) RIGID INSULATION
BENEATH CULVERT CROSSING

5'-6" (MIN. DESIGN DEPTH)
27" (18" MIN)
8" GATE VALVE
STA: 208+63

EXISTING 18" CPEP CULVERT CROSSING
APPROX. STA: 207+72
APPROX. INV: 871.18

EXISTING 18" CPEP CULVERT CROSSING
APPROX. STA: 212+41
APPROX. INV: 865.22

ELEVATION
Station
WL - Chapel Rd PROFILE
845 850 860 870 880 890 900
205+50 206+00 207+00 208+00 209+00 210+00 211+00 212+00 213+25
BORING DEPTH (P-121 DRILLED)
STA:207+72
ELEV:871.18

206+00
884.10
878.60

207+00
882.14
876.64

208+00
880.69
875.19

209+00
877.79
872.29

210+00
874.87
869.37

211+00
872.79
867.29

212+00
870.30
864.80

213+00
868.72
863.22

MSK ENGINEERING AND DESIGN, INC.
P.O. BOX 139, 150 DEPOT STREET
MSK
BENNINGTON, VERMONT 05201
PH: (802) 447-1402  FAX: (802) 445-1291

K:\_DRAWING DATABASE\1001-019.7 PFOA REMEDIATION II\SOURCE DRAWINGS\PLANS\PROPOSED\DISTRICT F\1001-019.7 TOB F PROPOSED.DWG
10 October 2019 11:42:25

REVISIONS
DESCRIPTION

TOWN OF BENNINGTON
MUNICIPAL WATER SYSTEM
REMEDIAL EXPANSION PHASE II
BENNINGTON, VERMONT
1001-019.7
C147A
SERVICE DISTRICT F
PROFILE
10-11-2019
MSKJMD
PUMP STATION SITE PLAN AT CHAPEL ROAD AND JACK'S DRIVE

- **MUNICIPAL WATER SYSTEM**
  - Tie to Existing @ 3:1
  - 42'

- **EXISTING 18" CPEP**
  - -7.5%

- **EXISTING 18" CPEP**
  - -38.5%

- **INV: 942.75**

- **PROTECT STORM DRAIN INLET**
  - UE

- **UNDERGROUND ELECTRICAL SERVICE FROM EXISTING UTILITY POLE**
  - TA 944.65
  - 15'

- **DRYWELL TO BE COLLAPSED**
  - ± 24'

- **EASEMENT AREA**
  - Tie to Existing @ 6:1
  - 15'

- **70+00**
  - LG EL: 0.00
  - GND EL: 940.71
  - NORTHING: 152513.1176

- **8x8 TEE TO CHAPEL ROAD (STA 177+60)**
  - STA: 70+00
  - P-127 DRILLED

- **PRECAST CONCRETE PUMP STATION**

- **REMOVE EXISTING TREE**

- **LEACH FIELD**

- **BW FINISH GRADE @ BOTTOM OF WALL**

- **TBC TOP BACK OF CURB**

- **TG TOP OF GRAVEL**

- **FFE FINISH FLOOR ELEVATION**

- **FL FLOWLINE**

- **SPOT ELEVATION KEY**

- **EXISTING 18" CPEP**
  - -6.2%

- **NEW BLOWOUT CONCRETE APRON AT CPEP**
PRV SITE PLAN AT CHAPEL ROAD
GENERAL NOTES

1. TRAFFIC CONTROL DEVICES HAVING CONSTRUCTION PROJECTS DEEP ARE SHOWN TO COVER UNTIL WORK COMMENCES, DURING PERIODS OF INACTIVITY, OR UPON COMPLETION OF THE WORK. EACH SIGN SHALL BE ERECTED IN A NEAT AND WORKMAN-LIKE MANNER.

2. SIGNS SHALL BE LOCATED AS SHOWN ON THE PLAN. SIGNS SHOWN IN № 1 THROUGH № 6 ARE TO BE USED WHEN CONSTRUCTION IS UP TO 1000 FEET FROM THE INTERSECTION.

3. SIGNS SHELD BE MAINTAINED IN A CLEAN AND LEGIBLE CONDITION SATISFACTORY TO THE ENGINEER. NO MATERIAL WILL BE APPROVED THAT WILL DETERIORATE BY EXPOSURE TO THE ELEMENTS. SIGNS SHALL BE KEPT PLUMB AND LEVEL, AND ALWAYS PRESENT A NEAT APPEARANCE. DAMAGED, DEFACED, OR DIRTY SIGNS SHALL BE REPAIRED, CLEANED, OR REPLACED, AS ORDERED.

