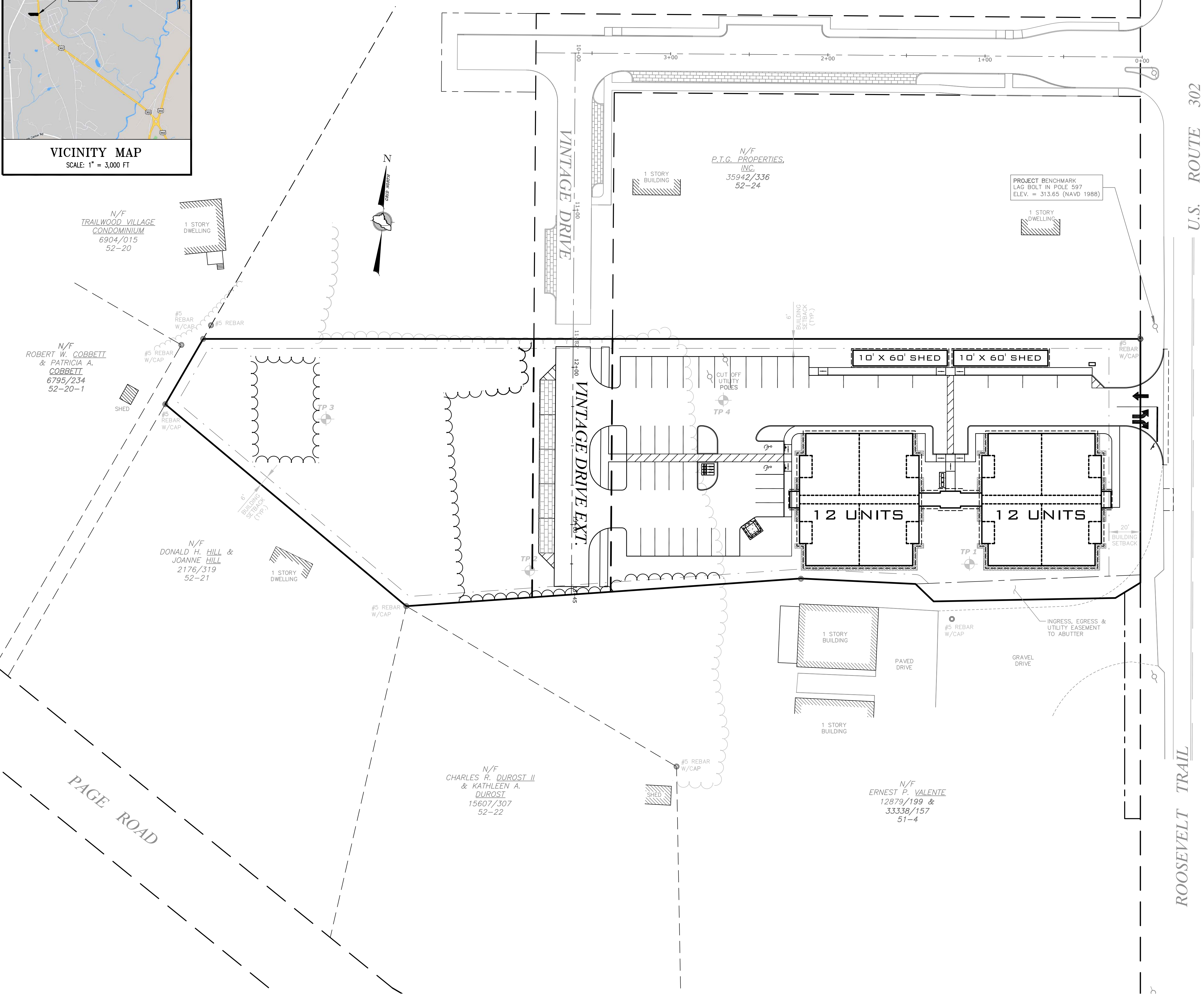


FIELDING CONDOS  
ROOSEVELT TRAIL, WINDHAM, MAINE



INDEX

- COVER/INDEX/VICINITY MAP
- BOUNDARY & TOPOGRAPHIC SURVEY
- SITE, LAYOUT & UTILITY PLAN
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- LANDSCAPE PLAN
- SITE LIGHTING LAYOUT
- ARCHITECTURAL PLANS

ABUTTERS

ASSESSOR'S MAP	PARCEL NUMBER	OWNER'S NAME
51	4	ERNEST P. VALENTE PO BOX 1963, WINDHAM, ME 04062 BOOK 39865, PAGE 157
52	20	TRAILWOOD VILLAGE CONDOMINIUM 936 ROOSEVELT TRAIL, SUITE 13, WINDHAM, ME 04062 BOOK 6904, PAGE 015
52	20-1	ROBERT W. COBBETT & PATRICIA A. COBBETT 37 PAGE ROAD, WINDHAM, ME 04062 BOOK 6795, PAGE 234
52	21	DONALD H. HILL & JOANNE HILL 31 PAGE ROAD, WINDHAM, ME 04062 BOOK 2176, PAGE 319
52	22	CHARLES R. DUROST II & KATHLEEN A. DUROST 3 WELCH ROAD, WINDHAM, ME 04062 BOOK 15607, PAGE 307
52	24	P.T.G. PROPERTIES, INC. 75 LOCKLAND DRIVE, WINDHAM, ME 04062 BOOK 35942, PAGE 336

THIS PLAN IS FOR REVIEW  
PURPOSES ONLY AND IS NOT  
INTENDED FOR CONSTRUCTION  
OR RECORDING

Revision	By	Date	Change
2	SMA	1/6/20	REVISED PER TOWN COMMENTS
1	SMA	12/21/20	SUBMITTED FOR TOWN REVIEW

PROJECT NUMBER: 41878 ACAD FILE: 41878-COVER.DWG SCALE: 1" = 30' DATE: DECEMBER 21, 2020

DRAWING STATUS

☐ SUBDIVISION PLAN

☐ MDEP REVIEW

☐ PLANNING BOARD

☒ TOWN REVIEW

☐ CONSTRUCTION

**1-6-20**

Drawing Name:  
**COVER/INDEX/VICINITY PLAN**

Project Name:  
**FIELDING CONDOS  
ROOSEVELT TRAIL, WINDHAM, MAINE**

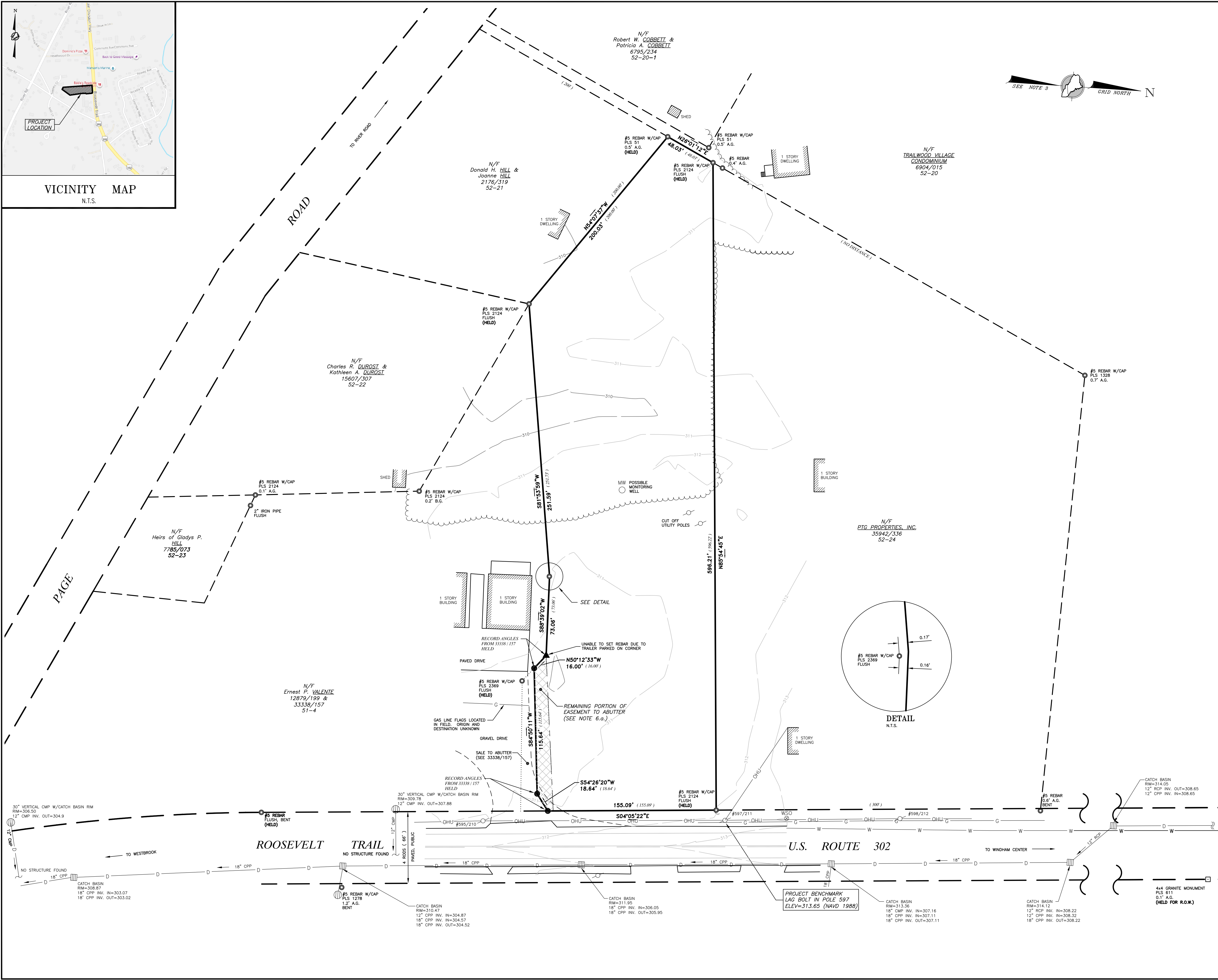
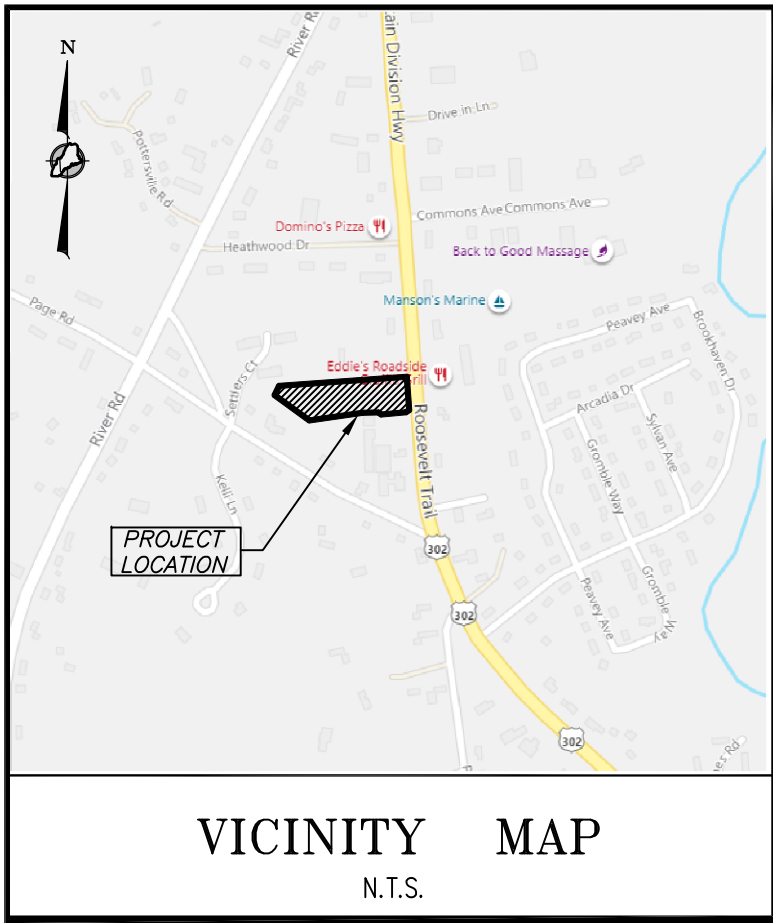
Owner/Applicant:  
**FIELDING'S OIL CO., INC.**

1-6-20

**Northeast Civil Solutions**  
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0 30 60 120'





**LEGEND**

NO MONUMENTATION FOUND OR SET  
#5 REBAR WITH CAP (NCS 2080) SET ON JUNE 4, 2020  
FOUND IRON (SIZE & TYPE AS NOTED)  
FOUND MONUMENT (SIZE & TYPE AS NOTED)  
UTILITY POLE (NUMBER AS NOTED)  
GUY WIRE ANCHOR

TREE LINE (APPROXIMATE)  
BOUNDARY LINE  
EASEMENT LINE  
EDGE OF GRAVEL  
EDGE OF PAVEMENT  
RIGHT-OF-WAY LINE  
ABUTTER LINE  
OVERHEAD UTILITY  
NOW OR FORMERLY OWNED BY  
DEED BOOK AND PAGE  
TAX MAP-LOT  
PARENTHESES DENOTE RECORD DATA

- NOTES**
- RECORD OWNER OF THE PARCEL SURVEYED IS FIELDING'S OIL CO., INC. AS DESCRIBED IN A DEED FROM THE ESTATE OF HENRY VALENTE, DATED AUGUST 1, 2016 AND RECORDED IN BOOK 33338, PAGE 154 IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS.  
TOTAL LOT AREA IS: 91.015 S.F. OR 2.09 Ac.
  - THE PARCEL SURVEYED IS IDENTIFIED ON THE TOWN OF WINDHAM TAX ASSESSOR'S MAP 51, PARCEL 4-1.
  - THE BEARINGS SHOWN ON THIS PLAN ARE BASED ON MAINE COORDINATE SYSTEM OF 1983, WEST ZONE, GRID NORTH.
  - PLAN REFERENCES:
    - "PLAN SHOWING A STANDARD BOUNDARY AND TOPOGRAPHIC SURVEY FOR PINELYNE FURNITURE COMPANY, INC., ROUTE 302 AND PAGE ROAD, WINDHAM, MAINE" BY MIDDLE BRANCH PROFESSIONAL LAND SURVEYORS, DATED APRIL 24, 1997, RECORDED IN PLAN BOOK 197, PAGE 534.
    - "STANDARD BOUNDARY SURVEY, TRAILWOOD VILLAGE CONDOMINIUM, PAGE ROAD, WINDHAM, MAINE" BY F.S. PLUMMER CO., INC., DATED JULY 11, 1985, RECORDED IN PLAN BOOK 150, PAGE 28.
    - "EXISTING CONDITIONS PLAN ON ROOSEVELT TRAIL, WINDHAM, MAINE FOR PETER GILMAN" BY WAYNE T. WOOD & CO., DATED OCTOBER, 2019, NOT RECORDED.
    - "RIGHT-OF-WAY MAP, STATE HIGHWAY 14, FEDERAL AID PROJECT NO. F-014-1(41)" BY STATE OF MAINE, DEPARTMENT OF TRANSPORTATION, DATED SEPTEMBER, 1986, D.O.T. FILE NO. 3-346.
    - "PLAN OF PAGE ROAD IN THE TOWN OF WINDHAM AS REDEFINED BY THE COMMISSIONERS OF CUMBERLAND COUNTY FOLLOWING THE HEARING ON THE SAME, SEPTEMBER 7, 1955" BY H.J. & E.C. JORDAN, DATED OCTOBER 14, 1955, RECORDED IN COUNTY COMMISSIONERS PLAN BOOK 7, PAGE 6.
  - THE WIDTH OF ROOSEVELT TRAIL IS 4 RODS (66') BASED ON CUMBERLAND COUNTY RECORDS. THE LAYOUT OF THE RIGHT-OF-WAY LIMITS IS BASED ON MONUMENTATION FOUND.
  - REFERENCE IS MADE TO THE FOLLOWING EASEMENTS OF RECORD:
    - EASEMENT FOR INGRESS, EGRESS AND UTILITIES FROM HENRY VALENTE TO ERNEST VALENTE, DATED APRIL 28, 2016, RECORDED IN BOOK 33256, PAGE 224. A PORTION OF THE LAND UNDER THIS EASEMENT WAS LATER CONVEYED TO ERNEST VALENTE ON AUGUST 4, 2016 AND RECORDED IN BOOK 33338, PAGE 157, LEAVING THE REMAINING EASEMENT AS SHOWN ON THIS PLAN.
  - AS OF THE ORIGINAL DATE OF THIS PLAN, THE PARCEL SURVEYED IS LOCATED IN THE C-1 ZONE. PORTIONS OF BULK & SPACE REQUIREMENTS ARE AS FOLLOWS:  
MINIMUM LOT AREA = NONE  
MINIMUM FRONTAGE = 100'  
SETBACKS:  
FRONT = 10'-20' (PRINCIPAL BLDGS), 20'+ (ACCESSORY BLDGS)  
SIDE = 6'  
REAR = 6'  
OTHER MUNICIPAL AND STATE OVERLAY ZONES MAY EXIST AND APPLY. BEFORE PROCEEDING ON ANY PROJECT WE RECOMMEND VERIFYING CURRENT ZONE AND ALL APPLICABLE SETBACKS AND RESTRICTIONS WITH THE APPROPRIATE AGENCIES.
  - ELEVATIONS AND CONTOURS ARE BASED ON NAVD 1988 DATUM OBTAINED BY GPS-RTK. SEE PLAN FOR TBM DESCRIPTION.
  - THE UTILITIES SHOWN ON THIS PLAN WERE FROM FIELD OBSERVATION ONLY. THERE MAY BE OTHER UTILITIES EXISTING THAT ARE NOT SHOWN. CONTACT DIG-SAFE (888)DIG-SAFE PRIOR TO ANY EXCAVATION WORK.

Revision:	By:	Date:	Change:
1	SMA	1/4/21	UPDATED BUILDING SETBACKS
PROJECT: 41878		DRAWING NAME: 41878.dwg	
ISSUED: JUNE 4, 2020		SCALE: 1"=40'	FB # 426
FIELD BY: JAP / ASF		DRAWN BY: JAP	
FIELD DATE: 5/08/2020		CHECKED BY: DMM / TFM	
Drawing Name and Location:			
BOUNDARY & TOPOGRAPHIC SURVEY			
ROOSEVELT TRAIL, WINDHAM, MAINE			
Owner:			
FIELDING'S OIL CO., INC.			
420 U.S. ROUTE 1, SCARBOROUGH, MAINE 04074			
Prepared For:			
FIELDING'S OIL CO., INC.			

**STAMP AND SIGNATURE**

**Northeast Civil Solutions**  
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0 40' 80' 160'

**STATE OF MAINE**  
TROY F. McDONALD  
PROFESSIONAL LAND SURVEYOR

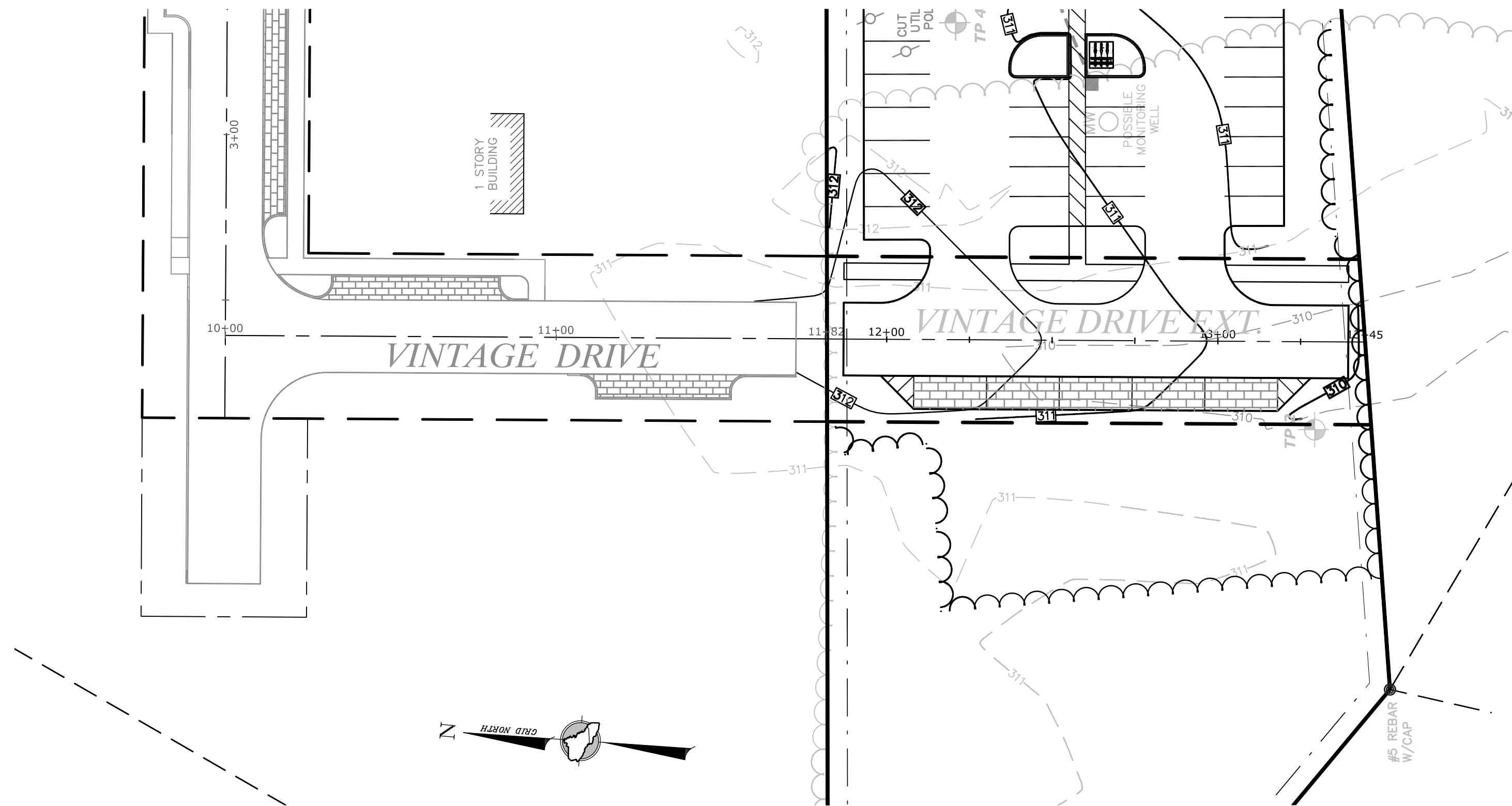
1/4/2021  
DATE

TROY F. McDONALD  
MAINE PROFESSIONAL LAND SURVEYOR No. 2080

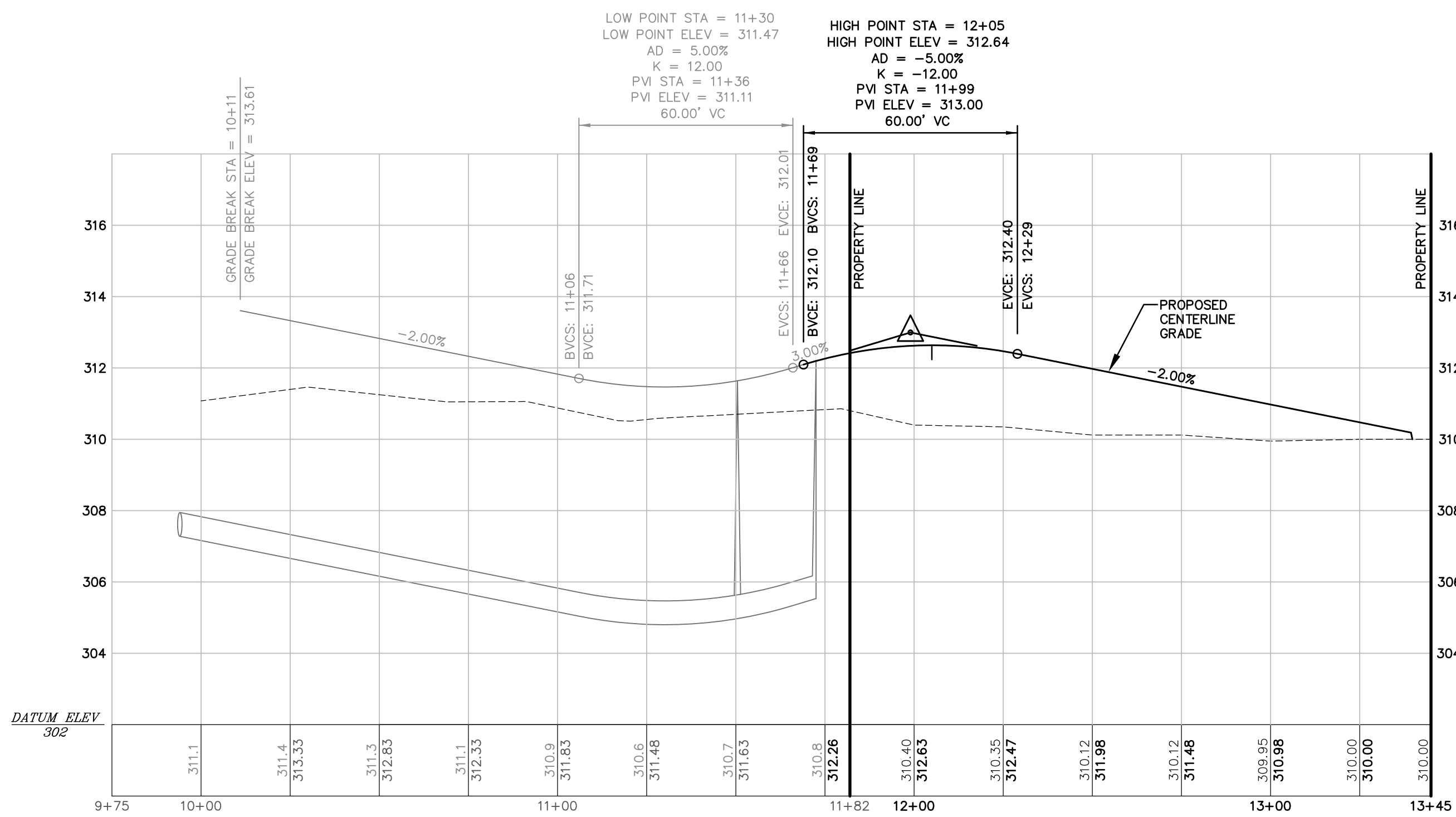
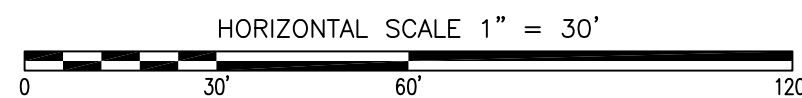




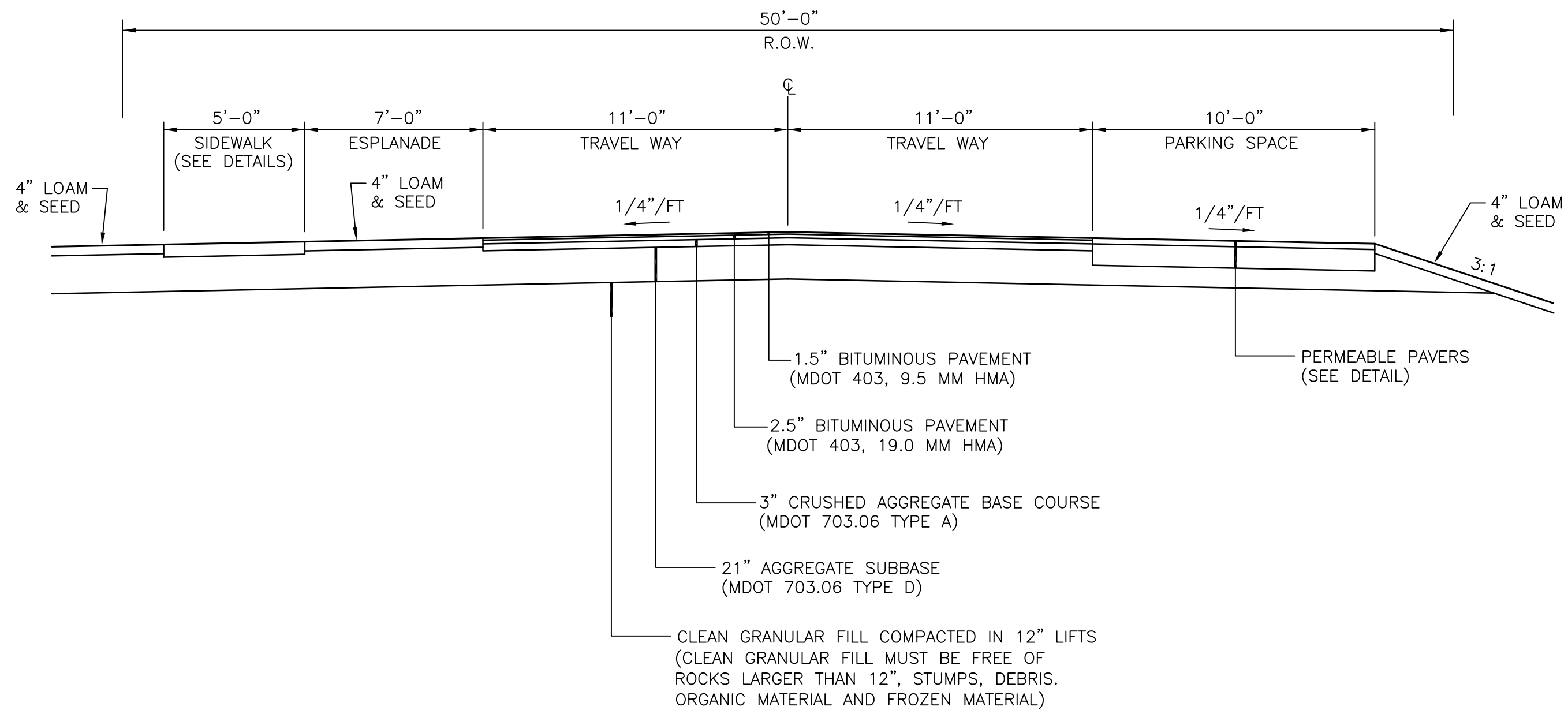




PLAN - VINTAGE DRIVE EXT.



ROAD PROFILE - VINTAGE DRIVE EXT.



TYPICAL ROAD CROSS SECTION

STA. 11+82 TO STA. 13+45

NOT TO SCALE

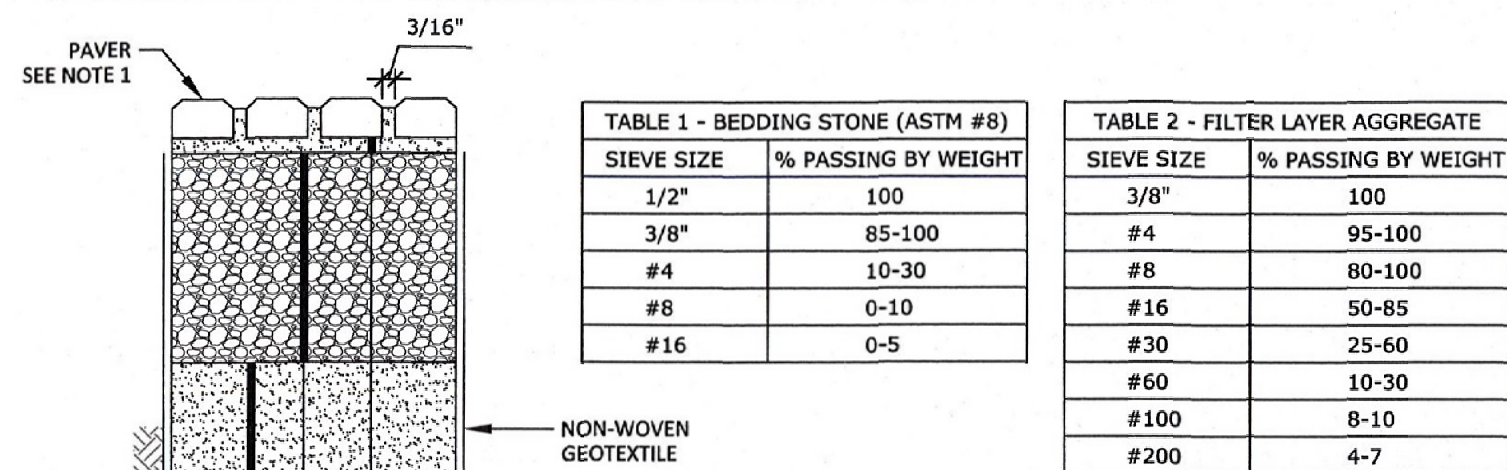


TABLE 1 - BEDDING STONE (ASTM #8)	
SIEVE SIZE	% PASSING BY WEIGHT
1/2"	100
3/8"	85-100
#4	10-30
#8	0-10
#16	0-5

TABLE 2 - FILTER LAYER AGGREGATE	
SIEVE SIZE	% PASSING BY WEIGHT
3/8"	100
#4	95-100
#8	80-100
#16	50-85
#30	25-60
#60	10-30
#100	8-10
#200	4-7

GENERAL NOTES:  
1. PAVERS SHALL BE STORMWATER BRICK AS MANUFACTURED BY GENEST CONCRETE WORKS, INC. OR APPROVED EQUAL. PAVERS TO BE INSTALLED PER MANUFACTURER SPECIFICATIONS.