4. SIGNS SHALL BE ERECTED PRIOR TO THE START OF ANY WORK AND SHALL BE CONSIDERED WORK COMMENCED WHEN WORKING IN A MANNER THAT HAPPEINS THE USE, OCCUPANCY, OR USE VALUE OF THE PROPERTY TO BE CONSTRUCTED UPON. THE WORKER SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE PROPERTY TO BE CONSTRUCTED UPON.

5. SIGNS SHALL BE LOCATED IN A CONVENIENT CONSIDERATION TO THE LOCATION OF HOMEOWNERS, AND ROADWAY AND SIDEWALK USERS. TECHNIQUES SUCH AS THE USE OF FREEWAY MAY BE MODIFIED, DUE TO FIELD CONDITIONS, AT THE DISCRETION OF THE ENGINEER.

6. SIGNS SHALL BE MAINTAINED IN PLUMB CONSIDERATION TO THE LOCATION OF HOMEOWNERS, AND ROADWAY AND SIDEWALK USERS. TECHNIQUES SUCH AS THE USE OF FREEWAY MAY BE MODIFIED, DUE TO FIELD CONDITIONS, AT THE DISCRETION OF THE ENGINEER.

7. CONSTRUCTION SIGNS INSTALLED ON POSTS SHALL BE SECURELY IN THE GROUND ON TWO FOUNDATIONS, COLLARS, OR SOIL BEARING PLATES ARE NOT PERMITTED.

8. NO CROSS-BRACING OR BACK-BRACING TO KEEP POSTS PLUMB WILL BE ALLOWED. CONCRETE CROSS-ARM AND BACK-ARMERING ARE NOT PERMITTED.


10. CONSTRUCTION SIGNS SHALL HAVE REFLECTIVE SHADING EQUAL TO OR EXCEEDING THE "AMERICAN SOCIETY FOR TESTING AND MATERIALS" (ASTM) D 4956, OR "AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS" (AASHTO) M 268, "AMERICAN SOCIETY FOR TESTING AND MATERIALS" (ASTM) D 4956, OR "AMERICAN SOCIETY FOR TESTING AND MATERIALS" (ASTM) D 4956. SIGNS SHALL BE REMOVED UPON THE COMPLETION OF THE WORK OR AS ORDERED.

11. SIGNS SHALL BE MAINTAINED IN A CLEAN AND LEGIBLE CONDITION SATISFACTORY TO THE ENGINEER. NO MATERIAL WILL BE APPROVED THAT WILL DETERIORATE BY EXPOSURE TO THE ELEMENTS. SIGNS SHALL BE KEPT PLUMB AND LEVEL, AND ALWAYS PRESENT A NEAT APPEARANCE. DAMAGED, DEFACED, OR DIRTY SIGNS SHALL BE REPAIRED, CLEANED, OR REPLACED, AS ORDERED.

12. SIGNS SHALL BE LOCATED AS SHOWN ON THE PLAN. SIGNS SHOWN IN № 1 THROUGH № 6 ARE TO BE USED WHEN CONSTRUCTION IS UP TO 1000 FEET FROM THE INTERSECTION.

13. SIGNS SHALL BE LOCATED AS SHOWN ON THE PLAN. SIGNS SHOWN IN № 1 THROUGH № 6 ARE TO BE USED WHEN CONSTRUCTION IS UP TO 1000 FEET FROM THE INTERSECTION.

14. SIGNS SHALL BE LOCATED AS SHOWN ON THE PLAN. SIGNS SHOWN IN № 1 THROUGH № 6 ARE TO BE USED WHEN CONSTRUCTION IS UP TO 1000 FEET FROM THE INTERSECTION.

15. SIGNS SHALL BE LOCATED AS SHOWN ON THE PLAN. SIGNS SHOWN IN № 1 THROUGH № 6 ARE TO BE USED WHEN CONSTRUCTION IS UP TO 1000 FEET FROM THE INTERSECTION.

16. SIGNS SHALL BE LOCATED AS SHOWN ON THE PLAN. SIGNS SHOWN IN № 1 THROUGH № 6 ARE TO BE USED WHEN CONSTRUCTION IS UP TO 1000 FEET FROM THE INTERSECTION.