PERMEABLE PAVER DETAIL  
NOT TO SCALE

BMP CONSTRUCTION OVERSIGHT NOTES:

- INSPECTIONS BY THE DESIGN ENGINEER OR SUITABLE THIRD PARTY WILL OCCUR AS NECESSARY TO CONFIRM THE MINIMUM THICKNESS OF EACH LAYER HAS BEEN PLACED AND COMPACTED PER MANUFACTURER'S SPECIFICATIONS. ALL THE MATERIAL USED FOR THE CONSTRUCTION OF THE PERMEABLE PAVER SECTION MUST BE CONFIRMED AS SUITABLE BY THE DESIGN ENGINEER. TESTING MUST BE DONE BY A CERTIFIED LABORATORY TO SHOW THAT THEY ARE PASSING MDEP SPECIFICATIONS.
- TESTING AND SUBMITTALS: THE CONTRACTOR SHALL IDENTIFY THE LOCATION OF THE SOURCE OF EACH COMPONENT OF THE PERMEABLE PAVER SECTION. ALL RESULTS OF FIELD AND LABORATORY TESTING SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR CONFIRMATION. THE CONTRACTOR SHALL:
  - SAMPLES OF THE FILTER LAYER, RESERVOIR COURSE AND BEDDING STONE SHALL BE COLLECTED. SAMPLES MUST BE A COMPOSITE OF THREE DIFFERENT LOCATIONS (GRABS) FROM THE STOCKPILE OR PIT FACE. SAMPLE SIZE REQUIRED WILL BE DETERMINED BY THE TESTING LABORATORY.
  - PERFORM A SIEVE ANALYSIS CONFORMING TO ASTM C136 (STANDARD TEST METHOD FOR SIEVE ANALYSIS OF FINE AND COARSE AGGREGATES 1996A) ON EACH TYPE OF THE SAMPLE MATERIAL. THE RESULTING FILTER MEDIA MIXTURE MUST HAVE 4% TO 7% BY WEIGHT PASSING THE #200 SIEVE AND A CLAY CONTENT OF LESS THAN 2% (DETERMINED BY HYDROMETER GRAIN SIZE ANALYSIS)

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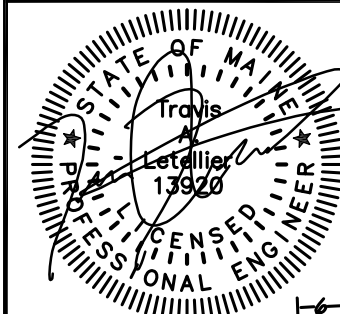
Revision	By	Date	Change
1	SMA	12/21/20	SUBMITTED FOR TOWN REVIEW
2	SMA	1/6/20	REVISED PER TOWN COMMENTS

PROJECT NUMBER: 41878 ACAD FILE: 41878-SITE.DWG SCALE: 1" = 30' DATE: DECEMBER 21, 2020

PLAN & PROFILE

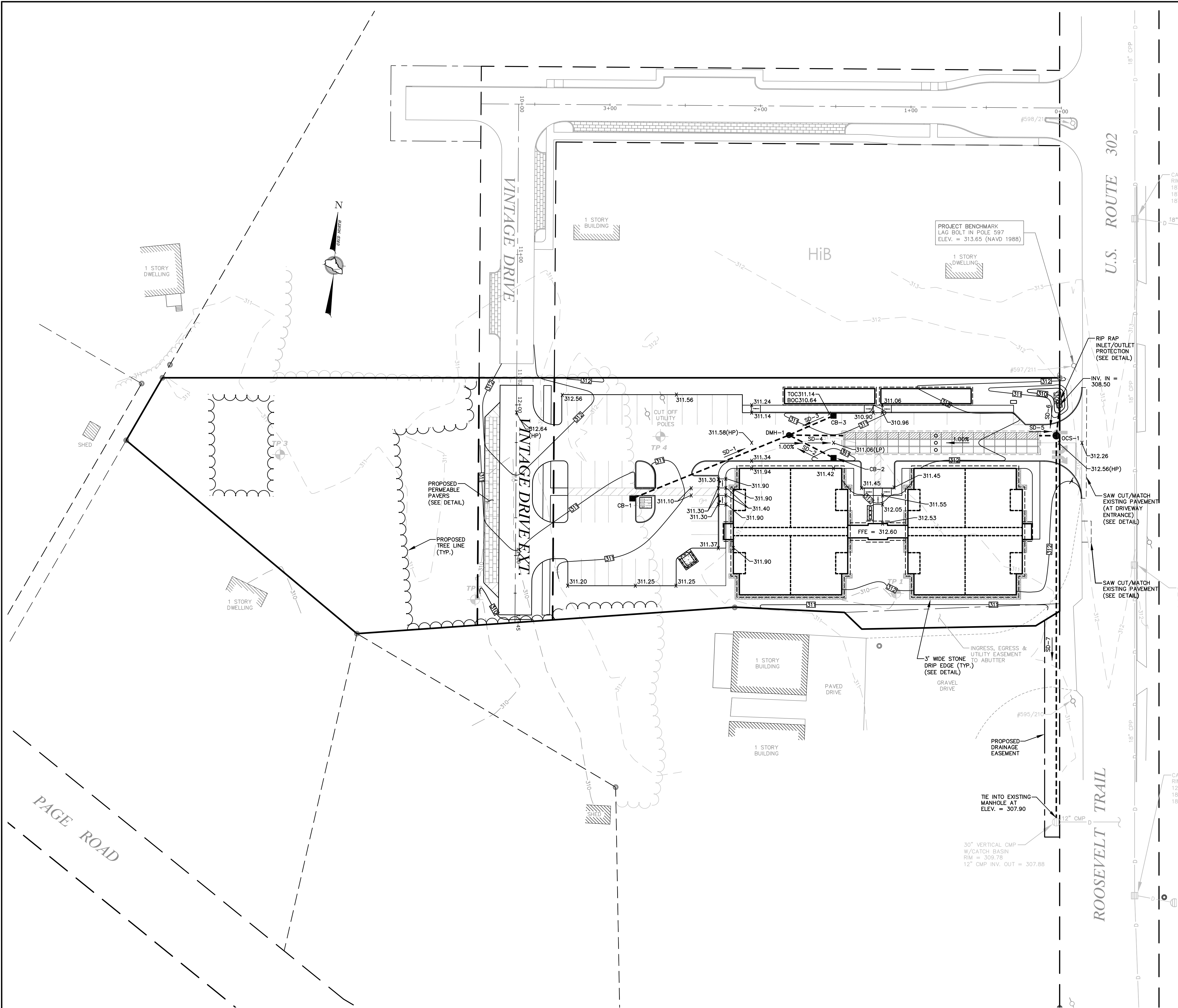
FIELDING CONDOS  
ROOSEVELT TRAIL, WINDHAM, MAINE

OWNER/APPLICANT:  
FIELDING'S OIL CO., INC.



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LEGEND

- BOUNDARY LINE
- EDGE OF PAVEMENT
- EDGE OF GRAVEL
- RIGHT-OF-WAY LINE
- ABUTTER
- EXISTING CONTOUR
- EXISTING EASEMENT
- EXISTING CATCH BASIN
- EXISTING UTILITY POLE
- EXISTING TREE LINE
- EXISTING CONTOUR
- PROPOSED DRAIN LINE
- PROPOSED OUTLET CONTROL STRUCTURE
- PROPOSED CATCH BASIN
- PROPOSED DRAIN MANHOLE
- PROPOSED TREE LINE
- PROPOSED CONTOUR
- PROPOSED PERMEABLE PAVER
- SPOT GRADE
- LOW POINT
- HIGH POINT
- SURFACE GRADE
- PROPOSED DRAINAGE EASEMENT

NOTES

STRUCTURE SCHEDULE			
STRUCTURE	RIM	INVERT IN	INVERT OUT
CB-1	310.75	----	307.60 (SD1)
CB-2	310.60	----	308.00 (SD-2)
CB-3	320.60	----	308.00 (SD-3)
DMH-1	311.40	306.50 (SD-1) 307.75 (SD-2) 307.75 (SD-3)	36.10 (SD-4)
OCS-1	SEE DETAIL		

PIPE SCHEDULE				
PIPE	PIPE DIAMETER	PIPE LENGTH	PIPE SLOPE (FT/FT)	TYPE
SD-1	12"	110'	0.010	CORRUGATED HDPE (SMOOTH INTERIOR)
SD-2	12"	30'	0.010	CORRUGATED HDPE (SMOOTH INTERIOR)
SD-3	12"	30'	0.010	CORRUGATED HDPE (SMOOTH INTERIOR)
SD-4	12"	35'	0.000 FLAT	CORRUGATED HDPE (SMOOTH INTERIOR)
SD-5	12"	10'	0.000 FLAT	CORRUGATED HDPE (SMOOTH INTERIOR)
SD-6	12"	20'	0.002	CORRUGATED HDPE (SMOOTH INTERIOR)
SD-7	12"	250'	0.002	CORRUGATED HDPE (SMOOTH INTERIOR)

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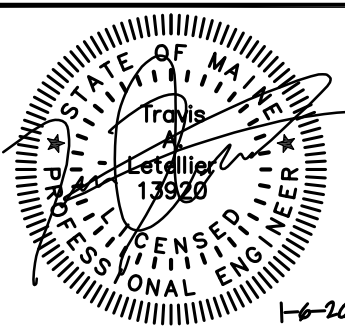
Revision	By	Date	Change
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1	SMA	12/21/20	SUBMITTED FOR TOWN REVIEW

PROJECT NUMBER: 41878	ACAD FILE: 41878-GRADING.DWG	SCALE: 1" = 30'	DATE: DECEMBER 21, 2020
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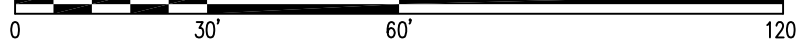
Drawing Name:  
GRADING & DRAINAGE PLAN

Project Name:  
FIELDING CONDOS  
ROOSEVELT TRAIL, WINDHAM, MAINE

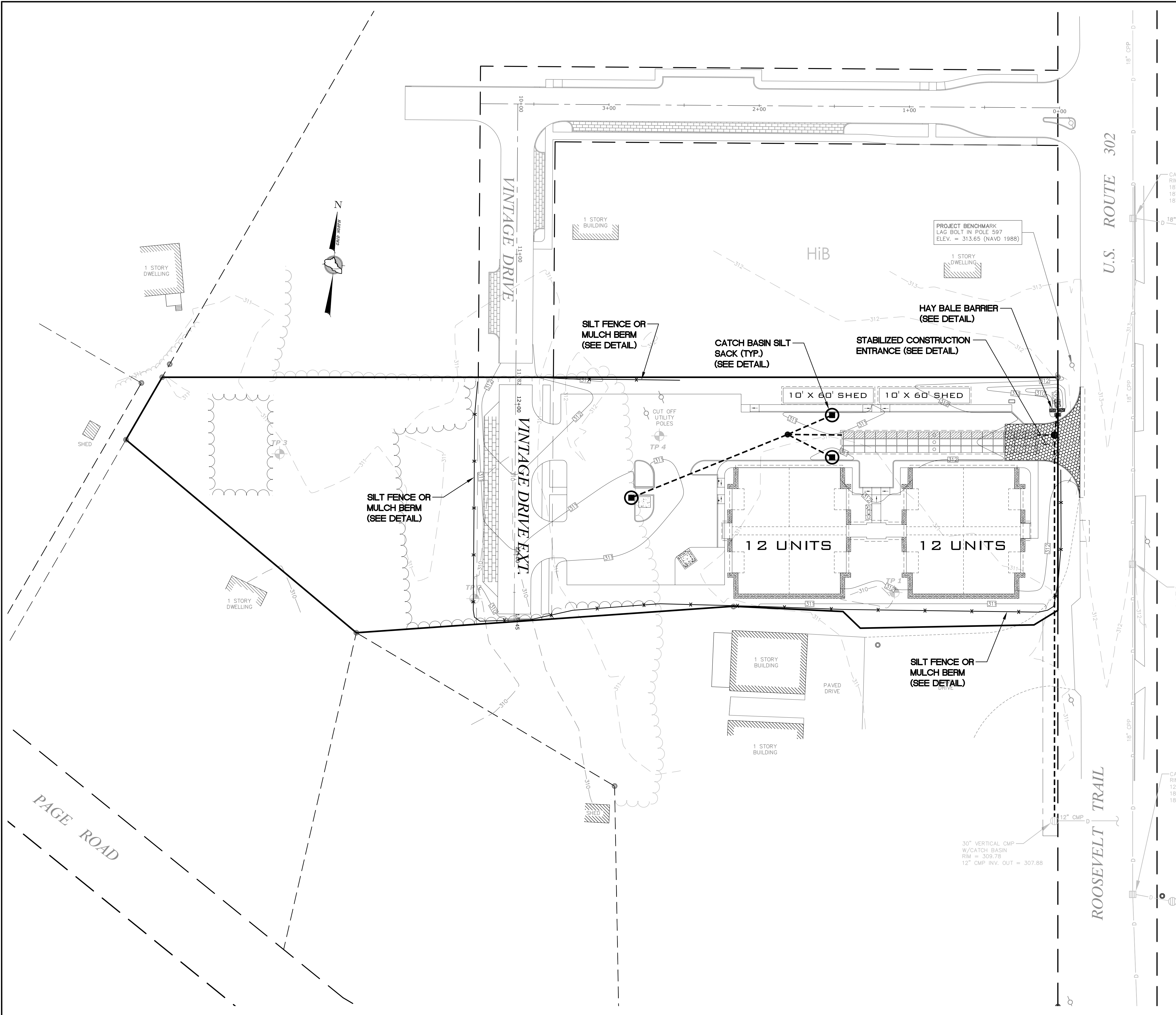
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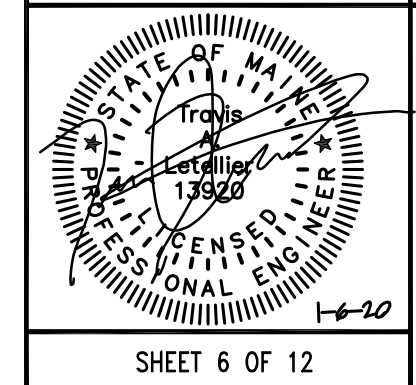
LEGEND


- MULCH BERM/EROSION CONTROL MIX OR SILT FENCE
- STABILIZED CONSTRUCTION ENTRANCE
- CATCH BASIN INLET PROTECTION (SILT SACK)
- HAYBALE BARRIER

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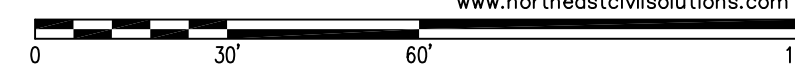
Revision	By	Date	Change
2	SMA	1/6/20	REVISED PER TOWN COMMENTS
1	SMA	12/21/20	SUBMITTED FOR TOWN REVIEW

PROJECT NUMBER: 41878	ACAD FILE: 41878-EROSION.DWG	SCALE: 1" = 30'	DATE: DECEMBER 21, 2020
Drawing Name: EROSION & SEDIMENTATION CONTROL PLAN			
Project Name: FIELDING CONDOS ROOSEVELT TRAIL, WINDHAM, MAINE			
Owner/Applicant: FIELDING'S OIL CO., INC.			





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0 30 60 120'



# EROSION AND SEDIMENTATION CONTROL PLAN NOTES

SEDIMENTATION AND EROSION FOR THIS PROJECT IS BASED UPON SOUND SCIENCE AND SOUND ENGINEERING PRACTICES, AND ADDRESSES TO THE STANDARDS DETAILED IN MAINE EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMP) BY THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, DATED OCTOBER 2016. THE CONTRACTOR SHALL MAKE HIMSELF FAMILIAR WITH THE AFOREMENTIONED PUBLICATION AND COMPLY WITH THE PRACTICES PRESENTED THEREIN.

A PERSON WHO CONDUCTS, OR CAUSES TO BE CONDUCTED, AN ACTIVITY THAT INVOLVES FILLING, DISPLACING OR EXPOSING SOIL OR OTHER EARTHEN MATERIALS SHALL TAKE MEASURES TO PREVENT UNREASONABLE EROSION OF SOIL OR SEDIMENT BEYOND THE PROJECT SITE OR INDUCED EROSION OF ADJACENT AREAS. IF DISTURBANCE ACTIVITIES TAKE PLACE BETWEEN 30 FEET AND 50 FEET OF ANY PROTECTED NATURAL RESOURCE, IF DISTURBANCE ACTIVITIES TAKE PLACE BETWEEN 50 FEET AND 100 FEET OF ANY PROTECTED NATURAL RESOURCE, OR IF DISTURBANCE ACTIVITIES TAKE PLACE LESS THAN 100 FEET FROM ANY PROTECTED NATURAL RESOURCE, PERMITTER EROSION CONTROLS MUST BE DOUBLED. IF DISTURBANCE ACTIVITIES TAKE PLACE LESS THAN 30 FEET FROM ANY PROTECTED NATURAL RESOURCE, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE PROTECTED NATURAL RESOURCE, PERMITTER EROSION CONTROLS MUST BE DOUBLED AND DISTURBED AREAS MUST BE TEMPORARILY OR PERMANENTLY STABILIZED WITHIN 7 DAYS.

## 1 EROSION AND SEDIMENTATION CONTROL

1.1 POLLUTION PREVENTION. MINIMIZE DISTURBED AREAS AND PROTECT NATURAL DOWNGRADIENT BUFFER AREAS TO THE EXTENT PRACTICABLE. CONTROL STORMWATER VOLUME AND VELOCITY WITHIN THE SITE TO MINIMIZE SOIL EROSION. MINIMIZE THE DISTURBANCE OF STEEP SLOPES. CONTROL STORMWATER DISCHARGES INCLUDING BOTH PEAK FLOW RATES AND VOLUMES TO MINIMIZE EROSION AT OUTLETS. THE DISCHARGE MAY NOT RESULT IN EROSION OF ANY OPEN DRAINAGE CHANNELS, SWALES, STREAM CHANNELS OR STREAM BANKS, UPLAND, OR COASTAL OR FRESHWATER WETLANDS OFF THE PROJECT SITE. WHENEVER PRACTICABLE, NO DISTURBANCE ACTIVITIES SHOULD TAKE PLACE WITHIN 50 FEET OF ANY PROTECTED NATURAL RESOURCE. IF DISTURBANCE ACTIVITIES TAKE PLACE BETWEEN 30 FEET AND 50 FEET OF ANY PROTECTED NATURAL RESOURCE, OR IF DISTURBANCE ACTIVITIES TAKE PLACE BETWEEN 50 FEET AND 100 FEET OF ANY PROTECTED NATURAL RESOURCE, PERMITTER EROSION CONTROLS MUST BE DOUBLED. IF DISTURBANCE ACTIVITIES TAKE PLACE LESS THAN 100 FEET FROM ANY PROTECTED NATURAL RESOURCE, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE PROTECTED NATURAL RESOURCE, PERMITTER EROSION CONTROLS MUST BE DOUBLED AND DISTURBED AREAS MUST BE TEMPORARILY OR PERMANENTLY STABILIZED WITHIN 7 DAYS.

1.2 SEDIMENT BARRIERS. PRIOR TO CONSTRUCTION, PROPERLY INSTALL SEDIMENT BARRIERS AT THE DOWNGRADIENT EDGE OF ANY AREA TO BE DISTURBED AND ADJACENT TO ANY DRAINAGE CHANNELS WITHIN THE DISTURBED AREA. SEDIMENT BARRIERS SHOULD BE INSTALLED DOWNGRADIENT OF SOIL OR SEDIMENT STOCKPILES AND STORMWATER PREVENTED FROM RUNNING ONTO THE STOCKPILE. MAINTAIN THE SEDIMENT BARRIERS BY REMOVING ACCUMULATED SEDIMENT, OR REMOVING AND REPLACING THE BARRIER UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED. WHERE A DISCHARGE TO A STORM DRAIN INLET OCCURS, IF THE STORM DRAIN CARRIES WATER DIRECTLY TO A SURFACE WATER AND YOU HAVE AUTHORITY TO ACCESS THE STORM DRAIN INLET, YOU MUST INSTALL AND MAINTAIN PROTECTION MEASURES THAT REMOVE SEDIMENT FROM THE DISCHARGE.

1.3 STABILIZED CONSTRUCTION ENTRANCE. PRIOR TO CONSTRUCTION, PROPERLY INSTALL A STABILIZED CONSTRUCTION ENTRANCE (SCE) AT ALL POINTS OF EGRESS FROM THE SITE. THE SCE IS A STABILIZED PAD OF AGGREGATE, UNDERLAIN BY A GEOTEXTILE FILTER FABRIC, DESIGNED TO PREVENT EROSION FROM TRACKING MATERIAL AWAY FROM THE SITE ONTO PUBLIC ROWS. MAINTAIN THE SCE UNTIL ALL DISTURBED AREAS ARE STABILIZED.

1.4 TEMPORARY STABILIZATION. WITHIN 7 DAYS OF THE CESSATION OF CONSTRUCTION ACTIVITIES IN AN AREA THAT WILL NOT BE WORKED FOR MORE THAN 7 DAYS, STABILIZE ANY EXPOSED SOIL WITH MULCH OR OTHER EROSION-RESISTANT NON-ERODIBLE COVER. STABILIZE AREAS WITHIN 75 FEET OF A WETLAND OR WATERBODY WITHIN 48 HOURS OF THE INITIAL DISTURBANCE OF THE SOIL OR PRIOR TO ANY STORM EVENT, WHICHEVER COMES FIRST.

1.5 REMOVAL OF TEMPORARY MEASURES. REMOVE ANY TEMPORARY CONTROL MEASURES, SUCH AS SILT FENCE, WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED. REMOVE ANY ACCUMULATED SEDIMENTS AND STABILIZE.

1.6 PERMANENT STABILIZATION. IF THE AREA WILL NOT BE WORKED FOR MORE THAN ONE YEAR HAS BEEN BROUGHT TO A STATE OF PERMANENT STABILIZATION, STABILIZE THE AREA WITHIN 7 DAYS BY PLANTING VEGETATION, SEEDING, SOD, OR THROUGH THE USE OF PERMANENT MULCH, OR RIPRAP, OR ROAD SUB-BASE. IF USING VEGETATION FOR STABILIZATION, SELECT APPROPRIATE SPECIES FOR THE LIGHT, MOISTURE, AND SOIL CONDITIONS; AMEND AREAS OF DISTURBED SUBSOILS WITH TOPSOIL, COMPOST, OR FERTILIZERS; PROTECT SEEDING AREAS WITH MULCH OR, IF NECESSARY, AND REPLACEMENT AND SCHEDULE SODDING, PLANTING, AND SEEDING SO TO AVOID DIE-OFF FROM SUMMER DROUGHT AND FALL FROSTS. NEWLY SEED OR SODDED AREAS MUST BE PROTECTED FROM VEHICLE TRAFFIC EXCESSIVE PEDESTRIAN TRAFFIC, AND CONCENTRATED RUNOFF UNTIL THE VEGETATION IS WELL-ESTABLISHED WITH 90% COVER BY HEALTHY VEGETATION. IF NECESSARY, AREAS MUST BE REWORKED AND RESTABILIZED IF GERMINATION IS SPARSE, PLANT COVERAGE IS SPOTTY, OR TOPSOIL EROSION IS EVIDENT. ONE OR MORE OF THE FOLLOWING MAY APPLY TO A PARTICULAR SITE.

- 1.6.1 SEEDING AREAS. FOR SEEDING AREAS, PERMANENT STABILIZATION MEANS A SOIL COVER OF THE MINIMUM REQUIRED BY NATURE. HEALTHY PLANTS WITH NO EVIDENCE OF WASHING OR RULING OF THE TOPSOIL.
- 1.6.2 SODDED AREAS. FOR SODDED AREAS, PERMANENT STABILIZATION MEANS THE COMPLETE BINDING OF THE SOD ROOTS INTO THE UNDERLYING SOIL WITH NO SLUMPING OF THE SOD OR DIE-OFF.
- 1.6.3 PERMANENT MULCH. FOR MULCHED AREAS, PERMANENT MULCHING MEANS TOTAL COVERAGE OF THE EXPOSED AREA WITH AN APPROVED MULCH MATERIAL. EROSION CONTROL BLANKETS OR MULCHES AS MULCH ARE NOT PERMANENT STABILIZATION ACCORDING TO THE APPROVED APPLICATION RULES AND LIMITATIONS.
- 1.6.4 RIP RAP. FOR AREAS STABILIZED WITH RIPRAP, PERMANENT STABILIZATION MEANS THAT SLOPES STABILIZED WITH RIPRAP HAVE AN APPROPRIATE UNDERGRADING OF A WELL-GRADED GRIEL OR APPROVED EQUIVALENT TO PREVENT SOIL MOVEMENT FROM BEHIND THE RIPRAP. STONE MUST BE SIZED APPROPRIATELY. IT IS RECOMMENDED THAT ANGULAR STONE BE USED.
- 1.6.5 AGRICULTURAL USE. FOR CONSTRUCTION PROJECTS ON LAND USED FOR AGRICULTURAL PURPOSES (E.G., PIPELINES ACROSS CROP LAND), PERMANENT STABILIZATION MAY BE ACCOMPLISHED BY RETURNING THE DISTURBED LAND TO AGRICULTURAL USE.
- 1.6.6 PAVED AREAS. FOR PAVED AREAS, PERMANENT STABILIZATION MEANS THE PLACEMENT OF THE COMPACTED GRAVEL SUBBASE IS COMPLETED, PROVIDED IT IS FREE OF FINE MATERIALS THAT MAY RUNOFF WITH A RAIN EVENT.
- 1.6.7 DITCHES, CHANNELS, AND SWALES. FOR OPEN CHANNELS, PERMANENT STABILIZATION MEANS THE CHANNEL IS STABILIZED WITH A 90% COVER OF HEALTHY VEGETATION, WITH A WELL-GRADED RIPRAP LINING, OR REINFORCEMENT MAT, OR WITH ANOTHER NON-EROSIVE LINING SUCH AS CONCRETE OR ASPHALT PAVEMENT. THERE MUST BE NO EVIDENCE OF SLUMPING OF THE CHANNEL LINING UNDERCUTTING OF THE CHANNEL BANKS, OR DOWN-CUTTING OF THE CHANNEL.

1.7 WINTER CONSTRUCTION. "WINTER CONSTRUCTION" IS CONSTRUCTION ACTIVITY PERFORMED DURING THE PERIOD FROM NOVEMBER 1 THROUGH APRIL 15. IF DISTURBED AREAS ARE NOT STABILIZED WITH PERMANENT MEASURES BY NOVEMBER 1 OR NEW SOIL DISTURBANCE OCCURS AFTER NOVEMBER 1, BUT BEFORE APRIL 15, THEN THESE AREAS MUST BE PROTECTED AND RUNOFF FROM THEM MUST BE CONTROLLED BY ADDITIONAL MEASURES AND RESTRICTIONS.

- 1.7.1 SITE STABILIZATION. FOR WINTER STABILIZATION, HAY MULCH IS APPLIED AT TWICE THE STANDARD TEMPORARY STABILIZATION RATE. AT THE END OF EACH CONSTRUCTION DAY, AREAS THAT HAVE BEEN BROUGHT TO FINAL GRADE MUST BE STABILIZED. MULCH MAY NOT BE SPREAD ON TOP OF SNOW.
- 1.7.2 SEDIMENT BARRIERS. ALL AREAS WITHIN 75 FEET OF A PROTECTED NATURAL RESOURCE MUST BE PROTECTED WITH A DOUBLE ROW OF SEDIMENT BARRIERS.
- 1.7.3 DITCH. ALL VEGETATED DITCH LINES THAT HAVE NOT BEEN STABILIZED BY NOVEMBER 1, OR WILL BE WORKED DURING THE WINTER CONSTRUCTION PERIOD, MUST BE STABILIZED WITH AN APPROPRIATE STONE LINING BACKED BY AN APPROPRIATE GRAVEL BED OR GEOTEXTILE UNLESS SPECIFICALLY RELEASED FROM THIS STANDARD BY THE DEPARTMENT.
- 1.7.4 SLOPES. MULCH NETTING MUST BE USED TO ANCHOR MULCH ON ALL SLOPES GREATER THAN 8% UNLESS EROSION CONTROL BLANKETS OR EROSION CONTROL MIX IS BEING USED ON THESE SLOPES.

1.8 STORMWATER CHANNELS, DITCHES, SWALES, AND OTHER OPEN STORMWATER CHANNELS MUST BE DESIGNED, CONSTRUCTED, AND MAINTAINED BY MEASURES THAT ACHIEVE LONG-TERM EROSION CONTROL. DITCHES, SWALES AND OTHER OPEN STORMWATER CHANNELS MUST BE SIZED TO HANDLE, AT A MINIMUM, THE EXPECTED VOLUME RUN-OFF. EACH CHANNEL SHOULD BE CONSTRUCTED IN SECTIONS SO THAT THE SECTION'S GRADING, SHAPING, AND INSTALLATION OF THE PERMANENT LINING CAN BE COMPLETED THE SAME DAY. IF A CHANNEL'S FINAL GRADING OR LINING INSTALLATION MUST BE DELAYED, THEN OVERFLOW BERMS MUST BE USED TO DIVERT STORMWATER AWAY FROM THE CHANNEL. PROPERLY-SPACED CHECK DAMS MUST BE INSTALLED IN THE CHANNEL TO SLOW THE WATER VELOCITY, AND A TEMPORARY LINING MUST BE INSTALLED IN THE CHANNEL TO PREVENT SCOURING. PERMANENT STABILIZATION FOR CHANNELS IS ADDRESSED UNDER SECTION 1.6.7 ABOVE.

1.8.1 THE CHANNEL SHOULD RECEIVE ADEQUATE ROUTINE MAINTENANCE TO MAINTAIN CAPACITY AND PREVENT OR CORRECT ANY EROSION OF THE CHANNEL'S BOTTOM OR SIDE SLOPES.

1.8.2 WHEN THE WATERSHED DRAINING TO A DITCH OR SWALE IS LESS THAN 1 ACRE OF TOTAL DRAINAGE AND LESS THAN 1/4 ACRE OF IMPERVIOUS AREA, DIVERSION OF RUNOFF TO ADJACENT WOODED OR OTHERWISE VEGETATED BUFFER AREAS IS ENCOURAGED WHERE THE OPPORTUNITY EXISTS.

1.9 SEDIMENT BASINS. SEDIMENT BASINS MUST BE DESIGNED TO PROVIDE STORAGE FOR EITHER THE CALCULATED RUNOFF FROM A 2-YEAR, 24-HOUR STORM OR PROVIDE FOR 3,600 CUBIC FEET OF CAPACITY PER ACRE DRAINING TO THE BASIN. OUTLET STRUCTURES MUST DISCHARGE WATER FROM THE SURFACE OF THE BASIN. WHENEVER POSSIBLE, EROSION CONTROLS AND VELOCITY DISSIPATION DEVICES MUST BE USED IF THE DISCHARGING WATER ARE LIKELY TO CREATE EROSION. ACCUMULATED SEDIMENT MUST BE REMOVED AS NEEDED FROM THE BASIN TO MAINTAIN AT LEAST 1/4 OF THE DESIGN CAPACITY OF THE BASIN. THE USE OF CATIONIC TREATMENT CHEMICALS, SUCH AS POLYMERS, FLOCCULANTS, OR OTHER CHEMICALS THAT CONTAIN AN OVERALL POSITIVE CHARGE DESIGNED TO REDUCE TURBIDITY IN STORMWATER MUST RECEIVE PRIOR APPROVAL FROM THE DEPARTMENT. WHEN REQUESTED MATERIAL RESOURCES, PERMITTER EROSION CONTROLS, YOU MUST DESCRIBE APPROPRIATE CONTROLS AND IMPLEMENTATION PROCEDURES TO ENSURE THE USE WILL NOT LEAD TO A VIOLATION OF WATER QUALITY STANDARDS. IN ADDITION, YOU MUST SPECIFY THE TYPE(S) OF SOIL LIKELY TO BE TREATED ON THE SITE, CHEMICALS TO BE USED AND HOW THEY ARE TO BE APPLIED AND IN WHAT QUANTITY. ANY MANUFACTURER'S RECOMMENDATIONS, AND ANY TRAINING HAD BY PERSONNEL WHO WILL HANDLE AND APPLY THE CHEMICALS.

- 1.10 ROADS, GRAVEL AND PAVED ROADS MUST BE DESIGNED AND CONSTRUCTED WITH CROWNS OR OTHER MEASURES, SUCH AS WATER BARS, TO ENSURE THAT STORMWATER IS DELIVERED IMMEDIATELY TO ADJACENT STABLE DITCHES, VEGETATED BARRIER AREAS, CATCH BASINMENTS, OR STREET DRAINAGE.
- 1.11 CULVERTS. CULVERTS MUST BE SIZED TO AVOID UNINTENDED FLOODING OF UPSTREAM AREAS OR FREQUENT OVERTOPPING OF ROADWAYS. CULVERT INLETS MUST BE PROTECTED WITH APPROPRIATE MATERIALS FOR THE EXPECTED ENTRANCE VELOCITY, AND PROTECTION MUST EXTEND AT LEAST AS HIGH AS THE EXPECTED MAXIMUM ELEVATION OF STORAGE BEHIND THE CULVERT. OUTLET STRUCTURES MUST INCORPORATE MEASURES, SUCH AS APRONS, TO PREVENT SCOUR OF THE STREAM CHANNEL. OUTLET PROTECTION MEASURES MUST BE DESIGNED TO STAY WITHIN THE CHANNEL LIMITS. THE DESIGN MUST TAKE ACCOUNT OF TAILWATER DEPTH.
- 1.12 PARKING AREAS. PARKING AREAS MUST BE CONSTRUCTED TO ENSURE RUNOFF IS DELIVERED TO ADJACENT SWALES, CATCH BASINS, CURB CUTTERS, OR BUFFER AREAS WITHOUT ERODING AREAS DOWNSLOPE. THE PARKING AREAS' SUBBASE COMPACTION AND GRADING MUST BE DONE TO ENSURE RUNOFF IS EVENLY DISTRIBUTED TO ADJACENT BUFFERS OR SIDE SLOPES. CATCH BASINS MUST BE LOCATED SET TO PROVIDE ADEQUATE DEPTH AT ALL TIMES. DESIGN MUST ALLOW INFLOW OF PEAK RUNOFF RATES WITHOUT BY-PASS OF RUNOFF TO OTHER AREAS.

## 2 INSPECTION AND MAINTENANCE

2.1 DURING CONSTRUCTION. THE FOLLOWING STANDARDS MUST BE MET DURING CONSTRUCTION.

- 2.1.1 INSPECTION AND CORRECTIVE ACTION. INSPECT DISTURBED AND IMPERVIOUS AREAS. EROSION CONTROL MEASURES MATERIALS STORAGE AREAS THAT ARE EXPOSED TO PRECIPITATION, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE. INSPECT THESE AREAS AT LEAST ONCE A WEEK AS WELL AS BEFORE AND WITHIN 24 HOURS AFTER A STORM EVENT (RAINFALL). INSPECT AND PRIOR TO COMPLETING PERMANENT STABILIZATION MEASURES. A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL, INCLUDING THE STANDARDS AND CONDITIONS IN THE PERMIT, SHALL CONDUCT THE INSPECTIONS.
- 2.1.2 MAINTENANCE. IF BEST MANAGEMENT PRACTICES (BMPs) NEED TO BE REPAIRED, THE REPAIR WORK SHOULD BE INITIATED UPON DISCOVERY OF THE PROBLEM BUT NO LATER THAN THE END OF THE NEXT WORKDAY. IF ADDITIONAL BMPs OR SIGNIFICANT REPAIR OR BMPs ARE NECESSARY, IMPLEMENTATION MUST BE COMPLETED WITHIN 7 CALENDAR DAYS AND PRIOR TO ANY STORM EVENT (RAINFALL). ALL MEASURES MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION UNTIL AREAS ARE PERMANENTLY STABILIZED.
- 2.1.3 DOCUMENTATION. KEEP A LOG (REPORT) SUMMARIZING THE INSPECTIONS AND ANY CORRECTIVE ACTION TAKEN. THE LOG MUST INCLUDE THE NAME(S) AND QUALIFICATIONS OF THE PERSON MAKING THE INSPECTIONS, THE DATE(S) OF THE INSPECTIONS, AND MAJOR OBSERVATIONS ABOUT THE OPERATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS, MATERIALS STORAGE AREAS, AND VEHICLES ACCESS POINTS TO THE PARCEL. MAJOR OBSERVATIONS MUST INCLUDE BMPs THAT NEED MAINTENANCE, BMPs THAT ARE NOT BEING USED, OR SELECTED AREAS WHERE ADDITIONAL BMPs ARE NEEDED. FOR EACH BMP REQUIRING MAINTENANCE, BMP NEEDING REPAIR, REPLACEMENT, AND LOCATION NEEDING ADDITIONAL. NOTE THE LOG THE CORRECTIVE ACTION TAKEN AND WHEN IT WAS TAKEN. THE LOG MUST BE MADE ACCESSIBLE TO DEPARTMENT STAFF AND A COPY MUST BE PROVIDED UPON REQUEST. THE PERMITTEE SHALL RETAIN A COPY OF THE LOG FOR A PERIOD OF AT LEAST THREE YEARS FROM THE COMPLETION OF PERMANENT STABILIZATION.

2.2 POST-CONSTRUCTION. THE FOLLOWING STANDARDS MUST BE MET AFTER CONSTRUCTION.

- 2.2.1 PLAN. CARRY OUT AN APPROVED INSPECTION AND MAINTENANCE PLAN THAT IS CONSISTENT WITH THE INTENT OF THE PERMIT. THE PLAN MUST ADDRESS INSPECTION AND MAINTENANCE OF THE PROJECT'S PERMANENT EROSION CONTROL MEASURES AND STORMWATER MANAGEMENT SYSTEM.
- 2.2.2 INSPECTION AND MAINTENANCE. ALL MEASURES MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION. A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL, INCLUDING THE STANDARDS AND CONDITIONS IN THE PERMIT, SHALL CONDUCT THE INSPECTIONS. THE FOLLOWING AREAS MUST BE INSPECTED AND MAINTAINED: EROSION CONTROL MEASURES MUST BE CORRECTED. AREAS, FACILITIES, AND MEASURES OTHER THAN THOSE LISTED BELOW MAY ALSO REQUIRE INSPECTION ON A SPECIFIC SITE. INSPECTION OR MAINTENANCE TASKS OTHER THAN THOSE DISCUSSED BELOW MUST BE INCLUDED IN THE MAINTENANCE PLAN DEVELOPED FOR A SPECIFIC SITE.
- 2.2.2.1 INSPECT VEGETATED AREAS, PARTICULARLY SLOPES AND EMBANKMENTS, EARLY IN THE GROWING SEASON OR AFTER HEAVY RAINS TO IDENTIFY ACTIVE OR POTENTIAL EROSION PROBLEMS. AREAS WITH SPARSE GROWTH, WHERE RILL EROSION IS EVIDENT, ARMOR THE AREA WITH AN APPROPRIATE LINING OR DIVERT THE EROSION FLOWS TO ON-SITE AREAS ABLE TO WITHSTAND THE CONCENTRATED FLOWS. SEE PERMANENT STABILIZATION STANDARDS IN SECTION 1.6.
- 2.2.2.2 INSPECT DITCHES, SWALES AND OTHER OPEN STORMWATER CHANNELS IN THE SPRING, IN LATE FALL, AND AFTER HEAVY RAINS TO REMOVE ANY OBSTRUCTIONS TO FLOW. REMOVE ACCUMULATED SEDIMENTS AND DEBRIS. TO CONTROL VEGETATED GROWTH THAT COULD OBSTRUCT FLOW, AND TO REPAIR ANY EROSION OF THE DITCH LINING. VEGETATED DITCHES MUST BE MOVED AT LEAST ANNUALLY (OR OTHERWISE MAINTAINED) TO CONTROL THE GROWTH OF WOODY VEGETATION AND MAINTAIN FLOW CAPACITY. ANY WOODY VEGETATION GROWING THROUGH RIPRAP LININGS MUST ALSO BE REMOVED. REPAIR ANY SLUMPING SIDE SLOPES AS SOON AS PRACTICABLE. IF THE DITCH HAS A RIPRAP LINING, REPLACE RIPRAP ON AREAS WHERE ANY UNDERLYING FILTER FABRIC OR UNDERDRAIN GRAVEL IS SHOWING THROUGH THE STONE OR WHERE STONES HAVE DISCLOSED. THE CHANNEL MUST RECEIVE ADEQUATE ROUTINE MAINTENANCE TO MAINTAIN CAPACITY AND PREVENT OR CORRECT ANY EROSION OF THE CHANNELS' BOTTOM OR SIDESLOPES.