17. SIGNS SHALL BE LOCATED AS SHOWN ON THE PLAN. SIGNS SHOWN IN № 1 THROUGH № 6 ARE TO BE USED WHEN CONSTRUCTION IS UP TO 1000 FEET FROM THE INTERSECTION.

18. SIGNS SHALL BE LOCATED AS SHOWN ON THE PLAN. SIGNS SHOWN IN № 1 THROUGH № 6 ARE TO BE USED WHEN CONSTRUCTION IS UP TO 1000 FEET FROM THE INTERSECTION.

19. SIGNS SHALL BE LOCATED AS SHOWN ON THE PLAN. SIGNS SHOWN IN № 1 THROUGH № 6 ARE TO BE USED WHEN CONSTRUCTION IS UP TO 1000 FEET FROM THE INTERSECTION.

20. SIGNS SHALL BE LOCATED AS SHOWN ON THE PLAN. SIGNS SHOWN IN № 1 THROUGH № 6 ARE TO BE USED WHEN CONSTRUCTION IS UP TO 1000 FEET FROM THE INTERSECTION.
### TABLE 6H-4: FORMULAS FOR DETERMINING TAPER LENGTH

**SPEED (S)** | **TAPER LENGTH (L) IN FEET**
--- | ---
40 MPH OR LESS | \( L = WS^2 \)
45 MPH OR MORE | \( L = WS \)

**WHERE:**
- \( L \) = TAPER LENGTH IN FEET
- \( W \) = WIDTH OF OFFSET IN FEET
- \( S \) = POSTED SPEED LIMIT, OR OFF-PEAK 85TH-PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED IN MPH

### TABLE 6H-3: MEANING OF LETTER CODES ON TYPICAL APPLICATION DIAGRAMS

<table>
<thead>
<tr>
<th>ROADWAY TYPE</th>
<th>DISTANCE BETWEEN SIGNS **</th>
</tr>
</thead>
<tbody>
<tr>
<td>URBAN (LOW SPEED)</td>
<td>100 FEET</td>
</tr>
<tr>
<td>URBAN (HIGH SPEED)</td>
<td>350 FEET</td>
</tr>
<tr>
<td>RURAL</td>
<td>500 FEET</td>
</tr>
<tr>
<td>EXPRESSWAY/FREEWAY</td>
<td>1,000 FEET, 1,500 FEET, 2,640 FEET</td>
</tr>
</tbody>
</table>

**NOTES FOR FIGURE 6H-3: TYPICAL APPLICATION**

1. A "SHOULDER WORK" SIGN SHOULD BE PLACED ON THE LEFT SIDE OF THE ROADWAY FOR A DIVIDED OR ONE-WAY STREET ONLY IF THE LEFT SHOULDER IS AFFECTED.
2. THE "WORKERS" SYMBOL SIGN MAY BE USED INSTEAD OF "SHOULDER WORK" SIGNS.
3. THE "SHOULDER WORK AHEAD" SIGN ON AN INTERSECTING ROADWAY MAY BE OMITTED WHERE DRIVERS EMERGING FROM THAT ROADWAY WILL ENCOUNTER ANOTHER ADVANCED WARNING SIGN PRIOR TO THIS ACTIVITY AREA.
4. FOR SHORT DURATION OPERATIONS OF 60 MINUTES OR LESS, ALL SIGNS AND CHANNELIZING DEVICES MAY BE ELIMINATED IF A VEHICLE WITH ACTIVATED HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS IS USED.
5. VEHICLE HAZARD WARNING SIGNALS MAY BE USED TO SUPPLEMENT HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS.
6. VEHICLE HAZARD WARNING SIGNALS SHALL NOT BE USED INSTEAD OF THE VEHICLE'S HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS.
7. WHEN PAVED SHOULDERS HAVING A WIDTH OF 8 FEET OR MORE ARE CLOSED, AT LEAST ONE ADVANCED WARNING SIGN SHALL BE USED. CHANNELIZING DEVICES SHALL BE USED TO DELINEATE THE AREA AND DIRECT SHOULDER TRAFFIC TO REMAIN WITHIN THE TRAVELED WAY.

### LEGEND

- **CHANNELIZING DEVICE**
- **DIRECTION OF TRAFFIC**
- **FLAGGER**
- **SIGN**
- **WORK SPACE**

### TABLE 6H-2: MEANING OF SYMBOLS ON TYPICAL APPLICATION DIAGRAMS

- **CHANNELIZING DEVICE**
- **DIRECTION OF TRAFFIC**
- **FLAGGER**
- **SIGN**
- **WORK SPACE**

### NOTES FOR FIGURE 6H-3: TYPICAL APPLICATION **"WORK ON THE SHOULDERS"**

- **SHOULDER WORK** sign should be placed on the left side of the roadway for a divided or one-way street only if the left shoulder is affected.
- **ROAD WORK** sign is used to indicate work on the road.
- **END ROAD WORK** sign is used to indicate the end of the work area.
- **SHOULDER TAPER** (see note 7) is used to indicate the taper length of the shoulder.

### SCALE:

- **NTS**
- **MUTCD**

### DRAWING INFORMATION:

- **CHECKED SHEET NUMBER**
- **DRAWN**
- **DATE**
- **REVISIONS DESCRIPTOR**
- **NUMBER**
- **DATE**
- **REVISIONS**

### DRAWINGS THIS SHEET

- **K:\_DRAWING DATABASE\1001-019.7 PFOA REMEDIATION II\SHEETS\C500 CONSTRUCTION DETAILS.DWG**

### EXTENDED DRAWING INFORMATION:

- **10 October 2019 11:37:52**
- **MSK ENGINEERING AND DESIGN, INC.**
- **P.O. BOX 139, 150 DEPOT STREET**
- **MSK BENNINGTON, VERMONT 05201**
- **PH: (802) 447-1402  FAX: (802) 445-1291**
**TYPICAL CONCRETE THRUST BLOCK DETAIL**

**NOTES:**
- Reinforced concrete min. 3" pre-anchor blocks required.
- Minimum 4" x 4" x 4" reinforced concrete block at each key.
- Thrust blocks are to be located 3'-6" from the first joint in the service line.
- Thrust blocks are to be formed with 2" rigid foam insulation to meet minimum bearing surface areas.

**CONSTRUCTION REQUIREMENTS:**
- Concrete thrust blocks are to be installed with a minimum 4" x 4" x 4" reinforced concrete block at each key.
- Thrust blocks are to be formed with 2" rigid foam insulation to meet minimum bearing surface areas.

**TYPICAL HDPE TRANSITION DETAIL**

**NOTES:**
- HDPE transition detail is required for all plastic transitions in the service line.
- Transition details are to be located at all plastic transitions in the service line.

**CONSTRUCTION REQUIREMENTS:**
- Transition details are to be located at all plastic transitions in the service line.
- Transition details are to be formed with 2" rigid foam insulation to meet minimum bearing surface areas.

**TYPICAL SAMPLING STATION DETAIL**

**NOTES:**
- Sampling stations are to have a 3'-6" minimum burial depth.
- Sampling stations are to be located at all plastic transitions in the service line.
- Sampling stations are to be formed with 2" rigid foam insulation to meet minimum bearing surface areas.

**CONSTRUCTION REQUIREMENTS:**
- Sampling stations are to have a 3'-6" minimum burial depth.
- Sampling stations are to be located at all plastic transitions in the service line.
- Sampling stations are to be formed with 2" rigid foam insulation to meet minimum bearing surface areas.
TYPICAL UTILITY TRENCH INSTALLATION DETAIL

GENERAL NOTES:

1. THE PROJECT IS PERMITTED UNDER AN INDIVIDUAL CONSTRUCTION PERMIT.

2. SOIL DISTURBANCE TO BE LIMITED TO 1/2 FT ACROSS, OR LESS, AT ANY TIME.

3. THE CENTERLINE OF THE TRAFFIC IS THE CENTERLINE OF THE TRENCH.

4. INSPECTIONS TO BE CONDUCTED EVERY 7 DAYS AND WITHIN 24 HOURS OF CONSTRUCTION MODIFICATIONS REQUIRING CONSTRUCTION PERMIT AMENDMENTS.

5. THE CONTRACTOR IS REQUIRED TO COMPLETE THE INITIAL STREET BUScce INSPECTION.

6. AT THE END OF EACH WORK DAY:

   a. ALL AREAS TO BE DUMPED OF EXCESS SEDIMENT, EXCEPT WITHIN 50' OF ANY RECEIVING WATER.

   b. ALL EXCAVATED MATERIAL TO BE STORED ON SITE AT ALL TIMES.

   c. EXCAVATION DEEPER THAN 10 FT OR LESS THAN 10 FT DEEP BUT MORE THAN 5 FT DEEP TO BE LEFT IN PLACE.

   d. ALL SEDIMENT REMOVED FROM SEDIMENT CONTROL PRACTICES AS A PART OF MAINTENANCE SHALL BE DISPOSED OF IN AN AREA NOT IN THE PATH OF FLOW.