- 2.2.2.3 INSPECT CULVERTS IN THE SPRING, IN LATE FALL, AND AFTER HEAVY RAINS TO REMOVE ANY OBSTRUCTIONS TO FLOW; REMOVE ACCUMULATED SEDIMENTS AND DEBRIS AT THE INLET, AT THE OUTLET, AND WITHIN THE CONDUIT; AND, TO REPAIR ANY EROSION DAMAGE AT THE CULVERT'S INLET AND OUTLET.
- 2.2.2.4 INSPECT AND CLEAN OUT CATCH BASINS. CLEAN-OUT MUST INCLUDE THE REMOVAL AND LEGAL DISPOSAL OF ANY ACCUMULATED SEDIMENTS AND DEBRIS AT THE BOTTOM OF THE BASIN, AT ANY INLET GRATES, AT ANY INFLOW CHANNELS TO THE BASIN, AND AT ANY PIPES BETWEEN BASINS. IF THE BASIN OUTLET IS DESIGNED TO TRAP FLOATING MATERIALS, THEN REMOVE THE FLOATING DEBRIS AND ANY FLOATING OILS (USING OIL-REMOVE/FLUSH PADS).
- 2.2.2.5 INSPECT RESOURCE AND TREATMENT BUFFERS ONCE A YEAR FOR EVIDENCE OF EROSION, CONCENTRATING RUN, AND ENCROACHMENT BY DEVELOPMENT. IF FLOWS ARE CONCENTRATING WITHIN A BUFFER, SITE GRADING, LEVEL SPREADERS, OR DITCH TURN-OUTS MUST BE USED TO GRADE, A MORE EVEN DISTRIBUTION OF FLOWS, AND TO PREVENT A WALK DOWN SLOPE OF ALL SPREADERS AND TURN-OUTS FOR EROSION. IF EROSION IS PRESENT, ADJUST OR MODIFY THE SPREADER'S OR TURN-OUTS UP TO ENSURE A BETTER DISTRIBUTION OF FLOW INTO A BUFFER. CLEAN-OUT ANY ACCUMULATION OF SEDIMENT WITHIN THE SPREADER BAYS OR TURN-OUT POOLS.
- 2.2.2.6 INSPECT AT LEAST ONCE PER YEAR, EACH STORMWATER MANAGEMENT POND OR BASIN, INCLUDING THE POND'S EMBANKMENTS, OUTLET STRUCTURE, AND EMERGENCY SPILLWAY. REMOVE AND DISPOSE OF ACCUMULATED SEDIMENTS IN THE POND. CONTROL WOODY VEGETATION ON THE POND'S EMBANKMENTS.
- 2.2.2.7 INSPECT AT LEAST ONCE PER YEAR, EACH UNDERDRAINED FILTER, INCLUDING THE FILTER EMBANKMENTS, VEGETATION, UNDERDRAIN PIPING, AND OVERFLOW SPILLWAY. REMOVE AND DISPOSE OF ACCUMULATED SEDIMENTS IN THE FILTER. IF NEEDED, REHABILITATE ANY CLOGGED SURFACE LININGS, AND FLUSH UNDERDRAIN PIPING.
- 2.2.2.8 INSPECT EACH MANUFACTURED SYSTEM INSTALLED ON THE SITE, INCLUDING THE SYSTEM'S INLET, TREATMENT CHAMBER(S), AND OUTLET AT LEAST ONCE PER YEAR, OR IN ACCORDANCE WITH THE MANUFACTURER'S GUIDELINES RECOMMENDED BY THE MANUFACTURER BASED ON THE ESTIMATED RUNOFF AND POLLUTANT LOAD EXPECTED TO THE SYSTEM FROM THE PROJECT. REMOVE AND DISPOSE OF ACCUMULATED SEDIMENTS, DEBRIS, AND CONTAMINATED WATERS FROM THE SYSTEM AND, IF APPLICABLE, REMOVE AND REPLACE ANY CLOGGED OR SPENT FILTER MEDIA.

## 2.2.3 REGULAR MAINTENANCE

2.2.3.1 CLEAR ACCUMULATIONS OF WINTER SAND IN PARKING LOTS AND ALONG ROADWAYS AT LEAST ONCE A YEAR, PREFERABLY IN THE SPRING. ACCUMULATIONS ON PAVEMENT MAY BE REMOVED BY PAVEMENT SWEEPING. WHENEVER POSSIBLE, EROSION CONTROLS AND VELOCITY DISSIPATION DEVICES MUST BE USED IF THE DISCHARGING WATER ARE LIKELY TO CREATE EROSION. ACCUMULATED SEDIMENT MUST BE REMOVED AS NEEDED FROM THE BASIN TO MAINTAIN AT LEAST 1/4 OF THE DESIGN CAPACITY OF THE BASIN. THE USE OF CATIONIC TREATMENT CHEMICALS, SUCH AS POLYMERS, FLOCCULANTS, OR OTHER CHEMICALS THAT CONTAIN AN OVERALL POSITIVE CHARGE DESIGNED TO REDUCE TURBIDITY IN STORMWATER MUST RECEIVE PRIOR APPROVAL FROM THE DEPARTMENT. WHEN REQUESTED MATERIAL RESOURCES, PERMITTER EROSION CONTROLS, YOU MUST DESCRIBE APPROPRIATE CONTROLS AND IMPLEMENTATION PROCEDURES TO ENSURE THE USE WILL NOT LEAD TO A VIOLATION OF WATER QUALITY STANDARDS. IN ADDITION, YOU MUST SPECIFY THE TYPE(S) OF SOIL LIKELY TO BE TREATED ON THE SITE, CHEMICALS TO BE USED AND HOW THEY ARE TO BE APPLIED AND IN WHAT QUANTITY. ANY MANUFACTURER'S RECOMMENDATIONS, AND ANY TRAINING HAD BY PERSONNEL WHO WILL HANDLE AND APPLY THE CHEMICALS.

2.2.3.2 MANAGE EACH BUFFER'S VEGETATION CONSISTENTLY WITH THE REQUIREMENTS IN ANY DEED RESTRICTIONS FOR THE BUFFER. WOODED BUFFERS MUST REMAIN FULLY WOODED AND HAVE NO DISTURBANCE TO THE DUFF LAYER. VEGETATION IN NON-WOODED BUFFERS MAY NOT BE CUT MORE THAN THREE TIMES PER YEAR, AND MAY NOT BE CUT SHORTER THAN SIX INCHES.

2.2.4 DOCUMENTATION. KEEP A LOG (REPORT) SUMMARIZING INSPECTIONS, MAINTENANCE, AND ANY CORRECTIVE ACTIONS TAKEN. THE LOG MUST INCLUDE THE DATE ON WHICH EACH INSPECTION OR MAINTENANCE TASK WAS PERFORMED, A DESCRIPTION OF THE INSPECTION FINDINGS OR MAINTENANCE COMPLETED, AND A DESCRIPTION OF THE INSPECTION OR MAINTENANCE PERSONNEL PERFORMING THE TASK. A MAINTENANCE TASK REQUIRES THE CLEAN-OUT OF ANY SEDIMENTS OR DEBRIS, INDICATE WHERE THE SEDIMENT AND DEBRIS WAS DISPOSED AFTER THE TASK. THE LOG MUST BE MADE ACCESSIBLE TO DEPARTMENT STAFF AND A COPY PROVIDED TO THE DEPARTMENT UPON REQUEST. THE PERMITTEE SHALL RETAIN A COPY OF THE LOG FOR A PERIOD OF AT LEAST FIVE YEARS FROM THE COMPLETION OF PERMANENT STABILIZATION.

2.3 RE-CERTIFICATION. SUBMIT A CERTIFICATION OF THE FOLLOWING TO THE DEPARTMENT THREE MONTHS OF THE EXPIRATION OF EACH FIVE-YEAR INTERVAL FROM THE DATE OF ISSUANCE OF THE PERMIT.

2.3.1 IDENTIFICATION AND REPAIR OF EROSION PROBLEMS. ALL AREAS OF THE PROJECT SITE HAVE BEEN INSPECTED FOR AREAS OF EROSION, AND APPROPRIATE STEPS HAVE BEEN TAKEN TO PERMANENTLY STABILIZE THESE AREAS.

2.3.2 INSPECTION AND REPAIR OF STORMWATER CONTROL SYSTEM. ALL ASPECTS OF THE STORMWATER CONTROL SYSTEM HAVE BEEN INSPECTED FOR DAMAGE, WEAR, AND MALFUNCTION, AND APPROPRIATE STEPS HAVE BEEN TAKEN TO REPAIR OR REPLACE THE SYSTEM, OR PORTIONS OF THE SYSTEM.

2.3.3 MAINTENANCE. THE EROSION AND STORMWATER MAINTENANCE PLAN FOR THE SITE IS BEING IMPLEMENTED AS WRITTEN, OR MODIFICATIONS TO THE PLAN HAVE BEEN SUBMITTED TO AND APPROVED BY THE DEPARTMENT, AND THE MAINTENANCE LOG IS BEING MAINTAINED.

2.3.4 MUNICIPALITIES WITH SEPARATE STORM SEWER SYSTEMS REGULATED UNDER THE MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM (MPDES) PROGRAM MAY REPORT ON ALL REGULATED SYSTEMS UNDER THEIR CONTROL AS PART OF THEIR REQUIRED ANNUAL REPORTING IN LIEU OF SEPARATE CERTIFICATION OF EACH SYSTEM. MUNICIPALITIES NOT REGULATED BY THE MPDES PROGRAM, BUT THAT ARE RESPONSIBLE FOR MAINTENANCE OF PERMITTED STORMWATER SYSTEMS, MAY REPORT ON MULTIPLE STORMWATER SYSTEMS IN ONE REPORT.

2.4 DURATION OF MAINTENANCE. PERFORM MAINTENANCE AS DESCRIBED AND REQUIRED IN THE PERMIT UNTIL THE SYSTEM IS FORMALLY ACCEPTED AS STABLE BY THE MUNICIPALITY OR QUASI-MUNICIPAL DISTRICT, OR IS PLACED UNDER THE JURISDICTION OF A LEGALLY CREATED ASSOCIATION THAT WILL BE RESPONSIBLE FOR THE MAINTENANCE OF THE SYSTEM. A MUNICIPALITY OR QUASI-MUNICIPAL DISTRICT CHOOSES TO ACCEPT A STORMWATER MANAGEMENT SYSTEM, OR A COMPONENT OF A STORMWATER SYSTEM, MUST PROVIDE A LETTER TO THE DEPARTMENT STATING THAT IT ASSUMES RESPONSIBILITY FOR THE SYSTEM. THE LETTER MUST SPECIFY THE COMPONENTS OF THE SYSTEM FOR WHICH THE MUNICIPALITY OR DISTRICT WILL ASSUME RESPONSIBILITY, AND THAT THE MUNICIPALITY OR DISTRICT AGREES TO MAINTAIN THOSE COMPONENTS OF THE SYSTEM IN COMPLIANCE WITH DEPARTMENT STANDARDS. UPON SUCH ASSUMPTION OF RESPONSIBILITY, AND APPROVAL BY THE DEPARTMENT, THE MUNICIPALITY OR DISTRICT SHALL BE INSTALLED TO DEVELOP, AND IMPLEMENT, CO-PERMITTEE FOR THIS PURPOSE ONLY AND MUST COMPLY WITH ALL TERMS AND CONDITIONS OF THE PERMIT.

## 3 HOUSEKEEPING

3.1 SPILL PREVENTION. CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM CONSTRUCTION AND WASTE MATERIALS STORED ON SITE TO ENTER STORMWATER, WHICH INCLUDES STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER. THE CONTRACTOR MUST DEVELOP, AND IMPLEMENT, AS NECESSARY, APPROPRIATE SPILL PREVENTION, CONTAMINANT, AND RESPONSE PLANNING MEASURES.

3.2 GROUNDWATER PROTECTION. DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOIL TOPOGRAPHY AND OTHER RELATED FACTORS ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DENSES, BERMS, SUMPS, AND OTHER FORMS OF SECONDARY CONTAMINANT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO PREVENT INFILTRATION. THE CONTRACTOR MUST DEVELOP AND IMPLEMENT A PLAN FOR THE PROPOSED INFILTRATION AREA, OR PROVIDE FOR TREATMENT WITHIN THE INFILTRATION AREA, IN ORDER TO PREVENT THE ACCUMULATION OF FINES, REDUCTION IN INFILTRATION RATE, AND CONSEQUENT FLOODING AND DESTABILIZATION.

3.3 FUGITIVE SEDIMENT AND DUST. ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE DUST EMISSIONS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL, BUT OTHER WATER ADDITIVES MAY BE CONSIDERED AS NEEDED. A STABILIZED CONSTRUCTION ENTRANCE (SCE) SHOULD BE INSTALLED TO MINIMIZE TRACKING OF MUD AND SEDIMENT. IF OFF-SITE TRACKING OCCURS, PUBLIC ROADS SHOULD BE SWEEP IMMEDIATELY AND NO LESS THAN ONCE A WEEK AND PRIOR TO SIGNIFICANT STORM EVENTS. OPERATIONS DURING DRY MONTHS, THAT EXPERIENCE FUGITIVE DUST PROBLEMS, SHOULD WET DOWN UNPAVED ACCESS ROADS ONCE A WEEK OR MORE FREQUENTLY AS NEEDED WITH A WATER ADDITIVE TO SUPPRESS FUGITIVE SEDIMENT AND DUST.

3.4 DEBRIS AND OTHER MATERIALS. MINIMIZE THE EXPOSURE OF CONSTRUCTION DEBRIS, BUILDING AND LANDSCAPING MATERIALS, TRASH, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS TO PRECIPITATION AND STORMWATER. THESE MATERIALS MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.

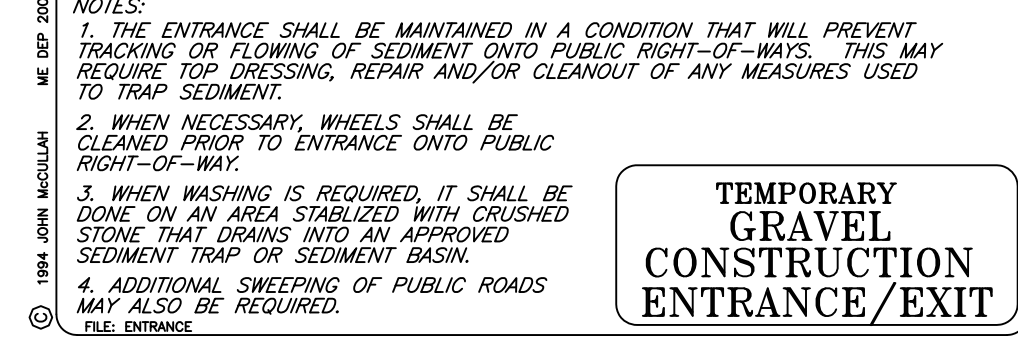
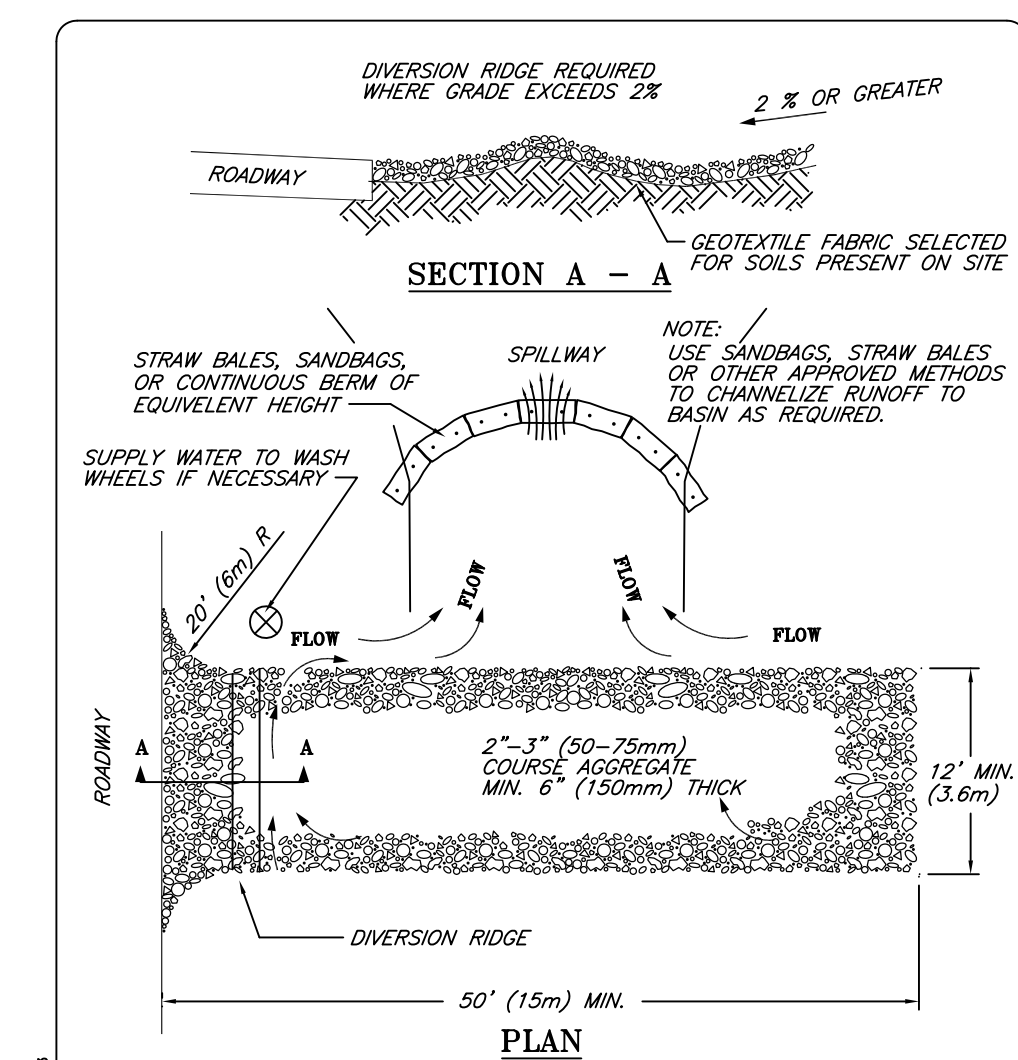
3.5 EXCAVATION DE-WATERING. EXCAVATION DE-WATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFER DAMS, PONDS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES THE EXCAVATION DE-WATERING IS REQUIRED TO PREVENT INFILTRATION OF WATER INTO THE CONSTRUCTION PRACTICES. THE COLLECTED WATER REMOVED FROM THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, MUST BE SPREAD THROUGH NATURAL WOODED BUFFERS OR BE TEMPORARILY STORED IN A TEMPORARILY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE, LIKE A COFFERDAM SEDIMENTATION BASIN. ALLOW ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE.

3.6 AUTHORIZED NON-STORMWATER DISCHARGES. IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGE. WHERE ALLOWED NON-STORMWATER DISCHARGES EXIST, THEY MUST BE IDENTIFIED AND STEPS SHOULD BE TAKEN TO ENSURE THE IMPLEMENTATION OF APPROPRIATE POLLUTION PREVENTION MEASURES FOR THE NON-STORMWATER COMPONENT(S). THE DISCHARGE, AUTHORIZED NON-STORMWATER DISCHARGES ARE:

- 3.6.1 DISCHARGES FROM FIREFIGHTING ACTIVITY;
- 3.6.2 FIRE HYDRANT FLUSHINGS;
- 3.6.3 VEHICLE WASHWATER IF DETERGENTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICLES (ENGINE, UNDERCARRIAGE AND TRANSMISSION WASHING IS PROHIBITED);
- 3.6.4 DUST CONTROL RUNOFF IN ACCORDANCE WITH PERMIT CONDITIONS AND APPENDIX C (5);
- 3.6.5 ROUTINE EXTERNAL BUILDING WASHDOWN, NOT INCLUDING SURFACE PAINT REMOVAL, THAT DOES NOT INVOLVE DETERGENTS;
- 3.6.6 PAVEMENT WASHWATER (WHERE SPILLS/LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED, UNLESS ALL SPILLED MATERIAL HAD BEEN REMOVED) IF DETERGENTS ARE NOT USED;
- 3.6.7 UNCONTAMINATED AIR CONDITIONING OR COMPRESSOR CONDENSATE;
- 3.6.8 UNCONTAMINATED GROUNDWATER OR SPRING WATER;
- 3.6.9 FOUNDATION OR FOOTER DRAIN-WATER WHERE FLOWS ARE NOT CONTAMINATED;
- 3.6.10 UNCONTAMINATED EXCAVATION DEWATERING (SEE REQUIREMENTS IN APPENDIX C (5));
- 3.6.11 POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS; AND
- 3.6.12 LANDSCAPE IRRIGATION.

3.7 UNAUTHORIZED NON-STORMWATER DISCHARGES. THE DEPARTMENT'S APPROVAL UNDER THIS AUTHORIZES A DISCHARGE THAT IS NOT AUTHORIZED AS A SOURCE OF NON-STORMWATER, OTHER THAN THOSE DISCHARGES IN COMPLIANCE WITH APPENDIX C (6). SPECIFICALLY, THE DEPARTMENT'S APPROVAL DOES NOT AUTHORIZE DISCHARGES OF THE FOLLOWING:

- 3.7.1 WASTEWATER FROM THE WASHOUT OR CLEANOUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS OR OTHER CONSTRUCTION MATERIALS;
- 3.7.2 FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE;
- 3.7.3 SOAPS, SOLVENTS, OR DETERGENTS USED IN VEHICLE AND EQUIPMENT WASHING;
- 3.7.4 TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE.



NOTES:

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A HARD SURFACE, NOT A GRAVEL PAD THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
4. ADDITIONAL MEASURES FOR PUBLIC ROADS MAY ALSO BE REQUIRED. FILE ENTRANCE.



## BASIC STANDARDS - EROSION CONTROL MEASURES:

MINIMUM EROSION CONTROL MEASURES WILL NEED TO BE IMPLEMENTED AND THE APPLICANT WILL BE RESPONSIBLE TO MAINTAIN ALL COMPONENTS OF THE EROSION CONTROL PLAN UNTIL THE SITE IS FULLY STABILIZED. HOWEVER, BASED ON SITE AND WEATHER CONDITIONS DURING CONSTRUCTION, ALL AREAS OF INSTABILITY AND EROSION MUST BE REPAIRED IMMEDIATELY DURING CONSTRUCTION AND NEED TO BE MAINTAINED UNTIL THE SITE IS FULLY STABILIZED OR VEGETATION IS ESTABLISHED. A CONSTRUCTION LOG MUST BE MAINTAINED FOR THE EROSION AND SEDIMENTATION CONTROL INSPECTIONS AND MAINTENANCE.

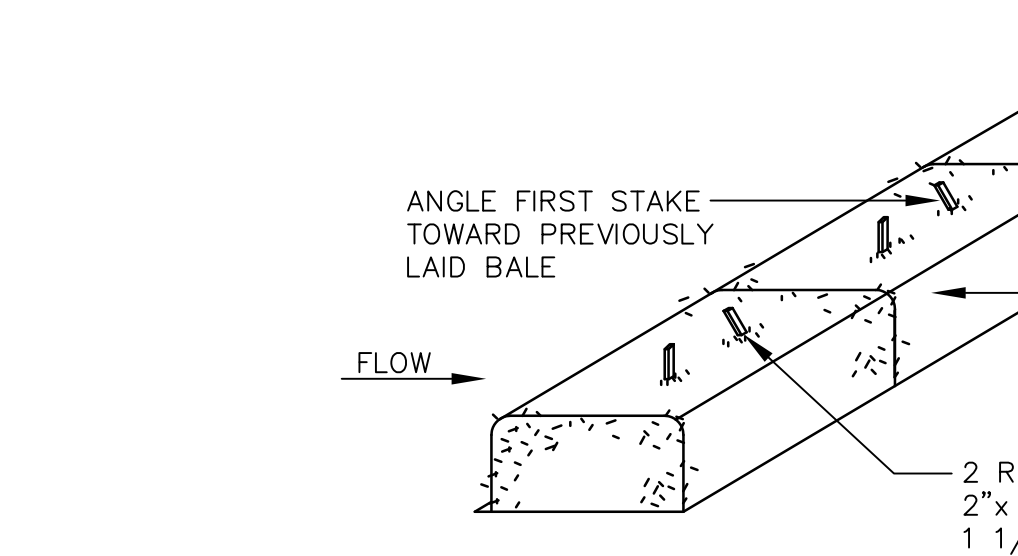
## GENERAL NOTE:

ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL MEET MDOT ITEM 656.

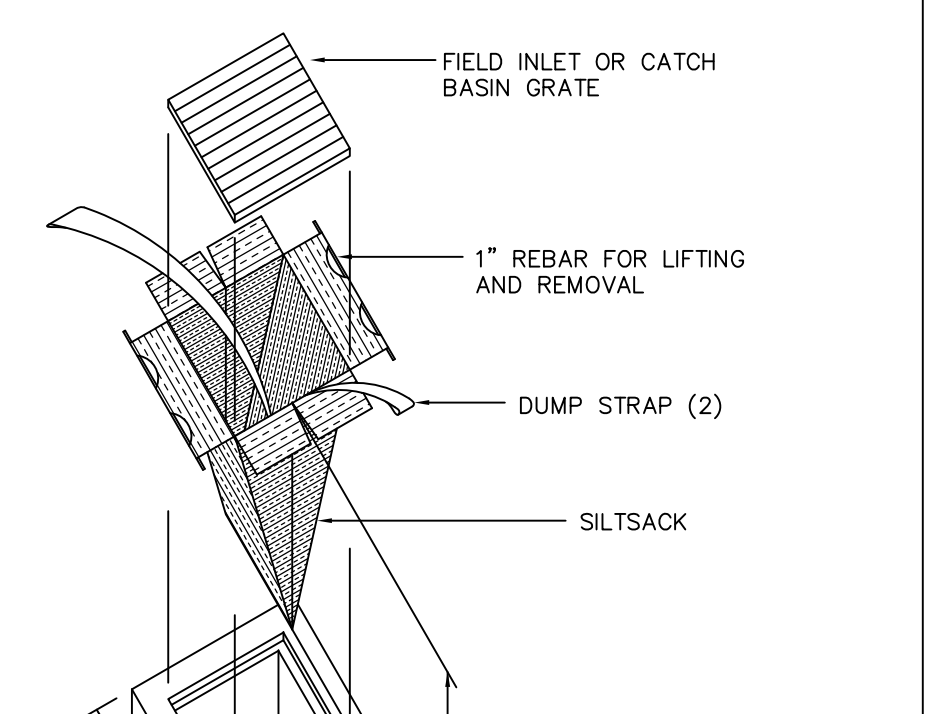
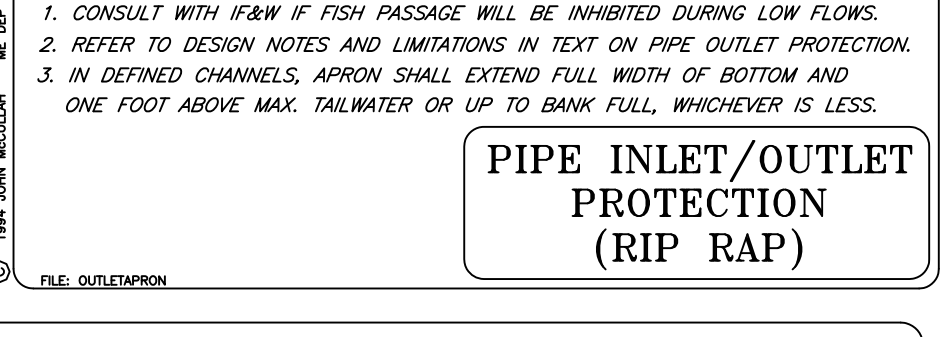
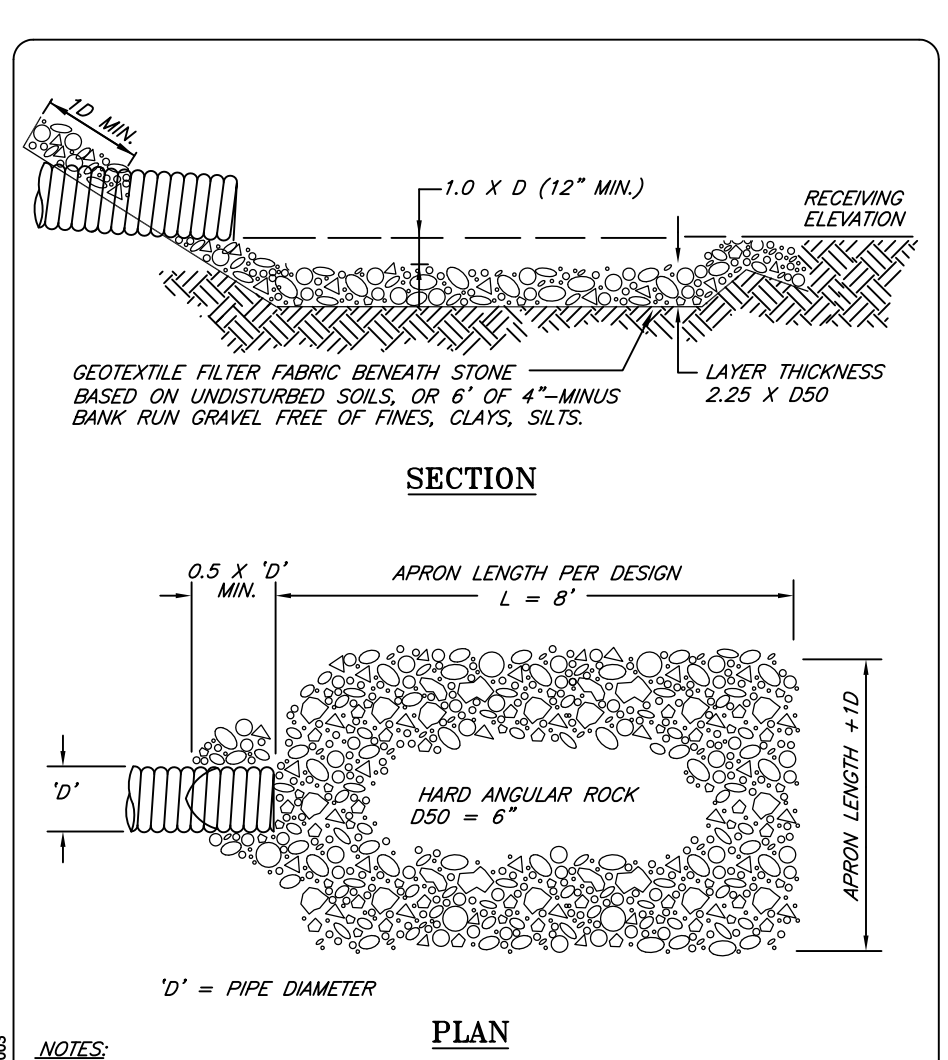


## NOTES:

- 1. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
- 2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4".
- 3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY STAKES OR REBARS DRIVEN THROUGH THE BALES. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARD PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
- 4. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS DIRECTED BY PROJECT ENGINEER.
- 5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.