7. ALL AREAS OF DISTURBANCE MUST HAVE TEMPORARY STABILIZATION PRIOR TO GROUND FREEZING.

8. IF NO PRECIPITATION, RAIN OR SNOW, WITHIN 24 HOURS IS FORECASTED AND WORK WILL RESUME IN THE SAME DISTURBED AREA OF EACH WORK DAY. WITH THE FOLLOWING EXCEPTIONS:

   a. EROSION CONTROL MEASURES TO BE ESTABLISHED TO CONTAIN SOIL DURING DESIGN STAGE, COMPUTED TO STABILIZE THE END OF EACH WORK DAY.

   b. ALL AREAS OF DISTURBANCE MUST HAVE TEMPORARY STABILIZATION PRIOR TO GROUND FREEZING.

9. ALL MULCH MUST BE ANCHORED WITH AN APPROVED METHOD TO PREVENT REMOVAL BY WIND.

10. VEGETATIVE COVER MUST OCCUR NO LATER THAN OCTOBER 15TH.

11. IF THE DISTURBED AREAS WILL COLLECT AND RETAIN RUNOFF, SUCH AS HOUSE FOUNDATIONS OR OPEN BASINS, ROADSIDE DITCHES, OR RECEIVING WATERS. IF EXCAVATED SOIL MIGRATES, CLEAN UP IMMEDIATELY.

12. ALL AREAS OF DISTURBANCE MUST HAVE TEMPORARY STABILIZATION PRIOR TO GROUND FREEZING.

STABILIZATION MEASURES, TEMPORARY OR PERMANENT, SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES, STAGE BANKS, CONTRIBUOTARY DRAINAGE AREAS. SIMILARLY, STABILIZATION OF CONTRIBUTING DRAINAGE AREAS SHALL BE ESTABLISHED PRIOR TO RAINFALL OR SNOWMELT.

CONSTRUCTION SPECIFICATIONS:

1. UTILITY TRENCH INSTALLATION. REQUIREMENTS FOR WINTER CONSTRUCTION THROUGHOUT THE WINTER PERIOD.

2. STABILIZATION MEASURES, TEMPORARY OR PERMANENT, SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES, STAGE BANKS, CONTRIBUOTARY DRAINAGE AREAS. SIMILARLY, STABILIZATION OF CONTRIBUTING DRAINAGE AREAS SHALL BE ESTABLISHED PRIOR TO RAINFALL OR SNOWMELT.

EPOC NOTES:

1. CREATION OF A CUT FLOODPLAIN TO BE CONSIDERED. REQUIREMENTS FOR WINTER CONSTRUCTION.

2. REQUIREMENTS FOR WINTER SHUTDOWN OF ALL EXCAVATION ACTIVITY PRIOR TO THE BEGINNING OF THE WINTER PERIOD (OCTOBER 10), THE FOLLOWING ARE REQUIREMENTS FOR THE FIRST PLAN:

   a. FOR AREAS TO BE STABILIZED BY MULCH, DOUBLE THE REGULAR COVERAGE RATE, OR ROUGHLY 2 INCHES OF STRAW/HAY MULCH AND EMBANKMENTS SHALL BE IMMEDIATELY STABILIZED WITH SOD, SEED & ANCHORED STRAW MULCH, OR OTHER APPROVED MATERIALS ACCORDING TO LOCAL STANDARDS.

   b. REQUIREMENTS FOR WINTER CONSTRUCTION. REQUIREMENTS FOR WINTER SHUTDOWN OF ALL EXCAVATION ACTIVITY PRIOR TO THE BEGINNING OF THE WINTER PERIOD (OCTOBER 10), THE FOLLOWING ARE REQUIREMENTS FOR THE FIRST PLAN:

   a. FOR AREAS TO BE STABILIZED BY MULCH, DOUBLE THE REGULAR COVERAGE RATE, OR ROUGHLY 2 INCHES OF STRAW/HAY MULCH AND EMBANKMENTS SHALL BE IMMEDIATELY STABILIZED WITH SOD, SEED & ANCHORED STRAW MULCH, OR OTHER APPROVED MATERIALS ACCORDING TO LOCAL STANDARDS.