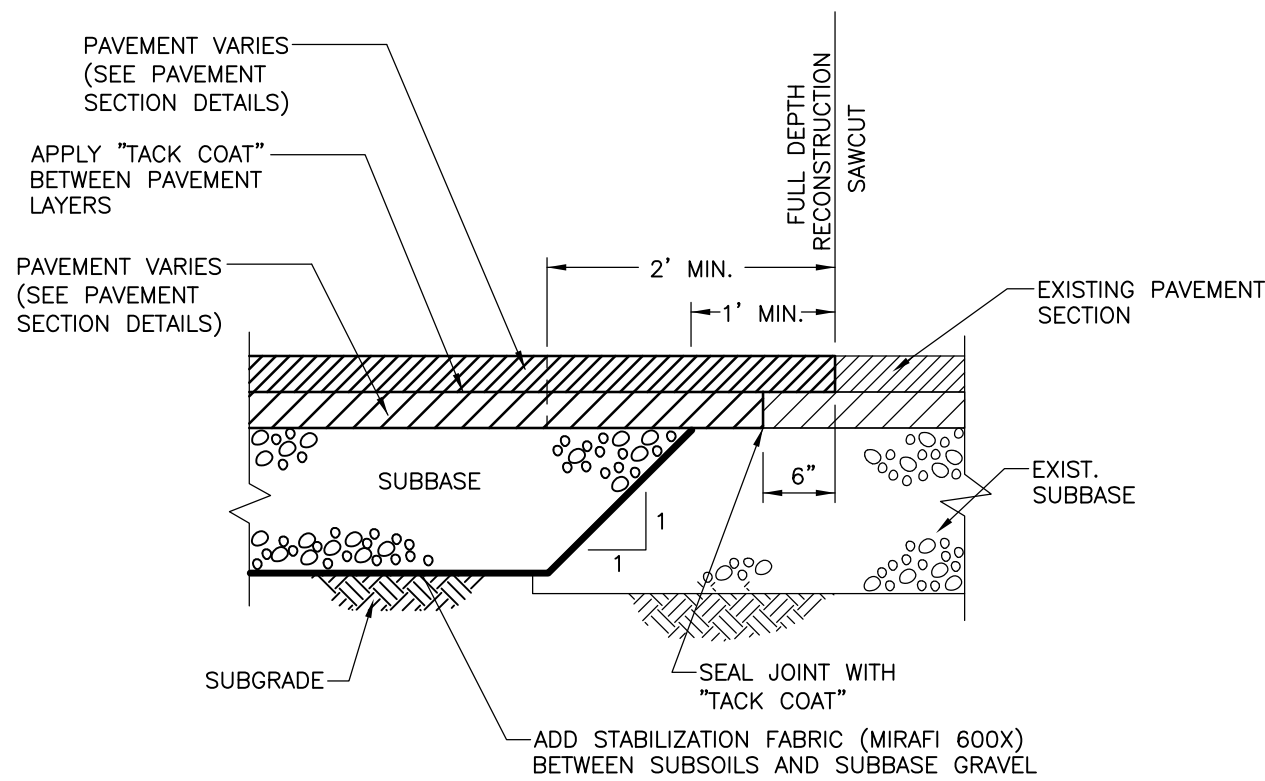
ANCHORING DETAIL  
HAY BALE SEDIMENT BARRIER  
NOT TO SCALE



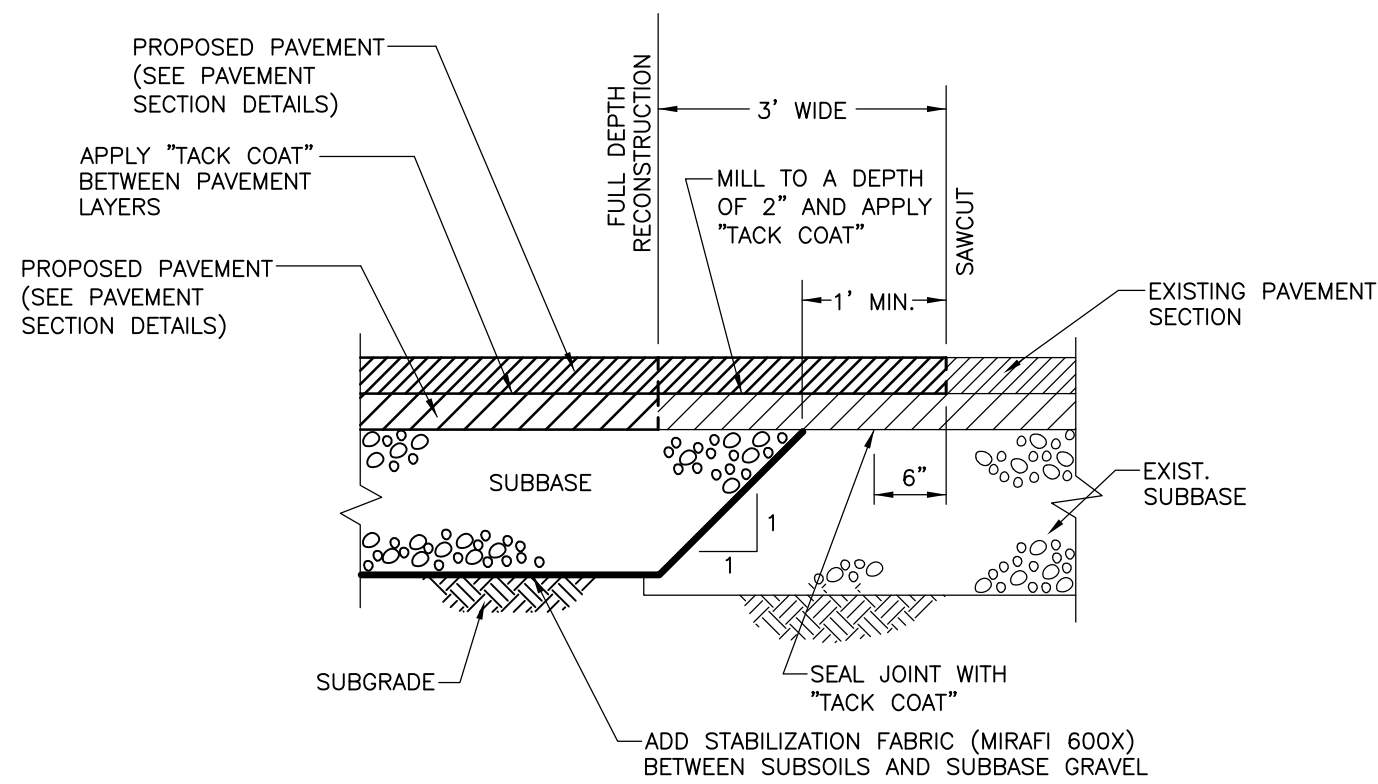
## BASIC STANDARDS - EROSION CONTROL MEASURES:

MINIMUM EROSION CONTROL MEASURES WILL NEED TO BE IMPLEMENTED AND THE APPLICANT WILL BE RESPONSIBLE TO MAINTAIN ALL COMPONENTS OF THE EROSION CONTROL PLAN UNTIL THE SITE IS FULLY STABILIZED. HOWEVER, BASED ON SITE AND WEATHER CONDITIONS

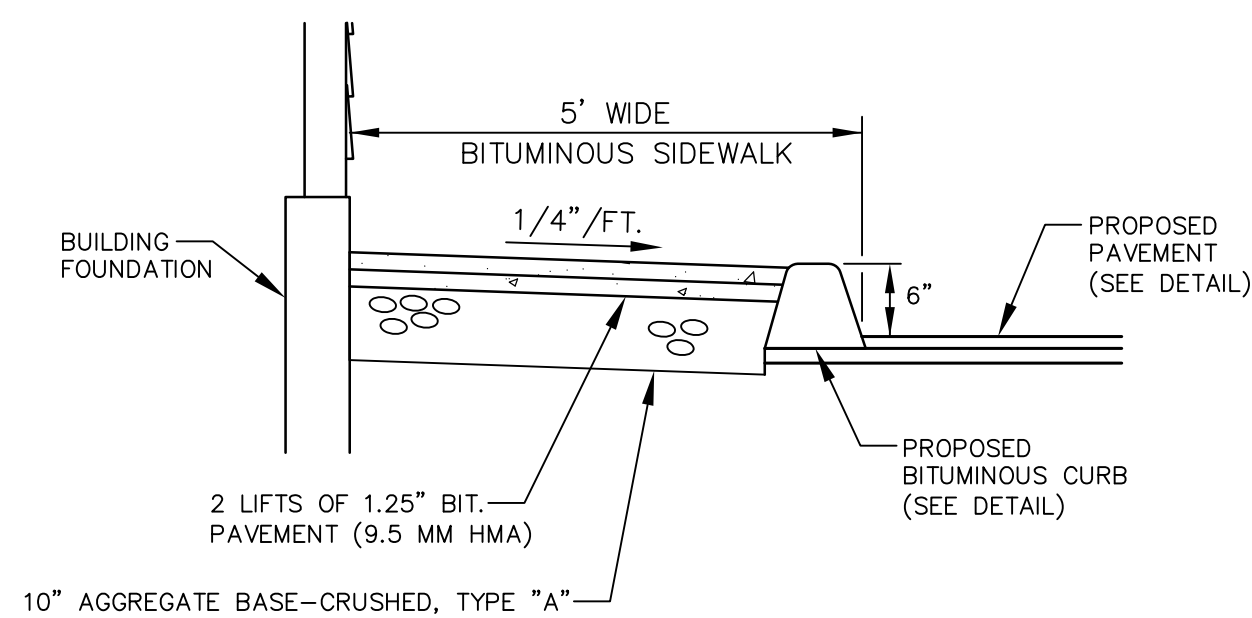




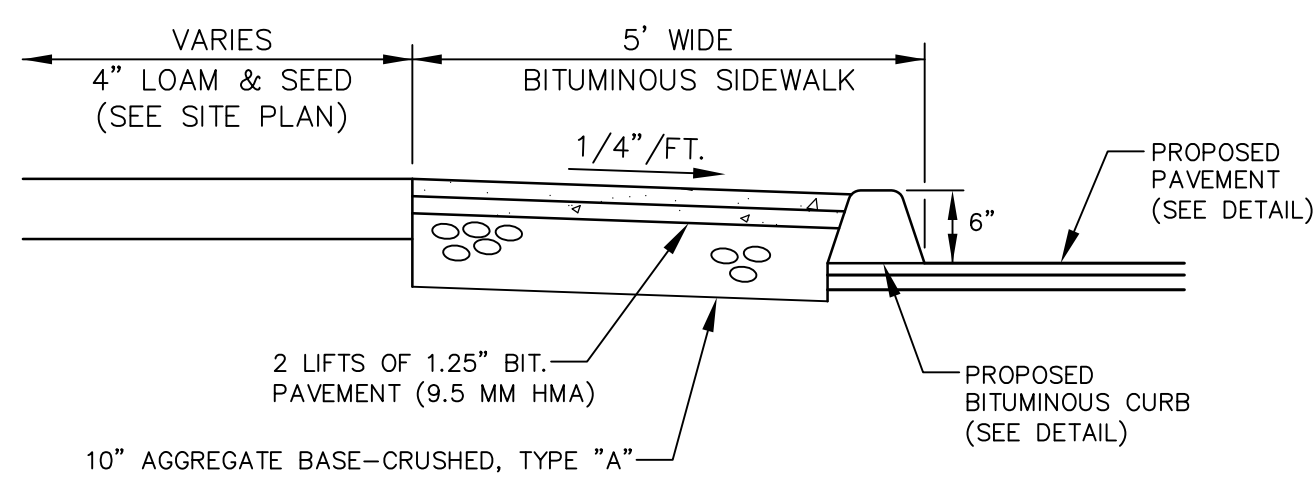
NOTE: PER MDOT ITEM 403  
**SAWCUT & PAVEMENT MATCH DETAIL**  
N.T.S.



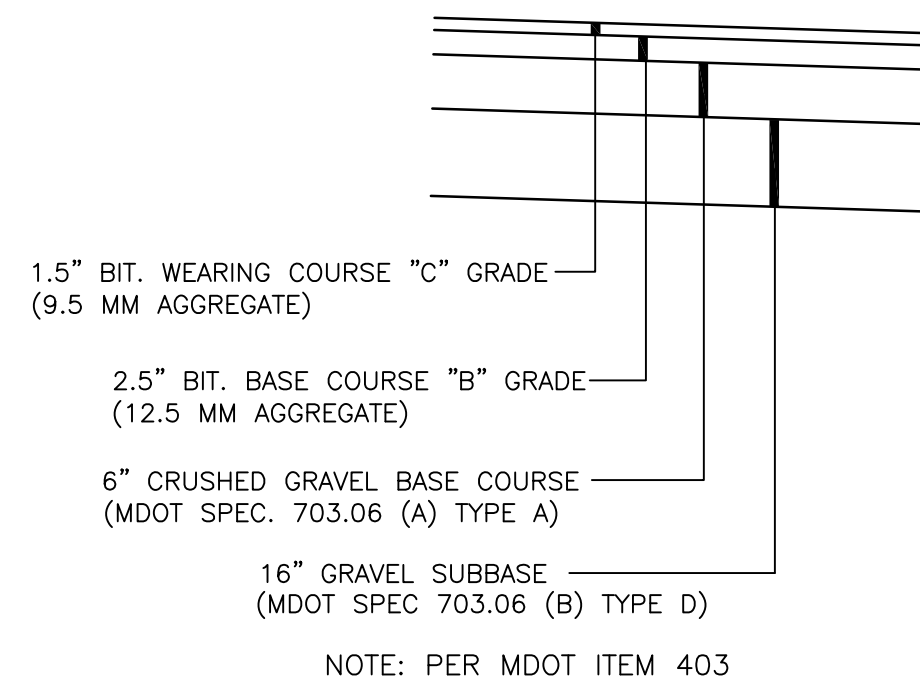
NOTE: PER MDOT ITEM 403  
**SAWCUT & PAVEMENT MATCH DETAIL**  
**(AT DRIVEWAY ENTRANCE)**  
N.T.S.



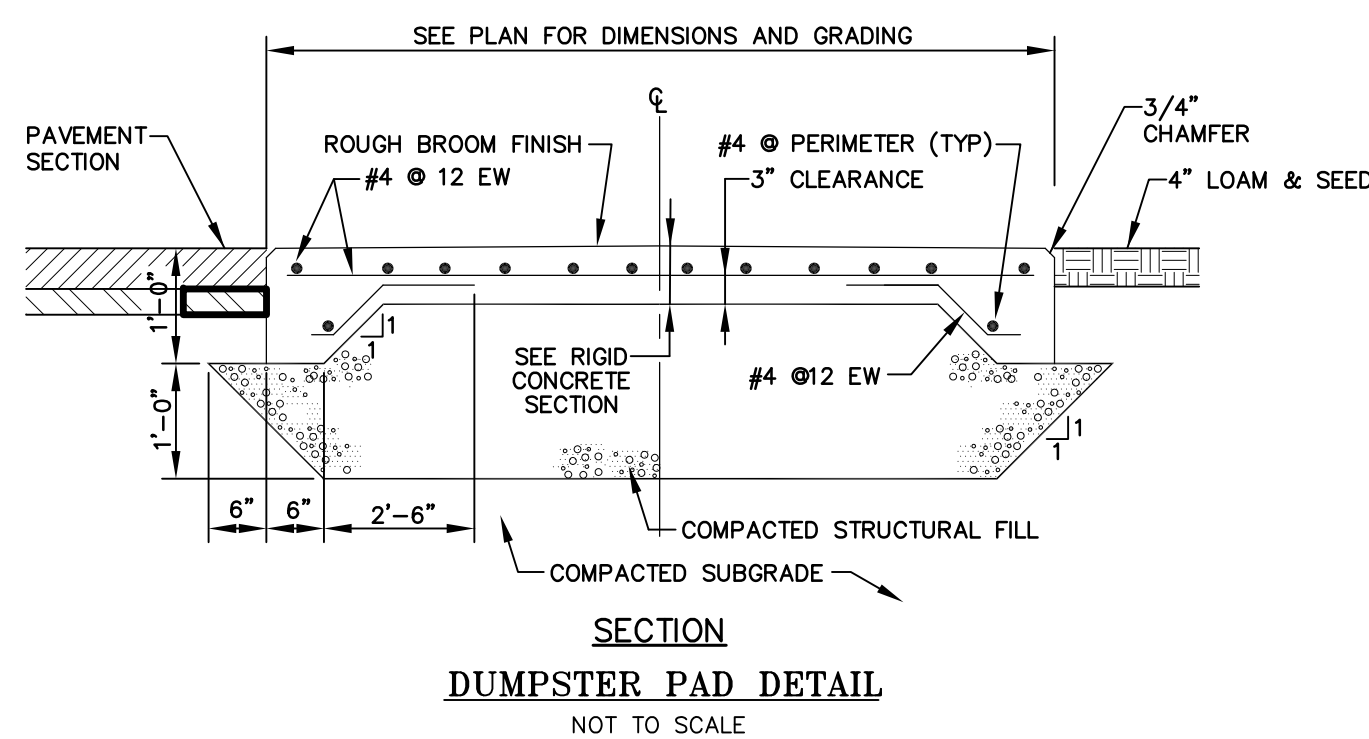
**BITUMINOUS SIDEWALK DETAIL**  
N.T.S.



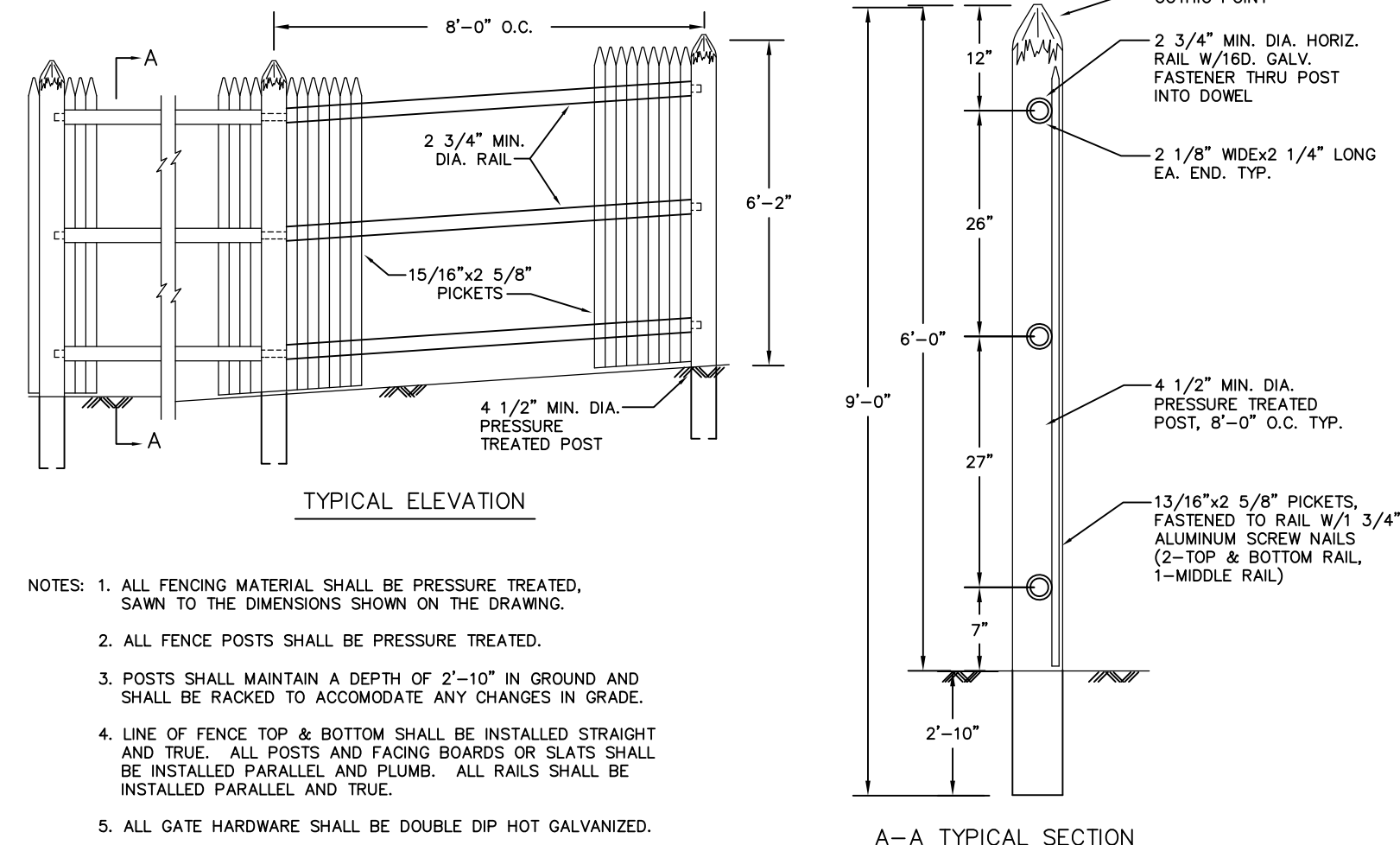
**BITUMINOUS SIDEWALK DETAIL**  
N.T.S.



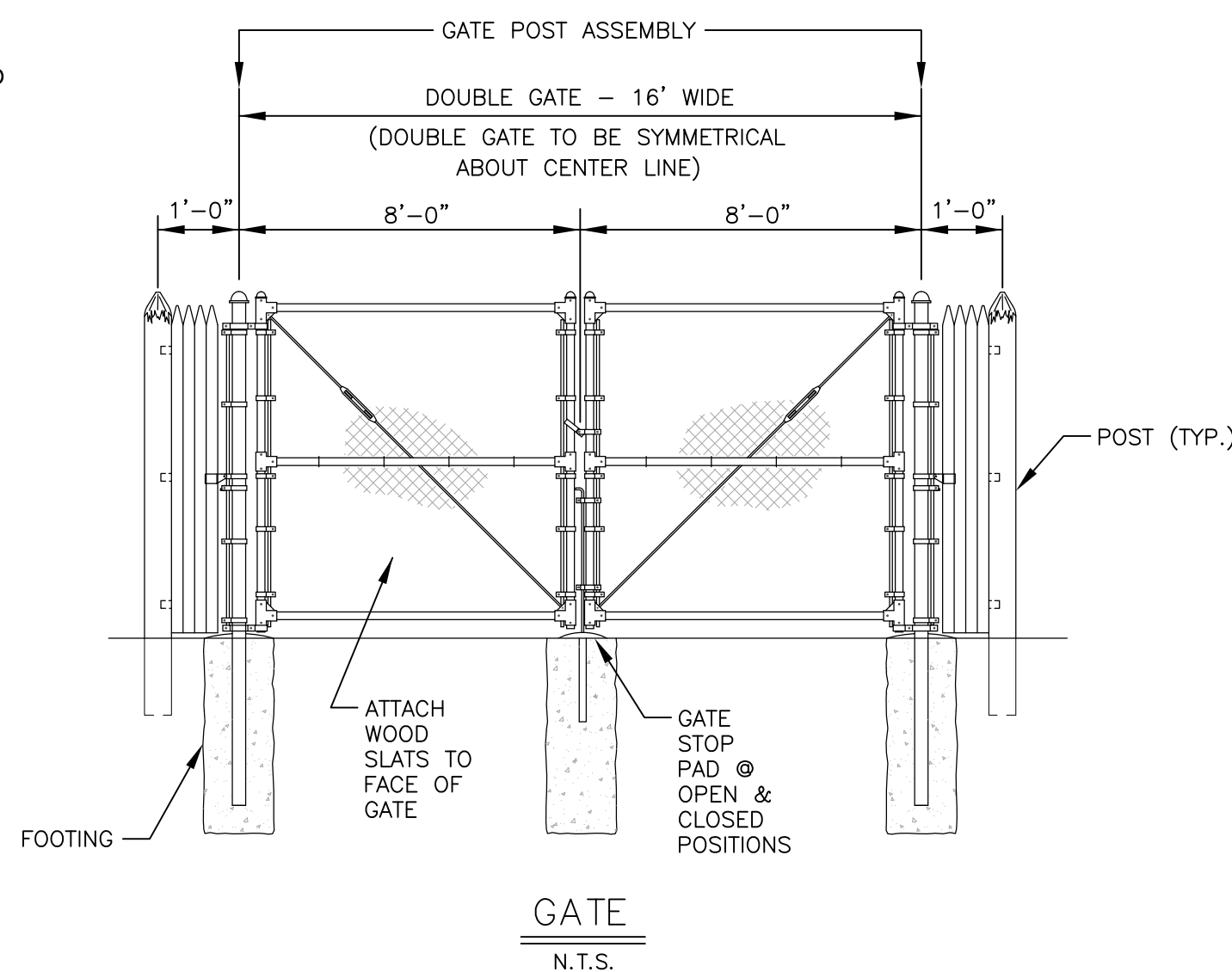
**TYP. PAVEMENT SECTION**  
**(FULL DEPTH CONSTRUCTION)**  
NOT TO SCALE



**DUMPSTER PAD DETAIL**  
NOT TO SCALE



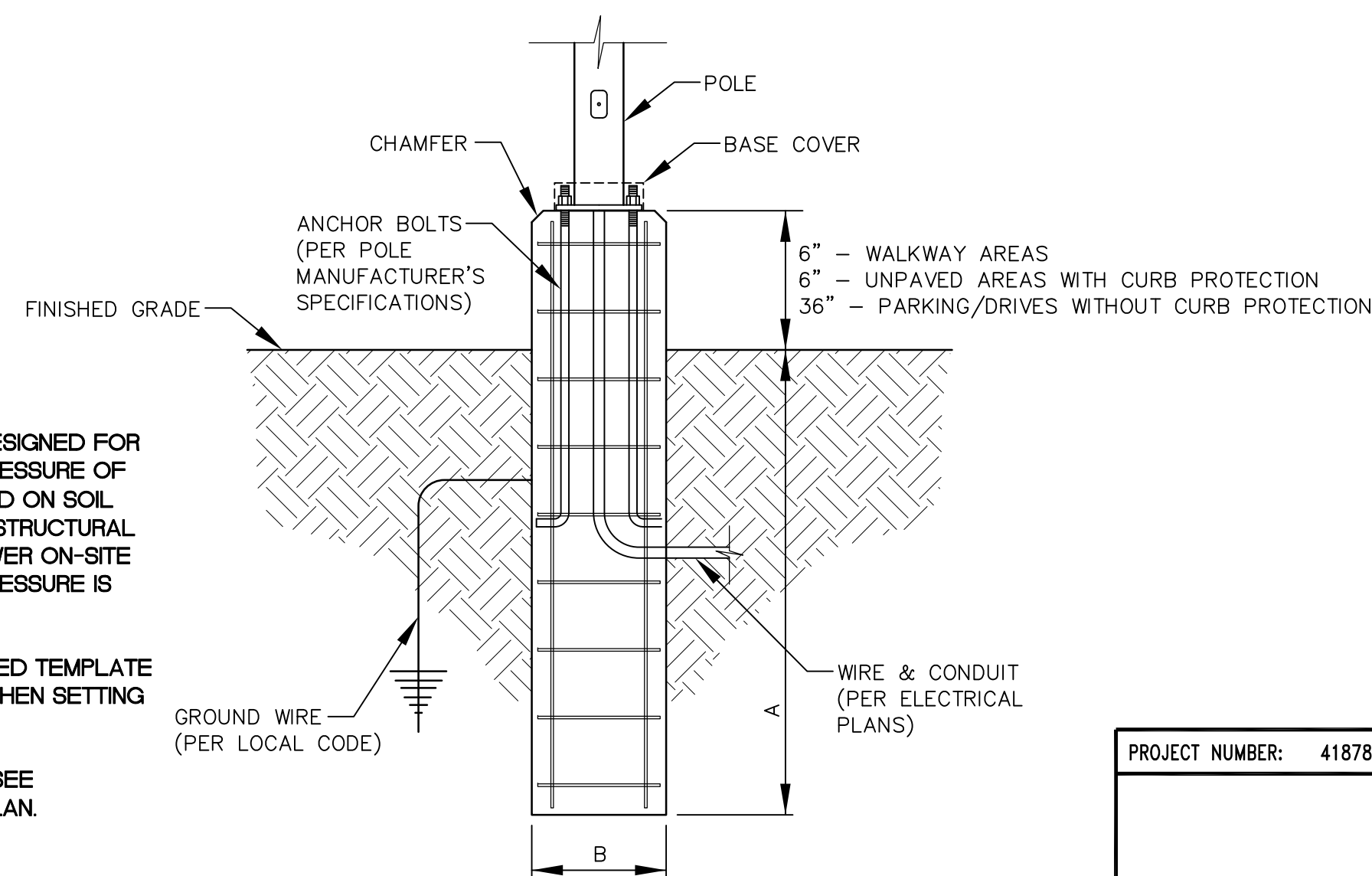
**STOCKADE FENCE DETAIL**  
N.T.S.



**GATE**  
N.T.S.

**NOTES:**

- POLE BASE IS DESIGNED FOR SOIL BEARING PRESSURE OF 100 PSF/FT BASED ON SOIL TYPE. CONTACT STRUCTURAL ENGINEER IF LOWER ON-SITE SOIL BEARING PRESSURE IS ENCOUNTERED.
- FACTORY SUPPLIED TEMPLATE MUST BE USED WHEN SETTING ANCHOR BOLTS.
- FOR LOCATION, SEE PHOTOMETRIC PLAN.



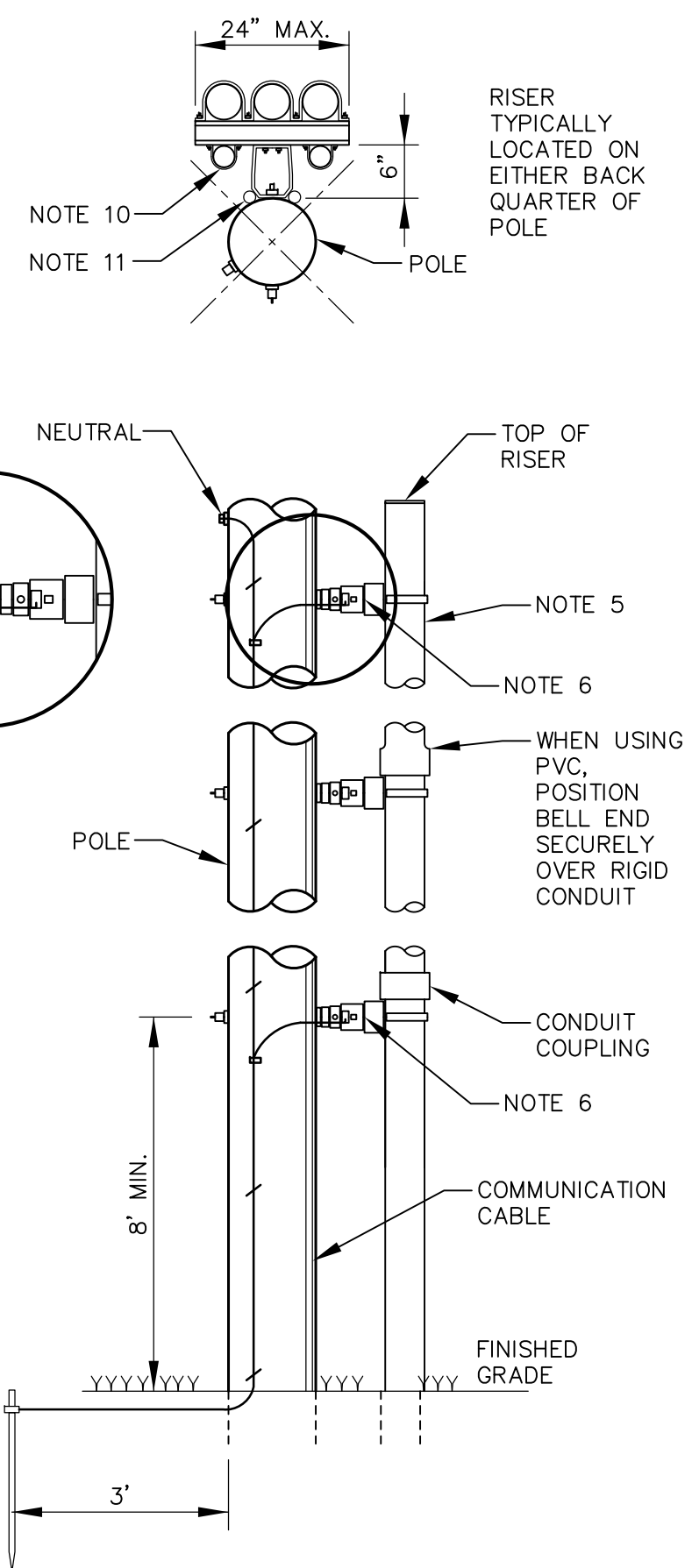
A	EMBEDMENT DEPTH (BELOW GRADE)	4'-6"
B	CONCRETE DIAMETER	30"

**LIGHT POLE BASE**  
NTS

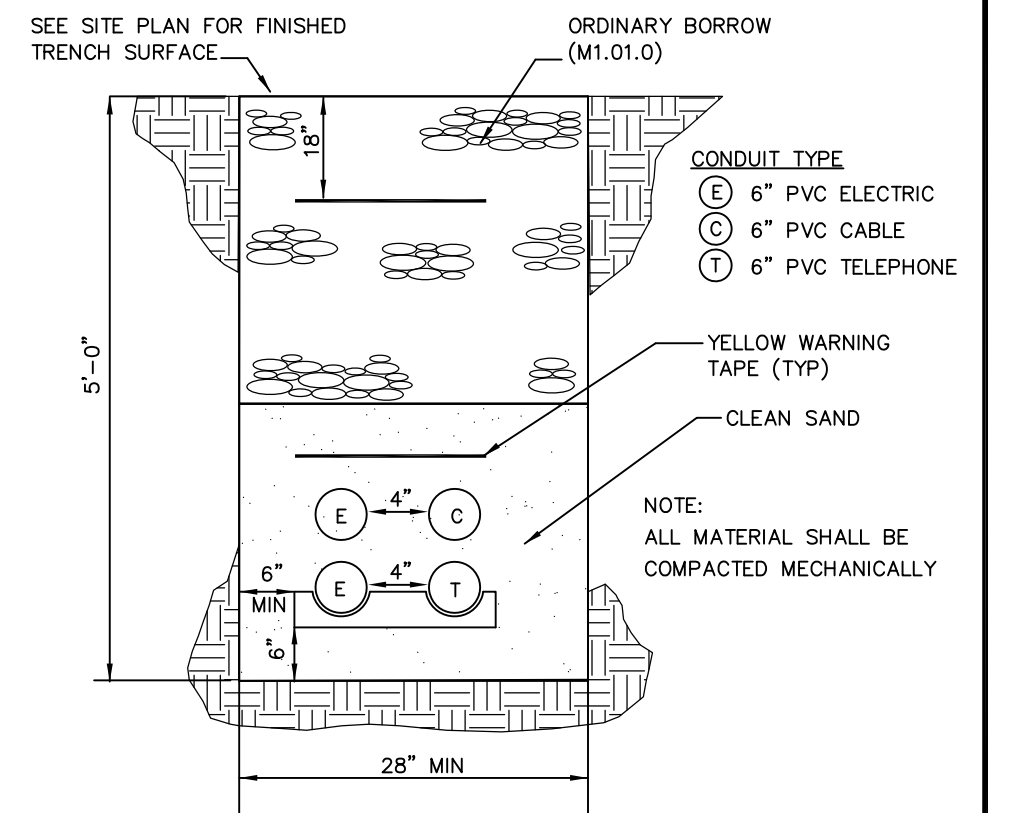
THIS PLAN IS FOR REVIEW  
PURPOSES ONLY AND IS NOT  
INTENDED FOR CONSTRUCTION  
OR RECORDING

**NOTES:**

- STAND OFF BRACKETS ARE REQUIRED WHEN MORE THAN ONE CONDUIT PER UTILITY IS TO BE INSTALLED ON A POLE.
- ALL THREE PHASE PRIMARY RISERS, WHETHER STAND OFF BRACKETS ARE USED OR NOT, SHALL BE RIGID STEEL FOR THE FIRST SECTION.
- ON SINGLE PHASE PRIMARY, SECONDARY AND SERVICE URD RISERS USING STAND OFF BRACKETS, RIGID STEEL OR SCHEDULE 80 MAY BE USED.
- WHERE RIGID STEEL OR SCHEDULE 80 PVC IS USED FOR THE RISER, ONE BRACKET SHALL BE USED TO SUPPORT EACH SECTION OF CONDUIT UP TO 10 FEET IN LENGTH. EACH BRACKET IS TO BE PLACED JUST BELOW THE RISER CONDUIT COUPLING.
- CONDUIT SECTIONS FOR A SINGLE PHASE OR THREE PHASE RISERS USING STAND OFF BRACKETS SHALL BE RIGID STEEL OR SCHEDULE 80 PVC CONDUIT ONLY (SEE NOTE #2), WITH THE EXCEPTION THAT SCHEDULE 40 PVC SUNLIGHT RESISTANT CONDUIT MAY BE USED FOR THE TOP SECTION OF THE RISER (NOT LONGER THAN 10'). IF TOP SECTION IS LONGER THAN 24\"/>
- WHERE PVC IS USED FOR THE RISER, EACH STAND OFF BRACKET SUPPORTING THE PVC SHALL BE GROUNDED. WHERE STEEL IS USED FOR THE RISER ONE STAND OFF BRACKET SUPPORTING THE STEEL IS REQUIRED TO BE GROUNDED.
- SWEEPS, WHEN USED, ARE REQUIRED TO BE STEEL.
- IF RISER IS ALL STEEL CONDUIT, INSTALL INSULATED GROUNDING BUSHING AT TOP OF RISER.
- LOWEST BRACKET SHALL BE A MINIMUM OF 8 FEET ABOVE FINISHED GRADE.
- ALTERNATE LOCATION FOR COMMUNICATION CABLE IF RUN IN METAL CONDUIT OR SCHEDULE 80.
- COMMUNICATION CABLE MAY BE ATTACHED DIRECTLY TO POLE ADJACENT TO BRACKETS.



**TYPICAL RISER DETAIL**  
NOT TO SCALE



ALL TRENCH CONDUITS SHALL BE SCHEDULE 40 PVC, UNLESS OTHERWISE NOTED

**COMMON TRENCH DETAIL**  
**1Ø ELECTRIC/TELEPHONE/CABLE**  
NOT TO SCALE

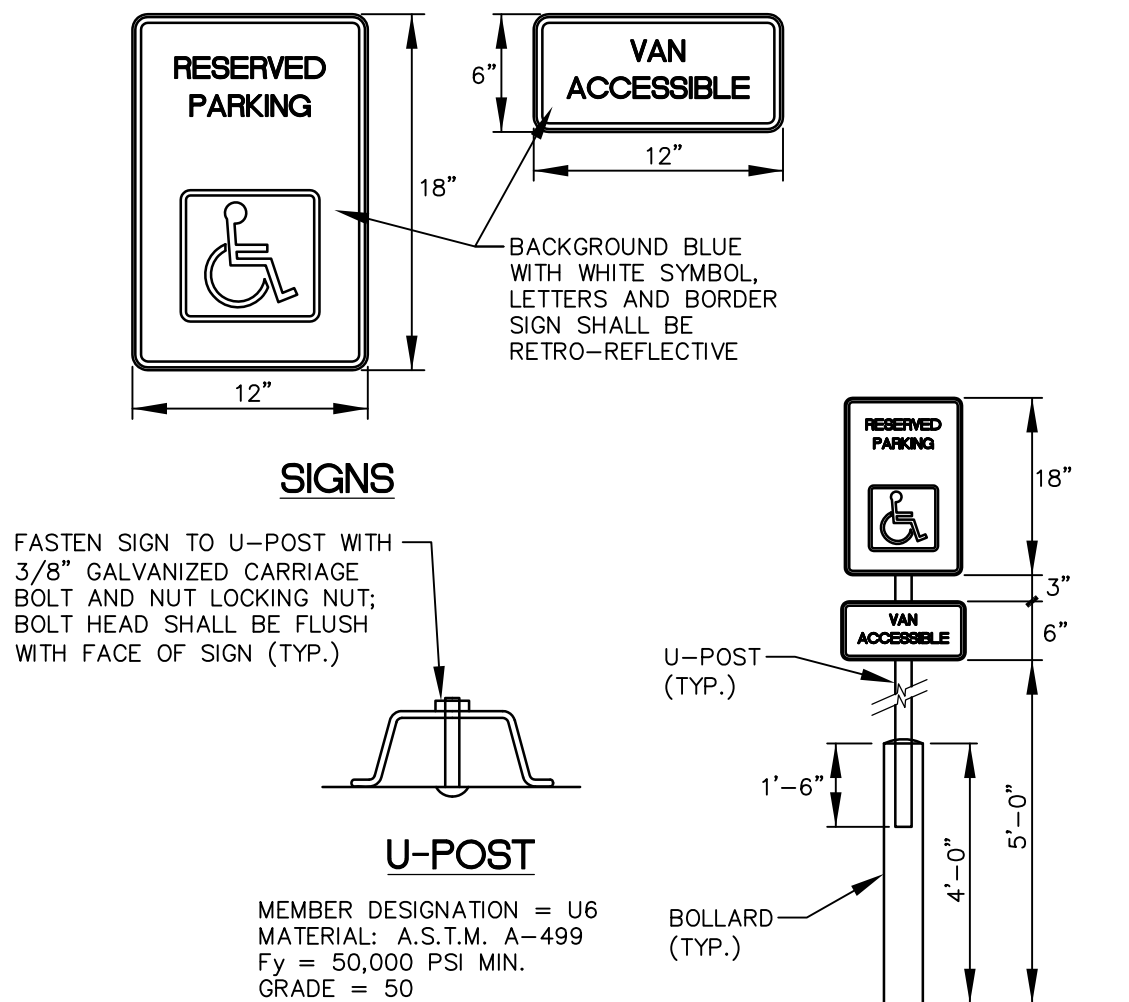
Revision	By	Date	Change
2	SMA	1/6/20	REVISED PER TOWN COMMENTS
1	SMA	12/21/20	SUBMITTED FOR TOWN REVIEW

PROJECT NUMBER: 41878	ACAD FILE: 41878-DETAILS.DWG	SCALE: AS NOTED	DATE: DECEMBER 21, 2020
Drawing Name: <b>CONSTRUCTION DETAILS - SHEET 1</b>			
Project Name: <b>FIELDING CONDOS</b> ROOSEVELT TRAIL, WINDHAM, MAINE			
Owner/Applicant: <b>FIELDING'S OIL CO., INC.</b>			
SHEET 8 OF 12			

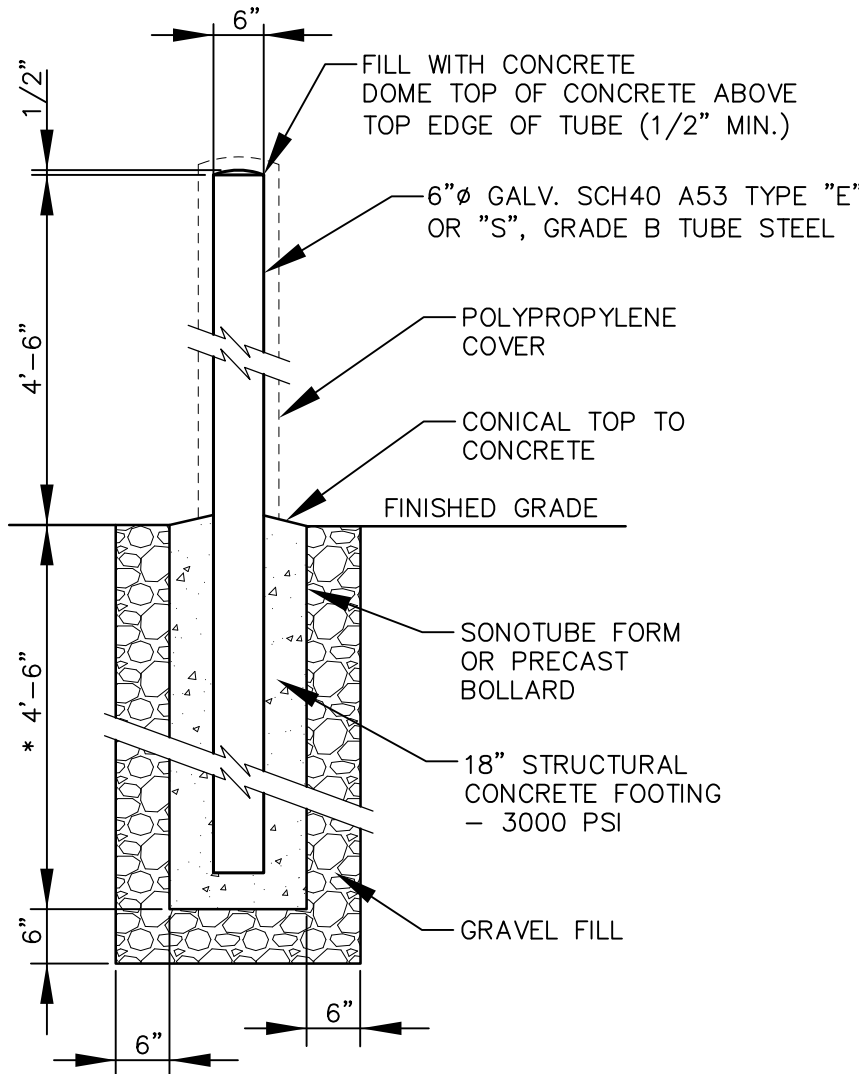


TRAFFIC SIGNS							
IDENTIFICATION NUMBER	SIGN HEIGHT	SIGN WIDTH	POST PER SIGN	TEXT	NUMBER OF SIGNS REQ'D.	SIGN AREA SQ. FT.	REMARKS
R1-1	30"	30"	1	STOP	1	6.25	PER MUTCD
R7-8	18"	12"	1	RESERVED PARKING	2	1.5	PER MUTCD
R7-8b	6"	12"	1	VAN ACCESSIBLE	1	0.5	PER MUTCD

NOTE: ALL SIGNS SHALL CONFORM TO MUTCD STANDARDS AND MDOT ITEM 645

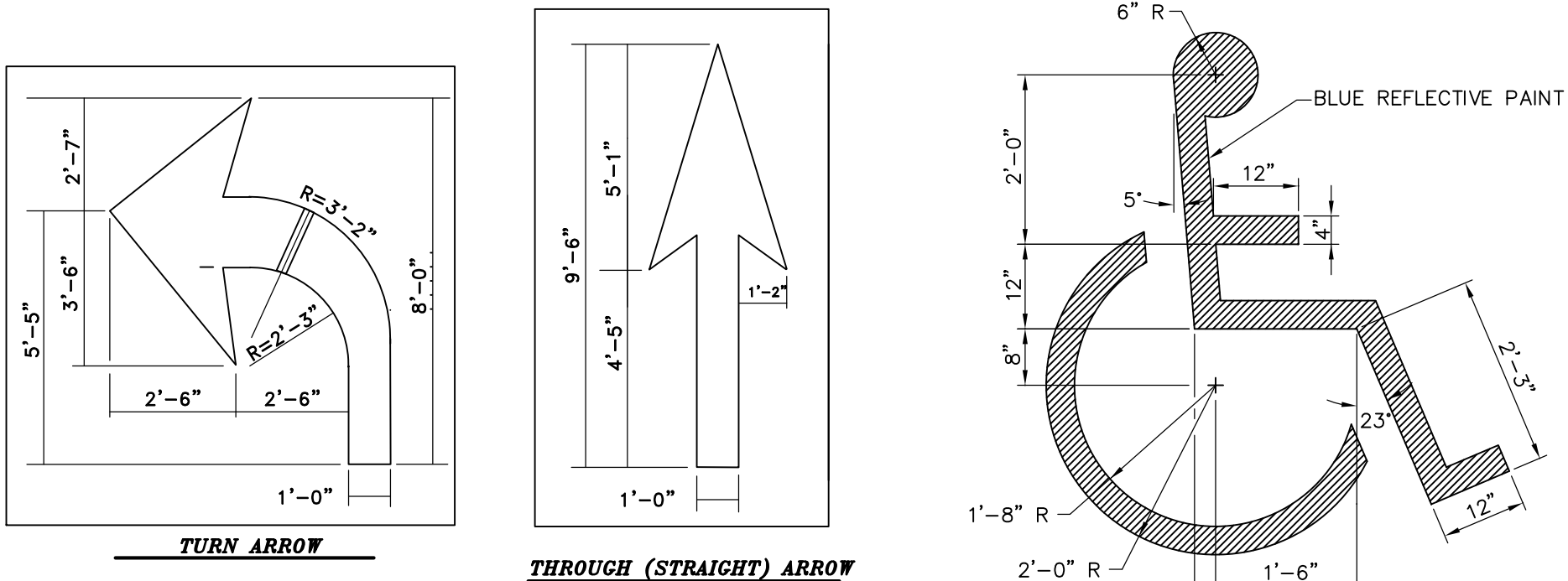


ACCESSIBLE PARKING SIGN  
N.T.S.



- NOTES:
1. PLACE BOLLARDS AS SHOWN IN PLAN VIEW AND/OR ACCESSIBLE PARKING LAYOUT DETAIL.
  2. BOLLARDS PLACED IN/AT DUMPSTER ENCLOSURE:
    - A. INSIDE: 6' TO CENTERLINE FROM FENCE SIDES (2 BOLLARDS); 1.0' TO CENTERLINE FROM BACK OF FENCE
    - B. OUTSIDE: AS SHOWN AT DETAIL (1 PER CORNER AT FRONT)

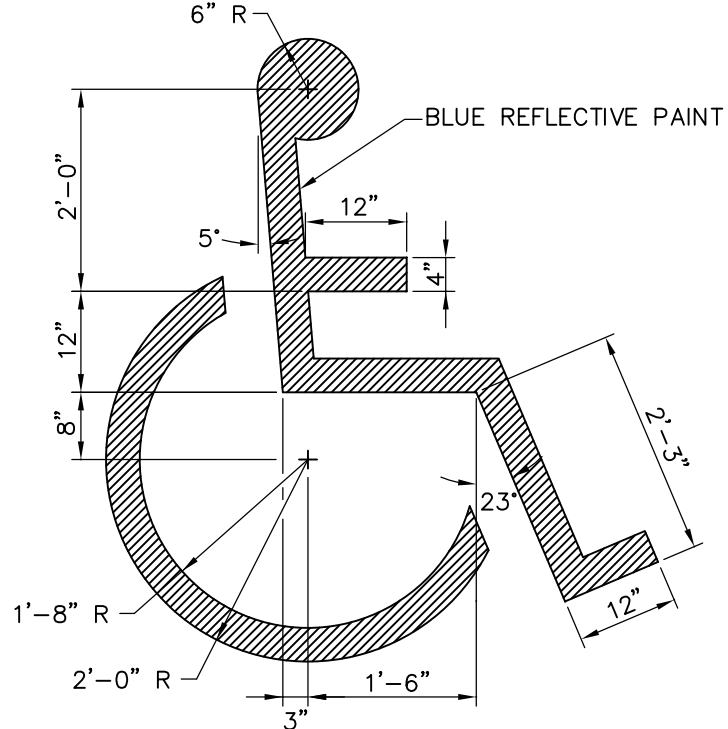
BOLLARD DETAIL  
N.T.S.



NOTE: PER MDOT ITEM 627

STRIPING ARROWS

N.T.S.



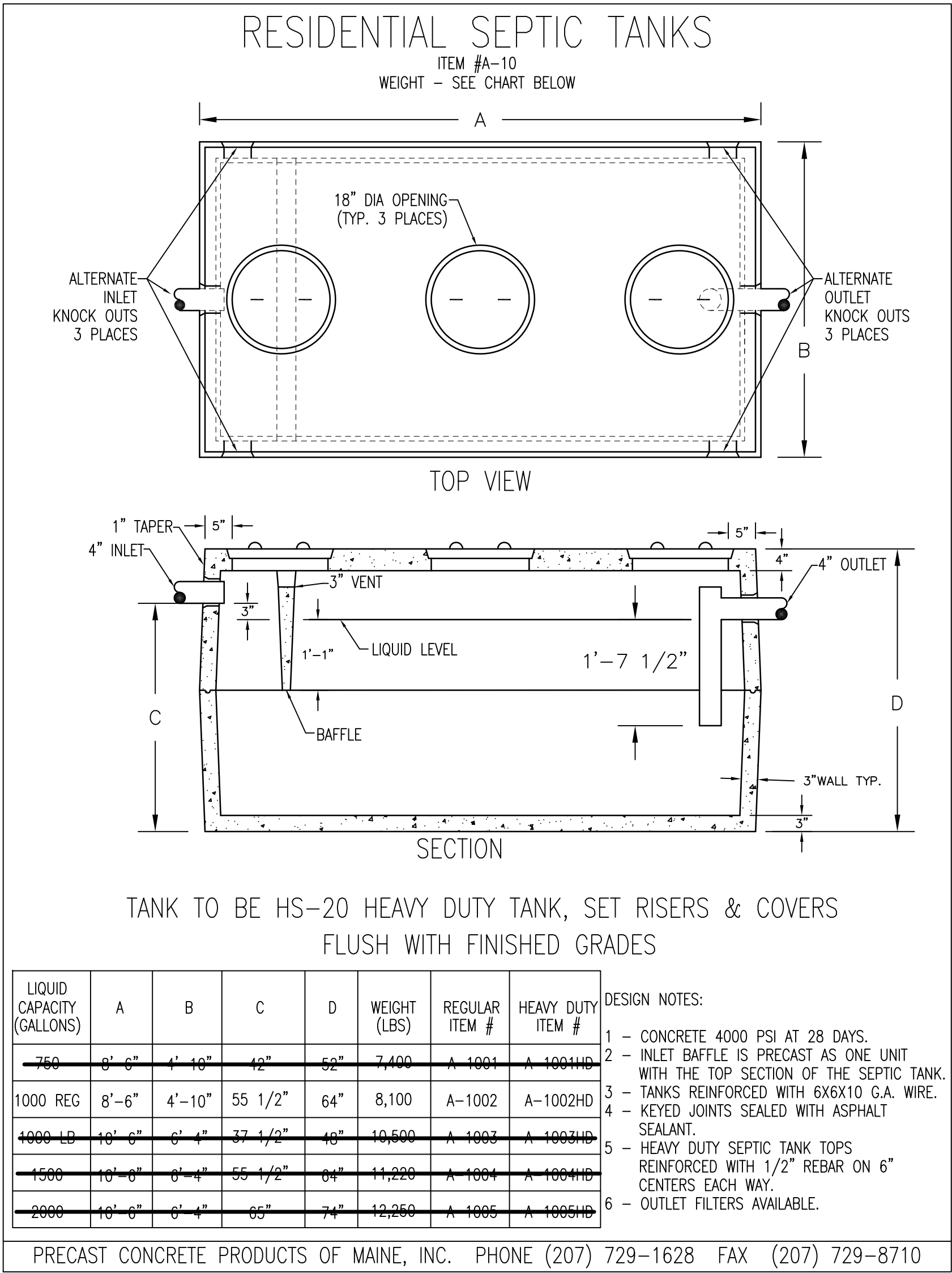
NOTE: PER MDOT ITEM 627

HANDICAPPED PAINTING

N.T.S.

### PAVEMENT MARKING NOTES :

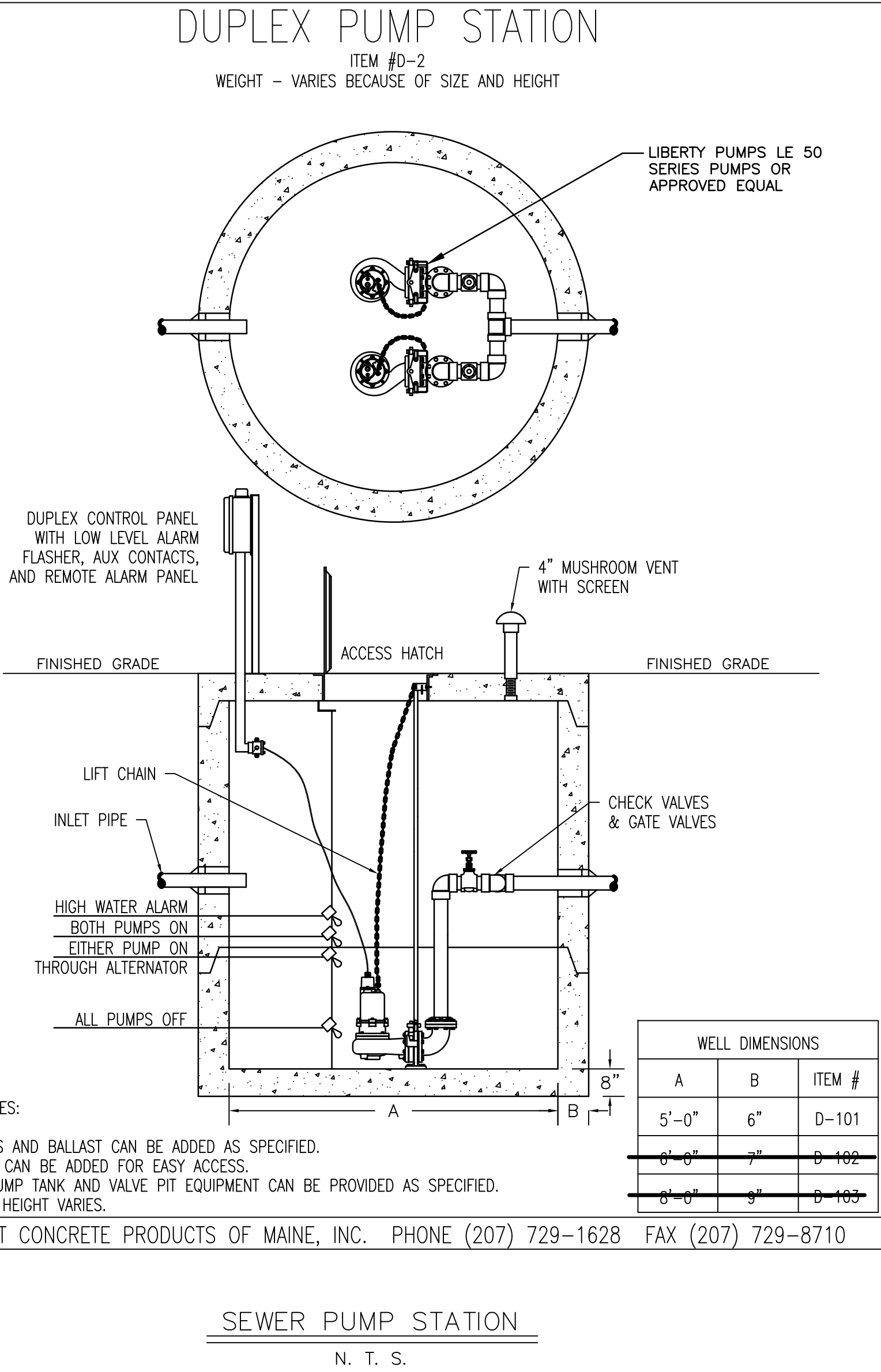
1. ALL PAVEMENT MARKING WORDS AND SYMBOLS SHALL BE RETROREFLECTIVE WHITE AND SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES **MUTCD** AND MDOT ITEM 627.
2. WORDS AND SYMBOLS SHALL BE CENTERED Laterally WITHIN THE LANE. THE LONGITUDINAL DIMENSION SHALL BE PARALLEL TO THE LANE.
3. MULTI-WORD MESSAGES SHALL READ "UP"; THAT IS, THE FIRST WORD SHALL BE NEAREST THE APPROACHING DRIVER.
4. THE WORD "ONLY" SHALL NOT BE USED WITH THROUGH OR COMBINATION ARROWS, AND SHALL NOT BE USED ADJACENT TO A BROKEN LANE LINE. A TURN ARROW SHALL PRECEED THE WORD "ONLY".
5. COMBINATION ARROWS MAY BE COMPRISED OF 2 SINGLE ARROWS (e.g. TURN AND THROUGH ARROWS). HOWEVER, THE SHAFTS OF THE ARROWS SHALL COINCIDE.
6. PREFORMED TAPE WORDS AND SYMBOLS SHALL BE PRE-CUT, EITHER BY THE MANUFACTURER OR THE CONTRACTOR.
7. WRONG-WAY ARROWS SHALL NOT BE SUBSTITUTED FOR THROUGH ARROWS.
8. LONGITUDINAL SPACING BETWEEN SUCCESSIVE WORDS AND/OR SYMBOLS SHOULD BE AT LEAST 4 TIMES THE HEIGHT OF THE LARGEST CHARACTER.



LIQUID CAPACITY (GALLONS)	A	B	C	D	WEIGHT (LBS)	REGULAR ITEM #	HEAVY DUTY ITEM #
750	8'-6"	4'-10"	42"	52"	7,400	A-1001	A-1001HD
1000 REG	8'-6"	4'-10"	55 1/2"	64"	8,100	A-1002	A-1002HD
1000 LB	10'-0"	6'-4"	37 1/2"	48"	10,800	A-1003	A-1003HD
1500	10'-0"	8'-4"	55 1/2"	64"	11,200	A-1004	A-1004HD
2000	10'-0"	6'-4"	65"	74"	12,250	A-1005	A-1005HD

- DESIGN NOTES:
- 1 - CONCRETE 4000 PSI AT 28 DAYS.
  - 2 - INLET BAFFLE IS PRECAST AS ONE UNIT WITH THE TOP SECTION OF THE SEPTIC TANK.
  - 3 - TANKS REINFORCED WITH 6X6X10 G.A. WIRE. KEYED JOINTS SEALED WITH ASPHALT SEALANT.
  - 4 - FLOAT HEIGHT VARIES.
  - 5 - HEAVY DUTY SEPTIC TANK TOPS REINFORCED WITH 1/2" REBAR ON 6" CENTERS EACH WAY.
  - 6 - OUTLET FILTERS AVAILABLE.

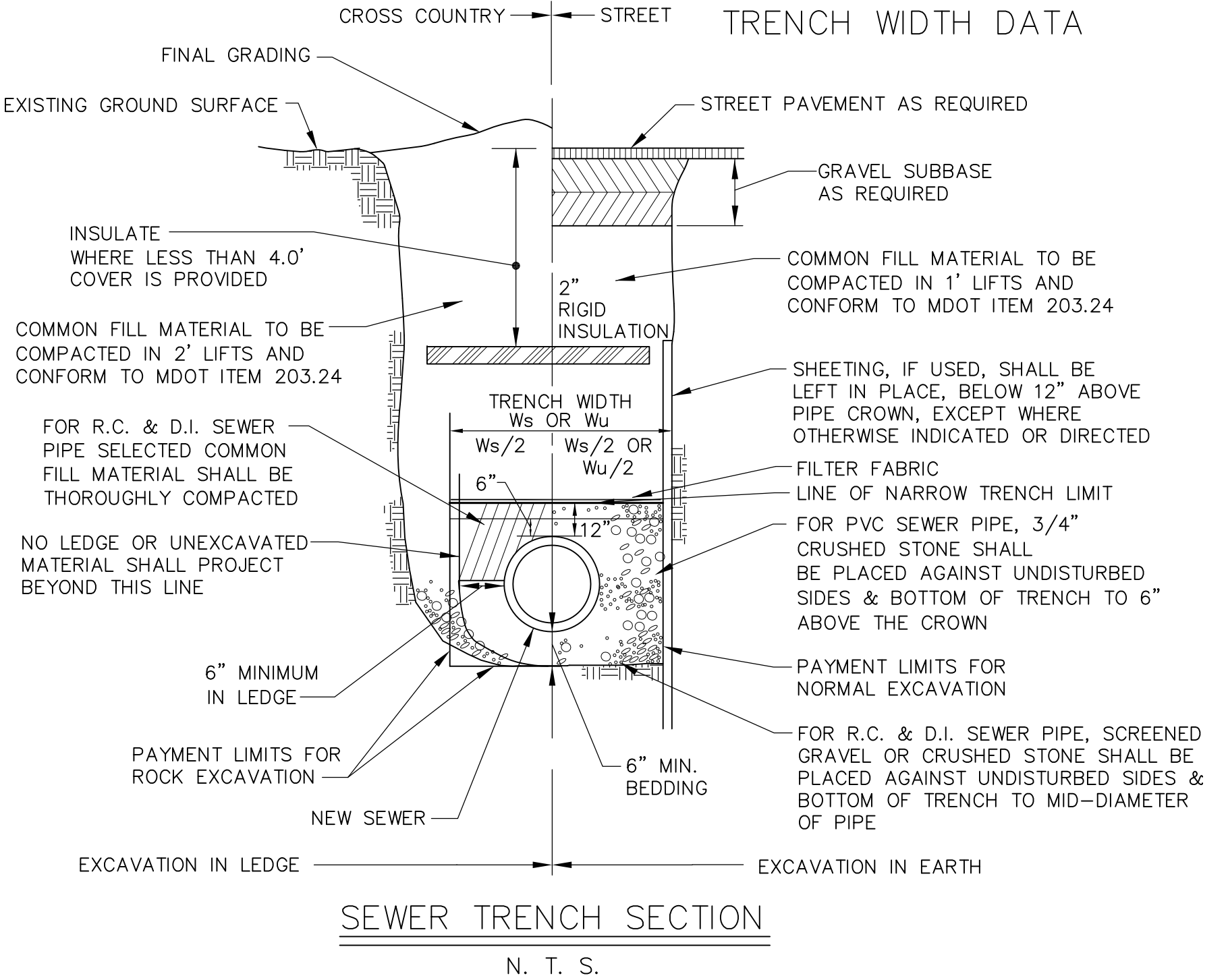
PRECAST CONCRETE PRODUCTS OF MAINE, INC. PHONE (207) 729-1628 FAX (207) 729-8710



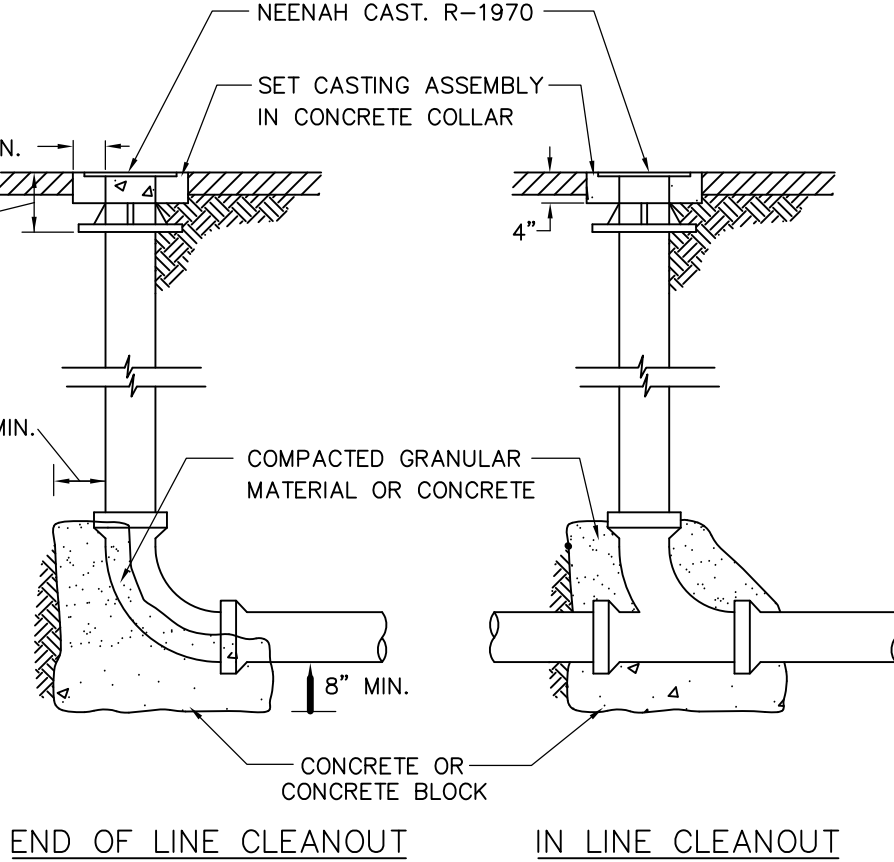
SEWER PUMP STATION  
N. T. S.

- NOTES:
1. TRENCHES LOCATED ON THE ROAD SHOULDER SHALL BE TREATED THE SAME AS STREET EXCEPT FOR PAVING
  2. SATISFACTORY EXCAVATED MATERIAL CAN BE USED FOR BACKFILL ABOVE THE LINE OF NARROW TRENCH LIMIT.

TRENCH WIDTH DIAMETER OF PIPE 12" AND SMALLER	Ws OR Wu	
	UNSHEETED	SHEETED
12"	3'-0"	4'-4"
15"	3'-2"	4'-8"
18"	3'-6"	5'-0"
21"	4'-0"	5'-4"
24"	4'-4"	5'-8"
27"	4'-8"	6'-0"
30"	5'-2"	6'-4"
36"	6'-0"	7'-0"
42"	6'-6"	7'-6"
48"	7'-0"	8'-0"



NOTE:  
CLEANOUT TOP SHALL BE ENCLOSED IN CASTING AND/OR FABRICATED COVER ASSEMBLY.



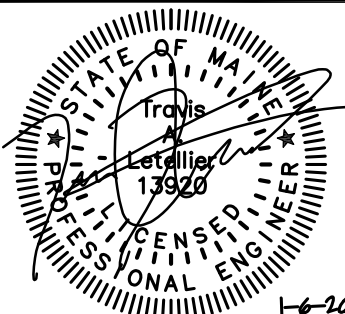
THIS PLAN IS FOR REVIEW  
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Revision:	By:	Date:	Change:
2	SMA	1/6/20	REVISED PER TOWN COMMENTS
1	SMA	12/21/20	SUBMITTED FOR TOWN REVIEW

PROJECT NUMBER: 41878	ACAD FILE: 41878-DETAILS.DWG	SCALE: AS NOTED	DATE: DECEMBER 21, 2020
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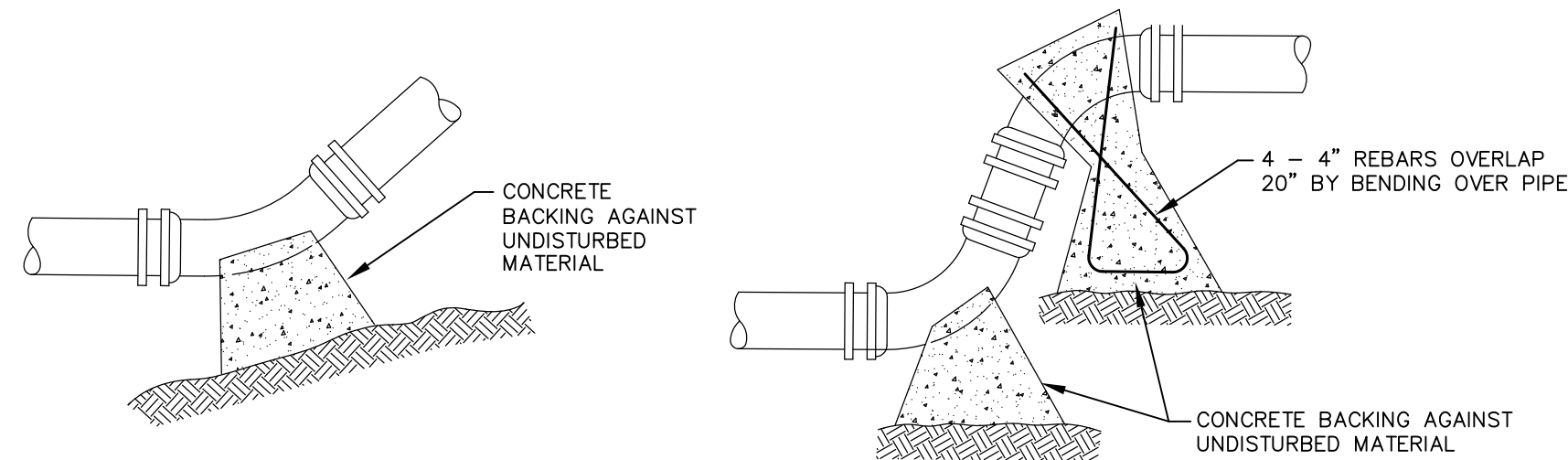
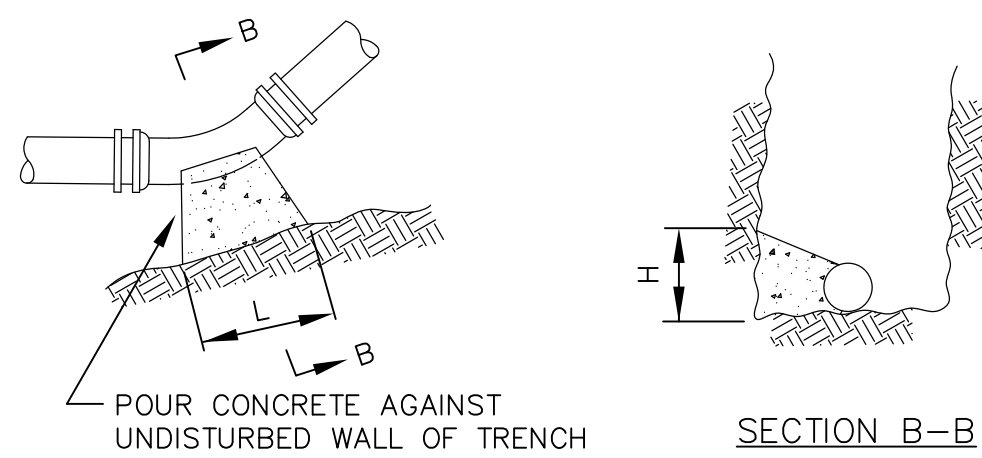
### CONSTRUCTION DETAILS - SHEET 2

Project Name:  
**FIELDING CONDOS**  
ROOSEVELT TRAIL, WINDHAM, MAINE  
Owner/Applicant:  
**FIELDING'S OIL CO., INC.**



SURVEYING • ENGINEERING • LAND PLANNING  
**Northeast Civil Solutions**  
INCORPORATED  
381 PAYNE ROAD, SCARBOROUGH, MAINE 04074  
tel 207.883.1000 fax 207.883.1001 e-mail / website  
info@northeastcivilsolutions.com  
www.northeastcivilsolutions.com



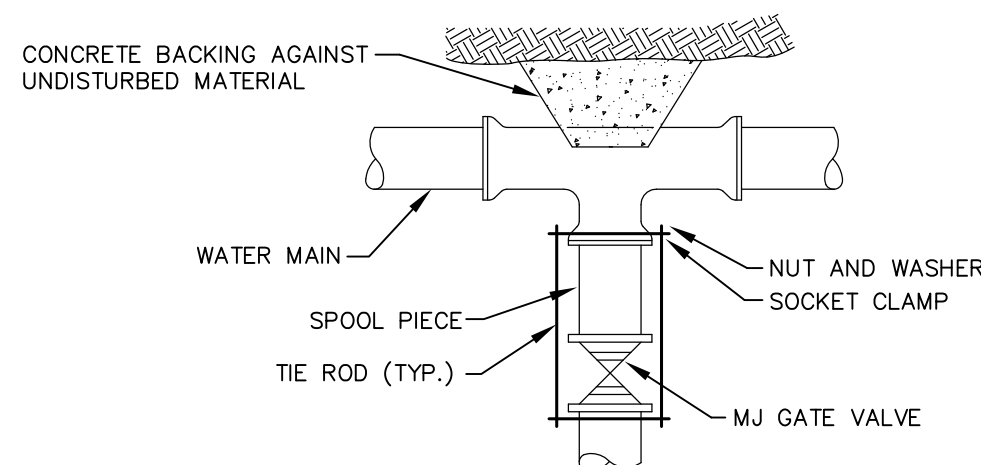


NOMINAL DIAMETER OF FITTING	BEARING AREAS - SQUARE FEET				
	DEAD END	BRANCH OF TEE	90° BEND	45° BEND	BEND SMALLER THAN 45° GREATER THAN 10°
6"	2	2	3	2	2
8"	4	4	5	3	2
10"	6	6	8	4	2
12"	8	8	10	6	3
14"	12	12	16	9	4
16"	12	12	20	10	5

- NOTES
- ALL BENDS, TEE HYDRANTS AND DEAD ENDS SHALL BE BRACED WITH CONCRETE THRUST BLOCKS.
  - BEARING AREA IS AREA OF CONCRETE IN CONTACT WITH WALL OF TRENCH=HxL.
  - HEIGHT (H) AND LENGTH (L) AS REQUIRED TO OBTAIN BEARING AREA IN TABLE.