   b. REQUIREMENTS FOR WINTER CONSTRUCTION. REQUIREMENTS FOR WINTER SHUTDOWN OF ALL EXCAVATION ACTIVITY PRIOR TO THE BEGINNING OF THE WINTER PERIOD (OCTOBER 10), THE FOLLOWING ARE REQUIREMENTS FOR THE FIRST PLAN:

   a. FOR AREAS TO BE STABILIZED BY MULCH, DOUBLE THE REGULAR COVERAGE RATE, OR ROUGHLY 2 INCHES OF STRAW/HAY MULCH AND EMBANKMENTS SHALL BE IMMEDIATELY STABILIZED WITH SOD, SEED & ANCHORED STRAW MULCH, OR OTHER APPROVED MATERIALS ACCORDING TO LOCAL STANDARDS.

   b. REQUIREMENTS FOR WINTER CONSTRUCTION. REQUIREMENTS FOR WINTER SHUTDOWN OF ALL EXCAVATION ACTIVITY PRIOR TO THE BEGINNING OF THE WINTER PERIOD (OCTOBER 10), THE FOLLOWING ARE REQUIREMENTS FOR THE FIRST PLAN:

   a. FOR AREAS TO BE STABILIZED BY MULCH, DOUBLE THE REGULAR COVERAGE RATE, OR ROUGHLY 2 INCHES OF STRAW/HAY MULCH AND EMBANKMENTS SHALL BE IMMEDIATELY STABILIZED WITH SOD, SEED & ANCHORED STRAW MULCH, OR OTHER APPROVED MATERIALS ACCORDING TO LOCAL STANDARDS.
MULCHING IS ESSENTIAL TO OBTAIN A UNIFORM STAND OF SEEDED PLANTS. OPTIMUM BENEFITS OF MULCHING NEW SEEDINGS ARE OBTAINED WITH THE USE OF SMALL GRAIN STRAW APPLIED AT A RATE OF 4-01 & 4 LBS/ACRE.

GENERAL SEED MIXTURES:

1. PROFESSIONAL AND WILL REFLECT THE ULTIMATE LAND USE.
2. WHEN LEGUMES LIKE CLOVER ARE INCLUDED, SPRING SEEDING IS PREFERRED. ACTUAL RESULTS OF A SOIL TEST ARE OBTAINED TO DETERMINE FERTILIZER NEEDS, USE COMMERCIAL LIMESTONE TO ATTAIN A PH OF 6.0 IN THE UPPER 2 INCHES OF SOIL. IF SOIL MUST BE FERTILIZED BEFORE

PERMANENT SEEDING PREPARATION:

1. DISTURBANCE OR SCARIFICATION OF SOIL SURFACE WILL BE NECESSARY PRIOR TO SEEDING. AREAS MUST BE SEEDED WITHIN 24 HOURS OF PREVIOUS DISTURBANCE OR SCARIFICATION OF SOIL SURFACE.
2. SITE CONDITIONS. THE AREA MUST BE ROUGH GRADED AND SLOPES PHYSICALLY STABLE. LARGE DEBRIS AND ROCKS SHOULD BE REMOVED. AREA MUST BE SEEDED WITHIN 24 HOURS OF PREVIOUS DISTURBANCE OR SCARIFICATION OF SOIL SURFACE.

METHOD OF SEEDING:

1. BEGINNING, PERENNIAL Ryegrass50.10'PENNFINE' VARIETY
2. OTHER GRASSES MAY BE SEEDED ANY TIME OF THE YEAR WHEN THE SOIL IS NOT FROZEN AND IS WORKABLE. WHEN LEGUMES LIKE CLOVER ARE INCLUDED, SPRING SEEDING IS PREFERRED.

AMENDMENTS:

1. WOODY DEBRIS THAT WILL PREVENT RECP FROM CONTACTING THE GROUND SURFACE. DO NOT STRETCH.
2. MATERIAL SHALL BE PLACED LOOSELY OVER SOIL MOISTURE MUST BE PRESENT TO ACCOMPLISH THIS. IF SURFACE IS POWDER DRY OR STICKY WET, CONTACT BETWEEN RECP AND GROUND MUST BE PREVENTED TO AVOID STABILIZED AREAS. RILLS AND GULLIES MUST BE REGARDED PRIOR TO PLACEMENT OF ADDITIONAL SEEDING. GROUND SURFACE MUST BE MADE FLAT WITHIN 12” OF THE RECP MATERIAL AND ABOUT 125 STAPLES PER 4’ x 225’ ROLL OF MATERIAL AND ABOUT 125 STAPLES APART AND IN ROWS ~ 3’ APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 4’ x 225’ ROLL OF MATERIAL AND ABOUT 125 STAPLES APART AND IN ROWS ~ 3’ APART.