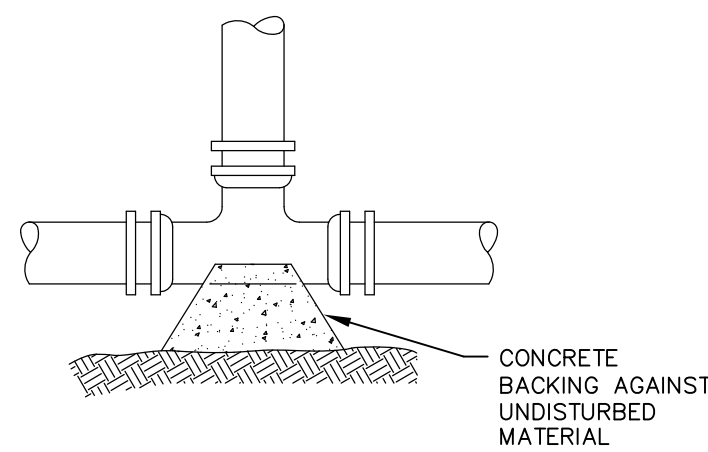
### THRUST BLOCK DETAILS

NOT TO SCALE



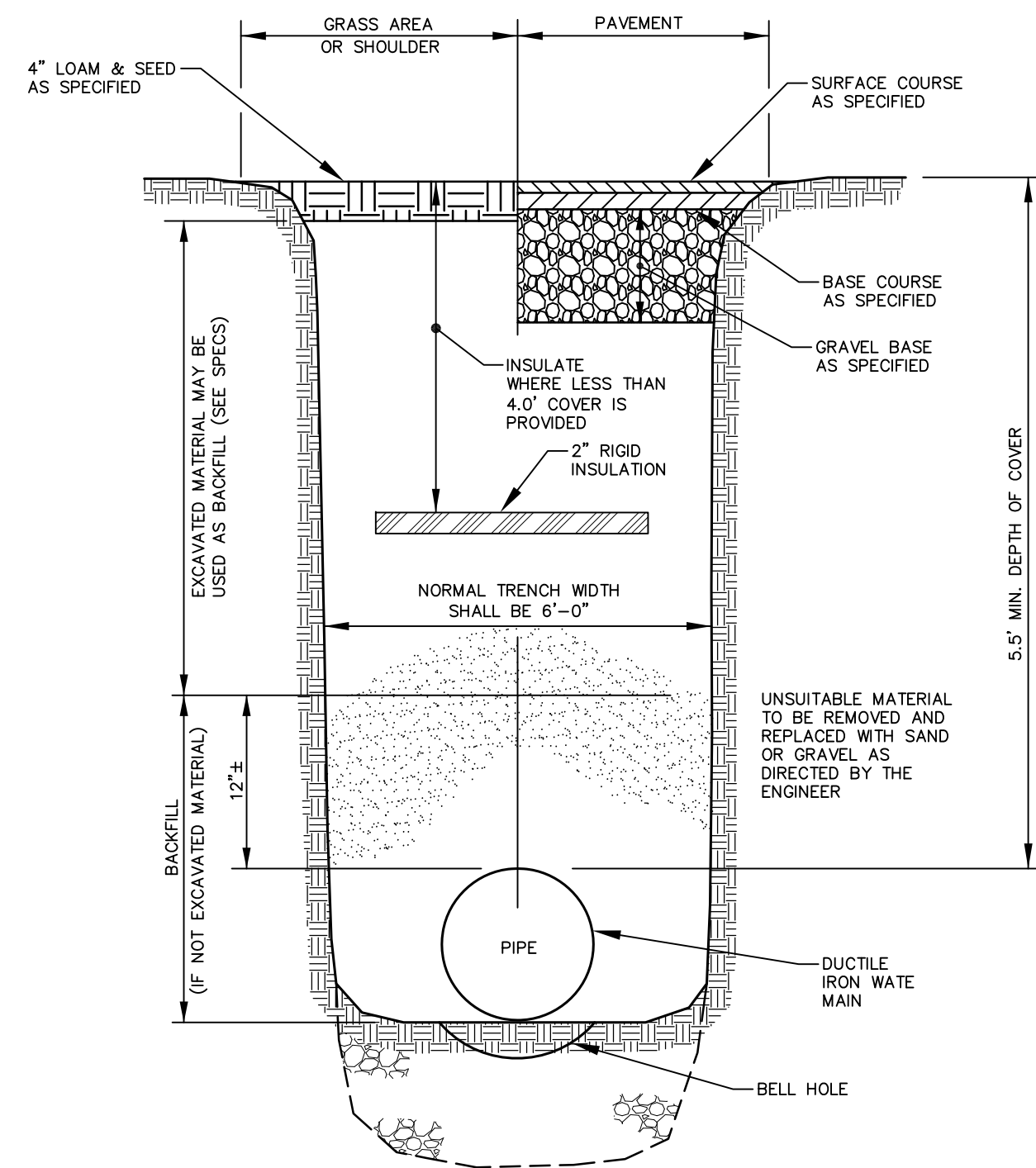
### TYPICAL VALVE CONNECTION RESTRAINED JOINT TEE

NOT TO SCALE



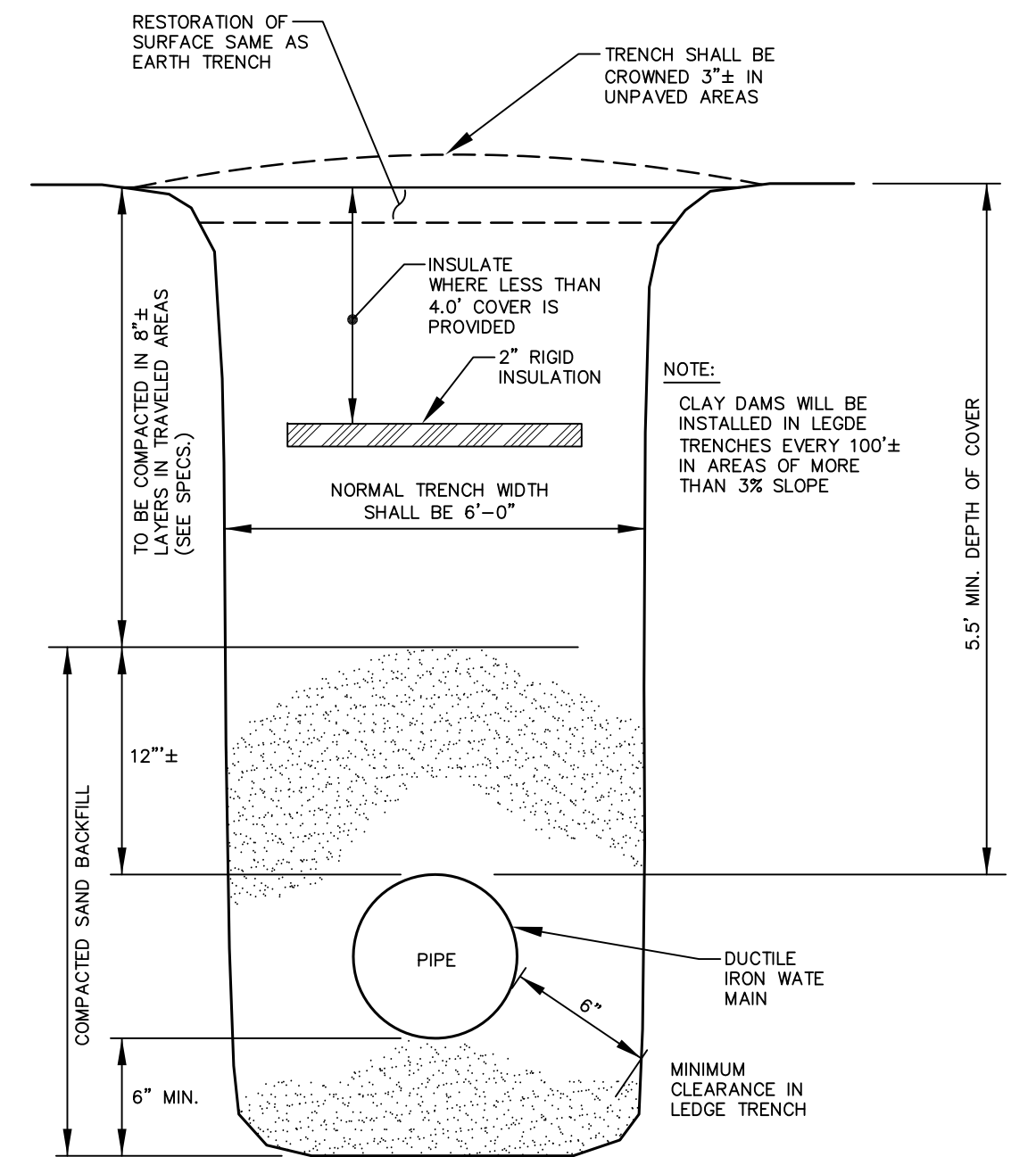
### TYPICAL TEE

NOT TO SCALE



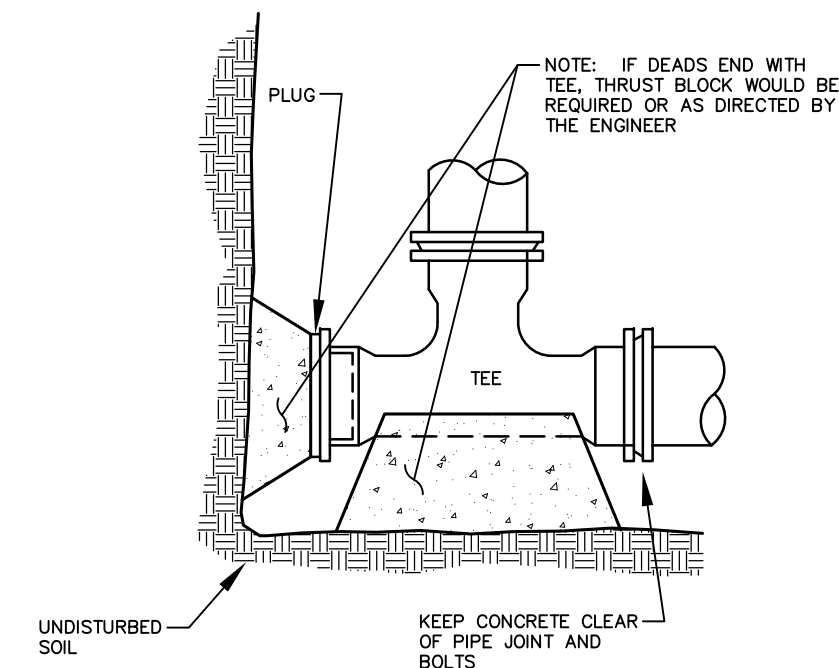
### SECTION THRU EARTH TRENCH

NOT TO SCALE



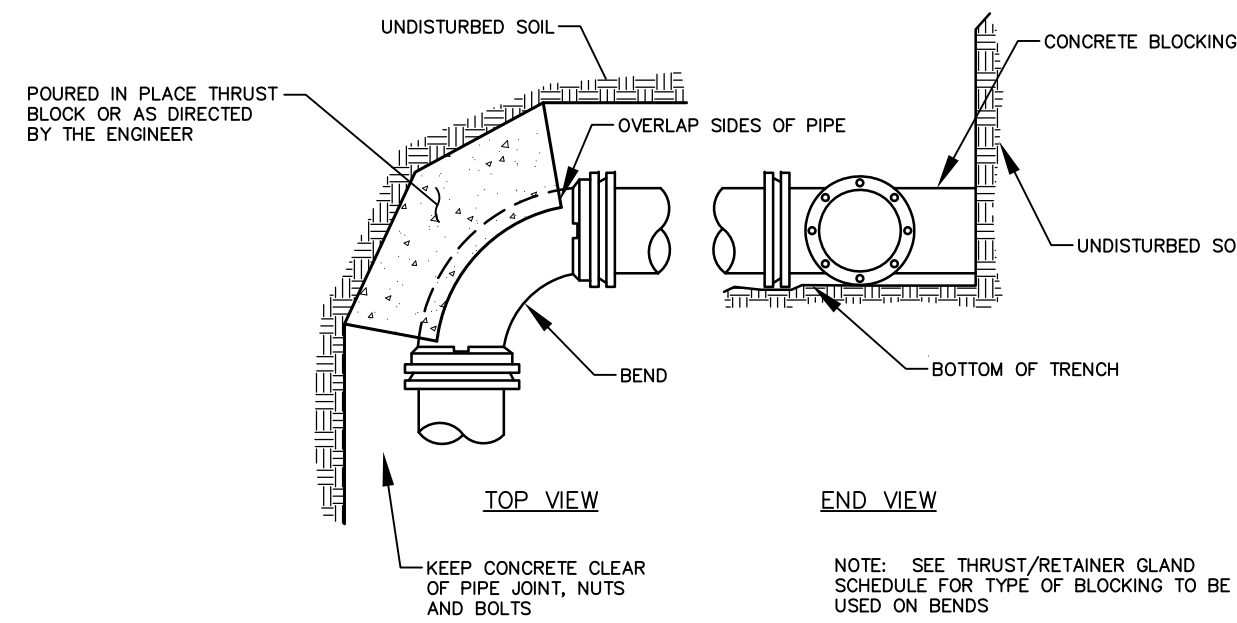
### SECTION THRU LEDGE TRENCH

NOT TO SCALE



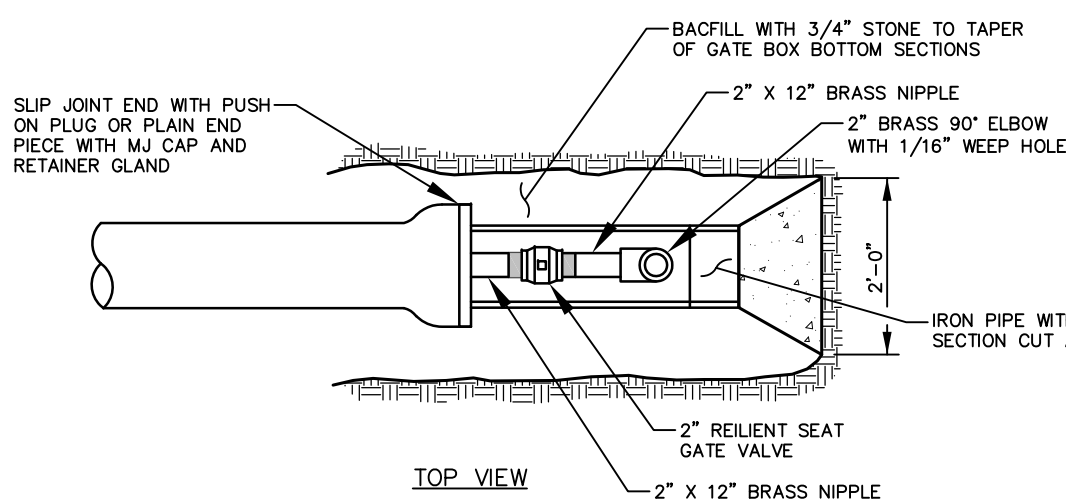
### STANDARD TEE BLOCKING

NOT TO SCALE

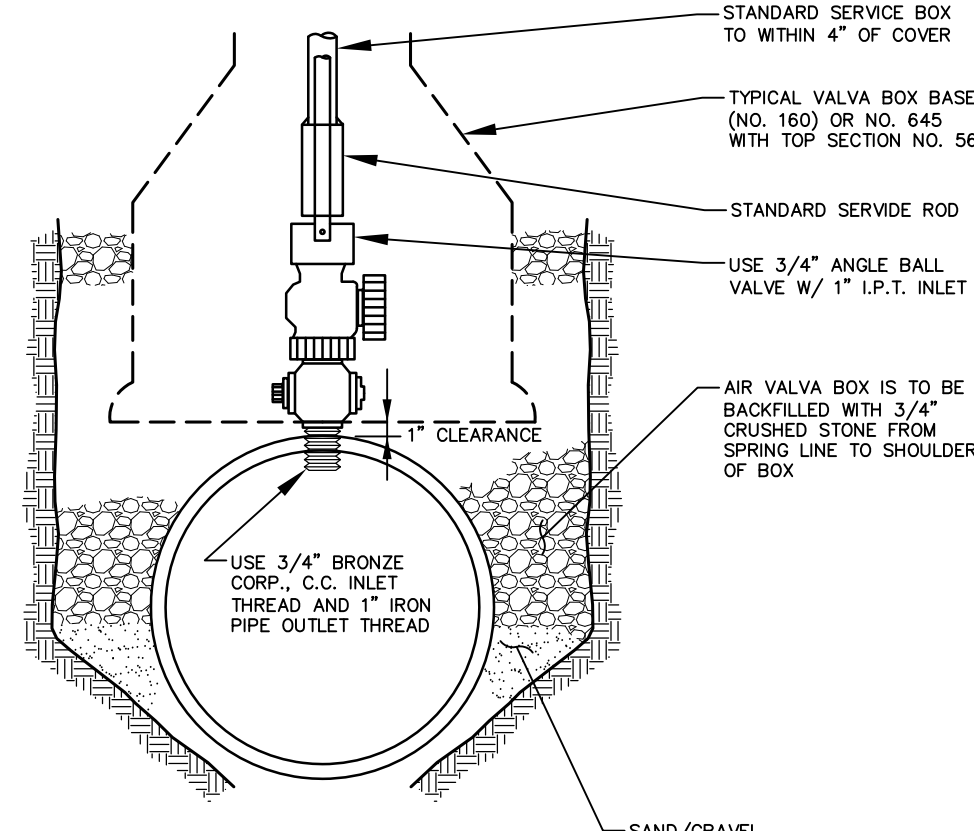


### STANDARD BEND BLOCKING

NOT TO SCALE

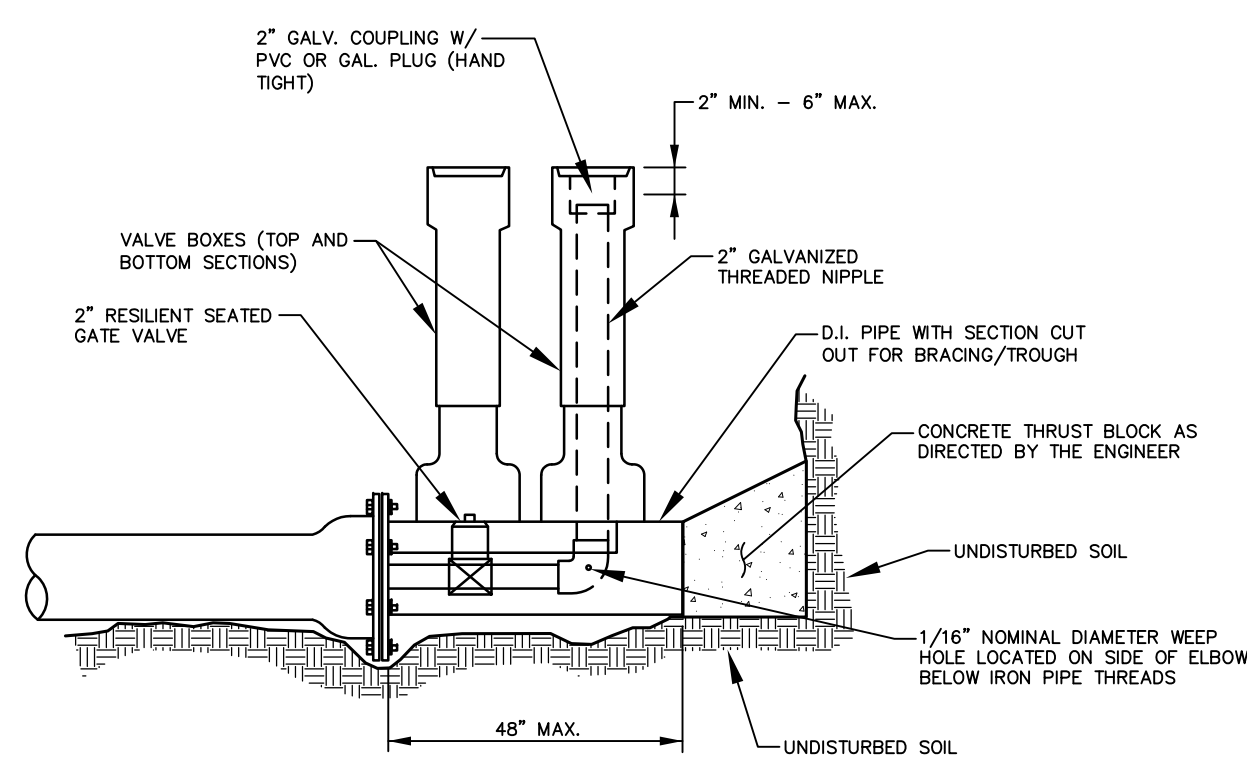


TOP VIEW



### TYPICAL AIR VALVE (1")

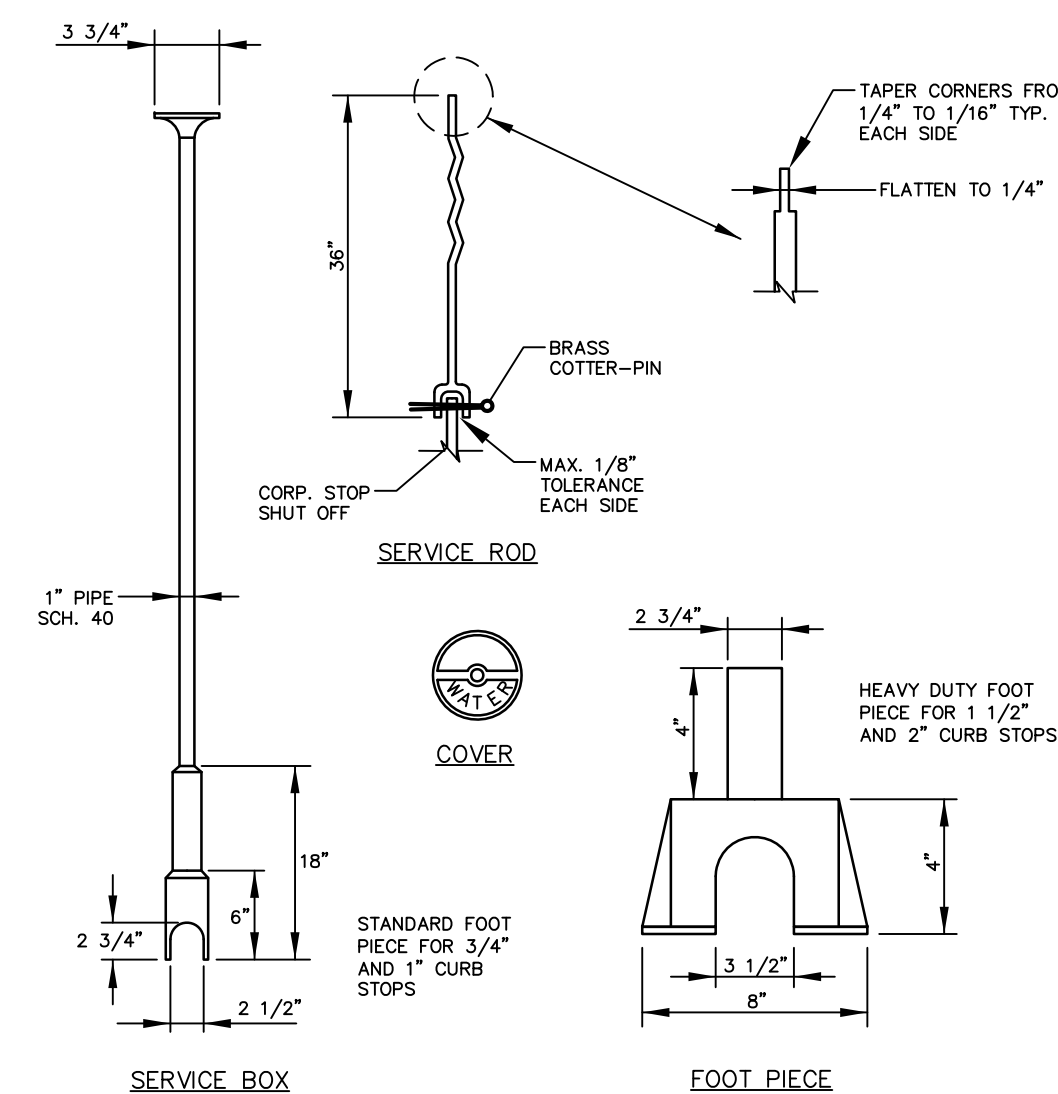
NOT TO SCALE



### STANDARD 2" BLOW OFF

NOT TO SCALE

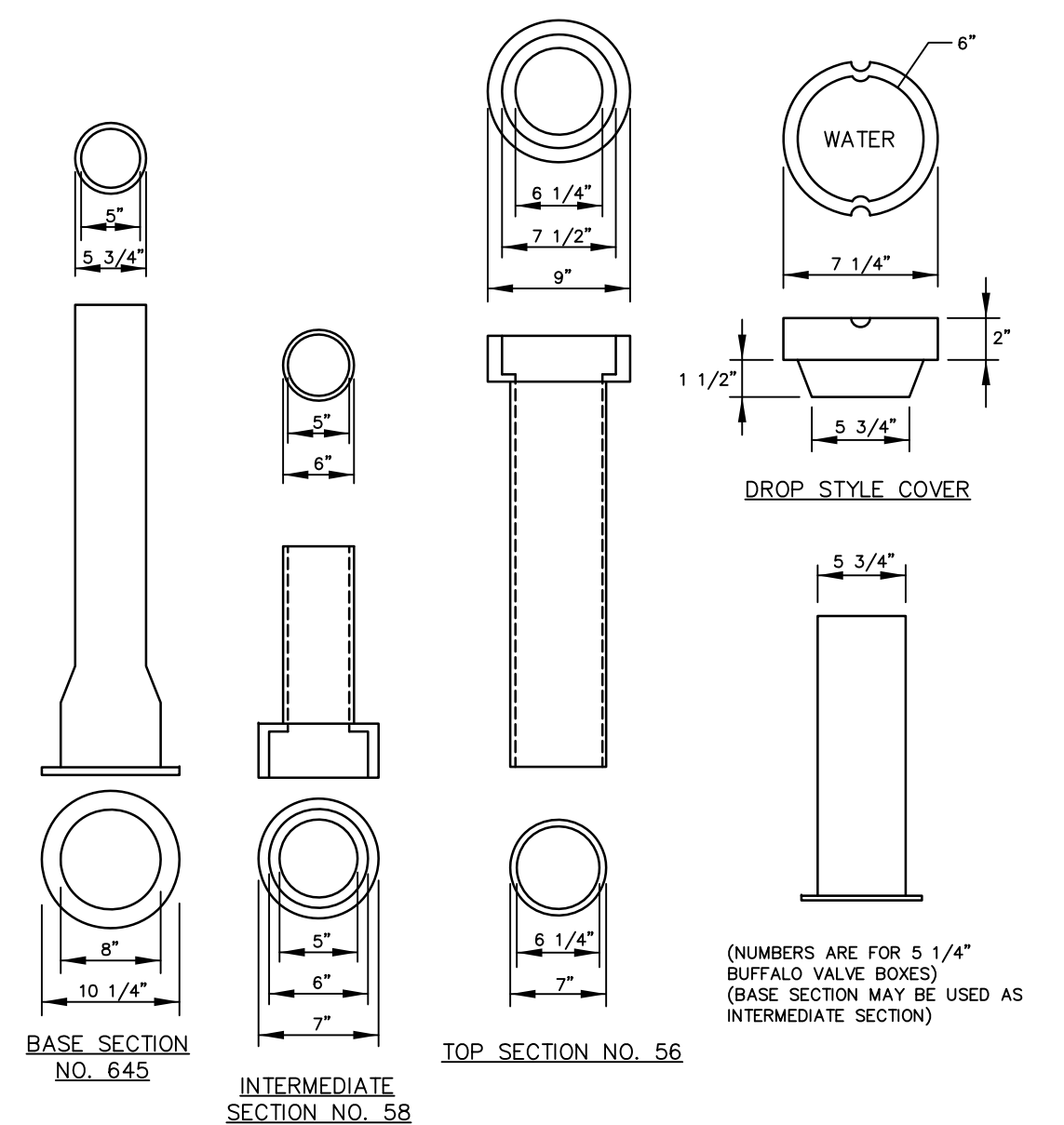
ALL WATER LINE WORK TO MEET  
PORTLAND WATER DISTRICT STANDARDS



SERVICE BOX

FOOT PIECE

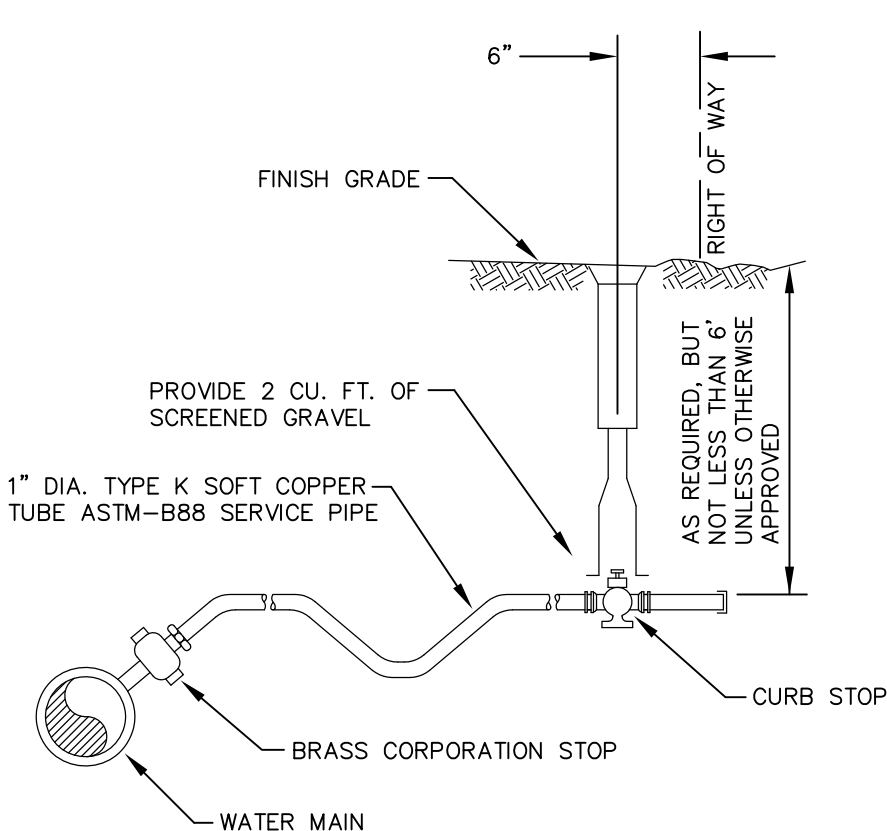
NOTE: ANY EXTENSION OF SERVICE BOX  
REQUIRES A COUPLING & 1" THREADED PIPE



### VALVE BOX & COVER

NOT TO SCALE

THIS PLAN IS FOR REVIEW  
PURPOSES ONLY AND IS NOT  
INTENDED FOR CONSTRUCTION  
OR RECORDING



### TYPICAL WATER SERVICE CONNECTION

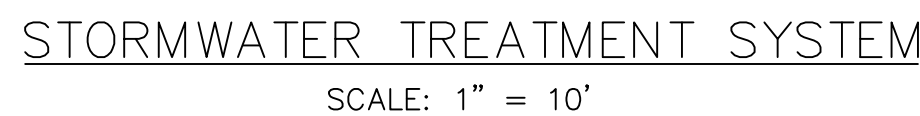
NOT TO SCALE

Revision	By	Date	Change
2	SMA	1/6/20	REVISED PER TOWN COMMENTS
1	SMA	12/21/20	SUBMITTED FOR TOWN REVIEW

PROJECT NUMBER: 41878	ACAD FILE: 41878-DETAILS.DWG	SCALE: AS NOTED	DATE: DECEMBER 21, 2020
Drawing Name: <b>CONSTRUCTION DETAILS - SHEET 3</b>			
Project Name: <b>FIELDING CONDOS</b> ROOSEVELT TRAIL, WINDHAM, MAINE			
Owner/Applicant: <b>FIELDING'S OIL CO., INC.</b>			
	SURVEYING • ENGINEERING • LAND PLANNING <b>Northeast Civil Solutions</b> INCORPORATED 381 PAYNE ROAD, SCARBOROUGH, MAINE 04074 tel 207.883.1000 fax 207.883.1001 e-mail / website info@northeastcivilsolutions.com www.northeastcivilsolutions.com		
SHEET 10 OF 12			

E:\LAND PROJECT\41000\41878 - FIELDING - WINDHAM\PLANSET\41878-DETAILS.DWG





1. MANHOLE FRAME AND GRATE SHALL BE DESIGNED TO WITHSTAND H=20 LOADING.
2. ACCESS LADDER WITH PRECAST DROP FRONT STEEL REINFORCED COPOLYMER RUNGS AT 12" O.C.
3. LeBARON STANDARD FRAME AND COVER SET IN MORTAR, CAT NO LK 110 SET ON TOP OF BRICK MASONRY AND SEALED WITH MORTAR. COVER TO BE SUPPLIED WITH 3" LETTERING TO READ "DRAIN".



MAINE DOT SPECIFICATION  
AGGREGATE MDOT #703.01

TYPE B COARSE GRAVEL SHALL  
HAVE NO MORE THAN 5%  
(PREFERABLY 2%) OF FINES  
PASSING THE #200 SIEVE

1. SAND MATERIAL TO HAVE UNIFORM MIX, FREE OF STONES, STUMPS, ROOTS OR OTHER OBJECTS LARGER THAN 2".
2. FILTER MEDIA SHALL CONSIST OF SILT/SAND LAYER WITH A FINES CONTENT OF 8% BUT NOT GREATER THAN 10% (I.E. 8%-10% PASSING #200 SIEVE)
3. DO NOT OVER COMPACT SAND MEDIA. PERMEABILITY OF FILTER WILL DECREASE IF OVER COMPACTED. ANTICIPATED LEVEL OF COMPACTION IS EQUAL TO 90-92% STANDARD PROCTOR.
4. MEDIA SHALL HAVE FILTRATION VELOCITY BETWEEN 2.5 AND 4.75 IN/HR SUCH THAT THE SYSTEM WILL DRAIN WITHIN 24-48 HOURS.

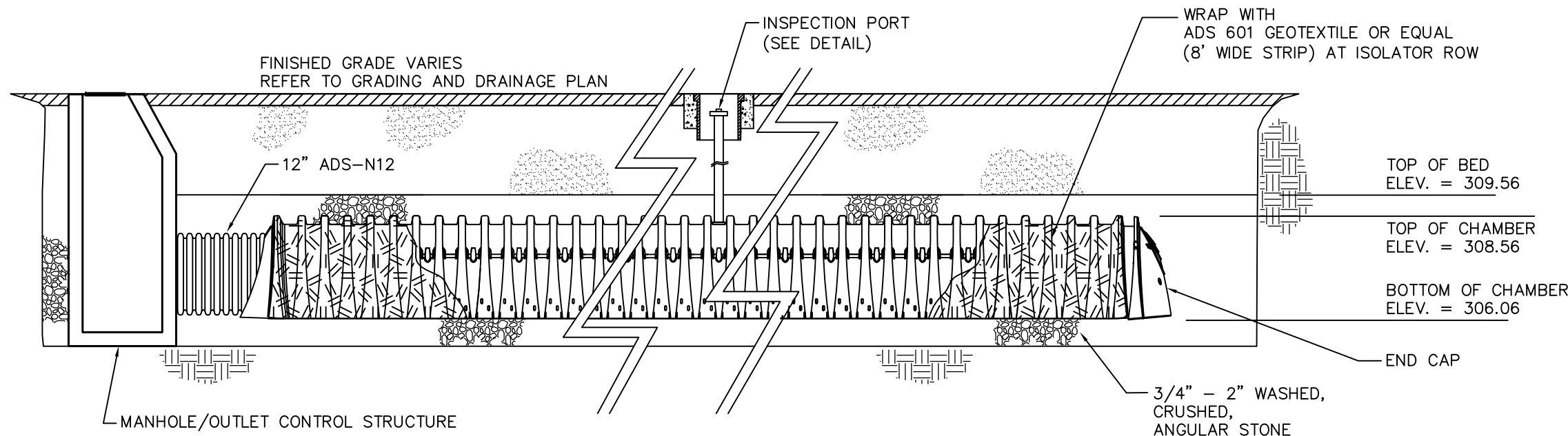


THIS PLAN IS FOR REVIEW  
PURPOSES ONLY AND IS NOT  
INTENDED FOR CONSTRUCTION  
OR RECORDING

Owner/Applicant:	FIELDING'S OIL CO., INC.
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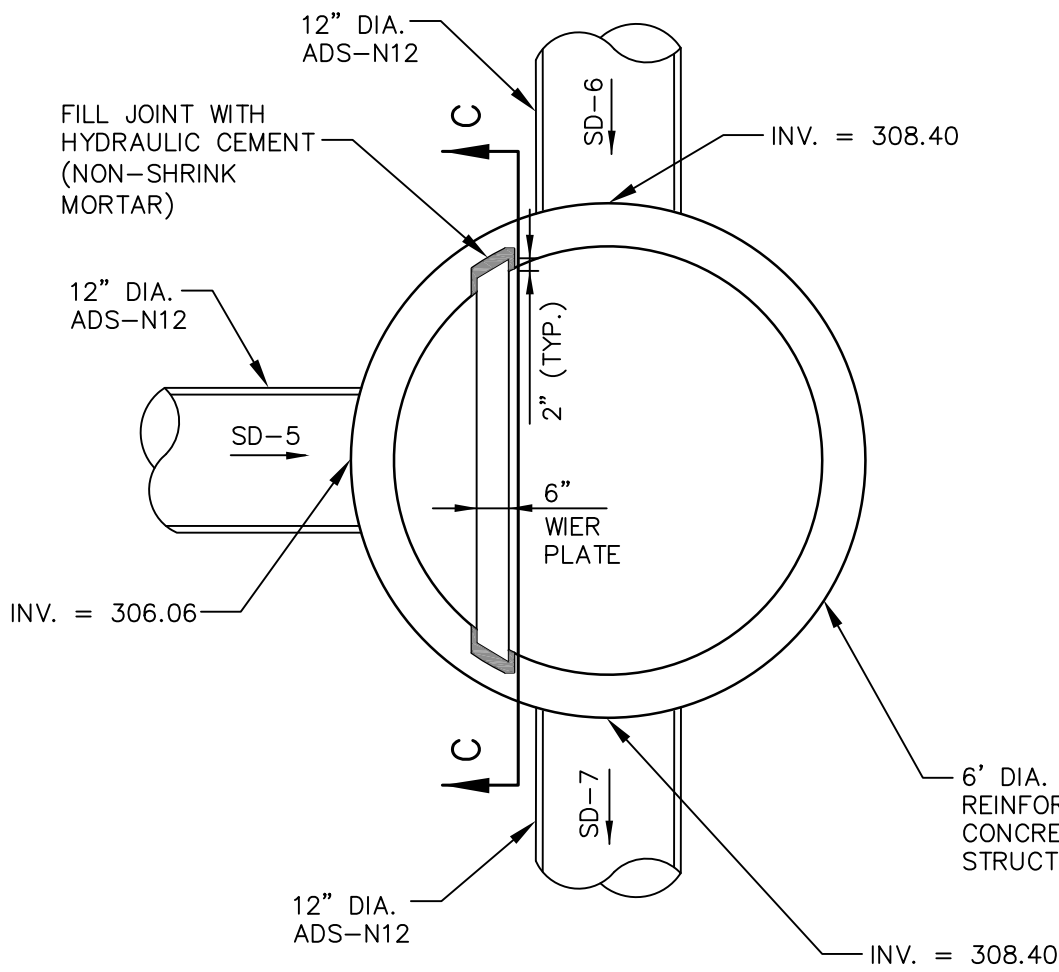




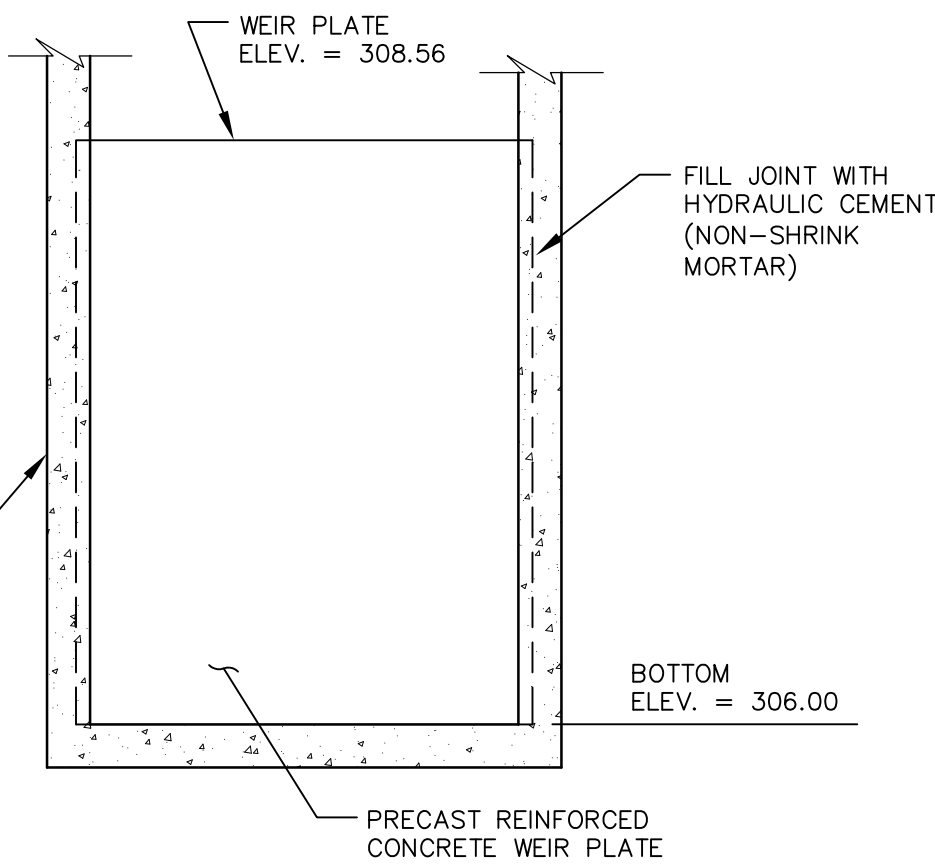


ISOLATOR ROW DETAIL  
NOT TO SCALE

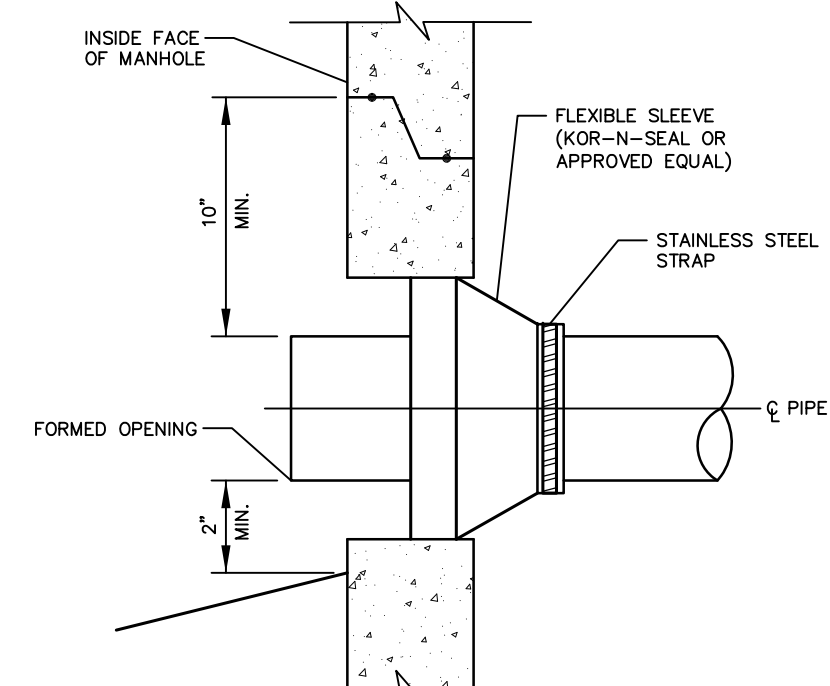
NOTES:  
1. ALL DESIGN SPECIFICATIONS FOR STORMTECH CHAMBERS SHALL BE IN ACCORDANCE WITH THE STORMTECH DESIGN MANUAL.  
2. THE INSTALLATION OF STORMTECH CHAMBERS SHALL BE IN ACCORDANCE WITH THE LATEST STORMTECH INSTALLATION INSTRUCTIONS.  
3. THE CONTRACTOR IS ADVISED TO REVIEW AND UNDERSTAND THE INSTALLATION INSTRUCTIONS PRIOR TO BEGINNING SYSTEM INSTALLATION. CALL 1-888-892-2694 OR VISIT [WWW.STORMTECH.COM](http://WWW.STORMTECH.COM) TO RECEIVE A COPY OF THE LATEST STORMTECH INSTALLATION INSTRUCTIONS.



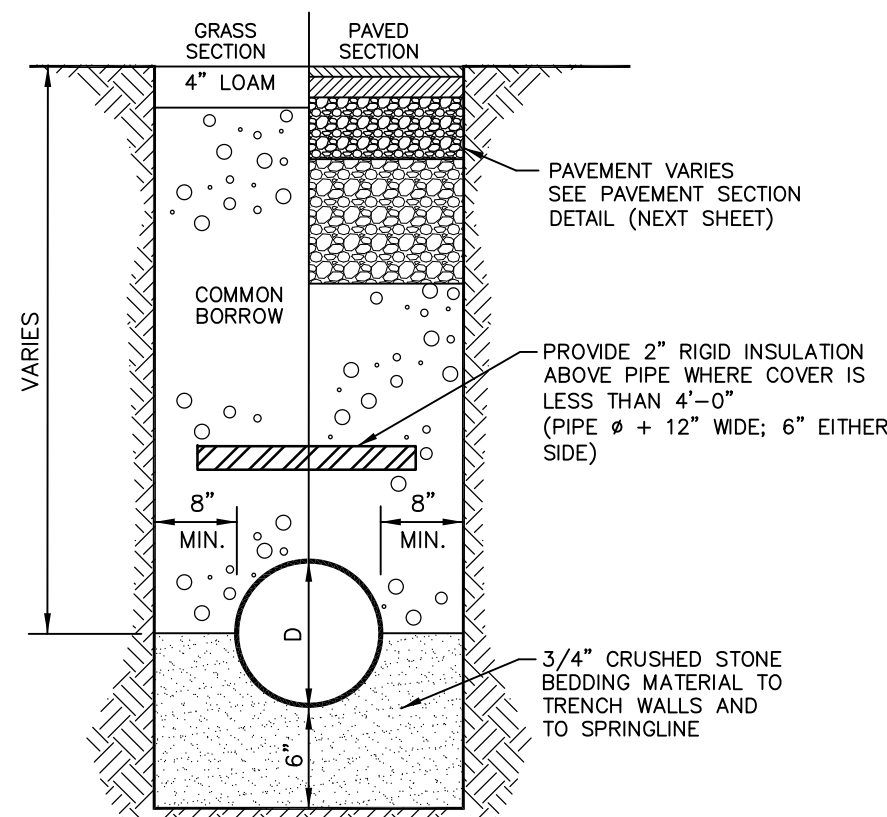
OUTLET CONTROL STRUCTURE OCS-1  
NOT TO SCALE  
NOTE: STRUCTURE TO BE DESIGNED TO WITHSTAND HS-20 LOADING



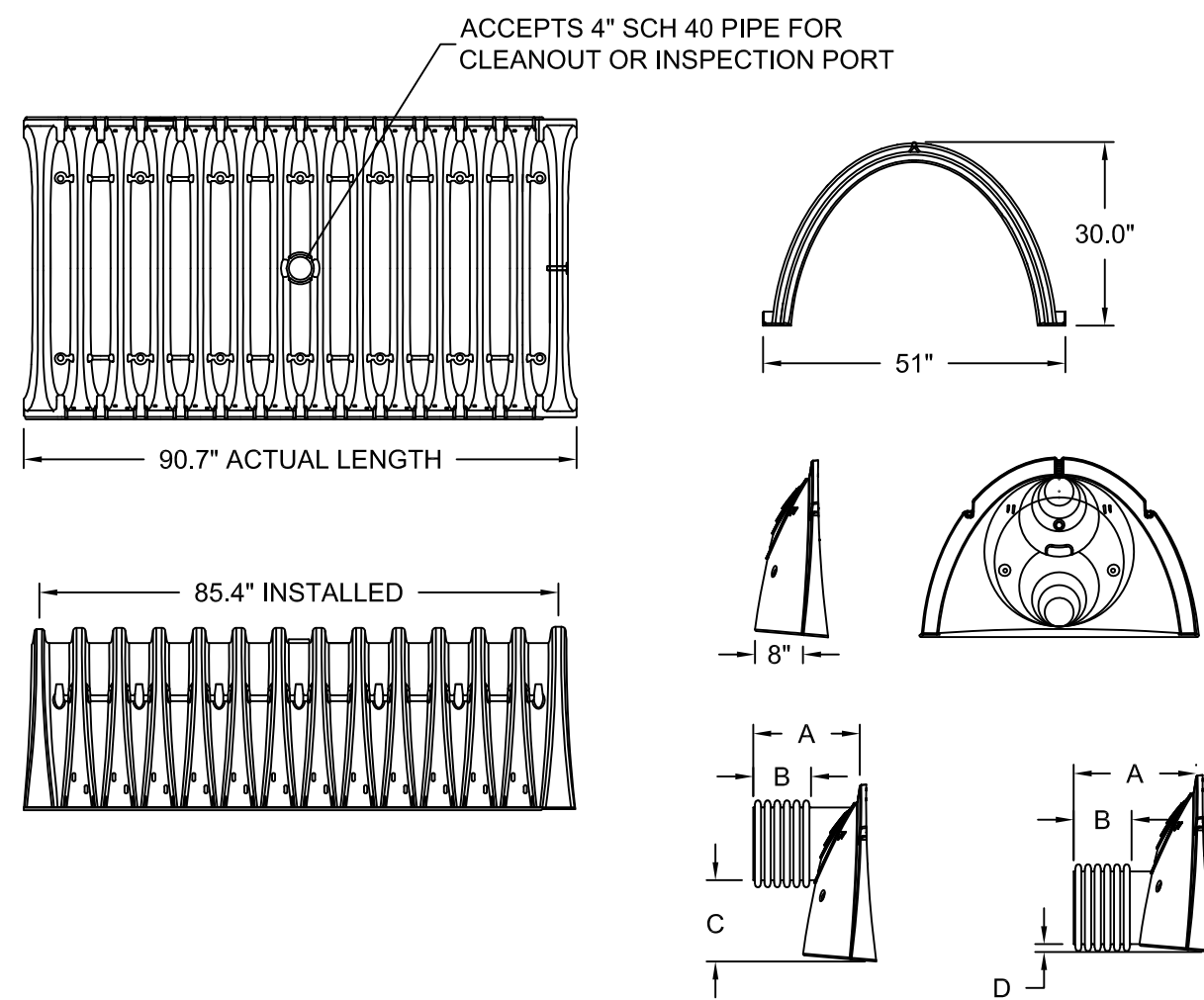
SECTION C-C (WEIR PLATE)  
NOT TO SCALE



NEW PIPE TO EXISTING MANHOLE  
CONNECTION DETAIL - 4" TO 24"  
NOT TO SCALE



TYPICAL STORM DRAIN  
TRENCH SECTION  
NOT TO SCALE



NOMINAL CHAMBER SPECIFICATIONS  
SIZE (W x H x INSTALLED LENGTH)  
CHAMBER STORAGE  
MINIMUM INSTALLED STORAGE  
WEIGHT

51.0" x 30.0" x 85.4"  
45.9 CUBIC FEET  
74.9 CUBIC FEET  
75 LBS.

STUBS AT TOP OF END CAP FOR  
PARTS NUMBERS ENDING WITH "T"

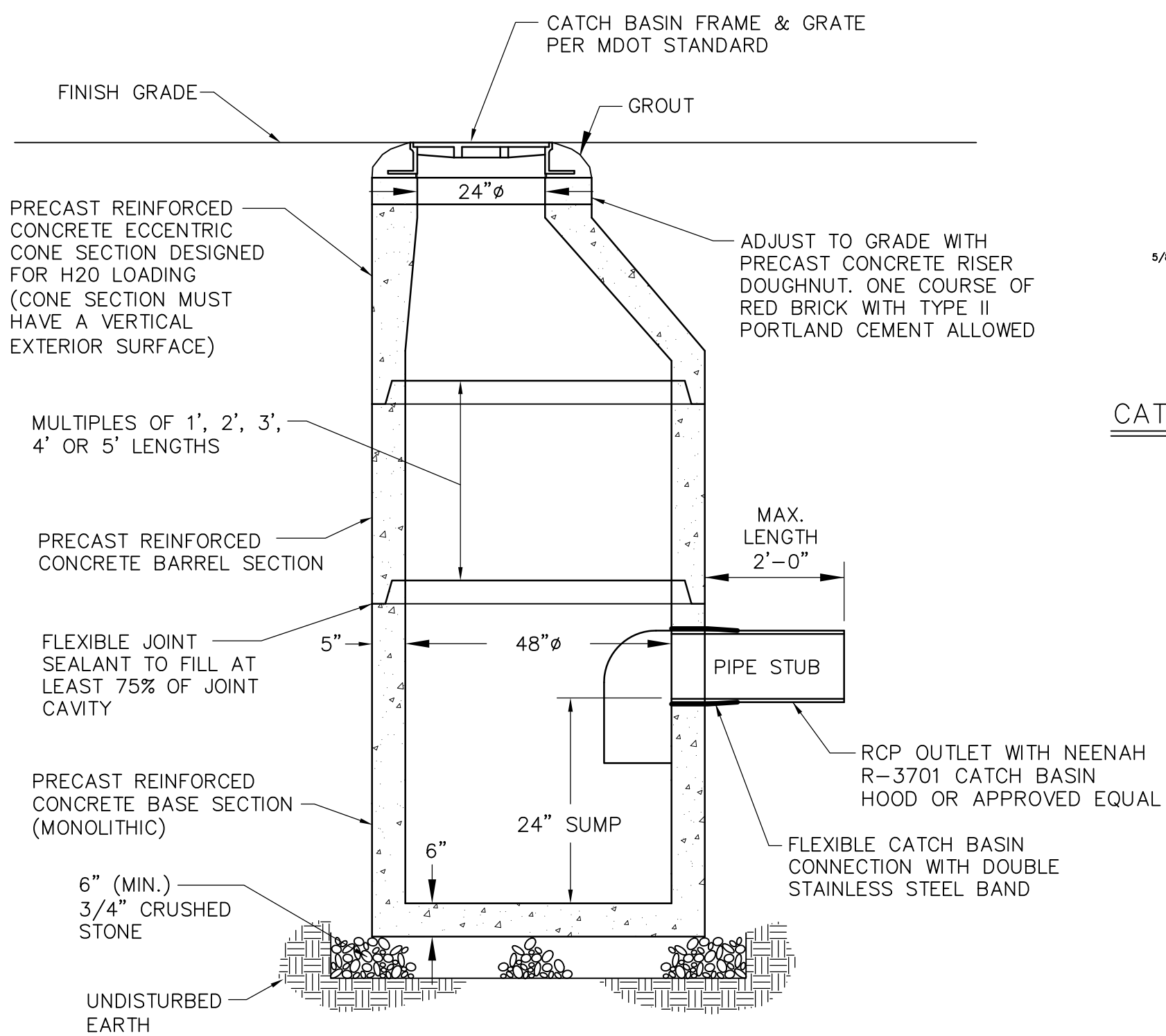
STUBS AT BOTTOM OF END CAP  
FOR PARTS NUMBERS ENDING WITH  
"B"

PART #	CHAMBER	PIPE SIZE	A	B	C	D
SC740EPE12B	SC 740	12 in (300 mm)	14.70 in (373 mm)	7.70 in (196 mm)	N/A	1.20 in (30 mm)
SC740EPE24B	SC 740	24 in (600 mm)	18.50 in (470 mm)	9.45 in (240 mm)	N/A	0.10 in (3 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL  
ALL STUBS, EXCEPT FOR THE SC740EPE24B ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

\* FOR THE SC740EPE24B THE 24" STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75". BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SETS LEVEL.

SC-740 TECHNICAL DETAILS  
NOT TO SCALE



NOTE: CATCH BASIN, FRAME AND GRATE SHALL BE DESIGNED TO WITHSTAND HS-20 LOADING.

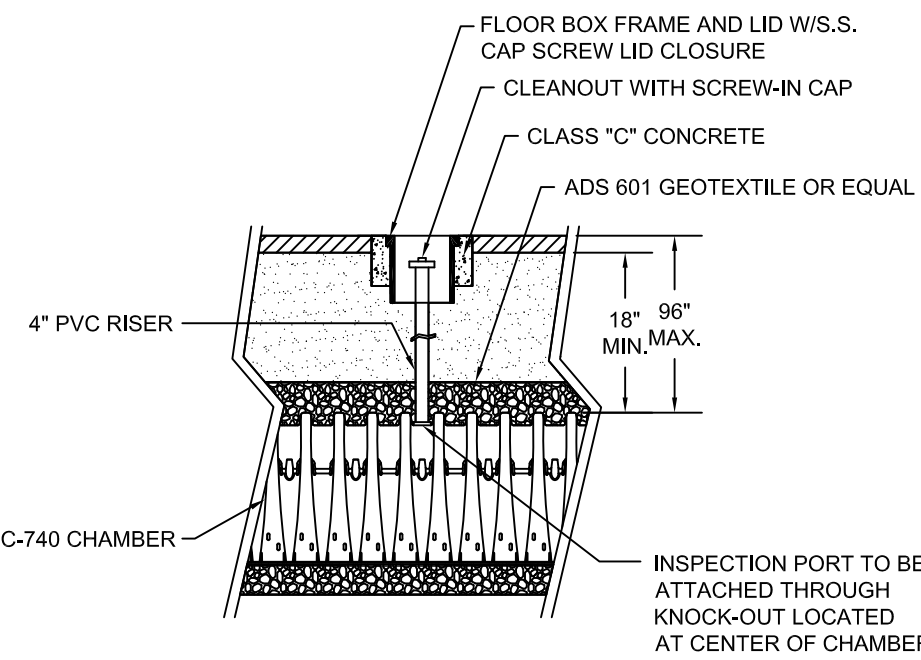
PER MDOT ITEM 604.

PRECAST CONCRETE CATCH BASIN DETAIL  
N.T.S.

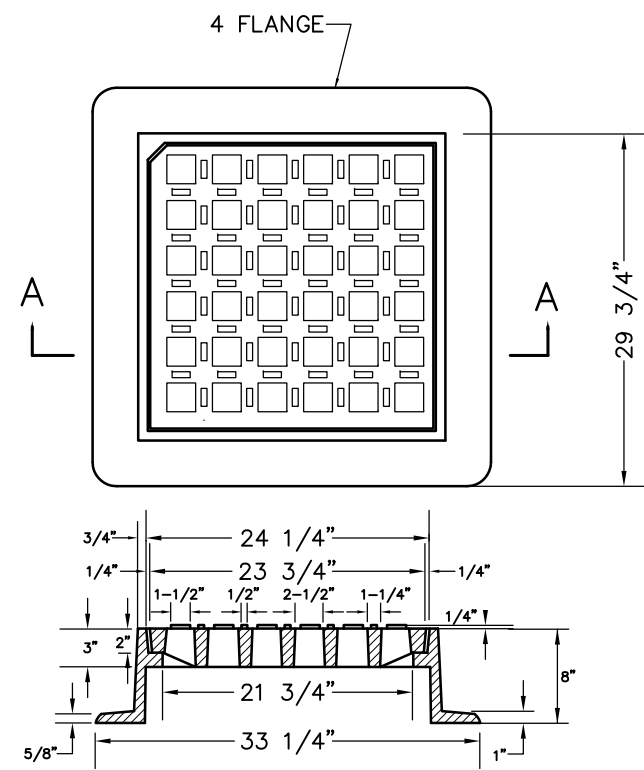
## ACCEPTABLE FILL MATERIALS STORMTECH SC-740 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO M43 DESIGNATION	AASHTO M145 DESIGNATION	COMPACTION/DENSITY REQUIREMENT
FILL MATERIAL FROM 18" TO GRADE ABOVE CHAMBERS	ANY SOIL/ROCK MATERIALS, NATIVE SOILS OR PER ENGINEER'S PLANS. (SEE TYPICAL STORMWATER TRENCH SECTION ON SHEET C-10)	N/A	N/A	PREPARE PER ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
FILL MATERIAL FOR 6" TO 18" ELEVATION ABOVE CHAMBERS (24" FOR UNPAVED INSTALLATIONS)	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES.	3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	A-1 A-2 A-3	COMPACT IN 6" LIFTS TO A MINIMUM 95% STANDARD PROCTOR DENSITY. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 LBS. DYNAMIC FORCE NOT TO EXCEED 20,000 LBS.
EMBEDMENT STONE SURROUNDING TO AN ELEVATION 12" ABOVE & 6" BELOW CHAMBERS	WASHED ANGULAR STONE WITH THE MAJORITY OF PARTICLES BETWEEN 3/4" - 2 INCH	3, 357, 4, 467, 5, 56, 57	N/A	NO COMPACTION REQUIRED
FOUNDATION BELOW CHAMBERS	WASHED ANGULAR STONE WITH THE MAJORITY OF PARTICLES BETWEEN 3/4" - 2 INCH	3, 357, 4, 467, 5, 56, 57	N/A	PLATE COMPACT OR ROLL TO ACHIEVE A 95% STANDARD PROCTOR DENSITY
SUBSURFACE SOIL FILTER	SEE CROSS SECTION	N/A	N/A	

## STORMTECH ACCEPTABLE FILL MATERIALS



STORMTECH INSPECTION PORT DETAIL  
NOT TO SCALE



NOTE: FRAME AND GRATE SHALL BE HEAVY DUTY CLASS 30 GRAY IRON.

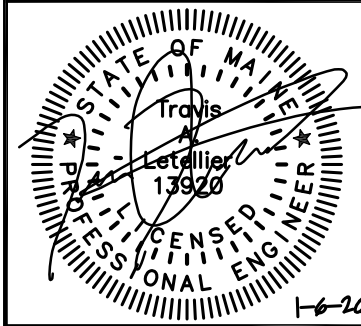
SECTION A-A  
CATCH BASIN FRAME AND GRATE  
N.T.S.

THIS PLAN IS FOR REVIEW  
PURPOSES ONLY AND IS NOT  
INTENDED FOR CONSTRUCTION  
OR RECORDING

Revision	By	Date	Change
2	SMA	1/6/20	REVISED PER TOWN COMMENTS
1	SMA	12/21/20	SUBMITTED FOR TOWN REVIEW

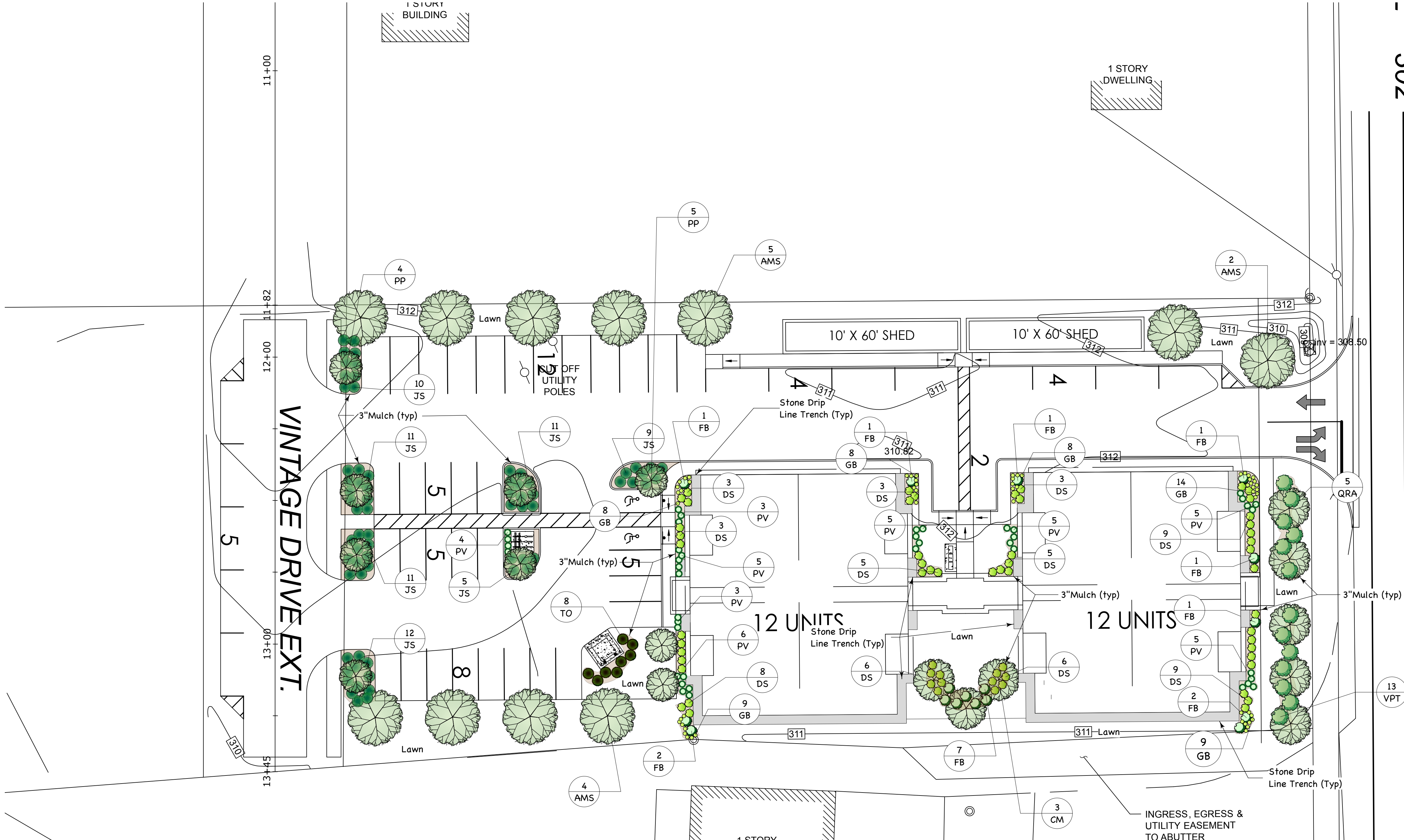
PROJECT NUMBER: 41878	ACAD FILE: 41878-UG-DET.DWG	SCALE: AS NOTED	DATE: DECEMBER 21, 2020
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Drawing Name: <b>UNDERGROUND DETENTION DETAILS - SHEET 2</b>
Project Name: <b>FIELDING CONDOS</b> ROOSEVELT TRAIL, WINDHAM, MAINE
Owner/Applicant: <b>FIELDING'S OIL CO., INC.</b>



**Northeast Civil Solutions**  
INCORPORATED  
381 PAYNE ROAD, SCARBOROUGH, MAINE 04074  
tel 207.883.1000 fax 207.883.1001 e-mail / website info@northeastcivilsolutions.com www.northeastcivilsolutions.com



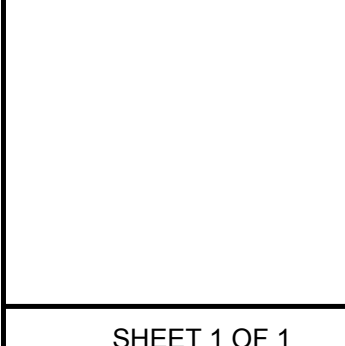


Plant Species List					
ID	Qty	Latin Name	Common Name	Scheduled Size	Remarks
AMS	11	Acer mivabel 'State Street'	State Street Mivabe Maple	2.5" - 3" cal.	B&B
CM	3	Cornus mas 'Golden Glory'	Golden Glory Cornelian Cherry	2" - 2.5" cal.	B&B
DS	60	Diervilla splendens 'El Madriacal'	Firefly Nightlow Bush Honeysuckle	18" - 24"	Cont. 3' o.c.
FB	17	Fothergilla x intermedia 'Blue Shadow'	Blue Shadow Fothergilla	18" - 24"	cont.
GB	56	Geranium x cantabrigiense 'Blokovo'	Blue Shadow Cranesbill	1 cal.	18" o.c.
JS	69	Juniperus sabina 'Buffalo'	Buffalo Juniper	18" - 24"	cont. 4' o.c.
PP	9	Parrotia persica 'Vanessa'	Vanessa Persian Ironwood	2.5" - 3"	B&B
PV	41	Panicum virgatum 'Shenandoah'	Shenandoah Switch Grass	2 gal.	30" o.c.
QRA	5	Quercus robur x alba 'Crimschmidt'	Crimson Spire Oak	2.5" - 3" cal.	B&B
TO	8	Thuja occidentalis 'Smaragd'	Emerald Arborvitae	6" - 7"	Cont. or B&B, 4' o.c.
VPT	13	Viburnum plicatum tomentosum 'Shasta'	Shasta Viburnum	24" - 30"	cont., 6' o.c.

- Plant Notes:**
- The Landscape Contractor is advised that these notes and drawing constitute the entire set of construction drawings.
  - The Landscape Contractor is advised of the existence of underground utilities. The Landscape Contractor shall verify utilities prior to commencing construction. Call DISSAFE at 1-888-344-7233.
  - The Landscape Contractor shall be responsible for repairing any utilities, walls, paving, curbing, etc. damage in the performance of this job at no cost to the Owner. The Landscape Contractor shall notify the Landscape Architect immediately if they encounter any site conditions, which will not allow them to carry out the landscape installation according to the drawings.
  - Planting of trees shall not occur until all erosion control is in place and all grading and paving is completed. Submit a sample of the topsoil with NPK, pH, calcium, aluminum effective cation exchange capacity tests and fertility recommendations as well as bulk density test of the sample. Topsoil shall be friable void of weeds, stones greater than 3/4" diameter, sticks and other debris. Topsoil shall contain, 70-80% sand, 5-20% clay, 18-20% silt, 5.0-8% organic matter and a pH of 6-6.9. Notify the Landscape Architect immediately if there is standing water or other factors, which would prohibit the installation of plant material.
  - All plants shall have a normal habit of growth for the species and shall be sound, healthy and free of diseases and insects. All plants shall be legibly tagged with the proper complete botanical name. They shall conform to the measurements on the Plant List and shall conform to ANSI Z60.1 - Nursery Stock, latest revision. Prior to plant installation, the Landscape Contractor shall submit a written affidavit of all plant species, cultivars, varieties, sizes and quantities that they propose to install with the name, phone number and location of all nurseries where plant material has been grown. All plants shall be grown in a latitude north of Washington D.C. The Landscape Architect will inspect all plants at the place of growth or upon delivery for conformity to the plant list and specifications. Such approval shall not affect the right of inspection and rejection during the progress of work. The Landscape Architect and Owner reserve the right to inspect, select and tag all plant material at the place of growth or select and approve a representative sample of each type of shrub, per groundcover or annual. The samples selected will serve as a minimum standard for all plants of the same species used for this work.
  - The top 1/3 of wire baskets and burlap on trees shall be cut and removed. All other plant material including trees shall have all non-biodegradable materials (tiring, wire, pots, etc.) removed at the time of planting. Circling roots or roots that would later grade the plant shall be straightened, cut or the root ball shall be cut utilizing a split ball technique.
  - Backfill mix shall be composed of an 80/20 top soil/ peat moss mix. Planting pits shall be excavated to three times the diameter and to the same depth of the plant root ball. Backfill 1/2 of the pit at a time, and compact. See Note 8 and install slow release fertilizer after first backfill lift. Setting the tree/shrub: Each tree/shrub shall be planted such that the trunk flare junction is level with or 1" above existing grade. All trees/shrubs where the planting depth is incorrect shall be rejected. All trees and shrubs shall have a 3" soil saucer constructed at the perimeter of the planting pit.
  - All plantings shall have slow release fertilizer installed at the time of planting. The fertilizer shall be "Roots transplant 1 Step", installed/ applied according to manufacturers instructions according to manufacturers instructions. After the plants are installed in each area, liquid feed all plants with Roots - Liquid Concentrate. Mix and apply according to manufacturers instructions. The landscape contractor shall submit samples of the slow release fertilizer and copies of the label of the liquid fertilizer prior to plant installation. The Landscape Contractor shall not install any plant material unless appropriate watering equipment is on site. All plants shall be adequately watered the day of installation or these plants will be rejected and replaced by the Landscape Contractor at no cost to the owner.
  - All trees shall have 2 stakes and guys. Stakes shall be 2" x 2" hardwood of sufficient length to guy above the first branches. Guys shall be flexible guying chain or an approved equal. Submit a sample of guying or to installation. Any plants with broken or damaged root balls will be rejected. The landscape contractor of remove all stakes after 1 year. All trees shall have treegators installed at the time of planting and shall be fill one a week from April thru November. Treegators shall be either the "Original" or "Treegator Jr."
  - Mulch to be installed to a depth of 3" after normal settling including the seasonal color area. Mulch shall be medium shredded Hemlock bark, dark brown in color. Do not place mulch in contact with the tree trunk. The Landscape Contractor shall submit a .25 cubic foot sample prior to installation.
  - All plants shall have their locations staked and approved by the Landscape Architect prior to plant installation. Plants shall be spaced according to the plan and as noted in the Plant Species List. All plants shall be oriented for best appearance and arranged to evenly occupy the space where they are planted.
  - Plant species and plant size substitutions will not be allowed unless first approved by the Landscape Architect. Any substituted plants installed without prior approval will be rejected.
  - All plants shall be guaranteed for one year. The landscape contractor of no cost to the owner shall replace any plants that die during the guarantee.
  - Allow deciduous and evergreen shrubs to grow together to form a continuous plant mass.
  - The contractor shall supply the quantities of plants sufficient to complete the work shown on all of the drawings. If quantities of plants listed in the plant species list do not correlate with the plantings indicated on the drawings, the quantities on the drawings shall govern. Any discrepancies between the plant list and the drawings shall not entitle the landscape contractor to additional remuneration. Notify the Landscape Architect immediately if discrepancies are detected.
  - Under no circumstance shall snow be plowed and piled on planting areas. This will result in crushing and death of the plant material and void the one year warranty.