PREPARATION:

1. PRIMARY TOOLS TO BE USED ARE STAPLE DRIVER AND COMPACTION EQUIPMENT. IN SOME AREAS, IT MAY BE NECESSARY TO USE MORE CONVENTIONAL SOIL STABILIZATION TOOLS TO ENSURE PROPER SEED AND SOIL CONTACT. MATERIAL AND ABOUT 125 STAPLES APART AND IN ROWS ~ 3’ APART.

ASSIGNMENTS:

1. TRENCH EVERY 12”
2. METAL STAPLES TO BE UNGALVANIZED U-SHAPED WIRE WITH 2” CROWN STABILIZED AREAS. RILLS AND GULLIES MUST BE REGARDED PRIOR TO PLACEMENT OF ADDITIONAL SEEDING. GROUND SURFACE MUST BE MADE FLAT WITHIN 12” OF THE RECP MATERIAL AND ABOUT 125 STAPLES PER 4’ x 225’ ROLL OF MATERIAL AND ABOUT 125 STAPLES APART AND IN ROWS ~ 3’ APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 4’ x 225’ ROLL OF MATERIAL AND ABOUT 125 STAPLES APART AND IN ROWS ~ 3’ APART.

ROCKY AREAS OR SPOTTY AREAS THAT WILL INTERFERE WITH FUTURE MOWING OR MAINTENANCE.

SOWING TIMES:

1. IF: LATE FALL OR EARLY WINTER, THEN SEED CERTIFIED ‘AROOSTOOK’ WINTER RYE (CEREAL RYE) AT 90 LBS PER ACRE (2.0 LBS/1,000 SF).
2. IF: SPRING OR SUMMER OR EARLY FALL, THEN SEED THE AREA WITH REGIONAL RYEGRASS (ANNUAL OR PERENNIAL). FERTILIZER AT 600 LBS PER ACRE OF 5-10-10 OR EQUIVALENT. IF MANURE IS USED, APPLY QUANTITY TO

CONTACT BETWEEN RECP AND GROUND MUST BE PREVENTED TO AVOID STABILIZED AREAS. RILLS AND GULLIES MUST BE REGARDED PRIOR TO PLACEMENT OF ADDITIONAL SEEDING. GROUND SURFACE MUST BE MADE FLAT WITHIN 12” OF THE RECP MATERIAL AND ABOUT 125 STAPLES PER 4’ x 225’ ROLL OF MATERIAL AND ABOUT 125 STAPLES APART AND IN ROWS ~ 3’ APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 4’ x 225’ ROLL OF MATERIAL AND ABOUT 125 STAPLES APART AND IN ROWS ~ 3’ APART.

PERMANENT SEEDRATES:

1. 4-01 & 4 LBS/ACRE
2. IF: LATE FALL OR EARLY WINTER, THEN SEED CERTIFIED ‘AROOSTOOK’ WINTER RYE (CEREAL RYE) AT 90 LBS PER ACRE (2.0 LBS/1,000 SF).
3. IF: SPRING OR SUMMER OR EARLY FALL, THEN SEED THE AREA WITH REGIONAL RYEGRASS (ANNUAL OR PERENNIAL). FERTILIZER AT 600 LBS PER ACRE OF 5-10-10 OR EQUIVALENT. IF MANURE IS USED, APPLY QUANTITY TO

WORKABLE. WHEN LEGUMES LIKE CLOVER ARE INCLUDED, SPRING SEEDING IS PREFERRED.
PLUMBING LEGEND AND TYPICAL WATER SERVICE ENTRANCE DETAILS

SECTION A-A
UTILITY VAULT

1. PRE-CAST CONCRETE UTILITY VAULT/METER PIT DETAIL

2. WATER SERVICE PIPE ENTRY

3. WATER SERVICE VERTICAL PIPE ENTRY

4. WATER SERVICE VERTICAL PIPE ENTRY

PLUMBING DETAILS

NOTE:

SERVICES ENTRANCE DIAGRAMS INCLUDED IN THE C600 SERIES OF THE SHEET SET ARE SCHEMATIC ONLY, AND BASED ON OBSERVATIONS MADE DURING PRELIMINARY DESIGN INSPECTIONS PERFORMED IN COOPERATION WITH THE PROPERTY OWNER. THESE DIAGRAMS ARE PROVIDED FOR GENERAL REFERENCE ONLY.