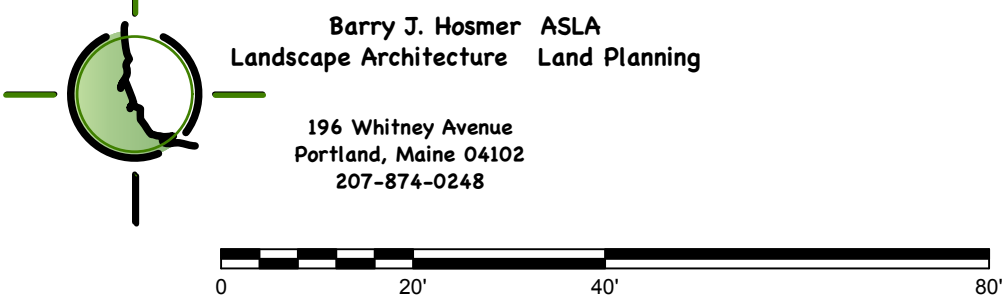
Revision	By	Date	Change

PROJECT NUMBER:	ACAD FILE:	SCALE: 1" = 30'	DATE:
Drawing Name: <b>LANDSCAPE PLAN</b>			
Project Name: <b>FIELDING CONDOS</b> ROOSEVELT TRAIL, WINDHAM, MAINE			
Owner/Applicant: <b>FIELDING'S OIL CO., INC.</b>			



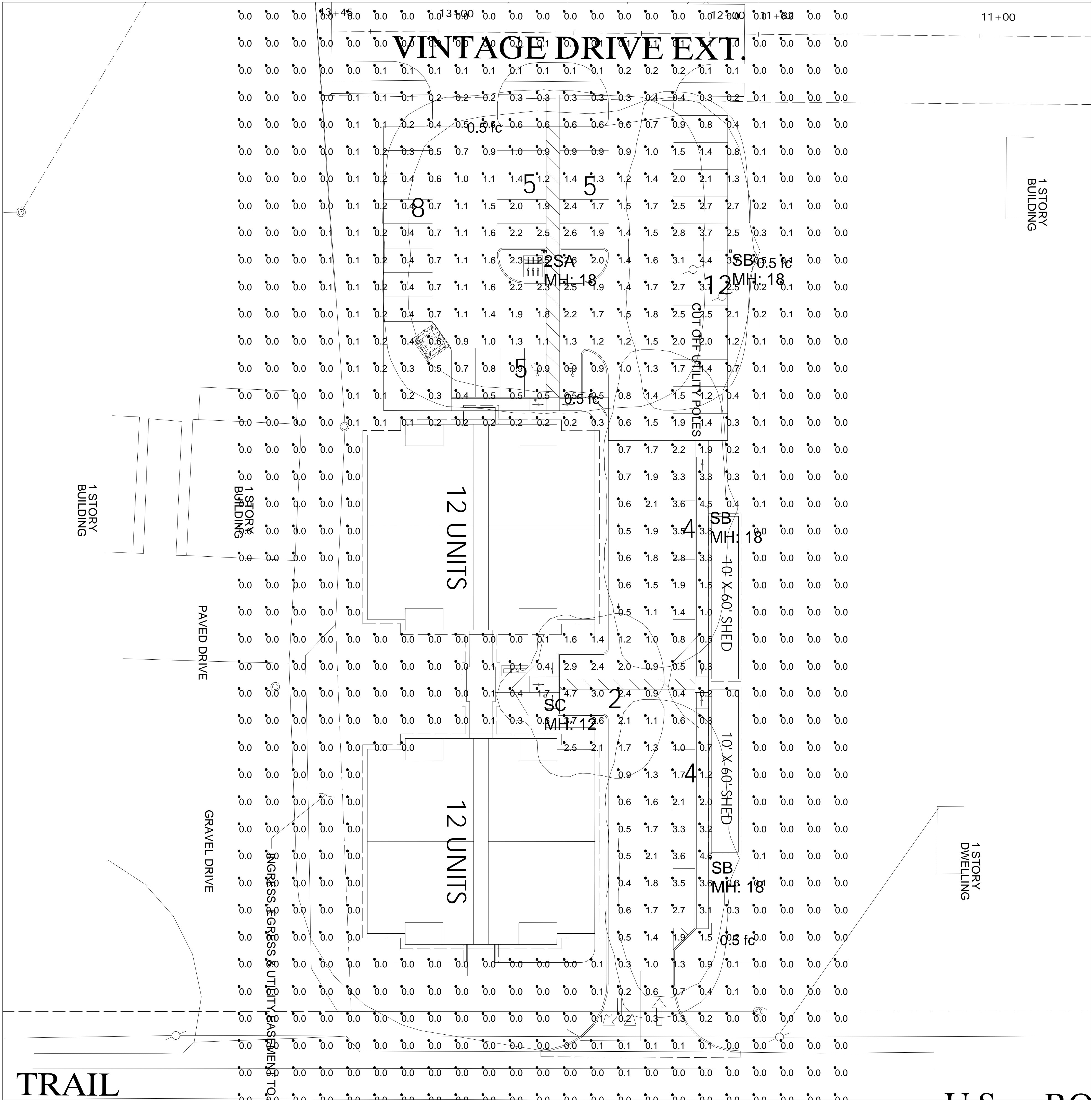
Barry J. Hosmer ASLA  
Landscape Architecture Land Planning

196 Whitney Avenue  
Portland, Maine 04102  
207-874-0248



This plan shall not be modified without written permission from Barry J. Hosmer - Landscape Architect. Any alterations, authorized or otherwise, shall be at the user's sole risk and without liability to Barry J. Hosmer - Landscape Architect.  
File Name: Fielding Oil - Windham v2020.vwx





PLAN VIEW

- NOTES:
- 1) EXACT MOUNTING DETAILS TO BE DETERMINED AT JOBSITE BY OTHERS.
  - 2) CALCULATIONS MAY or MAY NOT SHOW THE EFFECT OF SHADOWING CAUSED BY BUILDINGS AND OBJECTS WITHIN THE CALCULATED SPACE OR IN THE SITE AREA.
  - 3) READINGS SHOWN ARE INITIAL HORIZONTAL FOOTCANDLES ON A FLAT SITE WITHOUT REFLECTIONS OR OBSTRUCTIONS UNLESS OTHERWISE INDICATED.
  - 4) THIS CALCULATION IS BASED ON LIMITED INFORMATION SUPPLIED BY OTHERS TO SWANEY LIGHTING ASSOCIATES AND STANDARD ASSUMPTIONS OF THE SPACE AND/OR SITE.
  - 5) CONFORMANCE TO CODES AND OTHER LOCAL REQUIREMENTS AS DETERMINED BY THE AHJ ARE THE RESPONSIBILITY OF THE OWNER AND/OR THE OWNER'S REPRESENTATIVE.
  - 6) THIS LAYOUT DRAWING MUST BE COORDINATED WITH THE SITE LOCATION FOR CORRECT FIXTURE ORIENTATION.
  - 7) DOCUMENTS PRINTED OR PLOTTED FROM ELECTRONIC FILES MAY APPEAR AT OTHER THAN THE DESIRED OR ASSUMED GRAPHIC SCALES. IT IS THE RESPONSIBILITY OF THE RECIPIENT TO VERIFY THAT THE PRINTED OR PLOTTED-TO-SCALE DRAWING IS PRINTED TO SCALE.

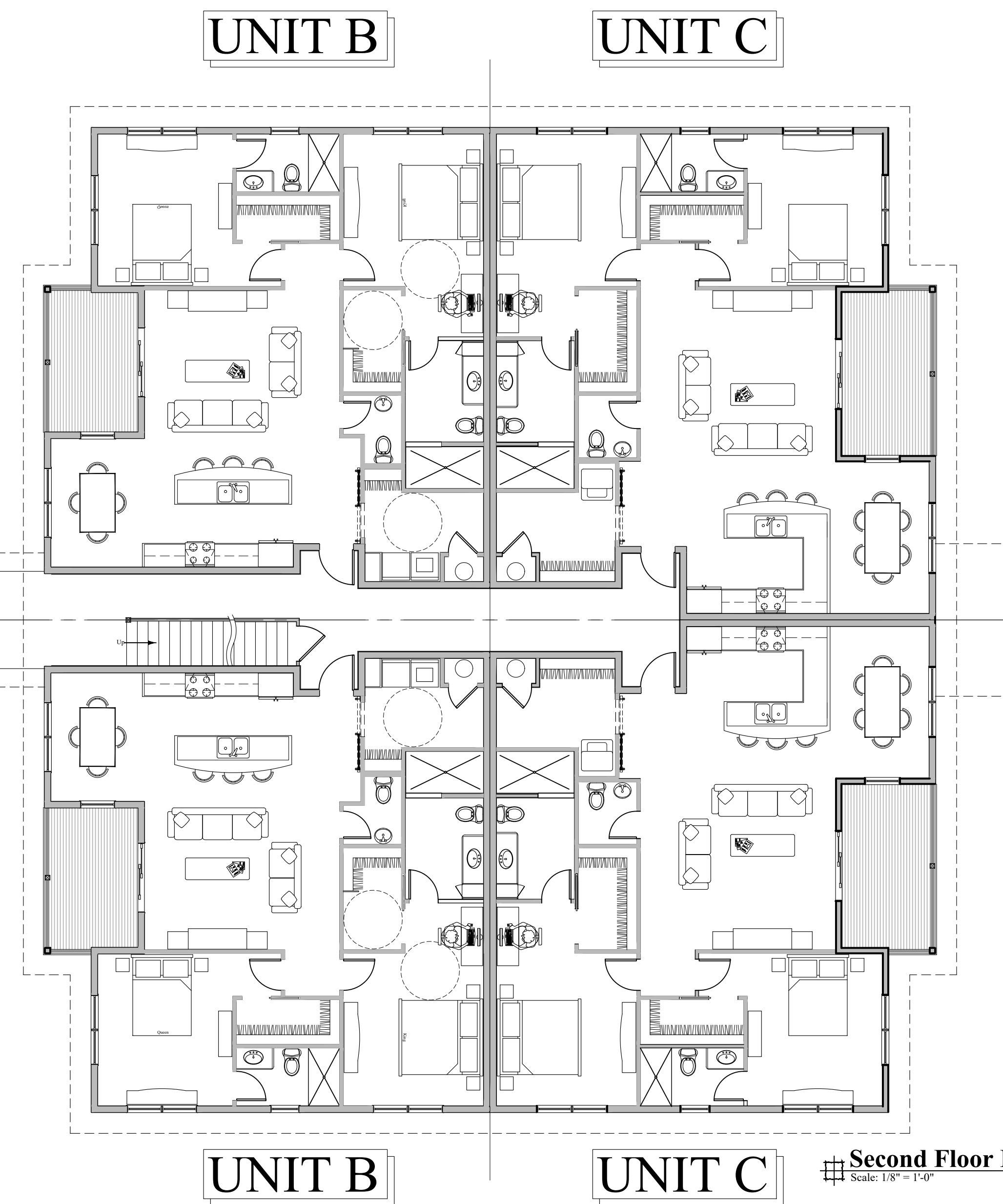
Calculation Summary					
Label	Avg	Max	Min	Avg/Min	Max/Min
SITE	0.44	4.7	0.0	N.A.	N.A.
PARKING	1.45	4.4	0.3	4.83	14.67

Luminaire Schedule (note fixture catalogue numbers are not complete)					
Type	Qty	Lum. Lumens	LLF	Lum. Watts	Description
2SA	1	7908	0.900	80.52	TWIN VP-S-36L-80-3K7-4W
SB	3	7516	0.900	109.78	VP-S-48L-110-3K7-3-BC
SC	1	5400	0.900	54	VP-S-24L-55-3K7-4

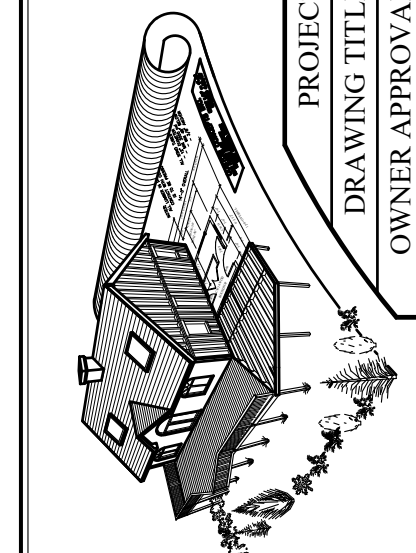






[illegible]

<b>CUSTOM CONCEPTS, INC.</b>	
<b>* ARCHITECTURE *</b>	
383 U.S. ROUTE 1A - SCARBOROUGH, MAINE 04074	
Phone: (207) 883-0083 WWW.CUSTOMCONCEPTS.COM	
ing Apartments – Windham	JOB NUMBER: 2020–17
inning Board Submission	DRAWN BY: MER
	SCALE: As noted
	<input checked="" type="checkbox"/> Preliminary Design <input type="checkbox"/> Design Development <input type="checkbox"/> Contract Documents CLIENT REVIEW FOR PERMITS, CONSTRUCTION ESTIMATING, CONSTRUCTION



DATE: Dec. 21, 2020
PB2

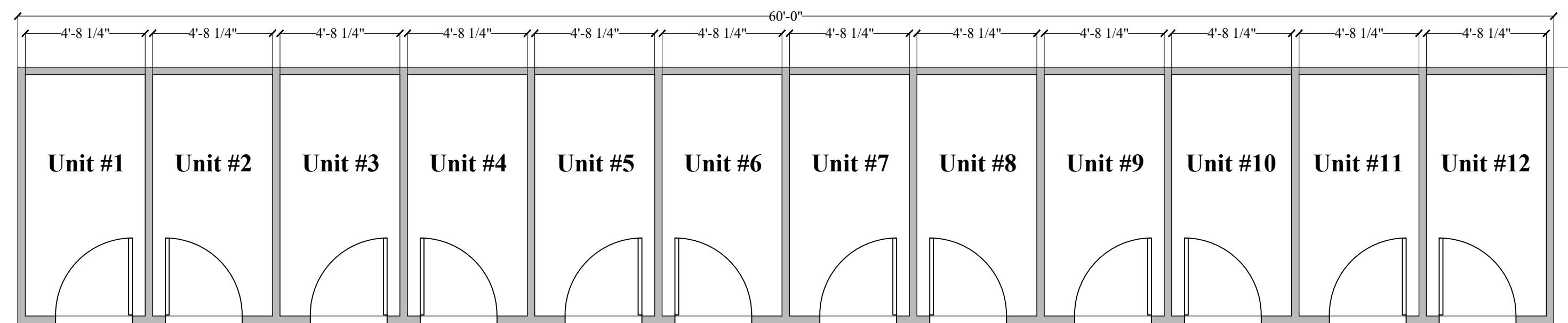
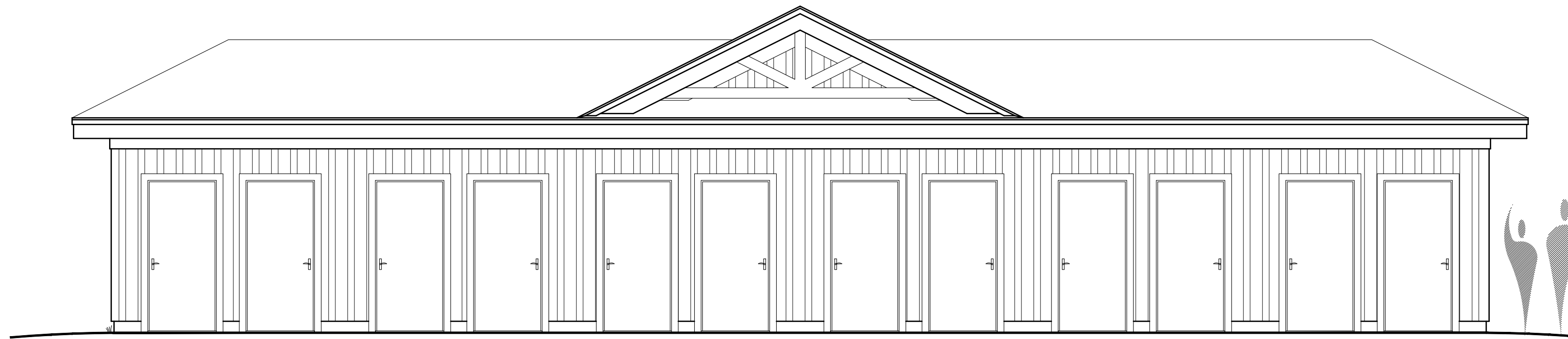
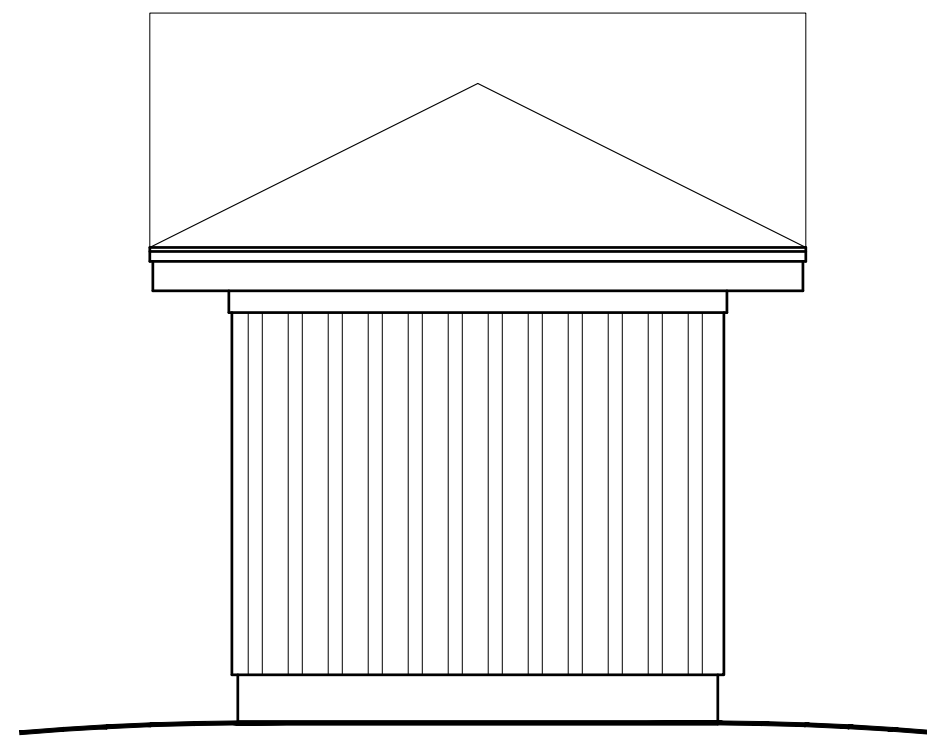
**PRELIMINARY**  
Not for Permitting or Construction

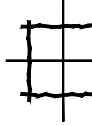
**PRELIMINARY**  
Not for Permitting or Construction

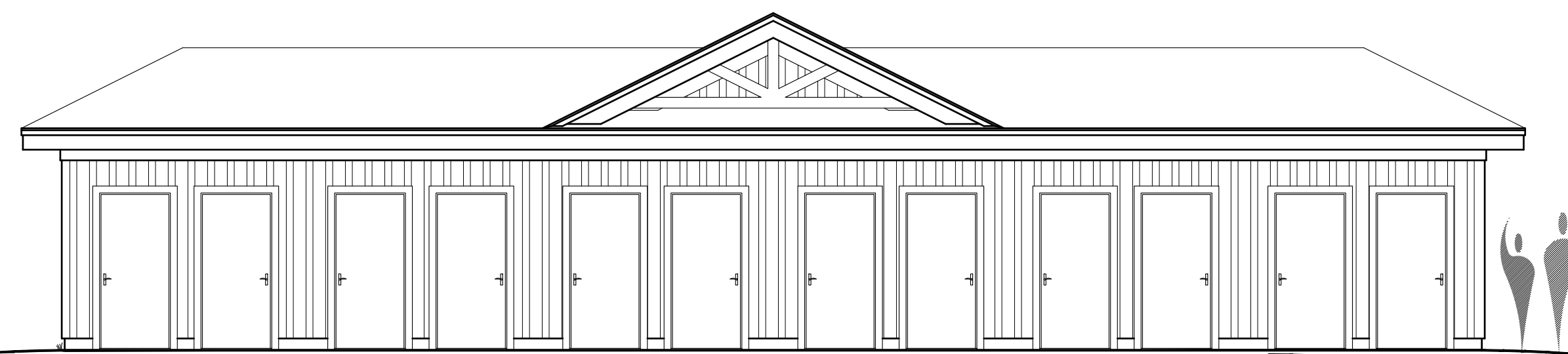
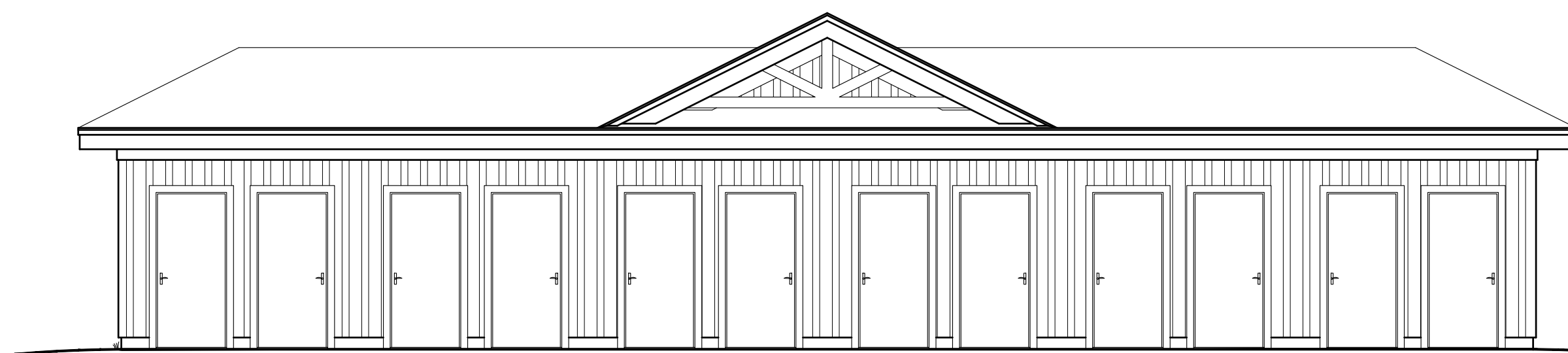








 **Storage Building**  
Building 1 of 2  
Floorplan & Elevations



PRELIMINARY  
Not for Permitting or Construction

NO.

DATE

DESCRIPTION

Revisions

 C U S T O M   C O N C E P T S ,   I N C .

ARCHITECTURE

383 U.S. ROUTE 1, SUITE 1A - SCARBOROUGH, MAINE 04074

Phone: (207) 883-0083   WWW.CUSTOMCONCEPTS.COM

 PROJECT: Fielding Apartments - Windham

DRAWING TITLE: Planning Board Submission

OWNER APPROVAL:

DATE:  
Dec. 21, 2020

PB4

☒ Preliminary

☐ Design Development

☐ Construction Documents

CLIENT REVIEW ONLY - NOT FOR CONSTRUCTION

CLIENT REVIEW AND COST ESTIMATING

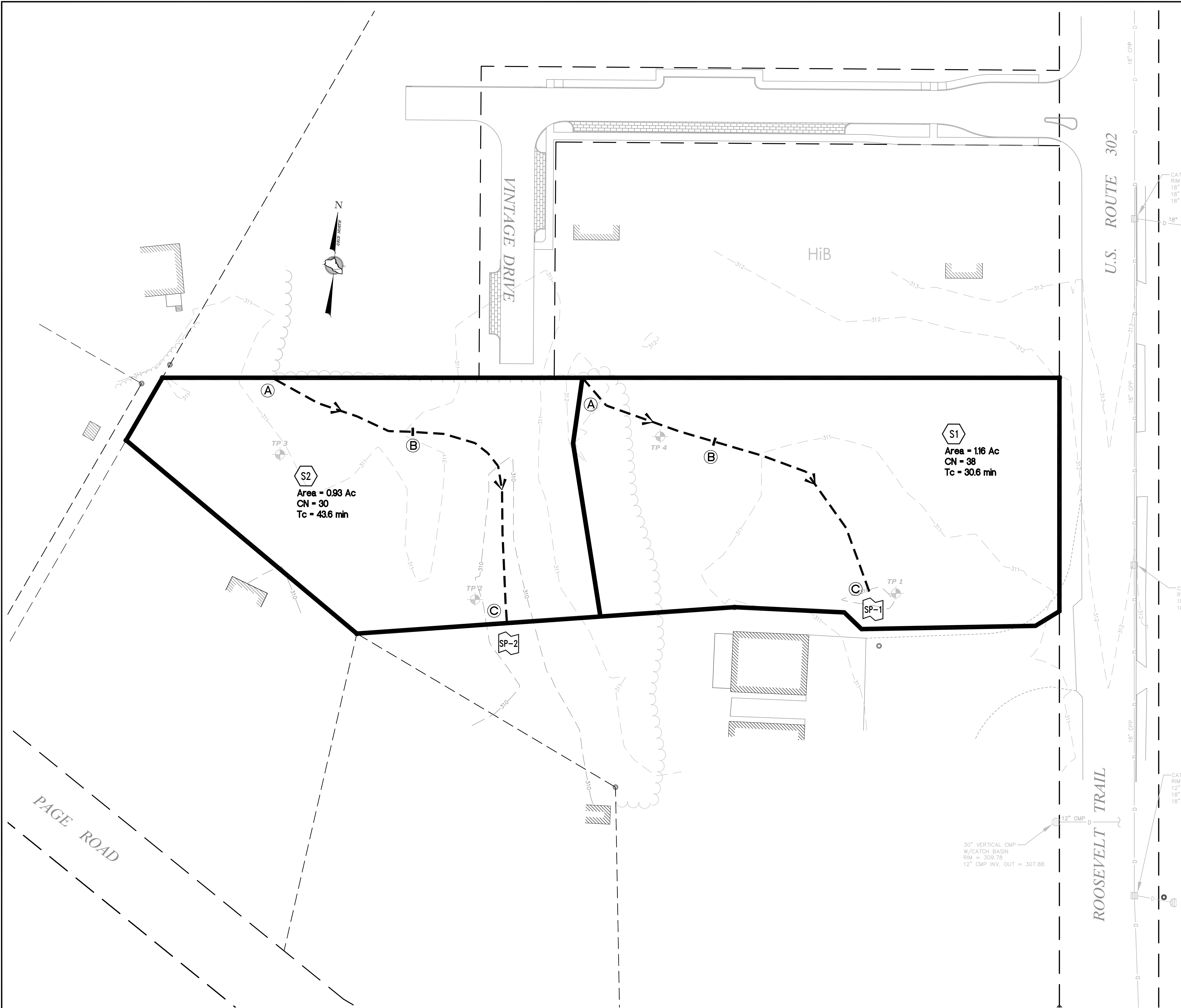
FOR PERMITS, BIDS, AND CONSTRUCTION

JOB NUMBER: 2020-17

DRAWN BY: MER

SCALE: As noted





LEGEND

SP1

STUDY POINT

S1

SUBCATCHMENT

P1

POND

PRE-DEVELOPMENT DRAINAGE SUBCATCHMENT

TIME OF CONCENTRATION PATH

SOILS LEGEND		
SYMBOL	SOIL TYPE	HSG
HiB	HINKLEY LOAMY SAND, 3%-8% SLOPES	A

THE SOURCE OF THE SOIL TYPES AND BOUNDARIES IS THE NATIONAL COOPERATIVE SOIL SURVEY (NCSS).

NOTES

Tc PATH TABLE				
SUBCAT	Tc PATH	FLOW	LENGTH	SLOPE (FT/FT)
S1	A-B	SHALLOW CONC	100'	0.0100
	B-C		160'	0.0100
S2	A-B	SHALLOW CONC	100'	0.0050
	B-C		169'	0.0100

THIS PLAN IS FOR REVIEW PURPOSES ONLY AND IS NOT INTENDED FOR CONSTRUCTION OR RECORDING

Revision	By	Date	Change
2	SMA	1/6/20	REVISED PER TOWN COMMENTS
1	SMA	12/21/20	SUBMITTED FOR TOWN REVIEW

PROJECT NUMBER: 41878	ACAD FILE: 41878-DRAINAGE.DWG	SCALE: 1" = 30'	DATE: DECEMBER 21, 2020
Drawing Name: PRE-DEVELOPMENT DRAINAGE AREA PLAN			
Project Name: FIELDING CONDOS ROOSEVELT TRAIL, WINDHAM, MAINE			
Owner/Applicant: FIELDING'S OIL CO., INC.			

SHEET 1 OF 2

SURVEYING • ENGINEERING • LAND PLANNING

Northeast Civil Solutions

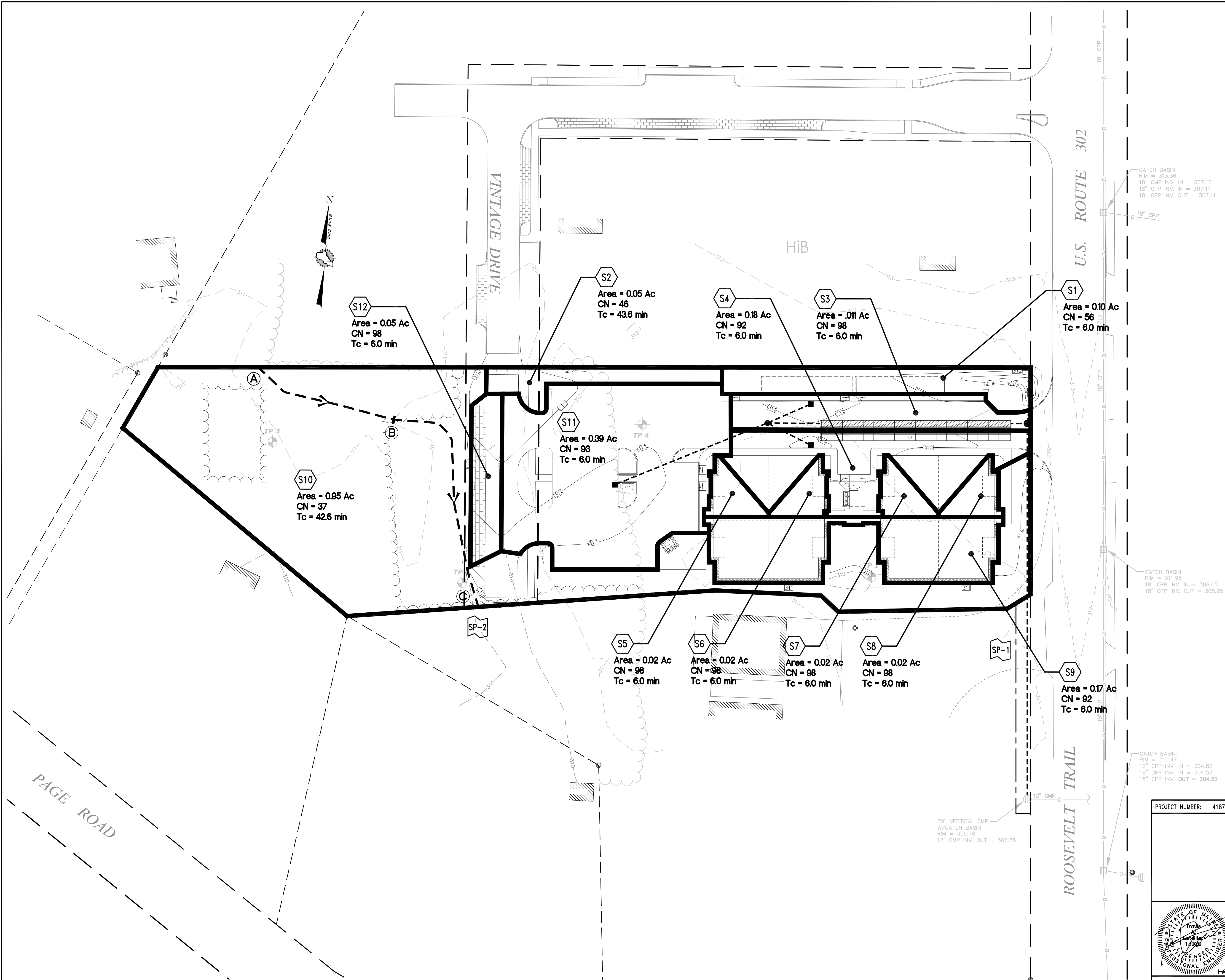
INCORPORATED

381 PAYNE ROAD, SCARBOROUGH, MAINE 04074

tel 207.883.1000 fax 207.883.1001 e-mail / website info@northeastcivilsolutions.com www.northeastcivilsolutions.com

E:\LAND PROJECT\41000\41878 - FIELDING - WINDHAM\PLANSET\41878-DRAINAGE.DWG





LEGEND

SP1

STUDY POINT

S1

SUBCATCHMENT

P1

POND

POST-DEVELOPMENT DRAINAGE SUBCATCHMENT

TIME OF CONCENTRATION PATH

SOILS LEGEND

SYMBOL	SOIL TYPE	HSG
HIB	HINKLEY LOAMY SAND, 3%-8% SLOPES	A

THE SOURCE OF THE SOIL TYPES AND BOUNDARIES IS THE NATIONAL COOPERATIVE SOIL SURVEY (NCSS).

NOTES

Tc PATH TABLE

SUBCAT	Tc PATH	FLOW	LENGTH	SLOPE (FT/FT)
S1		DIRECT ENTRY		
S2		DIRECT ENTRY		
S3		DIRECT ENTRY		
S4		DIRECT ENTRY		
S5		DIRECT ENTRY		
S6		DIRECT ENTRY		
S7		DIRECT ENTRY		
S8		DIRECT ENTRY		
S9		DIRECT ENTRY		
S10	A-B B-C	SHEET SHALLOW CONC	100' 162'	0.0050 0.0070
S11		DIRECT ENTRY		
S12		DIRECT ENTRY		

THIS PLAN IS FOR REVIEW PURPOSES ONLY AND IS NOT INTENDED FOR CONSTRUCTION OR RECORDING

Revision	By	Date	Change
2	SMA	1/6/20	REVISED PER TOWN COMMENTS
1	SMA	12/21/20	SUBMITTED FOR TOWN REVIEW

PROJECT NUMBER: 41878

ACAD FILE: 41878-DRAINAGE.DWG

SCALE: 1" = 30'

DATE: DECEMBER 21, 2020

Drawing Name:

POST-DEVELOPMENT DRAINAGE AREA PLAN

Project Name:

FIELDING CONDOS  
ROOSEVELT TRAIL, WINDHAM, MAINE

Owner/Applicant:

FIELDING'S OIL CO., INC.

SURVEYING • ENGINEERING • LAND PLANNING

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SHEET 2 OF 2

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