DUE TO SCHEDULING OR OTHER CIRCUMSTANCES, SOME PROPERTIES REQUIRING SERVICE CONNECTIONS WERE NOT INSPECTED, AND MAY NOT BE INCLUDED IN THE SHEET SET.

THE CONTRACTOR MUST VERIFY ALL INTERNAL PLUMBING COMPONENTS AND CONFIGURATIONS, AND COORDINATE CURB STOP AND SERVICE ENTRANCE LOCATIONS WITH THE ENGINEER AND PROPERTY OWNER PRIOR TO MAKING ANY CONNECTIONS.

ALL NEW SERVICE PLUMBING, PIPING AND COMPONENTS WITHIN RESIDENCES, UTILITY VULUTS AND/OR METER PITS SHALL BE COMPLETED BY A QUALIFIED PLUMBER, LICENSED TO PRACTICE IN THE STATE OF VERMONT, AND ALL WORK MUST BE PERFORMED IN COMPLIANCE WITH ALL APPLICABLE CODES, REGULATIONS AND PERMITS.
1. **Connection to Existing Municipal Water Main**

   Chapel Road

2. **Connection to Existing Municipal Water Main**

   Bradley Drive and Chapel Road

3. **Connection to Existing Municipal Water Main**

   North Bridge Street and Chapel Road

**Description:**
- **Existing 8" DI Water Main**
- Connect to existing main with 8" gate valve
- Remove piping and appurtenances beyond new connection (typical)
- New 8" DI Water Main (typical)
- New 8" gate valve
- New 8" DI Water Main
- Connect to existing 10" DI Water Main with 10x8 tapping sleeve
- Existing 8" DI Water Main to be abandoned
- New 8" gate valve
- New 8" gate valve
- New 8x8 tee
- New 8" gate valve
- New 8" gate valve
- New 8" DI Water Main (typical)
- Connect to existing 8" DI Water Main with new 8" gate valve
- Existing 6x6 tee
- Existing 6" DI Water Main to be abandoned
- New 8" gate valve

**Scale:** NTS
Booster Pump Systems are to be installed pursuant to the criteria described in the Town of Bennington Water Department Public Community Water System (the Water System), WSID #5016 - Variance Request Granted (12 July 2017)

1. Booster Pump Systems are to be installed at the listed properties per typical detail as shown on this sheet.
2. The plumber shall remove existing internal piping, components, and fixtures and all appurtenances from the existing pump installation. The plumber shall also remove any internal piping, components, and fixtures and all appurtenances from the existing pump installation.
3. The plumber shall remove all internal piping, components, and fixtures and all appurtenances from the existing pump installation.
4. The plumber shall remove all internal piping, components, and fixtures and all appurtenances from the existing pump installation.
5. The plumber shall remove all internal piping, components, and fixtures and all appurtenances from the existing pump installation.
6. The plumber shall remove all internal piping, components, and fixtures and all appurtenances from the existing pump installation.
7. The plumber shall remove all internal piping, components, and fixtures and all appurtenances from the existing pump installation.
8. The plumber shall remove all internal piping, components, and fixtures and all appurtenances from the existing pump installation.
9. The plumber shall remove all internal piping, components, and fixtures and all appurtenances from the existing pump installation.

Post hydrants shall be non-freezing, self-draining type with a 5'-6" min. depth of bury. These hydrants will be furnished with a 2" NPT inlet, a non-turning operating rod, and shall be open to the right. All working parts shall be bronze to bronze design and be serviceable from above grade without digging. The outlet shall also be bronze and be 2-1/2" NST. Hydrants shall be lockable to prevent unauthorized use as manufactured by Mueller, P/N A-410, or approved equal.

Boosted Service Entrance Diagrams

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Boosted Service Entrance Diagrams
THESE PROPERTIES AS LISTED ARE WITHIN THE NEW JACK'S DRIVE BOOSTED PRESSURE ZONE